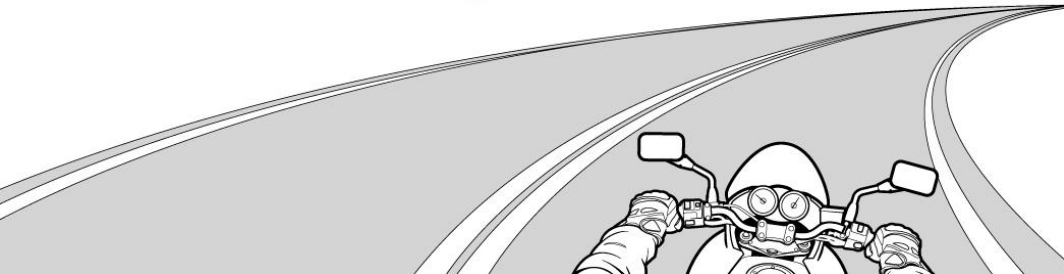


Transurban Motorcycle Technology Evaluation Challenge (MotoTEC)

 Transurban



 | TRANSPORTATION INSTITUTE
VIRGINIA TECH.

Motivation

- Are there market-ready or near-market-ready technologies that could improve, or even save the lives of motorcyclists?
- What if the benefits of these technologies aren't realized because of lack of supporting tests and evaluations?

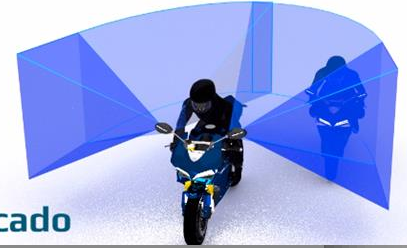
Pains & Barriers

- Motorcycle riders have a minority role on the road and in discussions around advanced technology
 - Often overlooked by roadway planners, technology developers and other drivers
 - Example: Are work zones designed with motorcycle riders in mind?
 - Are V2V V2I solutions being applied for motorcycles?
- Motorcycle technology startups/vendors rarely have the funding available for a robust design of rider-centric technologies
 - Difficult to develop due to rider constraints (vigilance requirements, vehicle design)
 - Low funding available for successful marketing efforts
 - Hard to get attention of motorcycle manufacturers and suppliers

Transurban MotoTEC

- Transurban Motorcycle Technology Evaluation Challenge (MotoTEC)
- Through a gracious donation by Transurban, the Virginia Tech Transportation Institute (VTTI) will deploy MotoTEC in 2018
 - This program will fund real-world evaluations of promising rider-centric safety and usability solutions
 - VTTI will manage these evaluations as an independent evaluator
- **MotoTEC Goal:** Leading program in the testing and evaluation of promising motorcycle technologies towards faster implementation on roadways and potential benefits realized.

Intelligent Motorcycle Mirror



Examples

WORK ZONE SAFETY APP

Free Work Zone Safety App for your phone

Zercado

ATSSA has released a Work Zone Safety App! Developed under the Federal Highway Administration (FHWA) Work Zone Safety Grant, this FREE app can help you:



- Quickly determine both minimum device spacing and minimum number of devices needed for merging, shifting, shoulder, or flagger operations.
- Calculate the number of devices you need.
- Customize your results to incorporate local standards.
- Learn about and apply best practices for stationary lane closures and short duration operations.
- Set up temporary traffic control plans.

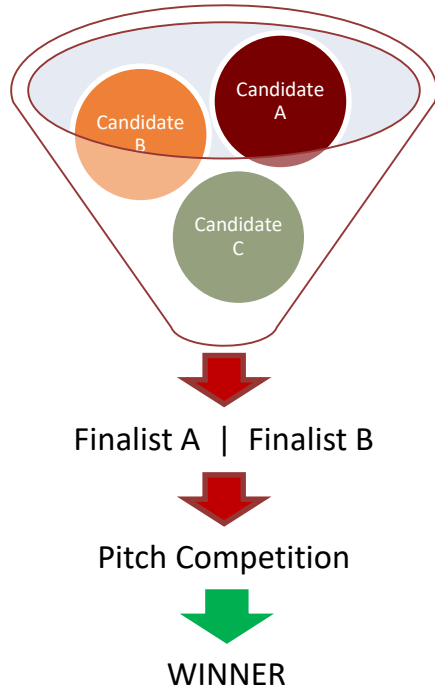
DigiLens HUD



Examples

DigiLens HUD delivers a comfortable, highly transparent eyepiece

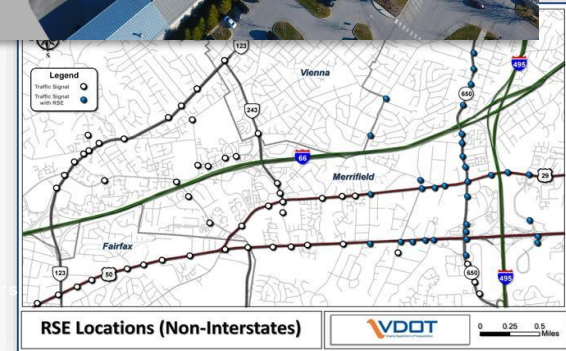
Approach



- Steering Committee formed from motorcycle industry stakeholders
 - Motorcycle Manufacturers
 - Tier 1 Suppliers
 - Rider Representatives
 - Startup Incubators/Accelerators
 - Researchers
 - Roadway Builders
- Request for Proposals – solicitation directed at vendors to have their technology evaluated
 - Brief three-page proposal
 - Steering committee down-selects to group of finalists invited to in-person pitch (if necessary)
 - Technology selected

Approach cont..

- VTTI customizes an evaluation plan
 - Leveraging one or more of the following:
 - Real world riding
 - Transurban express lane(s)
 - Virginia Connected Corridor
 - Virginia Automated Corridor
 - Virginia Smart Roads
 - Highway
 - Surface Street
 - Rural Road
- Pending the maturity and complexity of the technology selected, it is anticipated that each evaluation may take 12-15 months to complete



Value Propositions

- Steering Committee
 - Insight into novel motorcycle technologies available to the industry
 - Transdisciplinary discussions about incorporating motorcycle riders into the future of transportation
- Vendors
 - No-cost independent evaluation of their technology
 - Free press and brand awareness leveraging steering committee network
- Riders
 - Participation in technology selections
 - Experience with advanced technology
 - Involvement in shaping rider safety and experience discussion

Questions?

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