



**Home Innovation**  
RESEARCH LABS™

National Survey of  
Consumer  
Interest in Resiliency

*Prepared For*

**NATIONAL ASSOCIATION OF HOME BUILDERS  
1201 15<sup>TH</sup> STREET NW  
WASHINGTON DC 20005**

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## BACKGROUND

The unusual number of significant natural disasters occurring over the past few years, coupled with ongoing concerns over the effects of climate change, have prompted action at every level of government to increase the resiliency of communities, infrastructure, and buildings. The resiliency plans, policies and programs that have been put into place and those under consideration will significantly impact how and where new homes and communities are built and greatly influence how existing structures and cities are reengineered, rebuilt and/or remodeled.

To respond to these challenges, NAHB established a Resiliency Working Group to provide advice and oversight regarding NAHB's policy, strategy and tactics for addressing the full and integrated range of resiliency issues and to ensure NAHB is taking a comprehensive and coordinated approach. The Working Group developed a comprehensive strategy to guide NAHB's efforts to ensure any initiatives related to resiliency do not adversely impact the housing industry or NAHB's members' ability to provide safe, decent, and affordable housing in all areas of the country.

As part of this strategy, NAHB's Construction Technology Research Subcommittee commissioned Home Innovation Research Labs to conduct a nationwide survey among consumers, balanced to US Census on key demographic data (age, income, education, race, gender), using Home Innovation's research panels and sample sources.

## OVERALL SUMMARY OF FINDINGS

Most consumers believe new homes, built according to modern building codes, are more resistant to natural disasters than homes built in prior decades. Living in an area prone to a natural disaster doesn't necessarily lead consumers to perceive a risk of that natural disaster occurring. But perception of risk does affect assessment of damage from natural disasters.

The amount consumers are willing to pay extra for a new home built to minimize the effect of a natural disaster depends on the nature of the disaster—from a median of \$0 to avoid damage from a snowstorm to a median of \$1,000 to prevent damage due to a flood or tornado. However, perception of risk and household income have a significant impact on willingness to pay more for a home built to exceed current building codes, to further minimize damage from a natural disaster. Those with lower levels of perceived risk and lower incomes are the least willing to pay more.

## DETAILED FINDINGS FROM NATIONWIDE SURVEY AMONG CONSUMERS

A national survey was conducted among a random sample of 797 consumers, 18 and older, balanced to US census on key demographics. For subgroup analyses, augment interviews were conducted among consumers in the Northeast, Midwest and West to obtain a minimum of approximately 300 completed interviews in each of the 4 major census regions. In total, 1201 interviews were completed among consumers.

### Perceptions of Risk for Natural Disasters and Resiliency of New Homes

Living in an area prone to a natural disaster does not necessarily lead to the perception of a severe or high risk of that natural disaster occurring. So results could be analyzed based on where natural disasters tend to occur, hazard maps or risk data from ASCE 7 and the I-Codes, FEMA, IBHS and Verisk were used to create lists of states at risk of certain natural hazards. It should be noted that while someone may live in a state prone to certain natural disasters, they may live in a part of the state where they are less likely to happen—e.g., someone living in Eastern New York (Long Island or New York City) is more at risk of a hurricane than someone in Buffalo. Among those living in states at risk, the proportions perceiving a significant threat (severe or high risk) of certain natural disasters occurring follows.

- Snowstorms—56% in states at risk perceive a significant threat
- Hail—41% in states at risk perceive a significant threat
- Tornadoes—40% in states at risk perceive a significant threat
- Hurricanes—33% in states at risk perceive a significant threat
- Wildfires—30% in states at risk perceive a significant threat
- Floods—25% in states at risk perceive a significant threat
- Earthquakes—24% in states at risk perceive a significant threat

In total, most (60%) consumers believe new homes, built according to modern building codes, are more resistant to natural disasters than homes built in earlier decades, somewhat more so in the West (63%), particularly in California (69%), than in the Midwest (56%), Northeast (57%), or South (59%).

Perception of risk affects anticipation of damage from natural disasters. Those living in states prone to specific natural disasters are more inclined than those not living in these states to anticipate significant damage to their homes resulting from an occurrence. But those who perceive a significant threat of a natural disaster occurring are even more likely to anticipate severe damage to their homes resulting from an occurrence, particularly if it's a **tornado, earthquake, wildfire, flood or hurricane**.

- Two-thirds of those who perceive a severe/high risk of a tornado, earthquake or a wildfire occurring, anticipate significant damage to their homes from an occurrence
- 59% of those who perceive a severe/high risk of a flood/storm surge occurring, anticipate significant damage to their homes from an occurrence
- 52% of those who perceive a severe/high risk of a hurricane occurring, anticipate significant damage to their homes from an occurrence

(See tables C1-C11.)

