## WTS Southwest Region News

Spring 2018 Issue



A mobile park is destroyed after Hurricane Harvey landed in the Coast Bend area on Aug. 26 in Port Aransas, Texas.

#### The Geography of Vulnerability by Dr. Van Zandt

- People and households vary in their capacity to anticipate, cope with, respond, and recover from disasters.
- People and households are not randomly distributed in space.
- They are concentrated in fairly predictable spatial patterns based on household characteristics.
- •These patterns increase exposure to flooding and other hazards; and have short- and longterm consequences for socially vulnerable populations.

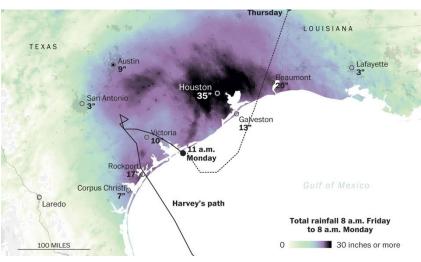
# Inaugural Winter Webinar a Success

The WTS Southwest Region is pleased to report that our inaugural Winter Webinar was a success. On March 8, the Southwest Region hosted a webinar entitled Resiliency in Transportation: What Does Disaster Preparedness and Recovery Mean for the Southwest Region? Thank you to LAN for hosting the webinar platform! With Kristina Saenz (CEC) serving as our emcee, the event kicked off with an introduction to the WTS regions, our representatives and our goals. The event helped meet some of those goals, specifically through providing access to top leaders in the industry and fostering networking opportunities and a shared knowledge base. Professional development credit was offered on an honor system basis.

With an initial registration list of more than 100 people, approximately 80 logins were recorded as participants in the event. Several of those locations represented multi-person 'brown bag' viewing sessions, adding to the networking spirit of the event. Although our post-event poll experienced technical difficulties, feedback was generally positive and participants were interested in a follow-up event.

**Dr. Shannon Van Zandt** (Professor and Interim Head of the Department of Landscape Architecture and Urban Planning at Texas A&M University; Fellow, Hazard Reduction and Recovery Center) presented on *The Geography of Vulnerability and Hurricane Harvey*. Dr. Van Zandt set the stage for the webinar by helping us understand the geography of vulnerability, which essentially means that people with lower socioeconomic status are often more likely to live in

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Source: Washington Post

### 2017-2018 Southwest Region Council



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## **About the Southwest Regional Council**

**Region Vision Statement:** The WTS Southwest Region seeks to build the future of the transportation industry, in alignment with the WTS International Mission, through raising awareness of chapters within the region, growth of WTS membership and development of student activities.

We first met as a regional council in August 2016 in Dallas, Texas and identified the following goals:

#### **Region Goals:**

- Build WTS Brand Awareness
- Serve members in "underserved" markets grow membership
- Foster networking and collaborations between region chapters
- Develop new chapters in the region
- · Grow student participation and develop student chapters

disaster-prone areas (such as flood zones). They may experience the effects of a natural disaster more acutely during and after the event. Dr. Van Zandt has been studying and mapping the impact of hurricanes in the Gulf of Mexico, with extensive work undertaken since Hurricane Ike. She presented several GIS maps, helping to demonstrate the correlation of rainfall, flooding, the geography of environmental justice communities of concern, and even transit dependent (zero-car) households, which obviously limits mobility and evacuation options.

Dr. Van Zandt was followed by Dawn Sullivan, P.E., (Director of Capital Programs at Oklahoma Department of Transportation [ODOT]) who presented on 21st Century Weather/Climate Challenges for Transportation Agencies. Ms. Sullivan chronicled a wide range of weather-related natural disasters and conditions that Oklahoma and ODOT maintenance staff have had to contend with over the past twenty years. The transportation infrastructure and its caretakers have grappled with extreme drought, fires, snowfall, flooding and debris, tornados, ice, and rockfalls while acknowledging extensive bridge deficiencies. ODOT adapted by increasing emergency preparedness, financial planning, Intelligent Transportation Systems (ITS) communication improvements, technology upgrades for maintenance vehicles, and roadside early warning systems, as well as pre-positioning de-icing materials and equipment stored in geographically dispersed saltsheds for efficient deployment.

As ODOT demonstrated, Departments of Transportation are logical champions for disaster



Major fire shuts down I-35 in Oklahoma's Arbuckle Mountains in 2006, prompting a FEMA declaration.



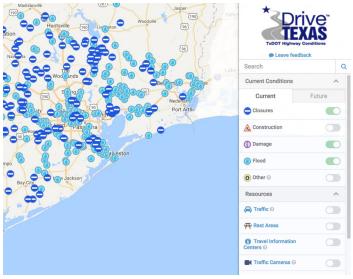
ODOT workers in front of a rockfall.

preparedness and response due to their geographic range and access to the expertise necessary to manage traffic flow, fear, human needs and recovery along with networks of communities, businesses and volunteer partners.

