

City of Tallahassee / Leon County Local Mitigation Strategy

2016 Update



September 2016

Table 3.3. Prioritized Mitigation Initiatives with Potential Funding Sources, 2016

Initiative	Summary/Status as of September 2016	Hazards	2016 Estimated Costs & Timeframe	Responsible Agencies	Jurisdiction	Potential Funding Sources
<p>(1) Increase intergovernmental coordination in the area of stormwater management.</p>	<p>Stormwater does not follow jurisdictional boundaries. Land use activities in the City can affect drainage characteristics outside municipal boundaries and, to a lesser extent, vice versa. In the past, stormwater management opportunities have been constrained by fiscal concerns and the impacts of significant amounts of pre-code development. These factors necessitate strong intergovernmental coordination for stormwater management efforts to be effective.</p> <p><u>Status:</u> Intergovernmental Stormwater management coordination is currently accomplished through several initiatives including countywide land development ordinance, Blueprint 2000 intergovernmental agency Stormwater improvement projects and Local Mitigation Strategy Steering Committee meetings. In addition, the City and County are currently working with the Northwest Florida Water Management District in an effort to improve the accuracy of the Flood Insurance Rate Maps through the Risk Map program, which is funded by FEMA. We have marked up proposed changes on the FIRMs and are working with FEMA (AECOM) and NWFWM. Once complete, it is expected that FEMA will issue updates to the FIRM, which will improve the accuracy of the depiction of Special Flood Hazard Areas for the community.</p>	<p>Flooding</p>	<p>Low/ Continuing</p>	<p>City and County Public Works; City and County Commissions</p>	<p>City of Tallahassee & Leon County</p>	<p>Local</p>
<p>(2) Improve the disaster resistance of existing site built housing stock.</p>	<p>Build upon current CDBG, HOME and SHIP programs to improve the disaster resistance of existing site built housing stock.</p> <p><u>Status:</u> The Capital Area Chapter of the American Red Cross continues to provide educational programs to low income population on how they can be disaster resistant and be part of the Ready Rating Program. http://www.readyrating.org/</p>	<p>All</p>	<p>High/ Continuing</p>	<p>Tallahassee Economic & Community Development, Leon County Housing and Human Services; Capital Area Red Cross</p>	<p>City of Tallahassee & Leon County</p>	<p>CDBG Program, SHIP, HOME, HMGP, and FMAP; Repair and Restoration of Disaster Damaged Historic Properties (FEMA); National Flood Mitigation Fund (FEMA); Em. Advance Measures for Flood Prev. (Army Corps)</p>

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<p>(3) Advocate that FEMA modify its policies to accommodate local floodplain management program requirements so as to avoid the frequent necessity for duplicate, and sometimes conflicting, modeling for NFIP purposes.</p>	<p>FEMA is very reluctant to fund and manage software review activities at a level necessary to facilitate needed coordination and cooperation with multi-objective local stormwater management programs. Tallahassee and Leon County have advanced stormwater regulations and require sophisticated digital modeling. FEMA is very slow to review (let alone consider approval of) new modeling software or even more current versions of previously approved software. As a result, local communities frequently are faced with having to do advanced modeling for design and local permitting and then duplicate modeling with the limited suite of FEMA-approved software for NFIP purposes. Not only is this a waste of taxpayer dollars, but frequently it results in conflicting flood stage data.</p> <p><u>Status:</u> The City of Tallahassee and Leon County continue to cooperate with the Northwest Florida Water Management District through a Cooperating Technical Partnership with FEMA, which will be instrumental in accomplishing this goal. The City and County attended the Apalachee Bay Saint Mark River Watershed Discovery Meeting for the purpose of updating the FEMA flood maps for the Saint Marks Basin. The City of Tallahassee has provided a map of areas to be reviewed to FEMA.</p>	<p>Flooding</p>	<p>Low/ Continuing</p>	<p>City of Tallahassee and Leon County Public Works; Leon County Development Support and Environmental Management (DSEM)</p>	<p>City of Tallahassee & Leon County</p>	<p>Local</p>
<p>(4) Improve floodplain boundary identification and implementation of the FEMA map amendment process.</p>	<p>Efforts would focus on correcting inaccuracies in FEMA flood hazard boundaries. These boundaries are used for insurance purposes and frequently increase rates for residents that are clearly not in the floodplain. Other citizens use this information to guide property purchases and find out they are susceptible to flooding despite lying outside the hazard areas of a FIRM. This initiative would require the hiring of sufficient personnel to identify and prepare map amendments and expand the existing floodplain database to include best available information, such as permitting models, for incorporation into a GIS. Besides providing better data that could reduce insurance rates and improve decisions regarding property purchases, this information could guide acquisition efforts.</p> <p><u>Status:</u> The City and County are currently working with the Northwest Florida Water Management District in an effort to improve the accuracy of the Flood Insurance Rate Maps through the Risk Map program, which is funded by FEMA. Once complete, it is expected that FEMA will issue updates to the FIRM, which will improve the accuracy of the depiction of Special Flood Hazard Areas for the community.</p>	<p>Flooding, Storm Surge/ Tsunami</p>	<p>Medium/ Continuing</p>	<p>City of Tallahassee Growth Management and Water Resources Engineering, DSEM, Leon County Public Works; Tallahassee-Leon MIS/GIS</p>	<p>City of Tallahassee & Leon County</p>	<p>EMPA Trust Fund (DEM); Small Watershed Program (USDA); Emergency Advance Measures for Flood Prevention (Army Corps); Resource Conservation and Development Program (USDA); Soil and Water Conservation Program (USDA); National Flood Mitigation Fund (FEMA)</p>

