This procedure governs the acceptance and continued use of proprietary roadside safety hardware on ODOT maintained roadways. Roadside safety hardware includes devices such as: roadside barriers, median barriers and barrier end treatments. ODOT reserves the right to select which products it will approve and support.

The Ohio Department of Transportation (ODOT) assigns similar products to Categories, in which a contractor is free to choose any product within a particular Category. Current Categories are described in ODOT’s Location and Design Manual, Volume 1, Section 603 and can also be found on the Office of Roadway Engineering’s website.

**STEP 1 - PRODUCT SUBMITTAL**

Prior to submitting any request to ODOT, the vendor must first test any Roadside Safety product by an accepted method. Accepted methods are listed in the table below. As part of Step 1, vendors submit to ODOT a detailed formal Approval Request accompanied by the ODOT New-Product Evaluation Form.


ODOT shall determine if a product or system will be approved for use on ODOT maintained roadways based upon the below methodologies as well as potentially other considerations such as ease/clarity of installation, cost, maintenance requirements or in-service performance (in Ohio or other states). Satisfying one of the below methodologies does not guarantee approval for use in Ohio.

<table>
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<th>Approval Methods</th>
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<td><strong>Method 1:</strong> Eligibility letter issued by FHWA. (Preferred)</td>
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<td><strong>Method 2:</strong> ODOT would evaluate the testing results and report issued by a testing house. This may include use of a partial test matrix as deemed appropriate by the Testing Facility.</td>
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<td><strong>Method 3:</strong> This includes NCHRP reports as well as miscellaneous research methodologies such as computer simulation, component testing, crash testing, etc. Approval would be based upon ODOT review and acceptance of the applicable research. 3rd party review could potentially be used by ODOT (ex. ISO 17025 testing facilities, researchers, consultants, etc.).</td>
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**Method 4:** ODOT would review information, analysis, test results, etc. used by the original approving state as a basis for their approval. 3rd party review could potentially be used by ODOT (ex. ISO 17025 testing facilities, researchers, consultants, etc.).

**Method 5:** Existing NCHRP350 systems would remain eligible for use until such a time that an acceptable equivalent MASH system is available and approved by ODOT for use.

**Method 6:** Manufacturers/sponsors of changes to existing approved MASH systems would be required to certify the proposed changes do not affect the systems' ability to be MASH compliant. Included with the certification would be supporting information, analysis, etc. for ODOT review. ODOT may accept, reject, utilize a 3rd party review or require the submitter to obtain a letter from an ISO 17025 testing house concurring with their conclusions.

**STEP 2 - EVALUATION & APPROVAL PROCESS**

ODOT will determine if the submitted product is appropriate for the state highway system and assign it a category. Additionally:

1) Products have to be compatible with existing ODOT standard (generic) guardrail/barrier/bridge rails systems.
2) Products must serve a need for ODOT.
3) Products and vendors will be evaluated for all aspects of their features: costs, installation, repair proprietary parts, non-standard parts, product in-service performance evaluation and product support by vendor.

A committee, made up of appropriate staff, will evaluate the product. The committee may ask the vendor to make a formal presentation to discuss the product.

Roadside safety products are tested under idealized conditions. Because of that, ODOT will place increasing emphasis on products which have proven field performance. The longer a product has been in use by other state level jurisdictions, the more favorable the committee will look at a product.

The committee will discuss the product, based on vendor's product submittal and presentation (if any). If the committee deems the product as having merit, then approval will be given as either:

- unconditional,
- through demonstration.

Products approved to "Unconditional" level will be approved for use. Upon approval vendors can market their devices to contractors. (Contractors are free choose any
product in a particular Category as ODOT considers all products within a Category to be "equal".) To the extent possible individual products will not be sole-sourced, but will compete with other products.

If the committee wishes to further evaluate in service performance of the product, the committee may elect to have it installed on "Demonstration" projects:

1. The vendor will find three sites or projects (not all in just one ODOT District) where the product would be appropriate for use, then work with an installer/contractor to accept the responsibility of using the product in lieu of a currently approved product in its category.

2. The installer is to formally request permission from the local Project Engineer to make the substitution. The Office of Roadway Engineering will review the project details and work with the Project Engineer on the substitution request. If the Project Engineer or other responsible officials within ODOT do not agree with the substitution, a new project will have to be selected by the vendor. A member of the New Product Evaluation Committee must be present and observe the installation.

3. The New Product Evaluation Committee will rely on feedback from the District and any site visits. Evaluation is not dependent on the unit being impacted in the field (as the system would have already been determined to be crashworthy), but rather the ability for proper installation and ease/practicality when installed.

Provided all feedback from the demonstration sites is positive, the product will then receive unconditional approval. The demonstration period will not be shorter than 9 months or longer than one calendar year. ODOT may terminate the demonstration period at any time.

STEP 3 - PRODUCT TRAINING
Once approved, the vendor will be expected to provide appropriate instructional material and training to support the product. Training may be at remote locations and could be given to designers, contractors and maintenance forces. Failure to provide support should result in product being removed from approved list.

STEP 4 - CONTINUOUS PRODUCT EVALUATION
Once a product is approved, ODOT will informally monitor the field performance, cost, and benefit of the product. If problems are encountered and are substantiated by FHWA, other states, In Service Performance Evaluation or ODOT evaluation, any product may be unilaterally removed from the approval list. The vendor must rectify the problem before the product will be again considered.