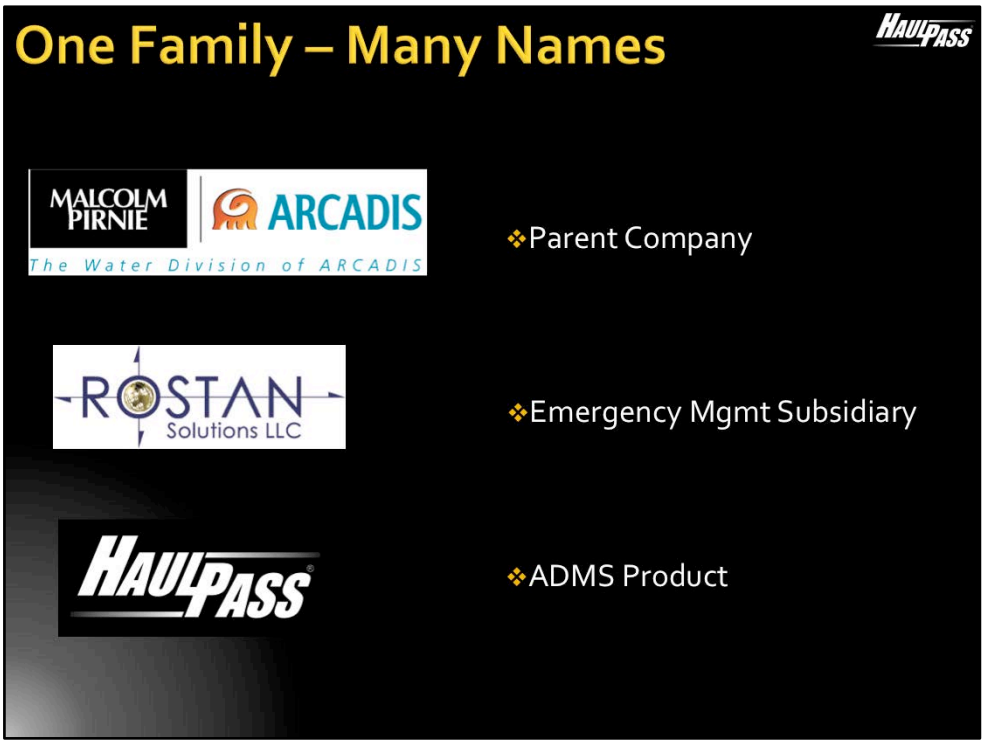
HAULPASS®

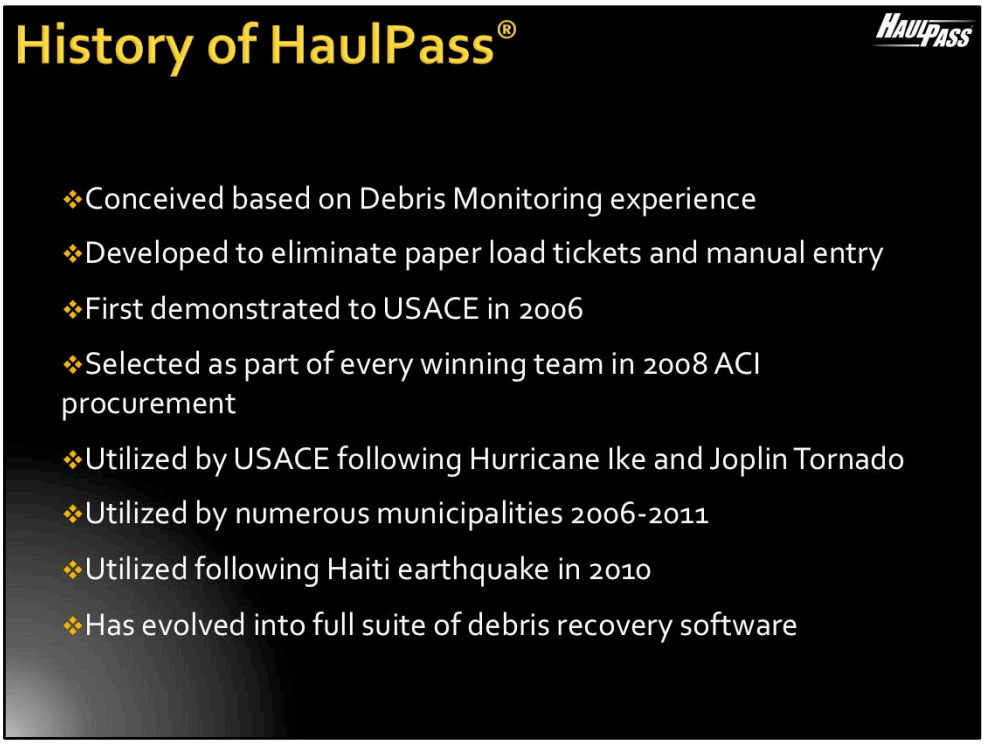
Automated Debris Management System (ADMS)

Leveraging Technology in Disaster Recovery

AAEES Excellence in Environmental Engineering and Science Awards April 25, 2013



- Paperless electronic data collection and management
- Limited opportunities for data entry errors and no legibility issues
- Satellite based GPS technology allows accurate automated debris pickup location
- Near real time event status using web-based reporting and GIS tools
- Timely reconciliation of contractor invoices



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❖Timely reconciliation of contractor invoices

Deployments

- Hancock County, MS 2006
- Erie County (Buffalo), NY 2006
- US Coast Guard, LA 2007
- USACE Texas DOT 2008
- USACE Cameron Parish, LA 2008
- USACE Vermillion Parish, LA 2008
- City of Humble, TX 2008
- City of Nassau Bay, TX 2008
- City of Piney Point, TX 2008
- Port-au-Prince, Haiti 2010
- Birmingham, AL 2011
- USACE Joplin, MO 2011
- James City County, VA 2011
- York County, VA 2011
- Williamsburg, VA 2011