Similarly, Amanda Worden, P.E., from the Texas Department of Transportation (TxDOT) San Antonio District presented on *Hurricane Harvey – Lessons Learned*. She discussed the practical details of TxDOT's emergency operations activities before, during, and after Hurricane Harvey. Each coastal district (Yoakum, Corpus Christi, Houston, and Beaumont) recorded extreme flooding levels within their sometimes vast geographies of responsibility. Staging areas were established to manage responding district crews and their shifts. The communications centers were critical for tracking resource assignment and reporting.



Damage from high winds in the Corpus Christi area from Hurricane Harvey.



DriveTexas.org

Ms. Worden also spoke about Drive Texas, a website committed to providing real-time information on road conditions. According to the website, "while road conditions can change rapidly, DriveTexas.org is an industry leader in providing some of the most accurate and up-to-date travel-related information currently available to drivers in Texas." This real-time technology will go far in helping citizens anticipate travel conditions in the face of dramatic weather events, in addition to more routine maintenance and construction conditions and updates.

Finally, **Sherri LaBas** spoke from her perspective as former Secretary for the Louisiana Department of Transportation and Development (LaDOTD) and an engineer in Louisiana for more than 30 years. Her presentation focused on the *Evolution of Emergency Contraflow Evacuation in Louisiana*. The problem of transportation congestion during hurricane evacuation has been long-felt in Louisiana, especially with the geography of the bayous and the limited frontage road and arterial network in certain locations. In

1998, Hurricane Georges resulted in awareness of the heightened frustration of motorists who observed adjacent traffic lanes sitting empty during evacuation efforts. The idea emerged for "contraflow," or directing traffic in the opposite direction by reassigning travel lanes in reverse directions to increase capacity. Some contraflow efforts were put in place during Hurricane lvan, but with limited benefits and the recognition that additional work would be needed to create a more comprehensive and phased evacuation plan.

In 2005 during Hurricane Katrina, the contraflow worked more effectively and bottlenecks for evacuation were lower. LaDOTD Public Works and Engineering staff mobilized across departments to react to Hurricane Katrina and the destruction in its path. Call centers were established, accommodations for displaced employees and citizens were identified, and a network of vehicles was identified for deployment during hurricane response. LaDOTD hired a full-time emergency coordinator and contracted with coaches to borrow buses, including school buses, to be available to transport evacuees. There were lessons learned for effective dispatch that can be applied in the future for other emergencies, from flooding to ice storms, that can happen in both northern and southern Louisiana.

To conclude, Ms. LaBas told of her personal experience with flooding in 2016. When it affects your family directly, a natural disaster experience certainly helps build professional resolve to contribute substantially to preparedness to avoid, minimize, or mitigate adverse impacts to transportation infrastructure and to our communities at large. This spirit is the essence of resiliency.



Flooding from Hurricane Katrina, courtesy of LaDOTD.



LaDOTD prepares for flooding with Hesco baskets at the old Mississippi River Bridge in Baton Rouge.

## **Chapter Announcements**

#### WTS Oklahoma

May Lunch Meeting

Speaker: Rhonda Carmean, American Airlines

Wednesday, May 9, 11:30 am - 1 pm

Tulsa Air & Space

Oklahoma State Capitol Tour Wednesday, June 6, 11:30 am - 1 pm Details to come

#### **WTS DFW**

Transportation Equity: Connecting the Dots to

Opportunity

Speaker: Patrick Kennedy

Tuesday, May 15, 11:30 am - 1 pm

Edison's

#### **WTS San Antonio**

Leadership Latte Friday, May 11, 7:45 - 9 am Rosella Coffee

Leadership Lattes are free, members-only opportunities to meet San Antonio's best and brightest leaders in a casual setting. Don't expect a pre-set agenda, presentation or speech; at a Leadership Latte, you will be part of a round table discussion in a relaxed environment.

May 2018 Luncheon Speaker: Maggie Saey Wednesday, May 16, 11 am - 1 pm The Plaza Club Vision Zero Summit
Friday, June 15, 8:30 am - 4:30 pm
Henry B. Gonzalez Convention Center
Regional and national Vision Zero authorities will offer a full-day of technical information for transportation professionals in the South Texas region on inclusive and safe roadway design to the goal of achieving zero traffic deaths and serious injuries. Summit attendees will be

#### **WTS HOT**

May Luncheon: City of San Marcos Development and Adoption of Code SMTX Thursday, May 24, 11:30 am - 1 pm Maggiano's Little Italy

2018 Golf Clinic Wednesday, May 9, 5:30 - 7 pm Barton Creek Golf Club

eligible for PE CEP and AICP CM hours.

#### **WTS Houston**

May Luncheon: How Did We Get Here (Successful Women of Transportation Panel) Thursday, May 24, 11:30 am - 1 pm Maggiano's Little Italy

#### **WTS** Louisiana

Coffee & Conversation (Members only)
Wednesday, May 9, 8 - 9:30 a.m.
Civil Design and Construction, Inc.
Coffee & Conversations is a series of real-time insights of personal development and business leadership, guided by noteworthy women in the transportation industry. Moderator: Karla Weston, PE, President & Owner of Civil Design & Construction

### We Want to Hear From You!

Have follow-up questions, feedback on the webinar, or suggestions on what you would like to see for our anticipated October webinar? Contact wts.southwestregion@gmail.com and let us know!