

# Signing and Striping Manual



*New Mexico* DEPARTMENT OF  
**TRANSPORTATION**  
MOBILITY FOR EVERYONE

New Mexico  
Department of Transportation

***Signing & Striping  
Manual***

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**List of Chapters**

<b><u>No.</u></b>	<b><u>Chapter Title</u></b>
<b>1</b>	<b>General</b>
<b>2</b>	<b>Signing</b>
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Although not obvious by their color, the Table of Contents and the List of Exhibits within the individual chapters also work as hyperlinks. Simply, left click on the section or exhibit number, title, or page number and the computer should take you to the proper page.

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# Chapter 1

# General

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## 1.1 OVERVIEW

### 1.1.1 Purpose of Traffic Control Devices [1A.01]

The purpose of traffic control devices on streets and highways is to promote highway safety and efficiency by providing for the orderly movement of all road users. Traffic control devices notify users of regulations, and provide warning and guidance needed for the reasonably safe and efficient operation of all elements of the traffic stream.

Traffic control devices and their supports should not bear any advertising messages that are not related to traffic control. It is important to recognize, however, that Tourist-Oriented Directional Signs (TODS) and Specific Services Signs are not classified as advertising, but rather motorist service signing.

**NOTE:** Throughout this manual, there are references to the *Manual on Uniform Traffic Control Devices (MUTCD)*. In addition, most section titles in this manual include within brackets a corresponding section number in the *MUTCD*, e.g., “[1A.01]” as used above refers to Section 1A.01 of the *MUTCD*. This cross reference is intended to help users quickly obtain additional guidance.

### 1.1.2 State and Federal Mandates

[Section 66-7-101](#), NMSA 1978, requires the State Transportation Commission to adopt a manual and specifications for a uniform system of traffic control devices consistent with Article 7 of Chapter 66, NMSA 1978 (*relating to: Traffic Laws; Signs, Signals and Markings; Accidents; Weight and Size; and Traffic Safety*), and that correlates with and so far as possible conforms to the system approved by the American Association of State Highway Officials. Specifically, that statement is referring to the *Manual on Uniform Traffic Control Devices (MUTCD)*, available at: [http://mutcd.fhwa.dot.gov/pdfs/2003r1r2/pdf\\_index.htm](http://mutcd.fhwa.dot.gov/pdfs/2003r1r2/pdf_index.htm).

The *MUTCD* is the national standard for all traffic control traffic devices installed on any street or highway in the United States. The National Committee on Uniform Traffic Control Devices (NCUTCD) and the Federal Highway Administration (FHWA) jointly develop the manual, and the U.S. Secretary of Transportation ultimately approves it. The New Mexico State Highway Commission has adopted the *MUTCD* for all traffic control devices within New Mexico.

The Commission adopted the current edition of the *MUTCD* (2003) by Resolution No. 2003-5. However, when adopting the *MUTCD*, the Commission took exception to the wording in Section 5A.01 of the *MUTCD* that does not allow a road on a designated state highway system from qualifying as a low-volume road. The Commission made this exception because of the many miles of low-volume unpaved roads designated as state highways.

Throughout the *MUTCD*, it uses the words “*standard*,” “*guidance*,” “*option*,” and “*support*” to provide the information required to make appropriate decisions regarding the use of traffic control devices on streets and highways.

The *MUTCD* defines these terms as follows:

1. “*Standard*” – a statement of required mandatory or specifically prohibitive practice regarding a traffic control device. The verb “*shall*” is typically used. Options may modify standards.
2. “*Guidance*” – a statement of recommended, but not a mandatory, practice in typical situations. Deviations are allowable if, engineering judgment or engineering study indicates the deviation to be appropriate. The verb “*should*” is typically used.
3. “*Option*” – a statement of practice that carries no requirement or recommendation. The verb “*may*” is typically used.
4. “*Support*” – an informational statement that carries no degree of mandate, recommendation, authorization, prohibition or an enforceable condition. Support statements use the verbs “*shall*,” “*should*,” and “*may*.”

The *MUTCD* and this manual both reference many other publications. [Section 1.1.8](#) identifies both these national publications, and several NMDOT manuals, standards and specifications.

This manual supplements the *MUTCD* for the State of New Mexico. This manual is intended for the use of NMDOT employees and those working for NMDOT, who are responsible to place and maintain signs on all state highways in accordance with [Section 66-7-102](#), NMSA 1978.

**66-7-102. State transportation commission to sign all state highways.**

A. The state transportation commission shall place and maintain such traffic-control devices, conforming to its manual and specifications, upon all state highways as it deems necessary to indicate and to carry out the provisions of Chapter 66, Article 7 NMSA 1978 or to regulate, warn or guide traffic.

B. No local authority shall place or maintain any traffic-control device upon any highway under the jurisdiction of the state transportation commission except by permission of the commission.

### 1.1.3 Principles of Traffic Control Devices [1A.02]

As noted in Section 1A.02 of the *MUTCD*, to be effective, a traffic control device should meet five basic requirements:

- A. Fulfill a need;
- B. Command attention;
- C. Convey a clear, simple meaning;

- D. Command respect from road users; and
- E. Give adequate time for proper response.

Therefore, it is important to consider the design, placement, operation, maintenance, and uniformity of all traffic control devices in order to maximize their ability to meet these five requirements. Also, carefully consider vehicle speed as an element that governs the design, operation, placement, and location of virtually all traffic control devices.

The proper use of traffic control devices should provide the reasonable and prudent road user with the information necessary to use the streets, highways, pedestrian facilities, and bikeways, both safely and lawfully. Uniformity of the meaning and application of traffic control devices is vital to their effectiveness.

#### **1.1.4 Older Drivers**

An increasingly important consideration is our aging population. As people age, vision declines, physical fitness and flexibility diminish, the ability to focus attention decreases, and the time to react to unexpected circumstances increases. Each of these changes affects one's ability to safely drive or use a crosswalk. For our older population to maintain their mobility without compromising safety, as transportation professionals we must consider their needs when applying traffic control devices.

Some specific difficulties that older drivers experience include:

- Declining eyesight, which affects their ability to see signs, pavement markings, pedestrians and other vehicles.
- Difficulty reading signs and pavement markings at night due to glare from on-coming headlights, especially when the roads are wet.
- Decreased physical fitness and their inability to turn their heads, which may make seeing some signs more difficult.
- Slower response to unexpected conditions.
- Incorrectly interpreting some signs and pavement markings.
- Difficulty making left turns due to improper positioning in the turn lane and the inability to judge the distance of oncoming vehicles.
- Slower gait, shorter steps, and slower reaction time requiring longer time for pedestrian crossing.

NMDOT desires to assist older drivers by providing Advance Street Name plaques, larger and brighter signs, highly visible fluorescent warning signs, brighter pavement



markings, better design of left-turn lanes, etc. It is important to note, that most improvements designed for older drivers also enhance the driving task for everyone.

### **1.1.5 Removing Unauthorized Signs and Markings [1A.08]**

In accordance with [Section 66-7-108](#), NMSA 1978, it is illegal for anyone to place, maintain or display upon or in view of any highway any unauthorized sign, signal, marking or device, which purports to be, is an imitation of, or resembles an official traffic-control device.

If you are aware of an illegal “traffic-control device,” have it removed as soon as possible because an illegal device:

- Creates disrespect for the official traffic-control devices.
- Encourages others to install similar illegal devices.
- May create a safety problem.

There is no need to provide any advance notice prior to removing an illegal device.

### **1.1.6 Engineering Study and Engineering Judgment [1A.09]**

Always base the decision to use a particular device at a specific location on either an engineering study or the application of engineering judgment. Thus, while this manual provides guidance and some engineering studies, it is not a substitute for engineering judgment.

Exercise engineering judgment in the selection and application of traffic control devices, as well as in the location and design of the roads and streets that the devices complement. Therefore, a qualified traffic engineer should make the final decision concerning the application of traffic restrictions.

### **1.1.7 Requests to Experiment with Unique Traffic Control Devices [1A.10]**

If district or general office personnel wish to experiment with a traffic-control device, or request an official change to or an interpretation of the requirements of the *MUTCD*, they should:

- Submit a request in writing to the State Traffic Engineer with the Traffic Technical Support Bureau, who will coordinate with the FHWA. The request must include information in accordance with [Section 1A.10](#) of the *MUTCD* (relating to interpretations, experimentation, changes and interim approvals).

- Identify the information that they will compile during any experiment identified in the request, since the collection of any data and the development of any follow-up report will be a conditional part of the request.
- If appropriate, the State Traffic Engineer will forward the request to FHWA.

### 1.1.8 Other Publications and References [1A.11]

National publications that supplement the *MUTCD* include the following:

1. *“The Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG),”* July 23, 2004 Edition (The U.S. Access Board) – available online at <http://www.access-board.gov/ada-aba/final.pdf>.
2. *“Clearview Typeface Supplement,”* dated September 2, 2004, FHWA – available online at <http://mutcd.fhwa.dot.gov/pdfs/clearfont/CTSEng.pdf>.
3. *“Guidelines for the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways,”* 2001 Edition (AASHTO).
4. *Manual of Transportation Engineering Studies*, 1994 Edition (ITE).
5. *A Policy on Geometric Design of Highways and Streets*, 2004 Edition (AASHTO). Also known as the “Green Book.”
6. *Recommended Practice for Roadway Sign Lighting*, RP-19-01, Sign Lighting Committee of the IESNA Roadway Lighting Committee, Illuminating Engineering Society (IES).
7. *“Retroreflective Sheeting Identification Guide,”* September 2005 (FHWA) – available online at [http://safety.fhwa.dot.gov/roadway\\_dept/retro/sign/retrore\\_sheet\\_id.htm](http://safety.fhwa.dot.gov/roadway_dept/retro/sign/retrore_sheet_id.htm).
8. *Roadside Design Guide*, 2002 Edition (AASHTO).
9. *Roundabouts: An Informational Guide*, Pub. No. FHWA-RD-00-067, June 2000 (FHWA) – available online at <http://www.tfhr.gov/safety/00-0671.pdf>.
10. *School Trip Safety Program Guidelines*, 1984 Edition (ITE).
11. *Standard Highway Signs Book*, 2004 Edition (FHWA) – available online at [http://mutcd.fhwa.dot.gov/ser-shs\\_millennium.htm](http://mutcd.fhwa.dot.gov/ser-shs_millennium.htm).
12. *Traffic Control Devices Handbook*, 2001 Edition (ITE).
13. *Traffic Engineering Handbook*, 1999 Edition (ITE).

14. “*Travel Better, Travel Longer: A Pocket Guide to Improve Traffic Control and Mobility for Our Older Population*,” FHWA-OP-03-098, 2003 (FHWA) – available online at <http://mutcd.fhwa.dot.gov/pdfs/PocketGuide0404.pdf>.
15. *Uniform Vehicle Code (UVC) and Model Traffic Ordinance*, 2000 Edition (National Committee on Uniform Traffic Laws and Ordinances).

NMDOT publications that are relevant to this manual include the following:

1. “Approved Products List” – available online at <http://www.nmshtd.state.nm.us/main.asp?secid=15122>.
2. “Standard Drawings,” (specifically, see: No. 631 for rumble strips; No. 701 for traffic signs and sign structures; No. 703 for traffic markers; and No. 704 for pavement markings) – available online at <http://nmshtd.state.nm.us/main.asp?secid=14793>.
3. “Standard Specifications for Highway and Bridge Construction,” (specifically, see: Section 631 for rumble strips; Section 701 for traffic signs and sign structures; Section 703 for traffic markers; Section 704 for pavement markings; and Section 721 for pavement marking removal) – available online at <http://nmshtd.state.nm.us/main.asp?secid=11183>.
4. “Sign Code Listing,” 2005 Edition, New Mexico Department of Transportation – available online at [http://nmshtd.state.nm.us/upload/images/Access\\_Management/NMDOT-2005-Sign-Code-Listing.pdf](http://nmshtd.state.nm.us/upload/images/Access_Management/NMDOT-2005-Sign-Code-Listing.pdf)

### **1.1.9 Definitions [1A.13]**

The following words and phrases when used in this manual shall have the following meanings:

“Advisory speed” – A recommended safe speed at a given location such as a curve, where the recommended speed is shown on a warning sign.

“Business district” – The territory contiguous to and including a highway when within any 300 feet along the highway there are buildings in use for business or industrial purposes, including but not limited to hotels, banks or office buildings, railroad stations and public buildings that occupy at least 50 percent of the frontage on one side or 50 percent of the frontage collectively on both sides of the highway.

“Controlled-access highway” – Every highway, street or roadway in respect to which owners or occupants of abutting lands and other persons have no legal right of access to or from the highway, street or roadway except at those points only and in the manner as may be determined by the public authority having jurisdiction over the highway, street or roadway.

“Conventional road” – Any street or highway other than a low-volume road (as defined herein), expressway, or freeway.

“Degree-of-curve” – The number of degrees in the change in horizontal alignment over a 100-foot section of roadway. This value is also inversely proportional to radius of the curve, where degree-of-curve is equal to 5,730 divided by the radius of the curve in feet (e.g., a curve with a 573-foot radius is a 10-degree curve).

“Department” – The New Mexico Department of Transportation (NMDOT).

“Designated disabled parking space” – Any space, including an access aisle, marked and reserved for the parking of a passenger vehicle that carries registration plates or a parking placard indicating disability in accordance with [Section 66-3-16](#), NMSA 1978, and designated by a conspicuously posted sign bearing the international disabled symbol of a wheelchair and if paved, by a clearly visible depiction of this symbol painted in blue on the pavement of the space.

“85th-percentile speed” – The speed at or below which 85 percent of free-flowing vehicles are traveling. This speed should be determined by conducting a spot speed study during ideal conditions, i.e., daylight, dry road, tangent section, etc.

“Expressway” – A divided highway with partial control of access.

“Freeway” – A divided high-speed highway with full control of access.

“Highway” or “street” – A public way generally open to the use of the public as a matter of right for the purpose of vehicular travel, including the entire area within the right-of-way.

“Intersection” –

1. the area embraced within the prolongation or connection of the lateral curb lines or, if none, then the lateral boundary lines of the roadways of two highways that join one another at, or approximately at, right angles, or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict; and
2. where a highway includes two roadways 30 feet or more apart, every crossing of each roadway of that divided highway by an intersecting highway shall be regarded as a separate intersection; in the event that the intersecting highway also includes two roadways 30 feet or more apart, every crossing of two roadways of those highways shall be regarded as a separate intersection.

“Legend” – All letters, numerals, shields, arrows, and borders as applied to a sign face.

“Local authorities” – Every county, municipality and any local board or body having authority to enact laws relating to traffic under the constitution and laws of this state.

“Low-volume road” – A road other than a freeway, expressway, interchange ramp, or a freeway service road, and which is outside of built-up areas of cities, towns and communities with a traffic volume less than 400 AADT and typically serves recreational areas and resource development activities.

“Motor Vehicle Code” – Articles 1 through 8 of [Chapter 66](#), NMSA 1978, except [Section 66-7-102.1](#), NMSA 1978.

“NMAC” – New Mexico Administrative Code, which are state rules written by New Mexico state agencies to support, clarify, or implement specific laws (statutes) enacted by the legislature. (Title 18 is entitled “*Transportation and Highways*,” and Chapters 20 and 21 of Title 18 are entitled “*Traffic Safety*” and “*Traffic Control Signage*,” respectively.)

“NMSA 1978” – New Mexico Statutes Annotated 1978.

“Posted speed limit” – The speed limit shown on regulatory speed limit signs placed along the roadway to which it applies.

“Public highway” – Every way or place generally open to the use of the public as a matter of right for the purpose of vehicular travel, even though it may be temporarily closed or restricted for the purpose of construction, maintenance, repair or reconstruction.

“Roadway” – That portion of a street or highway improved, designed or ordinarily used for vehicular travel, exclusive of the berm or shoulder, and in the event a highway includes two or more separate roadways, the term “roadway” refers to any such roadway separately, but not to all such roadways collectively.

“Safety zone” – The area or space that is officially set apart within a highway for the exclusive use of pedestrians and that is protected or is so marked or indicated by adequate signs as to be plainly visible at all times while set apart as a safety zone.

“Secretary” – Unless clarified as the Secretary of the U.S. Department of Transportation, shall mean the Secretary of the New Mexico Department of Transportation, or his or her designee.

“Spot speed study” – A structured process using an engineering and traffic study to determine the proper speed limit.

“State highway” – A public roadway that has been designated as a state highway by the legislature, the state transportation commission or the secretary of transportation.

“Street” or “highway” – A public way generally open to the use of the public as a matter of right for the purpose of vehicular travel, including the entire area within the right-of-way.

“Statutory speed limit” – A speed limit established by New Mexico statute and which applies to a specific class or category of road, e.g., in accordance with Subsection A of [Section 66-7-301](#), NMSA 1978, statutory speed limits in New Mexico are: 15 mph on all highways when passing a school while children are going to or leaving school providing the school zone is properly posted; 30 mph in a business or residence district; and 75 mph at other locations. However, the Department may alter the statutory speed limits as authorized in [Section 66-7-303](#), NMSA 1978, if the statutory speed is greater or less than is reasonable or safe under the conditions found to exist upon any part of a state highway.

“Through highway” – Every highway or portion thereof at the entrance to which vehicular traffic from intersecting highways is required by law to stop before entering or crossing it when stop signs are erected as provided in the Motor Vehicle Code.

“Traffic” – Pedestrians, bicyclists, ridden or herded animals, vehicles, streetcars, and other conveyances either singularly or together while using any highway for purposes of travel.

“Traffic control device” – A sign, signal, marking, or other device used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or shared-use path.

#### **1.1.10 Abbreviations Used on Signs and Pavement Markings [1A.14]**

[Exhibit 1.1-A](#) identifies acceptable abbreviations for use on traffic signs and pavement markings. In some cases, a prompt word is required in the same message, or in some cases immediately before the abbreviation. **Do not use periods with abbreviations.**

[Exhibit 1.1-B](#) (Table 1A-3 in the *MUTCD*) identifies abbreviations to avoid using because of their ambiguous meanings.

### Exhibit 1.1-A Acceptable Abbreviations

Word Message	Standard Abbreviation	Required Prompt Word
Access	ACCS	Road, RD
Afternoon / Evening	PM	
Ahead	AHD	Fog*
Air Force Base	AFB	[name]*
Alternate	ALT, Alt	
Avenue	AVE, Ave	
AZ Numbered Route	AZ	[Number]
Bicycle	BIKE	
Blocked	BLKD	Lane*, LN*
Boulevard	BLVD, Blvd	
Bridge	BRDG	[Name]*
Cannot	CANT	
CB Radio	CB	
Center	CNTR	
Chemical	CHEM	Spill
Circle	CIR, Cir	
Civil Defense	CD	
CO Numbered Route	CO	[Number]
Compressed Natural	CNG	
Condition	COND	Traffic*, TRAF*
Congested	CONG	Traffic*, TRAF*
Construction	CONST	Ahead
Court	CT, Ct	
Crossing (other than highway-rail)	XING	
Diesel Fuel	D	
Do Not	DONT	
Downtown	DWNTN	Traffic, TRAF
Drive	DR, Dr	
East	E	
Eastbound	E-BND	
Electric Vehicle	EV	

Word Message	Standard Abbreviation	Required Prompt Word
Emergency	EMER	
Entrance, Enter	ENT	
Exit	EX, EXT	Next*
Express	EXP	Lane, LN
Expressway	Expwy	
Feet	FT, Ft	
FM Radio	FM	
Freeway	FRWY, FWY	
Friday	FRI	
Frontage	FRNTG	Road, RD
Hazardous	HAZ	Driving
Hazardous Material	HAZMAT	
High Occupancy Vehicle	HOV	
Highway	HWY, Hwy	
Highway-Rail Grade Crossing Pavement Marking	RXR	
Hospital	H	
Hour(s)	HR	
Information	INFO, Info	
Inherently Low Emission Vehicle	ILEV	
Interstate	I	[Number]
It Is	ITS	
Junction / Intersection	JCT	
Kilogram	kg	
Kilometer(s)	km	
Kilometers per Hour	km/h	
Lane	LN	
Left	LFT	
Liquid Propane Gas	LP-GAS	

Word Message	Standard Abbreviation	Required Prompt Word
Local	LOC	Traffic, TRAF
Lower	LWR	Level
Maintenance	MAINT	
Major	MAJ	Accident
Meter(s)	m	
Metric Ton	t	
Mile(s)	MI	
Miles Per Hour	MPH	[Number]*
Minor	MNR	Accident
Minute(s)	MIN	
Monday	MON	
Morning / Late Night	AM	
NM Numbered Route	NM	[Number]
Normal	NORM	
North	N	
Northbound	N-BND	
OK Numbered Route	OK	[Number]
Oversized	OVRSZ	Load
Parking	PKING	
Parkway	PKWY	
Pavement	PVMT	Wet*
Pedestrian	PED	
Place	PL	
Pounds	LBS	
Prepare	PREP	To Stop
Quality	QLTY	Air*
Right	RHT	
Road	RD, Rd	
Roadwork	RDWK	Ahead, [Distance]
Route	RT, RTE, Rte	Best*
Saturday	SAT	
Service	SERV, Serv	
Shoulder	SHLDR	
Slippery	SLIP	
South	S	

Word Message	Standard Abbreviation	Required Prompt Word
Southbound	S-BND	
Speed	SPD	
Street	ST, St	
Sunday	SUN	
Telephone	PHONE, Phone	
Temporary	TEMP	
Terrace	TER, Ter	
Thursday	THURS	
Tires With Lugs	LUGS	
Tons of Weight	T	
Township	TWNSHP	Limits
Traffic	TRAF	
Trail	TR	
Travelers	TRAVLRS	
Tuesday	TUES	
Turnpike	TRNPK	[Name]*
Two-Way Intersection	2-WAY	
Two-Wheeled Vehicles	CYCLES	
TX Numbered Route	TX	[Number]
University	UNIV, Univ	
Upper	UPR	Level
US Numbered Route	US	[Number]
UT Numbered Route	UT	[Number]
Vehicle(s)	VEH	
Warning	WARN	
Wednesday	WED	
West	W	
Westbound	W-BND	
Will Not	WONT	

\* The prompt word should precede the abbreviation



**Exhibit 1.1-B Unacceptable Abbreviations**

Abbreviation	Intended Word	Common Misinterpretations
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (Merge)
LT	Light (Traffic)	Left
PARK	Parking	Park
POLL	Pollution (Index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
WRNG	Warning	Wrong

This exhibit is Table 1A-3 of the *MUTCD*, and is similar to Table 5-5 of the *Traffic Control Devices Handbook*

# Chapter 2

# Signs

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## 2.1 GENERAL

### 2.1.1 Function and Purpose of Signs

Signs provide regulations, warnings, and guidance information for road users. Additional guidance and requirements are located in the following subchapters of the *MUTCD* and this manual:

Type of Sign	Subchapter in <i>MUTCD</i>	Subchapter in this Manual
Regulatory Signs	2B	2.2
Warning Signs	2C	2.3
Guide Signs – Conventional Roads	2D	2.4
Guide Signs – Freeways and Expressways	2E	2.5
Specific Service Signs	2F	2.6
Tourist-Oriented Directional Signs	2G	2.7
Recreational and Cultural Interest Area Signs	2H	2.8
Emergency Management Signing	2I	—
School Signing	7B	2.9
Railroad Signing	8B	2.10
Bicycle and Multi-use Facility Signing	9B	2.11
Miscellaneous Signing	—	2.12

### 2.1.2 Standardization of Application [2A.03]

Since urban traffic conditions differ from rural environments, you may need to apply and locate signs differently. Therefore, after erecting a sign, observe the installation to determine if you achieved the desired effect.

Ensure that all signs are in place on new highways, detours, and temporary routes before opening up to traffic.

In situations where you believe unique sign messages are required, you may request approval of your State Traffic Engineer to develop and use a special sign message, but any new sign must be of the same shape and color as standard signs of similar type.

### 2.1.3 Excessive Use of Signs [2A.04]

Only use signs when warranted by facts and field studies since unnecessary signs create a safety problem by adding extra fixed objects and visual clutter. Therefore, avoid excessive use of signs.

Signs are generally not necessary to confirm rules of the road or general provisions regarding the operation of vehicles (e.g., SLOWER TRAFFIC KEEP RIGHT (R4-3), PASS ONLY ON THE LEFT, etc.). However, signs are essential where special regulations apply at specific places or specific times, or where unusual conditions are not self-evident. When signs are essential, take a conservative approach to the use of regulatory and warning signs since using too many of these signs will cause them to lose their usefulness.

Guide signs provide information as to highway routes, directions, destinations, and points of interest. Districts are encouraged to use a frequent display of route markers and directional signs to keep unfamiliar road users informed of their route and location.

The placement of a sign where it is not appropriate or justified is as objectionable as a substandard or obsolete sign. As soon as possible, remove or cover all signs that were required by uncommon circumstances or temporary restrictions when those conditions cease to exist, or the restrictions are withdrawn.

Never use highway signs for advertising or for any purpose other than related to traffic control. (TODS and specific service signs are motorist service signs, and not advertising signs.)

The application of all signs should comply with this manual and the following standards as identified in [Section 1.1.8](#):

- *MUTCD*.
- *Standard Highway Signs (SHS) Book*.
- NMDOT Approved Products List.
- NMDOT Sign Code Listing.
- NMDOT Standard Drawings.
- NMDOT Standard Specifications for Highway and Bridge Construction.

Although signs are put up with the intention of protecting road users, too much information can actually reduce road safety. A high density of visual clutter slows down the search times for important visual information, making it harder for drivers to pick out traffic lights and other safety signs. Reaction times are slower – even if the driver does not know they are being distracted.

Engineering judgment and studies are critical to the accurate use of signs and other traffic control devices. Traffic engineering studies may indicate that signs are unwarranted at certain locations.

#### **2.1.4 Classification of Signs [2A.05]**

As noted in Section 2A.05 of the *MUTCD*, there are only three classifications of signs:

- A. Regulatory signs give notice of traffic laws or restrictions.
- B. Warning signs give notice of a situation that might not be readily apparent.

- C. Guide signs show route designations, destinations, directions, distances, services, points of interest and other geographical, recreational, or cultural information.

### 2.1.5 Design of Signs [2A.06]

The primary purpose of the *MUTCD* is to improve safety and reduce driver frustration by promoting uniformity in the design and application of traffic control devices. FHWA is also working internationally to share and borrow ideas so that uniformity is much broader than just in the United States.

Uniform designs and applications of traffic signs help everyone, because as drivers we can see and understand the sign messages, and the systematic advance placement of warning signs provide sufficient notice for us to take appropriate actions.

To that end, the *MUTCD* establishes the basic framework for the design and application of signs, and the *Standard Highway Signs (SHS) Book* provides detailed drawings of the standard signs and alphabets.

Like all other states, New Mexico, has a need for unique signs in order to satisfy state legislation and NMDOT initiatives, and the need to personalize some signs. Since these unique signs are not in the *Standard Highway Signs Book*, they are included in the “NMDOT Sign Code Listing.”

The NMDOT Sign Code Listing includes a list of signs approved for use in New Mexico. Some of the signs are ones included in the *Standard Highway Signs Book* and others are the special New Mexico signs. Those that are “New Mexico sign designs” always have the “NM” identifier in the sign code. In addition to the sign code, the NMDOT Sign Code Listing includes information such as sign width and height, size, route number for shields, numerals for speed signs, R or L for Right or Left, and suggested application on what type of roadway. The NMDOT Sign Code Listing also provides sign face layout details for some of the signs not included in the *Standard Highway Signs Book*.

#### Regulatory and Warning Signs

On rare occasions, you may need to design a unique regulatory or warning sign that is not in either the *Standard Highway Signs Book* or the NMDOT Sign Code Listing, and then obtain the State Traffic Engineer’s approval prior to fabricating the sign. In these situations, consider the following:

1. Follow the basic principles established in the *MUTCD* relating to sign shape, color, legend, size, and application.
2. Ensure that word messages are clear so that everyone has the same understanding of the sign message. Avoid words and phrases included in [Exhibit 2.1-A](#) (as suggested in Table 1-7 of the *Traffic Control Devices Handbook* – see [Section 1.1.8](#)).

3. On regulatory and warning signs, words may be close to the borders; therefore, optically center the words within the sign space.

### Exhibit 2.1-A Words Not Recommended for Use in Sign Legends

Do Not Use	Because
HAZARDOUS or DANGEROUS	You are attempting to eliminate these problem locations and there is no need to identify the site for potential lawsuits.
WARNING	The size, shape and color indicate a warning sign.
SLOW	This relative term means different speeds to different road users; what speed is <i>slow</i> ? “SLOW TO XX MPH” is an acceptable legend.
NOTICE or CAUTION	These are unnecessary words – the sign provides the notice, with shape and color indicating caution.
TRAFFIC LAWS STRICTLY ENFORCED	It is assumed that the traffic laws will be enforced so the legend is unnecessary.
Terms, legends or destinations that may not be familiar to road users	These are unnecessary and may create confusion for road users [e.g., towns that are not on the New Mexico Transportation Map, and words like “Traffic Queue,” etc.] *
Cute or trite symbols, phrases, or words	These may reduce road user’s respect for the sign legend [e.g., “EVEN IF YOU ARE LATE, DON’T TAILGATE,” “ANGER IS ONE LETTER AWAY FROM DANGER,” “SPEED LIMIT 44,” etc.] *

\* Examples shown in brackets are not included in the *Traffic Control Devices Handbook*

To optically center the word “AHEAD” on a narrow rectangular sign, as illustrated in [Exhibit 2.1-B](#), visually balance the area to the left of the “A” with the area to the right of the last “D,” which should result in having the true center of the word being shifted slightly to the left.

You can also calculate the shift by using the spacing charts in the Standard Alphabets portion of the *Standard Highway Signs Book*. Unfortunately, all spacing charts in the *Standard Highway Signs Book* are for 4-inch legend, and not 5-inch legend as illustrated in [Exhibit 2.1-B](#). Therefore, designers can lay out the message with 4-inch Series D 2000 font as in [Exhibit 2.1-C](#), and then multiply the values by the fraction  $5"/4"$  (i.e., 1.25). When using the spacing charts for 4-inch legend, it shows a space of 0.12 inch to the left of an “A” and 0.40 inch to the right of a “D.” Therefore, for 4-inch Series D legend, the space in front of “AHEAD” should be 0.28 inch less than the space after the “AHEAD,” thereby shifting the word AHEAD 0.14 inches to the left of true center.

When converting the 4D letters to 5D letters, the length of the legend would be 21.515 inches long (i.e.,  $17.211 \times 5/4$ ), and the word would be shifted 0.175 inch to the left (i.e.,  $0.14 \times 5/4$ ). The legend to the left would measure 10.93 inches ( $21.515/2 + 0.175$ ). The legend to the right would measure 10.58 inches (from 21.515 minus 10.93).

**Exhibit 2.1-B Horizontal Spacing for an AHEAD Sign**



**Exhibit 2.1-C Spacing for A-H-E-A-D Using 4D Letters**

Character	Spacing for 4" Series D 2000 Letters		
	Left (inch)	Width (inch)	Right (inch)
A	[ 0.120 ]	3.402	0.120
H	0.480	2.723	0.480
E	0.480	2.481	0.200
A	0.120	3.402	0.120
D	0.480	2.723	[ 0.400 ]
Totals	H-E-A-D = 1.560	A-H-E-A-D = 14.731	A-H-E-A = 0.920
Grand Total	17.211 inches for 4D		

On warning signs, technicians must consider the effects of the diagonal edges in order to center the message both vertically and horizontally. In the absence of computer software, designers can use scaled strings of cutout legend, and manually position them within the sign border.

### Guide Signs

By their very nature and application, traffic engineers need to personalize guide signs for their specific location. Therefore, these signs typically need some final design details to determine the sign layout and dimensions. District Traffic Engineers do not need approval prior to fabricating guide signs, but may ask for a review if they need assistance.

Designers may manually layout new signs using the spacing tables in the “standard alphabets” section in the *Standard Highway Signs Book* (or the tables for Clearview font using tables in FHWA’s website <http://mutcd.fhwa.dot.gov/pdfs/clearfont/CTSEng.pdf>, which are also included in [Appendix A](#) of this manual).

There are several computer software programs available to help design signs, including such details as sign layouts, legends, quantities, and structure supports. Most other states (19 of 29 states) responding to a national survey in November 2006 are using SignCAD, perhaps because it is very robust, and it interfaces with sign manufacturing and sign management software. NMDOT currently uses GuidSIGN, but before purchasing any software other than GuidSIGN, designers should contact the Traffic Technical Support Bureau to determine compatibility for use on NMDOT design projects.

Sometimes it is necessary to use substandard size signs due to limited highway right-of-way, to limit the sign width of overhead signs to the lane width, or to limit the height of a sign due to vertical clearances. In these situations, there is a natural tendency to crowd letters together; however, legibility is generally better with smaller letters and normal spacing between letters than it is with larger letters and cramped spacing.

When designing the signing plan for a roadway, it is very important that throughout the development process, all members of the design team frequently communicate with the District Traffic Engineer. This communication is necessary since some members may have detailed information or knowledge that could influence sign messages or sign placement.

### **2.1.6 Bilingual Messages**

One of the benefits of using international style signs is the benefit of universally recognized sign shapes, colors, and symbols. Although some sections of New Mexico have extensive populations that are not fluent in English, these drivers can understand most of our signs. For example, a STOP sign's shape and color is universal; therefore, there is no need to use bilingual STOP signs with messages such as "STOP / ALTO."

What are the most important bilingual applications? It is not STOP, YIELD, Speed Limit or guide signs.

Instead, consider ROAD CLOSED; DO NOT STOP ON TRACKS; special parking restrictions; THRU TRAFFIC KEEP RIGHT; mandatory stops for customs, inspections, etc.

To assist drivers with limited knowledge of the English language, always use symbol-type signs when they are available. If you believe that limited understanding of some signs is a significant problem, you should contact the State Traffic Engineer and discuss the possibility of using a limited number of bilingual signs.

### **2.1.7 Use of Metric Measurements**

Unless authorized in writing by the Secretary, sign messages shall not display metric units of measurement except for auxiliary signs used for educational purposes. In addition, NMDOT is not currently developing any projects with metric dimensions.

### **2.1.8 Changeable Message Signs [2A.07, 2E.21]**

Follow the criteria in Section 2E.21 of the *MUTCD* for changeable message signs (CMSs). Of special mention is the requirement that CMSs should not include more than two displays, each of which may have up to three lines of text with each line having no more than 20 characters. Further, each display should convey a single thought.

In the past, many highway agencies prohibited the display of general safety messages or safety campaign messages, but the following messages are now acceptable providing there are no critical messages to display:

- CLICK IT OR TICKET
- DONT DRINK AND DRIVE
- YOU SNOOZE, YOU LOSE
- YOUR SPEED IS 59 MPH

Use CMSs to help alleviate major traffic problems generated by special events (e.g., sporting events, festivals, graduations, etc.). However, in an effort to avoid displaying advertising, use generic terms describing the event.

In addition, use CMSs during emergencies to convey critical information, including messages related to homeland security and AMBER Alerts. CMS advisories shall provide sufficient yet concise information while ensuring safe and efficient traffic flow.

All messages must be transportation related or convey specific emergency conditions that require motorist action.

Since a CMS is heavier than an extruded sign of the same size, NMDOT Standard Drawing 701-01-1/14 uses the design weight of 210 pounds per linear foot for a 10-foot high sign (i.e., 21 pounds per square foot).

Although the term changeable message sign (CMS) is the original term, the terms variable message sign (VMS), dynamic message sign (DMS), and dynamic message board (DMB) are becoming popular.

The abbreviations included in [Exhibit 1.1-A](#) are also acceptable for CMSs.

### **2.1.9 Retroreflection and Illumination [2A.08]**

The *MUTCD* requires traffic signs to be either retroreflective or illuminated to show the same shape and color both day and night. Since it is more cost effective to make signs retroreflective than it is to illuminate them, NMDOT requires retroreflective sheeting material on all signs.



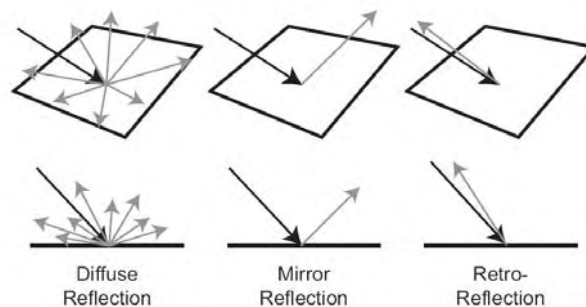
### What is Retroreflectivity?

Most objects reflect light. The most common type of reflection is “diffuse reflection” where light scatters after striking rough surfaces such as trees, clothing and carpet. Only a very small amount of the diffused light reflects back toward the light source.

Another type of reflection is “mirror reflection” that occurs when light strikes smooth or glossy surfaces, and the light reflects off the surface at an equal but opposite angle. Mirror reflection frequently occurs at night on wet roads when the headlights of approaching vehicles create extensive glare. Sign faces also produce some mirror reflection due to their glossy surfaces, and for this reason; it is a good practice to rotate signs away from the driver.

In contrast, “retroreflection” (see [Exhibit 2.1-D](#)) is the unique ability of a surface to reflect light back toward the light source, and “retroreflectivity” is the measurable property of a material to redirect light back to its source.

**Exhibit 2.1-D Types of Retroreflection**

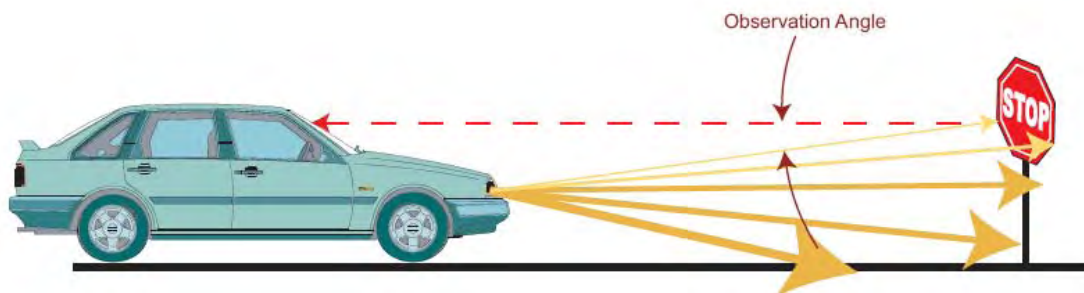


### Retroreflective Sheeting Materials

To make signs retroreflective, apply retroreflective sheeting, which contains either microscopic glass beads or cube corner reflectors, to the face of each sign. If the sheeting manufacturers could make all glass beads and cube corner reflectors perfectly shaped, all reflected light would return directly to the light source (headlights). Although we do not have perfectly shaped lenses, drivers do see more reflected light the closer their eyes are to the headlights. As illustrated in [Exhibit 2.1-E](#), the angle formed between the headlights, the sign and the driver’s eyes is the observation angle, and the smaller the angle the higher the retroreflectivity.



### Exhibit 2.1-E Graphic Illustration of the Observation Angle



Retroreflective materials are also more efficient when the light source is approximately perpendicular to the sign face; therefore, it is important to have signs oriented to face approaching traffic.

The ability to see traffic signs at night is a function of the following:

1. Driver's night vision.
2. Intensity and light distribution of the headlights.
3. Location of driver's eyes with respect to the headlights.
4. Distance, mounting height, and orientation of the sign in relation to the vehicle's headlights.
5. Type, color and age of the retroreflective material.

However, of the five items listed above, NMDOT can only assist the driver by modifying the last two items.

#### Why is Retroreflectivity Important?

The nighttime visibility of signs and pavement markings is essential for highway safety. National studies show that 50 percent or more of all fatal crashes occur at night despite lower travel volumes. In fact, the average fatality rate (fatalities per 100 million vehicle-miles of travel) is about three times higher during the night than during the day.

Some of the factors that contribute to higher nighttime crash rates include:

- After age 20, our eyes need twice as much light approximately every 13 years in order to read. For example, compared to a 20-year old driver, a 33-year old driver needs twice as much light, a 46-year old driver needs four times as much light, a 59-year old driver needs eight times as much light, and a 72-year old driver needs 16 times as much light.

- There are fewer visual clues that delineate the roadway alignment at night.
- Glare from opposing traffic further reduces the number of visual clues.
- Rain, snow, fog, dew and frost reduce visibility distances.
- There are more intoxicated and sleepy drivers.

Some traffic signs may look almost new during the day but are completely ineffective at night. This nighttime visibility problem is usually a function of the type and age of the retroreflective material. For example, the face of the STOP sign in [Exhibit 2.1-F](#) looks almost new during the day, but it is not retroreflective at night because the sign shop used a non-retroreflective sheeting material (the sign shop also used a non-standard lettering font for the STOP sign). Therefore, these problems illustrate the importance of obtaining all signs from a reputable sign shop.

**Exhibit 2.1-F    What is Wrong with This STOP Sign?**



Initially, only one type of retroreflective sheeting material was available, but as technology developed, brighter and more durable materials became available. [Exhibit 2.1-G](#) shows eight types of retroreflective materials currently manufactured for permanent-type signs, and the new more-efficient types are rapidly evolving. Please note that Types V and VI sheeting are not included because they are not for permanent signs (Type V sheeting is for delineation and Type VI sheeting is for temporary roll-up signs).

### Exhibit 2.1-G Retroreflective Materials for Permanent Signs

Type Retroreflective Material*	Common Name	Life Expectancy (years)	General Comments
I	Engineering Grade	7	These two types do not meet NMDOT Std. Specifications, and should not be used
II	Super-Engineering Grade	7-10	
III & IV	High-Intensity or High-Performance Grade	10+	Encapsulated lens or microprismatic materials
VII, VIII, IX & X	Super-High Intensity or Very High Intensity Grades	12+	Microprismatic materials

- As classified by ASTM D4956

[Exhibit 2.1-H](#) identifies some general advantages and disadvantages of the various types of acceptable retroreflective sheeting materials.

### Exhibit 2.1-H Advantages and Disadvantages of Retroreflective Materials

Type Material	Advantages	Disadvantages
Type III & IV	Moderate initial cost, high retroreflectivity, good life (10+ years). Excellent choice for sign background material when using a higher type material for white copy.	Low retroreflectivity for overhead signs, especially for white legend
Types VII, VIII & X	Extremely high retroreflectivity, excellent life (12+ years).	High initial cost
Type IX	Extremely high retroreflectivity, excellent life (12+ years). Superior retroreflectivity at closer viewing distances and high observation angles.*	High initial cost

\* Type IX material is ideal for white copy (i.e., legend, shields, arrows and border) on: (1) overhead signs, (2) street name signs, (3) signs installed at a higher-than-normal distance from the edge of roadway (e.g., freeways), and (4) signs on roadways with a high percentage of trucks (because the observation angle is greater for truck drivers).

#### When is Sign Lighting Required?

Because NMDOT has elected to use higher types of retroreflective sheeting materials, the amount of sign lighting should be minimal. Generally, only consider sign lighting for overhead freeway signs as discussed in [Section 2.5.2](#).

### **2.1.10 Minimum Retroreflectivity Levels [2A.09]**

Because of safety concerns involving retroreflectivity, in 1993 Congress directed the U.S. Secretary of Transportation to revise the *MUTCD* to include minimum levels of retroreflectivity for traffic signs and pavement markings. Since that time, FHWA has authorized extensive research and on December 21, 2007, FHWA modified the *MUTCD* (Revision 2 of the 2003 Edition) to establish minimum retroreflectivity values for traffic signs. [Exhibit 2.1-I](#) shows the minimum retroreflectivity values in Table 2A-1 of the *MUTCD*.

To date, FHWA has not adopted minimum retroreflectivity values for the following signs because they need additional research:

- Parking Standing, and Stopping (R7 and R8 series) signs.
- Walking/Hitchhiking/Crossing (R9 series, R10-1 through R10-4b) signs.
- Adopt-A-Highway signs.
- All signs with blue or brown background.
- Bikeway signs that are intended for the exclusive use by bicyclists or pedestrians.

Until the 1980's, highway agencies only used Type I (i.e., Engineering Grade ) retroreflective sheeting. However, there are several reasons why higher types of retroreflective materials are essential today:

1. Higher travel speeds.
2. Low beam headlights on newer vehicles do not provide as much upward light as older headlights, thereby reducing the illumination of signs.
3. Drivers in SUVs and large trucks generally sit at a greater height above the headlights than drivers in passenger cars, thereby increasing the observation angle and reducing the amount of retroreflection.
4. To improve safety, signs are being set back farther from the nearest travel lane to establish a clear zone.
5. More older drivers.

Type I (Engineering Grade) and Type II (Super Engineering Grade) materials frequently cannot meet some of the minimum retroreflectivity values in [Exhibit 2.1-I](#), even when brand new. Moreover, the higher type materials are more cost effective on an annual cost basis because they last longer. Therefore, Type I and Type II materials are no longer approved materials by the New Mexico Department of Transportation.

**Exhibit 2.1-I Minimum Maintained Retroreflectivity Levels**

Sign Color	Sheeting Type (ASTM D4956-04)				Additional Criteria
	Beaded Sheeting			Prismatic Sheeting	
	I	II	III	III, IV, VI, VII, VIII, IX, X	
White on Green	W*; G ≥ 7	W*; G ≥ 15	W*; G ≥ 25	W ≥ 250; G ≥ 25	Overhead
	W*; G ≥ 7	W ≥ 120; G ≥ 15			Ground-mounted
Black on Yellow or Black on Orange	Y*; O*	Y ≥ 50; O ≥ 50			②
	Y*; O*	Y ≥ 75; O ≥ 75			③
White on Red	W ≥ 35; R ≥ 7				④
Black on White	W ≥ 50				—
<div>① The minimum maintained retroreflectivity levels shown in this table are in units of cd/lx/m² measured at an observation angle of 0.2° and an entrance angle of -4.0°.</div> <div>② For text and fine symbol signs measuring at least 1200 mm (48 in) and for all sizes of bold symbol signs</div> <div>③ For text and fine symbol signs measuring less than 1200 mm (48 in)</div> <div>④ Minimum Sign Contrast Ratio ≥ 3:1 (white retroreflectivity ÷ red retroreflectivity)</div> <div>* This sheeting type should not be used for this color for this application.</div>					
Bold Symbol Signs					
<div>• W1-1, -2 – Turn and Curve</div> <div>• W1-3, -4 – Reverse Turn and Curve</div> <div>• W1-5 – Winding Road</div> <div>• W1-6, -7 – Large Arrow</div> <div>• W1-8 – Chevron</div> <div>• W1-10 – Intersection in Curve</div> <div>• W1-11 – Hairpin Curve</div> <div>• W1-15 – 270 Degree Loop</div> <div>• W2-1 – Cross Road</div> <div>• W2-2, -3 – Side Road</div> <div>• W2-4, -5 – T and Y Intersection</div> <div>• W2-6 – Circular Intersection</div> <div>• W3-1 – Stop Ahead</div>		<div>• W3-2 – Yield Ahead</div> <div>• W3-3 – Signal Ahead</div> <div>• W4-1 – Merge</div> <div>• W4-2 – Lane Ends</div> <div>• W4-3 – Added Lane</div> <div>• W4-5 – Entering Roadway Merge</div> <div>• W4-6 – Entering Roadway Added Lane</div> <div>• W6-1, -2 – Divided Highway Begins and Ends</div> <div>• W6-3 – Two-Way Traffic</div> <div>• W10-1, -2, -3, -4, -11, -12 – Highway-Railroad Advance Warning</div>		<div>• W11-2 – Pedestrian Crossing</div> <div>• W11-3 – Deer Crossing</div> <div>• W11-4 – Cattle Crossing</div> <div>• W11-5 – Farm Equipment</div> <div>• W11-6 – Snowmobile Crossing</div> <div>• W11-7 – Equestrian Crossing</div> <div>• W11-8 – Fire Station</div> <div>• W11-10 – Truck Crossing</div> <div>• W12-1 – Double Arrow</div> <div>• W16-5p, -6p, -7p – Pointing Arrow Plaques</div> <div>• W20-7a – Flagger</div> <div>• W21-1a – Worker</div>	
Fine Symbol Signs – Symbol signs not listed as Bold Symbol Signs.					
Special Cases					
<div>• W3-1 – Stop Ahead: Red retroreflectivity ≥ 7</div> <div>• W3-2 – Yield Ahead: Red retroreflectivity ≥ 7; White retroreflectivity ≥ 35</div> <div>• W3-3 – Signal Ahead: Red retroreflectivity ≥ 7; Green retroreflectivity ≥ 7</div> <div>• W3-5 – Speed Reduction: White retroreflectivity ≥ 50</div> <div>• For non-diamond shaped signs such W14-3 (No Passing Zone), W4-4p (Cross Traffic Does Not Stop), or W13-1, -2, -3, -5 (Speed Advisory Plaques), use largest sign dimension to determine proper minimum retroreflectivity level.</div>					

**NOTE:** Type I and II materials both have a uniform appearance similar to metallic paint, whereas all Type III, IV, VII, VIII, IX and X materials have a pattern of hexagons, diamonds or circular shapes measuring about one-eighth inch across. Therefore, it is easy to recognize the inferior Type I and II materials. FHWA's *Retroreflective Sheeting Identification Guide – September 2005* (included as [Exhibit 2.1-K](#) and available at [http://safety.fhwa.dot.gov/roadway\\_dept/retro/sign/retro\\_sheet\\_id.htm](http://safety.fhwa.dot.gov/roadway_dept/retro/sign/retro_sheet_id.htm)), is a handy tool to help determine the grade and manufacturer of most sheeting materials.

### 2.1.11 Sign Sheeting Requirements

Type III or IV retroreflective sheeting is the minimum type included in NMDOT Standard Specifications 701. However, in order to make signs with fluorescent backgrounds as required in the NMDOT Sign Code Listing, sign manufacturers may need to use types of sheeting with higher retroreflectivity values, for example, Types VII, VIII, IX or X.

For white legend, Standard Specifications 701.2.2.2 requires “*Type III Sheeting-Encapsulated Lens (High Intensity) or better retroreflective sheeting.*” However, [Exhibit 2.1-I](#) (i.e., Table 2A-1 of the *MUTCD*) indicates that only prismatic white sheeting material is acceptable for white legend on overhead white-on-green signs. Moreover, in light of the large 36-foot setback for extruded panel signs (NMDOT Standard Drawing 701-06), brighter sheeting materials (e.g., VII, VIII, IX and X) would also be beneficial for white legends on post-mounted guide signs on freeways.

The use of the brighter materials for the legend, and Type III or IV material for the sign background, increases the retroreflectivity contrast between the white legend and the background material and improves nighttime legibility. Therefore, Districts are encouraged to specify a Type VII, VIII, IX or X material for white legend on:

1. All overhead guide signs.
2. All post-mounted guide signs (including guide signs with blue or brown backgrounds) on all freeways and expressways.

[Exhibit 2.1-J](#) summarizes the recommended retroreflective sheeting materials for the various types of signs.

### Exhibit 2.1-J Recommended Retroreflective Sheeting

NO.	SIGN TYPE	SIGN SHEETING MATERIAL	INK OR APPLIED LEGEND
1	STOP, YIELD, DO NOT ENTER, WRONG WAY signs	White Type III or IV	Red reverse-screened background
2	Other regulatory signs	White Type III or IV	Black ink (may also include red, green, or blue ink)
3	All pedestrian, school, and bicycle related warning signs and plaques	Fluorescent yellow-green (YG), minimum Type III or IV	Black ink or non-reflective black copy
4	Other warning signs and plaques, including black-on-yellow panels for overhead guide sign, e.g., E11-1, 1a, 1b, 1c	Fluorescent yellow (FY), minimum Type III or IV	
5	Post-mounted guide signs on conventional roads*	Green (G), Blue (BL) or Brown (BR) Type III or IV	Prismatic white (W) Type III or IV,
6	Overhead guide signs on conventional roads		White (W) Type VII, VIII, IX or X
7	Guide signs along freeways and expressways (guide signs)		

\* It is permissible to use green electronic cut-able (EC) film over white Type III sheeting.

Microprismatic materials, such as Types VII, VIII, IX, and X material generally have small arrows to indicate what orientation of the material should be at the top of the sign. It is important to comply with this recommendation since failure to comply causes some panels to be more retroreflective than other panels. This is also a problem with legends when in an effort to reduce material usage, a sign shop rotates material in a die-cutting machine or uses nesting software on a computerized sign maker.

FHWA has a Retroreflective Sheeting Identification Guide that is visible at [http://safety.fhwa.dot.gov/roadway\\_dept/retro/sign/retrore\\_sheet\\_id.htm](http://safety.fhwa.dot.gov/roadway_dept/retro/sign/retrore_sheet_id.htm). The portion of FHWA's guide that covers rigid signs is included in [Exhibit 2.1-K](#).

#### 2.1.12 Sign Shapes and Colors [2A.10-11]

Sections 2A.10 and 2A.11 in the *MUTCD* identify nine sign shapes and ten sign colors. All signs used in New Mexico shall conform to these standards. The *MUTCD* also notes that the colors coral, purple and light blue are reserved for uses that will be determined in the future by FHWA.

NMDOT uses the following color combinations abbreviations for signs:

B/FO	Black-on-Fluorescent Orange
B/FP	Black-on-Fluorescent Pink
B/FY	Black-on-Fluorescent Yellow
B/O	Black-on-Orange
B/W	Black-on-White

B/Y	Black-on-Yellow
B/FYG	Black-on-Fluorescent Yellow Green
G/W	Green-on-White
R/W	Red-on-White
W/B	White-on-Black
W/BL	White-on-Blue
W/BR	White-on-Brown
W/G	White-on-Green
W/R	White-on-Red

NMDOT uses the designation “RB” for reflective background; however, keep in mind that all colors except black are required to be retroreflective.



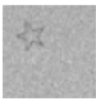
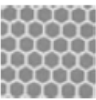
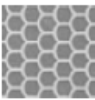
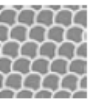
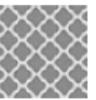
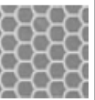
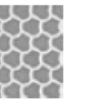
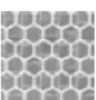


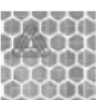
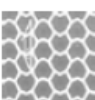

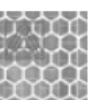
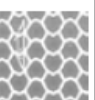

### 2.1.13 Dimensions [2A.12]

The dimensions for signs given in the *MUTCD* are the standard sizes for application on public streets and highways. When listing sign dimensions, the width is the first dimension and the height is the second dimension for rectangular signs, and dimensions of diamond-shaped signs are along each edge, e.g., 30 by 30 inches. Always round the overall sign dimensions for width and height to the nearest 6-inch increment.

Speed greatly affects the legibility and comprehension of sign legend. Larger sign sizes are advantageous where increased legibility or emphasis is desirable. Generally, there is a need for larger-size signs on high-speed facilities such as freeways or expressways. The NMDOT Sign Code Listing and the *MUTCD* provide some recommended sign sizes. [Exhibit 2.1-L](#) provides additional guidance.



## Exhibit 2.1-K FHWA's Retroreflective Sheeting Guide

FHWA Retroreflective Sheeting Identification Guide – September 2005									
<b>Notes:</b> ASTM Types are shown as stated by the manufacturers using ASTM D4956-04 "type" designations. Agencies should verify that the sheeting they use complies with their specifications or ASTM D4956. FHWA does not endorse or approve any material nor does it determine type category(s) for materials. This side of the Sheeting ID Guide is for rigid surfaces only. The other side is for flexible surfaces and non-signing applications.									
Retroreflective Sheeting Materials for Rigid Sign Surfaces Made with Glass Beads									
Example of Sheeting (Shown to scale)									
ASTM Type	I	II	II	III	III	III	III	III	III
Manufacturer	See note A	Avery Dennison®	Nippon Carbide	3M™	ATSM, Inc.	Avery Dennison®	Kiwalite®	LG Lite	Nippon Carbide
Brand Name	Engineer Grade	Super Engineer Grade	Super Engineer Grade	High Intensity	High Intensity	High Intensity	High Intensity	High Intensity	High Intensity
Series Number	Several	T-2000	15000 17000 18000	2800  3800	ASTM HI	T-5500	22000	LH8000 LH8100	N500 N800
NOTES:	A								
Retroreflective Sheeting Materials for Rigid Sign Surfaces Made with Prisms									
Example of Sheeting (Shown to scale)									
ASTM Type	III, IV	III, IV, X	VII, VIII, X	VIII	IV, VIII	IX	IX	X	Unassigned
Manufacturer	Avery Dennison®	3M™	3M™	Avery Dennison®	Nippon Carbide	3M™	Avery Dennison®	Nippon Carbide	3M™
Brand Name	High Intensity Prismatic	High Intensity Prismatic	Diamond Grade™ LDP	MVP Prismatic	Crystal Grade	Diamond Grade™ VIP	Omni-View™	Crystal Grade	Diamond Grade™ DG3
Series Number	T-6500	3930	3970	T-7500	94000 (IV) 92000 (VIII)	3990	T-9500	93000	4000
NOTES:	B	B	B,D		B,C			C	
<p>A – All the manufacturers listed on the other side of this guide (except Reflexite) provide Engineer Grade sheeting. Engineer Grade sheeting is uniform without any patterns or identifying marks. Visually, it is indistinguishable from lower quality grades (i.e., utility and commercial grades).</p> <p>B – These materials can be classified as different ASTM Types.</p> <p>C – These materials are visually indistinguishable from one another.</p> <p>D – The arrow or "water mark" on this product is no longer included with new productions.</p>									

**Exhibit 2.1-L Minimum Sign Sizes for Road Type and Speed**

Sign Type	Two-Lane Conventional Road ≤ 35 mph	Two-Lane Conventional Road ≥ 40 mph	Expressway	Freeway
	Multilane Conventional Road ≤ 30 mph	Multilane Conventional Road ≥ 35 mph		
STOP (R1-1)	30x30	36x36	48x48	48x48
YIELD (R1-2)	36x36x36	48x48x48	48x48x48	60x60x60
Speed Limit (R2-1)	24x30	24x30	36x48	48x60
Turn Prohibition (R3-series)	24x24	30x30	36x36	48x48
DO NOT PASS (R4-1)	24x30	24x30	36x48	48x60
SLOWER TRAFFIC KEEP RIGHT (R4-3)	24x30	24x30	36x48	48x60
Keep Right/Left (R4-7, R4-8)	24x30	24x30	36x48	48x60
DO NOT ENTER (R5-1)	30x30	30x30	36x36	48x48
WRONG WAY (R5-1a)	36x24	36x24	36x24	42x30
ONE WAY (R6-1)	36x12	36x12	54x18	54x18
ONE WAY (R6-2)	24x30	24x30	36x48	48x60
No Parking (R7 & R8 series)	12x18	12x18	36x36	48x48
NO TURN ON RED (R10-11, 11a)	24x30	24x30	36x48	-
Weight Limit (R12-1, 2)	24x30	24x30	36x48	36x48
Turn/Curve (W1-series, except 1a, 2a)	30x30	36x36	48x48	48x48
Turn/Curve Combination (W1-1a, 2a)	36x36	36x36	48x48	48x48
Large Arrows (W1-6, W1-7)	48x24	48x24	60x30	60x30
Chevron (W1-8)	18x24	18x24	24x30	30x36
Intersection (W2-series)	30x30	36x36	48x48	48x48
Stop/Yield/Signal Ahead (W3-series)	36x36	36x36	48x48	48x48
Merge/Change Lane (W4-series)	36x36	36x36	48x48	48x48
Divided Highway/Ends (W6-1, 2)	36x36	36x36	48x48	48x48
Hill (W7-1)	30x30	36x36	36x36	48x48
Slippery When Wet (W8-5)	30x30	36x36	36x36	48x48
LEFT/RIGHT LANE ENDS (W9-3L, R)	36x36	36x36	48x48	48x48
Railroad Advance Warning (W10-1)	36	36	48	48
Advisory Speed (W13-1)	18x18	24x24	30x30	30x30
NO PASSING ZONE (W14-3)	36x48x48	36x48x48	-	-
Route Marker, post mounted*	24x24, 30x24	24x24, 30x24	36x36, 45x36	48x48, 60x48
Destination/Distance – Legend size (D1, D2-series)	6	6	-	-

\* The width of the route marker depends on the number of digits in the route number

For special circumstances such as limited right-of-way, or conditions such as parking facilities, parks, etc., the use of smaller than standard size signs may be justified. When sign sizes are changed, retain the standard shapes, colors and proportions insofar as practicable.

#### 2.1.14 Use of Symbol Messages [2A.13]

To assist motorists that have limited understanding of the English language, always use approved symbol-type signs in lieu of legend messages whenever possible.

#### 2.1.15 Sign Borders [2A.15]

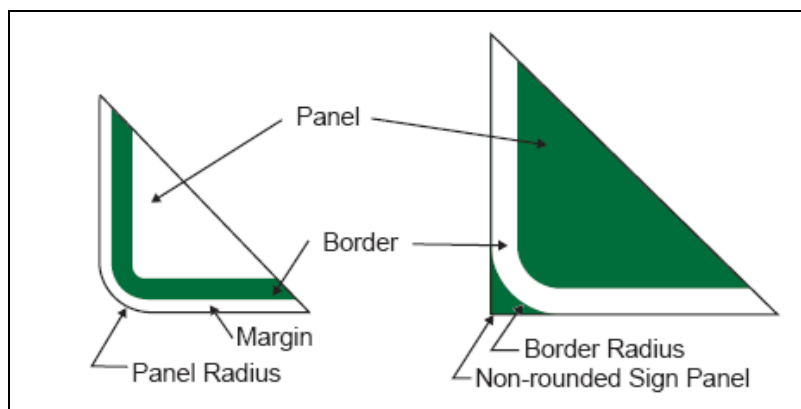
Unless specifically stated otherwise, each sign shall have a border of the same color as the legend, at or just inside the panel edge. Except for the STOP sign, all borders should have round corners.

As illustrated in [Exhibit 2.1-M](#), a dark border on a light background has a “margin” or setback distance from the edge, which reduces the possibility that ink will run over the edge of the blank if manufactured by a silk-screening process. The outside corner radius of a dark-colored margin is equal to the radius used on the sign blank, less the width of the margin.

Except for stop signs and signs made from extruded panels, all signs should have rounded corners. The border on guide signs made from extruded panels should be at the edge of the sign, except on the corners.

Section 2A.15 of the MUTCD says, “Except for STOP signs and as otherwise provided in Section 2E. 15, the corners of the sign should be rounded to fit the border.”

**Exhibit 2.1-M Location of Borders and Margins**



Appendix Part 7 of the *Standard Highway Signs Book* identifies the standard sign blank radii, margins and borders for small sign blanks. These values are also included with sign layouts for regulatory and warning signs in the *Standard Highway Signs Book* and in the NMDOT Sign Code Listing.

### **2.1.16 Standardization of Location [2A.16]**

The longitudinal locations of signs along the highway depend on the type of sign, the nature of the message, and the desired motorist response. The longitudinal displacement between a sign and the corresponding roadway element varies from zero in the case of a speed limit sign (or most regulatory signs) that is physically placed at the point where the speed limit (or regulation) begins or ends, to 1 mile or more in the case of an advance guide sign. In most cases, you can shift signs longitudinally without compromising their intended purpose. Signs may also be shifted longitudinally to improve their visibility, to avoid blocking other signs, to advance safety (by placing sign supports behind an existing barrier), or to improve operations (by providing more distance between signs in a series).

The longitudinal spacing between signs in a series may vary but as a rule, the spacing should be as follows:

- On freeways and expressways — approximately 1,000 feet, but a minimum of 800 feet.
- On conventional roads — approximately 200 feet. (Districts are encouraged to use greater distances, such as 500 feet, on high-speed conventional roads, and it may be necessary to use reduced spacing in urban areas.)

Warning signs generally belong in advance of the condition to which they call attention, whereas regulatory signs belong at the location where a prohibition applies or begins, or at intervals were mandated. On the other hand, place guide signs at varying locations to inform drivers as to their route of travel, destinations, and points of interest.

While it is preferable to erect signs individually (except where one sign supplements another or where guide signs must be grouped), it is sometimes advantageous to group signs together to eliminate extra posts. This is particularly true in urban areas where the number of signs is greater than the space available. As a rule, maintain minimum 200-foot spacing between sign assemblies. Urban areas, in particular, may require a case-by-case review.

Since it is not always possible to install signs at their normal location, NMDOT has established the following standard priority order:

1. Regulatory Signs — Stop, Yield, Turn Prohibitions, Lane Restrictions and Speed Limit, followed by Parking Restrictions and various other regulatory signs.

2. Warning Signs — Curve, Cross Road, Stop Ahead, Yield Ahead, Signal Ahead, Merging Traffic, Road Narrows, Narrow Bridge, Ramp Narrows, Divided Highway, and various other warning signs.
3. Guide Signs — Route Markers, Trailblazers, Destination, Advance Guide, and Exit Directional.
4. Emergency Service Signs — Hospital, Police, and Telephone.
5. Motorist Service Signs — Fuel, Food, Lodging, Camping, and Tourist Information.
6. Public Transportation Signs — Park and Ride, Bus Stop, and Light Rail.
7. Traffic Generators Signs — Airports, College or University, Military Bases, Convention Centers, Stadiums, State and National Parks, Museums, Municipal Golf Courses and Ski Areas.
8. General Information Signs — County Line, Reservation Boundaries, City or Village, Reference Location (i.e., Mileposts).

Make signing location decisions on a case-by-case basis considering the signing needs for the entire route. If more than one sign normally belongs at the same location, relocate or eliminate the lower-priority sign. For example, if a curve warning sign and a distance sign would normally belong at the same location, the curve sign should have priority because of the need to place it at a standard distance from the curve. On the other hand, you either can move a distance sign ahead or beyond the curve sign, or even eliminate it if other similar signs are along the roadway.

As noted in [Section 2.4.22](#), eliminate Reference Location signs if they cannot be located within 50 feet of the true location.

Ensure that signs are located to be compatible with all other highway signs in the area and other roadway features in the area. For example, do not place speed limit signs just before an intersection, a school zone, or a curve with a lower safe travel speed. On a given route, the signs should be consistent in size and messages.

See NMDOT Standard Drawings 701-02-1/3 and 2/3 (Small Sign Support Installation Details) for installation and placement information.

### **2.1.17 Make Upgrades When Replacing Signs**

When developing a signing project on an existing roadway, it is very important not to just replace existing signs with the same types of signs and in the same locations. Instead, the designer should consider making changes to the signs to conform to the current *MUTCD* and NMDOT Standards. It is also important to remove all non-essential signs at the same time.

### **2.1.18 Sign Materials**

The most widely used sign blank materials are aluminum, steel and plywood. However, aluminum is currently the only substrate approved for sign panels by NMDOT. Aluminum is lightweight and does not rust, but it requires cross bracing or extrusions for the larger-size signs. Aluminum provides a long life span and can be straightened or refaced as needed.

The thickness of the aluminum sign panels shall be 0.125-inch, except use 0.080-inch aluminum if the width of the sign is 24 inches or less. All blanks shall be 6061-T6 aluminum alloy.

With very few exceptions, signs need to be visible at night and the only approved method of making signs visible at night is the application of retroreflective sheeting material. Technically, some signs such as No Parking Signs with only daytime restrictions and signs for pedestrians (e.g., PUSH BUTTON FOR WALK SIGNAL, etc.) would not need retroreflective sheeting material, but retroreflective sheeting is more durable than non-retroreflective sheeting. Therefore, retroreflective sheeting is required for all traffic signs.

Specifications for sign materials are in Section 701 of the NMDOT [Standard Specifications for Highway and Bridge Construction](#), and NMDOT [Approved Products List](#) identifies those materials approved for use in New Mexico.

### **2.1.19 Sign Installations – Up to 50 Square Feet**

Generally, construct signs with areas up to 50 square feet with flat panel aluminum substrate and mount them on a single post, double post, or up to a maximum of three posts depending on sign area.

Signposts shall be approved breakaway posts, and shall consist of any of the following:

1. Square tubing (1.75-inch to 2.5-inch) inserted into a larger base post or attached to an approved slip base connection. (See NMDOT Standard Drawings 701-02 and 701-03.)
2. U-channel (4 lbs./foot) with a lap-splice or attached to an approved slip base connection. Do not install signs on a single U-channel signpost because they lack torsional resistance, and signs tend to flutter in the wind and eventually blow over. (See NMDOT Standard Drawings 701-02 and 701-03.)
3. I-beam supports with approved breakaway connections and a concrete foundation. (See NMDOT Standard Drawings 701-3 and 701-06.)

Sign areas exceeding 25 square feet for flanged channel posts or 36 square feet for square tubing posts, require three posts with an approved multi-directional slip base for each

post. The maximum area for a sign supported by flanged channel posts is 36 square feet and the maximum area for square tubing posts is 50 square feet. See NMDOT Standard Drawing 701-02 for placement and installation details.

In accordance with Note 4 on NMDOT Standard Drawings 701-03-1/2 and 701-03-2/2, backing zee bars or 1.5-inch perforated square tubing are required when the sign has an area of 10.5 square feet or more and is attached to more than one sign post.

### **2.1.20 Sign Installations – Greater Than 50 Square Feet**

Fabricate all signs with an area greater than 50 square feet from extruded aluminum panels that measure 12 inches in height, except use one 6-inch high extruded aluminum panel on primary and secondary panels to accommodate sign heights that are not an even increment of 12 inches, such as a 30-inch high exit panel. The maximum dimensions for an “extruded panel” sign is 30 feet wide and 16 feet high. Apply aluminum facing sheets over the aluminum extrusions, and apply sign legend to the facing sheets.

The majority of extruded panel signs used in New Mexico are located on either freeways or expressways. Mount all extruded panel signs on two or three I-beam posts (90 mph wind load). All sign installations need to be on an approved breakaway system. In accordance with NMDOT Standard Drawings 701-06-1/4 and 701-06-2/4, the minimum lateral clearance for extruded panel signs is 36 feet, which is the distance measured from the edge of closest driving lane to the nearest edge of the sign.

In accordance with Section 3.1 of the *Roadside Design Guide (RDG)*, most states specify a 30-foot clear zone on high-volume, high-speed roadways. However, the *RDG* suggests using smaller or larger values based on traffic volumes and the embankment slopes.

