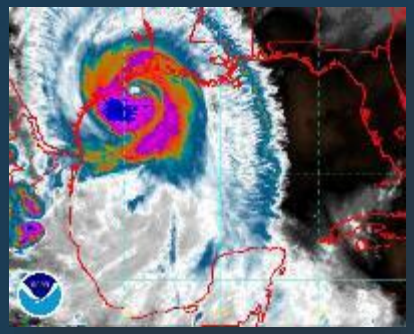
H-GAC 2021 Webinar/Workshop Series






Disaster Debris Workshop

WORKSHOP DATE:

JUNE 9, 2021

TIME:

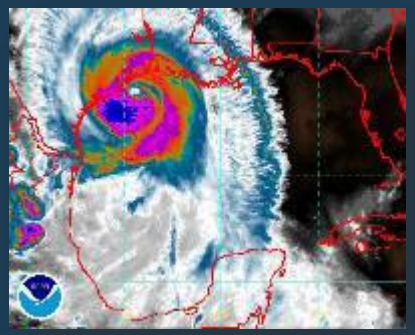
8:30 A.M. TO 11:30 A.M.

Houston-Galveston Area Council

Agenda

1. Emergency Trends in Disaster Recovery
2. Public Information Strategies Following a Disaster
3. Technology in Disaster Recovery
4. Best Practices in Preparedness Initiatives





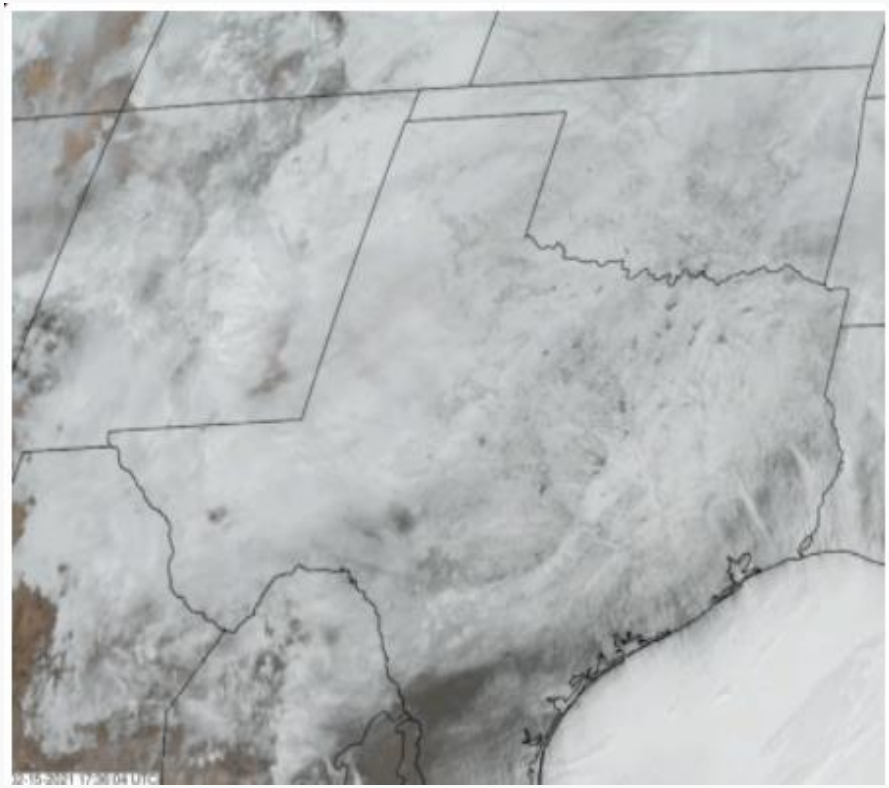

Part 1: Emergency Trends in Disaster Recovery

Houston-Galveston Area Council

Lessons Learned from the Texas Winter Storm

The Historic Texas Winter Storm

- The winter storm brought extreme cold temperatures, snow, sleet, freezing rain resulting in mass power outages and water shortages



What Happened

- There was a total of 8 days, 23 hours, and 23 minutes of severe winter weather between the first Winter Weather Advisory issued on Thursday, February 11th at 9:37am to when the last Hard Freeze Warning expired at 9am on Saturday, February 20th.
- Every square inch of Texas was in a Winter Storm Warning.

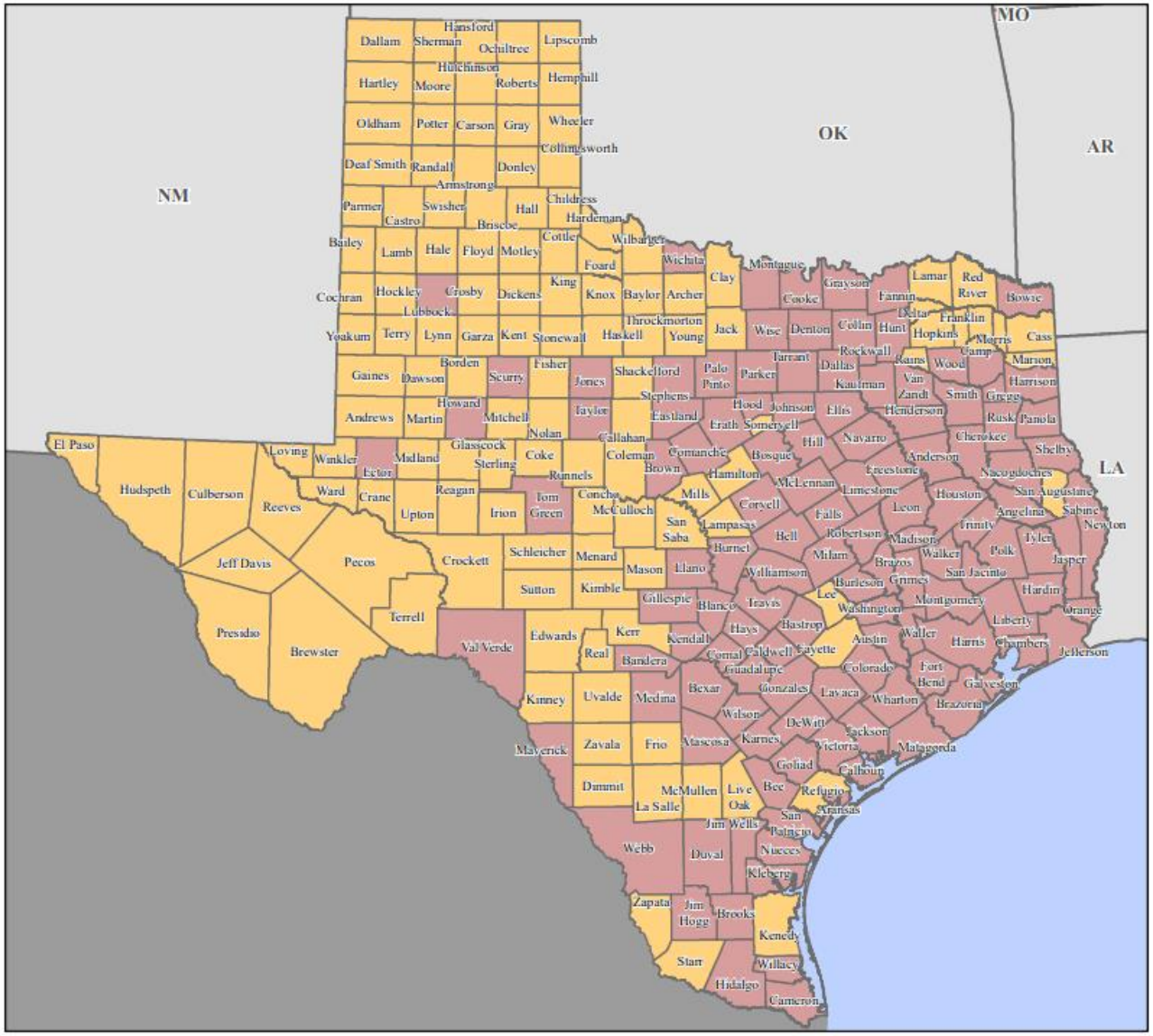
Low Temperatures

- Aldine 9°
- Bay City 16°
- Dayton 10°
- Hempstead 4°
- Houston 11°
- Huntsville 1°
- League City 15°
- Stafford 3°
- Sugar Land 14°
- Wharton 13°

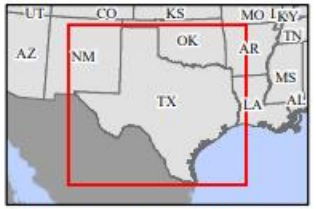
Insurance Losses

- Property damages estimated at $195 billion (costliest disaster in the State's history).
- Insurance losses are anticipated to be approximately $20 billion.
- Damages from:
  - Pipe bursts
  - Fire damage to some electrical equipment

FEMA-4586-DR, Texas Disaster Declaration as of 02/25/2021



FEMA



Data Layer/Map Description:
The types of assistance that have been designated for selected areas in the State of Texas.

All designated areas in the State of Texas are eligible to apply for assistance under the Hazard Mitigation Grant Program.

Designated Counties

- Public Assistance (Category B)
- Individual Assistance and Public Assistance (Category B)

N
W
E
S

0 40 80 120 160 Miles

Data Sources:
FEMA, ESRI;
Initial Declaration: 02/19/2021
Disaster Federal Registry Notice: Amendment #2: 02/25/2021
Datum: North American 1983
Projection: Lambert Conformal Conic

MapID a65966471da0225212231hqprod

Winter Storm Debris

- Damages from water leaks
  - Pipes
  - Furniture
  - Drywall
  - Carpet
  - Insulation
- Damaged vegetation

Debris Collections Post Winter Storm in Friendswood. Photo Credit: Jennifer Reynolds, Daily News, March 1, 2021

Challenges in Public Assistance

- Defining what is emergency versus permanent repairs.
- To stop a leak could be considered an emergency repair, but to replace a pipe is considered a permanent repair.

Challenges in Public Assistance

- Emergency repairs must be bid out separate from permanent repairs.
- Repairs to walls is considered permanent work and would have to be bid out separately from emergency leak repairs.

Debris Collections Post Winter Storm in Friendswood. Photo Credit: Jennifer Reynolds, Daily News, March 1, 2021

Damage Reporting

- The Public Assistance State of Texas Assessment Tool (pSTAT) was used to report damages to the state.
- The pSTAT is a survey tool which allows a local jurisdiction to capture photos, locations, and estimates of damage facilities, debris, and other disaster related damages.
- More detail, photos, and maintenance information will be needed up front in reporting damages.