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(5) Explore methods to eliminate additional development in the 25-year floodplain.	<p>This initiative aims at keeping new buildings from the highest risk area of the floodplain, and might include an acquisition effort targeting undeveloped lots.</p> <p><u>Status:</u> The City of Tallahassee, Growth Management Department continues to consider new ordinance language to accomplish this goal.</p>	Flooding	High/ Continuing	City of Tallahassee and Leon County Growth Management, Tallahassee-Leon County Planning	City of Tallahassee & Leon County	Local
(6) Create a public education campaign and community program that promotes awareness of vulnerability to hazards in our community and encourage disaster preparation.	<p><u>Status:</u> : Capital Area Chapter of the American Red Cross has developed the “Ready Rating Program.” The program is designed to mitigate the impact of various disasters by educating residential and commercial property owners on personal actions they can take to reduce the effects of a disaster (such as removing dead limbs, putting up shutters / plywood, creating a safe room in your house/business, etc.).</p> <p>The City, Red Cross and County hosted an annual “Build a Bucket” disaster fair focusing on the community’s vulnerability to various disasters and possible mitigation techniques, including wildfire mitigation actions developed by the Florida Forest Service. The fair could be hosted annually as a stand-alone event, and integrated into other community events throughout the year. This strategy would address creating a safe room within the home, general home protection procedures, etc.</p> <p>Leon County and City of Tallahassee Emergency Management also supports NOAA’s Weather Ready Nation initiative. NOAA’s Weather-Ready Nation initiative is first and foremost to save more lives and livelihoods. By increasing the nation’s weather-readiness, the country will be prepared to protect, mitigate, respond to and recover from weather-related disasters.</p> <p>As part of the Weather-Ready Nation initiative, NOAA, along with partners, wants to motivate individuals and communities to take actions that will prepare them in the event of a weather disaster and to share their preparedness steps with others. These actions can save lives anywhere - at home, in schools, and in the workplace before tornados, hurricanes, and other extreme types of weather strike.</p>	All	Low/ Continuing (for Repetitive Flood Loss Property Owners, Owners of Property in Floodplain, and Utility billing educational inserts)	City of Tallahassee and Leon County Emergency Management; Capital Area Red Cross	City of Tallahassee & Leon County	EMPA Trust Fund (DEM)

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(7) Continue current efforts to remove dead, dying or diseased trees or branches next to roadways and power lines.	Debris from storm events poses a hazard to overhead power lines and roads. <u>Status:</u> Existing City Electric utility tree trimming policy is to trim all vegetation back to 6 feet from existing power lines. The entire system is trimmed on an 18 month cycle. Recently adopted policy (Dec 2014 commission approval) allows neighborhoods with high rates of outages due to vegetation to request additional clearance up to 10 feet from existing power lines.	Hurricanes & Tropical Storms, Tornadoes, Thunderstorms, Exotic Pest Infestations, Drought	High/Continuing	City of Tallahassee and Leon County Public Works, City Electric Utilities and Talquin Electric	City of Tallahassee & Leon County	Local
(8) City of Tallahassee and Leon County flood-related capital improvement projects.	<u>Status:</u> Numerous stormwater projects have been identified as necessary to provide relief to existing flood problems. A complete listing of projects in the City of Tallahassee are included in Appendix D.	Flooding/ Tsunami	High/Continuing	City of Tallahassee and Leon County Public Works	City of Tallahassee & Leon County	CDBG (DEO); HMGP (DEM); Emergency Bank Protection (Army Corps); STP (ISTEA); Sustainable Development Challenge Grants (EPA); National Flood Mitigation Fund (FEMA); Soil and Water Conservation (USDA); Resource Conservation and Development (USDA); Small Watershed Program (USDA)

