



# Housing Market Index (HMI)

Special Questions on Labor and  
Subcontractors' Availability.

July 2019



Economics & Housing Policy Group

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## **Introduction:**

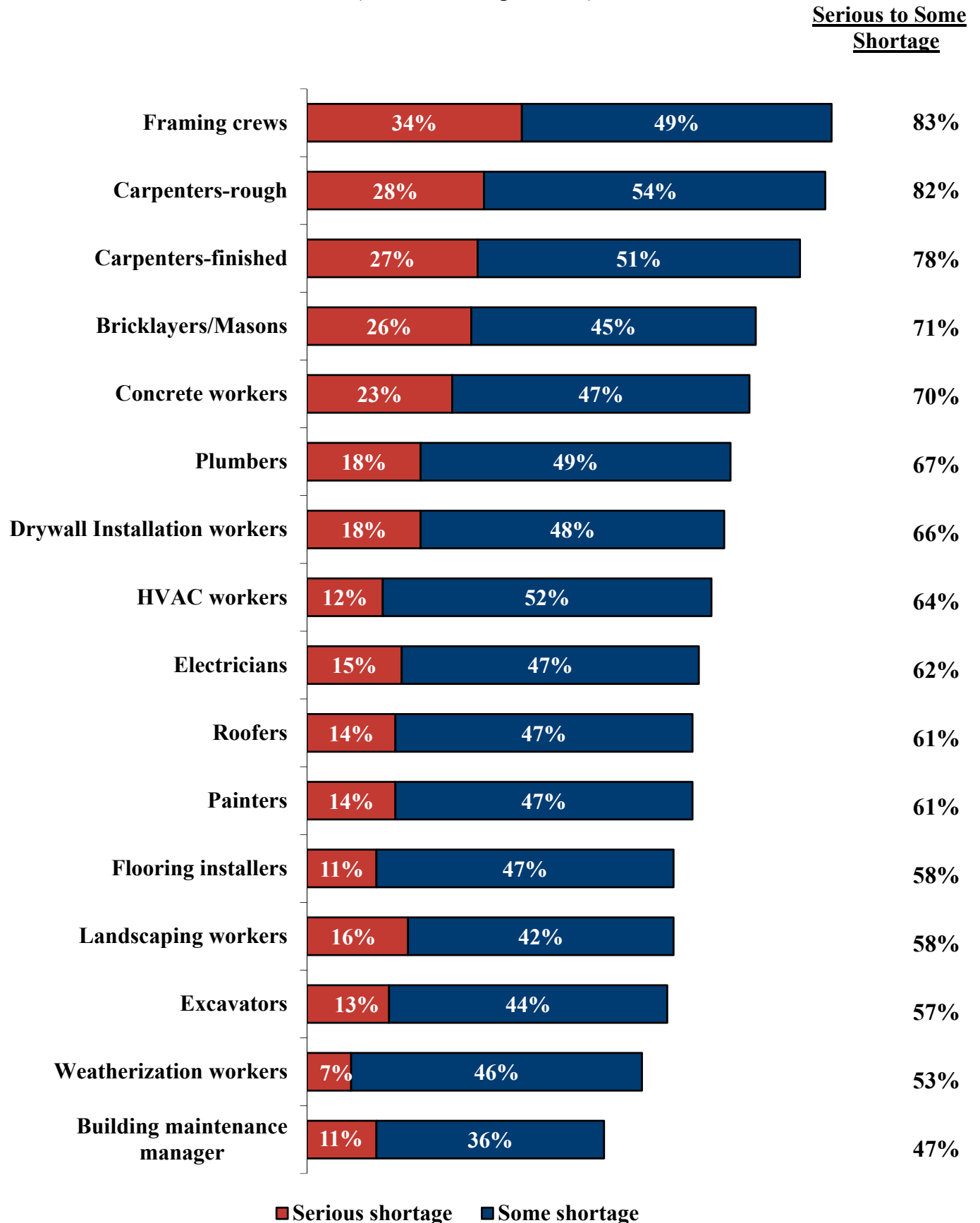
For more than 25 years, the National Association of Home Builders (NAHB) has conducted a monthly survey of its builder members that is used to generate the NAHB/Wells Fargo Housing Market Index (HMI). The main section of the HMI survey asks builders to rate market conditions for the sale of new homes at the present time and expected over the next 6 months, as well as the traffic of prospective buyers. The results are combined into a single composite index that measures the overall strength of the market for new single-family housing.

Throughout its history, the HMI has generally performed well as a leading indicator of single-family housing starts and is widely reported in business media and used by government and Wall Street analysts.

This month survey was sent electronically to a panel of roughly 2,900 builder members. Results are broken down by the four census regions and by total number of units started in 2018. The survey sample is refreshed annually to keep the panel consistent overtime.

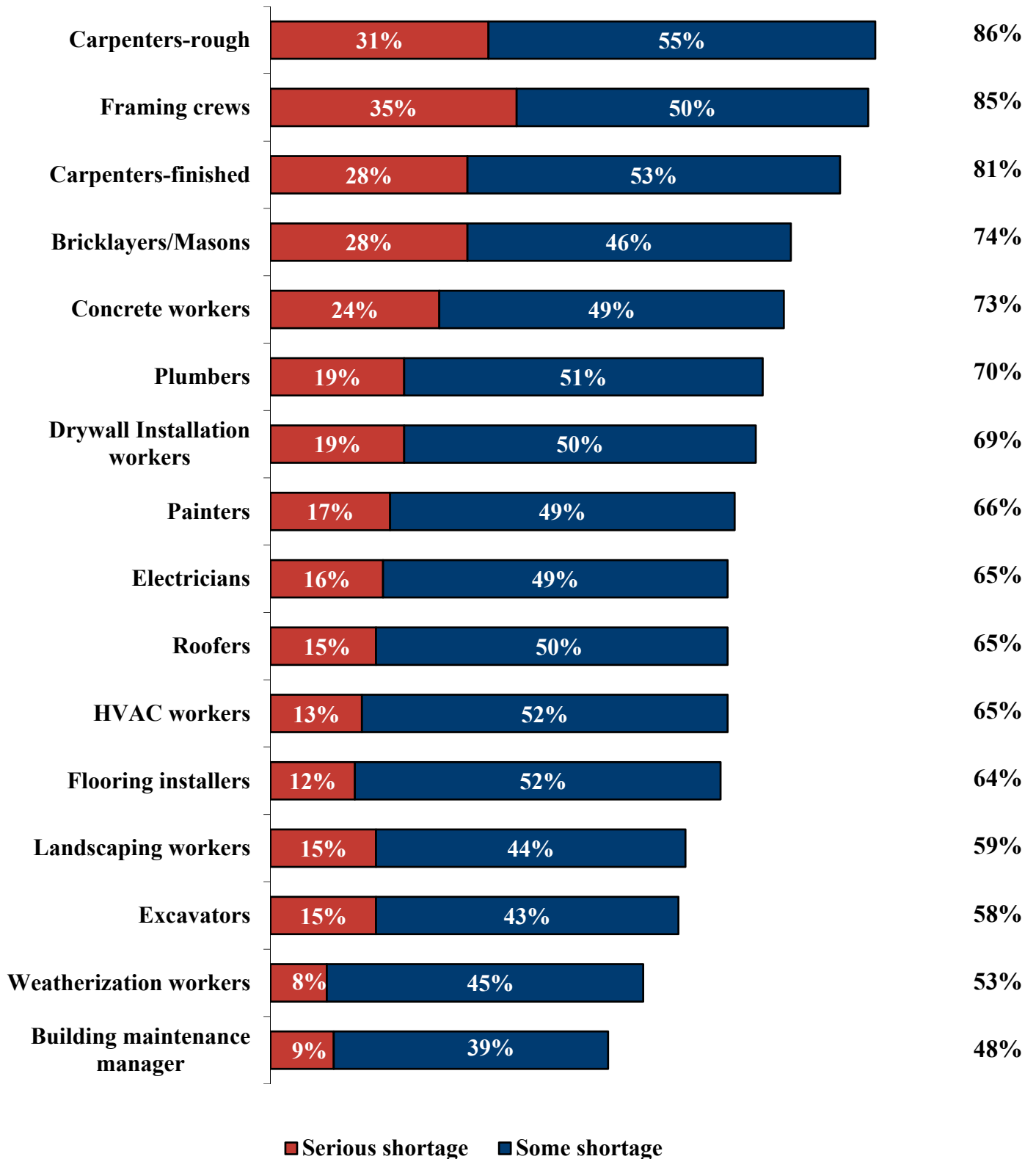
In addition to the questions that provide the data needed to compute the HMI, the survey often also includes a set of “special” questions on a topic of current interest to the housing industry. The July 2019 special questions relate to availability of labor and subcontractors for different trades e.g. carpenter, electrician etc. The results in this report are based on 419 responses to these special questions.

