
In Corvallis, the LB NET began in 1996, in part out of concerns that in a large disaster the local emergency agencies would not be able to provide immediate service to all disaster victims. The program encourages the residents in neighborhoods to work together to become better prepared for natural or other disasters, and to be self-sufficient for 72 hours following an event. For this study I interviewed the organizers of 14 neighborhoods between October 2001 and February 2003.

Oregon State University Office of International Research and Development used the LB NET as a model to develop a project in Uzhhorod funded by U.S. Department of State, Bureau of Educational and Cultural Affairs. The WNNP was funded for one year beginning in July 2000, with a one-year extension. The project included four trips from the U.S. to Uzhhorod: to conduct a needs assessment, participant selection and initial training; two consulting/mentoring trips; and for the project finale in April 2002. All project participants and two Ukrainian coordinators traveled to Corvallis for three weeks training in April 2001. For this study the WNNP
participants were interviewed in Corvallis in April 2001 and in Uzhhorod in April 2002.

This thesis examines how the Uzhhorod program evolved from the Corvallis program, and similarities and differences between the WNNP participants and the LB NET organizers, including neighborhood demographics, and organizer motivation, volunteer activities and social networks. In the conclusions section, I discuss environments where each program might be successfully duplicated.

by
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A THESIS

submitted to
Oregon State University

in partial fulfillment of the requirements for the degree of

Master of Arts

Presented March 5, 2004
Commencement June 2004
Master of Arts thesis of Naomi Weidner presented on March 5, 2004

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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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Naomi Weidner, Author
ACKNOWLEDGEMENTS

This study would not have been possible without the cooperation of the Linn-Benton Neighborhood Emergency Training neighborhood organizers and the participants of the Women's Neighborhood Network. I thank you not only for your patience during my interviews, but also for your participation in your neighborhood project to make your neighborhood and our communities safer places to live.

The Ukrainian project co-coordinators Tamara Gritso and Zita Bathori-Tartsi helped in so many ways, including organizing interviews and gathering information about Uzhhorod. I especially thank Tamara for assistance after the WNNP project ended by helping me understand life in Uzhhorod, from land ownership to the school system.

I thank my Ukrainian interpreters, Katherine Bazilia, Mary Radetsky and Tanya Galkina in Uzhhorod, and Victor Lychyk, Vitaly Pechenuk and Matilda Kuklish in Corvallis. I greatly appreciate your help in bridging the communications barrier.

I thank Peggy Peirson of the Benton County Office of Emergency Management for providing valuable input about emergency preparedness in Corvallis, and for being a friend.

I am deeply indebted to Marion McNamara. Without your friendship and vision, neither the Women's Neighborhood Network project nor this study would have taken place.

I am grateful to the support of my committee and to my major professor, Dr. Roberta Hall. I know I lingered longer than most students; I appreciate your understanding, as well as your gentle nudges to finish.

During most of my time as a graduate student at OSU I worked in the College of Pharmacy. I thank Evelyn Madison, Dean Wayne Kradjan and Dean Richard Ohvall for the support and flexibility that allowed me to travel to Uzhhorod.

Bruce Miller, you enrich my life. Thank you for always being beside me.
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<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
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<td>LB NET</td>
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<td>NDEC</td>
<td>National Disaster Education Coalition</td>
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<td>NGO</td>
<td>Non-governmental organization</td>
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<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
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<td>USCAC</td>
<td>Uzhhorod Sister Cities Association of Citizens</td>
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<td>USSR</td>
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INTRODUCTION

At the close of the twentieth century there has been a shift in how natural disasters are viewed, from being seen as acts of God – and therefore unpreventable – to being natural hazards and events for which we can plan and prepare.

The number of people worldwide who are at risk from natural hazards has been growing by 70 to 80 million per year (United Nations, 2002). This is largely because as populations increase, people move into areas that are more disaster prone, and partly because as populations increase, natural ecosystems that otherwise offer some protection are destroyed. For example, trees are removed for use as fuel or building materials, wetlands are drained and developed for housing or work places, and rivers are re-routed from their natural beds. Each of these acts increases vulnerability to floods. Loss of trees reduces the soil’s ability to absorb water and increases erosion. Loss of wetlands and engineered river beds reduce the earth’s ability to respond to events that can lead to flooding, and building in these lowland areas increases the number of people at risk. It is easy to see how development decisions have not only increased the number of people at risk, but also have created conditions that increase vulnerability, and decrease nature’s ability to respond to natural events.

Strictly speaking, there are no such things as natural disasters, but there are natural hazards. A disaster is the result of a hazard’s impact on the society. So the effects of a disaster are determined by the extent of a community’s vulnerability to the hazard (or conversely, its ability, or capacity to cope with it). This vulnerability is not natural, but the result of an entire range of constantly changing physical, social, economic, cultural, political, and even psychological factors that shape people’s lives and create the environments in which they live. “Natural”
disasters are nature's judgment on what humans have wrought.

Rather than acts of God for which we cannot prepare, disasters are now seen as
the result of natural events at the interface with society, and events that are influenced
by decisions made by societies and individuals. Development can be done with an eye
to natural events: homes can be constructed outside the flood plain; buildings can be
made earthquake safe. In areas where development is done with an eye to reducing
the effects of natural hazards, there has been a decrease in the loss of life from natural
events.

In the U.S., businesses and organizations within sectors are encouraged to be
prepared for disasters. Schools, hospitals and governments have disaster plans and are
required to conduct disaster exercises on a regular basis. Businesses small and large
are encouraged to have business continuity plans.

But in the end, all disasters are local. It is the individual household that is
affected. Whether it is a flash flood that sweeps away one home or an earthquake that
destroy thousands of homes, it is the individuals who are affected who must deal with
the aftermath. There are actions the individual can perform and decisions the family
can make to reduce their vulnerability to natural events, and there is increasing interest
in programs to encourage household and neighborhood preparedness.

One model for disseminating preparedness information is based on organizing
neighborhood teams. Two neighborhood programs have been developed to encourage
preparedness in Corvallis, Oregon, U.S.A. and Uzhhorod, Ukraine. In Corvallis, the
Linn-Benton Neighborhood Emergency Training (LB NET) program is coordinated
through the Benton County Office of Emergency Management. Interested citizens
volunteer to organize their neighborhoods, and for the most part, their involvement
with the program is confined to the development of preparedness networks in their
neighborhoods. LB NET funding is minimal – materials are purchased with funds
donated for that purpose, and the time of the Project Coordinator is covered as a
portion of her position with Benton County.
In Uzhhorod, the Women's Neighborhood Network Project (WNNP) was coordinated by two half-time, paid Ukrainian coordinators, and organized in the U.S. by two part-time, paid U.S. coordinators. The individuals who became neighborhood organizers applied to the project; they were volunteers. The project was funded for one year (with a one-year extension) by the U.S. Department of State, Bureau of Educational and Cultural Affairs.

In this thesis, I examine the projects, the environments in which they have evolved, the connectedness and motivation of the neighborhood organizers, and how these factors might affect the projects' abilities to continue beyond the initial development of a neighborhood network. I explore questions such as:

1. What are the similarities and differences in the model as implemented in the U.S.A. and Ukraine?
2. What are the similarities and differences between the family and social networks of the neighborhood organizers in each project?
3. Has implementation of the model resulted in better-prepared communities in the event of disaster?
4. Does the neighborhood emergency training model succeed as a self-sustaining, stand-alone project?
5. Is the model one that can be successfully adapted for communities in countries other than the U.S. or Ukraine?

In the remainder of the Introduction I provide a brief description of Ukraine's history and relationship with Russia, examine the histories of Corvallis, Oregon and Uzhhorod, Ukraine, and the history and development of the neighborhood preparedness project in each community. In the Literature Review section I briefly review various aspects of emergency preparedness, gender and emergency preparedness, disaster issues in Ukraine and the Soviet Union, disasters in Oregon, U.S.A., capacity building, and anthropological tools I used in this study. In Methods and Strategies I describe my methods for collecting and analyzing the information. In Findings and Discussion I discuss the results of the interviews, including similarities
and differences between the two groups of neighborhood organizers. In Conclusions I return to the questions listed above and summarize results and propose additional areas of research for community networks and emergency preparedness.

**LIMITATIONS**

I was involved with the WNNP in a paid position as the associate director while I was a graduate student at Oregon State University (OSU). This frequent and extended contact with the participants and Ukrainian organizers gave me opportunities to develop relationships and friendships that I could not with the LB NET participants. This closer involvement allowed me to gather information that I would not have learned had I only relied on my formal interviews with the participants. As the associate director I had a voice in the development of the project, including training and other activities. For example, the project personnel decided that the project would be more likely to succeed in its goal of developing five networks if the participants worked together in teams of two or three.

A personal limitation of this project is one created by distance. I could easily drive through any of the LB NET neighborhoods to observe, for example, the age of the homes in a neighborhood; it is not something I could do in Uzhhorod. On my three trips to Uzhhorod as part of the WNNP, I visited only about one-half of the neighborhoods, forcing me to rely on the participants’ written descriptions of their neighborhoods for some information.

Three WNNP participants and both Ukrainian coordinators spoke English. Of the three participants, two preferred to conduct interviews through an interpreter. My conversations and interviews with the others required interpretation. Although all the interpreters were skilled, any act of interpretation allows for influence from the interpreter. Always working with the same interpreters allowed us to become familiar with each other’s styles, and allowed them to come to understand the emergency preparedness terms and the kinds of information I was seeking. While being a great help, this also was another potential area of influence from the interpreters.
Any discussions of the model of neighborhood emergency preparedness are necessarily limited by the fact that this study includes only two examples, and while there are similarities between the examples, there are also significant differences. For example, the WNNP participants conducted the training of their neighbors, while a trainer from outside the neighborhood conducted the training of LB NET neighborhoods.

The ability to compare and contrast the two models is hindered by the use of different methodologies to collect data in the U.S. and Ukraine. The three biggest differences were:

- The need for interpreters for interviews with the WNNP organizers.
- The use of tape recorders for the LB NET organizer interviews.
- The WNNP participant information about personal networks was from the first interview in which I asked each participant to talk about networks that were important to her, while the LB NET organizer information was gathered from questions that specifically asked about important personal networks.

As a member of the emergency preparedness community in Corvallis, I was already familiar with the LB NET program. I tried to always be aware of the possibility of bias from this knowledge influencing my interviews with LB NET participants by focusing only on the interview at hand.

**DEFINITION OF TERMS**

The *World Disasters Report 2002. Focusing on Reducing Risk* (International Federation of Red Cross and Red Crescent Societies, 2002a) includes tables that report numbers of disasters and affected people in nations around the world. As no single institution compiles disaster numbers, *World Disasters Report 2002* uses data from two sources: the Centre for Research on the Epidemiology of Disasters in Brussels and the U.S. Committee for Refugees. For the purposes of their tables, disaster is defined as:
A situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance. In order for a disaster to be entered in EM-DAT [a database at the Centre for Research on the Epidemiology of Disasters], at least one of the following criteria has to be fulfilled:

- 10 or more people reported killed;
- 100 people reported affected;
- a call for international assistance; and/or
- declaration of a state of emergency

**Killed:** People confirmed dead or missing and presumed dead.

**Affected:** People requiring immediate assistance during a period of emergency, i.e., requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance. In EM-DAT, the total number of people affected include people reported injured, homeless, and affected.

**Estimated damage:** The economic impact of a disaster usually consists of direct damage (e.g., to infrastructure, crops, housing) and indirect damage (e.g., loss of revenues, unemployment, market destabilization). EM-DAT’s estimates relate only to direct damage. (International Federation of Red Cross and Red Crescent Societies, 2002a:179-180).

**Ukraine and Russia – A Little History**

Note: Where possible, I have used the Ukrainian spellings of locations in Ukraine. For example, Chornobyl, the site of a nuclear reactor accident in 1986, is more commonly known in the U.S. by the Russian spelling, Chernobyl.

For centuries Ukraine (which means borderland) has been a traditional crossroads between the Baltic and Black seas, Europe and Central Asia. As a borderland between Europe and Russia, Ukraine has been the object of numerous battles and annexations. There is an oft-told joke in the Transcarpathia region of Ukraine about a man who was born in the Austro-Hungarian Empire, went to school in Poland, was married in Czechoslovakia, and died in Ukraine. When he got to heaven
St. Peter asked him why he moved around so much, and he replied that he had lived in the same house his whole life.

In the eighteenth century, after a series of battles between Russia and the Turks, Russia expanded into southern Ukraine. Between 1772 and 1795 the Partitions of Poland transferred most of western Ukraine from Poland to the Russian Empire. This absorption of Ukraine into the Russian Empire was essential to the emergence of the Russian Empire as a world power.

Ukrainian nationalism, which thrived in the 1840s and 1920s, attracted repressive action from Russia, first under the tsar and later under Stalin. Ukraine was a founding member of the USSR in 1922, but when Stalin took power in 1927, he was determined to eliminate "dangerous" nationalism. He made an example of Ukraine, by executing intellectuals and political dissidents and engineering an artificial famine in the 1930s that starved over six million Ukrainians.

During World War II, Ukraine was a major battleground because of its borderland location. An estimated six million Ukrainians died in the war (including four million civilians). Cities, towns and thousands of villages were devastated by the war.

The Soviet Union became an empire in which political and personal survival were overriding objectives. In the harsh, unforgiving climate and the often brutal social order, people learned to live with the existing systems. Continuation of existing systems was encouraged, no matter how poorly the systems worked, and innovation was discouraged. Any individual initiative was perceived as a threat—an attempt to increase power or status—and therefore discouraged. Likewise, individualism was seen as a threat to the status quo.

The KGB functioned as a secret police with informers throughout the population. Various divisions within the KGB known as Directorates were responsible for infiltrating ethnic, political and religious groups in the Soviet Union, uncovering and eliminating dissent and subversion, and in general monitoring the activities of the Soviet people. The MVD was internal police with some functions
similar to police in Western countries (controlling traffic, maintaining public order, investigating crimes and arresting criminals, running the prison system). All Soviet citizens were required to carry internal passports which gave personal and work-related information. The MVD administered and monitored the system which gave them authority over people who were not where their internal passports and other documents said they were supposed to be.

On April 26, 1986, a chain reaction in a Chornobyl nuclear reactor became out of control, creating explosions and a fireball that blew off the reactor's heavy steel and concrete lid. The Kremlin did not announce the accident for two days, and then downplayed the effects. May Day parades in Kyiv, just 60 miles to the south, were held as scheduled, despite the fact that the wind was blowing fallout over the city. Thirty-one people died in the explosion. It is not known how many more died from acute radiation sickness; however, in 1999, the Ukrainian Health Ministry released a report stating that over 170,000 people had died or suffered fatal diseases as a result of involvement in the clean up. More than 600,000 workers – known locally as “liquidators” – worked on the clean up of Chornobyl. Many were conscripted off the streets of Ukrainian villages and cities.

In local elections in 1990, the nationalist movement won seats across the Soviet Union, and took control of several city councils in the west. In August, 1991, the Supreme Council adopted a declaration of independence, that was later ratified by over 84% of the population.

Although at the time of the breakup of the Soviet Union, Ukraine had been considered the republic most likely to succeed economically, by 1993 it was on the verge of total economic collapse. Economic restructuring failed to meet its potential, partly because of extreme government corruption. Living conditions declined for most people. Many are unemployed or underemployed, often working but not receiving pay. Infrastructure and social services in many cities and towns have deteriorated alarmingly, causing interruptions in the delivery of water, electricity, and heat.
The former Soviet Union was not an environment that encouraged collaboration, trust, or transparency. Ironically, the materialist idealism of the former Soviet Union created economic and political realities that made it rational for citizens to hoard goods and withhold information, and when possible, to resist the forced volunteerism that characterized the communist era.

Part of the legacy of the Soviet Era was a near collapse of civil society and individual sense of agency, as citizens lived in a top-down, centrally planned economy that discouraged personal initiative and dissent. The Ukrainian term for volunteer had become synonymous with the term for conscript, and those who volunteered were viewed as dull or naive.

**UZHHOROD, TRANSCARPATHIA, UKRAINE**

Situated on both banks of the Uzh River, Uzhhorod is an ancient city in the western Ukrainian oblast of Transcarpathia.

Ukraine is divided into 24 oblasts (regions). Transcarpathia is the western-most oblast and borders the nations of Poland, Slovakia, Hungary and Romania, and the Ukrainian oblasts of Lviv (which lies to the northeast) and Ivano-Frankivsk (to the east) (see Figure 1). Because of its important geographical location, the Transcarpathia oblast has been a bridge to other parts of Europe, and as such it has been a political football. With the exception of periods in the Sixteenth and Seventeenth centuries when portions of Transcarpathia were subject to Transylvanian and Cossack revolts, Transcarpathia was part of Hungary or the Austro-Hungarian Empire until the end of World War I, when the region was included as part of the newly formed country of Czechoslovakia. In the spring of 1942, German troops moved into the region, and at the end of the Great Patriotic War (known as World War II in the U.S.A.), Transcarpathia became part of the USSR, and was known as the Zakarpatska region of Ukraine. As part of Ukraine, the oblast gained independence with the breakup of the Soviet Union in 1991. See Appendix A for additional history of the City of Uzhhorod.
In 2001 Uzhhorod was the administrative center of the Transcarpathia oblast. It was located four kilometers from the Slovak border, 25 kilometers from the Hungarian border, and approximately 280 kilometers southwest of Lviv, the largest city in western Ukraine. Uzhhorod covered 40 square kilometers, and, with a population of 125,600, had a population density of 2,600 to 3,000 people per square kilometer. The city was subdivided into eight administrative districts. The population was multi-ethnic, with over 70 ethnic groups represented, including Ukrainian, Russian, Hungarian, Slovak, Roma, Czech, Jew, German, Pole, and Armenian.

In Uzhhorod eight newspapers were published – one in Hungarian, one in Russian and six in Ukrainian. One television and three radio stations broadcast in Ukrainian, Slovakian, Romanian and Hungarian. Uzhhorod was home to the Uzhhorod State University and two institutes, and a military base.

There were 24 public schools in Uzhhorod. Most held classes for grades one through 12; however, the gymnasium and the languages and sciences lycium taught
grades five through 12. There were also three special schools that focused on English or French language, and one private junior-level school.

The city was situated on the Kyiv-Bratislava highway. It had a public bus system, numerous taxis, a train station and an airport.

Transcarpathia was known for its wines. The furniture factories of Uzhhorod were famous in the Soviet era; one factory continued to produce in Uzhhorod. In addition, clothing, shoes and motors were made in Uzhhorod.

Although religion was suppressed under Soviet rule, in 2002 Uzhhorod had about 10 churches (Orthodox, Roman Catholic, Greek Catholic, Reformist, Evangelist and Adventist). A synagogue was closed by the Soviets; the building was being used for symphony concerts.

Uzhhorod maintained Sister City relationships with nine cities in six countries: Kosice and Mikhalovtse in Slovakia; Nyiregyhaza and Bekescsaba in Hungary; Lipa, Czech Republic; Darmstadt, Germany; Horsensi, The Netherlands; Orel, Russia; and Corvallis, Oregon, U.S.A.

The Uzh River flows out of the Carpathian Mountains north of Uzhhorod, and eventually joins the Danube River in Hungary to the south. It flows through Uzhhorod from west to east. Five bridges crossed the River Uzh (one railway bridge, two vehicle transport bridges and two pedestrian bridges).

There were 170 kilometers of streets within the city. Water was provided from two reservoirs and twelve artesian wells, via 254 kilometers of water pipes. The water delivery system was antiquated, with as much as 60% of the water being lost before reaching taps due to cracks and breaks in the system. Five electrical stations supplied the city with electricity; the city consumed an average of 500,000 kilowatts per day. Centralized steam heat was provided by 32 gas-fueled boilers and delivered via 235 kilometers of pipes. Some homes and apartment buildings had their own boilers.

Due to shortages of electricity, it was common during the winter for power to be cut in scheduled power outages. The periodic power outages and the failing water delivery system had become a way of life for the citizens of Uzhhorod. Residents
knew the electricity schedule and planned their lives around the scheduled outages, and were not greatly surprised to have no water when they turned on the faucet.

The city had three fire stations. At the main station, located in southeast Uzhhorod, one floor housed the regional fire center.

Enterprises identified as having the potential of being involved in a fire or explosion included the furniture factory, an open joint stock company, mechanical plant, sewing and shoe factories, gas stations, and oil tanks. There were five production companies that used substances considered to be poisonous. In addition, an estimated 17-20 rail cars transported poisonous substances through the city daily (McNamara et al., 2000).

Typical single-family homes were built in the 1930s, although a number have been built since independence in 1991. The more modern homes were built as a family was able to pay for construction and, therefore, often took a number of years to complete. Most private homes had a small kitchen garden, and many families maintained dachas — small garden farms outside the city.

Typically, the house was owned, but the land was not. When planning to build a house, an application was made to the government, and the family’s name was put on a waiting list. In the Soviet Era special consideration was given for certain groups of people (e.g., for families with young children, or for physicians). It was not expected, but often parents would build a new home for their children when the children married (Weidner, 2001).

Most apartment buildings were built in the Soviet era and were concrete slab construction. Most were four or five stories tall with 15 flats per floor. The tallest was 16 stories. Apartment buildings had stairways and elevators; often the elevators were not serviceable.

City officials had determined that the greatest risks of natural or human-caused disasters were from flooding, earthquakes, hazardous spills, fires, water pipe damage, strong winds and winter storms (McNamara et al., 2000). The Uzh River has a history of flooding in Uzhhorod, most recently in 1993, 1998 and 2001. The worst of those
events occurred in November 1998, in a flood that affected 1,000 square kilometers and resulted in 18 deaths, 230 injuries, 24,340 people being left homeless, and a total of nearly 25,000 people affected (Centre for Research on the Epidemiology of Disasters, 2004).

Uzhhorod had approximately 9,000 buildings. In the event of an earthquake of magnitude 7.0 on the Richter Scale, city officials believed that 680 houses would be destroyed, 2,600 would be badly damaged, and 40,000 people (10,500 families) would become homeless. During the initial 15-40 hours following the earthquake, the city would be without electricity, water, gas and heat. In a hazardous spill event, it was possible that 10,000-15,000 people would need to be evacuated (McNamara et al., 2000).

Appendix C contains additional information about Uzhhorod and comparisons to Corvallis, Oregon.

WOMEN'S NEIGHBORHOOD NETWORK PROJECT

The Women's Neighborhood Network Project (wNNP) was developed by Oregon State University faculty in the Office of International Research and Development and the Department of Anthropology, in response to a request for proposals from U.S. Department of State, Bureau of Educational and Cultural Affairs. The funding agency desired projects that would, among other things, foster women's leadership and encourage the growth of democratic institutions while operating at two levels to enhance institutional partnerships and offering practical information to individuals and groups to assist them with professional and volunteer responsibilities. The wNNP project goals included:

- Establish five neighborhood networks for emergency preparedness;
- Foster connections between government officials, emergency service providers and citizens;
- Raise awareness about emergency preparedness; and
• Help establish connections between local and regional Red Cross organizations and the Krakow Chapter of the Polish Red Cross.

The project was originally funded for one year, and was given no-cost extensions for an additional 12 months.

The Women's Neighborhood Network Project began in July 2000. (See Table 1 for a timeline of project activities.) In November 2000, four team members from Corvallis, Oregon, traveled to Uzhhorod to select project participants and two part-time coordinators, provide initial training of the participants, and conduct a needs assessment. Participant application to the project was limited by the funding agency to women; the project organizers further limited application to members of the Uzhhorod Sister Cities Association of Citizens (USCAC). The previous year, the Office of International Research and Development had selected participants in Uzhhorod for another project funded by the U.S. Department of State, and had been overwhelmed with applications. Since USCAC was a project partner, requiring USCAC membership helped limit the size of the applicant pool. In addition, the project organizers believed that previous involvement with USCAC was a useful requirement because it indicated an individual’s openness to ideas from outside her culture. See Appendix D for the participant application.

The Participant Interviews and Selection

Each woman interested in the WNPN submitted a written application that included information about her participation with Uzhhorod Sister Cities Association of Citizens, and essay-type responses to questions about why she wanted to be in the project and ideas she had about how to get her neighbors involved in the project (see Appendix D). The applications were translated prior to the arrival of the U.S. team in Uzhhorod.

Of 30 applicants, 20 were identified by USCAC as meeting the criteria and were invited for interviews. Following interviews, 10 participants and four alternates were selected to participate in the project. Two participants became unable to travel to the
Table 1. Chronology of WNNP Activities.

<table>
<thead>
<tr>
<th>MONTH</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant selection</td>
<td>11</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Interview neighbors</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Weekly meetings</td>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Training in U.S.A.</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Organize neighbors</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentoring in Uzhhorod</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training and project finale in Uzhhorod</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
U.S. and savings from lower-than-anticipated airfares allowed the project to increase
the number of participants to 12 and to include all of the alternates.

In the selection of applicants, an attempt was made to identify women who
already had neighborhood connections upon which they could build. Questions asked
during the applicant interviews were designed to determine how well applicants knew
their neighbors and what kinds of activities they did together. (See Appendix E for the
interview guide questions.) For example, one woman mentioned that she and her
neighbors helped someone in their building who’d had an apartment fire. Another
woman and her neighbors helped a neighbor whose wall had collapsed during heavy
rain. The affected family stayed with her, while another neighbor helped rebuild the
wall.

Five applicants lived in apartment buildings where at least some of the
neighbors cooperate to clean the area around the apartment building or common areas
inside. One neighborhood organized a playground and a dog walk area for residents to
use; another worked together to beautify the neighborhood. One neighborhood had a
common boiler, and members of one apartment building pooled money to purchase a
pump to improve water pressure in their building.

Some neighbors came together for social events. One applicant’s
neighborhood gathered for barbecues, another’s neighborhood celebrated holidays
together, and a third said that her neighbors spent leisure time together.

**Project Activities**

*Participant activities prior to training in the U.S.*

Following selection of the participants, all participants, alternates and the two
part-time Ukrainian coordinators were brought together for a one-day training that
included an overview of rapid assessment, and interview and observation skills for the
neighborhood needs assessment portion of the project. Each participant completed a
short pre-project survey (see Appendix H) to prompt her to begin thinking about the
project, how well she knew her neighbors, and her family’s emergency preparedness.
Following the rapid assessment training (see Appendix G for the RAP summary document used in the training), the participants as a group developed five questions they would ask their neighbors (Appendix I) to learn general information about their neighbors, including what they knew about the local emergency telephone numbers; their knowledge of local hazards; and their interest in learning more about emergency preparedness.

Over the next several days, the participants worked in teams of two or three to interview their neighbors. Each participant conducted two interviews with a U.S. team member as note-taker, observer and coach for interview techniques. The notes written by the observers were used in the rapid assessment process to determine local knowledge, as well as to identify training needs for the participants’ visit to the U.S. the following spring.

Between November 2000 and April 2001, the participants continued interviewing their neighbors and met weekly for English language lessons. At these meetings they also had guest speakers from emergency agencies, who told the women about the services they provide and the issues they face, and at some meetings they learned skills such as first aid.

U.S. team member activities prior to the participant training in the U.S.

During the November 2000 visit the U.S. team members interviewed city officials and providers of emergency services, such as the ambulance service and the fire department (Figure 2). Information gathered in these interviews included the city’s and agencies’ current emergency response capabilities, what they perceived as their most pressing needs in communicating with citizens, and how they felt they could best strengthen the communities’ resilience in the face of emergencies. Some agency personnel also indicated that there was little cooperation between the citizens of Uzhhorod and the providers of these services. One city official said that during one flood, he had observed people standing around watching while the soldiers made and stacked sandbags to protect private property (McNamara et al., 2000).
Participant training in the U.S.

