



# POST-DISASTER DEBRIS REMOVAL FUNDING – THE GAME HAS CHANGED...

SASHTO 2014 – TECHNICAL SESSION



# INTRODUCTIONS

## Presenters

### Leland Colvin, P.E., Chief Engineer for Operations – South Carolina Department of Transportation

- SCDOT's authorized agent for Federal Disaster – DR 4166
- 20 years of SCDOT experience serving in various capacities including Director of Construction and Project Engineer for the Charleston Region
- Serves on SCDOT's executive coordinator team for emergency incident response
- First-hand recent experience with FEMA public assistance

### Jon Hoyle, President – Thompson Consulting Services

- 11+ years post-disaster debris removal monitoring and grant administration experience
- \$2B of grant program experience:
  - FEMA Public Assistance
  - Federal Highway Administration Emergency Relief
  - FEMA Hazard Mitigation Assistance (HMGP, SRL, RFC & RL)
- Extensive disaster recovery experience with state transportation agencies - SC, VA, AL, MS, FL and TX
- Assisted state transportation agencies with debris management planning and training

# DISCUSSION TOPICS

## Agenda

- Introduction
- Policy Changes
  - Federal Highway Administration Map 21
  - Sandy Recovery Improvement Act (SRIA)
- Advances in Technology
  - Automated Debris Management System (ADMS)
- Lessons Learned from Recent Disasters
- Consider This...
  - 3 Things You Should Do Now



# POLICY CHANGES

## Federal Highway Administration Map 21

- In October of 2012, FHWA issued Moving Ahead for Progress in the 21st Century (MAP 21)



- Provides that all debris removal for major disasters declared under the Stafford Act is now funded by FEMA rather than FHWA for DOTs
- DOTs will need to comply with FEMA policies, regulations and procedures to receive reimbursement for debris-related disaster costs
- Infrastructure damage is still funded through FHWA-ER
- <https://www.fhwa.dot.gov/map21/factsheets/er.cfm>

# POLICY CHANGES

## Sandy Recovery Improvement Act (SRIA)

- On January 29, 2013 the Sandy Recovery Improvement Act (SRIA) was signed into law



**FEMA**

- Debris Removal Alternative Procedures under the SRIA offers an enhanced package of incentives to applicants following a disaster
- DOTs now have a tremendous financial incentive to complete debris removal programs in an expeditious manner with enhanced funding opportunities
- <https://www.fema.gov/sandy-recovery-improvement-act-2013>

# POLICY CHANGES

## Sandy Recovery Improvement Act (SRIA)

- Debris Removal Program Alternative Procedures Incentives:
  - Advanced funding based on capped estimates
  - Use of a sliding scale to determine the Federal share for removal of debris and wreckage, based on the time it takes to complete debris and wreckage removal

Debris Removal Completed (Days from Start of Incident Period)	Federal Cost Share
0-30	85%
31-90	80%
91-180	75%

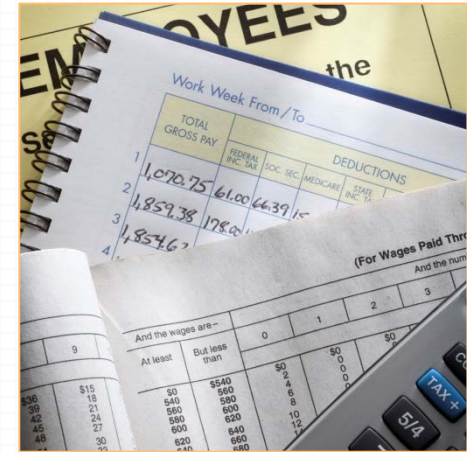
Federal dollars will NOT be provided for debris removal after 180 days (unless an extension is granted by FEMA)

- Retain income from recycled debris without offset to the grant amount
- Reimbursement of base and overtime wages for applicants performing or administering debris and wreckage removal
- One-time cost-share incentive to a state, tribal or local government to have a debris management plan approved by FEMA and have pre-qualified one or more debris and wreckage removal contractors before the date of declaration of the major disaster

# POLICY CHANGES

## Direct Administrative Costs

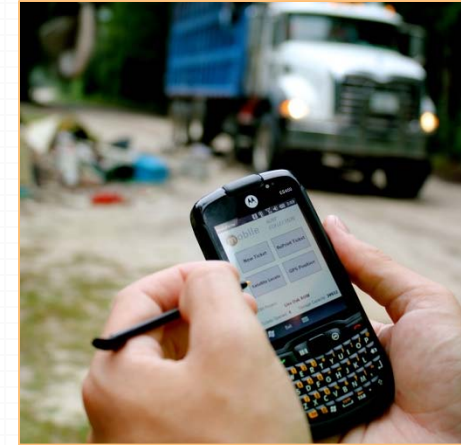
- Data and documentation requirements are more stringent with access and cost of technology
- Direct Administrative Costs: FEMA has been reimbursing PA program applicants for costs associated with managing and administering disaster recovery costs in accordance with Disaster Assistance Policy 9525.9 (DAP 9525.9)
- DOTs can retain the assistance of consultancies for managing and administering costs and seek reimbursement for these services
- [http://www.fema.gov/pdf/government/grant/pa/9525\\_9.pdf](http://www.fema.gov/pdf/government/grant/pa/9525_9.pdf)



