House of Representatives
Study Committee on Disaster Mitigation and Resilience

Final Report

The Honorable Clint Crowe, Chairman
Representative, 118th District

The Honorable J Collins
Representative, 71st District

The Honorable Edna Jackson
Representative, 165th District

The Honorable Lynn Smith
Representative, 70th District

2024

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INTRODUCTION

The House Study Committee on Disaster Mitigation and Resilience was created by the passage of House Resolution 1432 during the 2024 Session of the Georgia General Assembly.

HR 1432 stated that the committee will examine ways to develop a comprehensive resilience plan to accommodate and mitigate current and future disaster events with the goal of facilitating strong economic development, promoting tourism, and assisting communities and businesses struggling with repeated disaster impacts.

The committee consisted of four members of the House of Representatives. On June 6, 2024, Speaker Jon Burns appointed the following members: Representative Clint Crowe, Chair; Representative J Collins; Representative Edna Jackson; and Representative Lynn Smith.

MEETINGS

The House Study Committee on Disaster Mitigation and Resilience held three public meetings:[1]
August 22nd, 2024 at the Butts County Administration Building in Jackson, Georgia
Link to Recording of Meeting: https://www.youtube.com/watch?v=pOuVBrrvKyM
The following individuals provided testimony at the meeting: Stephen Clark (State Hazard Mitigation Officer, Georgia Emergency Management Agency); Dr. Brian Bledsoe (University of Georgia); Jason Stott (Storm Center Operations Manager, Georgia Power); Drew Gardner (, Senior Operations Project Manager, RaceTrac); Jeff Partin (Director of Security and Emergency Management, Home Depot); Brad Johnson (Butts County Manager); Kevin Johnson (Henry County Deputy Manager); and Glenn Polk (Spalding County Fire Chief and EMA Director).

November 21st, 2024 at the Savannah Economic Development Authority Building in Savannah, Georgia
Link to Recording of Meeting: https://www.youtube.com/watch?v=Y1jPtMQMRx0&t=10501s
The following individuals provided testimony at the meeting: Jackie Jackson (Resilience Program Administrator, Chatham County); Jennifer Kline (Coastal Hazards Specialist, Georgia Department of Natural Resources); Kait Moreno (Resilience Planning Director of the Coastal Equity and Resilience Hub, Georgia Tech); Jake Matthews (Vice President of Governmental Affairs, Georgia Forestry Association); Lee Ballentine (FirstNet Manager, AT&T); and Elizabeth Reynolds (State Director for Legislative Affairs, AT&T). Following the meeting, committee members participated in a site visit to Tybee Island. The tour was led by Alan Robertson from AWR Strategic Consulting, who is a contracted consultant with the City of Tybee Island.

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[1] The committee thanks Chelsea Bell, Megan Mercer, Marci Rubensohn, Christina Tai, and The Pew Charitable Trusts for their work and assistance in organizing the meetings. The committee also thanks the House Media Services Office for livestreaming and maintaining all recordings of the meetings. Finally, the committee thanks the Butts County Administration Office, the Savannah Economic Development Authority, and City of Tybee Island for hosting the committee during meetings and site visit, respectively.

December 4th, 2024 at the State Capitol in Atlanta, Georgia
Link to Recording of Meeting: https://www.youtube.com/watch?v=Y1jPtMQMRx0&t=10501s
The following individuals provided testimony at the meeting: Aleisha Rucker-Wright (Deputy Executive Director, Georgia Emergency Communications Authority); Pokey Harris (Executive Director of 911 Board, North Carolina Department of Information Technology); Thomas Rogers (Network Engineer, North Carolina Department of Information Technology); Ben Moser (President and CEO, United Way of Chattahoochee Valley); Michael Smith, President and CEO (United Way of Valdosta); Venessa Turner (Georgia Department of Agriculture); Rusty Haygood (Deputy Commissioner for Community Development, Georgia Department of Community Affairs); Shana Jones (Associate Director, Carl Vinson Institute of Government (UGA)); Chris Stallings (Director, Georgia Emergency Management Agency); Anne Brody (State Government Relations Director, American Flood Coalition); Ran Reinhard (Director of Operations, South Carolina Office of Resilience); Alex Butler (Resilience Planning Director, South Carolina Office of Resilience); and Kristiane Huber (Officer, State Resilience Policy, The Pew Charitable Trusts).

