



Livable City Year 2018–2019
in partnership with
City of Bellevue



CITY OF BELLEVUE

In Partnership with the
University of Washington

IMPROVING EMERGENCY
COMMUNICATIONS
WITH LIMITED-ENGLISH-PROFICIENCY
CHINESE- AND RUSSIAN-SPEAKING
COMMUNITIES

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ABOUT LIVABLE CITY YEAR

The University of Washington’s Livable City Year (LCY) initiative is a partnership between the university and one local government for one academic year. The program engages UW faculty and students across a broad range of disciplines to work on city-defined projects that promote local sustainability and livability goals. Each year hundreds of students work on high-priority projects, creating momentum on real-world challenges while serving and learning from communities. Partner cities benefit directly from bold and applied ideas that propel fresh thinking, improve livability for residents, and invigorate city staff. Focus areas include environmental sustainability; economic viability; population health; and social equity, inclusion and access. The program’s 2018–2019 partner is the City of Bellevue; this follows partnerships with the City of Tacoma (2017–2018) and the City of Auburn (2016–2017).

LCY is modeled after the University of Oregon’s Sustainable City Year Program, and is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), an international network of institutions that have successfully adopted this new model for community innovation and change. For more information, contact the program at uwlcyl@uw.edu.



ABOUT CITY OF BELLEVUE

Bellevue is the fifth largest city in Washington, with a population of more than 140,000. It’s the high-tech and retail center of King County’s Eastside, with more than 150,000 jobs and a skyline of gleaming high-rises. While business booms downtown, much of Bellevue retains a small-town feel, with thriving, woodsy neighborhoods and a vast network of green spaces, miles and miles of nature trails, public parks, and swim beaches. The community is known for its beautiful parks, top schools, and a vibrant economy. Bellevue is routinely ranked among the best mid-sized cities in the country.

The city spans more than 33 square miles between Lake Washington and Lake Sammamish and is a short drive from the Cascade Mountains. Bellevue prides itself on its diversity. Thirty-seven percent of its residents were born outside of the US and more than 50 percent of residents are people of color, making the city one of the most diverse in Washington state.

Bellevue is an emerging global city, home to some of the world’s most innovative technology companies. It attracts top talent makers such as the University of Washington-Tsinghua University Global Innovation Exchange. Retail options abound in Bellevue and artists from around the country enter striking new works in the Bellwether arts festival. Bellevue’s agrarian traditions are celebrated at popular seasonal fairs at the Kelsey Creek Farm Park.

Bellevue 2035, the City Council’s 20-year vision for the city, outlines the city’s commitment to its vision: “Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past.” Each project completed under the Livable City Year partnership ties to one of the plan’s strategic areas and many directly support the three-year priorities identified by the council in 2018.



**BELLEVUE 2035:
THE CITY WHERE YOU WANT TO BE**

Improving Emergency Communications with Limited-English-Proficiency (LEP) Chinese- and Russian-Speaking Communities in the Cities of Bellevue and Seattle supports the High Performance Government target area of the Bellevue City Council Vision Priorities and was sponsored by the Fire Department.



HIGH PERFORMANCE GOVERNMENT

Bellevue is characterized by high performance government. Our residents live in a safe, clean city that promotes healthy living. The perception of safety contributes to the success of businesses and neighborhoods. Police, fire and emergency personnel are seen by citizens every day, and we ensure that these services reflect high standards and pride.

People are attracted to live here because they see that city government is well managed. Our high quality of customer service ensures that residents realize a direct link between their tax dollar investments and the services they receive. We make public investments wisely, assuring taxpayers that we are living within our means, while also ensuring that we have superb infrastructure to support growing businesses and desirable residential opportunities. We have beautiful public buildings that residents point to with pride. Government plays its role in supporting the careful balance of neighborhoods, commercial and retail growth, diverse residential living opportunities, and amenities that characterize Bellevue. City leadership fosters careful, long-term planning, responsible financial policy, and thoughtful partnerships with businesses, the nonprofit sector, and the region.

We seek input from our residents and businesses, and this input informs city decision-making. We make decisions in a transparent manner. We support public engagement and connectivity. Bellevue does its business through cutting-edge technology. City government uses technology to connect with its residents, giving them voice in their community. Our boards, commissions, and other citizen advisory groups assist the City Council in providing superior leadership by representing the diverse interests of the city and providing thoughtful and creative ideas that assure sound policy direction and decisions.

Our residents care for Bellevue. They speak up and collectively work to address our mutual needs. In Bellevue, our commitment to public service is paramount. Our residents know that their local government listens, cares about, and responds to them.

**BELLEVUE 2035:
THE CITY WHERE YOU WANT TO BE**

*Bellevue welcomes the world. Our diversity is our strength.
We embrace the future while respecting our past.*

The seven strategic target areas identified in the Bellevue City Council Vision Priorities are:



ECONOMIC DEVELOPMENT

Bellevue business is global and local.



TRANSPORTATION AND MOBILITY

Transportation is both reliable and predictable. Mode choices are abundant and safe.



HIGH QUALITY BUILT AND NATURAL ENVIRONMENT

From a livable high-rise urban environment to large wooded lots in an equestrian setting, people can find exactly where they want to live and work.



BELLEVUE: GREAT PLACES WHERE YOU WANT TO BE

Bellevue is a place to be inspired by culture, entertainment, and nature.



REGIONAL LEADERSHIP AND INFLUENCE

Bellevue will lead, catalyze, and partner with our neighbors throughout the region.



ACHIEVING HUMAN POTENTIAL

Bellevue is caring community where all residents enjoy a high quality life.



HIGH PERFORMANCE GOVERNMENT

People are attracted to live here because they see that city government is well managed.

For more information please visit: <https://bellevuewa.gov/city-government/city-council/council-vision>

EXECUTIVE SUMMARY

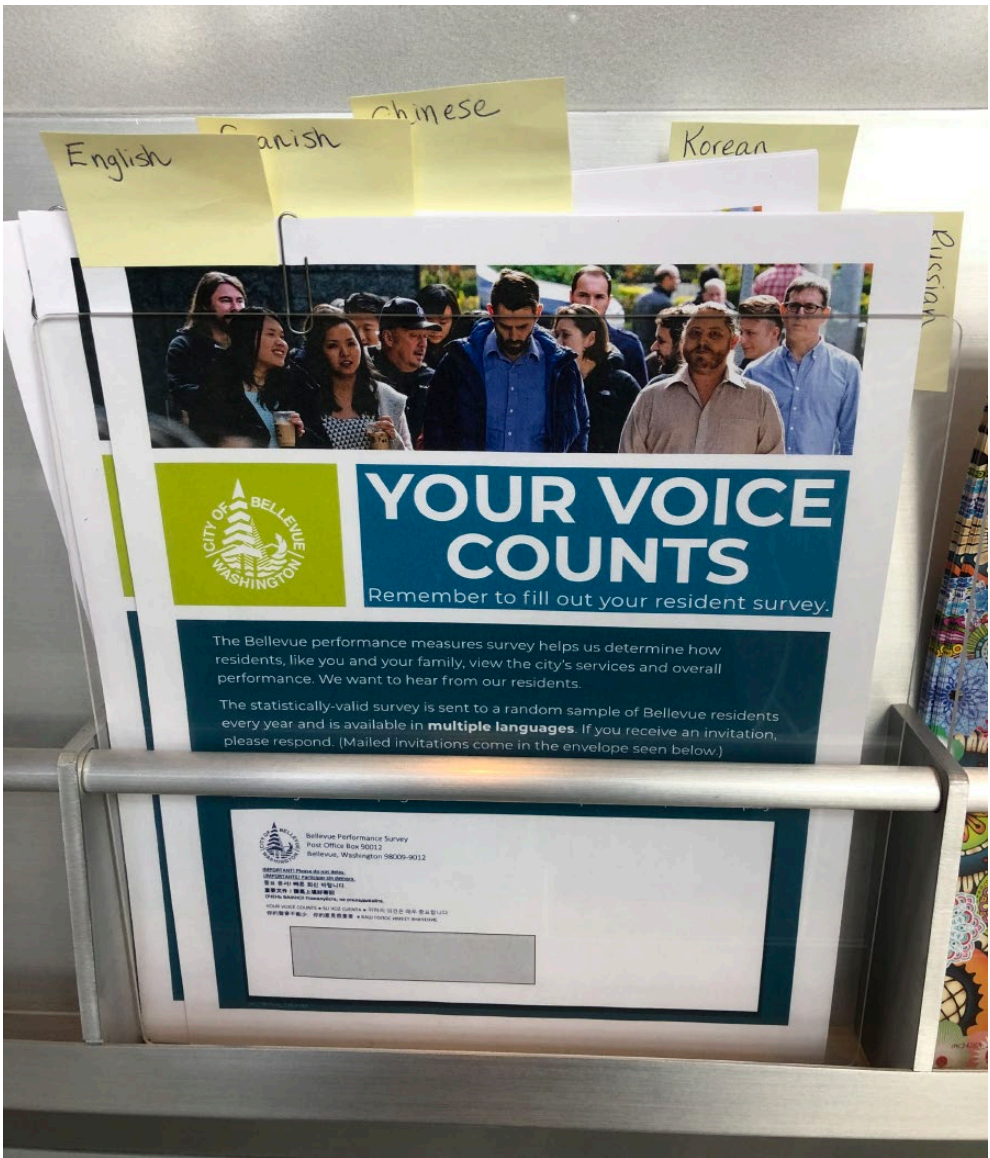
In the event of an emergency or disaster, use of existing networks of communication and discovery of new avenues to disseminate information among limited English proficient (LEP) individuals and communities may reduce health disparities experienced by minority populations. From January to April of 2019, one student pursuing a Master’s of Public Health degree collected qualitative data to determine the most efficacious conduits for information sharing among Chinese- and Russian-speaking LEP persons who live in the City of Bellevue, Washington. This student conducted semi-structured interviews (SSIs) with 14 people who work with LEP populations in a variety of capacities, including English as a second language (ESL) teachers and providers at colleges, community-based organizations (CBOs), faith-based organizations (FBOs), and non-governmental organizations (NGOs), in addition to government employees of Bellevue and Seattle. All 14 interview participants focus on reaching vulnerable communities in their work. In addition, thirty-four participants completed qualitative, online surveys. This included government employees and medical interpreters (MIs) from Bellevue and Seattle. The student researcher applied a thematic analysis to gathered data to observe patterns. Major themes include desire for greater collaboration among existing, trusted conduits of communication among LEP communities; and integration of a new network of trusted advocates and ESL teachers and providers.