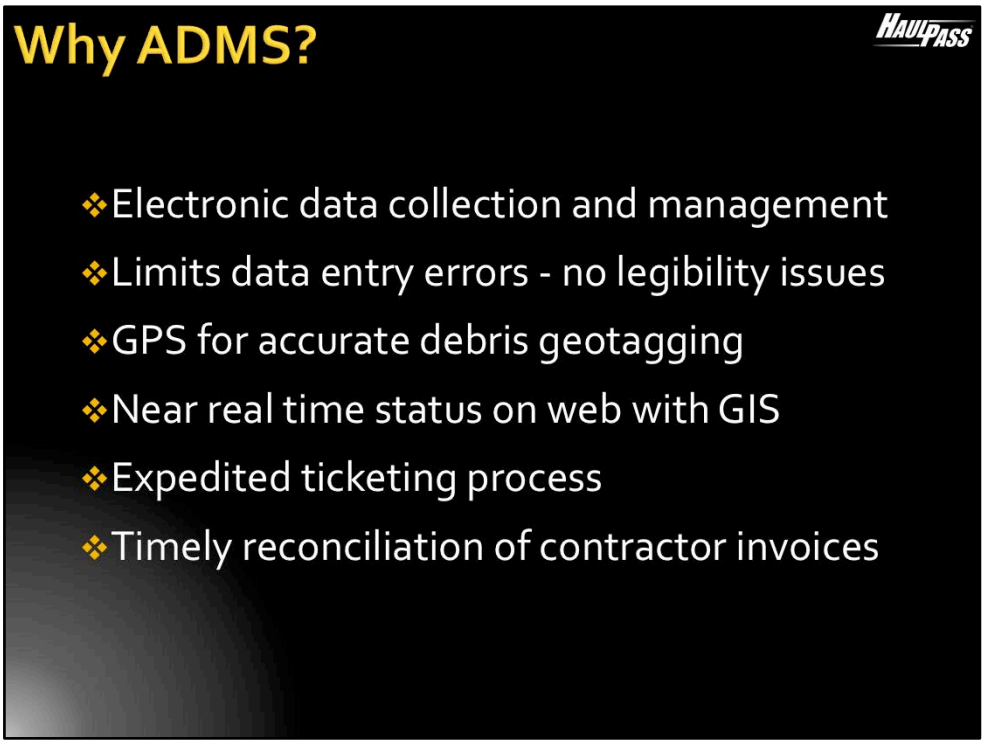
- Easy to use filters
- Create reports from filtered data
- Visual Aids – color themes below

Proprietary and Confidential - Patent Pending

Joplin, Missouri 2011 Tornado

- USACE procured ADMS services
- Deployment within 24 hrs of NTP
- 60+ Field Staff
- 1600+ ROE/PPDR Projects
- Hundreds of Certified Trucks
- 5 Dump Sites

Proprietary and Confidential - Patent Pending



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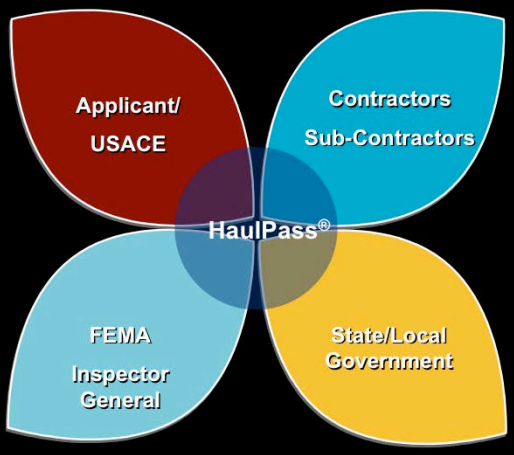
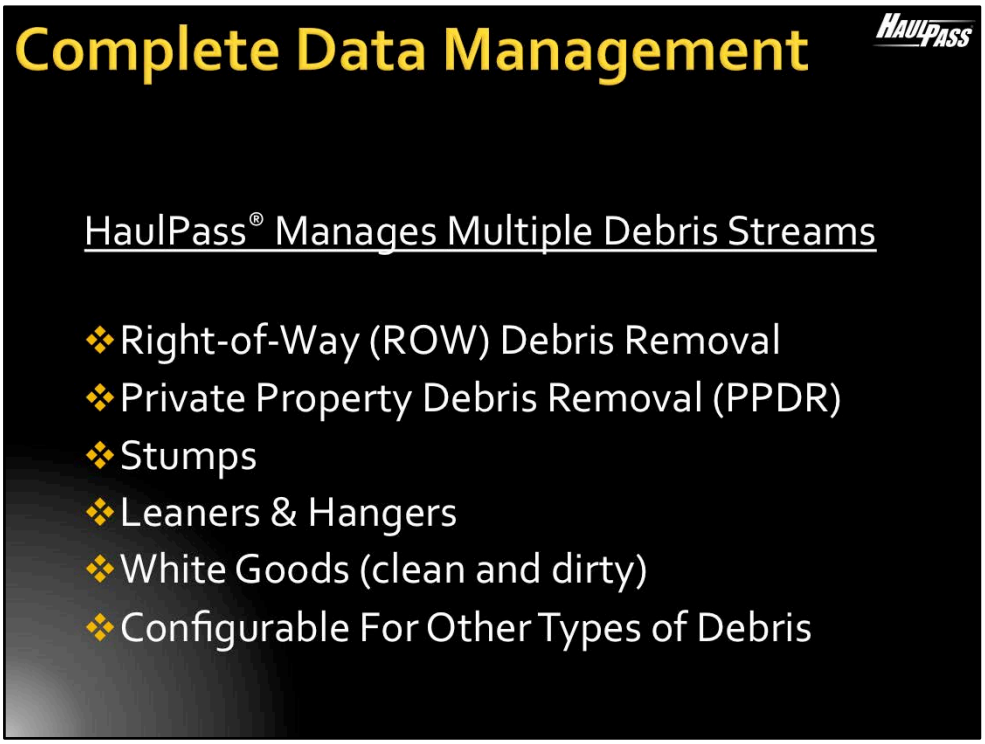
HaulPass® – Common Source

Enabling all parties to view the same data set





HaulPass™ addresses multiple debris streams:

- Right-of-Way Debris Removal
- Right-of-Entry Debris Removal
- Stumps
- Leaners & Hangers
- White Goods (clean and dirty)
- Configurable to handle other waste streams

Fully automated data management starts with equipment certification and QA/QC monitor registration.