Although signs with 36-foot setbacks do not technically need guardrail protection, when possible, locate them behind existing, or required roadside barriers. When installed behind guardrail, make sure that the sign support is outside the anticipated maximum deflection of the barrier to ensure that the barrier functions properly if hit, and to prevent damage to the sign and sign supports. See the following NMDOT Standard Drawings:

- 701-04-1/1 (Extruded Panel Sign Frame Details).
- 701-05 (Extruded Panel Sign Assembly Details).
- 701-06-1/4 (Design Loads for Extruded Panel Signs / I-Beam Posts).
- 701-06-2/4 (Design Loads for Extruded Panel Signs / I-Beam Posts).
- 701-06-3/4 (Breakaway System for I-Beam Post Details).
- 701-06-4/4 (I-Beam Post and Footing Details) for panel details, installation details and I-Beam Post sizing information.

### 2.1.21 Overhead Sign Installations [2A.17]

Section 2A.17 of the *MUTCD* provides the following list of locations where designers should consider overhead signs:

- A. Traffic volume at or near capacity;
- B. Complex interchange design;
- C. Three or more lanes in each direction;
- D. Restricted sight distance;
- E. Closely spaced interchanges;
- F. Multi-lane exits;
- G. Large percentage of trucks;
- H. Street lighting background;
- I. High-speed traffic;
- J. Consistency of sign message location through a series of interchanges;
- K. Insufficient space for ground-mounted signs;
- L. Junction of two freeways; and
- M. Left exit ramps.

When warranted, install overhead signs on tubular post support systems. All overhead sign structures require shielding in the form of guardrail, barriers, attenuators, or a combination of properly placed devices.

New Mexico uses the following four types of overhead sign support systems, and NMDOT Standard Drawing 701-01-6/14 shows the actual placement of the overhead signs:

1. Cantilever Sign Support is generally limited to one sign panel centered directly over the appropriate lane, and is primarily for right- or left-hand lane drops, and Exit Direction signs.
2. Butterfly Sign Support is limited to one sign panel per direction of travel, typically in the median for Interchange Sequence signs on urban freeways or expressways. Do not install in gores or other unprotected areas.
3. Two-Post Sign Bridge may span up to 156 feet over multi-lane roadways, especially urban freeways and expressways where there is limited space for sign placement (e.g., closely spaced interchanges, for sign spreading, where multiple exits exist or where there are complex or unusual roadway geometrics). Where a median is 12 feet or less, sign bridges should generally span the entire roadway without a center support. Sign bridges may include signage for both directions of travel.
4. Bridge-Mounted Signs are signs attached to highway bridges by use of a structural steel mounting frame, as necessary. Although used in New Mexico, mounting signs on highway bridge overpasses is not a preferred method since it



affects the bridge's aesthetics. If used, typical applications would include Pull-Through and Advance Guide signs.

### 2.1.22 Orientation [2A.20]

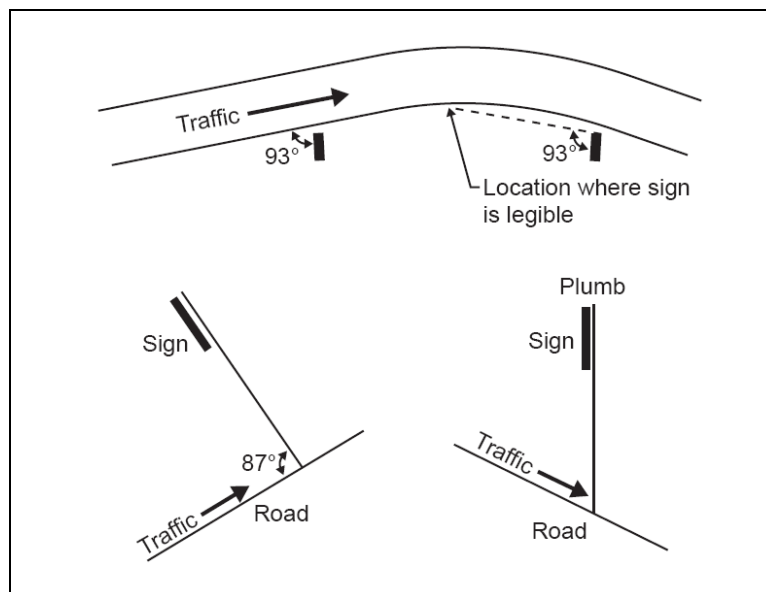
In an effort to eliminate mirror reflection from the glossy face of traffic signs, position signs as follows and as indicated in [Exhibit 2.1-N](#):

- On tangent sections, position signs so that the vertical axis is plumb and the horizontal axis is at angle of 93 degrees with the edge of the roadway, i.e., angled 3 degrees away from traffic. (A 3-degree angle is approximately a 1:20 angle.)
- On horizontal curves, position the sign vertical and the horizontal axis at an angle of 93 degrees with a straight line between the sign and the location where the sign is first legible (based on 40 feet per 1 inch of letter height).
- Position overhead signs perpendicular to the roadway alignment at the location where the sign is first legible (based on 40 feet per 1 inch of letter height). On level roadways and those with an upgrade, angle the sign downward about 3 degrees more than the grade of the roadway. On downgrades, mount the sign vertical.

Section 2A-20 of the *MUTCD* recommends turning signs slightly away from traffic if: (1) mirror reflection is a problem; and (2) the signs are less than 30 feet from the pavement.

However, 3M's Information Folder 1.11 recommends turning sign 3 degrees away without the other stipulations. (See [http://multimedia.mmm.com/mws/mediawebserver.dyn?66666660Zjcf6lVs6EVs666W\\_0C0rrrrQ-](http://multimedia.mmm.com/mws/mediawebserver.dyn?66666660Zjcf6lVs6EVs666W_0C0rrrrQ-))

**Exhibit 2.1-N Recommended Sign Orientation**



### **2.1.23 Posts and Mountings [2A.21]**

As noted in Section 2A.21 of the *MUTCD*, when engineering judgment indicates that there is a need to draw attention to a regulatory or warning sign, place a minimum 2-inch wide strip of retroreflective material for the full length of the support from the sign to within 2 feet above the edge of the roadway. The color should match the background color of the sign.

Retroreflective strips are preferred over using flags or flashing lights to call attention to the signs. They are especially effective at night, perhaps because they show the physical location of the sign instead of allowing the retroreflective sign to appear as if suspended in the air. To a lesser extent, they are also effective during the day.

Plastic retroreflective sleeves are commercially available from several sources, and sign crews can generally attach them to the post with self-tapping screws. The sign crews can also achieve a similar effect by applying retroreflective sheeting directly to the front of the signpost.



### **2.1.24 Sign Maintenance [2A.22]**

Poorly maintained signs lose the respect of the motorist, and consequently, their effectiveness as traffic control devices, and they discredit the Department.

Under most circumstances, it is cheaper to replace damaged or unreadable signs than to attempt to repair them. However, do not take down a damaged sign until the replacement is in hand.

Report missing, damaged or ineffective signs to the appropriate maintenance personnel and encourage others to do the same. Ineffective signs include those blocked by vegetation and other signs. Take pride in the Department.

### **2.1.25 Minimizing Vandalism**

Typical types of sign vandalism include theft and damage to the sign faces. While it is impossible to eliminate all vandalism, you can take steps to minimize it.

Discourage vandalism by taking the following actions:

- Install signs at heights above the minimum requirements. Installing signs with a 7-foot clearance essentially puts the sign out of reach of most would-be vandals. However, do not install signs at heights greater than 8 feet above the near edge of the roadway since the signs may not be as visible to motorists.
- Band smaller signs to light poles or traffic signal poles, or rivet signs to steel square posts to make it difficult to remove the sign. (It is not a good idea to band

large signs to street hardware because the banding materials do not hold up well in high winds.)

- Use theft-resistant fasteners that require special tools to loosen the fasteners.
- Some anti-graffiti coatings are commercially available to reduce the damage from spray paints, paint balls, etc. Since these coatings generally reduce retroreflectivity, it is a good idea to check the retroreflectivity of some sample signs with a hand-held retroreflectometer both when the coating is first applied and periodically during the life of the sign.
- Use public relations campaigns directed toward local groups that use graffiti or bumper stickers in political campaigns, alerting these groups to the permanent damage that stickers or paint does to the retroreflective surface. Emphasis that the typical taxpayer cost to replace a sign is about \$100, and that vandalism could cause a serious accident.
- Apply stickers on the back of signs to emphasize the penalties for having the signs in one's possession.
- Use a unique bar code on the back of each sign that documents the date of manufacture, date and location of installation, all maintenance activities, etc., and if a stolen sign is found, the computer will identify the proper location of the sign.

In any event, corrective action must be taken as soon as possible because allowing a defaced sign to remain in place breeds more vandalism.

### **2.1.26 Use of Flags and Flashers on Signs**

While it is permissible to attach flags or flashing lights to the top of signs to call attention to a sign, the use of retroreflective sleeves as discussed in [Section 2.1.23](#) is a preferred solution. Therefore, attaching flags and flashers should be a last resort, and only if studies indicate that a large number of motorists do not see the signs, as verified by crash reports.

“Flags” may be fluorescent orange, or may consist of an 18-inch by 18-inch diamond-shaped sign made with fluorescent orange retroreflective (FO) sheeting material (similar to an OM1-3 object marker).

Attach flashing yellow lights to warning signs such as Turn or Curve signs if there is a documented run-off-the-road or sideswipe problem. You may also attach a flashing red light above a STOP sign, especially as a temporary measure for a newly installed STOP sign. When used, the bottom of the light housing should be a minimum of 12 inches above the top of the STOP sign.

However, use these devices with discretion, since their existence tends to breed the need for additional devices and cause other signs to lose their effectiveness. In addition, exercise care to ensure that the devices are crashworthy and do not become flying objects in the event an errant vehicle hits them. Therefore, only use these devices based on a documented need.

### **2.1.27 Sign Inventory**

One cannot over emphasize the importance of having a good sign inventory. For example, without an inventory, missing signs may go unnoticed for years, or until a crash problem evolves and there is a need to restudy the location. Computerized listings also facilitate drive-by sign inspections.

A good sign inventory system also improves the quality of a signing program, thus reducing the number of crashes and the possibility of tort liability. It is also possible to use a computerized inventory for planning purposes to determine the number of any given type of sign that should be replaced next year or during some other time period.

Elements captured in most inventories include the following:

- Linear location along the road.
- Side of road (left, median, overhead, or right side).
- Sign code and size.
- Type and manufacturer of sheeting.
- Type and number of sign supports.
- Date installed.
- Date inspected.
- Inspection comments (condition, retroreflectivity if a “control sign,” required maintenance, etc.)

#### Sign Inventory Data Collection Methodologies:

The process of capturing, analyzing, and presenting sign inventory information has evolved significantly in the last decade. The reduced cost and increased accuracy of Global Positioning Systems (GPS) has made the process of inventorying assets along highways much easier and more viable for highway agencies. In addition, the sophistication of Geographic Information Systems (GIS) has provided better data models for displaying and integrating asset inventories using Linear Referencing Systems (LRS). Today, it is common to capture road assets using GPS technologies, integrate the GPS locations using the LRS and generate milepost/offset values for the sign locations, and present the integrated asset inventories to decision makers.

As GPS technology is integrated into road data inventory processes, it is important to understand the limitations of the technology. The accuracy of GPS devices is not absolute. The \$150 consumer grade GPS units capture good locations (30 to 60 feet) if occupying the point for a couple minutes, but more accuracy with a shorter occupancy

time may be needed for inventory processes. It may be desirable to use GPS receivers that provide real-time corrected coordinates using fixed base stations, or to post process the coordinates from base station data files through a process known as differential correction. GPS also has some difficulty in urban areas where canyoning from tall buildings can limit the availability of the open sky and make it difficult to get access to GPS satellites.

Additionally, GPS locations provide only a point on the earth. At a busy intersection, it may be difficult to identify the road that relates to a sign's captured location. Therefore, the data collector should capture the route/street name for the sign in addition to the GPS coordinate. This assists with the location of the sign in the LRS and ensures better data analysis and display.

#### Manual Field Data Collection Practices:

Highway agencies have taken on the process of collecting sign locations through various methods. One method is manually driving the roads and capturing the attributes and location of each sign along the highway. Experienced field and traffic personnel can easily identify the standard signs and select the *MUTCD* codes for each sign encountered. At that point, a decision must be made on how accurately the sign must be located. Some agencies simply capture the sign location as the GPS coordinate acquired where the vehicle is parked along the road. Others walk to the sign location and capture a location for the sign while standing very near the sign location. The trade-off is the cost associated with the additional time it takes to walk to each sign versus the increased accuracy. In areas where signs are numerous, it is often advantageous to have exact sign locations, not just the approximate location along the road.

New technologies in GPS and measuring devices have increased the efficiency of locating the signs along the road. Laser range finders will provide the offset distance from the side of the road, and range finders that are more sophisticated will even link to the GPS devices to provide the actual GPS coordinate of the sign after reading the offset distance. Often the cost of these devices is easily justified by the time saved, the increased safety of the inventory crew, and the increased accuracy of the location information.

#### Automated Data Collection Practices:

Many agencies have identified a need to capture data without physically visiting each sign in the field. Vendors and service providers understand this desire and a new set of hardware and software tools have been developed in the early 2000's. It is now possible to drive the road at normal highway speeds, capture digital photos at a uniform interval (e.g. every 25 feet), and inventory the assets along the road from the captured frames. While capturing the images, the location of the capture vehicle is also recorded from differentially corrected GPS. Through a process that is similar to traditional photogrammetry techniques, a data collector in the office can locate a sign in one digital image, locate the same sign in the next digital image, and the software will automatically calculate the coordinate of the sign from the GPS collected locations of the vehicle. The

final accuracies depend on the accuracy of the vehicle GPS, the quality of the images, and the care taken by the data collector in capturing the location from the images.

Additionally, some software is able to capture the size of the sign, automatically analyze the sign image and select a *MUTCD* code for the sign, and integrate laser readings to estimate the reflective properties of the sign. These solutions work well in areas where signs are easily viewable, but not as well in busy urban areas where trucks or other obstructions can block signs from the video capture and laser.

The Geo-3D company has done the things described above. They use KRONOS software to capture the image data, and Trident-3D software to extract the sign information. (See <http://www.geo-3d.com/products/trident3d.html>.)

#### Integrating Captured Data:

LRS models have become more powerful and flexible in the last decade, and now make accommodations for not only data captured by mileposts, but also point data captured from GPS or other sources. LRS integration of asset inventories is an important aspect of the overall purpose for data inventory maintenance. By accurately capturing sign locations, these assets can be integrated into crash analyses, speed studies, and other safety evaluations. Additionally, most LRS models can import coordinates from GPS technologies and provide linear locations (e.g., US 54 at Reference Post 148.92) to end users for a better understanding of the locations than a coordinate can provide. This is especially important in sign inventory systems, since it is unlikely the sign crew will be able to interpret a coordinate location, but can easily understand a route and mile post location.

### **2.1.28 Sign Management Methods**

**Section 2.1.10** includes FHWA's minimum-maintained retroreflectivity values. Technically, the Department could measure the retroreflectivity of every sign with a retroreflectometer. Hand-held instruments cost about \$8,000 and measure the retroreflectivity at preset angles to simulate what a driver sees. To take a reading, the operator must accurately position the instrument against the sign face and pull the trigger. Because signs will generally be 7 feet or more above the ground, this is a time-consuming and difficult task. To make it even more difficult, retroreflectivity of white legend on regulatory signs (e.g., STOP, YIELD, DO NOT ENTER, etc.) and on guide signs need to be determined in addition to the background colors when using this method. Therefore, taking retroreflectivity readings on every sign is not a viable method.

Manufacturers of Type III and higher types of sheeting typically guarantee their materials at a very high retroreflectivity level for 10 or more years. Since the minimum retroreflectivity values are significantly less than the guaranteed values at the end of the warranty period (typically 80 percent of new minimum values), these materials should exceed the manufacturer's warranty, even if installed under the harshest conditions

(south-facing signs installed at locations with high temperatures, high humidity and high elevation).

In light of these issues, [Exhibit 2.1-O](#) shows four generally accepted methods to manage a sign program. There are advantages and disadvantages of each approach.

In the absence of a sign inventory system, you are encouraged to use Method 4 since it will typically reduce labor costs and help ensure a uniform appearance of the signs. For example, if all colors of the sheeting provide a minimum 13-year life as determined by sampling, then if you replace all signs on a given state highway in 2008, you should not have to schedule the next replacement program until the year 2021.

By replacing all of the signs at the same time, you eliminate the need to track and monitor individual sign replacement dates. However, it is always a good idea to inspect signs on a regular basis to ensure that they exist, and that they are properly oriented. The best time for these reviews is at night, because night reviews also help identify problems caused by lights and other visual distractions.

### Exhibit 2.1-O Sign Replacement Programs

Methods	Advantages	Disadvantages
<p><b>1. Nighttime Visual Inspection.</b> Annually inspect all signs at night by a trained sign inspector from a model year 2000 or newer, full-size SUV or pick-up traveling at highway speeds and using low beams. The inspector should be age 60 or older and should evaluate the signs from the normal viewing distance. This is the “<i>calibrated eye</i>” approach. <u>Replace defective individual signs.</u></p>	<ul style="list-style-type: none"> <li>• Documents which signs have no retroreflectivity</li> <li>• Helps evaluate sign orientation &amp; competing lights</li> </ul>	<ul style="list-style-type: none"> <li>• Requires a trained, nighttime sign inspector</li> <li>• Subjective and inaccurate</li> <li>• Requires an annual review</li> <li>• Encourages the mixing of old and new signs</li> </ul>
<p><b>2. Expected Sign Life.</b> <u>Replace individual signs</u> based on the age of the sign. Base the replacement interval on the sheeting manufacturer’s warranty, test deck measurements, or the measurement of control signs of similar colors and materials. To identify the year, use a sign inventory, or affix dates or colored stickers to the signs to identify the year of manufacture, installation or scheduled replacement.</p>	<ul style="list-style-type: none"> <li>• Simple</li> </ul>	<ul style="list-style-type: none"> <li>• Requires a good inventory or elaborate sign dating method</li> <li>• Requires annual reviews</li> <li>• Encourages the mixing old and new signs</li> </ul>
<p><b>3. Control Signs.</b> <u>Replace individual signs</u> based on the age of each individual sign and the retroreflectivity readings of a few control signs. Control signs should face south to maximize the sun exposure, and should include signs of every color combination.</p>	<ul style="list-style-type: none"> <li>• Lower costs than Method 2</li> </ul>	<ul style="list-style-type: none"> <li>• Requires a good inventory</li> <li>• Requires frequent reviews</li> <li>• Encourages the mixing old and new signs</li> <li>• May replace some signs that still have acceptable retroreflectivity</li> </ul>
<p><b>4. Blanket Sign Replacement.</b> <u>Replace all signs on a section of highway at the same time</u> based on the retroreflectivity readings of a few control signs. Control signs should face south to maximize the sun exposure, and should include signs of every color combination.</p>	<ul style="list-style-type: none"> <li>• Reduces the mixing of old and new signs</li> <li>• Systematic approach</li> <li>• Lowest cost per replaced sign</li> </ul>	<ul style="list-style-type: none"> <li>• May prematurely replace some signs installed during intervening replacement cycles (e.g., due to vandalism, crashes, etc.); however, signs that are almost new could be used to replace other knock-downs/vandalized signs.</li> </ul>



## 2.2 REGULATORY SIGNS

### 2.2.1 STOP Sign (R1-1) [2B.04-7]

Sections 2B.04 through 2B.07 of the *MUTCD* address normal installations of STOP (R1-1) signs.

A frequent issue that is not addressed in the *MUTCD* concerns the methodology of revising traffic control at an intersection such as: (1) converting all-way to two-way stop control, and (2) reversing STOP signs. The recommended transitional procedures are as follows for these two situations:

#### Converting All-Way to Two-Way Stop Control.

1. Install black-on-white notification signs 30 days prior to the changeover date under the STOP signs to be removed stating, “THIS STOP TO BE REMOVED ON —/—/—,” and under the STOP signs to remain stating, “CROSS STREET STOP TO BE REMOVED ON —/—/—.”
2. Remove the STOP signs, Stop Ahead signs, notification signs, ALL WAY plaques and stop lines on the appropriate approaches on the changeover date. Also, install CROSS TRAFFIC DOES NOT STOP signs under the remaining STOP signs.
3. A minimum of 30 days after removing the two STOP signs, remove the CROSS TRAFFIC DOES NOT STOP signs.

#### Reversing STOP Signs.

1. Create a transitional all-way stop for 30 days, beginning about 60 days before the proposed STOP sign reversal date. To accomplish this, install Stop Ahead (W3-1) signs on the previously uncontrolled approaches, supplemented by a black-on-yellow plaque with the legend NEW. To make the new signs more conspicuous, you may add flags or flashing yellow lights to the new W3-1 signs. Install STOP signs on the uncontrolled approaches and add the standard ALL WAY plaque under the STOP signs on every approach on the changeover date. You may also add flags or flashing red lights to the new STOP signs, and add stop lines as needed.
2. After the all-way stop was in place for 30 days, remove the flags and NEW plaque, and install a black-on-white notification sign under the STOP signs to be removed stating “THIS STOP TO BE REMOVED ON —/—/—.” Also, install notification signs underneath the STOP signs to remain stating “CROSS STREET STOP TO BE REMOVED ON —/—/—.”

3. Remove the STOP signs, Stop Ahead signs, notification signs, ALL WAY plaques and stop lines on the appropriate approaches on the changeover date. Also, install CROSS TRAFFIC DOES NOT STOP signs under the remaining STOP signs.
4. After at least another 30 days, remove the CROSS TRAFFIC DOES NOT STOP signs.

**NOTE:** Using transitional signing will require the following new sign face approvals (suggested sizes are in parentheses).

- ✓ CROSS TRAFFIC DOES NOT STOP (24"x30")
- ✓ CROSS STREET STOP TO BE REMOVED ON —/—/— (24"x30")
- ✓ NEW (24"x12")
- ✓ THIS STOP TO BE REMOVED ON —/—/— (18"x24")

### **2.2.2 Speed Limit Sign (R2-1) [2B.13]**

The Speed Limit (R2-1) sign is one of the most common traffic signs but studies demonstrate that speed limits frequently have little effect on the actual speeds unless motorists know that the speed limit is enforced.

Since the presence of an unrealistic speed limit increases speed differentials and the probability of crashes, it is important to use an engineering traffic study to determine the appropriate speed limit. It is also important to reevaluate the speed limit on roadway segments that have undergone a significant change in roadway characteristics or surrounding land use.

Drivers tend to select their speed by considering the roadway width and alignment, presence of intersections and driveways, roadside conditions, parked vehicles, pedestrian traffic, mix and density of vehicle traffic, weather, and other conditions, and pay less attention to the speed limit. Like all other states, New Mexico law requires a driver to operate his or her vehicle at a speed that is reasonable and prudent for existing conditions, regardless of the presence of a posted speed limit.

Speed differences between vehicles traveling in the same direction increases crash potential, and the greater the speed differences, the greater the damage when vehicles collide with one another. In a perfect world, everybody would drive at exactly the same speed at any given location.

New Mexico has three statutory speed limits identified in Paragraphs (1), (2) and (3) of Subsection A of [Section 66-7-301](#), NMSA 1978, but nothing in this law explicitly states that speed limit signs are required for enforcement of the 30-mph statutory speed limit in business or residence districts, and the 75-mph speed limit.

**66-7-301. Speed regulation.**

A. No person shall drive a vehicle on a highway at a speed greater than:

- (1) fifteen miles per hour on all highways when passing a school while children are going to or leaving school and when the school zone is properly posted;
- (2) thirty miles per hour in a business or residence district;
- (3) seventy-five mile per hour; and
- (4) the posted speed limit in construction zones posted as double fine zones or other safety zones posted as double fine zones as designated by the [state] highway and transportation department, provided that the posted speed limit shall be determined by an engineering study performed by the state highway and transportation department.

However, the Department may alter the statutory speed limits as authorized in [Section 66-7-303](#), NMSA 1978, if the statutory speed is greater or less than is reasonable or safe under the conditions found to exist upon any part of a state highway. Based on a traffic engineering study prepared by the District Traffic Engineer, signed by the State Maintenance Engineer, and filed with the Traffic Safety Bureau, the Secretary may establish a different speed limit, except no speed limit shall be greater than 75 mph.

Research shows that the safest speed limit approximates the 85th-percentile speed, which is the speed that 85 percent of the free-flowing vehicles are traveling at or below. In reality, it is necessary to round the speed limit to the nearest 5-mph multiple at or below the 85th-percentile speed.

Studies repeatedly show that establishing the speed limit below the 85th-percentile speed increases the number of crashes. The cause of this increase in crashes may be the direct result of a few drivers who actually attempt to obey the speed limit, which in turn frustrates other drivers and causes traffic queues and congestion, and the temptation to tailgate and pass slower vehicles.

Basing the speed limit on the 85th-percentile speed implies that 85 percent of the drivers travel at reasonable speeds. It also implies that we use a democratic process to establish speed limits where motorists vote for the speed limit with their right foot.

People frequently demand a 25-mph speed limit in front of their home, but no one wants to drive 25 mph in front of everybody else's home.

Although not as common as the 85th-percentile speed, another good indicator of an appropriate speed limit is the upper limit of the pace, which is defined as the 10-mph range of observed speeds with the largest percentage of free-flowing vehicles.

The basic reason to have a posted speed limit is to encourage speed uniformity and to provide a means to prosecute the few drivers that travel at excessive speeds and jeopardize the safety of others.

Use a spot speed study to determine the speed distribution of vehicular traffic at a specific location. The 85th-percentile speed is a major factor, but not the only factor, in

selecting the appropriate speed limit. Other factors to consider when recommending a speed limit include:

- Road surface.
- Shoulder conditions.
- Grade.
- Alignment.
- Sight distance.
- Roadside conditions.
- Crash experience.
- Number and type of access locations.
- Development setback.
- Design speed.

Setting a speed limit is like petting a porcupine — you do it very carefully!

The most common method to determine vehicle speeds is with a radar speed gun. To establish a regulatory speed limit, perform the spot speed studies on straight sections of roadway, away from intersections where congestion may slow traffic. Design the study to avoid influencing the speeds, e.g., technicians with radar guns should not be visible to passing motorists, if possible. Perform speed studies under ideal weather, road and traffic conditions, and without the presence of police vehicles or any restriction that could influence speeds such as having supplementary light or hazard flashers on.

When using the radar gun to collect speeds, try to minimize the cosine error by keeping the angle between the radar beam and the alignment of the road as low as possible by taking the reading when vehicles are as far away as possible. If the angle is 10 degrees or greater, multiply the measured 85th-percentile speed by the factor in [Exhibit 2.2-A](#), which will increase the measured speed to approximate the true speed.

**Exhibit 2.2-A Adjustment Factor for Radar Speed Readings**

Angle between Radar Beam and Direction of Vehicular Travel	5°	10°	15°	20°	25°	30°
Adjustment Factor *	1.003	1.015	1.035	1.064	1.103	1.155

\* The adjustment factor = 1 / (cosine of the angle)

As a rule-of-thumb, spot speed studies should include a minimum of 100 free-flowing vehicles, but if traffic volumes are very light you may reduce the sample to about 50 vehicles or a 2-hour sample. If there are traffic queues, record only the speed of the first vehicle in the queue since other vehicles are not free-flowing vehicles. Use a data sheet similar to shown in [Exhibit 2.2-B](#) to annotate the spot speed information. One advantage of recording the speeds of exactly 100 vehicles is the simplicity of determining the 85th-percentile speed.

Exhibit 2.2-B Radar Spot Speed Data

Speed (mph)	Record	No.	Cumulative Total
20			
21			
22			
23			
24			
25	//	2	2
26			
27	//	2	4
28	////	4	8
29	//	2	10
30	/// /// //	12	22
31	////	5	27
32	/// ///	10	37
33	/// /// /// ////	19	56
34	/// /// ///	15	71
35	/// /// //	12	83
36	/// //	7	90
37	///	5	95
38	///	3	98
39			
40	//	2	100
41			
42			
43			
44			
45			
<b>TOTALS</b>		100	

The last column shows that the 85th-percentile speed is between 35 and 36 mph.

The *MUTCD* indicates that the speed limit should be within 5 mph of the 85th-percentile speed, but you may make reductions below the 85th-percentile speed if crash rates are abnormally high or if special safety concerns exist that may not be readily apparent to drivers. For example, drivers may be unaware of limited stopping sight distance or restricted sight distance from a side road.

Although technicians can collect spot speed data, only a qualified traffic engineer can actually set speed limits based on analyses of the data and through personal observations. If there are no extenuating circumstances, establish the speed limit to the nearest 5-mph increment at or below the 85th-percentile speed.

Speed limits should generally apply to all vehicles, but under unusual situations, it is possible to establish a separate speed limit for trucks via the Trucks Speed Limit (R2-2) sign. However, as noted, the perfect scenario is to have all vehicles travel at the same speed.

When a reduction in the posted speed limits would be greater than 15 or 20 mph, provide additional time for motorists to reduce their speed without applying their brakes by either:

1. Reducing the speed limit in increments by establishing an intermediate transitional speed zone about one-fourth mile in length, or
2. Using the Speed Reduction (W3-5) sign to provide additional advance warning (see [Section 2.3.12](#)).

Do not install the Speed Limit signs until after the speed zone resolutions are approved and filed with the Traffic Safety Bureau.

The following signs may on the same post as the Speed Limit (R2-1) sign:

- Truck Speed Limit (R2-2).
- Nighttime Speed Limit (R2-3).
- Minimum Speed Limit (R2-4).
- Safety Corridor (SC-NM-06a).

As noted in the Sign Code Listing, the standard sizes for the R2-1 sign are 24"x30" for conventional roads, 36"x48" for expressways, and 48"x60" for freeways.

Locate an R2-1 sign at every location where the speed limit changes. Also, install R2-1 signs at intermediate locations such as beyond major intersections to inform drivers of entering vehicles of the speed limit, and at other locations where it is necessary to remind the road users of the applicable speed limit. However, avoid placing a sign immediately in advance of a curve or turn, especially since warning signs may be present with a conflicting advisory speed, for example, a lower advisory speed on an Advisory Speed (W13-1) plaque.

Neither the *MUTCD* nor New Mexico statutes contain any maximum spacing requirements for Speed Limit (R2-1) signs. In the absence of specific spacing requirements, [Exhibit 2.2-C](#) provides suggested spacing of R2-1 signs.

To show the beginning of a new speed limit, install the R2-1 sign at the physical location where the speed limit changes. For speed reductions over 10-mph, use the Speed Reduction (W3-5) sign in advance of the new speed limit to allow drivers to reduce their speed without using their vehicle's brakes.

In school areas, the END SCHOOL ZONE sign is an alternative to the speed limit sign. Provide the advance notice of a speed reduction within a school zone with the Reduced Speed School Zone Ahead (S4-5 or S4-5a) signs.

In rural districts on US and state numbered routes, erect R2-1 signs indicating the statutory speed limits at entrances to the State and at the municipal boundaries. A special oversize sign is often desirable at these locations.

It is also very important that appropriate Speed Limit signs be in place within safety corridors.

On expressways and freeways, install an R2-1 sign about 1,000 feet after the Confirmation Route Marker after each interchange when space is available.

### Exhibit 2.2-C Suggested Spacing for Speed Limit Signs

Type Road	Normal Placement	Maximum Interval (miles)
Urban conventional roads	At the beginning of the speed limit, at municipal boundaries, and after each major intersection	0.5 mile
Rural conventional roads, 40 mph and less		1 mile
Rural conventional roads, 45 mph and greater		3 miles
Expressways	At the beginning of the speed limit, at the entrance to the State, and after each major intersection, and after each interchange	5 miles
Freeways	At the entrance to the State, at the beginning of the speed limit, and after each interchange	10 miles

### 2.2.3 Turn Prohibition Signs (R3-2, 3, 4 & R3-18 Series) [2B.19]

Some typical sign messages are:

- No Right Turn (R3-1).
- No Left Turn (R3-2).
- NO TURNS (R3-3).
- No U-Turns (R3-4).
- No U-Turns and Left Turns (R3-18).



R3-1



R3-2



R3-3



R3-4



R3-18

Place Turn Prohibition signs where the driver who is most likely to make that turn can easily see the sign. At signalized intersections, the ideal location is near the left overhead traffic signal for No Left Turn, No U-Turns, and No U-Turns and Left Turn signs, and near the right overhead traffic signal for No Right Turn signs. At unsignalized intersections, post-mount the signs on the appropriate side of the roadway.



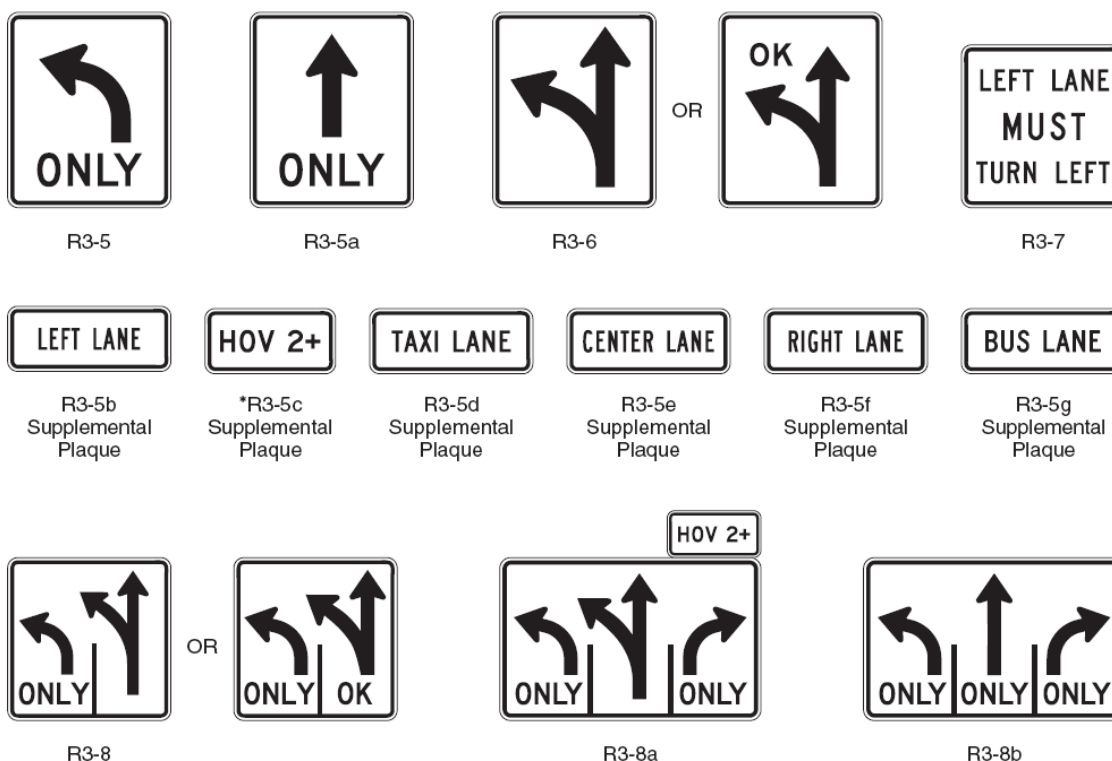
## 2.2.4 Intersection Lane Control Signs (R3-5 through R3-8) [2B.20]

Intersection Lane Control signs tell road users in certain lanes what movements are permitted from that specific lane. In some cases, there are optional movements and in other cases, a specific movement is mandatory.

Always install the R3-5 and R3-5a signs over the travel lane. However, the R3-6 and R3-8 series signs may be installed overhead or on the ground providing the number of through lanes is two or less. [Exhibit 2.2-D](#) illustrates these signs.

Other types of R3-8 series signs may be required for unique situations, in which case the width of the arrow stem shall be a minimum of 2.5 inches.

### Exhibit 2.2-D Intersection Lane Control Signs



\* The diamond symbol may be used instead of the word message "HOV".  
The minimum vehicle occupancy level may vary, such as 2+, 3+, 4+.  
The words "LANE" or "ONLY" may be used with this sign when appropriate.

## 2.2.5 DO NOT PASS Sign (R4-1) [2B.29]

NMDOT typically uses the NO PASSING ZONE (W14-3) pennant on the left and the DO NOT PASS (R4-1) sign on the right in combination at the beginning of no passing zones. Although signs are not legally required to supplement a no-passing zone



pavement marking in accordance with [Section 66-7-315](#), NMSA 1978, traffic engineers are encouraged to as a minimum, install a sign at the beginning of no-passing zones on two-lane two-way roadways to advise motorists of the no-passing restriction.

If installing a sign, use the left-side-mounted W14-3 pennant instead of the R4-1 sign for the following reasons:

1. The W14-3 pennant has a unique shape that no one can confuse with any other sign. In effect, the W14-3 pennant is a large yellow arrowhead pointing back to the right side of the roadway, and is recognizable from a distance of approximately 1,000 feet. On the other hand, from a distance, the DO NOT PASS (R4-1) sign looks like many other regulatory signs, and the standard 6-inch legend is not legible until motorists are within about 240 feet.
2. Signs on the left side of the roadway are more visible when passing because the vehicle in the right lane frequently reduces visibility to the right side of the roadway.

When installed, the W14-3 pennant shall satisfy the requirements of [Section 66-7-315](#), NMSA 1978, to have a sign or a marking at the beginning of a no-passing zone.

If a no-passing type sign is to be installed within a no-passing zone on a two-lane, two-way highway to remind motorists of the restriction, the only acceptable sign is the DO NOT PASS (R4-1) sign. This type of sign is not necessary for enforcement; therefore, if used within a zone, its use should be limited to locations beyond major intersections.

### **2.2.6 PASS WITH CARE Sign (R4-2)**

The PASS WITH CARE sign may be installed at the end of a no-passing zone if either a DO NOT PASS (R4-1) sign or a NO PASSING ZONE (W14-3) pennant is at the beginning of a zone.

### **2.2.7 Thru Traffic Keep Right/Left Signs (R4-NM-12R & L) [2B.33]**

The THRU TRAFFIC KEEP RIGHT (R4-NM-12R) and THRU TRAFFIC KEEP LEFT (R4-NM-12L) signs may be used on two-lane roadways prior to a passing or turning lane at a T-intersection to supplement the pavement markings. As noted in the *MUTCD*, NMDOT also uses the Keep Right (R4-7) and Keep Left (R4-8) signs, respectively, when some traffic may need to be on both sides of divisional islands or medians.

### **2.2.8 STAY IN LANE Sign (R4-9)**

A STAY IN LANE (R4-9) sign may be used on multi-lane highways where because of the roadway alignment some drivers have a tendency to drift across the lane lines. When

used it should be installed in advance of the problem location and supplement the solid white lane line markings.

### **2.2.9 DO NOT ENTER Sign (R5-1) [2B.34]**

A DO NOT ENTER (R5-1) sign may be mounted back-to-back with a STOP (R1-1) or YIELD (R1-2) sign on a one-way roadway such as an off-ramp. When used in this manner, the R5-1 sign must be a smaller sign than the STOP or YIELD sign, and positioned in such a manner that it does not obscure the outline of the STOP or YIELD sign. See NMDOT Standard Drawing 701-18-1/1 (Typical Wrong Way Signing for Diamond Interchange Only) for additional wrong way signing information.

### **2.2.10 Parking Signs (R7 Series) [2B.39-41]**

Parking signs govern the parking, stopping and standing of all vehicles. When installed in urban areas, pay particular attention to ensure that the correct mounting heights are used (minimum 7-foot mounting height measured from top of curb or sidewalk to bottom of sign).

For reserved parking for persons with disabilities, it is necessary to install the Reserved Parking Handicap Symbol (R7-8) sign for each parking stall. See [Section 3.2.9](#) for additional information regarding ADA requirements in parking lots and the use of substandard mounting height for the R7-8 sign.

### **2.2.11 Weight Limit Signs (R12-series) [2B.49]**

The Weight Limit (R12-series) signs may be located at the nearest intersection prior to the area in which the weight limit applies. In these situations, add a distance plaque below the Weight Limit Sign to inform drivers of the distance to the restriction.

Upon approval of a weight limit, it is very important to have the appropriate signs erected as soon as possible. One method to expedite the posting is for the sign crews to have an inventory of partially-finished Weight Limit (W12-1) signs (i.e., without the numerals), and an inventory of black, 5-inch, E-series cutout pressure-sensitive numerals. Since cutout legend has a tendency to dry out, do not stock more than a 12-month supply.



R12-1

Suggested field application of pressure sensitive legend is included in [Exhibit 2.2-E](#).

### Exhibit 2.2-E Field Application of Pressure-Sensitive Legend

1. Store legend at room temperature.
2. Apply legend at the storeroom since it is difficult to apply during hot, cold or humid conditions.
3. Wash hands and the sign face with clean soapy water and thoroughly dry to ensure good adhesion of the legend.
4. Using a china pencil or non-permanent felt-tip pen, draw horizontal lines on the sign face to delineate the top and the bottom of the legend in accordance with the dimensions on the approved sign standard. These lines will also be valuable to help align the legend. (Vertical lines may also be valuable in orienting some legend.)
5. Without removing the backing paper, position the characters at their relative locations. The space between characters should generally be about 125% of the stroke width (the width of the lines in the legend) – use a slightly smaller space before and after a “4” or a “7”. Characters that have a curve at the top should extend slightly above the top transverse line and characters that have a curve at the bottom should extend slightly below the lower transverse line.
6. Pull the backing paper off part of the character and align that part before removing the balance of the paper. It is normally best to start with the bottom of characters with straight bottoms (e.g., 2’s, A’s, L’s, etc.), and the top of characters with straight tops (e.g., 5’s, 7’s, F’s, etc.). After the first part of the character is in place, remove the balance of the paper and allow the character to flow into place without stretching it.
7. Use fingernails or a special plastic blade should as a squeegee to apply pressure to the characters to affix them to the sign. If you make a mistake, you can immediately remove the legend by using a blade or knife to lift a corner, but if removed, use new legend instead of trying to reapply the same legend.
8. Use a damp cloth to remove felt-tip or china pencil markings.

#### 2.2.12 ENGINE BRAKE USE PROHIBITED Signs (R5-NM-2b)

When a local ordinance prohibits the use of engine brakes, the Department may install the ENGINE BRAKE USE PROHIBITED (R5-NM-2) sign at the municipal limits. The Ordinance number needs to be identified on the sign.



R5-NM-2b

#### 2.2.13 Other Regulatory Signs [2B.54]

The NMDOT Sign Code Listing includes numerous other regulatory signs that are not in the *MUTCD*. For example, use the following signs when experience indicates that signs may be necessary to provide public notice for enforcement purposes:

- IT’S OUR LAW (R16-NM-2).
- Do Not Drink and Drive (R16-NM-5).
- DO NOT DRINK AND DRIVE (R16-NM-5a).
- Operation DWI, Checkpoints Everywhere (R16-NM-6).
- ACCESS CONTROLLED (R16-NM-10).

- STATE PROPERTY DO NOT DISTURB (R16-NM-21).
- TREE CUTTING PROHIBITED (R16-NM-23).
- REMOVAL OF ROCK PROHIBITED (R16-NM-24).
- DO NOT THROW LITTER (R16-NM-25).
- DO NOT LITTER \$300 FINE (R16-NM-25a).
- NO DUMPING ALLOWED (R16-NM-26).
- NO FISHING FROM BRIDGE (R16-NM-28).

## 2.3 WARNING SIGNS

### 2.3.1 Application of Warning Signs [2C.02]

The standard warning signs described in this subchapter and in Subchapter 2C of the *MUTCD*, cover the majority of the situations you are likely to encounter when developing signing plans. If there is a need for other warning signs, they shall be of standard warning sign color, shape and have brief and easily understood legend consistent with the *MUTCD*. Base the application of signs on a traffic engineering study and or on engineering judgment.

Before fabrication of any warning sign that is not included in the *Standard Highway Signs Book* or the NMDOT Sign Code Listing, the State Traffic Engineer sign must approve the sign face drawing.

On relatively straight, rural conventional roads without development, there are few reasons for warning signs. However, on windy rural roads, there is a natural tendency to install too many warning signs when a better practice may be to use signs such as the Winding Road (W1-5) sign with a distance plaque (e.g., W7-3a) with a message such as NEXT 2 MILES.

Similarly, in developed areas, there is a tendency to install signs for intersections, sometimes even when the intersections are visible. Therefore, when the number of warning signs in a given direction is over four or five per mile, the use of restraint is a good practice.

### 2.3.2 Size of Warning Signs [2C.04]

At a minimum, the size of warning signs shall comply with the size identified in the NMDOT Sign Code Listing for the type of roadway, i.e., conventional roadway, expressway or freeway. You may specify oversized and larger size diamond-shaped signs where engineering judgment indicates that there is a need for increased emphases, better recognition, or increased legibility.

On high-speed conventional roads (two lanes with a speed limit of 40 mph or higher, or more than two lanes and a speed limit of 35 mph or higher), Districts are encouraged to use the next larger size (e.g., 36"x36" or 48"x48") warning sign and any associated plaques than the size listed in the NMDOT Sign Code Listing for conventional roads. See the examples listed in [Exhibit 2.1-M](#) for additional guidance.

### 2.3.3 Placement of Warning Signs [2C.05]

Since the primary purpose of warning signs is to gain attention of the unfamiliar motorist, the placement of warning signs is important. The placement must allow these drivers

sufficient time to see the warning sign, understand the intent of the warning sign, identify the potential hazard, decide what action must be taken, and then to perform any necessary maneuver. Table 2C-4 in the *MUTCD* provides recommended sign placement distances, and is included in this manual as [Exhibit 2.3-A](#).

When using [Exhibit 2.3-A](#), note that Condition A is only for those situations where motorists may have to change lanes in heavy traffic. Examples of applicable signs include:

- Merge (W4-1).
- Lane Reduction Transition (W4-2L, W4-2R).
- Entering Roadway Merge (W4-5).
- RIGHT LANE ENDS (W9-1).

The advance placement distances for Condition B are typically much smaller than the historical values used by traffic engineers. The reason for the change is that FHWA reconciled their advance distances to match the stopping sight distances in Table 3-1 of AASHTO's *A Policy on Geometric Design of Highways and Streets*. However, remember that these are minimum advance distances, and you should think about the following:

1. For Stop Ahead, Yield Ahead, Signal Ahead and Intersection Warning signs, use the 0 mph advisory speed because a driver may wish to turn at an intersection or may need to stop due to other stopped or turning traffic.
2. The advance distances use the assumption that when going into a reduced advisory speed, drivers have a 2.5-second reaction time, and will use their brakes to decelerate (the *MUTCD* uses the general deceleration rate of 10 feet/second<sup>2</sup>, except it uses 11.2 feet/second<sup>2</sup> for stop conditions). For example, with reference to [Exhibit 2.3-A](#), the advance distance for a 60-mph road with a 40-mph advisory curve is 175 feet, which when added to the noted sign legibility distance of 250 feet, creates a total deceleration distance of only 425 feet. However, these short advance distance values force drivers to use their brakes, thereby wasting energy.
3. The combination of lower advance posting distances and higher but more realistic advisory speeds on turns and curves (see [Section 2.3.18](#)), may violate drivers' expectations.
4. FHWA is considering a reduction in the legibility distance rule-of-thumb from 40 feet to 30 feet per inch of legend height. If this change happens, most values in Table 2C-4 will increase, and agencies that use the minimum values would find it necessary to readjust their advance placement distances.
5. A FHWA signing expert admits that they not aware of any state that is re-signing their roadways based on the new values.



Therefore, engineers should treat the advance placement distances in [Exhibit 2.3-A](#) (i.e., MUTCD Table 2C-4) as minimum values, and are encouraged to use larger values.

### Exhibit 2.3-A Minimum Advance Placement Distances for Warning Signs

Posted or 85th-Percentile Speed	Advance Placement Distance <sup>1</sup>								
	Condition A: Speed reduction and lane changing in heavy traffic <sup>2</sup>	Condition B: Deceleration to the listed advisory speed (mph) for the condition <sup>4</sup>							
		0 <sup>3</sup>	10	20	30	40	50	60	70
20 mph	225 ft	N/A <sup>5</sup>	N/A <sup>5</sup>						
25 mph	325 ft	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>					
30 mph	450 ft	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>					
35 mph	550 ft	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>				
40 mph	650 ft	125 ft	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>				
45 mph	750 ft	175 ft	125 ft	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>			
50 mph	850 ft	250 ft	200 ft	150 ft	100 ft	N/A <sup>5</sup>			
55 mph	950 ft	325 ft	275 ft	225 ft	175 ft	100 ft	N/A <sup>5</sup>		
60 mph	1100 ft	400 ft	350 ft	300 ft	250 ft	175 ft	N/A <sup>5</sup>		
65 mph	1200 ft	475 ft	425 ft	400 ft	350 ft	275 ft	175 ft	N/A <sup>5</sup>	
70 mph	1250 ft	550 ft	525 ft	500 ft	425 ft	350 ft	250 ft	150 ft	
75 mph	1350 ft	650 ft	625 ft	600 ft	525 ft	450 ft	350 ft	250 ft	100 ft

#### Notes:

1. The distances are adjusted for a sign legibility distance of 175 ft for Condition A. The distances for Condition B have been adjusted for a sign legibility distance of 250 ft, which is appropriate for an alignment warning symbol sign.
2. Typical conditions are locations where the road user must use extra time to adjust speed and change lanes in heavy traffic because of a complex driving situation. Typical signs are Merge and Right Lane Ends. The distances are determined by providing the driver a PIEV time of 14.0 to 14.5 seconds for vehicle maneuvers (2001 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E) minus the legibility distance of 175 ft for the appropriate sign.
3. Typical condition is the warning of a potential stop situation. Typical signs are Stop Ahead, Yield Ahead, Signal Ahead, and Intersection Warning signs. The distances are based on the 2001 AASHTO Policy, Stopping Sight Distance, Exhibit 3-1, providing a PIEV time of 2.5 seconds, a deceleration rate of 11.2 ft/second<sup>2</sup>, minus the sign legibility distance of 175 ft.
4. Typical conditions are locations where the road user must decrease speed to maneuver through the warned condition. Typical signs are Turn, Curve, Reverse Turn, or Reverse Curve. The distance is determined by providing a 2.5 second PIEV time, a vehicle deceleration rate of 10 ft/second<sup>2</sup>, minus the sign legibility distance of 250 ft.
5. No suggested distances are provided for these speeds, as the placement location is dependent on site conditions and other signing to provide an adequate advance warning for the driver.

### 2.3.4 Horizontal Alignment Signs (W1-1 through W1-5, W1-11, W1-15) [2C.06]

Driving through a turn or curve is an ordinary part of driving and does not normally pose any hazard. However, if an alignment change is unexpected or more severe than expected, then the use of a horizontal warning sign is required to alert the road user. Install signs only if the safe speed (i.e., the advisory speed or 85th-percentile speed) or the design speed of the turn or curve is actually less than the posted speed.

Some examples of signs used to warn the road user of alignment changes are:

- Turn (W1-1).
- Combination Turn/Advisory Speed (W1-1a).
- Curve (W1-2).
- Combination Curve/Advisory Speed (W1-2).
- Reverse Turn (W3-1).
- Reverse Curve (W1-4).
- Winding Road (W1-5).
- One-Direction Large Arrow (W1-6).
- Chevron Alignment (W1-8).
- Horseshoe Curve (W1-NM-9-R or L).
- Combination Horizontal Alignment/Intersection (W1-10).
- Reverse Horseshoe Curve (W1-NM-10-R or L).

Turn signs – i.e., the Turn Sign (W1-1), Combination Turn/Advisory Speed (W1-1a), and the Reverse Turn (W3-1) – are for applications where the posted or advisory speed is 30 mph or less.

You may install an Advisory Speed (W13-1) plaque below a horizontal alignment warning sign, but only if the advisory speed is at least 5 mph below the legal speed limit.

### 2.3.5 Combination Horizontal Alignment/Advisory Speed Signs (W1-1a, 2a) [2C.07]

It is important to emphasize that the *MUTCD* currently stipulates that the Combination Horizontal Alignment/Advisory Speed (W1-1a, W1-2a) signs are to supplement other advance warning signs; therefore, these signs are always additional signs. The *MUTCD* also indicates that when used, these signs shall be installed at the beginning of the turn or curve.



W1-1a

### 2.3.6 Combination Horizontal Alignment/Intersection Signs (W1-10) [2C.08]

It is acceptable to combine the Turn (W1-1) sign or the Curve (W2-1) sign with the Crossroad (W2-1) or the Side Road (W2-2) sign to create a Combination



W1-10



Horizontal Alignment/Intersection (W1-10) sign indicating that the intersection occurs within the turn or curve. Districts may also propose additional combinations to eliminate unnecessary warning signs.

### 2.3.7 Chevron Alignment Sign (W1-8) [2C.10]

The Chevron Alignment (W1-8) sign may supplement or be used as an alternate to standard delineation of curves and turns. Based on the results of a study in Virginia, “Evaluation of Curve Delineation Signs,” published in Transportation Research Record 1010, the recommendation is to use the W1-8 sign on curves or turns that have a degree-of-curve greater than 7-degrees.

When used, place the W1-8 signs on the outside of the turn or curve, in line with and at approximately a right angle to approaching traffic. The bottom of the W1-8 signs shall be not less than 4 feet above the nearest edge of pavement.

Install W1-8 signs back-to-back on two-lane, two-way roadways. For flatter curves, it generally is acceptable to mount back-to-back signs on the same post, with the signs oriented perpendicular to the highway centerline.

On 1/19/07, the National Committee on Uniform Traffic Control Devices (NCUTCD) approved a recommendation to encourage FHWA to amend the MUTCD to allow the bottom of the W1-8 sign to be a minimum of 4 feet above the near edge of roadway.

[Exhibit 2.3-B](#) shows recommended spacing based on three different methods in accordance with TTI Report FHWA/TX-04/0-4052-1, entitled Simplifying Delineator and Chevron Applications for Horizontal Curves. Methods 1 and 2 are the preferred methods, but if specific curve geometry is unknown, field personnel may use Method 3.

#### Exhibit 2.3-B Suggested Spacing for W1-8 Signs on Horizontal Curves

Method 1	Method 2	Method 3	Chevron Spacing (feet)
Curve Radius (feet)	Degree of Curve	Curve Advisory Speed (mph)*	
< 200	> 28.6	≤ 15	40
200 - 400	14.3 - 28.6	20 - 30	80
401 - 700	8.2 – 14.2	35 - 45	120
701 – 1250	4.6 – 8.1	50 - 60	160
> 1250	< 4.6	> 60	200

\* Do not use the radius or degree-of-curve information to establish advisory speeds.

Using Method 3 to establish W1-8 spacing is the least desirable method. Therefore, Districts are encouraged to use Methods 1 or 2 by considering one of the following methods when the radius or degree-of-curve is unknown:

1. Use a GPS-based device called a Radiusmeter that produces an immediate radius value after traversing a horizontal curve at highway speeds. The Radiusmeter works in any type vehicle, is highly accurate and easy to use, and costs \$400 to \$500.
2. Estimate the degree-of-curve by dividing the total change in direction of the curve, in degrees, by the length of the curve in hundreds of feet. For example, if you have a right angle (90-degree) curve that measures 1,000 feet from the beginning of the curve (P.C.) to the end of the curve (P.T.), the curve would be a 9-degree curve (i.e.,  $90/10=9$ ). A compass that includes degrees and a distance-measuring instrument (DMI) would both be very helpful.
3. Although labor intensive, estimate the degree-of-curve by stretching a 62-foot string between two points along the roadway's centerline and measuring the distance from the center of the string to the centerline. When measured in inches, the middle ordinate very closely approximates the "degree-of-curve" for curves up to about a 45-degree curve (e.g., a 10-inch middle ordinate equals a 10-degree curve, a 20-inch middle ordinate equals a 20-degree curve, etc.).

### 2.3.8 Divided Highway (Road) Sign (W6-1) [2C.18]

A highway is a divided highway if the highway has two or more roadways and constructed in a manner that impedes vehicular traffic between the two roadways by an intervening grass median, raised median, concreted median barrier, guardrail, or some other type of physical barrier.

In advance of a divided highway, use the symbol-type Divided Highway (W6-1) sign instead of the legend-type DIVIDED HIGHWAY (W6-1a) or DIVIDED ROAD (W6-1b) signs, since the W6-1 sign is easier for non-English speaking motorists to understand.

### 2.3.9 Divided Highway (Road) Ends Sign (W6-2) [2C.19]

Use the symbol-type Divided Highway Ends (W6-2) sign at the end of a divided highway instead of the legend-type DIVIDED HIGHWAY ENDS (W6-2a) or the DIVIDED ROAD ENDS (W6-2b) signs to assist non-English speaking motorists.

### 2.3.10 Winter Weather Signs (W8-13, W24-NM-12, W24-NM-13) [2C.28]

In addition to the BRIDGE ICES BEFORE ROAD (W8-13) sign included in Section 2C.28 of the *MUTCD*, you may use the ICY (W24-NM-12) and the WATCH FOR SNOWPLOWS (W24-NM-13) signs where applicable.

Cover or close these signs during seasons of the year when the message is not relevant. If folded, the preferred method is to fold the bottom upward so that the top of the signpost does not stick above the sign (see Note #3 on NMDOT Standard Drawing 701-02-2/3).

### 2.3.11 Advanced Traffic Control Signs (W3-1, W3-2, W3-3) [2C.29]

To assist motorists who have difficulty with the English language, always use these symbol signs and avoid using the following legend message signs: STOP AHEAD (W3-1a), YIELD AHEAD (W3-2a), and SIGNAL AHEAD (W3-3a).

### 2.3.12 Speed Reduction Signs (W3-5) [2C.30]

Use a Speed Reduction Sign to warn motorists in advance of a speed reduction that is 15 mph or greater.

To assist motorists who have difficulty with the English language, use the Reduction Ahead (W3-5) sign instead of the legend message XX MPH SPEED ZONE AHEAD (W3-5a) sign.



W3-5



W3-5a

### 2.3.13 Lane Ends Signs (W4-2, W9-1, W9-2) [2C.33]

Section 2C.33 of the *MUTCD* allows either the Lane Ends (W4-2) symbol sign or the LANE ENDS MERGE LEFT (RIGHT) (W9-2) word sign to warn of the reduction in the number of traffic lanes in the direction of travel on a multi-lane highway. However, to assist motorists who have difficulty with the English language, always use the W4-2 sign instead of the legend message W9-2 sign.



W4-2

The *MUTCD* also allows the use of the RIGHT LANE ENDS (W9-1) sign in advance of the W4-2 sign. If using the W9-1 sign, always use a supplemental distance (W16-2) plaque below the W9-1 sign to assist motorists in identifying the actual location of the lane drop.

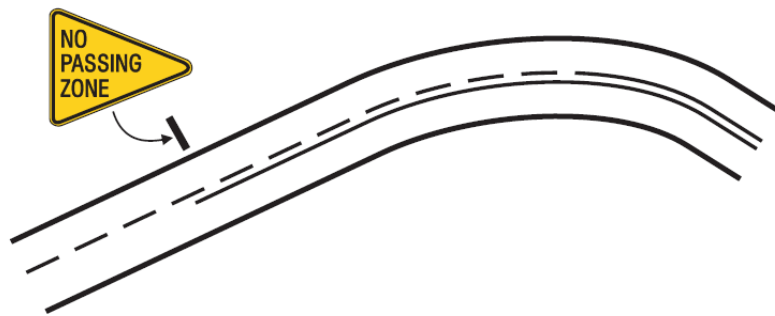
Use the W4-2 sign within a truck-climbing lane in accordance with the NMDOT Standard Drawing 701-11-1/1. However, do not use the W4-2 sign to indicate the end of an acceleration lane.

### 2.3.14 NO PASSING ZONE Sign (W14-3) [2C.35]

As noted in [Section 2.2.5](#), the left-hand mounted NO PASSING ZONE (W14-3) Pennant is always preferred to the DO NOT PASS (R4-1) Sign at the beginning of a no-passing zone on a two-lane, two-way roadway. Also, when installed, the W14-3 pennant shall satisfy the requirements of [Section 66-7-315](#), NMSA 1978, to have a sign or marking at the beginning of a no-passing zone. The only acceptable location for the W14-3 pennant is as illustrated in [Exhibit 2.3-C](#).

See [Section 3.2.1](#) for the criteria to establish no-passing zones.

**Exhibit 2.3-C Only Install Pennants at the Beginning of a NPZ**



**2.3.15 Vehicular Traffic Signs (W8-6, W11-1, 5, 5a, 8, 10, 11, 12p, 14) [2C.40]**

To assist motorists who have difficulty with the English language, always use the Truck Crossing (W11-10) sign instead of the legend message TRUCK CROSSING (W8-6).

**2.3.16 Nonvehicular Signs (W11-2, 3, 4, 6, 7, 9, NM-3a) [2C.41]**

In addition to the signs identified in Section 2C.41 of the *MUTCD*, use the Elk Crossing Area (W11-NM-3a) sign where appropriate.

**2.3.17 Distance Plaques [2C.45]**

Use NMDOT's larger NEXT XX MILES (W7-NM-3a) Plaque (measuring 36 by 18 inches) with the 48-inch Hill (W7-1) sign, or other 48-inch warning signs as applicable, in lieu of the smaller NEXT XX MILES (W7-3a) plaque.

**2.3.18 Advisory Speed Plaque (W13-1) [2C.46]**

An advisory speed is a "recommended safe speed." However, this speed is relative, since a speed that is safe or comfortable for a driver of a car may not be safe or comfortable for a truck driver; and the safe or comfortable speed for a driver of a sports car may not be safe or comfortable for the driver of a family sedan. Therefore, an advisory speed is only a recommendation.

The most common application of an advisory speed is with the Advisory Speed (W13-1) plaque installed below the Turn (W1-1) sign or Curve (W1-2) sign, but you may install a W13-1 plaque below any warning sign.

If a regulatory speed limit, as displayed by black-and-white signs, is not appropriate at a turn or curve, the appropriate advisory speed may either be determined by making several

test drives around the turn or curve using a ball bank indicator (see [Exhibit 2.3-D](#)), or from the 85th-percentile speed on the curve.

### Exhibit 2.3-D Ball Bank Indicator



Model 1023W1 Ball Bank Indicator, Courtesy of Rieker, Inc., ©2002-2006 Rieker® All Rights Reserved.

A ball bank indicator measures the combination of centrifugal force and vehicle body roll in degrees. To determine the advisory speed with a ball bank indicator, mount the instrument on the dash of a passenger vehicle and align it so that it provides a “zero reading” when the vehicle is on a perfectly level surface. Have a technician record the reading as the vehicle travels at a uniform speed around the turn or curve in the center of the lane. The goal is to determine the highest multiple of 5 mph that produces a maximum ball bank reading of 12 degrees above 40 mph, 14 degrees between 30 and 40 mph, and 16 degrees below 30 mph.

Section 2C.46 of the 2003 *MUTCD* indicates that advisory speeds on curves should correspond to a 16-degree ball bank reading. However, FHWA is proposing to eliminate the 16-degree value in the next edition.

Electronic ball bank indicators are also available. These instruments simplify the process and allow one person to determine the proper advisory speed without compromising safety. However, when using an electronic model, it is very important to maintain a smooth turn to obtain accurate readings.

If using the 85th-percentile speed on the turn or curve, the advisory speed should be the nearest multiple of 5 mph that is at or below the 85th-percentile speed.

On the recommendation of a qualified traffic engineer, you may use advisory speed plaques at other locations such as below intersection signs like the Cross Road (W2-1) sign or the Side Road (W2-2) sign, when the engineer determines that there may be limited sight distance problem.

Regardless of the application or methodology, do not use an advisory speed unless it is at least 5 mph less than the posted speed limit or the statutory speed limit.

The W13-1 plaque shall not be mounted or used as a primary sign and, when used, mount it below the warning sign on a common post. The size of the plaque varies according to the size of the warning sign it supplements.

### **2.3.19 Supplemental Arrow Plaques [2C.47]**

The Diagonal Arrow (W16-7p) plaque is for use with crossing-type warning sign, but only when the sign is at the physical crossing location.

**Exhibit 2.3-E W16-7p Plaque with a W11-2 Sign**



### **2.3.20 Advance Street Name Plaques (W16-8, W16-8a) [2C.49]**

You may install an Advanced Street Name (W16-8, W16-8a) plaque, with a black legend on a yellow background, below any Intersection Sign (W2-Series) or an Advanced Traffic Control Sign (W3 Series). However, do not install warning signs for the sake of adding Advance Street Name (W16-8, W16-8a) plaques.

The lettering on W16-8 and W16-8a plaques varies depending on the size of the warning sign — 4-inch for 36-inch warning signs and 6-inch for 48-inch warning signs. To enhance legibility, use upper/lowercase legend.

## 2.4 GUIDE SIGNS – CONVENTIONAL ROADS

### 2.4.1 General Criteria for All Guide Signs

Guide signs are necessary to guide the motorist along streets and highways; to inform them of intersecting routes; to direct them to cities, towns, villages, or other important destinations; to identify nearby rivers, streams, parks, forests, and historical sites; and generally to give such information as will help them along their way in the most simple, direct manner possible.

However, do not install signs that provide questionable traffic service or that were requested primarily for recognition or advertising purposes. No sign or its support shall bear any commercial advertising information, except Special Service signs authorized by State Statute. Do not use flashing lights or distracting legend on any guide signs. Guide signs are normally rectangular, with the longer dimension horizontal. All guide signs shall have white lettering and borders. The background color shall be green for destination and distance signs, blue for motorist service signs, and brown for cultural or recreational interest type signs.

Guide signs must be legible to approaching drivers. Where speeds or volumes are high, large signs are required. Where a vehicle is moving slowly or must stop, small signs may be used.

Guide signing, particular on freeways and expressways needs to be incorporated into the early planning and design of a highway facility since roadways are becoming more geometrically complex and therefore resulting in more complicated signing.

It is important to note, that unlike regulatory and warning signs, the *Standard Signs Book* does not contain as many design details for most guide signs, probably because these signs need to be custom designed. Therefore, states typically have unique design details for destination and distance signs, and major guide signs as used on expressways and freeways. Some of the differences include the respective sizes of legend on major guide signs, spacing and justification of legends, border widths and radii, fonts, etc. As a result, the sign software manufacturers currently find it necessary to custom design their software for every state.

However, there is a consortium of states that are working together to standardize the little design details in an effort to assist the software and sign manufacturers.

### 2.4.2 Conventional Roads (Rural Area)

Conventional roadways in rural areas generally have high speeds with vast distances between intersections, towns or cities, and the traffic volumes may be low. These roadways may have many curves, hills, no passing zones and other distinctions. Signing should be consistent and maintain same letter height and font through the entire route. Destination signs shall maintain uniformity and continuity over the entire route. While



signing for this type of roadway is less complex than in urban areas, exercise care to ensure that signing is appropriate.

### 2.4.3 Conventional Roads (Urban Area)

Conventional roadways in urban areas generally are high volume highways that challenge the driver with many more obstacles than driving in rural areas. Urban roadways have high traffic volumes, often with heavy truck traffic, frequent intersections (including traffic signals), driveways, businesses, advertising signs and pedestrian and bicycle traffic. Due to the lack of space in the urban environment, sign placement and design is often a problem. This presents a challenge to the designer to prioritize, properly locate and size the signs.

### 2.4.4 Size of Signs [2D.04]

Guide signs vary in width and height depending upon the length of message, number of lines of copy and letter/numeral size. The legend on a guide sign must be determined by using the appropriate letter and numerical height, font series and symbol size before the overall sign dimensions can be determined.

NMDOT uses several guide sign sizes depending on the type of roadway facility. Under some circumstances, the available right-of-way space may limit sign width. Where clearances are limited, and standard sign design cannot be used, a reduced letter height, font, interline, and edge spacing may be used.

### 2.4.5 Lettering Style [2D.05]

The *MUTCD* currently defers to the *Standard Highway Signs Book* for the design of uppercase letters (capitals), lowercase letters, numerals, route shields, and spacing. The standard alphabet is a Gothic-style alphabet developed in the 1940's and 1950's, and frequently known as "Highway Gothic." However, FHWA has granted interim approval of the Clearview font for white legends on guide signs.



Because the new font has better legibility, the assumption is that NMDOT will convert to the Clearview font for white legend on all new guide signs.



Research shows that the new Clearview font generally improves the maximum nighttime sign legibility distance by approximately 12 percent for the same size sign. Therefore, on September 2, 2004, FHWA issued interim approval for the optional use of the Clearview font for white legend on all guide signs (see [http://mutcd.fhwa.dot.gov/pdfs/ia\\_clearview\\_font.pdf](http://mutcd.fhwa.dot.gov/pdfs/ia_clearview_font.pdf)). In accordance with the interim approval, FHWA will grant statewide interim approval to any state that submits an appropriate written request to the Director of the FHWA Office of Transportation Operations. As of December 2007, FHWA has granted interim approval to 16 states.

[Exhibit 2.4-A](#) shows the correlation between the Highway Gothic and Clearview fonts, and the primary application of each font.

**Exhibit 2.4-A Transitioning to the Clearview Font**

Highway Gothic, 2000		Clearview Typeface		Primary Application for Guide Signs
Series	Stroke Width (Percent of Height)	Series*	Stroke Width (Percent of Height)	
E-Modified	20	5W, 5WR**	20	Destinations and most other legends on expressways and freeways
E	18	4W	18	Cardinal directions and action messages on expressways and freeways
D	16	3W	17	Destinations on conventional highways
C	14	2W	15	(Destinations on conventional roads when a higher series cannot be used)
B	13	1W	13	Street names (and destinations on conventional roads when a higher series cannot be used)

\* Clearview has different designs for the black (B) and white (W) fonts. Currently, only the white (W) font is approved by FHWA, and then only for guide signs.

\*\* Clearview 5WR has tighter letter space than 5W and is for use on replacement guide signs when the 5W may create a sign that is too wide for the specific application.

Studies indicate that upper/lowercase Clearview 3W font has a legibility distance of about 29 percent greater than all capital letters using the Highway Gothic Series D font with the same size footprint. Therefore, since the *MUTCD* allows upper/lowercase legend for all place names, there is no reason not to use upper/lowercase legends for all designations and distances on guide signs.

