

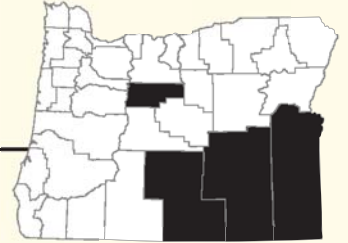
Appendix E: Household Preparedness Survey

PARTNERS *for*
**DISASTER RESISTANCE
RESILIENCE**



Household Preparedness Survey

Jefferson, Harney, Lake and Malheur Counties



Household Natural Hazards Preparedness Survey

Survey Report for:

Jefferson County, Oregon
Harney County, Oregon
Lake County, Oregon
Malheur County, Oregon

Prepared by:

Oregon Natural Hazards Workgroup

Community Service Center
1209 University of Oregon
Eugene, OR 97403-1209
Phone: 541.346.3889
Fax: 541.346.2040
Email: onhw@uoregon.edu
<http://www.oregonshowcase.org>

January 2007



Special Thanks & Acknowledgements

The Community Service Center would like to thank the following individuals for their assistance on this project:

Rena Thompson, Jefferson County

Andy Seebert, Harney County

Phil McDonald, Lake County

Craig Smith, Malheur County

Project Manager:

Bethany Johnson, Oregon Natural Hazards Workgroup

Project Advisors:

Krista Mitchell, Project Coordinator, Oregon Natural Hazards Workgroup

André LeDuc, Director, Oregon Natural Hazards Workgroup

Robert Parker, Managing Director, Community Service Center

Natural Hazard Household Preparedness Survey

Background

The *Partners for Disaster Resistance and Resilience: Oregon Showcase State Program* was established in 2000 to provide a more coordinated approach to addressing risks from natural hazards in Oregon.

Establishing disaster safety as a public value is a shared objective among the partners involved with the Program. This Program strives to reduce deaths, injuries, property damage, economic losses and human suffering caused by natural disasters. The next flood, earthquake or wildfire cannot be avoided. However, we can make a comprehensive and concentrated effort to reduce the effects of these natural forces on our economic, social and environmental stability. The Program provides a comprehensive framework for government and the private sector to prepare for and minimize risk and impact of natural hazards.

The Federal Emergency Management Agency (FEMA) published Interim Rule 44 CFR Part 201 in February 2002, requiring all states and communities to develop natural hazard mitigation plans by November 2003. These planning and mitigation requirements for states and communities are being accomplished through the Pre-Disaster Mitigation Program (PDM). Oregon Natural Hazards Workgroup (ONHW) at the University of Oregon, as the coordinator of the *Partners for Disaster Resistance and Resilience: Oregon Showcase State Program*, is working with Oregon Emergency Management (OEM) and the PDM Program to assist local governments with their natural hazard mitigation planning efforts.

Citizen involvement is a key component in the natural hazard mitigation planning process. Citizens have the opportunity to voice their ideas, interests and concerns about the impact of natural disasters on their communities. To that end, the Disaster Mitigation Act of 2000¹ requires citizen involvement in the natural hazard mitigation planning process. It states:

An open public involvement process is essential to the development of an effective plan. In order to develop a more

¹ National Archives and Records Administration. 2002. Federal Emergency Management Agency 44 CFR Parts 201 and 206 Hazard Mitigation Planning and Hazard Mitigation Grant Program; Interim Final Rule in Federal Register.

comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

1. An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.
2. An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process.

The benefits of citizen involvement, according to Bierle², include the following: (1) educate and inform public; (2) incorporate public values into decision making; (3) improve substantially the quality of decisions; (4) increase trust in institutions; (5) reduce conflict; and (6) ensure cost effectiveness.

The survey helps the counties of the Southeastern region, made up of Jefferson, Harney, Lake and Malheur Counties, realize Bierle's five benefits of citizen involvement in the natural hazard mitigation planning process. As part of the PDM Program, ONHW is assisting the Southeastern region of Oregon with the citizen involvement components of the natural hazard mitigation planning process.

Methodology

To conduct the household survey, ONHW modified the eight page survey administered statewide in 2002 to a five page survey. The purpose of the survey is to better understand the perceptions of risk to natural hazards held by citizens, as well as the level of preparedness and types of risk reduction activities in which citizens have engaged. (See Appendix A) The primary goal of the survey was to gauge the overall perception of natural disasters and determine a baseline level of loss reduction activity for residents in the community. ONHW adapted the statewide survey to include questions about citizens' support for different types of community planning actions. Planning actions mentioned included protecting critical facilities, disclosing natural hazard risks during real estate transactions, and the use of tax dollars to compensate land owners for not developing in hazardous areas.

The survey was sent to 1200 households in the Southeastern region, which includes: Jefferson, Harney, Lake and Malheur Counties. The households were randomly selected and population weighted based on registered voter lists provided to ONHW by each of the counties.

² Bierle, T. 1999. "Using social goals to evaluate public participation in environmental decisions." *Policy Studies Review*. 16(3/4) ,75-103.

The mailing contained a cover letter, the survey instrument, an entry raffle form for a gift certificate to a local hardware store, and a postage-paid return envelope. Completed surveys were returned to ONHW. A second mailing was sent to households who did not respond to the first mailing, approximately three weeks later. ONHW received 277 valid responses, for a 23% response rate.

Limitations

The study identifies key issues about how members of the Southeastern Oregon communities perceive their risk to natural hazards, providing a snapshot of those perceptions at a single point in time. As such, survey responses may reflect external issues, such as heightened concern about terrorism or the current state of the economy. This study was not intended to be representative of the perceptions of all residents, and cannot be generalized to the public.

Organization of Report

The survey results are organized into the following sections:

Characteristics of Survey Respondents: This section reports information about respondent characteristics including: educational attainment, age, and length of time as an Oregon resident.

Perception of Risk: This section identifies the general level of concern over natural hazards risk.

Household Preparedness and Risk Reduction: This section describes the types of structural and nonstructural measures that are being implemented by survey respondents, and the types of resources or programs that might increase risk reduction activities.

