

TITLE 18 TRANSPORTATION AND HIGHWAYS
CHAPTER 31 CLASSIFICATION AND DESIGN STANDARDS FOR HIGHWAYS
PART 6 STATE HIGHWAY ACCESS MANAGEMENT REQUIREMENTS

18.31.6.1 ISSUING AGENCY: New Mexico Department of Transportation (NMDOT), 1120 Cerrillos Road, Post Office Box 1149, Santa Fe, New Mexico 87504-1149.
 [18.31.6.1 NMAC - Rp, 18.31.6.1 NMAC, 6/27/2017]

18.31.6.2 SCOPE: New Mexico department of transportation districts and divisions, all other state agencies, local governments, land owners, developers, and general public.
 [18.31.6.2 NMAC - Rp, 18.31.6.2 NMAC, 6/27/2017]

18.31.6.3 STATUTORY AUTHORITY:

A. State highway commission (now state transportation commission): The basic enabling legislation for the management of access on state highways is Section 67-11-2 NMSA 1978, which states: "The state highway commission (now state transportation 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. New Mexico department of transportation: Pursuant to Section 67-3-6 NMSA 1978, the New Mexico department of transportation shall exercise the power, authority, and duty granted to the state transportation commission. Therefore, the department may prescribe rules and regulations for providing access to state highways pursuant to Sections 67-11-1 NMSA 1978 through Sections 67-11-10 NMSA 1978. In addition, the following state transportation commission policy and department 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 transportation commission Policy CP 65, Interstate Access.
- (2) New Mexico department of transportation administrative directive AD 222, Highway Access Control.

[18.31.6.3 NMAC - Rp, 18.31.6.3 NMAC, 6/27/2017]

18.31.6.4 DURATION: Permanent.

[18.31.6.4 NMAC - Rp, 18.31.6.4 NMAC, 6/27/2017]

18.31.6.5 EFFECTIVE DATE: June 27, 2017 unless a later date is cited in the history note at the end of a section.

[18.31.6.5 NMAC - Rp, 18.31.6.5 NMAC, 6/27/2017]

18.31.6.6 OBJECTIVE:

A. By 18.31.6 NMAC, the department 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 department 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 state transportation commission. It is based upon the authority granted to the New Mexico department of transportation.

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 New Mexico department of transportation. 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.

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, 18.31.6.6 NMAC, 6/27/2017]

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. Developed area/business district**-- A developed area/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. 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.
- N. 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 twenty-five percent (either peak hour or daily) and greater than 100 vehicles per day more than the existing use.
- O. Channelized intersection**-- An "at grade" intersection with painted islands, raised islands, or other devices for directing traffic along definite paths.
- P. 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.
- Q. Commission**-- The New Mexico state transportation commission or its predecessor.
- R. 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.
- S. 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.
- T. 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.
- U. Cross street**-- The lower function roadway that crosses a higher function facility, also referred to as minor street.
- V. 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.
- W. Curb return**-- The access radius for an intersection or driveway opening, also referred to as radius return.
- X. 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.
- Y. 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.
- Z. Department**-- New Mexico department of transportation and all of its components, including but not limited to, the district engineers, and the department divisions.
- AA. Design vehicle**-- A selected motor vehicle with the weight, dimensions, and operating characteristics used to establish highway design controls.
- AB. Developer**-- A person or persons representing a proposed land development project.

AC. 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.

AD. 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.

AE. Driveway-- For the purposes of department 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.

AF. Driveway angle-- The angle of 90 degrees or less between the driveway centerline and the edge of the traveled way.

AG. 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.

AH. Driveway throat width-- The narrowest width of a driveway measured parallel with the edge of the traveled way exclusive of radii, ramps or tapers.

AI. 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.

AJ. Egress-- To exit an abutting property or intersecting roadway to gain access to a state highway.

AK. Freeway-- A multi-lane divided highway having a minimum of two lanes in each travel direction, with access provided by grade-separated interchanges.

AL. 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.

AM. 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.

AN. 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.

AO. Functional area of an intersection-- The areas of both upstream and downstream of an intersection where additional access points should not be allowed. The upstream area consists of length. The downstream area consists of stopping sight distance. Right-turn conflict overlap should also be considered when determining the downstream area.

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 either private 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. NMDOT-- The New Mexico department of transportation.

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. Right-turn conflict overlap-- A conflict that occurs when a driver in a through travel lane must monitor more than one access connection at a time.

BW. Setback-- The lateral distance between the highway right-of-way line and any development structure, obstacle or parking area along the highway roadside.

BX. Shall-- A mandatory condition where the requirements must be met.

BY. Should-- An advisory condition where the condition is recommended but not mandatory.

BZ. 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.

CA. Signal progression-- The timing of consecutive signalized intersections to provide for the progressive movement of traffic at a planned rate of speed.

CB. 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.

CC. State highway-- Any public highway that has been designated as a state highway by either the New Mexico state legislature or the state transportation commission.

CD. 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.

CE. 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.

CF. Subdivide-- To divide land into two or more smaller lots, tracts or parcels of land.

CG. 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.

CH. Traveled way-- That portion of a roadway containing the travel lanes and speed-change lanes, exclusive of pavement provided for shoulders.

CI. Traversable median-- A median which, by its design, does not physically discourage or prevent vehicles from entering upon or crossing it.

CJ. Trip-- A one way vehicle movement from one location to another.

CK. 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.

CL. 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.

CM. Trip generation-- An estimate of the number of trips expected to be generated by specific type of land use.

- CN. Undivided roadway--** A highway without physical separation between traffic traveling in opposite directions.
- CO. Vertical alignment--** The vertical profile of a highway, intersection approach or driveway approach, typically measured along its centerline.

[18.31.6.7 NMAC - Rp, 18.31.6.7 NMAC, 6/27/2017]

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, 18.31.6.8 NMAC, 6/27/2017]

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 NMDOT manuals, standards, and policies:
 - (1) State access management manual.
 - (2) Standard specifications for road and bridge construction.
 - (3) State transportation 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.
- I.** A guide for erecting mailboxes on highways, American association of state highway and transportation officials.
- J.** Americans with Disabilities Act, accessibility guidelines for buildings and facilities (PROWAG), architectural and transportation barriers compliance board, as amended; 36 CFR Part 1191.
- K.** Traffic engineering handbook, current edition, institute of transportation engineers.
- L.** Access management guidelines for activity centers, NCHRP 348.
- M.** Manual of traffic signal design, second edition, institute of transportation engineers.
- N.** Traffic access and impact studies for site development, institute of transportation engineers.
- O.** Guide for the development of bicycle facilities, American association of state highway and transportation officials, 3rd edition.
- P.** Transportation and land development, institute of transportation engineers.
- Q.** An informational guide for roadway lighting, American association of state highway and transportation officials.
- R.** Web sites (note: web addresses may change without notice):
 - (1) New Mexico department of transportation: dot.state.nm.us.
 - (2) Federal highway administration: www.fhwa.dot.gov.
 - (3) Institute of transportation engineers: www.ite.org.
 - (4) American association of state highway and transportation officials: www.transportation.org.
 - (5) Transportation research board: www.nas.edu/trb.
 - (6) National cooperative highway research program: www.trb.org/NCHRP/NCHRP.aspx.

[18.31.6.9 NMAC - Rp, 18.31.6.9 NMAC, 6/27/2017]

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, 18.31.6.10 NMAC, 6/27/2017]

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 - Rp, 18.31.6.11 NMAC, 6/27/2017]

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 state transportation commission policies and department administrative directives. The interchange and the management plan shall receive the approval of the deputy secretary for highway operations. 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 - Rp, 18.31.6.12 NMAC, 6/27/2017]

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 New Mexico department of transportation.

