**Survey Booklet**

**Instructions:** If you proceed with the paper version of this survey, please, answer questions in this booklet, put it into the enclosed prepaid envelope and send it by mail. Otherwise visit <http://www.tornadosurvey.com> to fill the survey. We would appreciate if you answer each of these questions unless question’s instructions state otherwise. You can choose or write “Decline to answer” if you prefer to not answer a question.

Are you 18 years of age or older? \_\_\_ Yes \_\_\_ No (If no - cannot participate, ask an adult)

***Section A: Using Tornado Warnings***

In this section, we ask a few questions about tornado warnings. As you might know, a tornado warning is a message from weather forecasters which states that tornadoes are imminent, and that people should seek shelter immediately.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A1: How do you usually receive tornado warnings?** | | | | |
| *(Please check all that applies.)* | | | | |
| 🞎 | Weather radio |  | 🞎 | Cell phone app/SMS |
| 🞎 | Local radio |  | 🞎 | Friends/family/neighbours |
| 🞎 | TV |  | 🞎 | I usually do not receive tornado warnings |
| 🞎 | Internet-based service |  | 🞎 | Other (specify): |
|  |  |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A2: At each of the following times, how likely are you to learn about a tornado warning when it is issued for your area?** | | | | |
| *(Please check one box in each row.)* | | | | |
|  | Practically no chance | Unlikely | Quite likely | Almost certain |
|  | <10% | 10-50% | 51-75% | 76-100% |
| Weekday 2 am | 🞎 | 🞎 | 🞎 | 🞎 |
| Weekday 3 pm | 🞎 | 🞎 | 🞎 | 🞎 |
| Weekday 7 pm | 🞎 | 🞎 | 🞎 | 🞎 |
| Weekend 7 pm | 🞎 | 🞎 | 🞎 | 🞎 |

**A3: If the National Weather Service issues a tornado warning for your area, how much time do you believe you would have, on average, before a tornado arrives?**

*(Please, estimate to the best of your ability and write the number in the field below.)*

|  |
| --- |
| **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** *(minutes)* |

***Section B: House***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **B1: I live in a:** | | | | |
| *(Please check only one box.)* | | | | |
| 🞎 | Apartment/Condo |  | 🞎 | Mobile home |
| 🞎 | Well-built house (brick, wood, concrete) |  | 🞎 | Manufactured home |
| 🞎 | Well-built townhouse/rowhouse/duplex |  | 🞎 | Other |

**B2: How many separate rooms are in your house, apartment, or mobile/manufactured home?**

*(Include bedrooms, living rooms, kitchens, etc. but EXCLUDE bathrooms, porches, balconies, foyers, halls, and unfinished basements.* *Write the number in the field below.)*

|  |
| --- |
| **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** *(rooms)* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **B3: Which area in your home would you use to shelter from a tornado?** | | | | |
| *(Please check only one box.)* | | | | |
| 🞎 | Bathroom |  | 🞎 | Tornado shelter (including backyard shelter) |
| 🞎 | Kitchen, bedroom, or a living room |  | 🞎 | I would never shelter in my home |
| 🞎 | Hallway |  | 🞎 | Other area (write down): |
| 🞎 | Specifically designed safe room |  |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 🞎 | Basement |  | 🞎 | Don’t know |
| 🞎 | Closet |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **B4: Does your sheltering area have a window?** | | | | | | |
| *(Please check only one box.)* | | | | | | |
| 🞎 | Yes |  | 🞎 | No | 🞎 | I would never shelter in my home |

|  |  |  |
| --- | --- | --- |
| **B5: Our household has enough car space to transport all of us in case of an emergency\_\_** | | |
| *(Please check only one box.)* | | |
| 🞎 | Yes |  |
| 🞎 | No |  |
| 🞎 | We have no car |  |