Community Natural Hazard Preparedness: This section describes citizens' priorities for planning for natural hazards and the community-wide strategies respondents support.

Written Responses to Open-Ended Questions: This section includes summarizes the responses of the open-ended questions and comments.

Characteristics of Survey Respondents

Demographic survey questions provide a statistical overview of the characteristics of the respondents. This section of the survey asked respondents about their age and gender, their level of education, and how long they have lived in Oregon. The survey also included questions regarding respondents' present housing.

There were 277 people who responded to the survey, giving the survey a 23% response rate. Of the four counties the survey was mailed to, the majority of surveys returned came from residents of Jefferson and Malheur Counties (Table 1). This is not surprising as Jefferson and

Malheur have the greatest number of residents in the region with 50,339 of the 65,370 total residents (2000 U.S. Census). Zip codes provide a more specific location of the survey respondents than the county level data. Of the 30 different zip codes indicated, the most respondents live in the 97914 zip code (City of Ontario) followed by 97741 (City of Madras) (Table 2).

Table 1. Percent of Surveys Received Per County

County	Percent of Surveys Received
Harney	14%
Lake	15%
Jefferson	33%
Malheur	38%

Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006).

Table 2. Percent of Surveys Per Zipcode

Zip code	Percent of Surveys
97914	21%
97741	15%
97630	10%
97760	9%
97918	8%
97913	6%
97738	6%
97720	6%
97734	4%
Other	16%

Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006).

Gender and Age

Women accounted for 57% of survey respondents even though they represented just less than 50% of the population in the Southeastern region according to the 2000 Census. The mean age of survey respondents was 58 years. This is considerably higher than the average median age, 40 years, of residents in Southeastern Oregon according to the U.S. Census 2000. Table 3 compares the ages of survey respondents to the 2000 U.S. Census. This shows that younger people were underrepresented while older people were overrepresented.

Table 3. Percentage of Southeastern Oregon Population and Survey Respondents by Age Category (persons 20 and over)

Age Category	Mid & Southeastern Oregon³	Survey Respondents
20 - 24	6.0%	1.1%
25 - 34	12.3%	6.2%
35 - 44	14.4%	11.8%
45 - 54	13.3%	23.2%
55 - 59	5.2%	14.1%
60 - 64	4.6%	9.9%
65 - 74	7.5%	18.1%
75 - 84	4.7%	13.1%
85+	1.7%	1.1%

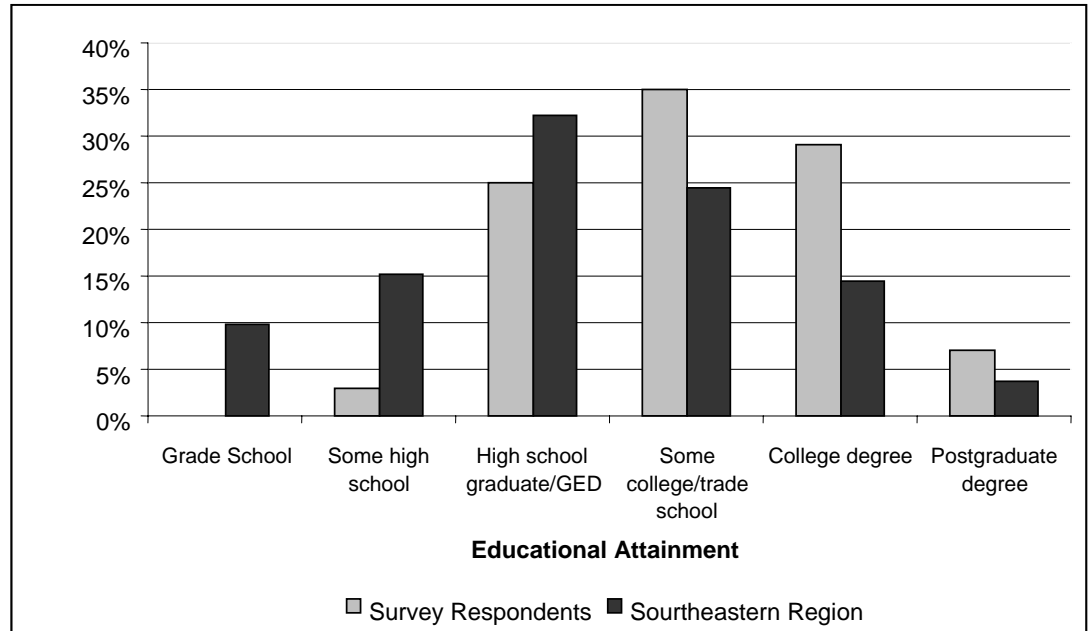
Source: U.S. Census Bureau: www.census.gov (2000) and Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006).

Level of Education

In general, survey respondents were relatively well educated. Figure 1 compares the level of education of survey respondents with the 2000 U.S. Census. About 71% of survey respondents have attended some college or gone to a trade school, obtained a college degree, or have a postgraduate degree. In contrast, figures from the Census show that an average of 43% of Southeastern residents have achieved this level of educational attainment. Survey respondents were much more likely to have completed a higher educational level than the overall population of the Southwestern region.