If designing signs with a Clearview font, it is important to note that the height of the lowercase legend is approximately 82 percent (instead of 75 percent) of the

The height of every lowercase Clearview letter is greater than the height of the same lowercase Highway Gothic letter. Clearview font is also similar to some common word processing fonts (e.g., Georgia, Times New Roman, etc.) where ascenders of lowercase Clearview letters (i.e., b, d, f, h, k, l, and t) extend above the top of the capital letter (see the top of the “b” in [Exhibit 2.4-B](#)).

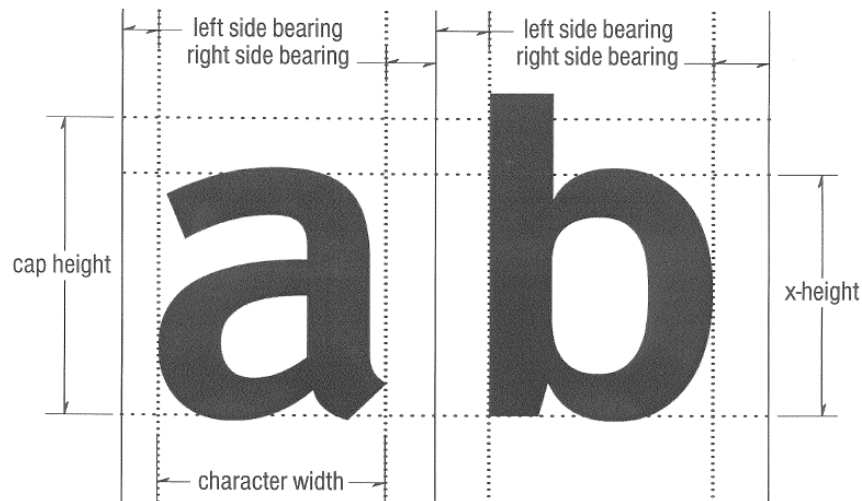
height of the uppercase legend. Therefore, you need to ignore references in the *MUTCD* such as:

1. Lowercase letters are to be 75 percent of the height of uppercase legend.
2. The height of the uppercase letters should be approximately 1.33 times the “loop” height of lowercase letters.

To avoid the above problem, this manual uses a single dimension to specify the height of upper/lowercase legend, e.g., *16CV-5WR*, in lieu of two separate values as used in *16/12 EM*.

Spacing for Clearview shall conform to the criteria in FHWA’s “Clearview Typeface Supplement” at <http://mutcd.fhwa.dot.gov/pdfs/clearfont/CTSEng.pdf>, and in [Appendix A](#) of this manual. Specifically, calculate the spacing by using a combination of a “right side bearing” associated with the first of two letters and a “left side bearing” associated with the second letter as illustrated in [Exhibit 2.4-B](#).

**Exhibit 2.4-B Spacing Between Letters**



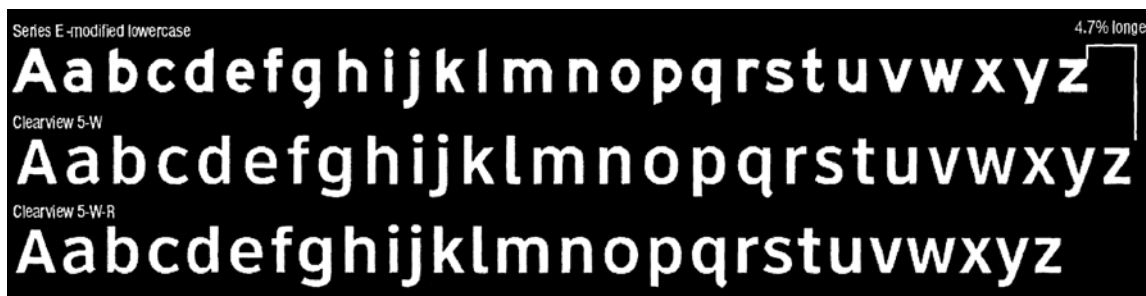
With reference to [Exhibit 2.4-A](#), some words using uppercase and lowercase Clearview letters are up to 20 percent longer than the comparative string of lowercase Highway Gothic letters, at least in part because of the bolder stroke width. An exception is the Clearview 5W and 5WR series, where the 5W series is only about 4.7 percent longer than the E-modified, and 5WR is about 4 percent shorter than E-modified, as illustrated in [Exhibit 2.4-C](#).

It is important to note that the letters used in the Clearview 5W and 5WR fonts are identical. However, they designed the 5WR series as a Replacement Series with reduced spacing between letters to ensure that replacement guide signs used along expressways

and freeways would never be larger than the old signs with E-modified font, and thereby never require new sign structures. However, some states (e.g., Pennsylvania and Texas) are using the 5WR as the standard font even for signs on new sign structures.

The Clearview font is a TrueType font and is compatible with PCs, sign design software, and computerized sign makers.

#### Exhibit 2.4-C Lowercase Clearview Letters Length Comparison



In addition to the new Clearview font, FHWA has entered into an agreement with the National Park Service (NPS), that mandates that the “Rawlinson Roadway” typeface be used on all new NPS signs as discussed in [Section 2.8](#) (relating to recreational and cultural interest area signs).

#### 2.4.6 Size of Lettering [2D.06]

The letter and numerical height for guide signs on conventional roads is included in [Exhibit 2.4-D](#).

#### Exhibit 2.4-D Principal Legend Size

Type of Conventional Road	Highway Gothic (upper/lowercase)	Clearview (upper/lowercase)
Urban streets with 25 mph speed limit	4D	4CV-3W
Two- and three-lane roads with 30 mph or higher speed limit	6D	6CV-3W
Four-lane roads	8D	8CV-3W

#### 2.4.7 Arrows [2D.08]

Guide signs use the following three types of arrows:

1. Standard Arrow. Use the “standard arrow” on destination signs on conventional roads and off-ramps. Also, use the standard arrow on diagrammatic signs but

with an extended and perhaps curved shaft. In addition to use on guide signs, the standard arrow is used on some regulatory and warning signs (e.g., R3-series, R4-series, R6-series, R7-series, R9-3b, R10-4b, R10-6, etc.), and on directional arrow auxiliary signs (e.g., M5-series, M6-series, and M7-series), many of which have extended shafts.

2. Up Arrow. Use “up arrows” on Exit Direction Signs and Gore Signs on freeways and expressways.
3. Down Arrow. Use “down arrows” on overhead guide signs for lane assignment.

The “up arrow” is the only arrow that has a rounded point on the front of the arrowhead, and it is only arrow with a tapered shaft.

The “standard arrow” and the “down arrow” both have straight shafts, but the distinguishing feature is the shape of the arrowhead. Specifically, the arrowhead on the “standard arrow” is essentially an equilateral triangle with the arrowhead having an angle of approximately 70 degrees, whereas the arrowhead on the “down arrow” is somewhat squatty in that the front of the arrowhead has an internal angle of about 95.4 degrees.

The orientation of standard arrow, as used on destination signs, should reflect the sharpness of the turn. Arrows pointing ahead or to the left should be on the left side of the sign, and arrows pointing to the right should be after the destination and on the right side of the sign

Details for the standard arrow as used on guide signs on conventional roads to indicate the directions toward designated routes or destinations are included in Appendix 6 of the *Standard Highway Signs Book*, Pages 6-1 and 6-2.

## **2.4.8      Numbered Highways [2D.09]**

NMDOT Sign Code Listing includes design details for the following markers that are unique to New Mexico:

- Interstate Route Marker with Direction and Shield (M1-NM-1a)
- New Mexico Route (M1-NM-5)
- Frontage XXXX Road (M1-NM-10)
- Historical New Mexico US 66 (M1-NM-11)

The route markings on roadways should correspond with the numbered traffic routes shown on the latest tourist maps. Therefore, the application of any new traffic routes or revisions should be coordinated with the production of a new map.

Maintenance of route marker assemblies is very important since a missing sign could result in unnecessary travel and erratic maneuvers. Proper route markings can make driving easier and safer.

## **2.4.9 Route Signs and Auxiliary Signs [2D.10]**

Use the signs that have a distinctive shape and color only for the intended system of numbered highways. Use auxiliary plaques with the following background colors, but only for the noted numbered highway systems:

Blue – use only on Interstate routes

Green – use only on Interstate business routes

Route signs never exist by themselves, but always as a part of a sign assembly. As part of an assembly, use them prior to a junction with a numbered traffic route, and whenever the numbered traffic route changes direction, and as part of a confirmation assembly.

## **2.4.10 Design of Route Signs [2D.11]**

### State Route (M1-NM-5)

For post-mounted route marker assemblies, use the State Route (M1-NM-5) sign, which consists of black numerals within a round red zia symbol surrounded by a black border. The standard size for the M1-NM-5 marker is 24 by 24 inches for one- and two-digit route numbers, and 30 by 30 inches for three-digit route numbers. The NMDOT Sign Code Listing illustrates the M1-NM-5 sign on Page 23/38 of Appendix D.

Use the M1-NM-5 sign only as an independent assembly with the M2-1 junction auxiliary, and the M5-1 through M6-9 arrow auxiliaries or as a confirmation or reassurance assembly.

When the state route number is required on a guide sign panel such as the M2-2 and larger, use the circular state route (M1-5) sign for one- and two-digit route numbers and the oval design for three-digit route numbers (see Page 2/2 in Appendix A of the NMDOT Sign Code Listing).

### County Route Sign (M1-6)

County governments within the state have the authority to establish a system of numbering country roads. The County Route Sign (M1-6) is the standard pentagon shape with a yellow legend on a blue background. The M1-6 sign shall have minimum dimensions of 18 by 18 inches for one- and two-digit route numbers, and 24 by 24 inches for three-digit route numbers.

### Frontage XXXX Road Marker (M1-NM-10)

Use the Frontage XXXX Road (M1-NM-10) markers on designated frontage roads. The M1-NM-10 marker shall have black letters on a white background. The M1-NM-10 marker shall be 30 by 30 inches. (See NMDOT Sign Code Listing, Appendix D, Page 24/38 for an illustration featuring a sign face layout of the M1-NM-10 marker.)

#### 2.4.11 Confirming or Reassurance Assemblies [2D.31]

Place Confirming Assemblies on conventional highways just beyond major intersections (25 to 200 feet), including all intersections with any state highway, to keep road users informed of their route. The assemblies shall consist of a route sign and cardinal direction auxiliary, and reassure the driver that they have correctly followed the intersection signing.

The standard width for the assemblies for all U.S. and State numbered traffic routes on conventional roads is 24 inches for one- and two-digit route numbers and 30 inches for all three-digit route numbers. The Cardinal Direction Auxiliary, NORTH, SOUTH, EAST and WEST (M3-1 through M3-4) signs shall have a standard size of 24 by 12 inches. The background color of all auxiliary signs must always match the color of the route marker.

Install Confirming Assemblies beyond major intersections and at intervals of at least every 5 miles in rural areas and every 3 to 5 blocks in urban areas to keep the driver informed.

#### 2.4.12 Trailblazer Assemblies [2D.32]

Trailblazer Assemblies provide directions to a specific traffic route from other highways in the vicinity. Install these assemblies at strategic locations that will provide the road user with the most direct or timely point of access to the trail-blazed route.

The Trailblazer Assembly shall consist of a minimum of three signs: a TO Auxiliary Sign (M4-5), a Route Marker Sign, and a single arrow Directional sign (M6-Series) pointing in the direction leading to the route. If it is desirable to segregate the trail blazed traffic by cardinal direction, then four signs are required: a TO Auxiliary Sign (M4-5), a Cardinal Direction Auxiliary Sign (M3-1 through M3-4), a Route Marker Sign, and a single arrow Directional sign (M6-Series) pointing to the specified direction of the trail-blazed route.

After making the decision to use a trailblazer, it is extremely important to use a Trailblazer Assembly at every subsequent turn until the user actually arrives at the designated route.

#### 2.4.13 Destination Signs (D1 Series) [2D.34]

On state highways, install Destination (D1 series) signs in advance of all intersections with U.S. and State numbered traffic routes. As a rule, use the D1a series signs since it provides some additional distance information not included on the D1 series signs.

Destination signs may have up to three destination names on a single sign where the closest destination lying straight ahead should be on the



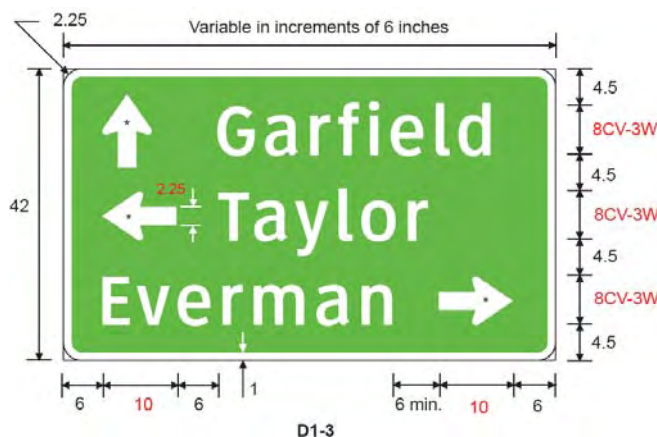
D1-2



D1-2a

top line, the closest destination to the left should be on the second line, and the closest destination name to the right should be on the third line. It is possible to have more than one arrow in any of the three directions, and when this occurs, the closest destination should be above those that are further away.

Use upper/lowercase Clearview legend on all D1 series signs since research shows a 29 percent improvement in legibility distance when compared to all uppercase Highway Gothic legend on the same size sign.

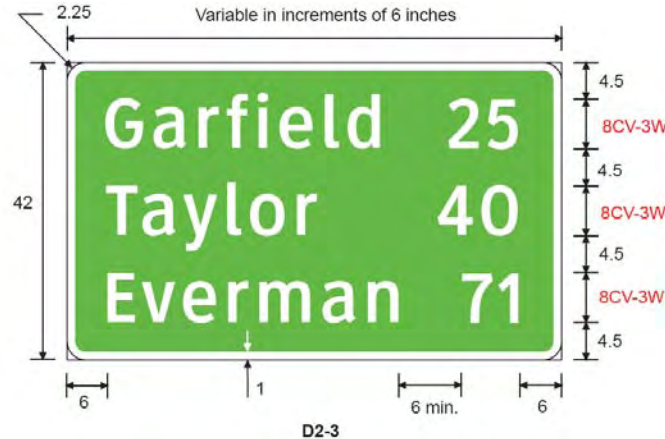


Note: The D1-3 sign shown above and the D2-3 sign in [Section 2.4.14](#) are from the 2006 *Standard Highway Sign Designs for Texas*. These signs are included because they use Clearview font, but some of the dimensions may not agree with practices currently used in New Mexico, e.g., TxDOT uses left-adjusted destinations on the D1-3 sign, different spaces, etc. As noted in [Section 2.4.1](#), each state currently has unique design details for many of the guide signs, frequently for undefined details in the *MUTCD* or the *Standard Highway Signs Book*.

#### 2.4.14 Distance Signs (D2 Series) [2D.36]

As noted for Destination (D1 series) signs, use upper/lowercase Clearview legend on all D2 series signs since research shows a 29 percent improvement in legibility distance when compared to all uppercase Highway Gothic legend on the same size sign.

The distance shown on Distance Signs should be the distance to the center of the city or the central business district (CBD).



#### 2.4.15 Street Name Signs (D3-1, D3-NM-3, D3-NM-3a) [2D.38]

Because street name signs are extremely useful to unfamiliar drivers, establish the practice of installing them at all intersections in both urban and rural areas regardless of any other route signing or Advance Street Name (D3-2) signs. Overhead street name signs that are near traffic signals are especially useful because drivers should already be looking in that general area, and there should be fewer sight distance obstructions.

Use upper/lowercase Clearview legend for all street names since research indicates a 29 percent improvement in legibility distance when compared to all uppercase Highway Gothic legend. (Note: the actual comparison was CV-3W upper/lowercase versus all uppercase Series D Highway Gothic. Actual word length is typically shorter.)

As a rule, avoid using suffixes such as “Road” or “Street” because their presence often reduces legibility. If it is determined that these terms are essential, use abbreviations for the terms but without a period, i.e., *Rd*, *St*, *Ave* and *Blvd*. Abbreviated suffixes are appropriate to avoid confusion under the following situations:

- For alphabetic or numeric street names (e.g., K St and 13th St).
- When the street name is a cardinal direction (e.g., East Ave, North St).
- To distinguish between other nearby roads with the same base name (e.g., Alameda Dr and Alameda Ave).
- Anytime the lack of a suffix could be confusing.

When appropriate, use abbreviations such as N, S, E and W in front of the street name to assist motorists. When used, abbreviated prefixes and suffixes may be a smaller size legend than the street name, generally about 75 percent the height of the street name.

See NMDOT Standard Drawing 701-15-1/2 for detailed drawings showing approved sign face details for Street Name Signs.



### Street Name (D3-1) Sign

Lettering on ground-mounted Street Name (D3-1) signs should be at least 6-inches high, and on multi-lane roads with speed limits over 40 mph, the lettering should be at least 8-inches high. Whenever possible, use D-series (or CV-3W legend), but for unusually long street names, use a lower series legend such as C-series (or CV-2W legend).

To reduce costs and fixed objects, you may mount D3-1 signs above STOP (R1-1) or YIELD (R1-2) signs. However, to avoid compromising the unique shapes of these regulatory signs, the bottom of any D3-1 sign with the same orientation as the STOP sign should be at least 6 inches above the top of the R1-1 or R1-2 sign. (For side road approaches, it is permissible to use 6-inch legend for street names when installed above STOP or YIELD signs.)

Unless overhead street name signs are used, a minimum of one D3-1 sign should be placed in each direction. In business districts and on numbered traffic routes, as a minimum, place D3-1 signs on diagonally opposite corners, with the signs parallel to the streets they name.

### **Exhibit 2.4-E Size of Street Name Signs**

Location	Speed	Legend
Post-mount	25-40 mph, and side road approaches with stop or yield control	6D or 6CV-3W upper/lowercase
	>40 mph	8D or 8CV-3W upper/lowercase
Overhead	*	12D or 12CV-3W upper/lowercase **

\* Section 2D.38 of the *MUTCD* indicates that agencies should consider Overhead Street Name signs in urban and suburban areas where Advance Street Name signs are not used.

\*\* Although FHWA recommends 12-inch legends, the larger signs create structural (wind load) issues and some agencies conclude that Overhead Street Name signs with 8-inch legends are better than the option of not using any Overhead Street Name signs.

### Overhead Street Name (D3-NM-3 and D3-NM-3a) Sign

To improve visibility, Districts are encouraged to use the Overhead Street Name (D3-NM-3, 3a) sign above the roadway, especially on traffic signal mast arms. At intersection crossroads where the crossroad has different names for each of the directions of travel, use the Overhead Street Name (D3-NM-3a) sign with the street name to the left above the street name to the right.

Historically, most states have used 8-inch legends (8D or 8CV-3W) for overhead street names, but the *MUTCD* recommends using 12-inch legend for the street name. To help reduce the wind loading, mount the signs to the right of the overhead traffic signals, such as centered above the right edge line. Also, design mast arms to accommodate the extra

wind loading. If installing D3-NM-3 or D3-NM-3a signs on existing mast arms with unknown structural capabilities, specify hardware that allows the sign to rotate and “spill” the wind.

At locations where a study indicates that the visibility of a reflectorized sign may be inadequate due to competition from ambient lighting, you may install internally illuminated signs. The extra weight of internally illuminated signs may require stronger poles.

In rural areas, you may install Advance Street Name signs below an intersection warning sign. When combined with a yellow diamond-shaped sign, the color shall be a black message on a yellow background as discussed in [Section 2.3.20](#).

#### **2.4.16 Advanced Street Name Signs (D3-2) [2D.39]**

Advanced Street Name (D3-2) signs identify the street name at an upcoming signalized or unsignalized intersection. D3-2 signs need to be located a minimum of 200 feet in advance of the intersection to allow the road user to make any necessary lane changes or to slow down in preparation for a turn. See NMDOT Standard Drawing 701-15-2/2 for further information and sample sign face drawings.

In rural areas, an Advanced Street Name (W16-8) plaque, with black legend on a yellow background may be more appropriate than the D3-2 sign since the Districts may be able to install the W16-8 plaque on existing signposts. [Section 2.3.20](#) discusses the W16-8 plaque.

#### **2.4.17 Parking Area Sign (D4-1) [2D.40]**

For parking areas on conventional roads, use the smaller D5-NM-3a-72 sign at a location 1/4 mile to 1 mile in advance of the parking area to allow the driver ample time to reduce speed and safely exit, and the D5-NM-4a-66 sign for the exit directional sign at the turnoff point to the parking area. (See the NMDOT Sign Code Listing, Appendix D, Page 26/38.)

#### **2.4.18 Rest Area [2D.42]**

For rest areas on conventional roads, use the smaller D5-NM-1a-60 sign at a location 1/4 mile to 1 mile in advance of the rest area to allow the driver ample time to reduce speed and safely exit, and the D5-NM-2a-48 sign for the exit directional sign at the turnoff point to the rest area. (See the NMDOT Sign Code Listing, Appendix D, Page 25/38.)

#### 2.4.19 Historic Markers

Historic Markers are special signs that are located in various areas throughout the State. These signs denote a specific event, location, and/or person(s) in New Mexico history. They have a unique rustic design developed in conjunction with the New Mexico Department of Cultural Affairs (NMDCA) – Historic Preservation Division. The Department by the NMDCA must approve all text on Historic Markers. The text is usually limited to approximately 50 words. See the NMDOT Historic Marker Standard Drawings for further design details and information.

It should be noted that Historic Markers do not have breakaway posts; therefore, these signs must be outside of the clear zone, regardless whether a designated pull out area is provided or not.

#### 2.4.20 Weigh Station Signing [2D.44]

Standard signing for a Weigh Station shall include the following signs:

- Advance Sign (D8-1).
- Regulatory Sign (R13-NM-2).
- Exit Direction Sign (D8-2).
- Gore Sign (D8-3).

Figure 2D-10 of the *MUTCD* shows an example of Weigh Station Signing; however, New Mexico State Law requires the R13-NM-2-84 sign for all weigh stations signing since it contains the text approved by the NM State Highway Commission. Do not use the R13-1 sign as shown in the *MUTCD*.

#### 2.4.21 General Motorist Service (GMS) Signs (D9 Series) [2D.45]

NMDOT no longer authorizes General Motorist Service (GMS) signing for gas, food, lodging and camping, because:

- In rural areas, these services are frequently within sight of the road, and these services are normally eligible for TODS in accordance with 18.21.4 NMAC, see [Appendix C](#), Page C-17).
- In urban areas, NMDOT does not permit GMS signing for these common services because GMS signs would create driver overload and sign clutter.

Therefore, GMS signing is limited to the following services:

- Hospital. A facility approved as a hospital by the Department of Health, and which provides continuous emergency care to the public with a doctor on duty 24 hours a day, 7 days a week.

- Police. A station manned by State Police 24 hours a day, 7 days a week.
- Tourist information. A facility approved by the appropriate public agency as a tourist or visitor information center which is open at least 6 months each year, including the period between Memorial Day and Labor Day. During the open season, the facility shall be open at least 8 hours per day, 7 days a week.

Therefore, only authorize GMS signs for hospitals, police stations and tourist information, at locations within 3 miles of the facility in urban areas and 5 miles of the facility in rural areas.

#### **2.4.22 Reference Location System Signs [2D.46]**

Install Reference Location Signs (D10-1, D10-2, and D10-3), commonly referred to as mileposts, at 1-mile intervals along a route, on both sides of the roadway. These signs identify mileage that assists the road user in estimating their progress. These signs also provide a method of identifying the location of emergency incidents and accidents, and aid in highway maintenance operations and services. Place signs in an ascending order with the zero or lowest number point beginning at the south and west state lines or at the south and west terminus point where routes begin within the state. The distance numbering is continuous for each route.

Except for the enhanced location reference signs for use on freeways in [Section 2.5.22](#), install Reference Location Signs (D10-1, D10-2, D10-3) at 1-mile intervals on all two-lane, two-way state and U.S. traffic routes, on each side of the roadway for both directions of travel except within incorporated city limits. NMDOT discourages back-to-back installations. If the District cannot install the D10-1, D10-2, or D10-3 sign at the correct location, move it up to 50 feet in either direction. If a 50-foot adjustment cannot accommodate the sign, then omit it.

In addition to the Reference Location Signs (D10-1, D10-2, and D10-3), there is also the Intermediate Reference Location Signs (D10-1a, D10-2a, and D10-3a) which may be installed at 1/10th-mile intervals between the “mileposts.”

Mount all reference location signs at a 4-foot mounting height, measured from the top of paved roadway to the bottom of sign. Position the signs in line with the mow line or up to 30 feet from the edge of driving lane.

Sign sizes vary according to number of digits and type of roadway classification. For installation and proper size, see NMDOT Standard Drawings 703-02-1/2 (Reference location sign and 1/10 Mile Delineators), 703-02-2/2 (Reference Location Sign Detail for Non- Interstate Highways), or the NMDOT Sign Code Listing.

### **2.4.23 General Information Signs (I series) [2D.48]**

Miscellaneous Guide Signs identify geographic features, such as incorporated village limit, town limit, city limit county line, reservation boundary, river crossing, creek crossing and arroyo crossing. Use the following signs:

- County Line (I-NM-2a, 2b and 2c).
- City Limit (I-NM-2d).
- Town Limit (I-NM-2e).
- River crossing (I-NM-3).
- Creek Crossing (I-NM-3a).
- Entering or Leaving Reservation (I-NM-12, 12a, 12b)

### **2.4.24 Signing of Named Highways [2D.49]**

A legislative act or a resolution by the Secretary must exist before installing any memorial names along a highway. Erect signs as required by the act or resolution.

As noted in Section 2D.49 of the *MUTCD*, if installed along a highway, memorial name signs shall not:

1. Be included on any directional guide sign.
2. Interfere with the placement of any other necessary highway signing.
3. Compromise the safety or efficiency of traffic flow.
4. Appear more than one time in each direction.

### **2.4.25 Trail Signs [2D.50]**

Trail signs provide road users with route information concerning a particular trail of cultural, historical or educational significance. Install these signs only if approved by the NMDOT. They are a low priority sign.

### **2.4.26 National Scenic Byways Signs (D6-4, D6-4a) [2D.52]**

Eight of the 126 National Scenic Byways established by the US Department of Transportation are in New Mexico. Anyone interested in submitting a route nomination needs to first contact the NMDOT Scenic and Historic Byways Coordinator, PO Box 1149 (SB-1 North), Santa Fe, NM 87504-1149, 505-827-5516.

### **2.4.27 Adopt-A-Highway Signs**

The purpose of NMDOT's Adopt-A-Highway program is to reduce department maintenance costs by allowing the business community to volunteer to pick up litter and in return for recognition of their service.

When NMDOT enters into an agreement with a business, display the business's name on a Business Name (I-NM-12d) plaque beneath the ADOPT-A-HIGHWAY LITTER CONTROL NEXT # MILE (I-NM-12c) sign.



## 2.4.28 Design Criteria

### General Design Guidelines

Part 8 of the *Standard Highway Signs Book* establishes the following general guidelines for designing highway sign:

1. The overall sign dimensions should be multiples of 6 inches.
2. Lettering should normally be uppercase, except destination names may be upper/lowercase.
3. On conventional roads, principal legend should be 6 inches in height (if necessary, 4-inch legend is permissible on low-volume 25-mph urban roads). The current rule-of-thumb is, use 1-inch legend height for every 40 feet of desired legibility distance.
4. Keep the amount of legend to a minimum to improve legibility. On conventional roads, guide signs should have no more than three lines of principal legend; and on expressways and freeways, a maximum of two destinations, plus directional copy (exit number, route numbers, cardinal directions, arrow, and exit information).
5. Base the width of the border on the size of the sign, but do not exceed the stroke width of the major lettering. (NMDOT's standard is in [Exhibit 2.4-F.](#))
6. For guide signs, the corner radii should be approximately one-eighth of the smaller side dimension, but never exceed 12 inches. (NMDOT's standard is in [Exhibit 2.4-F.](#))
7. The interline spacing between multiple lines of legend should be approximately 75 percent of the average height of the uppercase legend (e.g., a 12-inch vertical space between two lines of 16-inch legend).
8. The vertical space between the top line of legend or copy (e.g., shield, arrow, etc.) and the top of the sign, and the space between the bottom line of legend and the bottom of the sign, should be approximately equal to the average letter height of the nearest line of legend.
9. The horizontal space between the vertical edges of the sign and the beginning or end of the legend or copy should be approximately equal to the height of the largest letter.

10. The horizontal space between words, words and numbers, and between a word and an arrow in a line of copy, should be 100 to 150 percent of the uppercase letter height.

### Border Width and Corner Radii

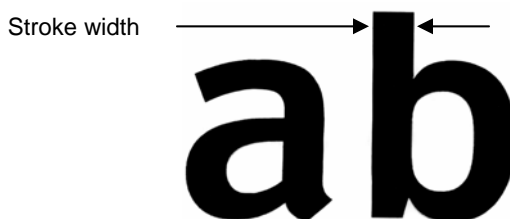
Guide signs do not use margins, and the border width and radius should conform to NMDOT Standard Drawing 701-14-1/2 and 701-14-2/2, which is also included as [Exhibit 2.4-F](#).

**Exhibit 2.4-F Border Width and Radius**

Guide Sign Height	Border *	Radius
3' 6" or less	1.125"	3"
4' to 5' 6"	1.125"	6"
6' to 7' 6"	2"	9"
8' or greater	3"	12"

\* On Page 8-2 of the *Standard Highway Signs Book*, FHWA also indicates that the width of the border should not exceed the stroke width of the major lettering of the sign. The major lettering is the destination name, and [Exhibit 2.4-A](#) shows the stroke width as a percentage of the nominal letter height. The stroke width is also the width of an uppercase "I" for both the Highway Gothic and the Clearview fonts.

However, note that the stroke width is varies for many of the Clearview letters, but the stroke width is typically the width of the vertical lines as illustrated below.



### Arrows

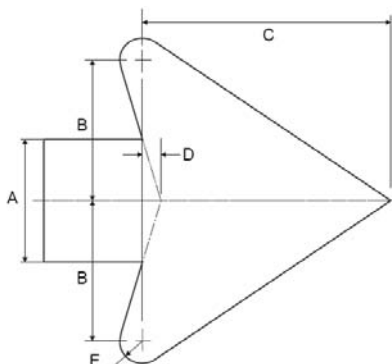
The size of the arrow is a function of the legend size. [Exhibit 2.4-G](#) shows details for the most common type of arrow, which is called the "Standard Arrow." The standard arrow is used on Destination signs, and on many regulatory and warning signs, and on the directional arrow assemblies used with route markers. The "Standard Arrow" is also used on Diagrammatic signs.

[Exhibit 2.4-H](#) shows details for the "Up Arrows" and "Down Arrows," which are generally only used on freeways and expressways.

Although it is called an "Up Arrow," almost all applications are at an angle, pointing diagonally upward.

Because the arrow names and applications are somewhat confusing, [Exhibit 2.4-I](#) summarizes the typical applications.

**Exhibit 2.4-G Standard Arrow Details**



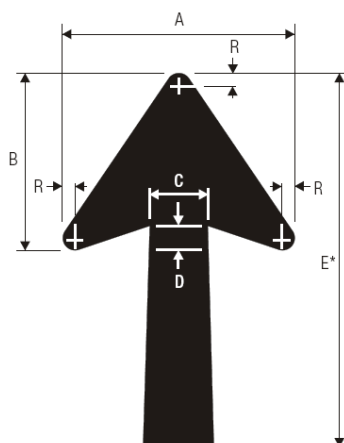
	Arrowhead Width x Length (inches)*	A	B	C	D	E
<b>S2</b>	2.05 x 3	0.75	0.875	1.5	0.125	0.15
<b>S4</b>	4.125 x 6	1.5	1.75	3.063	0.25	0.313
<b>S6</b>	6.125 x 9	2.25	2.625	4.5	0.375	0.438
<b>S8</b>	8.125 x 12	3	3.5	6.125	0.438	0.563
<b>S12</b>	12.125 x 18	4.5	5.188	9.125	0.688	0.875
**		8	9.188	16.25	1.25	1.625
**		16	18.375	32.5	2.5	3.25
**		24	27.56	48.75	3.75	4.875

\* A longer shaft is occasionally used, e.g., on some regulatory and warning signs

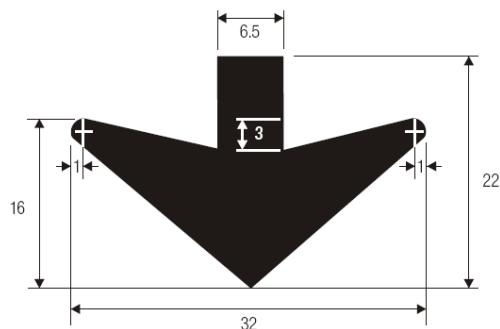
\*\* For use on diagrammatic signs



**Exhibit 2.4-H “Up Arrows” and “Down Arrows”**



UP ARROW



DOWN ARROW

	Letter Size	Suggested Size	A	B	C	D	E*	R
U1	8	15.125 x 20	15.125	11.563	3.75	1.313	17-25	0.813
U2	10-13.3	18.25 x 25	18.25	14	4.5	1.5	20-30	0.75
U3	16 or 20	22.25 x 35.625	22.25	17	5.375	1.75	25-35	1

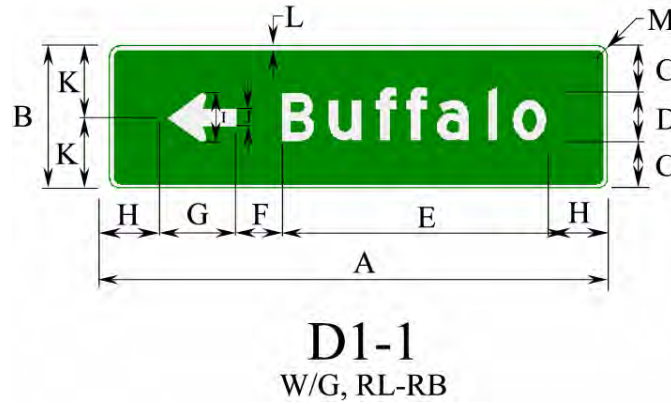
\* Use a taper of 0.5-inch per foot for longer or shorter shaft lengths.

**Exhibit 2.4-I Application of Arrows**

Type	Type Arrow Head	Shaft Taper?	Typical Applications
Standard	Approx. equilateral triangle with no rounding on the front point	No	As the name implies, this is the most common arrow. It is used on directional signs on conventional highways, and with an extended shaft on regulatory, warning, route marker arrows, and on diagrammatic signs.
Up	Approx. equilateral triangle with rounded front point	Yes	Exit direction and gore signs on expressways and freeways, typically oriented at an upward-pointing angle.
Down	Flat-headed arrow with no rounding on the front point	No	Overhead downward-pointing arrow for lane assignment

### 2.4.29 Designing a Destination Sign

Design the following Destination (D1-1) sign using 8-inch Clearview 3W Upper/Lowercase Legend.



- A. Total sign width.
- B. Total sign height.
- C. Nominal vertical spacing on the top and bottom (equal to the average letter height).
- D. Letter height (given as 8 inches).
- E. Text length.
- F. Spacing between arrow and text (1 to 1-1/2 times a letter height).
- G. Total length of arrow.
- H. Horizontal spacing (left & right, equal to a letter height for each side).
- I. Arrowhead width.
- J. Stem width.
- K. Distance from top or bottom of sign to center of arrow.
- L. Border thickness (see [Exhibit 2.4-F](#)).
- M. Corner radius (see [Exhibit 2.4-F](#)).

Determine the following for this sign:

- 1. Destination.
- 2. Arrow size.
- 3. Sign width.
- 4. Sign height and area.
- 5. Border thickness and corner radius.
- 6. Number of posts and estimated post size.

Solution:

- 1. The first line of copy on a destination sign should be the next destination along that route as indicated on the New Mexico Transportation Map. The arrow pointing to the left should be on the left side of the sign. Up to three destinations may be on each sign and the line of text having the longest length determines the

sign width. See Figure 2D-7 in the *MUTCD* for an illustration of this type of sign and Sections 2D.33 and 2D.34 for further information.

2. In this example, use 8-inch CV-3W upper/lowercase letters as requested. According to [Exhibit 2.4-G](#), the “S8” standard arrow when pointing to the left should have an arrowhead width of 8.126 inches and an overall length of 12 inches.
3. The sign width in this example can be determined either by using a computer program or by manually adding the letter widths and the left and right spaces as defined in FHWA’s interim approval. By applying horizontal spacing rules for this sign and going from the left-hand side of the sign to right-hand side, the rule states that, the space between the arrowhead or the first letter of text and the edge of the sign shall be equal to at least a full letter height. In this case, since the letter height is 8 inches, the space should then be a minimum of 8 inches. The arrow has an overall length of 12 inches. For the second space, between the end of the arrow stem and the first letter should also be at least 8 inches, and a maximum of 12 inches (actually, 1.0 to 1.5 times the letter height). By using the values in [Appendix A](#) (see Page A-3), or on Page 23 of FHWA’s “*Clearview Typeface Supplement*” (at <http://mutcd.fhwa.dot.gov/pdfs/clearfont/CTSEng.pdf>), the length of “Buffalo” can be determined for 4-inch CV-3W (e.g., 2.72 + 0.36, + 0.60 + 2.44 + 0.60, etc.), for a total length of 20.28 inches. Since our example requires 8-inch CV-3W legend, the actual string length would be double this value or 40.56 inches. The final horizontal space, last letter of text to the edge of the sign should also be at least 8 inches. The sum of the minimum values as shown in the following table is 76.56 inches. Since signs should be multiples of 6 inches, the next multiple is 78 inches. The difference of the widths is 1.44 inches, and the recommendation is to add this to the right space (technically, for a one-line sign, the extra space could have been put anywhere, but if there were more than one line of text, it is very desirable to align the left side of each message).

Element	Minimum Values (inches)	Final Dimensions (inches)
Left space	8 (min)	8
Arrow length	12	12
Space after arrow	8 (min)	8
String length	40.56	40.56
Right space	8 (min)	9.44
Total sign width	76.56	78

4. Standard criteria establish the sign height, which equals 24 inches. Therefore, the sign area is 14 square feet.

5. [Exhibit 2.4-F](#) indicates that a sign that is 24 inches high should use a 1.125-inch border, except the border should not be wider than the stroke width of the major lettering. [Exhibit 2.4-A](#) indicates that the stroke width of the 3W font is 17 percent of the legend height, or 1.36 inches (i.e.,  $8 \times 0.17 = 1.36$ ). Therefore, the 1.125 border thickness indicated in [Exhibit 2.4-F](#) is acceptable. The corner radii of sign borders should be approximately equal to one-eighth of the lesser side dimension, and one-eighth of 24 inches is 3 inches (which also conforms to [Exhibit 2.4-F](#)).
6. The number and size of posts can be determined by using the cross-section of the roadway at the location where the sign is to be located. With a known sign area, use the appropriate horizontal offset distance for that type of roadway and a proper vertical clearance from the top of pavement to the bottom of the sign, a design height can be determined, which is defined as the ground elevation at the base of the longest post to the bottom of the sign. Once the design height is established, then the number of posts, post size and post length can then be determined in accordance with NMDOT Standard Drawing 701-02-1/3. In this example, we will assume a design height of 7'-6" (90 inches), and with a sign area of 14 square feet, the standard indicates that two 12-gauge 2"x2" square posts are required. The minimum post length for the longest post is 116 inches by adding the following values together:
  - 22" behind the sign (because the post is to be within 2 inches of the top of sign).
  - 90" the design height, i.e., between the sign and ground.
  - 4" minimum below ground level (total of 8" in the anchor).

Therefore, use a 2" x 2" x 10' post — a 36-inch 2.25 x 2.25" base post will also be required for each post, but the multi-directional slip base is not required.

When using computer software to lay out a sign, it may be necessary to input the border width and radius, and the arrow dimensions, before the program automatically determines all spacing requirements within the sign and calculate the overall sign dimensions.

### 2.4.30 Shop Drawing Review

Before fabricating large guide signs, NMDOT generally requests sign shops to provide shop drawings to ensure that the sign shop correctly understands the Department's plan sheets and criteria. This process helps to avoid subsequent legal challenges due to misunderstandings.

This process may disappear in the future as more designers develop plan sheets with software that interfaces directly with sign manufacturing software. In this situation, the designer develops the layout in a "what-you-see-is what-you-get" format, and every reviewer sees an actual scaled drawing of the finished product.

In the interim, as a minimum, check the following details on shop drawings:

1. Spelling of destinations and other words.
2. Size and type fonts.
3. Arrow type, size and orientation.
4. Spacing between letters, words, lines of legend, and to the edge of the signs.
5. The overall sign dimensions.
6. Border width and radius.
7. Sign and legend colors and type of retroreflective sheeting (including fluorescent yellow for all yellow warning messages).
8. Sign fabrication method, e.g., type extruded aluminum channels, riveted flat sheet aluminum faces, direct applied copy, etc.

## 2.5 GUIDE SIGNS – FREEWAYS AND EXPRESSWAYS

### 2.5.1 General [2E.03]

Signs on sections of expressway with interchanges shall be designed the same as freeways.

### 2.5.2 Retroreflection or Illumination [2E.05]

All signs must use retroreflective sheeting.

Consider illumination of overhead signs on freeways and expressways when the roadway geometry limits the headlight illumination of the signs. Specifically, illuminate overhead signs when any of the following occur within 800 feet of the sign:

1. Horizontal curve to the left with a 1-degree or greater curve.
2. Horizontal curve to the right with a 2-degree or greater curve.
3. Sag vertical curve.

Ultimately, use engineering judgment to determine the need for sign lighting. If it is determined that sign lighting is necessary, it should conform to the sign illumination criteria in the IESNA Roadway Lighting Committee's recommendations in their *Recommended Practice for Roadway Sign Lighting* (see reference in [Section 1.1.8](#)), where minimum illumination should satisfy the values in [Exhibit 2.5-A](#). If one sign on a sign structure is illuminated, then illuminate all signs on that structure.

**Exhibit 2.5-A Recommended Maintained Lighting Levels for Signs**

Ambient Light Level	Maintained Average Sign Luminance (foot candles) *
Low	13
Medium	26
High	52

\* These illumination levels should consider loss of light due to dirt on the luminaires and deterioration of the bulb. In addition, the IESNA recommends a maximum-to-minimum uniformity ratio of 6 to 1.

NMDOT Standard Drawings 701-01-8/14, 11/14, 12/14, and 13/14 provide guidance on lighting rails, walkways, and safety railings to facilitate luminaires.

### 2.5.3 Designation of Destinations [2E.12]

The selection of destinations along freeways and expressways should be consistent, and generally include the following four types of destinations:

#### 1. Control Cities.

Control cities are especially important to non-local travelers, because unfamiliar travelers can usually relate only to major cities in establishing their direction of travel when getting on a freeway. The distances to control cities, as shown on Post-Interchange Distance Signs, also help unfamiliar travelers estimate trip duration and plan their stops. All distances should be the distance to the center of the control city.

Although most control cities are large, some may be small communities selected because they are strategically located at the junction of major highways, thus matching the destinations one would use in trip planning.

On Interstate highways, NMDOT uses the control cities included in the “*List of Control Cities for Use in Guide Signs on Interstate Highways*” (see [Section 1.1.8](#)). The control cities used on Interstate highways in New Mexico are included in [Exhibit 2.5-B](#), and listed in order from west to east, or south to north. For each of the Interstate highways, the first and the last control city is in an adjacent state.

#### Exhibit 2.5-B Interstate Control Cities

Interstate Route	Approved Control Cities*
10	Tucson, Lordsburg, Deming, Las Cruces, El Paso
25	El Paso, Las Cruces, Albuquerque, Santa Fe, Las Vegas, Raton, Pueblo, Colorado Springs
40	Flagstaff, Gallup, Albuquerque, Santa Rosa, Tucumcari, Amarillo

\* Includes the next control city in adjacent states

Use the next control city as the destination name in each of the following situations:

- A. At interchanges between freeways.
- B. At separation points of overlapping freeway routes.
- C. On directional signs on intersecting routes, to guide traffic entering the freeway.
- D. On all Pull-Through Signs.
- E. On the bottom line of all Post-Interchange Distance Signs.

2. Local Community Names.

Most interchanges use local community names as the destinations on Advance Guide Signs and Exit Directional Signs. However, there are two exceptions:

1. Designers should always use control cities as the designation at freeway-to-freeway interchanges, including the separation point of overlapping freeway routes.
2. For cities with multiple exits, designers should use either street names or traffic route numbers.

When local community names are used, the normal practice is to use the closest city or town identified on the current edition of the New Mexico Transportation Map, one to the left and one to the right of the freeway. You may make an exception, however, if the intersecting route is a U.S. or NM numbered traffic route, and a larger but more distant community exists along the same traffic route and all of the following are satisfied:

- The population-to-distance ratio (i.e., distance to the freeway), is 50 percent greater than the population-to-distance ratio of the closer community.
- The more distant community does not have a closer interchange along the freeway or expressway.
- The larger community is within 20 miles.

The destination(s) used on the Advance Guide Signs and Exit Direction Signs at a specific interchange should also be used as the destination(s) on the top line(s) of the Post-Interchange Distance Signs at adjacent interchanges for approaching traffic.

3. Street Names.

Except for freeway-to-freeway interchanges in urbanized areas with more than one exit, street names should be the principal destination shown on Advance Guide Signs, Exit Directional Signs, Post-Interchange Distance Signs, and Interchange Sequence Signs.

If the intersecting street is a numbered traffic route, a Route Marker and Cardinal Direction Marker should also be included on the Advance Guide Sign or Exit Directional Sign. However, on Post-Interchange Distance Signs and Interchange Sequence Signs, use the Route Marker and Cardinal Direction Marker in lieu of the street name.

Do not use a city name and a street name on the same sign.



#### 4. Supplemental Destinations.

A Supplemental Guide Sign may show one or two extra destinations accessible from an interchange that are not included on the standard interchange signing. These “bonus destinations” may be communities or other large traffic generators. See [Section 2.5.12](#) for criteria to select these large traffic generators.

### 2.5.4 Size and Style of Letters and Signs [2E.13]

As noted in [Section 2.4.5](#), NMDOT anticipates using the Clearview font for all white legends on all guide signs. [Exhibit 2.5-C](#) shows specific sizes for minimum sign copy for freeway and expressway guide signs. (Note, when specifying upper/lowercase legend, only show the size of the uppercase legend, e.g., 16CV-5WR U/L or 16E-mod. U/L).

### 2.5.5 Arrows for Interchange Guide Signs [2E.18]

Freeway and expressway guide signs use all three types of arrows discussed in [Section 2.4.7](#) and illustrated in [Exhibits 2.4-G](#) and [2.4-H](#).

Use the “standard arrow” with an extended shaft for Diagrammatic Signs as discussed in [Section 2.5.6](#). Also, use the standard arrow with the normal shaft length on directional signing along off-ramps at single-exit interchanges (e.g., diamond interchanges).

Use “up arrows” for overhead and ground-mounted Exit Direction Signs and Gore Signs to indicate an exit ramp. Specifically, use the U3 “up arrow” for Exit Directional signs and the U2 “up arrow” for Gore Signs. The arrow should be located at the side of the sign corresponding to the direction of exiting traffic. The normal orientation is a 45-degree up angle, but if the off-ramp angle is flatter or sharper than usual, you may adjust the orientation accordingly; for example, set at 30, 60 degrees.

You may use a “down arrow” only on an overhead sign when it is necessary to make a lane assignment for a particular destination or route. In this situation, the arrow must point down to the center of the appropriate lane, using either a completely vertical or a slightly tilted orientation. All down arrows should be 32 inches wide and 22 inches high.

### 2.5.6 Diagrammatic Signs [2E.19]

The purpose of a diagrammatic sign is to graphically show the exit configuration to identify the through lanes and the lanes that must exit. To help drivers, especially older drivers, clarify where the various highway lanes go, use 8-inch wide lanes instead of the 5-inch wide lanes specified in Table 2E-4 of the *MUTCD* and on Page 8-3 of the *Standard Highway Signs Book*.

The footnote on the bottom of Page 8-3 in the *Standard Highway Signs Book* states, “Wider lane widths appear to better meet the needs of older drivers.”

**Exhibit 2.5-C Minimum Legend Sizes for Miscellaneous Guide Signs**

Type of Sign	Minimum
<b>A. Advance Guide and Exit Directional Signs</b>	
Exit Panel Word	10 CV-4W
Exit Panel Numeral & Letter	15 CV-5WR
Route Marker	36 x 36, 45 x 36
Cardinal Direction (first letter & balance of word)	15 CV-5WR & 12 CV-5WR
Destination – upper/lowercase	16 CV-5WR
Distance Message Word	10 CV-5WR
Distance Message Numeral	15 CV-5WR
Distance Message Fraction	10 CV-5WR
Exit Directional Arrow	22.25 x 36.625*
<b>B. Gore Signs</b>	
Word	12 CV-5WR
Numeral & Letter	15 CV-5WR
Arrow	18.25 x 25**
<b>C. Pull-Through Signs</b>	
Destination – upper/lowercase	16 CV-5WR
Cardinal Direction (first letter/balance)	15/12 CV-4W
Route Marker Shield	36 x 36, 45 x 36
<b>D. Supplemental Guide Signs</b>	
Destination – upper/lowercase	13.3 CV-5WR
“EXIT” Word or Action Message	10 CV-4W
Exit Numeral & Letter	15 CV-5WR
<b>E. Changeable Message Signs</b>	
Characters	18
<b>F. Interchange Sequence Sign</b>	
Interchange Name or Route No. (upper/lowercase)	13.3 CV-5WR
Numeral	13.3 CV-5WR
Fraction	10 CV-5WR
<b>G Next Exits Sign</b>	
Place Name (upper/lowercase)	13.3 CV-5WR
NEXT # EXITS	10 CV-5WR

Type of Sign	Minimum
<b>H. Distance Signs</b>	
Word (upper/lowercase)	13.3 CV-5WR
Numerals	13.3 CV-5WR
<b>I. General Motorist Service Signs</b>	
“EXIT” Word	10 CV-5WR
Exit Numeral & Letter	15 CV-5WR
Services	10 CV-5WR
<b>J. Rest Area &amp; Scenic Area Signs</b>	
Word	12 CV-5WR
Distance Numeral	15 CV-5WR
Distance Fraction	12 CV-5WR
Distance Word	10 CV-5WR
Action Message	12 CV-5WR
<b>K. Reference Location Signs</b>	
Word	4 CV-3W
Numeral	10 CV-5WR
<b>L. Boundary &amp; Orientation Signs</b>	
Word (upper/lowercase)	8 CV-5WR
<b>M. Next Exit &amp; Next Services Signs</b>	
Word and Numeral	8 CV-5WR
<b>N. Exit Only Panels</b>	
Word	12 CV-5WR
<b>O. Diagrammatic Signs</b>	
Lane Widths	8
Lane Line Segments	1.5 x 6
Gap Between Lane Line Segments	6
Stem Height (up to upper point of departure)	30
Arrowhead (std. arrow)	varies***
Space Between Arrowhead and Route Shield	12

- \* Use the U3 Size from **Exhibit 2.4-G**  
 \*\* Use the U2 Size from **Exhibit 2.4-G**  
 \*\*\* See design details in **Exhibit 2.4-F**

Use the standard arrow, as illustrated in [Exhibits 2.4-E](#) and [2.4-F](#), on Diagrammatic Signs, except the stem will always have an extended length. The number of lanes will determine the size of the arrowhead, e.g., the shaft will be 8, 16 or 24 inches wide

depending if the arrow represents one, two or three travel lanes, respectively, going in the same direction.

Use fluorescent yellow (FY) sheeting for all EXIT ONLY (E11-1, E11-1a, E11-1b, E11-1c) panels used to supplement a lane drop graphic, and for the upper half of a LEFT EXIT plaque.

### **2.5.7 Signing for Interchange Lane Drops [2E.20]**

Lane drops at interchanges present additional problems for road users. To provide better visibility and emphasis, use overhead Major Guide Signs for all lane drops at interchanges, and use an EXIT ONLY (E11-1, E11-1a, E11-1b, E11-1c) panel, as illustrated in Figure 2E-9 of the *MUTCD*, whenever the through route continues as the primary route.

For a left lane drop on a diagrammatic sign, use a left exit plaque as illustrated in Figure 2E-8 of the *MUTCD*, except the word “LEFT” shall have a black legend on a fluorescent yellow (FY) background.

### **2.5.8 Route Signs and Trailblazer Assemblies [2E.25]**

As noted in Section 2E.25 of the *MUTCD*, use cutout route marker shields on large directional guide signs. Therefore, use the round or oval State Route (M1-5) markers on M2-2 and larger guide signs as detailed on Page 2/2 in Appendix A of the NMDOT Sign Code Listing, and on NMDOT Standard Drawing 701-14-2/2.

On Interstate highways, use the Interstate Route Marker with Direction and Shield (M1-NM-1a) for all route confirmation assemblies. The normal location is about 1,500 feet beyond the last acceleration lane after each interchange.

### **2.5.9 Interchange Exit Numbering [2E.28]**

NMDOT uses the reference location exit numbering system (commonly called the “milepost exit numbering system”) as discussed in the *MUTCD*. To assist motorists, it is important to use the same exit number in both directions at full interchanges. In other words, use the nearest “milepost” number to the center of the interchange, instead of the nearest milepost to the beginning of the exit ramps.

Display Interchange exit numbers on an Exit Number Panel (E1-5) on all Advanced Guide signs and Exit Direction signs. The E1-5 panel includes the word EXIT (or EXITS for multiple exits), the exit number and any suffix letter for multiple exits as indicated in [Exhibit 2.5-D](#).

If an E1-5 panel does not have two primary signposts supporting the panel, use two, 5.5-foot W6x9 upright supports, or other optional Exit Number Panel supports (see NMDOT Standard Drawings 701-05-1/2 and 701-05-2/2).

In addition, display exit numbers on all Exit Gore signs, supplemental signs, General Motorists Service signs, and Specific Service signs. See NMDOT Standard Drawing 701-05-1/2 for additional details.

**Exhibit 2.5-D Exit Number Panel (E1-5)**



### 2.5.10 Interchange Classification [2E.29]

NMDOT does not use an interchange classification system as outlined in Section 2E.29 of the *MUTCD*.

### 2.5.11 Next Exit Supplemental Signs [2E.31]

Because of the rural nature of most of New Mexico, use Next Exit Supplemental Advance Guide signs (E2-1, E2-1a) only when interchanges are more than 15 miles apart.

### 2.5.12 Other Supplemental Guide Signs [2E.32]

Supplemental Guide Signs can provide destination information to the road user that is not on the standard interchange signs (i.e., Advance Guide Signs and Exit Directional Signs). For example, if the standard interchange signs are using street names for a city but significant communities exist outside of the immediate area, it is possible to use the community names as shown on the example.



Attractions may be the most common supplemental destinations, for which, NMDOT has adopted AASHTO's "*Guidelines for the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways*" (see [Section 1.1.8](#)). This document clarifies what attractions qualify for supplemental signing and what does not. [Exhibit 2.5-E](#) summarizes the facilities that warrant signs

The *MUTCD* only permits one Supplemental Guide sign for each interchange approach, with a maximum of two traffic generators on the sign.

Prior to installing any Supplemental Guide signing, ensure that all complimentary signing is in place at ramp terminals and along the interchanging road and other roads as necessary to direct the motorist to the traffic generator.

### **Exhibit 2.5-E Criteria for Signing Traffic Generators**

Type of Generator	Specific Criteria	Major Metro Area*	Urban Area*	Rural Area*
Public Airport	No. of scheduled flights per day	35	15	10
	Distance from Interchange	5 miles	10 miles	20 miles
College or University	Total enrollment full and part-time students	4,000	2,000	1,000
	Distance from Interchange**	5 miles	10 miles	20 miles
Arenas, Auditoriums, Convention Halls, Stadiums, State and Nat'l Parks/Monuments, Museums, Major Recreational Areas (Fairgrounds, Historical Interest Facilities, Arboretums, Municipal Golf Courses, Ski Areas) and other transportation systems	Annual attendance	100,000	50,000	25,000
	No. of seats (if applicable)	4,000	2,000	1,000
	Distance from Interchange**	20 miles	50 miles	100 miles

\* Major Metro Area has population above 250,000.  
Urban Area has a population of 5,000 to 250,000.  
Rural Area has a population under 5,000.

\*\* The maximum distance increases 1 mile for each 10 percent over the minimum requirement listed, up to a maximum of two times the minimum distance listed.

**Exhibit 2.5-F** identifies those traffic generators that do not normally warrant signs. Under unusual circumstances, the District Engineer or his or her designee may authorize supplemental signing for traffic generators listed in this exhibit. For example, unusual conditions may include but not be limited to safety or operational problems, temporary need or major special events occurring. However, consider any exception to **Exhibit 2.5-F** as a temporary fix, either for the duration of the special event or for no longer than 1 year.

## Exhibit 2.5-F Traffic Generators That Do Not Normally Warrant Signs

### **BUSINESSES**

Amusement Parks  
TV/Radio Stations  
Theaters  
Motels/Hotels/Inns  
Trailer Parks  
Industrial Parks and Plants  
Shopping Centers

### **CEMETERIES**

Local or State  
Private/Public  
Military

### **COMMUNITIES**

Civic Centers Military  
Libraries  
Churches  
Subdivisions

### **GOVERNMENTAL**

Research/Experimental  
County and City Facilities  
Courthouses  
Driver's License Centers  
Highway Buildings  
Jails/Prisons  
Civil Defense Facilities  
Maintenance Facilities  
Power Plants

### **HISTORICAL**

Homes and Buildings (excluding historic districts)  
Privately Owned Facilities

### **MEDICAL**

Mental Facilities  
Research Facilities  
Sanitariums  
Infirmaries or Treatment Centers  
Veterans Facilities  
County, Fraternal or Nursing  
Retirement Facilities  
Humane Facilities  
Emergency Medical Services\*

### **MILITARY**

Sites or Detachments  
Armories  
Arsenals

### **RECREATIONAL /CONSERVATIONAL**

Country Clubs and Private Golf Courses  
Fish Hatcheries, Game Farms, Game Preserves, and Ranger Stations  
Points of Interest  
Camps: Scout, Church, 4-H, Youth, and YMCA/YWCA

### **SCHOOLS**

Grade/High  
Seminaries  
Private

\* May be included on General Motorist Service (GMS) signs (see [Section 2.4.21](#))

### 2.5.13 Exit Direction Signs [2E.33]

The Exit Direction Sign repeats the information as shown on the Advance Guide sign or signs and includes a standard 22"x 36" up arrow at a 45-degree angle, pointing in the

direction of the exit point. Install an Exit Direction sign at all interchanges, either as a ground-mount or as an overhead sign.

#### **2.5.14 Exit Gore Signs [2E.34]**

NMDOT uses the Exit Gore Sign (E5-1a), with the exit number within the sign area. Place the E5-1a sign in the interchange gore to indicate the exit or departure point from the main roadway. Use the 18.25 x 25 (U2 size) “up arrow,” typically aligned at a 45-degree upward angle, but the actual angle should approximate the angle of departure.

Where the safe exit speed is unusually low and additional emphasis is necessary in order to ensure safety, mount a Speed Advisory Panel (E13-1) with a black legend and border on a reflectorized yellow background below the Gore Sign. The width of E13-1 panel must be the same width as the E5-1a sign.

Fabricate the E5-1a sign from a flat aluminum panel attached to backing zeos, and subsequently attach the assembly to three-2.50" x 2.50" square tubing posts with each post attached to an approved slip base system. However, any E5-1 sign with three or more digits that also has the optional E13-1 warning panel will need to be constructed of extruded aluminum and mounted on I-Beam posts and base posts.



#### **2.5.15 Post-Interchange Distance Signs [2E.35 & 2E.36]**

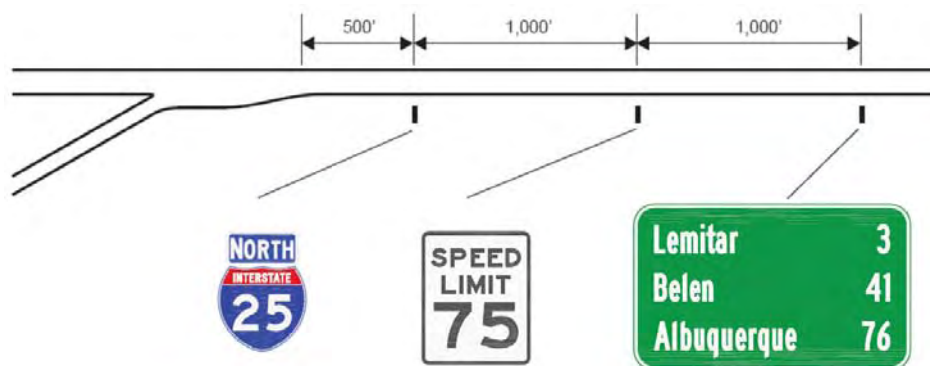
Use Post-Interchange Distance signs in rural areas where there are greater distances between exits. The Post-Interchange Distance sign shall always have at least two lines of copy to a maximum of three lines of copy. The top line of copy should designate the destination at the next interchange. If there are two designations at the next interchange (for example, one in each direction), then one of them may be put on the second line, and if not, a designation between the next interchange and the control city may be used. The name chosen for the second line of the distance sign may vary on successive signs. The third or bottom line of copy must always be the name of the appropriate “control city.”



[Exhibit 2.5-G](#) shows the relative position of the Route Marker Confirmation Assembly, and the Speed Limit and Post-Interchange Distance signs.



### Exhibit 2.5-G Spacing of Signs after an On-Ramp



#### 2.5.16 Interchange Sequence Signs [2E.37]

Interchange Sequence signs are primarily used in urban areas where there is less than 800 feet between interchanges. As a rule, install these signs in the median as an overhead sign, and typically install them back-to-back on a butterfly support, with one sign for each direction of travel.

Although similar to a Post-Interchange Distance sign, the Interchange Sequence sign shows the next two or three interchanges to alert drivers of the close proximity of the upcoming interchanges.

With these closely spaced interchanges, drivers may only see one, two, or at the most three Interchange Sequence signs before seeing an Exit Directional sign.

#### 2.5.17 Diamond Interchanges [2E.45 & 2E.46]

There are many diamond interchanges in the state. To help prevent wrong way movements, always install DO NOT ENTER (R5-1) and WRONG WAY (R5-1a) signs at the end of exit ramps as included in NMDOT Standard Drawing 701-18-1/1.

#### 2.5.18 New Mexico Speed Limit Notification Signs

Section 66-7-102.1, NMSA 1978, states that the State Transportation Commission shall erect billboard-size signs at entry points into New Mexico on Interstate and major state highways, warning and informing motorists of New Mexico speed limits, the fines for speeding in New Mexico and New Mexico's commitment to enforce its speed limits. When appropriate, install the sign within the first mile inside the New Mexico border.



### **2.5.19 General Services Signs [2E.51]**

Except for HOSPITAL and 24-HR PHARMACY, General Service signs should not be used in urban areas. In rural areas, only use General Service signs where the road user can return to the highway and continue in the same direction of travel. See Section 2E.51 in the *MUTCD* for additional information.

### **2.5.20 Rest Area and Scenic Area signs [2E.52]**

Signing for Rest Areas and Scenic Areas must conform to the same provisions as described in [Section 2.4.18](#). Larger rest area and scenic area signs are required for expressway and freeway applications. All signs for rest areas and scenic areas shall have white legend, symbols and border on a blue background. Rest areas and scenic areas shall have at least one Advance guide sign 1 or 2 miles in advance of the facility. Between the advance sign and the gore of the rest area, you may place a REST AREA NEXT RIGHT (D5-1b) sign.

### **2.5.21 Tourist Information and Welcome Centers [2E.53]**

New Mexico has several Tourist Information and Welcome Centers in the state generally situated at entry points into the state. Tourist Information signs direct the road user to a location where maps, literature and other information are available. Tourist information signs shall have white lettering and border on a blue background. Use the E-NM-23-240 sign for information centers on expressways and freeways.

Install the Tourist Information Free Maps & Literature (E-NM-23-96) sign for tourist information centers located on or near conventional roadways.

### **2.5.22 Reference Location Signs [2E.54]**

FHWA requires reference location signs at 1-mile intervals on all expressways and freeways. These are the D10-1, D10-2 and D10-3 signs, which are typically called “mileposts.”

### **2.5.23 Weigh Station Signing [2E.58]**

Weigh Station Signing for freeways and expressways follows the same requirements as described in [Section 2.4.20](#) of this manual except for larger signs. The Exit Direction sign (D8-2) for freeways and expressways shall be located a minimum of 1,500 feet in advance of the gore.

New Mexico State Law requires the R13-NM-2-222 sign at all freeway and expressway weigh stations since this sign contains the text approved by the NM State Highway Commission. Do not use the R13-1 sign shown in the *MUTCD*. See Figure 2D-10 in the

*MUTCD* for sample sign layout and the NMDOT Sign Code Listing Appendix D for a sign face detail of sign R13-NM-2-222.

#### **2.5.24 Preferential Lane Signing [2E.59]**

The *MUTCD* has an exhaustive discussion on preferential lane and HOV signing in Section 2E.59.

#### **2.5.25 Emergency Median Crossovers**

NMDOT's emergency median crossover policy is for Interstate highways and other controlled access divided highways. Crossovers are for the exclusive use of emergency vehicles, law enforcement vehicles, and highway maintenance and service vehicles, i.e., they are not for use by the public.

Construction of emergency median crossovers may be by contract or by District Maintenance crews; however, their location and design shall conform to the following:

1. Because of the close proximity of interchanges, do not provide emergency crossovers on urban freeways.
2. Emergency crossovers will normally not be provided when interchanges are spaced less than 5 miles apart. Moreover, when the spacing between interchanges exceeds 5 miles, the distance between crossovers, and between crossovers and interchanges, should be at least 3 miles apart.
3. Crossovers may be provided only when all of the following are satisfied:
  - Sight distance is adequate, and the crossover can be located more than 0.5 mile from any structures crossing over the roadway.
  - The crossover can be located more than 1 mile from any ramp terminal, including rest areas.
  - The location is not on a superelevated curve.
  - The median width is sufficient to allow emergency vehicles to turn without interfering with traffic.
4. Crossover should be depressed below shoulder level to be inconspicuous to traffic.

General design elements, and signing and delineation, shall conform to NMDOT Standard Drawing 701-20-1/1. (It is important to evaluate the need for drainage structures during design.)

### **2.5.26 Temporary Access Control Signing**

When temporary concrete or bituminous manufacturing plants, or waste sites, are set up on or adjacent to the highway right-of-way, it is sometimes necessary to allow construction vehicles to enter the highway at locations other than at an interchange. For these situations, special signing will be required to warn motorists of the entrance of the slow-moving construction vehicles.

On Interstate highways, it is necessary to obtain FHWA's approval on an Interstate Access Permit Request on Ongoing Construction Project Form before authorizing these entry points. A copy of the permit is included in the State Access Management Manual. A Traffic Control Plan must be included with the permit request.

## 2.6 SPECIFIC SERVICE SIGNS

Specific Service signs, commonly referred to as “logo signs,” are guide signs that provide road users on Interstate highways and other freeways with business identification and directional information for services or qualified attractions.

Part 2F in the *MUTCD* addresses Specific Service Signs, and New Mexico’s rules for this program are at 18.21.3 NMAC, as included in [Appendix C](#) (see Page C-7). Limit the use of Specific Service signs to areas primarily rural in character where adequate sign spacing can be maintained.

The signs have white legend and border on a blue background, and up to six attached logos, each of which identifies a specific business by their symbol or trademark, or by their business’s name. Each logo is a separate attached panel.

Specific Service signs provide the road user with commercial logo information regarding GAS, FOOD, LODGING, CAMPING, and ATTRACTIONS. The signs are for use only on Interstate highways, and on other freeways on the National Highway System. When used on the non-Interstate freeways, the signs are identical to those on Interstate highways. Place mainline signs beginning about 1 mile or more from an interchange. Additional signs are frequently necessary to provide directional guidance; e.g., ramp signs along off-ramps that provide access in more than one direction, and trailblazer signs along other roads when the business is not clearly visible.

The NMDOT Commercial Logo Program Administrator (headquartered in Santa Fe in the Traffic Services Section) administers the logo program. The layout and design of logo signing shall be in accordance with the Department’s Rule 88-2(L).



In addition to the Department’s policy in 18.21.3 NMAC, FHWA allows up to 12 logos for any service, but not more than six logos per panel, and no more than four panels per approach (Interim approval, dated September 21, 2006).

## **2.7 TOURIST-ORIENTED DIRECTIONAL SIGNS**

Tourist-Oriented Directional Signs (TODS) provide direction to eligible businesses located in rural areas or in communities with a population of 2,000 or less. TODS cannot be installed on freeways or prior to an interchange on an expressway.

Part 2G in the *MUTCD* addresses TODS, and New Mexico's rules for this program are at 18.21.4 NMAC, as included in [Appendix C](#) (see Page C-17). The layout and design of logo signing shall be in accordance with the Department's Rule 88-2(L).

## 2.8 RECREATIONAL AND CULTURAL INTEREST AREA SIGNS

In accordance with Part 2H of the MUTCD, recreational and cultural interest areas are attractions or qualified traffic generators that are open to the public for the purpose of play, amusement or relaxation.

“Recreational areas” include state and national parks, fairgrounds, zoos, campgrounds, gaming facilities and ski areas.

“Cultural interest areas” include museums, art galleries and historical buildings and sites. Qualified traffic generators include colleges or universities, military bases, arenas, auditoriums, convention halls and stadiums.

Examples of traffic generators that do not qualify include shopping centers, theaters, cemeteries, libraries, churches, courthouses, highway buildings, veteran’s facilities, country clubs, private golf courses, and public and private schools (grade, middle and high).

Section 2H of the *MUTCD* addresses recreational and cultural interest area signs. In New Mexico, use the following standard guide signs to direct motorists to these facilities:

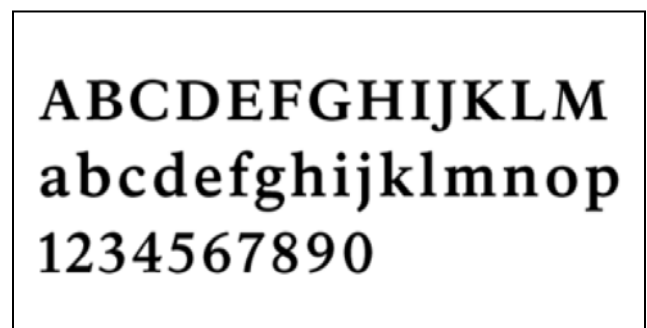


- On freeways, use Business Logo on either the “attraction” or “camping” Specific Service signs as appropriate. In areas without Specific Service signs (e.g., urban areas), install large attractions on Supplemental Guide signs.
- On conventional highways, use a Tourist-Oriented Directional Signs (TODS). If TODS cannot be installed in urban areas, use generic symbols from Figure 2H-2 of the *MUTCD*.

