Planning For Emergencies Including The Disability Community: Spatial Mapping Project

Noah’s Ark Institute
BrightMinds Institute
Planning For Emergencies Including The Disability Community:

Spatial Mapping Project

Noah's Ark Institute

Making the world better for everyone with autism

www.noahsarkinstitute.org

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1 INTRODUCTION

It is a basic principle that disaster preparedness is best planned and disseminated from the local level. The local community experiences the impact of disasters and, in the initial period that directly follows such events, predominately locally derived assistance and expertise is going to be available.

Additionally, when thinking about the ‘Whole Community’, think about the term resilience. Resilience is the opposite of vulnerability. This concept is the key to planning, implementing, surviving and recovering from a disaster and it is best developed from within the community.

For emergency managers and planners the time between emergencies, (peace time) is as important as the when the emergency hits. As communities strive for a ‘whole community’ approach and inclusive
emergency planning processes, emergency planners must understand the dynamic nature and makeup of their residents to be effective in their planning efforts. It is only through an understanding of the population within the community that real progress can be made toward the inclusion and accommodation of protected populations such as individuals with disabilities. The end goal must be to provide access to emergency preparedness systems and planning for families of individuals with disabilities and their loved ones in a manner that reaches parity to the access to services available to the general population, both in timely access and in quality of that service. Up-to-date and richly detailed demographic information is a useful tool for emergency planners to add to their toolkit.

In order to work toward a better understanding of the diversity within the community geo special mapping is a useful tool for emergency personnel and planners. Knowing where everyone resides, in a manmade or natural disaster will facilitate the acquisition, positioning and deployment of hard and soft resources in an efficient and expeditious manner.

Through the use of geo spatial mapping, maps of the northern New Jersey four contiguous counties of Hudson, Essex, Passaic and Bergen have been created. The benefit to such mapping efforts will be the greater understanding of the disability community’s population density. This will add a dimension to the overall planning and implementation of emergency management services.

The maps will work as a valuable resource to emergency planners and community leaders as they strive to service the community as a whole. This is especially important in the densely populated northern New Jersey four contiguous counties of Hudson, Essex, Passaic and Bergen, for resource allocation and deliverables in the planning stage of operations as well as during a time of emergency to enhance the successful execution of the specific emergency situation.

The spatial mapping is comprised of data sets obtained through census data. This project also reached out to the community based Independent Living Centers to ensure that sensitivity to the needs of the disability community were not overlooked. The overall goal of the project is to fully engage emergency planners and the disability community in the planning process.

**Methodology**

This project selected the four most densely populated counties in the State of New Jersey for not only their population density but also for their location in the strategically vital north east corridor as well as their shore line access with the inherent evacuation and recovery issues their demographics present. A way to visually convey information in a format which is usable for local First Responders and community leaders is through geo special
mapping. This type of information conveyance will provide the community with ideas and strategies on emergency preparedness, and build resiliency in the community through collaboration based upon the mapping data.

Maptitude Geographic Information System (GIS) software is the software chosen. This will be extremely useful when designing protocols for various geo physical demographic areas.

This accompanied with the perceived understanding that the counties in the four county catchment area also represent a highly rich density of individuals not only with disabilities but as well these counties represent many other access barriers including multi-cultural diversities.

The data sets are divided into four categories in each set of low (green), medium (yellow), and high (red), and very high (purple) density categories for very easy identification of high density population “hotspots” for the emergency managers to begin working toward greater community outreach into hotspot areas.

**Mapping Project Goals And Objectives**

**Goals:**

The primary goal of the mapping project is to translate local disability information in a way that is understandable to the local emergency preparedness professionals and community leaders. This will further the dialogue of whole community with the disability community and first responders and increase the capacity of all community members.

Also the mapping project will match data sets to the community and facilitate community dialogue around preparedness.

**Objectives:**

The long-term objective of the mapping project is to increase community resiliency in time of emergency or disaster.

**Data**

The United States Census\(^1\): The Census Bureau provides demographic and other information on coastal areas for use in emergency preparedness. For example, since 1960, the number of people living along U.S. coastlines has increased by nearly 30 percent to more than 87 million. The use of U.S. Census data gives a very clear representation of the disability community within the four selected counties of New Jersey.

The Centers for Disease Control and Prevention (CDC)’s Behavioral Risk Factor Surveillance System (BRFSS)\(^2\) is the nation’s premier system of health surveys that collect state data about U.S. residents regarding their health-related risk behaviors and events, chronic health conditions, and use of preventive services. Currently, BRFSS collects data, including data on disability, in
all 50 states, the District of Columbia, and three U.S. territories.

BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted multi-mode (mail, landline phone, and cell phone) health survey system in the world. Since 1984, this unique state-based system has provided flexible, timely, and ongoing data that meet individual state needs.

The federal government, state governments, universities, private organizations, and researchers use BRFSS data to monitor public health. BRFSS data can help to identify and track health behaviors and conditions; track health objectives; evaluate disease prevention activities; and rapidly assess emerging health problems, such as novel influenza.

The last phase of the project is the creation of this booklet with accompanied outreach in the community as well as to the county OEMs in the State of New Jersey to inform them of the outcomes and instruct them on the various usages of the mapping techniques.

**Deliverables**

1) A four county physical demographic map with the disability population density articulated to enhance the overall understanding that emergency planners, managers and local officials need if they are to plan to include the entire community.

2) Outreach to the local OEMs and others with an interest in emergency planning to understand and use the materials in the emergency planning process.

3) Resource booklet with all of the ascertainment materials available both in hard copy and on the web.

4) Development of partnership between the stakeholders in the community and the local OEMs to better coordinate planning and services.

5) Create and disseminate a comprehensive resource training program which will facilitate the community partnerships between local emergency management and community disability leaders.
Whole Community and Independent Living

Whole Community

Experience has taught us that we must do a better job of providing services for the entire community, regardless of the background, demographics, or challenges. This means planning for the actual makeup of a community, making sure we meet the needs of everyone regardless of age, economics or accessibility requirements.

Whole Community is a concept which sees light in the Federal Emergency Management Agency’s Administrator Craig Fugate, when he comments:

“...Addressing these related concerns cannot be achieved by simply improving on what we have always done – we must
fundamentally **change** how we go about disaster preparedness, response, recovery and mitigation; involving the communities we served directly in these efforts. We must look beyond the traditional, “government-centric” approach to emergency management and embrace a philosophy and operational posture that leverages, and serves the **Whole Community**.”

*Craig Fugate, FEMA Administrator*

**Whole Community Defined**

As a concept, Whole Community is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests. By doing so, a more effective path to societal security and resilience is built. In a sense, Whole Community is a philosophical approach on how to think about conducting emergency management.

There are many different kinds of communities, including communities of place, interest, belief, and circumstance, which can exist both geographically and virtually (e.g., online forums). A Whole Community approach attempts to engage the full capacity of the private and nonprofit sectors, including businesses, faith-based and disability organizations, and the general public, in conjunction with the participation of local, tribal, state, territorial, and Federal governmental partners. This engagement means different things to different groups. In an all-hazards environment, individuals and institutions will make different decisions on how to prepare for and respond to threats and hazards; therefore, a community’s level of preparedness will vary. The challenge for those engaged in emergency management is to understand how to work with the diversity of groups and organizations and the policies and practices that emerge from them in an effort to improve the ability of local residents to prevent, protect against, mitigate, respond to, and recover from any type of threat or hazard effectively.