**Q1. Availability of following types of labor - LABOR (Directly employed by your firm)  
(Percent of Respondents)**



**Q1. Availability of following types of labor – SUBCONTRACTORS’  
(Percent of Respondents)**

**Serious to Some  
Shortage**



**Availability of following trades - LABOR (Directly employed by your firm) – HISTORY**  
**(Percent of Respondents)**

	Jul. 2019	Jul. '18	July '17	Jun. '16	Jun. '15	Jun. '14	Mar. '13	Jun. '12	May '06	Nov. '05	Oct. '05	Jul. '05	Oct. '04	Jul. '04	Dec. '03	Apr. '02	Nov. '00	Jul. '00	Feb. '00	Dec. '98	Sep. '97	Sep. '96
<b>CARPENTERS - ROUGH</b>																						
Serious shortage	28	37	29	23	14	11	4	5	9	13	16	21	13	22	9	5	26	29	34	36	24	27
Some shortage	54	46	47	49	55	52	38	24	32	35	38	45	47	44	42	48	48	47	51	51	49	49
No shortage	18	17	24	28	32	37	57	71	59	52	46	34	40	34	48	47	27	24	15	13	27	24
<b>CARPENTERS - FINISHED</b>																						
Serious shortage	27	30	23	22	16	12	4	4	10	13	15	18	18	18	12	5	21	22	33	29	24	21
Some shortage	51	48	51	48	50	46	34	22	30	36	35	40	39	37	39	44	50	47	46	50	47	51
No shortage	21	21	26	31	34	42	62	74	60	51	50	42	43	45	49	50	29	30	21	21	30	28
<b>ELECTRICIANS</b>																						
Serious shortage	15	17	12	9	6	4	2	2	5	7	9	7	5	7	4	4	11	8	15	10	7	7
Some shortage	47	43	42	39	40	31	24	14	19	29	29	29	30	31	24	25	41	43	44	45	38	34
No shortage	38	40	45	52	55	64	74	84	76	64	62	64	65	62	71	71	49	48	41	45	56	59
<b>EXCAVATORS</b>																						
Serious shortage	13	11	9	8	5	4	2	2	3	4	8	3	5	3	1	-	6	5	7	5	3	5
Some shortage	44	42	36	36	32	24	16	12	13	17	21	23	21	30	23	22	30	28	40	38	31	31
No shortage	43	47	55	56	62	72	82	86	84	80	72	75	74	67	76	77	65	67	53	57	66	64
<b>FRAMING CREWS</b>																						
Serious shortage	34	42	33	27	17	15	7	5	8	12	14	22	14	17	10	5	26	25	31	38	25	31
Some shortage	49	39	44	41	50	45	41	25	29	30	38	31	41	43	41	48	42	45	47	48	48	42
No shortage	17	18	22	32	33	41	52	70	63	58	49	47	45	41	49	47	33	30	22	14	27	27
<b>ROOFERS</b>																						
Serious shortage	14	16	15	9	6	6	3	2	6	8	11	9	7	14	5	5	13	12	20	19	18	21
Some shortage	47	44	43	36	34	31	23	14	21	26	32	33	34	26	36	33	47	50	45	47	42	40
No shortage	39	41	42	55	59	63	74	83	73	66	56	59	59	60	58	63	40	38	35	34	40	39

**Availability of following trades - LABOR (Directly employed by your firm) – HISTORY**  
**(Percent of Respondents) – *continued***

	<b>Jul. 2019</b>	Jul. '18	July '17	Jun. '16	Jun. '15	Jun. '14	Mar. '13	Jun. '12	May '06	Nov. '05	Oct. '05	Jul. '05	Oct. '04	Jul. '04	Dec. '03	Apr. '02	Nov. '00	Jul. '00	Feb. '00	Dec. '98	Sep. '97	Sep. '96
<b>PLUMBERS</b>																						
Serious shortage	<b>18</b>	20	16	11	9	5	2	3	6	11	9	6	5	7	5	5	13	11	17	15	11	9
Some shortage	<b>49</b>	43	41	36	36	33	21	13	19	24	26	28	35	23	26	28	38	41	45	42	30	33
No shortage	<b>33</b>	38	43	53	55	62	77	84	75	65	65	66	61	69	69	67	49	48	39	43	59	58
<b>BRICKLAYERS/ MASONS</b>																						
Serious shortage	<b>26</b>	22	19	16	13	10	6	5	8	8	9	15	11	15	9	10	21	24	26	24	22	19
Some shortage	<b>45</b>	43	44	41	40	39	26	21	19	25	31	24	32	27	40	37	45	38	46	42	41	41
No shortage	<b>30</b>	35	36	43	47	51	67	74	72	67	60	61	57	58	51	53	34	37	29	34	37	40
<b>PAINTERS</b>																						
Serious shortage	<b>14</b>	16	12	10	8	7	2	2	6	7	8	6	6	9	5	4	9	11	11	12	6	12
Some shortage	<b>47</b>	43	44	40	38	31	20	17	15	23	24	31	25	23	28	26	44	41	44	44	41	33
No shortage	<b>38</b>	41	44	51	54	62	78	80	79	70	68	63	69	67	67	70	47	49	46	44	53	55
<b>LANDSCAPING WORKERS</b>																						
Serious shortage	<b>16</b>	13	13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>42</b>	45	35	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>42</b>	42	52	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>FLOORING INSTALLERS</b>																						
Serious shortage	<b>11</b>	11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>47</b>	46	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>42</b>	43	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>DRYWALL INSTALLATION WORKERS</b>																						
Serious shortage	<b>18</b>	17	18	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>48</b>	49	43	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>34</b>	34	39	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

**Availability of following trades - LABOR (Directly employed by your firm) – HISTORY**  
**(Percent of Respondents) - *continued***

	<b>Jul. 2019</b>	Jul. '18	July '17	Jun. '16	Jun. '15	Jun. '14	Mar. '13	Jun. '12	May '06	Nov. '05	Oct. '05	Jul. '05	Oct. '04	Jul. '04	Dec. '03	Apr. '02	Nov. '00	Jul. '00	Feb. '00	Dec. '98	Sep. '97	Sep. '96
<b>CONCRETE WORKERS</b>																						
Serious shortage	<b>23</b>	24	19	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>47</b>	46	44	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>30</b>	31	37	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>WEATHERIZATION WORKERS</b>																						
Serious shortage	<b>7</b>	9	8	6	3	3	1	3	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>46</b>	39	37	32	32	26	19	13	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>47</b>	52	55	62	65	71	79	84	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>HVAC WORKERS</b>																						
Serious shortage	<b>12</b>	15	11	6	3	1	1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>52</b>	43	42	30	26	19	13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>36</b>	42	47	64	72	80	86	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>BUILDING MAINTENANCE MANAGER</b>																						
Serious shortage	<b>11</b>	10	6	5	4	2	2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>36</b>	37	37	28	28	16	11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>53</b>	53	57	67	68	82	87	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Source: HMI Special Survey, NAHB EcHp.

Note: 'na' Not Applicable.