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(9) Acquire parcels in the 100-year floodplain.	<p>This initiative builds on past City/County floodplain acquisition efforts and would be enhanced by improved information developed through initiative #5. Acquisitions would target improved parcels with the most vulnerable structures.</p> <p><u>Status:</u> The City and County continue to evaluate potential acquisition projects and possible funding sources for property acquisitions within the 100-year floodplain. Many parcels within the 100-year floodplain have been purchased by the City of Tallahassee and Leon County during previous years to provide flood relief to flood prone property owners. Some of these acquisition projects were entirely funded using local dollars. Others were funded through state and federal programs while also making use of local matching funds. Examples of these programs include the Flood Mitigation Assistance Program and the Hazard Mitigation Grant Program, both of which are FEMA programs administered by the Florida Division of Emergency Management.</p>	Flooding, Hurricanes & Tropical Storms, Storm Surge/ Tsunami	High/Continuing	City Water Resources Engineering; County Public Works; Tallahassee - Leon County Planning	City of Tallahassee & Leon County	Florida Communities Trust; HMGP
(10) Develop an emergency notification system for all hazards.	<p>Emergency notification is essential to protecting lives and property. Immediate notification to a specific area is critical during rapidly developing situations such as tornados, hazardous material releases, and flash flooding. This system can also be used to inform residents of utilities issues such as boil water notices, power outages, sewer issues, Amber Alerts and more. For the City of Tallahassee, the Department of Communications sends out such notifications.</p> <p><u>Status:</u> The Federal Emergency Management Agency, Federal Communications Commission, and the Wireless Communications Industry launched the Wireless Emergency Alert (WEA) system in 2013. This system sends concise, text-like messages to WEA capable mobile devices. Wireless providers, representing 97% of subscribers, are participating in distributing Wireless Emergency Alerts. Mobile users will not be charged for receiving these text-like alerts and are automatically enrolled to receive them. Wireless Emergency Alerts use a different kind of technology, than text messages, to ensure they are delivered immediately and are not subjected to potential congestion (or delays) on wireless networks. Wireless Emergency Alerts are a point-to-multipoint system, which means alert messages will be sent to those within a targeted warning area, unlike text messages which are not location aware. Wireless Emergency Alerts distributed by the National Weather Service include: Tornado</p>	All Hazards	Medium/Continuing	Leon County, City of Tallahassee, Emergency Management; Law Enforcement, Fire and Health	City of Tallahassee & Leon County	U.S. Department of Homeland Security

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	<p>Warning, Extreme Wind Warning, Flash Flood Warning, and Hurricane Warning.</p> <p>The City of Tallahassee’s Water Quality Administration has initiated a remote detection system to determine the run status and condition of the potable well facilities. This system achieves the goal of an audible alarm system for our potable water system. The Thomas P. Smith wastewater treatment plant on Springhill Road has a separate monitoring system with audible alarms for all equipment. The SCADA system monitors for potential chemical and gas leaks with audio and visual alarms.</p> <p>Leon County utilizes the internet website http://leoncountyfl.gov/ei to post all-hazards emergency public information for use by citizens and the media during emergency events. They also utilize a subscription service (powered by GovDelivery) available at the Leon County website for citizens to sign up for all-hazards emergency notifications, traffic notifications, as well as general Leon County government announcements. Notifications are available via email and SMS.</p> <p>Florida State University maintains a nationally-renowned emergency notification and warning system targeted toward its campus community that includes up to 36 methods of message delivery. FSU recently added capabilities to issue emergency alerts and share response information through a new mobile app called SeminoleSAFE. The FSU ALERT EZ system allows for single-button activation and streamlines warning and notification to 3-5 minutes or less in the most extreme situations.</p> <p>COT Electric Utility staff maintains a list of email and phone numbers for residents downstream of the Corn Hydro Facility. This list enables automatic email and phone distribution of either early warning of flooding due to know events upstream or emergency notification of rapidly developing events. Additionally, an emergency siren exists at the dam for boaters and residents in the immediate downstream area. These systems are tested on a quarterly basis.</p>					