³ The age categories are percentages of the total number of people in each age group for all four counties as reported by the US Census 2000

Figure 1. Level of Education of Southeastern Oregon Population and Survey Respondents

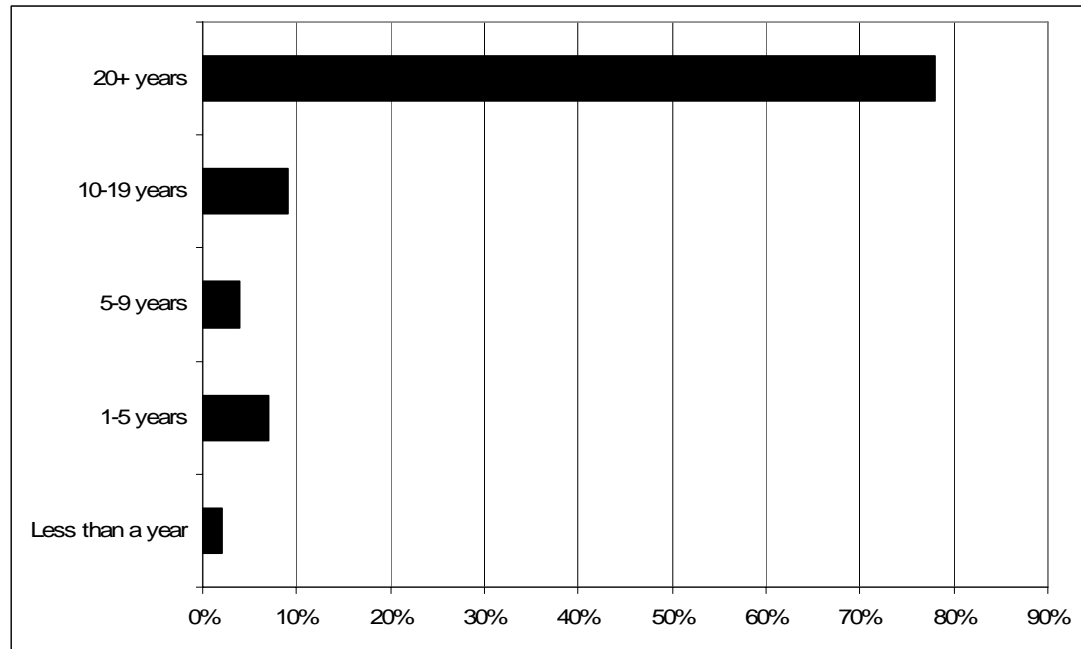


Source: U.S. Census Bureau: www.census.gov (2000) and Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

Oregon Residency

Approximately 78% percent of survey respondents have lived in Oregon for 20 years or more (see Figure 2). Respondents who have lived in Oregon for fewer than 20 years have most commonly moved from California (13%) and Idaho (13%).

Figure 2. Length of Time Survey Respondents Have Lived in Oregon



Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

Housing Characteristics

Housing characteristics are important variables in creating effective education and outreach programs. Knowledge of the percentage of homeowners in a community can help target the programs and homeowners might be more willing to invest time and money in making their homes more disaster resistance. Due to a data collection error, homeownership rates of survey respondents can not be reported. However, the US Census 2000 reports an average of 67% of Southeastern Oregon residents are homeowners.

Almost 66% of survey respondents live in single-family homes, 24% live in manufactured homes, 2% in apartments, and 3% live in duplexes. In addition, 76% said they have access to the internet.

Perception of Risk

It is helpful to understand community members' experiences and their perceptions of risk to natural hazards to make informed decisions about natural hazard risk reduction activities. The survey asked respondents about their level of concern for specific hazards in the Southeastern region. The primary objective of this question was to create a "natural hazard profile" of respondents to better understand how Southeastern residents perceive natural hazards.

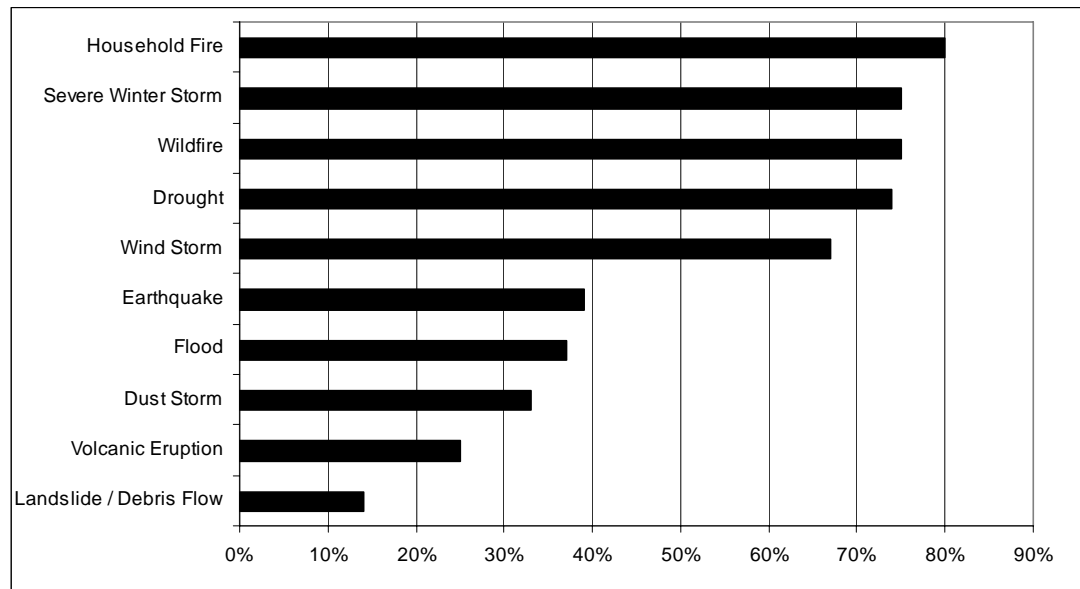
The survey asked respondents to rank their personal level of concern for specific natural disasters affecting their community. The results show that respondents were most concerned about household fire, wildfire, severe winter storm, drought and windstorm. The respondents are least concerned about landslide/debris flows. Figure 3 shows the percent of respondents that identified their level of concern as either "Very Concerned" or "Somewhat Concerned".