In April 2001, the 12 project participants and two Ukrainian coordinators traveled to Corvallis, Oregon, for three weeks of training that included sessions designed to develop skills such as organizing volunteer groups, developing printed materials, preparing materials for presentations, and making presentations, as well as information about emergency preparedness. There were also sessions on how to work together, how to motivate volunteers, how to work with individuals who have different work or organizational styles, and meetings with local Corvallis groups that demonstrated different ways a community can work together to be better prepared for natural or human-caused emergencies. (See Appendix J for a list of the training and other activities held while the participants were in Corvallis.) The written materials provided in training sessions included emergency preparedness materials translated into Ukrainian specifically for this project, as well as Russian-language materials that had been developed by emergency organizations for use in Russian communities in the U.S. Figures 3-6 are photographs from the training.
Figure 3. The 12 WNNP participants and two Ukrainian coordinators, April 2002.

Figure 4. WNNP participants in a training activity developed to increase their skills for working together.
Figure 5. During their visit to Corvallis, the WNNP participants and Ukrainian coordinators visited with members of the Corvallis Police Department and the Benton County Sheriff's Department.

Figure 6. In Uzhhorod, Ukraine, the citizens do not cultivate relationships with members of law enforcement agencies. The WNNP participants enjoyed meeting members of the Corvallis Police Department and deputies from the Benton County Sheriff's office.
The part-time coordinators remained in Corvallis for an additional week of training to learn computer software programs that would be useful for their work with the project, to develop materials for the project, and to participate in a community emergency preparedness event in Seattle, Washington.

**Participant activities after training in the U.S.**

Upon their return to Uzhhorod, the participants worked in their teams to develop five neighborhood networks, and to develop and make presentations to their neighbors about emergency preparedness. Originally the teams were formed based solely on geographic location. There were four teams of two, one team of three, and one woman working alone. It became obvious, however, that there were advantages to working in teams, and the solo woman joined another team, but maintained her neighborhood as a separate location, so that five teams had six neighborhoods. (See Appendix O for descriptions of the neighborhoods.)

During this period, they continued to meet bi-monthly, to share their experiences and trade information about their successes and failures. Their successes included expansion of their presentations from their neighbors to their work sites. Teachers presented material at school, not only to students but also to other teachers and staff. Medical doctors made presentations at work to other medical professionals, including head nurses from hospital departments, department chiefs, head physicians, and other medical workers.

At the project participants’ weekly meetings, the physicians saw the effectiveness the teachers were having in presenting material to students, and decided to expand their hospital presentations to include the pediatric patients and their parents.

On October 21, 2001, in honor of International Disaster Preparedness Day, three project participants who are also teachers, together with other school personnel, organized preparedness events at three schools. They used material prepared as part of the project, and invited the fire department to participate by bringing a fire truck to
the schools and demonstrating equipment. A similar event was held on May 3, 2003, one year after the conclusion of the project. During this period the participants continued to work with their neighborhood groups and to meet weekly.

**U.S. team member activities after participant training in the U.S.**

In July 2001, Charlotte Haynes (Director, Women in Development, Oregon State University) and Donna Gregerson (Extension Staff Chair, Benton Extension Service), traveled to Uzhhorod for a mentoring visit. They attended presentations made by the project participants and met with each of the five neighborhood groups. The project participants also met with Haynes and Gregerson in sessions that addressed leadership training, and volunteer recruitment, motivation and management.

**Project finale in Uzhhorod**

In April 2002, a team of four people from Corvallis traveled to Uzhhorod to provide additional training and support to the participants, to help the participants organize a community event that was the project finale, and to bring together representatives of Red Cross organizations from Ukraine; Krakow, Poland; and Corvallis, Oregon.

The participants organized an evening of workshops on emergency preparedness to which they invited the public (Figure 7). The topics they presented included:

- How to Be Prepared For a Flood
- Emergency Planning For Special Needs Populations
- Developing a Family Emergency Plan, and
- Preventing Fires at Home

In addition, at the request of the participants, a U.S. team member made a presentation on personal safety.
Figure 7. One of the WNNP participants with a poster she developed and used in a public presentation during the final project activities in Uzhhorod, April 2002.

On another evening, one U.S. team member led the participants, some of their neighbors, and the Red Cross representatives in an exercise of what they would do in a winter storm emergency. The exercise was designed to review and reinforce the participants’ prior learning of disaster-related concepts and to recognize the progress they had made in developing of their neighborhood groups.

The project finale was designed to bring together the professional providers of emergency services and the citizens of Uzhhorod. Called the “Day of the Rescuer,” this event was held on a Saturday in the public square located at one end of the pedestrian mall. Representatives included the ambulance service, fire department, rescue unit, and Red Cross. The fire department, rescue unit and ambulance service all brought vehicles and equipment that they demonstrated for the public (Figures 8-9). The Uzhhorod City Red Cross and the Krakow (Polish) Red Cross provided demonstrations and an opportunity for citizens to practice cardio-pulmonary resuscitation. Previously, the fire department had conducted public education in the schools, but this event provided the first opportunity for most citizens to interact with the professionals and see their equipment, and the first opportunity to see the services of all these organizations in one place. The event was attended by an estimated 400 people.
Figure 8. The Uzhhorod Fire Department and Search and Rescue Unit demonstrate their rescue skills at Day of the Rescuer.

Figure 9. Children and adults were given the opportunity to handle pieces of fire fighting equipment.
Post-project – after April 2002

Although the funding for the project had ended, as of May 2003, the participants in the WNNP continue to meet weekly. In May 2003, the teacher/participants helped their three schools plan the Day of Preparedness. The event was similar to the International Disaster Preparedness Day held in October 2001, but they expanded student involvement by involving older students in preparing for the event. Older students have also become involved by going into classrooms of younger students to talk about preparedness.

As a result of their working and meeting together for 29 months (the original project months of January 2001 through May 2002, and after completion of the project through May 2003), the participants in this project have formed a close-knit group that supports each other beyond the original scope of the project. They have provided support to each other through deaths, births and weddings, and as of May 2003, they report they were continuing to meet on a monthly basis.

CORVALLIS, OREGON, U.S.A.

Corvallis, Oregon is located approximately 85 miles south of Portland, Oregon, on the west bank of the Willamette River at the confluence of the Mary’s River. The Willamette River flows from south to north, in a valley between the Coast and Cascade mountain ranges.

The known history of the area around Corvallis, Oregon, includes the Kalapuya, a native people who lived in small village bands for at least the past 6,000 years, managed resources of the Willamette Valley through techniques that included the use of regular burning, and practiced hunting and gathering in the area. Some bands maintained permanent villages along the Mary’s River, a tributary of the Willamette River. The native populations were decimated by smallpox brought into the area by European maritime fur traders in the late eighteenth century, and by malaria in the 1830s. By some estimates, as much as 90 percent of the population was lost to these events, opening the area for the Klickitat Indians (who had lived farther
north) to move into the area. When Euro-American migrants began arriving in the mid-nineteenth century, both Kalapuya and Klickitat people lived in the area (City of Corvallis, 2002).

In 1845 and 1846 the first land claims were registered by Euro-American settlers in a community called Marysville. In 1847, Benton County was established, bounded by Polk County in the north, the Willamette River on the east, the Pacific Ocean on the west, and California to the south. Settlement into the mid-Willamette Valley increased with the establishment of the Territorial Road. By the summer of 1847 the road ran from Portland south to the Yamhill County line. Several years later, the road was extended along the Willamette River to the mouth of the Mary’s River. Soon after that early canoe ferry service was provided across the Mary’s and Willamette rivers (City of Corvallis, 2002).

In 1848, the settlement of the Willamette Valley slowed with the discovery of gold at Sutter’s Mill in California, with many settlers heading south to the gold fields rather than north to the Willamette Valley. Also in 1848, the U.S. annexed the Oregon Territory (City of Corvallis, 2002).

Settlement was accelerated by the 1850 Donation Land Claim Act that granted up to 640 acres of land to white or half-Indian male settlers, with the exact amount depending on their marital status. The Act granted land title to settlers who cultivated the land and lived on it for four years (City of Corvallis, 2002). For additional information about the history of Corvallis, see Appendix B.

In 2002 Corvallis had a population of over 50,000, and was the county seat of Benton County which had a population of 80,000. The 1998 median family income in Benton County was $49,630. The area of the city was 13 square miles. State highway 99W passed through the city on the north-south axis, and highways 20 and 34 joined together in the city and passed through on the east-west axis.

As the county seat of Benton County, Corvallis had the offices of both county and city management. Within Corvallis city limits there were five fire stations.
The dominant population of Corvallis was of European descent. There were, however, approximately 4,000 Hispanics, many with some heritage from Mexico. They were mostly employed in service and agricultural jobs (U.S. Census Bureau, 2003).

Corvallis was home to Oregon State University, which had 17,000 students from 80 countries and 7,000 employees; and a campus of Hewlett Packard, where 4,000 people were employed. Corvallis had additional businesses involved in technology production, an office of the U.S. Environmental Protection Agency, and a branch of Linn-Benton Community College.

Corvallis had two high schools, three middle schools, 11 elementary schools, and four private schools. There was one hospital that employed 1,300. Corvallis had 66 churches.

Within Benton County there were plant nurseries and farms growing grass seed, hay, wine grapes and Christmas trees. There were also beer microbreweries and wineries.

Neighboring towns included Adair Village to the north and Philomath to the west. Between 1943 and 1946 an active military base was located eight miles north of Corvallis at Adair. In the 1960s a portion of the base was reactivated by the Air Force. Philomath was located five miles west of Corvallis, where until the 1980s the major industry was timber mills. Adair Village and Philomath were bedroom communities of Corvallis.

Appendix C contains additional information about Corvallis and comparisons to Uzhhorod.

**Linn Benton Neighborhood Emergency Training (LB NET)**

The Linn-Benton Neighborhood Emergency Training (LB NET) program was begun in 1996 as a result of concerns identified by the Benton County Emergency Management Council and the Linn County Emergency Management Office. The agencies recognized that in a large disaster emergency personnel could not provide
immediate service to all disaster victims. LB NET was jointly developed in the two counties to help neighbors learn to be a resource to each other, increase emergency preparedness in the participating neighborhoods, and reduce risk through emergency preparedness. LB NET was organized and supported in the neighborhoods in Linn and Benton counties through each county's Office of Emergency Management.

Based on a model developed by LuAn Johnson, Ph.D., Program Manager, Seattle Division of Emergency Management, the LB NET program helps neighbors organize themselves to be self-sufficient for a period of 72-hours following an earthquake. This is the time period commonly believed to be the minimum that individuals and families should be prepared to function without outside assistance following a major earthquake or other emergency event.

Dr. Johnson provided training for trainers in Corvallis on two occasions (1996 and 2001). The trainers then presented the program to neighborhood groups, and provided printed materials and support to help them organize.

**The LB NET Participants**

In Benton County, recruitment of individuals to organize their neighborhoods was done through informational presentations at community events, articles in the local newspaper, and from among the ranks of individuals who were neighborhood organizers in the Neighborhood Watch program, a program that helped neighborhoods organize around the theme of community safety.

**Pre-LB NET Neighborhood Activities**

Approximately every two or three years during the 1990s, an emergency preparedness community resource fair was held in Corvallis. These events typically had speakers who spoke on specific topics of interest, and included informational displays organized by the local emergency management agencies, American Red Cross, Federal Emergency Management Agency (FEMA), and local stores selling equipment and supplies of interest. Participants in LB NET received invitations to the
emergency preparedness fairs, as well as to other events and training organized by the Benton County Office of Emergency Management.

Benton County has had active Neighborhood Watch groups since the late 1970s. Neighborhood Watch and LB NET are similar in that both organize neighborhoods around specific topics of interest. The goals of Neighborhood Watch include reducing crime and creating neighborhoods where the residents feel safe. Neighbors meet periodically, know what vehicles their neighbors drive (so they can recognize vehicles that might not belong in the neighborhood), and watch each others’ homes during absences.

**LB NET Activities**

*Neighborhood meetings*

An individual interested in organizing an LB NET neighborhood began by contacting Peggy Peirson, Program Coordinator, in the Benton County Office of Emergency Management. Prior to the organizational neighborhood meeting, Ms. Peirson or another LB NET trainer talked to the organizing individual and provided information for distribution to the organizer’s neighbors. Organizational meetings were commonly held in the home of the organizer, but some were held in other homes or in local public facilities such as a school, church or community hall. Any refreshments provided at a meeting were the responsibility of the organizer. The cost of materials distributed at a meeting was covered through donations from the Linn and Benton county offices of emergency management, the Albany and Corvallis fire fighters’ associations, and Hewlett Packard.

The initial neighborhood meeting was typically attended by five to 25 individuals and lasted about two hours. At the first meeting of each group, Ms. Peirson or another trainer gave an overview of the local hazards, and the reasons behind the need for self-sufficiency for at least a 72-hour period following an emergency. Each attendee was given a booklet that further outlined the program, offered suggestions for personal, family and neighborhood emergency preparedness,
and "job specifications" for seven response teams (block coordinator, communications, damage assessment, first aid, safety and security, light search and rescue, sheltering, and special needs). It was suggested that the individuals and families organize themselves into seven teams, although it was possible for smaller neighborhoods to combine some of the teams.

The model called for the neighborhood members to meet on a regular basis to develop the neighborhood’s ability to respond and to strengthen the network (see Table 2 for a timeline of the suggested schedule). The suggested schedule and topics (LB NET, 2000) were:

- Approximately six months after the first meeting, hold a table top exercise. This exercise allowed the participants to discuss what the response teams would do following an emergency, and establish locations for activities such as the neighborhood first aid station, sheltering and child care.
- Approximately six months later, conduct a walk around the neighborhood, and hold a discussion of where each of the response teams would set up in an actual emergency, what would happen if some team members were injured or were otherwise unavailable at the time of the emergency, and the location of gas meters (if natural gas was supplied to the neighborhood).
- Six to 12 months later, hold a "First Things First" meeting to practice the response sequence for activities at home, and for the response teams to practice their response through 10 mini-scenarios that helped teams review and discuss their activities.
- Six to 12 months after the "First Things First" meeting, hold a functional drill, in which the response teams actually practice some of their activities, such as setting up a first aid station.
- Annual updates to maintain readiness.
Table 2. Suggested chronology of LB NET activities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>1st meeting</th>
<th>6 months later</th>
<th>6 months later</th>
<th>6-12 months later</th>
<th>6-12 months later</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn hazards, need for program; receive LB NET participant training manual</td>
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<td></td>
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<td></td>
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<tr>
<td>Table top exercise</td>
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<tr>
<td>Walk around neighborhood and discuss where response teams would set up in an emergency</td>
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<tr>
<td>“First Things First” meeting. Practice response sequence activities at home; response teams practice in mini-scenarios</td>
<td></td>
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<tr>
<td>Functional drill. Response teams actually practice some activities</td>
<td></td>
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<td>Annual updates to maintain readiness</td>
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</tbody>
</table>
Between the organized neighborhood meetings, the response teams would meet to identify issues and plan their response. For example, the Sheltering and Special Needs team would identify elderly, children or others with special needs, and identify likely locations for sheltering people whose homes were not habitable.

*Other emergency preparedness activities*

Benton County, in cooperation with other groups and organizations, periodically held emergency preparedness fairs (the most recent was in 1999) at which emergency preparedness topics were presented in a workshop setting, and additional material was available on various topics of emergency preparedness interest. While there were no meetings of the LB NET organizers, these community events provided an opportunity for them to obtain new information and materials, and exchange information with other community members.
LITERATURE REVIEW

CAPACITY BUILDING

Capacity building is a development term that became popular in the 1980s. Eade (1997) writes that capacity building is concerned with social and political relationships, and it cannot be viewed in isolation, but must include the social, economic and political environments, and the full range of institutions, from community based, non-governmental and other organizations and institutions down to the community, household and personal level.

The International Strategy for Disaster Reduction defines capacity building as, “efforts aimed to develop human skills within a community or organization needed to reduce the level of risk” (International Strategy for Disaster Reduction, 2004:1).

Capacity building goes beyond the material response often associated with development to include social and political aspects. In their view of capacity building World Disasters Report 2003 includes access to resources, a voice in government, freedom from marginalization and discrimination, and protection of basic human rights. The authors also write that capacity is not just the ability to do something because,

... it seldom happens that real capacity can be built through a simple transfer of information or skill alone. Yet it is common for organizations to focus on strengthening the ability of communities to organize in a certain way or perform a certain task, without paying adequate attention to the capacity of those groups to realize the new skills in their daily life. To build genuine capacity requires generating a fertile environment within which the seeds of training have a chance to grow (International Federation of Red Cross and Red Crescent Societies, 2003c:47-48).

COMMUNITY AND NETWORKS

Human beings today are shaped by the community surrounding and supporting them and the families they grow up in – a community which is both open to the great impersonal processes of institutional form and growth that unify modern civilization and yet closed enough to impress
upon them the culture and attitudes of place, time, class, and locality (Arensberg and Kimball, 1965: 44-45).

In *Culture and Community* Arensberg and Kimball write that community is not an extension of the family, or a common lineage, although it does have successive generations; it is not a resource unit; and it is not confined to one generation or one sex; but it is, "the unit minimum population aggregate, ... a structured social field of interindividual relationships unfolding through time" (Arensberg and Kimball, 1965:17). They also write that "horizontal" institutions, such as the Roman Catholic church or the national judiciary system, unite communities that are geographically located in many areas.

In the opening paragraph of *Social Networks and Organizations* Kilduff and Tsai (2003) recall the April 17, 1775, rides of Paul Revere and William Dawes to alert communities between Boston and Lexington of the approach of the British army. Both men carried the same message, but the effects were quite different. Because Paul Revere was well known to the communities he visited, the message he delivered spread quickly, whereas William Dawes was not well-known and his message did not spread, leaving some communities totally unaware of the British army's approach. Kilduff and Tsai write, "The moral of this tale is that the network of relationships within which we are embedded may have important consequences for the success or failure of our projects" (2003:1-2).

An individual's connectedness to others through different relationships (e.g., relatives, neighbors, friends, work colleagues, social groups) has been positively linked in studies to reduced mortality in elderly, the ability to resist infections, and higher performance ratings and faster promotions at work. It is also possible that the economic and civic life of a community is linked to the level of community involvement of its citizens (Kilduff and Tsai, 2003).

The study of social networks developed out of network study in physics, mathematics anthropology. Network research is different from traditional approaches in the social sciences, in several distinctive ways, including that network research
focuses on relations and patterns of relations rather than on attributes of the actors (Kilduff and Tsai, 2003).

Networks can be described as having ties that are symmetric or asymmetric. Symmetric networks are those in which two people each describe their relationship in terms of having the same strength of connection, for example when two people each describe the other as a friend. Asymmetric networks are those in which two people describe the relationship in different terms, for example when a friendship is acknowledged by only one person (Kilduff and Tsai, 2003).

EMERGENCY PREPAREDNESS

Cost Effectiveness

Estimates of the number of people affected and the cost of disasters vary widely. Noji (1997) writes that during the last 20 years of the twentieth century, natural disasters claimed approximately three million lives worldwide, adversely affected an additional 800 million people, and caused more than $50 billion in property damage. At the other end of the spectrum, in a brief prepared for the World Summit on Sustainable Development, Yates et al. (2002) write that between 1992 and 2001 an average of 200 million people per year were affected by natural disasters, and that 62,000 lives were lost in those disasters. They predict that by 2050 natural disasters will claim 100,000 lives annually with global annual costs greater than $300 billion (Yates et al., 2002).

There are strong links between disasters and the countries that are most struggling with economic development. The United Nations Development Program reports that 24 of the 49 least developed countries are at high risk of disasters (Yates et al., 2002). Disasters play a crucial role in whether poor people can escape poverty, remain poor or even become poorer. Three disasters that captured headlines in the U.S. in 1998-1999 were Bangladesh floods, Hurricane Mitch in Honduras and the Turkey earthquakes. Yates et al. (2002) write that the economic losses from these
events (given as a percent of gross domestic product) were 9% for Bangladesh, 82% for Honduras, and 10% for Turkey.

Emergency preparedness activities range from government actions at the national level to activities conducted by individuals in their homes and neighborhoods. According to Yates et al. (2002) cost-benefit analysis of a wide range of activities from local to global indicates that for every dollar spent on mitigation, four to 10 dollars are typically saved from the total cost of disaster recovery. Kofi Annan, UN Secretary-General makes the connection between the costs of disasters and development:

More effective prevention strategies would save not only tens of billions of dollars, but save tens of thousands of lives. Funds currently spent on intervention and relief could be devoted to enhancing equitable and sustainable development instead, which would further reduce the risk of war and disaster. Building a culture of prevention is not easy. While the costs of prevention have to be paid in the present, its benefits lie in the distant future. Moreover, the benefits are not tangible; they are the disasters that did not happen (Yates et al., 2002:4).

**Disasters as Social Events**

Previously considered unpredictable events or “acts of God,” disasters have come to be considered events that are the result of human actions and human decisions (Oliver-Smith, 1996; Anderson, 1994). Oliver-Smith (1996:303) writes that,

Disasters occur at the interface of society, technology, and environment and are fundamentally the outcomes of these features. In very graphic ways, disasters signal the failure of a society to adapt successfully to certain features of its natural and socially constructed environment in a sustainable fashion.

Without the interaction with humans, disasters would be nothing more than interesting geological or meteorological phenomena (Noji, 1997). A flash flood in a desert that causes no damage to property or human life is not considered a disaster. A
similar flood in a metropolitan area – an area where humans have chosen to live – is considered a disaster based on its effect on humans, i.e., it causes damage to public or private property, or human injury or loss of life.

Disasters can be triggered by natural (e.g., earthquake or lightning) or human-caused events (e.g., nuclear accident or chemical spill), but their effects on humans are the result of socioeconomic and political structures and processes (Maskrey, 1989). Because disasters are not the result of solely natural causes, their impacts are not random. Social factors are important in the interpretation of the degree of destruction (Anderson, 1994; Hoffman and Oliver-Smith, 1999). For example, siting and construction methods of homes and other buildings affect which buildings will be damaged in a flood. Homes built on a hillside may be less affected by a flood than homes built on a valley floor, but the hillside home may be more prone to destruction by landslide.

As social events, steps can be taken to reduce disasters’ effects. Mitigation and preparedness have been proven to reduce the impact of disasters. In November 2001, Hurricane Michelle, the most powerful hurricane to hit Cuba since 1944, came ashore with winds reaching 225 kilometers per hour. Effective disaster planning and preparedness helped ensured the safe evacuation of 700,000 people with only five deaths (International Federation of Red Cross and Red Crescent Societies, 2002a).

**Emergency Preparedness Programs and Materials**

In the United States, the American Red Cross has been providing assistance to people affected by disasters for over 100 years. More recently, emergency preparedness has been advocated by the American Red Cross (ARC) and the Federal Emergency Management Agency (FEMA). Both organizations intensified their efforts to encourage and help individual and family preparedness following a series of costly disasters in the U.S. that included Hurricane Hugo in 1989, the Loma Prieta Earthquake in 1989, Hurricane Andrew in 1992, the Midwest Floods in 1993, and the Northridge Earthquake in 1994.
In early 1991 the ARC Board of Governors set a goal for the organization that "the public can expect the organization to provide nationwide 'disaster planning, preparedness, and education'" and developed the *Community Disaster Education Guide* (ARC, 1992) for staff and volunteers to use in the education of the public.

*Talking About Disaster: Guide for Standard Messages* (National Disaster Education Coalition, 1999) was developed to help standardize disaster safety messages about specific topics such as earthquake, flood and tornado. It was produced through the collaborative efforts of the ARC, FEMA, NOAA/National Weather Service, National Fire Protection Association, U.S. Geological Survey, Institute for Business and Home Safety, International Association of Emergency Managers, and the U.S. Department of Agriculture Cooperative State Research, Education and Extension Service. In *Talking About Disaster*, the authors stress that being prepared is the best way to protect family and home against disasters. They provide information about the powerful forces that create the events that can cause disasters, offer specific steps to become prepared (i.e., create an emergency kit of equipment and supplies, create a family disaster plan, learn first aid and cardiopulmonary resuscitation, install smoke detectors), and provide checklists to help the reader tackle the outlined tasks.

The pamphlet "Your Family Disaster Plan," provides a four-page quick guide to family preparedness (FEMA and ARC, 1992). The authors suggest that family preparedness can be strengthened by neighbors helping neighbors:

Working with neighbors can save lives and property. Meet with your neighbors to plan how the neighborhood could work together after a disaster until help arrives. If you’re a member of a neighborhood organization, such as a home association or crime watch group, introduce disaster preparedness as a new activity. Know your neighbors’ special skills (e.g., medical, technical) and consider how you could help neighbors who have special needs, such as disabled and elderly persons. Make plans for child care in case parents can’t get home (FEMA and ARC, 1992:3).
Simpson (2002) writes that other than his own work, there has been little academic research on earthquake preparedness organizations. He has found that,

"Community-based preparedness organizations can have a very positive effect on encouraging individual and neighbourhood preparedness activity; that the programs can increase feelings of social support, particularly for earthquake and self-protection activity; that they can serve as a valuable source of immediate post-disaster medical triage and assistance; and that they can serve as a model for a new approach to public versus private sector preparedness (Simpson, 2002:57).

Simpson also writes that one of the most important factors in community-based preparedness programs is the desire of the community to develop the program themselves. He has found evidence that participants in at least some of the programs conduct hazard-reducing activities that the city cannot afford to fund on an individual basis (Simpson, 2002).

The model for the Linn-Benton Neighborhood Emergency Training (LB NET) was developed by LuAn Johnson and was originally called SPAN (for Strengthening Preparedness Among Neighbors) (Johnson, 1996). The focus is neighbors working together to prepare for and be self-sustaining after a disaster or other emergency. Training includes communications, first aid, damage assessment, safety and security, search and rescue and sheltering and special needs (Mulick, 2003).

There is limited published information about neighborhood emergency networks. Simpson (2001) provides a history and review of Community Emergency Response Training (CERT) programs. (The CERT program is also known as Community Emergency Response Team.)

CERTs promote partnering between emergency services and the people they serve. The concept grew out of a desire by officials in the Los Angeles Fire Department to involve volunteers in earthquake preparedness. The original program was developed in 1985 after studying volunteer groups in Japan, a country with extensive earthquake experience. Two years later the program was adapted for
San Francisco Bay Area, and after Hurricane Andrew struck Florida in 1992, the Orlando Fire Department contacted the Los Angeles Fire Department about their program. The program was adapted to hurricane preparedness and it spread throughout Florida. In 1993 FEMA became involved and offered CERT train-the-trainer courses. Once FEMA became involved the program changed from a grassroots or local program to one administered and directed from the top (Simpson 2001). The program has grown to 1077 CERT units in 49 states, the District of Columbia, and three U.S. territories. Since September 11, 2001, the CERT training has expanded to include issues related to terrorism. (FEMA, 2004).

Emergency preparedness is not just a North American phenomenon. In 1990 the United Nations established the International Decade for Natural Disaster Reduction (IDNDR) with UN member states committing to reduce the impact of natural disasters through “concerted international action.” By the end of the decade, progress had been made but the results were not what the UN had hoped for. At the IDNDR closing conference in Geneva in July 1999, secretary-general Kofi Annan told the delegates, “We know what has to be done. What is now required is the political commitment to do it” (International Federation of Red Cross and Red Crescent Societies, 2002a:18). With the close of the decade, the IDNDR has been succeeded by the International Strategy for Disaster Reduction.