[18.31.6.13 NMAC - Rp, 18.31.6.13 NMAC, 6/27/2017]

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 18.31.6.14 NMAC).

(2) Permit application form: All applications shall be made on the approved department permit application form, "application for permit to construct an access or median opening on public right-of-way."

(3) Department district offices: Persons wishing to submit an access permit application form should contact the appropriate department 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 departments external web site, dot.state.nm.us/content/dam/nmdot/Infrastructure/Access_management_Manual.pdf.

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 deemed incomplete 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 deemed incomplete, the department shall notify the applicant within 15 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.

E. Access permit requests from private entities:

(1) Individual use: Requests for a new private access shall be made on the department 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 sub-dividers 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 department 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 45 days. The review period may be extended by the department when further action is required by the access control review committee or other government entities, the applicant will be notified.

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 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 applicant may request a hearing with the department district engineer or designee 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 J 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 O 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 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 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 department 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 highway operations 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 highway operations 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 highway operations. At this final decision point, no other department employee will be authorized to approve the permit.

J. Variance procedures: 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.

K. 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 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 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 traffic engineer of pending access construction in state right-of-way at least 10 working days prior to any construction, unless other arrangements are made. 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 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 either removed 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 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.

L. Inspection of access:

(1) The permittee shall employ a qualified construction inspector to ensure that the conditions of the access permit are met unless otherwise determined necessary by the district engineer's designee. 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:

- (a) do not comply with the provisions of the permit;
- (b) conflict with concurrent highway construction or maintenance work;
- (c) endanger highway property, natural or cultural resources protected by law; or
- (d) 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.

(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.

M. 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. This shall consist of, but not be limited to, 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 or failure to follow permit requirements and specifications (see Subsection K, 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.

N. 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.

O. 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 30 days to correct the violations.

(3) If, after 30 days, the violations are not corrected, the district engineer, or the district engineer's designee, may issue a written notice of revocation of the permit.

(4) The permittee may request a hearing on the revocation of the permit by giving written notice to the district office within 10 days of the written notice of the revocation.

(5) The requested hearing shall be held no later than 30 days after receipt of the written 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 highway operations or designee by giving written notice of a request for an appeal to the district office within 10 days of the date of the district's written decision.

(7) The deputy secretary for highway operations, or the deputy's designee, shall hear the appeal within 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 Paragraph (10) of Subsection G 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. The permittee shall be responsible for costs, labor and material provided by the department for such actions.

(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. The permittee shall be responsible for costs, labor and material provided by the department for such actions.

[18.31.6.14 NMAC - Rp, 18.31.6.14 NMAC, 6/27/2017]

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 Paragraph (1) of Subsection D 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 (Sections 61-23-12 NMSA 1978 through 61-23-13 NMSA 1978).

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 department 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 eight of the 12 hours. The remaining four 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 eight-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 K 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 and lighting 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 and lighting agreement shall be the responsibility of the permittee. For highway improvement projects, the signalization and lighting agreement shall be the responsibility of the departments project development engineer.

[18.31.6.15 NMAC - Rp, 18.31.6.15 NMAC, 6/27/2017]

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 Paragraph (1) of Subsection E of 18.31.6.14 NMAC).

B. Traffic study approach: A two-tiered approach shall be utilized to satisfy the department's traffic study requirements for a proposed land development project. Traffic impact study requirements of local governments shall also be followed, where applicable. The departments two-tiered approach is as follows: First tier, site threshold analysis (STA); second tier, traffic impact analysis (TIA).

C. Site threshold analysis: A STA shall be required of all developing or redeveloping properties that directly or indirectly access a state highway. The STA should examine existing roadway volumes and trip generation estimates to determine if additional traffic analysis is required. The department STA 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 traffic impact analysis as determined by the district traffic engineer, the STA should be approved and the traffic study requirement for the proposed development will be complete. A description of the subject matter that should be included in the site traffic analysis is provided in Section 16 of the *state access management manual*.

D. 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 impacting a state highway when:

- (a) The results of a STA 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 department 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 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 or an electronic submittal, as directed by the district traffic engineer. A sample outline for TIA documentation is provided in the appendix of the *state access management manual*.

E. 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.

F. 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, 18.31.6.16 NMAC, 6/27/2017]

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 department at unsignalized or signalized access points where specific public safety and traffic operation 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 district traffic engineer.

(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 access 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 functional 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 (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Directional Volume in the Through Lane (vphpl) ²			Minimum Directional Volume in the Through Lane (vphpl) ²		
	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	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
	<i>Left-turn Deceleration Lanes are required on Urban Two-lane Highways for the following Left-turn Volumes:</i> 1. 30 mph : 46 vph or more 2. 35 to 40 mph : 36 vph or more 3. 45 to 55 mph : 26 vph or more			<i>Right-turn Deceleration Lanes are required on Urban Two-lane Highways for the following Right-turn Volumes:</i> 4. 30 mph : 46 vph or more 5. 35 to 40 mph : 41 vph or more 6. 45 to 55 mph : 36 vph or more		
<i>Notes:</i> 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 ¹ (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Volume in the Adjacent Through Lane (vphpl) ²			Minimum Volume in the Adjacent Through Lane (vphpl) ²		
	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
	Left-turn Deceleration Lanes are required on			Right-turn Deceleration Lanes are required on		

	Urban Multi-lane Highways for the following Left-turn Volumes: 3. 30 mph : 56 vph or more 4. 35 to 40 mph : 46 vph or more 5. 45 to 55 mph : 36 vph or more	Urban Multi-lane Highways for the following Right-turn Volumes: 6. 30 mph : 56 vph or more 7. 35 to 40 mph : 46 vph or more 8. 45 to 55 mph : 41 vph or more
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 ¹ (vph)	LEFT-TURN DECELERATION LANE			
	Minimum Directional Volume in Through Lane (vphpl) ²			
	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
	<i>Left-turn Deceleration Lanes are required on Rural Two-lane Highways for the following Left-turn Volumes:</i> 1. 30 mph : 26 vph or more 2. 35 to 40 mph : 21 vph or more 3. 45 to 55 mph : 16 vph or more 4. 55 mph : 11 vph or more			
<i>Notes:</i> <i>Use linear interpolation for left-turn volumes between 5 and 25 vph. The directional volume in the through lane includes through vehicles and turning vehicles.</i>				

Table 17.B-4 Criteria for Left-turn Deceleration Lanes on RURAL MULTI-LANE HIGHWAYS				
Left-Turn Volume ¹ (vph)	LEFT-TURN DECELERATION LANE			
	Minimum Volume in Adjacent Through Lane (vphpl) ²			
	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
	<i>Left-turn Deceleration Lanes are required on Rural Multi-lane Highways for the following Left-turn Volumes:</i> 5. 30 mph : 36 vph or more 6. 35 to 40 mph : 26 vph or more 7. 45 to 55 mph : 21 vph or more 8. 55 mph : 16 vph or more			
<i>Notes:</i> 1. Use linear interpolation for left-turn volumes between 5 and 35 vph. 2. The volume in the adjacent through lane includes through vehicles and turning vehicles.				

Table 17.B-5				
Criteria for Right-Turn Deceleration Lanes on				
RURAL TWO-LANE HIGHWAYS				
Right-Turn Volume ¹ (vph)	RIGHT-TURN DECELERATION LANE			
	Minimum Directional Volume in Through Lane (vphpl) ²			
	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> 3. 30 mph : 31 vph or more 4. 35 to 40 mph : 31 vph or more 5. 45 to 55 mph : 26 vph or more 6. 55 mph : 21 vph or more			
<i>Notes:</i> 1. Use linear interpolation for left-turn volumes between 5 and 30 vph. 2. The directional volume in the through lane includes through vehicles and turning vehicles.				