Table 4. Survey Respondents' Level of Concern Regarding Natural Hazards in the Southeastern Region

	Very Concerned	Somewhat Concerned	Neither Concerned nor Unconcerned	Not Very Concerned	Not Concerned
Drought	22%	52%	12%	9%	6%
Dust Storm	7%	26%	27%	22%	19%
Earthquake	11%	28%	21%	26%	14%
Flood	8%	29%	17%	23%	23%
Landslide / Debris Flow	4%	10%	23%	29%	34%
Wildfire	40%	35%	11%	8%	6%
Household Fire	31%	49%	11%	7%	2%
Volcanic Eruption	5%	20%	18%	20%	37%
Wind Storm	13%	54%	15%	11%	7%
Severe Winter Storm	23%	52%	14%	7%	4%

Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

Figure 3. Percentage of Survey Respondents' Who Are "Very Concerned" or "Somewhat Concerned" about Natural Hazards



Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

Household Preparedness and Risk Reduction

There are many steps people can take to prepare their households for a natural disaster or emergency. Preparing for a disaster can improve the safety and comfort of the members of a household immediately following a natural disaster or emergency. The survey asked respondents about what steps their households have taken or plan to take to increase their disaster preparedness.

Property Protection

Only 37% of the respondents considered the possible occurrence of a natural hazard when they bought or moved into their current homes. The need to have adequate provisions for financial and property recovery when natural disasters do occur is a necessary component of natural hazard preparedness. Fourteen percent of the respondents indicated they have flood insurance leaving 86% without it. However, 53% of those who don't have flood insurance indicated the reason is because their home is not located in the floodplain and 17% felt it was not necessary. Approximately the same amount of respondents (15%) indicated they have earthquake insurance. The top two reasons given by those who don't have earthquake insurance were that it is not necessary (37%) or that they never considered it (32%).

Table 5. Survey Respondents' Reasons For Not Having Flood and/or Earthquake Insurance

Flood Insurance		Earthquake Insurance	
Not located in the floodplain	53%	Not necessary	37%
Not necessary	17%	Not familiar with it/don't know	32%
Not familiar with it/don't know	9%	Not available	11%
Too Expensive	8%	Too Expensive	11%
Not available	6%	Deductible too high/not worth it	5%
Other	4%	Other	5%
Deductible too high/not worth it	3%		

Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

Sixty percent of respondents have used fire-resistant building or roofing materials and have secured their homes to its foundation. Fifty-six percent of respondents talked with members of their households about what to do in the case of a natural disaster or emergency. Table 6 summarizes the activities respondents indicated they have done, plan to do, have not done, or were unable to do to prepare for natural disasters.

Table 6. Survey Respondents' Household Disaster Preparedness Activities

	Have Done	Plan To Do	Not Done	Unable To Do	Does Not Apply
Attended meetings or received written information on natural disasters or emergency preparedness?	27%	7%	61%	5%	
Talked with members in your household about what to do in case of a natural disaster or emergency?	56%	14%	27%	2%	
Developed a "Household/Family Emergency Plan" in order to decide what everyone would do in the event of a disaster?	39%	19%	40%	2%	
Prepared a "Disaster Supply Kit" (Stored extra food, water, batteries, or other emergency supplies)?	41%	23%	36%	1%	
In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	38%	6%	55%	1%	
Have you secured your water heaters, cabinets and bookcases to the wall?	26%	5%	62%	5%	4%
Have you fit your gas appliances with flexible connections?	24%	1%	14%	3%	58%
Used fire-resistant building or roofing materials?	60%	5%	22%	6%	7%
Secured your home to its foundation?	60%	3%	18%	9%	10%
Braced unreinforced masonry, concrete walls, and chimney?	22%	3%	27%	7%	41%
Elevated your home in preparation for floods?	19%	0%	20%	11%	50%

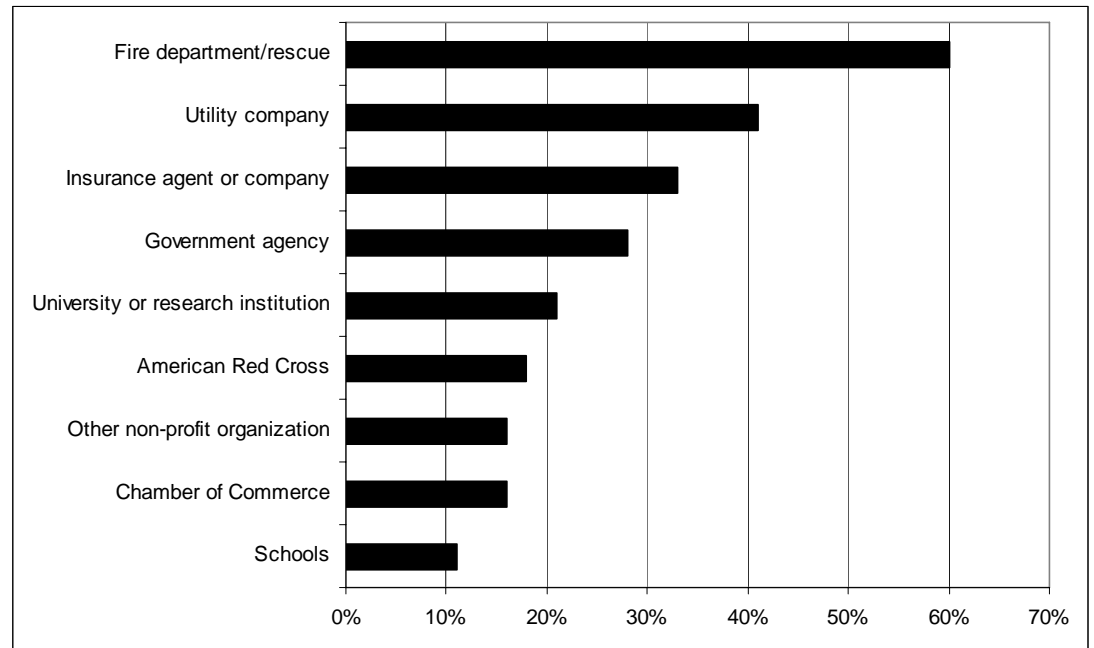
Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (June 2006)

Preferred Sources and Formats of Information

To develop and implement effective outreach and education activities, it is important to understand the mechanisms for information dissemination. Of the listed organizations that might provide information to households about household preparedness for natural disasters, respondents most frequently preferred the fire department or

rescue organization. Figure 4 shows that schools were the least preferred organization to be the primary information source.