Within a recreation or cultural interest area, use the symbol signs identified in Figure 2H-5 in the *MUTCD*.

National Park Service (NPS) and the Rawlinson Roadway typeface.

Historically, the United States National Park Service (NPS) has used a modified Clarendon font on their guide signs. However, the NPS retired the old font because they now have an improved font called “Rawlinson Roadway,” which improves legibility distance by 20 to 30 percent for the same length legends.



Moreover, on March 10, 2006, FHWA approved the new font, and in accordance with a revised Memorandum of Understanding between FHWA and the NPS, the new font is now required on all NPS informational, directional, guide and service signs.

District Traffic Engineers should also be aware that the NPS has entered into a “requirements contract” with Bunting Graphics (from Verona, Pennsylvania), that stipulates that Bunting Graphics is the “sole provider” of signs for the National Parks Service. Therefore, District Traffic Engineers should work with the NPS to obtain the required signs.

In addition to national parks, the required use of Rawlinson Roadway font applies to national battlefields, national historic sites, national memorials, national military parks, national monuments, national parkways, national preserves, national recreational areas, national seashores, national trails, and some world historic sites. At the time of writing, the following 17 facilities come under the NPS within New Mexico (see <http://www.nps.gov/state/nm/>):

1. Aztec Ruins National Monument
2. Bandelier National Monument
3. Capulin Volcano National Monument
4. Carlsbad Caverns National Park
5. Chaco Culture National Historic Park
6. El Camino Real de Los Tejas National Historic Trail
7. El Camino Real de Tierra Adentro National Historic Trail
8. El Malpais National Monument
9. El Morro National Monument
10. Fort Union National Monument
11. Gila Cliff Dwellings National Monument
12. Old Spanish National Historic Trail
13. Pecos National Historic Park
14. Petroglyph National Monument
15. Salinas Pueblo Missions National Monument
16. Santa Fe National Historic Trail
17. White Sands National Monument

## 2.9 SCHOOL SIGNING

Use signs as recommended in Subchapter 7A of the *MUTCD*.

Signing and pavement markings for schools shall conform to the NMDOT draft *Handbook on School Signing*. The school district's Traffic Safety Committee is responsible for developing the safe school route plan, identifying the major school crossings and, for facilities on state highways, contacting the appropriate District Traffic Engineer.

On state highways, the District Traffic Engineer is responsible for specifying the necessary traffic control devices and determining their costs, preparing a reimbursement agreement for the school district's approval, and implementing the plan after the school district signs the agreement. Do not order or install any traffic control devices until there is an executed agreement.

As noted in Row 3 of [Exhibit 2.1-J](#), new warning signs for schools should use fluorescent yellow-green retroreflective sheeting material.

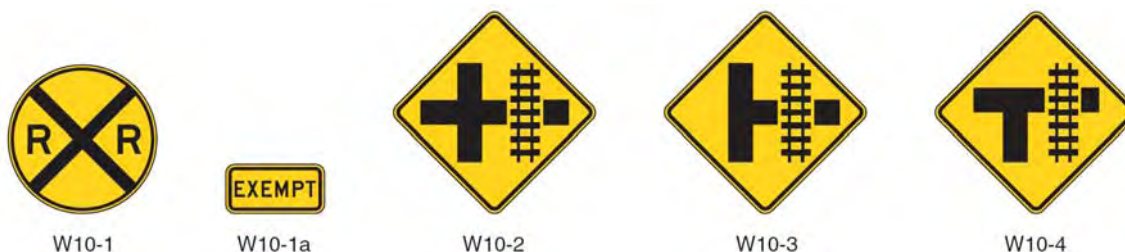


## 2.10 RAILROAD SIGNING

### 2.10.1 General

Use signs as recommended in Chapters 8B and 10C of the *MUTCD*.

In accordance with the *MUTCD*, the recommended location for the Highway-Rail Grade Crossing Advance Warning (W10-1, W10-2, W10-3 and W10-4 signs), should be determined from Table 2C-4 of the *MUTCD*, using Condition B and the “stopped” condition (i.e., “0” mph) since motorists may need to stop at the crossing. These values are much lower than those used in earlier editions of the *MUTCD*. The location of these signs also controls the location of the pavement markings.



### 2.10.2 Crossbuck Signs (R15-1) [8B.03]

Section 8B.03 of the *MUTCD* typically requires a 2-inch wide strip of retroreflective sheeting material on the front and the back of all Crossbuck (R15-1) sign supports, and on the back of the R15-1 sign. On Page I-6 of the *MUTCD*, it specifies that the retroreflective sheeting should be in place by January 17, 2011.



I-7

### 2.10.3 Signing to Stations

In an effort to promote intermodalism, it is desirable to install the Train Station (I-7) sign or the Light Rail Transit Station (I-12) sign in both directions of travel on the nearest state highway. If a trailblazer were necessary on a local roadway, the installation on the state highway would be contingent upon a commitment by local authorities to install the necessary trailblazer on their roadway.



I-12

Districts may install the name of the station above the I-7 or I-12 sign, and an appropriate directional arrow below the sign.

District 3 recently started using trailblazer designs for the Rail Runner Express similar to the one illustrated. This design is included in this manual because the program will undoubtedly



expand into other districts in the future. Legend for the station name is generally 6D, except use 4D in urban areas where space is limited.

By converting the station name in the Rail Runner signs to upper/lowercase Clearview legend, the legibility distance would increase by approximately 29 percent.
--

## 2.11 BICYCLE AND MULTI-USE FACILITY SIGNING

### 2.11.1 General

The design and placement of bicycle signs should generally be in accordance with Chapter 9B of the *MUTCD*. All bicycle-warning signs in New Mexico shall use an approved fluorescent yellow-green retroreflective sheeting material.

### 2.11.2 Bicycle Signing on the Interstate Highways

State rule 18.31.3 NMAC (see [Appendix C](#), Page C-43) provides for the use of bicycles on rural Interstate highways. Four of the five contiguous states also allow bicycles on the shoulders of their Interstate highways, in part, because they believe that using the shoulders of Interstate highways may be less dangerous than using some alternative rural highways. In addition, in some cases the Interstate highway is the only option for travel to a given destination.

Bicyclists may use the shoulder of an Interstate highway for transportation or recreation purposes except at the following locations:

- Within the boundaries of cities with a population of 50,000 or more.
- At any location deemed inappropriate by the Secretary or his or her designee, and the appropriate signs are in place to inform bicyclists.

At the time of printing, the areas of Albuquerque and Las Cruces are the only two areas where bicycles may be prohibited on the Interstate highway. Therefore, Districts may install the NON-MOTORIZED TRAFFIC PROHIBITED (R5-7-48) sign or the No Bicycles (R5-6-48) sign on the on-ramps within these two areas, and along the mainline of the Interstate highways approaching these two areas at locations where bicyclists must exit.

18.31.3.6 NMAC states, in part: *“Allowing bicycles on the shoulders of some interstate highways is not intended to stand as a route recommendation, nor to imply that such shoulders are safer for bicyclists than other routes.”*

### 2.11.3 Bicycle Routes [9B.20]

The purpose of bicycle route signing is to provide guidance for cyclists. For consideration as a candidate for a designated bicycle route, a high-speed conventional road must accommodate bicycles reasonably well, including either a bike lane, a useable paved shoulder, or a wide curb lane.

When considering a bicycle route or when planning highway improvement projects, consult the Statewide Bicycle-Pedestrian-Equestrian (BPE) Coordinator. The BPE Coordinator, along with the District Engineer and/or the District Traffic Engineer, will make the needed determination of the suitability of the state highway for designation as a bicycle route. Off-system facilities such as city and county roads or paved trails may also be integrated into state bicycle routes through signage with approval of the local entity involved.

### Numbered Bicycle Routes

Continuous sections of state highway with meaningful starting and ending points are preferred for designated bicycle routes. The numbering of a designated bicycle route shall follow the criteria established by the BPE Advisory Committee and the BPE Coordinator. Routes with a numerical bicycle route designation shall use the Bicycle Route (M1-8-NM) sign as illustrated in [Exhibit 2.11-A](#). The M1-8-NM sign shall contain the route designation on a green background with a retroreflective white legend and border. The sign shall measure 12"x18" with 1.5-inch corner radii.

#### **Exhibit 2.11-A Bicycle Route Sign (M1-8-NM)**



Place M1-8-NM signs at the beginning of the designated bicycle route, immediately after intersections with other state highway or bicycle route, in advance of locations where the bicycle route changes direction, and at other locations where the sign would be beneficial. On segments of highway that would otherwise require M1-8-NM signs at intervals of 20 miles or more, install at least one M1-8-NM sign at the roughly at the mid-point of the gap. Destination (D1-1b, D1-1c) plaques may be mounted directly below the M1-8-NM sign, and the M4-11 through M4-13 supplemental plaques may be mounted above the M1-8-NM sign. If used, install the appropriate arrow (M7-1 through M7-7) as the bottom sign in the sign assembly.



D1-1b



D1-1c

### Non-Numbered Bicycle Routes

Some state highways have generic Bike Route (D11-1) signs, which are also an acceptable means to designate a bike route. D11-1 signs do not conflict with the M1-8-NM and need not be removed except to be replaced by an M1-8-NM with a specific numerical designation. These signs may mark a “spur” or other segment that will not receive a specific numerical designation or to mark a non-state bicycle route that intersects a state highway.



D11-1

### Shared Route Signing

If a State highway does not meet the designated bicycle route criteria but bicyclists routinely use it, consider the route for a shared route designation. For these highways, use the Bicycle Warning (W11-1) sign in combination with the SHARE THE ROAD (W16-1) plaque. It is acceptable to use a single sign assembly just at specific problem locations, or to repeat the sign assemblies as infrequently as every 10 to 20 miles.



W11-1 & W16-1

If a designated bicycle route terminates for reason of facility inadequacy, Districts may use a W11-1 sign and the W16-1 plaque at this location if bicyclists continue using the state highway despite the termination of the designated bicycle route. This combination of signs is also appropriate within a designated bicycle route, or elsewhere, in order to warn motor vehicles and bicyclists of a condition that may temporarily necessitate shared use of the roadway. The distance signage is placed in advance of a specific condition should follow *MUTCD* recommendations per posted speed limit.

## 2.12 MISCELLANEOUS SIGNING

### 2.12.1 DWI Memorial Signs

The Traffic Safety Bureau manages the DWI Memorial Signing Program as part of their public education and information series. The application for the program and the sign layout are included in [Appendix B](#), and is available at [http://nmshtd.state.nm.us/upload/images/Traffic\\_Safety/memorial\\_sign\\_application.doc](http://nmshtd.state.nm.us/upload/images/Traffic_Safety/memorial_sign_application.doc).



### 2.12.2 Safety Corridor Signing

Safety Corridors are segments of highways identified by the Traffic Safety Bureau as having higher traffic crash rates than statewide averages for similar roadways. “Safety Corridor” signs identify these segments of highway to alert the road user to be cautious and to obey all traffic laws when driving in these areas. Safety Corridor signing is considered as a temporary solution until the crash rate can be reduced and sustained, or until major improvements are funded and made.

The following NMDOT Standard Drawings address Safety Corridor signing:

- 701-19-1/3 – Safety Corridor Sign Layout.
- 701-19-2/3 – Typical Intersecting Roadway Safety Corridor Signing.
- 701-19-3/3 – Safety Corridor Sign Face Details. This standard includes two series – one series for Interstate highways and the other series for non-Interstate highways.

### 2.12.3 Outdoor Advertising Signs (Billboards)

The NMDOT’s “*Billboard Permit, Installation and Removal Policy*” is defined in Administrative Directive 703, and available on INTRANS. Essentially, this policy establishes a procedure for District maintenance patrols to report any observed billboard activity visible from the main travel way to the Beautification Unit of the State Maintenance Bureau and the appropriate Assistant District Engineer.

# Chapter 3

# Markings

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## 3.1 GENERAL

### 3.1.1 Standardization of Application [3A.02]

All pavement markings applied to state highways shall be retroreflective.

### 3.1.2 Materials [3A.03]

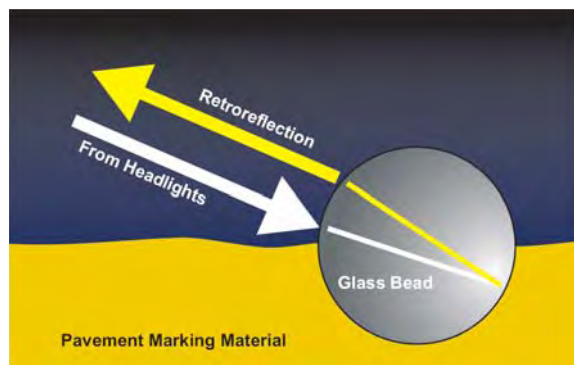
#### Overview

All pavement-marking materials used on state highways shall meet the requirements of Section 704 of the Standard Specifications. In particular, provide traffic paint in accordance with the Department's Specifications for White and Yellow Traffic Line Paints Used on Construction Projects (High Solids Waterbase Acrylic) Specification M-TPC-WBACR for standard acrylic paint or M-TPC-WBACRHB for Hi-Build acrylic paint, available from Traffic Services Engineer.

Waterborne Paint with glass beads is the most popular and cost-effective pavement-marking material used in United States. It is the least expensive of the materials used today, but unfortunately, it is one of the least durable of all pavement-marking materials. However, manufacturers of waterborne paint are making significant improvements in both durability and retroreflectivity.

Common types of materials used in United States for pavement markings include the following:

- Waterborne (WB) paint
- Hot thermoplastic
- Preformed thermoplastic
- Preformed tape (tape)
- Epoxy
- Methyl methacrylate (MMA)
- Polyurea



With the exception of the waterborne paint, the other materials listed above come under the general classification of “durable” pavement-marking materials. However, some materials are more durable than other materials, and not all materials are compatible with each other or with some road surfaces. [Exhibit 3.1-A](#) shows material compatibility between existing and new striping materials as documented by the Texas Department of Transportation (Table 2-3 of TxDOT's *Pavement Marking Handbook*, August 2004).

### Exhibit 3.1-A Material Compatibility for Restriping

Original Material	New Material					
	WB Paint	Thermo	Tape	Epoxy	MMA	Polyurea
WB Paint	Y	Y	N	N	N	N
Thermo	Y	Y	N	N	N	N
Tape	N	N	N	N	N	N
Epoxy	Y	Y	N	Y	-	-
MMA	Y	Y	N	-	Y	-
Polyurea	Y	Y	N	-	-	Y

[Exhibits 3.1-B](#) and [3.1-C](#) also show findings of Texas Department of Transportation for bituminous and Portland cement pavements, respectively, as a function of remaining pavement life (Tables 2-19 and 2-20 of TxDOT's *Pavement Marking Handbook*, August 2004). An analysis of their findings indicates that:

1. Thermoplastic is the preferred material on bituminous pavements; and
2. Thermoplastic or epoxy is the preferred material on Portland cement pavements, except epoxy is only for long lines (i.e., not for legends).

### Exhibit 3.1-B Recommended Materials for Bituminous Pavements

Traffic Characteristics	Pavement Remaining Service Life*		
	0 – 2 years	2 – 4 years	> 4 years
ADT < 1,000	<b>Thermo</b> , WB Paint	<b>Thermo</b> , WB Paint	<b>Thermo</b> , WB Paint, Epoxy, Polyurea, MMA
1,000 < ADT < 10,000	<b>Thermo</b> , WB Paint	<b>Thermo</b> , Epoxy, Polyurea, MMA	<b>Thermo</b> , Tape, Epoxy, Polyurea, MMA
ADT > 10,000	<b>Thermo</b> , Epoxy	<b>Thermo</b> , Tape, Epoxy, Polyurea, MMA	<b>Tape</b> , <b>Thermo</b> , Epoxy, Polyurea, MMA
Heavy Weaving or Turning	<b>Thermo</b> , Epoxy	<b>Thermo</b> , Epoxy, Polyurea, MMA	<b>Thermo</b> , Epoxy, Polyurea, MMA

\* The highest-performing material(s) is in bold type.

**Exhibit 3.1-C Recommended Materials for Portland Cement Pavements**

Traffic Characteristics	Pavement Remaining Service Life*		
	0 – 2 years	2 – 4 years	> 4 years
ADT < 10,000	<b>Thermo</b> , Epoxy, WB Paint	<b>Epoxy, Thermo</b> , WB Paint, Polyurea, MMA	<b>Epoxy, Thermo</b> , Polyurea, WB Paint, MMA
10,000 < ADT < 50,000	<b>Thermo</b> , Epoxy, WB Paint, Polyurea	<b>Epoxy, Thermo</b> , Tape, Polyurea, WB Paint, MMA	<b>Epoxy, Thermo</b> , Polyurea, MMA
ADT > 50,000	<b>Epoxy, Thermo</b>	<b>Epoxy, Thermo</b> , Tape, Polyurea, MMA	<b>Tape, Thermo</b> , Polyurea, Epoxy, MMA
Heavy Weaving or Turning	<b>Epoxy, Thermo</b> , Polyurea	<b>Epoxy, Thermo</b> , Tape, Polyurea, MMA	<b>Epoxy, Thermo</b> , Tape, Polyurea, MMA

\* The highest-performing material(s) is in bold type.

Black Contrast Markings

White pavement markings are frequently difficult to see on Portland cement roadways during some daylight conditions. Therefore, a recommended procedure is to apply black epoxy, flooded with black aggregate to make the white markings stand out. For skip lines, crews can apply a black line immediately after the white skip lines, using the same dimensions for both colors. Another method, which is acceptable for all types of lines, is to place an 8-inch wide line as the background material and then apply the white marking over the black marking.

Black epoxy should satisfy color chip 37038 of Federal Standard 595B, and have similar quality as the white epoxy pavement markings.

**3.1.3 Eradication**

Water blasting is the preferred method to remove pavement markings if traffic patterns change. Section 721 of the Standard Specifications covers removal of pavement markings, and states “*Use equipment that is capable of completely removing pavement stripes 1/4±1/8-inch deep and at least twice the width of the stripe.*”

Other methods of pavement eradication should have written approval by the District Engineer, District Traffic Engineer, or their designees.

Black paint or non-reflective black removable marking tape is not an acceptable method of obliterating a pavement marking, even for a short time period.

### 3.1.4 Retroreflectivity

As noted in [Section 2.1.10](#), in 1993 Congress directed the U.S. Secretary of Transportation to revise the *MUTCD* to include minimum levels of retroreflectivity for traffic signs and pavement markings. Subsequent to the congressional mandate, FHWA sponsored extensive research on the retroreflectivity needs of drivers for both signs and pavement markings, and has adopted minimum retroreflectivity values for signs.

To date, FHWA has not published proposed minimum values for pavement markings, but recent research indicates that minimum, maintained retroreflectivity values should vary by color and travel speed, and the existence of lighting or raised retroreflective pavement markers (RRRMs) as shown in [Exhibit 3.1-D](#). However, providing and maintaining a minimum level of pavement marking retroreflectivity is difficult for the following reasons:

- Most markings are “manufactured” on location under varying temperature and humidity conditions, applied over existing surfaces that may be less than ideal (e.g., rough texture due to surface treatment, oil contaminants, etc.), and traffic sometimes drive on or cross over the markings before they are cured, all of which affect the initial retroreflectivity.
- The retroreflectivity of some line segments deteriorate much faster than other segments because vehicles frequently ride on the lines (e.g., in heavy weaving areas, around curves, and at intersections). In addition, asphalt roadways sometime bleed and the asphalt material may track onto the pavement markings, causing permanent discoloration and loss of retroreflectivity.
- Snowplows, sanding, chemicals, and tire studs and chains cause markings to deteriorate very quickly during the winter months.
- If lines wear out during the winter, it may not be practical to replace them for several months.

Therefore, all of the above will be major concerns when FHWA proposes their minimum retroreflectivity recommendations.

#### Exhibit 3.1-D Recommended Minimum Retroreflectivity Values

Condition	Speed Classification		
	≤ 40 mph	45-55 mph	≥ 60 mph
White	85	100	150
White with RRPMS or Lighting	30	35	70
Yellow	55	65	100
Yellow with RRPMS or Lighting	30	35	70

## 3.2 PAVEMENT AND CURB MARKINGS

### 3.2.1 No-Passing Zone Pavement Markings [3B.02]

When centerline markings are used, establish no-passing zones at all vertical or horizontal curves where the passing sight distance is less than the values specified in [Exhibit 3.2-A](#), when measured in accordance with [Exhibit 3.2-B](#) (as copied from Figure 3B-5 of the *MUTCD*).

**Exhibit 3.2-A Minimum Passing Sight Distance**

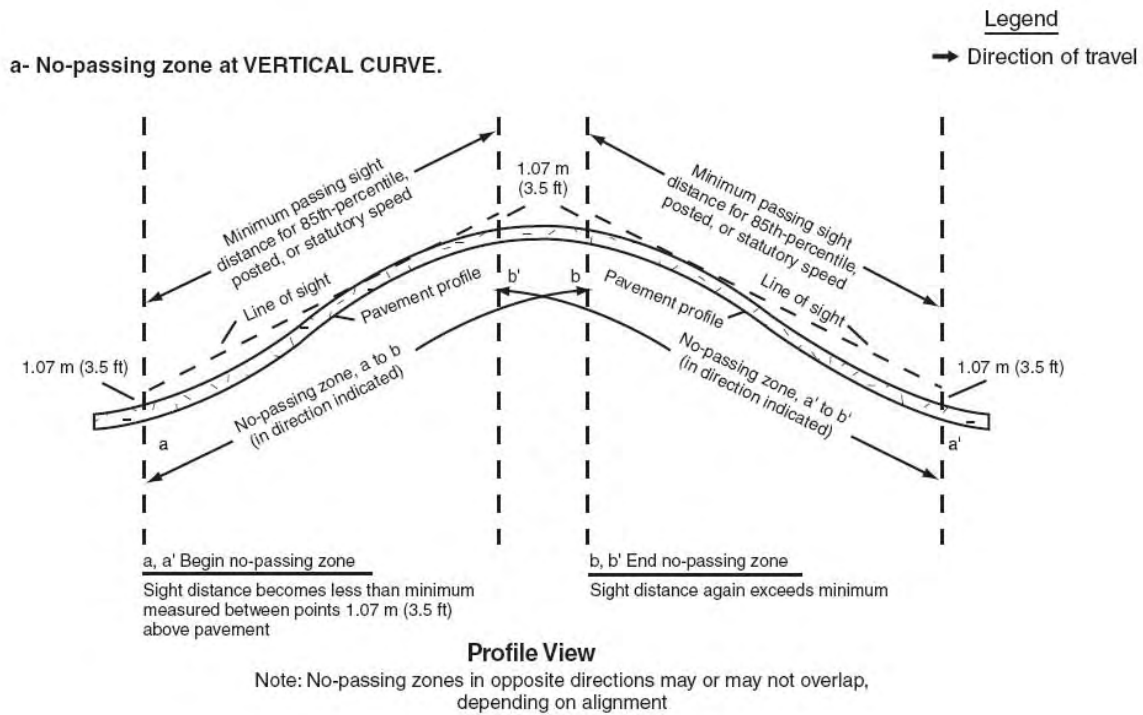
85th-Percentile or Posted or Statutory Speed Limit (mph)	Minimum Passing Sight Distance (feet) *
25	450
30	500
35	550
40	600
45	700
50	800
55	900
60	1,000
65	1,100
70	1,200

\* Measure passing sight distance between two points that are 3.5 feet above the pavement.

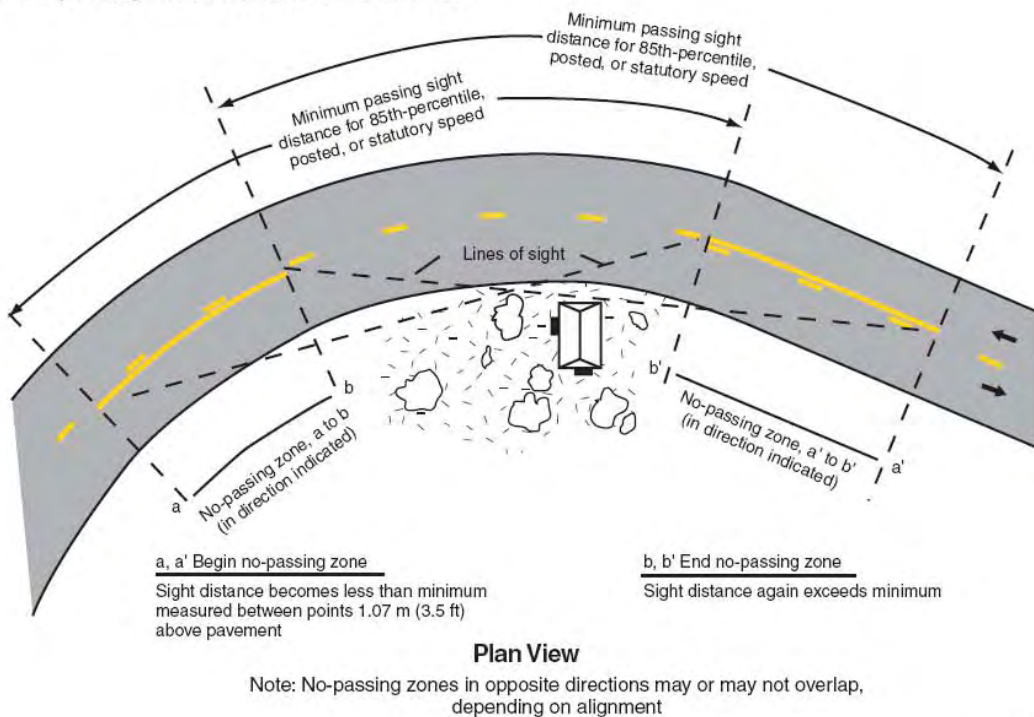
In addition to locations where passing sight distance is substandard, consider no-passing zones at the following locations:

- (a) In advance of an obstruction such as a bridge support pillar, a channelizing island, or a safety zone, that separates the two lanes of traffic.
- (b) In advance of and on or within, any bridge, tunnel or underpass designated as a narrow bridge or underpass.
- (c) In advance of a STOP (R1-1), YIELD (R1-2) sign, or a traffic signal.
- (d) In advance of an intersection with a state highway or a major roadway where passing may be undesirable due to the high number of crossing or turning movements.

## Exhibit 3.2-B Determining Limits of No-Passing Zones at Curves



### b- No-passing zone at HORIZONTAL CURVE.



Not to scale

- (e) In advance of a highway-rail grade crossing.
- (f) In advance of and within a school zone.
- (g) In advance of a divided highway.
- (h) In areas where an analysis of vehicle crashes shows an unusually high number of passing-related crashes.
- (i) In areas where the roadside development includes many driveways and intersections where passing would create frequent potential conflicts.
- (j) At locations where the roadway width is very restrictive, shoulders are nonexistent or in poor condition, the roadway cross-section has an excessive crown, or obstacles are close to the roadway.
- (k) In areas where traffic volumes are very heavy and there would be limited opportunities for motorists to pass other vehicles.
- (l) Where a passing zone would otherwise be less than 400 feet in length.
- (m) Where engineering judgment indicates that allowing passing is undesirable because a better passing area exists farther ahead.

If establishing a no-passing zone because of above Items (a) through (g), the recommended minimum length of no-passing zone in advance of the physical feature is as indicated in [Exhibit 3.2-C](#).

**Exhibit 3.2-C Advance Distance for No-Passing Zones**

<b>Speed Limit or 85th-Percentile Speed (mph)</b>	<b>Distance (feet) *</b>
35 or less	250
40	300
45	350
50	400
55	450
60	500
65	550
70	600
75	650

\* These values are for the above warrants (a) through (g).



### 3.2.2 White Lane Line Pavement Markings and Warrants [3B.04]

On state highways, use lane line markings on all freeways, expressways, and multilane roadways, to delineate the separation of adjacent travel lanes going in the same direction of travel.

Item (c) in [Section 3.2.1](#) indicates that no-passing zones should be in advance of STOP and YIELD signs, and traffic signals. Similarly, broken lane lines should become solid lane lines at a distance in advance of the intersection that is approximately equal to the value in [Exhibit 3.2-C](#).

Many states are using 6-inch wide white lane lines on freeways and multilane roadways. Because it is a broken line, the extra cost is minimal but the visibility is much better.

Use solid white lane line markings to separate through lanes from auxiliary lanes such as uphill truck lanes, left- or right-turn lanes, and preferential lanes. Districts are encouraged to use wider lane lines, such as 8-inch wide lines, to emphasize the fact that something is unusual.

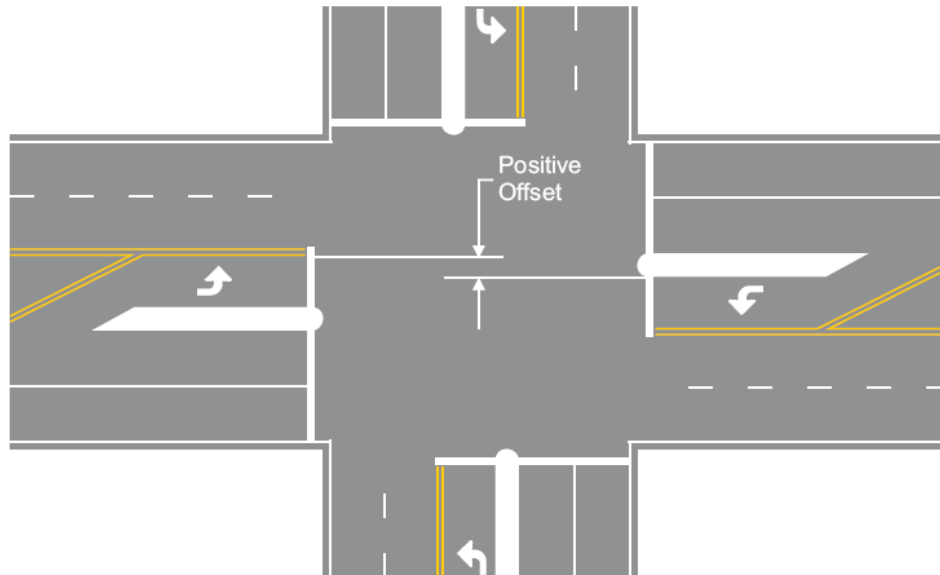
### 3.2.3 Other White Longitudinal Pavement Markings [3B.05]

#### Opposing Left-Turn Lanes

At unsignalized intersections and signalized intersections with permissive left-turn phases, whenever possible, use a positive offset at opposing left-turn lanes to reduce the sight distance obstruction caused by a vehicle in the opposing left-turn lane. A 3-foot positive offset will usually negate the sight-distance problem caused by a vehicle in the opposing left-turn lane.

On undivided highways where pavement width allows, use solid lines to form a parallel or tapered island between the left-turn lane and the adjacent through lane, as shown in [Exhibit 3.2-D](#). In some cases, it may be feasible to use reduced-width lanes at the intersection to accommodate the creation of an island.

### Exhibit 3.2-D Positive Offset at Opposing Left-Turn Lanes



#### Channelizing Lines at Entrance and Exit Ramps

In accordance with NMDOT Standard Drawing 704-05-1/1, white channelizing lines at entrance and exit gores on freeways and expressways shall be 12 inches wide instead of 8 inches as required in Figure 3B-8 of *MUTCD*.

Figure 3B-8 in the *MUTCD* and the NMDOT Standard Drawing 704-05-1/1 both show an optional dotted extension line at exit ramps. Although optional, Districts are encouraged to use these “puppy tracks” (2-foot long white stripe and a 4-foot gap) and to make them 12 inches wide (the same width as the channelizing lines) to clearly delineate the ramps. Districts may also consider similar treatment for entrance ramps.

#### Chevron and Cross-Hatch Markings

NMDOT Standard Drawings 704-03-2/2 and 704-05-1/1 show chevron markings in the neutral area between the white channelizing lines for both entrance and exit ramps. As shown on the standards, the center-to-center spacing of the chevron markings is a function of the posted speed limit (i.e., 15 feet for speeds less than 30 mph, 20 feet for speeds of 30 to 45 mph, and 30 feet for speeds greater than 45 mph).

Although Section 3B.05 of the *MUTCD* discusses the possible use of white chevron markings in the neutral area at exit ramps, the *MUTCD* does not suggest chevron markings at entrance ramps. Therefore, because NMDOT uses bolder channelizing lines

The *MUTCD* never mandates chevron markings, and the only place that it actually recommends chevron markings is in the neutral area between concurrent flow preferential lanes and other travel lanes when the separation is more than 4 feet. See Section 3B.23 in the *MUTCD*.

than specified in the *MUTCD* (i.e., 12 inches instead of 8 inches), and since chevron markings create an on-going maintenance issue, chevron markings should be considered optional within all gore areas.

Design details for chevron markings (or cross-hatching) are not included in the *MUTCD* except Section 3B.05 indicates that within a neutral area with a width of more than 4 feet between a preferential lane and other travel lanes traveling in the same direction, chevron markings should be at a spacing of 100 feet or greater.

In a recent survey of state practices, most state DOTs indicated that they do not use chevron markings and cross-hatching. Moreover, in light of the absence of national guidance, it is not surprising that for the states that do use these markings; everyone seems to use different widths, angles and spacing.

NMDOT Standard Drawing 704-03-2/2 does not show the line width for chevron and cross-hatch markings, it does show a 45-degree angle and the spacing of the chevrons.

Districts are encouraged to take the following actions relative to chevron and cross-hatch markings:

1. Be stingy on their use, and never use them at entrance ramps.
2. When applying markings to a new road surface, use 12-inch wide lines, at 30 degrees to the adjacent traffic lane, and installed at the following spacing – 20 feet for speeds of 25 mph, 35 feet for speeds of 30 to 45 mph, and 60 feet for speeds of 50 mph and above. (Note, a 30-degree angle will not look like a 30-degree angle when viewed at a low angle from a vehicle, but it does require about 20 percent more material than a 45-degree angle.)

NCHRP Synthesis 356, *Pavement Markings – Design and Typical Layout Details*, provides an excellent synthesis of highway practices, and is available at [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_356.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_356.pdf)

### 3.2.4 Extensions through Intersections and Interchanges [3B.08]

Districts are encouraged to use dotted extension lines through intersections and interchange areas as included in NMDOT Standard Drawing 704-03-2/2. These extension lines, which some Districts affectionately call “puppy tracks,” should be a minimum of 4 inches wide and 2 feet long, with a 2-foot space between the ends of the markings.

Although extension lines are normally optional, they are mandatory for dual turn lanes in order to emphasize the need to turn into the proper lane and to help vehicles avoid sideswiping other vehicles. Therefore, in these situations, use lines conforming to Figure 3B-22 of the *MUTCD*.

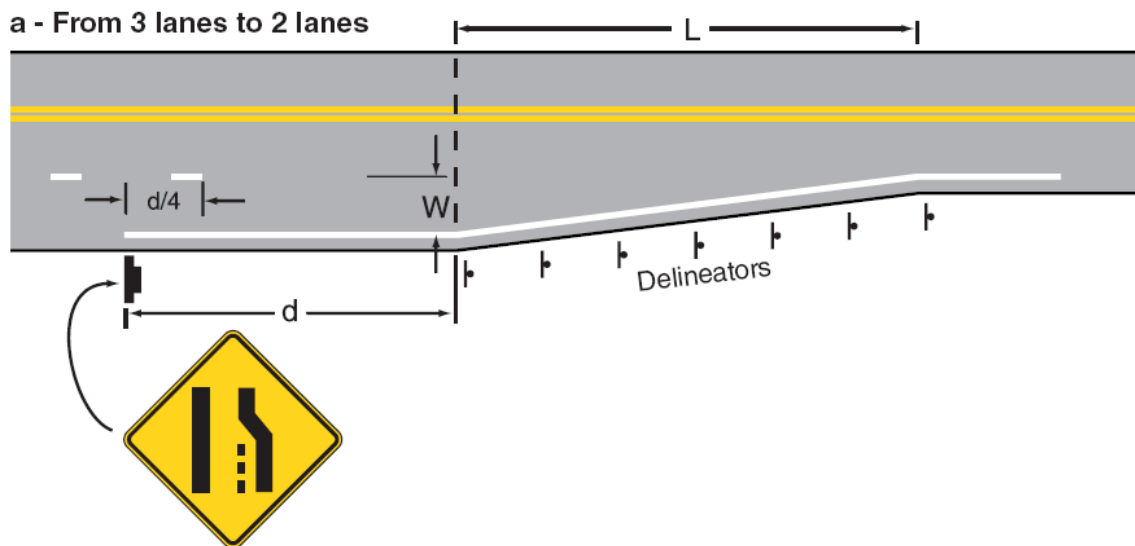
### 3.2.5 Lane Reduction Transition Markings [3B.09]

Section 3B.09 of the *MUTCD* discusses lane reductions from two directional lanes to one directional lane, with several different scenarios identified in Figure 3B-12 of the *MUTCD*.

[Exhibit 3.2-E](#) illustrates a typical situation. It is important, however, to keep in mind that the value “d” is the value of Condition A in [Exhibit 2.3-A](#).

Districts are encouraged to use the lane-reduction arrow within the lane that is ending to emphasize the lane reduction. On freeways, repeat the lane-reduction arrow every 200-feet as field conditions indicate.

**Exhibit 3.2-E Typical Lane Reduction Marking**



D = Advance warning distance (see Condition A in [Exhibit 2.3-A](#))  
 L = Transition length in feet  
 W = Offset in feet  
 S = Posted, 85th-percentile, or statutory speed in mph  
 L = WS for speeds of 45 mph or more; or  $WS^2/60$  for speeds less than 45 mph

### 3.2.6 Stop and Yield Lines [3B.16]

Place stop lines and yield lines at the location at which motorists should stop or yield. There is a tendency to place these lines too far back from the edge of the intersecting roadway where drivers do not have a clear line of sight to proceed safely. Therefore, before placing these lines, review sight distance from a 3.5-foot height above the pavement, keeping in mind that the driver's eyes will be about 8 to 10 feet behind the stop or yield line.

One reason that drivers sometimes enter an intersection without the proper clearance is because they had poor sight distance at the location where they stopped.

Common sight obstructions include on-premise signs, mailboxes, trees, traffic signal controller cabinets, etc.

### 3.2.7 Crosswalk Markings [3B.17]

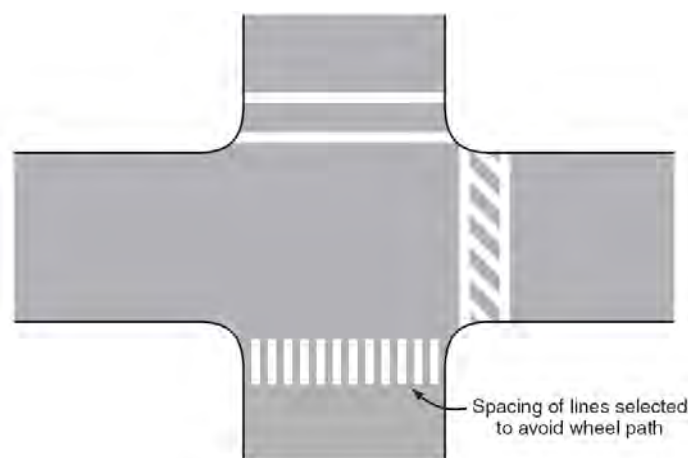
Research of marked versus unmarked crosswalks at 1,000 locations in 16 states indicates that crosswalk markings do not always improve pedestrian safety. Specifically, do not use crosswalk markings on multilane roadways with over 12,000 vehicles a day if the traffic on that roadway does not have a STOP sign, traffic signal, or some type of traffic calming device.<sup>1</sup> Therefore, apply crosswalks judiciously.

[Exhibit 3.2-F](#) illustrates the three types of crosswalk pavement markings contained in NMDOT Standard Drawing 704-03-1/2. When used, coordinate with the local entity to determine the type of crosswalk marking. However, in each case, the minimum effective width of the crosswalk is 6 feet, as measured between any transverse markings. The table included in [Exhibit 3.2-F](#) also shows some key design elements.

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<sup>1</sup> Zegeer, C. V., J. R. Stewart, and H. Huang. *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines*. FHWA-RD-01-075, FHWA, Washington, DC, March 2002.

### Exhibit 3.2-F Types of Crosswalks



Type of Crosswalk	Minimum Width of Transverse Markings	Minimum Width of Longitudinal Markings
Standard – solid white crosswalk lines	6 inches	n/a
Diagonal stripes	optional, but 6 inches if used	12-24 inches
Piano keys – longitudinal stripes	optional, but 6 inches if used	12-24 inches

### 3.2.8 Parking Space Markings [3B.18]

Districts may be involved in the layout of parking lots at rest areas and along streets. All parking space markings should be white in color and a minimum of 4 inches wide.

Within parking lots, the preferred minimum parking space dimensions are 9 feet wide and 17.5 feet long for the typical 90-degree parking angle. Suggested dimensions are included in Table 14-6 in the “*Traffic Engineering Handbook*,” (see [Section 1.1.8](#)).

Parking along streets and highways is a secondary use of the roadway; therefore, prohibit parking if it causes congestion or an unacceptable level of service. Parking prohibitions can be either on a full-time basis or during peak hours.

Parallel parking spaces along streets should be 8 feet wide by 22 to 26 feet in length, except the first and last stall might be as short as 20 feet. Use care to maintain adequate setbacks from intersections, driveways, crosswalks and fire hydrants. Minimum parking prohibition distances in [Section 66-7-351](#), NMSA 1978, include the following:

- Fire Hydrants – 15 feet.
- Crosswalk at intersection – 20 feet.
- Stop sign, traffic signal, or flashing beacon – 30 feet.

- Railroad crossing – 50 feet.
- Fire station entrance – 20 feet.

### Conventional Angle Parking

[Section 66-7-352](#), NMSA 1978, prohibits angle parking on any federal-aid or state highway unless the State Highway Commission has determined by resolution or order entered in its minutes that the roadway is of sufficient width to permit angle parking without interfering with the free movement of traffic.

Although businesses generally like angle parking because it provides approximately twice as many parking spaces as provided by parallel parking, there are safety concerns because of limited sight distance when patrons are backing out of the stalls. This is especially difficult when there is a mix of vehicles such as small cars and large SUVs.

Therefore, only consider angle parking along streets where the following criteria are satisfied:

1. The parking and maneuver area equals or exceeds the distance indicated in [Exhibit 3.2-G](#).

### **Exhibit 3.2-G Diagonal Parking Minimum Maneuver Area**

Parking Angle (degrees)*	Minimum Parking Maneuver Area (feet)**
45	30
60	37
90	43

\* The angle that vehicles on the nearest travel lane need to turn to the right to park in the center of a parking stall.

\*\* The perpendicular distance between the right edge of the nearest travel lane and the front edge of the parking stalls.

2. Parked vehicles do not adversely affect the available intersection sight distance.
3. Additional travel lanes are not required for the existing traffic volumes to achieve a satisfactory level of operation.
4. Pedestrian/bicycle activity is minimal within the parking maneuver area.

If the State Highway Commission approves angle parking, layout and mark the parking stalls in accordance with the request.

If a crash analysis indicates that, the parking-related crash rate within the area of existing angle parking is greater than the rate on similar portions of the same street or other streets within the municipality, the District should eliminate the angle parking.

#### Back-in Angle Parking

Because of sight restrictions involving conventional angle parking, a new trend is to use back-in angle parking. The following cities have been some of the first to use back-in angle parking:

- Indianapolis, IN
- New York, NY
- Portland OR
- Pottstown, PA
- Salem, OR
- Salt Lake, UT
- Seattle WA
- Tacoma, WA
- Tucson, AZ
- Washington, DC
- Wilmington, DE

Although back-in angle parking is different, the practice of backing into stalls in parking lots is very common, and natural. It is also much easier than parallel parking.

[Exhibit 3.2-H](#) shows an example of back-in angle parking. One of the most obvious benefits is that less maneuver space is required for back-in angle parking. Some of the reported advantages of back-in angle parking versus “pull-in” angle parking include:<sup>2</sup>

- Similar to backing into parallel parking space, but with fewer movements.
- Easy and safe exit from space.
- No blind backing into traffic.
- Better visibility for bicycles.
- Curbside loading.
- Vehicle doors open towards curb.

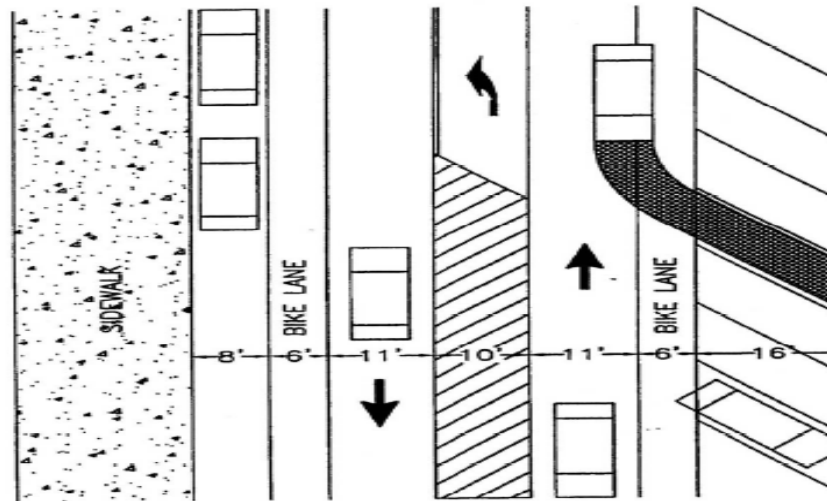
Because of the merits of back-in angle parking, Districts are encouraged to consider it instead of conventional angle parking.

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<sup>2</sup> Missoula Downtown Streets Project, [http://www.wgmgroup.com/pdf/BackIn\\_AngleParking.pdf](http://www.wgmgroup.com/pdf/BackIn_AngleParking.pdf) WGM Group, Inc.



**Exhibit 3.2-H Back-In Angle Parking**



If using back-in angle parking, install special BACK-IN ANGLE PARKING ONLY signs along the roadway. The signs should have green legend and border on a white background.

**3.2.9 Reserved Parking and ADA Requirements [3B.18]**

The American with Disabilities Act, 36 CFR Part 1191 (see <http://www.access-board.gov/ada-aba/final.pdf>) establishes the minimum number of required accessible parking spaces, based on the total number of spaces in the parking area. However, the New Mexico “Disabled Parking Standards and Enforcement Act” ([Section 66-7-352.4](#), NMSA 1978) sometimes mandates a higher number of disabled parking spaces than in Table 208.2 of the American with Disabilities Act; therefore, the New Mexico law prevails in these situations.

Rest areas and other NMDOT facilities are required to have the minimum number of accessible parking spaces as indicated in [Exhibit 3.2-I](#).

### Exhibit 3.2-I Minimum Designated Disabled Parking Spaces

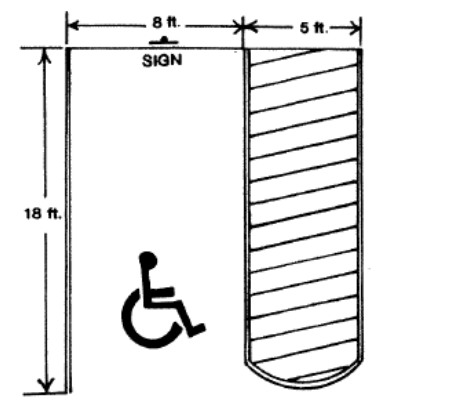
Total Spaces in Parking Lot	Minimum Designated Disabled Parking Spaces
1 to 25	1
26 to 35	2
36 to 50	3
51 to 100	4
101 to 300	8
301 to 500	12
501 to 800	16
801 to 1,000	20
more than 1,000	20, plus 1 for each 100 over 1,000

The designated disabled parking spaces shall be located to provide the most convenient access to entranceways or to the nearest curb cut. Every parking lot shall have at least one designated disabled parking space designed to accommodate a motor vehicle passenger van, and there shall be a minimum of one such space for every eight designated disabled parking spaces.

[Exhibit 3.2-J](#) shows layouts of the standard handicapped accessible reserved parking spaces in a parking lot. The standard reserved parking space shall be at least 8 feet in width and 18 feet in length. A minimum 5-foot-wide access aisle is required to facilitate the disabled person's maneuvering in and out of their vehicle. To qualify as "van accessible," a minimum 8-foot-wide access aisle is required. Two reserved parking spaces may share a common aisle.

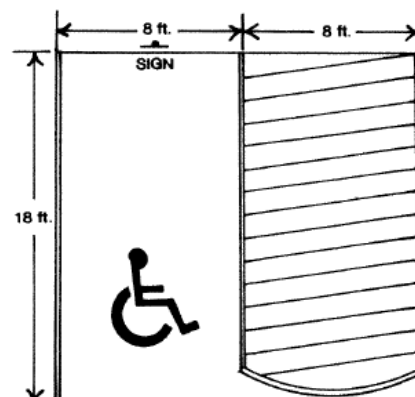
### Exhibit 3.2-J Typical Layouts

**TYPICAL LAYOUT OF A RESERVED PARKING SPACE**



HANDICAPPED/DISABLED SYMBOL TO BE PAINTED WHITE. LINES OUTLINING THE RESERVED SPACE AND DIAGONAL LINES SHOULD BE WHITE IN COLOR.

**TYPICAL LAYOUT OF A RESERVED VAN ACCESSIBLE SPACE**



HANDICAPPED/DISABLED SYMBOL TO BE PAINTED WHITE. LINES OUTLINING THE RESERVED SPACE AND DIAGONAL LINES SHOULD BE WHITE IN COLOR.

A Reserved Parking Handicap Symbol (R7-8) sign, and when applicable, with a VAN ACCESSIBLE (R7-8a) plaque, should be mounted in front of each reserved parking space. However, contrary to normal installation instructions, install these signs at a substandard 4-foot height above the parking surface to ensure that the sign is highly visible to the uninformed driver.

The space should be outlined by white pavement markings (4-inch striping), and the universal handicapped/disabled symbol should be applied in white at the entrance to the reserved space. Outline access aisles in white pavement markings and further delineated by painted white diagonal lines (minimum 4-inch width).

A common practice has been to paint the entire reserved parking space blue, but this is not a recommended practice because painted surfaces may be slippery when wet. Therefore, use only the symbol illustrated in Figure 3B-19 of the *MUTCD* and detailed in the “Pavement Marking Chapter” of the *Standard Highway Signs Book*. The border and blue background are optional.

The preferred location for the handicapped/disabled symbol is at the entrance to the parking space so that drivers see it before starting to turn into the stall.

### 3.2.10 Pavement Word and Symbol Markings [3B.19]

Details for pavement word and symbol markings are included in NMDOT Standard Drawings 704-02-1/1, 704-03-1/2 and 704-03-2/2.

The use of word-type pavement messages, frequently called “horizontal signing,” is an effective way to communicate with drivers providing the markings are visible. Therefore, Districts are encouraged to use horizontal signing to supplement traditional regulatory, warning, and directional signs.

Districts are encouraged to supplement route marker signs with elongated route markers and directional arrows on the pavement.

Thermoplastic is the recommended material for words and symbol messages.

Words and symbols shall conform to Figures 3B-14 through 3B-21, and 3B-25 of the *MUTCD*. Of specific importance, Lane-Reduction Arrows shall comply with Figure 3B-21.

The standard height of word messages is 8 feet on all types of roads, except “SCHOOL” is 10 feet high. A maximum of three lines of message may be used, and when two or three lines of message are used, they are read in the direction of travel, i.e., the motorist reads the first line they encounter first.

In 2006, the National Committee on Uniform Traffic Control Devices (NCUTCD) adopted a recommendation to request FHWA to change the *MUTCD* to allow red, white, and blue pavement markings to accommodate the Interstate shield marking.

Except for the opposing arrows of a two-way left-turn lane marking (see Figure 3B-7 in the *MUTCD*), successive lines of a message should be spaced at four to ten times the legend height (i.e., a typical spacing of 32 to 80 feet).

Probably because the pair of longitudinal markings for two-way left-turn lanes is unique, Figure 3B-7 of the *MUTCD* shows the two-way left-turn lane symbol markings as optional. However, districts are encouraged to install at least one set of these markings near both ends of every two-way left-turn lane.

### 3.2.11 Markings for Roundabout Intersections [3B.24]

In addition to Section 3B.24 of the *MUTCD*, see “*Roundabouts: An Informational Guide*” (see [Section 1.1.8](#)) includes extensive details.

When one or more approaches have multiple lanes, use lane lines between the lanes within the roundabout. An evolving philosophy involves using spiral curve pavement markings within the roundabout. In this situation, advance lane-assignment pavement-marking arrows would be identical to those used at signalized intersections, and if drivers are in the proper lane on the approach to the roundabout, drivers should never need to cross over longitudinal lane lines as they maneuver around the roundabout. (Information on this type of pavement marking is available at [http://tcd.tamu.edu/documents/tcd-mtc/January\\_2005.attachments.pdf](http://tcd.tamu.edu/documents/tcd-mtc/January_2005.attachments.pdf).)

### 3.2.12 Do Not Block Intersection Markings

Do Not Block Intersection Markings may be used to mark the edges of an intersection area that is in close proximity to a signalized intersection, railroad crossing, or other nearby traffic control that may cause vehicles to stop within the intersection and impede other traffic entering the intersection.

If used, the Do Not Block Intersection Markings should consist of 8-inch or 12-inch solid white lines that outline the area of the intersection as illustrated in [Exhibit 3.2-K](#).

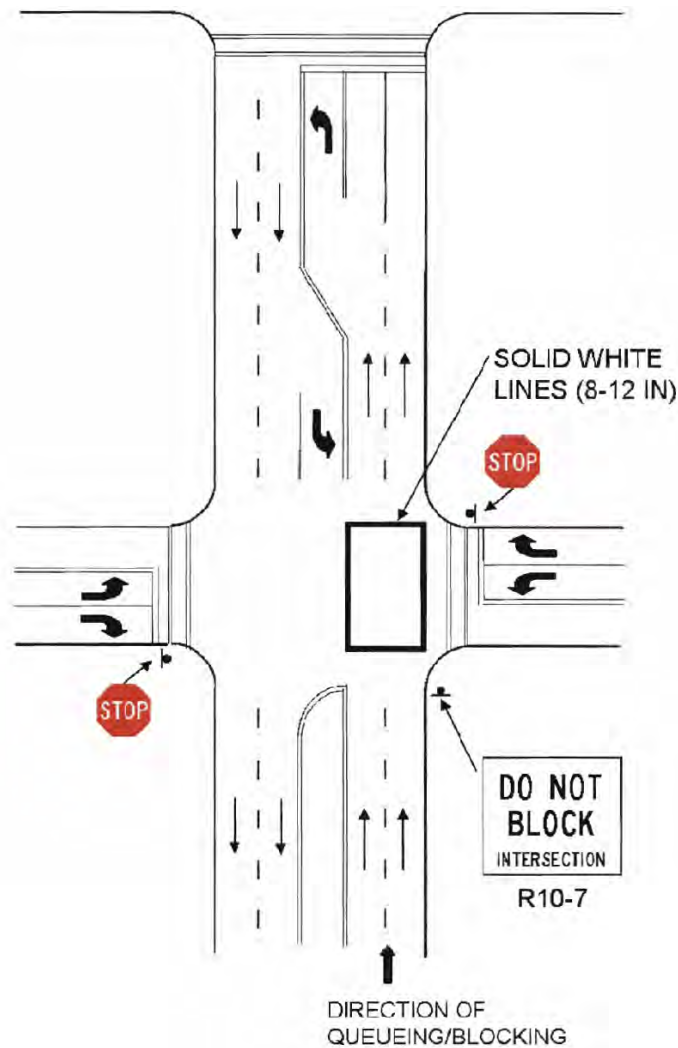
The box should envelop the area normally enclosed within the extension of the edge lines or centerlines, but may be expanded to encompass the left-turn lane if operational problems exist with left-turn vehicles. However, a minimum of 4 feet should exist between any crosswalks and the box.

Do not use “Do Not Block Intersection Markings” unless accompanied by one or more DO NOT BLOCK INTERSECTION (R10-7), DO NOT STOP ON TRACKS (R8-8), or similar signs.

**Enforcement:** Section 66-7-102, NMSA 1978, authorizes the State Transportation Commission to place and maintain approved traffic-control devices to regulate traffic. Therefore, since the signs are approved devices, Section 66-7-104, NMSA 1978, requires drivers to obey the signs unless otherwise directed by a traffic or police officer.

As the number of approach lanes increase, it is more difficult to ensure the safety of drivers either turning across the markings or entering the roadway and crossing the markings. Therefore, do not use Do Not Block Intersection Markings on roadways with more than two approach lanes.

**Exhibit 3.2-K Do Not Block Intersection Markings**



### 3.2.13 Speed Hump Markings [3B.26]

Although local authorities sometimes use speed humps, which are approximately 12 feet long and 3 or 4 inches high, on local roadways, NMDOT does not allow speed humps on any state highways.

### 3.2.14 Rumble Strips/Rumble Bars [6F.84]

Highway agencies have successfully used some rumble strips/rumble bars for about 40 years to alert drivers of potential dangers. Although these devices are very useful, two common problems need emphasis:

1. Making depressions too deep and causing driver panic.
2. Not considering the potential noise impacts in residential areas.

#### Transverse Rumble Strips

Section 6F.84 of the *MUTCD* and NMDOT Standard Drawing 631-07-1/1 address transverse rumble strips to alert drivers to unusual vehicular traffic conditions. Depressions should not be greater than 3/8 inch.

When using transverse rumble strips, the standard recommends using five sets of rumble strip clusters in advance of the intersection, beginning 100, 200 or 350 feet in advance of the stop bar for speeds of 25, 35 and 45 mph, respectively. The spacing of the clusters should be 100 feet between the first (i.e., closest to stop bar) and second clusters, and the second and third clusters; 200 feet between the third and fourth clusters; and 300 feet between the fourth and fifth clusters.

#### Longitudinal Rumble Strips

There are several types of longitudinal rumble strips that alert drivers if their vehicle strays from its normal travel path, including the following:

- Rumble bars, as historically used on flush, concrete islands.
- Shoulder rumble strips (see NMDOT Standard Drawing 631-01-1/1).
- Centerline rumble strips.
- Edge line rumble strips.

In the mid-1980's, shoulder rumble strips (SRS) came into existence in the United States, and they are included on NMDOT Standard Drawing 631-01-1/1. Many states are now using milled centerline and edge line rumble strips, where they center the rumble strips over the centerline and edge line pavement markings. In both cases, the pavement surface should be in good condition to accept the milling process without raveling or deteriorating. When the pavement markings break at intersections, also discontinue the rumble strips.



Centerline rumble strips (CLRS) reduce the occurrence of head-on and sideswipe crashes on undivided two-lane or four-lane highways. The milled rumble strips should be very

similar to the milled shoulder rumble strips (SRS) shown on NMDOT Standard Drawing 631-01-1/1, except the depth should be 7/16 to 9/16-inch and they would be continuous on 12-inch centers.

Edge line rumble strips (ELRS) help prevent run-off-the road crashes similar to shoulder rumble strips (SRS). If the lane width is less than 12 feet wide or the paved shoulders are 6 feet wide or wider, use SRS instead of ELRS. When ELRS are used, they should be 6-inch wide and be repeated continuously at 12-inch centers. The recommended length of the milled surface is about 5 inches long and the recommended depth is 5/16 to 7/16-inch. At intersections, avoid placing ELRS within about 25 feet of any intersection widening.

After the milling CLRS and ELRS, as soon as possible, apply pavement markings over CLRS and ELRS. Highway agencies frequently observe enhanced wet-night benefits of the milled surfaces on the retroreflectivity of the pavement marking lines applied over the milled surfaces. CLRS and ELRS provide a higher level of warning than SRS, and Districts are encouraged to use these as “recommended practice” when appropriate.



## 3.3 OBJECT MARKERS

### 3.3.1 Object Marker Design [3C.01]

Section 3C.01 and Figure 3C-1 of the *MUTCD* allow several types of Object Markers, including markers with three or more yellow retroreflectors that are a minimum of 3 inches in diameter. These circular devices are typically acrylic retroreflectors that are very bright when viewed at an angle normal to the face of the retroreflector, but they have almost no retroreflectivity when viewed at an angle of 30 degrees or more from normal.

Therefore, Districts are encouraged not to use Object Markers with these circular retroreflectors because the Object Markers frequently are not visible to drivers – for example, when turning at intersections, traveling around sharp turns and curves, or at any location where the markers become misaligned. [Exhibit 3.3-A](#) shows the recommended Object Markers.

**Exhibit 3.3-A Object Markers and End-of-Roadway Markers**



### 3.3.2 Markings for Objects in or Adjacent to the Roadway [3C.02,

Mark objects within the roadway with either Type 1 or Type 3 Object Markers. Use the OM-3L marker on the left side of the intended travel path and the OM-3R marker on the right side of the intended travel path. Whenever possible, the inside edge of the OM-3L or OM-3R marker should be aligned with the inside edge of the object.

If traffic can pass on either side of the object, use the OM-3C Object Marker.

The placement and mounting height of Object Markers have the same requirements as delineator markers.



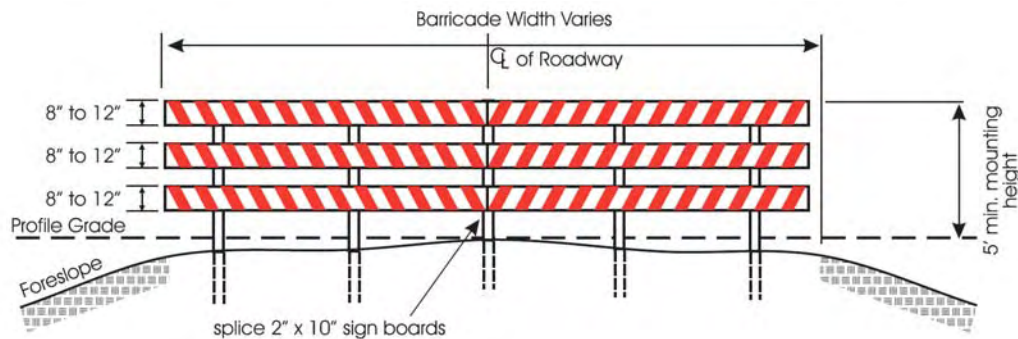
### 3.3.3 End-of-Roadway Markers [3C.04, 3F.01]

End-of-Roadway Markers warn road users of the end of a dead-end roadway where there are no other alternative vehicular paths. [Exhibit 3.3-A](#) depicts the OM4-3 End-of-Roadway Marker.

To increase the target value, use a series of three or more of the OM4-3 End-of-Roadway Markers across the end of the roadway, or place a red-and-white Type III barricade across the end of the roadway as illustrated in [Exhibit 3.3-B](#). This barricade would have three retroreflective rails, and except for the color, shall comply with the design details in Figure 6F-7 of the *MUTCD*. Always use appropriate advance warning signs in advance of the End-of-Roadway Barricade to warn of the road closure since the barricade is a formidable object that may not be crashworthy.

Do not use the End-of-Road Barricade at any location where it could be hit from the side unless it has been crash tested at that angle and determined to be crash worthy at the prevailing traffic speed.

**Exhibit 3.3-B End-of-Roadway Barricade**



By definition, T-intersections are not end-of-roadway situations since there are alternate vehicular paths. Therefore, Districts are encouraged to use a 48"x24" Two-Direction Large Arrow (W1-7) sign on the far side of the through roadway facing traffic on the stem of the T-intersection. Only use the larger 60"x30" sign if it is unlikely that a vehicle on the through roadway could hit the edge of the sign.

## **3.4 DELINEATORS**

### **3.4.1 Delineators [3D.01]**

Delineators are primarily nighttime guidance devices, and they may be mounted on approved steel posts or on restorable plastic posts for raised median or island applications. Normal placement is 2 to 8 feet from outer edge of shoulder, with a mounting height of 3 to 4 feet above pavement surface. The color of delineators shall conform to the color of edge lines.

NMDOT Standard Drawings 703-01-1/3, 703-01-2/3, and 703-01-3/3 provide additional information, including the spacing on curves and in advance of and beyond curves.

Chevron Alignment (W1-8) signs (as discussed in [Section 2.3.7](#)) also serve as delineation, but as the name implies, the W1-8 is a sign, and it provides both daytime and nighttime guidance. Moreover, when used, W1-8 signs essentially eliminate the need for other delineation.

### **3.4.2 1/10 Mile Delineators**

A reflective rectangular delineator measuring 4 inches wide by 8 inches high that follows the same mounting and location requirements as a standard delineator. Install 1/10 Mile Delineators on a steel post or a flexible plastic post. In the event that a standard delineator and a 1/10 Mile Delineator conflict, the 1/10 Mile Delineator shall have priority.

Use 1/10 Mile Delineators on all freeways and high-speed four-lane divided expressways. See NMDOT Standard Drawings 703-02-1/2 and 703-02-2/2 for installation details.

