

**Meeting Notes of the
State of Texas Resiliency Working Group**
Summary Report on October 19th, 2021 Virtual Meeting

Attendance

Airiohuodion, Charles	Gray, JoAnne	Olmsted, Steve
AlRashdi, Yazeed	Green, Veronica	Pike, Jason
Ashley-Nguyen, Heather	Hall, Clifton	Ploch, Jackie
Bales, Genevieve (FHWA)	Hong, Feng	Prozzi, Jolanda
Bales, Genevieve (FHWA)	Howell, Michael	Ramirez, Robert
Barnett, Clay	Huerta, Ana Ramirez	Ramirez, Thelma
Benthul, Bart	Isbell, Allie	Robles, Maria
Blazosky, Allie	Johnson, Sondra	Rudge, Dan
Briones, Gracie	Jones, David	Saldivar, Griselda
Burns, Mike	Keaveny, Jay	Samuel, Nicholas
Butler, Jessica	Keen, Stephen	Sanchez Jr, Raymond
Campos, Jose (FHWA)	Kessler, Dan	Schaus, Melba
Carlson, Todd	Klee, RoseMarie	Schipull, Darcie
Champine, Maria	Li, Jenny	Seedah, Dan
Coufal, Kendra	Li, Shirley	Showery, Aisa
Cousineau, Nicholas	MacDonald, Robert	Simmons, Deanne
Diaz, Luis M.	Maley, Barbara (FHWA)	Sullivan, Joseph(FHWA)
Dominguez, Javier	Maley, Barbara (FHWA)	Sullivan, Sean
D'Onofrio, David (FHWA)	McBride, Bryan	Temple, Janie
Driemeier, Kale	McKeown, Chad	Thurin, Peggy
English, Jeffrey	Miller, Matt	Torcat, Adriana
Fauver, Kirk (FHWA)	Morgan, Justin (FHWA)	Wells, Casey
Garcia, Eva	Neal, Jeffrey	Whitehair, Rose
Garza, Sara	Nelson, Christopher	Wolff, Catherine
Girard, Laura (FHWA)	Nelson, Scott	Yaquinto, Giacomo
Gonzalez, Brigida	Nelson, Uryan	
Graham, Tyler	Norton, Laura	

Agenda

1. Introductory Comments on Step 1 Framework Focus of this Meeting- Jeff Neal, North Central Texas Council of Governments
2. Invited Presentations
 - a. Sean Sullivan, Tampa Bay Regional Planning Commission
 - b. Rose Whitehair, Disaster Response and Recovery Subject Matter Expert - Tribal SCO/State SCO & CERT Instructor, (Dine' Nation)
 - c. Steve Olmsted, Arizona Department of Transportation
 - d. David D'Onofrio and Laura Girard, FHWA
3. Questions and Answers Session
4. Closing Comments, Jeff Neal

Opening, Welcoming Comments:

Jeff Neal made brief introductory remarks in reviewing the agenda.

1. In the interest of serving as a resource to improve resilience plan elements that are more interdisciplinary we have invited presenters that cross the range of resilience expertise from planning, emergency response, and maintenance to consider within your plans for step 1 of the five step framework in developing the goals and defining resiliency for your region.

Presentations

Collaborating to Increase Resiliency in Our Communities: Overview of the Tampa Bay Regional Resilience Coalition

Sean Sullivan, Executive Director, Tampa Bay Regional Planning Council

Director Sullivan made the following key observations:

1. TBRPC are currently developing a regional resiliency action plan.
2. TBRPC brings counties and municipalities within to one table to talk about the need for resilience using a collective regional approach.
 - a. One plan
 - b. Shared resources
 - c. Build capacity to learn resilience
 - d. Expanding partnerships-into private sector (90 partners) to contribute to regional resilience action plan
 - e. Pursue new innovations in resilience.
3. TBRPC has secured a primary champion in elected commissioner, Janet Long from Pinellas county. She has pushed for this coordinated approach and sold it to other county commissioners and elected officials across the region.
4. The resilience coalition formed in 2018 with a TAC-led creation of a memorandum of understanding signed with 25 local governments taking 10 months in 2018 starting January and finalizing in October to accomplish.
5. TBRPC is the leading member of the resilience coalition

The graphic features a blue header with the text "Resiliency Coalition Currently 28 Local Governments". Below the header, on the left, is the Tampa Bay Regional Resiliency Coalition logo, which includes a stylized bridge and waves, and a blue box with the text "Working together to increase coordination collaboration consistency to create more resilient, vibrant communities." To the right of the logo is a list of 22 municipalities and 6 counties. At the bottom right is a portrait of Janet C. Long, Coalition Chair, Pinellas County Commissioner.

