Information Sharing
HB 2340

State of Texas

November 2020

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Executive Summary

The motivation for this report came from the 86th Legislature's desire to improve the access and availability of disaster response and recovery information by addressing recommendations outlined in the *Eye of the Storm* report written by Governor Greg Abbott's Commission to Rebuild Texas. The *Eye of the Storm* provided guidance to the legislature on how to prepare Texas for future catastrophic disasters.

This report focused on addressing the directive given under H.B. 2340:

> *"The work group shall develop recommendations for improving the manner in which electronic information is stored by and shared among state agencies and between state agencies and federal agencies to improve the capacity of the agencies to:*
>
> *(1) Respond to a disaster; and*
> *(2) Coordinate the agencies' responses to a disaster."*

A working group comprised of representatives from multiple state agencies responsible for disaster response and recovery activities, as well as representatives from institutions of higher education, was convened to determine current data-sharing needs, to identify methods currently being used, and to build upon previous work done in this area.

The working group identified several independent disaster-related information sharing projects that were planned or in-progress, as well as multiple studies that had been conducted related to the feasibility of sharing certain types of data among disaster response agencies. These initiatives were examined in detail during discussions between each projects' leadership and the working group.

The working group reviewed each of the groups' reports and found several recommendations that the working group supported as well. In addition, the working group identified a need for overall coordination among the independent information sharing initiatives, and developed recommendations for future collaboration.

Overview

Goal

An Information Sharing work group shall develop recommendations for improving the manner through which electronic information is stored by and shared among state agencies and between state agencies and federal agencies to improve the capacity of the agencies to:
(1) respond to a disaster; and
(2) coordinate the agencies' responses to a disaster

Objectives

- Develop an information sharing working group
- Develop proposals for improving capacity for disaster response and agency coordination
- Provide recommendations to Governor's Office

Audience

- TDEM Leadership
- Governor's Office
- State Legislature

Authority

House Bill 2340

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For more information:

Texas Legislature Online
https://capitol.texas.gov/BillLookup/History.aspx?LegSess=86R&Bill=HB2340

Stakeholders

Members are identified in the chart below. (This should include all stakeholders such as the chain of command, working group members, local official committee members, etc)

Agent	Summary
Texas Division of Emergency Management (TDEM)	The Texas Division of Emergency Management is charged with carrying out a comprehensive all-hazard emergency management program for the state and for assisting cities, counties, and state agencies in planning and implementing their emergency management programs.
Texas Comptroller of Public Accounts	As Texas' chief tax collector, accountant, revenue estimator, treasurer and purchasing manager, the agency is responsible for writing the checks and keeping the books for the multi-billion-dollar business of state government.
Department of State Health Services (DSHS)	To improve the health, safety, and well-being of Texans through good stewardship of public resources, and a focus on core public health functions.
Texas Department of Transportation (TxDOT)	A forward-thinking leader delivering mobility, enabling economic opportunity, and enhancing quality of life for all Texans.
Texas General Land Office (GLO)	The Texas General Land Office primarily serves the schoolchildren, veterans, and the environment of Texas. The agency does so by preserving our history, maximizing state revenue through innovative administration, and through the prudent stewardship of state lands and natural resources. Within the GLO is the Division for Community Development and Revitalization (CDR), with the role of administering the disaster recovery and mitigation funds provided by the U.S. Department of Housing and Urban Development (HUD), as well as, the FEMA funded temporary housing program.
Health and Human Services Commission (HHSC)	Texas Health and Human Services has hundreds of programs and services that help more than 7 million Texans a month live better lives, and it's our strong foundation of dedicated people who make it happen every single day.

Texas Commission on Environmental Quality (TCEQ)	The Texas Commission on Environmental Quality strives to protect our state's public health and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.
Texas Historical Commission (THC)	The mission of the Texas Historical Commission is to protect and preserve the state's historic and prehistoric resources for the use, education, enjoyment, and economic benefit of present and future generations.
Texas Engineering Extension Service (TEEX)	TEEX continues to take a leading role in enhancing the homeland security of the state, preparing Texas communities to prevent, protect against, respond to, and recover from acts of terrorism and natural disasters.
Texas A&M AgriLife Extension Service	Texas AgriLife Extension Service educates Texans in the areas of agriculture, environmental stewardship, youth and adult life skills, human capital and leadership, and community & economic development.
Texas Military Department (TMD)	The Texas Military Department provides the Governor and the President with ready forces in support of state and federal authorities at home and abroad.
Texas Department of Public Safety (DPS)	Proactively protect the citizens of Texas in an ever-changing threat environment while always remaining faithful to the U.S. and State Constitution.

Background, Discussion and Recommendations
This section provides a summary of the project (background, discussion, recommendations, resource requirements, etc.)