## Willingness to Pay More to Minimize Damage from Natural Disasters

The amount consumers are willing to pay extra for a new home built to minimize the effect of a natural disaster depends on the nature of the disaster. Among the total US, the median amount consumers are willing to pay extra (half would pay more, half would pay less) to minimize the effect of specific natural disasters follows.

- Floods—\$1,000
- Tornadoes—\$1,000
- Hurricanes—\$600
- Earthquakes—\$500
- Wildfires—\$200
- Hail—\$100
- Snowstorms—\$0

Household income has a significant impact on willingness to pay more for a home built to exceed current building codes, to further minimize damage from a natural disaster. Not surprisingly, the less one earns, the less one is willing to pay. According to the US Census, median household income in 2017 was \$61,372. Among households with annual incomes less than \$100,000, nearly half would **NOT** pay more for a home built to exceed current building codes, to further minimize damage from an earthquake or wildfire, and almost as many would **NOT** pay more for a home built to exceed current building codes, to further minimize damage from a tornado, hurricane or flood. The median amount would pay extra to further minimize damage from:

- Earthquakes, wildfires, hail or snowstorms is **\$0, among households with incomes less than \$50,000**, and not much more among those with incomes of \$50,000 to less than \$100,000
- Hurricanes or floods is **\$100, among households with incomes less than \$50,000**, and \$1,000 and \$1,100, respectively, among those with incomes of \$50,000 to less than \$100,000
- Tornadoes is **\$300, among households with incomes less than \$50,000**, and \$1,800 among households with incomes of \$50,000 to less than \$100,000

Depending on the natural disaster, nearly a third to almost half of ALL consumers, living in states at risk of a natural disaster, are **NOT willing to pay more for a home built to exceed current building codes, to further minimize damage from a natural disaster.** Those living in areas prone to earthquakes, tornadoes, and hurricanes are the most willing to pay more; those living in states at risk of snowstorms, hail and wildfires are the least willing to pay more.

A survey<sup>1</sup> of residents of California, Memphis and St. Louis, conducted by Dr. Keith Porter from the University of Colorado, suggested about half of homeowners and renters in high-seismic areas would be willing to pay \$3 or more per square foot, extra, for a more resilient home. According to the US Census, the median size of a single-family home built in 2015 was approximately 2,500 square feet. This suggests these respondents from Dr. Porter's study would be willing to pay at least an additional \$7,500 for a more resilient home.

<sup>1</sup>Michael Davis and Keith Porter (2016) The Public's Role in Seismic Design Provisions. Earthquake Spectra: August 2016, Vol. 32, No. 3, pp. 1345-1361. <https://doi.org/10.1193/081715EQS127M>.



Perception of risk is a major influence on willingness to pay more for a home built to minimize damage from a natural disaster, especially from an earthquake. Among those who perceive they live in an area of severe or high risk, a slight majority are willing to pay \$7,500 or more for a home built to exceed current building codes, to further minimize damage from an earthquake, and nearly half are willing to pay \$7,500 or more for a home built to exceed current building codes, to further minimize damage from a hurricane, tornado or flood. If living in an area they perceive as a severe or high risk, the median amount more consumers are willing to pay for a home built to exceed current building codes, to further minimize damage from an/a:

- Earthquake is \$10,000
- Hurricane, tornado or flood is \$5,000
- Wildfire is \$3,500
- Hail is \$1,000
- Snowstorm is \$500

(See tables C12-C18.)

Consumers were also asked questions about their current home and the type of home they might buy. Data for these questions and demographics are included in tables C19-C20.

**Table C1. Perceive Severe/High Risk for Natural Disasters: Region**

	Total US	US CENSUS REGION (Includes Augments)			
		Northeast	South	Midwest	West
Base: Total Respondents	(797)	(282)	(313)	(308)	(298)
<b>Perceive Severe/High Risk for:</b>	%	%	%	%	%
Snow	34	52	15	64	17
Tornado	27	15	33	40	10
Hail	24	21	25	30	12
Hurricane	23	20	37	7	11
Flood/Storm Surge	22	24	28	14	13
Wildfire	18	16	15	6	33
Earthquake	15	16	10	6	28

**Table C2. Perceive Severe/High Risk for Natural Disasters: States at risk of Hurricanes & Floods**

	Total US	LIVE IN STATES AT RISK OF:			
		HURRICANES		FLOODS	
		YES	NO	YES	NO
Base: Total Respondents	(797)	(493)	(708)	(720)	(481)
<b>Perceive Severe/High Risk for:</b>	%	%	%	%	%
Hurricane	23	33	9	27	7
Flood/Storm Surge	22	29	14	25	12