Ticket Process

Field
- GPS Reading
- Card Verified
- Data Stored On Card

Tower
- Card Verified
- Load Call
- Card Cleared
- Data Transmit

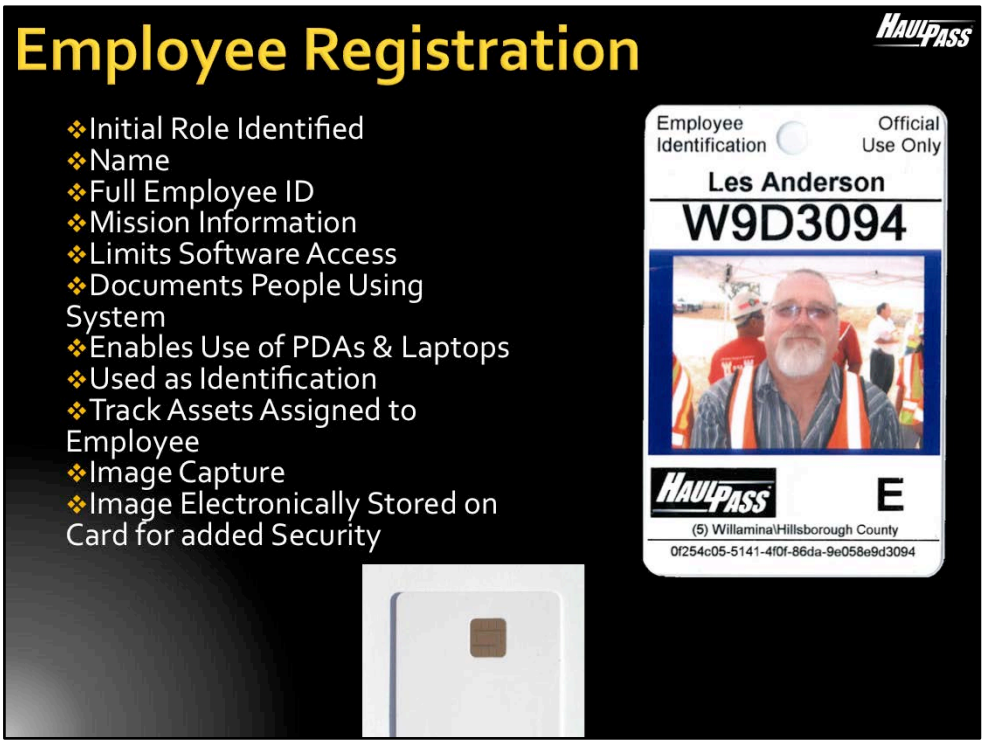
Event Manager
- Ticket Recv'd
- Match to Cert
- Mapped
- Retrievable

Field Components

- Industry Standard Components
- Smartcard Technology
- GPS Enabled Rugged Handheld PDA
- Belt Printers for Receipts at Tower
- Laptop Certification Computers
- Cellular Transmission When Available

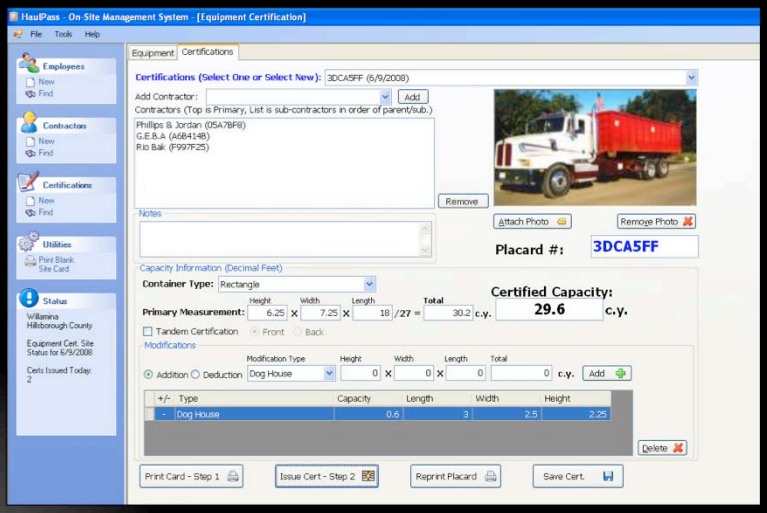
Starting with industry standard smart card technology, the HaulPass™ System uses GPS enabled rugged mobile handhelds to manage the debris process from collection to disposal.

Disposal sites are equipped to print debris load tickets for drivers, contractors, and applicants.



This card shows Brian Klett
Employee number WB94F1
W = ROW role
Working Hurricane George – Polk County
Mission Applicant = 5
Full Employee ID Number at bottom of card starts with 5fae…

Equipment Certification



Equipment Certification

- Uses Smart Card
- Certification Number
- Alternate Placard Number
- Mission Information
- Full Certification ID
- Image Stored On Card
- Certification Information On Card
- Driver Information
- Equipment Information
- Contractor Hierarchy
- Measurements
- Notes
- Known as "The HaulPass Card"