**Availability of following trades – SUBCONTRACTORS’ – HISTORY**  
**(Percent of Respondents)**

	<b>July 2019</b>	July '18	July '17	June '16	June '15	Jun. '14	Mar. '13	Jun. '12	May '06	Nov. '05	Oct. '05	Jul. '05	Oct. '04	Jul. '04	Nov. '00	Jul. '00	Feb. '00	Dec. '98	Sep. '97	Sep. '96
<b>CARPENTERS - ROUGH</b>																				
Serious shortage	<b>31</b>	37	27	26	16	15	8	4	9	11	10	19	11	15	22	26	22	33	23	28
Some shortage	<b>55</b>	53	55	52	58	53	41	27	32	35	38	41	44	42	47	43	62	51	52	48
No shortage	<b>14</b>	10	17	22	25	32	52	69	59	54	52	40	45	44	31	31	17	16	25	24
<b>CARPENTERS - FINISHED</b>																				
Serious shortage	<b>28</b>	28	21	21	16	12	4	3	7	8	8	15	12	6	17	17	17	21	14	15
Some shortage	<b>53</b>	56	58	52	53	51	38	27	30	29	32	36	32	40	49	43	51	54	53	53
No shortage	<b>18</b>	16	21	27	31	37	57	71	63	63	60	49	57	54	34	40	31	25	33	32
<b>ELECTRICIANS</b>																				
Serious shortage	<b>16</b>	17	12	10	8	4	2	2	4	6	6	11	6	7	10	10	11	10	6	7
Some shortage	<b>49</b>	49	50	45	40	38	23	18	22	23	25	28	26	29	40	37	46	43	35	32
No shortage	<b>35</b>	34	38	46	52	59	76	81	74	71	70	61	68	64	50	53	43	47	59	61
<b>EXCAVATORS</b>																				
Serious shortage	<b>15</b>	13	12	11	6	6	1	3	3	3	6	12	5	5	4	6	5	7	3	5
Some shortage	<b>43</b>	45	41	42	40	31	21	14	16	17	20	24	23	29	32	29	40	38	31	30
No shortage	<b>41</b>	42	47	47	54	63	78	83	81	80	74	64	72	66	64	65	55	55	66	65
<b>FRAMING CREWS</b>																				
Serious shortage	<b>35</b>	44	35	33	21	18	9	6	9	12	12	20	13	13	24	25	29	37	26	34
Some shortage	<b>50</b>	45	50	45	52	50	42	29	33	35	36	39	39	41	44	43	53	46	48	42
No shortage	<b>15</b>	11	15	23	27	32	49	65	58	52	52	41	48	46	32	32	18	17	26	24
<b>ROOFERS</b>																				
Serious shortage	<b>15</b>	18	14	11	8	5	3	3	5	7	8	17	9	8	11	11	15	21	14	17
Some shortage	<b>50</b>	51	49	44	36	39	26	19	25	27	28	26	32	37	43	46	50	46	43	43
No shortage	<b>35</b>	32	37	45	56	56	71	79	70	66	64	58	59	56	46	44	35	34	43	40

**Availability of following trades – SUBCONTRACTORS’ – HISTORY**  
**(Percent of Respondents) - continued**

	July 2019	July '18	July '17	June '16	June '15	Jun. '14	Mar. '13	Jun. '12	May '06	Nov. '05	Oct. '05	Jul. '05	Oct. '04	Jul. '04	Nov. '00	Jul. '00	Feb. '00	Dec. '98	Sep. '97	Sep. '96
<b>PLUMBERS</b>																				
Serious shortage	19	21	15	13	11	6	2	3	6	8	7	15	8	6	12	11	14	12	8	8
Some shortage	51	47	49	43	39	36	26	17	25	26	25	24	30	34	40	39	47	41	33	32
No shortage	30	33	37	44	50	57	73	80	69	65	69	61	62	60	48	51	40	46	58	60
<b>BRICKLAYERS/ MASONS</b>																				
Serious shortage	28	25	20	19	14	10	6	5	6	9	5	18	7	14	16	17	25	24	19	24
Some shortage	46	48	49	48	41	42	29	23	29	26	30	25	33	33	41	42	47	46	43	39
No shortage	26	27	31	33	44	48	65	72	65	66	65	57	60	53	43	41	28	30	39	37
<b>PAINTERS</b>																				
Serious shortage	17	18	12	11	8	7	3	2	5	4	5	12	5	4	9	11	7	10	8	9
Some shortage	49	50	50	43	42	39	22	20	17	24	20	24	25	29	39	37	50	46	38	39
No shortage	34	32	38	45	50	54	76	79	78	72	75	63	70	67	52	52	43	44	54	52
<b>LANDSCAPING WORKERS</b>																				
Serious shortage	15	14	12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	44	51	40	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	41	35	47	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>FLOORING INSTALLERS</b>																				
Serious shortage	12	13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	52	48	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	35	39	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>DRYWALL INSTALLATION WORKERS</b>																				
Serious shortage	19	19	20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	50	52	48	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	31	28	31	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

**Availability of following trades – SUBCONTRACTORS’ – HISTORY  
(Percent of Respondents)**

	<b>July 2019</b>	July '18	July '17	June '16	June '15	Jun. '14	Mar. '13	Jun. '12	May '06	Nov. '05	Oct. '05	Jul. '05	Oct. '04	Jul. '04	Nov. '00	Jul. '00	Feb. '00	Dec. '98	Sep. '97	Sep. '96
<b>CONCRETE WORKERS</b>																				
Serious shortage	<b>24</b>	25	18	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>49</b>	52	51	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>27</b>	22	31	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>WEATHERIZATION WORKERS</b>																				
Serious shortage	<b>8</b>	8	8	6	3	3	0	3	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>45</b>	42	41	39	33	28	20	15	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>47</b>	50	52	55	63	68	79	82	na	na	na	na	na	na	na	na	na	na	na	na
<b>HVAC</b>																				
Serious shortage	<b>13</b>	14	11	10	7	3	1	1	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>52</b>	50	50	38	36	30	21	14	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>35</b>	36	38	52	58	67	78	84	na	na	na	na	na	na	na	na	na	na	na	na
<b>BUILDING MAINTENANCE MANAGER</b>																				
Serious shortage	<b>9</b>	10	7	5	4	4	1	1	na	na	na	na	na	na	na	na	na	na	na	na
Some shortage	<b>39</b>	37	39	30	27	24	19	12	na	na	na	na	na	na	na	na	na	na	na	na
No shortage	<b>52</b>	53	54	65	69	73	80	87	na	na	na	na	na	na	na	na	na	na	na	na

Source: HMI Special Survey, NAHB EchP Group.

Note: “na” denotes Not Applicable

**AVERAGE PERCENT**  
**Availability of LABOR (Directly employed by your firm)**

<b>15 different types of trades* +</b>	<b>July 2019</b>	<b>July '18</b>	<b>July '17</b>	<b>Jun. '16</b>	<b>Jun. '15</b>	<b>Jun. '14</b>	<b>Mar. '13</b>	<b>Jun. '12</b>
Serious shortage	<b>18</b>	20	16	13	9	7	3	3
Some shortage	<b>47</b>	43	42	38	39	33	25	17
No shortage	<b>35</b>	37	42	49	52	60	72	80

<b>12 different types of trades** ++ @</b>	<b>July 2019</b>	<b>July '18</b>	<b>July '17</b>	<b>Jun. '16</b>	<b>Jun. '15</b>	<b>Jun. '14</b>	<b>Mar. '13</b>	<b>Jun. '12</b>
Serious shortage	<b>18</b>	20	16	13	9	7	3	3
Some shortage	<b>47</b>	43	42	38	39	33	25	17
No shortage	<b>34</b>	37	41	49	52	60	72	80

<b>9 different types of trades ^^</b>	<b>July 2019</b>	<b>July '18</b>	<b>July '17</b>	<b>Jun. '16</b>	<b>Jun. '15</b>	<b>Jun. '14</b>	<b>Mar. '13</b>	<b>Jun. '12</b>	<b>May '06</b>	<b>Nov. '05</b>	<b>Oct. '05</b>
Serious shortage	<b>21</b>	23	19	15	10	8	4	3	7	9	11
Some shortage	<b>48</b>	43	44	41	42	36	27	17	22	27	30
No shortage	<b>31</b>	33	37	45	48	56	69	80	71	64	59

<b>9 different types of trades ^^</b>	<b>Jul. '05</b>	<b>Oct. '04</b>	<b>Jul. '04</b>	<b>Dec. '03</b>	<b>Apr. '02</b>	<b>Nov. '00</b>	<b>Jul. '00</b>	<b>Feb. '00</b>	<b>Dec. '98</b>	<b>Sep. '97</b>	<b>Sep. '96</b>
Serious shortage	12	9	12	7	5	16	16	22	21	16	17
Some shortage	32	34	32	33	35	43	42	45	45	41	39
No shortage	56	57	55	60	61	41	41	33	34	44	44