# ADVANCES IN TECHNOLOGY

## Automated Debris Management System (ADMS)

- Automated debris management system (ADMS) is a technology solution that eliminates paper ticketing for debris removal
- Operates on a mobile device
- Utilizes a storage medium (QR code, smart card, bard code, etc.)
- Offers real-time/near real-time access to operational data
- Reduces data management costs associated with ticket entry
- Reduces threats of fraud, loss, and theft
- Encouraged by FEMA and USACE





# ADVANCES IN TECHNOLOGY

## Automated Debris Management System (ADMS)

ADMS Web

DASHBOARD | PROJECTS | CONTRACTORS | MAPS | UTILITIES | ADMIN

### DASHBOARD

PROJECT SUMMARY

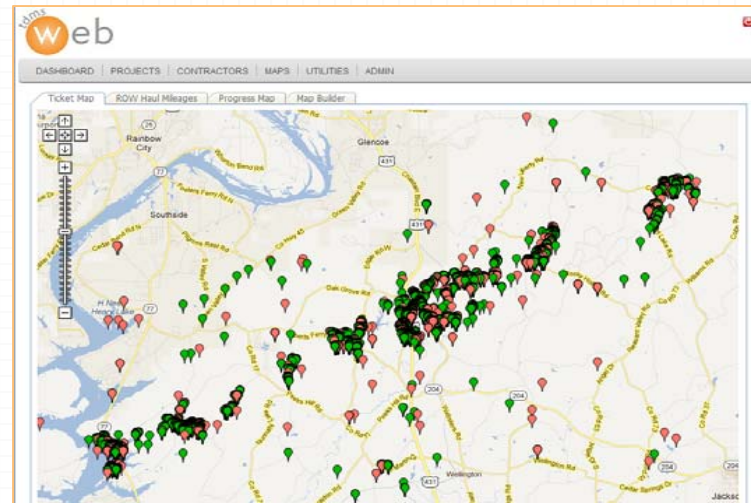
Debris Collection Project	All Of	Total YD <sup>3</sup>	Loads	Avg Load Wt	Trucks
ADCNR Burt's Postcard Debris Collection	10/30/2013	8,808	270	32	23
ADCNR Galesville Debris Collection	12/28/2013	3,219,000	4,136	780	33
ADCNR Wind Creek Debris Collection	07/07/2013	890	22	40	2
Calhoun County ROW	1/14/2013	304,158	8,383	36	93

Task Work Projects	All Of	Loads	Hangars	Lottery	Shrubs
ADCNR Burt's Postcard Urban	07/13/2013	818	213	244	0
ADCNR Burt's Postcard Trails	06/30/2013	402	51	274	0
ADCNR Galesville Urban	09/26/2013	7,890	3,303	3,243	440
ADCNR Galesville Trails	09/12/2013	34,470	264	30,536	0
Calhoun County Urban	08/17/2013	3,988	773	327	0

PROJECTS Projects	Total	Total YD <sup>3</sup>	Loads	YD <sup>3</sup>	New	Saving	Sched	Setting	Complete
ADCNR Galesville Demos	9	3,390	29	0	0	0	0	0	0
Calhoun County ROW	252	31,238	2,761	2,723	0	0	0	0	252
Clear Buckner ROW	62	0	0	0	62	0	0	0	0
Clear Dry Brook ROW	22	0	0	0	22	0	0	0	0
Clear Maffey ROW	95	0	0	0	95	0	0	0	0



ADMS Web

Wes Holden

Load Location | Relative Truck Loads | Relative Monitor Loads | Haul Route

Date: 05/06/2013 08:57:59  
 Truck: 1  
 Project: Blackhawk USACE  
 Monitor: Loading Monitor  
 Material: Other

Latitude: 31.077454210  
 Longitude: -91.601337670

Ticket No: 1-13128-32279

**DEBRIS LOAD TICKET**

Contractor: Xperts Outfit  
 Sub-Cont: E and R Trucking  
 Project No:  
 Driver:  
 Truck No: 1  
 TW Capacity: 18.00