Resiliency Coalition
Currently 28 Local Governments

Municipalities

1. Bradenton Beach -- June 2019
2. Clearwater
3. Dunedin
4. Gulfport
5. Holmes Beach -- May 2019
6. Indian Rocks Beach
7. Indian Shores
8. Largo
9. Madeira Beach
10. New Port Richey
11. Oldsmar
12. Palmetto
13. Redington Beach
14. Safety Harbor
15. Sarasota
16. Seminole
17. South Pasadena
18. St. Petersburg
19. St. Pete Beach
20. Tampa
21. Tarpon Springs
22. Treasure Island

Counties

1. Citrus County
2. Hernando County
3. Hillsborough County
4. Manatee County
5. Pasco County
6. Pinellas County

Working together to increase coordination collaboration consistency to create more resilient, vibrant communities.

Janet C. Long
Coalition Chair,
Pinellas County
Commissioner

- responsible for maintaining steering committee activities, developing a management and planning committee who are TBRPC staff to bring together the regional resilience plan.
6. Environmental, transport planning, and emergency management agencies all come to the table to help create, along with the University of South Florida professors providing guidance.
 7. TBRPC develops workgroups to help develop content for the regional resilience action plan (Draft Complete in November 2021).
 - a. Risk and Vulnerability Assessment
 - b. Energy Resiliency
 - c. Capital Improvement and Finance
 - d. Geospatial Data
 - e. Planning and Policy
 - f. Municipal Excellence
 - g. Communications and Engagement
 - h. Resilient Shorelines and Spaces.
 8. TBRPC developed a work plan on resilience that:
 - a. Integrated various existing county and municipal vulnerability assessments into one coordinated method and assessment along with various resilience guidance documents.
 - b. Developed shoreline and seawall guidance document using an EPA grant.
 - c. Developed a framework for resilience planning.
 9. TBRPC held a resilience summit for 350 attendees from stakeholder agencies including elected officials and helped raise awareness and pool resources to address resilience more effectively. What resulted from the summit:
 - a. TBRPC HR created new chief resilience officer position.
 - b. Resources in mapping, GIS, vulnerability assessments.
 - c. Capital improvement plan updates at municipal and county level to include SLR in project review process, and add funds for vulnerability assessments/utility fees.
 - d. Coordinated public engagement campaigns across stakeholder agencies (a regional cross-agency public engagement network focused on resilience!)
 10. TBRPC won an FHWA resilience and durability assessment pilot project: modeling 2045 sea level rise, seeding the findings into regional MPO LRTP updates.
 11. TBRPC established a Tampa Bay Climate Science Advisory panel (CSAP) and memorandum of understanding with local scientists involved in climate science many who work at University of South Florida and helped with developing the model projecting sea level rise out to 2045.
 - a. Combined Local St. Petersburg Harbor Tide Gauge Data (noting increase of 7.8 inches of Sea Level Rise in water levels from 1946 to 1919) as a baseline to develop the model with NOAA climate projections.
 - b. Noting incremental impacts on stormwater drainage systems: technological deployment of backflow preventers are big consideration for deployment to local partners to prevent water from flooding back into low lying areas from heavy precipitation events.

Arizona DOT Comparison of Resilience Program to Texas MPO 5-Step Framework

Steve Olmsted, NEPA Assignment Manager, Arizona DOT

Mr. Olmsted made the following key observations:

1. As part of step 1, Arizona DOT developed an internal Arizona DOT resiliency working group comprised of TSMO, Geotechnical, Bridge, Pavement, and Construction groups.
 - a. This working group was developed AFTER securing champions to encourage buy-in across the group managers of various contributing departments.
2. As part of step 1, Arizona DOT developed high level narratives to communicate stressor-specific impacts (heat, precipitation, etc.) and benefits.
3. As part of step 2, Arizona DOT created a GIS database with resilience data which are more connected to the programming and project development phase of resilience.
4. Within step 3, Arizona DOT creates a dashboard surrounding all major natural disaster events to collect all manner of GIS data to evaluate impacts from the event on infrastructure for planning purposes and to analyze how well response and recovery performed.
5. Within step 3, for structures and locations identification standpoint, Arizona DOT creates a programming-to-project link to resilience events that have been tracked and analyzed. This includes identifying the full history of events in the location.
6. Within step 3, and through prior vulnerability assessments, risk-based asset management serves as the framework connecting resilience into planning and programming which then feeds back to risk-based asset management where infrastructure has been improved against primary risks and stressors and can be updated with these listed improvements so resilience-improved assets become an identifiable asset category.
7. Within step 4, entry points for planning to programming are focused on the transportation asset management plan.
8. Within step 4, Arizona DOT ensures use of resilience approaches to projects by making sure its coordinating Vulnerability/Risk/TAMP-driven resilience outreach and discussions with MPOs centered around their long range plan development schedules, as well as on annual planning and programming schedules.
9. Within step 4, Arizona DOT incorporates resilience approaches into Statewide and Regional LRTPs, TIP/STIP, TAMP, and 5 year program. Arizona DOT also applies a maturity concept to gauge where Arizona DOT stands as well as partners in stages similar to the five step process.
10. Within step 4, Arizona DOT is at the stage of pilot testing a resilience program review of the planning to programming list, and what follows will be a potential weighted factor for resilience within project selection.
11. Arizona DOT developed resilience building projects and developed a matrix, identifying relevant resilience components providing justification for leadership to buy-in to resilience building investments.
12. Resilience tools needed: CBA, ROI, Risk Thresholds Identification, Identifying durability limit states, Rehabilitation timeline analyses, and Resilience bond adoption.

