

Orlovista

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Introduction

Information included in this Community Report was gathered in the following ways:

- Formal and informal interviews with Organization Leads located in or serving the community
- Community Forums at which:
 - gaps and proposed solutions were discussed, and
 - Assets, hot spots, and proposed resilience hubs were mapped
- Mission Critical Function Surveys designed to determine if the community is tending toward resilience or vulnerability.
 - Respondents rated twenty six societal functions on the following scale:
 - **Most Vulnerable-Collapse-Destroyed:1**
 - **Extremely Vulnerable-Major Damage:2**
 - **Elevated Vulnerability-Minor Damage:3**
 - **Not Affected:4**
 - **Resilient:5**
 - **Highly Resilient:6**
 - **Resilient and Sustainable:7**
- Housing and Emergency Services Surveys asked residents first to describe damage to their home as a result of Hurricane Irma, how long it took to repair the damage, and how they funded or attempted to fund the repairs. Secondly, this survey asked where people received information and what preparedness information they knew.
- Skills and Equipment Inventory Surveys: Lists of people who have volunteered either their services or their property to be used in the community to assist their neighbors in the event of a disaster



Community Description

Location

Orlovista is an unincorporated place in the Orlando Metropolitan Area in Orange County, Florida. It includes Zip Codes [32808](#), [32811](#), [32818](#), and [32835](#). It has a population of 5,814 in 2,141 households. It includes Census Tracts **014701** and **014702**. It is in the Metro West neighborhood. Survey respondents reside in Census Block Groups 120950147011, 120950147012, 120950147013, 120950147014, and 120950147021.

Map 1. Unincorporated Orlovista in Orange County

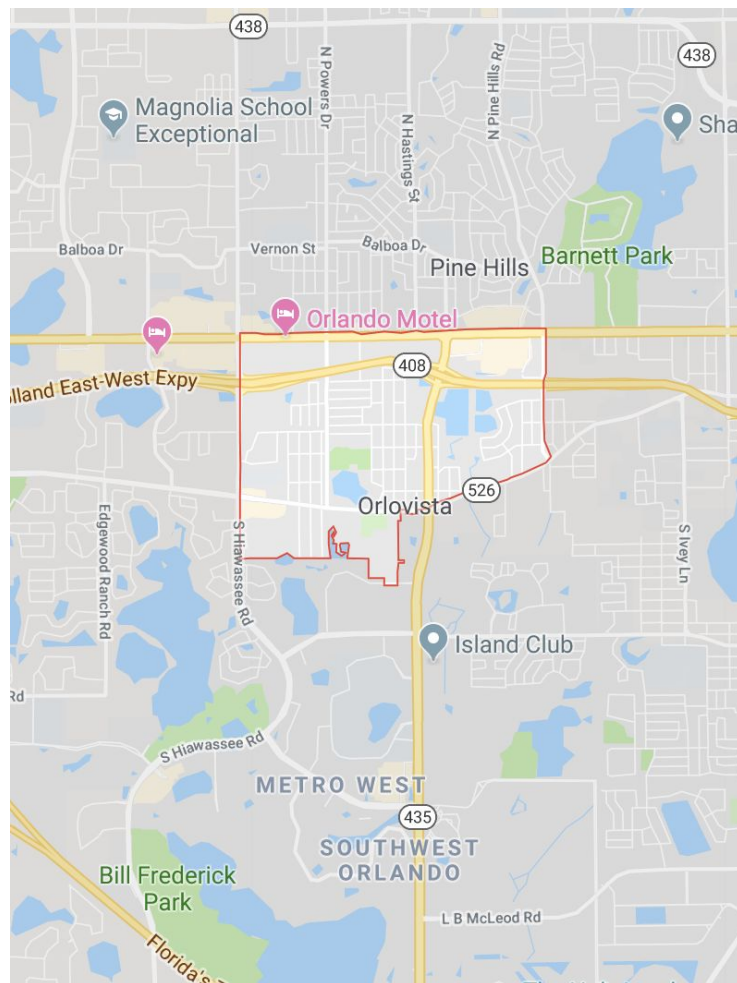


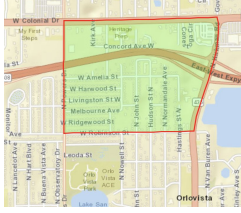
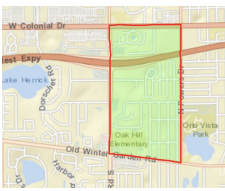



Table 1. Geography of Census Block Groups Surveyed

 <p>120950147011</p>	<p>Population 1,148</p> <ul style="list-style-type: none"> ➤ W Colonial Drive to the North ➤ Old Winter Garden Road to the South ➤ N Pine Hills Rd to the East ➤ N Kirkman Rd to the West
 <p>120950147012</p>	<p>Population 348</p> <ul style="list-style-type: none"> ➤ W Robinson St to the North ➤ Old Winter Garden Rd to the South ➤ S Kirkman Rd to the East ➤ S Powers Drive to the West
 <p>120950147013</p>	<p>Population 1,494</p> <ul style="list-style-type: none"> ➤ W Colonial Dr to the North ➤ W Robinson Rd to the South ➤ N Kirkman Rd to the East ➤ N Powers Dr to the West
 <p>120950147014</p>	<p>Population 2,070</p> <ul style="list-style-type: none"> ➤ W Colonial Dr to the North ➤ Old Winter Garden Rd to the South ➤ N Powers Dr to the East ➤ Hiawassee Rd N to the West
 <p>120950147021</p>	<p>Population 5,460</p> <ul style="list-style-type: none"> ➤ Old Winter Garden Rd to the North ➤ Raleigh St to the South ➤ S Kirkman Rd to the East ➤ Hiawassee Rd S to the West



School and Legislative Districts

Orlovista is served by the Orange County Unified School District, Congressional District [FL-10](#), State Senate District [FL-11](#), and State House District [FL-46](#).