**Table C3. Perceive Severe/High Risk for Natural Disasters: States at risk of Earthquakes & Wildfires**

	Total US	LIVE IN:		LIVE IN STATES AT RISK OF:			
		CALIFORNIA		EARTHQUAKES		WILDFIRES	
		YES	NO	YES	NO	YES	NO
Base: Total Respondents	(797)	(156)	(1045)	(412)	(789)	(359)	(842)
<b>Perceive Severe/High Risk for:</b>	%	%	%	%	%	%	%
Wildfire	18	35	15	24	14	30	12
Earthquake	15	42	11	24	10	25	11

**Table C4. Perceive Severe/High Risk for Natural Disasters: States at risk of Tornadoes, Snowstorms & Hail**

	Total US	LIVE IN STATES AT RISK OF:					
		TORNADOES		SNOWSTORMS		HAIL	
		YES	NO	YES	NO	YES	NO
Base: Total Respondents	(797)	(436)	(765)	(400)	(801)	(208)	(993)
<b>Perceive Severe/High Risk for:</b>	%	%	%	%	%	%	%
Snow	34	50	29	56	27	44	35
Tornado	27	40	17	16	29	41	22
Hail	24	30	17	21	22	41	18

**Table C5. Perceive Extensive/Significant Damage from Natural Disasters: Region**

	Total US	US CENSUS REGION (Includes Augments)			
		Northeast	South	Midwest	West
Base: Total Respondents	(797)	(282)	(313)	(308)	(298)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%
Tornado	46	43	49	53	42
Wildfire	44	42	41	39	55
Earthquake	36	41	30	34	45
Hurricane	33	37	35	35	32
Flood/Storm Surge	33	32	38	33	32
Hail	12	19	11	15	12
Snow	11	18	10	13	15
<b>Believe new homes more resilient than earlier homes</b>	<b>60</b>	<b>57</b>	<b>59</b>	<b>56</b>	<b>63</b>

**Table C6. Perceive Extensive/Significant Damage from Natural Disasters:  
States at risk of Hurricanes & Floods**

	Total US	LIVE IN STATES AT RISK OF:			
		HURRICANES		FLOODS	
		YES	NO	YES	NO
Base: Total Respondents	(797)	(493)	(708)	(720)	(481)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%
Hurricane	33	38	32	37	31
Flood/Storm Surge	33	38	31	35	32
<b>Believe new homes more resilient than earlier homes</b>	<b>60</b>	<b>59</b>	<b>59</b>	<b>62</b>	<b>54</b>

**Table C7. Perceive Extensive/Significant Damage from Natural Disasters:  
States at risk of Earthquakes & Wildfires**

	Total US	LIVE IN:		LIVE IN STATES AT RISK OF:			
		CALIFORNIA		EARTHQUAKES		WILDFIRES	
		YES	NO	YES	NO	YES	NO
Base: Total Respondents	(797)	(156)	(1045)	(412)	(789)	(359)	(842)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%	%	%
Wildfire	44	53	43	52	40	53	40
Earthquake	36	46	36	44	34	41	36
<b>New homes more resilient than old homes</b>	<b>60</b>	<b>69</b>	<b>58</b>	<b>66</b>	<b>56</b>	<b>62</b>	<b>58</b>

**Table C8. Perceive Extensive/Significant Damage from Natural Disasters:  
States at risk of Tornadoes, Snowstorms & Hail**

	Total US	LIVE IN STATES AT RISK OF:					
		TORNADOES		SNOWSTORMS		HAIL	
		YES	NO	YES	NO	YES	NO
Base: Total Respondents	(797)	(436)	(765)	(400)	(801)	(208)	(993)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%	%	%
Tornado	46	53	43	48	46	54	45
Hail	12	14	14	17	13	17	13
Snow	11	13	14	16	12	12	14
<b>New homes more resilient than old homes</b>	<b>60</b>	<b>56</b>	<b>61</b>	<b>58</b>	<b>60</b>	<b>58</b>	<b>59</b>

**Table C9. Perceive Extensive/Significant Damage from Natural Disasters:  
Perceive Risk of Hurricanes & Floods**

	Total US	PERCEIVE SEVERE/HIGH RISK OF:			
		HURRICANES		FLOODS	
		YES	NO	YES	NO
Base: Total Respondents	(797)	(227)	(974)	(241)	(960)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%
Hurricane	33	52	31	51	31
Flood/Storm Surge	33	49	30	59	28
<b>Believe new homes more resilient than earlier homes</b>	<b>60</b>	<b>68</b>	<b>57</b>	<b>65</b>	<b>58</b>

**Table C10. Perceive Extensive/Significant Damage from Natural Disasters:  
Perceive Risk of Earthquakes & Wildfires**

	Total US	PERCEIVE SEVERE/HIGH RISK OF:			
		EARTHQUAKES		WILDFIRES	
		YES	NO	YES	NO
Base: Total Respondents	(797)	(179)	(1022)	(207)	(994)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%
Wildfire	44	59	42	66	40
Earthquake	36	66	32	53	34
<b>Believe new homes more resilient than earlier homes</b>	<b>60</b>	<b>68</b>	<b>58</b>	<b>61</b>	<b>59</b>