**Emergency Preparedness and Risk Perception**

Emergency preparedness programs, however, are not “one size fits all.” There are differences in the way people perceive risk (e.g., a threat may be perceived as risk if there is action that can be taken to prevent or reduce the risk and considered fate if it is believed that nothing can be done). Other factors that affect threat perception include whether an individual is an expert in the threat or a member of the general public, whether the risk is encountered voluntarily or involuntarily, and the immediacy of the threat (e.g., it is easiest to motivate people immediately following an earthquake) (Gregory et al., 1997).
It is necessary for developers of preparedness programs to consider cultural influences or the programs may not be accepted (Gregory et al., 1997; Quarantelli, 1992). For example, the reasons that people choose to live in an area prone to flooding may be different in the U.S. than in Bangladesh.

GENDER AND EMERGENCY PREPAREDNESS

The poor are more likely to live in areas that are most affected by disaster. For economic reasons, the poor are forced into dangerous, less desirable locations such as flood plains, river banks, steep slopes and reclaimed land (International Federation of Red Cross and Red Crescent Societies, 2002a). In the U.S. and worldwide, more women than men are living in poverty, and a household headed by a single female parent is four times as likely to live in poverty as a male-headed household (Fothergill, 1996).

While it is commonly recognized that the interests of women and children often differ from those of men, it is less commonly recognized that those differences may be even greater during times of emergencies (Gell, 1999). Mulilis (1999:41-42) discusses how gender differences lead to different perspectives in hazard-related preparedness activities, including:

- **Psychological differences**: females tend to have a focus that is broader and more likely to include those around them, while males have a more egocentric or autonomous perspective.

- **Socialized role differences**: gender roles in emergency preparedness are a carry-over from socialized roles developed over time and are due to a combination of biological and social factors. For example, an expectation that in an emergency women operate within the home sphere where their domestic talents are more valued and men outside the home where their strength is more valued.

- **Hazard assessment differences**: males and females may perceive hazard threats differently. These can be grouped into four categories of factors:
household characteristics (demographics), previous direct hazard experience, household resources (knowledge, skills, finances, and including beliefs about preparedness activities), and perceptions of the hazard (judgments about the personal impact of a hazard).

In her review of the neglect of gender in disaster work, Fothergill (1998) writes that gender is significant in each of nine stages of a disaster (exposure to risk; risk perception; preparedness behavior; warning communication and response; physical impacts; psychological impacts; emergency response; recovery; and reconstruction). She cautions, however, that while different does not necessarily mean unequal, "feminist theory documents how gender stratification and gender differentiation are often nearly identical empirically, as anything ‘female’ has come to be devalued," and that gender inequality is both maintained and reproduced in times of disaster in ways that are no different than non-disaster periods (Fothergill, 1998:23).

While the 1990s were identified by the United Nations as the International Decade for Natural Disaster Reduction, in 1995 the specific focus was on women and children as the key to prevention. In that year, women were targeted as "an active and creative group central to community and household preparedness, crisis response, and recovery" (Enarson and Morrow, 1998:4).

One of the primary goals of emergency preparedness is to allow a community to return to normal as quickly as possible after a disaster; however, much of the focus of emergency preparedness is the public sphere, e.g., communications, transportation and business (Fordham and Kitteridge, 1998). While some women are in the public sphere through their employment, many more function in the private sphere of the home, either totally, or in addition to their presence in the public sphere.

Women's skills may often be taken for granted, but as primary household managers (e.g., obtaining, preserving, and distributing food and household supplies), their experience provides them with important skills for dealing with periods of crisis.
Women's involvement as informal neighborhood leaders and social activists also equips them with skills to deal with community crises (Enarson and Morrow, 1998).

**WOMEN IN RUSSIA AND POST-SOVIET UKRAINE**

In the former Soviet Union the socialist rhetoric of equality for women as worker, partisan and comrade was not matched with reality. Most Soviet women worked, often in heavy menial labor; however, they had the double burden of full-time work and managing a household in a system of food and consumer product scarcity. When they were not working, women were often found standing in line for food. Out of economic necessity, most urban women had only one child (or none) (Stent, 1993).

The collapse of the Soviet Union and independence of Ukraine brought a sense of euphoria to citizens who believed that their lives would be better in an independent Ukraine. New leaders emerged and voter turnout was high. As hoped-for reforms began to stall, people realized that the old Soviet institutions and bureaucratic practices had been preserved in the new Ukraine. The euphoria was replaced by uncertainty and a sense of pointlessness and eventually turned to apathy (Pavlychko, 1997).

The period of transition to a market economy in Ukraine (as well as Russia and most, if not all of the Newly Independent States) has included a revival of nationalism and economic crisis. Both factors have been historically conducive to conservative approaches to women (Marsh, 1996).

The role of women in the new nation is closely linked to the home. Women are expected to stay at home and produce more children for the nation (Marsh, 1996; Pavlychko, 1997; Stent, 1993).

In one Ukrainian study, three Ukrainian sociologists report that,

Women in Ukraine provide simplistic solutions (all their interests are focused on the survival of their families) and their only expectations of assistance is that which the relatives can provide (Saienko et al., no date, reported in Pavlychko, 1997:228).
The shift to a market economy has meant a change to a belief that those who work hard will earn enough to be able to buy the services that everyone previously received in the Soviet Union. This shift, combined with the new nationalism and the pressure put on women to return to “traditional roles in the home” has prevented many women from participating in the new market economy (Atwood, 1996).

Many women in the former Soviet Union believed that democratization would mean equal access to jobs and power, however, in Ukraine 70% to 80% of the unemployed are women, and of those two thirds are women with higher levels of education (Pavlychko, 1997).

Opinions are varied about the overall impact of the breakup of the former Soviet Union. At the “Women in Russia” conference in 1993, most of the Russian and Ukrainian delegates said that, “with the single exception of the freedom on speech they now enjoy, the disadvantages of the current situation outweigh the advantages” (Marsh, 1996:19). Stent (1993), however, reports that although their economic situations may be less than they had hoped for with the fall of communism, many people report that their lives are better because the post-Soviet society is less oppressive and there is no longer the constant feeling that someone is watching.

**DISASTER ISSUES IN UKRAINE AND THE SOVIET UNION**

*Poverty Increased with Independence*

Ukraine declared independence from the Soviet Union on August 24, 1991. Since independence the population has decreased from 51.7 million to an estimated 48.42 million in 2002. The decline in life expectancy (to 68.1 years) and increase in death rates are in part attributed to deteriorating health conditions. Since independence there has been an increase in poverty-related diseases such as diphtheria, cholera and tuberculosis (International Federation of Red Cross and Red Crescent Societies, 2003a).

More than 10 years after independence, the economy of Ukraine was still in transition. Initial market reform changes resulted in a decline in living standards, high
levels of unemployment, delays in payments of pensions and salaries, and a reduced budget for social services. These changes resulted in one-third of the population living below the national poverty level (International Federation of Red Cross and Red Crescent Societies, 2003a).

In 2002, a total of 58 natural disasters and 170 man-made disasters occurred in Ukraine. These events included floods, landslides and mining accidents (International Federation of Red Cross and Red Crescent Societies, 2003a).

In 2002, with just 11 years of independence, Ukraine was still influenced by the attitudes and policies of the Soviet era. As a part of the Soviet propaganda machine, disasters in the Soviet Union were downplayed. Little information was given out about disasters within its borders and the censors’ list of forbidden topics included the consequences of natural disasters (Strand, 1991). When Soviet disasters were reported in the internal press, information did not focus on damage or on what people could have done to prevent damage, but instead framed the information as a “triumph of the Soviet socialist system in overcoming the trials of nature” (Strand, 1991:16). This insulation from information increased vulnerability and decreased risk awareness.

In the Soviet Union, where practically everything belonged to the state, a “renter’s mentality” developed. Known as “bezkhozyaistvennost,” this attitude created an atmosphere where neither workers nor management cared about the quality of construction materials or the resulting quality of the finished product. This attitude extended to other aspects of life, including lack of desire to practice hazard mitigation or emergency preparedness (Strand, 1991).

Major Disasters in USSR

Chornobyl Nuclear Accident, April 26, 1986

The 1986 nuclear reactor accident at Chornobyl resulted in the release of an estimated 50 million curies of radioactive material (Noji, 1997). CNN reported that the deaths of 4,300 individuals and the changes in health of an additional 3.5 million
people can be linked to Chornobyl (CNN, 1996), while other sources claim over 7,000 deaths just in Russia, of individuals who helped put out the fire and seal the reactor (Reuters, 1995).

About 200,000 workers – known locally as “liquidators” – worked directly on the clean up of Chornobyl. They were among the 600,000 to 800,000 people who were registered throughout the Soviet Union as being involved in activities to alleviate the consequences of the accident (Merkle, 1996). Of the 173,416 liquidators registered in Ukraine, 4,000 have died. The Ukrainian Ministry of Health claims that 77% of the deaths of liquidators in 1994 were Chornobyl related (Mould, 2000:87-88).

The total number evacuated from the region in the days following the accident was between 116,000 and 135,000. These numbers do not include children who were evacuated from cities as far north as Gomel and as far south as Kyiv. Including the children, the evacuation likely displaced over 500,000 (Marples, 1988:31).

Soviet scientists and government officials grew concerned about fear running rampant, and blamed the fear, at least in part, on the west:

[T]hose Western scientists who have forecasted relatively high future cancer fallout from the accident have been condemned roundly by the Soviet side: first, for making predictions in the first place when they have insufficient evidence; and second, and perhaps more important, for causing fear among the local population (Marples, 1988:26).

Mozgovaya and colleagues at the Institute of Sociology, Russian Academy of Sciences in Moscow, Russia, conducted several studies from 1991 to 1993 on the social consequences of Chornobyl. Among the findings Mozgovaya (1993) reported was that in 1991 the population’s trust in the ability of authorities to protect them was declining. The lack of feeling socially protected led to increased social apathy and asocial behavior. In 1992 they found that in communities that had been impacted by the Chornobyl disaster, the residents had increased anxiety, less trust of authorities, and more health complaints than residents of communities not affected by Chornobyl. In a 1993 study in which the focus was the liquidators, Mozgovaya and colleagues
found that 27% of the liquidators reported that their family relationships had worsened since Chornobyl, that among certain groups of liquidators, 74% reported that their health had worsened, and that there was increased dependence on alcohol. They also reported that they felt their worthiness to society was not recognized and that they had a sense of humiliation and inferiority.

In April 1996, the “International Conference on One Decade After Chernobyl” was held in Vienna. In the summary of the conference results Merkel writes that a number of studies conducted in the 10 years following the Chornobyl disaster found significant psychological health disorders and symptoms among the communities affected by Chornobyl. He cautioned however, that “(i)t is extremely difficult to distinguish the psychological effects of the Chernobyl accident from effects of economic hardship and the dissolution of the USSR” (Merkle, 1996:10). The causes of psychological effects of Chornobyl include the lack of public information, especially immediately after the accident; the stress and trauma of relocation; the breaking of social ties; and the lack of information provided specifically about radiation exposure and the health effects, both immediately and in the future (Merkle, 1996).

The Nuclear Energy Agency (2002) reports that the severity of the psychological effects of the Chornobyl accident appears to be related to the public’s mistrust of politicians and government, especially those concerned with nuclear power. The public’s skepticism toward authority was reinforced by the difficulty in understanding radiation and its effects, and the inability of the experts to present information and communicate about the issues in a way that was comprehensible to the public. Teachers and physicians, who were traditional sources of information, could not explain what had happened or what consequences people could expect. The media, feeling the need to print something, published some of the more outlandish claims of radiation effects.

Many of the non-radiological symptoms people associated with the Chornobyl accident (e.g., headaches, depression, sleep disturbance, inability to concentrate, and
emotional imbalance) are now believed to be attributable to the stress of living during the general social degradation that occurred at the end of the Soviet Union, and to the cultural, social and psychological stress caused by the Chornobyl accident. To make matters worse, the Soviet scientists and government officials took a dismissive attitude of these symptoms, labeling the sufferers as "radiophobic," an action that further alienated the public by implying that the symptoms were a form of mental illness or an irrational and abnormal reaction (Nuclear Energy Agency, 2002; Marples, 1988).

Physicians, wanting to attach their own diagnosis, developed the term "vegetative dystonia," a diagnosis characterized by vague symptoms and for which there were no definitive diagnostic tests. At any one time, up to 1,000 children were hospitalized in Kyiv, often for weeks, for treatment of vegetative dystonia. The physicians were under pressure to respond to their patients' needs, and the development of a diagnosis not only justified the patients' complaints, but put blame for the disease on radiation exposure, while exonerating the patient of any responsibility (Nuclear Energy Agency, 2002).

The Chornobyl accident occurred during the initial period of "glasnost" in the Soviet Union, at a time when ordinary citizens were beginning to openly express dissatisfaction and frustration that had built up over nearly seventy years of repression. The Chornobyl accident appeared to epitomize everything that was wrong with the old system, including secrecy, withholding information and heavy-handed authoritarianism (Nuclear Energy Agency, 2002).

The public believes that the authorities have imposed upon them and against their will, an unseen, unknowable, polluting hazard, and that the risk is not just to themselves, but to their current and future descendents. The distrust of authorities results, at least in part, from having been told by authorities that nuclear power was safe (Nuclear Energy Agency, 2002).

According to the Ukrainian Red Cross Society, 2.6 million people continue to live in areas contaminated by the Chornobyl accident (Ukrainian Red Cross Society, 2002).
Armenian Earthquake, December 1988

The former Soviet Republic of Armenia experienced an earthquake in December 1988, that resulted in the deaths of three people for every survivor. Although earthquake-resistant buildings were to have been built in the area, it was found that the high death toll could in part be blamed on lack of adherence to the standard, that building plans were flawed and the quality of construction was low (Gutinov, 1990, reported in Strand, 1991:46). Strand (1991) reports that it is likely that similar construction standards can be found throughout the Soviet Union.

Another factor affecting a family’s ability to protect itself from disaster was the “propiska” system that required Soviet citizens to be registered to a specific town. Propiska did not allow people to move to another city without having a housing registration for that city. Because of the difficulty of obtaining registrations, people were often forced to live in hazardous areas because of their inability to legally move. There was also a housing shortage that often made a new flat more appealing, even if it were built in a hazardous area or of poor materials or construction (Strand, 1991).

Disasters in Ukraine

The compilers of the World Disasters Report 2002 tables caution that while data on the numbers of people affected by a disaster can be some of the most potentially useful figures for emergency preparedness and response planning, they are also some of the most loosely reported numbers (International Federation of Red Cross and Red Crescent Societies, 2002a:181-182). With that disclaimer, they report that in 2001 the total number of people reported killed in disasters in Ukraine was 85, and the total number of people reported affected in those disasters was 300,073 (International Federation of Red Cross and Red Crescent Societies, 2002a:202).

In “Mapping the Disaster Affected,” an insert into World Disasters Report 2002, countries are ranked according to the percentage of people killed and affected by disaster. Ukraine ranked seventy-sixth, with an annual average of 248,244 people
killed or affected by disaster during the period 1992-2001, or 0.5% of the total population (International Federation of Red Cross and Red Crescent Societies, 2002a).

Since independence in 1991, the largest natural disaster in Ukraine was flooding in June-July 1995 that affected approximately 1,700,000 people. There have been two floods that affected approximately 300,000, in March 2001 and August 1993. In July 2000 a windstorm affected over 39,000 (Centre for Research on the Epidemiology of Disasters, 2004).

In early March 2001 heavy rains and rapidly melting snow led to record levels on the Tisza River and its tributaries (including the Uzh River). Areas of Hungary, Romania and Ukraine were affected, with entire communities being forced from their homes by the flooding that followed. In Ukraine 33,539 houses were flooded with 1,705 being destroyed. More than 13,700 people were evacuated. There were nine deaths and 891 people were hospitalized. Approximately 100,000 acres of agricultural land was flooded, dissolving the straw and clay brick buildings commonly found in the agricultural area. In Hungary the results were slightly less severe with more than 25,000 people directly affected, twenty villages evacuated and 2000 houses with serious damage from the flooding (International Federation of Red Cross and Red Crescent Societies, 2002b, 2003b; Lowry, 2001).

DISASTERS IN OREGON

Oregon has an extensive history of flooding. According to the National Flood Insurance Program, Oregon has a total of 256 flood-prone communities, located in all 36 counties. The deadliest known flood in Oregon occurred in Heppner in 1903, the result of a spring storm that dropped 1.5 inches of rain in a twenty-minute period. A five-foot wall of water and debris swept through Heppner, ripping homes off foundations and claiming 247 lives (State of Oregon, 2000).

In December 1964, floods in western and central Oregon set many flood records. Known as the “Christmas Flood” of 1964, the event began with colder than usual temperatures across the state and heavy snow on December 18. This was
followed on December 19 with the arrival of a storm that probably originated in the subtropics, bringing record amounts of rain and warmer temperatures. Many areas received two-thirds their normal annual rainfall in just five days. Hundreds of homes and businesses were destroyed, thousands of people were evacuated, at least 30 bridges were destroyed and hundreds of miles of roads and highways were washed out. Damage totaled over $157 million dollars; at least 17 people died in Oregon (State of Oregon, 2000). In Corvallis the Willamette River crested at 26.5 feet, 6.5 feet over flood stage (Benton County Emergency Management Office, personal communication, 2003).

In mid-January 1974, a heavy rain combined with melting snow to create a flood that affected nine counties in western Oregon, causing $65 million in damages. In Corvallis, the Willamette River crested at 22.5 feet (Benton County Emergency Management Office, personal communication, 2003; Oregon Climate Service, personal communication, 2004).

In February 1996, an extended period of unseasonably cold weather and heavy snowfall was quickly followed by warming temperature and rain. On February 6, a strong subtropical jet stream reached Oregon, bringing a warm, humid air mass, and record amounts of rain, that quickly melted the snow pack. In Corvallis eight inches of rain fell during a four-day period. At least 25 rivers in Oregon reached flood stage; many reached flood levels comparable to those reached in the 1964 flood. The river gauge at Vida on the McKenzie River (a tributary of the Willamette River) recorded a 500% increase in flow from February 5 to February 6 (Taylor and Hatton, 1999). In Corvallis, the Willamette River peaked at 23.5 feet (flood stage is 20.0). Twenty-seven of 36 counties were affected in Oregon (State of Oregon, 2000). Five people in Oregon were killed, 2,000 were left homeless, and a total of 9,000 people were affected (Centre for Research on the Epidemiology of Disasters, 2004). In Benton County, the storm resulted in two deaths, $81,000 in damage to roads, and $548,000 damage to public property (Benton County Emergency Management Office, personal communication, 2003).
A series of snow and rain storms began arriving in western Oregon the evening of December 28, 2003. By eight the next morning, Corvallis had received 3.8 inches of snow. The weight of the particularly wet snow caused tree damage and scattered power outages. On January 2, 2004, a second storm arrived, depositing 3 to 5 inches more snow. Some outlying areas received as much as 12 inches total. On January 7, 2004, the subtropical jet stream brought warmer temperatures and rain. Forecasters warned of possible flood conditions, with the possibility an event similar to the 1964 flood. When the rain arrived, it fell onto snow and frozen surfaces, coating everything in as much as half an inch of ice. Trees throughout the area snapped under the weight, knocking out power to thousands of homes. In and around Corvallis, outages lasted from a few hours to eight days or more (Oregon Climate Service, 2004; NOAA, 2004).

Windstorms periodically cause damage in Oregon. The largest storm of recent note, was the Columbus Day Storm on October 12, 1962, in which hurricane force winds caused damage throughout Oregon. Some cities lost electricity for two to three weeks and more than 50,000 dwellings were damaged. Twenty-three people in Oregon lost their lives. At Corvallis airport wind gusts peaked at 127 miles per hour. On the Oregon State University campus in Corvallis, winds destroyed 55 trees and caused $50,000 damage. In Benton County damage to commercial buildings totaled $50,000, with $200,000 in damage to residential structures (NOAA, 2003; Taylor and Hatton, 1999; Benton County Emergency Management Office, personal communication, 2003).

More recently, in December 1995, winds of 68 miles per hour caused four deaths in Oregon, toppled 22 trees on OSU campus, caused $5,000 damage to Benton County schools, and $9,000 damage to power lines in Benton County. One bridge was destroyed (Benton County Emergency Management Office, personal communication, 2003).

In November 1998, 50-55 mile per hour winds, with gusts up to 70 miles per hour, left thousands of Oregonians without power, including 100 homes in Corvallis (Benton County Emergency Management Office, personal communication, 2003).
ANTHROPOLOGICAL TOOLS FOR DATA COLLECTION

Participant Observation

Participant observation is a way to collect data in a relatively unstructured manner in naturalistic settings by ethnographers who observe and/or take part in the common and uncommon activities of the people being studied (Dewalt and Dewalt 1998:260).

While conducting participant observation the ethnographer lives and works in the community being observed. Immersion in a community gives the ethnographer the opportunity to observe daily life of community members and to recognize patterns of behavior over time. A daily cycle develops of immersing oneself in the daily life and removing oneself to write observations and intellectualize what was seen and heard.

Participant observation allows a researcher to develop rapport and trust with community members. The researcher must learn to act like the people being observed so that when the novelty of having a stranger in their midst wears off, people will go about their business as usual (Bernard, 2002).

Fetterman (1998) writes that participant observation is immersion in a culture that requires close, long-term contact and puts the ethnographer living and working in a community for six months to one year or more. Bernard (2002) acknowledges that long-term participant observation is ideal because it allows the researcher to learn a new language (if necessary), build rapport and trust, and learn enough to ask good questions.

It is, however, possible to conduct participant observation in less time. Fetterman (1998) writes that in applied settings, participant observation can be conducted in a series of intense short visits carried out over a period of time, for example a few weeks every couple of months.

Ideally, the ethnographer knows the language of the people being studied; however, some activities of participant observation can be conducted by someone with limited knowledge of the local language. For example, the researcher can visit a market (to watch interactions between vendors and buyers, notice what people are
buying, how traffic flows through the market, how many vendors and buyers are
wearing ethnic clothes) or create maps of the physical environment (where houses are
located, where streets go) (Dewalt and Dewalt, 1998).

Participant observation can result in qualitative information (e.g., through
analysis of field notes, photographs, audiotapes and videotapes) or quantitative data
(e.g., information collected through direct observation or questionnaires) (Bernard,
2002).

While participant observation is an important skill in developing an
understanding of what it’s like to be a member of a given community, the observations
are filtered through the biases the researcher brings to the field and the researcher’s
ability to remain objective. Biases can include gender, age, sexual orientation, and
ethnic or religious affiliation, as well as things like theoretical orientation. It is
impossible to completely eliminate bias; however, the researcher needs to be aware of
her or his biases (Dewalt and Dewalt, 1998; Bernard, 2002).

Participant observation “is not an attitude or an epistemological commitment
or a way of life. It’s a craft” (Bernard, 2002:324). Beebe (2001:48) writes that
participant observation “is an essential ethnographic technique,” but it is more than
passively watching. It requires actively observing and regularly recording information
so that the researcher can systematically explore the relationships and events observed.

**Interviews**

Interviews with informants can range from informal conversations to formal
structured events that follow a question and response script like a questionnaire. In
informal conversations, the researcher may seek and obtain the same information as
one who uses a questionnaire, but because of the informal nature the researcher can
allow the conversation to take off in related but unexpected directions and possibly
reveal new information. In informal interviews the questions will often evolve from
the conversation (Bernard, 2002; Fetterman, 1998).
Questions known as survey or grand tour questions are meant to elicit a broad view of the informant’s world (e.g., Tell me about emergency services in Uzhhorod). Other questions are more specific (e.g., What do fire fighters do at a fire?). Questions can also be open-ended questions that allow the respondent to interpret what information the interviewer is looking for (e.g., How does the fire department interact with citizens?), or closed-ended questions that ask for specific information (e.g., How many times a month does the fire department respond to a fire?) (Bernard, 2002; Fetterman, 1998).

Depending on the situation, an ethnographer may use recording devices (tape recorder, camera, video recorder) or make written notes. Recordings allow repeated “viewings” for analysis, however, some people may be inhibited and not speak freely. In some situations it may be inappropriate to record or to make written notes until later, for example, at a funeral (Bernard, 2002; Fetterman, 1998).

**Unobtrusive Observation**

Unobtrusive observation is another method of collecting information. Unobtrusive observation can minimize the effects of the researcher’s presence because it doesn’t require interaction between the researcher and the observed (Kellehear, 1993). The information collected is physical evidence; for example, observing body language or the amount of space between two people talking, watching the flow and speed of foot traffic through a public market, or noticing artifacts known as outcroppings—physical evidence that doesn’t fit the situation—such as a home two blocks from a river with sandbags around the entrance (Bernard, 2002; Fetterman, 1998). The physical information can be used as proxy indicators for social behavior, for example, the presence of television satellite dishes may indicate affluence (Beebe, 2001).
Rapid Assessment Process (RAP)

The Rapid Assessment Process (RAP) is a technique that allows a multi-disciplinary team to relatively quickly (usually four days to six weeks) develop an insider’s view of a very focused situation. Similar to processes known as Rapid Appraisal or Rural Rapid Appraisal, RAP can quickly create an ethnographic picture that can be used when making design or implementation decisions for applied activities (Beebe, 2001).

The intensive team nature of a RAP can be an alternative to longer fieldwork conducted by an individual; however, the data gathered by RAP is more focused than data gathered in traditional ethnographic research. Beebe uses examples from a RAP conducted in a village in western Sudan. The focus of the study was farmers and the factors that influenced their decisions about what crops to plant, not the entire village life that may have been the focus of a traditional ethnography (Beebe, 2001).

In addition to the relative speed with which a RAP can be conducted, an important feature is the use of cultural insiders to help identify the most relevant elements of an issue. In Beebe’s example of a RAP conducted in a Sudanese village, the insider knew that one farmer cannot decide to change his crop without considering what his neighbors have planted. A switch to field crops when a neighbor is still growing gum arabic trees would mean that the birds harbored in the trees would have ready access to the field crop. This knowledge may have eventually surfaced, but by having an insider on the RAP team it became known much sooner (Beebe, 2001).

RAP uses a variety of ethnographic techniques (including participant observation, interviews, and unobtrusive observation) to gather information. A key feature of RAP is that data collection is done by more than person. Team members meet regularly and frequently for data analysis and triangulation to confirm that the team is “on track” in the data it is getting, and to determine any new directions necessary for additional data collection (Beebe, 2001; Bernard, 2002).

Triangulation, a term borrowed from navigation, is an important aspect of RAP. In navigation triangulation uses compass readings of two or more objects to
allow the user to create a triangle and locate a position. In the context of RAP, triangulation uses the expertise of the multi-disciplinary team members, including insiders; data collected through different means and from different sources; and different theories to piece together and highlight “different versions of the phenomena that is studied” (Beebe, 2001:20).
METHODS AND STRATEGIES

Prior to conducting any interviews for the WNNP or this project, appropriate forms had been submitted to, and approved by, the OSU Institutional Review Board. The approved informed consent form can be found in Appendix K.

INTERVIEWS

Women’s Neighborhood Network Project

During the selection process for participants in the WNNP, Marion McNamara (project director) and I (associate director) interviewed 20 applicants over a two-day period in a hotel room in Uzhhorod, Ukraine. Each interview was approximately 20 minutes long; with one exception interviews were conducted through an interpreter.