# Appendix

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# Standard Alphabets Spacing Chart

Measurements based on 4-inch upper case letter height

# Clearview 1-W

For positive contrast applications  
(light type on dark background)

Character	Left (in.)	Width	Right (in.)
A	0.28	2.28	0.28
B	0.52	1.88	0.36
C	0.40	1.96	0.24
D	0.52	1.96	0.40
E	0.52	1.44	0.36
F	0.52	1.40	0.32
G	0.40	2.08	0.40
H	0.52	1.88	0.52
I	0.52	0.52	0.52
J	0.24	1.28	0.52
K	0.52	1.92	0.24
L	0.52	1.36	0.32
M	0.52	2.24	0.52
N	0.52	2.04	0.52
O	0.40	2.32	0.40
P	0.52	1.80	0.32
Q	0.40	2.32	0.40
R	0.52	1.84	0.40
S	0.28	1.80	0.36
T	0.20	1.68	0.20
U	0.52	1.92	0.52
V	0.28	2.12	0.28
W	0.32	3.20	0.32
X	0.20	2.08	0.20
Y	0.20	2.08	0.20
Z	0.28	1.72	0.28
a	0.36	1.88	0.40
b	0.52	1.84	0.40
c	0.40	1.68	0.28
d	0.40	1.84	0.52
e	0.40	1.84	0.40
f	0.28	1.24	0.24
g	0.40	1.84	0.52
h	0.52	1.76	0.52
i	0.44	0.64	0.44
j	0.00	1.08	0.44
k	0.52	1.72	0.28
l	0.52	0.80	0.32
m	0.52	2.92	0.52
n	0.52	1.76	0.52

Character	Left (in.)	Width	Right (in.)
o	0.40	1.92	0.40
p	0.52	1.84	0.40
q	0.40	2.00	0.36
r	0.52	1.16	0.28
s	0.28	1.64	0.32
t	0.24	1.24	0.32
u	0.52	1.76	0.52
v	0.28	1.88	0.28
w	0.32	3.08	0.32
x	0.24	1.88	0.24
y	0.28	1.88	0.28
z	0.32	1.40	0.32
1	0.16	1.16	0.52
2	0.20	1.68	0.32
3	0.20	1.68	0.40
4	0.28	1.96	0.32
5	0.28	1.64	0.36
6	0.40	1.84	0.36
7	0.24	1.68	0.24
8	0.40	1.92	0.40
9	0.36	1.84	0.40
0	0.40	2.04	0.40
&	0.48	2.16	0.28
!	0.44	0.64	0.44
"	0.40	1.44	0.40
#	0.40	2.24	0.40
\$	0.36	1.68	0.36
¢	0.40	1.60	0.28
/	0.24	1.72	0.24
*	0.32	1.44	0.32
.	0.36	0.56	0.36
,	0.36	0.68	0.36
:	0.36	0.68	0.36
(	0.32	1.00	0.48
)	0.48	2.68	0.32
-	0.48	1.48	0.48
@	0.52	2.68	0.52
=	0.32	1.48	0.32
+	0.32	1.88	0.32
?	0.40	1.52	0.40

## Standard Alphabets Spacing Chart

Measurements based on 4-inch upper case letter height

Character	Left (in.)	Width	Right (in.)
A	0.28	2.76	0.28
B	0.56	2.28	0.40
C	0.44	2.44	0.28
D	0.56	2.40	0.44
E	0.56	1.80	0.44
F	0.56	1.72	0.40
G	0.44	2.56	0.44
H	0.56	2.32	0.56
I	0.56	0.60	0.56
J	0.24	1.60	0.56
K	0.56	2.36	0.24
L	0.56	1.64	0.28
M	0.56	2.80	0.56
N	0.56	2.52	0.56
O	0.44	2.84	0.44
P	0.56	2.20	0.36
Q	0.44	2.84	0.44
R	0.56	2.24	0.44
S	0.24	2.20	0.32
T	0.28	2.08	0.28
U	0.56	2.36	0.56
V	0.28	2.60	0.28
W	0.36	4.00	0.36
X	0.24	2.60	0.24
Y	0.20	2.56	0.20
Z	0.32	2.00	0.32
a	0.40	2.32	0.44
b	0.56	2.24	0.44
c	0.44	2.04	0.20
d	0.44	2.24	0.56
e	0.44	2.32	0.44
f	0.28	1.44	0.28
g	0.44	2.28	0.56
h	0.56	2.16	0.56
i	0.48	0.76	0.48
j	-0.04	1.32	0.48
k	0.56	2.12	0.24
l	0.56	0.96	0.32
m	0.56	3.64	0.56
n	0.56	2.16	0.56

## Clearview 2-W

For positive contrast applications  
(light type on dark background)

Character	Left (in.)	Width	Right (in.)
o	0.44	2.40	0.44
p	0.56	2.24	0.44
q	0.44	2.48	0.36
r	0.56	1.40	0.28
s	0.28	1.96	0.32
t	0.28	1.44	0.32
u	0.56	2.16	0.56
v	0.24	2.32	0.24
w	0.32	3.80	0.32
x	0.16	2.32	0.16
y	0.24	2.32	0.24
z	0.28	1.72	0.28
1	0.24	1.36	0.60
2	0.32	2.08	0.48
3	0.28	2.04	0.44
4	0.28	2.44	0.36
5	0.36	2.04	0.44
6	0.44	2.28	0.40
7	0.32	2.04	0.36
8	0.44	2.36	0.44
9	0.40	2.28	0.44
0	0.48	2.52	0.48
&	0.44	2.64	0.24
!	0.56	0.76	0.56
"	0.48	1.72	0.48
#	0.48	2.72	0.48
\$	0.44	2.04	0.44
¢	0.44	1.96	0.32
/	0.28	2.08	0.28
*	0.44	1.76	0.44
.	0.48	0.68	0.48
,	0.48	0.76	0.44
:	0.48	0.68	0.48
(	0.40	0.84	0.52
)	0.52	0.84	0.40
-	0.52	1.08	0.52
@	0.44	3.40	0.44
=	0.40	2.28	0.40
+	0.40	2.28	0.40
?	0.36	1.88	0.40

## Standard Alphabets Spacing Chart

Measurements based on 4-inch upper case letter height

## Clearview 3-W

For positive contrast applications  
(light type on dark background)

Character	Left (in.)	Width	Right (in.)
A	0.24	3.32	0.24
B	0.60	2.72	0.36
C	0.44	2.88	0.24
D	0.60	2.84	0.44
E	0.60	2.20	0.36
F	0.60	2.12	0.32
G	0.44	3.04	0.44
H	0.60	2.72	0.60
I	0.60	0.68	0.60
J	0.24	1.88	0.60
K	0.60	2.72	0.20
L	0.60	2.04	0.28
M	0.60	3.28	0.60
N	0.60	2.92	0.60
O	0.44	3.32	0.44
P	0.60	2.60	0.44
Q	0.44	3.32	0.44
R	0.60	2.64	0.40
S	0.32	2.56	0.36
T	0.24	2.52	0.24
U	0.60	2.76	0.60
V	0.28	3.04	0.28
W	0.36	4.68	0.36
X	0.24	3.04	0.24
Y	0.20	3.04	0.20
Z	0.36	2.48	0.36
a	0.44	2.68	0.44
b	0.60	2.60	0.44
c	0.44	2.40	0.28
d	0.44	2.60	0.60
e	0.44	2.64	0.44
f	0.36	1.68	0.32
g	0.44	2.64	0.60
h	0.60	2.48	0.60
i	0.52	0.84	0.52
j	-0.16	1.52	0.52
k	0.60	2.48	0.24
l	0.60	1.12	0.32
m	0.60	4.12	0.60
n	0.60	2.48	0.60

Character	Left (in.)	Width	Right (in.)
o	0.44	2.80	0.44
p	0.60	2.60	0.44
q	0.44	2.84	0.36
r	0.60	1.64	0.32
s	0.32	2.32	0.36
t	0.24	1.72	0.40
u	0.60	2.44	0.60
v	0.24	2.72	0.24
w	0.32	4.24	0.32
x	0.24	2.72	0.24
y	0.24	2.76	0.24
z	0.36	2.12	0.36
1	0.20	1.60	0.60
2	0.28	2.44	0.44
3	0.24	2.44	0.44
4	0.28	2.84	0.32
5	0.36	2.44	0.44
6	0.48	2.60	0.40
7	0.28	2.48	0.32
8	0.44	2.68	0.44
9	0.40	2.64	0.48
0	0.44	2.92	0.44
&	0.44	3.08	0.24
!	0.60	0.88	0.60
"	0.48	1.92	0.48
#	0.44	3.12	0.44
\$	0.40	2.40	0.40
¢	0.44	2.32	0.36
/	0.24	2.52	0.24
*	0.40	1.80	0.40
.	0.52	0.60	0.52
,	0.40	0.92	0.40
:	0.40	0.84	0.40
(	0.44	0.96	0.48
)	0.48	0.96	0.44
-	0.56	1.36	0.56
@	0.44	3.72	0.44
=	0.40	2.16	0.40
+	0.40	2.48	0.40
?	0.36	2.24	0.48

## Standard Alphabets Spacing Chart

Measurements based on 4-inch upper case letter height

Character	Left (in.)	Width	Right (in.)
A	0.28	3.48	0.28
B	0.72	2.84	0.48
C	0.56	3.04	0.36
D	0.72	3.00	0.56
E	0.72	2.36	0.52
F	0.72	2.24	0.52
G	0.56	3.20	0.56
H	0.72	2.88	0.72
I	0.72	0.72	0.72
J	0.32	1.96	0.72
K	0.72	2.92	0.28
L	0.72	2.16	0.36
M	0.72	3.44	0.72
N	0.72	3.08	0.72
O	0.56	3.48	0.56
P	0.72	2.72	0.52
Q	0.56	3.48	0.56
R	0.72	2.80	0.52
S	0.44	2.68	0.52
T	0.36	2.68	0.36
U	0.72	2.92	0.72
V	0.32	3.16	0.32
W	0.48	4.92	0.48
X	0.32	3.20	0.32
Y	0.28	3.24	0.28
Z	0.40	2.64	0.40
a	0.56	2.80	0.52
b	0.72	2.72	0.56
c	0.56	2.52	0.36
d	0.56	2.72	0.72
e	0.56	2.76	0.56
f	0.36	1.76	0.32
g	0.56	2.72	0.72
h	0.72	2.60	0.72
i	0.64	0.88	0.64
j	-0.12	1.64	0.64
k	0.72	2.64	0.28
l	0.72	1.20	0.40
m	0.72	4.28	0.72
n	0.72	2.60	0.72

## Clearview 4-W

For positive contrast applications  
(light type on dark background)

Character	Left (in.)	Width	Right (in.)
o	0.56	2.92	0.56
p	0.72	2.72	0.56
q	0.56	3.00	0.48
r	0.72	1.72	0.36
s	0.44	2.40	0.48
t	0.36	1.84	0.48
u	0.72	2.56	0.72
v	0.32	2.84	0.32
w	0.40	4.40	0.40
x	0.28	2.88	0.28
y	0.32	2.88	0.32
z	0.40	2.28	0.40
1	0.28	1.68	0.72
2	0.36	2.56	0.52
3	0.32	2.60	0.52
4	0.32	2.96	0.36
5	0.44	2.56	0.52
6	0.52	2.72	0.48
7	0.36	2.60	0.36
8	0.56	2.80	0.56
9	0.48	2.72	0.52
0	0.56	3.08	0.56
&	0.52	3.20	0.32
!	0.64	0.92	0.64
"	0.56	2.04	0.56
#	0.52	3.24	0.52
\$	0.44	2.52	0.44
¢	0.56	2.44	0.40
/	0.36	2.68	0.36
*	0.48	1.88	0.48
.	0.52	0.88	0.52
,	0.48	1.00	0.44
:	0.52	0.88	0.52
(	0.48	1.04	0.56
)	0.56	1.04	0.48
-	0.68	1.40	0.68
@	0.56	3.80	0.56
=	0.60	2.28	0.60
+	0.44	2.56	0.44
?	0.40	2.36	0.56

## Standard Alphabets Spacing Chart

Measurements based on 4-inch upper case letter height

Character	Left (in.)	Width	Right (in.)
A	0.36	3.76	0.36
B	0.80	3.04	0.60
C	0.64	3.28	0.44
D	0.80	3.24	0.64
E	0.80	2.56	0.56
F	0.80	2.44	0.52
G	0.64	3.48	0.64
H	0.80	3.08	0.80
I	0.80	0.80	0.80
J	0.32	2.24	0.80
K	0.80	3.12	0.36
L	0.80	2.36	0.48
M	0.80	3.68	0.80
N	0.80	3.32	0.80
O	0.64	3.72	0.64
P	0.80	2.92	0.48
Q	0.64	3.72	0.64
R	0.80	3.00	0.60
S	0.48	2.88	0.52
T	0.40	2.88	0.40
U	0.80	3.12	0.80
V	0.36	3.40	0.36
W	0.40	5.32	0.40
X	0.32	3.44	0.32
Y	0.28	3.52	0.28
Z	0.52	2.88	0.52
a	0.52	2.96	0.52
b	0.76	2.88	0.60
c	0.60	2.72	0.40
d	0.60	2.92	0.76
e	0.60	2.96	0.60
f	0.44	1.92	0.40
g	0.60	2.92	0.76
h	0.76	2.76	0.76
i	0.68	0.92	0.68
j	-0.12	1.76	0.68
k	0.76	2.84	0.28
l	0.76	1.28	0.44
m	0.76	4.52	0.76
n	0.76	2.76	0.76

## Clearview 5-W

For positive contrast applications  
(light type on dark background)

Character	Left (in.)	Width	Right (in.)
o	0.60	3.08	0.60
p	0.76	2.92	0.60
q	0.60	3.20	0.48
r	0.76	1.84	0.40
s	0.44	2.56	0.52
t	0.36	1.96	0.44
u	0.76	2.72	0.76
v	0.28	3.04	0.28
w	0.32	4.64	0.32
x	0.24	3.08	0.24
y	0.28	3.12	0.28
z	0.48	2.44	0.48
1	0.40	1.80	0.80
2	0.48	2.76	0.64
3	0.44	2.80	0.64
4	0.48	3.16	0.52
5	0.60	2.76	0.64
6	0.64	2.92	0.60
7	0.40	2.84	0.40
8	0.64	2.92	0.64
9	0.60	2.92	0.64
0	0.68	3.28	0.68
&	0.64	3.44	0.40
!	0.72	1.00	0.72
"	0.56	2.16	0.56
#	0.56	3.44	0.56
\$	0.48	2.72	0.48
¢	0.60	2.60	0.40
/	0.44	2.88	0.44
*	0.60	1.92	0.60
.	0.56	1.00	0.56
,	0.52	1.08	0.52
:	0.56	1.00	0.56
(	0.60	1.08	0.60
)	0.60	1.08	0.60
-	0.80	1.56	0.80
@	0.64	4.04	0.64
=	0.72	2.40	0.72
+	0.60	2.68	0.60
?	0.56	2.56	0.56



# Standard Alphabets Spacing Chart

Measurements based on 4-inch upper case letter height

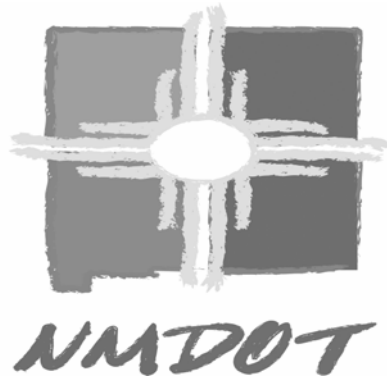
# Clearview 5-W-R

For positive contrast applications  
(light type on dark background)

Character	Left (in.)	Width	Right (in.)
A	0.24	3.76	0.24
B	0.68	3.04	0.48
C	0.52	3.28	0.32
D	0.68	3.24	0.52
E	0.68	2.56	0.44
F	0.68	2.44	0.40
G	0.52	3.48	0.52
H	0.80	3.08	0.80
I	0.68	0.80	0.68
J	0.20	2.24	0.68
K	0.68	3.12	0.24
L	0.68	2.36	0.36
M	0.68	3.68	0.68
N	0.68	3.32	0.68
O	0.52	3.72	0.52
P	0.68	2.92	0.36
Q	0.52	3.72	0.52
R	0.68	3.00	0.48
S	0.36	2.88	0.40
T	0.28	2.88	0.28
U	0.68	3.12	0.68
V	0.24	3.40	0.24
W	0.28	5.32	0.28
X	0.20	3.44	0.20
Y	0.16	3.52	0.16
Z	0.40	2.88	0.40
a	0.40	2.96	0.40
b	0.64	2.88	0.48
c	0.48	2.72	0.28
d	0.48	2.92	0.64
e	0.48	2.96	0.48
f	0.32	1.92	0.28
g	0.48	2.92	0.64
h	0.64	2.76	0.64
i	0.56	0.92	0.56
j	-0.24	1.76	0.56
k	0.64	2.84	0.16
l	0.64	1.28	0.32
m	0.64	4.52	0.64
n	0.64	2.76	0.64

Character	Left (in.)	Width	Right (in.)
o	0.48	3.08	0.48
p	0.64	2.92	0.48
q	0.48	3.20	0.36
r	0.64	1.84	0.28
s	0.28	2.56	0.40
t	0.24	1.96	0.36
u	0.64	2.72	0.64
v	0.16	3.04	0.16
w	0.20	4.64	0.20
x	0.12	3.08	0.12
y	0.16	3.12	0.16
z	0.36	2.44	0.36
1	0.28	1.80	0.68
2	0.36	2.76	0.52
3	0.32	2.80	0.52
4	0.36	3.16	0.40
5	0.48	2.76	0.52
6	0.52	2.92	0.48
7	0.28	2.84	0.28
8	0.52	2.92	0.52
9	0.48	2.92	0.52
0	0.56	3.28	0.56
&	0.52	3.44	0.28
!	0.60	1.00	0.60
"	0.44	2.16	0.44
#	0.44	3.44	0.44
\$	0.36	2.72	0.36
¢	0.48	2.60	0.28
/	0.32	2.88	0.32
*	0.48	1.92	0.48
.	0.44	1.00	0.44
,	0.40	1.08	0.40
:	0.44	1.00	0.44
(	0.48	1.08	0.48
)	0.48	1.08	0.48
-	0.60	1.56	0.60
@	0.52	4.04	0.52
=	0.60	2.40	0.60
+	0.48	2.68	0.48
?	0.44	2.56	0.44

# **New Mexico Department of Transportation**



## **Traffic Safety Bureau**

# **MEMORIAL SIGN PROGRAM:**



## **Memorial Sign Program For Victims of Alcohol-Related Crashes**

### **An Overview of the Program and Procedures**

The New Mexico Department of Transportation (NMDOT) has established an alcohol-related crash victim Memorial Sign Program. Upon the request by the family or friends of a victim of a fatal alcohol-related crash within the state's jurisdiction, who died in an alcohol-related crash, and when certain other requirements are met, a sign can be installed on the State Highway System (exclusive of the interstate system). The standard sign features the words "Please Don't Drink and Drive" "In Memory of (Victim's name)".

The program applies ONLY to the installation of signs on the State Highway Systems because the New Mexico Department of Transportation does not have jurisdiction over county or municipal roads, and circumstances preclude such signs on the interstate system.

#### **BACKGROUND:**

Families and friends of victims of alcohol-related crashes have indicated a strong interest for some type of signing which would publicly memorialize these victim(s). The NMDOT has embraced the idea of a "Memorial Sign Program for Victims of Alcohol-Related Crashes" both as a means of lending emotional support to a victim's family, and furthering the Department's efforts to combat drinking and driving.

#### **GUIDELINES:**

The New Mexico Department of Transportation and the District Engineers have adopted the following guidelines.

**NO ONE DRIVING A VEHICLE WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS IS ELIGIBLE FOR A MEMORIAL SIGN.**

The District Traffic Engineer will make the final determination as to sign location based on safety considerations and regulations. The District Traffic Engineer shall determine the location of a Memorial Sign after consultation with the District Coordinator. All State Highways, except the Interstate System, are eligible for signing under this program. The NMDOT has no jurisdiction on county roads or city streets, and thus cannot install signs along those roadway systems.

1. The first step in this process is for the sponsor to request a "Memorial Sign Program" application from the Transportation

Programs Division or the District Coordinator. This application will enable the District Coordinator to: contact the sponsor, explain essential aspects of the program, verify eligibility, and secure a written agreement from the sponsor to abide by Department provisions and procedures. The application specifies:

- a. Name, address and daytime telephone number of the sponsor.
  - b. Eligibility criteria: verification of alcohol involvement through a copy of the police report. (Indication of alcohol involvement as the cause or contributing cause to the crash by the investigation officer as recorded on the police crash report shall be considered sufficient evidence for the purpose of this program).
  - c. The application will contain a signature line for the sponsor to verify his/her willingness to abide by the conditions set forth therein and to hold the Department harmless of any liability.
2. The sponsor then returns the signed application to the District Coordinator. The Coordinator will verify eligibility and possible sign locations, and forward a copy to the District Engineer.
3. Once a location is selected, the District Coordinator will forward a copy of the approved application to the sponsor.
4. At this point, eligibility has been verified, and the willingness of the sponsor to participate in this program in accordance with the Department policies, procedures and specifications has been established in writing.
5. It is then the sponsor's responsibility to submit a copy of pages 7 and 9 to an approved sign manufacturer. The cost for a single sign shall be the current market price. The standard sign features the words "Please Don't Drink and Drive" "In Memory of" along with the victim's name.
6. The sign manufacturer will ship the completed sign directly to the appropriate District Highway Office, along with page 7 of the application signed off by the sign manufacturer.
7. The New Mexico Department of Transportation District offices will install the Memorial Sign without cost to sponsor according to each District's work schedule. Specific requirements are as follows:
  - a. All sign fabrication and installation requirements shall be in accordance with NMDOT specifications for road and bridge construction, 1994 edition and the Manual on Uniform Traffic Control Devices.

- b. Placement of the sign will be under the direction of the respective District Traffic Engineer. Each separate Patrol within a District has agreed to install two signs. Installation depends on the District's work schedule and related circumstances. Cost for replacing damaged signs will be the sponsor's responsibility.
  - c. The sign blank material shall be 0.125' thick aluminum (5052-h387 or 6061-t6 aluminum) 30"X 48", white SEG background with black vinyl lettering of specified size, spacing and separation. Please refer to the attached sign specification sheet.
  - d. A sign 30"X 48" can accommodate up to a maximum of three names.
  - e. A sign will remain in place for at least one (1) year from date of installation. Once a sign is replaced, the sponsor will be notified and the sign will be available for return to the sponsor at one of the NMDOT District offices.
- 8. The District Traffic Engineer will notify the Coordinator when the sign arrives at the District office and the proposed date of installation. The District Traffic Engineer will also sign off on Page 7 of the approved application and forward it to the District Coordinator.
- 9. The Coordinator will contact the sponsor with the location and date sign will be installed.
- 10. The District Traffic Engineer will notify the Transportation Programs Division as soon as the sign is installed.
- 11. The District Coordinator will forward the original application and Page 7 including all signatures and dates to the Transportation Programs Division.
- 12. Once this information is provided to the Transportation Programs Division (Traffic Safety Bureau), the process from initial request to installation is complete.

**Memorial Sign Program:**

A Memorial Sign Program for victims of alcohol-related crashes & the  
Installation of Memorial Signs on the State Highway systems

**Application:**

I have read and agree with the above guidelines, and wish to proceed with  
the application.

1. If there are additional questions about this program or this Application  
Form, the sponsor for a memorial sign should first contact:

New Mexico Department of Transportation

Traffic Safety Bureau  
P.O BOX 1149  
604 W. SAN MATEO RD.  
SANTA FE, NM 87504-1149  
PHONE: (505) 827-0427  
FAX: (505) 827-0431

2. The applicant must provide the following information:  
(Please Type or Print)

- a. Name, mailing address and day-time telephone number of sponsor;  
Name:

Address:

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Phone Number: 

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- b. Name of Victim(s) of the DWI crash as it is to appear on the sign  
(maximum of 3 names);

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- c. A copy of the police crash report as verification of alcohol-related  
involvement;

- d. Agreement that the District Traffic Engineer will determine the location of the "In Memory of" sign, based on sponsor input, safety considerations and regulations.
3. It is the sponsor's responsibility to:
- a. Complete the application, sign it and return it to the District Coordinator.
  - b. After approval by the District Coordinator, order sign from list of manufacturers approved by the Department (attached), in accordance with Department specifications and procedures (see attached sign specifications sheet):
    1. The sign blank material should be 0.125" thick aluminum (5052-h38 or 6061-t6), white SEG background with black vinyl lettering of the size, spacing and separation stipulated in the attached sign specification sheet.
    2. "Please Don't Drink and Drive" "In Memory of" (victim's name) sign can accommodate up to a maximum of three (3) names.
  - c. Notify District Coordinator of any changes of address before, during, and after installation of the Memorial Sign.
  - d. By signing and dating this application where indicated below and returning it to the District Coordinator, the sponsor stipulated that he/she has read it, understands it and agrees to abide by all Department specifications, requirements and procedures relating to the acquisition, purchase, payment, installation, replacement and removal of all signs, and further agrees to hold the Department harmless from any potential liability associated with the sign and sign program which may arise between the sponsor and the sign manufacturer. The Department is not responsible for damage to or theft of a Memorial Sign.

SIGNATURE:

Sponsor: \_\_\_\_\_

Date: \_\_\_\_\_

Type/Print

Sponsor's Name: \_\_\_\_\_

**PAGE TO SUBMIT TO SIGN MANUFACTURER AFTER DISTRICT  
COORDINATOR APPROVAL**

By signing and dating this application where indicated below and returning it to the District Coordinator, the sponsor stipulated that he/she has read it, understands it and agrees to abide by all Department specifications, requirements and procedures relating to the acquisition, purchase, payment, installation, replacement and removal of all signs erected as part of this alcohol-related crash victim's Memorial Sign Program. The sponsor further agrees to further hold the Department harmless from any potential liability associated with the sign and sign program. The Department is not responsible for any problems that may arise between the sponsor and the sign manufacturer. The Department is not responsible for damage to or theft of a Memorial Sign.

**SIGNATURES:**

Sponsor: \_\_\_\_\_ Date: \_\_\_\_\_

Type/Print Sponsor's Name: \_\_\_\_\_

---

**FOR OFFICIAL USE ONLY:**

Eligibility Verified: \_\_\_\_\_ Date: \_\_\_\_\_  
(District Coordinator)

District where Memorial Sign will be installed and shipped: \_\_\_\_\_  
(District Traffic Engineer)

Date the signed copy of application is forwarded to sponsor: \_\_\_\_\_  
(District Coordinator)

Date Memorial Sign  
Ordered: \_\_\_\_\_ (sign manufacturer)

Date Memorial Sign Shipped to the District: \_\_\_\_\_ (sign manufacturer)

Location Memorial Sign was installed: \_\_\_\_\_  
(District Traffic Engineer) (Patrol number-Highway-Milepost-Direction)

Verified & Dated: \_\_\_\_\_  
District Traffic Engineer/Designee

Verified & Dated: \_\_\_\_\_  
District Coordinator

Verified & Dated: \_\_\_\_\_  
Transportation Programs Division



## **INDEMNIFICATION AND HOLD HARMLESS AGREEMENT**

### **“MEMORIAL SIGN PROGRAM”**

By signing and dating this “indemnification and Hold Harmless Agreement” and the Memorial Sign Program application where indicated and returning Both to the District Coordinator, the sponsor warrants that he/she has read it understands it, and agrees to abide by its conditions. The sponsor acknowledges that the New Mexico Department of Transportation (Hereinafter referred to as the Department) has sole discretion as to the specifications, installation, placement, replacement, and removal of all Memorial Signs and that the Department shall have no liability of any kind whatsoever to the sponsor or to any third party arising from the exercise of that discretion by the Department. The Department will not be responsible to the sign manufacturer or the sponsor for any of the costs related to the manufacturing of a Memorial Sign; such costs are the sole responsibility of the sponsor. The sponsor further agrees to indemnify, defend, and hold the Department harmless from any liability that might result from this agreement, its performance, or any aspect thereof.

---

Sponsor’s Signature

---

Date

---

Type or Print Sponsor’s Name

**4 ½" space (between top of sign/first word)**

**4" Letter Type**

**2" SEPARATION (BETWEEN EACH WORD)**

**4" SPACE (BETWEEN DRIVE AND IN)**

**2 ½" LETTER TYPE.... 2" SEPARATION**

**3" LETTER TYPE (NAMES)**

**2" SEPARATION (BETWEEN NAMES)**

**PLEASE**

**DON'T**

**DRINK AND**

**DRIVE**

*IN MEMORY OF*

XXXXXX XXXXXX

XXXXXX XXXXXX

XXXXXX XXXXXX

**SPACE VARIES DEPENDING ON  
NUMBER OF NAMES  
(THREE NAMES MAXIMUM)**

**DESCRIPTION:**

0.125" Aluminum sign (5052-h38 or t6 aluminum) 30" X 48", white SEG background with black vinyl lettering.

Each line on the Memorial Sign will be centered

**Cost:**

Typical sign fabrication costs in the range of \$90.00- \$120.00. Please contact one of the approved vendors listed to obtain a cost estimate.

**APPROVED:**

SIGNATURE (NMDOT District Traffic Engineer)

Date:

The following is a list of manufacturers that have met the New Mexico Department of Transportation's specifications for sign fabrication:

1. Action Safety Supply  
700 Haines NW  
Albuquerque, NM 87102  
Phone: 505-878-9690  
Fax: 505-878-9688  
Contact: Mike Radigan
  
2. J-H Supply Company  
2132 Osuna NE  
Albuquerque, NM 87113  
Phone: 505-344-6006  
Fax: 505-245-2116  
Contact: Dan Urban
  
3. P&M Signs  
202 Broadway  
P.O box 567  
Mountainair, NM 87036-0567  
Phone: 505-847-2850  
Fax: 505-847-0007  
Contact: Phil Archuleta
  
4. SanBar Construction Corp.  
9101 Broadway SE  
Bosque Farms, NM 87105  
Phone: 505-452-8000  
Fax: 505-452-8800  
Contact: Lydia Gallegos
  
5. United Rentals Highway Technologies  
6221 Chappell Rd. NE  
Albuquerque, NM 87113  
Phone: 505-345-8295  
Fax: 505-345-0546  
Contact: Larry Moritomo

## **FREQUENTLY ASKED QUESTIONS**

- Who qualifies to participate in the program?

Victims of alcohol-related fatal crashes occurring in New Mexico or New Mexicans who died in alcohol-related crashes outside our state, and when certain other requirements are met, a sign can be installed on the State Highways System (exclusive of the Interstate System).

- How much will this cost me?

Costs to the sponsor will include the purchase price of the sign and prorated shipping charges (\$90.00 - \$120.00). The sign must be purchased from an authorized sign manufacturer that meets NMDOT's specifications for sign fabrication and is on the Department's purchasing list. The NMDOT District Offices will install the Memorial Sign without cost to the sponsor according to each District's work schedule.

- How long does the sign remain up?

A sign will remain in place for at least one (1) year from the date of installation. Once a sign is replaced, the sponsor will be notified and the sign will be available for return at the appropriate NMDOT District Office.

- Can I have the sign installed where I want?

The sign will be installed on a state road right-of-way (no interstate routes). These locations have already been predetermined by NMDOT, and take into consideration road geometries, visibility, and federal and state regulations. The District Coordinator has some latitude to accommodate your preference of the locations available.

**NMDOT MEMORIAL SIGN ADMINISTRATOR:  
1-505-827-0427**

**NMDOT DISTRICTS**

**Program Managers**

DISTRICT 1 – COUNTIES:  
DEMING, SOCORRO, GRANTS, LUNA,  
SIERRA, HIDALGO, DONA ANA

Mike Quintana  
604 W. San Mateo  
Santa Fe, NM 87504  
(505) 827-0491

DISTRICT 2 – COUNTIES:  
ROSWELL, OTERO, EDDY, LEA,  
CHAVES, LINCOLN, DEBACA,  
ROOSEVELT, CURRY

Franklin Garcia (Supervisor for  
District 2)  
604 W. San Mateo  
Santa Fe, NM 87504  
(505) 827-3200

DISTRICT 3 – COUNTIES:  
ALBUQUERQUE, VALENCIA,  
BERNALILLO

Cindy Abeyta  
604 W. San Mateo  
Santa Fe, NM 87504  
(505) 827-0490

DISTRICT 4 – COUNTIES:  
LAS VEGAS, GUADALUPE, MORA,  
SAN MIGUEL, QUAY, HARDING,  
UNION, COLFAX

Isabel Lopez  
604 W. San Mateo  
Santa Fe, NM 87504

DISTRICT 5 – COUNTIES:  
SANTA FE, SAN JUAN, TAOS,  
RIO ARriba, LOS ALAMOS,  
TORRANCE

Kirene Bargas  
604 W. San Mateo  
Santa Fe, NM 87504  
(505) 827-0553

DISTRICT 6 – COUNTIES:  
GRANTS, MILAN, MCKINLEY,  
CIBOLA, CATRON, SANDOVAL

Franklin Garcia  
604 W. San Mateo  
Santa Fe, NM 87504  
(505) 827-3200

**MADD**

3939 San Pedro NE  
Albuquerque, NM 87110  
(505) 255-2955  
(800) 255-6233



## TITLE 18 - TRANSPORTATION AND HIGHWAYS

# CHAPTER 20 TRAFFIC SAFETY

18.20.1 NMAC	GENERAL PROVISIONS [RESERVED]	
18.20.2 NMAC	<a href="#">NEW MEXICO TRAFFIC SAFETY EDUCATION AND ENFORCEMENT PROGRAM</a>	<a href="#">pdf version</a>
18.20.3 NMAC	<a href="#">DRIVER EDUCATION SCHOOLS</a>	<a href="#">pdf version</a>
18.20.4 NMAC	<a href="#">SNOW-REMOVAL VEHICLE LIGHTING</a>	<a href="#">pdf version</a>
18.20.5 NMAC	<a href="#">REMOVAL OF ENCROACHMENTS, OBSTRUCTIONS, ABANDONED MOTOR VEHICLES, AND FOR RESTRICTION OF VENDING</a>	<a href="#">pdf version</a>
18.20.6 NMAC	<a href="#">COMMUNITY DWI PREVENTION PROGRAM</a>	<a href="#">pdf version</a>
18.20.7 NMAC	<a href="#">MEMORIAL SIGN PROGRAM</a>	<a href="#">pdf version</a>
18.20.8 NMAC	<a href="#">DRIVING SAFETY SCHOOLS</a>	<a href="#">pdf version</a>
18.20.9 NMAC	<a href="#">DESIGNATION OF HIGHWAY ROUTES FOR TRANSPORT OF RADIOACTIVE MATERIALS</a>	<a href="#">pdf version</a>
18.20.10 NMAC	<a href="#">NEW MEXICO'S MOTORCYCLE TRAINING PROGRAM</a>	<a href="#">pdf version</a>
18.20.11 NMAC	<a href="#">IGNITION INTERLOCK DEVICES</a>	<a href="#">pdf version</a>
18.20.12 NMAC	<a href="#">IGNITION INTERLOCK DEVICES FEES AND PAYMENTS</a>	<a href="#">pdf version</a>

<b>TITLE 18</b> <b>CHAPTER 20</b> <b>PART 7</b>	<b>TRANSPORTATION AND HIGHWAYS</b> <b>TRAFFIC SAFETY</b> <b>MEMORIAL SIGN PROGRAM</b>
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18.20.7.1 ISSUING AGENCY: New Mexico State Highway and Transportation Department, Post Office Box 1149, Santa Fe, New Mexico 87504-1149 (505) 827-0410.  
[Recompiled 11/16/01]

18.20.7.2 SCOPE: This rule applies to any person or entity who desires to place a Memorial Sign.  
[Recompiled 11/16/01]

18.20.7.3 STATUTORY AUTHORITY: This rule is adopted pursuant to NMSA 1978, Section 66-7-102 and 66-7-506.  
[Recompiled 11/16/01]

18.20.7.4 DURATION: Permanent.  
[Recompiled 11/16/01]

18.20.7.5 EFFECTIVE DATE: July 1, 1998, unless a later date is cited at the end of a section or paragraph.  
[Recompiled 11/16/01]

18.20.7.6 OBJECTIVE: The objective of this rule is to provide minimum and uniform standards and procedures for the application and installation of D.W.I. Memorial Signs and to promote traffic safety concerning impaired drivers.

[Recompiled 11/16/01]

18.20.7.7 DEFINITIONS:

- A. "Authorized sign manufacturer" means a sign manufacturer that meets the Department's specifications for sign fabrication and is on the Department's purchasing list.
- B. "Department" means the New Mexico State Highway & Transportation Department.
- C. "District Memorial Sign Coordinator" (also known as "District Coordinator") means a person who is not a Department employee and who serves as a facilitator of the program (one per district).
- D. "District Patrol" (also known as "Patrol") means an area within a State Highway District comprising a crew of State Highway and Transportation Department employees whose responsibility is to provide routine maintenance to State Highways and State Highway Facilities within the patrol area boundary.
- E. "District Traffic Engineer" means an Engineer employed by the Department working at one of the six Highway District Offices, responsible for traffic operations.
- F. "Division" means, the Transportation Programs Division of the New Mexico State Highway and Transportation Department.
- G. "D.W.I" means driving while impaired by drugs or alcohol.
- H. "Highway district office" means the District Office having jurisdiction over the proposed or actual location of a memorial sign.
- I. "Sponsor" means an individual(s) making application for a Memorial sign, who is responsible for completing the application and paying for the sign from an authorized sign manufacturer.
- J. "State Highway System" means, for the purpose of this program, all roads the Department has total maintenance responsibility for (US and NM routes), excluding the Interstate Highway System.
- K. "Victim" means someone killed in an alcohol involved crash, excluding any driver who was under the influence of any alcohol or drugs.

[Recompiled 11/16/01]

18.20.7.8 MEMORIAL SIGN PROGRAM:

- A. Families and friends of victims of alcohol-related crashes have indicated a strong interest in some type of signing which would publicly memorialize these victim(s). The Department does not presently have a program to meet this need, but has embraced the idea of a "Memorial Sign Program for Victims of Alcohol-Related Crashes" both as a means of lending emotional support to the victim's family, and furthering the Department's efforts to combat drinking and driving.
- B. The Department has established an alcohol-related crash victim Memorial Sign Program. Upon request by the family or friends of a victim of a fatal alcohol-related crash within the state's jurisdiction or New Mexicans who died in an alcohol related crash anywhere, and when certain other requirements are met, a sign can be installed on the State Highway System (exclusive of the Interstate System).
- C. The Department will make the determination for the location of all Memorial Signs based on safety considerations and regulations. Each Patrol within a District has agreed to install two signs. All state highways, except the Interstate System, are eligible for signing under this program. The Department has no jurisdiction on county roads or city streets, and thus cannot install signs along those roadway systems.
- D. The sign blank material shall be 0.125" thick aluminum 30" x 48", white SEG background with black vinyl lettering of specified size, spacing, and separation. A sign 30" x 48" can accommodate up to a maximum of three names. The standard sign features the words "Please Don't Drink and Drive" "In memory of (victim's name(s)).

[Recompiled 11/16/01]

18.20.7.9 PROCEDURES:

- A. If necessary the Sponsor may request a "Memorial Sign Program" application from the Division, the District Coordinator, or other Department designee. This application will enable the District Coordinator to: contact the Sponsor, explain essential aspects of the program, verify eligibility, and secure written agreement from the Sponsor to abide by Department provisions and procedures.
- B. The application must contain the following information:
  - (1) Name, address and day-time telephone number of the Sponsor.

(2) Eligibility criteria: a. verification of alcohol involvement through a copy of the police crash report. Indication of alcohol involvement as the cause or contributing cause to the crash by the investigating officer as recorded on the police crash report shall be considered sufficient evidence for the purpose of this program. b. verification that the person for whom the Memorial Sign is intended was a victim, as defined herein.

(3) The application will contain a signature line for the Sponsor to verify his/her willingness to abide by the conditions set forth therein and to hold the Department harmless of any liability.

C. The signed application is then returned by the Sponsor to the District Coordinator. The Coordinator will verify eligibility and forward a copy of all qualified applications to the District Traffic Engineer.

D. Once a location is selected by the District Traffic Engineer, the District Coordinator will forward an authorization for sign purchase to the Sponsor and the Division.

E. It is the Sponsor's responsibility to submit a copy of the approved authorization and payment in full, to an approved sign manufacturer. The cost for a sign shall be the Sponsor's responsibility.

F. The sign manufacturer will ship the completed sign directly to the appropriate Highway District Office.

G. The Highway District Offices will install the Memorial Signs without cost to the Sponsor according to each District's work schedule. Specific requirements are as follows

(1) All sign fabrication and installation requirements shall be in accordance with Department specifications for road and bridge construction, and the Manual on Uniform Traffic Control Devices.

(2) Placement of the sign will be under the direction of the respective District Traffic Engineer. Installation depends on the District's work schedule and related circumstances. Cost for replacing damaged signs will be the Sponsor's responsibility.

(3) A sign will remain in place for at least one (1) year from date of installation. Once a sign is removed, the Sponsor will be notified and the sign will be available for return to the Sponsor at the Highway District Offices.

H. The District Traffic Engineer will notify the Coordinator who will contact the Sponsor as to the location and date the sign was installed. Once this information is provided the Department, the process from initial request to installation is complete.

I. The Highway District Office will be responsible for removal of all Memorial Signs. Damaged signs will be removed if not repaired promptly after notification to the Sponsor.

[Recompiled 11/16/01]

#### 18.20.7.10 PROCEDURES FOR VERIFICATION:

A. The Division will keep an appropriate data base of all applications, installation dates and locations.

B. The Division will provide information and materials on the Memorial Sign Program to all District Coordinators and District Traffic Engineers.

C. The Division will be a liaison between the District Coordinators, District Traffic Engineers, and Sign manufacturers. Semi-annual reports verifying and updating information will be generated and made available by the Division.

[Recompiled 11/16/01]





## TITLE 18 - TRANSPORTATION AND HIGHWAYS

### CHAPTER 21

### TRAFFIC CONTROL SIGNAGE

18.21.1 NMAC	GENERAL PROVISIONS [RESERVED]	
18.21.2 NMAC	<a href="#">TEMPORARY CLOSING OF STATE HIGHWAYS FOR SPECIAL PUBLIC EVENTS OR CIVIC FUNCTIONS</a>	<a href="#">pdf version</a>
18.21.3 NMAC	<a href="#">REQUIREMENTS FOR SIGNS ON GAS, FOOD, LODGING, CAMPING AND ATTRACTION, TRAVELER INFORMATION SIGNS</a>	<a href="#">pdf version</a>
18.21.4 NMAC	<a href="#">TOURIST ORIENTED DIRECTIONAL SIGNS (TODS)</a>	<a href="#">pdf version</a>
18.21.5 NMAC	<a href="#">OUTDOOR ADVERTISING REQUIREMENTS</a>	<a href="#">pdf version</a>

<b>TITLE 18</b> <b>CHAPTER 21</b> <b>PART 2</b>	<b>TRANSPORTATION AND HIGHWAYS</b> <b>TRAFFIC CONTROL SIGNAGE</b> <b>TEMPORARY CLOSING OF STATE HIGHWAYS FOR SPECIAL PUBLIC EVENTS OR CIVIC FUNCTIONS</b>
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18.21.2.1 ISSUING AGENCY: New Mexico State Highway and Transportation Department  
P. O. Box 1149 Santa Fe, New Mexico 87504-1149 (505) 827-5525.  
[10/31/98; 18.21.2.1 NMAC – Rn, 18 NMAC 21.2.1, Recompiled 11/16/01]

18.21.2.2 SCOPE: All local governments and general public.  
[10/31/98; 18.21.2.2 NMAC – Rn, 18 NMAC 21.2.2, Recompiled 11/16/01]

18.21.2.3 STATUTORY AUTHORITY: This rule is adopted pursuant to NMSA 1978 Sections 66-3-702; 66-7-7; 66-7-320; 66-7-321; 66-7-339; 66-7-363; 66-8-115; 66-9-8; 67-3-14; and 67-3-40. [10/31/98; 18.21.2.3 NMAC – Rn, 18 NMAC 21.2.3, Recompiled 11/16/01]

18.21.2.4 DURATION: Permanent.  
[10/31/98; 18.21.2.4 NMAC – Rn, 18 NMAC 21.2.4, Recompiled 11/16/01]

18.21.2.5 EFFECTIVE DATE: October 31, 1998, unless a later date is cited at the end of a section or paragraph.  
[10/31/98; 18.21.2.5 NMAC – Rn, 18 NMAC 21.2.5, Recompiled 11/16/01]

18.21.2.6 OBJECTIVE: The purpose of this rule is to prohibit the temporary closing of state highways unless prior approval of said closing is obtained as provided herein. This rule sets forth the requirements for obtaining this approval for the temporary closing of all or a portion of a state highway in order to conduct thereon a special public event or civic function, including but not limited to, a bicycle, foot, or vehicle race, use of a highway

by snowmobiles (where it is in accordance with the law), horses, motorized bicycles, etc., parade or celebration, and to minimize the inconvenience to the traveling public caused by the occurrence of such events on state highways. [10/31/98; 18.21.2.6 NMAC – Rn, 18 NMAC 21.2.6, Recompiled 11/16/01]

18.21.2.7 DEFINITIONS:

A. "Temporary closing of a highway" means any shutting off blocking, re-routing, or other restrictions of the normal use of a state highway.

B. "Sponsor" means the governmental entity, association or other organization requesting the temporary closing.

[10/31/98; 18.21.2.7 NMAC – Rn, 18 NMAC 21.2.7, Recompiled 11/16/01]

18.21.2.8 APPLICABILITY: This rule is applicable to allow temporary closings only for public events or civic functions.

[10/31/98; 18.21.2.8 NMAC – Rn, 18 NMAC 21.2.8, Recompiled 11/16/01]

18.21.2.9 PROCEDURE:

A. Application by Sponsor: The sponsor of an activity described herein, shall, at least 30 days prior to the event, make written application to the Secretary of the Department on an application form to be obtained at any District Office or at the State Maintenance Bureau at the General Office. The Department will normally require at least thirty (30) days to review the application and consult with the sponsors, where necessary, prior to any decision making.

B. Review of Application: The Secretary of the Department or his designee shall review the application and, when necessary, coordinate with the New State Police Uniformed Bureau Commander and the local authorities within whose jurisdiction the event is to take place.

C. Notice of action taken by the Department: The Secretary of the Department or his designee shall inform the sponsor in writing of the action taken on the notice, including all conditions imposed if approval is granted. Such conditions include without limitations:

(1) The requirement that the sponsor make adequate provisions for traffic control (i.e., law enforcement, traffic control devices and/or signing).

(2) The requirement that the sponsor and/or the participants in the special event or civic function execute releases of liability, indemnity and hold harmless agreements and also submit proof of insurance coverage for any liability arising out of the special event or civic function, in forms satisfactory to the Department.

(3) The requirement that the sponsor participate in preparation and execution of an agreement between the sponsor, the Department, local government authorities and state or local police for the establishment, signing and marking of appropriate detours and alternative routes jointly affecting state and local road systems.

[10/31/98; 18.21.2.9 NMAC – Rn, 18 NMAC 21.2.9, Recompiled 11/16/01]

HISTORY OF 18.21.2 NMAC:

Pre-NMAC History: The material in this Part derived from that previously filed with the Commission of Public Records - State Records and Archives.

SHD Rule 81-4, Rule for Temporarily Closing of State for Special Public Events of Civic Functions, filed August 14, 1981.

History of Repealed Material : [RESERVED]

**TITLE 18                    TRANSPORTATION AND HIGHWAY**  
**CHAPTER 21            TRAFFIC CONTROL SIGNAGE**  
**PART 3                    REQUIREMENTS FOR SIGNS ON GAS, FOOD, LODGING,**  
**CAMPING AND ATTRACTION, TRAVELER INFORMATION SIGNS**

**18.21.3.1            ISSUING AGENCY:** New Mexico Department of Transportation Post Office Box 1149 Santa Fe, New Mexico 87504-1149 (505) 827-0714.  
 [9/30/98; 18.21.3.1 NMAC - Rn & A, 18 NMAC 21.3.1, 1/14/2005]

**18.21.3.2            SCOPE:** This rule covers specific service signing to provide the traveler with business identification and directional information for essential motorist services for the general public.  
 [9/30/98; 18.21.3.2 NMAC - Rn, 18 NMAC 21.3.2, 1/14/2005]

**18.21.3.3            STATUTORY AUTHORITY:**

A. Regulations for signs giving specific information in the interest of the traveling public are authorized under Sections 66-7-101, Most current adopted edition of the *manual on uniform traffic control devices* or latest approved edition; 66-7-102, 67-3-16, 67-12-4, 67- 12-5 and 67-14-1 NMSA 1978 et seq.

B. All rules and regulations set forth herein are subject to revision by the New Mexico department of transportation with the approval of the New Mexico state transportation commission.  
 [9/30/98; 18.21.3.3 NMAC - Rn & A, 18 NMAC 21.3.3, 1/14/2005]

**18.21.3.4            DURATION:** Permanent.  
 [9/30/98; 18.21.3.4 NMAC - Rn, 18 NMAC 21.3.4, 1/14/2005]

**18.21.3.5            EFFECTIVE DATE:** September 30, 1998, unless a later date is cited at the end of a section.  
 [9/30/98; 18.21.3.5 NMAC - Rn & A, 18 NMAC 21.3.5, 1/14/2005]

**18.21.3.6            OBJECTIVE:** The objective of these regulations is to establish standards for signs, displays and devices related to specific service signs (LOGOS signs), giving specific information in the interest of the traveling public, to be erected within the rights-of-way of the interstate highway system and other controlled access roadways.  
 [9/30/98; 18.21.3.6 NMAC - Rn, 18 NMAC 21.3.6, 1/14/2005]

**18.21.3.7            DEFINITIONS:** As used in these rules unless the context clearly indicates otherwise.

A. **"As-built plans"** means detailed plans showing the configuration and location of specific information "panels" and trailblazer signs after the initial construction is completed on an interchange by interchange basis.

B. **"Business sign"** means a separately affixed sign attached to a motorist informational "panel," showing the name, brand or trademark of a qualified motorist service business.

C. **"Commission"** means the New Mexico state transportation commission.

D. **"Department"** means the New Mexico department of transportation.

E. **"Department secretary"** means the secretary of the New Mexico department of transportation or his designated representative.

F. **"District"** means any one of six sub-districts of the NMDOT responsible for construction and maintenance activities in a defined geographical area.

G. **"Eligible highway"** means those sections of controlled access highways determined by the NMDOT to be eligible for the specific information "panel" program.

H. **"Eligible interchange"** means those interchanges within the eligible sections of highways where the specific information "panel" program may be provided.

I. **"Exit gore"** means the earliest point at which the exit roadway becomes fully separated from the mainline roadway.

J. **"Interstate system"** or **"interstate highway"** means every state highway that is a part of a national system of interstate and defense highways established pursuant to Section 103(b), Title 23, United States Code. This definition also includes fully controlled access freeways on the primary highway system.

K. **"Logo"** means a symbol or design used by a qualified traveler service business that may consist of an easily recognizable identification symbol, name brand, trademark, or combination thereof.

L. **"Main traveled way"** means the through traffic lanes of interstate systems or access controlled routes, exclusive of frontage roads, auxiliary lanes and ramps.

M. **"Specific service sign"** means a "specific informational panel" bearing separately affixed individual business signs, indicating the presence of one or more gas, food, lodging, camping or attraction, and erected in advance of exit ramps on interstate systems or access controlled roadways. In appropriate context only, it also means a supplemental direction panel.

N. **"Separate traveler informational sign"** means a traveler information panel which indicates the presence of only one type of tourist service, namely, gas, food, lodging, or camping. The phrase "traveler information sign" when not qualified means "separate traveler informational panel."

O. **"Combination traveler informational sign"** means a traveler informational panel which indicates the presence of more than one type of tourist service. No traveler informational panel may indicate the presence of more than three types of tourist services in any event.

P. **"NMDOT program administrator"** means that person assigned by the NMDOT to oversee and coordinate the LOGOS sign program and when applicable the program manager's activity.

Q. **"Owner"** means the holder of fee title, or holder of leasehold estates from the owner of the real property.

R. **"Permit"** means formal approval by the NMDOT or when applicable the program manager for work performed within the highway right-of-way and processed on forms provided by the NMDOT or when applicable the program manager for that purpose.

S. **"Program manager"** or **"contractor"** means, when applicable, that person, firm, or organization selected by the NMDOT for the purpose of administering, marketing, constructing, refurbishing, and maintaining the existing and future specific service sign program in New Mexico.

T. **"Qualified motorist business"** means a business furnishing gas, food, lodging, camping or attraction related tourist services.

U. **"Responsible operator"** means a person or entity other than an owner who operates an independent motorist service business, and who has authority to enter into agreements relevant to matters covered by these requirements.

V. **"Mainline specific information panel"** means a background sign-panel with border and copy upon which one (1) or more separate business signs may be attached and are located adjacent to the mainline and exit ramps of the eligible highway.

W. **"Ramp supplemental directional sign"** means a motorist informational panel located on, opposite or at the terminus of an exit ramp from the interstate system, bearing business signs and directional information for a qualified motorist service business.

X. **"Trailblazer sign"** means a business sign with an appropriate directional arrow sign mounted along the route leading from the interchange to the business for traffic direction purposes.

Y. **"Visible"** means the location of the business can be readily identified by traffic approaching the termini of the highway exit ramp serving the business or approaching an intersection along the route from the exit ramp to the business.

[9/30/98; 18.21.3.7 NMAC - Rn & A, 18 NMAC 21.3.7, 1/14/2005]

**18.21.3.8 RESPONSIBILITY:** It shall be the responsibility of each division and section within the department to carry out their pertinent functions relating to programming, design and contracting for each project concerning the traveler informational signing program. The traffic services section shall handle all phases of the business sign portion of a project. All actions shall be in conformity with regulations promulgated by the department and with the federal-aid highway program manual, volume 6, chapter 8, section 3.

[9/30/98; 18.21.3.8 NMAC - Rn, 18 NMAC 21.3.8, 1/14/2005]

#### **18.21.3.9 LOCATION:**

A. The use of specific service signs should be limited to areas primarily rural in character or to areas where adequate sign spacing can be maintained.

B. Limitation of specific information panels and individual business signs:

(1) Where there are sufficient qualified applicants, a separate specific information panel shall be erected for each type of traveler service. The GAS, FOOD, LODGING, CAMPING and ATTRACTION specific information panels shall carry no more than six individual business signs each.

(2) Combination motorist information signs may be used at an interchange at the discretion of the department or contractor.

C. Relationship to exit gore and right-of-way line: The specific information panels shall be erected between the previous interchange and 1/2 mile in advance of the exit gore for the approaching interchange. These panels shall be located outside of the clear zone and readable from the main traveled way. The last panel shall be erected no closer than 1/2 mile to the exit gore of the approaching interchange with at least 800 foot spacing between the information panels. In the direction of traffic, the successive panels shall be those of "ATTRACTION", "CAMPING", "LODGING", "FOOD", "GAS" in that order.

D. Not to be used where re-entry to freeway is Inconvenient: The specific information panel shall not be erected at an interchange at which an exit from the freeway is provided but at which no entrance ramp exists at that interchange or at another reasonably convenient location that would permit a traveler to proceed in the desired direction of travel without undue indirection or use of poor connection roads.

E. Continuity of signing along exit ramp: The traveler services information, shown on the specific information panels, shall be repeated on the panels located along the interchange ramp where distance allows or at the ramp terminal where the service installations are not visible from the ramp terminal. In addition, appropriate trailblazer assemblies or direction information panels may also be provided along the crossroad, as required, to adequately direct travelers to the respective service facilities. These signs shall be the same in shape, color, and message as those shown on the specific information panels, together with a supplemental arrow sign (M6 series) showing the directions for the different services and, where needed, the mileage to the service installation. Normally, this signing will not be necessary at double-exit interchanges. The legends or symbols on these signs shall be smaller (minimum 4-inch letter height, except that any legend on a symbol shall be in proportion to the size of the symbol) than those shown on the specific information panels.

F. General traveler service signs: There is no need for a general traveler service sign to confirm the specific information panels erected for any of the five services. A general traveler service sign carrying any of the legends or symbols not contained on the specific information panels and also the symbols for phone and hospital, when applicable, may be erected. If so used, it shall be erected in conjunction with the ground mounted exit direction signs, or may be a separate sign with appropriate directional information erected a minimum of 800 feet following the last advance guide sign. Figures 1 through 5 are prepared from the standards and are included for informational purposes.

[9/30/98; 18.21.3.9 NMAC - Rn & A, 18 NMAC 21.3.9, 1/14/2005]

#### **18.21.3.10 CRITERIA TO DETERMINE SPECIFIC INFORMATION PERMITTED:**

A. Location of service establishments from interchange: The maximum distance that the "ATTRACTION", "GAS", "FOOD", "LODGING" or "CAMPING" services can be located from the main traveled way to qualify for a business sign shall not exceed 3 miles in either direction. If within that 3-mile limit one or more of the service types considered is not available, continue in 3-mile increments of consideration up to 15-mile maximum, if necessary, to find an available service of the type being considered. Services beyond the 15-mile limit do not qualify for signing.

B. Types of services permitted: Subsequent to the date of this rule, the types of services permitted shall be limited to "gas", "food", "lodging", "camping" and "attraction". Requirements to qualify for display on a specific information panel are as follows:

- (1) "gas" and associated services to qualify for erection on a panel shall include:
  - (a) vehicle services such as fuel, oil and water;
  - (b) continuous operation at least 16 hours per day, 7 days per week for freeways and expressways, and continuous operation at least 12 hours per day, 7 days per week for conventional roads;
  - (c) modern sanitary facilities;
  - (d) public telephone;
  - (e) drinking water.
- (2) "food" to qualify for erection on a panel shall include:
  - (a) where required, licensing or approval by state or political subdivision;
  - (b) continuous operations to serve three meals per day at least 6 days per week;
  - (c) modern sanitary facilities;
  - (d) public telephone.
- (3) "lodging" to qualify for erection on a panel shall include:
  - (a) where required, licensing or approval by state or political subdivision;
  - (b) adequate sleeping accommodations;

- (c) public telephone;
- (d) modern sanitary facilities.
- (4) "camping" to qualify for erection on a panel shall include:
  - (a) licensing or approval by appropriate public agency;
  - (b) adequate parking accommodations;
  - (c) modern sanitary facilities, drinking water and showers;
  - (d) continuous operation seven days a week;
  - (e) public telephone;
  - (f) provisions for removal or covering of the business signs during off-seasons if operated on a seasonal basis.

- (5) "attraction" to qualify for erection on a panel shall include:
  - (a) regional significance;
  - (b) adequate parking accommodations.

[9/30/98; 18.21.3.10 NMAC - Rn & A, 18 NMAC 21.3.10, 1/14/2005]

#### **18.21.3.11 COMPOSITION:**

A. Single-exit interchanges: For a single-exit interchange, the business signs shall be arranged on the panel, with a maximum of two horizontal rows. When the number of business signs is one-half or less of the maximum permitted, the arrangement shall be in one horizontal row. The maximum in one horizontal row shall be limited to one-half of the maximum permitted on the panel. The signs should be mounted on the panel in the order of the travel distance measured from the point of the intersection of the main traveled way and the exit traveled way, the closest at the top left, the next closest at the bottom left, and continuing to the end.

B. Double-exit interchanges: In the case of a double exit interchange, the specific information panels shall consist of two sections where the same type of traveler services are to be signed for each exit. The arrangement of the business signs on each section of the panel shall be in accordance with the requirements for a single-exit specific information panel. For double-exit interchanges, the travel distance shall be measured from the intersection of the main traveled way and the first exit traveled way. The specific information panel shall display the appropriate business sign or signs and directional information for each exit. The top section of this panel shall display the business signs for the first exit with the appropriate service type and the exit numbering. The lower section of this panel shall display the business signs for the second exit with the appropriate service type, same as the top section, and the exit numbering. Exit numbering shall be placed on the panels and shall consist of "Exit 44 A" or "Exit 44 B" with the appropriate number and letter. The number of business signs on this panel (total of both sections) shall be limited to six for "GAS," "FOOD," "LODGING," "CAMPING" or "ATTRACTION". If the "FOOD," "LODGING", "CAMPING" or "ATTRACTION" panel is 13-feet wide, the number of business signs on this panel shall be limited to four. The legends or symbols on the mainline signs shall be clearly legible at normal highway speeds (letter height and legend on a symbol shall be in proportion to the size of the symbol).

C. Commercial symbols or trademarks: Business signs composed of nationally, regionally, or locally known commercial symbols or trademarks for service stations, restaurants, motels and campgrounds shall be used when applicable. The brand or trademark identification symbol used on the business sign shall be reproduced with the colors and general shape consistent with customary use. Any messages, trademarks, or brand symbols which interfere with, imitate, or resemble any official warning or regulatory traffic sign, signal or device are prohibited. [9/30/98; 18.21.3.11 NMAC - Rn, 18 NMAC 21.3.11, 1/14/2005]

#### **18.21.3.12 SIZE:**

- A. Business signs:
  - (1) The business signs displayed on the information panel shall be contained within a 48-inch wide and 36-inch high rectangular background area, including border.
  - (2) The existing business signs measuring 60-inch by 36-inch on "FOOD," "LODGING" and "CAMPING" specific information panels shall be replaced, at the logo client's expense, with 48-inch wide by 36-inch high business signs. New 48 inch wide by 36 inch high business signs must be provided by the participating business as new specific information panels are being installed or existing specific information panels are being overlaid or refurbished.
- B. Information panel - single-exit interchange:
  - (1) The maximum size of the specific information panel should be 15-feet wide and 10-feet high, including border; the minimum size should be 15-feet wide and 6-feet high, including border.

(2) The size of existing "FOOD," "LODGING" and "CAMPING" specific information panels are 18-feet wide and 10-feet high or 13-feet wide and 6-feet high, including border. These specific information panels should be replaced with 15-feet wide and 10-feet high or 15-feet wide and 6-feet high respectively, as appropriate, during routine re-construction projects or by, when applicable, the program manager/contractor. The department or contractor may choose to refurbish the existing sign and provide spacing between business signs as approved by the department.

C. Information panel - double-exit interchange:

(1) For double-exit interchanges where the same type of motorist services are to be signed for each exit, the specific information panels shall consist of two 15-foot wide and 6-foot high sections, one for each exit.

(a) Existing "FOOD," "LODGING" and "CAMPING", specific information panels, consist of two 13-foot wide and 6-foot high sections, one for each exit. These specific information panels shall be replaced with two 15-feet wide and 6-feet high during routine re-construction projects or as needed by the contractor.

(b) Each section shall be capable of accommodating a maximum of either three gas, FOOD, LODGING, CAMPING or ATTRACTION business signs.

(2) For double-exit interchanges where a type of motorist service is to be signed for only one exit, only one specific information panel may be used.

[9/30/98; 18.21.3.12 NMAC - Rn & A, 18 NMAC 21.3.12, 1/14/2005]

#### **18.21.3.13 COLOR AND RETROREFLECTORIZATION:**

A. Specific information panel: The background, border, and all legend shall consist of type III, or greater, retroreflective sign sheeting. The type of service, "GAS," "FOOD", "LODGING", "CAMPING" or "ATTRACTION" along with the exit number messages shall be white retroreflectorized 10-inch capital letters. The type of service shall be left justified and the "EXIT" and number shall be right justified. There shall be no hyphen between the type of service and the word "EXIT."

B. Business signs: The business sign color shall be a white message on a blue background, except that colors consistent with customary use should be used with nationally, regionally or locally known symbols or trademarks. The principal legend on the business sign shall be reflectorized and at least 10 inches in height, whether upper or lower case alphabet is used; however, where the symbol or trademark is used alone for the business sign, any legend on the symbol or trademark shall be in proportion to the size thereof, consistent with customary use. The business signs shall have a white border except that when symbols or trademarks are used the border may be omitted. The background, border, and all legend shall consist of type III, or greater, retroreflective sign sheeting.

[9/30/98; 18.21.3.13 NMAC - Rn, 18 NMAC 21.3.13, 1/14/2005]

**18.21.3.14 TRANSVERSE LOCATION OF SIGNS AND OF SIGN SUPPORTS:** Specific information panels: The specific information panels shall be located outside of the clear zone, but in a location where they are readable from the traveled ways. Consideration should be given to the natural terrain in the placement of the panels.

[9/30/98; 18.21.3.14 NMAC - Rn, 18 NMAC 21.3.14, 1/14/2005]

#### **18.21.3.15 PROCEDURES TO BE FOLLOWED BY THE DEPARTMENT:**

A. Eligibility of funds: Federal funds may be eligible to participate in the cost and erection of these panels in the same manner that such funds are eligible for other highway signs to the national highway system, except that federal funds are not eligible to participate in the cost of procuring and installing the business signs.

B. Programming, project authorization and other actions: The procedures for obtaining approval for programming, project authorizations and other actions for federal projects including these panels shall follow the same procedures in use for other national highway system projects. If the department desires to erect these panels on the interstate highway system or other controlled access routes on the national highway system without federal fund participation, it shall provide a design consistent with standards in the MUTCD and standards herein. No panels shall be approved which do not conform to the requirements of these standards. Programming of a traveler informational panel project shall be at the discretion of the department and/or, when applicable, the program manager/contractor.

[9/30/98; 18.21.3.15 NMAC - Rn & A, 18 NMAC 21.3.15, 1/14/2005]

#### **18.21.3.16 ELIGIBILITY:**

A. Intended primarily for rural interchanges: Traveler information panels shall be erected and maintained at rural interchanges whether a business is or is not visible to the traveling public from the highway and at suburban or urban interchanges where spacing allows.

B. Types of services and criteria: Types of services and criteria are set forth in Subsection B of 18.21.3.10 NMAC.

C. Conformity with civil rights laws: The owner or responsible operator of a qualified traveler business must give written assurance of its conformity with all applicable laws concerning the provisions of public accommodations without regard to race, religion, sex, handicap or national origin.

D. Mileage limits - who may apply. (See Subsection A of 18.21.3.10 NMAC)

E. Rules applicable to business signs:

(1) The owner or responsible operator of the business must file an application for placement of its business sign on all traveler informational panels erected at the interchange on which it is eligible for such placement, and if it is not visible from the exit ramp, on any supplemental directional panel on the exit ramp or at its terminus, on a form specified by the department or when applicable, the program manager/contractor.

(2) The applicant must also agree to furnish the necessary number of its business signs to be affixed to the traveler informational panels.

(3) The applicant must also acknowledge that the permit is revocable for his failure to comply with those requirements of Subsection J of 18.21.3.16 NMAC of this section; that revocation under this paragraph forfeits applicant's paid rental and permit fees, there being no allowance for a pro rata refund for the remainder of the year.

(4) The applicant expressly agrees to waive all claims against the department and when applicable, its contractor, including claims for damage to its business signs by the department's or contractor installation, maintenance removal and replacement as required in Subsection B of 18.21.3.18 NMAC. Applicant further agrees to indemnify the department and when applicable, the contractor and save them harmless from all claims arising out of the erection, maintenance and existence of applicant's business and logo signs within department's right of way. Such claims to be indemnified include, but are not limited to, damages caused as a result of relying upon the representations made by the business and logo signs to the detriment of the traveling public.

F. Conformity with laws: All signs or advertising on the premises must be in full compliance with all other state and federal laws and regulations.

G. Priority of business sign application: If applications are received for any one interchange from more than the maximum allowable businesses to be placed on any one panel, only six applications for gas, food, lodging, camping and attraction shall be granted. The order of priority shall be the six businesses closest to the interchange that have applied for a permit prior to the closing date set by the department or the contractor for receipt of applications except as stated in Subsection A of 18.21.3.16 NMAC of this requirement.

H. Length of time of permit: Any grant of a new or renewal application shall entitle the applicant to placement of its business sign(s) on traveler information panel(s) for the interchange(s) for the paid rental period.

I. Permit renewed annually: Eligibility of qualified traveler service businesses for continued placement of their business sign on a traveler information panel may be reviewed annually before a grant of renewal permit, on the same basis as for an original permit, but no new application shall be deemed to have higher priority than a renewal application unless it is received at least sixty (60) days before the permit is scheduled to expire under Subsection H of 18.21.3.16 NMAC.

J. Causes for removal of business signs: Notwithstanding Subsection I of 18.21.3.16 NMAC of this section, the business sign of a traveler service business shall be removed from all traveler informational panels and may be replaced by the business sign of another qualified applicant for failure to comply with Subsection B of 18.21.3.10 NMAC, as follows:

(1) If it fails on a sufficient number of occasions or over a sufficient period of time to provide all of the services required by Subsection B of 18.21.3.10 NMAC, so as to justify a finding by the department or when applicable the program manager that the business is not in substantial compliance with that paragraph.

(2) If it fails to open for business for more than seven consecutive days or for more than ten days cumulatively during any one-year period, unless the department or when applicable the program manager finds that closure for such period was beyond the control of the owner or responsible operator, or that the closure was justified by extenuating circumstances.

(3) If it fails to comply with Subsection C of 18.21.3.16 NMAC of this section, except in isolated instances without the knowledge of the owner, responsible operator or manager of the business, or on any occasion unless steps are promptly taken to insure to the fullest extent reasonably possible that such instances will not recur.

(4) If it willfully fails to comply with Subsection F of 18.21.3.16 NMAC of this section, or if it fails to take immediate steps to comply promptly after it is notified or becomes aware that it is not in compliance.

K. Removal caused by fire or accident: If due to fire, accident or similar causes, a qualified traveler service business becomes inoperable for an extended period of time, exceeding seven days, but not more than ninety



days, its business sign shall be temporarily removed from or covered on all motorist informational panels, but the business shall not lose its priority. Further extension may be granted on good cause shown. However, failure of the owner or responsible operator to proceed with necessary repairs within a reasonable time shall cause the loss of right to continued placement of the business sign and require a new application.

L. Waiver: Upon petition by an applicant showing a significant business disadvantage to it which would arise under strict enforcement of these regulations, or showing a substantial benefit to the public if a variance is granted, the department or when applicable the program manager may authorize a waiver of any requirements of Subsection J of 18.21.3.16 NMAC:

- (1) that it will not derogate from the purposes of these requirements;
  - (2) that the applicant will suffer a significant business disadvantage if the waiver is not granted, or that a substantial benefit to the public will be realized if the waiver is granted;
  - (3) that the waiver will not be contrary to any provisions of state law, or federal law or regulations.
- [9/30/98; 18.21.3.16 NMAC - Rn & A, 18 NMAC 21.3.16, 1/14/2005]

#### **18.21.3.17 APPLICATION AND APPEAL PROCEDURES:**

A. Application procedures:

(1) Upon selection of a particular interchange, individually or as part of a selected segment of the Interstate or access controlled national highway system, for erection of traveler informational panels for one or more types of qualified traveler service businesses, the department or when applicable the program manager may secure applications from owners or responsible operators of eligible businesses for placement of their business signs on such panels.

(2) The department or when applicable the program manager shall issue permits to each eligible applicant, up to the maximum number permissible.

B. Appeal procedure: Any order of the department or when applicable the program manager denying an application under these rules or for removal of a business sign pursuant to Subsection J of 18.21.3.16 NMAC, may be appealed by the applicant or permittee to the department secretary or when applicable the program manager within fifteen calendar days after knowledge of the facts or occurrences giving rise to the appeal. Any person who has been sent written notice of any fact or occurrence is presumed to have knowledge of the fact or occurrence. Appeals shall be in writing and contain the name and address of the party appealing, a concise statement of the grounds for the appeal, including any supporting evidence to substantiate the appeal, if available, and specify the ruling requested from the secretary or when applicable the program manager. The department or when applicable the program manager shall notify applicants or permittees promptly on any application denial or decision to remove a sign pursuant to Subsection J of 18.21.3.16 NMAC.

[9/30/98; 18.21.3.17 NMAC - Rn & A, 18 NMAC 21.3.17, 1/14/2005]

#### **18.21.3.18 ERECTION AND MAINTENANCE:**

A. Erect and maintain informational signs: The department or when applicable the program manager shall furnish, erect and maintain traveler informational panels at locations specified by the department or when applicable the program manager, or it may agree or contract with any city, county, or other governmental agency of this state, or with an independent contractor, to erect and maintain such panels at specified locations. In the event the department chooses to use an independent contractor for program management, the department may allow the contractor to fully administer the program, including marketing, issuing permits and collecting fees as well as providing, erecting informational panels, installing business signs and maintaining all logo informational sign panels. Compensation to the contractor may consist of the fees generated by the program. All existing sign panels as well as all sign panels provided and installed by the contractor will remain the property of the department and the state of New Mexico.

B. Erect and maintain business signs: The department or when applicable the program manager shall perform all required installation, maintenance, and removal and replacement of all business signs upon specific information panels within the right-of-way or as stated in Subsection A of 18.21.3.18 NMAC.

C. Business sign damage and new signs: The department or when applicable the program manager shall not be responsible for damages to business signs caused by acts of vandalism or natural causes requiring repair or replacement of business signs. Permittees in such event shall provide a new or renovated business sign together with payment of the appropriate service charge to the department or when applicable the program manager to replace such damaged business signs. A service fee for each mainline and/or each ramp supplement and/or each trailblazer business sign shall be assessed in accordance with the current, approved LOGO fee schedule.

D. Business sign approval actions: Promptly upon the approval of applications for business signs to be affixed to traveler informational panels, the department or when applicable the program manager shall notify the party with which it has contracted, so that the panels may be erected. The department or when applicable the program manager shall furnish the party with which it has contracted with all necessary information in order to permit the department or when applicable the program manager to erect the panels.

E. Furnishing business signs: The department or when applicable the program manager shall notify businesses to which applications have been approved sufficiently in advance of the date the panels will be erected, or business signs will be affixed to them, to permit such businesses to furnish the necessary number and detail of their business signs to allow when applicable the program manager to fabricate and install the business signs. If the department or when applicable the program manager is notified that a motorist service business has failed to timely furnish detailed information of its business signs, or that the signs furnished are not in compliance with these requirements and, if the department or when applicable the program manager finds that the permittee has not shown due diligence, it may cancel the permit and forfeit the permit fee.

[9/30/98; 18.21.3.18 NMAC - Rn & A, 18 NMAC 21.3.18, 1/14/2005]

#### **18.21.3.19 FEES:**

A. Application fees: All application fees are a one-time charge and are payable on application approval. The application fee for each business sign placed on a motorist informational panel shall be in accordance with the current, approved logo fee schedule. A separate fee in accordance with the current, approved logo fee schedule, shall be applicable for each business sign placed on a supplemental ramp directional panel. A separate fee, in accordance with the current, approved logo fee schedule, shall be applicable for each business sign installed as trailblazer at a crossroads between the ramp terminus and the location of the business. If a business is not visible from the exit ramp terminal, the motorist services information, shown on the specific information panels shall be repeated on the supplemental panels located along the interchange ramp where distance allows or at the ramp terminal.

