Missouri Department of Transportation
Innovations Challenge
Why is innovation in transportation critical?

- **Safety**
  - Traveler safety
  - Employee safety

- **Service**
  - Customer Service
  - Efficient and Innovative Projects

- **Stability**
  - Managing Assets
  - Stabilizing Resources
  - Building a Prosperous Economy
How and When it Began

- Employee idea system in 2005
- Tool & Equipment Challenge in 2007
- Innovations Challenge in 2012

17 Years of Success!
Challenge Coordinators

- Promote the Competition
- Collect Submissions
- Technical Review Team
- Safety Reviews
- Choose 18 first-round winners
Innovations Challenge Categories

**Tools and Equipment**
Fabricating or modifying tools and pieces of equipment

**Productivity**
Employees changing processes, materials and products

**Projects**
Innovative projects driven by management
Challenge Criteria

Innovations are evaluated on the following:

**Originality** – How new is it to MoDOT?

**Safety** – How does this improve the safety of our employees and the public?

**Internal and External Performances** – How much does it improve productivity and service to our customers and employees?

**Conserving Resources** – How much time and money does it save?
Rounds and Timeline

Kickoff and First-Round Competition: September – December

Second-Round Statewide Evaluations: January – February

Showcase Attendees Announcement: February

Showcase: April
First-Round Winners and Statewide Evaluations

- District and Central Office first-round winners
- $75 per person up to a maximum of $450 per team
- Second-round evaluations
- Narrowing the field to the top 60
Showcase Judging

- 60 innovations
- 6 Judges per category
- Judges rank their top 6
Showcase Awards

- Productivity – Top 4
- Projects – Top 4
- Tools and Equipment – Top 4
- Director’s Awards for Safety, Service and Stability
- Dickson People’s Choice
Showcase Earnings

- Category and Director’s Awards winners earn up to $425 per person up to a maximum of $1,550 per team

- Showcase category winners also earn from $1,000 or $10,000 for the district or division budget
Showcase Day!
**Showcase Day!**

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**Projects**

**Displaced Left Turn**

**Description and Benefit**

The new Displaced Left Turn Ramp at the MO 141 to 364 Interchange is an innovation that should benefit the traveling public by reducing the amount of time traffic needs to stop at the traffic signals at the interchange. The off-ramp to Route 141 from EB MO 364 will no longer require a signal for that movement at the southside of the interchange. Right turns will be free flow from this ramp to SB Route 141 while left turns to NB Route 141 will make that turning movement on the north side of the interchange.

This will allow left turns to occur simultaneously for both the WB and EB off-ramps from MO 364. Vehicle travel time is expected to be reduced by 70% for the NB 141 to WB 364 movement at the intersection. This ramp should improve safety by reducing the number of conflict points by eliminating the left turn signal phase at the south side of the interchange and by reducing the angle of accidents that occur at the revised north side intersection. In addition, the proposed improvements will reduce congestion on NB 141, reducing the number of rear-end crashes that occur during peak periods. The cost of the short-term projects at the interchange was $4M. These projects provide both operational and safety benefits at the interchange until long-term improvements can be funded. The long-term improvements at the interchange will require further environmental study and would require significant funding.

**For More Information Contact**

St. Louis District Design
Dan Savagean at dan.savagean@modot.mo.gov or 314-439-3089.
MoDOT’s 2018 Showcase
Innovation Winner
TMA Flagger

- First in the nation remote control flagging operation
- Meets MUTCD requirements
Innovation Winner
Maintenance Management System

- Custom web application
- User-friendly tracking for day-to-day activities
- Improves data accuracy
- Manages assets
Innovation Winner
Blade Saver

- Easily checks carbide blades
- Saves money
- Improves safety
MoDOT’s 2019 Showcase
The most important step...
Implementation
MoDOT’s Weekly News Feature

Implement This Innovation!

Wing Camera

- A back-up camera mounted to the top of the passenger side mirror.
- Allows you to see over the front-mounted wing plow, making it easier to see cars or other obstructions while plowing.
- Contact: Northwest District Maintenance Crew Leader David Poynter.
MoDOT’s Innovation Store!

Innovations Order Form

- District: CO
- Building: Use for testing only

Total Budget: $3,500.00
Budget Already Spent: $0.00

This Order Total: $1,000.00

Handouts & Videos

- Blade Saver: Item Price: $350.00, Subtotal: $0.00
- Concrete Sled Design with Ripper Teeth & Winch: Item Price: $1,600.00, Subtotal: $0.00
- Hopper Toper: Item Price: $1,500.00, Subtotal: $0.00
- Rotating Herbicide Rack: Item Price: $1,800.00, Subtotal: $0.00

Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material on-hand. Includes up to $100 material cost and $250 incentive.

Notes: Will have a longer lead time due to Central Office purchasing/fabrication.
FOCUS on Innovation

Program Delivery
Innovations relating to Design and Bridge construction.

Administration and Support
Innovations that improve processes, increase efficiencies and save money.
Check out our websites!

To view best practices and showcase event videos, visit our Innovations Challenge website at: www.modot.org/innovations-challenge

To view videos and descriptions of Showcase innovations, visit our Showcase Homepage at: www.modot.org/innovations-showcase-homepage
MoDOT’s 2022 Showcase
For more information,

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