Orange County Local Mitigation Strategy 2016 Identified Risks¹

The Local Mitigation Strategy identifies older homes as a vulnerability:

Another potential vulnerability is the age of the housing structure. Well over half of all housing structures in Orange County (53.5%) were built prior to the implementation of the Florida Building Code in 1992.... This may mean an increased vulnerability as the standards developed following the devastation of Hurricane Andrew may not exist in many of these homes. There is some likelihood that many of the homes may have been brought up to the code due to renovations or other work to meet compliance. However, if they have not been, then a large number of homes may be more susceptible to many of the natural/severe weather and tropical system hazards to which Orange County is subjected to on an annual basis.²

The Quick Reference Risk and Vulnerability Assessment Summary (See Table 1) in the Orange County Local Mitigation Strategy 2016 assigns high Risk-Relative Threat to Heat Waves, Tornadoes, Sinkholes/Land-Subsidence, and Tropical Storms.³

¹ EPA EJSCREEN <<https://www.epa.gov/ejscreen>>

² [Orange County Local Mitigation Strategy 2016](#), p. 25

³ [Orange County Local Mitigation Strategy 2016](#), p. 170



**Table 2. 2016 Quick Reference Risk and Vulnerability Assessment
Summary for Orlando**

Risk and Vulnerability Assessment Summary					
Hazard Name	People	Property	Environment	Program Operations	Risk – Relative Threat
Diseases and Pandemic	Low	High	Moderate	High	Moderate 48%
<i>Animal</i>	Low	High	Moderate	High	Moderate 44%
<i>Human</i>	Moderate	Moderate	Low	High	Moderate 43%
<i>Plant/Agriculture</i>	Low	High	Moderate	High	Moderate 51%
Extreme Temperatures	Low	Low	Moderate	Moderate	Moderate 54%
<i>Drought</i>	None	Low	Moderate	High	Moderate 57%
<i>Freezes/Winter Storms</i>	Low	Low	Moderate	Moderate	Moderate 41%
<i>Heat Waves</i>	Low	Low	Moderate	Low	High 62%
Floods	Low	Moderate	Moderate	Moderate	Moderate 43%
Severe Thunderstorms	Low	Moderate	Low	Moderate	Moderate 59%
<i>Hail</i>	None	Moderate	Low	Low	Moderate 52%
<i>Lightning</i>	Low	Moderate	Low	Low	Moderate 52%
<i>Tornados</i>	High	High	Moderate	High	High 71%
Sinkholes/Land-subsidence	Low	High	Low	Moderate	High 62%
Hazardous Materials	Moderate	Low	Low	Moderate	Low 29%
Terrorism/CBRNE	High	High	Low	High	Moderate 32%
Tropical Systems	High	High	High	High	High 67%
Wildfires	Low	High	Low	High	Moderate 52%



The Orange County Local Mitigation strategy includes a section on Hazardous Materials. The following excerpts explain the probability, vulnerability and Low Risk (29%) Rating for Extremely Hazardous Materials Incidents:

Facilities that store chemicals are scattered about the County and those with EHS chemicals are concentrated in the industrial areas. These areas are not as populated, but other facilities are located in more commercial and/or residential areas that may increase the chance of exposure.

Probability: There are over 200 fixed facilities that house extremely hazardous substances in Orange County. The probability of an incident occurring is high as there will continue to be hazardous materials present through the continued use of chemicals at fixed facilities and their transport to, from, through, and within Orange County and its jurisdictions. With Orange County being part of a large metropolitan area and centrally located in the State, it is a primary highway and freight passage in the region for goods that are being transported north and south on the Florida peninsula to Jacksonville or Miami, as well as east or west between Daytona Beach/Port Canaveral and Tampa. The likelihood for transportation incidents is amplified due to the number of possible encounters that can occur in a multi-modal setting. The most likely incident that may occur would involve a petroleum product spilling onto a roadway or other impermeable surface that would then require some kind of clean-up.

Other releases at fixed facilities will also continue to happen. While the number of instances will be likely be lower than the transportation incidents, the chemicals involved, such as EHS chemicals like chlorine, ammonia, sulfur dioxide, will be greater in their severity than petroleum products. The degree to which these releases or spills impact the county, either in quantity, severity, or location is an unknown variable. Continued emergency planning, accuracy for inventory reporting, and preparedness training must continue to occur to help reduce the number of occurrences.⁴

Risk: **Low – 29%**

Even with a high probability of incidents, minor to moderate anticipated or potential impacts, and a moderate vulnerability, the risk of hazardous materials is low. This is a result of the significant amount of mitigation measures that take place in the county to prepare for a release in advance. Training happens on a regular basis throughout the year and an exercise with a HazMat-based scenario is conducted by the Local Emergency Planning Committee (LEPC) on, at least, a bi-annual basis, if not more frequently. The specialized equipment and HazMat teams provide a consistently high level of support for responding the incidents.⁵