I interviewed the Ukrainian participants two more times, first in April 2001, when the participants were in Corvallis for training, and in April 2002, in Uzhhorod. See Table 3 for a chronology of interviews.

Table 3. Chronology of WNNP and LB NET interviews.

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All April 2001 interviews were conducted with one of three State Department interpreters; no interviews were conducted in English. Two interviews were conducted in an office on the OSU campus; ten were conducted in various common areas of the hotel where the participants were staying. Efforts were made to select a common area of the hotel that was not in use by other people, for example, the patio or beverage room. All interviews were conducted during the participants’ free time; the interviews at the hotel were more convenient for them.

The interviews were not recorded. In the Soviet era the KGB relied heavily on informants to collect information about individuals and organizations. The decision to not record WNNP interviews was based on the belief that the use of recording devices would make the Ukrainian participants uncomfortable and possibly make them less willing to talk.

At the beginning of each interview I explained my purpose for the interview, and the reason for the informed consent form (Appendix K). I also explained that if she chose not to be interviewed, it would have no effect on her participation in the WNNP. Each participant signed a translated, Ukrainian version of the informed consent form.

Each interview lasted between 20 and 30 minutes. Each was held as a get-acquainted conversation, and partly meant to build rapport and put the participants at ease about being interviewed.

I explained that we each have networks or groups of people with whom we interact, and suggested that some of these groups might be family, friends, colleagues at work, or parents of children that our children associate with. I asked each participant to begin with one of these groups, and to tell me about the group. I took extensive notes during each interview and transcribed the notes each evening.

Nine of the 12 participants were interviewed again in April 2002 in Uzhhorod. Three participants were unavailable for interview: the husband of one had died a couple of months previously, one had recently given birth, and one was ill. Although not all the participants were interviewed a second time, at least one person from each
neighborhood team was. My desire was that the second interview would be in their teams, but because of scheduling difficulties, they were interviewed based on their availability to meet at particular times. Three interviews were conducted in pairs; three were interviewed individually. Five interviews were conducted through an interpreter; one was conducted in English. Interviews were approximately one hour per person. The interviews were semi-structured with open-ended questions. A list of guide questions is included in Appendix L.

In addition to participant interviews, Uzhhorod city officials and managers of city departments (such as housing) and emergency providers (such as the ambulance service and the fire department) were interviewed in November 2001 as part of the RAP needs assessment at the beginning of the Women’s Neighborhood Networking Project. Twelve interviews were conducted by teams consisting of one of two graduate students from the OSU Department of Anthropology, the LB NET project coordinator in the Benton County Emergency Management office, and an interpreter. (I was one of the two graduate students.) Snowball sampling was used to identify knowledgeable people to interview, with the first interview being conducted with one of Uzhhorod’s vice mayors. For the purposes of this study, these interviews are only used as a source of information about the pre-project state of emergency services in Uzhhorod.

**Linn Benton Neighborhood Emergency Training**

Interviews with the LB NET neighborhood organizers were conducted over a 16-month period from October 2001 through February 2003. I was provided a list of the neighborhood organizers by Peggy Peirson, Program Coordinator in the Benton County Office of Emergency Management. The list included 29 neighborhoods that had been organized by 28 individuals. One individual was listed twice, because he had organized two sections in the same housing development. Four organizers were no longer participating in the program and did not wish to be interviewed. Three had moved and could not be located. Five were unresponsive to telephone messages. Two
agreed to provide written responses to my guide questions; only one actually returned responses. One individual agreed to be interviewed, but cancelled the meeting twice before declining to be interviewed. I interviewed a total of 14 individuals; 10 were female.

Nine interviews were conducted in the home of the organizer; five were conducted at other sites, including one at the city library; one in the office of a local non-profit organization; one in a meeting room at OSU; and two at the employment of the organizer. Each interviewed organizer signed the informed consent form (Appendix K).

Interviews were semi-structured with open-ended questions. A list of guide questions is included in Appendix M. The questions were grouped into three sections:

- Self, family and home,
- Neighborhood and neighborhood emergency network project, and
- Personal networks of the informant (the informant within her or his larger community).

I referred to the guide questions at the end of each section to assure that we had covered all the questions. Each interview lasted approximately one hour and was tape recorded. All recordings were transcribed; most within 72 hours; four were transcribed several weeks later.

**OTHER INFORMATION/DATA**

**Participant Observation**

In my capacity as associate director for the WNNP I made three trips to Uzhhorod: two trips were three weeks long and one was two weeks long. My days were spent in interviews with WNNP participants and their neighbors, and in meetings with city officials, directors of emergency services, the local Red Cross, and the WNNP participants or coordinators. In addition, on one trip I was invited to observe an exercise of the rescue unit, and many evenings I was invited to dinner in the homes of
participants, coordinators or interpreters. On each of these occasions participant observation added to my understanding of what it means to live in Uzhhorod.

I have lived in Corvallis or Benton County for more than 20 years and have been a volunteer in the local emergency preparedness community for more than 12 years. During the WNNP participants' training in Corvallis, I attended the first, organizational meeting of an LB NET neighborhood. At this meeting I had the opportunity to observe the trainer, the neighborhood organizer and the attending neighbors.

Data Verification and Questions

Two of my trips to Uzhhorod also included trips to Kyiv, Ukraine, and Krakow, Poland. Each trip was one-week long and made by over-night train, with the train trips lasting between 18 and 22 hours. Trips were made with the WNNP program director (from Corvallis) and the two WNNP Ukrainian coordinators. One trip also included the director of the Uzhhorod Red Cross and a representative from the Ukraine Red Cross. The travel by train afforded excellent opportunities to talk with the Ukrainians about life in Uzhhorod and to clarify questions.

One of the Ukrainian coordinators agreed to verify information and answer my specific questions via e-mail. Some of the questions I asked her were open-ended (e.g., what happens with a single-family house or a flat when a couple divorces?); others were more specific (e.g., what industries are located in Uzhhorod?).

Secondary Data

Between their selection to participate in the WNNP project and their training in Corvallis (November 2000 through March 2001), the WNNP participants interviewed their neighbors using the questions they had developed in the rapid assessment training (Appendix I). Each participant wrote a short summary of each interview; the summaries were translated by one of the Ukrainian coordinators. These interviews
were used by the WNNP directors to identify training needs, and for this project they provided some insight into the neighbors' attitudes about disasters.

The WNNP participants also wrote up summaries describing their neighborhoods and the neighborhood demographics. Those summaries are included in Appendix O.

**LANGUAGE INTERPRETATION**

Language interpretation in Corvallis was provided by three professional interpreters provided by the WNNP funding agency. Often the interpretation was simultaneous which worked especially well with open-ended questions. It allowed the informant to speak in her usual manner, and I took notes similar to those I would take during a direct conversation with an informant.

In Uzhhorod interpretation was provided by Uzhhorod interpreters paid by the WNNP. Two interpreters and one Ukrainian coordinator were English language teachers in Uzhhorod schools. One was an interpreter who worked for a local travel agency. The Uzhhorod interpreters were most comfortable interpreting a sentence or two at a time. This method worked well with questions meant to elicit short answers. It also worked with open-ended questions, but the responses were often broken up into smaller bits. This method of interpretation allowed me to take comprehensive notes, as I could continue to write information from one response while the informant was speaking the next portion of her or his response.

Especially with the Ukrainian interpreters, some were more skilled at interpreting the meaning of what was said rather than translating word-for-word. Word-for-word translation can leave questions about what was meant, while interpreting the meaning is usually less ambiguous. Interpreting the meaning, however, allows for more influence from the interpreter.
DATA ANALYSIS

I used a system similar to Beebe's (2001) to identify themes. Using my notes and printed transcripts of recorded LB NET interviews, notes from WNNP interviews, and secondary information provided the WNNP participants and Ukrainian coordinators, I reviewed each document multiple times and created margin notes to identify recurring words and phrases. On successive readings I identified common themes and began to put information into tables to more easily identify clusters or similar bits of information.
FINDINGS

WOMEN’S NEIGHBORHOOD NETWORK PROJECT

*Motivation for Applying to the Project*

All applicants to the Women’s Neighborhood Networking Project knew that their involvement in the project would include an expenses-paid training trip to Corvallis, Oregon. During the participant selection interviews, an effort was made to identify other reasons for each woman’s interest in the project (see Table 4 and Appendix F). One applicant’s home had been flooded in two events (1992, 1998). There had been a fire in the apartment building of one applicant, and another had helped neighbors when a wall collapsed during heavy rain. Six applicants had been involved through their professions in various disasters: three were physicians who had treated victims of flood or gas explosion; one was a teacher who had cared for students who were prevented from returning home by a flooded river; one was an attorney who had provided legal service to landslide victims; and one had worked in a bank where documents were damaged in a flood. One woman’s neighborhood had taken water from a community well, but the well dried up, forcing the neighborhood to get water from trucks.

In addition, two applicants mentioned in their interviews that they had been members of Civil Defense teams. Although we did not specifically ask applicants if they’d been members, it is likely that the number who had been involved was actually higher, as this was a common activity during the Soviet era.

Each of these applicants recognized from these events that she could know more about emergency events. Many wanted to learn how to prevent and respond to disasters.

In addition, two applicants stated that they liked to help people. One woman’s parents had always been available to help their neighbors and friends. She said that she had been raised in an environment where helping others was expected. Several of
Table 4. Information about the WNNP participants’ motivation for becoming involved in WNNP and their previous disaster experience. Additional information about the participants’ motivation is available in Appendix F.

<table>
<thead>
<tr>
<th>ID no.</th>
<th>Motivation</th>
<th>Previous Disaster Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>Interested in being part of a project to work with women and help women make good decisions.</td>
<td></td>
</tr>
<tr>
<td>W2</td>
<td>Important for neighbors to know each other; if they have skills together, it unites them.</td>
<td>P – Physician working in a hospital during 1998 flood in Uzhhorod. By the 2nd or 3rd day people were seeking treatment and telling stories of their flood experiences.</td>
</tr>
<tr>
<td>W3</td>
<td>Believed there is a need to plan for emergencies. Was a member of a first aid team. Other people have always identified her as a leader.</td>
<td></td>
</tr>
<tr>
<td>W4</td>
<td>Had theoretical knowledge of emergencies. People need to be trained so they don’t panic.</td>
<td>P – An attorney; helped victims of a landslide.</td>
</tr>
<tr>
<td>W5</td>
<td>Deputy principal at a school, and responsible for children and staff. In 1998 flood they realized they weren’t ready for emergencies.</td>
<td></td>
</tr>
<tr>
<td>W6</td>
<td>Director of local Red Cross. Emergency preparedness should have been a major focus, but wasn’t because of economic constraints.</td>
<td></td>
</tr>
<tr>
<td>W7</td>
<td>Physician interested in psychological help that can be offered to victims. In 1998 flooding, many people were stressed, took a long time to recover. Some developed serious illnesses.</td>
<td></td>
</tr>
<tr>
<td>W8</td>
<td>People need training to help each other instead of working against each other. Wants to learn more about herself, and share and improve leadership skills.</td>
<td></td>
</tr>
<tr>
<td>W9</td>
<td>Lived in neighborhood for 27 years; has good relationship with her neighbors. People come to her when they have problems.</td>
<td></td>
</tr>
<tr>
<td>W10</td>
<td>Recently learned that her neighborhood has potential for seismic activity.</td>
<td>P – In 1998 flooding she cared for children at school who could not cross the river to go home.</td>
</tr>
<tr>
<td>W11</td>
<td>Witnessed people trying to deal with flood when they don’t know what to do. Need to work together</td>
<td>N – Lived in neighborhood affected by flooding in 1992 and 1998.</td>
</tr>
<tr>
<td>W12</td>
<td>People need knowledge about how to prepared and act in emergencies so they don’t panic. Specifically interesting in learning how to get people to work together as a team and how to deal with job stress – how to help the responders.</td>
<td>P – Physician; treated victims of a gas explosion and the 1998 flood.</td>
</tr>
</tbody>
</table>

* N = neighborhood experience; P = professional experience
the applicants who are medial doctors mentioned that neighbors come to their homes for health advice, including to have their blood pressures checked.

**Previous Disaster Experience**

Three applicants had experienced a disaster either directly or in their neighborhood (see Table 4). One applicant's home had been flooded on two occasions (1992, 1998) by the Uzh River. Her house sat on a little higher ground so their home had not been flooded, but in 1992 their automobile was completely submerged.

One applicant lived in an apartment building where there had been a fire in another unit. One applicant had helped neighbors when a wall in their home collapsed during heavy rain.

Six applicants had been involved in various disasters through their professions. Three applicants were physicians who had treated victims of flood or a gas explosion; one was a teacher who had remained at school to provide shelter for students who had been prevented from returning home during flooding of the Uzh River; one had provided legal service to landslide victims; and one had worked in a bank that had flooded.

**Other Volunteer Activities**

A requirement for applying to the project was that the women be involved with Uzhhorod Sister Cities Association of Citizens (USCAC). In actuality, the involvement of some applicants was minimal: two were involved in a separate NGO project that USCAC supported, and one had not been involved in USCAC projects, but had been an officer. Interestingly, during the first interviews in which I asked the women to talk about the groups or networks of people that were important to her, none of the participants chose to talk about USCAC.

Two participants frequently volunteered with a local NGO supporting disabled children in Uzhhorod. One also volunteered with a political group.
The WNNP Participants and Their Families

The 12 WNNP participants were all women who, at the start of the program in 2000, ranged in age from 20 to 62. The group included three teachers, six physicians, an attorney, a pensioner (retired architect), and a university (law) student. With the exception of the student, all were married. Seven had school-age children living in their homes; four had children at university but living at home (including the one university student who was also a participant); two had adult children living with them, including one extended family that included a grandchild; and two had adult children living elsewhere. Two participants had a parent or in-law living in their households, one full-time and one occasionally. Three participants lived in single-family homes, while nine lived in flats. Two mentioned that they, or another family member, had a dacha – a small garden plot outside the city.

First Interview – April 2001

My first interview with each participant was conducted in Corvallis, Oregon, through an interpreter, and lasted 20-30 minutes. During this interview, I asked each participant to talk about groups of people who are important to her. I explained that she could talk about as many different groups as she wished, within the 20 minute interview. If she seemed confused about what I meant, I suggested that some examples of these groups were family, friends, work colleagues, or parents of children’s classmates and friends.

For their first topic nine participants elected to talk about their families, two chose friends and one chose co-workers (see Table 5). Due to the time limitation, three talked about only one topic (co-workers, friends, or family). For their second topics, seven talked about friends, one about family, and one about co-workers. Five participants spoke about a third topic (three about co-workers, one about her students, and one about her neighbors). Three spoke about a fourth topic (clients, neighbors, or co-workers).
Table 5. Summary of topics of first WNNP interview.

<table>
<thead>
<tr>
<th>Topic number</th>
<th>Family</th>
<th>Friends</th>
<th>Co-workers</th>
<th>Neighbors</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>1 (students)</td>
</tr>
<tr>
<td>Fourth</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1 (clients)</td>
</tr>
</tbody>
</table>

Families

All of the participants maintain close contact with their families. The only reason for not seeing extended family members at least once per month is if they are separated by a great distance.

In part because of limited housing options, it is not uncommon for adult children to remain at home after marriage. One participant had her daughter, son-in-law and granddaughter living in her household, and another had an adult, unmarried daughter living with her. Two participants (including the one who is a university student) lived in their childhood homes with one or both parents. Three participants had children living at home while they attend university. The mother-in-law of one participant lived most of the year with her, but also rotated among her children, living with each for a portion of the year.

One participant has three siblings living in or near Uzhhorod. They get together every Sunday to attend church, then visit the graves of their parents, and go to a restaurant for coffee.

Three participants mentioned providing financial support for family members. One has 10 siblings between her and her husband, and they provide financial help, as they are able and as it is needed, to all of them.
Another participant has a sister who lives in another city. Her sister’s daughter is studying to be an attorney. She, her sister, and their mother have each supported the student for one year while she attends university. They will share the financial burden of the fourth year of university.

Another participant and her husband take care of both their mothers (their fathers have died) because their mothers’ pensions are too small to live on. They maintain the mothers’ residences, buy their groceries and give them money. She said, “You have to understand – that’s my mother! These are things I don’t even discuss with my husband.” She explained that their parents had helped them build their house, and her mother had cared for her children while she was in university.

All the participants who have extended family members living nearby mentioned seeing them for family birthdays and holidays. One said they rotate holidays between the homes of her mother and her mother-in-law.

**Friends**

Nine participants talked about their friends as either the first or second group that was important to them. Another talked only about her work group, but it was from this group that she had friends.

Two mentioned doing volunteer work with friends. One regularly sings in a church choir that sings weekly and occasionally travels to neighboring countries to perform. The other volunteered with a friend for a group that works with disabled children. She also volunteered with the same friend for a political group.

Of the 10 who talked about their friends, only one (the youngest), did not mention that her group of friends included long-term friends, and only two (the youngest and the oldest) did not mention that their group of friends included entire families; i.e., when they get together with their friends, it is for activities that include all their children. Three mentioned going on vacations with friends, for example, skiing in the mountains or to the beach; and three regularly spend birthdays and holidays with friends.
One woman and her friend were godmothers to each other's children. When she went to China for training, this friend cared for her daughter.

One woman's family is friends with six other families. The couples have been friends for about 20 years; some of them since childhood. They have supported each other through births and deaths. When one man was going to university in the U.S., the others helped his wife and children who had remained in Uzhhorod.

The participant whose work group was the source of her friends is a physician. When her father had cancer, her friends/colleagues offered moral support and advice. Some gave her medicines that were hard to get. She explained that it was medicine the friends already had, perhaps left-over from treating patients or family.

One women mentioned that her family goes to the home of friends during planned power outages. They take turns hosting, depending on which areas of the city have power. They eat together, have discussions, talk about politics, watch television, and discuss the problems they have raising their children.

Another woman and her husband have a flat with a fireplace. In the winter their friends visit them, and warmer times of the year, they go to their friends' homes where there is more space for gathering and sharing meals.

Co-workers

Five women identified co-workers as a group that was important to them, and one said only that she does not socialize with co-workers.

One woman had lived in Uzhhorod, then she and her husband left so he could attend a university in Moscow. When they returned, she said that she felt like a stranger: many people they had known from school had left Uzhhorod. Her current group of friends was from her colleagues at work. She socialized with co-workers more than the other participants. As part of their socializing, they often discussed work and sought solutions from the group of friends for work and personal problems.

The participant who retired in 1994 said that she maintains contact with some of her former colleagues. She has a handicapped adult daughter living at home who
had a car that was specially adapted for her. When the car was stolen, her former colleagues drove her daughter to and from work every day. She continued to have frequent telephone contact with her former colleagues, and would invite some of them to her home for visits.

*Other groups known through work (students, clients, etc.)*

Two participants selected as a separate network, clients or students - non-colleagues they had contact with through their place of employment. One works in a social service role; the other is a teacher. The teacher specifically mentioned having contact with some students in settings outside the school. She goes with the students (as a chaperone) on over-night field trips in the spring and fall.

*Neighbors*

Two participants selected neighbor groups as a third or fourth group to talk about. Both happened to have lived in the same neighborhood for about 26 years; one in a building of 10 flats, the other in a building of 20 flats. Each knew all the neighbors in her building, but had a stronger relationship with those who lived closest. Each mentioned that with her neighbors she maintained the area around the buildings by clearing away snow and cleaning sidewalks. One talked about cleaning the grounds in the spring, including painting playground equipment, filling a sandbox, and planting flower beds.

*Neighborhood Demographics*

As an activity to learn more about their neighborhoods, the WNNP participants were asked by the project directors to write descriptions of their neighborhoods. Summaries of their descriptions are in Appendix O. Table 6 shows the household demographics of the WNNP participants, and Table 7 provides additional information about the WNNP neighborhoods.
Table 6. Information about the households of the WNNP participants (at the time of the first interviews in November 2000).

<table>
<thead>
<tr>
<th>WNNP Participant</th>
<th>Employed outside the home</th>
<th>House or flat</th>
<th>No. of yrs in home</th>
<th>Total no. living in household</th>
<th>Number of school-age children</th>
<th>No. of extended family or adult children* living in household</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID no.</td>
<td>Age*</td>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W1</td>
<td>20</td>
<td>F</td>
<td>Student at university</td>
<td>F</td>
<td>20 yrs</td>
<td>4</td>
</tr>
<tr>
<td>W2</td>
<td>35</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>15-20 yrs</td>
<td>3</td>
</tr>
<tr>
<td>W3</td>
<td>62</td>
<td>F</td>
<td>Was, retired</td>
<td>F</td>
<td>15-20 yrs</td>
<td>3</td>
</tr>
<tr>
<td>W4</td>
<td>40</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>8 yrs</td>
<td>5</td>
</tr>
<tr>
<td>W5</td>
<td>38</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>5-6 yrs</td>
<td>4</td>
</tr>
<tr>
<td>W6</td>
<td>44</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>15 yrs</td>
<td>4</td>
</tr>
<tr>
<td>W7</td>
<td>49</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>10 yrs</td>
<td>5</td>
</tr>
<tr>
<td>W8</td>
<td>25</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>25 yrs</td>
<td>4</td>
</tr>
<tr>
<td>W9</td>
<td>50</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>27 yrs</td>
<td>3</td>
</tr>
<tr>
<td>W10</td>
<td>40</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>15-20 yrs</td>
<td>4</td>
</tr>
<tr>
<td>W11</td>
<td>33</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>5-6 yrs</td>
<td>4</td>
</tr>
<tr>
<td>W12</td>
<td>50</td>
<td>F</td>
<td>Yes</td>
<td>F</td>
<td>27 yrs</td>
<td>2</td>
</tr>
</tbody>
</table>

* Adult child refers to an age equal to or older than the typical age for completion of high school.

^ These values were provided as a range by one of the Ukrainian project coordinators.
**Table 7. WNNP neighborhood size, helpers, and other neighborhood activities.**

<table>
<thead>
<tr>
<th>Organizer ID no.</th>
<th>House* or flat</th>
<th>Team No.</th>
<th>ID no.</th>
<th>Neighborhood easily defined^</th>
<th>No. of households in WNNP</th>
<th>WNNP helpers</th>
<th>Other neighborhood activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>F</td>
<td>1</td>
<td>A</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2</td>
<td>F</td>
<td>1</td>
<td>A</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W3</td>
<td>F</td>
<td>2</td>
<td>C</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W4</td>
<td>F</td>
<td>1</td>
<td>A</td>
<td>Yes</td>
<td>6</td>
<td></td>
<td>Whitewashed stairway, cleaned grounds; put locks on stairway doors; collected money for intercom system lift maintenance, and for cleaning woman for lift and stairway.</td>
</tr>
<tr>
<td>W5</td>
<td>H</td>
<td>3</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W6</td>
<td>F</td>
<td>2</td>
<td>C</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W7</td>
<td>H</td>
<td>3</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W8</td>
<td>F</td>
<td>4</td>
<td>E</td>
<td>Yes</td>
<td>20</td>
<td></td>
<td>Cleaned out basement and cleaned yard.</td>
</tr>
<tr>
<td>W9</td>
<td>F</td>
<td>5</td>
<td>F</td>
<td>Yes</td>
<td>10</td>
<td>2</td>
<td>Men's group cleaned basement of debris. Spring cleaning of grounds; clear away snow together, maintain flower beds and playground.</td>
</tr>
<tr>
<td>W10</td>
<td>F</td>
<td>2</td>
<td>B</td>
<td>Yes</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W11</td>
<td>H</td>
<td>4</td>
<td>E</td>
<td></td>
<td>30</td>
<td></td>
<td>Regularly scheduled neighborhood cleaning days. Organized against siting of gas station in neighborhood.</td>
</tr>
<tr>
<td>W12</td>
<td>F</td>
<td>5</td>
<td>F</td>
<td>Yes</td>
<td>8</td>
<td>2</td>
<td>Men's group cleaned basement of debris and re-roofed apt. building.</td>
</tr>
</tbody>
</table>

* "House" refers to a single-family residence

^ The term "easily defined" refers to buildings of flats.
Of six WNNP neighborhoods described in Appendix O, three were neighborhoods of multi-story apartment buildings; one was composed of only single-family, one- and two-story homes; and two were a mix of flats and single-family homes. Most of the apartment buildings in these neighborhoods were five- or nine-stories tall; however, a few buildings were shorter. Typically, apartment buildings had 15 flats per floor, and were built of concrete since about 1970.

Single-family homes were typically built of brick. Older homes were built in the 1930s; newer homes have been built since about 1990. Newer homes were built as the family could afford the materials. A neighborhood of newer homes would have houses in varying stages of construction, including some that appeared to be (or in fact were) abandoned because of lack of funds. When a family moved into a new home, they could sell their flat or give it to one of their children. Residents in houses owned the house, but not the land; the land was made available to them on a long-term basis by the government.

In the rare case of divorce, if the couple had their own flat or house, one person might stay in it, and the other might return to the home of his or her parents. Alternatively, the couple might sell the flat or house and purchase two smaller flats.

In the Soviet era housing was provided by the government. With independence, families were given the opportunity to purchase their residences. The fee was on a sliding scale, based on longevity in the residence. Similarly, utilities had been provided by the government in the Soviet era and after independence people were expected to pay for services used. Because of the deteriorated economic conditions, in actuality, many people have not been able to pay for their residences or their utilities. This has contributed to the country’s economic slide. Power is generated (typically nuclear) and water provided at the government’s expense with many people unable to make their utility payments. In November 2001, I was told that the government frequently talked about cutting service or removing people from residences, but no action had yet been taken. There was great sympathy for the people
who were in this position, but there was no mechanism to provide social services if the government did take action.

Depending on the neighborhood, the ages of residents ranged from relatively young (25-45 years plus children of all ages) to an older mix, with mostly retired people. With the exception of the newer houses, most residents had lived in their house or flat for many years. Many residences, especially in the areas with a higher concentration of retired people, included more than one generation living in the homes. In some areas, new flats historically had been made available to individuals or families in particular professions, thus creating, for example, a concentration of medical people in one area and teachers in another.

Second Interviews – April 2002

My focus for the second interviews was to learn what the participants had been doing to develop their neighborhood networks since their April 2001 training in the U.S. Three participants were not available to interview due to an illness, a birth, and a death. Other members of their teams, however, were interviewed. Guide questions for these interviews can be found in Appendix L.

The participants worked in teams to develop materials about emergency preparedness and make presentations, but each also worked individually in her own neighborhood. The following summaries report interview findings.

Network organization

While the neighborhoods identified in the neighborhood descriptions (Appendix O) often include hundreds of people, the project participants were encouraged to focus on a much smaller number for their neighborhood networks. Four participants reported that eight to 30 households participated in their networks. One WNNP Ukrainian project coordinator reported that the average size of neighborhood networks was 10 households.
One woman reported that she had organized her network like a pyramid, with herself at the top, then two helpers (her husband and another woman), then the rest of the neighbors. She and two other participants said that their husbands had organized the men in their neighborhoods, and that the men had their own responsibilities. For example, in all three buildings, the men cleaned out the basements of debris and discarded furniture that was considered a fire hazard. In one building, the men also took on the task of re-roofing the five-story building. Although not directly related to the project, this task was organized through the structure of the neighborhood network.

Following the model used by LB NET, the members of one participant’s neighborhood network identified lead individuals for each of six functions: medical care, communications, sheltering, search and rescue, transportation, and building repair.