**Whole Community is a philosophical approach in how to conduct the business of emergency management.**

**Benefits include:**

- Shared understanding of community needs and capabilities
- Greater empowerment and integration of resources from across the community
- Stronger social infrastructure
- Establishment of relationships that facilitate more effective prevention, protection, mitigation, response, and recovery activities
- Increased individual and collective preparedness
- Greater resiliency at both the community and national levels
Independent Living

Emergency Preparedness must strive to provide services that ensure individuals maintain their independence and continue to be able to self-determine to the greatest extent possible.

Independent Living Philosophy

*Each person with a disability is unique and has the same civil rights as people who do not have a disability.*

A few guiding principles are:

- People with disabilities know their needs best
- People with disabilities should have a choice on how they are integrated in their community.
- People with disabilities have the same aspirations as people who do not have disabilities.
- People with disabilities expect equal access to social, economic and political opportunities for people with disabilities.
- People with disabilities are in the best position to guide, direct, and control programs for people with disabilities.

**Information** – to know what your options are

**Peer Support** – encouragement and guidance from other disabled people

**Housing** – a suitable place to live

**Equipment** - technical aids, to reduce unnecessary dependence on others

**Personal Assistance** – human help with everyday tasks

**Transport** – to get where you need to be

**Access to the Environment** – to go where everyone else does.
Disability Defined

For the purpose of this grant the term disability is defined according to Federal Law. Federal law defines a “disability” as a physical or mental impairment that substantially limits or restricts the condition, manner, or duration under which an average person in the population can perform a major life activity, such as walking, seeing, hearing, speaking, breathing, learning, working, or taking care of oneself. A record of such an impairment; or being regarded as having such an impairment.

The ADA Amendments Act of 2008 adds major bodily functions to the list of major life activities. These include functions of the immune system, normal cell growth, digestive, bowel, and bladder, and reparatory, neurological, brain, circulatory, endocrine, and reproductive functions. Further information on disability can be found at www.ADA.gov.
In keeping with the above definition and utilizing the categories established in the US Census this project looked into disability in the top four counties of New Jersey.

Disability And You
Your odds of becoming disabled before you retire are about 1 in 4\textsuperscript{iv}.

Conditions which are indicators of disabling conditions:\textsuperscript{v}

1. Arthritis
2. Back pain
3. Heart disease
4. Cancer
5. Depression
6. Diabetes

Common Conditions That Cause Disability

A CDC study shows that 47.5 million US adults (21.8\%) reported a disability\textsuperscript{vi} in 2005, an increase of 3.4 million from 1999\textsuperscript{vii}.

Arthritis or rheumatism continues to be the most common cause of disability, while back or spine problems and heart trouble round out the top three causes.

Among adults reporting a disability, the most commonly identified limitations were difficulty climbing a flight of stairs (21.7 million, 10.0\%) and walking 3 city blocks (22.5 million, 10.3\%). That means that 1 in 10 adults have trouble walking a distance equal to walking from the parking lot to the back of a large store or through a mall.

Arthritis and other musculoskeletal problems: These are the most common causes of long-term disability. They make up as much as a third of all disability cases. Arthritis is probably the biggest single cause. Arthritis is the most common cause of disability in the United States, limiting the activities of nearly 21 million adults.

About 1 in 3 people say arthritis affects their ability to do their jobs in some way, according to the CDC.\textsuperscript{viii}

Other muscle and joint problems -- bad backs, bones that never mend, bad hips --

Autism and Other Developmental Disabilities: New Jersey shares one of the highest rates of autism Spectrum disorders in the Nation\textsuperscript{ix}. It is a national and statewide emergency. New Jersey has a
rate of autism estimated to be as high as one in 49, with one in 27 boys in the state receiving this diagnosis. Autism spectrum disorders (ASDs) are a group of developmental disabilities that often are diagnosed during early childhood and can cause significant social, communication, and behavioral challenges over a lifetime. People with ASDs have a different way of understanding and reacting to people and events in their world. These differences are caused by the way their brain processes information.

**Heart disease and stroke:** People may live with heart disease for years or decades. Studies estimate that heart disease is now the reason for 17% of all health costs in the U.S.

**Cancer:** While cancer itself can be disabling, treatments such as surgery, radiation, and chemotherapy are in themselves disabling factors.

Cancer is the fastest-growing cause for disability claims. In part, this reflects a rising rate of cancer. It could also result from more effective treatment. People are living much longer after a cancer diagnosis.

**Mental health problems:** You might think of disability as physical, but mental health problems may also be disabling for individuals. Depression, bipolar disorder, and other conditions can be as disabling as any physical illness.

Mental health problems are the most common reason that people file for Social Security disability claims.

**Diabetes:** As a cause of disability, diabetes, along with obesity, is linked to a number of serious health problems, like heart disease.

**Nervous system disorders:** These include a number of conditions that affect the brain or nerves, such as:

1. Multiple sclerosis (MS)
2. Parkinson's disease
3. Amyotrophic lateral sclerosis (ALS, also known as Lou Gehrig's disease)
4. Epilepsy
5. Alzheimer's disease
6. MS is a leading cause of disability in young adults. It most often appears between ages 20 and 40.

**Pregnancy:** You might not think about pregnancy as a disabling condition. Yet, if an emergency situation arises, a woman in late stage pregnancy will have significant access and functional needs that she would not experience at any other time.

Long-term disability caused by pregnancy is relatively rare.

**Accidents:** Many people assume accidents are the most likely cause of disability. But they are actually the cause of less than 10% of disability cases.
Disability and Seniors

Though we believe we are invincible, the lucky amongst us will live into our golden years. Each of these lucky men and women will need to be taken into consideration at the Emergency Preparedness Planning Table.

B. Madeleine Goldfarb
Noah’s Ark Institute

Emergency personnel help a resident of Little Ferry, New Jersey, onto a boat after rescuing her from floodwater after Superstorm Sandy 2012

Though disability is estimated to affect over 20% of the United States population, seniors, of age as a group have an estimated rate of disability closer to 50% by of those individuals over 85 population ages, the rate of increase with each passing age. Therefore it can be those communities with will need to develop their activities with disability a
Data were collected in June-September 2005 by U.S. Census Bureau using the Survey of Income and Program Participation (SIPP); CDC and the U.S. Census Bureau analyzed the most recent data and released their findings in May 2009.¹

New Jersey’s population has grown to 8.8 million, and within 20 years is expected to approach 9.4 million. Of huge significance is the amount of growth that is anticipated in the senior population, this growth is equivalent to more than 90 percent of the increase. Baby Boomers, born between 1946 and 1964, account for nearly 30 percent of New Jersey’s total population, and rising.
Emergency planning should be woven into all aspects of our lives, including where and how we live, learn, work and play.

Everyone—government, businesses, educators, health care institutions, communities and every single American—has a role in creating a more prepared nation.