***Section C: Tornado Warning at Home Scenario***

**For the following question please imagine that you are home at 7 pm (evening) when you learn that a tornado warning is issued for your area.**

|  |  |  |
| --- | --- | --- |
| **C1: What would you do in this scenario?** | | |
| *(Please check only one box.)* | | |
| 🞎 | Nothing |  |
| 🞎 | Seek more information without taking shelter |  |
| 🞎 | Take shelter at home or near |  |
| 🞎 | Drive to another house or structure |  |
| 🞎 | Drive out of the potential tornado path |  |
| 🞎 | I would never learn about a warning at that time |  |
| 🞎 | Other (write down) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

**For the following question please imagine that you are home at 2 am (night) when you learn that a tornado warning is issued for your area.**

|  |  |  |
| --- | --- | --- |
| **C2: What would you do in this scenario?** | | |
| *(Please check only one box.)* | | |
| 🞎 | Nothing |  |
| 🞎 | Seek more information without taking shelter |  |
| 🞎 | Take shelter at home or near |  |
| 🞎 | Drive to another house or structure |  |
| 🞎 | Drive out of the potential tornado path |  |
| 🞎 | I would never learn about a warning at that time |  |
| 🞎 | Other (write down) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

|  |  |  |
| --- | --- | --- |
| **C3: What do you expect to do if you hear a tornado siren at home?** | | |
| *(Please check only one box.)* | | |
| 🞎 | We are not near a siren/Have never heard it |  |
| 🞎 | Nothing |  |
| 🞎 | Seek more information without taking shelter |  |
| 🞎 | Take shelter at home or near |  |
| 🞎 | Drive to another house or structure |  |
| 🞎 | Drive out of the potential tornado path |  |
| 🞎 | Other (write down) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

ANSWER ONLY IF YOU DRIVE TO ANOTHER HOUSE OR STRUCTURE.

**C4: How long does it usually take you to drive to the house or structure you would use as a shelter?**

*(Please, estimate to the best of your ability and write the number in the field below.)*

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** *(minutes)*

ANSWER ONLY IF YOU DRIVE TO ANOTHER HOUSE OR STRUCTURE.

|  |  |  |
| --- | --- | --- |
| **C5: If you drive to shelter in another house or structure, what kind of shelter would you use?** | | |
| *(Please check only one box.)* | | |
| 🞎 | Room with windows in a well-built house |  |
| 🞎 | Room without windows in a well-built house |  |
| 🞎 | Basement |  |
| 🞎 | Specifically designed safe room |  |
| 🞎 | Tornado shelter outside of the house |  |
| 🞎 | Community/public shelter |  |
| 🞎 | Public building (mall, church, et cetera) |  |
| 🞎 | Other (write down): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

|  |  |  |
| --- | --- | --- |
| **C6: When deciding to shelter or flee from a tornado, which sources would you use to seek more information?** | | |
| *(Please check all that applies.)* | | |
| 🞎 | Radio or weather radio |  |
| 🞎 | Internet |  |
| 🞎 | Cell phone app/SMS |  |
| 🞎 | TV |  |
| 🞎 | Call somebody |  |
| 🞎 | Go outside and watch the sky |  |
| 🞎 | I would not seek more information |  |
| 🞎 | Other (write down): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **C7: Imagine the following scenario. You are home AT 7 PM (EVENING). Based on all your information (news, Internet, weather outside and other), there is chance of a tornado within 10 miles of your house or closer in the next 15 minutes. Please, describe your actions depending on these chances in the table below.** | | | | | | | |
| *(Please check only one box in each row.)* | | | |  | |  | |
| The chance of a tornado passing within 10 miles of your house or closer within the next 15 minutes is\_\_\_ | Do nothing | Shelter at home | Drive to a shelter | | Flee | | Don’t know/Other |
| 0% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 10% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 20% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 40% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 60% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 100% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **C8: Imagine now the following scenario. It is 2am (night). Based on all your information (news, Internet, weather outside and other), there is chance of a tornado within 10 miles of your house or closer in the next 15 minutes. Please, describe your actions depending on these chances in the table below.** | | | | | | | |
| *(Please check only one box in each row.)* | | | |  | |  | |
| The chance of a tornado passing within 10 miles of your house or closer within the next 15 minutes is\_\_\_ | Do nothing | Shelter at home | Drive to a shelter | | Flee | | Don’t know/Other |
| 0% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 10% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 20% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 40% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 60% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |
| 100% | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 |