WNNP activities

No neighborhood met on a regular basis. Some participants found it easier to talk informally with individuals or a few people, and only had formal meetings when there was a particular reason, for example, to distribute new handouts or information.

In each neighborhood, the participant and her neighborhood helpers identified individuals and families who were considered to be “at risk.” Neighbors identified as being at risk included disabled, people with severe health problems, or those at risk because of age (either young or old). Through the process of getting this information, one participant learned of a woman in her apartment building who never left her flat. Some of the people identified as being at risk were already known to their neighbors, who sometimes checked on them, gave them food (or rarely, money), or ran errands for them. Some neighbors who had not previously been active in checking on at-risk neighbors have since become involved.

Each neighborhood network established a phone tree so that contact could easily be made with all members of the network. One individual in each neighborhood was given responsibility for creating and maintaining the phone tree.
All participants also distributed informational materials and made presentations about flooding, fire prevention and safety, safety rules, and natural gas. Additional activities conducted by some neighborhoods are included in Table 8. Examples of these activities include teaching first aid to neighbors, and developing presentations on topics identified by neighbors as being of interest, such as household poisons or how to turn off water and gas. Some WNHP neighborhoods also organized a men’s subgroup that conducted their own activities such as cleaning out apartment building basements to reduce fire hazard.

The participants who lived in apartment buildings often made posters that they placed in building common areas, either focusing on a particular hazard, or announcing a meeting. One woman reported that sometimes someone in her building would take down a poster, but she would make a new one to replace it.

As of February 16, 2004, no WNHP neighborhood had experienced an emergency. One woman who had been selected as a participant but was unable to travel to the U.S., had flooding in her neighborhood in March 2001. She had interviewed her neighbors and they were aware of her involvement in the project. Some of her neighbors contacted her during the flood to see if she could give them any advice.

*Materials developed*

Uzhhorod did not have a unified emergency telephone system such as the 9-1-1 system used in the United States. During the participants’ initial interviews with their neighbors, they learned that many people were not aware of one or more of the emergency telephone numbers. As a result, one of the first materials the participants developed was labels that listed the emergency numbers that could be placed on telephones (Figure 10). The labels were designed to include a small version of the project logo, so that any telephone user would not only see the emergency numbers, but also would be reminded of the project.
Table 8. Activities conducted by the WNNP participants. The activities in all neighborhoods included distributing informational materials, creating a phone tree and identifying neighbors who were at-risk because of age (young or old), illness, or other factors. Presentations included flooding, fire prevention and safety, safety rules, natural gas. The activities below are in addition to those conducted by all neighborhoods.

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Team No.</th>
<th>Team Members*</th>
<th>WNNP Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>W1, W2, W4</td>
<td>Demonstrated survival kit contents received during training in the U.S. Small group (3-4 people) meetings. Put locks on common space doors. Installed intercom system for visitors to contact residents. Collect money to pay for lift maintenance.</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>W10</td>
<td>Informal meetings, with everyone adding to the discussion. Developed presentation on household poisons. Approached Housing Committee about needed repairs to gas pipes.</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>W3, W6</td>
<td>Held monthly meetings; usually 20-30 people attended. Held some meetings at the Children’s Library, and attracted library patrons. Left handouts at the Children’s Library. Meeting with members of the Housing Committee. Neighbors check on other neighbors who are shut-ins.</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>W5, W7</td>
<td>Demonstrated survival kits that they received as part of training in the U.S. Learned how, and taught neighbors to turn off water and gas. Conducted a hazard study to identify hazards. Presentations included winter travel safety. Practiced duck, cover and hold (earthquake safety) with children.</td>
</tr>
<tr>
<td>E</td>
<td>4</td>
<td>W8, W11</td>
<td>Held about 12 small group meetings (3-5 people each). Made first aid kits, and stored water and warm clothes. Identified leaders for medical care, communications and shelter. Men formed own work group. Presentations to teachers and kids at neighborhood pre-school. Successfully petitioned against putting a gasoline station in the neighborhood.</td>
</tr>
<tr>
<td>F</td>
<td>5</td>
<td>W9, W12</td>
<td>Made an evacuation plan. Talked to neighborhood children about how to evacuate the building in an emergency. Men formed own work group. Cleaned out building basements to reduce fire hazard. Taught first aid to neighbors. Re-roofed building.</td>
</tr>
</tbody>
</table>

* Bold indicates WNNP participants interviewed in April 2002. Three participants were not available due to an illness, a birth and a death.
Other materials the participants and coordinators developed included bookmarks on fire safety and earthquakes, a booklet on safety for elderly and other special needs populations, and a calendar for 2002 with each month focusing on a different emergency situation and providing related safety tips and preparedness information. A complete list of the materials the participants developed is in Appendix N.

Expansion of the project

As the participants developed their neighborhood networks and met weekly as a group, they began to realize that there were other audiences for the information. In support of the three participants who were teachers, the participants helped organize a school event on October 13, 2001, as part of the International Day of Preparedness. While helping with this event, two participants who were physicians at the city hospital realized that their colleagues would also be interested in the preparedness and safety information. They began by giving presentations in their own departments at the hospital (Figure 11). Quickly the requests for presentations grew, and they made separate presentations to department chiefs, head physicians, department head nurses, and other medical workers. They also provided handouts to patients and their families. They tailored some of the presentations for the audience, for example, giving a presentation about safe winter travel to a group of colleagues who traveled frequently. The hospital was situated on a hill prone to landslides, and they gave a presentation on landslides, locally known as “soil shifting.”
Figure 11. Two participants who were medical doctors, with a display they created for emergency preparedness presentations to their colleagues.

One of the physician participants had experience writing articles for the newspaper. She developed a series of preparedness articles that appeared in the weekly television schedule section of the newspaper, thus putting the information in the hands of the reader for a full week.

One participant worked with special needs children. She worked with the teachers to distribute printed material through the children to their parents. She also made presentations to the students about fire safety, and coordinated each presentation with an activity. For example, while the children pretended they were cooking she would talk about fire safety in the kitchen.

The participant who was an attorney practiced and taught law. When she noticed her students losing interesting during lectures she would briefly change the topic to emergency preparedness. Often she would introduce the topic by asking the students how they would respond in a given emergency situation. She also made a chart showing evacuation paths for her building and posted it throughout the building.
The participants also developed radio spots about emergency preparedness and safety that were broadcast on a station that is popular with taxi drivers and young people.

**LINN-BENTON NEIGHBORHOOD EMERGENCY TRAINING**

*Motivation for Joining the Project*

The Linn-Benton Neighborhood Emergency Training program was begun in Linn and Benton counties in 1997, in part out of local concern following local flood and wind events in 1996. At various times, the Benton County Office of Emergency Management has advertised *LB NET* at community events, on the radio and in the local newspaper, especially in 1999 when there were a number of newspaper, magazine and television articles about the phenomenon known as Y2K – the fear of the damage that could be caused by technical system failures as a result of the year changing to the year 2000.

In my interviews with the *LB NET* organizers, eight organizers said that anticipation of Y2K had some influence in their decisions to organize their neighborhoods. Six people specifically mentioned that their neighborhoods were organized in anticipation of Y2K (see Table 9). Another person said that she had read about *LB NET* in a city newsletter, and that the article was probably discussing Y2K. One organizer said that her neighborhood network was organized in 1999 and she was aware of the warnings about Y2K, but that she and her neighbors lived in an urban growth boundary interface zone and they were more concerned about the risk of wildland fires than Y2K. She said that she became aware of *LB NET* through an article in the paper about Y2K.

Three people mentioned that they were members of a church that advocates preparedness. One of these held a position at church in which she was a liaison between the church and the community. When she learned about *LB NET* she told others in her church about the program.
Table 9. Information about LB NET organizers’ motivation for becoming LB NET organizers and previous disaster experience.

<table>
<thead>
<tr>
<th>ID no.</th>
<th>Motivation</th>
<th>Previous Disaster Experience*</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2</td>
<td>Likes to know the people in her neighborhood. Began in 1999; saw an article in the paper by Benton County Emergency Management Office, and that caught her interest, but she wasn’t really thinking Y2K. Lives in urban growth boundary.</td>
<td>P – Was education coordinator for a hospital in eastern Oregon and member of committee that organized emergency exercises.</td>
</tr>
<tr>
<td>B3</td>
<td>Read about LB NET in a city newsletter and thought it would be good for her neighborhood. Article was probably about Y2K.</td>
<td>D – Experienced “pretty big” earthquake in LA area as a child. Lived in LA for Watts Riot and was visiting during Rodney King Riot.</td>
</tr>
<tr>
<td>B4</td>
<td>Y2K (when nothing happened, they lost interest)</td>
<td>N – In current home for 1996 flood, but not affected. Broken pipe in neighbor’s house while her daughter house sat.</td>
</tr>
<tr>
<td>B5</td>
<td>Organized neighborhood as a demonstration model for a project at work.</td>
<td>D – Minor earthquakes. Used to live at end of supply line in remote area; required considering what could happen.</td>
</tr>
<tr>
<td>B6</td>
<td>Neighborhood Watch neighborhood. A neighbor had information about LB NET and contacted him because they neighbor knew he had organized Neighborhood Watch. Interest was spurred by Y2K. When nothing happened, they lost interest.</td>
<td>D – As a youth was in Yosemite National Park during a flood in the 1930s.</td>
</tr>
<tr>
<td>B7</td>
<td>Member of a church that advocates preparedness. Also, he is with the fire department, so he is inclined to think about preparedness.</td>
<td>P – Only through position with Corvallis Fire Department</td>
</tr>
<tr>
<td>B8</td>
<td>Y2K and talk of “the big one” earthquake</td>
<td>Broken well water pipe (outside the home)</td>
</tr>
<tr>
<td>B9</td>
<td>She didn’t organize neighborhood for LB NET, someone else did, then she became involved.</td>
<td></td>
</tr>
<tr>
<td>B10</td>
<td>Member of a church that advocates preparedness. Knew that one neighbor was elderly and wondered who would check on her in an emergency.</td>
<td>D – In house for 1996 flood; no damage. Area was isolated from rest of city and services.</td>
</tr>
<tr>
<td>B12</td>
<td>Involved with daughter’s school activities. They had a preparedness evening. It was in 1999, but the focus was earthquake preparedness.</td>
<td>D &amp; N – Lived in Marin County for 1989 Oakland earthquake. Grew up in area prone to slow-rising flood, but her home never flooded.</td>
</tr>
<tr>
<td>B13</td>
<td>Y2K. When nothing happened, people lost interest.</td>
<td>D &amp; P – Lived in area of ash fall when Mount St. Helens erupted in 1980; employed by timber company to conduct research on the recovery process.</td>
</tr>
<tr>
<td>B14</td>
<td>Member of a church that advocates preparedness. Had position with church as liaison between the church and community. Learned about LB NET and mentioned it to others at church. Spurred by Y2K. Lives in urban growth boundary.</td>
<td>Lived in California when her kids were young. Held a family exercise and pretended they had no water or electricity.</td>
</tr>
</tbody>
</table>

* D = direct experience; I = indirect experience; N = neighborhood experience; P = professional experience.
One man said that his neighborhood was in the Neighborhood Watch program and they were approached by the LB NET coordinator about also being in LB NET. Two men said that their involvement grew out of their paid positions that had made them aware of the need to be prepared. Related to this, one woman said that she organized her neighborhood as a demonstration for a project at work.

One organizer was involved in a number of grass roots community development projects, and saw LB NET as another community development tool. Another learned of LB NET through an emergency preparedness fair at her daughter’s school. One woman said that she knew there was an elderly woman living in her neighborhood and she had wondered who would check on her in an emergency, and another said that she liked to know the people in her neighborhood and to know that she could count on them in an emergency. Although she was the only person who specifically gave this as part of her motivation for organizing an LB NET neighborhood, it was also mentioned by many of the organizers.

**Previous Disaster Experience**

Thirteen of 14 LB NET organizers reported previous disaster experience (see Table 9). Three had experienced major earthquakes in California, either as children or as adults; none of their homes had experienced more than moderate damage, although they may have been without water, electricity or other services for several days. One had experienced only minor earthquakes.

Two organizers reported experiences with burst water pipes. One incident was a pipe outside the home that was ruptured when a family member was digging. The other occurred while the organizer’s daughter was house sitting for a neighbor. The pipe burst and water flowed inside the neighbor’s home for a number of hours before it was discovered, causing extensive damage to the home and the owner’s possessions.

One woman lived in a neighborhood that was cut-off from the rest of Corvallis in the 1996 flood. She had helped open a shelter in a school for other residents who
could not return to their homes. One man was a youth in Yosemite National Park when there was flooding within the park boundaries.

One woman had lived in Los Angeles during the Watts Riot and was visiting during the Rodney King Riot. Another had lived in an isolated community in Arizona. Because they lived at the end of the supply line, she had regularly stored extra amounts of food and other supplies. She also mentioned that in her current job she traveled a lot, which she said had influenced her involvement in emergency preparedness. She explained this was partly because she would frequently travel in areas where the common emergencies were outside her usual realm of experience, and partly because traveling made her feel more vulnerable.

Four had disaster experience in their professional lives: one as a member of the fire department, one as the manager of the county emergency management office, and one as a hospital nurse who was on a committee that organized hospital emergency exercises. One organizer had lived in an area of ash fallout following the 1980 eruption of Mount St. Helens, and he was in charge of forest recovery research for a timber company that operated on Mount St. Helens.

One organizer had grown up in an area that experienced slow-rising floods, but her childhood home had not flooded. One, as the mother of a young family living in California, had conducted a family emergency exercise in which they pretended to not have water or electricity. She roped off a portion of their home (including the bathroom) to simulate that it had been destroyed in an earthquake, and they used camping and barbecue equipment to prepare a simple meal.

In addition, three were members of a church that advocates its members be prepared to survive any emergency for up to two years. Many church members may not be able to save enough money (for example) to get them through two years, but they are encouraged to strive towards this goal.
Other Volunteer Activities

Two organizers did not indicate any volunteer activities except for their involvement with LB NET (see Table 10). Ten specifically mentioned being actively involved with activities in their churches or other religious organizations (see Table 14); however, of these, only six reported a church or religious group as a volunteer activity. One mentioned a specific activity, preparing a monthly newsletter.

Two women were actively involved as volunteers with environmental projects in the community. Three (one man and two women) regularly volunteered with social service groups: one was a senior peer counselor for Retired Senior Volunteer Program; one was a driver for Meals on Wheels; and one regularly drove a patient to dialysis. One woman volunteered for projects supporting arts and culture in the community. One organizer belonged to Rotary.

Two organizers volunteered at the schools attended by their children. One sorted books for the county library. One man was in the Air National Guard.

Three people (one man and two women) were heavily involved in volunteer activities, each serving on a variety of boards of directors and committees for a number of volunteer organizations.

LB NET Organizers and Their Families

The 14 LB NET organizers included four men and 10 women (see Table 11). Four organizers were retired (two men and two women), one worked from her home, and two were stay-at-home moms. One woman was a stay-at-home mom while her children were in school, but had recently begun a business that she operated from her home. Two men were public employees in areas of emergency service. Two women were health care professionals (a pharmacist and a part-time family practice physician). Two women were employed in education, one with the local school district, the other with the university.

Twelve LB NET organizers were married and one was a single parent. Six had children living at home, with a total of 10 children living at home who ranged from an
Table 10. Other volunteer activities of LB NET organizers. The number indicates the number of organizations for which the participant volunteered.

<table>
<thead>
<tr>
<th></th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>B7</th>
<th>B8</th>
<th>B9</th>
<th>B10</th>
<th>B11</th>
<th>B12</th>
<th>B13</th>
<th>B14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious/Spiritual</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Child’s school</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Other community organizations</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Special interest</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

| Total             | 2  | 2  | 0  | 2  | 4  | 7  | 1  | 1  | 0  | 3   | 2   | 3   | 1   | 1   | 29    |

* Arts and culture
* Environmental organization
* Military
* Political
Table 11. Information about the households of the LB NET organizers.

<table>
<thead>
<tr>
<th>ID no.</th>
<th>Age*</th>
<th>Sex</th>
<th>Employed outside the home</th>
<th>House or flat</th>
<th>No. of yrs in home</th>
<th>Total no. living in household</th>
<th>Number of school-age children</th>
<th>No. of extended family or adult children* living in household</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>51</td>
<td>F</td>
<td>Works from home</td>
<td>H</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>57</td>
<td>F</td>
<td>Retired</td>
<td>H</td>
<td>20</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>46</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>15</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>46</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>1 (adult child, student)</td>
</tr>
<tr>
<td>B5</td>
<td>52</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>2</td>
<td>2@</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B6</td>
<td>79</td>
<td>M</td>
<td>Retired</td>
<td>H</td>
<td>16</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B7</td>
<td>M</td>
<td>Yes</td>
<td>H</td>
<td>6</td>
<td>2*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B8</td>
<td>52</td>
<td>F</td>
<td>Retired</td>
<td>H</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B9</td>
<td>35</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B10</td>
<td>49</td>
<td>F</td>
<td>Yes</td>
<td>H</td>
<td>26</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B11</td>
<td>59</td>
<td>M</td>
<td>Yes</td>
<td>H</td>
<td>13</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12</td>
<td>50</td>
<td>F</td>
<td>No</td>
<td>H</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>B13</td>
<td>69</td>
<td>M</td>
<td>Retired</td>
<td>H</td>
<td>14</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B14</td>
<td>57</td>
<td>F</td>
<td>Small business at home</td>
<td>H</td>
<td>14</td>
<td>3</td>
<td></td>
<td>1 adult child</td>
</tr>
</tbody>
</table>

* Age at time of interview
* Children of an age equal to or greater than the typical age of high school completion
@ Organizer plus non-related adult renter
# Organizer plus child
infant to adult, college-age children. One woman had no children. One had a sister living with her when she organized her LB NET, but the sister had moved out by the time of my interview. The number of people living in their households ranged from two to five, with a mean of 2.64.

The mother of one organizer had lived in the organizer's house until the mother died; another's mother was in assisted living. Three had adult children living in other communities but within two hours travel by road. Five had adult children living elsewhere. One had parents in Portland and Brookings. All other relatives lived outside Oregon.

All 14 LB NET organizers lived in single-family dwellings that they owned; one rented a room to a non-related adult. Each had lived in their neighborhood from two to 20 years, with a mean of 11.6 years. One house was built in 1916; the others were built between the 1950s and 1994.

Although it was not a question that I asked, 10 LB NET organizers mentioned they had moved to Corvallis as adults.

**LB NET Neighborhood Demographics**

Corvallis is a university town and has a sizeable population of students who rent houses and apartments. The student population in the various LB NET neighborhoods varied, mostly with proximity to the Oregon State University campus.

Many of the older, established neighborhoods were a mix of retired people, families whose children had grown and moved away, and younger families who had moved into the area, as the older families moved out. Two organizers mentioned that someone living in a rental unit had attended at least one LB NET meeting.

Ten neighborhoods were located within the city limits of Corvallis; three were located outside Corvallis city limits, and one was in Philomath. Two LB NET neighborhoods were located on streets that are accessed via Oak Creek Road. This was an urban growth boundary interface zone located outside the Corvallis city limits.
with limited access via a single road. The farthest reaches of the area included properties that were adjacent to Oregon State University forestry lands.

One neighborhood consisted of homes built in the 1970s by a group of people who all belonged to the Roman Catholic church. The LB NET organizer in this neighborhood was a member of the first non-Catholic family to move into the neighborhood. Soon after they moved in, a couple of other Catholic families relocated outside the neighborhood and were replaced by non-Catholics. She described it as a close neighborhood where all the kids played together.

Another neighborhood was located on a wooded hillside and was laid out with unfenced, connected backyards. At the time of my interview with this organizer in 2002, most of the children in this neighborhood had grown up and moved out, but when they were young, they would all play together in the connected backyards.

Additional demographic information is included in the LB NET portion of Appendix O, Description of Neighborhoods.

**The LB NET**

When I contacted each LB NET organizer that I interviewed, the organizer's initial response was that her or his neighborhood emergency network was not active, that it was, in fact, defunct, and would not be of interest to me.

Most LB NET organizers began their involvement by contacting the project coordinator in the Benton County Office of Emergency Management, and expressing a desire to develop a network in their neighborhoods. A couple of neighborhood organizers said they had been contacted by the project coordinator because of their previous involvement with the Neighborhood Watch program (see Table 12). Neighborhoods involved with Neighborhood Watch were seen as already having a history of neighborhood projects, and were therefore likely candidates for participation in LB NET.
Table 12. Other LB NET neighborhood activities.

<table>
<thead>
<tr>
<th>Organizer ID no.</th>
<th>Neighborhood ID</th>
<th>Neighborhood Watch</th>
<th>Other neighborhood activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>H</td>
<td>Yes</td>
<td>Annual potluck and other events. Communal road maintenance.</td>
</tr>
<tr>
<td>B3</td>
<td>I</td>
<td>Yes, but is probably inactive</td>
<td>Previously many social events, including pumpkin carving, and ladies night out. None in recent years.</td>
</tr>
<tr>
<td>B4</td>
<td>J</td>
<td></td>
<td>Annual picnic, yard sales</td>
</tr>
<tr>
<td>B5</td>
<td>K</td>
<td>inactive</td>
<td>Cooperative removal of a dead tree</td>
</tr>
<tr>
<td>B6</td>
<td>L</td>
<td>Yes, but might be inactive</td>
<td>Annual ice cream social and holiday events</td>
</tr>
<tr>
<td>B7</td>
<td>M</td>
<td>Yes</td>
<td>Annual block party</td>
</tr>
<tr>
<td>B8</td>
<td>N</td>
<td></td>
<td>Occasional BBQ</td>
</tr>
<tr>
<td>B9</td>
<td>O</td>
<td>Yes</td>
<td>Periodic ice cream social or BBQ</td>
</tr>
<tr>
<td>B10</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B11</td>
<td>Q</td>
<td></td>
<td>Annual potluck Annual National Neighborhood Night Out</td>
</tr>
<tr>
<td>B12</td>
<td>R</td>
<td></td>
<td>Neighbors help with maintenance of large, old tree in her yard</td>
</tr>
<tr>
<td>B13</td>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B14</td>
<td>T</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ten LB NET neighborhoods had a history of sponsoring neighborhood activities. Activities were mostly social events such as an annual block party, barbecue, potluck or ice cream social; however, the activities of three neighborhoods included communal road maintenance, and maintenance or removal of old trees.

The LB NET organizers worked independently of each other. Other than periodic emergency preparedness fairs to which all LB NET organizers and neighborhood members were invited, there was no mechanism to bring the organizers together. Two organizers knew each other through their involvement with the same church.

Organizers notified their neighbors of the first meeting by walking through their neighborhoods, distributing flyers or postcards with information, and inviting people who were home, or leaving the printed material for those who were not. Six
organizers mentioned having a spouse or neighbor help them distribute flyers (see Table 13).

Each organizer was left to define the size of her or his own neighborhood. For some this was an easy task. Seven neighborhoods were easily defined by the layout of their streets: three were neighborhoods of cul-de-sacs, and four were dead-end or loop streets. One neighborhood was defined as all the households receiving mail at a common postal drop site.

Other organizers struggled with where to set their neighborhood boundaries. One woman lived in a development of 146 houses that had been built in four phases. She invited all 146; however, the families who attended the meeting were all from her more immediate neighborhood. Another organizer lived in an area that was part of a neighborhood association that included hundreds of homes. She distributed flyers throughout the area of the association; she did not remember how many or which families attended the organizing meeting.

The LB NET organizers were provided printed materials by the project coordinator in the Benton County Office of Emergency Management, and training was provided by either the project coordinator or another LB NET presenter. Most presentations were done by the project coordinator; only four organizers mentioned having a presentation by someone else. Many organizers said they provided meeting handouts to their neighbors who did not attend.

Household participation levels varied, with the highest participation in the neighborhoods that were most easily defined, such as neighborhoods on dead end or loop streets. This was not always the case, however. The residents on one loop-street neighborhood were believed to be especially interested in the project because of their location in an urban interface zone—an area of residences in close proximity to a forest. The previous year, a wildland fire had threatened to cross a ridge and enter their valley. In this neighborhood of 18 homes, only 15 people from four or five homes attended the LB NET meeting.
Table 13. Information about LB NET neighborhood meetings and activities.

<table>
<thead>
<tr>
<th>Organizer ID no.</th>
<th>Neighborhood</th>
<th>Households</th>
<th>Organizer have a helper?</th>
<th>No. of LB NET meetings</th>
<th>LB NET activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>G</td>
<td>No</td>
<td>55</td>
<td>2 meetings</td>
<td>Discussed resources (shelter, generator, tools, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+ 1 social breakfast</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>H</td>
<td>Yes</td>
<td>8</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surveyed supplies/equipment/skills. Assigned teams.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Designated meeting place. Developed phone tree.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Discussed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>scenarios.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Households each assembled 72-hour kits.</td>
</tr>
<tr>
<td>B3</td>
<td>I</td>
<td>No</td>
<td>100s</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td>1 helped distribute flyers</td>
</tr>
<tr>
<td>B4</td>
<td>J</td>
<td>No</td>
<td>146</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1-2 helped distribute flyers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td>K</td>
<td>No</td>
<td>20</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td>B6</td>
<td>L</td>
<td>Yes</td>
<td>--</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12-15</td>
<td></td>
<td>Made assignments for teams</td>
</tr>
<tr>
<td>B7</td>
<td>M</td>
<td>Yes</td>
<td>25</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td>B8</td>
<td>N</td>
<td>No</td>
<td>--</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 helped distribute flyers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6-7</td>
<td>6-8 meetings</td>
<td>Assigned roles, conducted neighborhood survey and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>over 9-10 months</td>
<td>identified at-risk neighbors.</td>
</tr>
<tr>
<td>B9</td>
<td>O</td>
<td>No</td>
<td>12</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td>B10</td>
<td>P</td>
<td>No</td>
<td>15-16</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4-5</td>
<td></td>
<td>1-2 helped distribute flyers</td>
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<tr>
<td>B11</td>
<td>Q</td>
<td>Yes</td>
<td>25</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td>B12</td>
<td>R</td>
<td>Yes</td>
<td>26</td>
<td>1 meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
<td>Established meeting place; identified block captain and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>person to check on elderly</td>
</tr>
<tr>
<td>B13</td>
<td>S</td>
<td>Yes</td>
<td>29</td>
<td>4 meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td></td>
<td>Learned first aid; covered family emergency preparedness for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>no</td>
<td></td>
<td>home &amp; vehicle. Organizer kept meeting minutes.</td>
</tr>
<tr>
<td>B14</td>
<td>T</td>
<td>Yes</td>
<td>18</td>
<td>2 meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4-5</td>
<td></td>
<td>Neighborhood survey, inventory of people, equipment,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>animals. Identified at-risk people. Identified gathering place,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Block Captain, first aid stations. Formed teams.</td>
</tr>
</tbody>
</table>

* The term "easily defined" is used for those neighborhoods that were defined by being located on loop or dead end streets, neighborhoods of cul-de-sacs, or by sharing a neighborhood mail drop site.
Household participation ranged from three to 15; one organizer didn’t remember how many households attended the meeting. Six organizers reported participation as a range. Using the mid-point of the ranges to figure the mean and median number of households participating in LB NET neighborhoods yields 8.6 and 8, respectively.

The LB NET program was developed to be held as a series of meetings held approximately every six months. Ten neighborhoods met only once (Table 11). Two neighborhoods held two meetings each; one held four meetings; and one held six to eight meetings over a period of nine to 10 months. One neighborhood that was also involved in Neighborhood Watch met regularly; however, only one meeting was devoted to LB NET.