**Availability of SUBCONTRACTORS**

<b>15 different types of trades* +</b>	<b>July 2019</b>	<b>July '18</b>	<b>July '17</b>	<b>Jun. '16</b>	<b>Jun. '15</b>	<b>Jun. '14</b>	<b>Mar. '13</b>	<b>Jun. '12</b>
Serious shortage	19	21	16	15	10	8	3	3
Some shortage	48	49	48	43	42	38	27	20
No shortage	32	31	36	42	48	54	69	77

<b>12 different types of trades** ++</b>	<b>July 2019</b>	<b>July '18</b>	<b>July '17</b>	<b>Jun. '16</b>	<b>Jun-15</b>	<b>Jun. '14</b>	<b>Mar. '13</b>	<b>Jun. '12</b>
Serious shortage	20	21	18	17	12	9	4	3
Some shortage	49	48	49	46	45	42	30	22
No shortage	32	31	32	37	43	49	66	75

<b>12 different types of trades** ++</b>	<b>Jul. '05</b>	<b>Oct. '04</b>	<b>Jul. '04</b>	<b>Nov. '00</b>	<b>Jul. '00</b>	<b>Feb. '00</b>	<b>Dec. '98</b>	<b>Sep. '97</b>	<b>Sep. '96</b>
Serious shortage	15	8	9	14	15	16	19	13	16
Some shortage	30	32	35	42	40	50	46	42	40
No shortage	55	60	56	44	45	34	35	45	44

<b>9 different types of trades ^^</b>	<b>Jul. 2019</b>	<b>July '18</b>	<b>Jul. '17</b>	<b>Jun. '16</b>	<b>Jun-15</b>	<b>Jun. '14</b>	<b>Mar. '13</b>	<b>Jun. '12</b>	<b>May '06</b>	<b>Nov. '05</b>	<b>Oct. '05</b>
Serious shortage	23	25	19	17	12	9	4	3	6	8	7
Some shortage	50	49	50	46	45	42	30	22	25	27	28
No shortage	28	26	31	37	43	49	66	75	69	66	64

<b>9 different types of trades ^^</b>	<b>Jul. '05</b>	<b>Oct. '04</b>	<b>Jul. '04</b>	<b>Nov. '00</b>	<b>Jul. '00</b>	<b>Feb. '00</b>	<b>Dec. '98</b>	<b>Sep. '97</b>	<b>Sep. '96</b>
Serious shortage	15	8	9	14	15	16	19	13	16
Some shortage	30	32	35	42	40	50	46	42	40
No shortage	55	60	56	44	45	34	35	45	44

**Note:**

**(\*) Carpenter-Rough, Carpenter-Finished, Electricians, Excavators, Framing Crews, Roofers, Plumbers, Bricklayers/Masons, Painters, Landscaping workers, Drywall Installation workers, Concrete workers, Weatherization workers, HVAC workers and Building Maintenance Manager.**

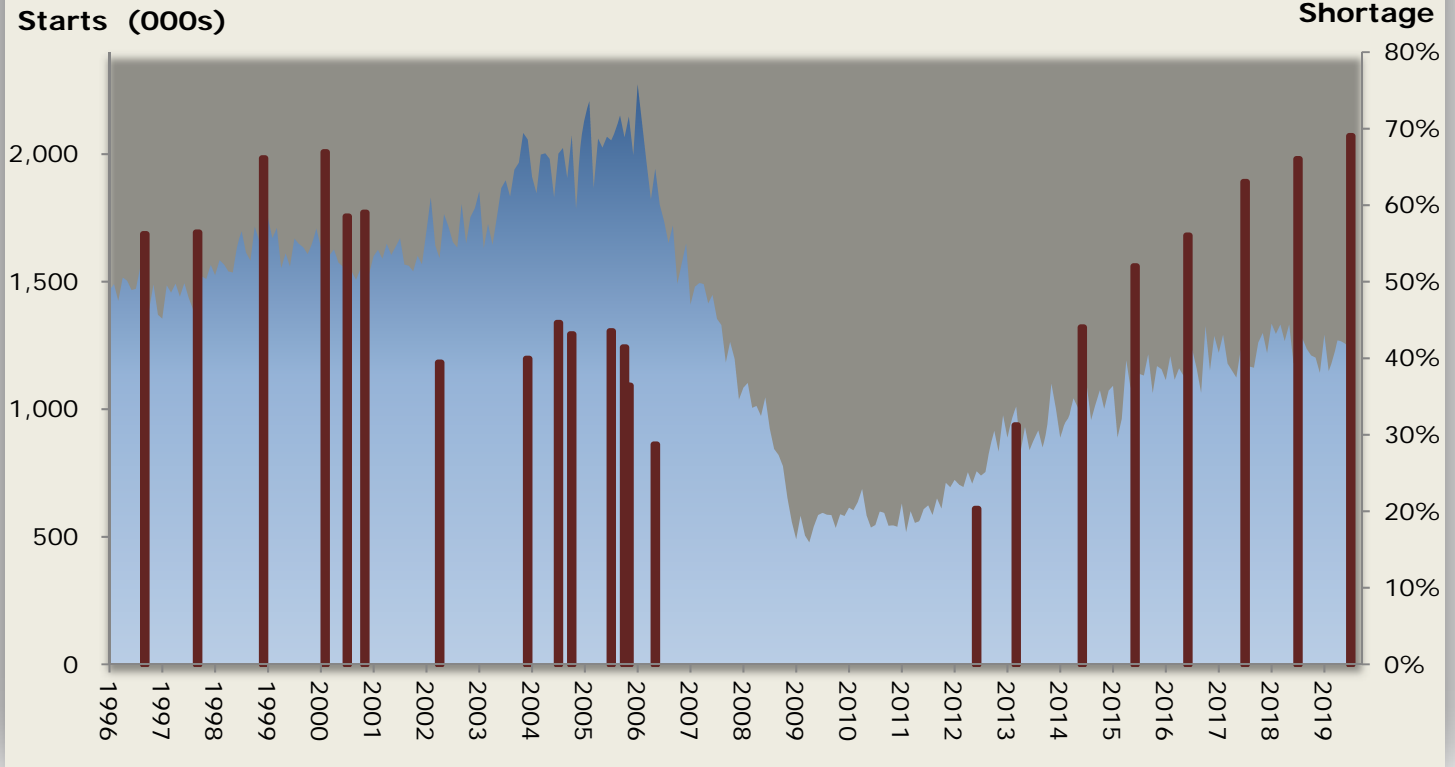
**(\*\*) Carpenter-Rough, Carpenter-Finished, Electricians, Excavators, Framing crews, Roofers, Plumbers, Bricklayers/Masons, Painters, Weatherization workers, HVAC workers and Building Maintenance Manager.**

**(@) Prior to July 2017 the average percent for the availability of trades for Labor and Subcontractors includes only Carpenter-Rough, Carpenter-Finished, Electricians, Excavators, Framing crews, Roofers, Plumbers, Bricklayers/Masons, and Painters.**