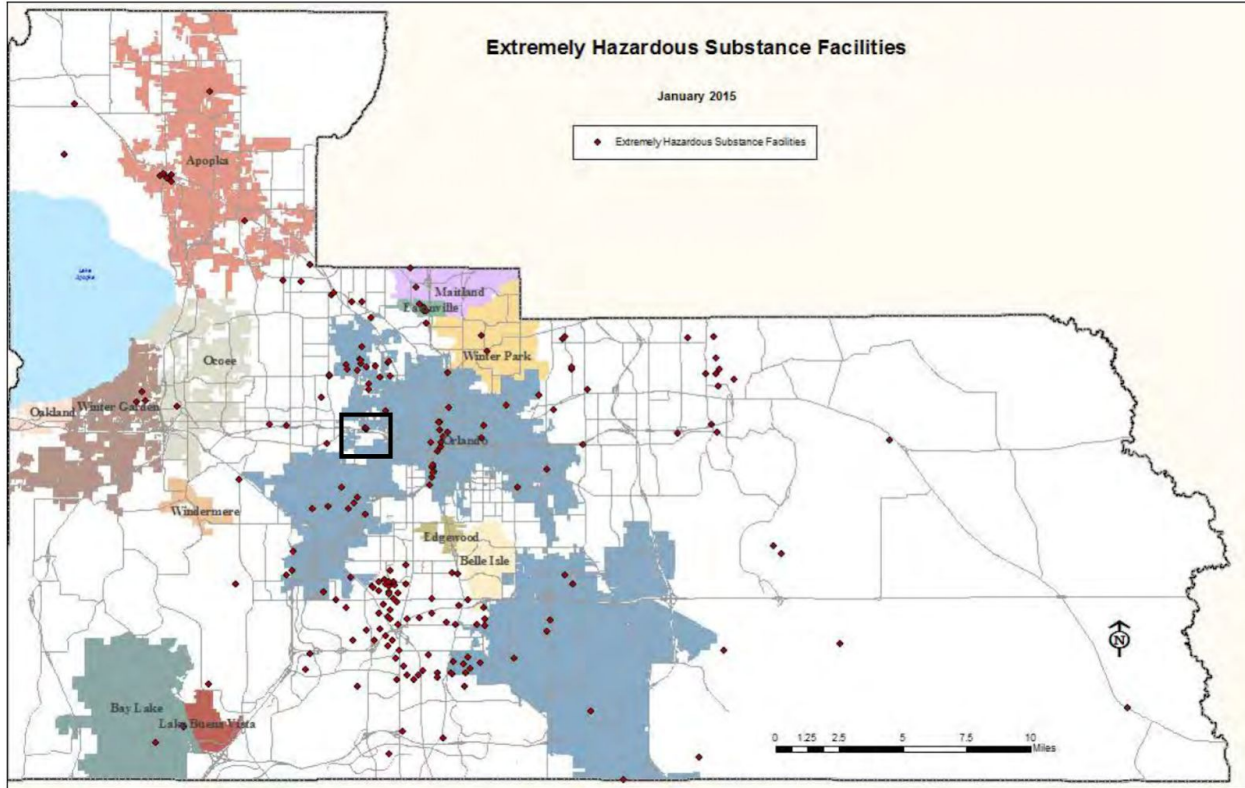
⁴ Orange County Local Mitigation Strategy 2016, p. 83

⁵ Orange County Local Mitigation Strategy 2016, p. 86



Map 2. Orange County Local Mitigation Strategy 2016 Map of Extremely Hazardous Facilities in Orange County, FL.

Black rectangle surrounds the Orlovista area.



Demographics

The minority population in the four Census Block Groups surveyed ranged from 54% to 86%. The low income population in each Census Block Group ranged from 32% to 68%. The percentage of linguistically isolated residents is very low, with the percentage between 2% and 10%. ⁶ (Data in the following table is from the EPA EJSCREEN tool, which uses Census data and American Community Survey data.)

Table 3. Percent of Population for Demographic Indicators

Indicator	Census Block Group				
	120950147011	120950147012	120950147013	120950147014	120950147021
Minority Population	86%	84%	81%	72%	54%
Low Income Population	68%	32%	66%	54%	40%
Linguistically Isolated Population	2%	5%	2%	10%	10%
Population with Less Than High School Education	20%	13%	22%	15%	9%
Population under Age 5	8%	0%	5%	3%	10%
Population over Age 64	11%	26%	6%	9%	9%

⁶ EPA EJSCREEN: Environmental Justice Screening and Mapping Tool <<https://www.epa.gov/ejscreen>>



Environmental Health Concerns

The following table summarizes environmental indicators in Orlovista Census Block Groups surveyed (see Table 4). In addition there are many homes constructed prior to the 1960's, which appear in the table below as the lead paint indicator.⁷ Note that in addition to possibly having lead paint, homes of this age are particularly vulnerable to wind damage, as they were constructed prior to changes in Florida's building code that were designed to make homes better able to withstand hurricanes. Census Block Groups 120950147011 is in the 81st percentile in the US for Lead Paint Indicator.

Air quality indicators of elevated NATA Diesel Particulate Matter, NATA Air Toxics Cancer Risk, and NATA Respiratory Hazard Index are in the 80th to 90th percentile in the US. The Traffic Proximity, calculated from daily traffic count divided by distance to road ranges from the 57th percentile in the US to the 93rd percentile in the US, with both Census Block Groups 120950147013 and 120950147014 in the 93rd and 90th percentile in the US respectively.

Proximity to Superfunds and to Facilities with Required Risk Management Plans is over the 80th percentile with only one exception: Census Block Group 120950147021 for Superfund Proximity, which is in the 78th percentile.

⁷ EPA EJSCREEN: Environmental Justice Screening and Mapping Tool <<https://www.epa.gov/ejscreen>>



Table 4. Percentile in the US for Environmental Indicators

Indicator	----- Census Block Group -----				
	120950147011	120950147012	120950147013	120950147014	120950147021
NATA Diesel Particulate Matter (ug/m3)	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US	70-80th Percentile in US
NATA Air Toxics Cancer Risk (risk per MM)	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US
NATA Respiratory Hazard Index	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US	80-90th Percentile in US
Traffic Proximity and Volume (daily traffic count/distance to road)	87th Percentile in US	79th Percentile in US	93rd Percentile in US	90th Percentile in US	57th Percentile in US
Lead Paint Indicator (% pre-1960s housing)	81st Percentile in US	53rd Percentile in US	49th Percentile in US	50th Percentile in US	26th Percentile in US
Superfund Proximity (site count/km distance)	84th Percentile in US	81st Percentile in US	82nd Percentile in US	80th Percentile in US	78th Percentile in US
Proximity to facilities w Required Risk Management Plans (facility count/km distance)	84th Percentile in US	83rd Percentile in US	84th Percentile in US	85th Percentile in US	86th Percentile in US
Hazardous Waste Proximity (facility count/km distance)	40th Percentile in US	38th Percentile in US	36th Percentile in US	26th Percentile in US	41st Percentile in US

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.