Table 17.B-6 Criteria for Right-Turn Deceleration Lanes on RURAL MULTI-LANE HIGHWAYS				
Right-Turn Volume ¹ (vph)	RIGHT-TURN DECELERATION LANE			
	Minimum Volume in Adjacent Through Lane (vphpl) ²			
	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
	<i>Right-turn Deceleration Lanes are required on Rural Multi lane Highways for the following Right-turn Volumes:</i> 3. 30 mph : 36 vph or more 4. 35 to 40 mph : 36 vph or more 5. 45 to 55 mph : 31 vph or more 6. 55 mph : 21 vph or more			
Notes: 1. Use linear interpolation for left-turn volumes between 5 and 35 vph. 2. The volume in the adjacent through lane includes through vehicles and turning vehicles.				

[18.31.6.17 NMAC - Rp, 18.31.6.17 NMAC, 6/27/2017]

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 department. 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 (provided in Section 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 department. 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 and intersection area of influence 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: Any part of an access including radius returns shall 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/business districts: 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.

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. Access horizontal alignment: 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 seventy-five and eighty percent of the highway posted speed at the point where the full-width lane ends and the transition taper begins.

(3) 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 four feet should be provided adjacent to speed change lanes.

(4) Bicycle lane width: When a right-turn deceleration lane or acceleration lane is required on a roadway with designated bicycle lanes, a five foot lane width (seven foot desirable) should be provided between the outside travel lane and the speed-change lane.

(5) Grade adjustment: Adjustments should be made to the speed change lane lengths based on the roadway grade.

(6) Truck design: If a speed-change lane is designed for a site with five or more large trucks during the design hour, a combination truck design vehicle should be used as the design vehicle.

(7) 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 four inches. The maximum grade for a driveway should be ten percent for a low

volume residential driveway and eight percent for all other access locations. Steeper access drives require special department approval. A level area (maximum two 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 department 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, equestrian 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 to 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 department 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 Department and AASHTO standards and the Night Sky Protection Act (Sections 74-12-1 NMSA 1978 through 74-12-11 NMSA 1978). The lighting design shall use full cut-off fixtures, and be consistent with AD 226, roadway lighting.

(1) **Signalized access:** Illumination shall 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.

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 department 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 clear site triangles, on a case by case basis.

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 department. AASHTO's *a guide for erecting mailboxes on highways*, should also be used for the location and design of mailbox installations.

U. Utilities: All utilities located within the state highway right-of-way shall comply with the department's utility accommodations Policy and 17.4.2. NMAC.

V. Environmental review: As may be required by law.

[18.31.6.18 NMAC - Rp, 18.31.6.18 NMAC, 6/27/2017]

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 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 department 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 the New Mexico department of transportation 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 which shall include but not limited to shifting, extending or reducing 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 of the access control review committee from a department project development engineer or from other government agencies. It shall be the responsibility of the requestor, whether representing the department 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 bureau chief 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 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 by applicable state and federal law, rules, regulations and procedures.

F. Requests for 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 of the access control review committee from a department 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 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. The request shall be sent to FHWA for approval if on a federal or interstate highway.

(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 department regarding the approval of the access control break.

G. Temporary construction access breaks: Any requests for temporary construction access breaks for department construction projects should be incorporated in roadway plans during their development. These requests should follow the format described in the access permit form C-196.

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 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 the departments 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 - Rp, 18.31.6.19 NMAC, 6/27/2017]

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.
18.31.6 NMAC, State Highway Access Management Requirements, filed 10/1/2001 - Repealed effective 6/27/2017.

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.
18.31.6 NMAC, State Highway Access Management Requirements (filed 10/1/2001) was replaced by 18.31.6 NMAC, State Highway Access Management Requirements, effective 6/27/2017.

STATE ACCESS MANAGEMENT MANUAL

The New Mexico State Highway and Transportation Department (NMSHTD) has developed a *State Access Management Manual* to facilitate the management of access to and from the state highway system. It is the responsibility of the NMSHTD to regulate the location, design, and operation of public and private access streets and driveways along the state highway system, and to reconcile, to the extent feasible, the needs and rights of both property owners and roadway users.

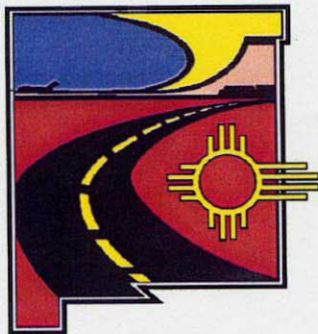
Under the Constitution and Laws of New Mexico, the State Highway Commission is charged with the duty of determining all matters of policy relating to the design of state highways and public roads. Rules and regulations governing the design, construction, and maintenance of access points and median openings along state highways have been established by the NMSHTD. These rules and regulations are contained in the New Mexico Administrative Code (NMAC) and are identified as 18.31.6 NMAC, *State Highway Access Management Requirements*. The rule document can be found in this manual after the table of contents and list of acronyms. Thereinafter, Chapters 1 through 9 of this manual expound on 18.31.6 NMAC, providing a comprehensive explanation and interpretation of the rule document contents. The sections of the manual chapters are numbered and organized the same as in the rule document for ease of use as well as to maintain consistency in the application of the NMSHTD access management procedures throughout the State of New Mexico.



Pete K. Rahn, Cabinet Secretary

9-20-01

Date



New Mexico State Highway and
Transportation Department

STATE ACCESS MANAGEMENT MANUAL

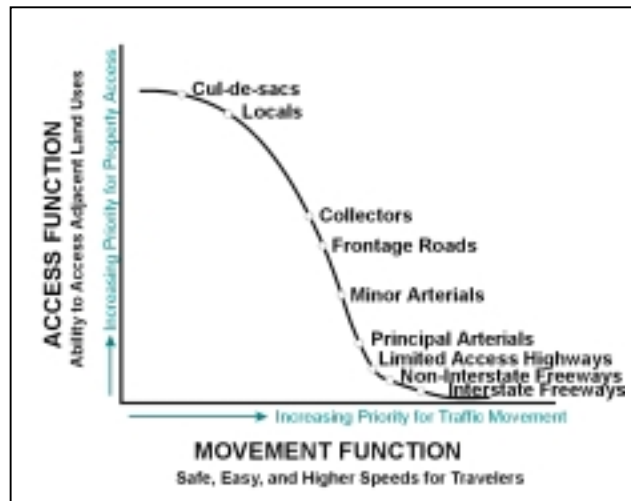
New Mexico State Highway and Transportation Department



PREFACE

Significant resources have been invested to develop the state highway system in New Mexico. Growing traffic use, traffic safety concerns and the ever-increasing cost of upgrading and expanding the highway system require that appropriate measures are taken to maintain and to continue to develop this highway system at safe and efficient levels.

Access management is one of the traffic management strategies available to highway jurisdictions to get the most out of their transportation system. Access management balances the need to provide safe and efficient traffic movement on state highways with the need to provide reasonable access to adjoining properties. This balance of traffic movement and land access can be accomplished since the state transportation system consists of highways with varying functions. No single class of highway can provide both high levels of traffic movement and high levels of property access. The relationship between land access, traffic movement, and the various highway types is illustrated below.



The *State Access Management Manual*, along with rule 18.31.6 NMAC, presents the administrative procedures and engineering methods used by the New Mexico State Highway and Transportation Department to actively manage access to and from the state highway system. Fewer direct access points, greater separation of driveways, and better driveway design and location are the basic elements of access management. Access management is not limited to driveways but also extends to intersections, medians, median openings, traffic signals, and interchanges. Through the implementation of an effective access management program, the following benefits result:

- ✓ Conflicts are reduced along highway facilities, thereby reducing accident potential, which results in a safer highway environment.
- ✓ Traffic flow is smoother which maintains desired travel speeds resulting in shorter and safer travel for the motoring public.
- ✓ The statewide movement of goods and services necessary for economic prosperity is maintained.
- ✓ The useful life of existing roadway facilities is extended.
- ✓ Uniform standards are established which ensures fair and equal application of access requirements for property owners.