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<p>(11) Evaluate requirements and feasibility for the County's participation in the NFIP Community Rating System.</p>	<p>Participation in the Community Rating System allows communities to reduce their flood insurance premiums as compensation for flood protection efforts undertaken above NFIP requirements. Communities are assigned a ranking in a 10-tier classification system based on actions taken to reduce flooding. Each additional improvement in one's class ranking allows a 5 percent reduction in premiums.</p> <p><u>Status:</u> Leon County is officially in the CRS program as of May 21, 2015 and rated as a class VI community. In April 2013, Leon County requested entry into the CRS program. A new application Verification Visit was conducted by an ISO/CRS Specialist on July 10, 2014.</p>	<p>Flooding, Hurricanes & Tropical Storms, Storm Surge/ Tsunami</p>	<p>Low/Continuing</p>	<p>Leon County Emergency Management; Leon County Public Works</p>	<p>Leon County</p>	<p>Local</p>
<p>(12) Explore the feasibility of adding a full build-out component to the Leon County Master Stormwater Management Plan</p>	<p><u>Status:</u> The master Stormwater management plan does not take into account Stormwater and flooding impacts given future build-out conditions for the entire County. This information could be used to revise existing floodplain regulations so that they reflect projected build-out conditions. Based on information from the Leon County Public Works Department, there are no plans to update the Master Plan at this time due to staffing limitations and current allocation of available resources.</p>	<p>Flooding, Hurricanes & Tropical Storms, Storm Surge/ Tsunami</p>	<p>Medium/Continuing</p>	<p>Leon County Growth Management, Tallahassee-Leon County Planning</p>	<p>Leon County</p>	<p>EMPA Trust Fund (DCA); Small Watershed Program (USDA); Emergency Advance Measures for Flood Prevention (Army Corps); Resource Conservation and Development Program (USDA); Soil and Water Conservation Program (USDA); National Flood Mitigation Fund (FEMA)</p>

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<p>(13) City and County are to implement a program to acquire easement or fee simple land allowing access to maintain the major ditches/canals to reduce flooding.</p>	<p>The program would consist of the acquisition of easements for ditches and the necessary land to access the ditches so normal maintenance can be performed. Currently the City of Tallahassee is responsible for the maintenance of over 23 miles of major ditches, and the County maintains over 28 miles of major ditches. About 15 miles have adequate access easements, are located within an easement or are located on public ROW. Approximately 30 acres are needed to have full public access to maintain the ditches.</p> <p>Status: The County has no plans to acquire any additional easements or fee simple properties for maintenance access. The City continues to acquire properties and/or easements as needed in conjunction with stormwater management capital improvement projects.</p>	<p>Flooding</p>	<p>High/Continuing</p>	<p>City Water Resources Engineering; County Public Works</p>	<p>City of Tallahassee & Leon County</p>	<p>HMGP (DEM); National Flood Mitigation Fund (FEMA)</p>

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<p>(14) Continue and expand program to deploy flood warning devices and systems at critical facilities and Lake Talquin Dam.</p>	<p>In the event of a leak/breakdown at the dam, there is no local warning system for persons living below the dam on either the Leon or Liberty County side of the river. An audible warning system would provide residents with advance warning. Of course, the alarm would have to be accompanied with a public education program explaining what the alarm meant and how residents should respond. Many areas throughout the County are subject to flooding during heavy rains, particularly low-lying roads. To assist motorists and residents, the City and County should acquire flood-warning devices that would be deployed at vulnerable locations during or in advance of a flood. The program would require the City and County to evaluate and prioritize each vulnerable structure and/or locations for inclusion into a warning system. Eventually the City and County would transition into an automated warning system.</p> <p><u>Status:</u> There are several flood-warning devices in place and functioning within the community, which include the warning system at the Lake Talquin Dam as well as the Capital Area Flood Warning Network and City of Tallahassee Rainfall Data Telemetry System. The Capital Area Flood Warning Network and the City of Tallahassee Rainfall Data Telemetry System provide real-time rainfall totals and water levels at key points within the community. Emergency Management Officials can then use this information during major storm events to identify potential areas of flooding.</p> <p>Florida State University has identified locations on its campus that are prone to flooding, with a history of personal injury and property damage. FSU has proposed to install flood detection equipment in several key locations on its campus and integrate it into its FSU ALERT emergency notification and warning system. The FSU Flood Detection and Warning system is pending funding opportunities.</p>	<p>Flooding, Hurricanes & Tropical Storms, Storm Surge/ Tsunami</p>	<p>Medium/Continuing</p>	<p>City of Tallahassee and Leon County Emergency Management</p>	<p>City of Tallahassee & Leon County</p>	<p>HMGP (DEM); National Flood Mitigation Fund (FEMA)</p>