Committee Findings

Understanding Georgia's Disaster Landscape: Past, Present, and Future

State Experience

Georgia's geographical location and environment allows for a multitude of natural disaster threats.[2] During the course of this committee, various previous natural disasters were discussed in the context of their impact, recovery, and lessons learned. While disaster planning can be prone to recency bias, considering past experiences is vital in the disaster mitigation process.

The meeting in Jackson, Georgia, allowed local leaders from surrounding counties to recall their experiences with the 'Great Floods of 1994', caused by Tropical Storm Alberto, [3] and the 2023 tornado outbreak that affected multiple southern states.[4] This highlighted that many communities, such as a town in middle Georgia like Jackson, are susceptible to different weather-related events. The state's diverse environment means threats can range from cold-weather, tornadoes, flooding, hurricanes, and other natural threats.

Hurricane Helene, in 2024, devastated several communities in Georgia, with Governor Brian Kemp issuing a Major Disaster Declaration for 41 counties.[5] The powerful storm overwhelmed numerous industries including several segments of the agricultural industry, the supply chain and

[2] https://gema.georgia.gov/georgia-disaster-history
[3] https://www.albanyherald.com/multimedia/photos-flood-of-1994-damage/collection_f47c6848-98f5-11e9-b017-57697189edca.html#6
[4] https://www.ncei.noaa.gov/access/monitoring/monthly-report/tornadoes/202301
[5] https://gema.georgia.gov/press-releases/2024-10-02/major-disaster-declared-41-georgia-counties-individual-and-public

logistics sector, and power companies.[6] Helene downed over 8,000+ utility poles, leaving a large number of communities without power or water for days, weeks, and in rare cases, over a month.[7]

During the course of the committee's work, disaster-related events resulted in the cancellation or postponement of meetings during the course of the committee's work, including Hurricanes Helene and Milton. The committee sympathizes with the families and loved ones of the 33 Georgians and all victims who lost their lives during these storms.

Georgia's Coast

Georgia's coastal plain is vulnerable to several natural disaster threats. During the second meeting in Savannah, the testimonies emphasized these threats such as hurricanes, flooding, and land erosion.[8] Some presenters also identified that these present unique community and economic hardships, such as varying development regulations and standards for residential and commercial zones. Unique community and economic hardships, such as varying development regulations for residential and commercial zones, were identified by testimonies from both public and private entities.[9]

During a site visit to Tybee Island led by Alan Robertson, a consultant with the City of Tybee Island, the members were taken to several spots on the island; including beach front and small waterways connected to the ocean. Some areas were experiencing large amounts of erosion, while others were struggling with antiquated infrastructure. While the local community is advancing with plans to confront these issues, the committee noted the importance of both the challenges and local efforts to be included in future disaster focused discussions on a state level.

Representative Edna Jackson voiced a concern for the roadway entering Tybee Island. U.S. Highway 80 is the only entrance and exit way to the island, and its low placement makes it increasingly vulnerable to flooding due to high or violent tides and large rainstorms. If the roadway is obstructed, residents on the island and emergency crews are restricted from island access until the tide lowers. While this highway is under the jurisdiction of the federal government, the local concerns were noted by committee members during the site visit.

Downed trees along main highways near the coast and across several rural South Georgia counties illustrated a visual result of recent disasters. Jake Matthews, with the Georgia Forestry Association, testified that this is reminiscent of Hurricane Michael in 2018, and affects a majority of the same counties. Clearing, hauling, and properly disposing of lumber knocked down by aggressive storms presents different obstacles than the professional harvesting of lumber and

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[6] https://extension.uga.edu/topic-areas/timely-topics/helene-report.html; https://jagwire.augusta.edu/au-expert-discusses-hurricane-helenes-impact-on-the-supply-chain/

[7] https://www.southerncompany.com/newsroom/business-leadership/a-storm-of-unprecedent-magnitude-southern-companys-response-to-h.html

[8] https://iris.uga.edu/mapping-flood-vulnerability-in-the-savannah-metro-area/

[9] https://www.savannahga.gov/3709/Impact-Fees

timber. In the case of Hurricane Michael, the General Assembly crafted a $200 million income tax credit geared toward reforestation of damaged property.[10] Any eligible landowners seeking the credit were required to apply at 100% of the value of their timber loss, which would be capped at $400/acre. The measure was limited to only counties mentioned in the bill.