RECOMMENDATIONS FOR THE CITY OF BELLEVUE

- 1. Create and formalize a cultural navigator network among City divisions that serve LEP communities.
- 2. Develop a relationship with the City’s ESL teacher and provider network and integrate them into the cultural navigator network.

ACRONYMS USED IN THIS REPORT

BDAN: Bellevue Diversity Advisory Network	LEP: Limited English proficient
CBO: Community-based organization	MI: Medical interpreter
CBS: Council for Basic Skills	NES: Native English-speaker
CCN: Community Communications Network	NGO: Non-governmental organization
CDC: Centers for Disease Control and Prevention	NSS: Native Spanish-speaker
CO: Carbon monoxide	OEM: Office of Emergency Management
CSA: Community Safety Ambassador	PIO: Public information officer
ESL: English as a second language	RCW: Revised Code of Washington
FBO: Faith-based organization	SSI: Semi-structured interview



City Hall Resident Survey KATHRYN TAYLOR

INTRODUCTION

KEYWORDS

health communication • limited English proficiency • emergency • disaster • management • minority • ethnicity • networks • preparedness

An essential aspect of emergency management is effectively communicating information to the public during an emergency or disaster. In the context of this report, the operational definition of emergency or disaster is,

“An event or set of circumstances which: (i) demands immediate action to preserve public health, protect life, protect public property, or provide relief to any stricken community overtaken by such occurrences, or (ii) reaches such a dimension or degree of destructiveness as to warrant the governor declaring a state of emergency (Legislature 2017a).”

In the United States, as a result of growing LEP populations, multiple language access policies have emerged at federal and state levels. The purpose of these policies is to address inadequate approaches to emergency communications that have proven deadly for LEP populations. Research on Chinese LEP communities in King County reveals that Chinese-speaking communities lack awareness of the resources available to them, as well as confidence in their ability to understand public communications in English due to the complex nature of many emergencies and disasters (Yip et al. 2013). Moreover, the practice of

Broadcasting emergency alerts in English yields disparate access to emergency communications, which adversely impacts LEP communities.

OPERATIONAL DEFINITION OF EMERGENCY/DISASTER

“An event or set of circumstances which: (i) demands immediate action to preserve public health, protect life, protect public property, or provide relief to any stricken community overtaken by such occurrences, or (ii) reaches such a dimension or degree of destructiveness as to warrant the governor declaring a state of emergency” (Legislature 2017a).

broadcasting emergency alerts to the public in English yields disparate access to emergency communications, which adversely impacts LEP communities. Further research regarding how to identify and utilize trusted advocates of Bellevue’s LEP residents is essential for connecting these communities with available emergency management resources. Therefore, the goal for this project is to identify effective means through which the City of Bellevue can communicate to LEP individuals and communities. In particular, this report considers two language communities (Chinese and Russian) and methods the City of Bellevue could rely upon during and after an emergency or disaster to reach these communities.

The following objectives are the focus of this project:

Objective 1: Review existing literature on past and current practices and efforts for reaching LEP populations with emergency communications during and after an emergency or disaster. The first objective of this project entails examination of existing literature on public health preparedness and response mechanisms related to reaching and disseminating information to LEP populations. Most studies focused on emergency communications examine barriers to medical care as they relate to LEP status. Research on this topic demonstrates the need for qualified language service providers, written translations, and multimedia approaches in hospitals and clinics (NOHLA 2012). However, knowledge gaps persist related to the most efficient and effective ways to reach LEP communities with real-time communications during an emergency or disaster. Thus, the literature review portion of this report points in the direction of future research questions while also bringing to the fore best practices from the past.

Objective 2: Identify an efficient means for disseminating emergency communications during an emergency or disaster in two of the most commonly spoken languages of LEP communities in the City of Bellevue: Russian and Chinese.

The second objective, identifying means through which emergency communications can be effectively disseminated to LEP communities, is informed by the literature review as well as by insights gleaned through interviews and collection of survey responses. This qualitative data reflects the work of those who routinely interface with LEP communities in Bellevue and Seattle. Particular consideration has been given to research that focuses on emergency communication efforts during and after an emergency or disaster.

The City of Bellevue primarily disseminates emergency communications in English through a public alert system maintained by King County and the public information officer (PIO). The Revised Code of Washington (RCW) 38.52.070, signed into law in 2017, requires local municipalities to provide emergency communications to LEP communities in their native languages (Legislature 2017b). With current efforts to broadcast emergency communications falling short of reaching all residents of Bellevue, the second objective seeks to explore new means through which emergency communications can reach Russian- and Chinese-speaking communities. Supportive research focuses on identifying trusted means for disseminating emergency communications to LEP residents in an effort to provide potentially life-saving information during an emergency or disaster.

Since 2017, Washington State law requires local municipalities to provide emergency communications to LEP communities in their native languages.



ALERT King County is a regional public information and alert system. People can register for free to receive alerts during emergencies.
KING COUNTY

LITERATURE REVIEW METHODOLOGY

In a multistep process, I conducted a review of the existing literature on LEP populations and emergency communication. I used the PubMed/ MEDLINE database, ScienceDirect, and University of Washington Libraries to collect peer-reviewed articles written and published in English between 2000 and 2019. I used the following terms in my initial search: health, communication, limited English, emergency, disaster, management, minority, race, ethnicity, networks, and preparedness. I also conducted a search among governmental, academic, for-profit, and not-for-profit organizations; I looked for records of these institutions' efforts in emergency communication with LEP populations. Finally, I reviewed the references of the previously selected publications and selected additional relevant sources for continued analysis. I considered studies, reviews, and grey literature eligible for inclusion if they addressed disparate access to health information among racial and ethnic minorities.

STUDY CRITERIA

All studies included in my literature review abide by the following criteria: published in English, published between 2000 and 2019, conducted within the United States. Grey literature inclusion criteria included: literature published by a government or non-governmental organization (NGO) at either the federal or state level in the US, availability in English, and inclusion of standards or guidelines related to emergency management practices for LEP populations. Of the 56 sources I identified, 32 met all inclusion criteria. Of these, 16 articles were scientific studies or reviews of applicable studies, and 16 documents were grey literature.

CONTENTS OF LITERATURE REVIEW

1. Research that sheds light on disparate communication among LEP communities during and after emergencies or disasters
2. The utilization of community-based organizations (CBOs), faith-based organizations (FBOs) non-government organizations (NGOs), and medical interpreters (MIs) as trusted advocates in emergency management
3. Existing networks for communication sharing in LEP communities
4. Training efforts necessary for effectively reaching LEP populations during an emergency or disaster



ScienceDirect



LITERATURE REVIEW

DISPARATE COMMUNICATION AMONG LEP POPULATIONS

Effective and efficient communication regarding evacuation, health care, shelter, and transportation options has been identified as an essential component of emergency management. LEP communities' lack of access to clear emergency communications leads to their increased morbidity and mortality following emergencies (Federal Coordination and Compliance Section 2016). Disparate access to emergency communications is well-documented in the studies referenced throughout this literature review.

In a cross-sectional survey conducted by Alhborn et al. (2012), the reception of tornado warning emergency communication was evaluated among native Spanish-speaking (NSS) and native English-speaking (NES) adults of Oklahoma. Half of NSS participants reported speaking English "very well," with the other 50% identified as NSS with LEP. The authors created a survey to compare access to tornado warning communications and information used for previous weather events among the NSS and NES populations. Survey respondents identified which information source(s) they would utilize in the event of a tornado. These sources included internet, radio, telephone, television, NOAA All Hazards radio, and tornado sirens. In order to evaluate NSS and NES populations' access to and use of emergency communication sources during severe weather events, the researchers devised a scoring system to designate participants as having poor reception, adequate reception, or excellent reception.

Communication regarding evacuation, health care, shelter, and transportation options has been identified as an essential component of emergency management.

Identification of trusted community leaders is paramount for the creation of such a network and one of the primary goals of this project.

The authors noted two disparities in access among NSS and NES adults: 1) access to internet and 2) knowledge of the telephone alert system. Furthermore, the devised scoring system revealed that NSS adults exhibit poor reception compared to NES adults. This study sheds light on disparate access to emergency communications, exposing, in particular, how this impacts NSS LEP adults in the State of Oklahoma. Lack of knowledge among the NSS LEP adults of the telephone alert system is particularly relevant to this project since one of my main purposes is to identify a means through which available resources can be made known to LEP populations.