Emergency Management for Tribal Nations

Rose Whitehair, Disaster Response and Recovery Subject Matter Expert - Tribal SCO/State SCO & CERT Instructor, Dine' Nation

Rose Whitehair made the following key observations:

1. Tribes were left out of the Stafford Act and department of defense funds given to states did not reach the Tribal nations for emergency managers, ICS, NIMS implementation which where requirements for EOCs and disaster response in general.
 - a. As a direct result of this lack of funding, within tribal municipalities and jurisdictions, 1 person may serve as public safety director, fire chief, emergency manager, and public information officer.
2. The Navajo nation is the size of West Virginia covering three states of Utah, Arizona, and New Mexico and 911 is not in service so a tourist traveling through these regions would need to know the local police department numbers for adequate emergency response.
3. Community members in the Navajo nation are trained to be prepared to survive 72 hours on their own before response arrives and if it is on a scale of a national disaster, federal response may never arrive or it may come 72 days if not 72 weeks or 72 months after.
4. Tribal traditions, ceremonies, and knowledge of the land and how to survive are incorporated into community resilience training and preparation giving the Navajo nation certain advantages in terms of resilience activities.
5. Culturally-sensitive community preparedness classes oriented around concepts of resilience are a need going forward (avoiding disaster forecasting or trend language because tribes are wary of it becoming true).
 - a. Specific to this notion of resilience is the tribal concept of moving and camping and having the tribes move with the land and with the seasons and having different camps, fall camps, winter camps associated to be integrated into this concept of moving in response to changes in the land and specifically as it relates to heat, drought, and extreme weather events.
6. Training for emergency operations for tribal nations are underway are coupled with data gathering using FEMA funds to gather GIS data on where homes are existing within the disaster area.
 - a. Measures on counts of people trained as logistic section chiefs, and first responders are actively collected. Measures include having 3-5 members in each region able to know the language, culture, sensitivities on language and capable of translating that information to elders, while also involving the youth are all wrapped up in the notion of tribal resilience.
7. With every resilience working group and related activities, please ensure you include Tribal nations and Tribal partners because somewhere along the way planning will enter the picture as you consider resilience-related investments and Tribes need to be consulted to prevent re-do cycles as a result Tribes not having been at the table at the time that the project was planned.

FHWA Resource Center Climate Resilience Interdisciplinary Team: Presentation to the Texas MPOs Resilience Working Group

David D'Onofrio, FHWA and Laura Girard, FHWA

Mr. D'Onofrio and Ms. Girard made the following key observations:

1. FHWA has a resilience web portal with multiple resources, one of which will arrive soon is steps to integrate resilience into the planning process, asset management, along with pilots which have done just that (<https://www.fhwa.dot.gov/environment/sustainability/resilience/>).
2. The FHWA resource center has an annual call for services for MPOs requesting assistance which is now open and will close by October 29th- the request must be submitted by FHWA division staff.
3. Highways in the Coastal Environment 3rd Edition was released in January 2020. (<https://www.fhwa.dot.gov/engineering/hydraulics/pubs/hif19059.pdf>). This serves as a manual for design recommendations that address sea level rise scenarios, precipitation changes, and other hazard-based stressors for coastal roads.
4. Hydraulic Engineering Circular No. 17 was released in 2016 (<https://www.fhwa.dot.gov/engineering/hydraulics/pubs/hif16018.pdf>) containing design relation to rivers and transportation specifically as it relates to floods, flood plain policies, and quantifying exposure to these types of natural hazard events.
5. FHWA released the Vulnerability Assessment and Adaptation Framework, 3rd edition (https://www.fhwa.dot.gov/environment/sustainability/resilience/adaptation_framework/) in 2017 to help planners assess vulnerability of transportation infrastructure to extreme weather and climatic change effects based on 6 steps:
 - a. Define scope
 - b. Obtain asset data
 - c. Obtain climate data
 - d. Assess vulnerability
 - e. Prioritize adaptation options
 - f. Integrate into decision making
6. FHWA has worked to integrate the coupled model intra comparison tool (CMIP) into transportation planning uses. This tool contains climate projections for precipitation events or other weather projecting out 25 or 50 years. It is available here: <https://fhwaapps.fhwa.dot.gov/cmip>
7. There are 6 web-based training courses available on-demand through the national highway institute. These will be available over the course of the next 6 months.

Around the State

1. The working group did not conduct around the state updates.

Closing Comments

1. No comments were made for closing comments or questions discussion.