Contamination Cleanup Sites

There are 6 Contamination Cleanup Sites in Orlovista: 2 Active Petroleum Cleanup Sites, 2 Pending Petroleum Cleanup Sites, and 2 Active Other Cleanup Sites.⁸

Active Petroleum Cleanup Sites include:

- **ALL TRANSMISSION WORLD** at 102 KIRKMAN RD, ORLANDO, FL 32811; Facility Id: 8512892 [Watch This Site](#) [Documents](#)
- **ORLANDO GROCERY** at 6435 OLD WINTER GARDEN RD, ORLOVISTA, FL 32811; Facility Id: 8513228 [Watch This Site](#) [Documents](#)

Pending Petroleum Cleanup Sites Include:

- **DISCOUNT AUTO AIR** at 501 WILMER AVE, ORLANDO, FL 32808; Facility Id: 9201934
[Watch This Site](#) [Documents](#)
- **JONES PROPERTY** at 6046 OLD WINTER GARDEN RD, ORLANDO, FL 32835; Facility Id: 9102680 [Watch This Site](#) [Documents](#)

Active Other Cleanup Sites Include:

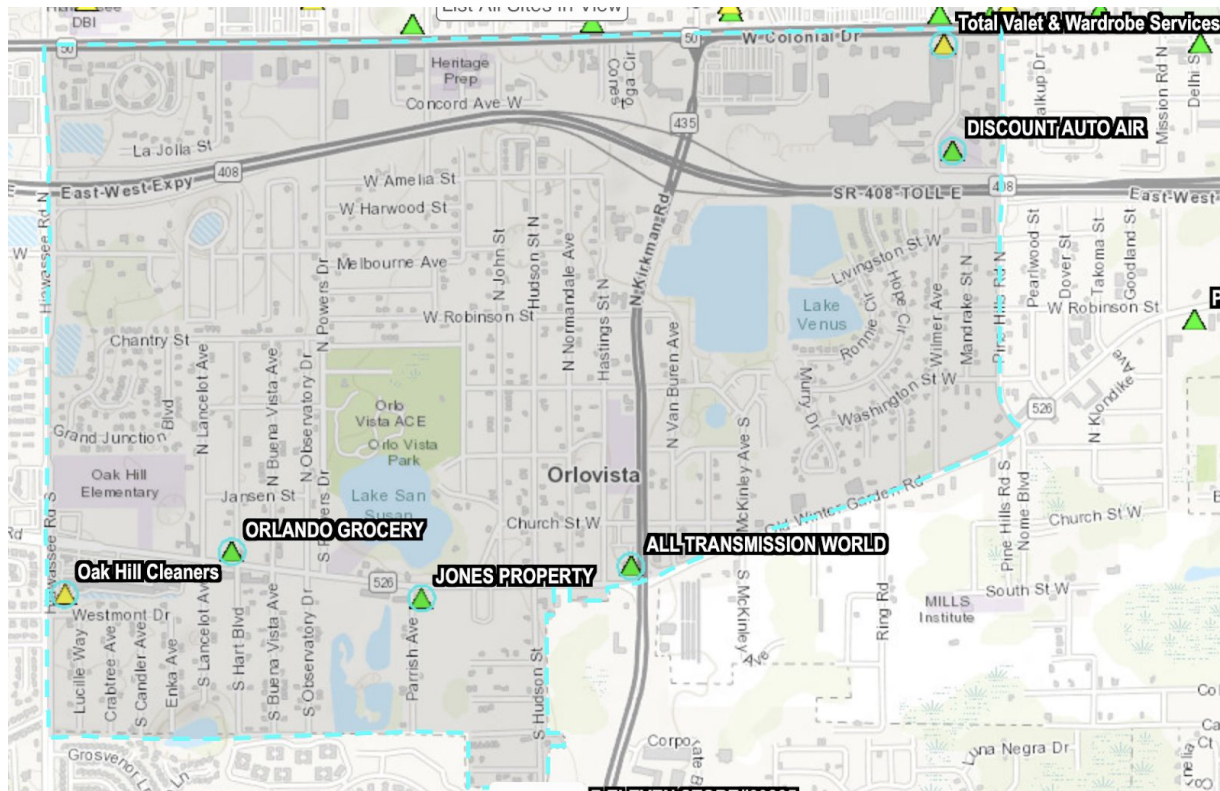
- **Oak Hill Cleaners** at 6650 Old Winter Garden Rd, Orlando, FL 32835; Facility Id: ERIC_5007 [Watch This Site](#) [Documents](#)
- **Total Valet & Wardrobe Services** at 5036 W Colonial Dr, Orlando, FL 32808; Facility Id: ERIC_5025 [Watch This Site](#) [Documents](#)

⁸ Florida Department of Environmental Protection Contamination Locator Map
<<http://prodenv.dep.state.fl.us/DepClnup/viewmap.do>>



Map 2. Contamination Locator Map⁹

Cleanup types: ▲ Brownfields ▲ Petroleum ▲ Superfund ▲ Other Waste Cleanup



⁹ Florida Department of Environmental Protection Contamination Locator Map
<<http://prodenv.dep.state.fl.us/DepCInup/welcome.do>>



Surveying Completed

Twenty one Mission Critical Function Surveys and 21 Housing and Emergency Services Surveys were collected in Orlovista. They were collected in the Census Block Groups indicated below.¹⁰

Table 5. Number of Respondents to Surveys by Census Block Group

Census Block Group	# Mission Critical Functions Surveys	# Housing Surveys
120950147011	2	2
120950147012	4	4
120950147013	10	10
120950147014	2	2
120950147021	3	3
Total	21	21