GEMA Director Chris Stallings stated that a major element of response is debris removal, which includes both natural and man-made debris (building material, cars, etc.). This process takes excessive amounts of time, man-power, and money. While GEMA and other actors have been successful in the removal process, other efficiency methods were also explored. Discussions of these measures ranged from funding options, central coordination, and technological enhancements.

Disaster Related Technology

Power Accessibility and Secondary Power Sources

Chris Stallings stated that power is typically the biggest issue in most natural disaster events. Primary power sources, such as power lines and utility poles, are vulnerable to damage in most weather events. Some buildings do not have appropriate equipment to attach other power sources, such as generators.

Several testimonies mentioned generators as a central part of immediate disaster recovery. Stephen Clarke, State Hazard Mitigation Officer with GEMA, estimated that the agency has acquired between 15-18 commercial grade generators, while other agency partners supply more when necessary.[11] Private companies, such as RaceTrac, have already prioritized acquisition of generators and power resources as a key part of their disaster mitigation strategy. However, the access to secondary power should also be considered with the ability to plug these units into a building's power system.

Power transfer switch installation was mentioned as a priority by several parties. Power transfer switches allow facilities to easily transfer all power dependent equipment in a given building or site to a secondary source, such as a generator, with one switch. Gas stations and convenience stores have begun installing switches on new buildings as they are constructed, in addition to upgrading several older stores. Representative J Collins, echoed these concerns for public buildings such as elderly care or assisted living facilities.

Emergency Networks and Communications

Access to wireless networks is a crucial component of disaster response. Lee Ballentine, FirstNet Manager for AT&T, presented network devices that are made for emergency response situations. One of these devices is the Compact Rapid Deployable (CRD). This is a small on-demand cell tower

[10] O.C.G.A. § 48-7-40.36

[11] https://gema.georgia.gov/press-releases/2024-06-14/gemahs-receives-195-million-hazard-mitigation-grant

with a range of up to one mile. They are typically deployed before or after storms to ensure network connection for devices within its range. The case example for this use is Jasper Memorial Hospital in Jasper County, which was struck by a tornado outbreak in 2023. The facility ran all of their operations on their internet network, which was knocked out during the storm. Ballentine explained that a hospital in this situation would be able to plug an ethernet cable into CRD devices, and continue to run their operations. He stated that the State of Florida has purchased multiple of these devices, and have used them in similar situations.[12]

Next Generation 911

Regional emergency operations centers play a vital role in emergency response and communication. 911 centers are responsible for connecting resources and services to callers in emergency situations. Georgia's current emergency communication infrastructure is built on Legacy 911. Originally created to receive calls from landline telephones, this system lacks the flexibility to allow for technological updates. Aleisha Rucker-Wright, Deputy Director of the Georgia Emergency Communications Authority, testified that the system has been widely unchanged since 1968. Communications have certainly changed over time, including the introduction of mobile devices and new GPS models.

Next Generation 911 is an internet network that is dedicated to routing 911 calls. This would allow 911 operations to have access to all features that a typical modern smart phone would, on a secure network. This would replace the current analog 911 infrastructure, and switch 911 systems over to an internet protocol (IP) based network. Over 80% of 911 calls nationally are received from a wireless device.[13]

This system can also manage call overload situations, such as a natural disaster. Some regional 911 offices are limited on their ability to transfer emergency calls during these situations to one to three other 911 centers because of current technological impediments. 64 percent of Georgia 911 centers were impacted during Hurricane Helene in 2024, and more than 150 outage or gap-in-service issues were reported by these centers during and after the storm.[14]

North Carolina began to implement Next Generation 911 in 2018, and completed the transition in 2020. The North Carolina 911 Board, a 17-member policy making board, oversees the operations of the state emergency network.[15] In 2017, the Board awarded AT&T a services management contract to be the provider. This governance was crucial for North Carolina to implement their updated emergency network. Network implementation is conducted on a state-by-state basis, in which funding, implementation, and other concerns are detailed in different ways.

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[12] https://firstnet.gov/newsroom/press-releases/firstnet-network-expands-across-florida-advance-public-safety-communications;

[13] https://www.nena.org/page/911statistics

[14] This statistic was provided by GECA representative during their testimony.