B. Annual rental fees: In addition to the application fee, an annual rental fee, in accordance with the current, approved logo fee schedule, for each business sign affixed to a traveler informational panel, not including supplemental ramp signs and/or trailblazers shall be paid annually. The advertiser shall be notified when the traveler information panel is erected and the logo installed and the rental fee is then due. Rental fees shall be reviewed periodically to determine their relationship to the cost of operation of this program. Rental fees not received within thirty (30) days of notification to the applicant by the department shall subject applicant's application to revocation and removal of his sign without application fees being refunded.

C. Fee schedule preparation: In the event the department chooses to use an independent contractor, the contractor will prepare a logo sign fee schedule that shall be included as part of his proposal and is, therefore, subject to approval by the department. At the end of four years the logo sign fee schedule should be reviewed by the department and the contractor, at which time any necessary changes can be made. If the department does not choose to use an independent contractor, the department will prepare the logo sign fee schedule.

D. Retention and refunding fees.

(1) If an application for a permit is, for any reason not granted or renewed, all fees tendered with the application shall be refunded. If the permit is revoked under Subsection J of 18.21.3.16 NMAC, or if the rental is not timely tendered under Subsection B of 18.21.3.19 NMAC, the department or when applicable the program manager shall not refund any application fees.

(2) If an application is approved and contract has been awarded for the erection of the sign, no part of the permit fee shall be refunded. If a permit has been renewed, no part of the permit fee shall be refunded. If the business sign is subsequently removed by a taking of eminent domain of the business being advertised, a proportional refund of the permit fee may be made; however, in case of any removal, the rental fee for any months or major portion (16 days or more) of a month remaining to the anniversary date of placement of the business sign may be refunded. There shall be no refund of rental fees for any business sign temporarily removed or covered pursuant to Subsection K of 18.21.3.16 NMAC.

E. Department administered logo sign program: If the department chooses to continue the administration of the logo sign program, the department shall fully administer the program, including marketing, issuing permits and collecting fees as well as providing, erecting informational panels, installing business signs and maintaining all logo informational sign panels. A separate logo signing program account shall be established to receive any and all fees from the program. All funds in this account shall be used to furnish, erect and maintain traveler informational panels as needed as well as to pay costs associated with the administration of the logo sign program.

[9/30/98; 18.21.3.19 NMAC - Rn & A, 18 NMAC 21.3.19, 1/14/2005]

**18.21.3.20 MISCELLANEOUS:**

A. The department or when applicable the program manager shall adopt all necessary forms, accounting methods and other necessary procedures to carry out the full intent of these regulations.

B. These regulations shall be effective on the day they are filed with the New Mexico records and archives center, and any regulation heretofore affecting the subject matter hereof is hereby superseded.

[9/30/98; 18.21.3.20 NMAC - Rn & A, 18 NMAC 21.3.20, 1/14/2005]

**HISTORY OF 18.21.3 NMAC:**

**Pre-NMAC Regulatory Filing History:** The material in this part was derived from that previously filed with the State Records and Archives under:

SHC 75-2, Regulations for Gas, Food, Lodging and Camping, Motorist Information Signs, filed 6/24/75.

SHD 78-2, Regulations for Gas, Food, Lodging and Camping Motorist Information Signs on Interchanges of the Interstate Highway System and Full Access Controlled Primary Highway System, filed 9/22/78.

SHD 78-2, Amendment No.1, filed 5/7/85.

SHD Rule 88-2(L), Regulations for Gas, Food, Lodging and Camping Motorist Information Signs on Interchanges of the Interstate Highway System and Full Access Controlled Primary Highway System, filed 3/31/88.

**History of Repealed Material:** [RESERVED]

**Other History:**

SHD Rule 88-2(L), Regulations for Gas, Food, Lodging and Camping Motorist Information Signs on Interchanges of the Interstate Highway System and Full Access Controlled Primary Highway System (filed 3/31/88) was renumbered, reformatted, amended, and replaced by 18 NMAC 21.3, Requirements For Signs On Gas, Food, Lodging, Camping And Attraction, Traveler Information Signs, effective 9/30/1998.

18 NMAC 21.3, Requirements For Signs On Gas, Food, Lodging, Camping And Attraction, Traveler Information Signs (filed 9/16/1998) was renumbered, reformatted, amended, and replaced by 18.21.3 NMAC, Requirements For Signs On Gas, Food, Lodging, Camping And Attraction, Traveler Information Signs, effective 1/14/2005.

**TITLE 18            TRANSPORTATION AND HIGHWAYS**  
**CHAPTER 21       TRAFFIC CONTROL SIGNAGE**  
**PART 4             TOURIST ORIENTED DIRECTIONAL SIGNS (TODS)**

18.21.4.1            ISSUING AGENCY: New Mexico State Highway and Transportation Department  
Post Office Box 1149 Santa Fe, New Mexico 87504-1149            (505) 827-5525  
[12/31/98; 18.21.4.1 NMAC – Rn, 18 NMAC 21.4.1, Recompiled 11/16/01]

18.21.4.2            SCOPE: All state agencies and general public.  
[12/31/98; 18.21.4.2 NMAC – Rn, 18 NMAC 21.4.2, Recompiled 11/16/01]

18.21.4.3            STATUTORY AUTHORITY: Regulations for signs giving specific information in the interest of the traveling public are authorized under Sections 66-7-101, 66-7-102, 66-7-108, 67-8-9, 67-8-10, 67-12-4, 67-12-5, and 67-14-1 et seq., NMSA 1978 Comp., Section 2-I of the Manual on Uniform Traffic Control Devices; and approved by the New Mexico State Highway Commission on October 15, 1992. All rules and regulations set forth herein are subject to revision by the New Mexico State Highway and Transportation Department with the approval of the New Mexico Highway Commission.  
[12/31/98; 18.21.4.3 NMAC – Rn, 18 NMAC 21.4.3, Recompiled 11/16/01]

18.21.4.4            DURATION: Permanent.  
[12/31/98; 18.21.4.4 NMAC – Rn, 18 NMAC 21.4.4, Recompiled 11/16/01]

18.21.4.5            EFFECTIVE DATE: December 31, 1998, unless another date is cited at the end of a section or paragraph.  
[12/31/98; 18.21.4.5 NMAC – Rn, 18 NMAC 21.4.5, Recompiled 11/16/01]

18.21.4.6            OBJECTIVE: Tourist Oriented Directional Signs (TODS) provide the business identification and directional information for businesses (including seasonal agricultural products), services, and activities the major portion of whose income or visitors are derived during the normal business season from motorists not residing in the immediate area of the business or activity. They are intended for use only on rural conventional roads and shall not be used at interchanges, expressways, freeways or all roadways with any form of access control. They may be used in conjunction with motorist service signs. If tourist oriented directional signs (TODS) and specific service (LOGO) signs (SHTD Rule 88-2(L)) are installed at the same intersection, the LOGO signs shall be incorporated in the TODS signing scheme.  
[12/31/98; 18.21.4.6 NMAC – Rn, 18 NMAC 21.4.6, Recompiled 11/16/01]

18.21.4.7            DEFINITIONS:

A. "Business Sign" means a sign showing the name and/or brand and/or trademark, and/or directional arrow and/or distance to a qualified TODS business. Business signs may be erected individually or as a component of a sign assembly as determined by location.

B. "Department" means the New Mexico State Highway and Transportation Department.

C. "Interstate System" means every state highway that is part of a national interstate and defense highways established pursuant to Section 103(b), Title 23, United States Code.

D. "Logo" means an officially sanctioned sign of the Logo Signing Program.

E. "Logo Sign" means an officially sanctioned sign of the Logo Signing Program.

F. "Signing Priority" means all other type of signing shall have a priority over TODS signing.

G. "Tourist Oriented Directional Signs or TODS" means officially sanctioned signing that is located within the right-of-way of routes (except Interstate) under the jurisdiction of the Department and provides business identification and directional information for businesses, services and activities, the major portion of whose income from visitors are derived during the normal business season from motorists not residing in the immediate area of the business or activity.

H. "Trailblazer" means a route marker assembly used to indicate the direction to the nearest or most convenient point of access to a qualified TODS business.

I. "TODS Intersection" means a juncture of a highway and a public roadway that provides access to a qualified TODS business.

J. "Intersection TOD Sign" means a sign assembly installed within the highway right-of-way at or near a TODS intersection and is used to indicate the name, direction and distance to a qualified TODS business.

K. "Advance Intersection TOD Sign" means a sign assembly installed within the highway right-of-way at least one-half mile in advance of a TODS intersection and is used to indicate the name, direction and distance to a qualified TODS business.

[12/31/98; 18.21.4.7 NMAC – Rn, 18 NMAC 21.4.7, Recompiled 11/16/01]

18.21.4.8 SIGN, PANEL OR BUSINESS LOCATION: TOD signs shall be used only in rural areas where the business is not visible from the highway. Businesses visible from the road shall not qualify to receive TOD signing. Specifically, a prospective TOD business may be located:

A. in a rural area, inside the limits of an unincorporated or incorporated community with a population of 2000 or less;

B. Outside the limits of an unincorporated or incorporated community with a population between 2000 and 10,000. However, TOD signing may be located within the unincorporated /incorporated limits;

C. The location of other traffic control devices shall at all time take precedence over the location of TODS;

D. Intersection TODS panels should be at least 200 feet from the intersection;

E. Advance TODS panels should be at least 1/2 mile, but not more than 1 mile from the intersection, but will only be permitted in situations where sight distance, intersection maneuvers or other vehicle characteristics require notification;

F. Trailblazer TODS signs should be at least 100 feet from the intersection;

G. Intersection TODS panels should be spaced 200 feet from other intersection TODS panels and at least 200 feet from other traffic control devices;

H. Advance TOD panel should be spaced 800 feet from other advance TODS panels and at least 200 feet from the traffic control devices;

I. Trailblazer TOD signs should be spaced at least 200 feet from other traffic control devices;

J. TOD signs/panels shall not obstruct the drivers critical viewing of other traffic control devices;

K. At intersections where specific services (LOGO) signing is located, prior to TODS, then

(1) The LOGO signs shall be combined with TODS, if within guidelines of sign layout; or

(2) No TOD signing will be permitted at the LOGO intersection unless 8.11.1 [Paragraph (1), Subsection K., Section 8 of 18.21.4.8 NMAC] above is applicable, or

(3) No LOGO signing will be permitted at an intersection currently signed under TODS unless the LOGO(s) are combined as per above.

L. TODS shall not be permitted at interchanges if an at-grade intersection is replaced with an interchange, the intersection will no longer qualify for TODS and any previously erected TODS shall be removed by the Department.

M. A TODS trailblazer is required if the business is one or more miles from the intersection, and additional trailblazers are mandatory in advance of any turn the motorist is required to execute while enroute to the business;

N. Transverse location of signs should be at least eighteen feet offset from the outside edge of the near driving lane.

[12/31/98; 18.21.4.8 NMAC – Rn, 18 NMAC 21.4.8, Recompiled 11/16/01]

18.21.4.9 GENERAL ELIGIBILITY CRITERIA: It is the intention of TODS to provide information of significant interest to the general traveling public using signs that point out cultural, historical, recreational, educational or entertainment activities or unique commercial activities that are tourist or motorist oriented. In order to qualify for TODS, a business, as a minimum, must:

A. Give written assurance of its conformity with all applicable laws concerning the provisions of non-discrimination with regard to race, religion, sex, color or national origin and shall not breach such assurances;

B. In addition to the aforementioned non-discrimination clause, provide reasonable access and/or accommodation for the physically impaired;

C. Not have illegal signs (billboards) as defined by the Highway Beautification Act of 1965 (23 USC 131); or the Intermodal Surface Transportation Efficiency Act 1991;

D. Be open to the general motoring public, including families (members only or Time Share Investor facilities shall not be qualified for TODS);

E. Derive the major portion of income and/or number of visitors from motorists not residing in the immediate area of the business; and

F. The business/activity shall be conducted in a building or an appropriate area designed for the purpose. However, a building principally used as a residence may be permitted if there is a convenient, separate, and well-marked entrance.

[12/31/98; 18.21.4.9 NMAC – Rn, 18 NMAC 21.4.9, Recompiled 11/16/01]

18.21.4.10 SPECIFIC ELIGIBILITY CRITERIA: This section describes the types of businesses or activities that may qualify for TODS. These criteria are in addition to the requirements found in these regulations. By type, the specific criteria that an individual business or activity must meet to qualify for TODS are:

A. Motorist Service: A service of significant interest to motorist may qualify. The types of services, which may qualify, include, but are not limited to: gas, food, lodging, motor vehicle service or repairs. A business or activity providing motorist service must:

- (1) Be open a minimum of eight (8) hours a day, six (6) days a week, and twelve (12) months a year;
- (2) Have on-site restrooms facilities and drinking water available;
- (3) Have a telephone available for public use; and
- (4) Be located within five (5) miles of the TODS intersection.

B. Tourist Attraction: An attraction of significant interest to tourists as a historic, cultural, religious, scientific or education site, or as a site naturally for outdoor recreation or as a site of natural scenic beauty, may qualify for TODS if it:

- (1) Is open a minimum of six (6) hours a day, five (5) days a week, six (6) months, in continuum, a year;
- (2) Has on-site restroom facilities and drinking water available;
- (3) Is located within fifteen (15) miles of the TODS intersection; and
- (4) Has a telephone available for public use.

C. Agricultural Business Activity: An agricultural enterprise of significant interest to the traveling public may qualify if it:

- (1) Is open a minimum of six (6) hours a day, six (6) days a week, twelve (12) months a year or during the normal seasonal period of not less than three (3) months in continuum;
- (2) Is located within fifteen (15) miles of the TODS intersection;
- (3) Has on-site restroom facilities and drinking water; and
- (4) Has a telephone for public use.

D. Other Commercial Activity: A non-agricultural activity of significant interest to the traveling public may qualify, if it:

- (1) Is open a minimum of eight (8) hours a day, six (6) days a week, twelve (12) months a year or during the normal seasonal period of not less than three (3) months in continuum;
- (2) Has on-site restroom facilities and drinking water available;
- (3) Has a telephone available for public use; and
- (4) Is located within five (5) miles of the TODS intersection.

E. TODS Designs: Tourist oriented directional signs shall be rectangular in shape and:

- (1) Registered LOGOS shall be in accordance to the register color(s) of the LOGOS;
- (2) Shall have a white legend and border on a blue background;
- (3) Major routes in rural districts, intersection and advance TOD sign letters and numerals should be at least six inches (6") in height;
- (4) Non less important rural roads, the legend should be in numerals and letters at least four inches (4") in height;
- (5) Trailblazer TOD sign letters and numerals should be at least four inches (4") in height;
- (6) Lettering should be upper case letters;
- (7) Legends, arrows, borders, symbols, and logos shall be Retroreflective;
- (8) Each TOD sign should not have more than two lines of legend including not more than one symbol, a separate directional arrow, and the distance to the facility shown beneath the arrow;
- (9) Advance TOD signs shall not include the distance to the facility nor directional arrow;
- (10) Advance TODS panels should include the appropriate legend NEXT LEFT, NEXT RIGHT or AHEAD. Where there is intervening minor roads, the legend LEFT 1/2 MILE or RIGHT 1/2 MILE should be used;

- (11) TOD signs should not exceed the size necessary for two lines of legend without crowding;
- (12) Legends shall not include promotional advertising;
- (13) LOGOS resembling official traffic control devices shall not be permitted;
- (14) Direct and/or indirect reference to the availability of alcoholic beverages shall not be permitted;

and

- (15) The dates/days/hours of operation may be required.

[12/31/98, 18.21.4.10 NMAC – Rn, 18 NMAC 21.4.10, Recompiled 11/16/01]

#### 18.21.4.11 APPLICATION AND APPEAL PROCEDURES:

A. Application Procedures: Applications for tourist oriented directional signing shall be submitted to the appropriate District Highway and Transportation Office.

B. Applications shall be accompanied with a photocopy of the business license or other document that shows the actual registered name of the business and/or DBA that is to be the legend on the TOD sign(s).

C. The application shall include a sketch map.

D. The appropriate District Traffic Engineer shall review/verify TOD applications. Conditions and recommendations regarding approval will be forwarded with the application to the State Maintenance Bureau.

E. TODS permits shall be issued to each eligible applicant, up to the maximum number allowed.

F. If the number of approved applicants for an intersection is greater than the number of spaces available, space shall be allocated as follows:

(1) Year-round operations shall take precedence over seasonal activities, except when the distance computation of the bumping procedure applies.

(2) If paragraph 5.6.1 [Paragraph (1), Subsection F., Section 5 of 18.21.4.5 NMAC] of this sub-regulation does not apply, order of priority shall be the closest, qualified applicant to the intersection that have applied for a TODS permit in order to fill vacant space(s).

(3) Once an activity or site is approved for signing, it may occupy a space as long as it continues to qualify. However, a year-round activity will be able to bump a seasonal activity except when the distance computation of the bumping procedure applies.

G. Bumping Process: Rank current and new applicants - highest score gets bump. Notify business of intent to be bumped by March 1st, using Certified/Return Receipt Mail.

(1) Financial - not paid up to date is an AUTOMATIC BUMP.

(2) Distance - 1 point for each 0.1 mile from the TODS intersection to the location of the business.

(3) Waiver - 30 points each.

H. Appeal Procedure: Any order of the Department denying an application under these rules, or for removal of a business sign pursuant to section 5.7 may be appealed by the applicant or permittees to the appropriate District Office. The District shall notify applicants or permittees promptly on any application denial or decision to remove a sign.

[12/31/98; 18.21.4.11 NMAC – Rn, 18 NMAC 21.4.11, Recompiled 11/16/01]

#### 18.21.4.12 FURNISH, ERECTION, MAINTENANCE AND REMOVAL:

A. The applicant shall furnish, erect, maintain and remove TOD signs at locations specified by the Department. All of the above responsibilities shall be done in accordance with the New Mexico Highway and Transportation Department Standard Specifications for Highway and Bridge Construction. Upon approval of the application, the Department will notify the applicant for coordination of the installation.

B. All TOD signs shall be manufactured and installed by a contractor approved by the Department.

C. The applicant shall assume any liabilities that may arise from the TODS installation.

D. The applicant shall remove or appropriately cover a TOD sign of a seasonal business when the business is closed during the off-season period.

E. TOD signs shall be removed if the business no longer qualifies for TODS.

F. All required trailblazing signs shall be installed prior to the installation of either intersection or advance TOD signs.

G. The Department shall determine when a TOD sign is no longer serviceable and needs to be replaced. Replacement TOD signs may be subject to fees - see FEE Section of these regulations. Payment of all fees assessed shall be remitted in full within thirty (30) days from the date of notification.

H. The applicant may request additional services in connection with the modification of TOD signs. This requested service is subject to fees and pre-payment of the fee shall be mandatory - see FEE Section of these regulations.

I. The Department will provide normal maintenance of/to TOD signs:

- (1) If a TOD sign is modified or replaced at the request of the business, the business shall be required to pay for modifications and/or replacement. Department approval shall be required prior to any modifications.
- (2) The Department shall not be responsible for damages to TOD signs caused by acts of vandalism or natural causes requiring repair or replacement of business signs. Applicants in such event shall pay incurred fees for services and cost of TOD sign replacement.

[12/31/98; 18.21.4.12 NMAC – Rn, 18 NMAC 21.4.12, Recompiled 11/16/01]

18.21.4.13 FEES: Rental fees are based on a continuous twelve (12) month year commencing on April 1 and ending on March 31. The first year's rental fee may be prorated on a monthly basis, but subsequent annual rental fees shall be for the entire twelve (12) month period even if the TODS business is seasonal. The advertiser shall be notified when the motorist information panel is erected and the TODS installed and the rental fee is then due. Rental fees shall be reviewed periodically to determine their relationship to the cost of operation of this program. Rental fees not received within thirty (30) days of notification to the applicant by the Department shall subject applicants permit to revocation and removal of its sign without any previously paid fees being refunded. The fees are:

- A. Application \$75/per sign 1 time charge
- B. Annual Rental \$120.00 per year
- C. Signs N/A Provided by applicant
- D. Service Provided by applicant
- E. TrailBlazers Provided by applicant

[12/31/98; 18.21.4.13 NMAC – Rn, 18 NMAC 21.4.13, Recompiled 11/16/01]

18.21.4.14 RETENTION AND REFUNDING FEE:

A. If an application for a permit is, for any reason not granted, all fees rendered with the application shall be refunded. If the permit is revoked due to non-conformance with any of the specified sections, or if the rental fee is not timely tendered, the Department shall not refund any fees.

B. If an application is approved and a contract has been awarded for the erection of the sign, no part of the fees shall be refunded. If the business sign is subsequently removed by a taking of eminent domain of the business being advertised, a proportional refund of the pre-paid rental fee may be made. However, in case of any removal, the rental fee for any months or major portion (16 days or more) of a month remaining to the pre-paid rental of the business sign may be refunded. There shall be no refund of rental fees for any business sign temporarily or covered.

[12/31/98; 18.21.4.14 NMAC – Rn, 18 NMAC 21.4.14, Recompiled 11/16/01]

18.21.4.15 MISCELLANEOUS: The Department shall adopt all necessary forms, accounting methods and other procedures to carry out the full intent of these regulations.

[12/31/98; 18.21.4.15 NMAC – Rn, 18 NMAC 21.4.15, Recompiled 11/16/01]

HISTORY OF 18.21.4 NMAC:

Pre-NMAC History: The material in this Part was derived from that previously filed with the State Records and Archives under: SHTD Rule 92-1, Tourist Oriented Directional signs, filed November 2, 1992.

History of repealed Material: [RESERVED]



**TITLE 18           TRANSPORTATION AND HIGHWAYS**  
**CHAPTER 21       TRAFFIC CONTROL SIGNAGE**  
**PART 5            OUTDOOR ADVERTISING REQUIREMENTS**

18.21.5.1           ISSUING AGENCY: New Mexico State Highway and Transportation Department P. O. Box 1149 Santa Fe, New Mexico 87504-1149 (505) 827-5460  
 [10/31/98; 18.21.5.1 NMAC – Rn, 18 NMAC 21.5.1, Recompiled 11/16/01]

18.21.5.2           SCOPE: All state agencies and the general public.  
 [10/31/98; 18.21.5.2 NMAC – Rn, 18 NMAC 21.5.2, Recompiled 11/16/01]

18.21.5.3           STATUTORY AUTHORITY: NMSA 1978, Sections 67-12-1 et. seq., as amended; and NMSA 1978, Sections 67-3-11 and 67-3-14, as amended.  
 [10/31/98; 18.21.5.3 NMAC – Rn, 18 NMAC 21.5.3, Recompiled 11/16/01]

18.21.5.4           DURATION: Permanent.  
 [10/31/98; 18.21.5.4 NMAC – Rn, 18 NMAC 21.5.4, Recompiled 11/16/01]

18.21.5.5           EFFECTIVE DATE: October 31, 1998, unless a later date is cited at the end of a section or paragraph.  
 [10/31/98; 18.21.5.5 NMAC – Rn, 18 NMAC 21.5.5, Recompiled 11/16/01]

18.21.5.6           OBJECTIVE: Implement and enforce the New Mexico Highway Beautification Act.  
 [10/31/98; 18.21.5.6 NMAC – Rn, 18 NMAC 21.5.6, Recompiled 11/16/01]

18.21.5.7           DEFINITIONS:

A. "Abandoned Sign" means any outdoor advertising device that (1) no longer has active copy for a period of one year, and (2) no longer has a lease for the site in which it is located.

B. "Beautification Act" means NMSA 1978 Section 67-12-1 et. seq., as amended.

C. "Bona Fide Business Activity" means a commercial or industrial activity which is carried on for profit and which operates for at least six (6) continuous months of the year and with a valid twelve (12) month business license issued by a city, county, or state whether or not a permanent structure is located thereon.

D. "Centerline of Highway" means a line equidistant from the edges of the median separating the main-traveled way of a divided highway separated by more than the normal median width or constructed on independent alignment.

E. "Commercial or Industrial Activities" means those activities generally recognized as commercial or industrial by zoning authorities in New Mexico, except that none of the following shall be considered commercial or industrial activities:

- (1) Outdoor advertising structures.
- (2) Agricultural, forestry, ranching, grazing, farming, and related activities, including, but not limited to, wayside fresh produce stands.
- (3) Transient or temporary activities.
- (4) Activities not visible from the main-traveled way.
- (5) Activities conducted in a building principally used as a residence.
- (6) Railroad track and minor sidings and supporting building and fixtures; except for depots open to the public at least six (6) hours-per day.
- (7) Activities located in their entirety more than 660 feet from the nearest edge of the right of way line outside urban areas.
- (8) Feeder pens and dairy activities, including sale of dairy products on the premises upon which they are produced.
- (9) Camping or overnight parking unless such facilities are equipped with adequate parking accommodations, modern sanitary facilities and drinking water. Establishment must be licensed or approved by appropriate governmental agency.

- F. "Commission" means the State Highway Commission.
- G. "Customary Maintenance" means the usual state of maintaining a sign in order to keep it in a good state of repair while not changing the general structure of non-conforming signs significantly. This would include painting, replacement of a damaged panel, or a rotten pole, etc.
- H. "Department" means the New Mexico State Highway and Transportation Department.
- I. "Directional Signs" means signs containing directional information about public places owned or operated by federal, state or local governments or their agencies; publicly or privately owned natural phenomena, historic, cultural, scientific, education, and religious sites; and areas of natural scenic beauty or naturally suited for outdoor recreation, deemed to be in the interest of the traveling public.
- J. "Erect" means to construct, build, raise, assemble, place, affix, attach, create, paint, draw, or in any other way establish or bring into being.
- K. "Facing" means the number of surfaces on a sign.
- L. "Information Center" means a site established and maintained within right-of-way for the purpose of informing the public of places of interest within the state and providing other information the Commission considers desirable.
- M. "Interstate System" means that portion of the national system or interstate and defense highways located within this state as may now or hereafter be officially so designated by the Commission and approved pursuant to Title 23, United State Code.
- N. "Lease" means any agreement, whether oral or written, by which one such party or his agent gives to another party for consideration, the right to erect or maintain an outdoor advertising device on the land or one of the parties or their principal.
- O. "Legible" means capable of being read without visual aid by a person of normal visual acuity.
- P. "Maintain" means to allow to exist.
- Q. "Main-traveled" means the traveled way of a highway on which through traffic is carried. In the case of a divided highway, the traveled way of each of the separated roadways for traffic in opposite directions is a main-traveled way. It does not include such facilities as frontage roads, turning roadways, or parking areas.
- R. "Official Signs and Notices" means signs and notices erected and maintained by public officers or public agencies within their territorial or zoning jurisdiction and pursuant to and in accordance with direction of authorization contained in federal, state or local law for the purpose of carrying out an official duty or responsibility. Historical markers authorized by law and erected by state or local government agencies or non-profit historical societies shall be considered official signs.
- S. "On-premise sign" means sign, which advertises activities, conducted on the property upon which the sign is located; and is located within the area actually utilized for the purpose of the activity it advertises.
- T. "Outdoor Advertising Device" means any surface and supporting structure, visible from the main-traveled way of the interstate or primary system, and used or intended to be used to advertise or inform. This may be a display, light, device, figure, painting, drawing, message, plaque, structure, or object may support multiple surfaces, and if so, each surface shall be considered a separate outdoor advertising facing. Any structure used or intended to be used to support such a surface as just described is included.
- U. "Primary System" means that portion of connected main highways located within this state as may now or hereinafter be officially so designated by the Commission and approved pursuant to Title 23, United States Code.
- V. "Public Service Signs" means signs located on school bus stop shelters, signs which;
- (1) identify the donor, sponsor, or contributor of said shelters;
  - (2) contain public service messages which shall occupy at least 50 percent of the area of the sign;
  - (3) contain no other message;
  - (4) are located on school bus shelters which are authorized or approved by city, county, or state law, regulation or ordinance and at places approved by the city, county, or state agency controlling the highway involved; and
  - (5) may not exceed 32 square feet in area. Not more than one sign on each shelter shall face in any one direction.
- W. "Public Utility Signs" means warning signs, informational signs, notices, or markers, which are customarily erected and maintained by publicly or privately owned public utilities, as essential to their operations but is not advertising a product.
- X. "Ranch/Farm, Service Club and Religious Notices" mean signs and notices which do not exceed thirty-two (32) square feet, which are erected and authorized by law, and which relate to the name of Ranch/Farm and directions to it, meetings of non-profit service clubs and charitable associations or religious services.

Y. "Safety Rest Area" means a site established and maintained by or under public supervision or control for the convenience of the traveling public within or adjacent to the right of way of the interstate or primary system.

Z. "Sign" means any outdoor advertising device as defined in paragraph 7.20

AA. "State Law" means a state constitutional provision or statute, or an ordinance, rule, or regulations enacted or adopted by a state agency or political subdivision of a state pursuant to the state constitution or to a state statute.

AB. "Unzoned Area" means an area, which has not been zoned by a properly constituted zoning authority according to legally prescribed procedure.

AC. "Unzoned Commercial or Industrial Area" means unzoned lands upon which there is located a bona fide commercial or industrial activity operating for at least six (6) continuous months of the year with a valid 12 months business license issued by a city, county or the state, whether or not a permanent structure is located thereon, and the area along the highway extending outward 1,000 feet from and beyond the edge of such commercial or industrial activity and extending perpendicular from the centerline to a depth of 660 feet from the nearest edge of the right-of-way line on the same side of the highway as the commercial or industrial activity.

AD. "Urban Area" means an urbanized area or, in the case of an urbanized area encompassing more than one state, that part of the urbanized area in each such state, or in urban place as designed by the Bureau of the Census having a population of 5,000 or more and not within any urbanized area, within boundaries to be fixed by responsible state and local officials in cooperation with each other, subject to approval by the Federal Secretary of Transportation. Such boundaries shall, as a minimum, encompass the entire urban place designated by the Bureau of Census.

AE. "Urbanized Area" means an area so designated by the Bureau of the Census, within boundaries to be fixed by responsible state and local officials in cooperation with each other, subject to approval by the Federal Secretary of Transportation. Such boundaries shall, as a minimum, encompass the entire urbanized area within a state as designated by the Bureau of Census.

AF. "Visible" means capable of being seen (whether or not legible) without visual aid by a person of normal visual acuity, except that within urban areas "visible" means within 660 feet of the nearest edge of the right-of-way line.

AG. "Zoned Industrial or Commercial Area" means area which is reserved for business, commerce, trade, manufacturing, or industry, pursuant to a validly promulgated state or local ordinance or regulation. [10/31/98; 18.21.5.7 NMAC – Rn, 18 NMAC 21.5.7, Recomplied 11/16/01]

18.21.5.8 CLASSES OF SIGNS ALLOWED: No outdoor advertising devices shall be erected or maintained except:

A. Directional and other official signs and notices.  
B. Signs, displays, and devices advertising the sale or lease of specific properties upon which they are located.

C. On premise signs.  
D. Signs, displays, and devices located within 660 feet of the nearest edge of the right-of-way, which are zoned as industrial or commercial under authority of law.

E. Signs, displays, and devices located within 660 feet of the nearest edge of the right-of-way in unzoned industrial or commercial areas.

F. Signs lawfully in existence on October 22, 1965, determined by the Commission, subject to any necessary federal approval, to be landmark signs of historic or artistic significance worthy of preservation including signs on farm structures or natural surfaces, and which have been permitted under Section 27 [18.21.27 NMAC].

G. Signs lawfully in existence on the effective date of the Highway Beautification Act and which are continuing to exist and currently permitted under Section 27 [18.21.27 NMAC]. [10/31/98; 18.21.5.8 NMAC – Rn, 18 NMAC 21.5.8, Recomplied 11/16/01]

18.21.5.9 RECLASSIFICATION OF HIGHWAYS:

A. Any sign lawfully erected along a highway which is not part of the interstate or primary system at the time of the sign's erection and which sign becomes subject to the provisions of the Beautification Act and this rule due to the reclassification of the highway as a primary highway, will remain a legal and compensable sign so long as all permits for the sign are timely obtained and all permit fees timely paid. Failure to timely obtain permits and timely pay permit fees will, however, render such a sign illegal and non-compensable and subject to removal by the Department at the expense of the sign owner.

B. Permits and permit fees for the class of signs described in this section are timely obtained and timely paid if obtained and timely paid for the next calendar year following the reclassification, and following notification to the sign owner of the reclassification by the Department.

[10/31/98; 18.21.5.9 NMAC – Rn, 18 NMAC 21.5.9, Recomplied 11/16/01]

18.21.5.10 SIGNS PROHIBITED: No sign may be erected or maintained which:

A. Physically intrudes upon the right-of-way or by being of such a distracting nature so as to dangerously divert driver's attention from the roadway.

B. Attempts or appears to attempt to direct the movement of traffic or which interferes with, imitates or resembles any official traffic sign, signal or device.

C. Prevents the driver of a vehicle from having a clear and unobstructed view of pre-existing official signs and approaching or merging traffic.

D. Contains, includes, or is illuminated by any flashing, intermittent or moving light or lights.

E. Is lighted in any way unless the lighting is so effectively shielded as to prevent beams or rays of light from being directed at any portion of the main-traveled way of the interstate or primary systems, or is of such low intensity or brilliance as not to cause glare or to impair the vision of the driver of any motor vehicle, or to otherwise interfere with any driver's operation of a motor vehicle.

F. Moves or has any animated or moving parts.

G. Is erected or maintained upon trees or painted or drawn upon rocks or other natural features.

H. Is structurally unsafe or in disrepair as determined by the Department.

I. If it is determined by the Department that action is taken by an legal authority that does not amount to or come within a comprehensive zoning plan, a permit for the erection of a billboard will be denied and not authorized.

[10/31/98; 18.21.5.10 NMAC – Rn, 18 NMAC 21.5.10, Recomplied 11/16/01]

18.21.5.11 SIGN CONTENTS PROHIBITED: Signs containing the following copy are prohibited.

A. The imitation or simulation of official U.S. Interstate, state or county highway sign shields within advertising displays.

B. Prohibited words: Any words that could be construed as a command, such as "stop, slow, turn right (or left), straight ahead," or any such words whether used alone or in combination on signs which duplicate or resemble official signs so as to cause a motorist to be misled in any manner.

[10/31/98; 18.21.5.11 NMAC – Rn, 18 NMAC 21.5.11, Recomplied 11/16/01]

18.21.5.12 LANDMARK SIGNS: An outdoor advertising device will qualify as a landmark sign of historical or artistic significance upon presentation of satisfactory proof that the sign has been lawfully in place at the same location of a period of 25 years or more, and that the sign has not substantially changed in size, lighting or message content after designation as a landmark sign will terminate the landmark status.

[10/31/98; 18.21.5.12 NMAC – Rn, 18 NMAC 21.5.12, Recomplied 11/16/01]

18.21.5.13 MAXIMUM SIZE AND AREA LIMITATIONS:

A. The maximum area of the surface of any outdoor advertising device shall be 1,200 square feet, with a maximum length of 60 feet and a maximum height of 25 feet. Length and height measurements shall include border and trim, but shall not include any ornamental base or apron support.

B. An exception to the above is to be found in directional signs which are limited to a maximum area of 150 square feet and no more than 20 feet in any dimension. Public service signs are limited to thirty-two (32) square feet.

C. The areas shall be measured by the smallest square, rectangle, triangle, circle, or combination thereof which will encompass the basic advertising face.

D. Where two (2) advertisements are involved on a single facing, the total square feet of each advertisement shall not exceed 350 square feet. Where two (2) structures are involved at the same location, each structure must be separately permitted.

E. Where four (4) advertisements are involved on a back to back structure or a double facing, the total square feet of each advertisement shall not exceed 350 square feet. Each face must be separately permitted.

F. The maximum area of any single advertisement on a single facing shall not exceed 1,200 square feet. Each facing of a double-faced or back to back sign must meet this same standard.

[10/31/98; 18.21.5.13 NMAC – Rn, 18 NMAC 21.5.13, Recomplied 11/16/01]

18.21.5.14 BACK-TO-BACK AND V-TYPE SIGNS: Sign and sign facing placement will be permitted as described in the Outdoor Advertising Handbook.

[10/31/98; 18.21.5.14 NMAC – Rn, 18 NMAC 21.5.14, Recompiled 11/16/01]

18.21.5.15 MINIMUM SPACING REQUIREMENTS: For all signs other than Directional Signs:

A. Interstate Highways and Controlled Access Freeways: No two signs on the same side of the right-of-way shall be spaced less than 500 feet apart inside and outside villages and cities.

B. Non-Freeway Primary Highways: Outside of incorporated villages and cities, no two signs on the same side of the right-of-way shall be spaced less than 300 feet apart.

C. Inside incorporated villages and cities, no two (2) signs on the same side of the right-of-way shall be spaced less than 100 feet apart on non-freeway primary highways.

D. Directional and official signs such as historic markers or illegal signs within the right-of-way shall not be counted nor shall measurements be made from them for purposes of determining compliance with the 500, 300 or 100-foot spacing requirements.

[10/31/98; 18.21.5.15 NMAC – Rn, 18 NMAC 21.5.15, Recompiled 11/16/01]

18.21.5.16 INTERSECTIONS, INTERCHANGES, AND SAFETY REST AREAS: Outside of incorporated villages and cities, no sign structure shall be placed within 500 feet of an interchange, or an intersection at grade, or a safety roadside rest area or any portion of an interstate or primary highway which is a limited access highway. Said 500 feet to be measured along the interstate or limited access primary highway from the beginning or ending of the pavement widening at the exit from the entrance to the main-traveled way. The spacing-between-structures provisions do not apply to sign structures separated by buildings or other obstructions in such a manner that only one sign structure located within the above spacing distance is visible from the highway at one time.

[10/31/98; 18.21.5.16 NMAC – Rn, 18 NMAC 21.5.16, Recompiled 11/16/01]

18.21.5.17 MEASUREMENTS OF UNZONED COMMERCIAL OR INDUSTRIAL AREAS: An unzoned commercial or industrial area shall be measured from the outer edge of the regularly used buildings, parking lots, storage or processing areas of the activities, and not from the property line of the activity, unless the property line and outer edge of the building, parking lots, storage or processing areas of the activities should coincide. Such measurements shall be along or parallel to the edge of the right-of-way of the highway.

[10/31/98; 18.21.5.17 NMAC – Rn, 18 NMAC 21.5.17, Recompiled 11/16/01]

18.21.5.18 SIMULATED COMMERCIAL ACTIVITY: Buildings or activities constructed or initiated to simulate legitimate commercial or industrial activity but not constituting commercial or industrial activity, shall not be used as a basis for determining unzoned commercial areas.

[10/31/98; 18.21.5.18 NMAC – Rn, 18 NMAC 21.5.18, Recompiled 11/16/01]

18.21.5.19 TEMPORARY UNZONED COMMERCIAL - INDUSTRIAL AREAS: Buildings or open sales areas actively used for commercial or industrial purposes for six (6) or more consecutive months will qualify an area as unzoned commercial or industrial zone, provided a 12-month business license for that activity is obtained from the local governing authority.

[10/31/98; 18.21.5.19 NMAC – Rn, 18 NMAC 21.5.19, Recompiled 11/16/01]

18.21.5.20 DIRECTIONAL SIGNS REQUIREMENTS:

A. Directional Signs Prohibited: The following signs are prohibited:  
(1) Signs advertising activities that are illegal under federal or state laws or regulations in effect at the location of those signs or at the location of those activities.

(2) Signs located in such a manner as to obscure or otherwise interfere with the effectiveness of an official traffic sign, signal, or device, or obstruct or interfere with the driver's view of approaching, merging, or intersection traffic.

(3) Signs which are erected or maintained upon trees or painted or drawn upon rocks or other natural features.

(4) Obsolete signs.

(5) Signs which are structurally unsafe or in disrepair.

(6) Signs which move or have any animated or moving parts.

- (7) Signs located in rest areas, parklands, or scenic areas.
  - B. Size Requirement of Directional Signs: No sign shall exceed the following limits:
    - (1) maximum area - 150 square feet;
    - (2) maximum height - 20 feet;
    - (3) Maximum length - 20 feet.
  - C. All dimensions include border and trim, but exclude supports.
  - D. Lighting of Directional Signs: Signs may be illuminated, subject to the following:
    - (1) Signs, which contain, include, or are illuminated by any flashing, intermittent, or moving light or lights are prohibited.
    - (2) Signs which are not effectively shielded so as to prevent beams or rays of light from being directed by any portion of the traveled way of an interstate or primary highway or which are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle, or which otherwise interfere with any driver's operation of a motor vehicle are prohibited.
  - E. No sign may be so illuminated as to interfere with the effectiveness of or obscure an official traffic sign, device or signal.
  - F. Spacing of Directional Signs:
    - (1) Each location of a directional sign must be approved by the Department.
    - (2) No directional sign may be located within 2,000 feet of an interchange or intersection at grade along the interstate system of other freeways (measured along the interstate or freeway from the nearest point of the beginning or ending of pavement widening at the exit from or entrance to the main-traveled way).
    - (3) No directional sign may be located within 2,000 feet of the rest area, parkland, or scenic area.
    - (4) No two directional signs facing the same direction of travel shall be spaced less than one (1) mile apart.
    - (5) Not more than three directional signs pertaining to the same activity and facing the same direction of travel, may be erected along a single route approaching the activity.
    - (6) Signs located adjacent to the interstate system shall be within 75 air miles of the activity.
    - (7) Signs located adjacent to the primary system shall be within 50 air miles of the activity.
  - G. Permitted Content of Directional Signs: The message of directional signs shall be limited to the identification of the attraction or activity and directional information useful to the traveler in locating the attraction, such as mileage, route numbers, or exit numbers. Descriptive words or phrases, and pictorial or photograph representations of the activity or its environs are prohibited.
- [10/31/98; 18.21.5.20 NMAC – Rn, 18 NMAC 21.5.20, Recompiled 11/16/01]

18.21.5.21 LIGHTING RESTRICTIONS: Signs shall not be placed with illumination that interferes with the effectiveness of any official traffic sign or device. Signs shall not include or be illuminated by flashing, intermittent or moving lights (except that part necessary to given public service information such as time, date, temperature, weather or similar information). No sign shall cause beams or rays of light of such intensity or brilliance to be mistaken for a warning or danger signal as to cause glare or impair the vision of any driver's operation of a motor vehicle.

[10/31/98; 18.21.5.21 NMAC – Rn, 18 NMAC 21.5.21, Recompiled 11/16/01]

18.21.5.22 APPLICANTS FOR SIGN PERMITS: No outdoor advertising device or facing allowed under Section 8.6 or 8.7 [Subsections F. and G., Section 8 of 18.21.5 NMAC] may be erected or maintained unless the owner of the outdoor advertising device or facing first submits an application for a permit and obtains a permit for the device or facing from the State Maintenance Bureau of the Department. Exceptions to this requirements are:

A. Signs on a piece of property giving notice that said specific land and/or improvements alone are offered for sale. Generalized real estate signs are not excepted.

B. On-premise signs advertising goods or services from sale on the premises.

[10/31/98; 18.21.5.22 NMAC – Rn, 18 NMAC 21.5.22, Recompiled 11/16/01]

18.21.5.23 APPLICATION FEES:

A. Each application shall be accompanied by a nonrefundable \$100 fee. If the lessor or lessee changes, the new names and addresses of parties to the lease shall be provided to the Department.

B. Directional sign applications need not be accompanied by a fee.

[10/31/98; 18.21.5.23 NMAC – Rn, 18 NMAC 21.5.23, Recompiled 11/16/01]

18.21.5.24 SIGN PERMIT TAGS:

A. Upon the approval of an application for a permit, a sign permit tag will be issued for the specific sign at a given location. Within thirty (30) days of issuance (one hundred and twenty (120) days should the sign structure not be constructed at the date of such issuance), the sign permit tag shall be affixed to the lower corner of the face of the sign nearest the right-of-way line or to the face of the upright, leg, or pole of the structure nearest the right-of-way line.

B. Permit tags are transferable with the ownership of signs, but may not be relocated from one site to another. Permit tags are issued to specific signs at specific locations and shall not be transferred from one location to another. Any change in size or location of the advertising device will require a new application and a new permit tags.

[10/31/98; 18.21.5.24 NMAC – Rn, 18 NMAC 21.5.24, Recompiled 11/16/01]

18.21.5.25 RENEWAL OF SIGN PERMIT TAGS: Sign permits are issued on a calendar year basis, January 1, through December 31. Every permit must be renewed each year and accompanied by a \$25 renewal fee. Permanent metal tags will be issued with fees collected annually in advance.

[10/31/98; 18.21.5.25 NMAC – Rn, 18 NMAC 21.5.25, Recompiled 11/16/01]

18.21.5.26 TIME LIMITS: Sign permits will be valid from the date of their issuance until the following January 1, and permit tags will be valid from the date of their issuance until otherwise notified by the Department, except that when a sign which is the subject of the issuance of a permit and tag is not erected at the date of such issuance, such sign must be erected within one hundred and twenty (120) days after such issuance, with the tag properly affixed, or the permit and tag will be void. Upon written request to the Department, a one time sixty (60) day extension to erect a previously permitted sign, may be granted.

[10/31/98; 18.21.5.26 NMAC – Rn, 18 NMAC 21.5.26, Recompiled 11/16/01]

18.21.5.27 PERMIT TAG REPLACEMENT: Lost permit tags may be voided and replaced within a month of issuance upon the submission of the new application. Damaged or stolen permit tags may be voided and replaced upon application or within thirty (30) days of notification by the Department that the tag is not on the sign. There will be a \$25 charge for each replacement.

[10/31/98; 18.21.5.27 NMAC – Rn, 18 NMAC 21.5.27, Recompiled 11/16/01]

18.21.5.28 LOCAL ZONING AUTHORITIES: Local political subdivisions shall have authority under their own zoning laws to zone areas for commercial or industrial purposes, and the bona fide action of such local political subdivision in this regard will be accepted for the purposes of these regulations. The Department will not issue permits for the erection of the new signs in areas where counties and municipal zoning ordinances are in effect and which require a permit to be issued for such signs by the county or municipal authority, unless the applicant has received a permit for the sign from the governmental authority promulgating such ordinances, and a copy of the approved permit application or a letter granting approval is attached to the Departments sign permit application; provided, however, in areas zoned commercial or industrial by a county law, provisions of NMAC 10.9 [10.9 NMAC] shall apply.

[10/31/98; 18.21.5.28 NMAC – Rn, 18 NMAC 21.5.28, Recompiled 11/16/01]

18.21.5.29 NEW HIGHWAY CONSTRUCTION: A permit will not be issued for a sign to be located along a new interstate or primary route, until the route is accepted by the Department and is open to traffic.

[10/31/98; 18.21.5.29 NMAC – Rn, 18 NMAC 21.5.29, Recompiled 11/16/01]

18.21.5.30 SIGN OWNER NAME PLATES: All signs must have affixed the sign owner's name and address on a separate name panel of wood or metal construction fastened to the sign. A commercial sign company shall limit its name plate to its trade name only, provided that the trade name is as indicated on all the company's outdoor advertising permit applications.

[10/31/98; 18.21.5.30 NMAC – Rn, 18 NMAC 21.5.30, Recompiled 11/16/01]

18.21.5.31 REMOVAL OF NON-COMPENSABLE SIGNS: Permit Violations: Any outdoor advertising device, which has been erected or maintained in violation of the permit requirements of the Beautification Act or this rule, which has been erected or maintained without timely payment of all permit fees required by the Beautification Act or this rule, is subject to removal by the Department without compensation and at the expense of

the owner of the outdoor advertising device. Such removal will be preceded by notice to the owner of the outdoor advertising device, if known, that the device must be removed within 30 days of will be subject to removal by the Department at the owner's expense. If the outdoor advertising device is not removed within 30 days, the Department may thereafter remove the device at the expense of the owner of the device without any compensation whatsoever. [10/31/98; 18.21.5.31 NMAC – Rn, 18 NMAC 21.5.31, Recompiled 11/16/01]

18.21.5.32 LOCATION VIOLATIONS AND ENCROACHMENTS: Any outdoor advertising device which has been erected and maintained under permit but is at variance from the location set forth in the permit application is subject to removal by the Department without any compensation whatsoever and at the expense of the owner of the outdoor advertising device.

A. Any outdoor advertising device which has been erected, in such a manner that all or part of the device encroaches into or upon the right of way of any interstate system or primary system, as defined by the Beautification Act, is subject to removal by the Department without any compensation whatsoever and at the expense of the owner of the outdoor advertising device.

B. Such removals will be preceded by notice by certified mail to the owner of the outdoor advertising device and to the owner of the land upon which the device is located that the device must be removed within thirty (30) days or will be subject to removal by the Department at the owner's expense. If the outdoor advertising device is not removed within the thirty (30) days, the Department may thereafter remove the device at the expense of the owner of the device and without any compensation whatsoever.

[10/31/98; 18.21.5.32 NMAC – Rn, 18 NMAC 21.5.32, Recompiled 11/16/01]

18.21.5.33 VIOLATION OF STANDARDS AND SPECIFICATIONS: Any outdoor advertising device which has been erected and maintained in accordance with all permit and permit fee requirements of the Beautification Act and this Rule, but which does not conform to the standards and specifications of the Beautification Act and this rule pertaining to size, lighting, content location, maintenance, spacing and construction is subject to removal by the Department without any compensation whatsoever and at the expense of the owner of the outdoor advertising device. Such removal will be preceded by notice via Certified Mail to the owner of the device, and to the owner of the land if known, upon which the device is located of the particular standards and specification that the device violates, and that the violations must be corrected within thirty (30) days or the device will be subject to removal by the Department at the owner's expense. If the failure to conform to the standards and specifications is corrected within the said thirty (30) days, then said failure will be deemed cured for all purposes; if, the defects are not corrected within the thirty (30) days, the Department may thereafter remove the outdoor advertising device at the expense of the owner of the device without any compensation whatsoever.

[10/31/98; 18.21.5.33 NMAC – Rn, 18 NMAC 21.5.33, Recompiled 11/16/01]

18.21.5.34 LANDOWNER INTERFERENCE WITH SIGN REMOVAL: Landowners who interfere with the removal of signs from their property, preventing either the sign owner or the Department from removing same, maybe liable for the costs of a forced removal.

[10/31/98; 18.21.5.34 NMAC – Rn, 18 NMAC 21.5.34, Recompiled 11/16/01]

18.21.5.35 CUSTOMARY MAINTENANCE OF CONFORMING SIGNS: Customary maintenance shall be performed on all permitted signs.

A. No process will frequently involve a change of legend and delays in reselling the advertising surface. For the purpose of these regulations, six (6) months will be the time limit allotted sign owner to restore and replace live legends at which time the Department may give a thirty (30) day notice to the owner to revitalize the sign or remove it as abandoned. Should no action be taken in thirty (30) days, the Department may remove the sign at the owner's expense.

B. No sign, which has been blank for a period of one (1) year, shall be issued a renewal permit for the next calendar year, a new application for a permit must be submitted.

[10/31/98; 18.21.5.35 NMAC – Rn, 18 NMAC 21.5.35, Recompiled 11/16/01]

18.21.5.36 CUSTOMARY MAINTENANCE OF NON-CONFORMING SIGNS: A non-conforming sign increased in size by 30% or more from the original inventory is illegal and subject to removal.

A. Should any design or structural change be made to a non-conforming sign so as to result in an increase in said sign's value, such increase in value shall be deemed non-compensable should said sign be acquired by the Department through the condemnation process.



B. A non-conforming sign when destroyed by natural causes may not be reconstructed and its permit shall be revoked. Reconstruction shall render the sign a new structure and illegal and its permit shall be revoked.

C. Non-conforming signs erected before May 19, 1966, which have been destroyed through vandalism, may be re-erected in kind or may be offered to the State for purchase according to the procedures set forth in the Beautification Manual.

[10/31/98; 18.21.5.36 NMAC – Rn, 18 NMAC 21.5.36, Recompiled 11/16/01]

**18.21.5.37 MAINTENANCE PROHIBITED FROM HIGHWAY RIGHT-OF-WAY:**

A. No sign owner shall maintain or erect any advertising device from or in the right-of-way of any interstate or primary highway.

B. Any sign owner violating this provision of these regulations shall have his sign permit revoked whether or not the sign is conforming and such action shall render the sign illegal and subject to immediate removal.

[10/31/98; 18.21.5.37 NMAC – Rn, 18 NMAC 21.5.37, Recompiled 11/16/01]

**18.21.5.38 RIGHT-OF-WAY LANDSCAPE DAMAGE:** It is unlawful for any sign owner or his agents to damage the landscape of any public right-of-way. These damages are more specifically described as follows:

A. Cutting trees on the right-of-way for the purpose of facilitating the readability of an outdoor advertising device.

B. Damage to any landscaping, such as grass, shrubs, rocks, gravel, or cement.

C. Damage to any improvements in the right-of-way such as fences, ditches, structures, etc. The sign owner shall be liable for and shall reimburse the State for the cost of replacing any and all features of the right-of-way to its original condition and shall have his sign permit revoked for any signs involved in such acts.

[10/31/98; 18.21.5.38 NMAC – Rn, 18 NMAC 21.5.38, Recompiled 11/16/01]

**18.21.5.39 MOBILE TYPE SIGNS:** No advertising devices shall be displayed that are attached or placed on mobile vehicles or trailers.

[10/31/98; 18.21.5.39 NMAC – Rn, 18 NMAC 21.5.39, Recompiled 11/16/01]

**18.21.5.40 MUNICIPAL LAND OWNERSHIP:** City property located in an area governed by these regulations not zoned, whether within or outside city, town or village limits, must conform to these regulations in every respect concerning the unzoned commercial or industrial area. This applies to signs and advertising devices intended to advertise the local community or local community services.

[10/31/98; 18.21.5.40 NMAC – Rn, 18 NMAC 21.5.40, Recompiled 11/16/01]

**18.21.5.41 FARMING-AGRICULTURAL AND RELATED ACTIVITIES:** The use of feeder pens, farming and dairy facilities including pastures, milk parlors, and on-premise sale of dairy products or farm products shall not constitute an unzoned commercial or industrial zone.

A. Roping arenas, rodeo grounds, or fair grounds will not be considered unless activities open to the public are conducted continuously six (6) consecutive months or more during each calendar year.

B. Any sign adjacent to both an Interstate System and Primary System, which is located within the control area of both systems must meet the spacing requirements of the Interstate Highway System.

[10/31/98; 18.21.5.41 NMAC – Rn, 18 NMAC 21.5.41, Recompiled 11/16/01]

**18.21.5.42 ON-PREMISE SIGNS:** On-premise signs are defined and limited to signs advertising on-premise activities only and are further defined as follows:

A. Signs used to advertise the activities conducted on the property where the sign is located. (See the definition of On-Premise Signs [18.21.5.7 NMAC]).

B. There must be a regularly used building, and/or service, and/or repair, and/or processing, and/or storage, and/or parking area used in conjunction with the on-premise activity.

C. Land, whether contiguous or not, and whether owned or not, that is not used as part of the major activity as set forth herein, but is surplus if it is held for future use, shall not qualify as a part of the immediate on premise area, including railroad mainline tracks, siding, spurs, and loading docks.

D. The lands that are directly used as an integral part of the principal activity of the subject advertised, even though the sign site and principal activity is separated by highway shall be deemed to be contiguous.

E. Definition of on-premise parking lots, storage areas, servicing areas, are those areas regularly used in conjunction with on-premise activity and have continued maintenance of the surfacing and lighting.

F. When the activity, which is advertised by an on-premise sign ceases for six (6) consecutive months, then the on-premise sign advertising that activity become illegal and a public nuisance and subject to removal under these regulation.

[10/31/98; 18.21.5.42 NMAC – Rn, 18 NMAC 21.5.42, Recompiled 11/16/01]

#### 18.21.5.43 MISCELLANEOUS PROVISIONS AND RESTRICTIONS:

A. Stopping or parking on the right-of-way of any controlled access highway, or violation of the access control line to service any advertising device, is unlawful and constitutes grounds for revocation of the permit as to such advertising device. In the event of such revocation the advertising device which is the subject of the revoked permit is illegal and subject to removal without compensation to the owner.

B. Proposed outdoor advertising devices which will be located in areas covered by the Highway Beautification Act and these Rules, and which require a permit issued by the Department, shall not be erected prior to the issuance of such permits. If any advertising device is erected in violation of this requirement said advertising device is illegal and subject to removal without compensation to the owner.

[10/31/98; 18.21.5.43 NMAC – Rn, 18 NMAC 21.5.43, Recompiled 11/16/01]

18.21.5.44 PENALTIES FOR REPEATED VIOLATIONS: If repeated violations establish a pattern or practice of disregard for these rules and regulations, permitting privileges are subject to suspension. A notification of such intent to suspend permitting privileges will be sent to the sign owner, stating the grounds therefor.

A. Any person upon receipt of a notice of intent to suspend shall have a right to a hearing on whether the suspension should be invoked. A hearing shall be requested within fourteen (14) days from the receipt of the notice.

B. Any person requesting a hearing shall be notified of the time, place and procedures for the hearing.

[10/31/98; 18.21.5.44 NMAC – Rn, 18 NMAC 21.5.44, Recompiled 11/16/01]

#### HISTORY OF 18.21.5 NMAC:

Pre-NMAC History: The material in this Part was derived from that previously filed with the State Records and Archives under: LD 1, Outdoor Advertising filed August 25, 1970; SHC Rule 77-1, Outdoor Advertising Rules and Regulations, supersedes Rule LD 1, filed March 15, 1977; SHC Rule 78-1, Outdoor Advertising Rules and Regulations; supersedes SHC 77-1, filed September 21, 1978; SHTD Rule90-3(L), Outdoor Advertising Rules and Regulations; supersedes SHC 78-1, filed February 19, 1991.

History of Repealed Material: [RESERVED]



## TITLE 18 - TRANSPORTATION AND HIGHWAYS

### CHAPTER 31

## CLASSIFICATION AND DESIGN STANDARDS FOR HIGHWAYS

18.31.1 NMAC	GENERAL PROVISIONS [RESERVED]	
18.31.2 NMAC	<a href="#">NEW MEXICO SCENIC AND HISTORIC BYWAYS PROGRAM</a>	<a href="#">pdf version</a>
18.31.3 NMAC	<a href="#">ALTERNATIVE MODES OF TRANSPORTATION ON LIMITED ACCESS HIGHWAYS</a>	<a href="#">pdf version</a>
18.31.4 NMAC	<a href="#">LITTER CONTROL AND BEAUTIFICATION GRANT REQUIREMENTS</a>	<a href="#">pdf version</a>
18.31.5 NMAC	<a href="#">BEAUTIFICATION OF HIGHWAY ROADSIDES AND MEDIANS</a>	<a href="#">pdf version</a>
18.31.6 NMAC	<a href="#">STATE HIGHWAY ACCESS MANAGEMENT REQUIREMENTS</a>	<a href="#">pdf version</a>

<b>TITLE 18</b>	<b>TRANSPORTATION AND HIGHWAYS</b>
<b>CHAPTER 31</b>	<b>CLASSIFICATION AND DESIGN STANDARDS FOR HIGHWAYS</b>
<b>PART 2</b>	<b>NEW MEXICO SCENIC AND HISTORIC BYWAYS PROGRAM</b>

18.31.2.1 ISSUING AGENCY: New Mexico State Highway and Transportation Department, Post Office Box 1149, Santa Fe, New Mexico 87504-1149 (505) 827-5515.  
[Recompiled 11/16/01]

18.31.2.2 SCOPE: Application and acceptance procedures for sponsors participating in the Scenic and Historic Byways Program.  
[Recompiled 11/16/01]

18.31.2.3 STATUTORY AUTHORITY: NMSA 1978, Sections 67-3-11 and 67-3-14. NMSA 1978, Sections 67-3-11, 67-3-14, 67-12-12, and 67-12-14.  
[Recompiled 11/16/01]

18.31.2.4 DURATION: Permanent.  
[Recompiled 11/16/01]

18.31.2.5 EFFECTIVE DATE: July 31, 1998, unless a later date is cited at the end of a section or paragraph.  
[Recompiled 11/16/01]

18.31.2.6 OBJECTIVE: This Rule has been prepared to provide information on and establish procedures for the State Highway and Transportation Department Scenic and Historic Byways Program ("Program").  
[Recompiled 11/16/01]

#### 18.31.2.7 DEFINITIONS:

A. "Corridor" means the road or highway right-of-way and the adjacent area that is visible from and extending along the byway. The distance the corridor extends from the byway could vary with the different intrinsic qualities.

B. "Corridor management plan (CMP)" means a written document that specifies the actions, procedures, controls, operational practices, and administrative strategies to maintain the intrinsic qualities of the byway.

C. "Intrinsic quality" means scenic, historic, recreational, cultural, archeological, or natural features that are considered representative, unique, irreplaceable, or distinctly characteristic of an area. [

D. "Local commitment" means assurance provided by communities along the byway that they will undertake actions, such as zoning and other protective measures, to preserve the intrinsic qualities of the byway and the adjacent area as identified in the CMP.

E. "Regional significance" means characteristics that are representative of a geographic area encompassing two or more states.

F. "Scenic byway" means a public road having special intrinsic qualities that have been recognized as such through legislation or some other official declaration. The term road and highway are synonymous. They are not meant to define higher or lower functional classifications or wider or narrower cross-sections. Moreover, the term scenic byway refers not only to the road or highway itself but also to the corridor through which it passes.

G. "Scenic byways agency" means the SHTD, which is responsible for administering the States scenic and historic byways program, as recognized in the administration of Title 23, United States Code.

H. "SHTD" means the State Highway and Transportation Department.

I. "Sponsor" means a local historical society, cultural organization, government agency, chamber of commerce or other similar group that serves as a focal point for originating and developing route nominations or project proposals.

J. "State scenic byway" means a road or highway under State, Federal, or local ownership that has been designated as a scenic byway for the purposes of this Program.

[Recompiled 11/16/01]

#### 18.31.2.8 ROUTE NOMINATION ACCEPTANCE PROCEDURES FOR STATE SCENIC BYWAY DESIGNATION:

##### A. Introduction:

(1) The Scenic and Historic Byways Program began as part of the Intermodal Surface Transportation Efficiency Act (ISTEA) initiated in 1991. The SHTD administers the Program with funds provided by the Federal Highway Administration for the purpose of protecting the scenic, historic, recreational, cultural, natural and archaeological integrity of New Mexico's highways and adjacent areas.

(2) The national funding level for the Program is established by Congress for a number of years. States compete for grant monies, annually. Funding is available each year for safety improvements, construction of pedestrian-use facilities, highway improvements to enhance scenic area access, protection of historical and cultural resources, and for the development of tourist information.

(3) The Program is two-part: 1) nominating a route for designation into the Scenic and Historic Byways System, and 2) applying for grant monies for a proposed eligible project on a state scenic byway. A route nomination can be submitted to SHTD at any time. A grant application can be submitted when applications are being accepted.

(4) The SHTD Scenic Byways Program Coordinator ("Coordinator") will announce to all Regional and Metropolitan Planning Organizations (RPOs and MPOs), various organizations known to have an interest in the program, and others when grant applications are being accepted and the deadline for submitting them (usually June).

(5) The SHTD formed the Scenic and Historic Byways Advisory Council (SHBAC) which is composed of 17 members from various government agencies or public organizations. The SHBAC has established the requirements and procedures for the program and is the final authority for determining what route nominations and grant applications are submitted for approval by the State Highway Commission (SHC).

(6) This document outlines the procedures and criteria for both nominating a route for designation as a scenic byway, and for applying for a grant for an eligible project on a state scenic byway.

##### B. Route Nomination Requirements:

(1) route sponsors are local historical societies, cultural organizations, government agencies, chambers of commerce or other similar groups that serve as focal points for originating and developing the nomination.

(2) A route sponsor must be recognized by the RPO or MPO as representing an interest in the scenic or historical development of that area.

(3) RPOs/MPOs from adjacent geographical areas are encouraged to coordinate on the sponsorship of a nominated route that is of mutual interest.

(4) The proposed state scenic byway shall be evaluated by the following criteria:

(a) The extent it possesses one or more of the following characteristics: unusual or distinctive scenic, recreational, historical, educational, geological, archaeological, natural, cultural, or ethnic features;

(b) Suitability for the prescribed type(s) of vehicular use;

(c) Existing route with legal public access and use; and

(d) Strong local support with proponents demonstrating coordination with relevant agencies.

(5) The nomination must be accompanied by a conceptual management plan as specified in the application process.

C. Route Sponsor's Responsibilities:

(1) Evaluate the proposed route to assure that it meets the criteria established by the SHBAC and outlined in this document.

(2) Demonstrate that the route nomination has strong local support, as follows:

(a) Initiate public meetings to gain strong local support from community leaders, citizens, and agencies having jurisdictional authority over the roadway [for example, U.S. Forest Service (USFS), Bureau of Land Management (BLM), National Park Service (NPS), or Bureau of Indian Affairs (BIA)].

(b) Assure that local zoning ordinances comply, or will comply, with the restriction on the erecting of new billboards along the proposed route.

(c) Make a preliminary presentation to the appropriate RPO/MPO for the purpose of gaining its support for the route nomination. The presentation should address the requirements for route nomination and should include exhibits, pictures and a map of the proposed route. The Coordinator should receive a copy of the presentation package prior to the RPO/MPO meeting.

(d) Present the final route nomination application to the appropriate RPO/MPO. The nomination application should include finalized plans for promotion, development, and corridor management of the proposed route.

(e) If approved by RPO/MPO, the sponsor shall submit the final route nomination application with a letter of recommendation from the RPO/MPO to the program coordinator.

D. RPO/MPO responsibilities:

(1) Evaluate route nomination applications to assure that it meets the requirements.

(2) Each RPO/MPO may submit one route nomination per each county within the planning organization or a maximum of five candidates, whichever is greater. If more than one application is submitted, a priority order should be indicated.

(3) RPO/MPO's recommendations should be submitted to the Coordinator. The Coordinator will present the nomination package(s) at the next SHBAC meeting for evaluation and recommendation. Upon SHBAC's recommendation, the Coordinator will present the nomination package(s) to the SHC for final approval of the proposed route(s) as official New Mexico Scenic and Historic Byways.

E. SHBAC's responsibilities:

(1) Evaluate nominations submitted by the RPO/MPOs. Conduct site visits as necessary. This may be accomplished through the Coordinator.

(2) Submit recommended routes for consideration and approval to the SHC. This may be accomplished through the Coordinator.

(3) Prepare and make a presentation to the SHC, as necessary. This may be accomplished through the Coordinator.

(4) Monitor development, operation and maintenance of projects that have received Program funds. This may be accomplished through the Coordinator.

(5) Should the SHBAC become aware, either through its own monitoring activities or from external sources, that a designated scenic byway is not being managed in accordance with the management plan submitted by the route sponsor, or otherwise no longer meets established eligibility criteria, the SHBAC shall:

(a) Notify the route sponsor through the RPO/MPO of its concerns. This notification shall advise the sponsor that if the noted deficiencies are not resolved, the route may be removed from the New Mexico Scenic and Historic Byways System. The Sponsor shall be afforded a period of six months to correct the deficiencies or otherwise appeal the SHBAC decision.

(b) Following this notification period the SHBAC may, at its discretion, remove the route from the New Mexico Scenic and Historic Byways System. This action does not impact scenic byways designations made by other agencies, such as, USFS, BLM, BIA, NPS.

(c) Areas identified as lacking the unusual or distinctive features (intrinsic values), included in the Scenic and Historic Byways Program criteria, may be excluded or segmented from existing or future byway designation.

F. Route Nomination - Minimum Application Requirements:

(1) Format:

(a) Use 8 1/2" x 11" paper, vertically bound on the left side, with the capacity to add or delete material without destroying the binder.

(b) Provide a cover sheet with the proposed project name, route number, termini (identified with mileposts), sponsor's name, and date.

(c) Prepare a cover letter addressed to the Scenic and Historic Byways Program Coordinator, NMSHTD, P. O. Box 1149 (SB-1N), Santa Fe, New Mexico 87504-1149.

(d) Prepare a table of contents.

(e) Prepare the report with the information outlined under headings.

(f) Photographs included in the report for information and documentation should be enclosed in acetate sheet protectors on black background or in clear vinyl sheet holders.

(g) The application shall contain no more than 13 pages. (Suggest no more than 3 pages of text followed with up to 7 pages of exhibits, pictures, maps, etc.) Four (4) originals and five (5) reproductions of the nomination package shall be submitted to the RPOs/MPOs.

(2) Statement of Significance - Briefly describe the route that is being nominated and why it should become a State scenic byway.

(3) Road Section of Areas - The road sections or areas recommended for designation should be clearly described by a written paragraph and should be depicted on standard, published maps. Information concerning the entity responsible for the roadway should be included. The written description should include the general location within the state, the county, road name and number, length, mileposts, adjacent cities, direction of road and area or width of the zone of influence.

(4) Maps - Maps to be included in the report should be of a quality published by the United States Geological Survey, SHTD, the county or the city. The area to be depicted should be at a scale that will maximize the space on the 8 1/2" x 11" sheet. If a larger map is used it shall be folded and placed in a pouch at the back of the report. The area designated shall be delineated with marking pens or similar instruments of legible quality. Interesting, relevant points should be labeled.

(5) Local Support - Identify the individual(s) or organization(s) preparing the nomination. Show evidence that local counties, communities, agencies, land owners and private citizens have been involved in the nomination process. A public meeting is not required, however, it is recommended as a suitable method of demonstrating support.

(6) Conceptual/Management Plan:

(a) Discuss how the nominating organization proposes to promote and market the route on the local and regional level. Include promotional activities, placement of scenic or historic markers and proposed improvements or development along the route.

(b) Describe the availability of financial resources with which to upgrade, promote, and otherwise make the scenic road and its corridor available for its intended uses. If no funding is presently available, indicate how the organization plans to locate funding sources.

(c) Describe how the route will be managed to allow for future public use and development along the route and include evidence of a commitment to preserve the intrinsic qualities of the proposed byway.

(7) Inventory of Significant Findings - The inventory of natural, cultural, and visual resources is the main focus of the designation evaluation. It must be descriptive and provide complete and convincing information. The inventory should contain the following information as applicable to the road area under consideration:

(a) Natural Resources - Natural resources should be depicted on maps and described in written form. Areas of importance to the road designation should be sufficiently detailed. Natural resources are comprised of five distinct features

(i) Geology - Geology is the description of the physical history of the earth and the rocks and soil of which it is composed. This section should contain information on the bedrock strata, sections and rock outcrops, and the surface geology and soil types.