In one study, Yip and colleagues examined the role of self-efficacy and emergency response (2013). Over the course of this study, University of Washington (UW) researchers held focus group sessions with Chinese-speaking LEP communities (Yip et al. 2013). Regarding emergency communication, they found that study participants preferred to receive information from family members or friends capable of interpreting emergency communications to them. The researchers identified limited English proficiency as a main barrier which interferes with Chinese-speaking populations' reception of pertinent information during an emergency. The authors call attention to the "Community Communications Network" (CCN), a large collection of partnerships formed by Public Health – Seattle & King County with other organizations and agencies, as a potential conduit for the City to disseminate information among LEP communities. The Centers for Disease Control and Prevention (CDC) also recommends that public health planners develop this type of grassroots networking, with the aim to connect people and trusted community leaders to assist with the delivery of information to at-risk groups before, during, and after an emergency or disaster (CDC 2015). Identification of who those trusted community leaders are is paramount for the creation of such a network and one of the primary goals of this project. In another UW study, Meischke, et al. (2010) investigated emergency communication with LEP populations

in the context of pre-hospital care. Though the focus of this study was to assess 911 call centers' interactions with LEP individuals during emergency and non-emergency situations, one outcome of this study is particularly relevant to the goals of this project: identification of the underuse of the Language Line (an interpreter resource currently used by the City of Bellevue). The authors of this study found that the Language Line was used in only 13% of the 911 calls placed by LEP individuals. The authors suggest that the underuse of the Language Line may be due to perceived time delays by dispatchers. The authors' findings are relevant to this project because they call attention to an existing, underutilized resource which fails to achieve its intended purpose, to serve LEP communities. Beyond creating new forms of information sharing for LEP populations, making available resources known to the LEP public is an essential step in increasing their access to emergency communications.

Making available resources known to the LEP public is an essential step in increasing their access to emergency communications.

In a study conducted by Yip, et al. (2014), emergency communications with the LEP Chinese community were further examined. In a set of phone interviews with Chinese-speaking LEP individuals, the authors examined each person's inclination to interact with emergency communication systems as well as their perceptions of those systems. The authors portrayed two hypothetical, emergency situations. Participants assessed each participant's propensity to seek out emergency services for a flu outbreak and for a friend's fall from a ladder. Similar to prior research, LEP status presented as a barrier which discouraged participants from placing 911 calls. Their perceived inability to communicate effectively in English deterred them. Of utmost importance to this research, the authors described a strong correlation between English proficiency and utilization of community-based organizations (CBOs) as a first source of information during a hypothetical flu outbreak. Level of trust associated with a particular CBO source stood out as another significant predictor

Elevating CBOs as sources of information for LEP communities may be a critical step in reaching LEP populations with emergency communications.

of whether a person referred to a CBO as a first source for information. Elevating CBOs as sources of information for LEP communities during an emergency or disaster may be a critical step in reaching LEP populations with emergency communications.

Historic record-keeping of unintentional carbon monoxide (CO) poisoning outbreaks demonstrates their occurrence disproportionately affects racial/ethnic minorities. Excessive CO-related morbidity and mortality due to the use of charcoal grills, kerosene heaters, and generators inside or near residents' homes have been associated with LEP racial/ethnic minorities after extreme storms which result in power outages. This outcome has been represented by studies conducted in Connecticut, Texas, Maine, and Washington states. Studies conducted in Connecticut, Maine, and Texas further reveal that a disproportionate number of CO-poisoning cases impact LEP immigrant families. These studies call attention to various problematic factors: delayed media messaging after storms that cause power outages; failure to reach non-English speaking people; and charcoal bags with non-pictorial, English-only labels. These factors likely contribute to disparate CO-poisoning among racial/ethnic minorities (Styles et al. 2015). Of six reported deaths resultant from CO-poisoning related to a storm in 2006 in King County, all represented LEP immigrant households (Gulati et al. 2009). Of grave public health importance is the ability to effectively advise members of the public, especially those of racial and ethnic communities, about the dangers of CO-poisoning through announcements that follow a disaster and through language-accessible emergency preparedness training.

THE ROLE OF CBOS, NGOS, AND FBOS AS TRUSTED ADVOCATES

The aforementioned studies establish that LEP persons belonging to racial and ethnic minorities experience disparate health communications during and after an emergency or disaster. As a result, the public health community's past and current communication avenues must be examined for strengths and weaknesses. This sort of assessment identifies missing links in communication processes implicated by disparate access. For the purposes of this project, the roles of community-based organizations (CBOs), faith-based organizations (FBOs), and non-governmental organizations (NGOs) are assessed separate from other communication avenues, such as print media, social media, radio, and television.

Andrulis and Brach (2007) demonstrate that health literacy, or “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions,” is disproportionately lower among LEP individuals. According to the Institute of Medicine, health literacy is a matter of culture and language (Adams and Corrigan 2003). For this reason, no single approach, focused solely on language, is appropriate for the creation and dissemination of health information. While this review does not focus on identifying and understanding the nuances associated with distinct cultures, it does recognize LEP populations’ use of CBOs and race/ethnicity-associated NGOs as meeting places and safe havens. Andrulis, et al. (2011) call attention to three elements that should be assessed when health communications are disseminated to diverse communities: 1) the message(s), 2) the channel(s) through which the messages are communicated, and 3) the parties that deliver the message(s). CBOs and NGOs, as channels through which information can be disseminated, and the individuals who work for and associate themselves with such organizations to deliver messages, are the focus of this section.

A single approach, focused solely on language, is not appropriate for the creation and dissemination of health information.

In an article, Klaiman, et al. (2010) examined strategies for communicating information to vulnerable populations through CBOs during and after disasters in Philadelphia. The authors identified trusted CBOs which demonstrate familiarity with the unique needs of the populations they serve. The Philadelphia Department of Public Health (PDPH) and the Office of Emergency Management (OEM) created a database of partner CBOs and NGOs. This has increased communications related to emergency and non-emergency health predicaments for LEP populations. The authors recognize that the actual mechanism for information dissemination is a key component for reaching LEP persons. Each organization within PDPH’s database is coded according to the population(s) served. PDPH developed a quarterly health bulletin to be disseminated by partner organizations; the newsletter is published in English as well as the major languages spoken by LEP populations. Through PDPH and OEM’s efforts, Philadelphia has established an essential and trusted bidirectional communication relationship with many agencies set up to serve LEP residents. PDPH and OEM found that the quarterly health bulletin served as a crucial instrument for them to gain buy-in from CBOs/NGOs and to strengthen engagement with community leaders (Klaiman et al. 2010).

Shiu-Thornton and colleagues (2007) and the CDC (2015) have established that CBOs/NGOs are trusted sources of information for the communities that they serve. Though these organizations are familiar with and support many different LEP populations, they may lack funding and human resources necessary for additional outreach efforts, including those related to emergency preparedness. In a study of the National Alliance for Hispanic Health, Baezconde-Garbanati et al. (2005) examined the organizational capacities essential for CBOs/NGOs to operate as conduits for information sharing about emergency preparedness. Though the authors based their research on organizations that primarily serve Hispanic people, nearly 40% of the NGOs/CBOs that participated in their study also served Asian/Pacific Islanders, African Americans, Native Americans, and non-Hispanic Whites. Thus, I have included this study in this review.

The authors examined each organization's willingness to provide services to their communities in times of need. Of the 27 organizations that participated in the study, a reported 70% stated their willingness to provide services; however, 65% of these organizations reported that they were ill-prepared to meet the needs of the communities they serve



during an emergency. Of particular interest, the researchers asked each agency they surveyed which communication channel they would use to share information with the communities they serve in the event of an emergency. Of the formal communication channel options, radio stood out as the first choice, with 90% of organizations stating they would rely on it; TV and print media followed with 85% and 82%, respectively, selecting them as preferred communication modes. Of distinct mention are the top informal channels of communication chosen by the participating agencies: educational materials (leaflets and factsheets) and interpersonal communication (word-of-mouth) both polled at 82%. This report suggests the importance of networks generated through the work of CBOs/NGOs, as well as how crucial interpersonal communication is for disseminating information among LEP communities. Additional research should be conducted on the use of interpersonal communications as the preferred form of informal communication among LEP populations during emergencies and disasters.

Efforts to increase utilization of CBOs/NGOs as avenues for emergency management information for LEP populations occur not only at the city, county, and state levels, but also at the federal level. In 2016, the US Department of Justice (USDOJ) published, “Tips and Tools for Reaching Limited English Proficient Communities in Emergency Preparedness, Response, and Recovery,” which contains suggestions for emergent communication with LEP communities. Among tips provided for effective

Additional research should be conducted on the use of interpersonal communications as the preferred form of informal communication among LEP populations during emergencies and disasters.

dissemination of information, the document noted that relying upon a single method for information dissemination is problematic since individual communities experience varying degrees of access to different information sources. For this reason, USDOJ recommends the development of partnerships with CBOs, FBOs, and NGOs that serve LEP populations. Staff that specifically serve LEP persons, like ESL teachers, could be approached for participation in such partnerships. These organizations frequently stand out as valuable channels for information dissemination (Federal Coordination and Compliance Section 2016).