¹⁰ EPA EJSCREEN <<https://ejscreen.epa.gov/mapper/>>



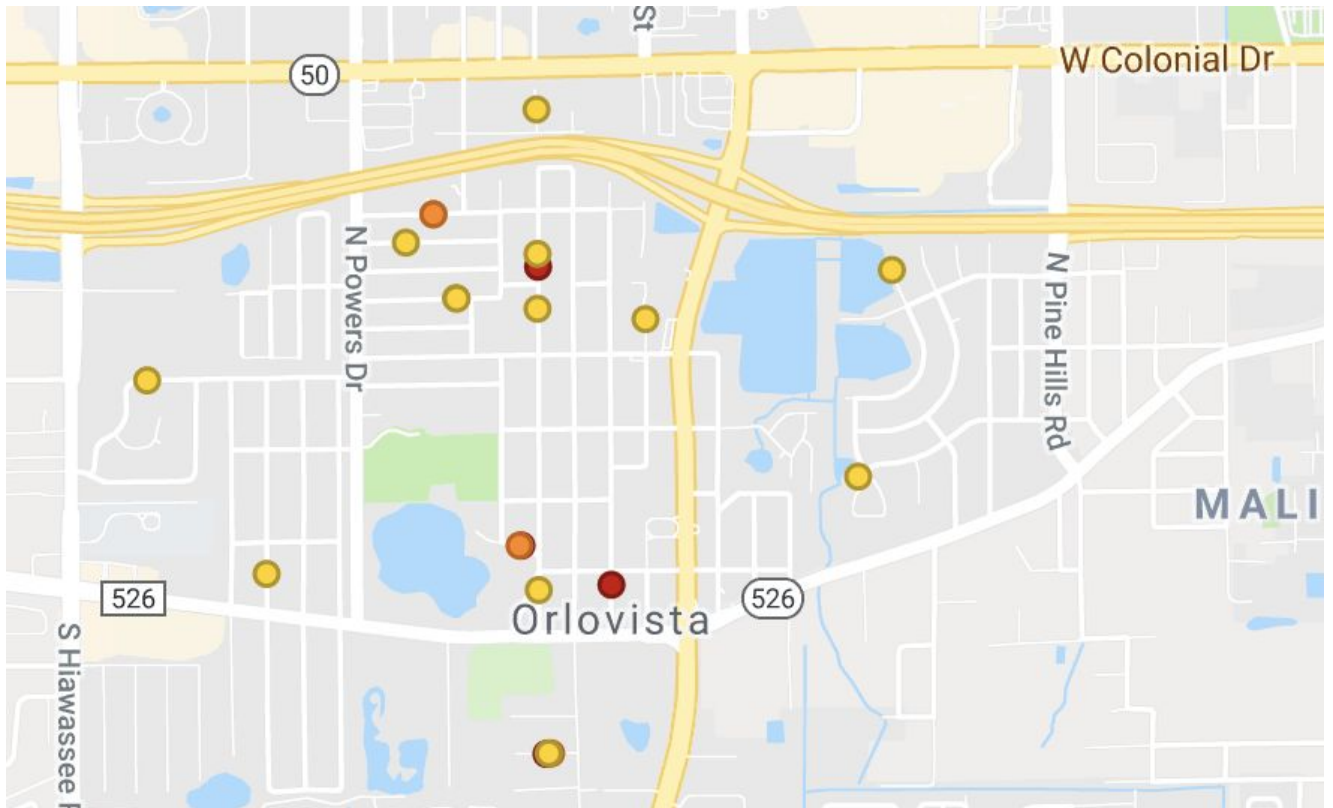
Mission Critical Functions Surveys:

Mission Critical Function Surveys are designed to determine if the community is tending toward resilience or vulnerability. Respondents rated twenty six societal functions that they experienced after Hurricane Irma on the following scale:

- Collapse -Destroyed:1
- Extremely Vulnerable-Major Damage:2
- Elevated Vulnerability-Minor Damage:3
- Not Affected:4
- Resilient:5
- Highly Resilient:6
- Resilient and Sustainable:7

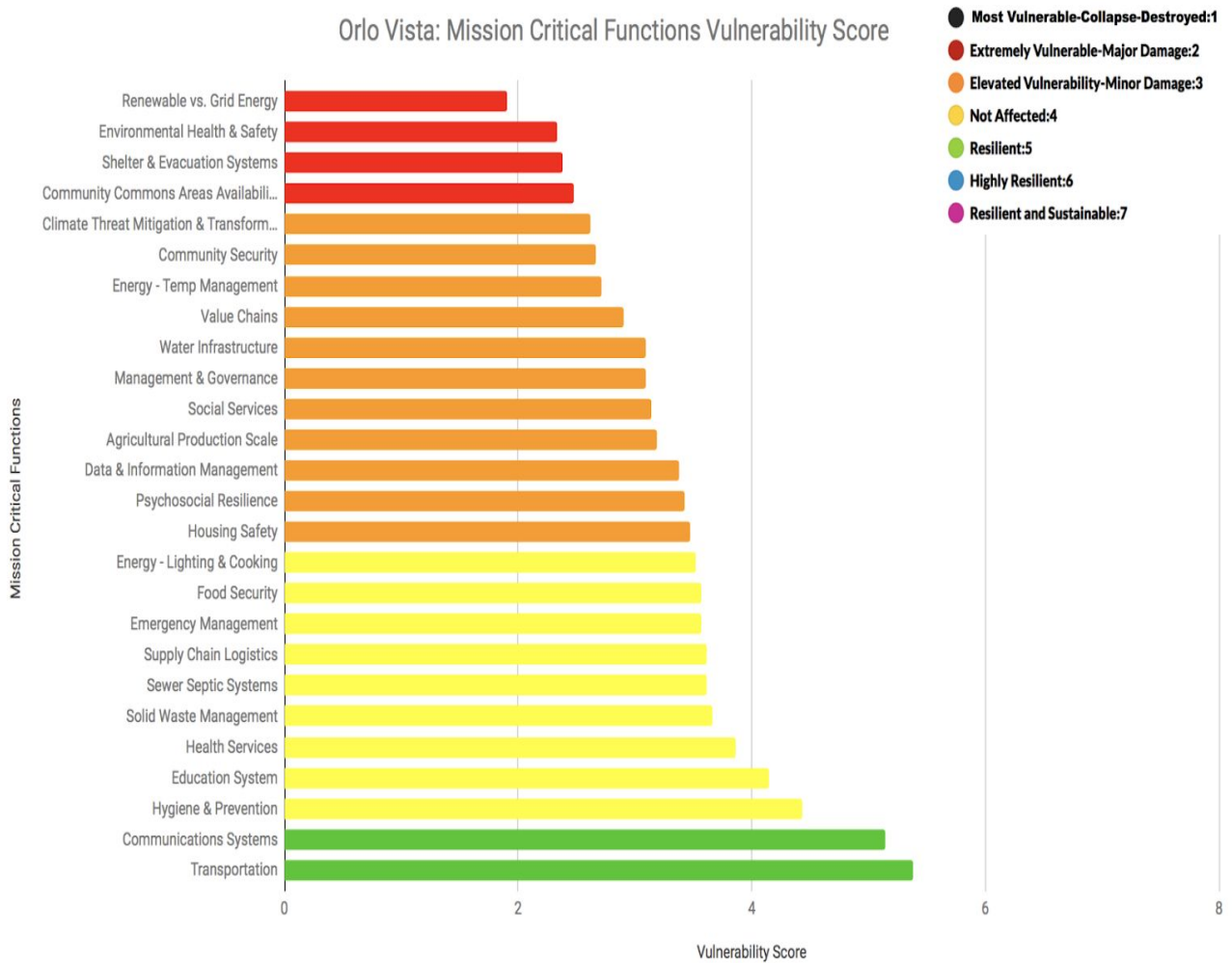
Map 3. Vulnerability Scores of Respondents in Orlovista

Note that the average Vulnerability Score, indicated by point color, across the 26 domains was between 2 and 4 for Orlovista residents surveyed.