(ii) Hydrology - Hydrology contains information that addresses the occurrence, circulation and distribution of water. This section should contain information of interest about groundwater tables, aquifers and recharging basins. Surface drainage comprised of streams and bodies of water should also be inventoried.

(iii) Climate - The climate of the area should be comprised of the prevailing weather condition of the area. Issues such as the temperature, precipitation and seasonal distribution and prevailing winds should be addressed in this section.

(iv) Biota - The biota portion of the report shall contain a description of the living matter contained within the study area. This should outline the biotic communities, plants, animals, birds, insects and fish within the area. It should also contain information on the ecosystem values, changes and controls as they pertain to the proposed designation.

(v) Topographic - The topographic resources of the area are comprised of the land conformation and natural resources. The natural resources are comprised of relief, land form, water and vegetative cover.

(b) Cultural Resources - Cultural resources are the fragile, limited, and non-renewable portions of the human environment. They are comprised of the cultural heritage contained in civilization. Cultural resources should also inventory the man made features comprised of travel ways, buildings and structures, site improvements and changes, and utilities easements and constructs. They include:

(i) Architectural resources - Structures, landscaping or other human constructions that possess artistic merit which are particularly representative of their class or period, or which represent achievements in architecture, engineering, technology, design or scientific research and development.

(ii) Historical resources - Sites, districts, structures, artifacts or other evidences of human activities that represent facets of the history of a nation, state or locality; places where significant historic or unusual events occurred, even though no physical evidence of the event remains, or places associated with a personality important in history.

(iii) Archaeological Resources - Occupation sites, work areas, evidence of farming or hunting and gathering, burials and other funerary remains, artifacts, and structures of all types, usually dating from prehistoric or aboriginal periods, or from historic periods and non-aboriginal activities for which only vestiges remain.

(iv) Cultural Development - Cultural resources also encompass the historic development of civilization. These should include political/governmental development, socio/cultural and technological/economic impacts of civilizations on the study area.

(v) The information presented should deal with the impact of the road or area and what influence it has had in history. Focus on how it helped shape society on a local, state, and/or national level. The information may have been documented by a historical organization. Cultural resources should be depicted on maps, when applicable, and described in written form. Areas of importance to the road designation should be sufficiently detailed. For the historic designation of a route, the cultural resources section should comprise the main body of the report.

(c) Visual Resources - Visual resources are created by the physical components of the natural and cultural resources in the landscape. These components are so arranged that they make up the visual character of a landscape and distinguish it from others. Whereas natural and cultural resources may be well documented, their visual character requires direct observation in order to determine visual quality. Successful visual quality assessment requires two essential steps:

(i) The establishment of Landscape Assessment Units: 1) the selection of appropriate viewpoints, and (2) the classification of the viewpoints scenic element.

(ii) An evaluation of the visual quality of the landscape for each of the Landscape Assessment Units.

(8) Desirable Zone of Influence - The area, on either side of roadway, that would be necessary to protect the resources from damaging encroachments must be defined. These areas will generally be the same as that which can be seen from a viewpoint, but need to be clarified. They can be illustrated on a map.

(9) Land Ownership - Describe and illustrate the land ownership along the roadway. Use the following general categories: federal, state, city, Native American reservation or private.

(10) Land Use - Describe and illustrate the land uses along the roadway. Use the following categories: residential, commercial, industrial, agricultural, government, conservational, or recreational.

(11) Land Zoning - Describe and illustrate the zoning along the roadway. Consult local zoning boards for this information.

(12) Photographs and Supportive Materials - Provide photographs and other information that document the scenic or historic significance of the roadway. Newspaper, magazine articles or other sources may be cited. Include letters from local agencies or groups indicating their concern with the proposed designation.

(13) Recommendations - List recommendations to protect or enhance the unique features and special natural or cultural resources on the area. Examples of recommendations are:

- (a) Modification to structures and signs;
- (b) Pruning or removal or addition of plant materials;
- (c) Enhancement of historical markers;
- (d) Erosion control;
- (e) Addressing vehicular and pedestrian traffic;
- (f) Compliance with area planning and zoning;
- (g) Location of scenic viewpoints; and
- (h) Restoration of vegetative cover in disturbed areas.

[Recompiled 11/16/01]

#### 18.31.2.9 GRANT APPLICATION/ACCEPTANCE PROCEDURES FOR PROPOSED SCENIC BYWAY PROJECT:

A. Prescreening: The project sponsor should prescreen the project grant application to assure that it meets the basic requirements. Applications should be formatted as outlined in this document. The Coordinator may be contacted for assistance.

B. Types of projects eligible for Federal assistance with Scenic Byway grants:

(1) Planning, design, and development of State scenic byways programs.

(2) Safety improvements to a highway designated as a scenic byway to the extent such improvements are necessary to accommodate increased traffic and changes in the types of vehicles using the highway due to such designation.

(3) Construction along the scenic byway of facilities for the use of pedestrians and bicyclists, rest areas, turnouts, highway shoulder improvements, passing lanes, overlooks, and interpretive facilities.

(4) Improvements to the scenic byway that will enhance access to an area for the purpose of recreation, including water-related recreation.

(5) Protecting historical, archeological, and cultural resources in areas adjacent to the highways.

(6) Developing and providing tourist information to the public, including interpretive information about the scenic byway.

C. Basic Requirements for a Grant Application:

(1) To be eligible to apply for a grant, the route must be designated as a State scenic byway under this program prior to the annual grant-funding cycle.

(2) The minimum grant request that will be considered is \$10,000. The maximum grant that will be considered is \$1,000,000 for a single state project. Projects sponsored by multiple states may be up to \$1,000,000 per supporting state.

(3) National Environmental Policy Act (NEPA) compliance is the financial responsibility of the sponsor and is not eligible for grant funding. NEPA should be substantially complete at the time of application. Maintenance is not an eligible activity.

(4) The public must have a legal right to access the project.

(5) The federal share payable for the costs of carrying out projects and developing programs is 80%. The sponsor must secure 20% non-federal matching funds. Only cash or donations of land as described in USC Title 23, Section 323, are considered an allowable match for this criteria.

(6) The RPO or MPO must concur with the project grant application before forwarding it to the Coordinator. The project should be compatible with adjacent land uses.

D. Evaluation and Statewide Ranking of Project Grant Applications - The Coordinator will present the grant applications for consideration at a scheduled SHBAC meeting. The SHBAC will serve as a technical review committee, evaluating each proposal on criteria outlined in Appendix 3 of this document, and establish a statewide ranking for the projects. The SHBAC may choose to limit the number of projects it reviews if the quantity is too numerous. Therefore a sponsor submitting more than one application must prioritize their submittals. If necessary, the SHBAC may ask the RPO to screen submittals.

E. Concurrence - Projects approved by the SHBAC will be forwarded to the SHC for final concurrence. A list of those approved by the SHC will be forwarded to the appropriate RPOs or MPOs to prioritize and incorporate into the regional transportation improvement plan (RTIP).



F. Submittal of Grant Applications to FHWA - Approved grant applications are forwarded by the Coordinator to the FHWA division office with a state budget summary sheet.  
[Recompiled 11/16/01]

18.31.2.10 SHOULD YOU SPONSOR AN ISTE A SCENIC BYWAY GRANT?: A sponsor should evaluate its ability to implement a project prior to making a grant application. It is recommended that the sponsor be a governmental body. Private non-profit and civic organizations are encouraged to work with governmental agencies to develop project applications. A sponsor should consider the following questions before applying for a grant: A.

Does the RPO or MPO concur with the project proposal? A key concept of ISTE A is statewide planning for transportation improvements. The RPO or MPO must concur with the project and include it in the Transportation Plan.

B. Do you have the time, staff and skills needed to administer the project contract? This can involve planning, environmental analysis, survey and design, etc. The project sponsor will act as lead agency for project development and implementation, including NEPA compliance, survey and design, contract award and administration.

C. Are you aware that ISTE A grant funds are a reimbursement for actual costs incurred? Invoices submitted by the sponsor will be reimbursed at 80% of the total invoice amount, the 20% match is the sponsors responsibility.

D. Do you have a dependable source of partnership funds? Projects cannot be substituted if a selected grant falls through; the state and non-selected projects would lose the opportunity for that year. Therefore, the sponsor must identify the source of matching funds in the grant application and will be required to certify that matching funds are available prior to award of the grant.

E. How good is your cost estimate? It is the sponsor's responsibility to cover cost overruns.

F. Can you complete NEPA and survey and design within a year of grant award? Can you complete construction within two years? New Mexico's competitive status depends on demonstrated success on grants awarded.

G. Who will be responsible for operation and maintenance costs? The application must identify who will be responsible for ongoing operation and maintenance of the project. If the responsible party is other than the sponsor, they must agree in writing, or co-sponsor the project.

H. Is the project located on public land or public right-of-way? The public must have legal access to the project.

[Recompiled 11/16/01]

18.31.2.11 PROJECT GRANT APPLICATION FORMAT:

A. The application should be typewritten on 8 1/2" x 11" paper. Submit three (3) originals, of which two (2) shall be bound on the left margin, and one shall be unbound. The application should not exceed 13 pages, including the cover sheet, cover letter, and table of contents.

B. A cover letter addressed to the Scenic Byways Coordinator, New Mexico State Highway and Transportation Department, P. O. Box 1149, Santa Fe, New Mexico 87504-1149.

C. Complete appropriate portions of the Project Summary Form included with the Scenic Byways Program Grant Application Package provided by Federal Highways Administration each grant cycle. Instructions on how to fill out the application are included in the package.

D. Table of contents.

E. Text up to three typewritten pages addressing the description of the proposal:

(1) Project location and description;

(2) Project cost with breakdown of estimated cost for categories--land or easement acquisition, NEPA, survey, design, and contract documents, construction or publication, and annual operation and maintenance (O&M) [NOTE: NEPA and O&M are not eligible for grant funding.];

(3) Identification of the partner(s) responsible for the work. Clearly identify the amount of grant request and amount and source of required matching funds;

(4) Project timeline (when key steps can be accomplished, when matching funds are available, and when contract can be awarded);

(5) Identify which of the six eligible projects categories the proposed project fits and describe how; and

(6) Respond to criteria established by SHBAC.

F. A project location map. The map should be of a quality similar to that published by the United States Geological Survey, NMSHTD, the county or the city. The area to be depicted should be at a scale that will maximize the space on the 8 1/2" x 11" sheet. If a larger map is used, it shall be folded and placed in a pouch at the back of the report. A drafted site plan may be included.

G. Any supporting illustrations or letters, or reference list of planning documents (not to exceed five pages).

H. If a comprehensive plan for the scenic byway has been developed, enclose a copy. Do not send other documents.

[Recompiled 11/16/01]

18.31.2.12 EVALUATION CRITERIA: Grant applications will be evaluated and ranked according to the following criteria:

A. What is the relationship of the project to the scenic byway? (The relationship of the project to the byway may be one of proximity, impact or function.)

- (1) Is proximity to the byway adjacent, less than one mile, or over one mile?
- (2) Is there a direct impact to the site caused by the byway designation?
- (3) Does the project have a functional relationship to the byway?

B. Who does the project serve?

- (1) What is the average daily traffic for the byway?
- (2) How will this project serve byway users?
- (3) Does the project benefit more than one byway?

C. Public and private commitment and support:

- (1) Is there support other than the sponsors? If so, identify supporters and type of support.
- (2) Are there contributions of funds, materials, land, or labor in addition to the required 20% matching funds?

- (3) Are other investments being made in scenic byway facilities and enhancements?

D. Status of comprehensive planning:

- (1) Is this project part of a comprehensive plan for the scenic byway?
- (2) Does the plan address facilities and services needed to enhance the user experience?
- (3) Does the plan protect the scenic or historic values for which the byway was established?
- (4) Did the plan development include public involvement?

E. Status of project planning:

- (1) Is there a conceptual plan (site plan or narrative) for the project?
- (2) Has NEPA been completed for the project? If not, who is responsible for doing it, and what is the timeline? (For non ground disturbing projects substitute "Is graphic design complete?")
- (3) Has survey and design been completed for the project? If not, who is responsible for doing it, and what is the timeline? (For projects such as brochures or signs, substitute "Is there camera ready art?")
- (4) What are the projected operation and maintenance costs, and who will be responsible for O&M?

F. Benefit to the community or environment:

- (1) Will the project benefit the local community economy?
- (2) Will it solve an environmental problem?
- (3) Will it provide needed visitor facilities or services that the community does not provide?
- (4) Does it solve a health or safety problem?

G. Unique benefits of the project:

- (1) Does the project have a multi-cultural emphasis?
- (2) Does the project have educational values for natural or cultural resources?
- (3) Will the project provide access to people with disabilities?

H. From a national perspective:

- (1) Is the project sponsored by multiple states?
- (2) Is the project a model for other states?

I. From a Statewide perspective:

- (1) Does this project benefit tourism?
- (2) Does this project foster economic development?
- (3) Does the project implement a State initiative?
- (4) Is it a timely companion to another project?

(5) Is there a risk that the sponsor will not be able to follow through with project implementation or funding?

[Recompiled 11/16/01]

- 18.31.2.13 DESIGNATED SCENIC BYWAYS AND HISTORIC TRAILS:
- A. Sandia Crest Scenic Byway - NM 536, (Cibola National Forest); 11 miles.
  - B. Santa Fe National Forest Scenic Byway - NM 475; 15 miles.
  - C. 13.3 Gila Cliff Dwellings/Inner Loop Scenic Byway - NM 15 and NM 35, (Gila National Forest); 110 miles.
  - D. Sunspot Scenic Byway - NM 6563, (Lincoln National Forest); 14 miles.
  - E. Enchanted Circle Scenic Byway - NM 38, 522 and US 64, (Carson National Forest); 84 miles.
  - F. Wild Rivers Back Country Byway - NM 378, (BLM); 13 miles.
  - G. Quebradas Back Country Byway - County Road A-135 from I-25 or County Road A-129 from US 380 (BLM); 24 miles.
  - H. All former US 66 (Route 66) alignments - mile marker 373.5 (Texas border) to mile marker 0 (Arizona border) excluding those portions overlaid by Interstate 40 and Interstate 25; 373 miles.
  - I. El Camino Real - US 85, 60, 380; NM 304, 47, 408, 1, 51, 187, 185, 273 (Santa Fe to Texas border); 276 miles.
  - J. The Jemez Mountain Trail - NM 4, 126, 44; 163 miles.
  - K. Narrow Gauge Scenic Byway - from mp 0, Dulce, New Mexico, to mp 9.8 at the Colorado border; 9.8 miles.
  - L. Mesalands Scenic Byway (Quay and Guadalupe Counties) - US 54, 84; NM 91, 104, 129, 156, 209, 219, 231, 252, 278, 469, and one un-numbered county road at Colonias; 320 miles.
  - M. Salt Missions Trail - NM 333, 41; US 60; NM 513, 55, 337, 131; 140 miles.
  - N. Santa Fe National Historic Trail - NM 410, 406, 453, 21, 161, 518, 63, 50; County Road 67-C; US 56, 64, 87, Old US Highway 85; 480 miles.
  - O. Billy the Kid Trail - NM 48, 270; US 70, 380; 84.2 miles.
  - P. Geronimo Trail - NM 51, 195, 52, 59, 61, 35, 152, 187; 220 miles.
  - Q. Corrales Road - NM 448; 6.7 miles.
  - R. Turquoise Trail - NM 14, 536 (from Santa Fe to Albuquerque); 48 miles.
  - S. Lake Valley Back Country Byway - NM 152, 27, (BLM); 47 miles.
  - T. Guadalupe Back Country Byway - NM 137 (begins at junction of NM 137/US 285), (BLM); 30 miles.
  - U. Abo Pass Trail - NM 47, US 60; 31 miles.
  - V. Dry Cimarron Scenic Byway - NM 406, 456, 370, 325, 551, 72; CO 8, 18, 385; OK 325; (215 road miles in New Mexico, 80 in Colorado and 75 in Oklahoma).
- [Recompiled 11/16/01]

#### HISTORY OF 18.31.2 NMAC:

##### Pre-NMAC Regulatory Filing History:

The material in this Part was derived from that previously filed with the State Records and Archives under: 18 NMAC 31.2, New Mexico Scenic and Historic Byways Program, filed February 27, 1998. This rule was an emergency rule. Pursuant to State Highway Commission Policy CP4-95, "In no event shall an emergency rule remain in effect for more than one hundred and twenty days.

History of Repealed Material: [RESERVED]

**TITLE 18                    TRANSPORTATION AND HIGHWAYS**  
**CHAPTER 31            CLASSIFICATION AND DESIGN STANDARDS FOR HIGHWAYS**  
**PART 3                    ALTERNATIVE MODES OF TRANSPORTATION ON LIMITED**  
**ACCESS HIGHWAYS**

18.31.3.1            ISSUING AGENCY: New Mexico State Highway and Transportation Department, Post Office Box 1149, Santa Fe, New Mexico 87504-1149 (505) 827-5547.  
 [Recompiled 11/16/01]

18.31.3.2            SCOPE: This Rule will apply to all citizens of, and visitors to, New Mexico.  
 [Recompiled 11/16/01]

18.31.3.3            STATUTORY AUTHORITY: Adoption of these regulations is pursuant to authority granted to the State Highway Commission under Sections 66-7-321 and 67-11-4, NMSA 1978, as amended  
 [Recompiled 11/16/01]

18.31.3.4            DURATION: Permanent.  
 [Recompiled 11/16/01]

18.31.3.5            EFFECTIVE DATE: March 15, 1997, unless a later date is cited at the end of a section or paragraph  
 [Recompiled 11/16/01]

18.31.3.6            OBJECTIVE: The objective of this rule is to prohibit or regulate certain modes of transportation on limited access highways. Interstate highways are designed for motor vehicles. There is an inherent danger anytime motorized and non-motorized modes of transportation mix. There are, however, reasons for allowing bicycles on rural interstates, e.g., facilitating bicycle touring and recreation can benefit a state's economy; most western states, including four of the five states contiguous to New Mexico allow bicycles on the shoulders of interstate highways; interstate shoulders provide a less dangerous route for bike touring than some alternative rural highways; and, some bike touring routes in New Mexico can only be pursued by riding on the shoulders of some rural interstates. This rule is designed to delineate which modes of transportation are prohibited on interstates and to establish the conditions under which bicycles may be operated in interstate highways right-of-way. Allowing bicycles on the shoulders of some interstate highways is not intended to stand as a route recommendation, nor to imply that such shoulders are safer for bicyclists than other routes.  
 [Recompiled 11/16/01]

18.31.3.7            DEFINITIONS:

A.            "Bicycle" means every device propelled by human power upon which any person may ride, having two tandem wheels, except scooters and similar devices.

B.            "Bikeway" means any road, path or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

C.            "Equestrian" means a person on horseback.

D.            "Interstate highway" means a principal highway system between states. The highest type of arterial highway; an expressway with full control of access.

E.            "Pedestrian" means any natural person on foot.

F.            "Right-of-way" means, in the appropriate context, a general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation needs.

G.            "Shoulder" means outside portion of a highway contiguous to the roadway that is primarily for use by motor vehicles with problems.

H.            "Vehicle" means every device in, upon or by which any person or property is or may be transported or drawn upon a highway, including any frame, chassis or body of any vehicle or motor vehicle, except devices that are moved exclusively by human power or used exclusively upon stationary rails or tracks.  
 [Recompiled 11/16/01]

18.31.3.8 TRANSPORTATION MODES PROHIBITED FROM INTERSTATE HIGHWAYS:

A. Equestrians, pedestrians, other non-motorized vehicles and low-power motor vehicles, such as motor scooters and all-terrain vehicles, are prohibited from using any interstate highway right-of-way for transportation or recreation purposes. Such interstate highways shall be signed appropriately.

B. Bicyclists are prohibited from using any interstate highway right-of-way for transportation or recreation purposes within the boundaries of cities with a population of 50,000 or more. Bicyclists are also prohibited from using any interstate highway right-of-way deemed inappropriate by the Secretary of Highways or his or her designee. Interstate highways prohibited for use by bicyclists shall be signed appropriately.

C. Where not otherwise prohibited, bicyclists are permitted to use interstate highways in New Mexico provided that they ride on the shoulders of the interstate highways.  
[Recompiled 11/16/01]

HISTORY OF 18.31.3 NMAC:

Pre-NMAC Filing History:

The material in this part was derived from that previously filed with the commission of public records-state records center and archives.

Rule No. LD 101, "Motorized Bicycles" Prohibited from Using any Portion of the Interstate Highway System, 10/26/77.

History of Repealed Material: [RESERVED]

<b>TITLE 18</b>	<b>TRANSPORTATION AND HIGHWAYS</b>
<b>CHAPTER 31</b>	<b>CLASSIFICATION AND DESIGN STANDARDS FOR HIGHWAYS</b>
<b>PART 6</b>	<b>STATE HIGHWAY ACCESS MANAGEMENT REQUIREMENTS</b>

**18.31.6.1**      **ISSUING AGENCY:** New Mexico State Highway and Transportation Department, 1120 Cerrillos Road, Post Office Box 1149, Santa Fe, New Mexico 87504-1149.  
[18.31.6.1 NMAC - Rp, 18 NMAC 31.6.1, 10/15/2001]

**18.31.6.2**      **SCOPE:** NMSHTD Districts and Divisions, all other state agencies, local governments, land owners, developers, and general public.  
[18.31.6.2 NMAC - Rp, 18 NMAC 31.6.2, 10/15/2001]

**18.31.6.3**      **STATUTORY AUTHORITY:**

**A. State Highway Commission:** The basic enabling legislation for the management of access on state highways is NMSA 1978, Section 67-11-2, which states: "The State Highway Commission is authorized and directed to do those things essential to plan, acquire by reasonable purchase or condemnation and construct a section or a part of a state or federally designated highway as a freeway or controlled-access highway or to make any existing state or federally designated highway a freeway or a controlled-access highway."

**B. State Highway and Transportation Department:** Pursuant to NMSA 1978, Section 67-3-6, the State Highway and Transportation Department shall exercise the power, authority, and duty granted to the State Highway Commission. Therefore, the Department may prescribe rules and regulations for providing access to state highways pursuant to NMSA 1978, Chapter 67. In addition, the following State Highway Commission policy and NMSHTD Administrative Directive supplement New Mexico State Statutes and shall be followed when determining the type and extent of access to be provided along state highways.

(1) State Highway Commission Policy CP 65, Interstate Access

(2) NMSHTD Administrative Directive AD 222, Highway Access Control

[18.31.6.3 NMAC - Rp, 18 NMAC 31.6.3, 10/15/2001]

**18.31.6.4**      **DURATION:** Permanent.  
[18.31.6.4 NMAC - Rp, 18 NMAC 31.6.4, 10/15/2001]

**18.31.6.5**      **EFFECTIVE DATE:** October 15, 2001 unless a later date is cited in the history note at the end of a section.  
[18.31.6.5 NMAC - Rp, 18 NMAC 31.6.5, 10/15/2001]

**18.31.6.6**      **OBJECTIVE:**

**A.** By 18.31.6 NMAC, the NMSHTD establishes access management requirements which will protect the functional integrity of the state highway system and the public and private investment in that system. Rule 18.31.6 NMAC, and its associated *State Access Management Manual* which is attached to and filed concurrently with this rule, provides procedures and standards to preserve and protect the public health, safety and welfare, to maintain smooth traffic flow, and to protect the functional level of state highways while considering state, regional, local, and private transportation needs and interests. The access management requirements also consider other Department regulations, policies and procedures related to highway rights-of-way such as drainage, archeology, hazardous materials and other environmental aspects.

**B.** Through the administration of 18.31.6 NMAC, it is the intent of the NMSHTD to work with property owners and local governments to provide reasonable access to the state highway system. However, the access rights of an owner of property abutting a state highway shall be held subordinate to the public's right and interest in a safe and efficient highway.

**C.** All owners of property abutting a public road have a right of reasonable access to the general system of streets and highways in the State, but not to a particular means of access. The right of access is subject to regulation for the purpose of protecting the health, safety and welfare of the traveling public.

**D.** Rule 18.31.6 NMAC addresses the design and location of driveways, medians, median openings, intersections, traffic signals, interchanges and other points of access to public highways under the jurisdiction of the New Mexico Highway Commission. It is based upon the authority granted to the State Highway and Transportation Department.

**E.** As of June 9, 1989, no person shall construct or modify any permanent or temporary access providing direct vehicular movement to or from any state highway from or to property in close proximity to or adjoining a state highway without an access permit issued by the State Highway and Transportation Department. Within those jurisdictions where the local governments and authorities have returned issuing authority to the Department, the Department has sole authority to issue state highway access permits. However, the Department will delegate the authority under 18.31.6 NMAC to other public agencies provided that these agencies minimally adopt the Rule and as the Department determines in its discretion as delegable.

**F.** Access permits shall be issued only when the permit application is found to be in compliance with 18.31.6 NMAC. The Department, or other issuing authority approved by the Department, is authorized to impose terms and conditions as necessary and convenient to meet the requirements of 18.31.6 NMAC. In no event shall an access permit be issued or authorized if it is detrimental to the public health, safety and welfare.

**G.** Direct access from a subdivision to a state highway shall be permitted only if the proposed access meets the purposes and requirements of 18.31.6 NMAC. All new subdivision of property shall provide access consistent with the requirements of 18.31.6 NMAC. The provisions of 18.31.6 NMAC shall not be deemed to deny reasonable access to the general street system. The issuance of any permit, agreement, plat, subdivision, plan or correspondence shall not abrogate or limit the regulatory powers of the Department or issuing authority in the protection of the public's health, safety and welfare.

[18.31.6.6 NMAC - Rp, 18 NMAC 31.6.6, 10/15/2001]

#### **18.31.6.7 DEFINITIONS:**

**A. Acceleration Lane--** A speed-change lane, including full-width auxiliary lane and tapered area, for the purpose of enabling a vehicle entering a roadway to increase its speed to a rate at which it can safely merge with through traffic.

**B. Access--** Any driveway or other point of access such as a street, road, or highway that connects to the general street system. Where two public roadways intersect, the secondary roadway shall be considered the access.

**C. Access Category--** The definition by which access to a state highway is controlled according to the categories described in 18.31.6.10 NMAC.

**D. Access Control--** The regulated limitation of access to and from a highway facility including full control of access, partial control of access, and driveway regulations.

**E. Applicant--** The owner of property or the representative of an owner applying for an access permit.

**F. Arterial Roadway--** The primary function of an arterial roadway is to provide mobility for through traffic movements. Arterial roadways provide for land access as a secondary function.

**G. At-Grade Intersection--** A crossing of two or more highway facilities at the same elevation where through traffic movements on one or more of the highways cross and where turning movements between the highway facilities may be allowed.

**H. Auxiliary Lane--** An additional lane adjoining the traveled way which may be used for parking, speed change, turning, storage for turning vehicles, weaving, truck climbing, and other purposes supplementary to through traffic movement.

**I. Average Daily Traffic (ADT)--** The average traffic volume per day, over a seven-day week, for a unique segment of roadway in both directions of travel on a two-way facility and in one direction of travel on a one-way facility.

**J. Average Weekday Traffic (AWDT)--** The average traffic volume for a unique segment of roadway on a typical weekday (Monday through Friday) in both directions of travel on a two-way facility and in one direction of travel on a one-way facility.

**K. Average Weekend Traffic (AWET)--** The average traffic volume for a unique segment of roadway over the weekend period (Saturday and Sunday) in both directions of travel on a two-way facility and in one direction of travel on a one-way facility.

**L. Business District--** A business district occurs along a highway when within 300 feet along such highway there are buildings in use for business or industrial purposes (including but not limited to hotels, banks or office buildings, railroad stations and public buildings) which occupy at least fifty percent of the frontage on one side or fifty percent of the frontage collectively on both sides of the highway.

**M. CHDB--** Consolidated Highway DataBase maintained by the New Mexico State Highway and Transportation Department.

**N. Capacity--** The maximum hourly rate at which persons or vehicles can reasonably be expected to

traverse a point or uniform section of a lane or roadway under prevailing roadway, traffic, and control conditions.

**O. Change of Use--** Occurs when a change in the use of the property including land, structures or facilities, or an expansion of the size of the structures or facilities, is expected to result in an increase in the trip generation of the property greater than 25 percent (either peak hour or daily) and greater than 100 vehicles per day more than the existing use.

**P. Channelized Intersection--** An "at grade" intersection with painted islands, raised islands, or other devices for directing traffic along definite paths.

**Q. Collector Street--** Collector streets connect developed areas with the arterial street system, balancing the need to provide traffic movement with the need to provide property access.

**R. Commission--** The New Mexico State Highway Commission.

**S. Control of Access--** The condition in which the right of owners or occupants of land abutting or adjacent to a roadway is controlled by public authority.

**T. Controlled-Access Highway--** Includes highways, streets or roadways to which owners or occupants of abutting lands, and other persons, have no legal right of access except as determined by the public authority having jurisdiction over the highway, street or roadway.

**U. Corner Clearance--** At an intersecting street or highway, the dimension measured along the edge of the traveled way between the centerline of the intersecting street and the centerlines of the first adjacent access points on the approach and departure sides of the intersection.

**V. Cross Street--** The lower function roadway that crosses a higher function facility, also referred to as Minor Street.

**W. Curb Cut--** An opening along a state highway with raised curb or curb-and-gutter to provide for driveway access using drivepad construction. Also referred to as Driveway Cut.

**X. Curb Return--** The access radius for an intersection or driveway opening, also referred to as Radius Return.

**Y. Curb Return Construction--** As applied to a driveway opening, means that proper access radii are used in the design and construction of an access facility.

**Z. Deceleration Lane--** A speed-change lane, including full-width auxiliary lane and tapered areas, for the purpose of enabling a vehicle to slow to a safe turning speed when exiting a roadway.

**AA. Department--** The New Mexico State Highway and Transportation Department.

**AB. Design Vehicle--** A selected motor vehicle with the weight, dimensions, and operating characteristics used to establish highway design controls.

**AC. Developer--** A person or persons representing a proposed land development project.

**AD. Divided Highway--** A highway with separated roadways for traffic traveling in opposite directions. Separation may be provided by depressed dividing strips, raised medians, traffic islands, other physical separations, standard pavement markings, or other traffic control devices.

**AE. Drivepad Construction--** As applied to a driveway or curb cut, means that access radii are not used in the design and construction of an access facility.

**AF. Driveway--** For the purposes of NMSHTD access management requirements, a driveway is a public or private access along a state highway serving a limited area where traffic signal control is not required. Excludes public streets, roads, highways, and other signalized intersections.

**AG. Driveway Angle--** The angle of 90 degrees or less between the driveway centerline and the edge of the traveled way.

**AH. Driveway Cut--** An opening along a state highway with raised curb or curb-and-gutter to provide for driveway access using drivepad construction. Also referred to as Curb Cut.

**AI. Driveway Throat Width--** The narrowest width of a driveway measured parallel with the edge of the traveled way exclusive of radii, ramps or tapers.

**AJ. Edge Clearance--** The distance measured along the edge of the traveled way between the frontage property line and the point of tangency of the nearest radius return for an access.

**AK. Egress--** To exit an abutting property or intersecting roadway to gain access to a state highway.

**AL. Freeway--** A multi-lane divided highway having a minimum of two lanes in each travel direction, with access provided by grade-separated interchanges.

**AM. Frontage--** The distance along the highway right-of-way line of a single property tract or roadside development area between the limits of the property.

**AN. Frontage Property Line--** A line, perpendicular to the highway centerline, at each end of the frontage, extending from the right-of-way line to the edge of traveled way.

**AO. Full Control of Access--** That part of access control where preference is given to through traffic



by providing access connections only with selected public roads, and by prohibiting at-grade crossings and direct private driveway connections. Access control is accomplished by legally obtaining right-of-way from the abutting property owners or by the use of frontage roads or other means to provide access to abutting properties.

**AP. Functional Classification--** The grouping of highways by the character of service they provide to through traffic movements (mobility) versus access to abutting properties (land accessibility).

**AQ. General-Purpose Lanes--** The continuous through lanes on a highway, excluding auxiliary lanes. Sometimes referred to as mainline lanes.

**AR. General Street System--** The interconnecting network of city streets, county roads, and state highways.

**AS. Grade Separation--** A crossing of two transportation facilities, such as two roadways or a roadway and a railroad, at different elevations where access is not provided from either facility at their intersection.

**AT. Grade or Gradient--** The rate (or percent) of change in slope. For highway facilities, it is measured along the centerline of the roadway or access facility.

**AU. Highway--** The entire width between the right-of-way lines of publicly maintained traveled way when any part thereof is open to the public for purposes of vehicular travel, or the entire width of any traveled way declared to be a public highway by law. It may include bridges, culverts, sluices, drains, ditches, waterways, embankments, walls, trees, shrubs and fences.

**AV. Highway Improvement Project--** Includes any project to improve a roadway segment or intersection facility to protect and maintain the general health, safety and welfare of the traveling public, typically conducted by the public entity having jurisdiction over the facility being improved. Highway improvement projects are generally included in the public entity's transportation improvement program, whether the program is local, regional or statewide.

**AW. Horizontal Alignment--** The combination of curved and tangent sections of a highway in the horizontal plane.

**AX. Ingress--** To leave the highway and enter into an abutting property or intersecting roadway.

**AY. Intersection--** Public street or other access serving a large area or a major traffic generator(s) where traffic signal control may be provided.

**AZ. Interstate Highway--** Represents the highest functional classification of a roadway in a highway network. Interstates are multi-lane divided highways having a minimum of two lanes in each travel direction, with access provided by grade-separated interchanges.

**BA. km/h--** A rate of speed measured in kilometers traveled per hour.

**BB. Land Development Project--** Includes any project to develop or redevelop private or public property adjacent or in close proximity to a state highway where direct or indirect access to the property is required from the state highway. Land development projects may be conducted by private and/or public entities.

**BC. Lane--** The portion of a roadway for the movement of a single line of vehicles, not including the gutter or the shoulder of the roadway.

**BD. Level of Service (LOS)--** A qualitative measure describing traffic operational conditions within a traffic stream based on factors such as speed, travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Level of service designations range from A (best) to F (worse).

**BE. Local Governments and Authorities--** Every county, municipal, and other local board or body having authority to enact laws relating to traffic under the constitution and laws of the State of New Mexico.

**BF. Local Road--** Local roads primarily provide direct access to abutting land and to roads of higher functional classification. Mobility is discouraged, especially in urban areas.

**BG. May--** A permissive condition where the condition is suggested but not mandatory.

**BH. MUTCD--** Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition.

**BI. Median--** That portion of a divided highway separating traffic traveling in opposite directions.

**BJ. Minor Street--** The lower function roadway that crosses a higher function facility, also referred to as Cross Street.

**BK. mph--** A rate of speed measured in miles traveled per hour.

**BL. NMSHTD--** The New Mexico State Highway and Transportation Department.

**BM. Nominal Control of Access--** That part of access control that may be applied when full or partial control of access has not been obtained by a highway authority. A means of access control that is consistent with the functional classification of a state highway facility, and that is sufficient to maintain a safe and efficient transportation system.

**BN. Non-Access Controlled Highway--** Includes state highways where roadside access is permitted and access control has not been established by legally obtaining right-of-way from the abutting property owners or

by the use of frontage roads or other means to provide access to abutting properties.

**BO. Non-Traversable Median**-- A median which, by its design, physically discourages or prevents vehicles from crossing it except at designated openings which are designed for turning or crossing movements.

**BP. Partial Control of Access**-- That part of access control where preference is given to through traffic to a degree that some at-grade crossings may be permitted. Access control is accomplished by legally obtaining right-of-way from the abutting property owners or by the use of frontage roads or other means to provide access to abutting properties.

**BQ. Permittee**-- The individual(s) responsible for fulfilling the terms and conditions of the access permit as imposed by the Department.

**BR. Property Owner**-- The person or persons holding the recorded title to property abutting a state highway, and other persons holding a recorded interest in such property, that includes a right to reasonable access from the state highway system.

**BS. Radius Return**-- The access radius for an intersection or driveway opening, also referred to as Curb Return.

**BT. Recovery Area**-- An unobstructed area provided beyond the edge of a traveled way for the recovery of errant vehicles.

**BU. Right-In/Right-Out Driveway (RI/RO)**-- A driveway located along a roadway prohibiting left-turn access into or out of the driveway.

**BV. Setback**-- The lateral distance between the highway right-of-way line and any development structure, obstacle or parking area along the highway roadside.

**BW. Shall**-- A mandatory condition where the requirements must be met.

**BX. Should**-- An advisory condition where the condition is recommended but not mandatory.

**BY. Sight Distance**-- The length of roadway visible to the driver of a vehicle, as further defined in the AASHTO document, *A Policy on Geometric Design of Highways and Streets*, latest edition.

**BZ. Signal Progression**-- The timing of consecutive signalized intersections to provide for the progressive movement of traffic at a planned rate of speed.

**CA. Speed-Change Lane**-- A separate lane for the purpose of enabling a vehicle entering or leaving a roadway to increase or decrease its speed to a rate at which it can more safely merge into or exit from through traffic.

**CB. State Highway**-- Any public highway that has been designated as a state highway by either the New Mexico State Legislature or the State Highway Commission.

**CC. Stopping Sight Distance**-- The distance required by a driver of a vehicle to bring the vehicle to a stop after an object on the roadway becomes visible.

**CD. Storage Lane Length**-- The length provided within a deceleration lane for the storage of queued vehicles, typically based on the vehicle queue expected during peak travel periods.

**CE. Subdivide**-- To divide land into two or more smaller lots, tracts or parcels of land.

**CF. Subdivision**-- A tract of land which has been subdivided in accordance with the laws of the state usually with appropriate streets, dedications and other facilities for the development or sale of industrial, commercial or residential land.

**CG. Traveled Way**-- That portion of a roadway containing the travel lanes and speed-change lanes, exclusive of pavement provided for shoulders.

**CH. Traversable Median**-- A median which, by its design, does not physically discourage or prevent vehicles from entering upon or crossing it.

**CI. Trip**-- A one way vehicle movement from one location to another.

**CJ. Trip Assignment**-- Refers to the addition of trips generated by a proposed development to a transportation network. Involves the specific routing of traffic on the street system.

**CK. Trip Distribution**-- Refers to the geographic origin or destination of trips related to a project. Involves the general allocation of trips generated by a development over the transportation network.

**CL. Trip Generation**-- An estimate of the number of trips expected to be generated by specific type of land use.

**CM. Undivided Roadway**-- A highway without physical separation between traffic traveling in opposite directions.

**CN. Vertical Alignment**-- The vertical profile of a highway, intersection approach or driveway approach, typically measured along its centerline.

[18.31.6.7 NMAC - Rp, 18 NMAC 31.6.7, 10/15/2001]

**18.31.6.8 REFERENCES:** The reference documents listed in 18.31.6.9 NMAC are supplementary and should be used when additional detail is required to address issues that arise during the access permitting and design process. The most recent edition of each technical reference shall be used.  
[18.31.6.8 NMAC - Rp, 18 NMAC 31.6.8, 10/15/2001]

**18.31.6.9 REFERENCE LIST:**

- A.** New Mexico State Statutes and Traffic Laws, as amended.
  - B.** The current editions, as amended, of the following NMSHTD manuals, standards, and policies:
    - (1)** State Access Management Manual
    - (2)** Standard Specifications for Road and Bridge Construction
    - (3)** Highway Commission Policies
    - (4)** Standard Drawing Serials and Designated Drawings
    - (5)** Drainage Manual, Volume I - Hydrology, Volume II - Sedimentation and Erosion, and Drainage Design Criteria (Administrative Memorandum 221), latest editions
    - (6)** New Mexico State Traffic Monitoring Standards
    - (7)** Railroads and Utilities Manual
    - (8)** Materials Manual
    - (9)** Construction Manual
    - (10)** Location Study Procedures, A Guidebook for Alignment and Corridor Studies
  - C.** A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, latest edition.
  - D.** Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, Federal Highway Administration, latest edition.
  - E.** Highway Capacity Manual, Transportation Research Board, National Research Council, latest edition.
  - F.** Trip Generation, Institute of Transportation Engineers, latest edition.
  - G.** Roadside Design Guide, American Association of State Highway and Transportation Officials, latest edition.
  - H.** Manual of Transportation Engineering Studies, Institute of Transportation Engineers, 1994.
  - I.** A Guide for Erecting Mailboxes on Highways, American Association of State Highway and Transportation Officials, 1994.
  - J.** Americans with Disabilities Act, Accessibility Guidelines for Buildings and Facilities (ADAAG), Architectural and Transportation Barriers Compliance Board, as amended; Federal Register, 36 CFR Part 1191, June 20, 1994.
  - K.** Traffic Engineering Handbook, Fourth Edition, Institute of Transportation Engineers, 1992.
  - L.** Access Management Guidelines for Activity Centers, NCHRP 348, 1992.
  - M.** Manual of Traffic Signal Design, Second Edition, Institute of Transportation Engineers, 1991.
  - N.** Traffic Access and Impact Studies for Site Development, Institute of Transportation Engineers, 1991.
  - O.** Guide for the Development of Bicycle Facilities, American Association of State Highway and Transportation Officials, 3rd Edition, 1999.
  - P.** Transportation and Land Development, Institute of Transportation Engineers, 1988.
  - Q.** An Informational Guide for Roadway Lighting, American Association of State Highway and Transportation Officials, 1984.
  - R.** Web Sites (note: web addresses may change without notice)
    - (1)** New Mexico State Highway and Transportation Department: [www.nmshtd.state.nm.us](http://www.nmshtd.state.nm.us)
    - (2)** Federal Highway Administration: [www.fhwa.dot.gov](http://www.fhwa.dot.gov)
    - (3)** Institute of Transportation Engineers: [www.ite.org](http://www.ite.org)
    - (4)** American Association of State Highway and Transportation Officials: [www.transportation.org](http://www.transportation.org)
    - (5)** Transportation Research Board: [www.nas.edu/trb](http://www.nas.edu/trb)
    - (6)** National Cooperative Highway Research Program: [www4.nationalacademies.org/trb/crp.nsf](http://www4.nationalacademies.org/trb/crp.nsf)
- [18.31.6.9 NMAC - Rp, 18 NMAC 31.6.9, 10/15/2001]

**18.31.6.10 ACCESS CATEGORIZATION SYSTEM:** The regulation and management of vehicular access to and from the New Mexico state highway system shall be defined by an access categorization system. The access categorization system for state highways is described in Section 10 of the *State Access Management Manual*. The

access categorization system shall be based on the Functional Classified System for New Mexico roadways, which consists of interstates and freeways (INTS), principal arterials (PRAR), minor arterials (MNAR), major collectors (MJCL), minor collectors (MNCL), collectors (COLL), local roads (LOC), and other special road types. The functional classified system shall be further defined as urban and rural routes based on the location of a highway with respect to population centers. The current classification of a highway shall be obtained from the Department and shall be used to determine the access category applicable to the highway under consideration. Access requirements for each access category are described in the *State Access Management Manual*.

[18.31.6.10 NMAC - Rp, 18 NMAC 31.6.11.1 through 18 NMAC 31.6.11.3, 10/15/2001]

**18.31.6.11 ACCESS MANAGEMENT PLANS:** The Department may develop an access management plan for a designated portion of state highway. An access management plan provides the Department, and local authority, with a comprehensive roadway access design plan for a designated state highway segment or corridor for the purpose of bringing that portion of highway into conformance with its access category and its functional needs to the extent feasible given existing conditions. Access management plans should be developed as described in Section 11 of the *State Access Management Manual*.

**A.** Access management plans for state highways are developed by the Department in cooperation with the appropriate local authorities through a memorandum of understanding or a joint powers agreement. Access management plans shall be adopted by the Department to become effective. The adoption of a plan shall be in the form of a formal written agreement prepared in accordance with 18.31.6.19 NMAC, Access Control Review Procedures. When applicable, concurrence of the local authority should also be obtained in written form.

**B.** After an access management plan is adopted, modifications to the plan shall require Department approval. Where an access management plan is in effect, all action taken in regard to access shall be in conformance with the plan and 18.31.6 NMAC unless the Department approves exceptions to the plan in writing. [18.31.6.11 NMAC - N, 10/15/2001]

**18.31.6.12 INTERCHANGE ACCESS MANAGEMENT PLANS:** An interchange access management plan shall be required for any new interchange or significant modification to an existing interchange. The interchange access management plan shall satisfy the requirements of 18.31.6.19 NMAC, Access Control Review Procedures, and applicable Highway Commission policies and Department administrative directives. The interchange and the management plan shall receive the approval of the Deputy Secretary for Planning and Design. If located on a national or interstate highway facility, approval shall also be obtained from the Federal Highway Administration. Section 12 of the *State Access Management Manual* should be used to guide the development of interchange access management plans.

[18.31.6.12 NMAC - N, 10/15/2001]

**18.31.6.13 ACCESS CATEGORY STANDARDS:**

**A. Purpose:** Whereas the requirements for access requests along state highways are described in multiple sections of 18.31.6 NMAC, summary information for each access category is provided in Section 13 of the *State Access Management Manual* to assist users in locating and determining the requirements for a proposed access along a state highway. Practitioners shall reference specific sections of 18.31.6 NMAC when determining applicable requirements for their access request. The summary information contained in Section 13 of the manual is provided solely to ease use of the access management manual, with the exception below regarding interstate highways.

**B. Interstate Highways:** The design of interstate highway facilities, requests for modifications to existing interstate access points, and new interstate access proposals shall satisfy the requirements of all pertinent sections of the Code of Federal Regulations (CFR) and all interstate highway policies adopted by the Federal Highway Administration. All decisions regarding interstate highway facilities shall require the approval of the Federal Highway Administration and the NMSHTD.

[18.31.6.13 NMAC - N, 10/15/2001]

**18.31.6.14 PERMITTING PROCESS:**

**A. Purpose:** This section describes the application procedures for submitting an access permit request to the Department, and the administrative procedures used by the Department to approve or deny access permit requests on state highways.

**B. Types of Access:** Following is a list of the types of access that may occur along the state highway system. Refer to Section 14 of the *State Access Management Manual* for a description of each access type.

(1) Existing Lawful Access, Modification or Transfer

- (2) New Private Access (Individual Use)
- (3) New Subdivision Access
- (4) New Public Access
- (5) New Commercial Access
- (6) Temporary Construction Access
- (7) Temporary Access
- (8) Emergency Access
- (9) Field Access
- (10) Access Breaks in Established Access Control Lines
- (11) Illegal Access

**C. Access Permit Applications:** Applications for access permits shall be made by the property owner; the property owner's authorized representative; or, the local governmental agency requesting access from a state highway. Applications are required for all new access types, for modification or transfer of existing lawful access permits, and for upgrading an existing illegal access to a lawful access.

(1) **Changes in Property Use:** Where additional traffic is projected due to expansion or redevelopment of a property, the property owner shall contact the Department to determine if a new permit application and modifications to existing access points will be required. If the Department determines that the increased traffic generated by the property does not require modifications to the existing permitted access, according to the procedures of 18.31.6.16 NMAC, a new permit application will not be required. Failure to contact the Department to determine the need for access modifications or to apply for such modifications prior to initiation of property improvements, land use changes or traffic flow alterations actions, may result in notification to the property owner of intent to revoke or modify the existing permit and closure of the access to the property. (Also refer to Subsection O of 18.31.6.7 NMAC.)

(2) **Permit Application Form:** All applications shall be made on the approved NMSHTD permit application form, "Application for Permit to Construct Driveway or Median Opening on Public Right-of-Way."

(3) **NMSHTD District Offices:** Persons wishing to submit an access permit application form should contact the appropriate NMSHTD District Office to obtain application forms. District offices are located in Deming, Roswell, Albuquerque, Las Vegas, Santa Fe, and Milan. The application form can also be found in the appendix of the *State Access Management Manual*, and on the NMSHTD Access Management web site.

**D. Application Submittal Requirements:**

(1) Completed access permit forms shall be submitted to the appropriate District office with proof of ownership of the property to which access is requested. A plan or sketch of the property shall be attached to the permit application showing the length of the property frontage, the distance from the edge of the traveled roadway to the property line, edge clearances, corner clearances, the distance from the referenced mile marker to the centerline of the proposed driveway(s), and the location of any access drives along the state highway across from the proposed site. A traffic engineering evaluation shall be conducted for all access permit requests according to the requirements of 18.31.6.15 NMAC and 18.31.6.16 NMAC, with an exception. The traffic engineering evaluation may be waived for individual use access requests (see Subsection E, Paragraph 1 of 18.31.6.14 NMAC). In such cases, the Department may conduct the evaluation required to determine if an individual use access will be permitted or denied. A construction traffic control plan shall also be submitted with the application for review and approval by the District Traffic Engineer. The Department may require additional information relative to the evaluation of a permit application as further described in Section 14 of the *State Access Management Manual*.

(2) A permit application may be refused by the Department when necessary and relevant information is missing, or when there is no written evidence of the ownership of the property surface rights provided in the application. If the application is refused, the Department shall notify the applicant within ten (10) working days of receipt of the application and shall indicate the reason or reasons for refusal. The Department review period begins with the acceptance of an application.

(3) Each permittee understands and agrees as a condition of issuance of any permit, that if the Department determines that any violation has or may result in the creation or existence of any safety or traffic hazard, the Department may immediately take such action as the Department deems necessary to correct, eliminate or mitigate such hazard, without the need for the completion of any review process.

**E. Access Permit Requests from Private Entities:**

(1) **Individual Use:** Requests for a new private access shall be made on the NMSHTD access permit application. Application requirements for individual use permits shall include a platted survey of the property, proof of ownership of the property, and details regarding the location of the proposed access and the proposed development. A traffic engineering evaluation typically shall not be required. The Department may conduct the

evaluation required to determine if an individual use access will be permitted or denied.

(2) Subdivisions and Commercial Developments: Requests for new subdivision access, new commercial access or for modification to an existing lawful access for other than individual use shall be made on the access permit application. The applicant shall be required to satisfy all pertinent requirements of 18.31.6 NMAC.

**F. Access Permit Requests from Governmental Entities:**

(1) Local Governments: Requests by local governmental agencies for new access or for the reconstruction of existing access to the state highway shall be administered by the Department. The local governmental agency shall be considered the applicant. The Department shall work with local governmental agencies realizing that the access will serve multiple property owners. Access to subdivisions and other developments shall not be considered public access until the access is constructed and accepted as a local public roadway.

(a) Local governmental agencies shall provide notice of all developments that will directly or indirectly impact the state highway, and shall request Department participation in the administration of an access permit if it is determined by the Department that an access facility will directly or indirectly impact the operation and function of a state highway. The local governmental agencies may also require subdividers to provide additional notice of all proposed developments that will directly or indirectly impact the state highway.

(b) Where a private development accessing the roadway of an appropriate local authority necessitates access improvements where the local roadway connects to a state highway, the permittee shall be the local jurisdiction.

(c) Local governmental agencies may be required to submit a traffic engineering evaluation with a permit application. The traffic engineering evaluation requirement shall be determined according to the procedures described in 18.31.6.15 NMAC and 18.31.6.16 NMAC. Local governmental agencies may require developers to assist in preparing and providing this information for submission to the State.

(2) Federal Government: Requests for access from a state highway by the General Services Administration (GSA), United States Postal Service (USPS), Department of Defense (DOD), Department of Energy (DOE), or other divisions of the federal government shall be administered by the NMSHTD in cooperation with the pertinent division of the federal government. The access location, spacing and design standards described in 18.31.6.18 NMAC and Section 18 of the *State Access Management Manual* should be followed for such requests.

(3) Sovereign Nations: Access requests on state highway segments that traverse sovereign nation lands shall be administered by the Department in cooperation with the pertinent sovereign nation. The access location, spacing and design standards described in 18.31.6.18 NMAC and Section 18 of the *State Access Management Manual* should be followed for such requests.

**G. Administrative Review Process:**

(1) An administrative review period begins with the acceptance of a permit application by the appropriate District Engineer or the District Engineer's designee.

(2) Upon acceptance of the application permit and supplemental information, the Department shall use 18.31.6 NMAC, the *State Access Management Manual* and any other applicable state statutes for evaluating and acting on the application. Access requests that break existing access control lines or that are requested on a controlled-access facility shall be acted on by the Access Control Review Committee according to the procedures in 18.31.6.19 NMAC. The application will normally be processed within forty-five (45) days. The review period may be extended by the Department when action is required by the Access Control Review Committee. Transmittal of a completed permit, approved by the District Engineer, or transmittal of a denied application constitutes action on the permit application.

(3) If the Department approves an application permit, the permit shall be prepared and transmitted to the applicant along with any additional terms and conditions established by the Department. The owner noted on the permit, normally the surface right owner, will become the permittee. If the permittee does not agree to all terms and conditions of the permit, the permit shall not be issued.

(4) In accepting the permit, the permittee agrees to all terms and conditions of the permit. Should the permittee or applicant choose to appeal a denied application, or the terms and conditions of a permit, the appeal shall be filed within sixty (60) days of the date the denial notice or the approved permit is transmitted.

(5) The issue date of the permit is the date the Department representative signs the permit.

(6) The granting of an access permit conveys no rights, title or interest in state highway rights-of-way to the permit holder or property served. A permit for direct access to a state highway does not entitle the permit holder to control or have any rights or interests in any portion of the design, specifications or operation of the highway or roadway, including those portions of the highway built pursuant to the terms and conditions of the permit.

(7) If the Department denies an application, the Department shall provide the applicant a copy of the application marked "denied" along with any attachments and a written explanation for the decision. The Department or the applicant may request a meeting with the Department to discuss reasons for denial.

(8) Denial of an application request for physical modifications to an existing lawful access does not constitute revoking access authorization for the existing access.

(9) Requests for variance from the standards of 18.31.6 NMAC may be submitted to the District Engineer and shall be considered an attachment to the permit application. The review of variance requests shall be in accordance with Subsection I of 18.31.6.14 NMAC. Variance procedures may be used when the standards established by 18.31.6 NMAC are not entirely applicable to the proposed request for access.

(10) If, at the sole discretion of the Department, it is determined that a permittee is in violation of 18.31.6 NMAC or any conditions of a permit, the Department may revoke the permit. The revocations process shall be as described in Subsection N of 18.31.6.14 NMAC.

**H. Permit Fees:** The Department may establish a reasonable schedule of fees for access permits issued pursuant to 18.31.6 NMAC. It is the responsibility of the applicant to determine if any local governmental fees are applicable.

**I. Appeals and Variance Procedures:**

(1) If the permittee or applicant objects to the denial of a permit application by the Department or objects to any of the terms or conditions of the permit placed therein by the Department, a written appeal shall be filed with the appropriate District Engineer within sixty (60) days of the transmittal of notice of denial or transmittal of the approved permit. The request shall include reasons for the appeal and may include recommendations by the permittee or applicant.

(2) The District Engineer, or the District Engineer's designee, will submit a written request for review to the NMSHTD Traffic Technical Support engineer along with the permit application, the written appeal, and all supporting information. The Traffic Technical Support engineer will review the request and the appeal and offer an opinion to the District Engineer regarding the merits of the appeal. It is the intent of this process that an agreement is reached between the Traffic Technical Support engineer and the District Engineer. If, however, agreement cannot be reached, a formal meeting shall be scheduled with the Deputy Secretary for Planning and Design to hear the appeal. This meeting should involve the Applicant, the Traffic Technical Support engineer, and the District Engineer or designee. The Traffic Technical Support engineer shall provide a summary presentation of the facts and issues of dispute along with a discussion of the consequences, safety assessment, risks and value associated with the permit application. If applicable, the appeal should include a report from the Applicant's engineer. The Deputy Secretary for Planning and Design shall make the final decision. Final decisions that are exceptions to existing standards and regulations may be sent to the Federal Highway Administration for approval if their involvement is deemed appropriate by the Deputy Secretary for Planning and Design. At this final decision point, no other Department employee will be authorized to approve the permit.

(3) If an applicant wishes to seek a variance from the standards of 18.31.6 NMAC, a written request shall be submitted as an attachment to the permit application form. The request for variance should include specific and documented reasons.

(4) Review of the request for variance shall follow the procedure described in Subsection I, Paragraph 2 of 18.31.6.14 NMAC.

**J. Construction of Access by Owner:**

(1) An approved access permit shall be deemed expired and null and void if the access is not under construction within six (6) months from the date of issue unless otherwise noted and approved by the Department in writing. When the permittee is unable to commence construction within six (6) months after the permit issue date, a six-month extension may be requested from the District Engineer. Any request for an extension shall be in writing and submitted to the District Engineer before the permit expires. Denial of an extension may occur when the District Engineer ascertains and documents that unforeseen and significant changes in highway traffic operations, proposed access operation, or statutes and regulations that were not considered in the issuance of the permit have occurred. Any person wishing to reestablish an access permit that has expired shall be required to submit a new permit application and comply with all related requirements, as specified by the District Traffic Engineer.

(2) The permittee shall notify the District Engineer, or the District Engineer's designee, of pending access construction at least three (3) working days prior to any construction in state highway right-of-way. Construction of the access shall not proceed until both the access permit and a construction traffic control plan are approved. The access shall be constructed and completed in an expeditious and safe manner and shall be finished within forty-five (45) days of initiation of construction within the highway right-of-way. Failure by the permittee to complete construction in the 45-day period shall be sufficient cause for the Department to initiate action to suspend

or revoke the permit or to close the access.

(3) The construction of the access and its appurtenances as required by the terms and conditions of the permit shall be completed at the expense of the permittee, unless other arrangements are made with the District Engineer. The permittee should arrange for access construction to be completed by qualified contractors. Construction shall meet all Department specifications and shall be subject to inspection by the Department.

(4) Property required for highway access improvements shall be dedicated, without cost, to the Department. All rights, titles and interests of dedicated property shall be conveyed to the Department. All current title policies shall be disclosed and be acceptable to the Department. The owner shall certify that the property is clean of contamination or indemnify the Department from any remediation responsibilities prior to conveyance. The Department may refuse to accept any property containing or suspected of containing hazardous substances, toxic wastes or other contaminants until such substances are removed and/or the property is certified clean by the appropriate governmental entity. The access is not considered complete until property is conveyed.

(5) All materials used in the construction of the access within the highway right-of-way or on permanent easements become public property. Any materials removed from the highway right-of-way shall be disposed of as directed by the Department. All fencing, guard rail, traffic control devices and other equipment and materials removed in the course of access construction shall be given to the Department unless otherwise instructed by the permit or the Department inspector.

(6) The Department, at its discretion, may complete the installation of permanent traffic control devices. The permittee shall pay for direct costs and labor provided by the Department for the installation and relocation of all traffic control devices within public right-of-way directly related to the use or construction of the permitted access. Failure of the permittee to pay within a reasonable period may be considered grounds for permit suspension, which may lead to revocation and access removal.

(7) Where access construction requires the reconstruction of the existing state highway, the Department may require the contractor or permittee to post a bond to ensure completion of the work.

(8) The permittee shall provide adequate advance warning at all times during access construction according to the construction traffic control plan accompanying the approved access permit. The traffic control plan shall conform with the *Manual of Uniform Traffic Control Devices for Streets and Highways* (MUTCD). Construction traffic control may include the use of signs, flashers, barricades, and flaggers.

(9) The Department may restrict work on or immediately adjacent to the highway, control lane closure periods, and require pre-approval of all aspects of construction phasing where access construction will affect traffic operations, roadway capacity and/or safety. Every effort shall be made to minimize the closure periods of any travel lanes. Work in the right-of-way may not be allowed on holidays, at night, during peak traffic hours, or during adverse weather conditions without written permission from the District. Work hours shall be approved by the District Traffic Engineer.

(10) A utility permit shall be obtained for any utility work within highway right-of-way. Where necessary to remove, relocate, or repair a traffic control device or public or private utilities for access construction, the relocation, removal or repair shall be accomplished by the permittee without cost to the Department and at the direction of the Department or utility company. Any damage to the state highway or other public right-of-way beyond that which is allowed in the permit shall be repaired immediately. The permittee is responsible for the repair of any utility damaged in the course of access construction, reconstruction, or repair.

(11) Prior to use of the access, the permittee is required to complete the construction according to the terms and conditions of the access permit. Failure by the permittee to abide by all permit terms and conditions shall be sufficient cause for the Department to initiate action to suspend or revoke the permit or to close the access. If the permittee wishes to use the access prior to completion, arrangements shall be approved by the Department and included in the permit. The Department may order a halt to any unauthorized use of the access pursuant to statutory and regulatory powers. Reconstruction or improvement of the access may be required when the permittee has failed to meet required specifications of design or materials.

(12) If any construction element fails within two years due to improper construction or material specifications, the permittee shall be responsible for all repairs. Failure to make such repairs may result in suspension of the permit and closure of the access.

#### **K. Inspection of Access:**

(1) The permittee should employ a construction inspector to ensure that the conditions of the access permit are met. The District Engineer, or the District Engineer's designee, may inspect the access during construction and upon completion of the access to ensure that all terms and conditions of the permit are met. Inspectors are authorized to enforce the conditions of the permit during construction and to halt any activities within state right-of-way that (1) do not comply with the provisions of the permit, (2) conflict with concurrent highway



construction or maintenance work, (3) endanger highway property, natural or cultural resources protected by law, or (4) endanger the health and safety of workers or the public.

(2) The permittee shall ensure that a copy of the permit is available for review at the construction site at all times. The permit may require the contractor to notify the District representative noted on the permit at any specified phases in construction to allow a field inspector to inspect various aspects of construction such as concrete forms, subbase, base course compaction, and materials specifications. Minor changes and additions may be ordered by the Department field inspector to meet unanticipated site conditions. The Department may require the permittee to hire a New Mexico registered professional civil engineer to affirm to the best of the engineer's knowledge that the construction is in compliance with the permit and Department specifications. The Department may require testing of materials. When required, test results shall be provided to the Department.

**L. Maintenance of Access:** The permittee, his or her heirs, successors-in-interest, assigns, and occupants of the property serviced by the access shall be responsible for meeting the terms and conditions of the permit, the repair and maintenance of the access beyond the edge of the roadway including any cattle guard and gate, and the removal of snow or ice upon the access even though deposited on the access in the course of Department snow removal operations. Any significant repairs, such as culvert replacement, resurfacing, or changes in design or specifications, require authorization from the Department. The Department shall maintain the roadway including auxiliary lanes and shoulders, except in those cases where the access installation has failed due to improper access construction and/or failure to follow permit requirements and specifications (see Subsection J, Paragraph 12 of 18.31.6.14 NMAC). In this case, the permittee shall be responsible for such repair.

(1) Within unincorporated areas, the Department shall keep access culverts clean as part of maintenance of the highway drainage system. However, the permittee shall be responsible for the repair and replacement of any access-related culverts within the right-of-way.

(2) Within incorporated areas, drainage responsibilities for municipalities shall be determined by statute and local ordinance.

**M. Indemnification:** The Department and its duly appointed agents and employees shall be held harmless against any action for personal injury or property damage sustained by reason of the exercise of the permit.

**N. Revocations:**

(1) Where a change in property use occurs or a property's basic vehicular usage changes, so as to impact the highway, and the existing access points do not comply with 18.31.6 NMAC, the owner shall apply for a new access permit and reconstruct the driveways to comply with the Rule.

(2) If, at the sole discretion of the Department, it is determined that a permittee is in violation of 18.31.6 NMAC or any conditions of the access permit, the Department, acting through the District Engineer, or the District Engineer's designee, for the District where the driveways are located, shall inform the permittee in writing of the violations and allow the permittee thirty (30) days to correct the violations.

(3) If, after thirty (30) days, the violations are not corrected, the District Engineer, or the District Engineer's designee, may revoke the permit.

(4) The permittee may request a hearing on the revocation of the permit by giving written notice to the District office within ten (10) days of the notice of the revocation.

(5) The requested hearing shall be held no later than thirty (30) days after receipt of the notice of hearing. The Department's representatives shall be the District Engineer and the District Traffic Engineer, or their designees. After the hearing, the District Engineer, or the District Engineer's designee, shall issue a written decision.

(6) The permittee may appeal that decision to the Deputy Secretary for Planning and Design at the General Office in Santa Fe by giving written notice of a request for an appeal to the District Office within ten (10) days of the date of the District's written decision.

(7) The Deputy Secretary for Planning and Design, or the Deputy's designee, shall hear the appeal within thirty (30) days of receipt of the request for an appeal.

(8) The decision of the Deputy Secretary, or the Deputy's designee, shall be final and this decision completes the administrative review process.

(9) After the review process, or at any stage if the conditions set out in Subsection N, Paragraph 10 of 18.31.6.14 NMAC occurs, the District Engineer, or the District Engineer's designee, may take whatever action is appropriate including, but not limited to, physically closing the driveway with barriers or signing, and the Department may refuse to issue future permits to the permittee until the violations are corrected.

(10) Each permittee understands and agrees as a condition of issuance of any permit, that if the Department determines that any violation has or may result in the creation or existence of any safety or traffic hazard, the Department may immediately take such action as the Department deems necessary to correct, eliminate or mitigate such hazard, without the need for the completion of any review process.

[18.31.6.14 NMAC - Rp, 18 NMAC 31.6.10, 10/15/2001]

**18.31.6.15 TRAFFIC ENGINEERING EVALUATION:**

**A. General:** A traffic engineering evaluation shall be required for all proposed access points that are requested along the state highway system, to be submitted with the Access Permit Application (see Subsection D, Paragraph 1 of 18.31.6.14 NMAC). The extent of the traffic engineering evaluation is directly related the scope of the highway improvement under consideration, or to the size and type of land use for which access is requested. In this section, operational performance standards, traffic data requirements and traffic signal considerations are described. Additional information regarding traffic engineering evaluation requisites are provided in Section 15 of the *State Access Management Manual*. The specific traffic study process that shall be followed to address the traffic engineering evaluation requirement for a land development project are described in 18.31.6.16 NMAC. The criteria that shall be used to determine when speed-change lanes are required or should be considered at existing or proposed access points along the state highway system are defined in 18.31.6.17 NMAC. Design standards applicable to the traffic engineering evaluation are provided in 18.31.6.18 NMAC and are further described in Section 18 of the *State Access Management Manual*.

**B. Scope of Evaluation:** A traffic engineering evaluation shall be required when new or modified access facilities are proposed along a state highway to ensure that the operational characteristics of all state highways are maintained at acceptable levels. The evaluation may include, but is not limited to, roadway and intersection level of service calculations, driveway and intersection location and spacing assessments, traffic signal warrant and systems analyses, roadway and intersection design, and safety analysis. The Department shall require a traffic engineering evaluation of access issues for land development projects that request access to a state highway, directly or indirectly, and for highway improvement projects (see Subsection AV of 18.31.6.7 NMAC). The traffic engineering evaluation shall be performed by a registered engineer, authorized under New Mexico Engineering and Surveying Practice Act (NMSA 1978, Sections 61-23-12 through 61-23-13).

**C. Traffic Operational Performance:** The operational performance of a highway segment, intersection or access facility is described by level of service (LOS). Level of service is a quantitative measure of roadway or intersection operations and vehicle capacity. Level of service standards are defined by Access Category. Level of service (LOS) F shall not be accepted for individual movements.

**D. Establishing Existing Traffic Conditions:** Engineering evaluations of traffic and roadway conditions on state highways should be based on current traffic count information. The traffic data will be considered current if it is or has been collected within one year of the date that a scoping meeting is held between the permittee and the District Traffic Engineer, or if otherwise approved for use by the District Traffic Engineer.

(1) **Defining the Data Collection Period:** The permittee should recommend the periods for traffic data collection at the traffic analysis scoping meeting held between the permittee and the NMSHTD District Traffic Engineer. The periods for traffic data collection may include typical weekday conditions, special traffic conditions, or both.

(2) **Typical Weekday Traffic Conditions:** Traffic data representing typical weekday conditions should be obtained on Tuesday, Wednesday or Thursday, and may be obtained on Monday or Friday.

(3) **Special Traffic Conditions:** Special traffic conditions typically occur from 1900 to 2400 hours and from 0000 to 0600 hours on weekdays, and throughout the day on Saturday and Sunday. The duration of special traffic counts should be based on the activity or event and be sufficient to capture the peak travel condition.

(4) **Traffic Data for Traffic Signal Warrant Analysis:** A minimum of 12 hours of traffic count data for a representative day shall be obtained when conducting a traffic signal warrant analysis. Manual intersection turn movement counts shall be conducted for at least 8 of the 12 hours. The remaining 4 hours of data may be obtained using counting equipment on the intersection approaches, or by conducting a 12-hour intersection turn movement count. It is desirable to conduct an 8-hour manual turn movement count supplemented by 24-hour machine counts on each intersection approach when evaluating the need for traffic signal control on a state highway.

**E. Design Hour Volume:** Design hour volumes (DHV) should be calculated for the AM peak hour and the PM peak hour of a typical weekday, or for the design hour associated with special traffic conditions. Design hour volume is synonymous with the term peak-hour volume that is used for traffic operations analysis. For land development projects, the DHV should be based on the traffic data collected to establish existing traffic conditions combined with background traffic growth and traffic generated by pertinent site-specific land development. For highway improvement projects, appropriate future year traffic forecasts should be developed to represent the DHV for the facility.

**F. Traffic Signals:** Traffic signals may be warranted at either public or private access locations due to new land development or the redevelopment of an existing property. The installation of traffic signal control shall

be preceded by a traffic engineering evaluation that includes detailed analysis of the need for and an assessment of its impact upon the state highway. The engineering evaluation shall be conducted in accordance with the MUTCD, as clarified in sections of the *State Access Management Manual*, and shall include a traffic signal warrant analysis.

(1) **Installation:** If the warrant analysis and traffic engineering evaluation indicates that a signal is warranted, the permittee shall be required to provide all of or a portion of the funding for the installation (see Subsection J of 18.31.6.14 NMAC). The funding requirements will be determined by the Department.

(2) **Traffic Signal Spacing:** The number of traffic signals per mile has a significant influence on travel speed and vehicular delay along a roadway. Acceptable travel speeds and minimal delay occur when sufficient distance and relatively uniform spacing is provided between signals. Traffic signal spacing requirements shall be defined according to the highway functional classification where the intersection is located and shall be more restrictive for higher type roads.

(3) **Operations and Maintenance:** The electric power supply and maintenance for a signal installation shall be the responsibility of the local governmental agency. A Signalization Agreement stating the operation and maintenance responsibilities shall be executed between the Department and the local agency prior to installation of the signal. For land development projects, the signalization agreement shall be the responsibility of the permittee. For highway improvement projects, the signalization agreement shall be the responsibility of the NMSHTD project development engineer.