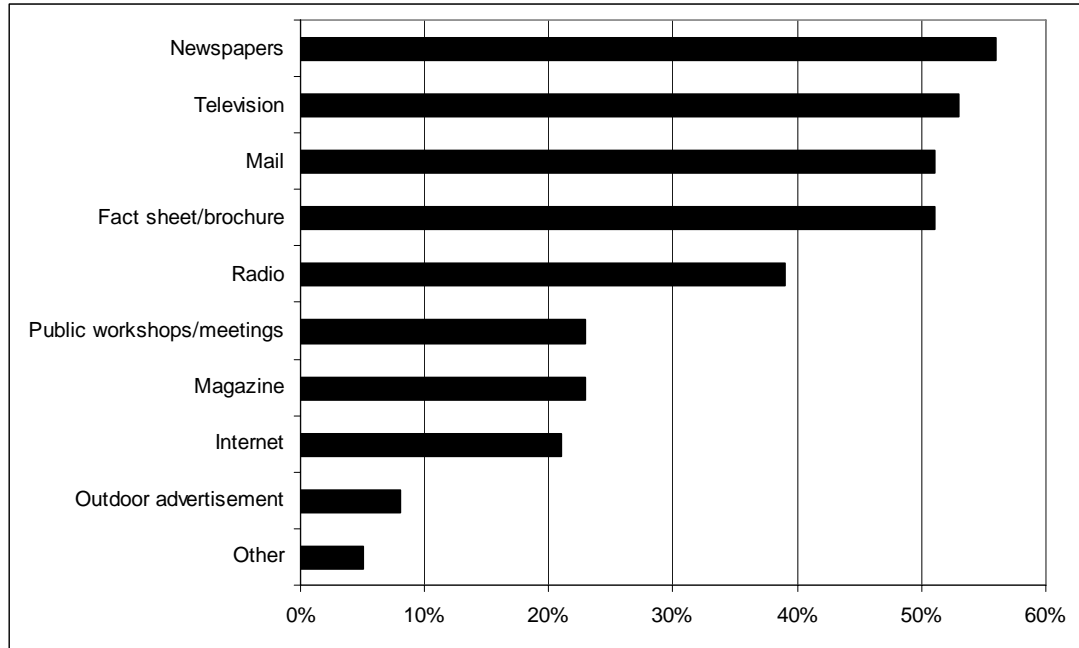
Figure 4. Survey Respondents' Preferred Sources of Information Regarding Household Preparedness



Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

When asked what the most effective way was to receive information, respondents indicated that the local newspaper (56%), television news (53%), fact sheet/brochure (51%), and mail (51%) were the most effective. Figure 5 shows how survey respondents rated the effectiveness of dissemination methods presented in the survey.

Figure 5. Survey Respondents' Ranking of Effectiveness of Selected Preparedness Outreach Methods



Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (September 2006)

Community Natural Hazard Preparedness

To assist those preparing the communities' natural hazard mitigation plans, it is essential to understand the importance community members place on specific community-level risk reduction actions. These questions could help Southeastern communities determine their citizens' priorities when planning for natural hazards. They also provide an idea of which types of strategies to reduce the communities' risk the citizens would be willing support. Table 7 illustrates the importance respondents placed on each potential natural hazard goal.

Over 95% of respondents indicated that it is very important or somewhat important to protect private property, protect critical facilities, protect and reduce damage to utilities, strengthen emergency services. The statement with the lowest priority (78%) is to protect historical and cultural landmarks.

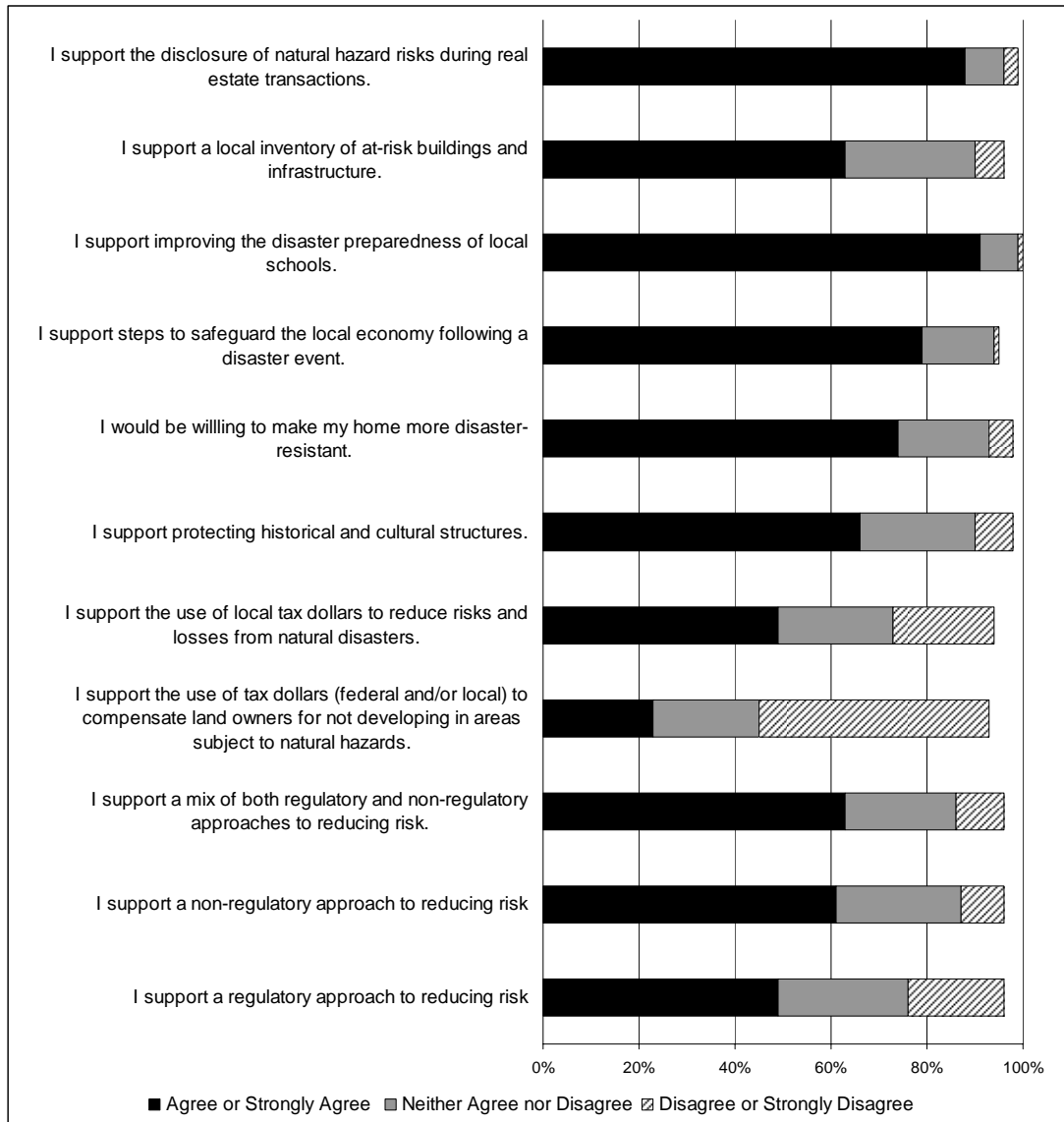
Table 7. Survey Respondents' Goal Prioritization