The Importance of Taking an All-Hazards Approach to Preparedness

Wide Range of Threats Over the Past 10 Ten Years

- 145 Thunderstorms
- 124 Flash Floods
- 108 Tornadoes
- 71 Funnel Clouds
- 56 Hail
- 10 Ice Storms/Winter Weather
- 9 Coastal Flooding
- 8 Extreme Heat
- 5 Tropical Storms
- 5 Flood

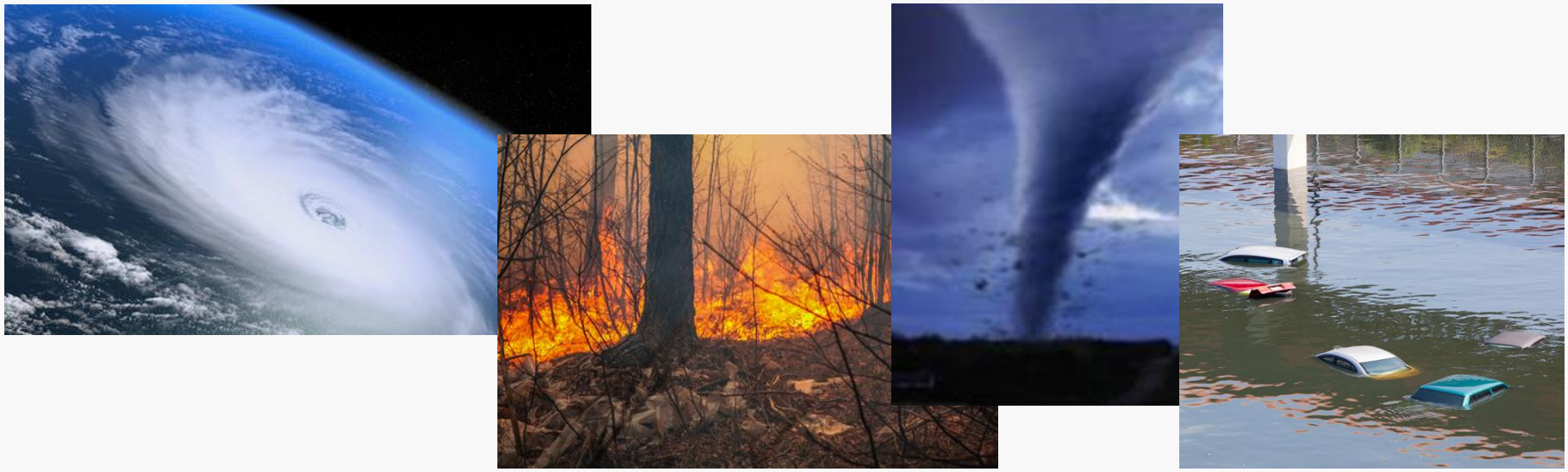
(Note: For this region Hurricane Harvey is considered as a flash flooding incident)

All-Hazards Approach Defined

- An all-hazards approach is an integrated approach to emergency preparedness planning that focuses on capacities and capabilities that are critical to preparedness for a full spectrum of emergencies or disasters, including internal emergencies and a man-made emergency (or both) or natural disaster.

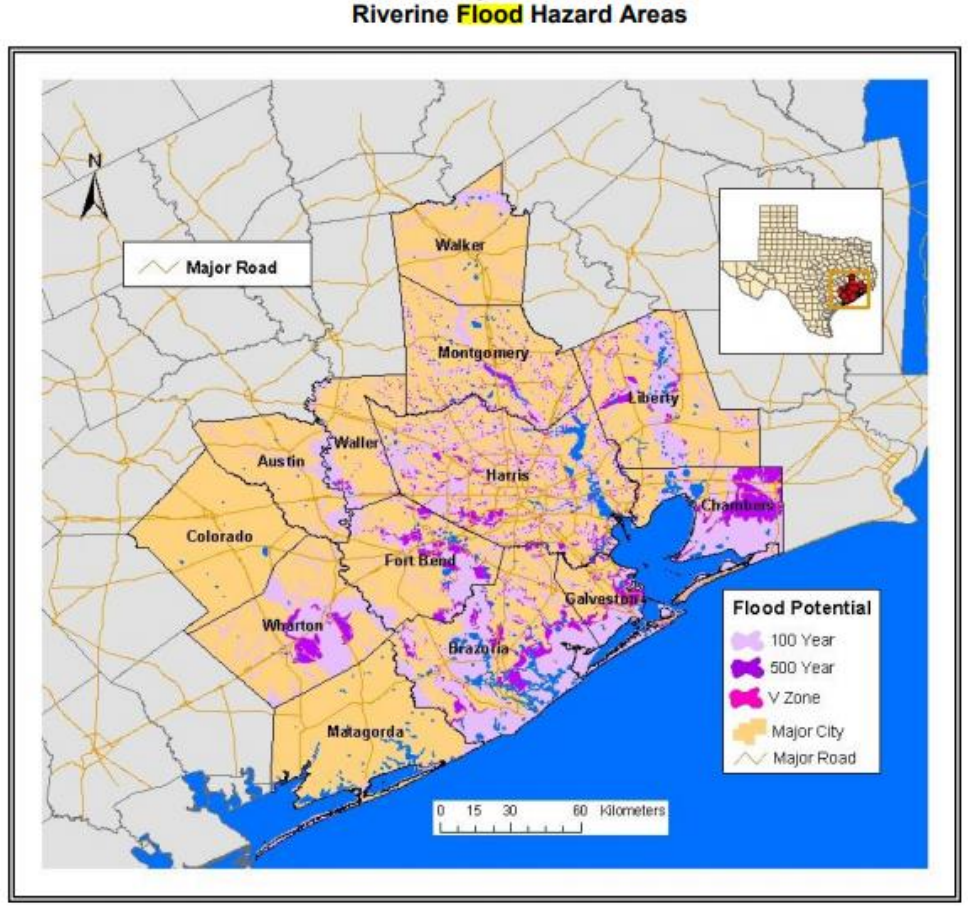
Focus on the Broad Range of Threats

- Threats or hazards that are classified as probable and those hazards that could cause injury, property damage, operational disruptions, or environmental impact should be addressed.



Resources in All-Hazards Preparedness Planning

- Jurisdiction hazard mitigation plan
  - Review past events
  - Review hazard profiles and vulnerability assessments



Resources in All-Hazards Preparedness Planning

- Disaster debris management plan
  - Review the quantities and types of debris that might be generated from potential hazards.

Type of Incident	Risk Rating[3]	Nature of Debris	Debris Generation Potential[4]	Widespread Impact
Flood	High	C&D HHW Personal property Vehicles White Goods E-Waste	Medium to High	Medium to High
Hurricane/Tropical Storms	High	Vegetative C&D Personal Property HHW White Goods E-Waste Vehicles/Vessels Putrescent	High	High

Resources in All-Hazards Preparedness Planning

- Talk to the experts
  - Set up a meeting with your contractors to assist in planning.
  - Arrange for training of staff.
  - Conduct exercises to work through potential scenarios.

Disaster Declaration Considerations

Reimbursement

- For financial reimbursement under the Public Assistance program to occur, disaster financial-impact thresholds must first be met and there must be a federal disaster declaration.

Keep Detailed Records of Hours and Expenses

- Keep detailed records in the event a disaster is declared for the incident at a later date.
  - Force account hours, expenses, and equipment use
  - Contractor expenses

Procurement

Tribal and local governments, including Tribal Recipients, and private non-profits must comply with:

- Their own documented procurement procedures;
- Applicable local government laws and regulations; and
- Applicable Federal laws and regulations.

If a Federal requirement is different than the local requirement, or the Applicant's own requirements, it must use the more restrictive requirement.

Contracts

- Contracts must be competitively procured in accordance with federal, state and local purchasing requirements.
- Contracts should include a scope of work that clearly designates the services requested.
- Contracts should be bid and billed for on a unit basis (cost per cubic yard). Contracts paid on an hourly basis are typically not reimbursable by FEMA.
- Any costs incurred must be fully documented.

Procurement of Contractors

- Must comply with federal standards as outlined in 2 CFR, § 200.317 through 200.326, Disaster Finance and Procurement, and 44 CFR, § 13.36, Procurement.
- Essential elements of procurement must include:
  - Competition
  - Clear and definitive scope of work
  - Qualified bidders (documented by licenses)
  - Financial records
  - Proof of insurance
  - Bonding
  - Cost analysis to demonstrate cost reasonableness
  - Compliance with federal, state and local laws
  - Clear documentation of the decision process

Force Account Costs

- Force account costs must be fully documented to be eligible for reimbursement.
  - Staff hours and activities related to the disaster
    - Overtime hours
    - Straight time if participate in alternate procedures
  - Volunteer hours and activities
  - Use of equipment
  - Rental equipment

Be Transparent with Elected Officials

- Keep elected officials updated on the status and costs of operations.

Reporting Damages to the State

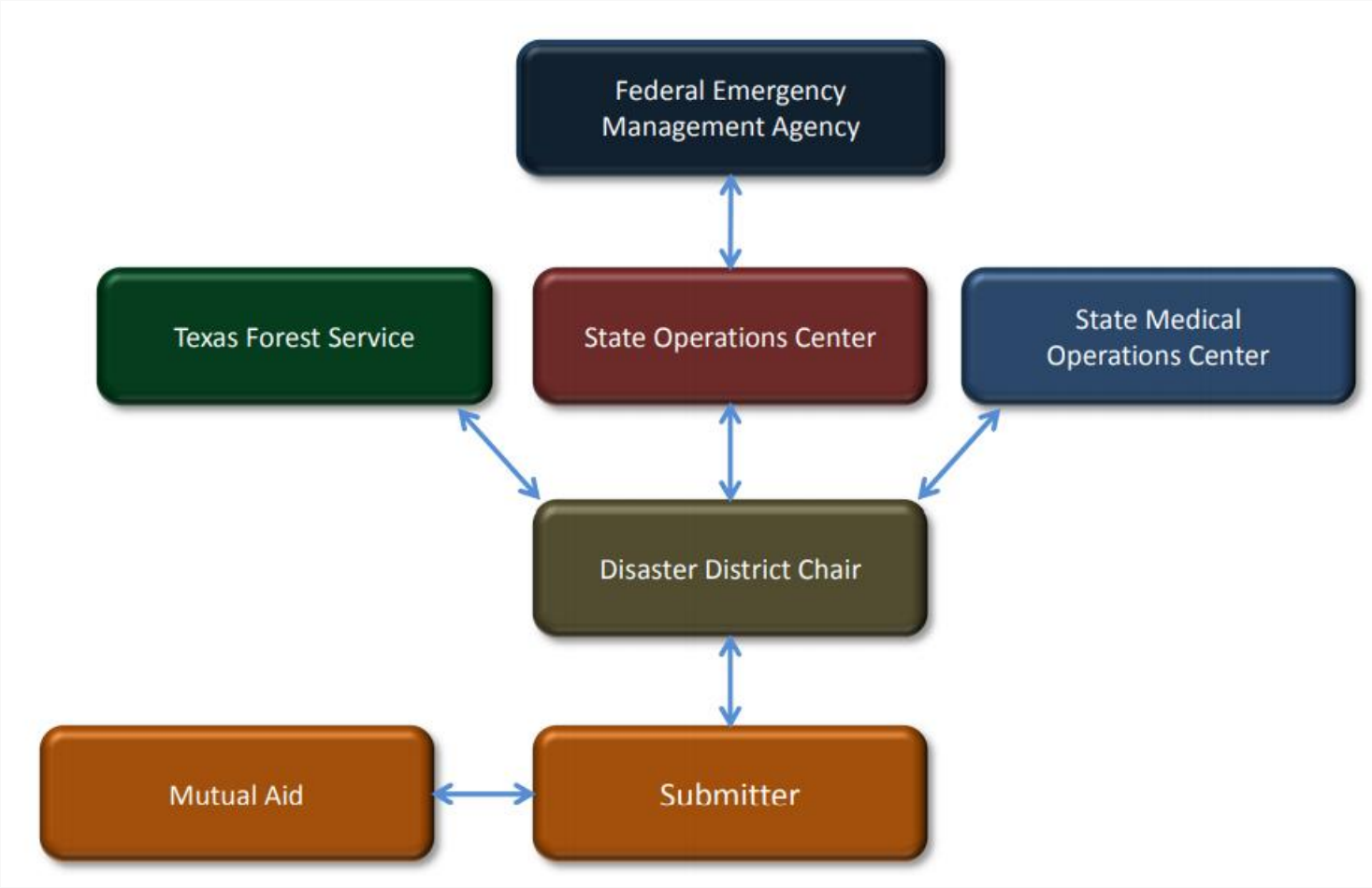
The State of Texas Assistance Request (STAR)

- State and federal law requires a local jurisdiction to first use its resources in responding to emergencies.
- A city may reach out to mutual aid participants or to their County if additional resources are required that cannot be supplied locally.
- Assistance from the State can be requested when a local government has depleted its local resources or has identified a resource gap.

