


To:		New York State Department of Transportation ENGINEERING BULLETIN	EB 06-033
Title: BRIDGE SAFETY ASSURANCE VULNERABILITY RATING REVISIONS			
Distribution: <input type="checkbox"/> Manufacturers (18) <input checked="" type="checkbox"/> Local Govt. (31) <input type="checkbox"/> Agencies (32) <input type="checkbox"/> Surveyors (33) <input type="checkbox"/> Consultants (34) <input type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> M.O./Regional Structures		Approved: <u>/s/G A Christian</u> George A. Christian Deputy Chief Engineer (Structures) <div style="text-align: right;"> <u>7/19/06</u> Date </div>	

ADMINISTRATIVE INFORMATION:

- Effective Date: This Engineering Bulletin (EB) is effective upon signature.
- Superseded Issuances: The Vulnerability Rating Scale definitions for “1” and “2” found in the following manuals as indicated below, are hereby superseded:
 - Collision Vulnerability Manual (Appendix A)
 - Concrete Details Vulnerability Manual (Appendix A)
 - Hydraulic Vulnerability Manual (Appendix A, page A.1)
 - Overload Vulnerability Manual (Appendix B, page B.1)
 - Seismic Vulnerability Manual (Appendix C, page C.1)
 - Steel Details Vulnerability Manual (Appendix A, page A1)
- No EIs or EBs are superseded.
- Disposition of Issued Materials: The changes transmitted by this EB will be made available on the NYSDOT Internet website, and will be included with any vulnerability manuals purchased from Plan Sales. In addition the changes will be included in future revisions of manuals listed above.

PURPOSE: To issue changes to the Vulnerability Rating Scale definitions for “1” and “2”, that were previously revised by New York State Department of Transportation internal memo in October of 2001.

TECHNICAL INFORMATION:

- These changes reflect current NYSDOT policy as of October 2001.
- Cost Impact: There is no appreciable cost impact.
- The Vulnerability Rating Scale definitions for “1” and “2” are changed to read as follows:

“1” - Safety Program Watch

This rating designates a vulnerability to failure resulting from loads or events that may occur in the next few years. Corrective or mitigating action, enhanced inspection, or other appropriate safety action, such as placing on a flood watch, shall be taken. If corrective or mitigating action is not immediately taken, placing the bridge on the current 5-Year Capital Program along with appropriate interim safety action, such as continued monitoring or traffic restrictions shall be considered.

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“2” - Safety Program Alert

This rating designates a vulnerability to failure resulting from loads or events that may occur, but are not likely in the next few years. Remedial work to reduce the vulnerability or enhanced monitoring is not an immediate priority, but may be needed in the near future. Placing the bridge on the Capital Program should be considered.

TRANSMITTED MATERIALS: Appendix: Vulnerability Rating Scale

BACKGROUND:

After coordinating with Regional Bridge Safety Assurance personnel, it was determined that the Vulnerability Rating Scale definitions for “1” and “2” should be revised. The definitions were revised, as stated above, by an internal memo dated October 4, 2001. This EB officially revises the definitions for both internal and external use.

CONTACT: For questions concerning this Engineering Bulletin contact the Bridge Safety Assurance Unit at (518) 457-5498.

APPENDIX

VULNERABILITY RATING SCALE

1. **SAFETY PROGRAM WATCH** - This rating designates a vulnerability to failure resulting from loads or events that may occur in the next few years. Corrective or mitigating action, enhanced inspection, or other appropriate safety action, such as placing on a flood watch, shall be taken. If corrective or mitigating action is not immediately taken, placing the bridge on the current 5-Year Capital Program along with appropriate interim safety action, such as continued monitoring or traffic restrictions shall be considered.
2. **SAFETY PROGRAM ALERT** - This rating designates a vulnerability to failure resulting from loads or events that may occur, but are not likely in the next few years. Remedial work to reduce the vulnerability or enhanced monitoring is not an immediate priority, but may be needed in the near future. Placing the bridge on the Capital Program should be considered.
3. **CAPITAL PROGRAM ACTION** - This rating designates a vulnerability to failure resulting from extreme loads or events that are possible but not likely. This risk can be tolerated until a normal capital construction project can be implemented.
4. **INSPECTION PROGRAM ACTION** - This rating designates a vulnerability to failure presenting minimal risk providing that anticipated conditions or loads on the structure do not change. Unexpected failure can be avoided during the remaining life of the structure by performing the normal scheduled bridge inspections with attention to factors influencing the vulnerability of the structure.
5. **NO ACTION** - This rating designates a vulnerability to failure which is less than or equal to the vulnerability of a structure built to the current design standards. Likelihood of failure is remote.
6. **NOT APPLICABLE** - This rating designates there is no exposure to a specific type of vulnerability.