[15] N.C.G.S. § 62A-2

While GECA's long-term goal is to switch over all of Georgia's emergency centers to this updated network, this transition will take time and require funding discussions between state and local governments. Each local government has different emergency needs, and collects different levels of 911 fees to fund 911 operations. Rucker-Wright offered a step towards cost-sharing may be to commission a state 911 fee study, or a legislative study committee. This study would provide a fair fee assessment across rural, urban, and communities that may experience a seasonal or temporary rise in population.

State and Local Coordination

There are three levels to disaster mitigation and resiliency: The federal level, such as the Federal Emergency Management Agency (FEMA), that plays a large role in disaster response and funding; the state level, such as GEMA, also participates in funding and connecting local units to federal resources, but has a more direct participatory role, such as providing and coordinating ground-level response; and the local level, such as local government, communities, and other groups. This level is the basic unit of disaster response, as they oversee local regulations, guidelines, and preparedness efforts.

Planning is a vital part of disaster preparedness and resilience, and this can come from many places. Planning is different at all levels, and overlap in most instances. Some testimonies stated that when unmanaged, wires often get crossed and services are duplicated, or absent altogether.

An example of local planning is the Disaster Recovery and Redevelopment Plan (DRRP), which was created by an Executive Order by Governor Nathan Deal in 2013.[16] This plan consisted of recovery strategies for coastal counties, but was later used to make the statewide Georgia Disaster Recovery and Redevelopment Plan, which was modeled under the National Disaster Recovery Framework.[17] This plan was coordinated with coastal counties through the state Department of Natural Resources Coastal Resources Division.

While this is an example of an advanced resiliency and recovery plan, other areas are experiencing different levels of need. United Way, a nonprofit company, invests in initiatives to provide more communication services to rural communities, while groups such as the American Flood Coalition focus on specific planning and funding location services for flood-related events.[18] Recent storms have exacerbated conditions in areas of need.

Collaboration with local governments is an important component in disaster preparation and response. Shana Jones, with the Carl Vinson Institute of Government at the University of Georgia, testified that professional bridges between local and state governments can often be the solution

[16] Executive Order 01.14.13.02.
[17] "National Disaster Recovery Framework" Third Edition, FEMA. December 10, 2024: https://www.fema.gov/emergency-managers/national-preparedness/frameworks/recovery
[18] The AFC Flood Fund Finder Tool: https://floodcoalition.org/fundingfinder

to many obstacles in disaster preparedness. The DRRP is an example of a streamlined planning process that highlighted proper coordination between state and local levels of government.

A central coordination strategy can bridge gaps in resilience and preparedness planning, while also continuing a focus on recovery effort. Communities rely on the state to coordinate federal funds from FEMA, which is an example of the coordination role that the state is currently playing in the disaster process. While a majority of emergency funding comes from the federal level, many presenters shared that the ten percent cost share from the state to local governments continues to provide an additional positive impact.[19] Proactive state actions will lead to enhanced relationships between the state and local levels of disaster mitigation and resiliency.

State Resiliency Office

What is it?

A State Resiliency Office (SRO) is typically tasked with leading statewide planning efforts on disaster recovery, mitigation, and resilience while also coordinating individual plans from communities around the state. In its basic form, the office is meant to craft a state resiliency plan and execute it. A chief resiliency officer (CRO) is an intermediary between the Resilience Office, local communities, and other state actors.

Kristiane Huber, PEW Charitable Trusts, identified four common approaches to state resiliency policy:

1. Establish a State Resilience Office and chief resiliency officer;
2. Develop a statewide resiliency plan;
3. Dedicate targeted resources; and
4. Support local resiliency planning.

