

FACILITY TYPE	MINIMUM APPLICABLE ROADWAY DESIGN CRITERIA						COMMENTS
	N/A	AASHTO	4R	3R	2R	PM	
National Highway System (NHS)							
A. NHS Interstate			X	X		X	4R criteria required on all new location and reconstruction projects. Rehabilitation of existing main lanes, structures; construction of HOV lanes, new interchanges, new rest areas and noise walls; and installation, rehabilitation, etc. of signs, pavement markings, striping, etc. on freeways also required to meet 4R criteria. Use 3R criteria for frontage road work only. See Preventive maintenance definition under "Notes".
B. NHS Non-Interstate			X	X		X	Use 3R criteria to rehab existing lanes and structures on non-Interstate portions of the NHS, and for frontage road work. Use 4R if work is on freeway main lanes, including added capacity projects. See Preventive Maintenance definition under "Notes". Preventive maintenance activities are eligible on any NHS route.
On - System Non-NHSs							
A. Freeway			X				Use 4R for all freeway construction and added capacity projects
B. Freeway Rehabilitation			X	X		X	4R criteria required on all freeway rehabilitation projects. Use 3R criteria for frontage road work only. See Preventive maintenance definition under "Notes".
C. Non-Freeway			X	X	X	X	Use 4R for all bridge replacement work. Meet standards for the appropriate roadway system and/or the appropriate type of work.
Off - System Routes & Miscellaneous							
A. Reconstruction / Rehabilitation		X	X	X			Added capacity projects should be designed in accordance with the applicable sections under 4R. At the request of the local entity and when agreed upon by TxDOT, AASHTO design guidelines may be used, except for bridge replacement/rehabilitation projects. Use 4R for all bridge replacement work. Meet standards for the appropriate roadway classification and/or the appropriate type of work.
B. Park Roads	X						Construct or rehabilitate roads within or adjacent to state parks roads/facilities under the jurisdiction of the Texas Parks and Wildlife Department (TPWD). Designs are to be in accordance with the latest MOA between TxDOT and TPWD outlining <u>State Park Road Standards</u> .
C. Hike & Bike Facilities		X					<u>AASHTO Guide for the Development of Bicycle Facilities</u> .
D. Landscape & Beautification			X				Projects to be developed in accordance with guidelines established by the DES–Landscape Section. Use 4R for clear zones, sight distance, slope conditions, etc.
E. Historic Preservation	X						Construct in accordance with the US Department of Interior’s <u>Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</u> and in consultation with the State Historic Preservation Office (SHPO).

Notes: 4R – Reconstruction projects consist of transportation projects to provide a new roadway or upgrade an existing roadway to meet geometric design criteria for a new facility. In addition to work described under resurfacing, restoration and rehabilitation, reconstruction work generally includes substantial changes in the geometric character of the highway, such as widening to provide additional through lanes and horizontal or vertical realignment, and major improvements to the pavement structure to provide long term service. Reconstruction work includes bridge replacement work.

3R – Rehabilitation projects consist of non-freeway transportation projects that extend the service life and enhance the safety of a roadway. In addition to the work described under resurfacing and restoration, the activities include upgrading the geometric design and safety of the facility. Work does not include the addition of through travel lanes. Work may include the upgrading of geometric features such as roadway widening, minor horizontal realignment, and improving bridges to meet current standards for structural loading and to accommodate the approach roadway width.

2R – Restoration projects consist of non-freeway work on facilities with an ADT of less than 1500 that propose to restore the pavement to its original condition. Upgrading roadway components as needed to maintain the roadway in an acceptable condition may be included in restoration work. The addition of through travel lanes is not permitted under 2R. Analyses should be performed to identify high accident locations so that corrective measures can be taken.

PM – Preventive Maintenance projects consist of work proposed to preserve, rather than improve, the structural integrity of the pavement and/or structure. Examples of preventive maintenance activities include ACP overlays (maximum 2” thick); seal coats; cleaning and sealing joints and cracks; patching concrete pavement; shoulder repair; scour countermeasures; cleaning and painting steel members to include application of other coatings; restore drainage systems; cleaning and sealing bridge joints; microsurfacing; bridge deck protection; milling or bituminous level-up; clean, lubricate and reset bearings; and clean rebar/strand and patch structural concrete and seal cracks.

Hazard Elimination Program - All roadway elements affected by the scope of the HES project must comply with the applicable design criteria for the facility type. Enhancements to features outside the scope of the approved HES project are at the district's option.

Projects consisting of safety appurtenances only are not subject to evaluation of roadway geometric elements; however, consideration should be given to upgrading to minimum lane and shoulder widths when projects are proposed that include providing skid resistant surfaces.