For all the neighborhoods that met more than once (N=4), the organizer mentioned that Y2K had some influence on their decision to organize their neighborhoods for LB NET. They either organized in anticipation of Y2K or they became aware of the LB NET program because of articles about Y2K in the newspaper (Tables 9 and 13).

One LB NET organizer held two LB NET meetings that she felt were poorly attended, with five people coming to the first meeting, and four or five to the second. Because of her interest in grassroots community development, she and a neighbor organized a neighborhood breakfast at which they prepared pancakes. There was a good turn out for this event, but she felt it was because it involved free food, and those attending had to contribute nothing. She considered organizing a neighborhood potluck, but she said she had become frustrated by the low response and stopped trying to organize her own neighborhood and instead focused her attention on resource-based community development activities in other Corvallis neighborhoods.

One organizer kept detailed minutes of what was discussed at the neighborhood meetings, and distributed the minutes to his neighbors, so that even the neighbors who didn’t attend a meeting could know what happened.
Twelve organizers said that lack of time was their biggest hurdle in scheduling another neighborhood meeting. One woman gave up trying to organize her neighborhood because of lack of participation. One man organized his neighborhood with the intent of having someone else take over. He believed in the program, but his profession would require that he report to work during a disaster or other emergency, so he could not be counted on in an emergency to participate in neighborhood activities.

All LB NET organizers said they continued to provide their neighbors with the newsletters and other material periodically mailed out by the Benton county Office of Emergency Management.

As of February 16, 2004, no LB NET neighborhood network had been activated by a disaster or other emergency; however, one neighborhood located on a private road on a hillside had become temporarily isolated in two snow storms (January 26-27, 2002, and the snow and ice storm of early January 2004). In each incident the members of the neighborhood telephoned or walked around the neighborhood to check on each other. All the neighbors had wood stoves in their homes and alternative cooking sources for preparing food, and were in no great danger during the power outages. In the January 2004 event, the neighbors took advantage of the power outage and temporary isolation and made opportunities to socialize with their neighbors by gathering in one home to visit and drink cocoa.

Other Networks Important to the LB NET Organizers

To help understand the importance of LB NET and other social networks in the lives of the LB NET organizers, I asked the organizers to tell me about social networks in their lives. Their responses ranged from two women who listed two networks each (family and church; and church and work), to another woman who listed 19 different social networks that are important to her. The mean response was 5.5 networks per organizer, with a median of 4.
The types of networks were varied (see Table 14). The most common (mentioned by 10 organizers) was a church or other spiritual group, with six organizers listing more than one spiritual group (e.g., church and a small study group). One of the small groups consisted of six couples, five of whom had been meeting weekly for 13 years. The group had evolved from meeting weekly for Bible study to supporting each other through raising children, deaths of parents, illnesses, bankruptcies and weddings. One couple moved away and the group invited a new couple to join them. They often spend holidays together, and twice a year have a retreat in the mountains or at the beach. With one exception, the couples all had moved to Corvallis from somewhere else.

Since I only interviewed the LB NET organizers and not any of the individuals identified as being part of their networks, it is not known if these networks are asymmetric or symmetric. That is, whether members of the network would identify the LB NET participant as being part of their network.

Another organizer mentioned participating in a group of seven other couples who meet weekly for coffee and conversation. The group is mostly retired farmers who had farmed along one road. They take turns hosting the meetings.

Also mentioned by nine organizers were special interest groups, which included volunteer and service organizations, an investment club, groups of musicians, a writing group and a commune. These nine individuals listed a total of 26 groups that were important to them.

One of the retired organizers maintained close contact with friends who lived about two hours up the interstate freeway. He and his wife had raised their family in this community, and returned to visit friends approximately every other month.

Two organizers mentioned networks that were important to them but that did not meet in the conventional sense. One organizer was in an internet-based support group for people who have experienced the death of an infant. Group participants exchange e-mails on an irregular basis depending on participants' need for support. The other organizer listens to a weekly Christian-based radio broadcast. She reported
Table 14. Types and numbers of social networks LB NET organizers said they belonged to.

<table>
<thead>
<tr>
<th>LN NET organizer by identification number</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>B7</th>
<th>B8</th>
<th>B9</th>
<th>B10</th>
<th>B11</th>
<th>B12</th>
<th>B13</th>
<th>B14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>10/12</td>
</tr>
<tr>
<td>Small spiritual</td>
<td>3</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6/8</td>
</tr>
<tr>
<td>Parenting</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/4</td>
</tr>
<tr>
<td>Kid's sports</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/1</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/1</td>
</tr>
<tr>
<td>Extended family</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/4</td>
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<tr>
<td>Work</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6/6</td>
</tr>
<tr>
<td>Professional</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/4</td>
</tr>
<tr>
<td>Special interest</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>9/26</td>
</tr>
<tr>
<td>Independent group of friends</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>3</td>
<td></td>
<td>5/11</td>
</tr>
<tr>
<td>Total networks per organizer</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>19</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

No. of responses/total networks

48 responses
77 total networks
that this was an important network for her because of the discussions she would later have with family and friends who had also listened to the broadcast.
DISCUSSION

SIMILARITIES AND DIFFERENCES AT THE PROJECT LEVEL

The Two Models

The LB NET organizers received no training that set them apart from the other LB NET participants in their neighborhoods, and there was no organization that met regularly in support of the LB NET organizers. For the most part, the LB NET organizers worked alone, although six organizers mentioned receiving help from their spouse or neighbors in contacting other neighbors to invite them to meetings. At each group’s first meeting, they were told by the LB NET presenter what hazards were in their areas, and they were given materials that had been developed specifically for the project.

Only four of 14 LB NET neighborhoods held more than one meeting: one had two meetings, one had two meetings and a social event, one had four meetings, and one group met six to eight times over a period of nine to 10 months.

In contrast, WNNP included city and agency interviews as part of a needs assessment. No similar interviews took place in Corvallis; however, two LB NET organizers were in positions similar to some of the agency personnel interviewed in Uzhhorod. The WNNP participants submitted written applications to the project and were interviewed before they were selected to participate in the project. They attended weekly meetings in Uzhhorod at which they had an English language lesson and had presentations by representatives of emergency service agencies in their city. As a group, they learned first aid. They also received intensive three-week training in the U.S., plus mentoring in Uzhhorod. They had two part-time Ukrainian coordinators who worked closely with them in the development of their neighborhoods.

From the beginning of the study until at least May of 2003, the WNNP participants and coordinators met as a group at least monthly and often weekly. In February 2004, they no longer meet as participants in WNNP, but continued to see each other regularly through membership in Zonta, an international service organization.
The WNNP participants worked in teams of two or three to develop their neighborhood networks. They interviewed their neighbors as part of the project needs assessment and developed many of the materials and handouts they used in their presentations. Additional materials were developed for them by the Ukrainian project coordinators.

The participants developed and made presentations to their neighbors. Some WNNP organizers held meetings of large groups of up to 30 or 40 people, but most preferred to meet in a less formal setting with three to five people. One presenter held informal guided discussions rather than make formal presentations. Often their presentations included safety skills and the opportunity to practice; for example, crawling on the floor to remain below smoke during a fire.

The WNNP participants expanded their project into their work places: the physicians made presentations to medical professionals and to pediatric patients and their parents. Teachers incorporated project information in their classrooms, sent information home to the students’ parents, and incorporated some of the activities they had learned through their training in the U.S. into existing annual disaster events at their schools. All the WNNP participants also joined the local chapter of the Ukrainian Red Cross and became Red Cross presenters.

Two WNNP participants indicated that it was easier, and they were more comfortable, implementing emergency preparedness networks at their places of employment than in their neighborhoods. One woman explained that she was less comfortable talking with the strangers in her neighborhood than with people at work. There are several possible explanations for this:

- She spent more time with colleagues at work than with her neighbors.
- She had a stronger existing relationship with colleagues than with her neighbors and would have to develop relationships with her neighbors.
- Her role at work was more familiar (and more comfortable) than the role she was creating in her neighborhood.
While literacy rates were high in Ukraine (98% in 2003, U.S. Department of State, 2003), it was often difficult or expensive for the citizens of Uzhhorod to obtain information about current topics. Some individuals had computers with internet access, and there were a limited number of internet cafes (in 2002, there were fewer than 10), but the connections were slow and often intermittent. Printed materials were often from the Soviet era, making the publish dates pre-1993. All of this helped create an environment in which the citizens were starved for information. The WNNP participants helped fill the void by distributing emergency preparedness materials at neighborhood meetings and the project finale in April 2002. In addition to materials paid for by the WNNP project, the participants paid for some of the printed materials with money from a fund-raising event in Corvallis when they prepared a Ukrainian dinner.

In contrast, the U.S. is a nation with a potential for information overload. Printed materials are readily available (some free of charge), most communities have public libraries, CNN provides 24-hour news and related event coverage, and newspapers and magazines publish on thousands of topics that range from general news and information to esoteric topics. According to a 2002 report by the Progressive Policy Institute, Oregon was ranked as the eighth state in the nation for the percentage of citizens with internet access. Oregon had 61.2 percent compared to 54 percent for the U.S. national average (Progressive Policy Institute, 2002).

The relative lack of information in Uzhhorod may have made its citizens more receptive to any project providing information.

Finally, as a direct result of the WNNP, several schools in Uzhhorod were given fire extinguishers by the WNNP participants. Because of funding issues the schools did not have adequate numbers of fire extinguishers. The WNNP participants made a group decision to use some of the money they raised in Corvallis when they prepared a Ukrainian dinner to purchase additional fire extinguishers for some schools. While there are also school funding issues in Corvallis, the existing school safety standards assure the purchase of fire extinguishers with public funds.
The Two Organizations

The LB NET and WNNP organizations are similar in that each was developed as a tool for creating communities that would be better able to be self-sufficient in the first 72-hours following an earthquake or other emergency. They are also similar in that each is a volunteer organization of people who live in the same neighborhoods in urban areas, although the urban areas were of different sizes (Corvallis was approximately 50,000 people, while Uzhhorod had approximately 125,600 people). The WNNP was designed to use the same materials as LB NET; however, as the project progressed, the materials were adapted to fit the Ukrainian situation.

The most apparent differences in the organizations are the:

- Nature of the emergency in each city;
- Method of selection of the organizers;
- External support available; and
- Resource environment.

Nature of the emergency in each city

In the United States the focus of emergency preparedness is typically earthquakes, even in areas where other events are more common. The reason for this is that prior to other events (i.e., floods, hurricanes, winter storms, and to a lesser extent tornadoes) it is possible to warn the population in the area of a predicted event. With earthquakes, however, there is no reliable forecast system. Emergency preparedness advocates point out that by being prepared for an earthquake, one is prepared for any of the other events. This was also the philosophy for Y2K – being prepared for Y2K would make one prepared for other emergencies. Although six LB NET organizers expressed concern about technology failures related to Y2K, the focus of the training provided for LB NET neighborhoods was earthquake preparedness.

In Uzhhorod the experience of the WNNP participants was with floods. One participant mentioned that she had learned that her neighborhood was in an area that could be seismically active.
As the WNNP participants began meeting with their neighbors, it became apparent that there were different issues in Uzhhorod than in Corvallis. Issues that were mentioned as important in Uzhhorod included:

- Safety at home (locks and windows, and being observant of strangers in the area),
- Lift (elevator) safety,
- Poisons in the home,
- Debris and discarded furniture in apartment building basements,
- Safe winter travel by car, and
- Rail travel safety

In addition, in the Uzhhorod schools students were taught that in the event of an earthquake they should leave the building and run a distance away from the building that is equal to one and one-half times the height of the building. As the associate director of the WNNP, this philosophy caused me great concern. In the U.S., people are taught to “duck, cover and hold” – that if they are in a building, they should seek a nearby place that might provide protection against collapsing walls or falling objects, for example, under a table or next to a sofa. Duck, cover and hold is believed to be safer than running from a building where there is increased risk of being hit by collapsing walls, structural pieces falling from buildings, or other falling objects such as trees or power lines.

In preparing for the WNNP participants’ training in the U.S., the U.S. directors and trainers held several discussions about the ethical conflict presenting itself: should the trainers introduce the concept of duck, cover and hold and encourage the participants to convey this information to their neighbors, or should the trainers not try to change the practices in Uzhhorod. Included in the consideration was information about the hold-over influence of the Soviet era, including the government’s practice of withholding information from the public and its history of down playing potential risks (Strand, 1991; Marples, 1988; CNN, 1996), and the lack of adherence to building
standards and quality control in building construction (Gutinov, 1990, reported in Strand, 1991). The decision of the WNNP directors and trainers was to provide the information to the participants with the caveat that we lacked knowledge about the specifics of building construction in Uzhhorod and that the participants should check with their local officials about the philosophy behind running from buildings during an earthquake.

Other issues surfaced during the course of the project. One neighborhood learned of plans to build a petrol (gasoline) station in the neighborhood. The participant and her neighbors organized and collected signatures against the project and delivered the signatures to city hall. The station was not built in that location.

In another neighborhood, con artists had recently been conducting a scam in which they said they were distributing a product to control cockroaches. If no one would be at home on the day of the delivery, the residents were instructed to leave a container in the hall to receive the product. The container thus identified flats where no one was home, and they became the targets of burglaries.

Method of selection of the organizers

When the LB NET project began the organizers contacted the organizers of neighborhoods that were participating in the Neighborhood Watch program to see if they were interested in the new program. Neighborhoods were also recruited at community events, and through articles in the newspaper and radio interviews. All LB NET organizers were volunteers.

The WNNP participants were recruited from the membership of the Uzhhorod Sister Cities Association of Citizens. They submitted written applications that included essay questions about why they wanted to be in the project and ideas they had about how to get their neighbors involved. The selected participants made a commitment to the project for one year, including three weeks away from their families and jobs for training in the U.S.
External support available

The LB NET organizers could arrange for training through the project coordinator in the Benton County Office of Emergency Management. Training was provided by volunteer trainers who were external to the neighborhood. No mechanism existed for meetings involving LB NET organizers, although they were invited to events periodically scheduled by the Office of Emergency Management, such as emergency preparedness fairs.

The WNNP participants were supported by two part-time coordinators in Uzhhorod, two part-time administrators in Corvallis, and additional resource personnel in Corvallis. The coordinators in Uzhhorod arranged weekly meetings that included presentations by local providers of emergency services and training such as first aid. The coordinators also developed some handout materials and helped the participants develop other materials. The administrators and resource personnel in Corvallis were available via e-mail to respond to questions and provided additional material of interest to the participants, for example, two of the physicians were interested in issues of mental health and disasters.

Resource environment

A component of the LB NET training that proved difficult for the WNNP participants and their neighbors was the gathering of supplies for 72-hour kits – supplies such as food, water, clothing, and equipment that are believed to be necessary to survive the initial 72 hours following an emergency. For the WNNP participants and their neighbors, daily life is more of a struggle than in the LB NET neighborhoods. It would be uncommon for a WNNP participant to be able to prepare or purchase extra food, water and clothing that would not be immediately used. One WNNP participant said that she and some of her neighbors did gather extra clothing and water that they stored for an emergency, but that it was “too difficult” to store extra food.

The ability of individuals to make a 72-hour kit is further complicated by limited availability of some of the recommended items. For example, in the U.S. it is
recommended that 72-hour kits include first aid supplies. In Uzhhorod, however, first aid and medical supplies are often in short supply and difficult to obtain.

**SIMILARITIES AND DIFFERENCES AT THE NEIGHBORHOOD LEVEL**

All 12 WNNP participants lived in urban neighborhoods. Of the 14 LB NET organizers, 12 lived in urban neighborhoods and two lived in urban growth boundary interface areas—less densely populated zones with larger lots that are adjacent to “wilder” areas such as forests or large parks.

All LB NET organizers lived in single-family residences, in neighborhoods that were almost exclusively owner-occupied single-family residences. Three neighborhoods included a few single-family or small multi-family units such as duplexes. One organizer lived in a neighborhood near Oregon State University campus that had a larger population of non-related students sharing the rent of single-family homes.

Eight WNNP participants lived in flats in areas that were completely made up of multi-level apartment buildings. Two lived in single-family homes in neighborhoods of single-family homes, and two lived in areas that were mixed apartment buildings and single-family homes.

It was not possible to collect similar information about the sizes of neighborhoods and networks for both LB NET and WNNP. The information that was available is presented in Table 15. The mean size of WNNP networks was provided by one of the Ukrainian coordinators as 10 households. The LB NET networks were slightly smaller with a mean size of 8.6 households.

The neighborhood activities reported by the LB NET organizers and the WNNP participants were quite different. Of the 14 LB NET organizers, nine reported that their neighborhoods annually or periodically held some kind of neighborhood event. Eight reported that the events in their LB NET neighborhoods were social: ice cream socials, block parties, barbecues, or seasonal events such Easter egg dying or pumpkin
Table 15. Comparison of WNNP and LB NET neighborhood demographics. Information is compiled from Tables 7 and 13.

<table>
<thead>
<tr>
<th></th>
<th>WNNP</th>
<th>LB NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of neighborhoods, in number of households (Comparable information was not available for WNNP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>8-146*</td>
<td>8-146*</td>
</tr>
<tr>
<td>Mean</td>
<td>34.45*</td>
<td>34.45*</td>
</tr>
<tr>
<td>Median</td>
<td>25*</td>
<td>25*</td>
</tr>
<tr>
<td>* Does not include LB NET organizer who gave neighborhood size as “100s”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of neighborhood networks, in number of households</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>3-15</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>10*</td>
<td>8.6</td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>* Mean provided by one of the Ukrainian project coordinators.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

carving. Two reported neighborhood maintenance activities such as maintaining a communal road or caring for a particularly old neighborhood tree. In contrast, five of 12 WNNP participants reported that their neighborhoods conducted activities that focused on maintaining common areas, such as cleaning or painting hallways, removing debris from building basements, or maintaining a playground; or that increased neighborhood safety, such as installing locks on common stairway doors. No WNNP participant reported purely social events involving her neighborhood.

**Similarities and Differences at the Organizer/Participant Level**

It was a requirement of the funding agency that the 12 WNNP participants be female. Of the 14 LB NET organizers, 10 (71.4%) were female.

Table 16 includes a comparison of the ages of the WNNP participants and LB NET organizers. The WNNP participants ranged in age from 20-62 (mean age = 40.5; median age = 40, while the LB NET organizers ranged in age from 35 to 79, (mean age = 54; median age = 52). (Age data is missing for one LB NET organizer.)
Table 16. Comparison of WNNP participant and LB NET organizer demographics. Information compiled from Tables 6 and 11.

<table>
<thead>
<tr>
<th></th>
<th>WNNP</th>
<th>LB NET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of participant/organizer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>20-62</td>
<td>35-79</td>
</tr>
<tr>
<td>Mean</td>
<td>40.5</td>
<td>54</td>
</tr>
<tr>
<td>Median</td>
<td>40</td>
<td>52</td>
</tr>
<tr>
<td><strong>Employment status of participant/organizer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Retired</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Student</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Not working by choice</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Number of people living in participant/organizer’s household</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>2-5</td>
<td>2-5</td>
</tr>
<tr>
<td>Mean</td>
<td>3.75</td>
<td>2.64</td>
</tr>
<tr>
<td>Median</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Breakdown of individuals living in participant/organizer’s households.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of households in each group with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of household couple</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Single parent</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>School-age children</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Total number of school-age children</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Adult children attending university</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Adult children not at university</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Adult child’s family</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Parent or in-law</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Number of years participant/organizer has lived in home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>5-30</td>
<td>2-26</td>
</tr>
<tr>
<td>Mean</td>
<td>15-20</td>
<td>11.57</td>
</tr>
<tr>
<td>Median</td>
<td>--</td>
<td>13.5</td>
</tr>
</tbody>
</table>
All 14 LB NET organizers lived in single-family homes. Nine organizers were employed, four retired, one was not employed by choice, and there were no student LB NET organizers. In contrast, three WNNP participants lived in single-family homes and nine lived in flats in multi-unit buildings. Ten participants were employed, one retired, and one student. There were no participants who were unemployed by choice.

While the range of the number of people living in the households was the same (2-5 people) for LB NET organizers and WNNP participants, the WNNP participants had slightly larger mean (3.75) and median (4) than the LB NET participants (mean = 2.64 and median = 2). This could be at least partly attributable to the LB NET organizers being an older group (mean age for LB NET = 54, and for WNNP = 40.5) and the LB NET having more retired organizers (4 for LB NET versus 1 for WNNP).

Couples formed the head-of-household for 13 LB NET participant households, while one participant was a single parent. Five organizers had a total of eight school-age children living in their homes. One organizer had one adult child living in her household who was a student; another had a non-student adult child in her household. One organizer had a non-related renter in her home.

All 12 WNNP participants were married. Nine participants had a total of 11 school-age children living at home. Three participants each had living in their homes one adult child who was going to university, and one participant was an adult child going to university but living in her parents’ home. In addition, one participant had an adult child’s family (child, spouse and grandchild) living with her. Two participants each had a parent or in-law living in their households. One of these was actually the home of the parent, and the daughter and her family were living with her father.

I had expected to find that the LB NET organizers were much more mobile and changed their residences more frequently than the WNNP participants. I thought the numbers would reflect the difficulty of changing residence in Ukraine and the more mobile society that is often perceived as being present in the U.S. This is not reflected in my findings, however. The two groups are similar for the number of years the organizers and participants lived in their residences, with a range of 5-30 years for
WNNP and 2-26 years for LB NET. The mean for WNNP is 15-20 years and 16.64 years for LB NET (Table 16).

I suspect that there are different reasons for the residence stability in each city, with my original assumption of difficulty relocating being correct for Uzhhorod.

In Corvallis, the residence stability of the LB NET organizers may be attributed, at least partially, to a combination of employment stability and the rules of the local educational system. In four households the LB NET organizer or spouse worked for or was retired from faculty positions at Oregon State University (OSU), and in three households the LB NET organizer or spouse worked for or was retired from Hewlett Packard (HP). OSU, like most university systems in the U.S., grants tenure to certain levels of faculty, encouraging long-term residence in the community. HP is an employer known for its retention of employees; even in difficult economic times, management will move employees within the company rather than issue layoff notices.

Another factor that could influence a family’s length of stay in a residence has to do with the rules of the local school systems. In Corvallis a student attends school based on the district where his or her home is located. Thus, families may stay in a house because of the desire to have their children attend a particular school. In Uzhhorod a student may attend any school in the city, with the selection being based on the focus of the school, e.g., a school that specializes in English language, or university preparation.

In the LB NET networks there was usually the expectation by members that the person who organized the first meeting would continue to be the leader. The networks were encouraged to identify a block captain who would be in charge in an actual emergency, but this was usually done at the second meeting. Of the 14 LB NET neighborhoods, 10 had only one meeting. One LB NET neighborhood collapsed when no one stepped forward to lead. The organizer made it clear from the beginning that he could not be the neighborhood leader because the expectations of his job would require him to be elsewhere in an emergency.
Motivation for Participating in a Neighborhood Emergency Preparedness Program

Summaries of the motivation of the WNNP participants are included in Table 4, and in Table 8 for the LB NET organizers. There can be no question that a three-week, expenses-paid trip to the United States was a large motivation for the women who applied to the WNNP. It is also true that more expectations (e.g., weekly group meetings) were placed on the WNNP participants than on the LB NET organizers. Beyond these two factors (one that can been viewed as positive and one as negative), the motivation of the two groups can be distilled to five categories (Table 17).

For the WNNP participants the concerns most expressed as motivation were concern about being prepared for emergencies (N=5), social concerns such as concern for the welfare of neighbors (N=4), and concerns arising from employment (N=3) (for example, physicians who had treated flood or gas explosion victims). The 12 WNNP participants expressed a total of 14 reasons, with two participants expressing two reasons each.

Among the LB NET organizers the three most expressed concerns were about the need to be prepared for emergencies (N=8), social concerns (N=4), and membership in a church that advocates preparedness (N=3). For the organizers who were motivated by concerns about being prepared for emergencies, two of the concerns expressed were about earthquakes, and the remaining six were about the technological phenomena Y2K. One organizer was not the original organizer and gave no motivation, other than having been asked by the organizer to help when she moved into the neighborhood. The 14 LB NET organizers gave a total of 20 reasons for organizing their neighborhoods, with seven giving two reasons each, and one person who was not the original organizer. Concerns about Y2K and membership in a church advocating preparedness were only expressed by LB NET participants.
Table 17. Comparison of motivation for applying to WNNP or organizing an LB NET neighborhood. Information is compiled from Tables 4 and 9.

<table>
<thead>
<tr>
<th>Motivation</th>
<th>WNNP</th>
<th>LB NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social concerns/concern for welfare of neighbors</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Church beliefs advocate preparedness</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Concerns arising from employment</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Concerns re: need to be prepared for emergencies</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Concerns specific to Y2K</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likes to know neighbors</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Interest originated with school involvement</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Learn about herself and improve personal skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Demonstration project for work</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Previous Disaster Experience**

It is interesting that two LB NET organizers mentioned broken pipes (one inside a neighbor’s home, one an outdoor well pipe). The only time I specifically asked the WNNP participants about previous disaster experience was during their interviews as applicants to the program. At that time, none mentioned water damage from broken water pipes. In later interviews, however, I learned that water damage is fairly common in flats following the scheduled periods when water is turned off to specific areas of the city. A resident might be running water to fill containers, or just running water in the course of daily life, when the water goes off. Without water coming out of the tap, sometimes the user forgets to turn off the spigot. Later, when the service resumes, if no one is in the flat, the water can run for hours, overflow the sink or bathtub, soak through the floor into the flat below and cause damage in two or more flats. Two WNNP participants and one Ukrainian interpreter told me about such incidents. One of the participants said that normally there is no compensation from the person who left the water on; any costs involved in repairing damage are borne by
the victim. She said, however, that when her daughter left the water on, she and her
daughter helped repair the damage to the downstairs flat.

Social Networks

The question of social networks was posed differently to the two groups. During the first of two short (half-hour or less) interviews, the WNNP participants were asked to talk about the groups of people that were important to them (see Table 5). Although the interviews were scheduled to be 20 to 30 minutes long, I allowed each participant to talk about each topic as long as she wished. Nine chose to talk first about family, two about friends, and one about co-workers. Three participants talked about only one topic (co-workers, friends, family). Of the remaining nine, seven talked about friends, one about family and one about co-workers. For eleven participants, family was either their first or second topic. Five participants talked about a third topic: three chose co-workers, and one each talked about her students or neighbors. Only three participants had enough time remaining in the interview for a fourth topic, with one person each talking about her clients, neighbors or co-workers. The 12 WNNP participants talked about 29 groups in seven categories.

Each interview with an LB NET organizer lasted approximately one hour and was divided into three sections (see Appendix M). The final section of each interview was about personal networks that were important to the organizer. In these interviews, organizers often spoke about multiple networks within a category. Table 12 details the categories of the networks. The networks were grouped into ten topics. There were a total of 48 responses and 77 total networks.

Table 18 compares WNNP and LB NET responses. Four things stand out in this table. First is the difference between the two groups in the family/extended family category. This difference is at least partially attributable to the way the questions were asked. At the beginning of each interview I asked the LB NET organizer to tell me about the members of their households. Later when we discussed social networks, family only came up in the context of extended family.
Table 18. Comparison of social networks that were mentioned in interviews as being important to WNNP participants and LB NET organizers. Numbers indicate the number of people who gave each category of networks as being important. The table is compiled from information detailed in Tables 5 and 14.