Graph 1. Average Mission Critical Function Ratings for Each Function

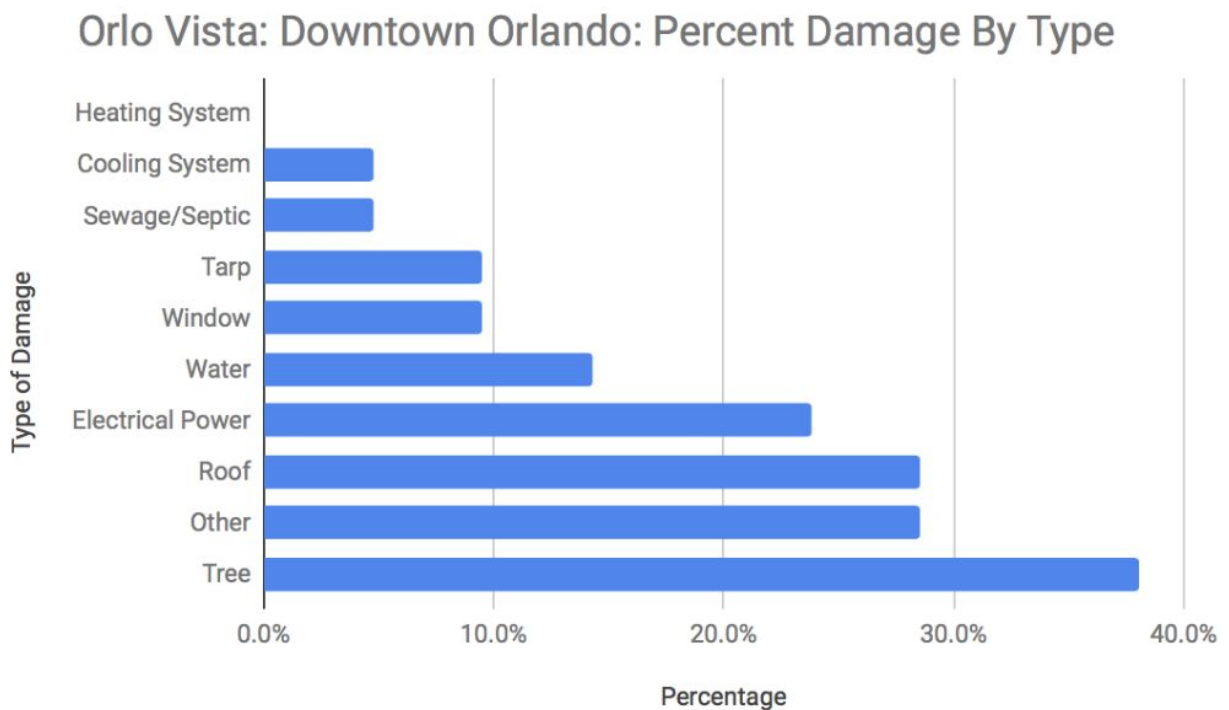
The categories with the lowest average ratings are considered to be the most vulnerable functions. Four categories received the rating of Extremely Vulnerable ranking (2): Renewable vs Grid Energy, Environmental Health and Safety, Shelter and Evacuation Systems, and Community Commons Area Availability. The three lowest ranked categories with the Elevated Vulnerability-Minor Damage (3) ranking were: Climate Threat Mitigation & Transformation, Community Security, and Energy-Temperature Management. The functions ranked the highest, and therefore regarded to be the most sustainable were Communications Systems and Transportation.



Housing and Emergency Shelter Survey

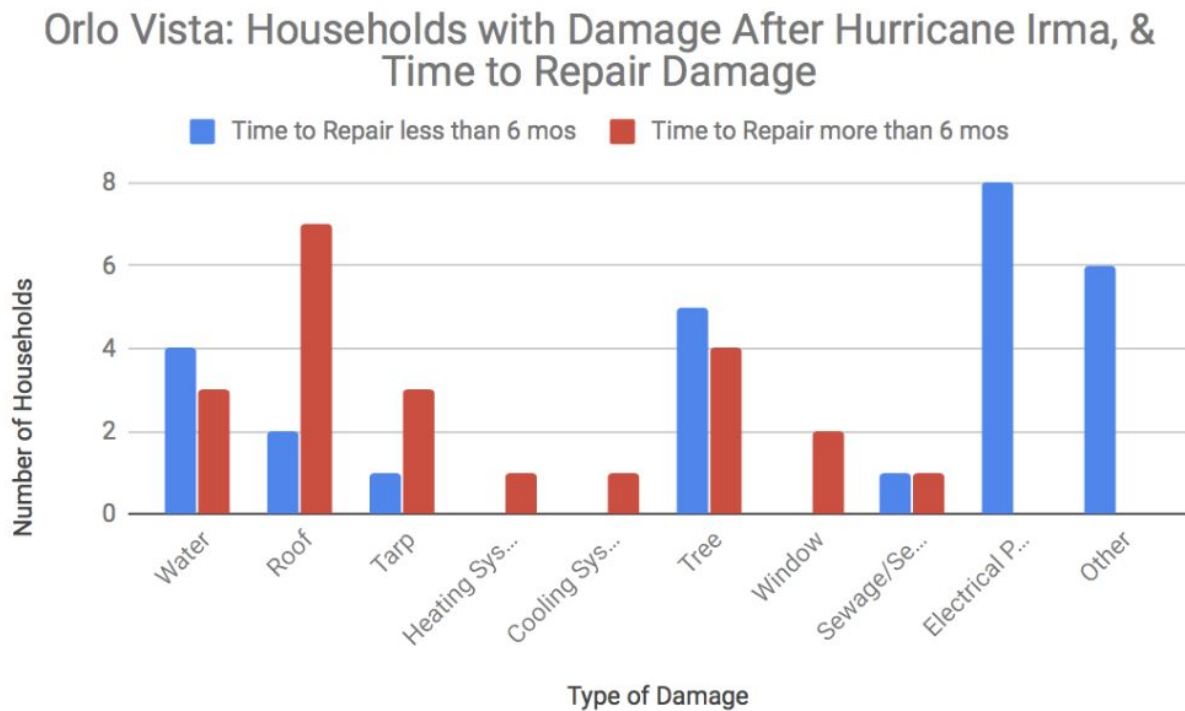
Type of damage to homes after Hurricane Irma: Fully 38.1% of respondents experienced tree damage; 28.6% experienced roof damage, 23.8% reported electrical damage, and 14.3% experienced water damage. Although 23.8% reported roof damage, only 9.5% reported tarps on their roofs.