With better health, seniors keep their independence. Support for older adults who choose to remain in their homes and communities and retain their independence ("aging in place") helps promote and maintain positive mental and emotional health.
Mental Disorders in America
Mental disorders are common in the United States and internationally. An estimated 26.2 percent of Americans ages 18 and older — about one in four adults — suffer from a diagnosable mental disorder in a given year.\textsuperscript{x} When applied to the 2004 U.S. Census residential population estimate for ages 18 and older, this figure translates to 57.7 million people.\textsuperscript{xii} Even though mental disorders are widespread in the population, the main burden of illness is concentrated in a much smaller proportion — about 6 percent, or 1 in 17 — who suffer from a serious mental illness. In addition, \textbf{mental disorders are the leading cause of disability in the U.S.}\textsuperscript{xiii} Many people suffer from more than one mental disorder at a given time. Nearly half (45 percent) of those with any mental disorder meet criteria for 2 or more disorders, with severity strongly related to comorbidity.\textsuperscript{xiv}

Since 2000, there has been a 22-percent increase in the number of adults using medications meant to treat psychological and behavioral disorders.

Those numbers precede separate, recently released data from the U.S. Centers for Disease Control and Prevention that show mental and behavioral diagnoses are also on the rise for children throughout the country.

Taken together, these studies show a population in New Jersey and across the United States receiving more mental and behavioral disorder diagnoses and taking more medications than ever before.

Among the findings:

- About 5 percent of New Jersey children have been diagnosed with anxiety disorder.
- 13 percent of New Jersey high school students said they had "seriously considered" committing suicide.
- 26 percent of women in the United States are on some type of mental health medication.

In the U.S., mental disorders are diagnosed based on the \textit{Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-V)}.\textsuperscript{xv}
Access And Functional Needs

FEMA Region II Stakeholders Meeting

Functional Needs Defined

A function-based definition, instead of the "special needs" label, reflects the capabilities of the individual, not the condition, label or medical diagnosis. Before, during, and after an incident, access and functional needs populations may have needs in one or more of the following functional areas:

- **Maintaining independence** - Individuals requiring support to be independent in daily activities may lose this support during an emergency or a disaster. This support may include supplies, durable medical equipment, and attendants or caregivers.

- **Communication** - Individuals who have limitations that interfere with the receipt of and response to information will need that information provided in methods they can understand and use. They may not be able to hear verbal announcements, see directional signs, or understand how to get assistance all because of hearing, vision, speech, cognitive, or intellectual limitations, and/or limited English proficiency.

- **Transportation** - Individuals who cannot drive or who do not have a vehicle may require transportation support for successful evacuation. This support may include accessible vehicles (e.g., lift-equipped or vehicles suitable for transporting individuals who use oxygen) or information about how and where to access mass transportation during an evacuation.

- **Supervision** - Before, during, and after an emergency individuals may lose the support of caregivers, family, or friends or may be unable to cope in a new environment (particularly if they have dementia, Alzheimer’s or psychiatric conditions such as schizophrenia or intense anxiety). If separated from their caregivers, young children may be unable to identify themselves; and when in danger, they may lack the cognitive ability to assess the situation and react appropriately.

- **Medical care** - Individuals who are not self-sufficient or who do not have adequate support from caregivers, family, or friends may need assistance with: managing unstable, terminal or contagious conditions that require observation and ongoing treatment; managing intravenous therapy, tube feeding, and vital signs; receiving dialysis, oxygen, and suction administration; managing wounds; and operating power dependent equipment to sustain life. These individuals require support of trained medical professionals.
Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are unaccompanied children; who are from diverse cultures; who have limited English proficiency; or who are non-English speaking; or who are transportation disadvantaged.

They have typically exhausted all other resources (family, neighbors, public transportation, etc.) and still need assistance for evacuation and/or sheltering before, during, and possibly after a disaster or emergency. These individuals typically reside in single homes or multiple family dwellings in the State and are not residents of hospitals, residential health care facilities, or any community-based residences or services that are already subject to emergency planning requirements.xvi

**Useful Definitions**

**Assistive Technology Device**—Any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

**Consumable Medical Supplies**—Disposable supplies used by the recipient or caregiver which are essential to adequately care for recipient’s needs. Such supplies enable the recipient to perform activities of daily living, or stabilize and monitor a health condition.

**Critical Needs**—Life-saving and/or life-sustaining items such as (but not limited to) water, food, first aid, prescriptions, infant formula, diapers, personal hygiene items, fuel for generators and transportation, power for medical equipment and other necessary health related equipment.

**Disaster Case Management**—Federally funded program administered by the Department of Homeland Security’s (DHS) Federal Emergency Management Agency (FEMA) in accordance with Section 426 of the Robert T. Stafford disaster Relief and Emergency Act (Stafford Act).

**Durable Medical Equipment (DME)**—Provides therapeutic benefits or enables an individual to perform certain tasks that he or she is unable to undertake otherwise due to certain medical conditions or illnesses; and can withstand repeated use; and is primarily and customarily used to serve a medical purpose; and generally is not useful to a person in the absence of an illness or injury; and is appropriate for use in the home, but may be transported to other locations to allow the individual to complete instrumental activities of daily living (IADL), which are more complex tasks required for independent living. Examples of this equipment include walkers, wheelchairs, power scooters, hospital beds, home oxygen equipment, diabetes self-testing equipment (and supplies), certain nebulizers, and their medications (non-disposable).

**Effective Communication**—Whatever is written or spoken must be as clear and understandable for people with disabilities as it is for people without disabilities. (ADA, 1990 as amended).
New Jersey Facts:

In 2011, 20.6% of adults in New Jersey reported having a disability, compared with 24.4% in the United States and Territories.

Disability Rates by Age in New Jersey\textsuperscript{xvii}

There are many different ways of looking at data. The following section, find general New Jersey disability statistics in chart and graph format. Information is provided to give varying presentations of available data.
Table 1: Number of people age 5+ with a disability in New Jersey ACS 2009

<table>
<thead>
<tr>
<th>Age</th>
<th>Any Disability</th>
<th>Daily Activity</th>
<th>Self Care</th>
<th>No Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Persons</td>
<td>920,000</td>
<td>440,000</td>
<td>228,000</td>
<td>7,235,000</td>
</tr>
</tbody>
</table>

Emergency planners and managers must include plans for close to 1 million residents with disabilities in the state in New Jersey. As with Census and other resource data, it is generally recognized that the percentages are under-representative of the true number of residents in any data set. These data sets are considered the minimum number of residents to be included in planning efforts.

Table 2: Age Distribution in New Jersey

Over 50% of all individuals with daily activity limitations are over the age of 65. Those communities in New Jersey with higher median age populations will by necessity have a larger population of individuals with disabilities than those communities with younger population demographics.
5 Maps

Map Introduction:

Planning For Emergencies Including The Disability Community: Spatial Mapping Project concentrated on four New Jersey counties. The four contiguous counties are Bergen, Essex, Hudson and Passaic, which are located in the Northeastern part of the state. These four counties represent over 32% of the State’s total population. All four counties also represent vast diversity in their population base.