The CDC also developed a document delineating strategies for identifying and engaging with at-risk groups (refugees, immigrants, racial/ethnic minorities, and those of a low-socioeconomic status) during an emergency. The document suggests the use of agencies and organizations that usually work with vulnerable populations and the importance of identifying trusted messengers from a similar community or background (CDC) 2015). Trusted messengers would most likely take the form of a CBO, FBO, or NGO, whose work puts them in daily contact with LEP persons. The aforementioned studies portray successful use of CBOs and NGOs as avenues for information sharing among LEP populations. Though the role of FBOs appears more limited, the CDC and the USDOJ recognize them as potentially useful avenues for dissemination of information to LEP populations during an emergency or disaster (Federal Coordination and Compliance Section 2016).



The US Department of Justice recommends cities establish ties to CBOs, FBOs, and NGOs already serving LEP communities. UNITED STATES DEPARTMENT OF JUSTICE ARCHIVES



Local print media stands as one of many outlets for sharing emergency communications. BELLEVUE REPORTER

Human resources, local television networks, print media, radio, and social media are readily available outlets for emergency communications.

EXISTING NETWORKS FOR COMMUNICATION SHARING AMONG LEP COMMUNITIES

Beyond the use of CBOs, FBOs, and NGOs as conduits for information sharing, other approaches in emergency management communications exist. For example, the use of human resources, local television networks, print media, radio, and social media are readily available outlets for emergency communications.

A study conducted in King County assessed the role of medical interpreters (MIs) as cultural brokers and information gatekeepers related to LEP communities' disaster preparedness (Shiu-rnton et al. 2007). During the study, researchers noted a consensus among MIs regarding LEP communities' lack of emergency preparedness. Among strategies they suggested for increasing emergency preparedness, was that local governments collaborate with CBOs, FBOs, and NGOs language-specific community businesses. Of the MIs interviewed, several stated that they would welcome emergency preparedness training. It is possible that training and establishment of a MI network would complement existing resources which the City of Bellevue may already have set up for information dissemination during and after an emergency or disaster.

IMPERSONAL COMMUNICATION STRATEGIES

It is important to note that I found no specific studies regarding best practices for emergency communications with Russian-speaking communities during the course of this review. In an effort to identify trusted impersonal communication sources used by LEP communities, I identified two studies. Clayman, et al. (2010) considered the use of multiple types of

media for providing health messages to Hispanic/Latino populations. The authors found that Hispanics/Latinos who are not comfortable speaking English are considerably more vulnerable with respect to information access. They also identified that this same group is difficult to reach using traditional communication methods (e.g., mailers and brochures) and new media communication forms (e.g., social media platforms). The authors found that Hispanics/Latinos who identify as "comfortable with speaking English" are also more likely to trust health information they encounter on the internet and in print media than Hispanics/Latinos who identify as "not comfortable speaking English." Those who feel more comfortable speaking English also appear more likely to spend more hours of the day listening to the radio, watching television, and reading print media (Clayman et al. 2010). These findings are important for forming recommendations about where local governments should focus resources and develop partnerships for health communications with LEP populations. Reliance on one or a couple of media forms for communication purposes is inadequate for reaching LEP communities; a combination of utilizing mixed-media and interpersonal avenues through CBOs, FBOs, and NGOs is necessary.

In a study completed on social media and its uses related to health communications, Chou, et al. (2009) found that social media outlets infiltrate populations regardless of education level, race/ethnicity, and access to health care. However, the researchers observed that these communication streams are predominately used by people of color (Chou et al. 2009). This finding is important to consider since social media could be used to facilitate broad communications among LEP populations if culturally and linguistically appropriate messages are created and disseminated using such channels. Though these studies focus on the sharing of health information, and not on emergency communications, the impersonal means through which information is most commonly shared among LEP communities is essential to identify because these methods may serve as additional avenues for efficient dissemination of emergency communications.

Yip, et al. (2009) studied information seeking behaviors that followed an H1N1 (swine flu) outbreak among Chinese LEP individuals in King County in 2009. The researchers sampled 100 Chinese-speaking, LEP adults and identified their major channels of information sharing during this global pandemic. Sixty-five percent of the participants selected speaking English "not well." Roughly 80% of the participants reported television as their main information source, followed by Chinese language newspapers and

CBOs (69% and 30%, respectively). Participants indicated the following lesser-utilized channels of information: friends, school, and the internet (38%, 23%, and 20%, respectively). In contrast with Chou and colleagues' study (2009), none of the study participants reported social networking channels as preferred sources of information. Age could be an external variable affecting social media usage, since 45% of the study participants were over 50 years of age.

Because different modes of communication vary in terms of their use from one cultural group to another, an argument can be made for the utilization of all of the aforementioned modes of communication to reach as many LEP residents as possible. For the purposes of creating emergency communication recommendations for the City of Bellevue, studies referred to throughout this literature review on Chinese-speaking individuals in King County will be considered, as well as recommendations from leaders of CBOs, FBOs, and NGOs that serve these communities.

Collaboration with CBOs, FBOs, NGOs, and local public health departments is of grave importance for effectively training personnel to employ a wide variety of communication efforts to reach LEP populations.

REACHING LEP COMMUNITIES DURING EMERGENCIES

A report published by the University of Washington's Northwest Center for Public Health Practice describes efforts to address emergency communications among LEP communities in Los Angeles County. The study was commissioned following a gap analysis of response to the H1N1 pandemic in LA County. Report findings of particular interest to this study involved the streamlining of efforts of multiple agencies to translate emergency communications to reach LEP populations during an emergency. Agencies involved collaborated with various faculty members to form a peer network and to share resources (e.g., trainings, seminars, informal discussions) to create effective communications. The report caused LA County Department of Public Health to augment workforce education programs to specifically include training on emergency communications with LEP communities (D'Ambrosio, Huang, and Sheng Kwan-Gett 2014). For example, the Department soon offered a webinar detailing the importance of utilizing multiple avenues of communication, including storytelling, pictorial communication, and social media. They also conducted an interactive workshop that shed light on real-life barriers faced by LEP persons during an emergency. This provoked thoughtful discussion about how to better serve LEP communities and prepare them for public health emergencies. The findings of this report establish the importance of workforce collaboration among the various departments involved in emergency preparedness and outreach to LEP populations, as well as the ways in which a workforce can be specifically trained to combat the disparate emergency communications experienced by LEP populations. Collaboration with CBOs, FBOs, NGOs, and local public health departments is of grave importance for effectively training personnel to employ a wide variety of communication efforts more likely to reach LEP populations.



LOCAL BACKGROUND

Language access policies meant to serve LEP communities include: Title VI of the Civil Rights Act of 1964, which requires recipients of federal funds (state and local government, CBOs, FBOs, and NGOs) to take practical steps to ensure that LEP individuals have meaningful access to the same information and services as everyone else (Justice 2016); and the Patient Protection and Affordable Care Act of 2010, which calls for enhanced language access in healthcare (Services 2010). In the wake of modern disasters in 2017, the State of Washington amended RCW 38.52.070 to authorize each political subdivision of Washington to establish a local organization for emergency management. Subsection 3a (i) of RCW 38.52.070 identifies the obligation to provide emergency notification to LEP individuals. Subsection 3a(ii) establishes that when 5% or 1,000 residents of a political subdivision identify with the same language group, they constitute a “significant population segment (SPS).” By law, emergency notifications must be provided in the languages spoken by each SPS (Legislature 2017b). The populations in the City of Bellevue that meet the SPS criteria are Chinese-, Russian-, Korean-, and Spanish-speaking groups. Notably, each group’s numbers are growing exponentially every year. (Management 2018).

Of the nearly seven million residents living in Washington state, over two million reside in King County. Of King County residents over five years of age, 26.7% speak a language other than English at home (US Census Bureau 2017). According to the US Census Bureau’s 2017 American Community Survey 1-Year Estimates, more than 8,000 Chinese-speaking (including Mandarin- and Cantonese-speakers) residents and more than 1,400 Russian-, Polish-, or other Slavic language-speaking residents currently live in Bellevue (US Census Bureau 2017). Recent studies in Washington state show that the absence of dissemination of emergency communications in languages other than English contributes significantly to excess morbidity and mortality among these LEP populations (Yip et al. 2013).

The City of Bellevue’s Office of Emergency Management’s (OEM) Strategic Plan 2018-2021 lists four goals related to realizing the vision of A Resilient Bellevue (OEM 2017). The third goal seeks to “[e]ducate and empower those who live and work in Bellevue to foster community resilience.” One of the objectives identified for realizing this particular goal is to develop, “a plan to create and translate emergency notifications into other languages,” in order to be compliant with the RCW 38.52.070. The OEM conducted a gap analysis, identifying what needs to be done in a

TOP LANGUAGES SPOKEN AT HOME OTHER THAN ENGLISH, 2011–2015

Language	Bellevue Citywide		Speak English less than “very well”	
	Estimate	Percentage of Pop 5 and Over	Estimate	Percentage speaking specific language
Chinese	11,983	9%	5,945	50%
Spanish or Spanish Creole	7,121	6%	3,451	48%
Other Asian languages	5,204	4%	1,329	26%
Korean	4,260	3%	2,180	51%
Hindi	3,818	3%	838	22%
Russian	2,900	2%	1,305	45%
Japanese	1,862	1%	795	43%
Other Indic languages	1,612	1%	456	35%
Vietnamese	1,431	1%	776	54%
French (incl. Patois, Cajun)	1,340	1%	122	9%
Other Indo-European Language	1,001	1%	379	38%
Tagalog	879	1%	335	38%
Persian	831	1%	414	50%

Top languages spoken at home other than English in Bellevue have changed significantly from the years portrayed in this table (2011–2015). New data elevates both Korean- and Russian-speaking residents above 4%—the threshold for significant population segments. US CENSUS BUREAU, 2011–2015, AMERICAN COMMUNITY SURVEY

Chinese-, Russian-, Korean-, and Spanish-speaking populations of Bellevue are growing exponentially every year.