**Table C11. Perceive Extensive/Significant Damage from Natural Disasters:  
Perceive Risk of Tornadoes, Snowstorms & Hail**

	Total US	PERCEIVE SEVERE/HIGH RISK OF:					
		TORNADOES		SNOWSTORMS		HAIL	
		YES	NO	YES	NO	YES	NO
Base: Total Respondents	(797)	(300)	(901)	(441)	(760)	(264)	(937)
<b>Perceive Extensive/Significant Damage from:</b>	%	%	%	%	%	%	%
Tornado	46	66	40	53	43	61	43
Hail	12	21	12	17	12	25	11
Snow	11	21	11	19	11	22	11
<b>New homes more resilient than old homes</b>	<b>60</b>	<b>62</b>	<b>58</b>	<b>62</b>	<b>58</b>	<b>61</b>	<b>59</b>

**Table C12. Amount Would Pay Extra to Minimize Damage from an Earthquake**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF EARTHQUAKES		PERCEIVE SEVERE/HIGH RISK OF EARTHQUAKES		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(421)	(229)	(407)	(102)	(534)	(158)	(135)	(121)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	41	35	43	15	45	45	46	27
\$1 - \$999	11	12	13	15	12	21	4	7
\$1,000 - \$7,499	15	12	14	19	13	9	19	18
<b>\$7,500+ (NET)</b>	<b>33</b>	<b>41</b>	<b>29</b>	<b>52</b>	<b>30</b>	<b>25</b>	<b>31</b>	<b>47</b>
\$7500 - \$14,999	10	11	9	11	10	8	11	13
\$15,000 - \$24,999	7	7	7	9	6	6	9	7
\$25,000+	16	23	13	32	14	11	11	27
<b>Median (in thousands)</b>	<b>0.5</b>	<b>2.0</b>	<b>0.2</b>	<b>10.0</b>	<b>0.1</b>	<b>0.0</b>	<b>1.0</b>	<b>5.0</b>
Base: Total Respondents	(797)	(412)	(789)	(179)	(1022)	(351)	(239)	(187)
Don't know	47	44	48	43	48	55	44	35

**Table C13. Amount Would Pay Extra to Minimize Damage from a Tornado**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF TORNADOES		PERCEIVE SEVERE/HIGH RISK OF TORNADOES		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(410)	(224)	(407)	(165)	(466)	(155)	(126)	(120)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	37	32	41	24	43	41	37	31
\$1 - \$999	10	12	11	12	11	17	6	8
\$1,000 - \$7,499	16	16	15	19	14	15	22	11
<b>\$7,500+ (NET)</b>	<b>36</b>	<b>41</b>	<b>32</b>	<b>45</b>	<b>32</b>	<b>27</b>	<b>37</b>	<b>51</b>
\$7500 - \$14,999	9	11	8	10	9	8	10	11
\$15,000 - \$24,999	7	10	6	13	5	5	10	8
\$25,000+	20	20	18	22	18	14	17	32
<b>Median (in thousands)</b>	<b>1.0</b>	<b>2.0</b>	<b>0.5</b>	<b>5.0</b>	<b>0.3</b>	<b>0.3</b>	<b>1.8</b>	<b>10.0</b>
Base: Total Respondents	(797)	(436)	(765)	(300)	(901)	(351)	(239)	(187)
Don't know	49	49	47	45	48	56	47	36

**Table C14. Amount Would Pay Extra to Minimize Damage from a Hurricane**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF HURRICANES		PERCEIVE SEVERE/HIGH RISK OF HURRICANES		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(417)	(272)	(352)	(133)	(491)	(149)	(133)	(126)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	41	30	52	17	49	44	43	34
\$1 - \$999	10	13	9	18	9	17	6	6
\$1,000 - \$7,499	16	19	12	18	15	14	19	17
<b>\$7,500+ (NET)</b>	<b>33</b>	<b>38</b>	<b>26</b>	<b>48</b>	<b>27</b>	<b>25</b>	<b>32</b>	<b>43</b>
\$7500 - \$14,999	10	13	6	17	7	7	12	10
\$15,000 - \$24,999	7	7	6	10	6	6	8	8
\$25,000+	16	18	14	21	14	12	12	25
<b>Median (in thousands)</b>	<b>0.6</b>	<b>2.0</b>	<b>0.0</b>	<b>5.0</b>	<b>0.0</b>	<b>0.1</b>	<b>1.0</b>	<b>2.8</b>
Base: Total Respondents	(797)	(493)	(708)	(227)	(974)	(351)	(239)	(187)
Don't know	48	45	50	41	50	58	44	33

