

AMERICAN ASSOCIATION  
OF STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

**AASHTO**

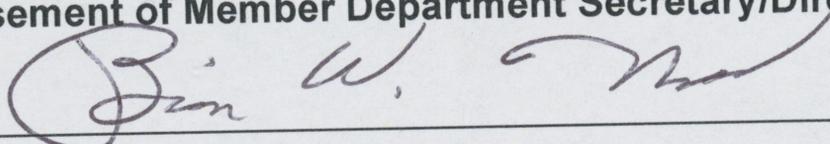
**Transportation Vanguard Award Nomination Form**

**2016**

**INFORMATION ON NOMINEE:**

Last Name: Barrus		First Name: Jesse		Date: June 20, 2016	
Email: jesse.barrus@itd.idaho.gov			Position Title: State Design/Traffic Services Engineer		
Department: Idaho Transportation Department				Phone: (208) 334-8558	
Street Address: 3311 W. State Street		City: Boise	State: Idaho	Zip Code: Click here to enter text.	
AASHTO Committee Membership (optional) Design and Traffic committees					

**NOMINATOR INFORMATION:**

Last Name: Rindlisbacher		First Name: Blake		Date: June 20, 2016	
Email: blake.rindlisbacher@itd.idaho.gov			Position Title: Engineering Services Administrator		
Department: Idaho Transportation Department				Phone: (208) 334-8231	
Street Address: 3311 W. State Street		City: Boise	State: Idaho	Zip Code: 83707-1129	
Endorsement of Member Department Secretary/Director: 					

**INSTRUCTIONS:**

Using a maximum of 2 additional single-sided pages, please provide reasoning as to why this individual should be selected as the Transportation Vanguard Award recipient. Please include as much specific information about the candidate as possible, including special projects, personal attributes, dedication, etc.

Send nominations by **Monday, July 25, 2016**, via e-mail to [mvitale@ashto.org](mailto:mvitale@ashto.org). Nominations must be submitted as a single file in MS Word format using **TVA2016\_Nomination\_Nominee\_Name.doc** as the file name.

**2016 Transportation Vanguard Award application**  
**American Association of State Highway and Transportation Officials**

*Nominee:*

**Jesse Barrus**

District 6 (Eastern Idaho) Operations Manager  
Idaho Transportation Department  
3311 W. State Street  
Boise, Idaho 83707-1129  
(208) 334-8558



*Nominating organization and official:*

Blake Rindlisbacher, Division of Engineering Services Administrator  
Idaho Transportation Department

**REASON FOR NOMINATION:** Barrus is a rising star within the Idaho Transportation Department, and is a worthy candidate for AASHTO's Transportation Vanguard award.

Barrus' rise is evidenced by several recent events. He is one of only 30 up-and-comers accepted into WASHTO's Emerging Leader Program. He was recently promoted to State Design/Traffic Engineer from a statewide candidate pool. He is also one of a select few named innovation stewards for ITD under the "Innovate ITD!" program that has thus far produced more than 290 innovations and saved Idahoans \$1.4 million.

The program encourages employee ideas and solutions to improve efficiencies that save the department and taxpayer money. The savings generated translate into more funding for critical road and bridge needs.

Under the direction of President Brian Ness, WASHTO has developed the Emerging Leaders program, a comprehensive year of leadership-development training offered to employees from each member agency. Barrus was one of only three from ITD selected from 35 qualified and motivated employees who applied for the program. Moreover, he was selected as one of only 30 participants from the 18 western states that comprise WASHTO.

Acknowledging the potential future impact that these individuals will have in the field of transportation, program participants are ultimately expected to apply these leadership skills and knowledge to their respective agencies. Starting with the first session last fall, individuals performed leadership-training activities, engaged in face-to-face sessions with established industry leaders, read leadership books, gave group presentations, and shared best practices.

When ITD's State Design/Traffic Services Engineer was recently selected for a one-year AASHTO fellowship, Barrus was selected to fill the spot in a statewide, competitive process. Quickly transitioning into his new role, Barrus became his department's innovation steward. He was also the innovation steward for the southeast Idaho regional office when he worked there, most recently as Materials Engineer.

Jesse began his professional career as a geotechnical engineer. He moved to ITD in as a Staff Engineer in Design in 2011, and was promoted to Materials Engineer in April 2014. Barrus then completed the AASHTO Materials Engineer academy, an extensive 10-week-long technical training for Materials Engineers in state departments of transportation. The training included two, 10-day-long sessions in Fredericksburg, Maryland.

He continues to put his thumbprint on projects of all sizes, from developing the state's first Diverging Diamond Interchange (DDI) project in fall 2013 to spearheading the state's first warranty paving project in Blackfoot last fall.

The Chubbuck Interchange (the DDI Barrus developed) was completed ahead of schedule, under budget, and included several innovations to accommodate large vehicles critical to the local economy, providing increased capacity and dramatically improving safety. By reducing

vehicle conflict points from 26 in a traditional diamond interchange layout, to 14 in the DDI configuration, crashes can be reduced by up to 60%, and the remaining crashes are less severe.

“Probably the most drastic benefit is the efficiency in which the new DDI moves cars,” said Barrus. “It was estimated to have cars backed up onto the interstate by 2040 if we didn’t do anything. By building this type of interchange, we not only solved the problem, we did it with \$2 million less than a replacement diamond would have cost.”



*The new Chubbuck Interchange, Idaho’s first Diverging Diamond model and one of the first in the nation.*

In the new warranty contract he developed and applied to the project in Blackfoot, bidders provide their own design, which must meet the agency's life-cycle requirements and other minimum parameters for quality and longevity. In exchange for that freedom of design, the contractor provides a warranty on the work. Barrus developed the paving specifications.

Barrus is a key regional component of a shift in the culture of the agency to produce a more skilled, robust workforce – translating into further savings and more efficiency.

Jesse also brings knowledge of engineering soils analysis, materials testing and inspection, drilling and rock probing, subsurface investigations for pavements, and highways materials analysis and testing into his job.

“I’m always looking to further develop skills and take advantage of opportunities to grow and become more efficient and valuable. Innovation is not only one of the tools of leadership – it is also a great by-product.”

Some of the features of the Diverging Diamond featured Jesse's innovative spirit:

- Oversized loads can now passively move through the interchange. This means a 20-foot-wide wide, 23-foot-tall, and 120-foot-long long mega load can move through the interchange without needing to move a sign, signal or anything. This was the first time this was done in Idaho.
- Over-height loads that were unable to move under the bridge, can still move up and over the interchange as they did before. This is not typical of a DDI. Most of them have concrete median and parapet that prevents this. Idaho may be the first state to accommodate this, by leaving a section of the median and parapet at-grade so these bigger vehicles can use it.
- Builders (Barrus was project manager) put the 10-foot-wide sidewalk/shared use path down the middle of the bridge, allowing pedestrians users to have a choice as to which side of the interchange they want to end up on. Idaho was an early adopter of this innovation.