

**GUIDANCE FOR PRESERVATION/REHABILITATION/REPLACEMENT (PRR) PROJECTS**

System	Classification	Type of Work	Design Guidelines	PRR Report	Evaluation of Safety Improvements (Note 1)		Design Exception Approval
					Baseline Countermeasures (Note 2)	Overrepresented/Abnormal Countermeasures	
NHS	Interstate	Replacement and Major Rehabilitation	DOTD Minimum Design Guidelines, AASHTO Green Book, & Interstate Corridor Guidelines (Note 3)	Interstate Report	Required	Required	FHWA(Note 4)/DOTD
		Minor Rehabilitation	Match Existing	Interstate Report	Required	Required	Not Applicable
		Preservation	Match Existing	Interstate Report	Not Required (Note 5)	Required	Not Applicable
Non-NHS	Non- Interstate	Replacement and Major Rehabilitation	DOTD Pavement PRR Minimum Design Guidelines (required) 3R Minimum Design Guidelines (desirable)	YES	Required	Required	FHWA(Note 4)/DOTD
		Minor Rehabilitation	Match Existing	YES	Required	Required	Not Applicable
		Preservation	Match Existing	YES	Not Required (Note 5)	Required	Not Applicable
Non-NHS	All Roads	Replacement and Major Rehabilitation	DOTD Pavement PRR Minimum Design Guidelines	YES	Required	Required	DOTD
		Minor Rehabilitation	Match Existing	YES	Required	Required	Not Applicable
		Preservation	Match Existing	YES	Not Required (Note 5)	Required	Not Applicable

Note 1: Refer to "Guidance for Safety Improvements for PPR Projects"

Note 2: "Required" in this column means a baseline of safety improvements is required to be considered regardless of the project limit's crash history

Note 3: Interstate Corridor Guidelines - Consult with Traffic Engineering Development Section (Section 27) for guidelines and reviews.

Note 4: FHWA approval required for full oversight (full fed review) projects: NHS- Interstate > \$1M and NHS Non-Interstate > \$10M

Note 5: Baseline safety improvements are required to be considered on Single Lift AC Overlays ( $\geq 1.5$  to  $\leq 2$ "

APPROVED: *Robert L. Jansen* 9/30/10  
 DOTD Chief Engineer Date

## Definitions

**PRR** = Preservation/Rehabilitation/Replacement

**Replacement** – the replacement of the existing pavement structure with an equivalent or increased pavement structure generally within the existing crown. These pavements would be typically designed for a 20 year design life. Typical examples:

- Portland Cement Concrete Pavement
- Full-Depth Asphaltic Concrete Pavement, etc.

**Rehabilitation** – consists of structural enhancements that extend the service life of an existing pavement and/or improve its load-carrying capability generally within the existing crown. These pavements would be typically designed for a minimum of 10 to 15 year design life.

**Major Rehabilitation** – Typical examples:

- Rubblize and Overlay
- Bonded Concrete Overlay (over concrete, asphalt, or composite pavement)
- Unbonded Concrete Overlay (over concrete, asphalt, or composite pavement)
- Single Lift and Multi-Lift Asphaltic Concrete Overlay ( $> 2''$ )
- Base Rehabilitation (Stabilization or Treatment) and Overlay
- Minor Widening and Overlay
- Minor Geometric Changes to Alignment
- Addition of Turn Lanes or Lengthening of Ramps, etc.

**Minor Rehabilitation** – consists of single lift asphaltic concrete overlays ( $\leq 2''$ ) of which the existing pavement required prior pavement preparation of cold planing and/or patching. Typical examples:

- Patching with Single-Lift Overlay ( $\leq 2''$ ) (Patching is limited to 10% of area within project limits).
- Cold Plane with Single-Lift Overlay ( $\leq 2''$ )

## Definitions (continued)

**Preservation** – refers to Pavement Preservation, which consists of light minor rehabilitation, preventive maintenance and routine maintenance.

**Light Minor Rehabilitation** – consists of non-structural improvements or repairs made to the existing pavement sections to address pavement distresses. Typical examples:

- Single Lift Asphaltic Concrete Overlay ( $\leq 2''$ ) (no patching or cold planing required)
- Asphalt or Concrete Patching only
- Pavement Diamond Grooving/Grinding only
- Load Transfer Restoration only, etc...

**Preventive Maintenance** – is a planned strategy of cost-effective, non-structural treatments to the existing pavements that preserves the current condition and retards future deterioration. Typical examples:

- Chip Seals
- Micro-Surfacing
- Thin Asphaltic Concrete Overlay ( $< 1.5''$ )
- Micro-Overlays
- Joint Cleaning and Resealing
- Crack Sealing (working cracks)
- Crack Filling (non-working cracks), etc...

**Routine Maintenance** – Repair work typically performed by Department forces that is planned and carried out on a scheduled basis to maintain the pavement. *Routine Maintenance is not included in the PRR Programs.* Typical examples:

- Pothole Patching
- Bump Grinding
- Spot Leveling
- Machine Leveling, etc...

**Definitions (continued)**

**Reconstruction** *is not considered a PRR treatment and therefore is not included in these guidelines.* Reconstruction typically consists of new pavement structure (pavement, base and subbase), the addition of travel lanes, or extensive changes in horizontal and vertical geometry, typically requiring right-of-way.

**3R Minimum Design Guidelines** – Guidelines for Resurfacing, Restoration, and Rehabilitation for non-Interstate National Highway System (NHS) projects.

**ADA-** Americans with Disabilities Act. – All PRR projects, where existing pedestrian access is provided, must meet requirements for accessibility in accordance with ADA with the exception of projects consisting only of preventive maintenance treatments.

DOTD Pavement PRR Minimum Design Guidelines govern if more stringent than 3R Minimum Design Guidelines. Exceptions to 3R Minimum Design Guidelines are to be justified in the PRR Report but no exception is noted on the plans. Exceptions to DOTD Pavement PRR Minimum Design Guidelines are to be justified in the PRR Report and Chief's approval noted in the plans on appropriate sheets.

Date: 9.30.10