Bergen County is the most populous county of the state of New Jersey. As of the 2010 United States Census, its population was 905,116.

Essex County is a county located in the northeastern part of the New Jersey. As of the 2010 United States Census, the population was 783,969 a decrease of 1.2% (9,664 fewer
residents) from the 793,633 enumerated in the 2000 Census making it the third-most populous county in the state and the only county in the study to see a decline in population during the decade.

**Hudson County** has the smallest land area of any county in New Jersey and one of the highest population densities not only in New Jersey, but, also in the United States. As of the 2010 United States Census, the county’s population was 634,266.

**Passaic County** is a county located in the New Jersey. As of the 2010 United States Census, the county’s population was 501,226.

The first two maps are of the entire state to put disability into a statewide context.

**New Jersey State Maps:** Map 1 looks at the percentage of the total population density with a disability in for categories: Low (Green), Medium (Yellow), High (Red), and Very High (Purple). Map 2 looks at the population distribution of individuals with a disability. More densely populated areas have more individuals with a disability in residence.

When considering disability in the state it is important to notice the differences in the maps. When considering percentage of total population by county notice the southern part of the state is predominantly in the Purple (Very High) or Red (High) density category shading and the Central and Northern parts of the State are predominantly shaded in Low (Green) and Medium (Yellow) shading areas.

This tells us that when comparing the regions, those regions with lower total number of residents and thereby lower population density have higher percentages of those residents living in their communities with a disability. For example: In New Jersey State Map 1, Cumberland county has a disability population of 21,208 individuals with a total percentage rate of 14.6%. This percentage represents the highest total percentage rate in the state. Though the percentage is high, giving the area the purple shading, the population density is one of the lowest in the State. By comparison the same county has a Green shading on the Total Population Map due to the low total population in the county compare with other counties.

In an emergency preparedness context, when developing programs and activities in emergency preparedness in all communities regardless of density of population, a significant amount of resources should be devoted to planning with the disability community.
New Jersey
Disabled Persons as % of Total Population

Map 1: New Jersey State Population %
Map 2: New Jersey State Population Distribution
In the following two maps find the population over 60 years of age in New Jersey. Here again there are two maps. Map 3 is looking at the % of Total Population and Map 4 the Population Distribution of New Jersey residents over 60 years of age.

According to the 2010 U.S. Census data, New Jersey has 1.6 million individuals age 60 and older – an increase of 15 percent since 2000.

According to the 2010 Census, New Jersey had 8,791,894 residents, or 4.5 percent more residents than a decade ago. Among them, 51.3 percent were women, 13.5 percent were senior citizens, 17.7 percent were Hispanics, and 8.5 percent were Asians. The proportions of elderly (from 13.2%), persons increased.

New Jersey’s population has become older and more diverse, and this trend is projected to continue into the next two decades. Consequently, New Jersey’s population is expected to include more seniors in 2020 and 2030.

**Aging and the Boomers**

In 2010, the median age for New Jerseyans rose to 39.0 years of age, up by 2.3 years from 36.7 in 2000. Some of the credit goes to the baby boom generation which remained the largest age category of New Jersey’s population. The oldest baby boomers began to reach age 60 in 2006 and these boomers started turning 65 in 2011. The first baby boomers begin turning 66 years old in 2013 and become eligible for full Social Security benefits. Another factor rising the overall age in New Jersey is that there were fewer births between 2000 and 2010 than in the previous decade. While the median age in 2000 was above forty years in only two counties the latest Census showed that the median age was above age 40 in 11 counties with the oldest being Cape May at 47.1; Hunterdon at 43.5 and Ocean at 42.6. The 2010 median age was lowest in Hudson County at 34.2 years.

**Senior Influence**

The 2010 Census showed that elderly or senior citizens (65 years and older) made up approximately 13.5 percent of New Jersey’s total population. That was up slightly from 13.2 percent in 2000. The largest increase in the number of senior residents from 2000 to 2010 occurred in Morris County where the number of seniors increased by 13,625. Numerically, Bergen and Ocean counties continue to have the largest numbers of senior citizens in the state.
Map 3: Population % over 60 in New Jersey
Map 4: Distribution of Population over 60 in New Jersey

This data is derived from the U.S. Census American Community Survey 2011 5 Year Estimates New Jersey Created by: B. Madaline Godfarb

Legend

- **County**
- **State**

**Distribution of Population 60+ NJ**
- 0.6 - 1.0%
- 1.1 - 4.0%
- 4.1 - 7.1
- 7.2 - 11.9

Source: 2011 5 Year ACS
Four County Detailed Distributions

Picture 1: George Washington Bridge connecting Fort Lee to NYC

Picture 2: Newark Military Park

Picture 3: Passaic County Great Falls

Picture 4: Jersey City Skyline
Four County Breakdown

In breaking down the information further by county subdivision it is possible to direct resource allocation, training, community outreach and joint planning activities which are targeted and individualized based upon community makeup.

In the purple “hotspots” there is a clear call to engage the disability community. Breaking down the information by community percentage gives a better indicator of need in the community than looking at population distribution as some lesser densely populated communities may have a higher percentage of total population which may be more adversely impacted than the non disabled members of the community in a disaster. The smaller communities also may have fewer rand or shared resources to work with and must be extremely judicious in the asset allocation, making planning inclusively vital.

The purple “hotspots” represent communities which should be immediately looked into for planning, yet this does not mean that the communities which are represented in the green or yellow shading do not have the same necessity to engage in inclusive planning processes. Of course, all communities should take inclusive planning very seriously. The maps are merely another tool to understand the dynamic nature of every community.

The greater the understanding of the unique nature of the communities where we live and work will help all of us plan and live safer more prepared lives.

All four counties have rich and dense populations with many factors that will impact how to approach community preparedness. These factors include disability as only one factor which will impact the way a community prepares, mitigates and ultimately recovers from a disaster. Understanding the multi factorial natural of the community is necessary to implement inclusive planning policies and practices.

In the four county study catchment areas, each one has super hotspots within their borders. The county with the largest number of super hot spots was Bergen County with a total of 18 super hotspots in overall disability. The community with the highest disability percentage overall in the study charted was East Newark, Hudson County.

Look to the purple “hotspots” only as a starting point and indicator of high need of consideration in planning.

