

2017 Innovations Showcase

Inaugural Showcase
Program



Competition & Results Video



MOTOR GRADER



RUTBUSTER





BEFORE





AFTER



VERSATILITY



PRODUCTIVITY & COST COMPARISON

THERE IS NO COMPARISON!

MOTOR GRADER

**Labor \$225/Hr Equip
\$275/Hr**

**500 – 1000 LF/Day
Tons/Mile ???**

RUTBUSTER

**Labor \$225/Hr Equip
\$230/Hr**

**10,560 LF/Day (2 Miles)
50 Tons/Mile/Wheelpath**

RUTBUSTER PRIMARILY LIMITED BY

**Ability to Deliver Material to Wheelpath
Milling Machine Speed When Doing Mill & Fill
With No Milling..**

20 Tons – 2,000 Ft – 20 Minutes

2018 Innovations Showcase

Statewide Competition
May 8-9, 2018
Gonzales, LA



2018 Innovations Showcase

- Goal: Identify, recognize and share the best innovations throughout the DOTD.
- 15 total innovations
- Two Separate Categories/People's Choice Award
- Will keep in conjunction with the statewide Roadeo in 2019.

People's Choice Award



Two Separate Categories

➤ Tools and Work Processes

➤ 10 entries

➤ Guard Rail Blade(District 61)

➤ Software/Technical

➤ 5 entries

➤ Bridge Data Mobility (District 58)

Top Three Finishers

- Tools and Work Processes
- Guard Rail Blade(District 61)
- Auxiliary Box (District 58)
- Push Pro (District 62)
- Tools and Work Processes
- Bridge Data Mobility (District 58)
- SOP for Fed Funds (Section 70)
- Access Connection Field Log (District 07)

District 61 – Guard Rail Blade



District 61 – Guard Rail Blade

- Cleaning under and around guardrail prevents scour and erosion issues.
- Resulting damage from runoff undermines approach slabs and causes issues around pilings and caps (load bearing members)
- Allows cleaning a larger area moving more material at one time without worker fatigue.
- Very durable and has no moving actuating mechanisms on the attachment → No Maintenance.
- District 61 Bridge Crews have been using for approximately 8 years now with NO ISSUES!

District 58 – Auxiliary Box



District 58 – Auxiliary Box

- **Economical** – It minimizes spillage since the material is within reach thereby saving money on material costs.
- **Increases Productivity** – Less time is spent in handling materials. Give workers more time to concentrate on task-at-hand rather than slowly shoving aggregates to avoid material spillage.
- **Multi function** – Applicable to several maintenance activities such as the ones mentioned from previous slide.
- **Complements different dump truck sizes** -
One size fits all-type container, depending on how it is utilized

District 58 – Auxiliary Box



District 62 – Push Pro



District 62 – Push Pro

- Work Smarter
- This work **IN THE PAST** was a manual labor task!
- Now we let the machine do the work; no more shovels and wheelbarrows. 16' Length allows full reach to centerline on most bridges.
- We are able to make erosion repairs under low clearance bridges by pushing the backfill material directly to the area needing repair, example soil, rap, rip rap, stone etc.
- These repairs include headwall backfill, wing wall backfill, scour around pilings etc.

District 62 – Push Pro



District 58 – Bridge Data Mobility



District 58 – Bridge Data Mobility

- Bridge data on mobile devices, tablets, or PC's and its available uses
 - Sorting or displaying data within google
 - For locating structures and routing
 - Creating specific data maps with ease
- Potential Mapping Options
 - Basic inventory maps
 - Storm or Severe Weather emergencies (scour critical or off system bridges)
 - Specialized maps for load posted or fracture critical bridges
 - Any GPS specific information that needs to be displayed

Section 70– SOP for Fed Funds

- Guide to Federally Funded Projects using Capital Outlay budget
- Provides the Project Manager with the information needed to understand and navigate through the project processes effectively and efficiently.
- Covers everything from the initial project request, developing the level of effort, environmental clearance, notice of task order execution, budget request, notice to proceed, shopping cart, purchase order, letting, supplements and change orders, reviewing and submitting invoice and project close-out with final audit.
- The manual can be read from beginning to end and/or used as a reference to look up procedures as the need arises.