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LIST OF ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ac	Acreage
acc/MEV	Accidents per Million Entering Vehicles
ACRC	Access Control Review Committee
AD	Administrative Directive
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic volume
AWDT	Average Weekday Traffic volume
AWET	Average Weekend Day Traffic volume
CFR	Code of Federal Regulations
CHDB	Consolidated Highway Database
CP	Commission Policy
DE	District Engineer
DHV	Design Hour Volumes
DTE	District Traffic Engineer
ESD	Entering Sight Distance
FHWA	Federal Highway Administration
ft	Feet
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
ITE	Institute of Transportation Engineers
LOS	Level of Service
LU	Large Urban
M	Municipal
MAF	Monthly Adjustment Factor
MOU	Memorandum of Understanding
mph	Miles per Hour
MPO	Metropolitan Planning Organization
MU	Municipal Urban
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
NMAC	New Mexico Administrative Code
NMSA	New Mexico Statutes Annotated
NMSHTD	New Mexico State Highway and Transportation Department
NMSTMS	New Mexico State Traffic Monitoring Standards
P	Passenger Car/Pick-up design vehicle
PCE	Passenger Car Equivalent
PDE	Project Development Engineer
R	Rural
RCOL	Rural Collector Street
RI/RO	Right-In / Right-Out access drive
RINT	Rural Interstate Highway
RMA	Rural Minor Arterial
RPA	Rural Principal Arterial
RPO	Regional Planning Organization
SF	Square Footage
SSD	Stopping Sight Distance
STA	Site Traffic Analysis
STH	Site Threshold Analysis
SU	Small Urban
SU (truck)	Single Unit Truck design vehicle
TIA	Traffic Impact Analysis
TRANSYT-7F	Traffic Network Study Tool
TWLTL	Continuous Two-Way Left-Turn Lane
UCOL	Urban Collector Street
UINT	Urban Interstate Highway
UMA	Urban Minor Arterial
UPA	Urban Principal Arterial

CHAPTER ONE

INTRODUCTION

INTRODUCTION

The New Mexico State Highway and Transportation Department (NMSHTD) has developed a *State Access Management Manual* to facilitate the management of access to and from the state highway system. It is the responsibility of the NMSHTD to regulate the location, design, and operation of public and private access streets and driveways along the state highway system, and to reconcile, to the extent feasible, the needs and rights of both property owners and roadway users.

Under the Constitution and Laws of New Mexico, the State Highway Commission is charged with the duty of determining all matters of policy relating to the design of state highways and public roads. Rules and regulations governing the design, construction, and maintenance of access points and median openings along state highways have been established by the NMSHTD. These rules and regulations are contained in the New Mexico Administrative Code (NMAC) and are identified as *18.31.6 NMAC, State Highway Access Management Requirements*. This manual expounds on 18.31.6 NMAC, providing a comprehensive explanation and interpretation of the rule contents. The sections of this manual are numbered and organized the same as in the rule document for ease of use as well as to maintain consistency in the application of the NMSHTD access management procedures. ***(Note that the section numbers in the rule document are preceded by the NMAC citation, 18.31.6, while the section numbers in the manual do not include the citation.)***

The manual sections are organized as follows:

Chapter 2 - Background, Definitions and References

- *Background, Definitions and References: Sections 1 through 9* - identifies the statutory authority for implementing access management procedures; defines those words that are technical or have specific definitions for the purposes of the rule and manual; and, lists supplemental references that may be used when additional detail is required.

Chapter 3 - Access Categories and Management Plans

- *Access Categorization System: Section 10* - defines access categories for the regulation and management of vehicular access to and from the state highway system.
- *Access Management Plans: Sections 11 and 12* - summarize special access management plans that may be needed for a designated highway corridor or an interchange area.

Chapter 4 - Access Category Standards

- *Access Category Standards: Section 13* - provides a summary description of the standards for each access category defined in Section 10 including the functional classification, access characteristics, speed-change lane requirements, and cross-references to various sections of the manual.

Chapter 5 - Permitting Process

- *Permitting Process: Section 14* - describes the procedures and requirements for obtaining an access permit from the Department for lawful access to the state highway system and for maintaining that access.

Chapter 6 - Traffic Engineering Data and Traffic Impact Studies

- *Traffic Engineering Evaluation: Section 15* - describes the data and operational guidelines for completing the traffic engineering evaluation required for addressing and resolving access issues.
- *Traffic Studies for Land Development: Section 16* - summarizes the procedures for completing a traffic study for a land development proposal, conducted as part of the overall traffic engineering evaluation, to determine expected impacts on the state highway system.

Chapter 7 - Speed Change Lanes

- *Speed-Change Lane Requirements: Section 17* - specifies the criteria for determining where separate right-turn and left-turn lanes are required at proposed access points.

Chapter 8 - Access Location and Design Standards

- *Access Location and Design Standards: Section 18* - defines access location and spacing criteria, and provides standards for the design and construction of all accesses.

Chapter 9 - Access Control Review Procedures

- *Access Control Review Procedures: Section 19* - describes the administrative procedures for addressing access requests on existing or proposed facilities with full or partial control of access.

ACCESS MANAGEMENT REQUIREMENTS

The basic components of the NMSHTD access management requirements are illustrated on the following page and are described below.

Access Management Regulations

New Mexico State Statutes enable the State Highway Commission, through the NMSHTD, to manage access to the state highway system. Rule 18.31.6 NMAC serves as the foundation of the Department's access management requirements. The rule and this manual were developed to facilitate the implementation of access management practices on the state highway system and must be followed to obtain lawful access to the state highway system.

ACCESS MANAGEMENT REQUIREMENTS

How is Access Management Governed?

Access Management Regulations

- Statutory Authority
- 18.31.6 NMAC
- Access Manual

Who is Involved?

General Participants

- Highway Jurisdiction
- Property Owner
- Land Use Authority

What is the Extent of the Access Issue?

Project Types

- Individual Use, Farm, Ranch or Residence
- Land Development Proposal
- Highway Corridor or other Highway System Improvement

What Type of State Highway Facility is Access Requested on?

Highway Access Control

- Highway Functional Classification
- Access Categorization System
- Access Category Standards

What are the Procedures for Gaining Lawful Access?

Permitting Process

- Access Permit Application
- Submittal Requirements
- NMSHTD Review / Approval
- Access Construction Requirements
- Variances, Waivers, Revocations
- Access Control Review Committee

How are Access Requirements Determined and Designed?

Engineering Process

- Engineering Studies
- Highway and Traffic Design
- Documentation and Plans Development

What is the Fair Share Contribution for Access to the Public Highway System?

Mitigation

- Conditions of Permit Approval, if any

General Participants of the Access Management Requirements

The three entities typically involved in access management decisions are (1) the agency having jurisdiction over the highway where access is requested, (2) property owners, and (3) land development review agencies. The *general role* of these entities is described below.

- *Highway Agency:* The responsibility of the highway agency is to preserve and protect the functional integrity of the highway system through the implementation of access management techniques, and through the implementation of highway improvements when needs are demonstrated and funds are budgeted for the improvement.
- *Property Owners:* Property owners require access from the adjacent roadway or street system to use and develop property, and are required to obtain access approvals from local and state government agencies.
- *Development Review Agency:* The role of land development review agencies is to regulate the type and intensity of land use according to subdivision and zoning standards, where they exist, and to coordinate access to adjacent properties.