        Every community needs to plan inclusively with all constituencies.
Bergen County “hotspots” for greatest potential impact include Hackensack, Paramus, Old Tappan, and Closter. Hackensack is a natural place to start inclusive emergency preparedness meetings. This data suggest that due to the high population and senior density and cultural diversity Hackensack would represent an opportunity in inclusive planning.
Essex County

Map 6: Essex County Disabled

Table 4: Essex County Disabled with Senior%

Essex County Total disability “hotspots” include South Orange, Bellville, East Orange and Caldwell. This data suggest that due to the high population and senior density and cultural diversity the greater Newark area would represent an opportunity in inclusive planning.
Hudson County

Map 7: Hudson County Disability

<table>
<thead>
<tr>
<th>City</th>
<th>Total Disability</th>
<th>Senior %</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>West New York</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union City</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Bergen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kearney</td>
<td></td>
<td></td>
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<tr>
<td>Jersey City</td>
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<tr>
<td>Hoboken</td>
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<tr>
<td>Bayonne</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 5: Hudson County Disability with Senior%

Hudson County Total disability “hotspots” include Harrison, West New York, Guttenberg and Secaucus. This data suggest that due to the high population and senior density and cultural diversity the greater Jersey City area would represent an opportunity in inclusive planning.
Passaic County

Map 8: Passaic County Disability

Table 6: Passaic County Disability with Senior%

Passaic County Total disability “hotspots” include Passaic, Paterson, Hawthorn and Totowa. This data suggest that due to the high population and senior density and cultural diversity the greater Paterson area would represent an opportunity in inclusive planning.
Map 9: Bergen County Mobility Disabilities

The disability categories for individuals with mobility disability in Bergen County should begin in the “hotspot” areas of Hackensack, Tenafly, Ridgefield, Bergenfield, Paramus, Hillsdale, Rivervale, Lodi and New Milford. Percentages are of total population. When looking at the category of disability as a whole the percentage of mobility + independence rises to 48.09% of total disability. Bergen County represents the largest number of communities in the Purple “Hotspot” categories.

Table 7: Disability % Bergen County

<table>
<thead>
<tr>
<th>% Of Total Disability Bergen County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility/ Self Care/ Independence</td>
</tr>
<tr>
<td>Hearing</td>
</tr>
<tr>
<td>Vision</td>
</tr>
<tr>
<td>Cognitive</td>
</tr>
</tbody>
</table>
Map 10: Essex Mobility

Digging deeper into the disability categories, inclusive planning around transportation and evacuation for individuals with mobility disability in Essex County should begin in the “hotspot” areas of Newark, East Orange, Orange, West Caldwell, Cedar Grove and Belleville. Percentages are of total population. When looking at the category of disability as a whole the percentage of mobility + independence rises to 64.2% of total disability.
Hudson County has a “hotspot” area of Jersey City. Given the population density and geographic features presented in the Jersey City area transportation and sheltering in place for individuals with mobility disability should be an emergent topic for inclusive emergency planners. When looking at the category of disability as a whole the percentage of mobility + independence rises to 66.3% of total disability. Passaic County charts the highest rate of Mobility/Independence difficulty in the all areas.

**Table 9: Disability % Hudson County**

<table>
<thead>
<tr>
<th>% of Disabilities in Hudson County</th>
</tr>
</thead>
<tbody>
<tr>
<td>66.3</td>
</tr>
</tbody>
</table>

**Legend:**
- Mobility/ Self Care/ Independence
- Hearing
- Vision
- Cognitive
Map 13: Passaic County Mobility Disability

Inclusive planning around transportation and evacuation for individuals with mobility disability Passaic County should begin in the “hotspot” areas in purple. These areas represent the highest percentages found in all counties data ascertainment and represent over 9% of the population, in many areas over 15% of the population. The purple areas are found in the county subdivisions of West Paterson, Prospect Park, Haledon, Hawthorn, and Passaic. When looking at the category of disability as a whole the percentage of mobility + independence rises to 70.9% of total disability. Passaic County charts the highest rate of Mobility/Independence difficulty in the catchment areas.

Table 10: Disability % Passaic County

<table>
<thead>
<tr>
<th>% Of Total Disability Passaic County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility/ Self Care/ Independence</td>
</tr>
<tr>
<td>Hearing</td>
</tr>
<tr>
<td>Vision</td>
</tr>
</tbody>
</table>

19.2  15.3  17.9  70.9

This data is derived from the U.S. Census American Community Survey for the period of 2008 - 2010.
Created by: B. Madeline Goldberg
FEMA NJ/ES Mapping 2013
6 Best Practices & Recommendations

Utilize a “Whole Community” Approach to Integrate Individuals with Disabilities and others with Access and Functional Needs AFN

When engaging individuals with Access and Functional Needs AFN and those with disabilities it is important to incorporate AFN-specific materials (or links to them) into the overall plan. This type of Universal Design helps to diminish the idea that individuals with a disability or an AFN are ‘special’ or separate.
Remember the metaphor ‘when planning for the whole community... Individuals with disabilities or an AFN should be baked into the batter of the plan...not layered on top as an afterthought.’

This type of Universal Practice supports the hard work of individuals with disabilities and advocates to distance the terminology away from a ‘special needs’ viewpoint and moves toward an inclusive model: this is constant with State and Federal disability and Emergency Preparedness legislation.

Some Groups To Think About

When planning for individuals with Disabilities & Access and Functional Needs

- Cognitive Impairments
- Deaf or Hard of Hearing
- Life Support Systems
- Mental Health and Substance Abuse Problems
  - Mobility Impairments
    - Seniors
  - Service Animals and Pets
  - Visual Impairments
  - Parents or Caregivers
    - Children
Accessible Communication Standards

To connect with individuals with disabilities and other people with AFN in emergency preparedness initiatives, campaigns and emergency planning it is critical that resources are presented in formats that are accessible to them, regardless of their disability. Though one term, “disability” is used, remember that this term is used to describe a vastly heterogeneous population. This requires providing materials and resources in many alternative formats to fit the needs in your community. In tackling this challenge it is helpful to focus on people’s abilities, and less on their disabilities.

The Access Board is an independent Federal agency that promotes equality for people with disabilities through leadership in accessible design and the development of accessibility guidelines and standards. Created in 1973 to ensure access to federally funded facilities, the Board is now a leading source of information on accessible design.

The Access Board develops and maintains design criteria for the built environment, transit vehicles, telecommunications equipment, medical diagnostic equipment, and information technology. It also provides technical assistance and training on these requirements and on accessible design and continues to enforce accessibility standards that cover federally funded facilities.

The Board is structured to function as a coordinating body among Federal agencies and to directly represent the public, particularly people with disabilities. Twelve of its members are representatives from most of the federal departments. Thirteen others are members of the public appointed by the President, a majority of whom must have a disability. http://www.access-board.gov/the-board

The Access Board provides guidance on many subject of interest to the disability community as well as important guidance for emergency managers and planners. An example of this guidance is: http://www.access-board.gov/news/946-board-releases-proposed-guidelines-for-emergency-transportable-housing

Above is a link to Guidelines for Emergency Transportable Housing.
Accessibility Considerations Quick Tips:

A Whole Community Approach to Accessibility
The way to ensure you are providing equal access to all community members is to develop a “whole community” approach to the work you do.

I. Think About Potential Barriers
Asking targeted questions is a tool to ensuring equal access to the entire community. A key question to ask is, "are there any environmental barriers that could keep someone from having full access?"

i. Accommodation Tips:
1. Consider access for people with physical disabilities who use assistive equipment such as wheelchairs, scooters, crutches, or walkers. Can everyone get into the building? If not, consider changing location to an accessible building.
2. Consider parking and transportation needs.
3. Consider other environmental issues such as noise level and crowding for individuals with communication and sensory (visual, hearing, speech) disabilities.
4. Consider seating and wait times for people who are elderly or frail or who have other conditions that limit their mobility or stamina.
5. Consider accommodating people who use specialized equipment such as oxygen tanks or dialysis equipment, or who have a service animal.