Bellevue firefighters respond to an emergency. CITY OF BELLEVUE

project, acknowledging the need for the City to create a Limited English Proficiency Communication Plan that would entail development and implementation strategies for disseminating emergency communications in the languages of Bellevue's significant population segments: Spanish-, Korean-, Chinese-, and Russian-speaking populations. The OEM also identified the need to create outreach materials in the languages spoken by Bellevue's significant population segments and the need for strengthened collaboration among CBOs, FBOs, and NGOs so they might support community response and recovery efforts in the case of an emergency or disaster. Creation and implementation of an emergency communication strategy that addresses this objective is essential for the City of Bellevue to comply with the new state law.

Efforts abound in King County to fulfill the requirements of the new law. Of note, the Vulnerable Populations Action Team and Community-Based Public Health Practice at Public Health – Seattle & King County have established contacts and partnerships to integrate within their “Community Communications Network (CCN).” One of the ways this network has been used by Public Health – Seattle & King County, is to notify LEP populations of the existence of the emergency notification system, AlertSeattle, and to prompt these residents to opt-in to receive



The City of Bellevue's Neighborhood Liaisons provide targeted services to Bellevue's 16 diverse neighborhoods. MARK HEILMAN

alerts. Low numbers of King County residents opt to receive the emergency communication alerts, which may indicate that the use of a CCN alone is inadequate for reaching the thousands of LEP residents of King County with emergency alerts (County 2018). Other institutionalized avenues of communication utilized in King County and Bellevue to reach the public include:

1. Bellevue Diversity Advisory Network (BDAN): a diverse group of people who provide counsel to the City on how to better reach, serve, communicate, and collaborate with Bellevue's diverse communities (City of Bellevue 2016).
2. Cultural Navigator Program (CNP): offers in-person information and interpretive services for Spanish-, Russian-, Cantonese-, Mandarin-, Korean-, Hindi-, Bengali- and Urdu-speaking residents (City of Bellevue 2017b).
3. Community Safety Ambassador program (CSA): comprised of multi-lingual Seattle residents who conduct disaster preparedness and life safety trainings (e.g., CPR, 911, First Aid) in Seattle's most spoken non-English languages (Arabic, Amharic, Cambodian-Khmer, Chinese, English, Kiswahili, Laotian, Moldavian, Oromo, Romanian, Spanish, Somali, Tigrinya, Thai, and Vietnamese) (Seattle.gov 2015).
4. Bellevue's Neighborhood Outreach Team: comprised of neighborhood liaisons who serve as the “inside connection” to city information for Bellevue's 16 diverse neighborhoods (City of Bellevue 2017c).
5. Public information officers (PIO): government employees who serve as direct sources of information to the public after an emergency or disaster (City of Bellevue 2017a).

Though these efforts and resources exist, the City of Bellevue and all other jurisdictions of King County still struggle to reach LEP communities with emergency notifications during and after emergencies and disasters.

METHODS

INTERVIEWS

After reviewing literature on management efforts focused on emergency communications among LEP populations, I conducted interviews with CBO, FBO, NGO, and City government personnel. My overarching goal was to gain insight from workforces dedicated to serving LEP communities. In speaking with staff of CBOs, FBOs, and NGOs, it soon became apparent that the employees with the most direct contact with LEP persons are English as a second language (ESL) teachers. Therefore, I focused my recruitment efforts on ESL teachers and providers.

In addition to reaching out to organizations in Bellevue, I approached city staff, asking them to participate in interviews. I contacted members of departments that work on behalf of LEP populations: the Communications Office, the Diversity Advantage Team, and the Office of Emergency Management. In order to gain a broader understanding of relevant government efforts in place to serve LEP populations, I also interviewed staff from the City of Seattle.

I conducted a total of 14 interviews. To establish contacts, I employed cold-calling and emailing methods. Once I succeeded in establishing contact and setting up a time to meet, I conducted semi-structured interviews (SSIs), executing them either by phone or at worksites. Each interview spanned 30 minutes to one hour. I tailored one interview guide for ESL teachers and providers of CBOs, FBOs, and NGOs. In addition, I contacted local colleges that offer ESL courses. I created a distinct interview guide to use with city government employees. Both guides consist of open-ended questions, as a means for prompting conversation.

SEMI-STRUCTURED INTERVIEWS (SSIS) WITH ESL TEACHERS AND PROVIDERS

I structured the interview guide for ESL teachers and providers to ascertain the amount of contact this workforce has with LEP communities, whether they consider themselves trusted advocates of LEP communities, how they disseminate information about their courses and events among LEP communities, and how well-connected ESL teachers and providers are with one another. Eight of 14 total interview participants were ESL teachers and providers. A synthesis of the interview transcripts is found in Table 1 of Appendix C.

SEMI-STRUCTURED INTERVIEWS (SSI) WITH CITY GOVERNMENT EMPLOYEES

I contacted government employees from various divisions of Bellevue's Office of Emergency Management (OEM) through email. Upon recommendations from all interviewees at Bellevue's OEM, I also reached out to government employees who work for Seattle and King County and set up additional interviews. Although this project's overarching goal is to identify means to improve dissemination of emergency communications with Chinese- and Russian-speaking persons in Bellevue, the City of Seattle's workforce demonstrates productive work in emergency communications with LEP communities. Drawing from their practice and expertise, this report represents more of the current efforts enacted in King County, beyond City of Bellevue programs and practices. In addition to heeding the recommendations made by Bellevue government employees to reach out to City of Seattle employees, if broad networks and partnerships are to form among city government departments, as well as among CBOs, FBOs, and NGOs throughout the King County area, then including Seattle perspectives is crucial. I interviewed a total of six government personnel: three respondents who work for the City of Bellevue and three who work for the City of Seattle.

I created the interview guide for city government employees who work on behalf of LEP communities. I aimed to identify: current practices in place to reach LEP communities with emergency information, barriers each City encounters in reaching these communities, methods that seem to be most effective for information sharing, and steps that can be taken to fortify current and future efforts in reaching LEP communities in the event of an emergency or disaster. A synthesis of the interview transcripts is found in Table 2 of Appendix C.

Thematic Analysis of Interview Data

After carrying out interviews, I applied a thematic analysis (TA) to all SSI data. This enabled me to identify patterns. TA's flexibility as a framework of analysis allows for detailed and comprehensive description of data. This means that TA can be used to grapple with quite different research questions. First, I read through each SSI transcript five times, taking notes. Next, I coded the data manually to identify as many potential themes as possible. After this initial coding, I collated data by code. I sorted codes into main themes and subthemes. Main themes are significant, broad patterns of meaning; and subthemes consist of notable elements of a main theme. A thematic map of codes, themes, and their relationships is found in Appendix A.

ONLINE SURVEYS

In addition to conducting interviews, I created four surveys and used them to collect qualitative data from members of the Bellevue Diversity Advisory Network (BDAN), Seattle’s Community Safety Ambassadors program (CSA), Bellevue public information officers (PIOs), and Washington state medical interpreters (MIs). I used SurveyMonkey to create each survey and provided links to participants through email. The purpose of the surveys was to learn more about the roles of leaders who serve LEP communities and whether these leaders work together.

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Public Information Officers serve the City of Bellevue as seasoned communicators in the Development Services, Fire, Parks and Community Services, Police, Transportation, and Utilities departments. BRAD HARDMAN

PUBLIC INFORMATION (PIO) SURVEY

The first group of government employees surveyed were the City of Bellevue’s PIOs. PIOs act as the first conduit of information sharing to the public after an emergency. I designed this survey to understand PIOs’ relationships with CBOs, FBOs, NGOs, and other government outreach departments from the City of Bellevue that engage in communication dissemination. Bellevue’s Chief Communications Officer disseminated an email to five PIOs, inviting them to participate in the online survey. All five respondents contacted completed the survey. Survey results are found in Table 3 of Appendix C.

MEDICAL INTERPRETER (MI) SURVEY

I identified medical interpreters by conducting a search of registries provided by the National Board of Certification for Medical Interpreters (CMI) and the American Translators Association (ATA). I looked for Chinese- and Russian-speaking interpreters who work in Washington state. MIs work on behalf of members of LEP communities as established by Shiu-Thornton, et al. (2007), and offer key insights into efforts to improve information sharing. I sent emails to MIs who work in Washington state, inviting them to participate in the survey and sharing a link. A total of seven Chinese-speaking and 11 Russian-speaking interpreters received an invitation to participate. Six respondents completed the survey. The results are found in table 4 of Appendix C.