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<p>(15) Secure funding source for identified shuttering and hardening needs for windows at Tallahassee Memorial Hospital (TMH).</p>	<p>Tallahassee Memorial Hospital is highly susceptible to wind damage from a tropical storm/hurricane. Currently neither hospital has storm shutters in place. As one of the primary hospitals serving the City of Tallahassee, Leon County and the region, local emergency management personnel should work with TMH to identify shutter options and hardening needs for windows, including costs. In addition, efforts should be undertaken to identify and harden essential support facilities (such as generators) at the hospital.</p> <p><u>Status:</u> Once a possible funding source is identified, the committee has discussed applying for window protection at TMH. TMH has developed an application for hazard mitigation and is ready to proceed, when funding becomes available. The other Tallahassee community hospital, Capital Regional Medical Center has hardened windows installed.</p>	<p>Flooding, Hurricanes & Tropical Storms, Storm Surge/ Tsunami</p>	<p>High/Continuing</p>	<p>City of Tallahassee and Leon County Emergency Management</p>	<p>City of Tallahassee & Leon County</p>	<p>EMPA Trust Fund (DEM); HMGP (DEM); CDBG (DEO)</p>
<p>(16) Consider addressing the economic impact of different disaster scenarios, as information becomes available.</p>	<p>The Florida Division of Emergency Management (DEM) is trying to develop an economic impact model as part of their disaster modeling, which may be available next year. Some data is already available through the TAOS and/or Hazus models.</p> <p><u>Status:</u> The City of Tallahassee, Leon County and the Capital Area Chapter of the American Red Cross both continue to have programs in place to assess the impacts of disaster immediately following an event. Damage Assessment Teams are also deployed following a disaster on a countywide basis to document disaster-related damages.</p> <p>Tallahassee - Leon County GIS (TLCGIS) has also developed HAZUS capabilities and training. This software program has been used to estimate direct economic loss from building damage and indirect losses such as business interruption. Additionally, HAZUS can estimate shelter needs based on population and socioeconomic information, as well as other impacts and mitigation needs.</p>	<p>All</p>	<p>Low/Continuing</p>	<p>TLCGIS, City & County Offices of Management and Budget</p>	<p>City of Tallahassee & Leon County</p>	<p>Local</p>

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<p>(17) Continue to improve and expand regional response capabilities for responding to hazardous materials and terrorism events.</p>	<p>The possibility of an incident involving a weapon of mass destruction or a hazardous materials release exists within Leon County. County EM is preparing a response plan and now needs to identify the equipment needed to respond to effectively to an incident. In addition, the City and County need to identify potential funding sources to acquire the highly specialized, and often expensive, equipment.</p> <p><u>Status:</u> Tallahassee Fire Department (TFD) has the only hazardous materials response unit in the region (between Alachua and Escambia Counties, and to a lesser extent, Bay County). Currently, TFD will respond to hazardous materials incidents outside of the County. TFD has also created a Regional Hazardous Materials Response Team.</p> <p>Our community emergency management officials have identified equipment needs and have purchased many of these items with funding from the federal Department of Homeland Security and the Federal Emergency Management Agency. A local committee outlines items to be purchased, and funding is coordinated through the Regional Domestic Security Task Force. However, available funding for this initiative is decreasing.</p>	<p>Hazardous Materials Storage and Transportation, Terrorism, Aviation Incidents</p>	<p>Medium/Continuing</p>	<p>City of Tallahassee and Leon County Emergency Management</p>	<p>City of Tallahassee & Leon County</p>	<p>DEO/FEMA and other federal agency grants Chemical Emergency Preparedness and Prevention Grants Program (EPA); Disposal of Federal Surplus Property (GSA); Hazardous Materials Training Program (FEMA)</p>
<p>(18) Maintain training programs for emergency responders, and continue to identify new training programs as needed.</p>	<p>In the event of a natural disaster, hazardous material release, or other catastrophic incident, numerous emergency responders, often with widely different roles, will be required to work as a single, integrated unit. Key to this effort is training. The City and County need to continually identify the different training needs for numerous responders, including, but not limited to dispatchers, initial responders, field responders, and incident commanders. Included as part of this is a continuous training program, involving classroom training, tabletop exercises and field exercises. The effort should also address the development and implement public awareness training programs.</p> <p><u>Status:</u> The Apalachee Regional Planning Council, Tallahassee, Gainesville, Thomasville, Valdosta and other surrounding communities have worked together on regional responses. In Florida, surrounding communities have agreed to support each other through the Fire Chief's Association and the Regional Domestic Security Tasks Forces. There are seven of these in Florida, and they support each other as needed.</p>	<p>All</p>	<p>Low/Continuing</p>	<p>City of Tallahassee and Leon County Emergency Management</p>	<p>City of Tallahassee & Leon County</p>	<p>Hazardous Materials Training Program (FEMA); Chemical Emergency Preparedness and Prevention Grants Program (EPA)</p>