The Information Sharing Working Group (Working Group) met to discuss the various data-sharing needs amongst the participating agencies, and to identify relevant data-sharing initiatives that currently exist. While most of the data that was identified as valuable to be shared among agencies centered on Individual Assistance and other federal aid program. The group also identified a need to share disaster-related research and study results across agencies, as well as a need to coordinate independent disaster-related information-sharing initiatives statewide

Several existing data-sharing initiatives were identified as having relevance to the Working Group's charter, including the *Feasibility Study on Single Intake Form and Automated Intake Process for Disaster Assistance and Disaster Case Management*, the *Cloud Feasibility Study*, the Federal Legislative and Policy Recommendations Regarding Disaster Assistance report, the Texas Disaster Information System (TDIS) and the TDEM Disaster Web Portal project. The group met with leaders from each of these projects to identify areas of overlapping responsibilities and goals.

Existing Data-Sharing Initiatives
Information Sharing Working Group reviewed the *Cloud Feasibility Study* commissioned by the Texas General Land Office (GLO), CDR and conducted by Horne, LLP. This study was intended to address questions posed by the 83rd Legislature outlined in in S.B. 171 related to the sharing of disaster related information, specifically related to disaster survivors' information. The study proposed a viable solution to the challenge of information sharing between agencies that leads to uncertainty over who has been contacted, what information has been disseminated and what assistance has been provided. The solution proposed was in the form of cloud-hosted capability that establishes a common data standard, and that interfaces with each agency's relevant data, and serves as a shared data repository of disaster information.

The Working Group also reviewed the Feasibility Study on the *Single Intake Form and Automated Intake Process for Disaster Assistance and Disaster Case Management* completed by Texas Health and Human Services Commission (HHSC) and Texas Division of Emergency Management (TDEM) as required by Senate Bill 6, 86th Legislature, Regular Session, 2019.   This report was motivated by a recommendation from the 2018 Eye of the Storm Report and had a goal of determining the feasibility of developing a single intake form for disaster victims to complete to determine their eligibility for disaster programs.

The Federal Legislative and Policy Recommendations Regarding Disaster Assistance report was developed by a working group composed of state and

federal experts from a great variety of organizations convened to address state-federal collaboration issues mentioned in the *Eye of the Storm* report. The authors identified twenty-two emergency management issues, including information sharing, which would be impacted by federal laws and policies and examined each in detail providing recommendations for each. The Working Group reviewed this report and discussed their findings as they related to data sharing challenges.

In early 2020, GLO project leaders presented to the working group the design and function of the Texas Disaster Information System (TDIS). The TDIS is a secure database that documents the impacts of past disasters, and provides analytical data assessing natural hazard risks, including anticipated effects of future extreme weather events and other natural hazards. The project is being led by the GLO CDR, in coordination with The Institute for a Disaster Resilient Texas at Texas A&M University, and with the Center for Space Research at the University of Texas. The two main goals that TDIS aims to address are:
- Provide reliable and accurate data to decision makers before, during and after disasters
- Help local communities become resilient by providing the information and tools to effectively conduct comprehensive planning.

To accomplish these goals, TDIS is coordinating with federal, state, regional, local and academic partners to gather reliable and accurate information through data sharing agreements.   Data will be identified and prioritized into critical data sets that will be used to design the initial data architecture for the data collection. An interactive, role-based web portal will allow for users to query and export data appropriately. The web portal will also provide the ability to display the relevant data in a comprehensive community planning platform that pulls in the different data sources applicable to that user's community. This existing architecture could be expanded to allow for the addition of future data sharing capabilities.

Pursuant to a separate legislature action assignment, TDEM is developing an initial Disaster Web Portal to provide key disaster information to the public, including access to ongoing response and recovery activities, as well as access to information on services and programs available to disaster victims through local, state, federal and volunteer organizations.

Recommendations

To enable the State to maximize benefits and reduce duplication of efforts, the Information Sharing Working Group recommends that coordination continue among all the various disaster data-sharing initiatives. Working together ensures that solutions are developed to address a more diverse set of needs and include data from a wider set of providers. The partnerships could also be beneficial when searching for limited funding streams.

As part of that partnership with the existing data-sharing initiatives, the Working Group supports and amplifies some of their key recommendations, including:

Implement overall recommendations from GLO Horne Cloud Feasibility Report. While the technical specifications may change based on updates to their data management systems or processes over the past 6 years, the general recommendations for the overall governance of the initiative remain valid. The working group recommends implementing the following:

- **Select a lead agency.** In order to move forward, a lead agency must be selected to direct this data-sharing initiative. The lead agency would be responsible for setting the vision and timeline, meeting deadlines, reporting progress, as well as any procurement necessary.   The lead agency would need to be able to direct participating agencies with specific tasks and implementation benchmarks, so legislative support for state agency participation would be necessary.