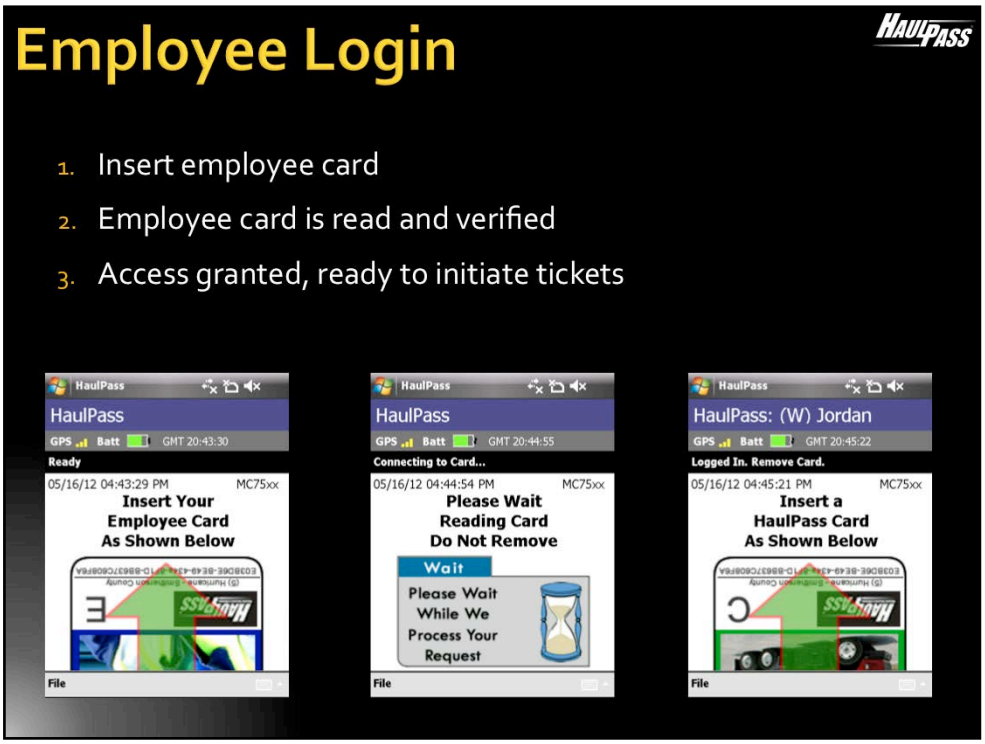
Shows an equipment certification card for
ID Starts with 91b11…
Hurricane George City of Tampa
Mission Applicant 5

MA's must match (employee and cert)

Multiple certs can be issued per piece of equipment

Card acts as the traveling database

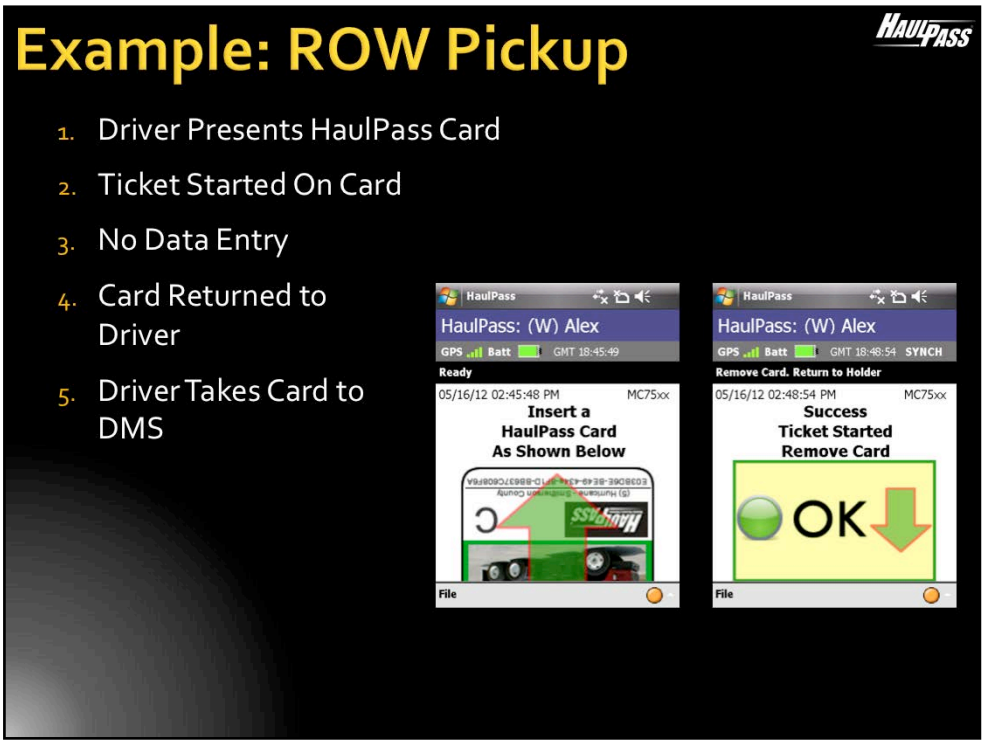
Field Data Collection



Driver will present a HaulPass Card. Insert card into slot.

Ticket data is automatically initiated.

No data entry required.



