

## Nebraska Department of Roads

Roadway Design, Bridge & Construction Division – Policy Letter

Policy Number: **DES 17-02**

Approval Date: 6-5-17 By:  Roadway Design Engineer

Approval Date: 6-12-2017 By:  FHWA – Nebraska Division

This policy affects Roadway Design Manual: Chapter; One: Design Standards

### Nominal Shoulder Width for Lateral Offset to Obstruction

#### **Purpose**

This policy provides clarification and guidance for the Lateral Offset to Obstruction criterion, which was included in State Highway minimum design standards for the first time in 2016. Nominal shoulder width and nominal paved shoulder width terms need clarification. Guidance for low-volume roads (i.e. less than an ADT of 400 VPD), per Section 4.4.2 of the Green Book, is included for information.

#### **Policy**

##### Low-Volume Highways (ADT < 400 VPD)

Roadside barriers may be placed at the outer edge of the shoulder; however, it is desirable to provide a minimum clearance of 4 ft. from the edge of traveled way to the barrier. No approval is necessary for the design decision.

##### Clarification of “Nominal Shoulder Width”

The nominal shoulder width is the shoulder width:

- a) on a paved or a turf only shoulder, the nominal shoulder width is the shoulder width(ex. New & Reconstructed(N&R) Interstate 4’Lt. 12’Rt. is the nominal shoulder width and the lateral offset to obstruction Or N&R Major Arterial 1500 VPD 6’ is the nominal shoulder width and the lateral offset to obstruction);
- b) on a shoulder with a paved portion & turf, the nominal shoulder width is the total shoulder width(ex. N&R Major Arterial 8’ total 2’ Paved; 8’ is the nominal shoulder width and the lateral offset to obstruction);

NEW AND RECONSTRUCTED RURAL – STATE HIGHWAY SYSTEM

<b>State Functional Classification</b>	<b>National Functional Classification</b>	<b>Lateral Offset to Obstruction</b>
Interstate	Interstate	The paved shoulder width
Expressway (Access Only at Interchanges)	Other Freeways and Expressways	The paved shoulder width
Expressway	Other Freeways and Expressways	Left = 4 ft. / Right = 8 ft.
Major Arterial	Other Principal Arterials or Minor Arterial	ADT ≥ 2,000 VPD: 8 ft. ADT 400 – 1,999 VPD: 6 ft. ADT < 400 VPD: 4 ft.
Major Arterial	Major Collector, Minor Collector or Local	ADT ≥ 2,000 VPD: 8 ft. ADT 400 – 1,999 VPD: 6 ft. ADT < 400 VPD: 4 ft.
Scenic Recreation – Major Arterial	Other Principal Arterials, Minor Arterial, Major Collector or Minor Collector	Design Speed ≥ 50 mph: 6 ft. Design Speed < 50 mph: 4 ft. desirable 2 ft. minimum

NEW AND RECONSTRUCTED MUNICIPAL – STATE HIGHWAY SYSTEM

<b>State Functional Classification</b>	<b>National Functional Classification</b>	<b>Lateral Offset to Obstruction</b>
Interstate	Interstate	The paved shoulder width
Expressway (Access Only at Interchanges)	Other Freeways and Expressways	The paved shoulder width
Expressway	Other Freeways and Expressways	Curbed: 1.5 ft. from the face of the curb Non-Curbed: Left = 4 ft. / Right = 8 ft.
Major Arterial	Other Principal Arterials or Minor Arterial	Curbed: 1.5 ft. from the face of the curb Non-Curbed: ADT ≥ 2,000 VPD: 8 ft. ADT 400 – 1,999 VPD: 6 ft. ADT < 400 VPD: 4 ft.
Major Arterial	Major Collector or Minor Collector	Curbed: 1.5 ft. from the face of the curb Non-Curbed: ADT ≥ 2,000 VPD: 8 ft. ADT 400 – 1,999 VPD: 6 ft. ADT < 400 VPD: 4 ft. desirable 2 ft. minimum

RESURFACING, RESTORATION AND REHABILITATION (3R) RURAL – STATE HIGHWAY SYSTEM

<b>State Functional Classification</b>	<b>National Functional Classification</b>	<b>Lateral Offset to Obstruction</b>
Interstate	Interstate	The paved shoulder width
Expressway	Other Freeways and Expressways	The paved shoulder width
Major Arterial	Other Principal Arterials or Minor Arterial	ADT $\geq$ 2,000 VPD: 6 ft. ADT < 2,000 VPD: 4 ft. desirable 2 ft. minimum
Major Arterial	Major Collector, Minor Collector or Local	ADT $\geq$ 2,000 VPD: 6 ft. ADT < 2,000 VPD: 4 ft. desirable 2 ft. minimum
Scenic Recreation – Major Arterial	Other Principal Arterials, Minor Arterial, Major Collector or Minor Collector	4 ft. desirable 2 ft. minimum

**RESURFACING, RESTORATION AND REHABILITATION (3R) MUNICIPAL**  
**– STATE HIGHWAY SYSTEM**

<b>State Functional Classification</b>	<b>National Functional Classification</b>	<b>Lateral Offset to Obstruction</b>
Interstate	Interstate	The paved shoulder width
Expressway	Other Freeways and Expressways	Curbed: 1.5 ft. from the face of the curb Non-Curbed: 8 ft.
Major Arterial	Other Principal Arterials or Minor Arterial	Curbed: 1.5 ft. from the face of the curb Non-Curbed: ADT $\geq$ 4,000 VPD: 8 ft. ADT 2,000 – 3,999 VPD: 5 ft. ADT < 2,000 VPD: 4 ft. desirable 2 ft. minimum
Major Arterial	Major Collector or Minor Collector	Curbed: 1.5 ft. from the face of the curb Non-Curbed: ADT $\geq$ 4,000 VPD: 8 ft. ADT 2,000 – 3,999 VPD: 5 ft. ADT < 2,000 VPD: 4 ft. desirable 2 ft. minimum