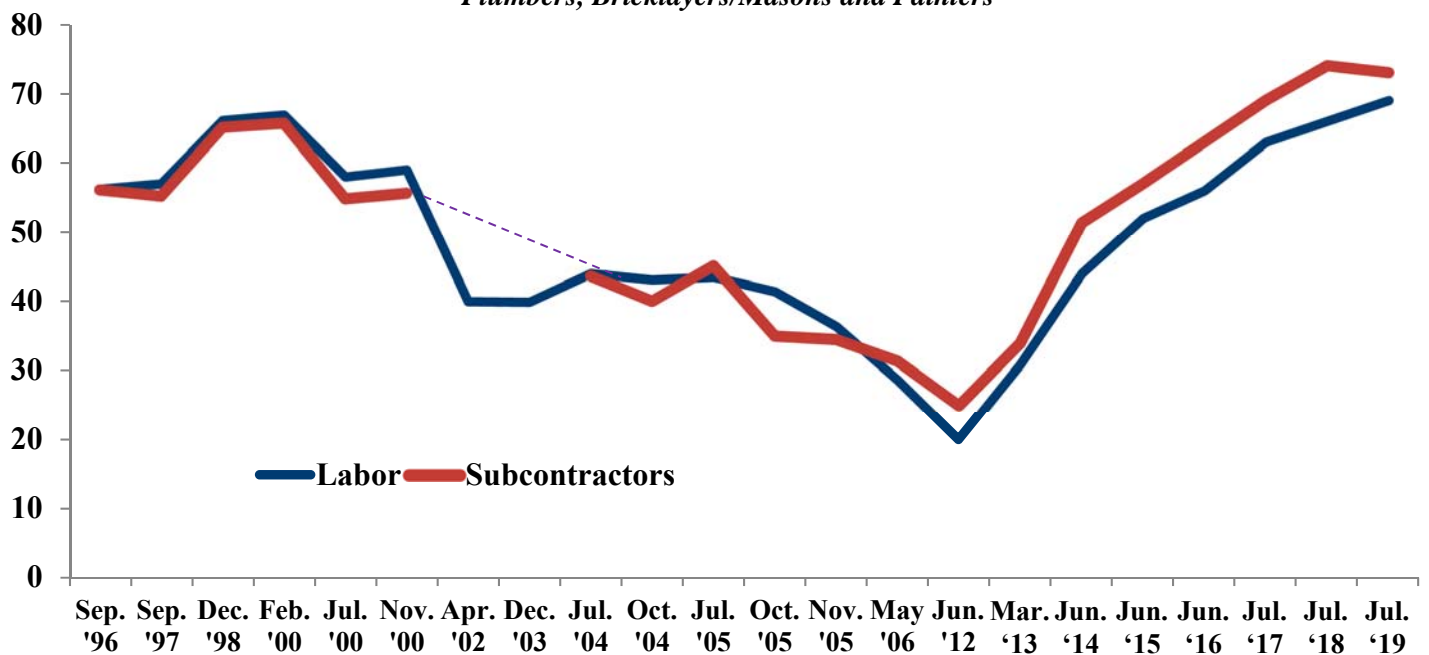
**(^^) Carpenter-Rough, Carpenter-Finished, Electricians, Excavators, Framing crews, Roofers, Plumbers, Bricklayers/Masons and Painters.**

**Note: (+) and (++) Prior to July 2017 the average percent for the availability of trades for Labor and Subcontractors did not include Landscaping, Concrete and Drywall installation workers.**

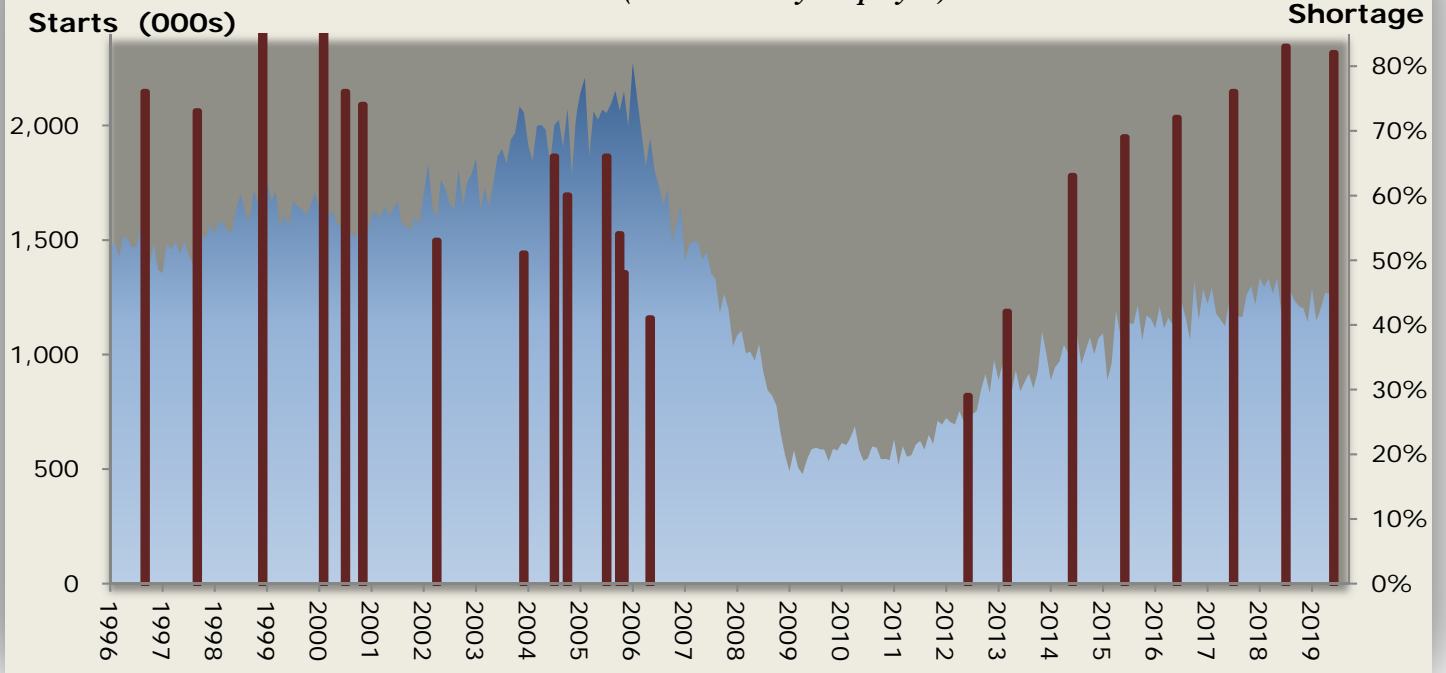
**HOUSING STARTS (AREA) AND LABOR SHORTAGE (Directly employed):  
AVERAGE PERCENTAGE FOR 9 TRADES \* (BARS)**



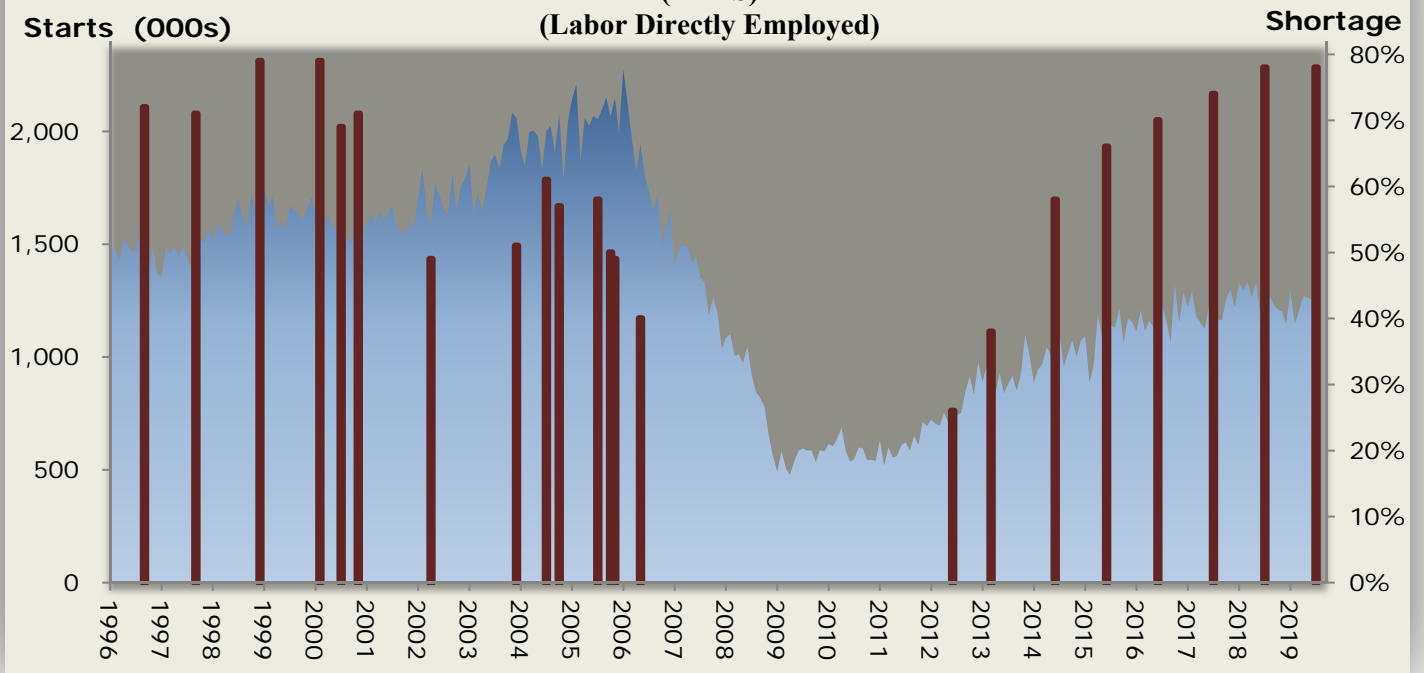
**Labor (directly employed) and Subcontractors' Serious to Some Shortage:  
Average Percent for 9 different trades  
Carpenter-Rough, Carpenter-Finished, Electricians, Excavators, Framing crews, Roofers,  
Plumbers, Bricklayers/Masons and Painters**