STAR Request Process

- If the local Disaster District Chairman cannot provide the requested resources, the local jurisdiction will make an assistance request using the State of Texas Assistance Request process.
- The State Operations Center receives the assistance requests. The State Operations Center works with state agencies, to fulfill the request.

STAR Request Process



Public Assistance State of Texas Assessment Tool

- The Public Assistance State of Texas Assessment Tool (pSTAT) is a survey tool which allows a local jurisdiction to capture photos, locations, and estimates of damage facilities, debris, and other disaster related damages.
- Once damage submissions in the pSTAT meet or exceed the county's fiscal threshold, TDEM will contact FEMA for a meeting to discuss any necessary documentation to certify the damage claims.

Considerations for Damage Assessments

- Keep detailed maintenance records and inspection reports of property and equipment.

Considerations for Damage Assessments

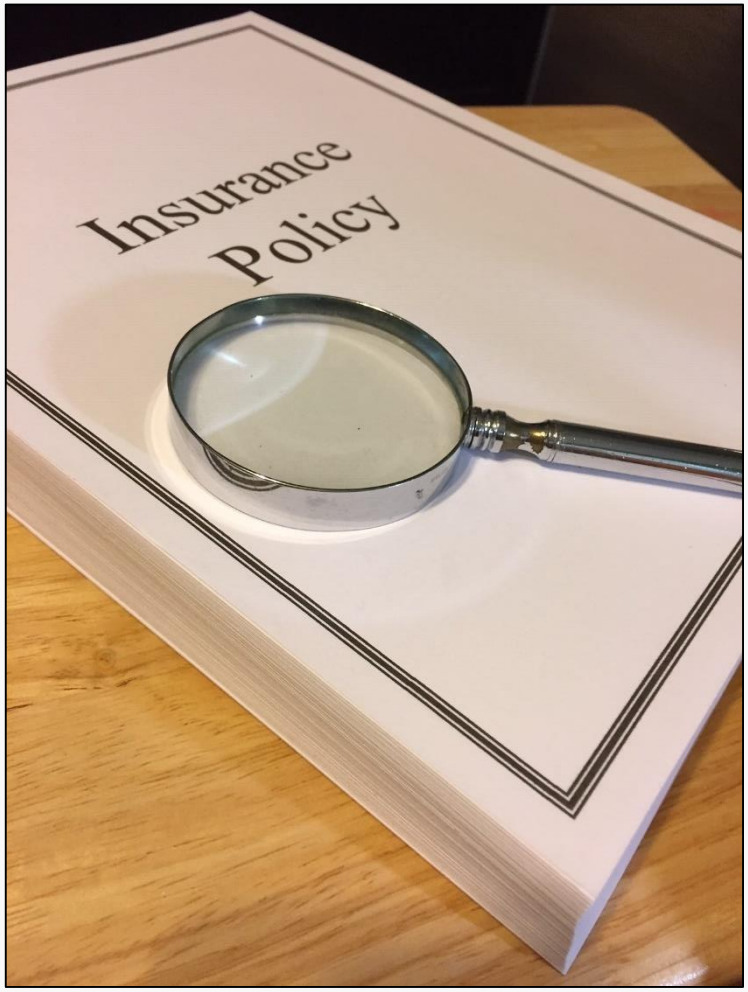
- If possible, get pictures of assets prior to the disaster.
  - Get pictures prior to hurricane season.
  - Drone pictures of structures.
  - Roof assessments.
  - Before and after pictures can be very helpful in establishing proof that any damage was caused by the disaster.

Considerations for Damage Assessments

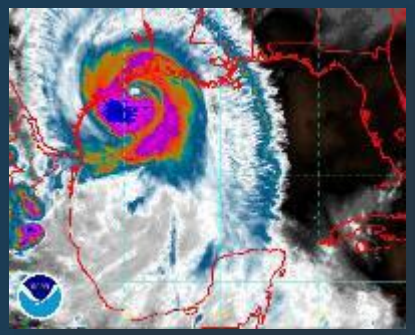
- Be prepared to do more work on the front end of the disaster.
- Need good estimates of damage as quickly as possible.
- If needed, establish prepositioned contracts to aid in damage assessments.

Considerations for Damage Assessments

- Maintain insurance information.
  - Will need to provide insurance policy to FEMA.
  - Will need to determine insurance benefits versus damage estimates.
  - FEMA will reduce public assistance payouts by the value of any applicable insurance benefits.








Part 2: Public Information Strategies Following a Disaster

Houston-Galveston Area Council

Key Considerations in Public Information

Public Information Objective

- The objective for public information is to provide timely, accurate, and consistent information to improve understanding and cooperation, thereby increasing efficiency of debris management operations while minimizing disruption to the general public.

Coordination in Public Information

- Public information must be coordinated and integrated across jurisdictions and organizations involved in the incident, including federal, state, tribal, and local governments; private-sector entities; and non-governmental organizations.

Joint Information System

- A Joint Information System (JIS) includes plans and protocols put in place by responding agencies to coordinate public information in order to ensure timely, accurate, accessible, and consistent messaging across multiple jurisdictions, NGOs, and the private sector.

Joint Information Center

- A Joint Information Center (JIC) is a central location that facilitates operation of the JIS—where personnel with public information responsibilities coordinate and perform those functions.

Disseminating the Message

- Media
  - Print/TV/Radio
- Website
- Social Media
  - Facebook
  - Twitter
  - Next Door
  - YouTube
  - Instagram
- Reverse 911
- Call Bank
- Flyer

Controlling the Flow of Information

- Provide regular updates.
- Establish realistic expectation on the timing of debris operations.
- Monitor social media.
- Correct misinformation.

Provide Instructions To Residents On Debris Separation.

Public Information/Emergency Set-out Procedures

- Debris should be staged separately by debris type along the ROW.
- Do not bag debris; only loose debris will be collected.
- Do not mix HHW with any of the other staged debris types.
- Do not mix household garbage with any of the other staged debris types.
- Do not place debris near water vaults, fire hydrants, or any other above-ground utility.
- Do not place debris on driveways.

47

https://www.youtube.com/watch?v=JSdlTXrwmho

Handling Sensitive Topics

Gather Information

- Who is affected?
- Who cares?
- What is happening?
- When did this or will this happen?
- Where is this occurring?
- Why should people care?

Plan the Content of the Message

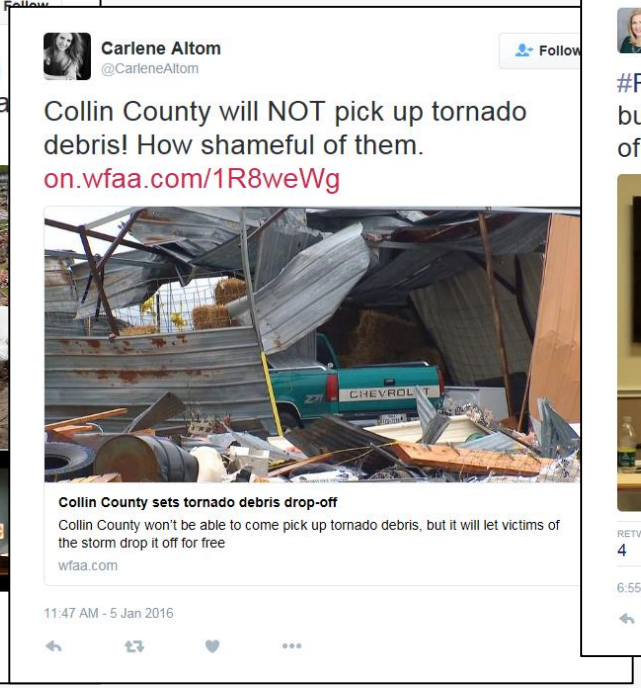
- Express empathy
- Provide relevant, helpful information
- Use plain language
- Avoid cliches
- Promote action
- Show respect
- Promote collaboration

Keep Elected Leaders in the Loop

- Keep elected leaders informed of sensitive issues and provide them updates on the status of those issues.
- Let them hear from you before they hear it from the media.
- Provide them with messages they can share with the media and their constituents.

Social Media Impacts

- Social media can be a great tool for communication.
- Sometimes people use social media to rant or provoke others to anger. Ignore posts like these. Do not feel obligated to engage with every comment.



Outreach Strategies to Inform and Engage the Public

Preparedness Public Information Tasks

- Maintain contact information pertaining to staff, news media, and response partners.
- Maintain and update social media sites and websites regularly.
- Conduct drills and exercises to test contact information, communications systems, and communication processes.
- Provide training to ensure spokespersons are adequately trained and prepared to speak to the media.
- Prepare pre-scripted messages.

Response Public Information Tasks

- Provide instructions to the public regarding proper set-out procedures.
- Provide safety messages in coordination with health authorities and other response partners.
- Set up a call center to answer questions from the public.
- Monitor media coverage and social media posts.
- Correct any misinformation.

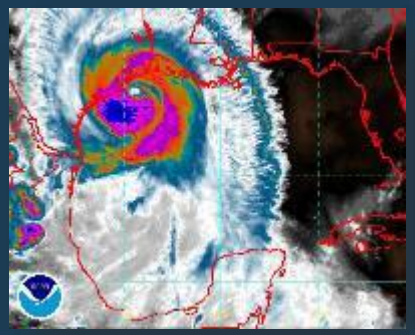
Recovery Public Information Tasks

- Provide the status of debris operations.
- Provide instructions to the public regarding how debris will be managed going forward.
- Monitor social media posts.
- Correct any misinformation.
- Express gratitude to residents for their cooperation.
- Participate in any debriefing of the event.
- Notate lessons learned for plan improvement.