Project Types

Access management may involve access to a single property or to numerous properties along a highway corridor. The extent of an access issue varies depending on the type of project that is proposed along a highway facility. There are two basic project types that the NMSHTD routinely considers: land development proposals and highway improvement projects. For land development proposals, property access is generally requested by private or public entities interested in developing or redeveloping land, whether directly or indirectly connected to the state highway system. Highway improvement projects are conducted by public entities to improve or otherwise upgrade a roadway segment or intersection to protect and maintain the general health, safety and welfare of the traveling public, which may involve new construction or improvements to existing facilities.

Highway Access Control

Access control is the regulated management of access to and from a highway facility. This regulated management occurs in three levels: (1) full control of access; (2) partial control of access; and, (3) nominal control of access. Full or partial access control provides a high degree of preference to through traffic movements on the highway, and may be achieved 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. On state highways where full or partial access control measures have not been established, some means of access management, such as driveway regulations, must be applied that is consistent with the functional classification of the state highway facility, and that is sufficient to maintain the safety and efficiency of the highway facility.

In addition, a state highway segment may be designated as a *non-access-controlled* facility or as a *controlled-access* facility depending on the level of access control employed. These types of facilities are described as follows:

- **Non-Access-Controlled Highways:** Non-access-controlled facilities include state highway segments where full or partial access control measures have not been established by special resolution and nominal access control measures are employed. The number, type, location and design of access points permitted to abutting properties along non-access-controlled state highways may be determined exclusively by the provisions of 18.31.6 NMAC.
- **Controlled-Access Highways:** Controlled-access facilities include state, federal or interstate highways and highway segments where full or partial access control measures have been established by special resolution. Controlled-access facilities require the highest level of access management, including compliance with the provisions of 18.31.6 NMAC, including review and approval of access breaks by the NMSHTD Access Control Review Committee, and approvals from the Federal Highway Administration (FHWA).

Permitting Process

Lawful access to non-access-controlled state highways is obtained through the access permitting process described in Section 14. Anyone requesting access to a state highway facility, including property owners, developers, governmental agencies or other entity, must submit completed access permit applications to the appropriate NMSHTD District office. The District Traffic Engineer or Permit Agent is the liaison between the Department and the Applicant. If all application requirements are met and any conditions on the proposed access request are agreed to, an access permit may be approved and issued.

Engineering Process

Engineering is an essential element of the access permit application process. Through engineering, the number, type(s) and location(s) of access are defined and appropriate designs are developed. Engineering efforts associated with access management may include: surveying, right-of-way and access control determinations; traffic studies; safety evaluations; sight distance evaluations; drainage analysis; signing and striping design; traffic signal and lighting design; intersection and highway design; and, construction traffic control plan development.

Mitigation

This aspect of access management assigns responsibility to the permit applicant for the mitigation of impacts to the state highway system that are attributable to a proposed access. Mitigation of impacts typically varies by the size and complexity of a land development proposal. The objective of mitigation is to preserve and protect the integrity of the highway system by implementing improvements necessary to provide safe and efficient access without causing deficiencies on the overall highway system. Mitigative improvements required by a highway authority will be consistent with the type of development. That is, small developments that have minor impacts typically will have low associated mitigation costs, while large developments that have considerable impacts could have high mitigation costs involving proposed access points as well as off-site improvements.

CHAPTER TWO

BACKGROUND, DEFINITIONS, AND REFERENCES

Sections 1 through 9

Overview

The New Mexico State Highway Commission has the authority to regulate access to the state highway system and accomplishes the regulation of access through the NMSHTD. The authority, responsibility, history and general objectives of New Mexico access management regulations are summarized in this chapter. To assure consistent interpretation of the access regulation contents, definitions are provided for those words that are technical or that have specific definitions for access management purposes. In addition, a list of supplemental references is provided at the end of this chapter for use when additional detail is required beyond that provided in this manual.

1. **ISSUING AGENCY:** New Mexico State Highway and Transportation Department
 1120 Cerrillos Road
 Post Office Box 1149
 Santa Fe, New Mexico 87504-1149

2. **SCOPE:** NMSHTD Districts and Divisions, all other state agencies, local governments, land owners, developers, and general public.

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 (see Appendix A), 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 (see Appendix A), 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. Copies of the documents are provided in Appendix B.
 - (1) State Highway Commission Policy CP 65, Interstate Access
 - (2) NMSHTD Administrative Directive AD 222, Highway Access Control

4. **DURATION:** Permanent.

5. **EFFECTIVE DATE:** October 15, 2001 unless otherwise indicated in 18.31.6 NMAC.
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*, 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

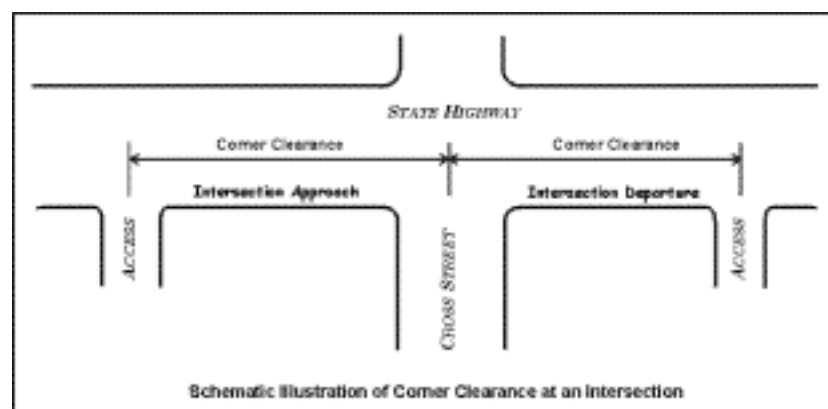
access to the general street system. The issuance of any permit, agreement, plat, subdivision, plan or correspondence shall not abrogate or limit the regulatory powers of the Department or issuing authority in the protection of the public's health, safety and welfare.

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 Sub-Section 10.D.
- 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

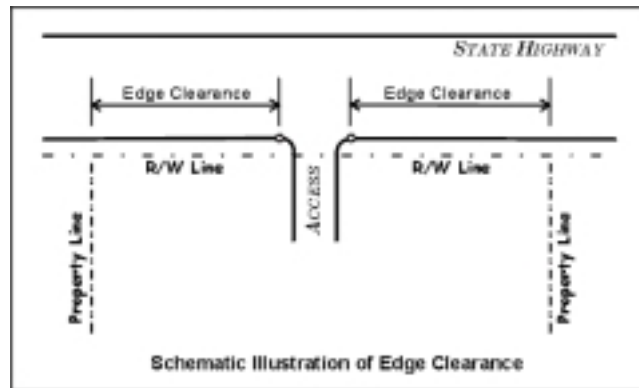
(including but not limited to hotels, banks or office buildings, railroad stations and public buildings) which occupy at least fifty percent of the frontage on one side or fifty percent of the frontage collectively on both sides of the highway.

- 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 (see Sub-Section 18.H).
- 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 (i.e., there are no curb returns; see Sub-Section 18.H).
- 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. A driveway is defined in this way to ensure that adequate traffic signal spacing is maintained and is planned for when access is requested. If an access requires or is expected to require future traffic signal control, then it should not be considered a driveway for location and spacing determinations.
- 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 driveway measured parallel with the edge of the traveled way exclusive of radii, ramps or tapers. Also referred to as driveway width.
- 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. Corner property at a highway intersection has a separate frontage along each intersecting roadway.
- 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. The function of a particular roadway class is defined in terms of service 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 to F, with LOS A representing the best operating conditions and LOS F the worst.

- 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*, as amended.
- 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. A raised median with curb and gutter is a common type of non-traversable median.
- 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. (see Appendix E)
- 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* (see Sub-Section 9.C).
- 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. Acceleration and deceleration lanes are speed-change lanes.
- 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, including the distance traveled during driver perception/reaction time and the vehicle braking distance.
- 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. Common types of traversable medians include painted medians and continuous two-way left-turn lanes.