ADMS Web

Jon Hoyle

DASHBOARD | PROJECTS | CONTRACTORS | TICKETS | MAPS | UTILITIES | ADMIN

Thompson Projects | Demos/Demos | Demo Detail | Demo Documents

View	Document	Phase	Delete
<input type="checkbox"/>	ROE Form	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Clearer Damage Description	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Photo ID	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Proof of Ownership	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Insurance Policy	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Proof of Ownership - Verification	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Site and Damage Assessment	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Mortgage Holder Notification	Verification	<input type="checkbox"/>
<input type="checkbox"/>	FEMA Transmittal	Verification	<input type="checkbox"/>
<input type="checkbox"/>	FEMA Decision	Verification	<input type="checkbox"/>
<input type="checkbox"/>	Environmental SWPC	Verification	<input type="checkbox"/>
<input type="checkbox"/>	City Condomnation Letter	Condemnation	<input type="checkbox"/>
<input type="checkbox"/>	Demo Permit	Ready for Demo	<input type="checkbox"/>
<input type="checkbox"/>	Schedule	Scheduled	<input type="checkbox"/>
<input type="checkbox"/>	Ticket Log	Demolished	<input type="checkbox"/>
<input type="checkbox"/>	Ticket Log - Before Photo	Demolished	<input type="checkbox"/>
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<input type="checkbox"/>	Demo Completion Verification	Demolished	<input type="checkbox"/>

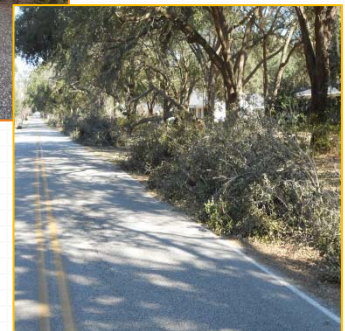
  

View	Document	Delete
<input type="checkbox"/>	Hauling Account	<input type="checkbox"/>
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<input type="checkbox"/>	Daily Activity Log	<input type="checkbox"/>
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# LESSONS LEARNED FROM RECENT DISASTERS

## South Carolina Department of Transportation Case Study

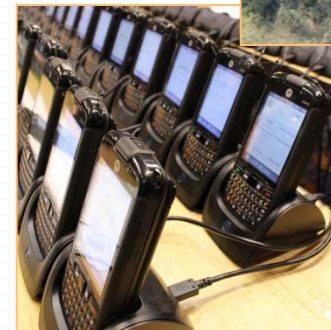
- Winter Storm Pax generated over **1.5"** of ice in the midland and coastal counties that caused wide-spread vegetative debris across the state and within the state-owned highway rights-of-way
- **22** of the state's 46 counties were included in the federal disaster declaration as a result of the storm damaged from the heavy ice accumulation (none of the upstate counties, which receive snow fall annually, were included in the declaration)
- SCDOT's contractors addressed approximately **700,000** hazardous trees (leaners & hangers)
- Approximately **4.5M** cubic yards of debris was removed from the highway right-of-way



# LESSONS LEARNED FROM RECENT DISASTERS

## South Carolina Department of Transportation Case Study

- SCDOT activated **3** monitoring firms and **5** contractors from our pre-positioned on-call contracts
- SCDOT has incurred approximately **\$165M** in disaster-related costs for FEMA Category A and B
- A quick and timely recovery effort was top priority for SCDOT and the Governor's office
  - One of the hardest hit counties was Aiken County, which is adjacent to Augusta National and the Masters Tournament
- Deployed over **500** monitors and contractors within the first **72** hours
- At the height of recovery over **5,000** monitors and contractors were deployed
  - Approximately 65% were in-state
- Thompson activated more than **430** ADMS units to document monitoring operations (largest single ADMS deployment to date)



# LESSONS LEARNED FROM RECENT DISASTERS

## South Carolina Department of Transportation Case Study

- SCDOT had a Debris Management Plan (DMP) focused mostly on hurricanes
  - A one-time 2% incentive from FEMA was realized for having a DMP in place
- Pre-positioned contracting
  - Very successful (a must !!)
- Drive your own recovery - do not rely on or wait for FEMA, educate yourself, and utilize experienced resources
- Establish a validation and documentation process early on with FEMA
  - This was a frustrating effort during this disaster
- Establish financial procedures (e.g. time keeping and invoicing) as part of your pre-disaster planning
  - For force account labor, equipment, and materials, a system must be able to carve out **only** disaster related costs for specific locations
  - Provide stop gap measures for spending limits
    - During the height of recovery operations, SCDOT was incurring \$10M per day

# CONSIDER THIS...

3 Things You Should Do Now

- Establish pre-position disaster contracts
  - Debris removal
  - Debris monitoring
  - Grant management services
- Develop or update your disaster debris management plan (DDMP)
- Drive your own recovery - be informed (SCDOT relied on outside expertise)