**Table C15. Amount Would Pay Extra to Minimize Damage from a Flood**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF FLOODS		PERCEIVE SEVERE/HIGH RISK OF FLOODS		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(422)	(402)	(253)	(143)	(512)	(153)	(140)	(120)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	37	36	39	26	40	42	37	28
\$1 - \$999	11	13	11	12	12	18	6	8
\$1,000 - \$7,499	21	16	21	18	18	18	26	18
<b>\$7,500+ (NET)</b>	<b>32</b>	<b>35</b>	<b>28</b>	<b>44</b>	<b>30</b>	<b>20</b>	<b>32</b>	<b>47</b>
\$7500 - \$14,999	12	10	13	15	10	8	16	12
\$15,000 - \$24,999	5	5	4	6	5	3	6	6
\$25,000+	15	20	11	23	15	9	10	29
<b>Median (in thousands)</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>5.0</b>	<b>0.5</b>	<b>0.1</b>	<b>1.1</b>	<b>5.0</b>
Base: Total Respondents	(797)	(720)	(481)	(241)	(960)	(351)	(239)	(187)
Don't know	47	44	47	41	47	56	41	36

**Table C16. Amount Would Pay Extra to Minimize Damage from a Wildfire**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF WILDFIRES		PERCEIVE SEVERE/HIGH RISK OF WILDFIRES		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(414)	(179)	(443)	(102)	(520)	(154)	(130)	(122)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	44	41	45	29	47	46	47	38
\$1 - \$999	11	10	12	8	12	19	5	7
\$1,000 - \$7,499	17	15	17	23	15	15	21	16
<b>\$7,500+ (NET)</b>	<b>28</b>	<b>33</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>20</b>	<b>27</b>	<b>40</b>
\$7500 - \$14,999	7	8	8	7	8	6	6	9
\$15,000 - \$24,999	5	3	4	7	3	3	6	7
\$25,000+	16	22	13	26	14	11	15	24
<b>Median (in thousands)</b>	<b>0.2</b>	<b>0.3</b>	<b>0.1</b>	<b>3.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.4</b>	<b>2.9</b>
Base: Total Respondents	(797)	(359)	(842)	(207)	(994)	(351)	(239)	(187)
Don't know	48	50	47	51	48	56	46	35

**Table C17. Amount Would Pay Extra to Minimize Damage from a Hail**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF HAIL		PERCEIVE SEVERE/HIGH RISK OF HAIL		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(432)	(112)	(540)	(155)	(497)	(161)	(144)	(119)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	45	44	45	33	48	49	44	39
\$1 - \$999	13	17	13	15	13	17	14	6
\$1,000 - \$7,499	23	24	22	27	21	20	24	25
<b>\$7,500+ (NET)</b>	<b>19</b>	<b>15</b>	<b>20</b>	<b>26</b>	<b>18</b>	<b>13</b>	<b>17</b>	<b>30</b>
\$7500 - \$14,999	8	4	8	10	7	5	9	11
\$15,000 - \$24,999	3	5	3	4	3	2	4	3
\$25,000+	8	6	9	12	8	6	4	16
<b>Median (in thousands)</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>1.0</b>
Base: Total Respondents	(797)	(208)	(993)	(264)	(937)	(351)	(239)	(187)
Don't know	46	46	46	41	47	54	40	36

**Table C18. Amount Would Pay Extra to Minimize Damage from a Snowstorm**

	TOTAL SAMPLE	LIVE IN STATES AT RISK OF SNOWSTORM		PERCEIVE SEVERE/HIGH RISK OF SNOWSTORM		HOUSEHOLD INCOME		
		YES	NO	YES	NO	<\$50K	\$50-\$99.9K	\$100+
Base: Total Answering	(464)	(225)	(455)	(250)	(430)	(173)	(153)	(130)
<b>\$ Amount Would Pay Extra</b>	%	%	%	%	%	%	%	%
\$0	54	47	54	38	60	58	57	44
\$1 - \$999	10	11	13	14	11	16	7	5
\$1,000 - \$7,499	17	21	14	20	14	13	16	24
<b>\$7,500+ (NET)</b>	<b>20</b>	<b>21</b>	<b>19</b>	<b>29</b>	<b>15</b>	<b>14</b>	<b>20</b>	<b>28</b>
\$7500 - \$14,999	6	11	5	12	4	5	8	6
\$15,000 - \$24,999	5	2	5	6	3	2	6	7
\$25,000+	9	8	9	11	8	7	6	15
<b>Median (in thousands)</b>	0.0	0.1	0.0	0.5	0.0	0.0	0.0	1.0
Base: Total Respondents	(797)	(400)	(801)	(441)	(760)	(351)	(239)	(187)
Don't know	42	44	43	43	43	51	36	30