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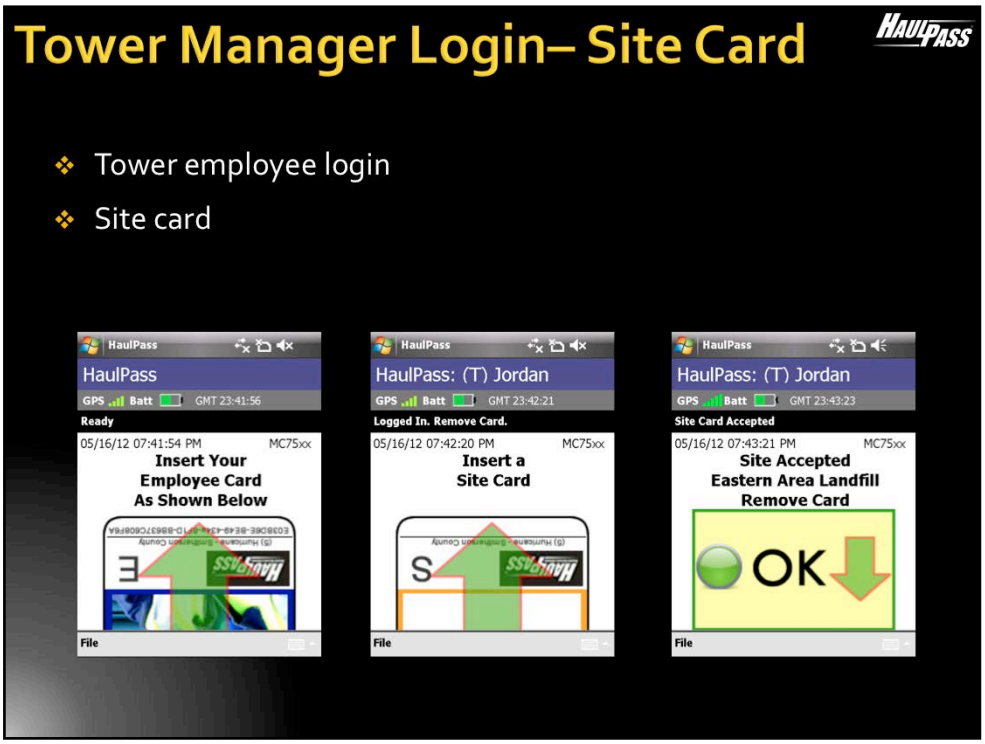
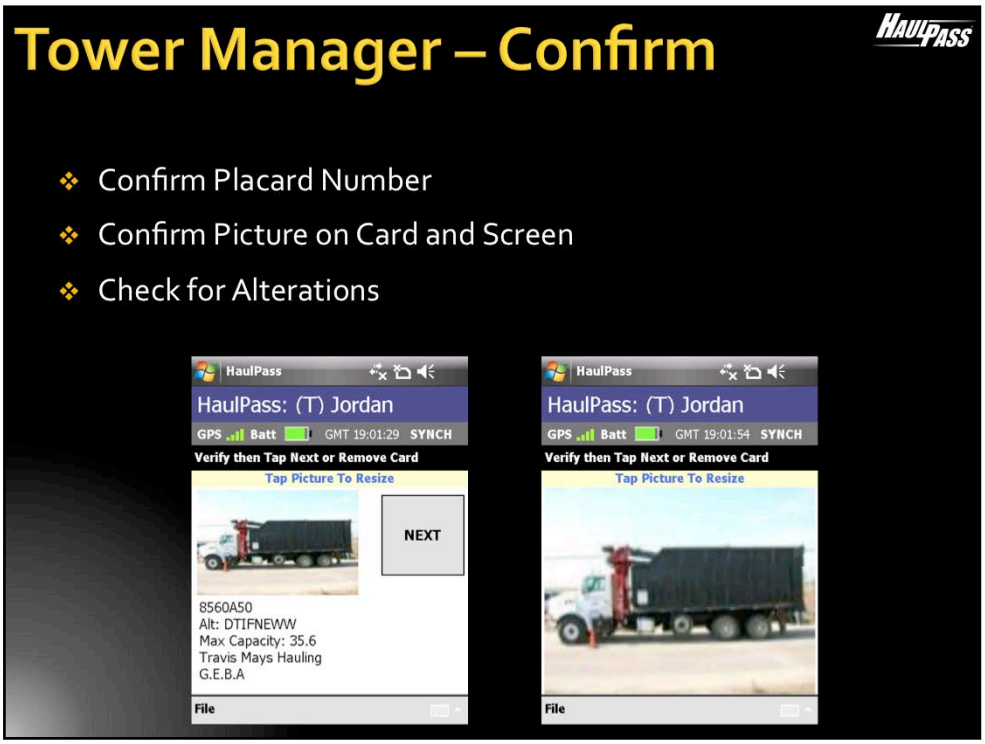
Tower



Confirm the measured capacity on the truck placard to the data on screen.

Confirm the picture of the truck on screen matches and no alterations have been made.



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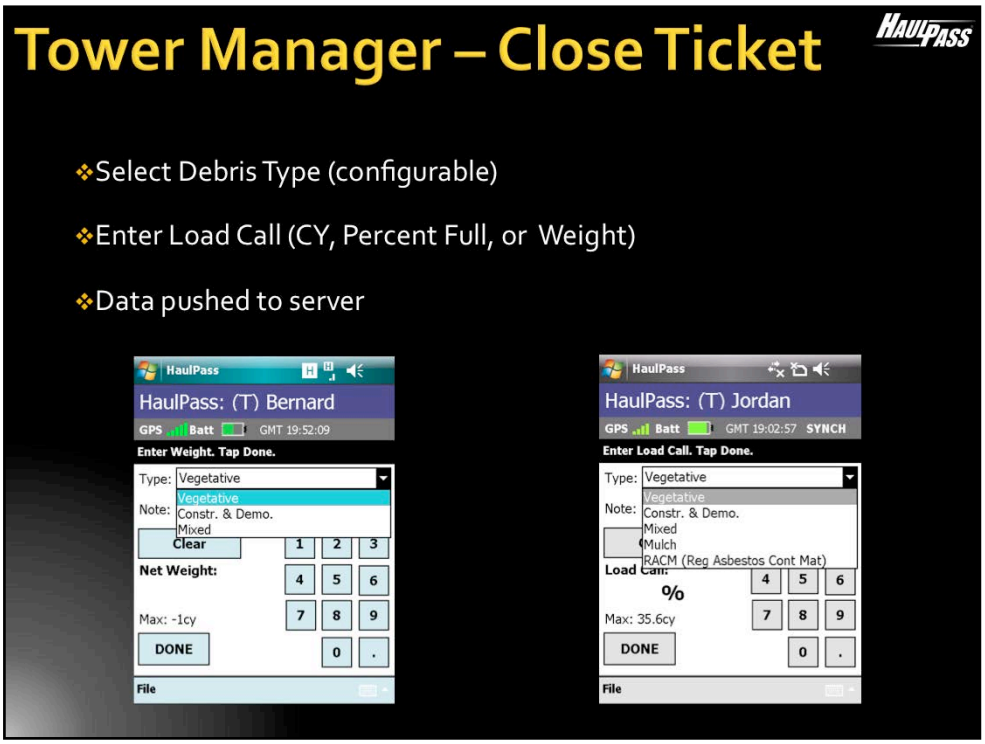
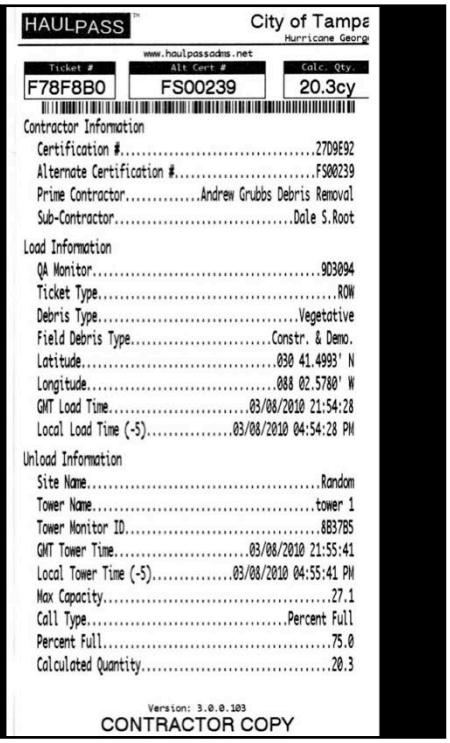


Load Call and Finalize Ticket

- Select the debris type.
- Drag the slider bar to the appropriate load call percentage.
- Press the “Complete” button.