	Very Important	Somewhat Important	Neither Important nor Unimportant	Not Very Important	Not Important
Protecting private property	71%	24%	3%	1%	1%
Protecting critical facilities (e.g., transportation networks, hospitals, fire stations)	86%	12%	1%	0%	1%
Preventing development in hazard areas	46%	39%	10%	3%	2%
Enhancing the function of natural features (e.g., streams, wetlands)	37%	41%	14%	4%	4%
Protecting historical and cultural landmarks	31%	43%	19%	5%	2%
Protecting and reducing damage to utilities	70%	27%	3%	1%	0%
Strengthening emergency services (e.g., police, fire, ambulance)	68%	28%	3%	1%	1%
Disclosing natural hazard risks during real estate transactions	62%	29%	6%	2%	2%

Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

There are a number of activities a community can undertake to reduce the risk from natural hazards. These activities can be both regulatory and non-regulatory. Figure 6 and Table 8 shows respondents' general level of agreement regarding the community-wide strategies included in the survey.

Figure 6. Survey Respondents' General Level of Agreement Regarding Community-wide Strategies



Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

Table 8. Survey Respondents' General Level of Agreement by Percentage Regarding Community-wide Strategies

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not Sure
I support a regulatory approach to reducing risk	13%	36%	27%	16%	4%	4%
I support a non-regulatory approach to reducing risk	18%	43%	26%	8%	1%	5%
I support a mix of both regulatory and non-regulatory approaches to reducing risk.	23%	40%	23%	8%	2%	4%
I support the use of tax dollars (federal and/or local) to compensate land owners for not developing in areas subject to natural hazards.	6%	17%	22%	32%	16%	6%
I support the use of local tax dollars to reduce risks and losses from natural disasters.	6%	43%	24%	16%	5%	6%
I support protecting historical and cultural structures.	13%	53%	24%	6%	2%	1%
I would be willing to make my home more disaster-resistant.	16%	58%	19%	4%	1%	3%
I support steps to safeguard the local economy following a disaster event.	17%	62%	15%	0%	1%	4%
I support improving the disaster preparedness of local schools.	34%	57%	8%	0%	1%	0%
I support a local inventory of at-risk buildings and infrastructure.	15%	48%	27%	4%	2%	4%
I support the disclosure of natural hazard risks during real estate transactions.	45%	43%	8%	2%	1%	1%

Source: Household Natural Hazards Preparedness Survey, Oregon Natural Hazards Workgroup, (Nov. 2006)

As shown in Figure 6 and Table 8, 91% of respondents indicated that it is very important or somewhat important for the community to improve the disaster preparedness of local schools. In addition, over 91% indicated that it is very important or somewhat important to disclosure natural hazard risks during real estate transactions.

Open-ended Survey Responses

Q3.1 If “NO” for flood, what is the main reason your household does not have insurance for flood events?

- Only through government agencies
- Haven't looked into it
- Not in flood zone
- We live on a hill (2)
- Refused by insurance company
- We rent
- House flood, not natural flood
- High desert
- No one will pay out even if you have flood insurance
- Told I didn't need it
- Wasn't suggested by agent

Q4.1 If “NO” for earthquake, what is the main reason your household does not have insurance for earthquake events?

Other

- Not offered in this area
- Didn't think there were earthquakes here
- Not sure, will find out. I think we do.
- Not in high risk area
- We rent
- Didn't think of it
- Probably not
- Looking into it/will consider
- Small chance of earthquake
- Not my home

Q6. Who is your preferred information source and what is the preferred way for you to receive information about how to make your household and home safer from natural disasters?

Other

- Want to talk to
- We called Andy Seebart and was told there was nothing available
- Our church has an excellent program to help w/preparedness
- Public service announcements over media: radio, TV
- Church
- Search & rescue meetings
- Church organization's meetings
- Landlord responsible
- Common sense
- Training in disaster
- Going to insurance agency & asking about coverage

Q 12. County

- Harney (37)
- Jefferson (84)
- Lake (38)
- Malheur (98)

Q16. Please indicate your level of education

- Lifetime of experience
- "5th" term college sr.
- Navy

Q17 Do you rent/own

- Mobile home 12' wide
- Acreage & shop
- Commercial bldg w/apartment
- Mobile home (2)
- Log home
- Apt. over store

Q18. If you have lived in Oregon for less than 20 years, in what state did you live before you moved to Oregon?