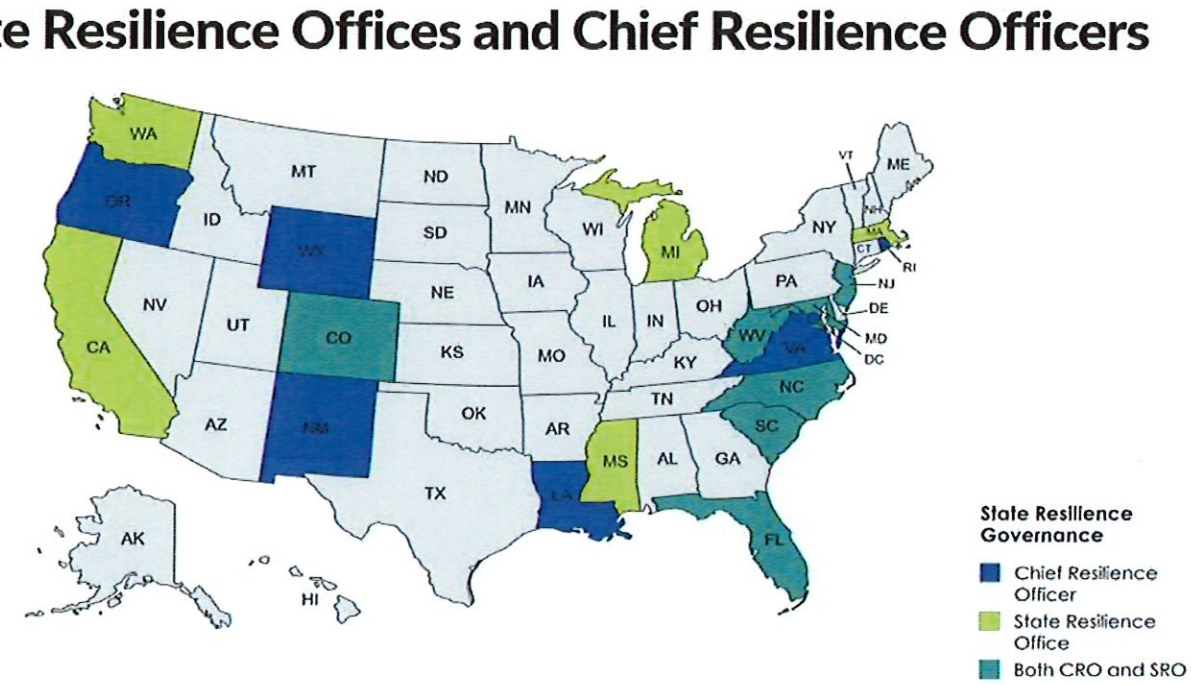
The goal of a SRO is to coordinate planning, and help communities and state agencies update and execute those plans. Resilience allows a combination of efforts by directly connecting the individual and local level to the state-level. By centralizing efforts, the state will be able to deconflict many complications currently experienced in the disaster mitigation, recovery, and resiliency process.

Experience of Other States

While other states have taken steps to prioritize resilience, these plans have varied in form and execution. From the way they are funded, to their office structure, each plan has adopted a strategy of resilience that fits their needs.

[19] https://www.fema.gov/press-release/20220318/fema-announces-9010-cost-share-adjustment

National research conducted by PEW indicates that 18 states and Washington D.C. have either created an SRO, established a CRO, or both as identified in the map below:[20]



As a response to the damage and flooding caused by Hurricane Joaquin in 2015, Governor Nikki Haley created the South Carolina Disaster Recovery Office. Originally meant to be a temporary office charged with overseeing the allocation of resources to disaster-stricken communities, the state was struck by Hurricane Matthew just a year later, which extended the life of the office. In 2018, the devastation of Hurricane Florence prompted the state to conduct an official study that resulted in the Strategic Statewide Resilience and Risk Reduction Plan. This plan included recommendations for a permanent office focused on disaster resilience to cover things such as community planning, coordination, and resource allocation. In 2020, the Disaster Recovery Office transitioned into an official state agency, known as the South Carolina Office of Resilience.[21]

The journey of South Carolina mirrors the experience of other states. South Carolina's enabling legislation included that the SRO was to be headed by a CRO. While some have created either a state officer role or a form of the state office, some have later revised their decisions. Florida and Virginia had both originally created Chief Resiliency Officer positions in their respective Governor's Offices, and then later created state offices.[22] These offices provided them with a team and more resources to execute their duties.

[20] https://www.planning.org/research/planning-for-state-resilience-a-fifty-state-breakdown/

[21] "Strategic Statewide Resilience and Risk Reduction Plan: 2024 Annual Update" South Carolina Office of Resilience. September, 2024.