**HOUSING STARTS (AREA) and SHORTAGE OF CARPENTERS-ROUGH (BARS)**  
*(Labor Directly Employed)*

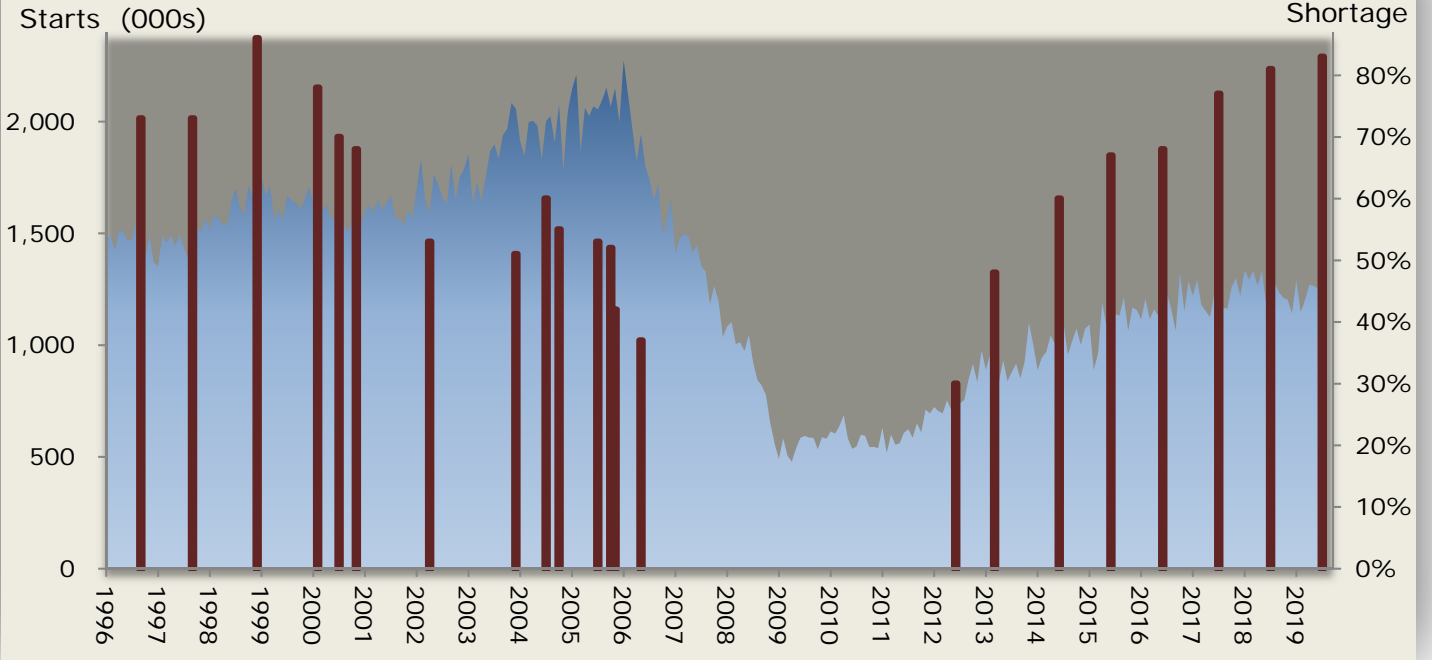


**HOUSING STARTS (AREA) AND SHORTAGE OF CARPENTERS -FINISHED (BARS)**  
*(Labor Directly Employed)*

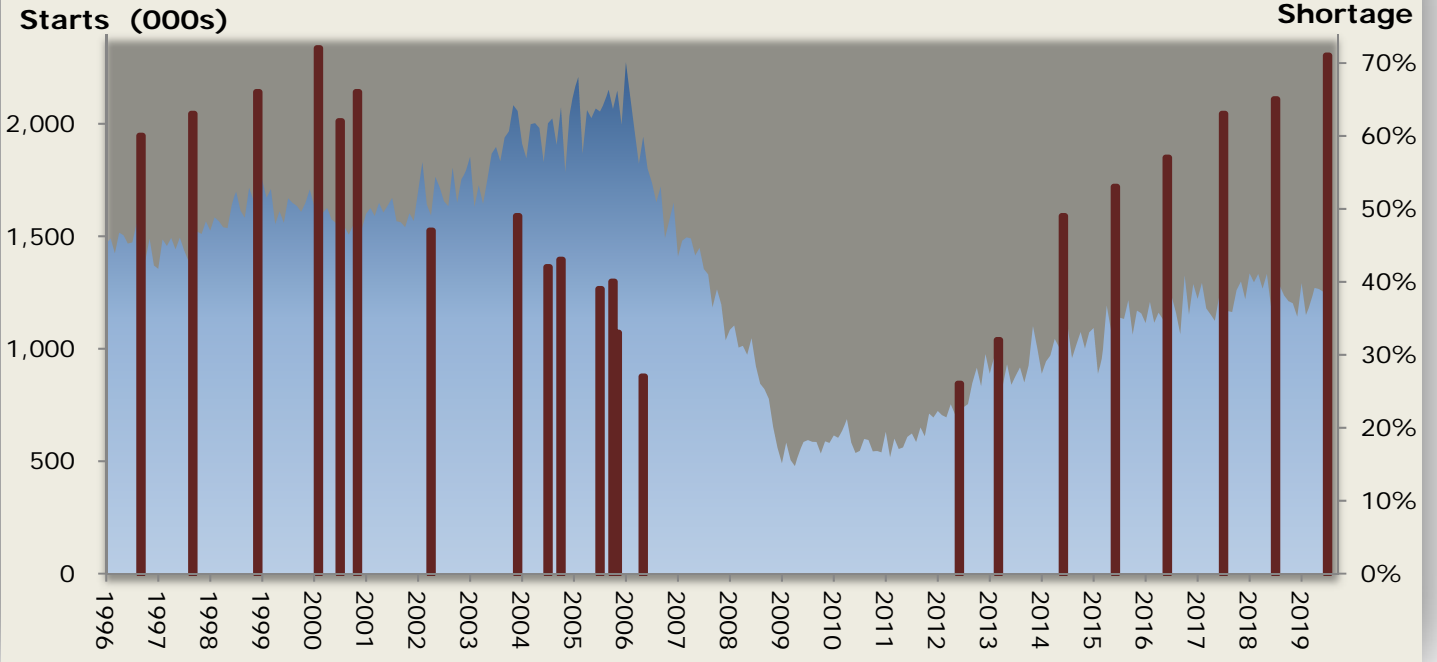




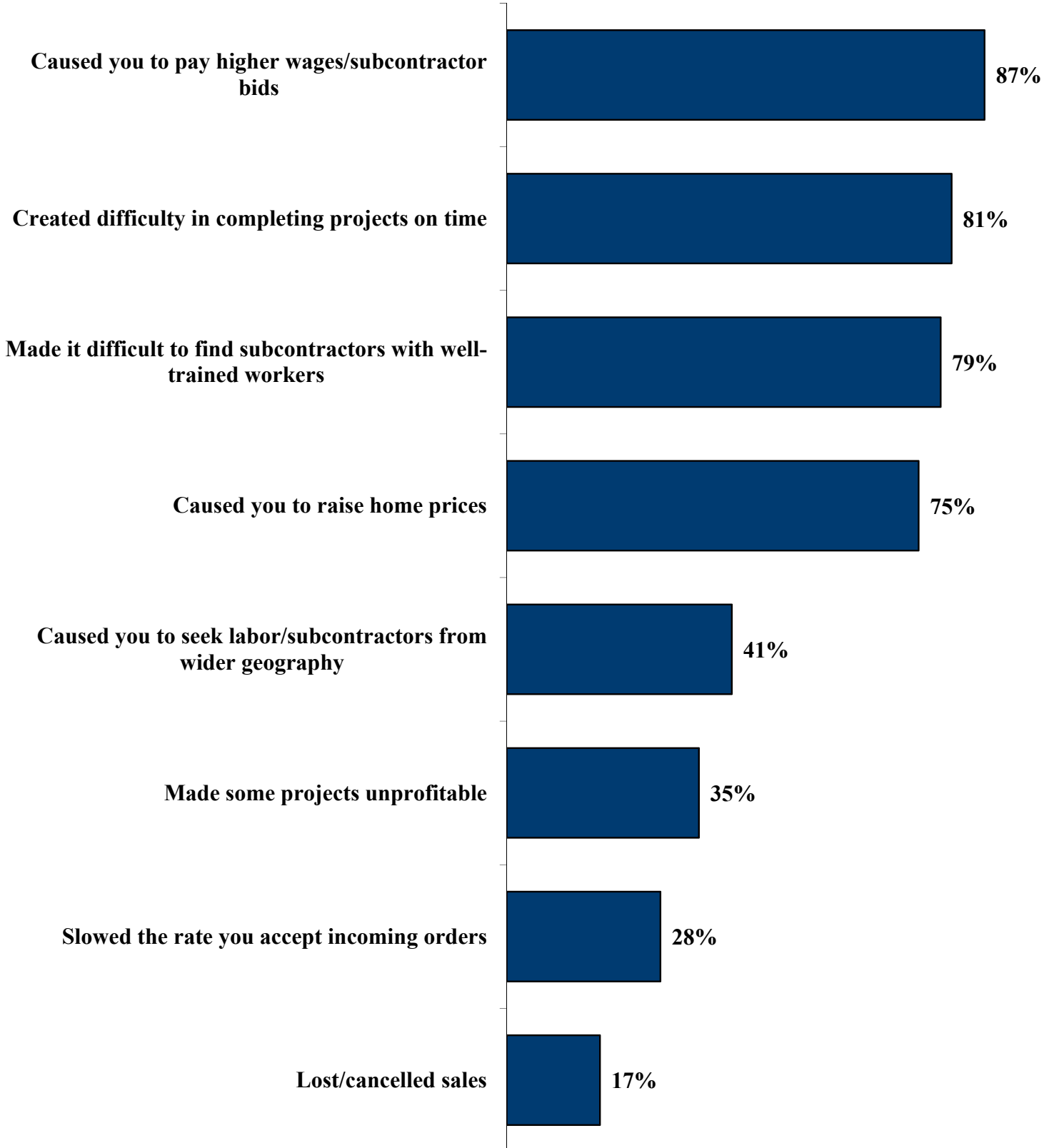
**HOUSING STARTS (AREA) AND SHORTAGE OF *FRAMING CREWS* (BARS)  
(Labor Directly Employed)**



**HOUSING STARTS (AREA) AND SHORTAGE OF *BRICK LAYERS/MASONS* (BARS)  
(Labor Directly Employed)**



**Q2. Indicate if labor shortages over the past 12 months have had any of the following effects on your business.  
(Percent of Respondents)**



**Indicate if labor shortages over the past 12 months have had any of the following effects on your business -  
HISTORY  
(Percent of Respondents)**

	<b>July 2019</b>	<b>Jul- 18</b>	<b>Jul- 17</b>	<b>Jun- 16</b>	<b>Jun- 15</b>	<b>Jun- 14</b>	<b>Mar- 13</b>
	<i>(over the past 12 months)</i>					<i>(over the past 6 months)</i>	
Caused you to pay higher wages/subcontractor bids	<b>87%</b>	84%	82%	75%	66%	65%	54%
Created difficulty in completing projects on time	<b>81</b>	73	72	64	58	60	46
Made it difficult to find subcontractors with well-trained workers	<b>79</b>	na	na	na	na	na	na
Caused you to raise home prices	<b>75</b>	83	74	68	61	62	54
Caused you to seek labor/ subcontractors from wider geography	<b>41</b>	45	47	37	31	36	35
Made some projects unprofitable	<b>35</b>	41	33	28	26	24	28
Slowed the rate you accept incoming orders	<b>28</b>	32	24	20	16	13	10
Lost/cancelled sales	<b>17</b>	26	22	15	15	9	9
Caused you to turn down some projects	<b>na</b>	40	35	28	23	18	15
Other	<b>na</b>	4	3	7	7	7	na

## **Detailed Tables**

**Q1. LABOR AVAILABILITY (Directly employed by your firm)**  
**(Percent of Respondents)**

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Carpenter-Rough</b>									
Serious shortage	28	34	31	23	37	27	35	23	9
Some shortage	54	56	54	54	52	54	46	59	78
No shortage	18	9	15	23	11	19	19	17	13
Responses	351	32	78	176	65	129	97	69	32
<b>Carpenter-Finished</b>									
Serious shortage	27	25	27	27	29	30	32	24	3
Some shortage	51	56	52	49	54	49	46	57	75