- Alaska (2)
- Arkansas
- Colorado (3)
- Illinois (2)
- Michigan
- Tennessee
- Wyoming (2)
- Arizona, Florida, Montana, Wyoming, Michigan, & Kansas
- North Carolina & Pennsylvania
- So. Dakota & Arizona

Please feel free to provide any additional comments.

- Some questions don't apply to me as I rent rather than own my residence!
- We always have extra food – in case of emergency. We have generator to keep refrigeration units & well operating, Lanterns & portable stove. The more information available will be good for everyone to get together to help in event of disaster.
- All is well – thank you.
- I think our rivers should be dredged so the high waters have a place to flow.
- Make the “Community Emergency Response Training” available to all residents in the state. It is an excellent program. It educates people in how to prepare themselves, family, & friends for disasters. It provides emergency response personnel with backup help.
- Of course because of global warming, the destruction of habitats, pollution, oil dependency, and people who either don't care or can't grasp what the consequences are of destroying all our resources, I am deeply concerned about eminent world-wide disasters.
- I am probably not a very good example to be completing this form – I'm a widow & live alone & was very unsure about how to answer most of these questions. I've only lived in this house about 2.5 years & it was new when I moved in, although it had a previous owner for a few months.

- Thank you for the time spent preparing, distributing, & utilizing citizens' input.
- 1) I would very much enjoy a final copy of survey results. 2) Civil servants are more & more forgetting who/whom. They work for why, they are on the personal list.
- I think we need less regulation.
- Home is located about 50 feet above 100 year flood plain and I am unaware of any history of earthquake history. It does concern me when I see construction (building) on steep slopes, or in areas prone to heavy runoffs.
- Tax dollars should not be used to restore homes/bldg built in known flood zones – flood zones should be clearly identified and public disclosure should be required. Give public information so they can make common sense discussion – regulations are too costly!
- We live on the rim of the Crooked River Gorge. The river is 100 feet out and 350 feet down.
- The more non-profit organizations (Red Cross) and churches are used the better. These have shown a great history of being closer to their communities, more compassionate, more sincere, and non-threatening. And they will be right there when a disaster occurs.
- Whatever approaches are used to assist us in making wiser choices regarding preparation for any emergencies, I believe they must be balanced – both regulatory & non-regulatory. One size does not fit all! For example, fire is a very real and present danger where we live, but flooding is not. So efforts need to be focused on what the most likely natural hazard(s) by area. Thank you for asking. Blessings on your work!
- My area is not subject to much by way of hazard – the Silvies River has flooded in the past, but I can't imagine it was more than 6-8 inches of water. Since this area is electric dependent, I have considered a small generator – not much else.
- In disaster preparedness I much prefer a non-regulated approach. But, to also have some regulations in place so that there is at least some disaster readiness in place should a disaster occur.
- Good luck. Most folks don't like being told what to do until there is an emergency & even then not! Compensating land owners to "not develop" seems an open unknown for a bottomless drain on the economy. Anyone can say "I want to build a huge [money-making] something" and you need to compensate them for their pipe dreams.
- It is hard for me to do these things, but family can do them. And I live with family. On Crooked River Ranch, over 4600 residents

reside. We have only one exit/access road. The BLM & State of Oregon have offered no solutions or help.

- Here in Summer Lake, we survived the winter fire, which became a firestorm due to inept state & federal performance. There was no common sense during the 1st 3 days of the fire, and the very agencies who should have been helping were exacerbating the situation. The best help came from local volunteers, friends, & neighbors. WE are now prepared & no longer count on state or federal help!!!
- People should depend on themselves and not expect the government to bail them out.
- Education is the main key to preparedness, not regulations. Some questions misleading, i.e. 8G, 7E. Historical & cultural protection is not necessarily the job of gov't, however, private & non-profit organizations can do this. *f – how would tax \$ be used?
- I am 89 years old and live in a rented duplex so some of my answers are left blank or I don't know correct answer! I believe this is a very important project. Good luck!
- I live alone, so not all apply directly.
- I believe it is each person's responsibility to determine what hazards are likely to happen in an area and then act accordingly.
- Everyone should have an emergency plan. My plan I keep my camp trailer ready and cleaned up to use for an emergency.
- I never vote for more taxes.
- I'm never in support of more taxes. And I'm reluctant for allowing government to interfere in our private lives. More rules always means less freedom.
- Encourage people to use common sense.



September 20, 2006

Dear Resident:

We need your help! The Counties of Jefferson, Harney, Lake, and Malheur are currently engaged in a cooperative planning process to reduce the risks and losses associated with natural disasters. As a part of this process, the *Partners for Disaster Resistance and Resilience* and the Oregon Natural Hazards Workgroup at the University of Oregon are conducting a household survey. This survey provides an opportunity for you to share your opinions about preparing for and reducing your household's and your community's risks from natural disasters. The information you provide about your household's needs for disaster preparedness could help the Mid and Southeast Region improve local disaster preparedness and risk reduction activities.

Your opinions are important to us! Please complete the enclosed survey and return it in the postage-paid envelope. The survey will take 15-20 minutes to complete. Please complete and return this survey by **Thursday, October 12, 2006**.

We will also enter your name in a drawing to win a gift certificate at Stunz Lumber Company, True Value Hardware, Big R Ranch Farm Home Supply, or Parr Lumber Company. Please fill out the enclosed form and return with your survey, or mail the gift certificate preference form in a separate envelope to be entered into the drawing.

Your returned survey indicates your willingness to take part in the study. Your participation in this study is voluntary. If you have questions regarding your rights as a research participant, please contact the Office of Human Subjects Compliance, Riverfront Research Park, Suite 106, University of Oregon, Eugene, OR 97403-5219, or call (541) 346-2510. All individual survey responses are strictly confidential and are for research purposes only.

If you have questions regarding the survey, please contact the Oregon Natural Hazards Workgroup at the University of Oregon at (541) 346-3588.

If you have questions about the regional planning process, please contact:

Jefferson County: Rena Thompson, 541-475-4462

Harney County: Andy Seebart, 541-573-5961

Lake County: Phil McDonald, 541-947-6027

Malheur County: Craig Smith, 541-473-5120

For information on *Partners for Disaster Resistance: Oregon Showcase State*, please visit <http://www.OregonShowcase.org>.