Graph 2. Housing and Emergency Shelter Survey Results



Time to complete repairs after Hurricane Irma: The bar graph below shows that most of the damage in Orlovista was repaired in less than 6 months. All reported electrical power damage or loss was repaired in less than 6 months. All respondents reporting heating system , cooling system and window damage also reported that it took over 6 months to complete repairs. It took more than 6 months for 7 households to repair their roofs, although 2 were able to repair them in less than 6 months. Three people who had tarps on their roofs took more than 6 months to have them removed, although one was able to complete the repairs in less than 6 months.

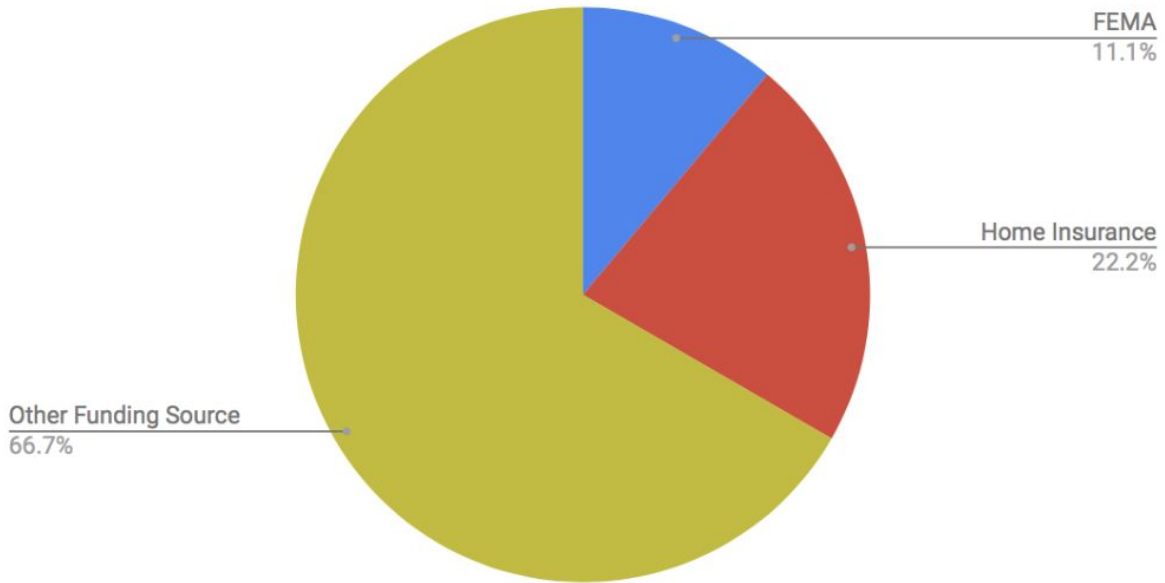
Graph 3. Time to Complete Hurricane Irma Repairs



Funding Repairs: 42.9% percent of survey respondents indicated how they funded repairs. Home insurance paid for repairs at 22.2% of the homes, and FEMA paid for repairs at 11.1% of homes. The remaining 66.7% of respondents funded their repairs from other sources.

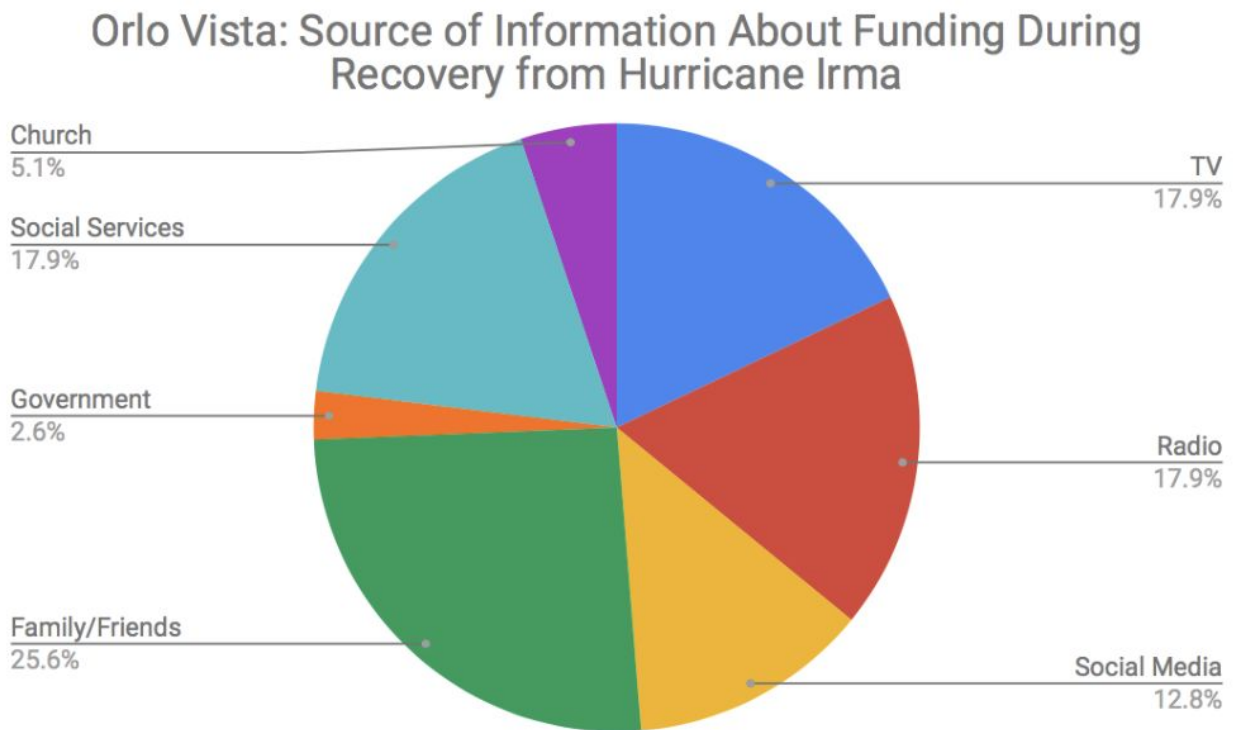
Graph 4. Source of Funds to Complete Hurricane Irma Home Repairs