II. Consider All Forms of Information

A. Printed materials-booklets, handouts, forms, and other items;

i. Accommodation Tips:
1. Consider Large Print, Braille, audio CD or other electronic formats
2. Consider language translations reflecting community diversity
3. Always use plain language

B. Signs at public events and other facilities

i. Accommodation Tips:
1. Consider Large Printing with high contrast colors
2. Consider Language translations reflecting community diversity
3. Consider Braille

C. Audio or spoken information, including:

a. In-person and telephone communication

i. Accommodation Tips:
1. Sign Language Interpreters
2. Language translations
3. CART- Communication Accessibility Real-Time
4. Assistive Listening Devices

b. Radio broadcasts
i. **Accommodation Tips:**
   1. Written transcript availability
   2. Web Connected Closed Captioning
   3. Language translations reflecting community diversity

c. **Public address system announcements**
i. **Accommodation Tips:**
   1. Captioning Systems, May be web enabled smart phone accessible
   2. High contrast signage
   3. Language translations reflecting community diversity

d. **Oral presentations at public meetings**
i. **Accommodation Tips:**
   1. Readers: Provide personnel who can serve as readers. For example, if visual aids will be used in a presentation at a public meeting, someone could sit with a blind or low vision participant and read or describe the information on the visuals.
   2. Printed transcripts or talking points

e. **Accessible online media:**
i. **Accommodation Tip:**
   1. Ensure that electronic information will be usable by a person without sight by complying with accessibility standards

**III. Notice to the community**

**Below is a sample form on how to inform the community of accommodation availability:**

Reasonable accommodations will be provided to attendees and stakeholders who have communication access needs, including limited English proficiency. We invite any person with an access or functional need or who would like to request an accommodation or obtain materials in an alternative format, to please indicate your need in the registration/RVSP process at least 2 weeks before the meeting (specify a date). Last minute request will be accepted, but may be impossible to fulfill.

**Accommodations may include:**

- Sign Language Interpreter
- CART – Real-time captioning
- Braille
- Large-Print
- Other needs: Please indicate ______________

For example, audio recordings can be helpful to many who have limitations in seeing, learning and reading. For print materials consider Braille and larger print/font versions to expand the potential audience that can use them. Materials should be available in a variety of accessible options. This may include audio recordings, pictures/graphics, accessible websites, and developing materials and making them available in multiple languages.
FEMA’s www.Ready.gov website puts forward excellent emergency preparedness materials that can be regionalized and used for reaching people with disabilities and other AFN. This includes brochures in multiple languages, captioned and signed videos that can be embedded in campaign and planning materials. Materials can be found at http://www.ready.gov/individuals-access-functional-needs

www.Disaboom.com is a popular website featuring information and resources for people with disabilities. It is an excellent source for the latest assistive technology as it pertains to identifying mediums through which to disseminate messages.

Use redundancy for distribution of information

Interrelated with the model of Universally Designed emergency preparedness initiatives and emergency planning are materials which must be offered in accessible formats. This added objective of redundancy by providing information not only in multiple formats but also in redundant methods ensures greater opportunity for the whole community to equally receive and understand the information you are sending out. A range of options makes it possible for people to choose the method that best meets their communication preferences and needs.

Inventive methods, beyond the once limited use of text telephones (TTY) or amplified handsets consist of wireless devices, videophones/video cams, computers, and messaging technologies including email, instant messaging (IM) and short message service (SMS). This assortment of choices makes it practicable for each user to opt for the equipment most accessible to their communication preferences and needs.

Notably, providing materials in multiple formats allows for vital, life saving and sustaining messages to be reinforced.

The use of photos in publications of all kinds to illustrate and reinforce key concepts is an excellent way to convey information to those who may have limited language proficiency and or communication skills. By implementing policies which address the use of multiple media commonly used by people with disabilities and others with AFN increases the likelihood the message is received, understood and then acted upon.
How am I messaging to the Whole Community?

Examples to achieve communication redundancy in conveying emergency preparedness messaging as well as situational awareness in times of emergency may include:

- Announce the massage
- E-mail the massage
- Text the massage
- Describe the massage
- Caption the massage
- Picture the massage
- Relay the massage
- Interpret the massage (language & sign)
- Provide captioning and other methods of visual presentation of the massage (for example photos, graphics, pictographs, Picture Exchange)
- Video describe the message
- Ensure that news outlets are captioning the message
- Repeat the massage frequently
- Monitor response to the message
- Be flexible to accommodate the community response to the message

Section 508 of the of the US Rehabilitation Act

The Internet is a key tool for most emergency preparedness operations and emergency planning initiatives. Accessible websites are a great way to distribute information to people with disabilities or other AFN, but it is critical that websites and their associated content comply with section 508 of the of the US Rehabilitation Act as well as with guidelines published by the World Wide Web Consortium, an international community where member organizations and the public work together to develop web standards.
Section 508 requires federal agencies to make their electronic information accessible to people with disabilities. The World Wide Web Consortium’s Web Accessibility Initiative develops guidelines that serve as the international standard for Web accessibility.

New technologies including voice input, voice output, screen readers, screen magnifiers, mouth sticks and pointers are making web-based content available to a growing number of people with disabilities, but only if the websites are designed to properly work with these technologies.

The following are key features of accessible websites that your web designer should consider:

- Explain all non-text elements like images, Flash elements, video and audio files, with a text equivalent in the form of or ‘alt tag/text’ (alternative text). This allows screen readers and other assistive software to interact with this element and describe it to the person with a disability or other AFN.
- When Internet sites steam video, all spoken information should be captioned and/or signed.
- Choose colors carefully. Not everyone perceives colors the same way. A good approach is to choose font colors that would be easily readable even if every other color were removed from the pages.
- Include links for more detailed information that specifically focuses on AFN needs.
- Consider using an American Sign Language companion video for complex text information on websites.
- If your website includes forms for registration, ordering, or anything similar, be sure that each field can be navigated by ways other than clicking with a mouse. Forms should include text labels so a user can access all areas, including drop-down menus, using a keyboard and nothing else.
- When recommending a website for more information give specifics as to where to look and what to look for — for example: ‘www.access-board.gov The Access Board — See section on emergency housing.’ Simply referring people to a large website such as http://www.fema.gov is not helpful and often frustrates people.
- Use one of the free online tools to access you website’s compliance with these and other accessibility guidelines. The Web Accessibility Initiative offers a good list of free resources: http://www.w3.org/WAI/RC/tools/complete

Section 508 of the Rehabilitation Act requires access to electronic and information technology procured by Federal agencies. http://www.section508.gov

Web Accessibility Initiative (WAI) website provides strategies, guidelines and resources to make the Web accessible to people with disabilities. http://www.w3.org/WAI/
Taking a W+H approach to problem solving:

The following are questions which will direct your understanding of the disability community. You can print this page separately from the booklet as a handy guide as you work toward greater inclusive practices in your community.