Access and Functional Needs Populations

- Be prepared to disseminate information to all audiences, including those with disabilities, access and functional needs, or language requirements.
- Have materials translated into common non-English area languages. Utilize other formats such as Braille, large print, audio, etc.
- Establish contacts to translate emergency information.
- Coordinate with local media resources to reach specific audiences.






Part 3: Technology in Disaster Recovery

Houston-Galveston Area Council

Drone Technology Uses

Unmanned Aircraft System (UAS)

Capabilities:

- Expedited damage assessments
- Ability to survey inaccessible areas
- Progress tracking
- Before and after comparisons

Unmanned Aircraft System (UAS)

Case Study:
Camp Fire – Paradise, CA

- Identified critical traffic issues for the purpose of truck routing
- Provided a system-wide view of traffic flow and vehicle progression
- Drone footage captured at key locations during peak travel time

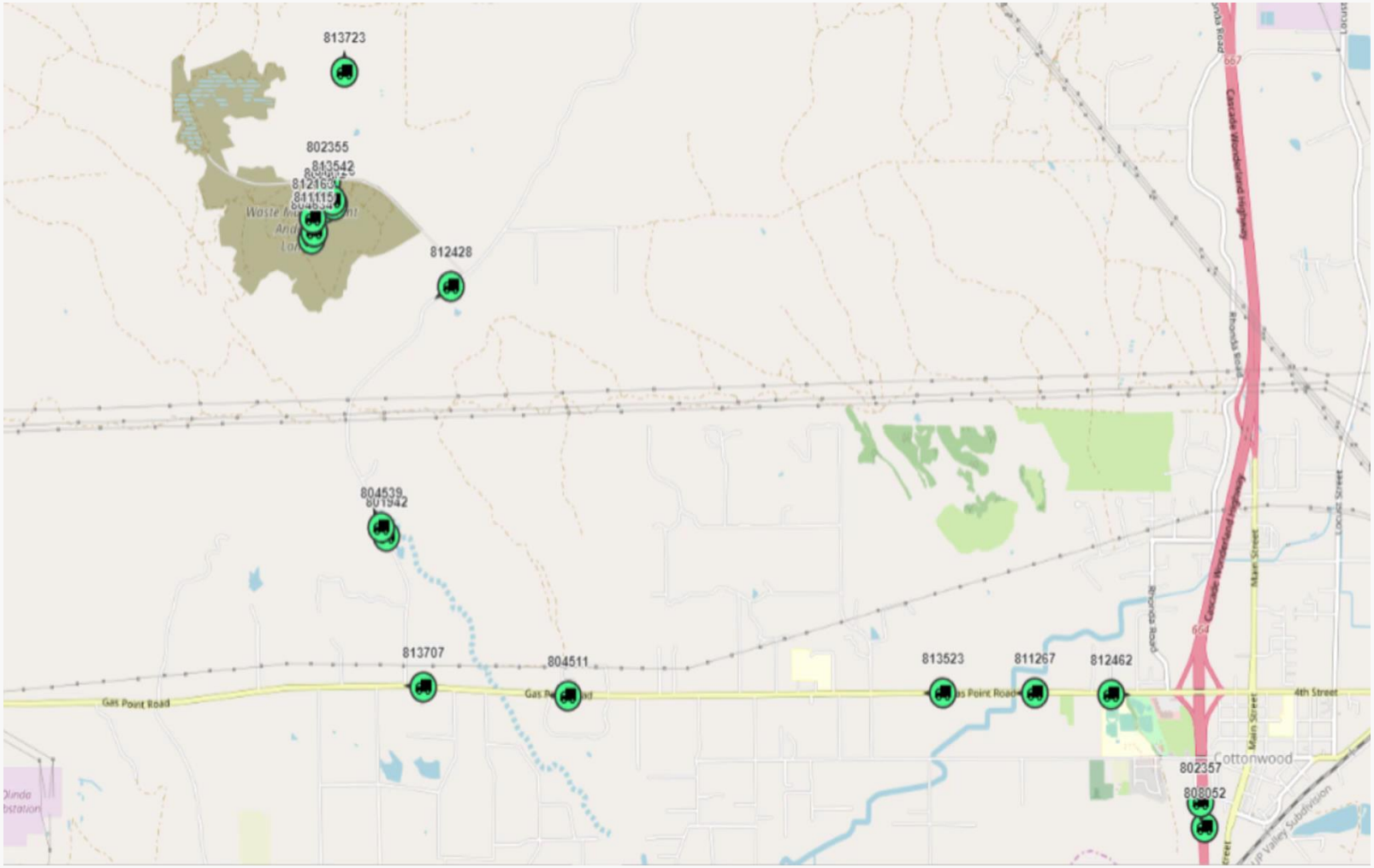
Unmanned Aircraft System (UAS)

Case Study:
Camp Fire – Paradise, CA

- Drones used for site assessment and pre-planning for debris removal crews on properties with unreachable owners or access issues

Asset Tracking

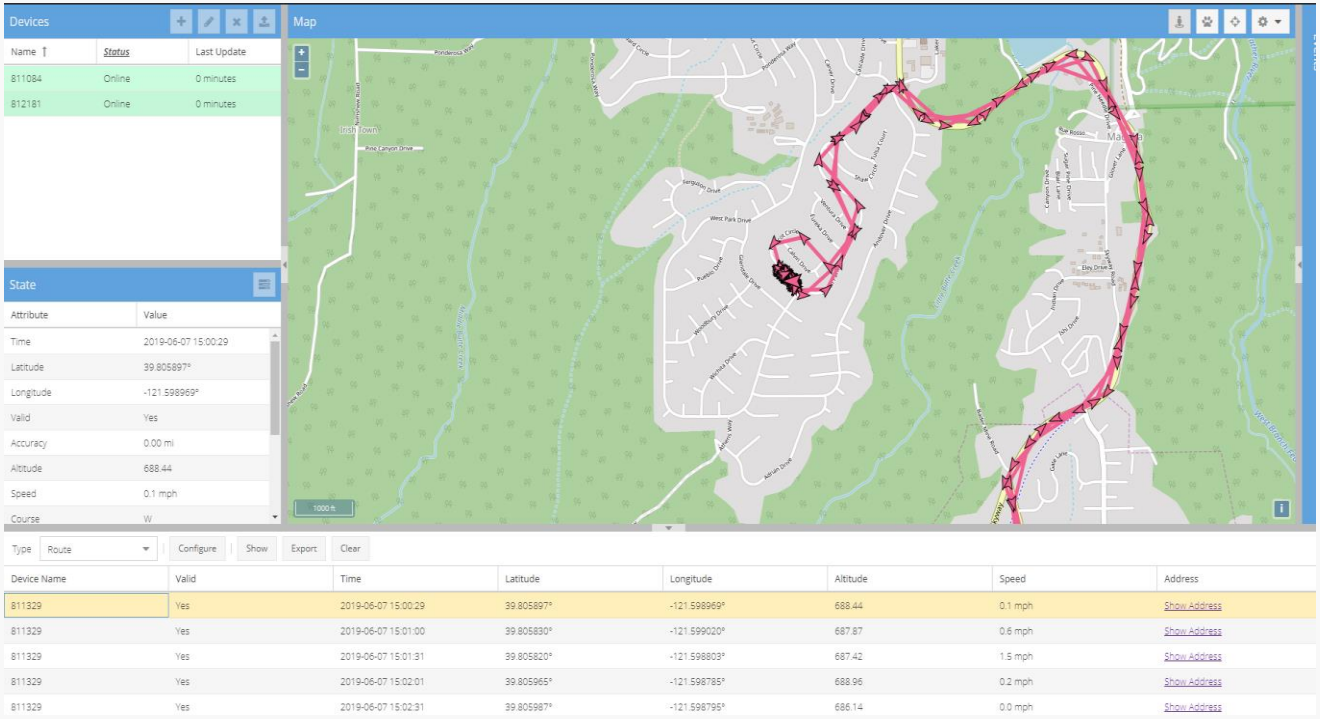
Fleet Tracking Capabilities



Fleet Tracking Capabilities

Captures:

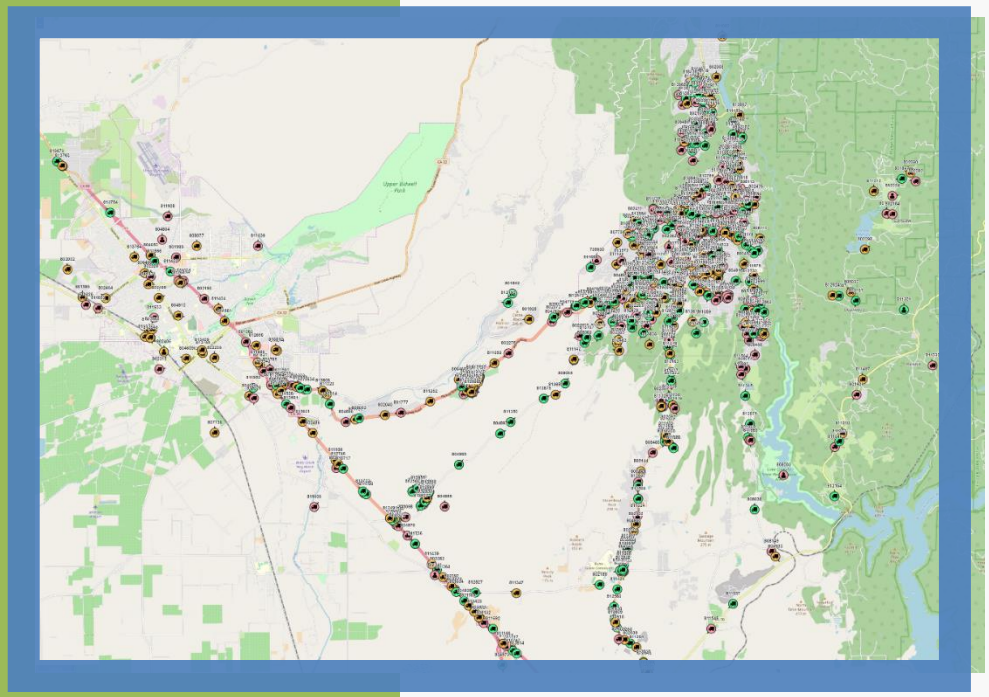
- Speed
- Location
- Time
- Truck number
- Subcontractor number
- Active/not active
- Return times
- Directional location