BELLEVUE DIVERSITY ADVISORY NETWORK (BDAN) SURVEY

The members of BDAN are a diverse group of residents appointed by the Bellevue City Manager. Their task is to collect community feedback using a cultural competency lens and to use that feedback to assess city services. They engage in dialogue on diversity issues and provide insights related to relevant community issues to the City of Bellevue. Members of BDAN were surveyed in an effort to identify existing networks that the City of Bellevue can utilize to share information during an emergency or disaster. The survey reports on LEP communities represented by members of BDAN. It also seeks to identify the frequency of communication BDAN members have within their social networks and with members of their LEP communities. Finally, this survey explores whether BDAN members consider themselves a trusted source of information in their communities



Bellevue Diversity Advisory Network members
BRAD HARDMAN

because of their connection to City government. Ten respondents participated in the survey and the results are displayed in Table 5 of Appendix C.

English, Kiswahili, Laotian, Moldavian, Oromo, Romanian, Spanish, Somali, Tigrinya, Thai, and Vietnamese. I wrote the CSA survey anticipating that I would identify the program as an important partner for other organizations to network with to improve information dissemination among LEP populations during and after an emergency or disaster. I contacted the supervisors of 13 CSAs, inviting them to participate in the survey. Three respondents completed the survey. Results are displayed in Table 6 of Appendix C.



COMMUNITY SAFETY AMBASSADORS PROGRAM (CSA) SURVEY

Much like members of BDAN, members of Seattle’s Community Safety Ambassador program (CSA) serve as advocates for Seattle’s LEP residents, as well as immigrant and refugee communities. CSA aids Seattle’s OEM in effectively communicating with LEP communities. Members of CSA provide basic emergency preparedness education to communities known to be disproportionately adversely affected by emergencies and disasters. Through the CSA program, Seattle’s OEM provides emergency preparedness trainings in Arabic, Amharic, Cambodian-Khmer, Chinese,



Bellevue night sky CITY OF BELLEVUE

FINDINGS

I completed a total of 14 semi-structured interviews (SSIs) with ESL teachers and providers and government employees from Bellevue and Seattle. I generated four internet surveys and succeeded in capturing responses from 34 individuals who work on behalf of LEP communities. Significant themes surrounding emergency communications with LEP populations centered around group access, trust, and efficiency. I observed these themes to be interdependent. Group access could be made possible through formalizing and integrating a network of cultural liaisons. These cultural liaisons must be trusted advocates of LEP communities. Interpersonal communication between cultural liaisons and LEP groups emerged as one of the most prevalent and efficient forms of communication with and among LEP persons. The most pervasive and efficient channels of communication appear to be word-of-mouth and social media. The analyses that influenced these results are reflected within this section of the report.

Significant themes surrounding emergency communications with LEP populations centered around group access, trust, and efficiency.

NEED FOR A FORMALIZED COMMUNICATION NETWORK

Both sets of interviews reveal the need for a formalized communication network which brings ESL workforces and city government together to operationalize robust and effective methods for disseminating information to LEP populations of Bellevue in the event of an emergency or disaster. It is possible that an approach adopted by the City of Bellevue could also be implemented in Seattle and King County. A detailed description of this process is found in the results section of this report.

SYNTHESES OF RESULTS

ESL TEACHER AND PROVIDER INTERVIEWS

ESL teacher and provider interviewees identified word-of-mouth and social media as their main avenues for disseminating information. Beyond their contact with LEP persons they have established a peer-to-peer network which they use to stay in communication with each other regarding events, courses, and conversation tables. The small subset of ESL teachers and providers who participated in interviews for this project reflect a well-connected, trusted source of information, who maintain regular contact with hundreds of LEP persons in King County. The ESL teachers and providers at Bellevue CBOs, FBOs, NGOs, and colleges represent a network of professionals that could aid the City of Bellevue in improving its contact with LEP persons during emergencies and disasters. An effective means for developing such an advisory relationship would likely entail contacting the ESL program heads at Bellevue College and City University of Seattle, as well as at various CBOs, FBOs, and NGOs that hold operations in the City of Bellevue. These resources are listed in Appendix B. Multiple participants expressed having the necessary resources to reach more LEP persons, while lacking the collaborative practices that would improve the efficacy of their outreach methods.

PUBLIC INFORMATION OFFICER (PIO) SURVEY

The PIO survey provided important data on the current use of community partnerships by PIOs in information dissemination among LEP communities. Of interest, all PIOs reported the need for interpreters or translators to improve information sharing with LEP communities, yet only three PIOs reported little-to-moderate use of these services. Strengthening the relationships between PIOs and cultural navigators who work as interpreters at Mini City Hall in the City of Bellevue could forge a partnership to increase emergency communications to LEP communities. Establishing and/or strengthening relationships between the City's PIOs and various CBOs, NGOs, and FBOs that serve LEP communities may also increase the City's ability to reach significant population segments during an emergency or disaster.

A small subset of ESL teachers and providers who participated in this project maintain regular contact with hundreds of LEP persons in King County.



Bellevue's existing Mini City Hall at the Crossroads Shopping Center primarily serves residents of Northeast Bellevue. CITY OF BELLEVUE

MEDICAL INTERPRETER (MI) SURVEY

MI's are uniquely involved with LEP communities since they work on behalf of LEP persons and share a common sense of belonging to non-English speaking communities. They are bilingual and sometimes multilingual. This survey sought to illuminate main avenues for information sharing. It also sought to understand the level of knowledge regarding city resources in MI's' specific language communities, and to confirm whether MI's viewed themselves as trusted advocates of LEP communities. These insights inform whether MI's can be integrated into a network of advocates and share information during an emergency with their language-specific communities. Although survey links were sent to Russian- and Chinese-speaking MI's, no Chinese-speaking MI's participated in the survey. Therefore, the data from the MI survey is only applicable to the Russian-speaking LEP community. Social media and word-of-mouth remain a prominently reported means of information sharing among LEP communities, with MI's reporting that these avenues are the quickest ways to disseminate information. A majority of MI's also report that their communities trust them. This is important to consider as additional networks of communication are generated to augment the existing networks available for communication sharing during an emergency or disaster.

BELLEVUE DIVERSITY ADVISORY NETWORK (BDAN) SURVEY

The most significant observation gleaned from the BDAN survey is that a majority of them consider themselves trusted sources of information for LEP communities. Thus, BDAN represents both the local government and a trusted information source for LEP communities. As previously stated, the literature highlights widespread wariness to distrust of government among LEP communities. It is possible that because a majority of BDAN members live among and speak the languages of LEP communities that their connection to city government does not deter

members of their own communities from trusting them and considering them as reliable information sources. Additional surveying of the attitudes and perceptions of the LEP groups that BDAN members serve would be helpful for verifying if and why BDAN members are trusted advocates among their LEP communities.

COMMUNITY SAFETY AMBASSADOR (CSA) SURVEY

A few significant themes emerged from the CSAs who completed the online survey. The main avenues for information sharing used by members of their communities are social media and word-of-mouth. When asked to identify the most efficient means of communication, all respondents, once again, identified word-of-mouth. Of note, no respondents selected social media. The sources of information identified as most trusted by members of their communities captured a friend or family member, CBOs, and FBOs, NGOs, and ESL teachers and providers. Though CSAs did not identify government sources as trusted avenues for information sharing during an emergency or disaster, all respondents agreed or strongly agreed that their communities would be better served by a government alert notification system transmitted in their native tongue.

Unlike responses from the other surveys, respondents did not identify social media as the most efficient form of communication even though it was chosen as one of the main avenues for information sharing. An extremely low number of respondents could be the underlying reason for the lack of identification of social media as one of the most efficient means of communication. However, word-of-mouth, as one of the main avenues of communication, is consistent with findings from my literature review as well as with the results of BDAN and MI surveys. It is possible that significant information could come from speaking with more members of CSA about the LEP communities they serve.

Social media and word-of-mouth are a prominent means of information sharing for LEP communities, with MI's reporting that these avenues are the quickest ways to disseminate information.



Diversity Advantage Plan Progress Report from 2015-2017. CITY OF BELLEVUE

RECOMMENDATIONS

Findings from both the interviews and online surveys influence the following two recommendations.

Create a formalized network of cultural liaisons specifically for emergency communications. Cultural liaison-partnerships sought by the City of Bellevue could incorporate already established groups and personnel including members of the Community Safety Ambassadors program (CSA), Bellevue Diversity Advisory Network (BDAN), and Mini City Hall's Cultural Navigators service. These divisions of the City of Bellevue and the City of Seattle and can be utilized as avenues to effectively communicate with Russian- and Chinese-speaking LEP populations. Once these relationships formally operate on behalf of the Bellevue Office of Emergency Management (OEM), alerts will be sent to members of CSA and BDAN, as well as to cultural navigators through a decided upon medium. The alert will prompt cultural liaisons to post to all of their social media accounts and alert all of their LEP friends and family through their chosen means of communication.

This method will help the City reach more Chinese- and Russian-speaking residents of Bellevue with emergency communications. The members of BDAN who do not speak the language of the communities they serve could partner with a Mini City Hall Cultural Navigator who they can contact for language-specific translation of an emergency message. The members of these groups that speak Russian and Chinese should be directed to become members of large, language-specific Facebook groups that enable them to reach more residents with emergency communications. These groups include: Seattle Chinese Culture and Arts Association, UW Asian American Christian Fellowship, Seattle Chinese School, Seattle

Chinese Times, Chinese Radio Seattle, and the Greater Seattle Chinese Chamber of Commerce.