***Section D: More Advance Time***

**Imagine now the following scenario. You are home at 7 PM (evening). You receive a tornado warning and you have at least forty (40) minutes before a tornado can strike your house.**

|  |  |  |
| --- | --- | --- |
| **D1: What would you do in this case?** | | |
| *(Please check only one box.)* | | |
| 🞎 | Nothing |  |
| 🞎 | Seek more information without taking shelter |  |
| 🞎 | Take shelter at home or near |  |
| 🞎 | Drive to a shelter |  |
| 🞎 | Drive out of the potential tornado path |  |
| 🞎 | Other (write down): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

**Now imagine the following scenario: You are home at 7 PM (evening). You learn that tornadoes could pass through your county from 7:40pm to 8:20pm. The chance of a tornado passing within 10 miles of your house or closer during this time interval can vary. Please, describe your response for every variation of this scenario presented in the following table.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D2: What would you most likely do in each of these scenarios?** | | | | | | | | |  |
| *(Please check only one box in each row.)* | | | | |  | |  | |  |
| The chance of a tornado passing within 10 miles of your house or closer from 7:40pm to 8:20pm is \_\_ | Nothing | Seek info | Shelter at home or near | Drive to a shelter | | Drive out of the tornado path | | Don’t know | |
| 0% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 10% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 20% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 40% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 60% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 100% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |

**Now imagine the following scenario: You are home at 2 am (night). You learn that tornadoes could pass through your county from 2:40am to 3:20am. The chance of a tornado passing within 10 miles of your house or closer during this time interval can vary. Please, describe your response for every variation of this scenario in the table.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D3: What would you most likely do in each of these scenarios?** | | | | | | | | |  |
| *(Please check only one box in each row.)* | | | | |  | |  | |  |
| The chance of a tornado passing within 10 miles of your house or closer from 2:40pm to 3:20pm is \_\_ | Nothing | Seek info | Shelter at home or near | Drive to a shelter | | Drive out of the tornado path | | Don’t know | |
| 0% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 10% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 20% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 40% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 60% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |
| 100% | 🞎 | 🞎 | 🞎 | 🞎 | | 🞎 | | 🞎 | |

***Section E: Public Referendum***

**In this section, we ask you to vote for or against an adoption of a new tornado alert system. The new tornado alert system would have three new features. First, it would predict tornadoes at least forty minutes before they happen. Second, it would describe a future time interval in which tornadoes can happen instead of issuing tornado warnings effective immediately. Third, it would describe chances of a tornado to happen within that time interval. People would receive tornado alerts in the same way they currently receive tornado warnings.**

**There is a concern that the new tornado alert system would be too expensive. Its introduction would incur a significant cost to the government and would inevitably increase your taxes. Additional taxes would mean that you would have less money to spend on other things. For these reasons, the National Weather Service weighs the costs and benefits of this system and would like to collect votes from the public.**