Questions to begin asking with the community in mind:

1. **Who** lives in my community?
2. **What** are the unique needs of my community?
3. **When** am I going to start engaging the unique members of my community?
4. How do I know **where** everyone resides?
5. **Where** are the resources co-located to serve my unique community makeup?
6. **How** many seniors are in my catchment area?
7. **How** have I engaged alternative transport for my community so emergency resources are not stretched too thinly during an actual event?
8. If my residents have mobility disability, **how** have we engaged together around planning?
9. **Who** in my community with a targeted disability has been CERT trained?
10. **Who** in my community with a targeted disability can provide disability awareness training to my CERT and Emergency Responder teams?
11. **Where** are my local community events so I can attend and provide resources around inclusive emergency planning and preparedness?
12. **How** do I budget inclusive emergency planning into the yearly budget as a line item and not as an ad hoc ad on?
13. **Who** represents of my unique community?
14. **Who** are the internal champions to engage my unique community?
15. **What** are the resources I need to full prepare my unique community?
16. **How** am I messaging to the ‘Whole Community’?
17. **How** do I know my messaging is being received by all?
How you say what you say has impact: Language Matters

The language you use in emergency preparedness outreach efforts, emergency plans and during emergency operations matter. When engaging people with disabilities and other AFN there are significant considerations in the language used.

**Simple Speech**

Use easy to understand messages to reach more people. Enhance the messaging by the use of easy-to-understand visuals in addition to, or instead of, text. Information that is only in print and/or only in one language potentially leaves out vast portions of your community.

**Do's and Don'ts of Interacting with People with Disabilities**

- **Proper Terminology**
  - Respect diversity, engage in proper etiquette
- **Perceptions and Stereotypes**
  - You cannot fully appreciate what is it like to have a disability unless you have a disability
- **Hands On Simulation**
  - Use community members representative of the community you serve
  - Do not use actors pretending to have a disability
- **Open Communication**
  - Forums and focus groups, town halls
- **Personal Stories**
  - Engage the community and listen
- **Acceptance and Awareness of Diversity**
  - Puts the person- NOT The condition – first. It’s all about dignity and respect

Disability is just one of the many characteristics of being Human. It’s just another attribute-like gender and ethnicity. By using words with dignity, we encourage equality for everyone.

- USE: Person who has CP, MD, MS, ETC.
AVOID: Victim of, or afflicted with, Cp, md, ms, etc.

USE: He/she uses a wheelchair, or is a wheelchair rider

AVOID: Physically disabled, restricted, or Confined to a wheelchair, or Wheelchair bound.

USE: Deaf, does not voice themselves, Or non-vocal

AVOID: Deaf mute, or deaf and dumb

USE: Mental health issues

AVOID: Crazy, insane, lunatic, mental patient, or psychotic


AVOID: Retard, slow, stupid, or lazy

USE: person with a disability

AVOID: Cripple, handicapped, or invalid

Offer to shake hands. Individuals with limited hand use or who wear an artificial limb can usually shake hands. Shaking hands with the left hand is an acceptable greeting. If you offer assistance, wait until the offer is accepted, then listen to or ask for instructions.

Treat adults as adults. Address people who have disabilities by their first names only when extending the same familiarity to all others.

Specify to whom messages are addressed

Messages intended for people with disabilities and others with AFN should specifically say so. Often emergency protective measures are tailored for segments of the community. A good example of this is shelter-in-place recommendations during hurricanes or hazardous materials incidents.

Start the message with language that clearly defines to whom the message is directed. Follow the message with specific instructions.

For example, “If you have a respiratory condition, include any medical assistive equipment on the emergency health information card you carry with you.” This type of effective preparedness language also keeps the message from stigmatizing certain illnesses or diseases.
Maximizing Relationships in Personal and Community Preparedness

Many emergency preparedness efforts focus on the value of having an emergency preparedness kit, but investing in relationships with our friends, neighbors, and colleagues is a valuable approach to preparedness. This approach will increase their overall competency and have a more resilient community that includes people with disabilities and other AFN. It is very important to understand that individuals with disabilities and other AFN may choose to shelter in place instead of heading an evacuation warning. They may stay in place until it is too late to safely evacuate. We need to include the language of “Stay bags” with the language of “Go bags”, to ensure that a prepared individual has both resources identified in their preparedness efforts.

Engaging Citizen Corps is another way to foster grassroots engagement. Citizen Corps cover 70% of our nation and is made up of our neighbors and friends in our community. The mission of Citizen Corps is to harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds. Citizen Corps is coordinated at the local level by Citizen Corps Councils or similar coordinating bodies such as the New Jersey Office on Emergency Management NJOEM.

Create a partnership where the disability community is engaged and trained as Citizen Emergency Response Team CERT Team members and/or create a relationship where disability experts in the community provide disability awareness training to the CERT Teams. This way, disability community leaders are brought together with planners to plan for emergencies before they happen. Citizen Corps members contribute to the development of community emergency plans, conduct outreach and education to the local community, offer training and participation exercises, encourage volunteerism, and in time of disaster, are called upon to take an integral part in the response efforts.


Manage Social Media and Mobile Apps to Engage and Inform Community Partners

Social media is a hot topic with public information officers, emergency managers and others interested in leveraging new communication strategies for emergency preparedness efforts.

While social media is an excellent tool to leverage as part of emergency preparedness campaigns and can potentially be used within emergency and communication plans, using it effectively requires time and commitment, trust in the people carrying out the social media plan on a day-to-day basis and a genuine desire to reach as many people as possible by engaging in two-way communication.

Mobile applications are increasingly being used as a tool in emergency management, as Smart phones more and more are the go to in the consumer phone market. To address this trend in consumer phone choice, federal, state, city and county emergency managers are beginning to create and implement mobile applications for the Smart phones that millions of Americans, including Americans with disabilities are now carrying with them.

Find the tools that will help you as you engage your community. Understanding how to use all methods of communication is essential when reaching out to the community. To better understand how to use social media go to Media Examiner. This site was established to help organizations realize how to best utilize social media tools like Twitter, Facebook, Google+ and LinkedIn to connect with their audience. [http://www.socialmediaexaminer.com/9-ways-to-transform-your-website-into-a-social-media-hub/](http://www.socialmediaexaminer.com/9-ways-to-transform-your-website-into-a-social-media-hub/)

The Red Cross created free, downloadable mobile apps: [http://www.redcross.org/prepare/mobile-apps](http://www.redcross.org/prepare/mobile-apps)

The Federal Emergency Management Agency FEMA has a free, downloadable mobile app that can be used in with all emergency preparedness campaigns: [http://www.fema.gov/smartphone-app](http://www.fema.gov/smartphone-app)
7 Conclusions

Starting Points For Emergency Planners
Understanding where the disability “hotspots” are located in the community is vital to emergency planners as they undertake inclusive emergency planning in their respective communities.

With the information provided by the maps, emergency planners can begin to ask the questions necessary to include the whole community and implement policies and processes which are universally designed.

There is incredible diversity in the communities in the study’s catchment area. This is evident through the mapping project. All communities would be well served by looking at their communities through varying lenses. As it stands now there may be a more myopic view of what the community needs. The mapping project has brought a light onto the diversity of needed options for any community and should be viewed as a starting point. That point can be used to start off the community conversation of inclusive planning.