Fleet Tracking Capabilities

Case Study:
Caltrans, Butte County

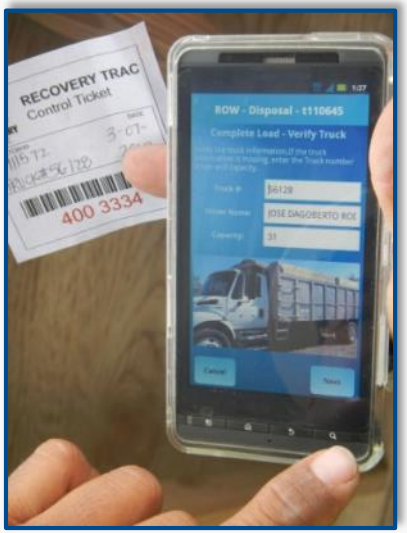
- Stakeholders: Caltrans, CALOES, CalRecycle, Tetra Tech, CHP
- Tetra Tech Fleet technology was used to maintain traffic patters of over 1,000 trucks a day and over 3,500 routes.
- Data captured: 546,000,000 million GPS locations



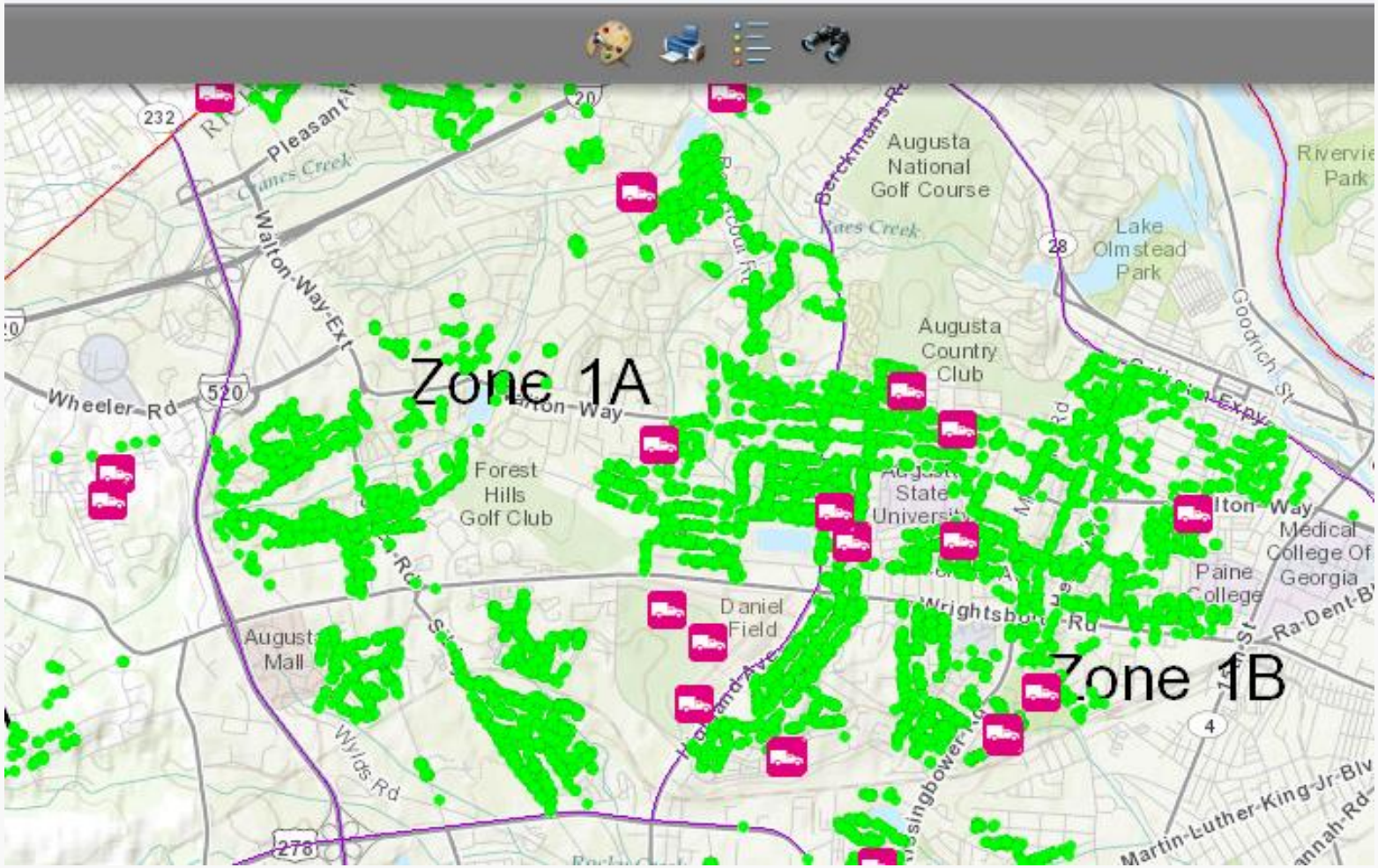
Automated Debris Monitoring System

Automated Debris Monitoring Systems

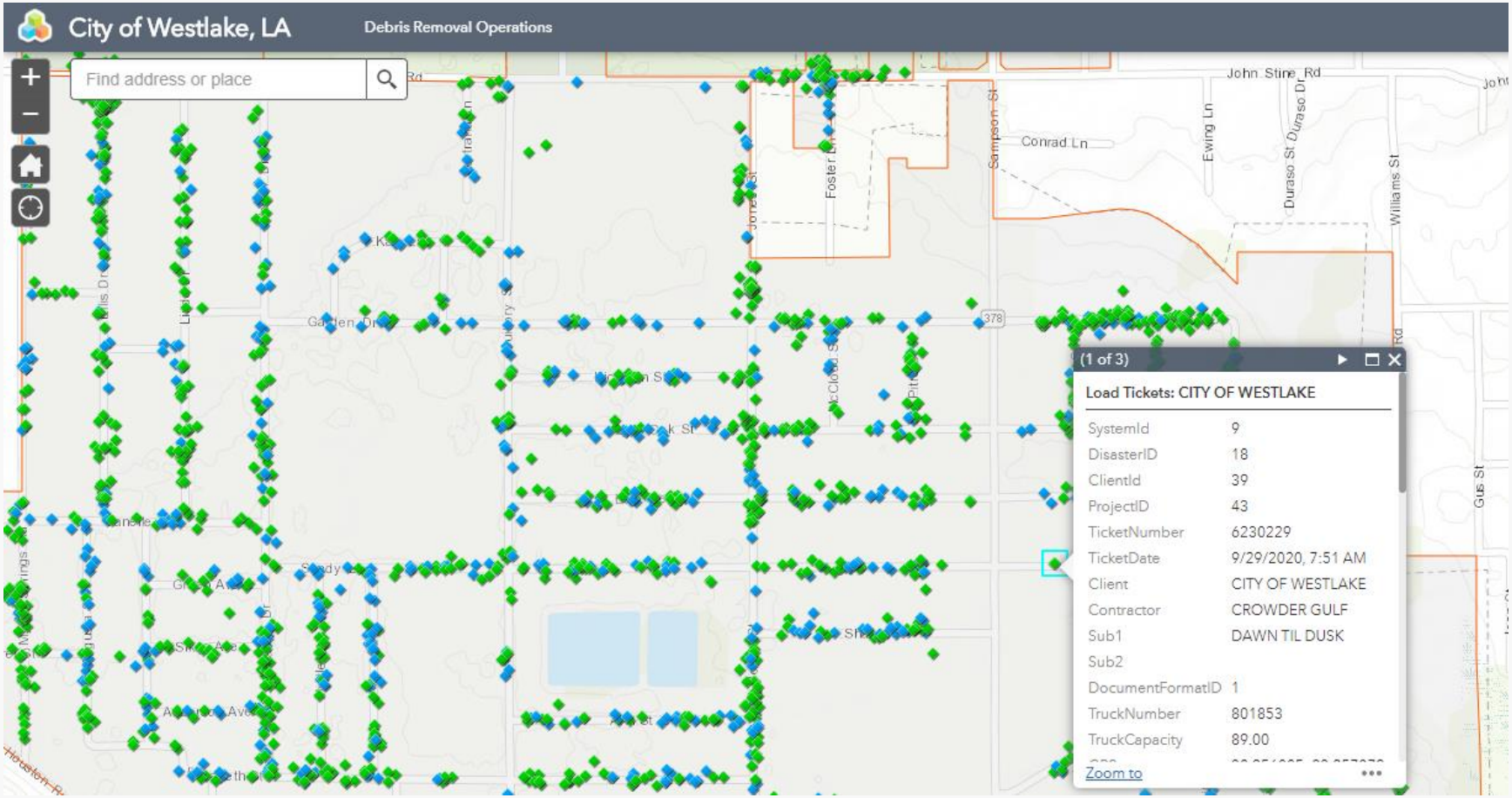
- An Automated Debris Monitoring System (ADMS), is a system used by a monitor to record crucial information so that a load ticket (and other documentation) can be generated.
- ADMS units increase field efficiency and eliminate most errors



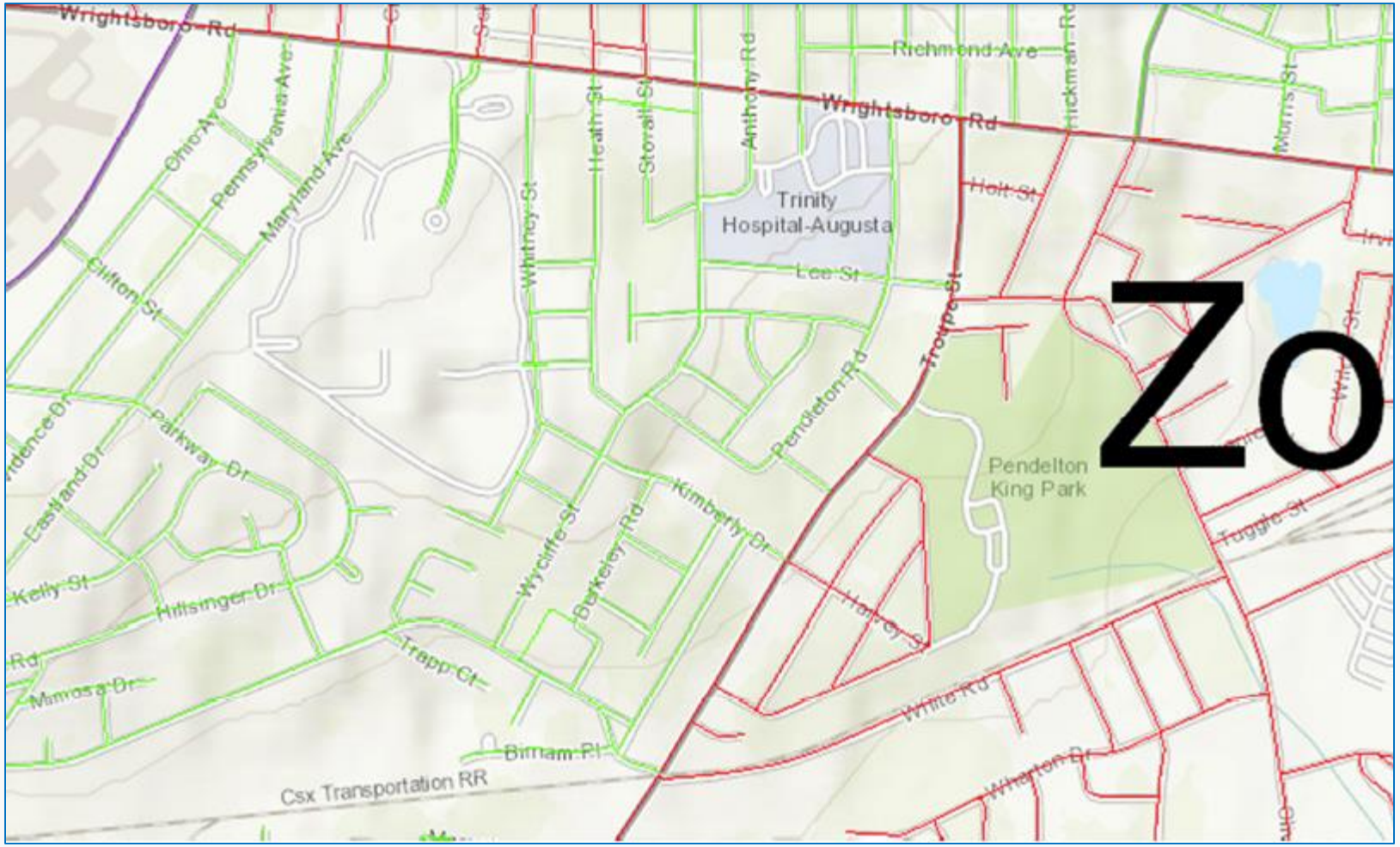
ADMS Real Time Collection Monitoring Locations