No shortage	21	19	21	24	17	21	22	19	22
Responses	350	32	77	176	65	131	96	67	32
<b>Electricians</b>									
Serious shortage	15	17	14	13	20	10	25	10	10
Some shortage	47	30	50	48	50	54	38	54	48
No shortage	38	53	36	38	30	36	37	37	42
Responses	340	30	74	172	64	127	95	63	31
<b>Excavators</b>									
Serious shortage	13	6	10	17	7	10	16	6	15
Some shortage	44	48	47	41	49	42	43	58	44
No shortage	43	45	44	42	43	48	41	36	41
Responses	342	31	73	171	67	126	95	64	34
<b>Framing Crews</b>									
Serious shortage	34	29	39	32	35	33	36	28	22
Some shortage	49	58	46	47	52	48	46	55	69
No shortage	17	13	15	21	12	20	18	16	9
Responses	343	31	74	173	65	126	94	67	32
<b>Roofers</b>									
Serious shortage	14	17	9	14	17	12	18	9	17
Some shortage	47	50	49	45	48	45	46	48	55
No shortage	39	33	42	41	34	43	36	42	28
Responses	339	30	74	171	64	127	95	64	29

**Q1. LABOR AVAILABILITY (Directly employed by your firm)**  
**(Percent of Respondents) - continued**

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Plumbers</b>									
Serious shortage	18	7	18	19	22	16	24	13	20
Some shortage	49	53	46	48	55	50	45	59	47
No shortage	33	40	36	33	23	34	31	29	33
Responses	337	30	74	169	64	126	94	63	30
<b>Bricklayers/Masons</b>									
Serious shortage	26	21	26	30	17	25	27	24	23
Some shortage	45	38	40	45	51	43	43	49	53
No shortage	30	41	34	25	32	32	30	27	23
Responses	337	29	73	172	63	127	93	63	30
<b>Painters</b>									
Serious shortage	14	13	11	15	17	11	20	12	10
Some shortage	47	23	54	46	56	45	46	60	47
No shortage	38	63	35	39	27	45	34	28	43
Responses	338	30	74	171	63	128	96	60	30
<b>Landscaping workers</b>									
Serious shortage	16	13	19	14	19	13	18	23	3
Some shortage	42	30	39	43	50	41	46	37	43
No shortage	42	57	42	43	31	46	36	40	53
Responses	336	30	72	170	64	127	95	60	30
<b>Flooring Installers</b>									
Serious shortage	11	10	8	11	16	8	15	11	7
Some shortage	47	43	49	43	56	50	45	51	37
No shortage	42	47	42	46	29	42	40	38	57
Responses	337	30	73	171	63	127	95	61	30
<b>Drywall Installation workers</b>									
Serious shortage	18	10	15	19	26	20	18	16	7
Some shortage	48	53	48	47	50	50	45	55	57
No shortage	34	37	37	35	24	30	37	29	37
Responses	337	30	73	172	62	126	95	62	30