Table C19. Consumer Residence and Home Types Like to Buy by Region

	US CENSUS REGION (Includes Augments)				
	Total US	Northeast	South	Midwest	West
Base: Total Respondents	(797)	(282)	(313)	(308)	(298)
	%	%	%	%	%
<b>LENGTH OF TIME AT CURRENT RESIDENCE:</b>					
Less than 3 years	26	23	27	27	27
3 to 10 years	36	29	40	30	40
More than 10 years	38	48	34	43	33
<b>TYPE OF HOME CURRENTLY RESIDE:</b>					
Single-family detached	68	58	69	71	69
Multifamily apartment/condo	17	23	16	15	19
Townhouse/duplex	8	11	7	8	5
Manufactured/mobile home/other	8	8	7	6	7
<b>OWN HOME:</b>	<b>63</b>	<b>63</b>	<b>62</b>	<b>67</b>	<b>59</b>
<b>CURRENT MARKET VALUE OF HOME:</b>					
Less than \$250,000	57	48	68	73	38
\$250,000 to \$499,999	29	31	26	24	34
\$500,000 or more	14	21	8	2	28
<b>Mean (\$000)</b>	<b>282</b>	<b>365</b>	<b>224</b>	<b>202</b>	<b>360</b>
<b>WHEN MIGHT BUY A HOME:</b>					
Bought home in past 3 years w/no plans to buy again soon	6	4	7	6	4
Less than 1 year	5	7	4	7	3
One to 3 years	19	22	22	17	18
Four to 6 years or more	21	20	21	16	28
Not sure	15	16	15	13	13
No plans to buy a home	33	31	30	40	34
<b>TYPE OF HOME LIKE TO BUY:</b>					
Newly constructed	25	28	26	20	24
Existing home	24	25	21	36	26
Either a new or existing home	51	47	53	44	50
Single-family detached	72	61	76	74	77
Townhouse/duplex	14	21	13	11	13
Multifamily apartment/condo	12	18	10	13	11
Manufactured/mobile home/other	13	11	12	14	14
<b>EXPECT TO PAY FOR NEW HOME:</b>					
Less than \$250,000	49	40	55	61	39
\$250,000 to \$499,999	27	27	27	21	30
\$500,000 or more	13	22	8	8	20
<b>Mean (\$000)</b>	<b>290</b>	<b>360</b>	<b>250</b>	<b>244</b>	<b>348</b>

Table C20. Consumer Demographics by Region

	US CENSUS REGION (Includes Augments)				
	Total US	Northeast	South	Midwest	West
Base: Total Respondents	(797)	(282)	(313)	(308)	(298)
	%	%	%	%	%
<b>GENDER:</b>					
Male	47	51	45	49	49
Female	53	49	55	51	51
<b>AGE:</b>					
18-34	29	24	36	29	29
35-49	26	32	25	24	25
50-64	26	23	23	25	29
65 or older	19	21	16	22	17
<b>Mean age</b>	<b>46.0</b>	<b>46.6</b>	<b>43.8</b>	<b>47.0</b>	<b>45.8</b>
<b>EDUCATION:</b>					
Completed high school or less	26	27	25	30	27
Some college or other post high school	35	31	33	39	39
Completed college	29	30	32	23	28
Any graduate school	10	12	10	7	7
<b>RACE/ETHNICITY:</b>					
White	66	61	59	80	59
Black	14	13	25	6	6
Hispanic	14	19	14	11	28
Asian	6	7	2	4	8
Native American	3	1	2	2	3
Other	1	2	1	1	1
<b>HOUSEHOLD INCOME:</b>					
Less than \$50,000	44	35	48	41	50
\$50,000 to \$99,999	30	33	30	38	28
\$100,000 or more	23	30	19	20	21
<b>Mean (\$000)</b>	<b>70.1</b>	<b>82.3</b>	<b>62.4</b>	<b>69.7</b>	<b>67.7</b>
<b>MARITAL STATUS:</b>					
Married/living with someone	58	62	54	63	56
Single/never married	26	26	30	22	29
Divorced/separated/widowed	16	12	17	15	15
<b>Mean # of people in household</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>	<b>2.7</b>	<b>2.9</b>

## QUESTIONNAIRE

### Q1a

Please indicate your gender.

- Male (1)
- Female (2)

### Q1b

Into which of the following categories does your age fall?

- Under 18 (1)
- 18-24 (2)
- 25-29 (3)
- 30-34 (4)
- 35-39 (5)
- 40-44 (6)
- 45-49 (7)
- 50-54 (8)
- 55-59 (9)
- 60-64 (10)
- 65 or older (11)
- Prefer not to say (12)

### Q1c

Which of the following best describes your highest level of education?