Receipt Sample

- ROW Receipt Sample
- Multiple Copies As-needed
- Number of Copies Configurable at Tower



HAULPASS™ City of Tampa
Hurricane George
www.haulpassadms.net

Ticket #	Alt Cert #	Calc. Qty.
F78F8B0	FS00239	20.3cy

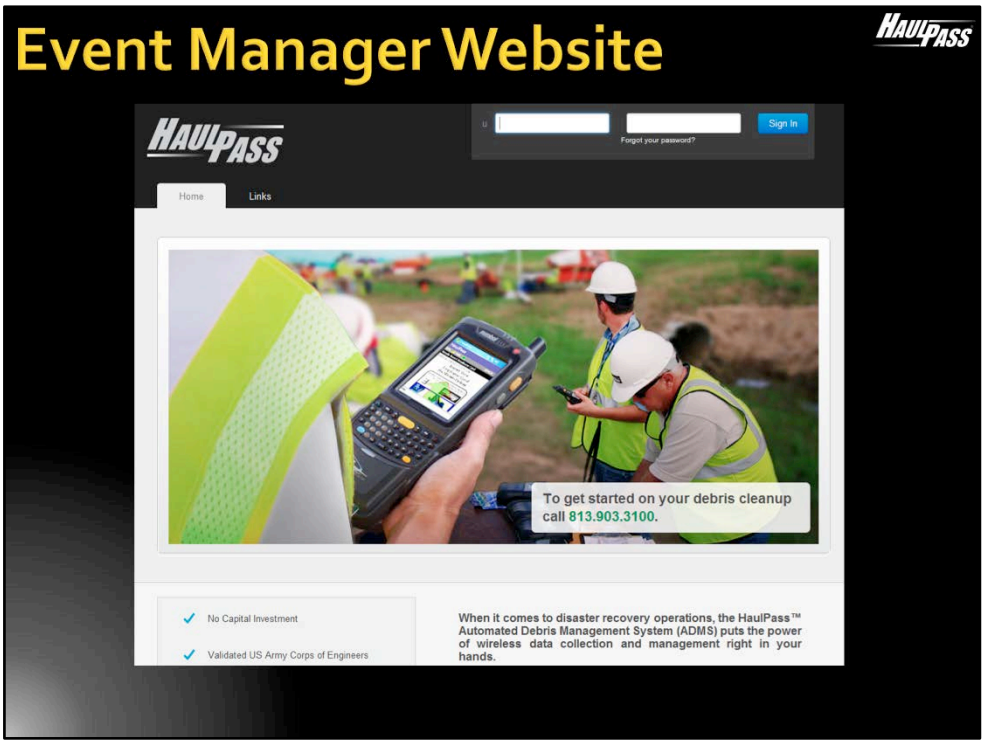
Contractor Information
- Certification #.....27D9E92
- Alternate Certification #.....FS00239
- Prime Contractor.....Andrew Grubbs Debris Removal
- Sub-Contractor.....Dale S.Root

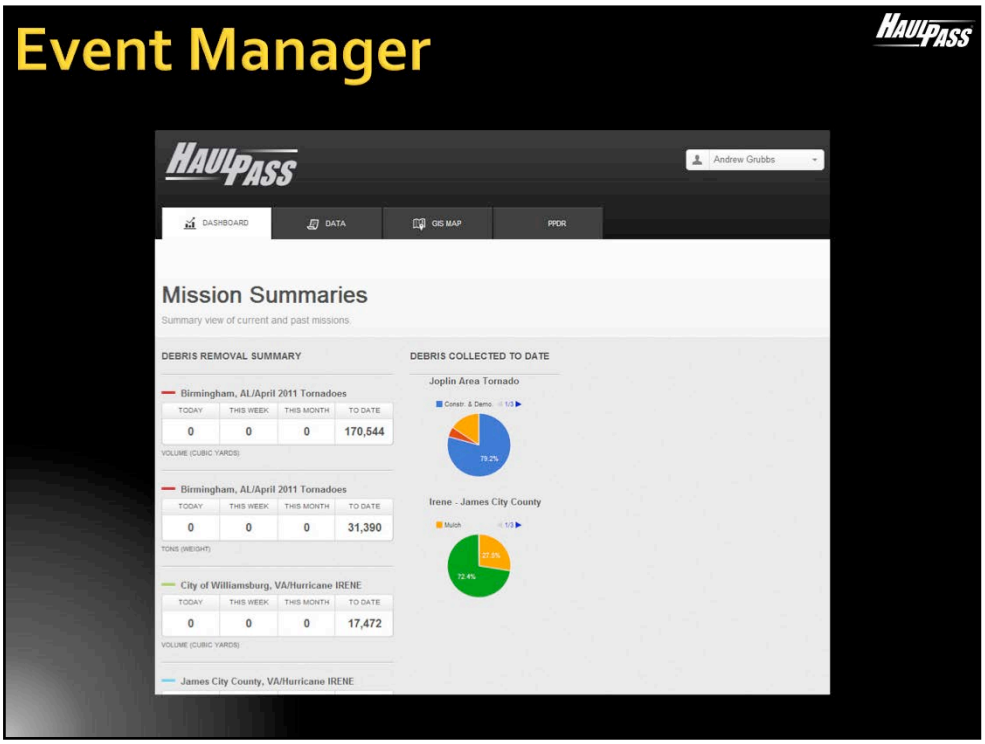
Load Information
- QA Monitor.....9D3094
- Ticket Type.....ROW
- Debris Type.....Vegetative
- Field Debris Type.....Constr. & Demo.
- Latitude.....030 41.4993' N
- Longitude.....088 02.5780' W
- GMT Load Time.....03/08/2010 21:54:28
- Local Load Time (-5).....03/08/2010 04:54:28 PM