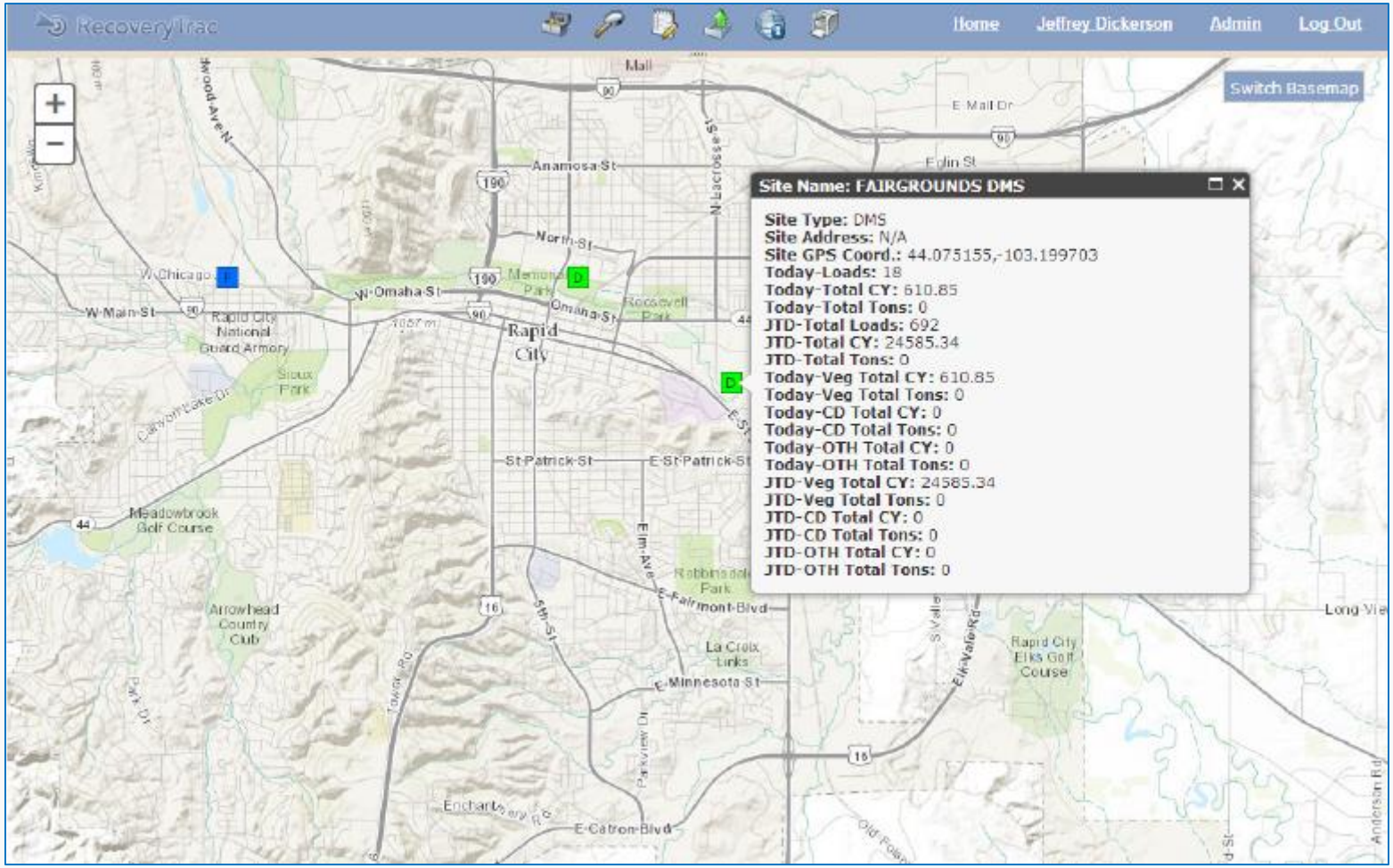
ADMS Unit Rate Tracking Map



ADMS Pass Completion Status



ADMS Disposal Site Locations and Statistics



ADMS Hazardous Tree Removal In-Progress Audit Report

Total Ticket Count: 79

	Ticket No.	Monitor	Date	GPS-Lat	GPS-Lng	Address	Service Code	Unit Count	Meas	Zone	Photo Count
∃	111470414	ANGELA MARTIN (B214262)	03/23/2014 9:39 AM	33.324213	-81.306739	2-22 CRICKET LN	1A	1.00	3.12	20(GIS: 20)	4
∃	111470415	ANGELA MARTIN (B214262)	03/23/2014 9:40 AM	33.324226	-81.306741	2-22 CRICKET LN	1A	1.00	2.38	20(GIS: 20)	4
∃	111470416	ANGELA MARTIN (B214262)	03/23/2014 9:40 AM	33.324217	-81.306724	2-22 CRICKET LN	1A	1.00	2.50	20(GIS: 20)	4
∃	111470417	ANGELA MARTIN (B214262)	03/23/2014 9:41 AM	33.324196	-81.306678	2-22 CRICKET LN	1A	2.00	2.75	20(GIS: 20)	4
∃	111470418	ANGELA MARTIN (B214262)	03/23/2014 9:41 AM	33.324203	-81.306732	2-22 CRICKET LN	1A	2.00	3.25	20(GIS: 20)	4
∃	111470419	ANGELA MARTIN (B214262)	03/23/2014 9:42 AM	33.324248	-81.306773	2-22 CRICKET LN	1A	1.00	3.50	20(GIS: 20)	4