<table>
<thead>
<tr>
<th></th>
<th>WNNP</th>
<th>LB NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/extended family</td>
<td>10</td>
<td>4*</td>
</tr>
<tr>
<td>Friends</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Professional/work groups</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Neighbors</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Spiritual/church</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Special interest</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Parenting/child’s sports/school</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

* Only discussed in this context as extended family

Second is that two of the WNNP participants talked about their neighbors as important social networks. None of the LB NET organizers spoke of their neighbors as a social network.

Third is that 10 LB NET organizers mentioned spiritual or church networks as being important. These 10 organizers mentioned 20 different networks ranging from membership in a church to small Bible study groups to a weekly nationally broadcast radio program. No WNNP participant mentioned a church network as being important to her.

Fourth is that 10 LB NET organizers mentioned networks grouped under the special interest category, while there are no networks under this category for WNNP. Again, this is at least partially attributable to the structure of the interviews. However, when I interviewed each WNNP participant, I explained that what I was interested in was groups of people who were important to her, and I gave as examples family, friends, work colleagues, or parents of children’s classmates and friends. One woman
who talked about her friends said that she and a couple of friends did volunteer work together in community organizations, but these were friends she knew before participating in the special interest groups.

**Volunteer Work**

The concept of volunteering as pleasurable activity or civic responsibility is a relatively new concept in Uzhhorod. In the Soviet Era volunteer work was less a volunteer activity and more a requirement. In part as a result of more than 10 years of projects between the Uzhhorod Sister Cities Association of Citizens (USCAC) and the Corvallis Sister Cities Association, the concept of volunteering has begun to lose some of the negative connotation in Uzhhorod. It is still, however, not a common activity. All applicants to the WNNP project were required to be active members in USCAC. For most of the applicants, however, their volunteer work was limited; only two did other volunteer work.

For the WNNP participants, the neighborhood networking project became a core volunteer and social activity. They looked forward to their meetings, and continued to meet for approximately one year after the end of the project. They sought ways they could make their community safer, for example by purchasing and donating fire extinguishers to local schools.

The volunteer experience of the LB NET organizers was much broader (Table 10). Of the 14 organizers, two reported no volunteer activity other than LB NET. The remaining 12 organizers reported volunteer participation in a total of 29 groups that ranged from involvement through their churches or children’s schools, to being a member of a school board, delivering for Meals on Wheels, sorting books at the library, or participating in local environmental, arts or service organizations. For the LB NET organizers, participation in a neighborhood emergency preparedness network was much less a of focal activity than for the WNNP participants.
CONCLUSIONS

WHAT ARE THE SIMILARITIES AND DIFFERENCES IN THE MODEL AS IMPLEMENTED IN THE U.S.A. AND UKRAINE?

Two programs – the Women’s Neighborhood Network Project (WNNP) in Uzhhorod, Ukraine, and the Linn Benton Neighborhood Emergency Training (LB NET) program in Corvallis, Oregon, U.S.A. – were developed as projects to promote emergency preparedness and response during the first 72 hours after a disaster or other emergency event. One (WNNP) was developed using the other (LB NET) as a model, but allowing for adaptations to the local culture and environment.

Some of the adaptations to the LB NET model which were made for the Ukrainian program included:

- An application and selection process to participate in WNNP.
- The WNNP participants interviewed their neighbors to learn what specific concerns their neighbors had.
- Weekly (and later monthly) meetings of all the WNNP participants with the two Ukrainian coordinators. Following their training in the U.S., the meetings included opportunities for the participants to discuss with each other the activities they were conducting in their neighborhoods and the materials they were using.
- Intensive three-week training in the United States that included not only emergency preparedness training, but also development of leadership and presentation skills.
- Working in teams of two or three to develop emergency neighborhood networks.
- The participants and their Ukrainian coordinators developed and designed many of the materials they used.
- The project concluded with a community event developed to highlight the emergency service providers in Uzhhorod.
As the women of the WNNP learned the model and began to use it, they made additional adaptations:

- The project expanded from neighborhoods to places of work, especially the municipal hospital and schools.
- The topics of what was considered an emergency expanded to include topics such as household poisons, elevator safety, home security, and safe winter travel.
- Rather than conduct large neighborhood meetings, many meetings were held as conversations with two or three people.

**What are the similarities and differences between the family and social networks of the neighborhood organizers in each project?**

As a group, the LB NET organizers were older and had slightly smaller households than the WNNP participants. The LB NET organizers also had a more active and more varied involvement in volunteer activities, and more social networks than the WNNP participants.

The WNNP participants appear to provided more support (financial and social) to extended family than the LB NET organizers. It is more common to have extended families living in one household in Uzhhorod than in the U.S.

Both social networks and volunteer activities play larger roles in the lives of the LB NET organizers than the WNNP participants.

The number of years the LB NET organizers had lived in their homes was surprisingly similar to the number of years for WNNP organizers. I had expected to find that the LB NET organizers were a more mobile group, and that they had lived in their neighborhoods for shorter periods of time. This may indicate that the people who are likely to volunteer to be organizers of similar neighborhood networks are more likely to have lived in their neighborhoods for longer periods of time. It may be necessary to be established in a neighborhood before one develops a sense of connectedness to neighbors.
HAS IMPLEMENTATION OF THE MODEL RESULTED IN BETTER-PREPARED COMMUNITIES IN THE EVENT OF DISASTER?

Since no disasters have occurred during the research period, this question cannot be answered. However, although not supported by data, I believe that the neighborhoods that have been organized, even if they only held one meeting, are better prepared to survive an earthquake or other emergency event than neighborhoods that have not participated in similar programs. The act of coming together and receiving the information sets people on the path of considering what could happen to them, their family or their neighbors in a disaster, and in an actual event they will be able to draw on that information. One LB NET organizer expressed a feeling commonly voiced by the LB NET organizers when she said that she had the sense that “people knew each other enough that if there was a disaster that we could rise to the occasion. That we’d be able to help one another” (Weidner, 2002a).

Similar sentiment was expressed by a member of the Uzhhorod rescue unit in an interview in April 2002. The discussion was about people being enthusiastic immediately following preparedness training, but when there is no emergency, they lose interest. A member of the rescue unit remarked, “Yes, but in an activity there is something that remains” (Weidner, 2002b).

LuAn Johnson developed the original model upon which the LB NET is based. It has been used in neighborhoods in San Francisco, California and Seattle, Washington. Future studies will be required to determine if the model itself is useful in promoting community preparedness and neighborhood self-sufficiency following a disaster or other emergency. Seattle communities that had participated in the Seattle neighborhood preparedness program received less damage and were more self-sufficient than other communities following the Nisqually Earthquake in Washington on February 28, 2001 (Benton County Emergency Management Office, personal communication, 2003).
DOES THE NEIGHBORHOOD EMERGENCY TRAINING MODEL SUCCEED AS A SELF-SUSTAINING, STAND-ALONE PROJECT?

It is a human tendency to deny vulnerability to risk. This makes the job of emergency managers and preparedness advocates that much more difficult. Of the 14 LB NET neighborhoods, more than half were organized in anticipation of Y2K. Of those, three specifically said that when nothing happened for Y2K they and their neighbors lost interest. Only four neighborhoods met more than once, and the organizer of one of those four made a conscious decision to not hold additional meetings because of low participation.

Twelve of 14 LB NET organizers said the biggest hurdle to organizing additional meetings was lack of time.

In Uzhhorod the wnnp participants were motivated to continue organizing their neighbors through their weekly meetings. With the end of the project those meetings became less frequent. The participants continue to see each other through other activities, but it is not known if any neighborhoods continue to meet.

Through the actions of one person (the neighborhood organizer) emergency preparedness information is provided to people who might otherwise not receive it. As such, the model is successful for disseminating emergency preparedness information. It appears that it is difficult for the neighborhoods to be self-sustaining as neighborhood emergency networks, but that may not be an important issue. As mentioned in the previous question, just getting the information into the hands of people can be an important factor in leading people to consider what could happen to them in an emergency.

IS THE MODEL ONE THAT CAN BE SUCCESSFULLY ADAPTED FOR COMMUNITIES IN COUNTRIES OTHER THAN THE U.S. OR UKRAINE?

The LB NET model required significant inputs of training and materials. With similar inputs of finances and time, this model could be successful in other international settings.
The LB NET model requires less financial and time support from both the project coordinator and the neighborhood organizers than the WNNP model. Because it requires less financial and time support, it would not be likely that this model would succeed without adaptation in an environment outside the U.S. The model itself would likely be too unfamiliar in other communities to allow it to develop and become self-sustaining.

**DIRECTIONS FOR FUTURE RESEARCH**

During their interviews with their neighbors in late 2000 and early 2001, the WNNP participants asked their neighbors questions included in the WNNP Pre-Project Survey (see Appendix H). It would be interesting to follow-up with the WNNP neighborhoods to see what changes have occurred as a result of their participation in the WNNP, however, that is beyond the scope of this study.

Additional research after an emergency in either city will provide insight into the value of the neighborhood preparedness model and possibly suggest additional revisions to the model.
BIBLIOGRAPHY


Johnson, LuAn, 1996. Instructor’s Guidebook (32 pp); Hosting a Neighborhood Disaster Preparedness Meeting (7 pp); SPAN’s Guide to Personal & Home Preparedness Activity (47 pp); Block Captain’s Kit (9 pp). A SPAN (Strengthening Preparedness Among Neighbors) project of the Benton/Linn County Emergency Management Council, Corvallis, Oregon.


APPENDIX A

ADDITIONAL HISTORY OF UZHGOROD, UKRAINE


- Uzhhorod is first mentioned in historical texts in the year 872. Other first mentions include: the bridge in 1320, the first Catholic church in 1322, and a hospital in 1451.

- In 1567 a census registered 75 homesteads; in 1631 the number of homesteads was 138. In 1691 the census registered 21 homesteads, 156 vineyards, 11 horses and 10 streets. In the 1900 census there were 1050 houses and 20 enterprises; in 1910 the area of the city was 21 sq km, there were 1346 houses and 50 streets, and the population included 15,980 civilians and 939 military men.

- In 1514 Uzhhorod was ruined by a peasant rebellion.

- In 1850 the streets were given Russian names. In 1875 the voluntary fire brigade was begun.

- In the 1685 census, the population of Uzhhorod included three leathermen, four blacksmiths, five tailors, six carpenters, nine potters, 10 furriers, and 13 cobblers. The first furniture factory began in 1886. The Uzhhorod to Velyky Brezny railway was laid in 1893.

- In 1776 a seminary was transferred to Uzhhorod.

- During its early history Uzhhorod was given by one power to another. In 1318, King Carl-Robert presented Uzhhorod to the Italian Drouhet counts. The last Drouhet died in 1691. In 1711, the town was occupied by Austrian troops and the town was considered state property. In 1771, the Uzhhorod castle was presented by the Austrian Empress Maria-Teresia to the Greco-Catholic See. In 1838, the local council proclaimed Uzhhorod a self-ruled town, an act that was reaffirmed in 1845 by the Hungarian Vicegerent Council. In 1919, Czech troops occupied Uzhhorod, and the Central Ruthenian People Council adopted a decision to join Czechoslovakia, with Uzhhorod being designated as the center of Subcarpathian Rus in 1920. In 1938 the Vienna Arbitration ceded Uzhhorod to Hungary. In 1944 Soviet troops entered Uzhhorod. In August of 1991, the majority of the City Council deputies condemned the USSR, setting the stage for privatization which began in 1992.
APPENDIX B

ADDITIONAL HISTORY OF CORVALLIS, OREGON

Adapted from City of Corvallis, 2002.

- In the winter of 1847-48, Joseph C. Avery marked off 12 acres of land around his cabin near the Mary’s River.
- In 1853 the area was renamed Corvallis.
- In 1848, a log school was constructed in the future community of Corvallis, although the first class wasn’t taught until 1850.
- Religious needs of the settlers were first met by circuit rider ministers in 1847 or 1848, with services held in homes or the school building.
- In 1849, the first Circuit Court session was held, and in 1850 the post office was established.
- The first sawmill was established by the summer of 1851, and the first frame house in Corvallis was built that year.
- Also in 1851 the first steamboat traveled up the Willamette River to Corvallis. The establishment of marine transportation provided an outlet for locally grown crops, mostly wheat. The first hotel was built about 1853.
- In July of 1869, a fire destroyed a number of downtown businesses.
- In 1862 Corvallis College was established; in 1868 it was designated as Oregon’s land grant institution.
- The railroad arrived in Corvallis in 1880.
- In 1935 a new high school was built, with its predecessor becoming a junior high school.
- The junior high school was destroyed in a fire in 1946.
## APPENDIX C

### COMPARISON OF CORVALLIS, OREGON AND UZHHOROD, UKRAINE

<table>
<thead>
<tr>
<th></th>
<th>Corvallis</th>
<th>Uzhhorod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founded</td>
<td>About 1853</td>
<td>Before 872</td>
</tr>
<tr>
<td>Population (2001)</td>
<td>50,000</td>
<td>125,600</td>
</tr>
<tr>
<td>Area</td>
<td>13 square miles</td>
<td>40 square kilometers</td>
</tr>
<tr>
<td>Administrative center of</td>
<td>Benton County</td>
<td>Transcarpathia Oblast</td>
</tr>
<tr>
<td>Fire stations</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Hospitals</td>
<td>1</td>
<td>2 (a municipal hospital with several sites, and a regional hospital)</td>
</tr>
<tr>
<td>Colleges/Universities</td>
<td>Linn Benton Community College and Oregon State University</td>
<td>Uzhhorod State University and 2 institutes</td>
</tr>
<tr>
<td>High schools</td>
<td>2</td>
<td>24 public schools. Majority are grades 1-12. The gymnasium is grades 5-12; The Languages &amp; Sciences/ Lycium is grades 5-12; 3 “special” schools (English/French)</td>
</tr>
<tr>
<td>Elementary &amp; middle schools</td>
<td>11 elementary 3 middle</td>
<td>11 elementary 3 middle</td>
</tr>
<tr>
<td>Private schools</td>
<td>4</td>
<td>1 junior high</td>
</tr>
<tr>
<td>Churches</td>
<td>66</td>
<td>10</td>
</tr>
<tr>
<td>Newspapers</td>
<td>1 daily</td>
<td>8 total (1 Hungarian, 1 Russian 6 Ukrainian) some are daily; some weekly</td>
</tr>
<tr>
<td>TV stations</td>
<td>1 in Corvallis; nearest commercial stations are in Eugene (3)</td>
<td>1 (at various times broadcasts are made in Ukrainian, Slovak, Romanian and Hungarian)</td>
</tr>
<tr>
<td>Radio stations</td>
<td>10 (Albany &amp; Corvallis)</td>
<td>3 (at various times broadcasts are made in Ukrainian, Slovak, Romanian and Hungarian)</td>
</tr>
<tr>
<td>Rail service</td>
<td>Yes (freight only)</td>
<td>Yes (freight &amp; passenger)</td>
</tr>
<tr>
<td>Public bus service</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Located on or near a main highway</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Airport</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Industries</td>
<td>High technology, microbrewery, wine, nursery, higher education</td>
<td>Furniture, shoe and sewing factories, higher education, wine and spirits</td>
</tr>
<tr>
<td>Tallest building</td>
<td>16 story apartment building</td>
<td>16 story apartment building</td>
</tr>
<tr>
<td>Hazards</td>
<td>Earthquake, flood, winter storm, high wind, hazardous materials</td>
<td>Earthquake, flood, winter storm, high wind, hazardous materials</td>
</tr>
</tbody>
</table>
APPENDIX D

WNNP PARTICIPANT APPLICATION FORM

Oregon State University
Women’s Neighborhood Networking Project
Uzhgorod, Ukraine
Application

Name: Family (Last) ___________________ First __________________ Middle ____________

Home mailing address ____________________________________________________________

City __________________ State ___________ Postal or ZIP code __________ Country ________

Home phone __________________ Work phone __________________ Fax __________________

E-mail _____________________________ Citizenship ________________________________

Date of birth (dd/mm/yyyy) __________ Village (or City) and Country of birth __________

If available, Foreign Passport number/expiration date ________________________________
Country of Foreign Passport __________________________________

Education (highest degree) ______________________________________________________

Please list the languages you speak (other than English) and level of fluency __________________________

To which foreign countries have you traveled, if any? ___________________________
Do you have any health condition which may affect your ability to travel? ______ yes ______ no  If you answer yes, please explain.

__________________________________________

__________________________________________

How long have you been a member of USCAC? __________________________

Have you held an office with USCAC? If so, what office? __________________________
Please list the USCAC projects you’ve been involved with. __________________________
What have you learned from your involvement in USCAC?

What are the most important challenges for USCAC? (For example, public outreach, fundraising, or strategic planning.)
1.
2.
3.

Please type your answers to the following two questions on separate sheets. Please limit your responses to not more than one page per question.

1. What attracted you to the Women’s Neighborhood Networking Project and what do you hope to gain from it?

2. What are your ideas for helping your neighbors to get involved in activities? Please be specific.

Signature of Applicant: ________________________________.
Date: ________________________________.

Signature of USCAC President: ________________________________.
Date: ________________________________.

Important Note: Applicants who are invited for an interview must be available on November 10, 2000 for the interview.

Oregon State University seeks a diverse pool of applicants for this leadership program. All accommodations and training sessions will be wheelchair accessible.
Opportunity Announcement
Women's Neighborhood Networking Project
Uzhgorod, Ukraine

Oregon State University (Corvallis, Oregon, USA) is seeking applications from women who belong to Uzhgorod Sister City Association of Citizens to participate in a US women's training program sponsored by U.S. Department of State, Bureau of Educational and Cultural Affairs.

Ten women will specialized training that will enable them to work together in pairs to develop and organize neighborhood groups that can help each other prepare for and survive local emergencies. Three weeks of training in Corvallis, Oregon, will focus on developing skills to organize and motivate neighborhood groups, and emergency preparedness. Training topics will include leadership, group process, volunteer management, motivation, and emergency preparedness. Participants will be expected to participate in English language lessons with one of the Uzhgorod coordinators prior to training in the US.

The program will use an extensive network of local agencies, groups and individuals who are involved in emergency preparedness, and will provide opportunities for participants to meet and interact with local volunteer groups. As a final project, participants will develop emergency preparedness training materials that they will use with neighborhood groups in Uzhgorod.

Oregon State University seeks a diversity of applicants for this training program. All accommodations and training sessions will be wheelchair accessible.

Key Qualifications of Applicants
- Participants must be women who are active members of Uzhgorod Sister City Association of Citizens.
- Must be interested in organizing and motivating others.
- English language competency is NOT required. Translators will be provided for the entire duration of the training.

Participants will be expected to:
- be able to spend three weeks in February-March 2001 in Oregon, USA.
- work in pairs to organize neighborhoods in Uzhgorod, Ukraine, and provide information about emergency preparedness.
- mentor and train another woman, following completion of training in Oregon.
- complete a pre-survey and post-survey.
- participate in English language lessons with an Uzhgorod project coordinator prior to training in Oregon.

In addition, participants will be encouraged to receive training and participate with the US team in small groups to conduct a needs assessment during the week of November 13-17, 2000.

Program Contacts: Marion McNamara or Naomi Weidner, Office of International Research and Development at Oregon State University, will coordinate the program, with assistance from the Corvallis Sister Cities Association; Benton County Emergency Management Services; OSU Extension, Benton County; and Krakow Red Cross. In Uzhgorod, coordinators are Zita Bathori-Tartsi and Tamara Gritso of the Uzhgorod Sister City Association of Citizens.

For application materials or more information contact:
Ms. Zita Bathori-Tartsi (e-mail: root@bathori.uzhgorod.ua or telephone: 380-31-22-14456) or Tamara Gritso (e-mail: tamara@mail.uzhgorod.ua or telephone: 380-31-22-43571).
APPENDIX E

GUIDE QUESTIONS USED IN THE SELECTION OF WNNP PARTICIPANTS

1. What attracted you to this project?

2. Tell us about your neighbors – how well do you know them? What kinds of things do you do with your neighbors?

3. What have you done as a volunteer? Did you organize anything? What were your greatest challenges?

4. What has been your involvement with Sister Cities Association of Uzhhorod?
APPENDIX F

SUMMARY OF MOTIVATION AND PREVIOUS DISASTER EXPERIENCE OF WNNP APPLICANTS (From interviews with potential participants, November 2000. Bold initials indicate applicants who became participants.)

RA: her home was flooded twice, in '92 and '98. In '92 she had ½ meter of water in her house. Her neighbors helped each other; they sandbagged. Soldiers evacuated them later. She knows her neighbors and neighborhood; she has lived in the same place for 55 years. Demographics: mostly old, pensioners. The young people have moved away; children help the parents.

MV: Director of Uzhhorod (city) Red Cross. In her Red Cross unit, emergency preparedness should have been a major focus, but has not been because of economic constraints. The Red Cross is for protecting lives. She worked with physicians to set up 1st responder network. Have a program for drivers to render 1st assistance. Staffers of RC have not had time to do these projects. This project will stimulate their work. Has lived in an apartment in a posh area for 15 years. There are 96 flats in the building. Some neighbors died in an apartment fire. They learned the importance of neighbors working together.

KL: Interested in organizing children in emergencies. Children in 2 floods and children of Chernobyl. Interested in how to distribute humanitarian aid. Some relief fails to reach those who need it. Her neighbors are old (average age 80). This project will train and unite people.

ST (interview in English): She gave a lot of thought before applying. She has the support of her family. She likes people. Has good relationship with her neighbors. Has lived in her neighborhood for 27 years. People come to her when they have problems (people always came to her parents’ home for help).

She lives in a new district of 5-storey apartment buildings. There are about 50 buildings. She knows 100-200 of her neighbors very well. They can turn to each other for help.
GO: People need help; they need information. Neighbor-to-neighbor is an efficient way to work. There is no agency for home repair; people must apply to office for help [housing authority?]. Some activities can be arranged through this office; they could disseminate information. Have training for old people about how to handle gas in their apartments. Not everyone has children who can help; neighbors help each other. Her husband (head of district council) was in charge of some rescue activities during flooding. Goods and aid were distributed through village councils. Need a system to distribute aid.

She lives in a 9-storey apartment building. Would like to have a private house. Neighbors are young and old.

IV: Need to plan before there are emergencies. Was always a member of a 1st aid team (Senetary team). Most members of the team work in medicine. Always has good contact with her neighbors. She has always been a leader. People identify her as a leader.

Has 20 families in her apartment building. Used to live in a larger apartment. Her husband and daughter are physicians; people come to them for help. Neighbors drop in to have their blood pressure checked. People are not currently inclined to socialize because of economics. She has a group of neighbors that are supportive of each other and socialize.

BA: Interested in a program for women; wants to help others; wants to know how to help: how to calm people, how to help children, how to help aged people.

She lives in a 5-storey building and knows most of the tenants. She knows the young people and the majority of the elderly people. Knows how to communicate with them, how to help people with bad back. Majority of neighbors are working people or retired. Many children. In fall and spring neighbors get together and clean around their building. They raised money to buy a pump to improve the water pressure in their building.

VS: She is a doctor, and was involved with a gas explosion. Also treated people from '98 flood. Worked for 5 years as coordinator of 1st responder physicians. In extreme situations, panic is dangerous. It affects people's health. People don't know what steps to take. Need knowledge of what to do in extreme situations. How to get people to follow a leader? How to get people to work as a team? Job stress – how to help the responders? It is important to teach people to help themselves.

Lives in neighborhood of 5-storey buildings. There are 2 buildings for former soldiers; 3 buildings for doctors. The buildings are 20-30 years old. Have a kindergarten and a program for elderly. A channel runs through the area; there are summer homes along the channel. She knows her neighbors. Neighbors take care of the area; have playground and dog walk area (organized by the neighbors). There are lots of elderly in the area.
MN: Devotes her life to helping people (she’s a dentist).
Lives in a new neighborhood that has both older people and younger generation. Old people look for help to the young people. Interested in how to make up community of these people. Volunteerism is not well developed – older people don’t understand. Wants to know how to establish contacts. Neighborhood was on a well, but the well dried up. Now they get water from trucks.

SO: Recently learned her neighborhood is dangerous because of seismic potential. In ’98 flooding her husband was on the other side of the river. She had to care for children at school [she’s a teacher] who lived on the other side of the river so they couldn’t go home. Interested in leadership. Has knack for organizing children. Wants to apply it to adults.
Lives in a large neighborhood of multi-storey buildings. Mostly young people (average age ~40). Neighbors help keep up the area.

SO: She worked at a bank during the ’98 flood. Bank made plans to evacuate; she saw the importance of knowing what to do; to take proper action. Emergency programs are run at the state level. She has been on a civil defense team and taught civil defense. Participated in competition between CD teams. CD teams disappeared after Ukraine left USSR. Sees need to have neighborhoods organized and to help old people.
Lives in an area of private houses and multi-storey apartment buildings; she lives in a 5-storey building. Knows people in her building and the next building. There is a common boiler for the neighborhood.

BL: She is interested in women. Women are not always in a position to make proper decisions. Women are guided by feelings. Wants to help women to make good decisions (not just to follow their feelings). Could have different kinds of extreme events, but people here don’t know what to do. Need to also train young people – they don’t think bad things can happen to them. Unfortunately today, people live for themselves. They are afraid to unite.
Lives in a apartment building; knows everyone in her building. Tries to be on good terms with everyone. Tries to improve their lives – sweep the stairs; tries to solve apartment problems such as gas and water. Average age ~40; all have children.

GI: She is a doctor at a hospital. On the 2nd or 3rd day of the ’98 flooding people coming to the hospital began to tell stories: no help from outside; people had to help each other. In some villages only a few houses were unaffected. Peoples’ souls call them to action. Important for neighbors to know each other. If they have skills together, it unites them.
Doesn’t know all her neighbors, but knows one who knows another, so they can all be connected. Neighbors are pensioners and younger people.
**MN:** She is deputy principal at school, and is responsible for children and staff. In '98 flooding realized that they aren't ready for emergencies. She is friendly with her neighbors.

   Lives in a new neighborhood of private homes. Most neighbors are her age (~40). Good contact with men and women. They supported each other as their houses were being built. Have neighborhood barbeques. Have kitchen gardens.

**RS:** Interested in psychological help that can be offered to help victims, and self-help. In '98 flooding many people were stressed; needed a long time to recover. Some people developed serious illnesses. Should not just sit and wait for emergencies to happen. Area is prone to landslides.

   Lives in a new neighborhood (~10 years old) of privately owned homes. Building continues. Low population density area. Middle-aged people and young families. They worked together to make a beautiful neighborhood.

**PL:** Since 1973 she has worked in civil defense system as a children’s surgeon. One neighbor had a wall fall down from rain. The family stayed with her while another neighbor rebuilt the wall.

   Her neighbors are her age (~45-50). One family is unemployed.

**VS:** Lives in a neighborhood affected by flooding in '92 and '98. In the flooding people tried to take care of themselves, but they didn’t work together. In the first flooding 3 houses were destroyed. Wants to learn so she can help herself and her neighbors.

   Neighbors work and spend leisure time together. Celebrate holidays together.

**PO:** Need ability to identify what areas need help after a flood. Need to prioritize preventive work. Solidified group that knows what needs to be done. People need skills to meet the worst that could happen. Those who lived through an event should be asked for input.

   Lives in the central part of the city; mostly private homes and a few multi-storey. Old people and a few young couples in the multi-storey buildings. She provides medical help to her neighbors.

**RI** (interview in English): People need training to help each other instead of working against each other. Also learn about self. Share and improve leadership. Need to build trust; identify leaders in neighborhood. Need to use different approaches to reach people.