In the process of setting up formalized cultural liaison relationships, emergency preparedness efforts should include language-specific prompts on relevant Facebook pages to turn-on notifications in order to receive real-time emergency alerts. King County medical interpreters (MIs) should also be contacted in an effort to create an MI cultural navigator consortium that can be contacted by Bellevue's OEM in case of an emergency. The partnership forged with King County MIs can direct this group to communicate emergency messages in their spoken languages on their social media platforms. They can also be directed to spread the emergency messages through their chosen means of communication to LEP family and friends. The desired outcome is that LEP residents who see emergency communications on social media platforms or who receive communication from a cultural liaison will, in turn, post the news to their social media platforms and tell their friends and family, thereby creating a word-of-mouth snowball effect.

Recruit additional cultural liaisons from an established network of ESL teachers and providers. Secondly, based on the network of ESL teachers and providers I discovered during the interview process, the City could contact the ESL teachers and providers at Bellevue CBOs, FBOs, and NGOs and recruit them as cultural liaisons. The City of Bellevue could work with Seattle and King County Public Health to gain access to their CCN and contact members of the Community Health Board Coalition (CHBC). This could increase the number of ESL teachers and providers who act as cultural liaisons.

WORD-OF-MOUTH

Though "word-of-mouth" is not a tangible, established medium for communication, it has been identified throughout the course of this project as one of the more pervasive and effective means for disseminating information among LEP populations. Once established, it is likely that a cultural liaison network will be able to exploit this word-of-mouth medium by first utilizing LEP residents' other pervasive means of communication (e.g., social media). Prevalence of membership to popularly-used, culturally-specific Facebook pages suggests that emergency information could reach thousands of Russian-speaking and Chinese-speaking LEP persons during an emergency.

CONCLUSION

The primary motivation for this project was to consider existing methods of emergency management communication and to identify potential avenues for the City of Bellevue to effectively disseminate emergency communications among limited English proficient (LEP) communities. I conducted a comprehensive literature review and gathered qualitative data from interviews and surveys which capture the experiences of City government personnel and CBO, FBO, NGO, and college personnel. Based on my review of data, I formed two recommendations for the City of Bellevue to improve emergency communications with Russian- and Chinese-speaking LEP communities. It is possible that these recommendations can be applied to the other significant population segments in Bellevue, such as Spanish-speaking and Korean-speaking communities.

The results of this project highlight the importance of creating a formalized network of trusted partners who serve as cultural liaisons for LEP populations. Though a language-specific emergency communications alert system would be ideal, in the interim, utilizing the access that an established cultural liaison network would provide is likely to increase substantially the number of LEP persons reached with emergency communications in their native languages. By applying the recommendations herein, I expect the City of Bellevue's Office of Emergency Management (OEM) to reach many more Chinese- and Russian-speaking LEP residents with emergency communication. The City's OEM can also consider expanding its liaison network to encompass organizations whose staff work on behalf of other prominent language groups: Spanish- and Korean-speaking communities.



Naturalization ceremony CITY OF BELLEVUE

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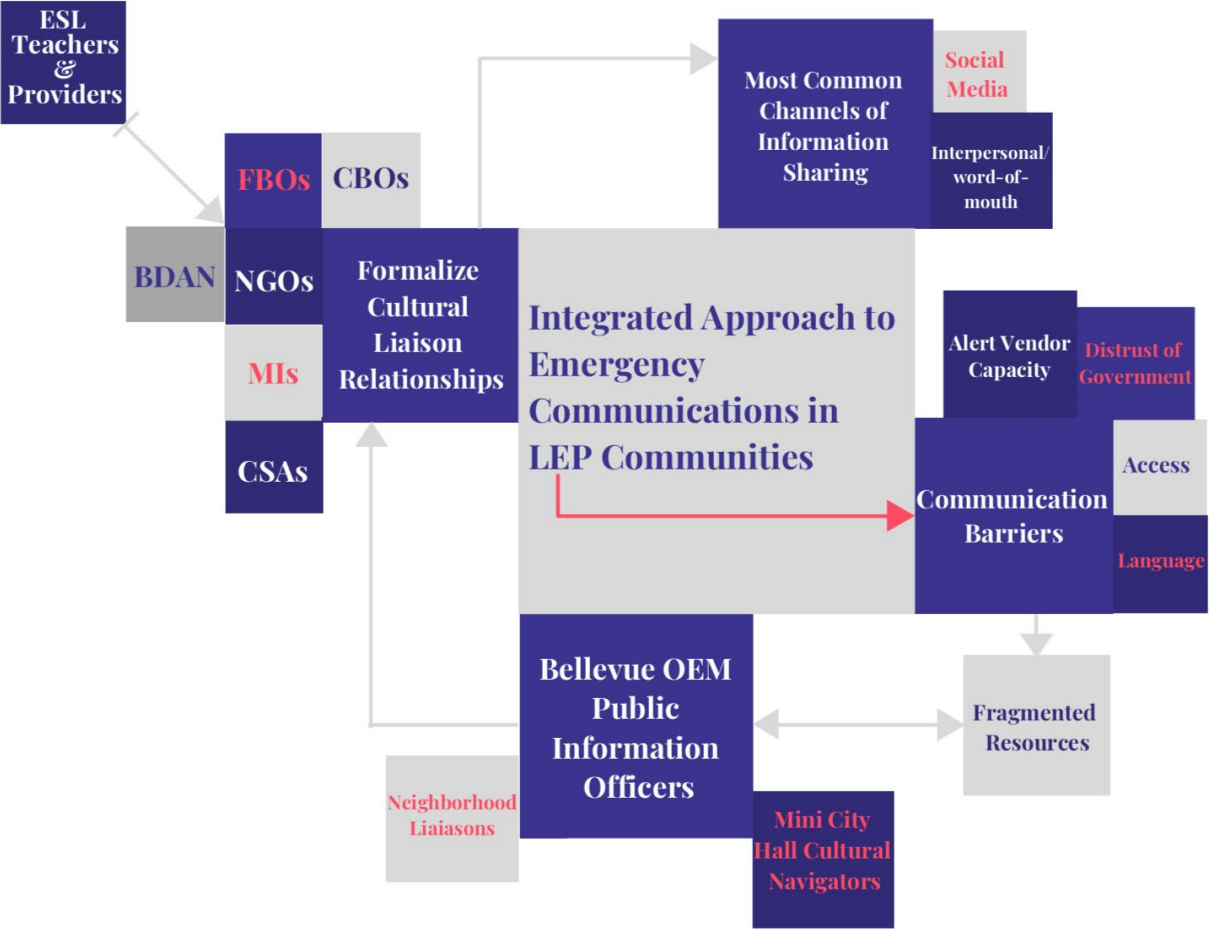
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APPENDICES

APPENDIX A: INTEGRATED APPROACH TO EMERGENCY COMMUNICATIONS IN LEP COMMUNITIES



APPENDIX B: BELLEVUE COMMUNITY LANGUAGE RESOURCES

Bellevue Chinese and Russian FBO Resources

1. Jubilee REACH
2. Russian Center for Spiritual Enrichment
3. Light to the World Church
4. Seattle Bethany Church
5. Russian Center for Spiritual Enrichment
6. Rock Chinese Church
7. Blessed Life Church

Bellevue Chinese and Russian CBO/NGO Resources

1. Bellevue Family YMCA
2. HopeLink
3. Asian American Journalists Association
4. English Language Learners Alliance
5. Refugee and Immigrant Service Center
6. Eastside Refugee and Immigrant Coalition
7. North Bellevue Community Center
8. South Bellevue Community Center
9. Crossroads Community Center
10. Highland Community Center
11. Mini City Hall
12. Asian Senior Concerns Foundation Community Center
13. Eastside Russian Language and Culture Meetup

Bellevue Russian and Chinese-serving Colleges/Language Schools

1. Bellevue College
2. Washington Academy of Languages
3. Russian Language School
4. International Language and Training Academy
5. Asia Pacific Language School
6. Russian School of Mathematics
7. Bellevue Learning Center

APPENDIX C: INTERVIEW AND SURVEY DATA

Table 1

ESL Teacher/Provider Interview Guide		
Interview Questions	*Answers/Remarks	**No.
1. What organization do you represent as an ESL teacher or provider for limited English proficient (LEP) communities?	<i>HopeLink</i>	1
	<i>North Bellevue Community Center</i>	1
	<i>Bellevue College</i>	1
	<i>English Language Learners Alliance (ELLA)</i>	1
	<i>Jubilee Reach</i>	1
	<i>Renton Technical College</i>	1
	<i>Cascadia College</i>	1
	<i>Highland Community Center</i>	1
2. How do you disseminate information to the LEP communities that you serve?	<i>Flyers in libraries and community centers</i>	6
	<i>MeetUp.com</i>	2
	<i>Word-of-mouth</i>	8
	<i>Connection with other ESL teacher/providers</i>	8
	<i>Language-specific Facebook groups</i>	7
3. On average, how many new students each quarter enroll in your ESL courses? (NB: A few respondents were unsure of their current numbers.)	<i>~300</i>	1
	<i>~250</i>	3
	<i>~70</i>	1
	<i>~90</i>	2
	<i>~40-50</i>	1
4. In your current role, do you consider yourself a trusted advocate of the LEP communities you serve?	<i>People seem to trust us</i>	1
	<i>Yes</i>	8
	<i>New students are coming all the time so word must be good</i>	1
5. Could you expand on the aforementioned connection between the ESL teachers and providers across organizations? *all respondents reported this connection	<i>We try to meet quarterly</i>	3
	<i>We all have access to a shared google folder</i>	1
	<i>We communicate more often through email</i>	3
	<i>We have an informal network of ESL teachers/providers from Lake Washington Technical College, Jewish Family Services, ELLA, HopeLink, Jubilee Reach, Bellevue College, Westminster Church, the Libraries, and more</i>	1
6. How prevalent is the Council for Basic Skills for ESL teachers and providers on the eastside?	<i>We all attend</i>	4
	<i>All heads of ESL departments attend the CBS quarterly</i>	1