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<p>(19) Continue to identify needs for improving the disaster resistance of critical facilities.</p>	<p>Critical facilities provide essential services in the event of an emergency, but may be housed in structures that require improvements to weather the impacts of a disaster. Improvements may include, but not be limited to, installing storm shutters, moving utilities underground, and acquiring gas generators for traffic signals, sewage pump stations, water well pump stations and emergency shelters.</p> <p>Status: The Local Mitigation Strategy Steering Committee continues to work to identify additional security measures to protect critical facilities within the community. The City has installed extra security measures at certain critical facilities throughout the City. The North Florida Regional Domestic Security Task Force is provided funding to address K-12, Universities, Court houses and communications towers, funding is still needed to protect utilities.</p> <p>There is increased emphasis on identifying needs for improving critical facilities and monitoring since Hurricane Hermine on September 2, 2016. Because of the hurricane, additional funding needs have been identified for generators to operate, traffic signals, sewage pump stations, water well pump stations and emergency shelters such as schools, public community centers and libraries. There is also a need to move key vulnerable electric grid components underground to protect them from storms. There are approximately 150 key overhead main circuit lines and these frequently serve medical, public safety and other critical facilities.</p> <p>A local committee outlines certain items to be purchased, and some funding is coordinated through the Regional Domestic Security Task Force (RDSTF). However, available funding for this initiative is decreasing.</p>	<p>Flooding, Hurricanes & Tropical Storms, Storm Surge/ Tsunami, Energy Failures/ Disruptions</p>	<p>High/Continuing</p>	<p>City of Tallahassee and Leon County Emergency Management</p>	<p>City of Tallahassee & Leon County</p>	<p>HMGP (DEM); CDBG (DEO); RDSTF (DHS)</p>

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<p>(20) Identify populations at risk under different scenarios.</p>	<p>Determine the impact on housing, medical, evacuation, shelters, etc., for different populations such as those attending special events, student populations, and the elderly.</p> <p><u>Status:</u> Leon County has developed HAZUS capabilities and training. This software program has been used to estimate direct economic loss from building damage and indirect losses such as business interruption. Additionally, HAZUS can estimate shelter needs based on population and socioeconomic information. Leon County Geographical Information system (GIS) department has received Hazus 3.1 and will use it to compare known damages from Hurricane Hermine. It will also be integrated into the 2020 LMS update.</p> <p>The Local Mitigation Strategy Steering Committee regularly meets to discuss these issues. Additional coordination has also taken place using the digital information available through the community's Geographic Information System. In addition, the Florida Department of Health and the Florida Division of Emergency Management also considers this topic for hazardous materials.</p> <p>In addition, the Leon County and the City of Tallahassee in 2011-2012 collaboratively developed a Post-Disaster Redevelopment Plan (PDRP) in order to better prepare the community for long-term recovery and redevelopment after a disaster. This plan complements other planning efforts ongoing in the city and the county, including the Comprehensive Plan, Local Mitigation Strategy (LMS) and Comprehensive Emergency Management Plan (CEMP). The PDRP identifies policies, operational strategies and roles and responsibilities for implementation that will guide decisions that affect long-term recovery and redevelopment of the community after a disaster.</p> <p>Leon County now also requires a Temporary Uses, Construction Staging Areas and Special Events Permit for events intended to accommodate an attendance of 250 or more persons. The County's Department of Development Support and Environmental Management processes this permit, which is reviewed by the County's Development Services Division, Fire Safety Office, Emergency Medical Services, Sheriff's Office and the Health Department.</p>	<p>All</p>	<p>Low/Continuing</p>	<p>TLCGIS, City of Tallahassee and Leon County Emergency Management, and City of Tallahassee - Leon County Planning</p>	<p>City of Tallahassee & Leon County</p>	<p>EMPA Trust Fund (DEM)</p>

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<p>(21) Encourage the establishment of community-based emergency shelters.</p>	<p>Subdivisions, mobile home parks, etc. that have storm shelters incorporated into their designs would provide additional sheltering capacity and eliminate the need to evacuate residents. These buildings could double as community centers.</p> <p><u>Status:</u> The City of Tallahassee and Leon County have a total of 15 school campuses and 72 buildings, which meet the Red Cross standards and can be used as emergency shelters. In addition, the City of Tallahassee is now providing transportation to persons who regularly ride StarMetro seeking shelter. Three shelters were employed during Hurricane Hermine on September 2, 2016.</p> <p>Through the successful completion of several structural hardening mitigation projects, Florida State University now maintains an inventory of four buildings with the capability to shelter 3,140 of its own students, faculty, staff and their immediate family members on campus, without burdening the community shelter system.</p>	<p>All</p>	<p>Low/ Continuing</p>	<p>City of Tallahassee and Leon County Emergency Management</p>	<p>City of Tallahassee & Leon County</p>	<p>Local</p>

Table 3.3. Prioritized Mitigation Initiatives with Potential Funding Sources, 2016