Unload Information
- Site Name.....Random
- Tower Name.....tower 1
- Tower Monitor ID.....8B37B5
- GMT Tower Time.....03/08/2010 21:55:41
- Local Tower Time (-5).....03/08/2010 04:55:41 PM
- Max Capacity.....27.1
- Call Type.....Percent Full
- Percent Full.....75.0
- Calculated Quantity.....20.3

Version: 3.0.0.103
CONTRACTOR COPY

Event Manager Website





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- Create reports from filtered data
- Visual Aids – color themes below

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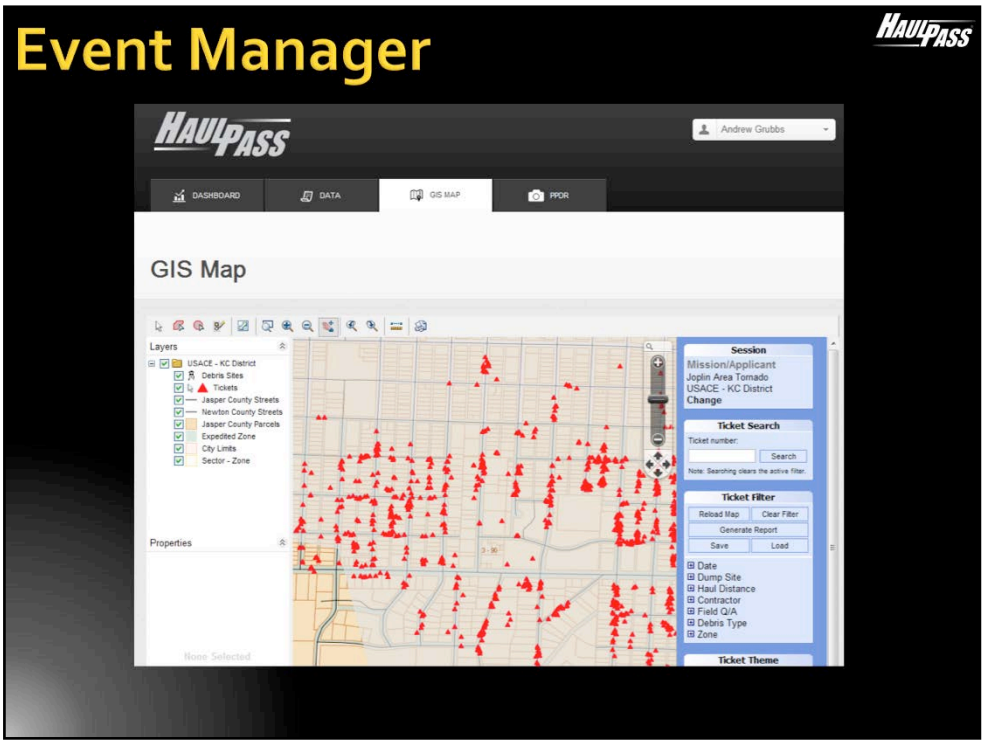

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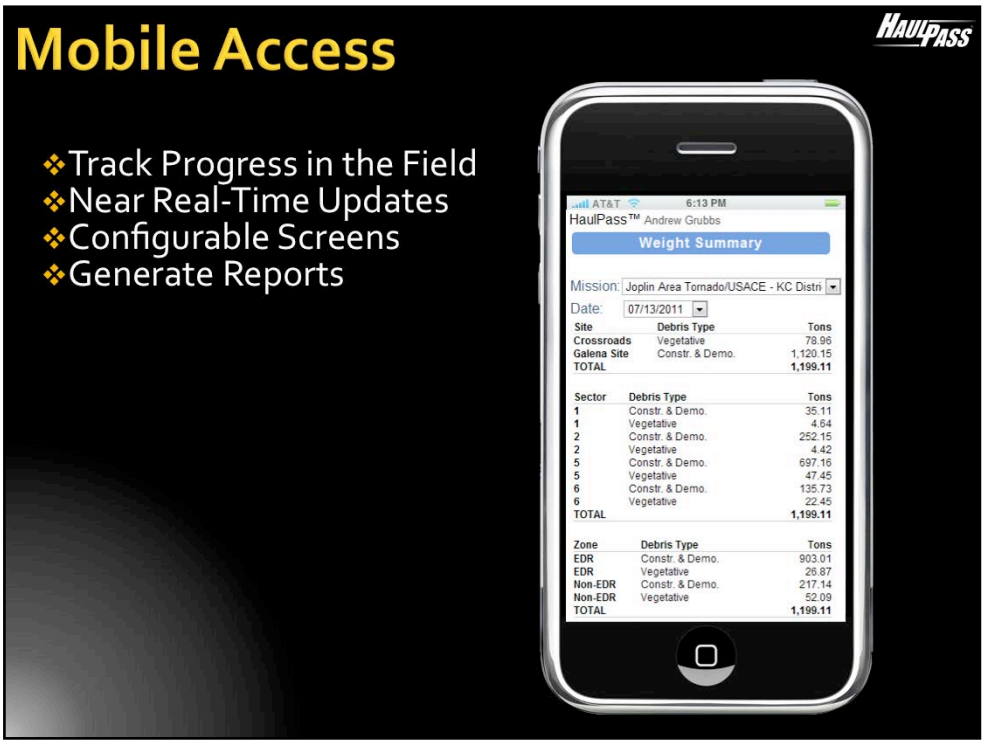

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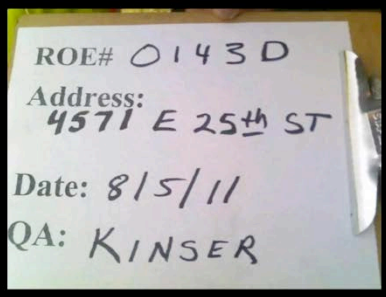
Joplin ROE/PPDR Mission

HAULPASS

- Field Personnel & Units
- Support documentation of cleanup
- Each property had 4 before images
- Each property had 4 after images
- Complete documentation of cleanup effort