[22] https://floridadep.gov/rcp; https://budget.lis.virginia.gov/amendment/2024/1/HB30/Introduced/MR/44/1h/

State Resiliency Plan

A state resiliency plan is the guide for how state and local communities prepare, respond, and rebuild following natural disaster events. A comprehensive plan identifies current and future risks, while defining clear strategies geared toward long-term risk reduction. The plan also directly engages local communities to learn about current gaps in local planning. Local communities face different conditions around Georgia. Some communities may be able to fiscally prioritize disaster planning, while others are not. The plan should consider these differences, and craft policies to aid communities of all types in long-term planning.

The committee urges further discussion on what a state Resiliency plan should comprise, while including guidelines listed above. Plans have been formulated to confront key threats experienced in other respective states. South Carolina's Strategic Statewide Resilience and Risk Reduction Plan includes data identification and information gaps between state and local governments, and recommendations on how to handle specific weather events. West Virginia adopted a more specific model through their Flood Resiliency Plan, which identifies priority policies and potential funding for flood-related events.[23] These examples demonstrate that a state plan can be flexible to suit unique needs on a state-by-state basis.

The committee refers other concerns and details to the discussion and drafting of the enabling legislation.

Creating the Georgia State Office of Resilience

Georgia does not currently have either a CRO or SRO. A majority of testimonies from local and state officials identified the need for a central coordination unit for resiliency planning. Jackie Jackson, Chatham County, testified that many local groups along the coast have implemented several different strategies, including non-profits, private parties, and local leaders. Other presenters confirmed this to be true in different regions of the state, and that it has presented repetition of efforts leading to more cost, confusion in resource allocation, and misplacement of physical assistance.

The duties of the office should include, but not be limited to: establishing a statewide comprehensive resiliency plan; creating a prioritized list of strategies; identifying hazard types and levels of threat; updating plans at set intervals to ensure up to date planning; and coordinating local planning to meet the needs and concerns of individual community cases. Other duties of the office should be clarified in the enabling legislation after careful consideration and deliberation. While priority should be given to the core duties provided in this report, the roles of the office can expand beyond specific items mentioned. The committee also suggests that the office be administratively attached to GEMA, similar to the Georgia Emergency Communications Authority, and the funding for the office should be determined during the appropriations process.

[23] "West Virginia Flood Resiliency Plan" West Virginia State Resiliency Office. June, 2024.

The committee also suggests that the enabling legislation creates the role of State Chief Resilience Officer. The office structure can be determined in the legislation, while stipulating that the CRO be charged with seeing the day-to-day operations of the office. The CRO should also be tasked with overseeing the creation, implementation, and coordination of a state resiliency plan. South Carolina's enabling legislation listed the duties of the role to be "to develop, implement, and maintain the Statewide Resilience Plan and... coordinate statewide resilience and disaster recovery efforts, including coordination with federal, state, and local governmental agencies, stake holders, and nongovernmental entities".[24]

The SRO should be charged with building a statewide comprehensive resilience plan. The office should conduct various means of research, including but not limited to: discussion and input from local communities; identify state level and agency needs; and identify hazard types and levels of threat.

The committee refers other concerns and details to the discussion and drafting of the enabling legislation.

[24] S.C. Code Ann. §48-62-10

COMMITTEE RECOMMENDATIONS

Upon the conclusion of its meetings and following discussion among committee members, the House Study Committee on Disaster Mitigation and Resilience makes the following recommendations:

1. Establish State Office of Resilience and Chief Resilience Officer, administratively attached to the Georgia Emergency Management Agency;
    a. Enabling Legislation creating the office should define duties to fall under the office and officer;
2. Implement Next Generation 911 as a replacement to the current Legacy 911 technology;
    a. Commission a state fee study or a legislative study committee to study the assessment of 911 fees and the long-term local government funding of Next Generation 911;
3. Create a Reforestation Tax Credit for the forestry industry, landowners, and affected counties as a response to Hurricane Helene;
4. Suggest revisions to the state building code to include requirements for new-build nursing homes, i.e., assisted living facilities, to have secondary power sources, including a requirement that existing facilities must install power transfer switches within a five-to-10-year timeframe defined in that section.

Speaker Burns, these are the findings and recommendations of your Study Committee on Disaster Mitigation and Resiliency.

Respectfully Submitted,

The Honorable Clint Crowe
Representative, 118th District
Chairman