Thank you for your participation! We look forward to hearing your opinions!

Andre LeDuc, State Coordinator
Partners for Disaster Resistance & Resilience

Household Natural Hazards Preparedness Questionnaire

This questionnaire is designed to help gauge household preparedness for disasters, and knowledge of tools and techniques that assist in reducing risk and loss from natural hazards. The questionnaire should be completed by an adult, preferably the homeowner or head of household. The information you provide about your needs for disaster preparedness could help improve public/private coordination of preparedness and risk reduction activities within your community. We ask that you please take a few minutes to complete this questionnaire.

Natural Hazard Household Risk Reduction

Households can do many things to prepare for a natural disaster or emergency. What you have on hand or are trained to do when a disaster strikes can make a big difference in your comfort and safety in the hours and days following a natural disaster or emergency. In addition, modifications to your home, including retrofits to strengthen your home's structure, can protect your home and its contents. The following questions focus on your household's preparedness for disaster events.

1. How concerned are you about the following natural disasters affecting your community?

(Check the corresponding box for each hazard)

Natural Disaster	Very Concerned	Somewhat Concerned	Neither Concerned nor Unconcerned	Not Very Concerned	Not Concerned
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dust Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide / Debris Flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Household Fire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcanic Eruption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wind Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Did you consider the possible occurrence of a natural hazard when you bought/moved into your current home?

Yes No

3. Does your household have insurance coverage for flood events?

- Yes No

If you answered Yes, please skip to Question 4.

3.1 If “NO” for flood, what is the main reason your household does not have insurance for flood events?

(Please check one)

- Not available Deductibles too high/not worth it Not necessary
 Not located in the floodplain Not familiar with it/don’t know Too expensive
 Other: _____

4. Does your household have insurance coverage for earthquake events?

- Yes No

If you answered Yes, please skip to Question 5.

4.1 If “NO” for earthquake, what is the main reason your household does not have insurance for earthquake events? *(Please check one)*

- Not available Deductibles too high/not worth it Too expensive
 Not necessary Not familiar with it/don’t know Other: _____

5. In the following list, please check those activities that you have done in your household, plan to do in the near future, have not done, or are unable to do. For Questions F-K, there is also the option to check does not apply, if the preparation action does not apply to a feature of your home. *(Please check one answer for each preparedness activity)*

In your household, have you or someone in your household:	Have Done	Plan To Do	Not Done	Unable To Do	Does Not Apply
A. Attended meetings or received written information on natural disasters or emergency preparedness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B. Talked with members in your household about what to do in case of a natural disaster or emergency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C. Developed a “Household/Family Emergency Plan” in order to decide what everyone would do in the event of a disaster?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D. Prepared a “Disaster Supply Kit” (Stored extra food, water, batteries, or other emergency supplies)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E. In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
F. Have you secured your water heater, cabinets and bookcases to the wall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Have you fit your gas appliances with flexible connections?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Used fire-resistant building or roofing materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Secured your home to its foundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. Braced unreinforced masonry, concrete walls, and chimney?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Elevated your home in preparation for floods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Household Risk Reduction

6. Who is your preferred information source and what is the preferred way for you to receive information about how to make your household and home safer from natural disasters? (*Please check all that apply*)

Information Sources:

- Chamber of Commerce
- University or research institution
- Schools
- Fire Department/Rescue
- Utility company
- Insurance agent or company
- University or research institution
- Government agency
- American Red Cross
- Other non-profit organization

Methods:

- Fact Sheet/brochure
- Internet
- Mail
- Outdoor advertisements (signs, etc.)
- Radio
- Television
- Magazine
- Public workshops/meetings
- Newspapers
- Other (please explain):

Community Risk Reduction

7. Natural hazards can have a significant impact on a community, but planning for these events can help lessen the impacts. The following statements will help determine citizen priorities for planning for natural hazards. Please tell us how important each one is to you.

Statements	Very Important	Somewhat Important	Neither Important nor Unimportant	Not Very Important	Not Important
A. Protecting private property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Protecting critical facilities (e.g., transportation networks, hospitals, fire stations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Preventing development in hazard areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Enhancing the function of natural features (e.g., streams, wetlands)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Protecting historical and cultural landmarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Protecting and reducing damage to utilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Strengthening emergency services (e.g.,- police, fire, ambulance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Disclosing natural hazard risks during real estate transactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General Household Information

9. Please indicate your age: _____

10. Gender: Male Female

11. Zip Code: _____

12. County: _____

13. Do you have access to the internet?

- Yes
- No

14. Do you rent or own your home?

- Yes
- No

15. Please indicate your level of education:

- Grade School/No Schooling
- Some high school
- High school graduate/GED
- Some college/trade school

- College degree
- Postgraduate degree
- Other, please specify: _____

16. How long have you lived in Oregon?

- Less than a year
- 1-5 years
- 5-9 years
- 10-19 years
- 20 years or more

17. Do you rent/own

- Single-family home
- Duplex
- Apartment (3-4 units in structure)
- Apartment (5 or more unit structures)
- Condominium / townhouse
- Manufactured home
- Other: _____

18. If you have lived in Oregon for less than 20 years, in what state did you live before you moved to Oregon?

- Not Applicable
- Washington
- California
- Other _____
- Idaho

Please feel free to provide any additional comments in the space provided below:

THANK YOU VERY MUCH FOR PROVIDING THIS INFORMATION

The Oregon Natural Hazards Workgroup at the University of Oregon's Community Service Center prepared this survey. Implementation of this survey is made possible by funding from the Federal Emergency Management Agency, Oregon Emergency Management and the Public Entity Risk Institute.

*For more information, please contact Oregon Natural Hazards Workgroup
at 1209 University of Oregon, Eugene, OR 97403-1209,
call (541) 346-3889, or visit www.OregonShowcase.org*