Initiative	Summary/Status as of September 2016	Hazards	2016 Estimated Costs & Timeframe	Responsible Agencies	Jurisdiction	Potential Funding Sources
<p>(22) Deploy low-power public radio station and notifications covering all of Leon County.</p>	<p><u>Status:</u> When an emergency requires immediate messaging, Leon County Emergency Management staff contacts the WFSU-88.9 FM station engineer and request activation of the link at their location. When both links are active (EOC and WFSU Studio), Leon County Emergency Management can broadcast live on WFSU-88.9 FM. The link is maintained by Leon County Management Information Services.</p> <p>Tallahassee Community College (TCC) utilizes an Emergency Notification System called TCC Alert. System components include:</p> <ol style="list-style-type: none"> 1. RAVE emergency reporting software sends messages to classroom phones, personal phones including text messages, E-mails and computer screen pop-ups for all campus computers. 2. Federal Signal Outdoor Siren System / Audible Messages 3. Captiveyes T.V. monitors screen pop-ups located throughout the campus <p>The FSU Alert emergency notification and warning system at Florida State University provides 35+ methods of delivery, single-button activation, and end-user delivery in 5 minutes or less. The university continues to develop and improve the system with expanded coverage, new interoperable communications technologies, and redundancies to ensure operability at all times, under all conditions. More information about the program can be found at: http://emergency.fsu.edu/services/FSUAlert</p> <p>The FAMU emergency notification system issues warnings through Blackboard Connect, the University's emergency notification system. This web-based system sends instant alerts to all students, faculty and staff cell phones, e-mail, and/or pagers. On the main campus (Tallahassee), when notification is necessary due to an immediate and serious threat to public safety, the campus community will also be alerted through its Emergency Siren System, which delivers an audible tone followed by a voice message to the community notifying them of the immediate threat.</p>	All	Low/Continuing	City of Tallahassee and Leon County Emergency Management WFSU TCC FSU	City of Tallahassee & Leon County	Local, State of Florida

Table 3.3. Prioritized Mitigation Initiatives with Potential Funding Sources, 2016

Initiative	Summary/Status as of September 2016	Hazards	2016 Estimated Costs & Timeframe	Responsible Agencies	Jurisdiction	Potential Funding Sources
(23) Identify major land-based transportation corridors and establish safe zones around those corridors based on the exposure pathway for different chemicals.	<p>This would also include identification of all structures, facilities and special need populations in the corridors. Provide ready access to this information to hazardous material response personnel, preferably from deployed resources (such as a GIS capability on the hazardous response vehicle).</p> <p><u>Status:</u> The Apalachee Regional Planning Council through the Local Emergency Planning Committee has developed a “Hazardous Materials Commodity Flow Study” for transportation. The study focuses on major highway and railway corridors for a nine county region for first responder training considerations. In addition, local Emergency Management officials have developed preliminary mapping of safe zones, 1-2 miles along the major routes through the community.</p>	Hazardous Materials Storage and Transportation	Low/Continuing	City of Tallahassee and Leon County Emergency Management	City of Tallahassee & Leon County	Hazardous Materials training Program (FEMA); Chemical Emergency Preparedness and Prevention Program (EPA)
(24) Establish a regional lightning detection and warning system.	<p><u>Status:</u> Representatives from Florida State University (FSU) have proposed a regional lightning mapping array (LMA). The proposed lightning mapping array would provide all public and non-profit entities in the region advanced warning of the potential of a lightning strike, followed by active monitoring capabilities once lightning is occurring. With advanced warning, detection and monitoring capabilities, the goal is to mitigate the risk to life and property from lightning strikes. FSU is exploring various possibilities for support.</p> <p>A local company, WeatherSTEM, has partnered with Florida State University, Tallahassee Community College, Florida A&M University, Leon County Schools and others to install forty-three weather stations throughout Tallahassee-Leon County. The WeatherSTEM systems allow anyone, including the general public, the opportunity to enroll in personal notifications of a variety of weather conditions, including lightning. The system provides a Professional Lightning Advisor (PLA) feature which allows people to monitor an ongoing lightning threat and determine when it is safe to resume normal activities. Additional stations and system features are in continual development.</p>	Lightning	Low/ Continuing	FSU	City of Tallahassee & Leon County	State of Florida, U.S. Government

Table 3.3. Prioritized Mitigation Initiatives with Potential Funding Sources, 2016

Initiative	Summary/Status as of September 2016	Hazards	2016 Estimated Costs & Timeframe	Responsible Agencies	Jurisdiction	Potential Funding Sources
(25) Establish a regional weather MESONET of weather stations.	<p><u>Status:</u> A local company, WeatherSTEM, has partnered with Florida State University, Tallahassee Community College, Florida A&M University, Leon County Schools and others to install forty-three weather stations throughout Tallahassee-Leon County. These systems provide real-time and historical weather data including, but not limited to: temperature, humidity, wind speed, wind direction, heat stress, rainfall total, rainfall rates. These widespread data network will assist the National Weather Service and local emergency management officials to monitor weather developments. Additional stations and system features are in continual development.</p>	Weather and Lightning	Low/ Continuing	FSU	City of Tallahassee & Leon County	State of Florida, U.S. Government

**Appendix D-
City of Tallahassee Local Mitigation Strategy
2016 Progress Report - Attachment**

Table 1: City of Tallahassee Drainage Improvement Projects

The City has identified the following 19 drainage improvement projects in its current Capital Improvement Program (FY2016-2021). The estimated cost of these projects totals \$94,739,630.