**This public referendum would determine whether the new tornado alert system is needed. Your vote would affect the choice of the system: if a new warning system gets the most votes, the government would most likely implement the system. Otherwise the old system would remain in place.**

|  |  |
| --- | --- |
| **E1: Please carefully read the description of both options in the table below and then make your referendum vote below the table.** | |
| **Option 1** | **Option 2** |
| * Existing system of tornado warnings (tornado warnings are issued 10-20 minutes in advance) * No change in taxes | * Tornado alerts are issued 40 minutes in advance * Describe the time interval when tornadoes can happen at your location * Specify the chance of tornadoes passing within 10 miles of your house or closer within that time interval * Every adult US resident, **including you,** pays additional **<Bid> USD** **each year** in federal taxes |
| **My vote:** | |
| 🞎 | 🞎 |

|  |  |  |
| --- | --- | --- |
| **E2: How certain are you in your vote in the previous question E1?** | | |
| *(Please check only one box.)* | | |
|  |  |  |
| 🞎 | 🞎 |  |
| Completely certain | Not completely certain |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **E3: How likely do you think it is that the results of this referendum will affect the government’s decision to adopt a new tornado warning system and your taxes?** | | | | |
| *(Please check only one box.)* | | | | |
| 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| 1 | 2 | 3 | 4 | 5 |
| Not at all likely |  |  |  | Extremely likely |

***Section F: Demographic Information***

In this section, we ask you to provide a little bit of personal information. While you can skip some of these questions, answering them truthfully would help to understand better which groups experience more difficulties with tornadoes. The responses would not be connected back to you.

|  |  |  |
| --- | --- | --- |
| **F1: What gender are you?** | | |
| *(Please check only one box.)* | | |
|  |  |  |
| 🞎 | 🞎 | 🞎 |
| Female | Male | Other |

**F2: In what year were you born?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(year)**

**F3: How many people, including you, live in your household (total, including children)?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(people)**

**F4: How many adults (18 or older), including yourself, live in your household?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(people)**

**F5:** **How many other household members would you expect to do the same thing you do when sheltering from a tornado?**

*(Please write “0” if there are no such household members.)*

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(people)**

|  |  |  |
| --- | --- | --- |
| **F6: Are you of Hispanic, Latino, or of Spanish origin?** | | |
| *(Please check only one box.)* | | |
|  |  | |
| 🞎 | 🞎 |  |
| Yes | No |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **F7: How would you describe yourself? I am \_\_\_** | | | | |
| *(Please check all that applies.)* | | | | |
| 🞎 | Asian |  | 🞎 | White |
| 🞎 | From indigenous tribes of Americas |  | 🞎 | Native Hawaiian or Other Pacific Islander |
| 🞎 | Black or African American |  | 🞎 | Other |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **F8: How good is your English?** | | | | |
| *(Please check one box in each row.)* | | | | |
|  | Not at all | Not very well | Very well | Perfectly/Native |
| I can read English \_\_ | 🞎 | 🞎 | 🞎 | 🞎 |
| I understand spoken English \_\_ | 🞎 | 🞎 | 🞎 | 🞎 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **F9: What is the highest degree or level of school you have completed?** | | | | |
| *(Please check only one box. If currently enrolled, mark the previous grade or highest grade received.)* | | | | |
| 🞎 | No schooling completed |  | 🞎 | Some college, but no degree |
| 🞎 | Grades 1-12, no high school diploma |  | 🞎 | Associate or bachelor’s degree |
| 🞎 | High school diploma or GED |  | 🞎 | Graduate or professional degree (master’s, MD, Phd) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **F10: What is the TOTAL income of your household, before taxes, last year (2019)? Please count income from all members of your household, and from all sources including AFDC, food stamps, social security, pensions, dividend and interest.** | | | | |
| *(Please check only one box.)* | | | | |
| 🞎 | Under $10,000 |  | 🞎 | $75,000 to $99,999 |
| 🞎 | $10,000 to $24,999 |  | 🞎 | $100,000 to $124,999 |
| 🞎 | $25,000 to $49,999 |  | 🞎 | $125,000 to $150,000 |
| 🞎 | $50,000 to 74,999 |  | 🞎 | More than $150,000 |
| 🞎 | Decline to answer |  |  |  |

**Thank you very much for completing the survey! If you have any thoughts or ideas, you are welcome to share them in the space below:**

|  |
| --- |
|  |