[18.31.6.15 NMAC - Rp, 18 NMAC 31.6.12.4 & 18 NMAC 31.6.12.5, 10/15/2001]

#### **18.31.6.16 TRAFFIC STUDIES FOR LAND DEVELOPMENT:**

**A. Purpose:** As stated in 18.31.6.15 NMAC, a traffic engineering evaluation shall be required for all land development proposals that may directly or indirectly impact a state highway facility. This section describes the specific traffic study process that shall be followed to address the traffic engineering evaluation requirement for a land development project. The traffic engineering evaluation requirement may be waived by the Department when considering a request for a new individual use access (see Subsection D, Paragraph 1 of 18.31.6.14 NMAC).

**B. Traffic Study Approach:** A three-tiered approach shall be utilized to satisfy the NMSHTD traffic study requirement for a proposed land development project. Traffic impact study requirements of local governments shall also be followed, where applicable. The NMSHTD three-tiered approach is as follows: First Tier, **Site Threshold Assessment (STH)**; Second Tier, **Site Traffic Analysis (STA)**; and, Third Tier, **Traffic Impact Analysis (TIA)**. Additional requirements and guidelines for conducting the three-tiered traffic study are defined in Section 16 of the *State Access Management Manual*.

**C. Site Threshold Assessment:** A STH shall be required of all developing or redeveloping properties that directly or indirectly access a state highway. The STH should examine existing roadway volumes and trip generation estimates to determine if additional traffic analysis is required. The NMSHTD STH form should be completed and should be reviewed by the District Traffic Engineer. If the site characteristics and the trip generation estimate for a proposed development do not satisfy the requirements for a site traffic analysis or a traffic impact analysis as determined by the District Traffic Engineer, the STH should be approved and the traffic study requirement for the proposed development will be complete. If additional analysis is required based on the results of the STH, the District Traffic Engineer should indicate to the applicant the level of analysis that is required.

**D. Site Traffic Analysis:** The purpose of a STA is to evaluate localized impacts of a proposed development. In general, localized impacts include the proposed access drive or drives and the first adjacent major intersection, signalized or unsignalized, in each direction along the state highway where the proposed access is located. The requirements for a STA are described in the following subsections. All site traffic analyses shall be sealed and signed by a registered New Mexico Professional Engineer prior to the issuance of an access permit by the Department.

(1) **When is a STA Required?** A STA shall be conducted for each new development or property redevelopment along a state highway when:

(a) The results of a STH indicate that the proposed development is expected to generate between 25 and 100 peak-hour total trips, and the adjacent roadway currently has a daily traffic volume greater than an average of 1,000 vehicles per day per lane (vpdpl), or

(b) There are safety concerns along the highway where the development is located that are verifiable by the District Traffic Engineer.

(c) For smaller developments, the requirement to perform a STA may be waived if site-specific improvements identified by the District Traffic Engineer are implemented by the applicant as a condition of the access permit. The improvements shall be implemented prior to permanent use of the access.

(2) **When is a STA Complete?** A STA is considered complete when a final traffic study report, signed

and sealed by a New Mexico registered professional engineer, is submitted to the District Traffic Engineer, and

(a) The results of the STA indicate that the levels of service for the proposed access points and the adjacent intersections satisfy or are better than the applicable LOS standards and the District Traffic Engineer concurs with those findings, or

(b) The results of the STA indicate that improvements are required at the proposed access points and/or at the adjacent intersections, and a mitigation plan has been developed and approved by the District Engineer.

(3) Requirements for Conducting a STA: A description of the subject matter that should be included in a site traffic analyses is provided in Section 16 of the *State Access Management Manual*.

**E. Traffic Impact Analysis:** The purpose of a TIA is to conduct a comprehensive analysis of the transportation system that will provide access to a proposed development site, including proposed access points, to identify potential short-term and long-term impacts on the state highway system. The requirements for a TIA are described in the following subsections. All traffic impact analyses shall be sealed and signed by a registered New Mexico Professional Engineer prior to the issuance of an access permit by the Department.

(1) When is a TIA Required? A TIA shall be conducted for each new development or property redevelopment along a state highway when:

(a) The results of a STH indicate that the proposed development is expected to generate 100 or more peak-hour total trips; or,

(b) The results of a STA indicate that expected levels of service (LOS) will be below the applicable LOS standards, and a mitigation plan cannot be resolved between the NMSHTD and the permittee to address identified deficiencies; or,

(c) There are safety concerns along the highway where the development is located that are verifiable by the District Traffic Engineer.

(2) When is a TIA Complete? A TIA is considered complete when a final traffic study report, signed and sealed by a New Mexico registered professional engineer, is submitted to the District Traffic Engineer, and

(a) The results of the TIA indicate that the levels of service for the proposed access points and the study area intersections satisfy or are better than the applicable LOS standards and the District Traffic Engineer concurs with those findings, or

(b) The results of the TIA indicate that improvements are required at the proposed access points and/or at the study area intersections, and a mitigation plan has been developed and approved by the District Engineer.

(3) Requirements for Conducting a TIA: A description of the subject matter that should be included in a traffic impact analyses is provided in Section 16 of the *State Access Management Manual*.

(4) Documentation: All required traffic impact analyses shall include documentation in the form of a bound report. A sample outline for TIA documentation is provided in the appendix of the *State Access Management Manual*.

**F. Fair Share Cost Analysis:** Based on the impact assessment completed for the STA or TIA, contributory costs of identified improvements should be identified. In addition to implementing the necessary improvements within the highway right-of-way at proposed site access points, the permittee shall be required to provide all or a portion of funding for mitigation of identified off-site impacts. The funding requirements shall be determined by the Department through negotiations with the developer and the appropriate local government agency. Refer to Subsection J of 18.31.6.14 NMAC for the permittee's responsibilities when constructing the required improvements.

**G. Traffic Study Validity Period:** Approved traffic studies should remain valid for a period of one-year following approval of the driveway permit application, or as determined by the District Traffic Engineer. [18.31.6.16 NMAC - Rp, 18 NMAC 31.6.12.4, 10/15/2001]

#### **18.31.6.17 SPEED-CHANGE LANE REQUIREMENTS:**

**A. Purpose:** This section defines the criteria for determining where speed-change lanes are required along non-access controlled and controlled-access state highways that provide access via at-grade intersections. Application guidelines for speed-change lanes on controlled-access interstate highways and freeways, which provide access exclusively by grade-separated interchanges, are also provided; however, specific criteria for speed-change lanes on grade-separated highway facilities are not explicitly defined (see Subsection C of 18.31.6.17 NMAC).

**B. State Highways with At-Grade Intersections:** At unsignalized at-grade intersections, four types of speed-change lanes are used including left-turn deceleration lanes, right-turn deceleration lanes, left-turn acceleration lanes, and right-turn acceleration lanes. At signalized at-grade intersections, three types of speed-

change lanes are used including exclusive left-turn lanes, exclusive right-turn lanes, and right-turn acceleration lanes.

(1) **Schematic Illustrations:** Illustrations of left-turn and right-turn speed-change lanes can be found in the appendix of the *State Access Management Manual*.

(2) **Design Period:** The need for speed-change lanes should be assessed using the hourly traffic volumes derived for the traffic study implementation year with the proposed development, or based on the future year traffic forecasts developed for a highway improvement project.

(3) **General Criteria:**

(a) Speed-change lanes may be required by the NMSHTD at unsignalized or signalized access points where specific public safety and traffic operations concerns are identified and documented.

(b) Left-turn acceleration and deceleration lanes should not overlap. Preference should be given to the left-turn deceleration lane. Alternative treatments to providing a left-turn acceleration lane may be considered when this situation arises such as providing traffic signal control or restricting the left-turn movement from the cross street. Alternative treatments require approval by the Department.

(c) Where two access points have right-turn speed-change lanes that overlap, or are in close proximity but do not overlap, a continuous ingress/egress lane may be established between the access points to improve roadway consistency, safety, and to maintain roadway edge continuity.

(d) If the design of an access facility crosses two different speed zones, the speed-change lane design should be based upon the applicable speed limit. The applicable speed for a deceleration lane is the posted speed limit at the beginning of the deceleration lane. The applicable speed for an acceleration lane is the posted speed limit at the end of the acceleration lane.

(e) Acceleration lanes should only be used where sufficient acceleration length can be provided.

(f) On multi-lane highways, the directional hourly traffic volume, or directional split, should be determined based on actual traffic count data. It may be assumed that traffic is equally divided among the mainline travel lanes when traffic count data are not available.

(4) **Unsignalized Intersections:** In addition to the location of the roadway (urban or rural), the three primary factors used to determine the need for a speed-change lane at an unsignalized at-grade access are highway travel speed, directional traffic volume per lane, and turning traffic volume. Sight distance conditions, level of service, and roadway geometry should also be examined when determining the need for speed-change lanes.

(a) **Urban Conditions:** The need for left-turn and right-turn deceleration lanes on urban state highways should be determined based on the criteria in Tables 17.B-1 and 17.B-2. Right-turn acceleration lanes may be required on urban state highways with posted speed limits greater than 40 mph where an acceleration lane is necessary for public safety and traffic operations based upon site and roadway specific conditions. Left-turn acceleration lanes may be required on urban state highways with posted speed limits greater than 45 mph where an acceleration lane is necessary for public safety and traffic operations based upon site and roadway specific conditions.

(b) **Rural Conditions:** The need for left-turn and right-turn deceleration lanes on rural state highways should be determined based on the criteria in Tables 17.B-3 through 17.B-6. Right-turn acceleration lanes may be required on rural state highways with posted speed limits greater than 40 mph where an acceleration lane is necessary for public safety and traffic operations based upon site and roadway specific conditions. Left-turn acceleration lanes may be required on rural state highways with posted speed limits greater than 45 mph where an acceleration lane is necessary for public safety and traffic operations based upon site and roadway specific conditions.

(5) **Signalized Intersections:** The use of speed-change lanes at signalized intersections is generally consistent for all access categories, urban and rural. Guidelines for determining the need for speed-change lanes at signalized intersections can be found in Section 17 of the *State Access Management Manual*.

**C. State and Interstate Highways with Grade-Separated Interchanges:** Speed-change lanes are used on controlled-access state and interstate highways at or between grade-separated interchanges. The need for speed-change lanes on grade-separated highway facilities should be determined based on design principles contained in the AASHTO publication *A Policy on Geometric Design of Highways and Streets*, and based on detailed traffic operations analyses of the grade-separated facilities according to Highway Capacity Manual methodologies. The need for and function of speed-change lanes should be documented in an Interchange Management Plan for the interchange (refer to 18.31.6.12 NMAC). Speed-change lanes on grade-separated highway facilities should enable a driver to make the necessary transition between the speed on a ramp and the speed of operation on the mainline highway in a safe and comfortable manner. Additional guidance is provided in Section 17 of the *State Access Management Manual*.

**Table 17.B-1**  
**Criteria For Deceleration Lanes On**  
**URBAN TWO-LANE HIGHWAYS**

Turning Volume <sup>1</sup> (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Directional Volume in the Through Lane (vphpl) <sup>2</sup>			Minimum Directional Volume in the Through Lane (vphpl) <sup>2</sup>		
	≤ 30 mph	35 to 45 mph	45 to 55 mph	≤ 30 mph	35 to 40 mph	45 to 55 mph
< 5	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
5	510	450	330	1,080	610	360
10	390	330	210	700	400	240
15	320	250	150	500	280	170
20	270	200	120	380	210	140
25	230	160	100	300	180	120
30	200	130	Required	250	160	110
35	170	110	Required	220	150	100
40	150	Required	Required	200	140	Required
45	130	Required	Required	190	Required	Required
≥ 46	Required	Required	Required	Required	Required	Required
	<b><i>Left-turn Deceleration Lanes are Required on Urban Two-lane Highways for the following Left-turn Volumes:</i></b> <ul style="list-style-type: none"> <li>• ≤ 30 mph : 46 vph or more</li> <li>• 35 to 40 mph : 36 vph or more</li> <li>• 45 to 55 mph : 26 vph or more</li> </ul>			<b><i>Right-turn Deceleration Lanes are Required on Urban Two-lane Highways for the following Right-turn Volumes:</i></b> <ul style="list-style-type: none"> <li>• ≤ 30 mph : 46 vph or more</li> <li>• 35 to 40 mph : 41 vph or more</li> <li>• 45 to 55 mph : 36 vph or more</li> </ul>		

*Notes:*

1. Use linear interpolation for turning volumes between 5 and 45 vph.
2. The directional volume in the through lane includes through vehicles and turning vehicles.

**Table 17.B-2**  
**Criteria for Deceleration Lanes on**  
**URBAN MULTI-LANE HIGHWAYS**

Turning Volume <sup>1</sup> (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Volume in the Adjacent Through Lane (vphpl) <sup>2</sup>			Minimum Volume in the Adjacent Through Lane (vphpl) <sup>2</sup>		
	≤ 30 mph	35 to 40 mph	45 to 55 mph	≤ 30 mph	35 to 40 mph	45 to 55 mph
< 5	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
5	Not Required	490	420	1,200	730	450
10	420	370	300	820	490	320
15	360	290	220	600	350	240
20	310	230	160	460	260	180
25	270	190	130	360	230	150
30	240	160	110	290	200	130
35	210	130	100	260	180	120
40	180	120	Required	240	170	110
45	160	110	Required	220	160	Required
50	140	Required	Required	200	Required	Required
55	120	Required	Required	190	Required	Required
≥ 56	Required	Required	Required	Required	Required	Required
	<b><i>Left-turn Deceleration Lanes are Required on Urban Multi-lane Highways for the following Left-turn Volumes:</i></b> <ul style="list-style-type: none"> <li>• ≤ 30 mph : 56 vph or more</li> <li>• 35 to 40 mph : 46 vph or more</li> <li>• 45 to 55 mph : 36 vph or more</li> </ul>			<b><i>Right-turn Deceleration Lanes are Required on Urban Multi-lane Highways for the following Right-turn Volumes:</i></b> <ul style="list-style-type: none"> <li>• ≤ 30 mph : 56 vph or more</li> <li>• 35 to 40 mph : 46 vph or more</li> <li>• 45 to 55 mph : 41 vph or more</li> </ul>		

*Notes:*

1. Use linear interpolation for turning volumes between 5 and 55 vph.
2. The volume in the adjacent through lane includes through vehicles and turning vehicles.

**Table 17.B-3**  
**Criteria for Left-Turn Deceleration Lanes on**  
**RURAL TWO-LANE HIGHWAYS**

Left-Turn Volume <sup>1</sup> (vph)	LEFT-TURN DECELERATION LANE			
	Minimum Directional Volume in Through Lane (vphpl) <sup>2</sup>			
	≤ 30 mph	35 to 40 mph	45 to 55 mph	> 55 mph
< 5	Not Required	Not Required	Not Required	Not Required
5	400	220	120	60
10	240	140	80	40
15	160	100	60	Required
20	120	80	Required	Required
25	100	Required	Required	Required
≥ 26	Required	Required	Required	Required
	<b><i>Left-turn Deceleration Lanes are Required on Rural Two-lane Highways for the following Left-turn Volumes:</i></b> <ul style="list-style-type: none"><li>• ≤ 30 mph : 26 vph or more</li><li>• 35 to 40 mph : 21 vph or more</li><li>• 45 to 55 mph : 16 vph or more</li><li>• &gt; 55 mph : 11 vph or more</li></ul>			
<b><i>Notes:</i></b> <ol style="list-style-type: none"><li>1. Use linear interpolation for left-turn volumes between 5 and 25 vph.</li><li>2. The directional volume in the through lane includes through vehicles and turning vehicles.</li></ol>				



**Table 17.B-4**  
**Criteria for Left-turn Deceleration Lanes on**  
**RURAL MULTI-LANE HIGHWAYS**

Left-Turn Volume <sup>1</sup> (vph)	LEFT-TURN DECELERATION LANE			
	Minimum Volume in Adjacent Through Lane (vphpl) <sup>2</sup>			
	≤ 30 mph	35 to 40 mph	45 to 55 mph	> 55 mph
< 5	Not Required	Not Required	Not Required	Not Required
5	450	310	210	130
10	310	220	130	90
15	240	160	100	70
20	190	130	80	Required
25	150	110	Required	Required
30	130	Required	Required	Required
35	110	Required	Required	Required
≥ 36	Required	Required	Required	Required
	<b><i>Left-turn Deceleration Lanes are Required on Rural Multi-lane Highways for the following Left-turn Volumes:</i></b> <ul style="list-style-type: none"><li>• ≤ 30 mph : 36 vph or more</li><li>• 35 to 40 mph : 26 vph or more</li><li>• 45 to 55 mph : 21 vph or more</li><li>• &gt; 55 mph : 16 vph or more</li></ul>			
<b><i>Notes:</i></b> <ol style="list-style-type: none"><li>1. Use linear interpolation for left-turn volumes between 5 and 35 vph.</li><li>2. The volume in the adjacent through lane includes through vehicles and turning vehicles.</li></ol>				

**Table 17.B-5**  
**Criteria for Right-Turn Deceleration Lanes on**  
**RURAL TWO-LANE HIGHWAYS**

Right-Turn Volume <sup>1</sup> (vph)	RIGHT-TURN DECELERATION LANE			
	Minimum Directional Volume in Through Lane (vphpl) <sup>2</sup>			
	≤ 30 mph	35 to 40 mph	45 to 55 mph	> 55 mph
< 5	Not Required	Not Required	Not Required	Not Required
5	800	460	270	160
10	430	280	170	110
15	290	180	110	80
20	200	140	90	70
25	170	120	80	Required
30	160	110	Required	Required
≥ 31	Required	Required	Required	Required
	<i>Right-turn Deceleration Lanes are Required on Rural Two-lane Highways for the following Right-turn Volumes:</i> <ul style="list-style-type: none"><li>• ≤ 30 mph : 31 vph or more</li><li>• 35 to 40 mph : 31 vph or more</li><li>• 45 to 55 mph : 26 vph or more</li><li>• &gt; 55 mph : 21 vph or more</li></ul>			
<i>Notes:</i> <ol style="list-style-type: none"><li>1. Use linear interpolation for left-turn volumes between 5 and 30 vph.</li><li>2. The directional volume in the through lane includes through vehicles and turning vehicles.</li></ol>				

**Table 17.B-6**  
**Criteria for Right-Turn Deceleration Lanes on**  
**RURAL MULTI-LANE HIGHWAYS**

Right-Turn Volume <sup>1</sup> (vph)	RIGHT-TURN DECELERATION LANE			
	Minimum Volume in Adjacent Through Lane (vphpl) <sup>2</sup>			
	≤ 30 mph	35 to 40 mph	45 to 55 mph	> 55 mph
< 5	Not Required	Not Required	Not Required	Not Required
5	910	520	310	180
10	520	330	200	130
15	370	220	140	100
20	270	170	110	90
25	220	140	100	Required
30	200	130	90	Required
35	180	120	Required	Required
≥ 36	Required	Required	Required	Required
	<b><i>Right-turn Deceleration Lanes are Required on Rural Multi-lane Highways for the following Right-turn Volumes:</i></b> <ul style="list-style-type: none"><li>• ≤ 30 mph : 36 vph or more</li><li>• 35 to 40 mph : 36 vph or more</li><li>• 45 to 55 mph : 31 vph or more</li><li>• &gt; 55 mph : 21 vph or more</li></ul>			
<b><i>Notes:</i></b> <ol style="list-style-type: none"><li>1. Use linear interpolation for left-turn volumes between 5 and 35 vph.</li><li>2. The volume in the adjacent through lane includes through vehicles and turning vehicles.</li></ol>				

[18.31.6.17 NMAC - Rp, 18 NMAC 31.6.12.7.1 through 18 NMAC 31.6.12.7.6, 10/15/2001]

**18.31.6.18 ACCESS LOCATION AND DESIGN STANDARDS:** The location and design of access points along state highway facilities shall be in accordance with standards established by the NMSHTD. These standards are defined below and are expounded on in Section 18 of the *State Access Management Manual*. Where specific design criteria are not provided in 18.31.6.18 NMAC, the design approach should be based on nationally accepted standards and shall be consistent with Department specifications.

**A. General:** The Department has developed these standards to provide guidance for the location and design of access points along state highways, specifically for those highways in access categories UPA, RPA, UMA, RMA, UCOL, and RCOL (see 18.31.6.10 NMAC). These criteria are based upon established design standards meant to protect public safety, to maintain safe and smooth-flowing traffic operations, and to preserve the intended function of all state highway facilities.

(1) **Local Standards:** Where a local jurisdiction has established more stringent design standards than the Department, the local standards should be applied with the concurrence of the Department.

(2) **Material Placed within State Rights-of-Way:** Any materials used within state highway right-of-way shall be subject to approval by the NMSHTD. Refer to 18.31.6.14 NMAC for additional requirements regarding construction within state highway right-of-way.

**B. Access Location:** Access points should be located along state highways to minimize turning movement conflicts between adjacent access facilities, and to provide adequate separation of conflicts for oncoming motorists. Stopping sight distance should be considered in determining access point locations.

(1) **Direct Access:** The number of access points should be limited to one per site unless frontage is adequate and design hour traffic volumes indicate that the operational level of service for a single access is expected to be below the minimum acceptable LOS standards.

(2) **Proximity to Speed-Change Lanes:** Access should not be permitted within a speed-change lane, or within 50 feet of either the leading or trailing limits of a speed-change lane.

(3) **Interchange Proximity:** Access shall not be permitted within the access control limits of an interchange, as established by the Department's access control determination, or within 50 feet of the leading or trailing edge of the access control limits for the interchange.

(4) **Corner Clearance:** Driveway access should be controlled on both the approach and departure sides of an intersection to maintain adequate corner clearances.

(5) **Edge Clearance:** The location of access points relative to frontage property lines should be based on local requirements. When property frontage is not adequate to comply with local government's edge clearance requirements, shared access should be considered.

**C. Access Spacing:**

(1) **Non-Developed and Developing Areas:** The spacing of access points in non-developed and developing areas should be based on the access category, the posted speed limit, and the type of access requested (i.e., intersection or driveway). Desired access spacing standards are provided in Section 18 of the *State Access Management Manual*. An applicant may request a variance to the spacing requirements when physical characteristics of a property preclude the desired spacing.

(2) **Developed Areas:** In developed or redeveloping areas where existing driveway locations preclude access spacing based on desired standards, new access points should be located to minimize conflicts with existing access points. Access points should be consolidated where possible to provide shared property access.

(3) **Business Districts:** The spacing of access points within business districts on urban or rural highways may be adjusted based on site-specific conditions consistent with the requirements for the access category of the highway.

**D. Median Openings:** New median openings on state highways with non-traversable medians should not be allowed unless a traffic engineering evaluation analyzing all related traffic and safety issues is prepared and approved by the Department. Median openings at intersections or full-access driveways should be spaced with a minimum frequency based upon the access category and posted speed of the highway.

**E. Selection of Design Vehicle:** The design vehicle should be used to determine the geometric characteristics of a roadside access or median opening, and to define the required design components for the adjacent highway. This vehicle should be the largest vehicle that is expected to access the site on a daily basis. Selection of the design vehicle is subject to the approval of the District Traffic Engineer.

**F. Sight Distance:** Sight distance at all access locations shall be adequate to provide safe operating conditions for the motoring public. An access permit should not be issued unless adequate stopping sight distances are provided for motorists passing the access, and adequate entering and crossing sight distances are provided for motorists using the access. The permittee shall maintain adequate, unobstructed sight distance in both directions from the access. Any potentially obstructing objects such as but not limited to advertising signs, structures, trees

and bushes, shall be designed, placed and maintained at a height not to interfere with the sight distances needed by any vehicle using the access. Roadway reconstruction may be required to provide adequate sight distance.

**G. Driveway Angle:** The access centerline should be perpendicular to the state highway centerline and extend tangentially for a minimum distance of 40 feet beyond the near-side edge line. An acute angle between 75 degrees and 90 degrees may be permitted if significant physical constraints exist. Acute angles less than 75 degrees shall require special approval of the Department.

**H. Access Radius:** The access radius should be designed to accommodate the design vehicle expected to use the access on a daily basis. Access radii apply to driveways that are not urban section driveway cuts.

**I. Driveway Width:** The width of a driveway should be measured exclusive of radii or tapers. Driveway widths should vary by design vehicle. All two-way driveways should accommodate a concurrent entering and exiting design vehicle, including the design vehicle's off-tracking.

**J. Access Connection Depth:** The access connection depth should be designed to facilitate the movement of vehicles off the highway to prevent the queuing of vehicles on the traveled way. An access shall not be approved for parking areas that require backing maneuvers within state highway right-of-way. All off-street parking areas must include on-site maneuvering areas and aisles to permit vehicles to enter and exit the site in forward drive without hesitation.

**K. Speed Change Lanes:** Design specifications for speed change lanes are provided in Section 18 of the *State Access Management Manual*. Schematic illustrations of speed-change lanes are included in the appendix of the *State Access Management Manual*.

(1) **Deceleration Lanes:** Deceleration lanes typically consist of three components: transition taper, deceleration distance, and queue storage. The length of the lane should allow a vehicle to come to a comfortable stop prior to reaching the end of the expected queue in the lane.

(2) **Acceleration Lanes:** Acceleration lanes should consist of a full-width lane and a transition taper. Acceleration lanes should be designed so that a turning vehicle will reach a speed between 75 and 80 percent of the highway posted speed at the point where the full-width lane ends and the transition taper begins.

(3) **Channelization:** Standard roadway signing and marking should be installed for all speed change lanes.

(4) **Shoulders:** Where shoulders are present along a roadway and speed change lanes are required, the shoulders should be continued along the speed change lanes. A minimum shoulder width of 4 feet should be provided adjacent to speed change lanes.

(5) **Bicycle Lane Buffers:** When a right-turn deceleration lane or acceleration lane is required on a roadway with designated bicycle lanes, a minimum buffer of 4 feet (5 feet desirable) should be provided between the outside travel lane and the speed-change lane.

(6) **Grade Adjustment:** Adjustments should be made to the speed change lane lengths based on the roadway grade.

(7) **Truck Design:** If a speed-change lane is designed for a site with 5 or more large trucks during the design hour, a combination truck design vehicle should be used as the design vehicle.

(8) **Pavement:** The speed change lane pavement section should be full depth and match the pavement section design of the adjacent roadway. All pavement designs require approval by the Department.

**L. Median Design for Turn Lane Installation:** Medians should be designed to accommodate the largest design vehicle anticipated to use the access, and may provide either partial or full access to a site. Where a single left-turn lane is necessary along a state highway, a minimum median width of 16 feet should be provided. Positive channelization should be provided for all median openings. Median paving should be full depth and match the pavement section design of the existing roadway. The installation of a median opening should not reduce the conveyance or storage capacity of the median, pertinent to its drainage function within the highway section.

**M. Setbacks:** Improvements on public or private property adjacent to the right-of-way should be located so that parking, stopping, and maneuvering of vehicles within the highway right-of-way will not occur.

**N. Access Vertical Alignment:** The vertical alignment of all access locations should be designed to minimize vehicle bounce and prevent high-centering of vehicles with a maximum clearance of 4 inches. The maximum grade for a driveway should be 10 percent for a low volume residential driveway and 8 percent for all other access locations. Steeper access drives require special Department approval. A level area (maximum 2 percent grade) 20 feet in length should be provided at each access to ensure proper sight distance from the access.

**O. Roadside Safety:** Careful consideration shall be given to the roadside clear zone. The permittee shall provide adequate clear zones. The roadside clear zone should be designed per the AASHTO *Roadside Design Guide* and applicable NMSHTD standards.

**P. Non-Motorized Considerations:** Access designs should provide for the safe movement of all

right-of-way users, including but not limited to pedestrians, bicyclists, and the handicapped. Where non-motorized facilities cross an access point, such as bicycle trails, appropriate modifications should be made to maintain safe operations for both facilities.

(1) **Sidewalks:** Sidewalks should be constructed along urban arterial and collector state highways. Sidewalks are required where they exist on adjacent properties to maintain consistency along the highway facility. Sidewalk widths should match existing adjacent sidewalk widths, but in any case shall conform with all federal, state, and local regulations and ordinances.

(2) **Bicycle Facilities:** Bicycle facilities along urban arterials and collectors should be constructed in accordance with the AASHTO *Guide for the Development of Bicycle Facilities*. Bicycle facilities should only be signed where designated by the state or local jurisdiction, with approval of the Department.

(3) **ADA:** Non-motorized facilities shall be designed in accordance with the Americans with Disabilities Act and applicable NMSHTD standards. Curb ramps shall be provided on urban sections where sidewalk and curb returns exist.

**Q. Lighting:** Where lighting is required at an access point, the lighting design shall comply with NMSHTD and AASHTO standards and the Night Sky Protection Act (House Bill 39). The lighting design shall use full cut-off fixtures, and be consistent with AD 226, Roadway Lighting.

(1) **Signalized Access:** Illumination should be provided at all signalized intersections in accordance with AASHTO's *An informational Guide to Roadway Lighting* or as otherwise approved by the Department.

(2) **Site Illumination:** Light beams from on-site lighting systems shall not be directed toward oncoming traffic along the adjacent roadway(s). All site illumination shall be constructed outside of the state highway right-of-way and outside of the roadside clear zone. Theater screens, lights, signs, billboards, signals or other illuminated structures should not be located adjacent to state highways, or in the vicinity thereof, which distract the attention of and impair the safety of the traveling public.

**R. Drainage:** Adequate drainage within state highway right-of-way shall be maintained at all access locations. Drainage of roadside ditches shall not be altered or impeded, and the applicant shall provide suitable and approved drainage structures as required by the Department. All site drainage shall be collected prior to entering state highway right-of-way. Site drainage shall not be permitted to drain into state right-of-way without written approval of the Department. Drainage mitigation design shall be in accordance with Administrative Memorandum 221, Drainage Design Criteria, and the NMSHTD Drainage Manual. Access permit applicants shall submit drainage analysis documentation to the Department prior to changing site drainage conditions.

**S. Right-of-Way Fencing:** Driveways shall not be permitted through an existing right-of-way fence, the continuation of which is necessary for the safety of the traveling public, unless the applicant first agrees in writing to construct and maintain a gate or a cattle guard and additional fence in good repair and to keep the gate closed to livestock. The Department shall determine whether a gate or cattle guard is required. All new fencing along a state highway shall be constructed so that clear sight triangles are provided for ingressing or egressing vehicles. This may require an offset from the right-of-way line to meet the minimum setback standards.

**T. Mailboxes:** Mailboxes installed within the state highway right-of-way shall be constructed in conformance with the rules and regulations of the U.S. Postal Service and the design standards of the NMSHTD. AASHTO's *A Guide for Erecting Mailboxes on Highways*, should also be used for the location and design of mailbox installations.

**U. Right-of-Way:** Improvements adjacent to state highway right-of-way shall conform to the pertinent State Highway Commission Policy regarding right-of-way.

**V. Utilities:** All utilities located within the state highway right-of-way shall comply with the utility accommodation policies defined in the NMSHTD's Railroads and Utilities Manual.

[18.31.6.18 NMAC - Rp, 18 NMAC 31.6.11.3 through 18 NMAC 31.6.11.5; 18 NMAC 31.6.12.1 through 18 NMAC 31.6.12.3; 18 NMAC 31.6.12.6; 18 NMAC 31.6.12.7.7 through 18 NMAC 31.6.12.7.11; 18 NMAC 31.6.12.9; 18 NMAC 31.6.12.10; 18 NMAC 31.6.12.12; 18 NMAC 31.6.12.13; 18 NMAC 31.6.12.14.2 through 18 NMAC 31.6.12.14.4; 18 NMAC 31.6.12.14.6; 18 NMAC 31.6.12.14.7; 18 NMAC 31.6.12.14.10; 18 NMAC 31.6.12.15, 10/15/2001]

#### **18.31.6.19 ACCESS CONTROL REVIEW PROCEDURES:**

**A. Purpose:** The Access Control Review Procedures define the process that the Department shall follow when considering requests for permanent breaks in existing access control lines, and/or for establishing or modifying access control limits on new or existing state, federal and interstate highways. Decisions regarding access control matters on state highways shall be addressed by the Access Control Review Committee of the Department. Review and approval of an access break in established access control lines shall be required by the

Access Control Review Committee. Refer to the *State Access Management Manual* for further clarification of the Access Control Review Procedures.

**B. Access Control Review Committee:**

(1) Purpose: The purpose of Access Control Review Committee is to review all access control requests by departmental staff members who have the expertise to identify issues that need to be resolved before access control limits are established or modified, or access breaks are recommended for approval.

(2) Authority: The Access Control Review Committee has authority to deny requested access control breaks for existing access control facilities. Access control breaks denied by the Committee may be appealed to the Secretary of Highways or his/her designee.

(3) Quorum Definition: It shall be required that a simple majority of voting members of the committee, or their alternates, be in attendance for a quorum.

**C. Operating Procedures:**

(1) The two basic functions of the Access Control Review Committee are:

(a) To make recommendations to the Secretary, or his/her designee, on requests for establishing access control on new or existing state, federal and interstate highways; and,

(b) To make recommendations to the Secretary, or his/her designee, regarding requests for permanent breaks in existing access control lines on state, federal and interstate highways.

(2) The Committee shall have the authority to deny access control breaks. A denial by the committee may be appealed to the Secretary, or his/her designee. Any access control breaks permitted shall, as a minimum, be in conformance with criteria contained in the most current edition of this rule, the *Interstate Access Control Policy* (CP 65), and any other applicable statutes, policies or procedures.

**D. New or Modified Access Control Limits on State, Federal or Interstate Highways:** Operating Procedures of the Access Control Review Committee for requests to establish access control on new highways or existing non-access controlled highways and procedures for modifying access control limits on access-controlled highways shall be as follows. Refer to the *State Access Management Manual* for further clarification.

(1) A request for the establishment or modification of access control shall be received by the Chairperson from a NMSHTD Project Development Engineer or from other government agencies. It shall be the responsibility of the requestor, whether representing the NMSHTD or other government agency, to provide a complete information/request package showing: Location, identified by stationing, distances and proposed right-of-way map; Specific Purpose, defined in a feasibility study or corridor study; and, Source of Funding, for all costs including engineering.

(2) The Chairperson shall request the Right of Way Manager to review the right-of-way map(s) and request Lands Engineering to prepare a draft Administrative Determination prior to review and consideration by the Committee. The draft Administrative Determination should be reviewed by the Project Development Engineer, or requestor, and the Traffic Technical Support Engineer prior to review and consideration by the Committee.

(3) The Access Control Review Committee shall either recommend approval of the draft Administrative Determination as presented or recommend approval based upon committee discussions and recommended modifications. The Access Control Review Committee may also recommend deferral of action on an Administrative Determination to a later meeting if additional information is required by the Committee for evaluation. If the Access Control Review Committee votes to recommend disapproval of a draft Administrative Determination, they shall provide specific reasons to the requestor for their recommendation.

(4) After the Administrative Determination has been recommended for approval by the Committee, it shall be sent to the Secretary, or his/her designee, for review and/or approval or disapproval. The request shall be sent to FHWA for approval if on a federal or interstate highway.

(5) If the request is disapproved by the Secretary or FHWA, it shall be sent back to the Chairperson of the Committee to inform the requestor of the disapproval.

(6) Once all approvals are obtained, the Chairperson shall send all documents to the office of record, which is the Right of Way Bureau Chief's office. The Right of Way Bureau Chief, or his/her designee, shall send a copy of the approved resolution to the owners of record of all affected properties.

**E. Requests For Interstate Access Control Breaks:** Requests for interstate access control breaks, which are requests for direct access to the interstate or requests that will have a major impact on the operation or function of the existing interchange, ramps, existing crossroad, etc., shall be handled as specified in Commission Policies and Administrative Memorandums.

**F. Requests For Non-Interstate Access Control Breaks:** Operating procedures of the Access Control Review Committee for requests for permanent access control breaks within the limits of existing access control rights-of-way on all federal or state highways (other than interstate) shall be as follows.

(1) A request for an access control break shall be received by the Chairperson from a District Office, a Project Development Engineer, an Access Control Study Team, another governmental agency or from an individual from the public or a private firm. For requests that create major impacts (i.e. requires a new interchange or major modifications), it shall be the responsibility of the requestor to provide a complete feasibility study similar to that required for Interstate Access. For requests that may create intermediate impacts (i.e. require traffic signals, require intermediate geometric improvements, etc.), the requestor shall furnish a traffic engineering evaluation or other reports to determine if the requested access is feasible. For access requests that appear to be minor, the request shall be submitted to the Access Control Review Committee for processing.

(2) Once all pertinent information is received, the request shall be placed on the agenda for the next Access Control Review Committee Meeting. The Access Control Review Committee shall consider all pertinent data available concerning the request for a break in the existing access control line.

(3) The Access Control Review Committee shall recommend approval of the access control break as presented; or, recommend approval based upon committee discussions and recommended modifications; or, recommend deferral if additional information is required; or, 4) deny the request. The committee may request that a specific report or feasibility study be conducted if after reviewing the request the Committee considers it to have major or intermediate impacts. If the Access Control Review Committee votes to deny an access control break, specific reasons for the denial shall be provided and a copy shall be sent to the Secretary, or his/her designee. A denial by the committee may be appealed to the Secretary, or his/her designee.

(4) After the access control break (Administrative Determination) has been recommended for approval by the Committee, it shall be sent to the Secretary, or his/her designee, for review and approval or disapproval. After the Secretary, or his/her designee, approves an Administrative Determination for interstate access, the Secretary, or his/her designee, shall prepare a resolution amending the original access control for presentation to the Highway Commission. Highway Commission approval is only needed for requested breaks in interstate access controlled rights of way. The Chairperson shall send a request for approval to FHWA for all interstate or federal highways.

(5) Once all approvals are obtained, the Chairperson shall send all documents to the office of record, which is the Right of Way Bureau Chief's Office. The Right of Way Bureau Chief shall request the appropriate appraisal difference be paid back to the Department.

(6) Once all approvals have been obtained and the appraisal difference has been paid back to the Department, the access-controlled right-of-way becomes non-access controlled right-of-way and the Right of Way Bureau Chief, or his/her designee, informs the requestor and the respective District that the requests for access may proceed contingent on all Department requirements being met. The respective District shall be responsible for making sure all construction is completed in accordance with the Department's regulations and any requirements that were made by the Commission, the Department, or FHWA regarding the approval of the access control break.

**G. Temporary Construction Access Breaks:** Any requests for temporary construction access breaks for projects should be incorporated in roadway plans during their development.

**H. Temporary Access Breaks:** Any request for a temporary access break, which is not related to a construction project, shall be submitted to the Access Control Review Committee for their review and/or approval. The temporary access break does not require an Administrative Determination or approval of the Secretary, but shall have FHWA approval if for a federal or interstate highway. If the Committee denies a temporary access break, it can be appealed to the Secretary, or his/her designee. If an appeal is approved by the Secretary, or his/her designee, the request must be forwarded to FHWA for their review and approval if for a federal or interstate highway.

**I. Access Control Recommendations by Other Government Agencies:**

(1) All access control recommendations by other government agencies for federal or state highways shall be submitted to NMSHTD's Access Control Review Committee in compliance with 18.31.6.19 NMAC.

(2) Any and all access control actions/recommendations (made by other governmental agencies) on federal or state highways which have not been approved according to the Access Control Review Procedures shall not be effective until acted on as set forth herein.

[18.31.6.19 NMAC - N, 10/15/2001]

**HISTORY OF 18.31.6 NMAC:**

**Pre-NMAC History:**

Material in the part was derived from that previously filed with the State Records and Archives under: SHTD Rule No. 89-1(L), Regulations for Driveways and Median Openings on Non-Access Controlled Highways, 6/9/1989.



**History of Repealed Material:**

18 NMAC 31.6, Requirements for Driveways and Median Openings on Non-Access Controlled Highways, 12/14/1998.

**Other History:**

Effective 10/15/2001, 18.31.6 NMAC, State Highway Access Management Requirements, replaced 18 NMAC 31.6, Requirements for Driveways and Median Openings on Non-Access Controlled Highways.

## **Statutory Chapters in New Mexico Statutes Annotated 1978**

### **CHAPTER 66 Motor Vehicles**

#### Article

1. General Provisions, 66-1-1 through 66-1-5.
2. Motor Vehicle Division of Taxation and Revenue Department, 66-2-1 through 66-2-17.
3. Registration Laws; Security Interests; Anti-Theft Provisions; Bicycles; Equipment; Unsafe Vehicles; Off-Highway Motor Vehicles; Other Vehicles, 66-3-1 through 66-3-1103.
4. Licensing of Dealers and Wreckers, 66-4-1 through 66-4-9.
5. Licensing of Operators and Chauffeurs; Financial Responsibility; Uninsured Motorists' Insurance; Identification Cards, 66-5-1 through 66-5-504.
6. Fees, 66-6-1 through 66-6-36.
- 7. Traffic Laws; Signs, Signals and Markings; Accidents; Weight and Size; Traffic Safety, 66-7-1 through 66-7-513.**
8. Crimes, Penalties and Procedure, 66-8-1 through 66-8-141.
9. Snowmobiles, 66-9-1 through 66-9-13.
10. Driver Education Schools, 66-10-1 through 66-10-12.
11. Vehicles of Historic and Special Significance, 66-11-1 through 66-11-5.
12. Boating, 66-12-1 through 66-12-24.
13. Boating While Intoxicated, 66-13-1 through 66-13-13.

NOTE: According to Section 66-1-1, the "short title" for Articles 1 through 8 of Chapter 66 NMSA 1978, but excluding Section 66-7-102.1, may be cited as the "*Motor Vehicle Code*."

**NOTE:** This Appendix is from New Mexico Statutes Annotated 1978, available at the following website: <http://64.132.204.47/NXT/gateway.dll?f=templates&fn=default.htm&vid=nm:all>. All excerpts included herein are from Article 7, and the excerpts are generally limited to those items that require action by NMDOT.

The next four pages is the table of contents for Article 7, and those sections that are included herein are shown in "boxes."

Any asterisks shown between sections (beginning on Page D-6), indicate that the one or more sections of the Motor Vehicle Code is not included in this manual.

## ARTICLE 7

### Traffic Laws; Signs, Signals and Markings; Accidents; Weight and Size; Traffic Safety

#### Part 1. APPLICATION OF TRAFFIC LAWS

66-7-1	Repealed.
66-7-2	Reference to vehicles upon the highways; exceptions.
66-7-3	Required obedience to traffic laws.
66-7-4	Obedience to police officers.
66-7-5	Public officers and employees to obey act; exceptions.
66-7-6	Authorized emergency vehicles.
66-7-7	Traffic laws apply to persons riding animals or driving animal-drawn vehicles.
66-7-8	Provisions uniform throughout state.
66-7-9	Powers of local authorities.
66-7-10	No interference with rights of owners of real property with reference thereto.
66-7-11	New Mexico state police power to close certain highways in emergencies.

NOTE: Only the Sections highlighted in yellow boxes are included in this appendix.

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66-7-101	State transportation commission to adopt sign manual.
66-7-102	State transportation commission to sign all state highways.
66-7-102.1	State transportation commission; speed limit signs.
66-7-103	Local traffic-control devices.
66-7-104	Obedience to any required traffic-control devices.
66-7-105	Traffic-control signal legend.
66-7-106	Pedestrian-control signals.
66-7-107	Flashing signals.
66-7-108	Display of unauthorized signs, signals or markings.
66-7-109	Interference with official traffic-control devices or railroad signs or signals.

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66-7-201	Accidents involving death or personal injuries.
66-7-202	Accidents involving damage to vehicle.
66-7-203	Duty to give information and render aid.
66-7-204	Duty upon striking unattended vehicle.
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- 66-7-214 Agency to tabulate and analyze accident reports.
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66-7-301	Speed regulation.
66-7-302	Repealed.
66-7-302.1	Speed limit; conviction; use limited.
66-7-302.2	Certain speeding convictions to be disregarded in the development or application of a point system.
66-7-303	Establishment of speed zones.
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66-7-305	Minimum speed regulation.
66-7-306	Special speed limitations.
66-7-307	Charging violations; rule in civil actions.
66-7-308	Drive on right side of roadway; exceptions.
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66-7-332	Operation of vehicles on approach of authorized emergency vehicles.

- 66-7-332.1 Approach of oncoming vehicle; yield right of way.
- 66-7-333 Pedestrians subject to traffic regulations.
- 66-7-334 Pedestrians' right-of-way in crosswalks.
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- 66-7-341 Railroad-highway grade crossing violations; all drivers.
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- 66-7-343 Railroad-highway grade crossing violations; certain vehicles required to always stop; exceptions.
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## Part 5. WEIGHT AND SIZE LIMITATIONS

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66-7-512 Traffic safety education and enforcement fund created.

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## PART 1 APPLICATION OF TRAFFIC LAWS

\* \* \*

### **66-7-3. Required obedience to traffic laws.**

It is unlawful and, unless otherwise declared in the Motor Vehicle Code [ [66-1-1](#) NMSA 1978] except [66-7-102.1](#) NMSA 1978] with respect to particular offenses, it is a misdemeanor for any person to do any act forbidden or fail to perform any act required in [Article 7](#) of [Chapter 66](#) NMSA 1978.

\* \* \*

## PART 2 SIGNS, SIGNALS AND MARKINGS

### **66-7-101. State transportation commission to adopt sign manual.**

The state transportation commission shall adopt a manual and specifications for a uniform system of traffic-control devices consistent with the provisions of [Chapter 66, Article 7](#) NMSA 1978 for use upon highways within this state. The uniform system shall correlate with and so far as possible conform to the system then current as approved by the American association of state highway officials.

### **66-7-102. State transportation commission to sign all state highways.**

A. The state transportation commission shall place and maintain such traffic-control devices, conforming to its manual and specifications, upon all state highways as it deems necessary to indicate and to carry out the provisions of [Chapter 66, Article 7](#) NMSA 1978 or to regulate, warn or guide traffic.

B. No local authority shall place or maintain any traffic-control device upon any highway under the jurisdiction of the state transportation commission except by permission of the commission.

#### **66-7-102.1. State transportation commission; speed limit signs.**

The state transportation commission shall erect billboard-size signs at entry points into New Mexico on interstate and major state highways, warning and informing motorists of New Mexico speed limits, the fines for speeding in New Mexico and New Mexico's commitment to enforce its speed limits.

### **66-7-103. Local traffic-control devices.**

Local authorities in their respective jurisdiction [jurisdictions] shall place and maintain such traffic-control devices upon highways under their jurisdiction as they may deem necessary to indicate and to carry out the provisions of [Article 7](#) of [Chapter 66](#) NMSA 1978 or local traffic ordinances or to regulate, warn or guide traffic. All such traffic-control devices hereafter erected shall conform to the state manual and specifications



**66-7-104. Obedience to any required traffic-control devices.**

A. The driver of any vehicle shall obey the instructions of any official traffic-control device applicable thereto placed in accordance with the provisions of [Article 7](#) of [Chapter 66](#) NMSA 1978, unless otherwise directed by a traffic or police officer, subject to the exceptions granted the driver of an authorized emergency vehicle in [Article 7](#) of [Chapter 66](#) NMSA 1978.

B. No provision of [Article 7](#) of [Chapter 66](#) NMSA 1978 for which signs are required shall be enforced against an alleged violator if at the time and place of the alleged violation an official sign is not in proper position and sufficiently legible to be seen by an ordinarily observant person. Whenever a particular section does not state that signs are required, such section shall be effective even though no signs are erected or in place.

**66-7-105. Traffic-control signal legend.**

Whenever traffic is controlled by traffic-control signals exhibiting different colored lights, or colored lighted arrows, successively [successively], one at a time or in combination, only the colors green, yellow and red shall be used, except for special pedestrian control signals carrying a word legend, and the lights indicated [indicate] and apply to drivers of vehicles and pedestrians:

A. green alone:

(1) vehicular traffic facing the signal may proceed straight through or turn right or left unless a sign at the place prohibits either turn. Vehicular traffic, including vehicles turning right or left, shall yield the right-of-way to other vehicles and to pedestrians lawfully within the intersection or an adjacent crosswalk at the time the signal is exhibited; and

(2) pedestrians facing the signal may proceed across the roadway within any marked or unmarked crosswalk;

B. yellow alone when shown following the green signal:

(1) vehicular traffic facing the signal is warned that the red signal will be exhibited immediately thereafter and the vehicular traffic shall not enter the intersection when the red signal is exhibited except to turn as hereinafter provided; and

(2) no pedestrian facing the signal shall enter the roadway until the green is shown alone unless authorized to do so by a pedestrian "walk" signal;

C. red alone:

(1) vehicular traffic facing the signal shall stop before entering the crosswalk on the near side of the intersection or, if there is no crosswalk, then before entering the intersection, and may turn right after standing until the intersection may be entered safely, provided that such vehicular traffic shall yield the right-of-way to all pedestrians and vehicles lawfully in or approaching the intersection. Whenever the local authorities in their respective jurisdictions determine on the basis of an engineering and traffic investigation that a turn as hereinabove provided should be prohibited at a particular intersection, such turn may be prohibited by the posting of signs at the intersection indicating that such a turn is prohibited;

(2) vehicular traffic on a one-way street facing the signal shall stop before entering the crosswalk on the near side of the intersection or if there is no crosswalk, then before entering the intersection, and if a left turn onto a one-way street in the proper direction is intended, may turn

left after stopping until the intersection may be entered safely, provided that such vehicular traffic shall yield the right-of-way to all pedestains [pedestrians] and vehicles lawfully in or approaching the intersection;

(3) whenever the local authorities in their respective jurisdictions determine on the basis of an engineering and traffic investigation that a turn as hereinabove provided should be prohibited at a particular intersection, such turn may be prohibited by the posting of signs at the intersection indicating that such a turn is prohibited; and

(4) no pedestrian facing the signal shall enter the roadway until the green is shown alone unless authorized to do so by a pedestrian "walk" signal;

D. red with green arrow:

(1) vehicular traffic facing the signal may cautiously enter the intersection only to make the movement indicated by the arrow, but shall yield the right-of-way to pedestrians lawfully within a crosswalk and to other traffic lawfully using the intersection; and

(2) no pedestrian facing the signal shall enter the roadway unless he can do so safely and without interfering with any vehicular traffic;

E. if an official traffic-control signal is erected and maintained at a place other than an intersection, the provisions of this section apply except as to those provisions which by their nature can have no application. Any stop required shall be made at a sign or marking on the pavement indicating where the stop shall be made, but in the absence of any such sign or marking, the stop shall be made at the signal; and

F. when a sign is in place permitting a turn, vehicular traffic facing a steady red signal may cautiously enter the intersection to make the turn indicated by the sign after stopping as required by Paragraphs (1) and (2) of Subsection C of this section. Vehicular traffic shall yield the right-of-way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection.

#### **66-7-106. Pedestrian-control signals.**

Whenever special pedestrian-control signals exhibiting the words "walk" or "don't walk" are in place:

A. "walk" indicates that pedestrians facing the signal may proceed across the roadway in the direction of the signal and shall be given the right-of-way by drivers of all vehicles; and

B. "don't walk" indicates that no pedestrian shall start to cross the roadway in the direction of the signal, but any pedestrian who has partially completed his crossing on the "walk" signal shall proceed to a sidewalk or safety island while the "don't walk" signal is showing.

#### **66-7-107. Flashing signals.**

A. Whenever an illuminated flashing red or yellow signal is used in a traffic sign or signal it shall require obedience by vehicular traffic as follows:

(1) flashing red (stop signal). When a red lens is illuminated with rapid intermittent flashes, drivers of vehicles shall stop before entering the nearest crosswalk at an intersection or at a limit line when marked, or, if none, then before entering the intersection, and the right to proceed shall be subject to the rules applicable after making a stop at a stop sign; or

(2) flashing yellow (caution signal). When a yellow lens is illuminated with rapid intermittent flashes, drivers of vehicles may proceed through the intersection or past such signal only with caution.

B. This section shall not apply at railroad grade crossings. Conduct of drivers of vehicles approaching railroad grade crossings [crossings] shall be governed by the rules as set forth in [Section 66-7-341](#) NMSA 1978.

**66-7-108. Display of unauthorized signs, signals or markings.**

A. No person shall place, maintain or display upon or in view of any highway any unauthorized sign, signal, marking or device which purports to be or is an imitation of or resembles an official traffic-control device or railroad sign or signal, or which attempts to direct the movements of traffic, or which hides from view or interferes with the effectiveness of any official traffic-control device or any railroad sign or signal, and no person shall place or maintain nor shall any public authority permit upon any highway any traffic sign or signal bearing thereon any commercial advertising.

B. Every such prohibited sign, signal or marking is hereby declared to be a public nuisance and the authority having jurisdiction over the highway is hereby empowered to remove the same or cause it to be removed without notice.

**66-7-109. Interference with official traffic-control devices or railroad signs or signals.**

No person shall without lawful authority attempt to or in fact alter, deface, injure, knock down or remove any official traffic-control device or any railroad sign or signal or any inscription, shield or insignia thereon, or any part thereof.

\* \* \*

## PART 4 TRAFFIC LAWS GENERALLY

**66-7-301. Speed regulation.**

A. No person shall drive a vehicle on a highway at a speed greater than:

(1) fifteen miles per hour on all highways when passing a school while children are going to or leaving school and when the school zone is properly posted;

(2) thirty miles per hour in a business or residence district;

(3) seventy-five miles per hour; and

(4) the posted speed limit in construction zones posted as double fine zones or other safety zones posted as double fine zones as designated by the [state] highway and transportation department, provided that the posted speed limit shall be determined by an engineering study performed by the state highway and transportation department.

B. In every event, speed shall be so controlled by the driver as may be necessary:

(1) to avoid colliding with a person, vehicle or other conveyance on or entering the highway;

(2) to comply with legal requirements as may be established by the state highway and transportation department or the New Mexico state police division of the department of public safety and the duty of all persons to use due care; and

(3) to protect workers in construction zones posted as double fine zones or other safety zones posted as double fine zones as designated by the [state] highway and transportation department.

C. The speed limits set forth in Subsection A of this section may be altered as authorized in [Section 66-7-303](#) NMSA 1978.

\* \* \*

### **66-7-303. Establishment of speed zones.**

A. Whenever the secretary of highway and transportation determines upon the basis of an engineering survey and traffic investigation, a detailed report of which is filed with the traffic safety bureau of the state highway and transportation department, that any speed established by law is greater or less than is reasonable or safe under the conditions found to exist upon any part of a state highway, the secretary of highway and transportation may declare the speed limit for that part, and that speed limit shall be authorized and effective when appropriate signs giving notice thereof are erected at that particular part of the highway; provided that no speed limit shall be declared greater than seventy-five miles per hour. The declaration of speed limits by the secretary of highway and transportation shall not be considered rules for purposes of the State Rules Act [[Chapter 14, Article 4](#) NMSA 1978].

B. Whenever a local authority determines upon the basis of an engineering survey and traffic investigation that any speed limit permitted under state law or local ordinance is greater or less than is reasonable or safe under the conditions found to exist upon any part of a highway within its jurisdiction, it may declare a speed limit for that part, and that speed limit shall be authorized and effective when appropriate signs giving notice thereof are erected at that particular part of the highway; provided that no speed limit shall be declared greater than seventy-five miles per hour.

C. Engineering surveys and traffic investigations made by local authorities shall be on a form approved by the secretary of highway and transportation. If engineers are not available to the local authorities, the state highway and transportation department may make the surveys and investigations for the local authorities.

D. Speed zones may be marked by a sign containing a flashing yellow light and, when the light is in operation, the speed limit, instructions or regulations on the sign are in effect.

E. Alteration of speed limits on state highways by local authorities is not effective until approved by the secretary of highway and transportation.

F. The provisions of Subsections A and B of this section shall not apply to changes of speed limit in construction zones authorized pursuant to [Section 66-7-303.1](#) NMSA 1978.

\* \* \*

**66-7-305. Minimum speed regulation.**

A. A person shall not drive a motor vehicle at such a slow speed as to impede the normal and reasonable movement of traffic except when reduced speed is necessary for safe operation or to be in compliance with law.

B. Whenever the state transportation commission or local authorities within their respective jurisdictions determine on the basis of an engineering and traffic investigation that slow speeds on any part of a highway consistently impede the normal and reasonable movement of traffic, the commission or the local authority may determine and declare a minimum speed limit below which no person shall drive a vehicle except when necessary for safe operation or to be in compliance with law; provided that local authorities in municipalities of more than one hundred thousand population may prohibit vehicles that by virtue of weight or design are slow moving on local arterials during peak hours of traffic.

**66-7-306. Special speed limitations.**

A. Subject to the requirements of [Section 66-3-847](#) NMSA 1978, no person shall drive any vehicle equipped with solid rubber or cushion tires at a speed greater than ten miles per hour.

B. A person shall not drive a vehicle over any bridge or other elevated structure constituting a part of a highway at a speed that is greater than the maximum speed that can be maintained with safety to the bridge or structure when such structure is signposted as provided in this section.

C. The state transportation commission upon request from a local authority shall, or upon its own initiative may, conduct an investigation of any bridge or other elevated structure constituting a part of a highway, and if it finds that the structure cannot with safety to itself withstand vehicles traveling at the speed otherwise permissible under the Motor Vehicle Code, the commission shall determine and declare the maximum speed of vehicles that the structure can withstand and shall cause or permit suitable signs stating the maximum speed to be erected and maintained at a minimum distance of three hundred feet before each end of the structure.

D. Upon the trial of a person charged with a violation of this section, proof of determination of the maximum speed by the state transportation commission and the existence of suitable signs constitutes conclusive evidence of the maximum speed that can be maintained with safety to the bridge or structure.

\* \* \*

**66-7-308. Drive on right side of roadway; exceptions.**

A. Upon all roadways of sufficient width a vehicle shall be driven upon the right half of the roadway, and where practicable, entirely to the right of the center thereof, except as follows:

- (1) when overtaking and passing another vehicle proceeding in the same direction under the rules governing such movement;
- (2) when the right half of a roadway is closed to traffic while under construction or repair;

(3) upon a roadway divided into three marked lanes for traffic under the rules applicable thereon; or

(4) upon a roadway designated and signposted for one-way traffic.

B. Upon all roadways any vehicle proceeding at less than the normal speed of traffic at the time and place and under the conditions then existing shall be driven in the right-hand lane then available for traffic, or as close as practicable to the right-hand curb or edge of the roadway, except when overtaking and passing another car proceeding in the same direction or when preparing for a left turn at an intersection or into a private road or driveway.

\* \* \*

#### **66-7-315. No-passing zones.**

A. The state transportation commission and local authorities may determine those portions of any highway under their respective jurisdictions where overtaking and passing or driving on the left of the roadway would be especially hazardous and may, by appropriate signs or markings on the roadway, indicate the beginning and end of such zones. When the signs or markings are in place and clearly visible to an ordinarily observant person, every driver of a vehicle shall obey the directions of the signs or markings.

B. Where signs or markings are in place to define a no-passing zone as set forth in Subsection A of this section, no driver shall at any time drive on the left side of the roadway within the no-passing zone or on the left side of any pavement striping designed to mark the no-passing zone throughout its length.

C. This section does not apply under the conditions described in Paragraph (2) of Subsection A of [Section 66-7-308](#) NMSA 1978 or to the driver of a vehicle turning left into or from an alley, private road or driveway.

\* \* \*

#### **66-7-335. Crossing at other than crosswalks.**

A. Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway.

B. Any pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided shall yield the right-of-way to all vehicles upon the roadway.

C. Between adjacent intersections at which traffic-control signals are in operation pedestrians shall not cross at any place except in a marked crosswalk.

#### **66-7-336. School crossings.**

A. Crosswalks may be established over highways abutting a school or the grounds adjacent to a school, and all children crossing the highways shall be required to do so within the marked crosswalks. The state transportation commission, with respect to state highways, and local

authorities, with respect to streets under their jurisdiction, with advice of the local superintendent of schools, shall establish and mark or cause to be marked these highway crossings.

B. Crosswalks over highways not abutting school grounds may be established by the state transportation commission, with respect to state highways, and by local authorities, with respect to streets under their jurisdiction, with advice of the local superintendent of schools and after adequate assurance has been given that proper safety precautions will be maintained pursuant to regulations of the state transportation commission and of the local authorities. Responsibility for maintaining the crossing will be with the appropriate county or municipality wherein the school is located.

C. At all school crossings except as provided in this section, appropriate signs shall be provided as prescribed by the state transportation commission or local authorities within their respective jurisdictions, indicating the crossings and regulating traffic movement within the school zones.

D. School crossings are not required to be specially posted when they are located at:

- (1) a signalized intersection;
- (2) an intersection where traffic is controlled by a stop sign; or
- (3) a point where a pedestrian tunnel or overhead crossing is provided.

\* \* \*

#### **66-7-345. Authority to designate through highways and stop and yield intersections.**

A. The state transportation commission, with reference to state and county highways, and local authorities, with reference to other highways under their jurisdiction, may designate through highways and erect stop signs or yield signs at specified entrances thereto or may designate any intersection as a stop intersection or as a yield intersection and erect stop signs or yield signs at one or more entrances to the intersection.

B. Preferential right of way at an intersection may be indicated by stop signs or yield signs as authorized in the Motor Vehicle Code [ [66-1-1](#) NMSA 1978].

C. Except when directed to proceed by a police officer or traffic-control signal, every driver of a vehicle approaching a stop intersection indicated by a stop sign shall stop before entering the crosswalk on the near side of the intersection or, in the event there is no crosswalk, shall stop at a clearly marked stop line, but if none, then at the point nearest the intersecting roadway before entering the intersection.

D. The driver of a vehicle approaching a yield sign, if required for safety to stop, shall stop before entering the crosswalk on the near side of the intersection or, in the event there is no crosswalk, at a clearly marked stop line, but if none, then at the point nearest the intersecting roadway where the driver has a view of approaching traffic on the intersecting roadway.

\* \* \*



**66-7-349. Stopping, standing or parking outside of business or residence districts.**

A. Upon any highway outside of a business or residence district, no person shall stop, park or leave standing a vehicle, whether attended or unattended, upon the paved or main-traveled part of the highway when it is practicable to stop, park or leave the vehicle off such part of the highway, but in every event an unobstructed width of the highway opposite a standing vehicle shall be left for the free passage of other vehicles and a clear view of such stopped vehicles shall be available from a distance of two hundred feet in each direction upon the highway.

B. Subsection A of this section does not apply to the driver of a vehicle that is disabled while on the paved or main-traveled portion of a highway in such manner and to such extent that it is impossible to avoid stopping and temporarily leaving the disabled vehicle in that position.

C. The state highway and transportation department, unless otherwise directed by an investigating police officer, or a police officer may remove or cause to be removed a vehicle or other obstruction from the paved or main-traveled part of a highway to the nearest place of safety if the vehicle or other obstruction obstructs traffic or poses a traffic hazard.

**66-7-350. Officers authorized to remove illegally stopped vehicles.**

A. Whenever any police officer finds a vehicle standing upon a highway in violation of any of the foregoing provisions of [Sections 66-7-349](#) through [66-7-352](#) NMSA 1978, such officer is hereby authorized to move such vehicle, or require the driver or other person in charge of the vehicle to move the same, to a position off the paved or main-traveled part of such highway.

B. Whenever any police officer finds a vehicle unattended upon any bridge or causeway or in any tunnel where such vehicle constitutes an obstruction to traffic, such officer is hereby authorized to provide for the removal of such vehicle to the nearest garage or other place of safety.

C. No driver of any vehicle shall permit said vehicle to remain unattended on or adjacent to any public road, highway or highway right-of-way of the state for a longer period than twenty-four hours without notifying the state police or sheriff's office of the county where said vehicle is parked or said vehicle shall be deemed abandoned. The state police or sheriff's officer may cause all such abandoned vehicles to be removed and the owner of the vehicle shall be required to pay all costs incident to the removal of said vehicle, provided that wrecked vehicles may be removed at any time and without regard to the twenty-four hour period hereinbefore provided.

D. Whenever an officer shall order a dealer or wrecker to remove from a highway, or territory adjacent thereto, any damaged or abandoned vehicle the officer shall at the time issue signed and dated instructions in writing to the dealer or wrecker specifically stating if the vehicle is to be "held for investigation" or if it may be released to the owner.

**66-7-351. Stopping, standing or parking prohibited in specified places.**

A. No person shall stop, stand or park a vehicle, except when necessary to avoid conflict with other traffic or in compliance with law or the directions of a police officer or traffic-control device, in any of the following places:

- (1) on a sidewalk;
- (2) in front of a public or private driveway;



- (3) within an intersection;
- (4) within fifteen feet of a fire hydrant;
- (5) on a crosswalk;
- (6) within twenty feet of a crosswalk at an intersection;
- (7) within thirty feet upon the approach to any flashing beacon, stop sign or traffic-control signal located at the side of a roadway;
- (8) between a safety zone and the adjacent curb or within thirty feet of points on the curb immediately opposite the end [ends] of a safety zone, unless the traffic authority indicates a different length by signs or markings;
- (9) within fifty feet of the nearest rail of a railroad crossing;
- (10) within twenty feet of the driveway entrance to any fire station and on the side of a street opposite the entrance to any fire station within seventy-five feet of said entrance, when properly signposted;
- (11) alongside or opposite any street excavation or obstruction when stopping, standing or parking would obstruct traffic;
- (12) on the roadway side of any vehicle stopped or parked at the edge or curb of a street;
- (13) upon any bridge or other elevated structure upon a highway or within a highway tunnel; or
- (14) at any place where official signs prohibit stopping.

B. No person shall move a vehicle not lawfully under his control into any such prohibited area or away from a curb such distance as is unlawful.

**66-7-352. Additional parking regulations.**

A. Except as otherwise provided in this section, every vehicle stopped or parked upon a roadway where there are adjacent curbs shall be so stopped or parked with the right-hand wheels of such vehicle parallel to and within eighteen inches of the right-hand curb.

B. Local authorities may by ordinance permit parking of vehicles within [with] the left-hand wheels adjacent to and within eighteen inches of the left-hand curb of a one-way roadway.

C. Local authorities may by ordinance permit angle parking on any roadway, except that angle parking shall not be permitted on any federal-aid or state highway unless the state highway commission has determined by resolution or ordered entered in its minutes that the roadway is of sufficient width to permit angle parking without interfering with the free movement of traffic.

D. The state highway commission with respect to highways under its jurisdiction may place signs prohibiting or restricting the stopping, standing or parking of vehicles on any highway where in its opinion, as evidenced by resolution or order entered in its minutes, such stopping, standing or parking is dangerous to those using the highway or where the stopping, standing or parking of vehicles would unduly interfere with the free movement of traffic thereon. Such signs shall be official signs and no person shall stop, stand or park any vehicle in violation of the restrictions stated on such signs.

**66-7-352.1. Short title.**

[Sections 66-7-352.1](#) through [66-7-352.6](#) NMSA 1978 may be cited as the "Disabled Parking Standards and Enforcement Act".

**66-7-352.2. Legislative intent.**

The policy and intent of this legislature is declared to be as follows:

A. that this legislature finds there is a significant safety hazard for mobility-impaired persons crossing through parking lots and that this hazard is greatly reduced when parking is provided adjacent to a building entrance;

B. that many commercial and governmental establishments now provide reserved parking for disabled persons, ensuring full and equal opportunity for the disabled to maintain independence and self-respect; and

C. that ultimately society will benefit from the increased interaction of the disabled with the mainstream that these parking spaces will provide.

**66-7-352.3. Repealed. 66-7-352.4. Parking lots; standards.**

A. Every parking lot coming under the provisions of the Disabled Parking Standards and Enforcement Act [ [66-7-352.1](#) NMSA 1978] shall have designated disabled parking spaces as provided in Subsection B of this section. No building permit shall be issued by any local government for the construction or substantial renovation of a commercial building inviting public access unless the parking lot has designated disabled parking spaces as delineated in Subsection B of this section.

B. The minimum numbers of designated disabled parking spaces are as follows:

TOTAL SPACES IN PARKING LOT	MINIMUM DESIGNATED DISABLED PARKING SPACES
1 to 25	1
26 to 35	2
36 to 50	3
51 to 100	4
101 to 300	8
301 to 500	12
501 to 800	16
801 to 1,000	20
more than 1,000	20, plus 1 for each 100 over 1,000.

The designated disabled parking spaces shall be located so as to provide the most convenient access to entranceways or to the nearest curb cut. Every parking lot shall have at least one designated disabled parking space designed to accommodate a motor vehicle passenger van, and there shall be a minimum of one such space for every eight designated disabled parking spaces.

**66-7-352.5. Unauthorized use; penalties.**

A. It is unlawful for any person to park a motor vehicle not displaying a special registration plate or a parking placard issued pursuant to Section [66-3-16](#) NMSA 1978 in a designated disabled parking space.

B. It is unlawful for any person to park a motor vehicle in such a manner so as to block access to any part of a curb cut designed for access by persons with severe mobility impairment.

C. Any person convicted of violating Subsection A or B of this section is subject to a fine of not less than two hundred fifty dollars (\$250) or more than five hundred dollars (\$500). Failure to properly display a parking placard or special registration plate issued pursuant to Section [66-3-16](#) NMSA 1978 is not a defense against a charge of violation of Subsection A or B of this section.

D. A vehicle parked in violation of Subsection A or B of this section is subject to being towed at the expense of the vehicle owner upon authorization by law enforcement personnel or by the property owner or manager of a parking lot.

\* \* \*

## PART 6 TRAFFIC SAFETY

**66-7-501. Short title.**

[Sections 66-7-501](#) through [66-7-513](#) NMSA 1978 may be cited as the "Traffic Safety Act".

\* \* \*

**66-7-513. Safe routes to school program.**

A. The "safe routes to school program" is created within the department to increase and make safer a student's ability to walk or ride a bicycle to school.

B. The program may be established to:

(1) provide assistance to the state, counties and municipalities to identify school route hazards and implement engineering improvements, including:

- (a) installing sidewalks;
- (b) painting crosswalks and other street and sidewalk areas;
- (c) installing traffic signals;
- (d) making street improvements;
- (e) providing lighting;
- (f) providing bus shelters, particularly in isolated or rural areas;
- (g) cutting curbs for handicapped access; and

- (h) other safety improvements;
- (2) develop criteria, in conjunction with the department's bicycle, pedestrian and equestrian committee, school districts and law enforcement agencies and with input from parents, teachers and school administrators, to be used in evaluating the applications of the program; and
- (3) include information about the safe routes to school program in public awareness campaigns about traffic safety.

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