



## **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. If selected, the sponsoring DOT will be asked to promote the innovation to other states by participating on a Lead States Team supported by the AASHTO Innovation Initiative.

1. Sponsoring DOT (State): Arizona DOT (ADOT)

2. Name and Title: Connor Varela, Maintenance Tech I

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State: Arizona

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### **Innovation Description (10 points)**

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

3. Name of the innovation:

**CDL** Training Guide

4. Please describe the innovation.

This kaizen is a CDL training template with pictures & labels to show what to point out & the correct way to explain the components to an instructor during a pre-trip CDL license test. It has pictures of every





section of the truck with labels on the parts giving it's correct name. Below the labels are the steps in the correct wording you need to tell an instructor.

### 5. What is the existing baseline practice that the innovation intends to replace/improve?

The process before this kaizen was reading a CDL book & having a coworker go over the truck & trailer with you to explain all the components & the correct way to call them out to an instructor. It was very hard to memorize & comprehend with so much information & no other way to study without visual descriptive photos of the ADOT vehicle you will be testing with, what the parts are, & how to explain each part of the inspection correctly. These are kind of like flash cards you can print out & study at any time of the day giving you exact pictures to match the part names & correct word for word steps you can read & practice saying out loud for an instructor.

### 6. What problems associated with the baseline practice does the innovation propose to solve?

These are like flash cards you can print out or keep digitally on your personal device to study at any time of the day giving you exact pictures to match the part names & correct word for word steps you can read & practice saying out loud for an instructor. This is how I learned everything I needed to know to take my CDL test within 3 months of my hire date. It helps you better comprehend the abundance of information by learning visually instead of reading a book or listening to a coworker explain it to you because it is very easy to forget or lose interest that way.

### 7. Briefly describe the history of its development.

This kaizen I created has helped me comprehend all the knowledge I needed for my CDL in a very short amount of study time, which got me signed off by my supervisor, stating that I am ready to take my CDL test in just 3 months of being here with ADOT. I decided to share this knowledge to help other newcomers obtain their CDL quicker & easier.

8. What resources—such as technical specifications, training materials, and user guides—have you developed to assist with the deployment effort? If appropriate, please attach or provide weblinks to reports, videos, photographs, diagrams, or other images illustrating the appearance or functionality of the innovation (if electronic, please provide a separate file). Please list your attachments or weblinks here.

This innovation improves Quality by eliminating Motion, Waiting, Over Production, Over Processing & Defects



# SHIO

Attach photographs, diagrams, or other images here. If images are of larger resolution size, please provide as separate files.





## **State of Development (40 points)**

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

9. How ready is this innovation for implementation in an operational environment? Please select from the following options. Please describe.
$\square$ Prototype is fully functional and yet to be piloted
☑ Prototype has been piloted successfully in an operational environment
$\square$ Technology has been deployed multiple times in an operational environment
☐ Technology is ready for full-scale implementation
Click or tap here to enter text.
10. What additional development is necessary to enable implementation of the innovation for routine use?
Create smaller training meetings for virtual hand offs.
11. Are other organizations using, currently developing, or have they shown interest in this innovation
or of similar technology?? ☐ Yes ☒ No
If so, please list organization names and contacts. Please identify the source of this information.

Organization	Name	Phone	Email
Click or tap here to			
enter text.	enter text.	enter text.	enter text.
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## **Potential Payoff (30 points)**

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

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

Helps training various amount of experience staff and new hires.

13. Identify the top three benefit types your DOT has realized from using this innovation. Describe the type and scale of benefits of using this innovation over baseline practice. Provide additional information, if available, using quantitative metrics, to describe the benefits.

Benefit Types	Please describe:	
Improved Quality	If parts are unknown, this guide explains the correct names	
	and location with clear text and pictures.	
Organizational Efficiency	Simply apply this guide to all staff to increase their	
	knowledge and passing rate of state testing.	
Shorter Schedule	Quickly learn what is needed to know on trucks and trailers	

Provide any additional description, if necessary:

### Click or tap here to enter text.

14 How broadly might this innovation be deployed for other applications. in the transportation industry (including other disciplines of a DOT, other transportation modes, and private industry)?

All places of business where CDL certificates are required to be held for day to day operations.





## **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.

15. 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:
	Gaining executive leadership support	Click or tap here to enter text.
	Communicating benefits	Click or tap here to enter text.
	Overcoming funding constraints	Click or tap here to enter text.
	Acquiring in-house capabilities	Click or tap here to enter text.
	Addressing legal issues (if applicable)	Click or tap here to enter text.
	(e.g., liability and intellectual property)	
	Resolving conflicts with existing	Click or tap here to enter text.
	national/state regulations and standards	
	Other challenges	Click or tap here to enter text.

16. Please provide details of cost, effort, and length of time expended to deploy the innovation in your organization.

Cost: 0

Level of Effort: 1

**Time**: 30:00

17. To what extent might 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.

N/A