MO: Has theoretical knowledge re: emergencies. Interested in comparing U.S. and Ukraine programs. Need to train people so they don’t panic. In a mountain area there was a landslide and houses were swept away. She was the only attorney who tried to handle the situation.

Lives in an 18-storey building (since 1992). Residents are her age (~40). Bank people, taxi drivers; wives who are not employed. Neighbors whitewashed an area that had been covered with graffiti.
Our goal for this assessment is to learn how Uzhgorod people in the past have responded to natural disasters or other emergency situations and to determine what training programs would help our participants develop networks to make their neighborhoods better prepared for future emergencies. Part of this is to understand the environment including transportation and communication services as well as available disaster response equipment, and another part calls for an understanding of culture as it relates to how people interact with each other and how services are provided to residents and by residents.

We will use two approaches. The first approach involves talking to people to learn about things such as their daily routines, what supplies of food and water they have on hand, and how they have experienced natural disasters in the past. For this part we rely on an approach that is called "rapid assessment." It is a team approach using both "outsiders" (the team from Oregon) and "insiders" (the Uzhgorod participants AND neighborhood residents as well as employees in agencies that deal with responses to emergencies). The second approach is called "unobtrusive research" and it involves using information that is available just by watching, or reading newspapers or reports - all kinds of information that can be obtained without talking to people and thus is "unobtrusive." In the next sections I provide a little background on these two approaches, and in the workshop more detail will be provided that it will be focused on our task: needs assessment.

Rapid Assessment Process

This approach requires "intensive team-based qualitative inquiry" in the words of James Beebe, who wrote the resource book manuscript we are using. It is intensive, meaning that it is quite focused on particular subject matter and it happens relatively quickly. It is team-based; by this he means it requires both insiders and outsiders to be involved and to share their impressions of the information that is being gathered. In this way, the information is considered, and verified, by several people who discuss openly what they have learned and how it affects the project they are undertaking. This perspective implies that there is likely to be some difference of viewpoints, and for a team to come to a conclusion, there has to be some give and take. This process requires a lot of discussion and it requires developing a summary that the team accepts. The word qualitative means that the results are not summarized in percentages or other metric means, as many surveys are (for example, 55% of people thought that what is needed is....; I am sure this kind of quantitative summary is familiar to all of us). Instead, a RAP assessment results in a set of thematic states expressing what is found to be happening. In some cases such as our study, we want to have it result in
statements that tell what some of the needs are in Uzhgorod related to being prepared for emergencies. Ultimately this will lead to a planned program to address them.

James Beebe’s book, *Rapid Assessment process (RAP); Intensive, Team-Based Qualitative Inquiry*, is still a manuscript, not really a book. He has allowed us to quote short sections from it and one is enclosed, titled, “Main Points;” it follows my notes. Another very useful item is a concept that he says all teams using this process need to remember. That concept is that this process may result in finding multiple or ambiguous meanings, not necessarily one obvious and clear “answer.” He says the RAP team should remind themselves they will need to learn to “live with ambiguity.” In other words, they need to be prepared to have complex rather than simple conclusions and to accept some ambiguity. In our particular study, we may find that in some neighborhoods there are different needs than in others, or that some residents respond differently than others, or that some people are more willing than others to be involved in neighborhood networks of people that work together to reduce the impact of disasters. There may be different ways to get to a disaster-resistant community and we need to recognize that at the outset.

**Unobtrusive Research**

For this part of the training I am using some quotes and insights from a book titled *The Unobtrusive Researcher: A Guide to Methods*. Unlike the reference above, this is a published book, but currently it is not in print. Its author Allan Kellehear is Australian and it was published in 1993 in Sydney, Australia, by Allen and Unwin publishers.

“Unobtrusive methods include: 1) written and audio-visual records; 2) material culture (physical objects, settings and traces); 3) simple observations; and 4) hardware techniques, for example camera, videos, etc.” (p. 5). In our study we will be emphasizing both numbers 2 and 3 above. Looking at apartment buildings, streets, buses, equipment in kitchens, will constitute settings and objects. Traces refer to physical things people leave behind or marks they make for having been there----sometimes people study garbage and use this to determine what people eat, for example. In our cases, traces may not be as useful as observations of settings, which will tell us what the materials are that will help or hinder response to disaster.

Kellehear noted a few advantages of using observational methods: “1) it forces the observer to familiarize with the subject; 2) it allows previously unnoticed or ignored aspects to be seen; 3) people’s actions are probably more telling than their verbal accounts and observing these are valuable; 4) it is unobtrusive and when obtrusive, the effect wears off in reasonable time” (p. 126). By this last statement he means that, for instance, if you stand in a local market and watch people buying groceries, you look unusual to them for a while, but they soon forget about you being there.
I have used "simple observations" in past studies and I found it useful to have a checklist and make a point of looking at certain things at each visit, to avoid bias. I make a note each time. In our study, we might, for example, always look in an apartment building for notices about evacuating; are they there? or are they absent? Are there ramps for people with wheelchairs to use if they need to leave a building? Or observe in a school building or a bus whether other items are in place. These are just examples; the team will have to decide what specific items to particularly observe after it gets better oriented in the city, and talks with the coordinators and participants.

**Interviews with Residents**

In the United States, there are certain guidelines requiring that when talking with people who are not part of the project it is necessary to tell them why you are talking to them and asking questions about this topic. We have agreed in our project that we will NOT ask for anyone's name, and if it is given or if any names of other individuals are used, we will NOT write them down. Our goal is to make the entire effort totally anonymous and thus confidential, so that there can be no concern that anyone is going to use any information improperly, that is, other than to get a general idea of the way Uzhgorod people respond to disasters. Our project is required to read to people the following statement, after first doing normal polite introductions. Notes that people take about the conversations should emphasize themes, and not use names, though in some cases specific details may help to make the information more useful and easier to remember. The important thing is confidentiality. If the detail can be noted but confidentiality preserved ---- that's OK.

**Statement**

-----We represent a project that Sister Cities groups in Uzhgorod and in Corvallis Oregon in the U.S. believe will improve the capacity of Uzhgorod and its people to respond to natural disasters such as floods. Right now, with funding from the United States, we are doing research to learn about the experience of Uzhgorod citizens with disasters in the past, and this will help us choose useful suggestions for Uzhgorod neighborhoods to consider. We would like to talk to you about this for 15 minutes, if you have time and are interested in talking with us about this topic. The notes we take will be used only in the next few months and will not have anything personal in them. To protect your privacy we will not ask you for your name or any information of a personal nature and we want you to feel free not to answer any question you find intrusive. You will have no risk from sharing this information, but we believe your insights could be helpful to the project and to the city's well-being.

Thank you--- (Whichever way it goes, whether the individual says yes or no).
One of the key things about this is that you do not force people to talk with you. If they are interested in the subject and have the time, and want to converse, fine. If they are not, you say, “thank you” and go on.

A Few Words about Interviews

In any interview, the gift of gab is important. And it is important to be conversational and human, as well as to ask specific questions. You can tell stories about yourself, and say things like, “I know that in my city we have trouble convincing people to keep a bottle of clean water on hand... etc.” These may help them think about how they relate to these things, or how people they know relate to them. It is not necessary to depersonalize the conversation or appear “like a machine” to maintain confidentiality. In fact, the RAP approach should use personality and friendliness. In using this approach, you can adapt the interview to the person you are interviewing. For example, you can use different phrases or talk about slightly different topics with someone who is a recent resident of Uzhgorod than you will discuss with someone who has been there a long time, and different with an older versus younger person, or person with young versus grown children etc. Take your cues in part from the person you are talking to, but keep your own checklist to be sure you don’t forget something that does apply. Your goal is to learn as much as possible about current practices in regard to preparedness to respond to a disaster, both in physical and in social means—that is, with equipment or reserve food, for example, and in terms of how neighbors do or do not help each other in times of natural disasters.

Workshop Organization

The workshop itself will also go over some questions we have developed on specific topics and will include some role-playing. This is a process in which one participant pretends to be an interviewee, and another one or two (probably one English speaker, one Ukraine or Russian speaker, and one interpreter) play the role of the researcher. After role-playing, others can offer suggestions of how to make it go better.

Prepared by Roberta Hall, Dept. of Anthropology, OSU, Corvallis, Oregon, USA, 97331; rhall@orst.edu
RAP: Main Points

1. RAP is intensive, team-based ethnographic inquiry using triangulation and iterative data analysis and additional data collection to quickly develop a preliminary understanding of a situation from the insider’s perspective.

2. The phrase “Rapid Assessment Process” defines the methodology and the acronym, RAP, communicates the essential ingredient for successful implementation.

3. RAP allows a team of at least two individuals to quickly gain sufficient understanding of a situation to make preliminary decisions for the design and implementation of applied activities or additional research.

4. Results can be produced in as few as about four days, but more typical implementation requires several weeks.

5. RAP uses the techniques and shares many of the characteristics of ethnography, but differs in two important ways. (1) More than one researcher is always involved in data collection and the teamwork is essential for data triangulation. (2) More than one researcher is involved in an iterative approach to data analysis and additional data collection.

6. The intensive teamwork for both the data collection and analysis is an alternative to prolonged fieldwork, and produces qualitative results.

7. RAP is especially appropriate for a variety of situations where qualitative research is needed.

8. RAP can be used for monitoring and evaluation.

9. Sometimes survey research is not an option for initial research because not enough is known to prepare the questionnaire.

[Note: This page of main points is taken from James Beebe’s manuscript and is used with the author’s permission.]
APPENDIX H

WNNP pre-project survey

1. How many of your neighbors do you know?

2. When was the last time you spoke with one of your neighbors?

3. What kinds of things do you do with your neighbors?

4. What things do you have for an emergency?

5. Do you have a plan for how your family can leave your building in an emergency?

6. What would you do if a big earthquake hit Uzhgorod? What would your family do?

7. Do you live in a flat or house?  
   - House
   - Flat
      - If a flat – how many people live on the same floor? ____
      - If a house – how many people live within (50 meters)? ____

8. Do you ever go shopping or run errands for someone else (outside your family)?
   - Yes
   - No
   - If yes, who? ______________________________________

9. Do you have a formal or informal neighborhood organization that takes responsibility for looking after each other in emergency situations?
   - Yes
   - No
   - Don’t know

10. Do you have the following emergency supplies easily accessible (check all that apply):
    - Flashlight or other light source
    - Spare batteries
    - Battery-powered radio
    - Pocket knife
    - Eating utensils
    - Means of cooking (stove)
    - Drinking water
    - Stored food
    - Can opener
    - Rope
    - Tarps
APPENDIX I

QUESTIONS WNNP PARTICIPANTS ASKED OF THEIR NEIGHBORS

1. What can you tell us/me about a disaster you have gone through?

2. Are you ready for disasters, and what will you do in case of disaster?

3. What would you do if there were a situation of disaster/emergency?

4. Do you know the phone numbers of the emergency services?

5. If you have been through a disaster, did you receive any help from your neighbors?
APPENDIX J

LIST OF ACTIVITIES DURING WNNP TRAINING, APRIL 2001, CORVALLIS, OREGON

Training/Presentations
- E-mail orientation
- Listen, Really Listen
- Developing Group Ground Rules
- Emergency Preparedness
- Disaster Mitigation
- Volunteer Organization and Management
- How to Teach
- Action Planning & Evaluation
- Group Process, Leadership, Responding to Change
- NASA Group Dynamics Exercise
- Ropes Course
- Mt. View School Drill
- Motivational speaker
- Materials Preparation
- Presentation Skills
- Evaluating Your Work
- Leadership Corvallis
- Creating Personal Action Plans

Social Events
- Potluck w/Sister Cities
- Pampering at NW Hairlines
- Sister Cities reception
- Easter dinner with local families
- Fund-raiser dinner
- Zonta dinner
- Lunch with Altrusa
- Strawberry shortcake dessert
- BBQ
- Farewell dinner

Field trips
- 911 Center, Fire Department, Courthouse, Corvallis Library
- Neighborhood presentation for LB NET
- Relief Society, home food storage systems
- Center Against Rape and Domestic Violence
- Meeting of Oregon State University President’s Commission on the Status of Women
- Relief Society meeting and quilt tying
- Mobility International
- Earthquake Presentation at a public meeting
- Meeting of Benton County Emergency Management Council
- Oregon Aquarium and Oregon Coast
- Corvallis Farmer’s Market
- Silver Falls State Park

Additional training for coordinators
- Designing and developing materials (design & software usage)
- Volunteer management
- Computer skills: Excel, advanced features of Word
- Field Trip: Community Disaster Fair in Seattle, WA
APPENDIX K

NEIGHBORHOOD EMERGENCY NETWORKS STUDY INFORMED CONSENT FORM

We represent a project that Sister Cities groups in Uzhgorod, Ukraine and in Corvallis, Oregon in the U.S. believe will improve the capacity the participants to respond to natural disasters such as floods. Currently, with funding from the United States, we are conducting research through Oregon State University, to learn about the experience of Uzhgorod and Corvallis citizens with neighborhood emergency training programs. We would like to interview you to learn about your experience with the neighborhood emergency training program. Your participation in this interview is voluntary and will not affect your participation in the neighborhood emergency training program. You may stop the interview at any time.

The notes we take will be used in a Masters thesis and may be used in journal articles on the topics of emergency preparedness and neighborhood networks. Your name will be included in our notes so that we may follow-up with you through the steps of the project, but your name will not be used in any published documents, nor will any information about you be shared with any agency. You are free to not answer any question you find intrusive. You will have no risk from sharing this information, but we believe your insights could be helpful to the project and to the well-being of Uzhgorod and Corvallis.

Please indicate your understanding of the program and your willingness to take part in the interview process by signing below.

Signature of Participant

Name of Participant

Date

For additional information about this project contact:

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For questions about the rights of research subjects, call the Institutional Review Board Coordinator at Oregon State University at 541-737-3437.

_____ I would like to receive a summary report of this project.
APPENDIX L

GUIDE QUESTIONS USED IN SECOND INTERVIEWS (APRIL 2002) OF WNNP PARTICIPANTS

What have you done as a part of this project? If prompting is needed, ask:

- Who are your team partners?
- Have you met with your neighbors? How often? How many people attended?
  What did you do at the meeting?
- What materials have you prepared?
- Did you do any other presentations (e.g., at work)?
APPENDIX M

GUIDE QUESTIONS USED IN INTERVIEWS OF LB NET ORGANIZERS

Questions about self and family

- Tell me a little about yourself.
- Some personal information – how many in your family? How many living in your household? What work/profession?
- How do you spend your day (routine, family activities, regularly recurring activities/events)?
- What about other recurring events – monthly, quarterly, semi-annual, annual?
- Any irregularly scheduled events?
- Did you organize your neighbors? Why?
- Have you had any experiences with a disaster or emergency event?
- Would you like to say anything else about your activities?

Questions about neighborhood network

- Tell me about your neighborhood emergency network.
- How were you recruited or become involved in the neighborhood emergency network?
- What do you see your job being?
- How long have you been involved?
- What training did you receive?
- Geographically, what do you consider to be your neighborhood (e.g., between which streets)?
- How many households are involved?
- How many do not participate?
- Who are your neighbors? (i.e., young/old; working/retired/unemployed; children; poor/affluent; educated; owners/renters)
- What is the structure of your network, starting with Peggy Peirson in Benton Co. Emergency Management?
- How many meetings have you had?
- What have you done at meetings?
- Do you currently have any activities planned?
- Do you have goals for your network?
- Does the network as a whole have goals?
- Do you ever have an opportunity to talk with individuals in other neighborhood networks?
- What has your neighborhood done as a result of the network program?
- What have you done as a result of the network program?
- Have you done anything that you wouldn’t have done without the network?
Questions about personal networks

- Tell me about the different networks in your life. To help you think about networks, some examples of other networks that you might have are: the parents of other children on your child's soccer team; church, work; other activities such as Master Gardners, book club, investment club, or canoe club; other groups where you volunteer, such as the Coop, political group, service organization ... For each:
  - What do you do with them?
  - How often do you see individuals in the network and/or everyone?
  - What kinds of help would you feel comfortable asking of them?
  - What kinds of help would you offer to them?
  - Would you like to say anything else about any of these networks?

- How many networks do you participate in?
  - Do their memberships overlap?

How much competition is there for your time? Do you feel that you are able to be involved, at the level you want, in all the activities that you want to be involved in?

Would you like to say anything else?
APPENDIX N

EDUCATIONAL MATERIALS DEVELOPED AND PRODUCED BY WNNP PARTICIPANTS AND COORDINATORS

Telephone stickers with emergency telephone numbers

Handouts on:

- Safety (emergency) Kits
- Winter Travel Safety
- What to do in case of spilled chemicals
- Fire Safety
- Earthquake Preparedness
- Wind and Snow Storms
- Developing a Family Plan
- How to Help Yourself
- Rail Travel Safety
- Flood Preparedness
- First Aid Kits
- Safety with Gas Stoves

Bookmarks on Fire Safety and Earthquakes

Booklets on Safety for Elderly and other Special Needs Populations

2002 calendar with safety tips and preparedness information
APPENDIX O

DESCRIPTION OF NEIGHBORHOODS

WNNP NEIGHBORHOODS
After conducting interviews with about ten of their neighbors, the participants in the WNNP wrote brief descriptions of their neighborhoods. The following information is extracted from those descriptions.

A. "Zaliznychny" – the Bus Station Neighborhood (Team 1)
This is a densely populated neighborhood, with mostly multi-story apartment buildings that were constructed in the 1970s. Most residents are aged 35-65; the majority are pensioners. The residents work together to clean the area around the buildings.

Most residents are not interested in disasters; they do not believe a disaster will happen in their neighborhood.

Hazard concerns: The rail station (with adjacent multiple tracks) is about 150 meters from the neighborhood. Petrol, coal and poisonous materials are transported through the station.

B. "Gymnasium" (Team 2)
This is a nine-story apartment building; other buildings in the area are smaller. Average age of residents is 40-45. There are no disabled residents.

Many residents are superstitious and do not want to talk about possible disasters, although some are aware of the potential for earthquakes. Some recognize that they are not ready for a disaster and could not imagine how they could help themselves in an emergency. Some said that they do help each other and believe they could rely on each other in an emergency.

C. "Mynaiska Street 29" Neighborhood (Team 2)
About 10 nine-story apartment buildings make up this neighborhood. Some buildings were built by Slovaks between 1984 and 1986. About 300-600 people live in the area. Most are families with children.

Hazard concerns: There are large electrical wires that cross the area; concern is that they could cause a fire. Elevators often do not work. Neighborhood is situated on the highway to Chop and the international border; there is heavy traffic and air pollution.
D. "Svitanok" Neighborhood (Team 3)
This neighborhood of single-family homes is one of the newest in Uzhhorod. It has developed since about 1987. Located on a hill, it was a garden prior to development. There are several streets of 10-20 houses each; the houses are two or three stories. The majority are finished; however, some are still under construction and some have been abandoned. The adults are mostly 24-45 years old, plus children of all ages. There are a few retired people. The average home has three or four people; some have only two. The residents are well educated.

The residents believe they can deal with a disaster themselves or with the help of their neighbors.

E. "Veselka-Avangard Stadium (Team 4)
This is a neighborhood of many multi-story apartment buildings; however, there is also an area of one- and two-story single-family homes. The neighborhood is located about two kilometers from the Uzh River. The area of private homes has been flooded twice, and the residents worked together to fight the flood, rather than wait for the professional services.

The residents regularly arrange "subotnics": Saturdays when the neighbors work together to clean the yard, plant trees, etc.

Hazard concerns: Fire, earthquake; flood in the area of the single-family homes.

F. "Shachta" Neighborhood (Team 5)
This neighborhood is mostly five-story apartment buildings, with some one- or two-story buildings. The neighborhood was first inhabited in the 1970s. In 2002, it was home to about 8,000 people. Most people have lived in the neighborhood for 15-20 years. Many flats house two generations. Most residents are 35-70 years old; the majority are retired.

The residents could identify no specific threat for the neighborhood.
LB NET NEIGHBORHOODS

The neighborhood descriptions below were taken from interviews conducted with the organizers of the LB NET neighborhoods.

G. S.W. Morris Ave., Corvallis

The first houses in area were built in 1940s; others in 1970s. Single- or two story; mostly wooden construction; one is of brick; several small apartment buildings. They’ve lived in house for four years. Neighborhood is near university campus, and is a mix of owner-occupied and rentals. There are a few households with children; but the neighborhood is mostly adults with no children living in the home, and collage-age unrelated individuals. The organizer originally contacted residents in 55 houses and apartments.

Hazard concerns: The creek at east end of the street flooded in 1996; there has been drug activity in one rental.

H. N.W. Charmyr Vista Drive, Corvallis

Husband has lived in house since 1969; she has since 1982. First four houses were built in the 1960s; others built in 1980s or 1990s. All are wood construction (one has decorative brick), single-family homes. This is a small neighborhood centered around one dead-end street and its T-intersection with a through street. Houses are on 2.5 acre or 5 acre lots. Most have long driveways from the street. Some lots have been logged and replanted; some still have mature trees.

Five households are middle-aged adults with grown children living away from home; one is middle-aged with no children; two are families with children (in grade or middle school). There is one widower who lives alone. Residents are professionals: retired nurse, engineer, university professor.

This neighborhood is off Oak Creek – an urban interface zone with numerous streets that all connect to a single access road. Neighborhood participates in Neighborhood Watch.

I. N.W. 8th Street, Corvallis

Neighborhood is located in an older part of Corvallis. Homes are older, wooden, mostly two-story single-family residences. Some have basements. There are also a couple of larger apartment buildings in the neighborhood.

Most residents in her immediate area are older – retired for a number of years – and the homes are all owner-occupied. There are some rentals nearby. One is an older house that has been broken into apartments. Within the larger neighborhood that is part of the neighborhood association, there are a number of rentals; some are occupied by students, while others are longer-term renters.

The LB NET neighborhood is a sub-group of a larger neighborhood association. At one time they were active in Neighborhood Watch, but might be currently inactive.
J. **34th Place, Philomath**

Large neighborhood of single-family houses. In the immediate area they've been built since 1994; however, there were earlier phases that pre-date that by a few years. Households range from young families with babies, to older families with teens or children who have moved away from home, to retired people. Many of the working people are professionals: teachers, school principals, veterinarians, nurses and doctors, newspaper editor, business owners, city employees, university professors. Houses are single- or two-story.

K. **N.W. 36th Street, Corvallis**

The neighborhood is four sides of one city block and the facing side of the block across the street. Most residences are single story and built in the mid-1950s. Single-family households, but some are non-traditional families: one elderly man lives with his middle-aged daughter; an older retired man lives alone.

Hazard concerns: Mature trees could present problems in high wind. Street is an access street; it is wider and busier than other streets in the area.

L. **N.W. Elizabeth Place, Corvallis**

They bought the house in 1984, but rented it out for two years until he retired in 1986. Neighborhood includes a total of about 12 or 15 houses located on one cul-de-sac and along the near end of a street that goes the top of a hill and loops back down. Houses are wooden construction, single-, two-story, and split-level; some have basements. Mostly owner-occupied; one has been rented in the past.

This is a stable neighborhood of mostly retired individuals and couples. Many have children who grew up in the neighborhood and have since moved away. One young family has small children. Many are retired professors from the university. One woman works for the state in Salem; most who are employed work locally.

Neighborhood has been in Neighborhood Watch program, but might not be currently active.

M. **N.W. Tyler Place, Corvallis**

Neighborhood is 25-30 homes located on 3 cul-de-sacs. Houses were built in the late '70s to early '80s. Mostly are single-story; a couple are two-story. Single-family houses; mostly owner-occupied, but are several rentals. It is a fairly stable neighborhood, although some of the rentals have a higher turnover of students. At the time of the LB NET training, one house was an adult foster care home, with five resident adults and one or two care givers. It has since reverted to a single-family home.

Neighborhood has a mixed population with many residents working, some retired, some college-age students, and a few children. He has lived in neighborhood for six years.

Neighborhood participates in Crime Watch program (Neighborhood Watch?).
N. S.W. Nash Ave., Corvallis

The LB NET organizer's family has lived in their house since 1988. Neighborhood was originally a Roman Catholic community; families knew each other and built their homes together. Her family was the first Protestant family in the neighborhood. Neighborhood is located on a hill and is currently just outside Corvallis city limits. Houses were built in mid- to late-70s; most are owner-occupied; however, there are a couple of rental houses. There is a small collection of trailers that were on property before the housing development began. Many of the houses have contiguous unfenced backyards.

The original residents have children who grew up in the neighborhood and have since moved away. Some are beginning to retire. As homes sell, younger families are moving in.

Hazard concern: large, long-distance power lines cross the neighborhood.

O. N.W. Lance Way, Corvallis

Neighborhood is defined as all the people who use one mailbox unit – 12 houses situated on a couple of streets. Houses were built mid-70s to mid-80s; mix of single- and two-story homes. Fairly stable neighborhood – a few elderly have moved out and younger families have moved in. Most adults are 30-50 years old; there are a few young children. Most work – no stay-at-home moms. She has a teenage son and an infant son. Many residents work at the university. She has lived in house for 4 years.

Neighborhood participates in Neighborhood Watch program.

P. S.E. Bethel, Corvallis

Neighborhood is about 15 houses along both sides of one street, between two cross streets. Houses are single- and two-story wooden homes. With one exception all are single-family homes; one is rented to non-related students. Neighborhood is a mix of owner-occupied and rentals. There is one young couple with a baby, and a number of retired people, as well as households with two people working.

Q. N.W. Garryanna, Corvallis

His house was built in 1989 and was one of first three houses in the neighborhood. Neighborhood is on a hill and has about 25 households; 12-14 participated in LB NET. Neighborhood consists of relatively expensive single-family houses; and is mostly adults. Approximately 1/3 are families with middle school or high school children. Backyards are not fenced – they share a community backyard.

Most adult residents work in a profession: government, physicians, etc.
R. Oak Dell Place, Corvallis

This neighborhood consists of several cul-de-sacs off one access street. Access is limited. About one-half the neighborhood is retired; others are working professionals with adult children, and younger families. All are required by covenant to be owner-occupied.

One uniting feature of the neighborhood is an old oak tree in LB NET organizer's back yard. It is between 500 and 600 years old. Some of the neighbors have helped maintain it by contributing money to hire arborists to keep the tree free of dead wood. On at least one occasion this involved bringing in a crane.

S. NW 13th Street, Corvallis

Neighborhood is situated along one street, so it is not compact. It stretches from the access street part-way up a hill where it dead ends. The neighborhood population is mixed and ranges from young families to retired individuals. At least one house is rented to non-related students. Most houses were built about 1980.

T. N.W. Mitchell Drive, Corvallis

This neighborhood is on a hill about two miles outside the Corvallis city limits. It is a fairly isolated neighborhood on a couple of streets that connect before feeding into Oak Creek Road. The LB NET organizer's house was built in the late '70s; they've lived in it since 1988. Other houses are slightly newer. Most, if not all, are owner-occupied. Many houses are on two acre or larger lots. Many lots are forested. The homes at the top of the road are adjacent to forest land owned by Oregon State University.

The neighborhood has no young children; there are families with older children, or children who are no longer living at home.

Hazard concerns: This neighborhood is off Oak Creek Road – an urban interface zone with numerous streets that all connect to a single access road. There used to be a second access road, but it is closed. There is concern that when the ground becomes soaked from heavy rain there is land slide potential. There is also concern of wild land fires coming into the neighborhood.