Mobility is by and large the single most disabling factor in all data sets. This tells is that we must begin the conversation around mobility and transportation. In an evacuation scenario how will residents with significant mobility disabilities evacuate? How will the emergency planners avoid an overrun on emergency systems such as 911 and ambulance companies? Engaging the community and Para Transit in the planning process will be a key factor in the ongoing efforts to update emergency plans.

The aging of New Jersey and its impact on disability rates cannot be overstated. As we age and in those communities with higher median age there is more disability. The rate at which New Jersey is aging is a trend which emergency planner should be aware of and planning for.

New Jersey also has one of the highest rates of autism spectrum disorders in the nation. This will also impact the planning efforts of emergency planers and boots on the ground in an actual event.

New Jersey is the most densely populated State in the nation and the catchment counties are all dense in their population as well as highly diverse culturally. These rich communities represent not only a real challenge for emergency planners, but also rich opportunities to plan inclusively.
Recognize Community Capabilities and Needs

Appreciating the actual capabilities and needs of a community is essential to supporting and enabling local actions. For example, in response to past disasters, meals ready-to-eat (MREs) have been used to feed survivors because these resources were readily available. However, for a large portion of the population, such as children, seniors, or individuals with dietary or health considerations, MREs are not a suitable food source for various reasons, as MREs tend to contain high levels of fat and sodium and low levels of fiber.

A community’s needs should be defined on the basis of what the community requires without being limited to what traditional emergency management capabilities can address. By engaging in open discussions, emergency management practitioners can begin to identify the actual needs of the community and the collective capabilities (private, public, and civic) that exist to address them, as the role of government and private and nonprofit sector organizations may vary for each community. The community should also be encouraged to define what it believes its needs and capabilities are in order to fully participate in planning and actions.

Based on a shared understanding of actual needs, the community can then collectively plan to find ways to address those needs.

Recently, Los Angeles and New York City respectively were sued for not engaging the disability community in emergency planning and response efforts. Rulings on the Los Angeles case confirms that
emergency services must be provided to all persons seeking them and that providing “special” accommodations for persons with disabilities is not acceptable. Also, persons with disabilities must be at the planning table.

In May of 2013, the U.S. Attorney for the Southern District of New York, on behalf of the United States Department of Justice (DOJ), filed a statement of interest that supports Plaintiffs’ position in the case. The DOJ’s statement of interest held that: “Unfortunately, despite the obvious importance of accounting for the unique needs of individuals with disabilities in planning for emergencies, New York City’s emergency plans, like many state and local emergency plans throughout the nation, fail to do so...” To read the full statement, follow the link below:


Functional Needs Support Services (FNSS) guidance to integrate disability services into emergency response to ensure that persons with disabilities maintain their independence during evacuations, sheltering, or other emergency response and recovery. A summary from:

FEMA: Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters November 2010:

- **Know your constituents** – analyze population information to identify specific support needs
- **Develop a planning and training process** – identify emergency roles and responsibilities and ensure that responsible staff is training to support individuals with functional needs
- **Engage disability representatives** – Include a diverse groups, including functional needs representatives in the planning process
- **Conduct facilities assessments** – identify barriers to accessibility and ensure that they are mitigated
- **Develop resource inventories** – identify and allocate supportive resources and assets
- **Adopt an emergency communications plan** - identify the system, process and message to convey information during an emergency

The full document can be found at: http://www.fema.gov/pdf/about/odic/fnss_guidance.pdf

Consideration of individuals with disabilities must not be conducted as a separate or independent planning process. Planning should be incorporated into all emergency preparedness efforts; creating an integrated response will include the *whole community* and achieve the goal of preserving financial, labor and human capital.

Inclusive planning practices for the provision of services to persons with disabilities during an emergency will lead to maintained quality of life and independence, enhanced safety, and reduced liability – and at the end of the day...it is the law.
8 Resources

Emergency Preparedness for Individuals with Disabilities and or Access and Functional Needs

People with disabilities and access and functional needs often need additional time and assistance to prepare for a disaster.

Below are additional resources and contacts in the area as well as nationally recognized organizations and Federal Partners to help emergency planners and first responders plan with their communities.

Appendix

State, Federal and National Partners:

3. www.ADA.gov
4. www.va.gov
6. For information about hazards which impact NJ
7. Information on creating an emergency preparedness kit and plan
   http://www.state.nj.us/njoem/plan/special-needs.html
8. Federal Emergency Management Agency Region 2 -
   http://www.fema.gov/about/regions/regionii/index.shtm
11. New Jersey Association of Homes and Services for the Aging - http://www.njahsa.org/
12. NJ Department of Children and Families - http://www.state.nj.us/dcf/
14. NJ Department of Community Affairs [http://www.state.nj.us/dca/](http://www.state.nj.us/dca/)
15. NJ Department of Education - [http://www.state.nj.us/education/specialed/](http://www.state.nj.us/education/specialed/)
17. New Jersey Department of Human Services [http://www.state.nj.us/humanservices/index.html](http://www.state.nj.us/humanservices/index.html)
19. New Jersey Office of Emergency Management (NJOEM) [http://www.state.nj.us/njoem/index.html](http://www.state.nj.us/njoem/index.html)
20. NJ Primary Care Association - [http://www.njpca.org/](http://www.njpca.org/)
23. Noah’s Ark Institute - [http://www.noahsarkinstitute.org](http://www.noahsarkinstitute.org)
25. **Be Ready to Go: Evacuation Transportation Planning Tips for People with Access and Functional Needs** is a resource for personal preparedness and planning materials. This resource can be found here: [http://rems.ed.gov/docs/Calema_TransportationEvacuationPlanningToolkit.pdf](http://rems.ed.gov/docs/Calema_TransportationEvacuationPlanningToolkit.pdf)
27. Guidance on the types of Emergency Health Information individuals with disabilities and AFN should have with them at all times. This is an excellent resource that can be used in designing a community initiative or emergency preparedness program. [http://www.jik.com/EmergencyBook%20finalw_cover.pdf](http://www.jik.com/EmergencyBook%20finalw_cover.pdf)

Information on this booklet or to schedule a presentation contact:

Noah’s Ark Institute [http://www.noahsarkinstitute.org](http://www.noahsarkinstitute.org) (973)619-0963

BrightMinds Institute **Phone:** (201) 222-2483
9 Acknowledgments

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This project has been a collaboration between Noah’s Ark Institute and BrightMinds Institute for Autism.

Copies of this document can be downloaded at www.noahsarkinstitute.org
Endnotes

i http://www.census.gov/

ii http://www.cdc.gov/brfss/about/

iii A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action

iv U.S. Social Security Administration, Fact Sheet February 7, 2013

v http://www.disabilitycanhappen.org/chances_disability/causes.asp


viii http://www.cdc.gov/arthritis/


x http://www.cdc.gov/features/dsadultdisabilitycauses/index.html#note


xvi http://www.state.nj.us/njoem/plan/special-needs.html


xviii http://faculty.som.yale.edu/ravidhar/documents/modelingtheunderreportingbiasinpanelsurveydata_000.pdf

xix http://www.fema.gov/library/viewRecord.do?id=4941