- CI. Trip--** A one way vehicle movement from one location to another. For example, a customer visiting an establishment in a car usually equals two trips; one trip to arrive and one trip to depart.
 - 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.
- 8. REFERENCES:** The reference documents listed in Section 9 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.
- 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) *18.31.6 NMAC, State Highway Access Management Requirements*
 - (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
 - (2) Federal Highway Administration: www.fhwa.dot.gov
 - (3) Institute of Transportation Engineers: www.ite.org
 - (4) American Association of State Highway and Transportation Officials: www.transportation.org
 - (5) Transportation Research Board: www.nas.edu/trb
 - (6) National Cooperative Highway Research Program: www4.nationalacademies.org/trb/crp.nsf

CHAPTER THREE

ACCESS CATEGORIES AND MANAGEMENT PLANS

Sections 10 through 12

Overview

The level of access that is allowed along a state highway is dependent on the intended function of that highway. The function of a particular highway is defined in terms of service to through traffic movements (mobility) versus access to abutting properties (land accessibility). The NMSHTD has developed a classification system that is based on the intended function of each state highway. Based on this functional classification system, eight access categories are defined for the purpose of managing access along New Mexico's highways. The access categorization system is described in this chapter.

In addition to the statewide access categories, special access management plans may be needed for a designated highway corridor or interchange area to ensure that the functional integrity of the state highway system is maintained, or to maintain a high degree of mobility where right-of-way may be restricted. Accordingly, this chapter also contains descriptions of access management plans for highway corridors and interchange areas.

10. ACCESS CATEGORIZATION SYSTEM:

- A. Purpose:** This section defines the access categorization system used to facilitate the regulation and management of vehicular access to and from the state highway system. The categorization system consists of eight access categories, which are directly based on the *Functional Classified System* of state highways developed and maintained by the Transportation Planning Division of the New Mexico State Highway and Transportation Department.
- B. Functional Classified System:** The hierarchy of the *Functional Classified System* for New Mexico roadways 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 is further defined as urban and rural routes based on the location of a highway with respect to population centers. For each highway segment in the State, one of the following location descriptors is assigned to the functional highway system designations. Refer to Section 7, Definitions, for more information on functional classification.
 - (1) Large Urban (LU):** Highway segments classified as large urban routes occur in areas with over 50,000 population. The population center is designated by urban area boundaries.
 - (2) Small Urban (SU):** Highway segments classified as small urban routes occur in areas with 5,000 to 50,000 populations. The population center is designated by urban area boundaries.

- (3) **Municipal (M) or Municipal Urban (MU):** Highway segments classified as municipal or municipal urban routes occur in areas with less than 5,000 population where local jurisdictional issues are germane to the operation of the route.
- (4) **Rural (R):** Highway segments classified as rural routes occur in areas with less than 5,000 population, are outside of designated urban area boundaries, and do not involve specific local jurisdictional issues.

C. Identifying the Functional Classification for a Specific Highway Segment: The Transportation Planning Division of the NMSHTD maintains the Consolidated Highway DataBase (CHDB) system, a database of information on New Mexico's highways. The functional classification of a specific highway segment can be obtained from the CHDB system by contacting the Transportation Planning Division of the Department or by contacting the NMSHTD District office where the highway segment is located. For reference when reviewing CHDB printouts, the hierarchy functional classification (i.e., principal arterial, minor collector, etc.) is referred to as network class and the location descriptor is referred to as location. A sample CHDB printout is included in Appendix C. Note that the format of the CHDB printout may change with upgrades and modifications to the database.

D. Access Categories: There are four urban access categories and four rural access categories. The access categories apply to highways functionally classified as collector roadways or above. Access specifications for state highways classified lower than a collector (such as a Local road, service road, etc.) will be determined by the NMSHTD District where the roadway is located.

- (1) **Access Categories for Urban Highways:** Highway segments with location descriptions of large urban (LU) or small urban (SU) are considered urban highways. The four access categories for urban highways and the applicable functional classifications for each urban access category are defined in Table 10.D-1.
- (2) **Access Categories for Rural Highways:** Highway segments with location descriptions of municipal (M), municipal urban (MU), or rural (R) are considered rural highways. The four access categories for rural highways and the applicable functional classifications for each rural access category are defined in Table 10.D-1.

Table 10.D-1 Access Categories for State Highways		
Urban¹ or Rural²	Applicable Functional Classification³	
	Network Class	Location Descriptors
<u>Urban Access Categories</u>		
Urban Interstate (UINT)	INTS	LU, SU
Urban Principal Arterial (UPA)	PRAR	LU, SU
Urban Minor Arterial (UMA)	MNAR	LU, SU
Urban Collector (UCOL)	COLL	LU, SU
<u>Rural Access Categories</u>		
Rural Interstate (RINT)	INTS	M, R
Rural Principal Arterial (RPA)	PRAR	MU, M, R
Rural Minor Arterial (RMA)	MNAR	M, R
Rural Collector (RCOL)	MJCL MNCL COLL	M, R M, R MU

Notes: 1. Urban highways are located in areas with 5,000 population or more.

2. Rural highways are located in areas with less than 5,000 population.

3. Obtain the applicable functional classification from the NMSHTD Consolidated Highway DataBase (CHDB). (see Sub-Section 10.C)

- 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. The plan should achieve the optimum balance between state and local transportation planning objectives, and preserve and support the current and future functional integrity of the highway. For new alignments, the plan will facilitate development of the corridor according to accepted access management principles.
- A.** Access management plans for state highways are developed by the Department in cooperation with the appropriate local authorities through a memorandum of understanding (MOU) 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 the procedures provided in 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.
 - C.** All access management plans should be based on an engineering and planning study of the facility. The plan should specify the highway, beginning and ending points (termini), and location including the county and municipality (if applicable), and the specific standards for intersection design, median treatments, public and private driveway access design, and type of intersection traffic control that apply.
 - D.** The access management plan should identify existing and future access locations and all access-related roadway design elements including signalized intersections that are to be modified and reconstructed, relocated, removed, consolidated, added, or remain in place. The access plan should not preclude the current or future accommodation of other transportation modes including bicycles, pedestrians and transit. All traffic control devices or modifications shall meet the requirements of the *Manual on Uniform Traffic Control Devices* (Sub-Section 9.D) as required by State and Federal statutes. To the extent practical, the plan shall meet the functional characteristics and design standards of its access category and conform to all standards and specifications of 18.31.6 NMAC.
 - E.** At least one advertised public meeting should be held during the development phase of the plan. All property owners of record abutting the state highway within the plan limits shall be notified by the Department of the proposed plan and afforded the opportunity to submit any information, data and agreements regarding the proposed plan.

- 12. INTERCHANGE ACCESS MANAGEMENT PLANS:** An interchange access management plan is required for any new interchange or significant modification to an existing interchange. 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.
- A.** The interchange access management plan shall satisfy the requirements of 18.31.6.19 NMAC, Access Control Review Procedures, and Highway Commission policy (CP) 65 and Administrative Directive (AD) 222, which are both included in Appendix B. The development of an interchange access management plan should also be consistent with Section 11, Access Management Plans.
 - B.** An interchange management plan is a simplified roadway, right-of-way and access control concept plan for the intersection of roadways where an interchange structure exists or is to be built or significantly modified. The plan should include schematics for the location of all current and future access locations, public and private; existing year and design year traffic patterns, traffic signal locations, signing plans and striping plans; the acquisition of access rights where necessary; and, any other controls along the intersecting roadways that will ensure the continued protection of the functional integrity of the interchange and the highway facilities of which it is a part. The existing and anticipated future land use development potential within the interchange area should be considered in the preparation of the plan.
 - C.** Interchange management plans should be developed based on desirable standards for traffic operations and roadway design, where feasible. Access rights should be obtained along the minor street for a distance of 300 feet measured from the radius point of any ramp touch down curve. Frontage roads and other accesses, which are closer to ramp termini than the spacing standards recommended, should either be relocated, closed, or turn movements restricted as soon as conditions allow.
 - D.** A request for modification to an existing interchange or for new access to a controlled-access highway may be submitted to the Department by local governmental agencies or private interests working through local government agencies, whose jurisdiction includes the controlled highway where access is requested. A request may also be made by other state and federal agencies. For additional information, refer to Section 19 of this manual.