- Completed grade 8 or less (1)
- Some high school (2)
- Completed high school (3)
- Some college or other post high school (4)
- Completed college (5)
- Any graduate school (6)

### Q1d

Which of the following best describes your race or ethnic background?

- Non-Hispanic White/Caucasian (1)
- Black/African American (2)
- Hispanic/Latino (3)
- Asian (4)
- Native American Indian/Alaskan/Hawaiian (5)
- Other (6)
- Prefer not to answer (7)

**Q1e**

Considering all sources of income from everyone in your household, which of the following best describes your total family income?

- Less than \$15,000 (1)
- \$15,000 - \$24,999 (2)
- \$25,000 - \$34,999 (3)
- \$35,000 - \$49,999 (4)
- \$50,000 - \$74,999 (5)
- \$75,000 - \$99,999 (6)
- \$100,000 - \$149,999 (7)
- \$150,000 - \$199,999 (8)
- \$200,000 or more (9)
- Don't know (10)
- Prefer not to answer (11)

**Q1f**

In which state do you currently live?

- |  |   |
|--|---|
| <input type="radio"/> Alabama (1)              | <input type="radio"/> Montana (27)        |
| <input type="radio"/> Alaska (2)               | <input type="radio"/> Nebraska (28)       |
| <input type="radio"/> Arizona (3)              | <input type="radio"/> Nevada (29)         |
| <input type="radio"/> Arkansas (4)             | <input type="radio"/> New Hampshire (30)  |
| <input type="radio"/> California (5)           | <input type="radio"/> New Jersey (31)     |
| <input type="radio"/> Colorado (6)             | <input type="radio"/> New Mexico (32)     |
| <input type="radio"/> Connecticut (7)          | <input type="radio"/> New York (33)       |
| <input type="radio"/> Delaware (8)             | <input type="radio"/> North Carolina (34) |
| <input type="radio"/> District of Columbia (9) | <input type="radio"/> North Dakota (35)   |
| <input type="radio"/> Florida (10)             | <input type="radio"/> Ohio (36)           |
| <input type="radio"/> Georgia (11)             | <input type="radio"/> Oklahoma (37)       |
| <input type="radio"/> Hawaii (12)              | <input type="radio"/> Oregon (38)         |
| <input type="radio"/> Idaho (13)               | <input type="radio"/> Pennsylvania (39)   |
| <input type="radio"/> Illinois (14)            | <input type="radio"/> Rhode Island (40)   |
| <input type="radio"/> Indiana (15)             | <input type="radio"/> South Carolina (41) |
| <input type="radio"/> Iowa (16)                | <input type="radio"/> South Dakota (42)   |
| <input type="radio"/> Kansas (17)              | <input type="radio"/> Tennessee (43)      |
| <input type="radio"/> Kentucky (18)            | <input type="radio"/> Texas (44)          |
| <input type="radio"/> Louisiana (19)           | <input type="radio"/> Utah (45)           |
| <input type="radio"/> Maine (20)               | <input type="radio"/> Vermont (46)        |
| <input type="radio"/> Maryland (21)            | <input type="radio"/> Virginia (47)       |
| <input type="radio"/> Massachusetts (22)       | <input type="radio"/> Washington (48)     |
| <input type="radio"/> Michigan (23)            | <input type="radio"/> West Virginia (49)  |
| <input type="radio"/> Minnesota (24)           | <input type="radio"/> Wisconsin (50)      |
| <input type="radio"/> Mississippi (25)         | <input type="radio"/> Wyoming (51)        |
| <input type="radio"/> Missouri (26)            |   |

**Q1g**

Which of the following best describes your current marital/cohabitation status?

- Married/living with someone (1)
- Divorced/separated (2)
- Widowed (3)
- Single/never married (4)

**Q1h**

How many people live in your household, including yourself?

(1) \_\_\_\_\_

**Q1**

Do you own or rent your current home or residence?

- Own (1)
- Rent (2)
- Neither (3)

**Q2**

How long have you lived in your current home or residence?

- Less than three years (1)
- 3 to 10 years (2)
- More than 10 years (3)

**Q3**

To the best of your knowledge, what is the current market value of your home?

*(Do not enter commas)*

\$ (1) \_\_\_\_\_

**Q4**

When, if at all, do you think you might purchase a home?

- Purchased a home within the last 3 years and have no plans to purchase a home any time soon (1)
- Less than one year (2)
- 1 to 3 years (3)
- 4 to 6 years (4)
- More than 6 years (5)
- No plans to purchase (6)
- Not sure (7)

**Q5**

Which type of home do you currently live in?

- Single-family detached (1)
- Townhouse/single-family attached (2)
- Multifamily (apartment/condo) (3)
- Manufactured (mobile) home (4)
- Other (5)

**Q6**

Which type of home would you like to buy for your next home?