Table 2

Government Personnel Interview Guide		
Interview Questions	*Answers/Remarks	**No.
1. In which city do you work on behalf of LEP communities?	<i>The City of Seattle</i>	3
	<i>The City of Bellevue</i>	3
2. What are the current efforts employed to disseminate information among LEP communities?	<i>The Bellevue Diversity Advisory Network (BDAN)</i>	
	<i>Cultural Navigators at Mini City Hall</i>	
	<i>Bellevue and Seattle Public Information Officers (PIOs)</i>	
	<i>Bellevue’s Neighborhood Liaisons</i>	
	<i>Bellevue staffs’ use of Language Line cards</i>	
	<i>Bellevue’s Diversity Advantage team</i>	
	<i>Public Health—Seattle and King County Community Communications Network (CCN)</i>	
	<i>Seattle Health Board Coalition</i>	
3. What are the main barriers faced in efforts to reach members of LEP communities with information?	<i>Seattle’s Community Safety Ambassadors</i>	
	<i>Distrust of government/apprehension surrounding the current administrations immigration policies</i>	3
	<i>Lack of an LEP communications plan</i>	2
	<i>Lack of a formal, all-encompassing relationship with community partners</i>	4
	<i>Access to trusted partners in LEP communities/unknown communication avenues</i>	6
	<i>Fragmentation of LEP communication efforts</i>	6
4. In your experience working for/among LEP persons, what is the most effective way for sharing information?	<i>Emergency alert systems only available in English</i>	4
	<i>Word-of-mouth (email, phone, in-person)</i>	6
	<i>Public outreach meetings</i>	2
	<i>Community-based organizations</i>	6
	<i>Internet/Social Media</i>	6
	<i>Flyers/Pamphlets/Leaflets/Newsletters</i>	2
	<i>Language-specific radio and television</i>	4
5. What are the next steps toward establishing more effective outreach to LEP persons in the event of an emergency?	<i>Integrate efforts</i>	6
	<i>Roll out the Language Access Policy</i>	2
	<i>Utilize community groups (churches, schools, cultural societies)</i>	5
	<i>Work together</i>	6
	<i>No need to reinvent the wheel, utilize available resources</i>	2

*The full answers from interview transcripts have been condensed to contain only pertinent information from each answer/remark
**The number of respondents who answered in this manner

APPENDIX C: INTERVIEW AND SURVEY DATA CONTINUED

Table 3

Public Information Officer (PIO) Survey					
Survey Questions/Statements	Survey Answers				
1. In what capacity do you work as a public information officer (PIO)?	Community Development				
	Emergency Management				
	Communications				
	City Manager's Office				
	Transportation				
2. Have you completed cultural competency training?	All 5 respondents reported "yes"				
3. There are current systemic communication efforts in reaching LEP residents after an emergency	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
	3	2	-	-	-
4. I work with or have worked with one of the following community stakeholder groups in an effort to communicate with limited English proficient residents.	A total of 33 community stakeholder groups were listed—the following were each identified by one respondent (two declined to answer)				
	Bellevue Chamber of Commerce				
	Bellevue Downtown Association				
	Eastside Refugee and Immigrant Coalition				
5. I utilize translator services to translate documents and forms into Russian to ensure this community has access to City resources.	A great deal	A lot	A moderate amount	A little	None at all
	-	-	1	2	2
6. I utilize translator services to disseminate documents and forms into Chinese (Mandarin and Cantonese) to ensure this community has access to City resources.	A great deal	A lot	A moderate amount	A little	None at all
	-	-	1	2	2
7. I have need for an interpreter/translator to ensure that the limited English proficient communities I work with have access to City services.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
	3	2	-	-	-
8. I work with local, culturally specific media outlets to disseminate information to limited English proficient communities.	A great deal	A lot	A moderate amount	A little	None at all
	1	-	-	2	2
9. I utilize feedback from the Diversity Advantage Team and/or the Neighborhood Outreach Team in communications efforts to LEP communities.	Always	Usually	Sometimes	Rarely	Never
	1	-	2	1	1

Table 4

Medical Interpreter (MI) Online Survey			
Survey Questions/Statements	Survey Answers		*No.
1. As a medical interpreter I identify as a member of the following community:	Russian-speaking		6
2. I am a resident of the following city in Washington state:	Kirkland		2
	Poulsbo		1
	Everett		1
	Woodinville		1
	Decline to answer		1
3. The main avenue(s) of information sharing among members of the limited English proficient (LEP) community I work on behalf of is/are (please choose all that apply):	Social media (Facebook, Facebook Messenger, Twitter, WhatsApp, WeChat, Viber, LinkedIn)		6
	Print media (newspapers, leaflets, brochures, newsletters)		3
	Radio (language specific)		1
	Television (language specific)		2
	Word-of-mouth		6
	Social workers		1
4. The quickest avenue for information sharing in my LEP community is:	Social media		4
	Word-of-mouth		2
5. Members of my community are most likely to trust emergent information coming from the following source(s):	CBOs, NGOs, and FBOs		6
	ESL teacher/provider and school		6
	A friend of family member		6
	Government employee		2
	Government alert system		2
6. Members of my LEP community know that they can opt into an emergency alert notification system	Strongly Agree	Agree	Disagree
	-	2	4
7. Members of my LEP community would be better served by an alert notification system that communicated in their native tongue	Strongly Agree	Agree	Disagree
	4	2	-
8. Members of my community have knowledge of the translation resources available to them that are provided by the city	Strongly Agree	Agree	Disagree
	-	3	2
9. I am a trusted member of my LEP community	Agree		Disagree
	5		1

*The number of respondents who answered in this manner (recorded where applicable)

APPENDIX C: INTERVIEW AND SURVEY DATA CONTINUED

Table 5

Bellevue Diversity Advisory Network (BDAN) Survey						
Survey Questions/Statements	Survey Answers					
1. I speak the native language of the cultural group I identify with/dialogue with regarding bridging cultural gaps and diversity issues on behalf of BDAN.	Yes, Fluently	Yes, conversationally		No, we speak English		No, we speak through an interpreter
	4	1		4		1
2. The culture I am most connected to in the Bellevue area is:	Chinese	Russian	Latinx	Gujarati	Japanese	African Diaspora
	3	2	2	1	1	1
3. I live among the _____ people of the culture I am connected to as a member of BDAN.	Russian-speaking	Chinese-speaking	Spanish-speaking	Japanese-speaking	Multi-ethnic	I do not live among the community I serve
	3	2	2	1	1	1
4. In BDAN meetings, emergency management as it pertains to limited English proficient (LEP) residents of Bellevue is discussed.	A great deal		A lot	A moderate amount		A little
	-		-	1		2
5. I receive feedback from the culture I am connected to regarding a lack of access to emergency communications during an emergency/disaster.	A great deal		A lot	A moderate Amount		A little
	-		-	-		3
6. I consider myself a trusted source of information for the cultural group I identify with because of my connection to city government.	Strongly Agree		Agree	Disagree		Strongly Disagree
	2		6	2		-
7. My connections to the cultural group I identify with are:	Familial/Personal	Business-based	Community-based	School-based		Healthcare-based
	6	1	9	8		3
8. I am in _____ communication with the cultural group with which I identify.	Daily	Weekly	Bi-weekly		Monthly	Yearly
	4	3	1		3	-
9. I am in _____ communication with other members of the BDAN network.	Daily	Weekly	Bi-weekly		Monthly	Yearly
	-	2	3		6	-

Table 6

Community Safety Ambassador (CSA) Survey					
Survey Questions/Statements	Survey Answers				
1. As a CSA I identify as a member of the following community:	Amharic-speaking, Tigrinya-speaking				
	Chinese-speaking				
	Vietnamese-speaking				
2. I am a resident of the following city in King County:	Seattle				
	Renton				
	Burien				
3. The main avenue(s) of information sharing among members of my limited English proficient (LEP) community is/are (please choose all that apply):	Social media	Print media	Radio	Television	Word-of-mouth
	2	1	-	-	3
4. The quickest avenue for information sharing in my LEP community is:	Social media	Print media	Radio	Television	Word-of-mouth
	-	1	-	-	3
5. Members of my community are most likely to trust emergent information coming from the following source(s):	CBOs, FBOs, NGOs	Friend/family member	Government employee	ESL teacher/provider	Government alert system
	2	3	1	2	-
6. Members of my LEP community know that they can opt into an emergency alert notification system.	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	1	1	-	1	-
7. Members of my LEP community would be better served by an alert notification system that communicated in their native tongue.	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	1	2	-	-	-
8. Members of my community have knowledge of the translation resources available to them that are provided by the city.	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	-	2	-	1	-
9. Members of my community would welcome emergency preparedness training in their native tongues.	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	2	1	-	-	-