

**Group Evaluation
Truck-Mounted Portable Variable Message Signs (PVMS's)
Oregon DOT**

1. Invitations are sent to manufacturers. The invitation includes all required submittal materials and testing procedures.
2. The manufacturer submits the following:
 - Preliminary Information for Product Evaluation Form
 - Checklist and Certification of Compliance with ODOT's Truck-Mounted Portable Variable Message Sign (PVMS) Specifications
 - Eight (8) copies of product brochure.
 - Four (4) copies of documentation that describes the technical aspects of the product. This should include sufficient detail about the equipment and its operation to demonstrate that the equipment meets ODOT's qualifications
 - Four (4) copies of the operating and maintenance manual
 - One (1) copy of a completed and signed Attachment B.
3. This information will be evaluated by the PVMS Qualification Review Committee and a list of equipment to be tested will be compiled. Invitations will be issued to manufacturers to bring the PVMS to the testing location by a specific date/time.
4. An on-site Equipment Evaluation and a Legibility Evaluation will be performed to determine if the equipment meets the Truck-Mounted Portable Variable Message Sign (PVMS) Specification for Qualified Products List (QPL). The Equipment Evaluation will be performed by a team of ODOT engineers/technicians. The Legibility Evaluation will be performed by persons who represent the driving population.
5. It is recommended, but not required that a technician be available during the test to operate the equipment and answer questions. If a technician is not available, the manufacturer must provide someone to operate the equipment.
6. The following procedures will be followed for the Legibility Evaluation
 - Manufacturers will be required to have equipment fully charged and the operator ready to display messages at the appointed time and location.
 - Day and night evaluations will be made. The nighttime test will be started approximately ½ hour after sunset. No separate backup lighting will be allowed.
 - Testing will be conducted without consideration to the prevailing weather conditions. ODOT has the option to reschedule the testing if weather conditions are extreme. There will be no consideration given to the location of the sun or moon during the test.

- The brightness will be set for "Auto".
 - To ensure an unbiased test, the machines tested will not display any manufacturer name or logo and the screen shall be blank until the operator is directed to display a message. Random numbers will be assigned to each PVMS unit being tested.
 - ODOT will select the messages to be displayed. To ensure a true test of legibility, messages may be non-standard. They may include the same words used in standard messages but in a different order and may include street or place names. An effort will be made to include as many different characters in the messages to be displayed on each sign as possible.
 - Single-stroke characters are to be used. If the message board is able to show two rows of pixels per line, the vendor is requested to reconfigure the unit to show only one row per line.
 - Messages displayed should be centered. Once the review starts, the unit can not be rotated or moved without specific permission from the evaluation coordinator.
 - Messages displayed will be two (2) panels and will be displayed four (4) times with the exposure time and time between each display determined by ODOT to emulate actual conditions.
 - The PVMS operator will have an opportunity to preprogram messages. The PVMS operator will be given a series of messages to be displayed. When the signal is given he/she will display messages as directed for the duration and sequences exactly as specified.
 - The evaluators who will participate in the Legibility Evaluation will be chosen by ODOT prior to the test. Approximately 10 evaluators representing a range of ages will evaluate each sign.
 - Each evaluator will review messages displayed on each sign from three viewing angles (center and 11 degrees left and right of center).
 - The operator will remain with the machine during the testing.
7. All test results will be compiled, reviewed, and submitted to the full QPL Committee for the final review. The Participating manufacturer will be notified of the results.