CHAPTER FOUR

ACCESS CATEGORY STANDARDS

Section 13

Overview

This section provides a summary description of access standards applicable to state highways in each access category described in Section 10, Access Categorization System. The summary includes a description of the intended highway function, access characteristics, speed-change lane requirements, and cross-references to various sections of the manual. The summary information is provided to assist users of this manual in locating and determining the requirements for a proposed access to a state highway.

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 this section 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 this section is provided solely to ease use of this 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.
- C. Functional Description:** A functional description is provided for each access category. The functional description is intended to describe the existing or future function of state highways included in the assigned access category. The existing design of a highway may not satisfy the required access location and design standards of the assigned category. All new access permitting and other access design decisions for a state highway should meet the access location and design standards applicable to the assigned access category.
- D. ACCESS CATEGORY: Urban Interstate (UINT) and Rural Interstate (RINT)**
 - (1) Functional Description:** Urban and rural interstate highways are fully access-controlled facilities that are intended to provide for high levels of safety and efficiency in the movement of high volumes of traffic at high speeds. They provide for interstate, interregional, intercity and, in larger urban areas, intracity travel.
 - (2)** Interstate highways are highways where full control of access has been obtained. Full control of access means that the authority to control access is exercised to

give preference to through traffic by providing access connections with selected public roads only and by prohibiting crossing at grade or direct private driveway connections. The advantages of full access control are the preservation of the as-built capacity of the highway, higher travel speed, and improved safety to highway users. Access to the interstate highway system requires approval from the NMSHTD Access Control Review Committee and the Federal Highway Administration according to the procedures described in 18.31.6.19 NMAC, Access Control Review Procedures, and related policies.

- (3) All opposing traffic movements on interstate highways shall be separated by physical constraints such as grade separations and non-traversable median separators. Access to an interstate highway, when allowed, shall consist of directional ramps, and shall be suitably spaced and designed to provide the minimum differential between the speed of the through traffic stream and the speed of the merging and diverging vehicles. Location and design of access shall be determined on an individual basis by the Department in accordance with federal regulations governing federal-aid highway design and construction. Private, direct access to an interstate facility is prohibited without exception. Except for temporary emergency and project construction access, each access allowed to an interstate shall comply with federal regulations and may require Federal Highway Administration approvals.
- (4) Auxiliary lane design and length shall meet federal interstate design practices and shall be approved by the Department. See Sub-Section 17.C for general guidance.
- (5) Temporary access may be allowed for official emergencies. Temporary access may be allowed by a NMSHTD District Engineer with FHWA concurrence where directly related to an interstate highway construction project. Temporary construction-related access outside the construction zone may be allowed only if no reasonable alternative exists and the access meets Department regulations. Such access may also require FHWA approval. Temporary access within a construction zone shall be incorporated into the approved traffic control plans.
- (6) Access onto interstate highway right-of-way but not to the roadway may be permitted by special Department license or agreement if approved by the FHWA and the Deputy Secretary for Planning and Design, where such access will not connect to the main roadway, and may be for such purposes as bike and pedestrian paths, drainage, underpasses, overpasses, utilities and related public necessities which will not connect to or interfere with the main roadway or ramps, or cause any type of highway safety, operational, or design deficiencies.
- (7) All private direct access to main interstate roadways, access ramps, and structures is strictly prohibited unless specifically authorized for official temporary highway construction purposes under Department contract. Access to a frontage road, built in association with an interstate highway, may be permitted in accordance with the assigned access category of the frontage road.
- (8) A new interchange or a significant modification to an interchange on an interstate highway requires an interchange management plan (see Section 12).

E. ACCESS CATEGORY: Urban Principal Arterial (UPA)

- (1) **Functional Description:** The urban principal arterial system serves the major centers of activity of urbanized areas, the highest traffic volume corridors, the longest trip desires, and carries a high proportion of the total urban area travel on a minimum of mileage. The system is integrated both internally and between major rural connections.

The principal arterial system carries most of the trips entering and leaving an urban area, as well as most of the through movements bypassing central city areas. In addition, significant intra-area travel, such as between central business districts and outlying residential areas, between major inner city communities, and between major suburban centers, is served by this class of highway. In urbanized areas, this system provides continuity for all rural arterials that intercept the urban boundary.

- (2) **General Access Characteristics:** The primary functional responsibility of urban principal arterials is through traffic movement. Many urban principal arterials are fully or partially access controlled. Direct access service to abutting properties is subordinate to providing service to through traffic movements. Access location and spacing standards are strictly enforced.
- (3) **Performance:** The operational performance of UPA facilities should meet LOS D standards at a minimum. See Sub-Section 15.C, Table 15.C-1.
- (4) **Traffic Signal Spacing:** The minimum spacing of signalized intersections is $\frac{1}{2}$ mile, except on UPA highways with posted speeds equal to or greater than 55 mph where 1-mile spacing is required. Preference is given to through traffic movement and progression bandwidths of 40 to 50 percent for two-way travel are required. See Sub-Section 15.F, Table 15.F-1.
- (5) **Spacing of Unsignalized Accesses - Full Access:** The minimum spacing of full-access unsignalized intersections is $\frac{1}{4}$ mile. On UPA highways with non-traversable medians, this represents the allowable spacing between median openings. See Sub-Section 18.C, Table 18.C-1, and Sub-Section 18.D.
- (6) **Spacing of Unsignalized Access - Partial Access:** The minimum spacing of unsignalized access points and driveways where some turn movements may be restricted, depending on the type of median control, varies by posted speed limit as follows (see Sub-Section 18.C, Table 18.C-1):
- ≤ 30 mph: 200 feet
 - 35 to 40 mph: 325 feet
 - 45 to 50 mph: 450 feet
 - ≥ 55 mph: 625 feet
- (7) **Corner Clearance:** When property is adjacent to an intersection, proposed access points on the approach or departure sides of the intersection should be controlled. Corner clearances should be consistent with the access spacing standards defined in Table 18.C-1.

- (8) **Left-turn and Right-turn Acceleration Lanes:** The need for left-turn and right-turn acceleration lanes is based on safety conditions associated with site-specific conditions. The Department may require acceleration lanes wherever safety concerns occur at a proposed access.
- (9) **Left-turn Deceleration Lanes:** Left-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of left-turns expected at an access (see Sub-Section 17.B, Table 17.B-1 and Table 17.B-2). Left-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following left-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	46 left-turns per hour	56 left-turns per hour
35 to 40 mph	36 left-turns per hour	46 left-turns per hour
45 to 55 mph	26 left-turns per hour	36 left-turns per hour

- (10) **Right-turn Deceleration Lanes:** Right-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of right-turns expected at an access (see Sub-Section 17.B, Table 17.B-1 and Table 17.B-2). Right-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following right-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	46 right-turns per hour	56 right-turns per hour
35 to 40 mph	41 right-turns per hour	46 right-turns per hour
45 to 55 mph	36 right-turns per hour	41 right-turns per hour

- (11) **Other References to Sections of the Manual:**

- Definitions of Terms: Section 7
- Access Categories: Section 10
- Permitting Process: Section 14
- Traffic Study Requirements: Section 16
- Design Specifications: Section 18
- Access Control Review Procedures: Section 19