Crew Photo

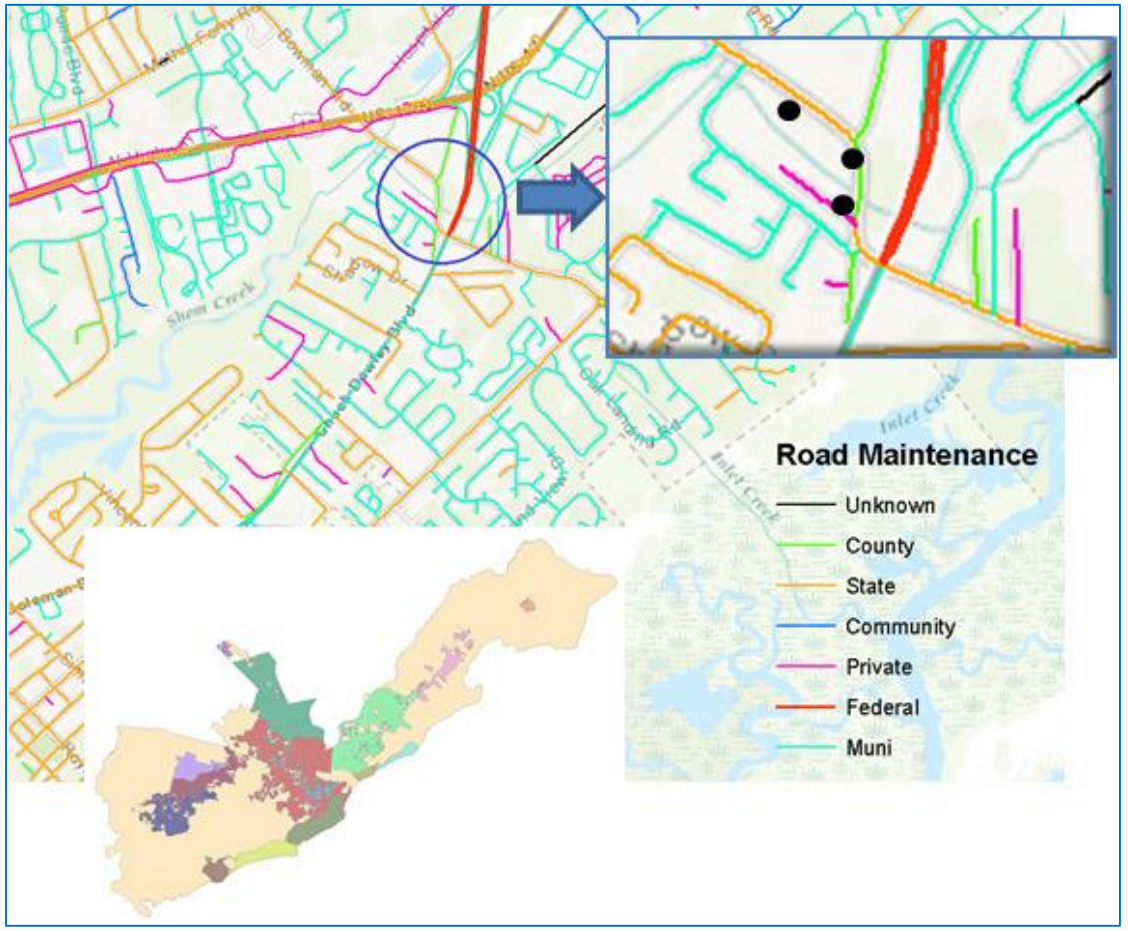
Pre-Work Photo

Measurement Photo

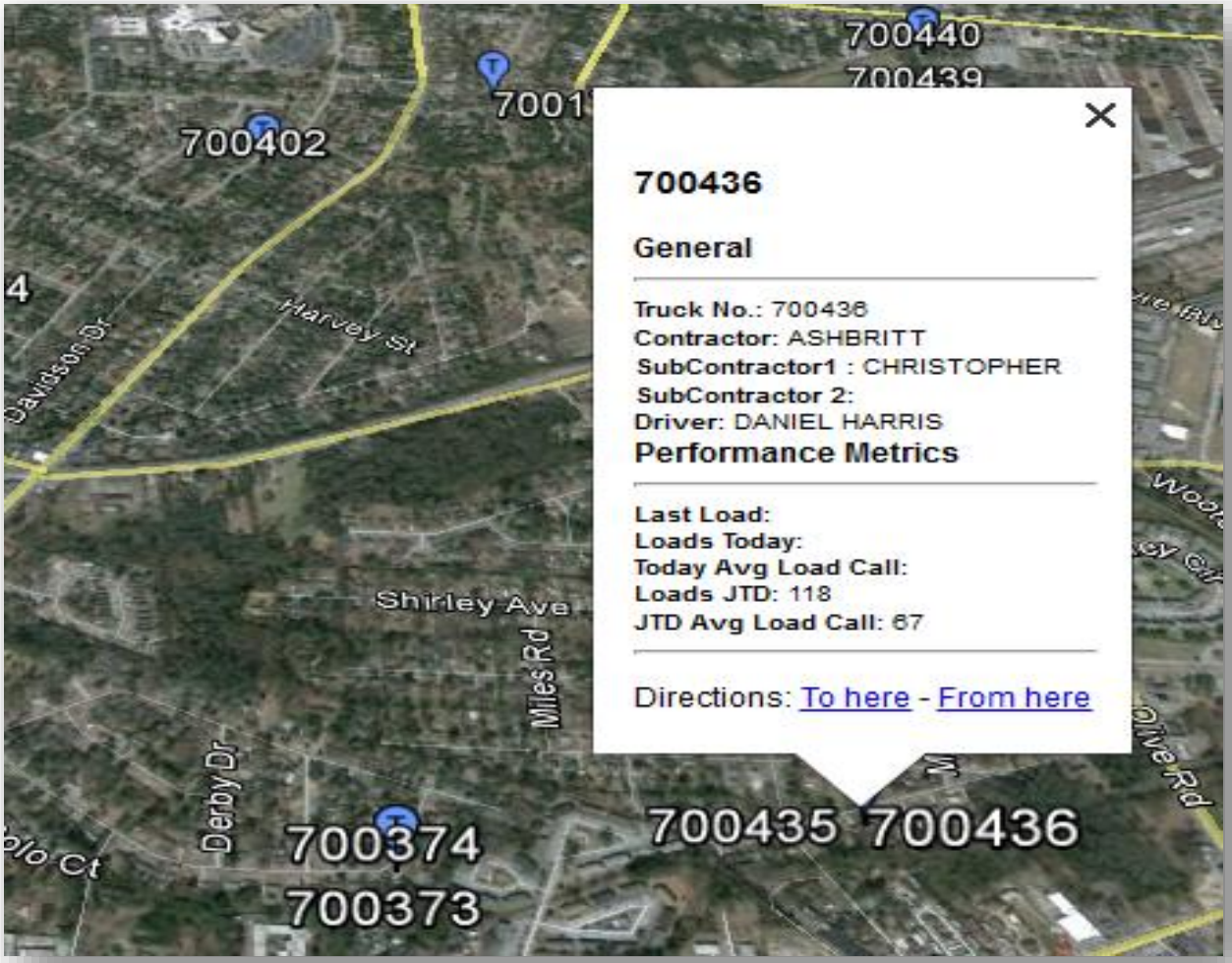
Post-Work Photo

∃	111470420	ANGELA MARTIN (B214262)	03/23/2014 9:42 AM	33.324402	-81.306778	1-21 CRICKET LN	1A	1.00	3.88	20(GIS: 20)	4
∃	111470421	ANGELA MARTIN (B214262)	03/23/2014 9:43 AM	33.324396	-81.306802	1-21 CRICKET LN	1A	1.00	3.12	20(GIS: 20)	4
∃	111470422	ANGELA MARTIN (B214262)	03/23/2014 9:43 AM	33.324412	-81.306757	1-21 CRICKET LN	1A	1.00	3.25	20(GIS: 20)	4
∃	111470423	ANGELA MARTIN (B214262)	03/23/2014 9:44 AM	33.324437	-81.306777	1-21 CRICKET LN	1A	1.00	3.88	20(GIS: 20)	4
∃	111470424	ANGELA MARTIN (B214262)	03/23/2014 10:06 AM	33.324274	-81.306813	2-22 CRICKET LN	1A	1.00	4.50	20(GIS: 20)	4
∃	111470425	ANGELA MARTIN (B214262)	03/23/2014 10:06 AM	33.324190	-81.306692	16116 S CAROLINA 3	1A	1.00	2.62	20(GIS: 20)	4
∃	111470426	ANGELA MARTIN (B214262)	03/23/2014 10:07 AM	33.324161	-81.306564	1-21 CRICKET LN	1A	1.00	2.75	20(GIS: 20)	4
∃	111470427	ANGELA MARTIN (B214262)	03/23/2014 10:18 AM	33.324207	-81.306708	2-22 CRICKET LN	1A	2.00	3.12	20(GIS: 20)	4
∃	111470428	ANGELA MARTIN (B214262)	03/23/2014 10:19 AM	33.324115	-81.306631	2-22 CRICKET LN	1A	2.00	4.75	20(GIS: 20)	4

ADMS City Boundaries and Road Centerline Data to Determine Applicant



ADMS Truck Locations



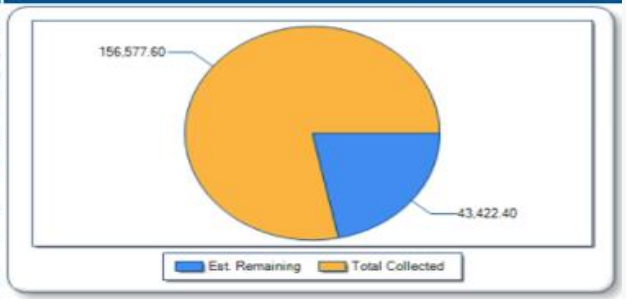
ADMS Customized Reports

VICTORIA COUNTY, TX
FEMA-DR-4332 | TX - HURRICANE HARVEY
ROW COLLECTION

Daily Totals

Daily Statistics (12/05/2017)	
Total Cubic Yards	434
CONSTRUCTION&DEMOLITION	34
VEGETATIVE/WOODY	400
Total Loads	11
Total Trucks Operating	3
Average CuYds Per Load	39.47
Average Load Call	63.64%
Disposal Sites in Operation	1
Total Cubic Yards By Zone	434
N/A	400
Zone: 2	34

CuYds Collected Vs. Remaining



*All figures are estimates pending reconciliation

Page 1 of 3

RecoveryTrac Project Haulout Report — Report Period: 10/02/2017 to 11/13/2017

VICTORIA COUNTY HURRICANE HARVEY ROW COLLECTION

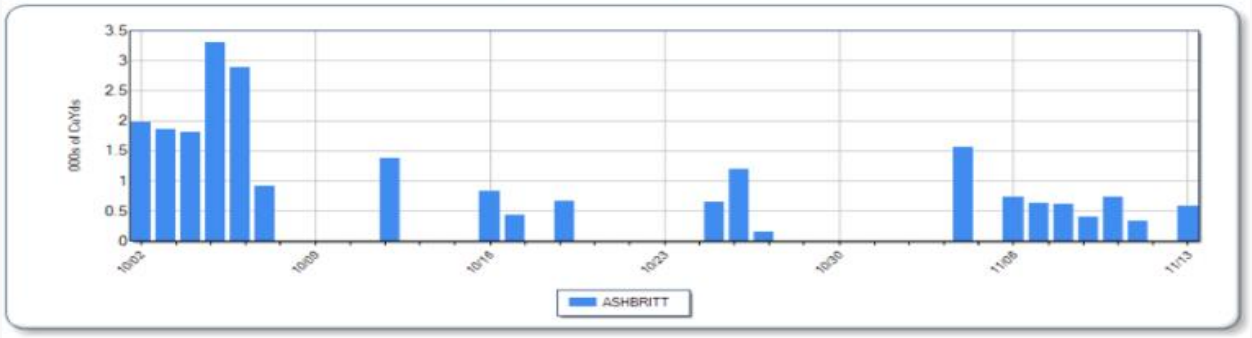
Current Day (11/13/2017) Statistics

DMS	Loads	Avg Load Call	Total Volume
OLD AIRPORT DMS	7	93.6	590
Totals:	7		590

Cumulative - JTD Statistics

DMS	Loads	Avg Load Call	Total Volume
OLD AIRPORT DMS	290	89.7	23,704
Totals:	290		23,704

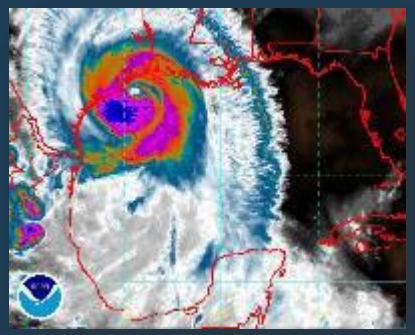
Haulout Debris Removed by Contractor by Day



Questions to Ask Your Vendor

- What capacity do you have to deploy ADMS?
- What measures are taken to secure the data?
- Can we integrate the information on our website?
- Who owns the data?
- Is the system easy to deploy?
- What contingency plans are in place if the system or cell towers are down?






Part 4: Best Practices in Preparedness Initiatives

Houston-Galveston Area Council

Divert Debris from Landfills

- Examine hazards, debris types, and amounts
- Develop a resource list for recycling or reuse of debris.
- Involve partners in planning including:
  - Landfill operators
  - Recyclers
  - Solid waste contractors

Consider Landfill Diversion Resources

- Reduction
  - Air curtain incineration
  - Grinding
- Reuse opportunities
- Metal recyclers
- Electronic waste recyclers
- Compost facilities
- Mulching companies
- Waste to energy combustion facilities

Pre-Negotiate Contracts

- Other communities may be competing with the same resources following a disaster.
- Can save time in an emergency.
- Provides an opportunity to negotiate better rates than at the time of an emergency.
- Contractors may be stretched thin and may not be willing to take on any new business.

Avoid Contracting Minefields In Selecting Vendors

- Provide full and open competition.
- Conduct all necessary affirmative steps to ensure the use of minority businesses, women's business enterprises, and labor surplus area firms when possible.
- Exclude contractors that develop or draft specifications, requirements, statements of work, etc.
- Maintain written standards of conduct governing employees who engage in the selection, award, and administration of contracts.