*(Select ALL that apply)*

- Single-family detached (1)
- Townhouse/single-family attached (2)
- Multifamily (apartment/condo) (3)
- Manufactured (mobile) home (4)
- Other (5)

**Q6b**

Would the new home you purchase be:

- A newly constructed home (1)
- An existing home (2)
- Either one / Don't know (3)

**Q7**

Approximately how much would you expect to pay for a home?

- Less than \$100,000 (1)
- \$100,000 - \$149,999 (2)
- \$150,000 - \$249,999 (3)
- \$250,000 - \$349,999 (4)
- \$350,000 - \$499,999 (5)
- \$500,000 - \$599,999 (6)
- \$600,000 - \$699,999 (7)
- \$700,000 - \$799,999 (8)
- \$800,000 - \$899,999 (9)
- \$900,000 - \$999,999 (10)
- \$1 million and over (11)
- Not sure/Don't know (12)

**i37**

Recent natural disasters have raised concerns about the resilience of buildings. By resilience we mean the ability of buildings to withstand severe weather events and other hazards. Your answers to the following questions will provide critical information for builders, building officials, engineers and architects, policymakers, and others interested in the topic of resilience.

**Q8a**

How great a risk do you think the following natural disasters pose to the community in which you currently live?

*(If no "Other" risk comes to mind please select "Not a Risk at All".)*

	Not a Risk at All (1)	Slight Risk (2)	Moderate Risk (3)	High Risk (4)	Severe Risk (5)	Not Sure/ Don't Know (6)
Earthquake (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flood/Storm Surge (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hail (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hurricane (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Snow (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tornado (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildfire (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q8b**

You indicated you thought there was, at least, some risk of another natural disaster posing a threat to the community in which you currently live. In the space provided please explain what that natural disaster is.

*(Please type "none" if there is no other natural disaster)*

**i40**

Assume you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

**Q9a**

If this new home built in your community were affected by a severe earthquake (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q10**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of extensive cracks occurring in plaster or gypsum board walls or ceilings, brick veneer or other interior and exterior finishes in the event of a significant earthquake?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q10DNK**

- Don't know / Unsure how much extra I would pay (1)



**Q9b**

If this new home built in your community were affected by a severe flood/storm surge (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q11**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of your home being flooded as a result of a significant rainfall or hurricane?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q11DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q9c**

If this new home built in your community were affected by a severe hail (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q12**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of replacing your roofing (e.g. asphalt shingles or concrete tiles) or siding (e.g. aluminum, vinyl or wood siding) after a significant hailstorm?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q12DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q9d**

If this new home built in your community were affected by a severe hurricane (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q13**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of losing portions of your roofing (e.g. asphalt shingles or concrete tiles) or siding (e.g. vinyl siding or brick) or having water leak through roofs doors and windows during a significant hurricane?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q13DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q9e**

If this new home built in your community were affected by a severe snow (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q14**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of ice dams damaging gutters and downspouts or accumulated snow causing sagging or cracking of roof rafters or trusses in the event of a significant snow storm?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q14DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q9f**

If this new home built in your community were affected by a severe tornado (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q15**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of losing a portion of your roof (including roof rafters or trusses) or having part of your home (e.g. garage or upper story) collapse due to a significant tornado?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q15DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q9g**

If this new home built in your community were affected by a severe wildfire (something we, of course, hope never happens), how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q16**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of embers igniting your roof, heat breaking glass in your windows or doors, or heat damaging your exterior siding in the event of a significant wildfire?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q16DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q9h**

If this new home built in your community were affected by the other severe natural disaster you mentioned, how much damage do you think it would sustain?

- Extensive damage (requiring major reconstruction of all or part of your home) (1)
- Significant damage (requiring you to vacate your home for more than a week while it is repaired) (2)
- Moderate damage (requiring you to vacate your home, but only for a week or less, while it is repaired) (3)
- Minor damage (doesn't make your home unsafe to occupy, but requires a professional such as a builder, roofer or mason to repair) (4)
- Cosmetic damage (could easily be repaired by a handyman or members of your household) (5)
- No damage at all (6)

**Q18**

Continuing with the assumption ...

... you are purchasing a newly-constructed home in the same area or community where you currently live. The home you are buying, along with others being built in this community, is built in accordance with the current building regulations adopted by your community to protect homes and their occupants against severe weather events and hazards.

How much more than the base selling price would you be willing to pay for this new home if it were built to exceed current building codes, to further minimize the likelihood of damages caused by the other natural disaster you mentioned previously?

*(If you are not willing to pay anything more, please write in "0")*

\$ (1) \_\_\_\_\_

**Q18DNK**

- Don't know / Unsure how much extra I would pay (1)

**Q17**

Do you think new homes built according to modern building codes are more resistant to natural disasters than homes built in earlier decades?

- Yes (1)
- No (2)
- Not Sure/Don't Know (3)









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