Orlo Vista: Distribution of Funding Source Obtained During Recovery from Hurricane Irma



Graph 5. Sources of Information Reported by Respondents

Most respondents (25.6%) indicated that they learned about funding sources from family and friends. Television (17.9%), radio (17.9%), and Social Services (17.9%), Social Media (12.8%) and Church (5.1%) were also sources of information regarding funding for people with damaged homes. Although Orlovista received national attention for its extreme flooding, only 2.6% of respondents reported receiving information from a government source.



Community Organization Tools

Community Forum Report

Attended by leaders from Mercy Drive and Orlovista



Friday, February 8, 2019

6:30 PM - 8:30PM

Disaster Resilience Forum Notes

Members attending the forum express the need for **Community Emergency Preparedness Plan** so the communities can learn about disaster preparedness and safety within the community by using the internet and interviewing local experts. Use the information to create an emergency preparedness plan for the community (see attachment).

Lawanna Gelzer stated that there was real need for Energy Audits of all the Communities, so that the member from the community could learn about the impact of energy use and explore ways in which individuals and organizations can reduce their energy consumption.

Major Community Concern

1. Members was concerns about infrastructure failure such as major electricity outage. Also, some members were very concern about what damage that could happen to their community because of all the remove of over 2000 trees from the Wekiva River Wetland and would it put the community increase flooding.
2. Sponsor a wetland restoration project and case study



4. Member was very upset to find out that there was NO evaluation center any of the 4 communities.
5. Members was concerns about infrastructure failure such as flooding, major electricity outage, septic tank failure (Orlo Vista and Holden Height Communities)

Open Disuses members attending express the need for Disaster Resilience and Environmental Education Programs and Training.

1. Community Vertical Garden
2. Provide educational information on the value of wetlands.
3. Host neighborhood meeting and tour to explain environmental impacts and other issues of environmental significance.
4. Have summer environmental awareness camp for local kids

Ali Ahmed gave members attending the forum and updated on the Heath Disparities Study.

In closing Lawanna ask everyone to attend the EPA - Orlando Gasification Plant Update Meeting, March 7, 2019 at the Callahan Neighborhood Center. (Flyer Attached)



Identified Gaps and Solutions

Gaps

- Communications problems when power is out
- Information on residents' opinions To inform decision-making
- Lack of knowledge about Environment
- Infrastructure failures: flooding, major Electrical outage, septic failures
- No Evaluation Centers in any of the 4 communities

Solutions

- Solar and generator power
- Have another meeting when Surveys are Complete
- Community Vertical Garden
- Educational information on Wetlands
- Neighborhood meeting & tour On environmental impacts And issues
- ?
- ?



**Mercy Drive / Orlo Vista
Communities**

Disaster Resilience Forum

Saturday, February 9th
10:00 - 12:00 Noon **Where**

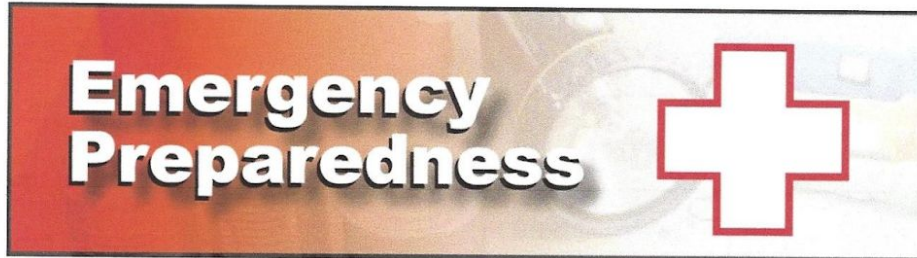
Northwest Community Center
3955 WD Judge Drive
Orlando, FL 32808

**Disaster Resilience Initiative
Community Forum**

Refreshments will be Provided !!
Contact Lawanna Gelzer at (407) 953-5599



Community Forum Handouts



Basic Disaster Supplies Kit

To assemble your kit, store items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry containers such as plastic bins or a duffel bag.

A basic emergency supply kit could include the following recommended items:

- **Water** - one gallon of water per person per day for at least three days, for drinking and sanitation
- **Food** - at least a three-day supply of non-perishable food
- Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert
- Flashlight
- First aid kit
- Extra batteries
- Whistle to signal for help
- Dust mask to help filter contaminated air and plastic sheeting and duct tape to **shelter-in-place**
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to **turn off utilities**
- Manual can opener for food
- Local maps
- Cell phone with chargers and a backup battery



Additional Emergency Supplies

Consider adding the following items to your emergency supply kit based on your individual needs:

- **Prescription medications**
- Non-prescription medications such as pain relievers, anti-diarrhea medication, antacids or laxatives
- Glasses and contact lense solution
- Infant formula, bottles, diapers, wipes, diaper rash cream
- Pet food and extra water for your pet
- Cash or traveler's checks
- Important family documents such as copies of insurance policies, identification and bank account records saved electronically or in a waterproof, portable container
- Sleeping bag or warm blanket for each person
- Complete change of clothing appropriate for your climate and sturdy shoes
- Household chlorine bleach and medicine dropper to disinfect water
- Fire extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plates, paper towels and plastic utensils
- Paper and pencil
- Books, games, puzzles or other activities for children