Avoiding Contracting Minefields

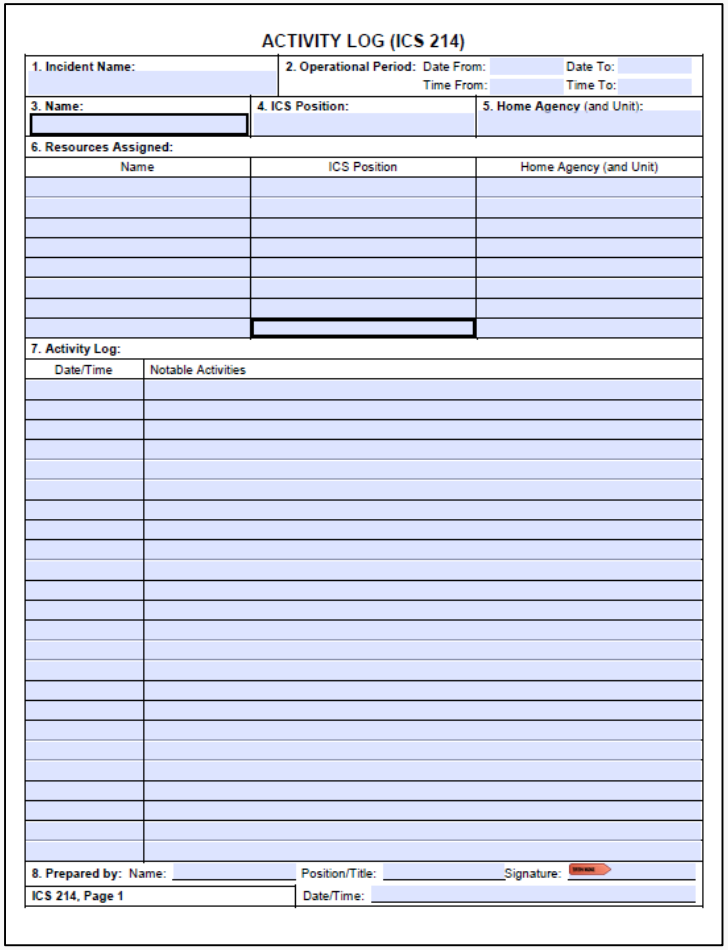
- Maintain records sufficient to detail the history of the procurement:
  - Rationale for the method of procurement
  - Selection of contract type
  - Contractor selection or rejection
  - Basis for the contract price

Identify DMSs in the Community

- Determine the types and quantities of debris the sites can handle.
- Determine the reduction methods to be used.
- Get any needed agreements to use the land.
- Consider the proximity of the community being served by the DMS as well as disposal or recycling sites for the processed debris.

Document Force Account Expenses

- Have a system in place to track force account expenses including:
  - Employee time
  - Equipment use
  - Supplies
  - Rentals
  - Volunteer hours



ACTIVITY LOG (ICS 214)

1. Incident Name:	2. Operational Period: Date From: Time From:	Date To: Time To:
3. Name:	4. ICS Position:	5. Home Agency (and Unit):

6. Resources Assigned:

Name	ICS Position	Home Agency (and Unit)

7. Activity Log:

Date/Time	Notable Activities

8. Prepared by: Name: Position/Title: Signature:

ICS 214, Page 1 Date/Time:

Have a Communication Plan

- Provide guidance regarding segregation of debris, safety, progress of debris operations, etc.
- Utilize social media tools. Monitor for misinformation.
- Coordinate the message with neighboring jurisdictions, state and federal officials.

Develop and Maintain an All-Hazards Debris Management Plan

- Overview
- Events and assumptions
- Debris collection and removal
- DMS and disposal locations
- Debris removal from private property
- Use and procurement of contracted services
- Use of force account labor
- Monitoring of debris operations
- Health and safety requirements
- Public information
- Identification of debris removal contractors

Develop and Maintain an All-Hazards Debris Management Plan

- Form a Debris Planning Team
  - Public Works and Solid Waste
  - Emergency Management
  - Parks
  - GIS/Information Technology
  - Finance and Administration
  - General Counsel
  - Environmental Services
  - Public Information

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Consider the Use of Residential Drop Off (RDO) Sites

- RDO sites give residents the opportunity to self-haul their disaster debris to a managed staging area for future pick-up by jurisdiction crews or contractors.
- Hours of operation as well as guidance regarding the debris that is acceptable for disposal at the site would need to be clearly communicated to the public.
- Staff would need to be on-site to direct traffic and to ensure debris is managed properly and safely.

Link with Volunteer Agencies

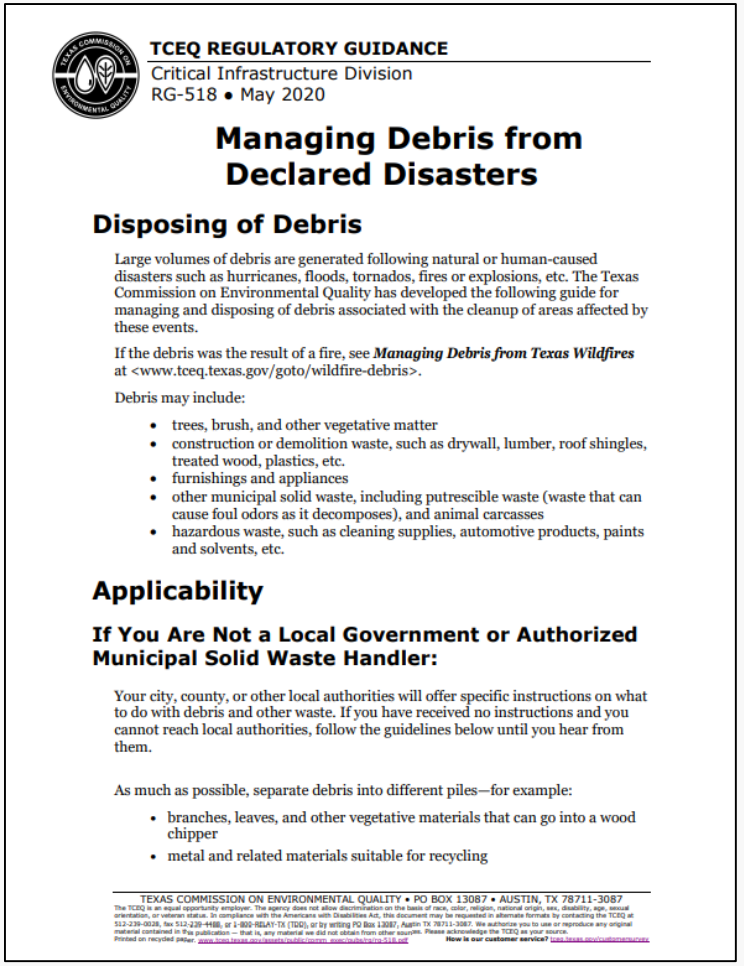
- Help individuals with disabilities and individuals with access and functional needs bring debris to the public ROW.
- Provide public information.

How Volunteer Agencies Can Help Local Jurisdiction in Debris Operations

- Check-in with the local Office of Emergency Management or other agency spearheading debris operations.
- Find out from them which areas need help and let them know where you will be operating.
- Let them know what homes are completed so they can have the debris picked up.
- Be sure to document hours and activities.

TCEQ Managing Debris From Declared Disasters

- TCEQ provides regulatory guidance in debris operations.
- Provides direction in TDMS permitting and operation.
- Provides recommendations for the reduction and disposal of debris.
- Available at: https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-518.pdf



TCEQ REGULATORY GUIDANCE
Critical Infrastructure Division
RG-518 • May 2020

Managing Debris from Declared Disasters

Disposing of Debris

Large volumes of debris are generated following natural or human-caused disasters such as hurricanes, floods, tornados, fires or explosions, etc. The Texas Commission on Environmental Quality has developed the following guide for managing and disposing of debris associated with the cleanup of areas affected by these events.

If the debris was the result of a fire, see ***Managing Debris from Texas Wildfires*** at <www.tceq.texas.gov/goto/wildfire-debris>.

Debris may include:

- trees, brush, and other vegetative matter
- construction or demolition waste, such as drywall, lumber, roof shingles, treated wood, plastics, etc.
- furnishings and appliances
- other municipal solid waste, including putrescible waste (waste that can cause foul odors as it decomposes), and animal carcasses
- hazardous waste, such as cleaning supplies, automotive products, paints and solvents, etc.

Applicability

If You Are Not a Local Government or Authorized Municipal Solid Waste Handler:

Your city, county, or other local authorities will offer specific instructions on what to do with debris and other waste. If you have received no instructions and you cannot reach local authorities, follow the guidelines below until you hear from them.

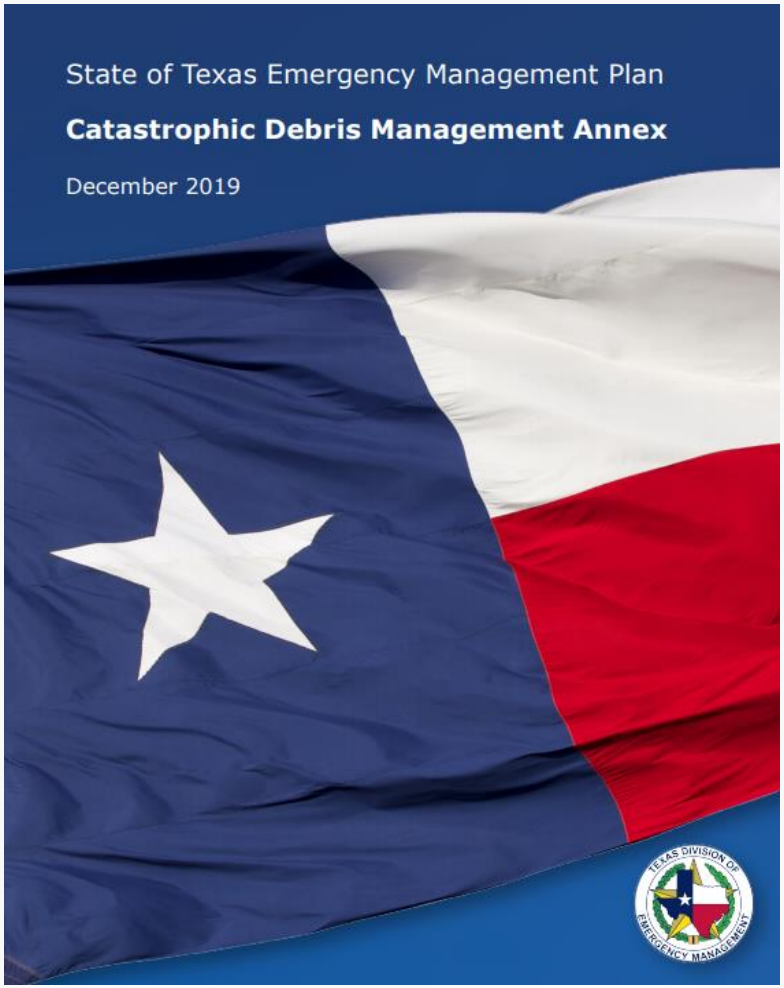
As much as possible, separate debris into different piles—for example:

- branches, leaves, and other vegetative materials that can go into a wood chipper
- metal and related materials suitable for recycling

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY • PO BOX 13087 • AUSTIN, TX 78711-3087

The State of Texas Catastrophic Debris Management Annex to the State EOP

- Outlines the role of the State and the responsibilities of local jurisdictions in conducting debris management operations.
- Available at https://tdem.texas.gov/wp-content/uploads/2019/08/Debris-Management.pdf



Thank You!