

AASHTO Innovation Initiative
[Proposed] Nomination of Innovation Ready for Implementation

Sponsor

Nominations must be submitted by an AASHTO member DOT willing to help promote the innovation

1. Sponsoring DOT (State): Colorado Department of Transportation

2. Name and Title: Gary Vansuch, Director of the Office of Process Improvement
 Organization: Colorado Department of Transportation
 Street Address: 2829 W Howard Pl
 City: Denver State: CO Zip Code: 80204
 E-mail: gary.vansuch@stc Phone: 303-913-1773 Fax:

3. Is the sponsoring State DOT willing to promote this innovation to other states by participating on a Lead States Team supported by the AASHTO Innovation Initiative? Yes or No: Yes

Innovation Description
(10 points)

The term "innovation" may include processes, products, techniques, procedures, and practices.

4. Name of the innovation:
Safety Plates

5. Please describe the innovation. Describe how this innovation transforms your existing "state of play."
 Energized conductors in luminaire poles can be incredibly dangerous to DOT employees and passerby. The safety plates go on top of the base to protect people and prevent water damage to the live wires.

6. If appropriate, please attach photographs, diagrams, or other images illustrating the appearance or functionality of the innovation (if electronic, please provide a separate file). Please list your attachments here.
 I have attached a meeting recording in which the innovator describes his idea. I also attached images of his schematic plans.

7. Briefly describe the history of its development.
 It was inspired by the tragic story of another DOT employee who almost died from an electric shock. Seeing how people were using traffic cones to cover luminaire bases (which is highly unsafe), the innovator set to work drafting custom-tailored plates to cover luminaire bases.

State of Development
(40 points)

Innovations must be successfully deployed in at least one State DOT. The All selection process will favor innovations that have advanced beyond the research stage, at least to the pilot deployment stage, and preferably into routine use.

8. How ready is this innovation for implementation in an operational environment? Please check of the following options. Please describe

- Prototype is fully functional and yet to be piloted
- Prototype demonstrated successfully in a pilot environment
- Technology has been deployed multiple times in an operational environment
- Technology is ready for full-scale adoption

The blueprints are specific and make the safety plate easy to replicate. It is already being used statewide in Colorado.

9. What additional development is necessary to enable routine deployment of the innovation? What resources—such as technical specifications, training materials, and user guides—are already available to assist with the deployment effort?
 The safety plates must be produced in DOT welding shops or by third-party welders. There is already the attached training video for this innovation to promote user adoption.

10. Has any other organization used this innovation? Yes or No: No
 If so, please list organization names and contacts. Please identify the source of this information.

Organization	Name	Phone	E-mail

Potential Payoff
(30 points)

Payoff is defined as the combination of broad applicability and significant benefit or advantage over other current practice (baseline).

11. How does the innovation meet customer or stakeholder needs in your State DOT or other organizations that have used it?

It has prevented many, many electric shocks from luminare bases. It has also prevented otherwise ncatastrophic accidents that could have occured from vehicle collisions with the luminare bases.

12. What type and scale of benefits have your DOT realized from using this innovation? Include cost savings, safety improvements, transportation efficiency or effectiveness, environmental benefits, or any other advantages over other existing baseline practice. Please identify the following benefit types:

Check boxes that apply	Benefit Types	Select a rating from the drop down menu
<input type="checkbox"/>	Cost Savings	Choose an Item
<input type="checkbox"/>	Shortened Project/Service Delivery Schedule	Choose an Item
<input checked="" type="checkbox"/>	Improved Customer Service	6-High to Exceptional
<input checked="" type="checkbox"/>	Improved Quality	6-High to Exceptional
<input type="checkbox"/>	Environmental Benefits	Choose an Item
<input checked="" type="checkbox"/>	Organizational Efficiency	3-Moderate
<input checked="" type="checkbox"/>	Improved Safety	7-Exceptional
<input checked="" type="checkbox"/>	Improved Operational Performance	5-High
<input checked="" type="checkbox"/>	Improved Asset Performance	7-Exceptional
<input type="checkbox"/>	Others (please describe)	Choose an Item

Provide an additional description, if necessary:

It has not only improved safety, but helped CDOT's general efficacy in electrical work by making luminare bases last longer. With the safety plates, water damage is almost non-existent.

13. Please describe the potential extent of implementation in terms of geography, organization type (including other branches of government and private industry) and size, or other relevant factors. How broadly might the technology be deployed?

This could be used across the country (or even the world). They are cheap, easy to make, and simple to install. This innovation can save countless lives!

Market Readiness
(20 points)

The All selection process will favor innovations that can be adopted with a reasonable amount of effort and cost, commensurate with the payoff potential.

14. What specific actions would another organization need to take along each of the following dimensions to adopt this innovation?

Check boxes that apply	Dimensions	Please describe:
<input type="checkbox"/>	Gaining executive leadership support	
<input type="checkbox"/>	Measuring performance (e.g. benefits documentation)	
<input type="checkbox"/>	Improving technology understanding	
<input checked="" type="checkbox"/>	Overcoming financial constraints	It is cheap to make, but not free.
<input type="checkbox"/>	Addressing legal issues (if applicable) (e.g., liability and intellectual property)	
<input checked="" type="checkbox"/>	Acquiring in-house expertise	It must be welded to specs.
<input type="checkbox"/>	Resolving conflicts with existing regulations and standards	
<input type="checkbox"/>	Other challenges	

15. What is the estimated cost, effort, and length of time required to deploy the innovation in another organization?

Please describe:

Cost	\$30
Level of Effort	medium
Time	10 minutes to install

16. To what extent should the implementation of this innovation require the involvement of third parties, including vendors, contractors, and consultants? If so, please describe. List the type of expertise required for implementation.

If DOTs do not have internal welding shops, the item might need to be produced by a third party.