- **Utilize a third-party mediator.** Since this project would most certainly require dedicated staff and consensus among participating agencies, the State should consider supporting the use of a third-party mediation group to organize and communicate the interest of all participating agencies in the development of the data warehousing system. Ideally this would include a project management team, led by Project Management Professionals (PMP) well-versed in the nuances of disaster response and recovery data storage, to guide the participating agencies through project definition.
  The Project Management team would need to be the mediating party working to achieve agreement by all participating agencies to abide by nationally accepted best practices for data storage and sharing. This would include working with the participants to:

  - Develop an agreement for communication protocols.
  - Engage legal counsel to resolve privacy concerns.
  - Define the overall data warehousing system and processes.

- **Model best practices in cloud hosted data sharing.** Data being shared must be standardized before it can be combined and accessed by other

agencies. Agreeing on interagency data standards is challenging because each participant has developed its databases based on unique agency needs, many of those databases include agency-specific nomenclature. While this is a challenging task, it is one that has been resolved by many in the private sector. In many industries, it is routine to collect a myriad of forms and unique data fields from different sources and standardize and communicate them to other service providers. Enterprise data standards should be used to define the data variables in context and only when needed to minimize cascading system remediations within the various agencies, or instead the development of data transformation capabilities to enforce established data standards outside of legacy agency systems.

Implement recommendations from the Feasibility Study on Single Intake Form and Automated Intake Process for Disaster Assistance and Disaster Case Management. This study found that while there would still be some challenges to sharing data with federal partners that would need to be addressed over time, the State-led development of a single intake form would benefit both survivors and partner agencies at the state, local and non-profit level. The Working Group supports this initiative and the following recommendations:

- o Approve the State-led single intake form in concept.
- o Task Texas Health and Human Services Commission (HHSC), with TDEM assistance, to develop the automated single intake system.
- o Provide funding for the contractor solutions for the development of the automated single intake system.

In addition to the above endorsements, the Information Sharing Working Group recommends collaborating to adopt the areas of each initiative that are already developed or supported. This would allow for faster implementation of future data sharing initiatives that would not need to re-develop basic governance or system architecture.

Implement the data sharing recommendations from the Federal Legislative and Policy Recommendations Regarding Disaster Assistance report. This report reiterated that the inability of federal agencies to share critical survivor information with state and local partners negatively impacted survivors. It also identified the current Privacy Act, Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA) policies as barriers to moving forward with data sharing initiatives, such as the Single Intake Form initiative, and determined that data sharing protocols needed to be developed to protect privacy and data security to allow appropriate sharing of survivor information. The Working Group supports the recommendation that state and federal partners convene a working group of experts to ensure that any related information security documents be updated to allow for states to take lead in disaster intake if they choose to do so.

Coordinate all of the existing data collection and data sharing initiatives with the development of a data-sharing advisory group made up of members of participating state agencies and overseen by a third-party mediator. In order to capitalize on all of the existing progress being made by these independent initiatives, the Working Group recommends that an umbrella organization be created to coordinate efforts and ensure that new initiatives do not conflict with one another. The Working Group supports the use of the third-party mediator to guide and advise this advisory group that was identified and recommended by the *GLO Horne Cloud Feasibility Study*.

Research the feasibility of expanding the TDIS architecture to support additional data sharing projects to maximize infrastructure investment. Development and ongoing maintenance of data sharing infrastructure is cost-prohibitive for many necessary projects. In order to maximize state and grant funding, the Working Group recommends working with the TDIS leadership to identify ways to expand the system architecture to support other data sharing projects like the Single Intake Form Automation Process.

Support the data-sharing work of the TDIS being led by the GLO with maintenance funding. While the initial funding for development of the system has been secured through Community Development Block Grant-Disaster Recovery (CDBG-DR) funds, those funds specifically prohibit the use for ongoing maintenance. To ensure that this valuable data sharing initiative continues, the Working Group recommends identifying dedicated funding to support ongoing operation of the system.

Update the data and add additional agencies to GLO Horne Cloud Feasibility Report. While most of the report remains valid to date, the Working Group recommends funding an update to the report. The update should validate that all data systems and processes originally included have not changed substantially, as well as add additional agencies with disaster response and recovery data that were not included in the first version of the study.

Collaborate with the TDIS to develop a disaster-related study and after-action report repository. In the process of researching this topic, the Working Group found that many studies and research were hard to find or housed within their own agencies. This has limited the access of the findings to other agencies and led to duplication of efforts. The Working Group recommends that TDIS be designated as the official repository for such studies and reports and that state agencies be directed to submit them upon completion for inclusion in the searchable database.

Steps to Development and Implementation

This section provides a summary of next steps including organizational approval, legislative approval and follow on steps if approved. It should also include resource requirements as identified.

Detailed next steps

Due Date	Objectives	Team Assignments	Status
	Initial PMP Review and Approval	Chief Kidd	

For More Information

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