Project	Cost (\$)	Prior Year	Current Status
Concord Road SMF	1,214,315	Construction	Completed
Downtown Stormwater Master Plan	850,000	Analysis	Analysis
Eastgate Flood Relief Project	5,450,000	Phase II Construction	Phase II Construction
Emory Ct and Dupont Dr Area Flood Relief (4)	7,103,704	Phase II Analysis & Design	Phase II Construction
Frenchtown Stormwater Master Plan (2)	11,645,400	(see note 2 below)	(see note 2 below)
Inglewood Stormwater Improvements	1,485,300	Design	Design
Lake Ella Stormwater Outfall	150,000	Design	Construction
Lower Central Drainage Ditch	11,450,050	Design	Permitting
Madison-Gaines St. Stormwater Outfall	7,250,000	Design	Construction
Maclay Boulevard Stormwater Facility	3,400,000	Study	Preliminary Engineering
Medium Stormwater System Imprv. (3)	24,000,000	New	(see note 3 below)
Meginnis Arm LOMR	225,000	FEMA Review	FEMA Review
Northeast Ditch Tributary 2 Flood Study	120,000	FEMA Review	FEMA Review
Rainfall and Stream Gauging	2,095,861	Data gathering	Data gathering
Royal Oaks Creek	3,000,000	Study	Design
Small Projects Initiative (see below)	8,350,000	See Table 2 below	See Table 2 below
Stormwater Infrastructure Inventory and Mapping	3,360,000	Data gathering	Data gathering
South City – Country Club Creek & East Ditch LOMR	1,750,000	Study	Preliminary Design
Upper West Ditch Stormwater Facility	1,840,000	Analysis	Design
Total	94,739,630		

Notes:

1. Projects listed as “On Hold” have been recommended and approved in the Capital Budget and are awaiting implementation.
2. The Frenchtown Stormwater Project has been segmented into multiple phases. Nine phases have been constructed while other phases are in various stages of implementation.
3. The Medium Stormwater System Improvement Project funds the construction of multiple small to medium sized projects, some of which are listed under the Small Projects Initiative (SPI) project list (Table 2).
4. These projects have been segmented into two phases.

Table 2: City of Tallahassee Drainage Improvement Projects - Small Projects Initiative – Current & Planned Projects

Project	Prior Year Activity	Status
3015 Shamrock North	Under Construction	Completed
3244 Shannon Lakes	Design	Under Construction
1341 Hutchinson Avenue	Design	Completed
903 Beard Street	Design	Under Construction
1133 Richardson Road	Under Construction	Completed
3509 Kilkenny East	Under Construction	Completed
2410 Limerick Drive	Under Construction	Completed
Limerick Drive Outfall	Design/Property Acquisition	Shelved
1423 Devils Dip	Under Construction	Under Construction
1829 Ivan drive	Design	Under Construction
3033 Shamrock South	Design	Design
Bradford Road Stormwater Outfall	Under Construction	Completed
Gwen Street	Study	Study
Limerick Drive (near 2220 Limerick Drive)	Study	Design
Tory Sound	Study	Design
Arkansas Street	Study	Design
Lee Avenue	Design	Design
Short Street	Study	Study
Sauls Street	Study	Property Acquisition
Glendale Drainage Improvements	Design	Design
1125 Seminole Drive	Study	Shelved
Longstreet/Pickett Court	Study	Shelved
Breckenridge on Park	Study	Study
Atchena Nene Drainage Improvements	Study	Study
Adams Street and College Avenue Drainage Improvements		Study
2494 Elfinwing Lane & 3753 Swallowtail Trace		Study
Brandon Hill Drive Drainage Improvements		Study
University Park Drainage Improvements		Construction
Rosemary Terrace Flood Relief		Study
Olson Road Stormwater Outfall Improvements		Study

Note: All “Small Projects Initiative” projects that are listed as “On Hold” have been recommended for construction and are awaiting implementation. SPI projects listed as “Future” are planned in the SPI program and are planned to be implemented in the order listed. SPI projects listed as “Integrated” are included as a component or part of a major capital improvement project.