District 07 Access Connection Field Log

- The Concept
 - Lack of Information
- The Opportunity
 - Increase Efficiency
- The Benefit
 - Complete Information with Documentation

District 07 Access Connection Field Log

DOTD DISTRICT 07 DESIGN
WATER RESOURCES
PERMIT REVIEW FIELD INFORMATION

APPLICANT: _____
CONTROL SECTION: _____
ROUTE NO: _____
PARISH: _____

LAT: _____ LONG: _____

U / DD STREAM PIPE U / D STREAM PIPE U / D STREAM PIPE U / D STREAM PIPE U / DD STREAM PIPE

SIZE: _____ SIZE: _____ SIZE: _____ SIZE: _____ SIZE: _____
MATERIAL: _____ MATERIAL: _____ MATERIAL: _____ MATERIAL: _____ MATERIAL: _____

DITCH DEPTH: _____

DATE OF FIELD VISIT: _____

SIZE	MATERIAL	UP/DOWN	DISTANCE	NOTES

(INCLUDE NORTH ARROW, DIRECTIONAL FLOW ARROW, CROSS DRAINS, OUTFALLS, ETC.)

DOTD DISTRICT 07 DESIGN
WATER RESOURCES
DRAINAGE INFORMATION

APPLICANT: _____
CONTROL SECTION: _____
ROUTE NO: _____
PARISH: _____

LAT: _____ LONG: _____ DITCH DEPTH: _____

SIZE: _____ SIZE: _____ SIZE: _____ SIZE: _____ SIZE: _____
MATERIAL: _____ MATERIAL: _____ MATERIAL: _____ MATERIAL: _____ MATERIAL: _____

DATE OF FIELD VISIT: _____

(INCLUDE NORTH ARROW, DIRECTIONAL FLOW ARROW, CROSS DRAINS, OUTFALLS, ETC.)

People's Choice Award Section 51 Culvert Pipe Puller



Tools and Work Processes

- D62 Water Pump: A way to pump water in a sewer jet to save time and money
- S51 Culvert Pipe Puller: Job specific fabricated tool that assists in the placement of concrete culverts.
- D02 Dump Inspection Door: Inspection door on the right side of the dump truck tailgate for filling shoulder ruts.
- D07 Striping Detail Trailer: Converted VMS trailer to aid in the striping process
- S42 Remote Accessory Power Supply & Circuit Protection: The innovative solution is the addition of a fuse panel/box placed inside of the cab which eliminates different sets of wiring connecting directly to the battery.
- D58 Salt Spreader: is an auxiliary tool in helping employees to properly maintain/repair/store small salt spreaders in a safe and efficient manner.
- D04 Brine Distributor: Distributor for brine solution for pre-wetting as a method of anti-icing on roadways.

Software and Technical

- D07 Permit Applicants Tip Sheet: Our updated and revised Tip Sheet saves money, saves staff time, and simplifies work by decreasing staff hours, copies, and phone time.
- D04 Asphalt Ticket Tracker: It is an excel program that tracks hot mix tickets and automatically calculates yields, total tonnages by sub-lot and mix use, and square yardage.

2018 Winners





2019 Innovations Showcase

The DOTD Innovations Showcase is designed to identify and share the best innovations in all areas of the department.

Categories

- ✓ Tools and work processes
- ✓ Software/technical

Criteria

- ✓ Saves money or time
- ✓ Simplifies a work process
- ✓ Improves safety
- ✓ Other enhancement to the work product

Entry Information

- ✓ Submit an innovation any time; contact your district committee member for your district's deadline
- ✓ Submitted to Innovations Committee member (see right)
- ✓ Committee members can also assist with putting entries together
- ✓ To access the entry form, click on the "Innovations Showcase" link on the intranet

Committee Members

- ✓ District 02 - Robert Alford
- ✓ District 03 - Jeffrey Legnon
- ✓ District 04 - Michael Nelson
- ✓ District 05 - George Skains
- ✓ District 07 - Damon Cooley
- ✓ District 08 - Rhett Desselle
- ✓ District 58 - Ken Free
- ✓ District 61 - Greg Coco
- ✓ District 62 - Jenna Bridges
- ✓ Headquarters - Jeffery Brown

Competition Details

- ✓ District level winners in each category will advance to statewide competition
- ✓ Statewide competition to be held along with the 2019 Statewide Roadeo

Innovations that have been in use, as well as those that are conceptual only, will be considered. However, concepts must be demonstrable (such as by use of a prototype). Entries will be judged on originality, transferability, cost of implementation, impact, and other factors.

The top three finishers in each category at the statewide level will be rewarded by a budget transfer from headquarters to their respective district or section's operating budget.

1st place – \$10,000 budget transfer
OR replacement of any equipment in the winner's work gang up to \$50,000 (e.g., pickup truck, mower, small dump truck, etc.)

2nd place – \$5,000 budget transfer

3rd place – \$2,500 budget transfer