**Q1. LABOR AVAILABILITY (Directly employed by your firm)**  
**(Percent of Respondents) - continued**

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Concrete workers</b>									
Serious shortage	23	23	22	19	34	21	25	22	10
Some shortage	47	33	46	50	45	50	44	47	57
No shortage	30	43	32	31	20	30	31	31	33
Responses	338	30	74	170	64	125	95	64	30
<b>Weatherization workers</b>									
Serious shortage	7	7	6	7	10	10	9	2	
Some shortage	46	48	48	46	42	48	46	42	39
No shortage	47	45	46	47	48	42	46	56	61
Responses	319	29	69	161	60	117	94	57	28
<b>HVAC workers</b>									
Serious shortage	12	10	10	12	16	12	14	13	7
Some shortage	52	53	60	45	62	48	59	56	50
No shortage	36	37	30	43	22	40	27	31	43
Responses	337	30	73	171	63	127	95	61	30
<b>Building Maintenance Manager</b>									
Serious shortage	11	12	8	11	16	8	10	16	11
Some shortage	36	35	44	37	27	38	42	38	29
No shortage	53	54	48	53	57	54	48	46	61
Responses	297	26	63	152	56	108	86	56	28

**Q1. SUBCONTRACTORS' AVAILABILITY**  
(Percent of Respondents)

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Carpenter-Rough</b>									
Serious shortage	31	31	36	24	41	33	33	26	13
Some shortage	55	60	53	56	52	53	49	62	79
No shortage	14	9	11	19	7	14	19	13	8
Responses	386	35	83	197	71	135	107	78	39
<b>Carpenter-Finished</b>									
Serious shortage	28	21	27	28	33	33	29	25	8
Some shortage	53	61	57	50	54	52	48	61	63
No shortage	18	18	16	22	13	16	23	14	29
Responses	380	33	81	194	72	135	106	76	38
<b>Electricians</b>									
Serious shortage	16	3	12	17	24	16	20	15	5
Some shortage	49	44	53	45	55	50	44	54	53
No shortage	35	53	35	37	21	34	35	31	42
Responses	384	34	81	198	71	139	108	74	38
<b>Excavators</b>									
Serious shortage	15	11	11	16	20	13	18	12	18
Some shortage	43	37	44	43	48	45	44	51	29
No shortage	41	51	44	41	32	42	38	37	53
Responses	384	35	81	197	71	138	108	75	38
<b>Framing Crews</b>									
Serious shortage	35	24	37	33	45	38	32	31	21
Some shortage	50	62	53	46	52	49	48	59	63
No shortage	15	15	10	22	3	14	19	10	16
Responses	387	34	83	199	71	136	108	78	38
<b>Roofers</b>									
Serious shortage	15	17	10	15	23	14	18	12	18
Some shortage	50	46	56	48	51	52	46	55	49
No shortage	35	37	34	37	27	33	36	33	33
Responses	385	35	82	197	71	138	108	75	39



**Q1. SUBCONTRACTORS' AVAILABILITY**  
(Percent of Respondents) - continued

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Plumbers</b>									
Serious shortage	19	6	17	18	31	18	23	16	18
Some shortage	51	55	48	49	58	53	50	54	50
No shortage	30	39	35	32	11	29	27	30	32
Responses	383	33	81	198	71	139	107	74	38
<b>Bricklayers/Masons</b>									
Serious shortage	28	29	27	30	24	30	29	25	18
Some shortage	46	38	41	48	49	47	41	51	51
No shortage	26	32	32	22	27	23	31	24	31
Responses	381	34	81	196	70	137	108	72	39
<b>Painters</b>									
Serious shortage	17	15	12	17	21	14	21	15	11
Some shortage	49	24	53	49	56	51	46	58	45
No shortage	34	62	35	33	23	35	33	27	45
Responses	383	34	81	198	70	138	109	73	38
<b>Landscaping workers</b>									
Serious shortage	15	12	12	13	27	15	14	18	10
Some shortage	44	38	44	44	46	42	45	43	41
No shortage	41	50	43	43	27	42	41	39	49
Responses	381	34	81	196	70	137	107	72	39
<b>Flooring Installers</b>									
Serious shortage	12	12	9	11	20	9	16	10	11
Some shortage	52	53	53	50	59	54	49	59	55
No shortage	35	35	38	39	21	37	35	32	34
Responses	381	34	81	196	70	137	108	73	38
<b>Drywall Installation workers</b>									
Serious shortage	19	12	15	17	33	21	21	14	8
Some shortage	50	56	50	48	51	53	40	60	55
No shortage	31	32	35	35	16	26	39	26	37
Responses	379	34	80	196	69	136	107	73	38

**Q1. SUBCONTRACTORS' AVAILABILITY**  
*(Percent of Respondents) - continued*

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Concrete workers</b>									
Serious shortage	24	23	20	21	36	23	25	23	10
Some shortage	49	37	52	50	46	51	47	51	54
No shortage	27	40	28	28	17	26	28	26	36
Responses	382	35	81	197	69	136	108	74	39
<b>Weatherization workers</b>									
Serious shortage	8	6	5	8	11	9	11	3	
Some shortage	45	42	49	44	44	47	45	41	36
No shortage	47	52	45	48	45	44	44	56	64
Responses	354	31	73	184	66	128	102	66	33
<b>HVAC workers</b>									
Serious shortage	13	9	7	13	21	13	17	11	8
Some shortage	52	50	64	45	60	50	54	57	50
No shortage	35	41	28	42	19	37	30	32	42
Responses	380	34	81	195	70	137	108	72	38
<b>Building Maintenance Manager</b>									
Serious shortage	9	8	3	8	17	8	10	8	6
Some shortage	39	31	52	39	31	42	41	39	26
No shortage	52	62	45	53	53	50	49	52	68
Responses	316	26	66	165	59	114	90	61	31

**Q2. Indicate if labor shortages over the past 12 months have had any of the following effects on your business**

*(Percent of Respondents)*

	Total	Region				Total No. of Units Started in 2018			
		NE	MW	S	W	Less than 6	6-24	25-99	100+
<b>Caused you to pay higher wages/subcontractor bids</b>	87	77	87	87	93	86	90	84	90
<b>Caused you to seek labor/subcontractors from wider geography</b>	41	44	48	38	37	32	50	40	50
<b>Made it difficult to find subcontractors with well-trained workers</b>	79	77	73	78	88	77	82	83	73
<b>Caused you to raise home prices</b>	75	74	80	76	70	75	80	74	75
<b>Created difficulty in completing projects on time</b>	81	65	78	82	86	78	81	84	80
<b>Slowed the rate you accept incoming orders</b>	28	24	28	27	33	34	27	18	25
<b>Lost/cancelled sales</b>	17	9	18	19	16	19	23	8	20
<b>Made some projects unprofitable</b>	35	32	29	40	30	41	39	25	20
<b>Responses</b>	386	34	83	193	76	138	104	77	40

**Appendix I: Survey Questionnaire: HMI Special Questions for July 2019**

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

Type of labor	<u>Labor</u> Availability <i>Directly employed by your firm</i>			<u>Subcontractors'</u> Availability		
	Serious shortage	Some shortage	No shortage	Serious shortage	Some shortage	No shortage
Carpenters-rough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carpenters-finished	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electricians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excavators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----	-----	-----	-----	-----	-----	-----
Framing crews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roofers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plumbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bricklayers/Masons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----	-----	-----	-----	-----	-----	-----
Painters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landscaping workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flooring Installers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drywall Installation workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----	-----	-----	-----	-----	-----	-----
Concrete workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weatherization workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building maintenance manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2. Please indicate if labor shortages over the past 12 months have had any of the following effects on your business (*Check all that apply*).**

- |   |  |
|---|--|
| <input type="checkbox"/> Caused you to pay higher wages/subcontractor bids                  | <input type="checkbox"/> Created difficulty in completing projects on time |
| <input type="checkbox"/> Caused you to seek labor/subcontractors from wider geography       | <input type="checkbox"/> Slowed the rate you accept incoming orders        |
| <input type="checkbox"/> Made it difficult to find subcontractors with well-trained workers | <input type="checkbox"/> Lost/cancelled sales                              |
| <input type="checkbox"/> Caused you to raise home prices                                    | <input type="checkbox"/> Made some projects unprofitable                   |

**THANK YOU**