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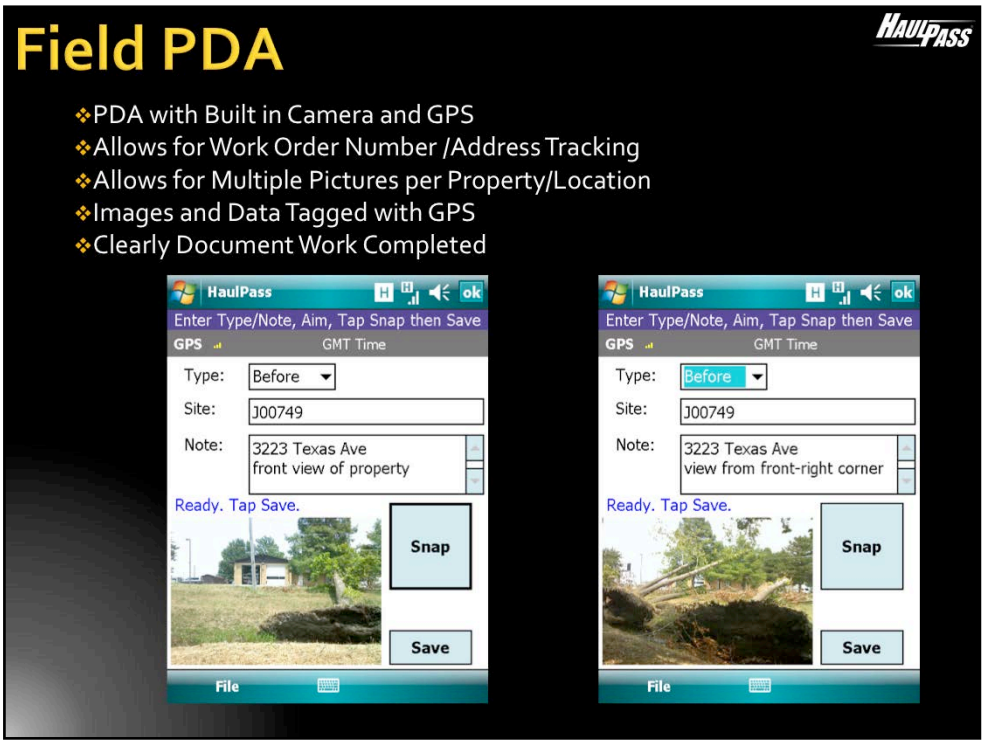

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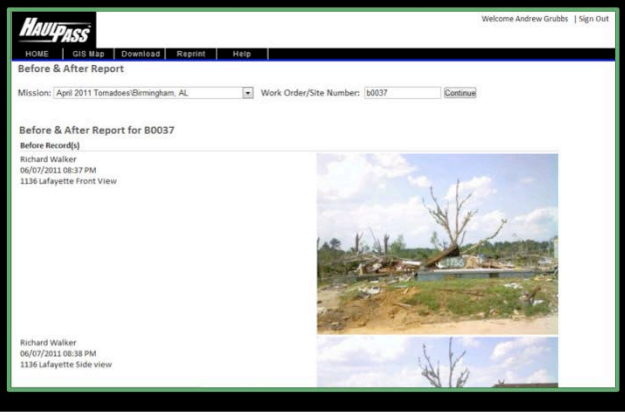
Event Manager

- Before and After Images
- All images stored by property
- Image files tagged
- Improved Reporting Times
- Faster management review



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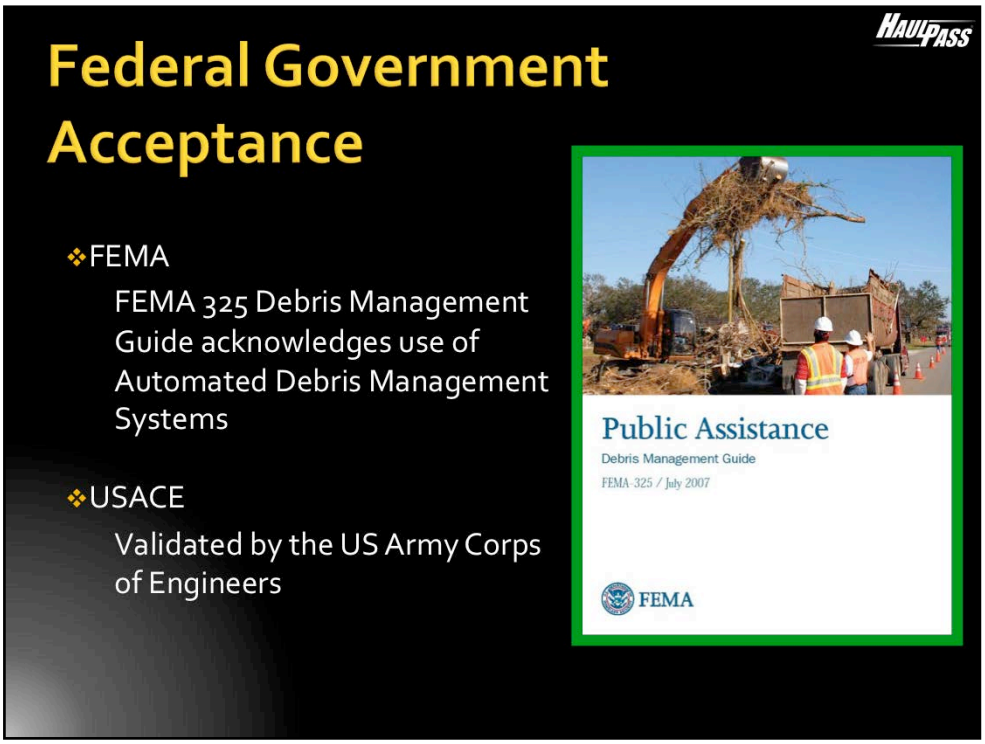

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HaulPass® Differentiators

- Rapid deployment
- Quick training of field staff
- Minimal hardware management in field
- No reliance on paper
- Highest levels of security
- Electronically encrypted data throughout process
- Network/cell availability not required during operations
- Ruggedized field hardware

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- Limited opportunities for data entry errors and no legibility issues
- Satellite based GPS technology allows accurate automated debris pickup location
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Questions

HAULPASS®