F. ACCESS CATEGORY: Urban Minor Arterial (UMA)

- (1) **Functional Description:** The urban minor arterial system interconnects with and augments the urban principal arterial system. It accommodates trips of moderate length at a lower level of travel mobility than principal arterials. The urban minor arterial system distributes travel to geographic areas smaller than those identified for higher function roadways. Ideally, the urban minor arterial system provides intra-community travel continuity but does not penetrate identifiable neighborhoods. This system includes urban connections to rural collector roads where such connections have not been classified as urban principal arterials.
- (2) **General Access Characteristics:** The urban minor arterial system places more emphasis on land access than the urban principal arterial system and offers lower traffic mobility. However, while greater direct access service to abutting properties is allowed, service to through traffic movements is preferred over land access.
- (3) **Performance:** The operational performance of UMA facilities should meet LOS D standards at a minimum. See Sub-Section 15.C, Table 15.C-1.
- (4) **Traffic Signal Spacing:** The minimum spacing of signalized intersections varies by posted speed limit and is 1/3 mile for posted speeds of 40 mph or less, 1/2 mile for 45 to 50 mph, and 1 mile for 55 mph or more. Preference is given to through traffic movement and progression bandwidths of 30 to 40 percent for two-way travel are required. See Sub-Section 15.F, Table 15.F-1.
- (5) **Spacing of Unsignalized Accesses - Full Access:** The minimum spacing of full-access unsignalized intersections on UMA highways with posted speeds ranging from 30 mph to 50 mph is 660 feet, and is 1,320 feet on UMA highways with posted speeds of 55 mph or more. On highways with non-traversable medians, this represents the allowable spacing between median openings. See Sub-Section 18.C, Table 18.C-1, and Sub-Section 18.D.
- (6) **Spacing of Unsignalized Access - Partial Access:** The minimum spacing of unsignalized access points and driveways where some turn movements may be restricted, depending on the type of median control, varies by posted speed limit as follows (see Sub-Section 18.C, Table 18.C-1):
 - ≤ 30 mph: 175 feet
 - 35 to 40 mph: 275 feet
 - 45 to 50 mph: 400 feet
 - ≥ 55 mph: 600 feet
- (7) **Corner Clearance:** When property is adjacent to an intersection, proposed access points on the approach or departure sides of the intersection should be controlled. Corner clearances should be consistent with the access spacing standards defined in Table 18.C-1.

- (8) **Left-turn and Right-turn Acceleration Lanes:** The need for left-turn and right-turn acceleration lanes is based on safety conditions associated with site-specific conditions. The Department may require acceleration lanes wherever safety concerns occur at a proposed access.
- (9) **Left-turn Deceleration Lanes:** Left-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of left-turns expected at an access (see Sub-Section 17.B, Table 17.B-1 and Table 17.B-2). Left-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following left-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	46 left-turns per hour	56 left-turns per hour
35 to 40 mph	36 left-turns per hour	46 left-turns per hour
45 to 55 mph	26 left-turns per hour	36 left-turns per hour

- (10) **Right-turn Deceleration Lanes:** Right-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of right-turns expected at an access (see Sub-Section 17.B, Table 17.B-1 and Table 17.B-2). Right-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following right-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	46 right-turns per hour	56 right-turns per hour
35 to 40 mph	41 right-turns per hour	46 right-turns per hour
45 to 55 mph	36 right-turns per hour	41 right-turns per hour

- (11) **Other References to Sections of the Manual**

- Definitions of Terms: Section 7
- Access Categories: Section 10
- Permitting Process: Section 14
- Traffic Study Requirements: Section 16
- Design Specifications: Section 18
- Access Control Review Procedures: Section 19

G. ACCESS CATEGORY: Urban Collector Highways (UCOL)

- (1) **Functional Description:** The urban collector highway system provides both land access service and traffic circulation within residential neighborhoods and commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to their ultimate destinations. The collector highway system also collects traffic from local streets in residential areas and channels it into the arterial street system.
- (2) **General Access Characteristics:** Collector highways balance the need to provide traffic movement with the need to provide property access. A higher level of property access is allowed on the collector street system than is allowed on the principal and minor arterial street systems.
- (3) **Performance:** The operational performance of UCOL highway segments should meet LOS C standards while LOS D standards are acceptable for signalized and unsignalized intersections on UCOL facilities, at a minimum. See Sub-Section 15.C, Table 15.C-1.
- (4) **Traffic Signal Spacing:** The minimum spacing of signalized intersections varies by posted speed limit and is 1/5 mile for 30 mph or less, 1/4 mile for 35 to 40 mph, and 1/3 mile for 45 to 55 mph. Progression bandwidths for through traffic movement are 25 to 35 percent for two-way travel. See Sub-Section 15.F, Table 15.F-1.
- (5) **Spacing of Unsignalized Accesses - Full Access:** The minimum spacing of full-access unsignalized intersections on UCOL highways with posted speeds equal to or below 40 mph is 330 feet, and is 660 feet on UCOL highways with posted speeds from 45 mph to 55 mph. On highways with non-traversable medians, this represents the allowable spacing between median openings. See Sub-Section 18.C, Table 18.C-1, and Sub-Section 18.D.
- (6) **Spacing of Unsignalized Access - Partial Access:** The minimum spacing of unsignalized access points and driveways where some turn movements may be restricted, depending on the type of median control, varies by posted speed limit as follows (see Sub-Section 18.C, Table 18.C-1):
 - ≤ 30 mph: 150 feet
 - 35 to 40 mph: 225 feet
 - 45 to 55 mph: 350 feet
- (7) **Corner Clearance:** When property is adjacent to an intersection, proposed access points on the approach or departure sides of the intersection should be controlled. Corner clearances should be consistent with the access spacing standards defined in Table 18.C-1.

- (8) **Left-turn and Right-turn Acceleration Lanes:** The need for left-turn and right-turn acceleration lanes is based on safety conditions associated with site-specific conditions. The Department may require acceleration lanes wherever safety concerns occur at a proposed access.
- (9) **Left-turn Deceleration Lanes:** Left-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of left-turns expected at an access (see Sub-Section 17.B, Table 17.B-1 and Table 17.B-2). Left-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following left-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	46 left-turns per hour	56 left-turns per hour
35 to 40 mph	36 left-turns per hour	46 left-turns per hour
45 to 55 mph	26 left-turns per hour	36 left-turns per hour

- (10) **Right-turn Deceleration Lanes:** Right-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of right-turns expected at an access (see Sub-Section 17.B, Table 17.B-1 and Table 17.B-2). Right-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following right-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	46 right-turns per hour	56 right-turns per hour
35 to 40 mph	41 right-turns per hour	46 right-turns per hour
45 to 55 mph	36 right-turns per hour	41 right-turns per hour

- (11) **Other References to Sections of the Manual:**

- Definitions of Terms: Section 7
- Access Categories: Section 10
- Permitting Process: Section 14
- Traffic Study Requirements: Section 16
- Design Specifications: Section 18

H. ACCESS CATEGORY: Rural Principal Arterial (RPA)

- (1) **Functional Description:** The rural principal arterial system consists of a network of highways that provide for long-distance corridor movement with trip lengths serving statewide and interstate travel. Personal travel and goods movement between the larger urban areas in the state is served by the rural principal arterial system efficiently and at high travel speeds.
- (2) **General Access Characteristics:** Direct access service to abutting land is subordinate to providing service to through traffic movements. Many rural principal arterials are fully or partially access controlled. Access location and spacing standards are strictly enforced.
- (3) **Performance:** The operational performance of RPA facilities should meet LOS C standards at a minimum, with the exception of unsignalized access points which should meet LOS D standards. See Sub-Section 15.C, Table 15.C-1.
- (4) **Traffic Signal Spacing:** The minimum spacing of signalized intersections is $\frac{1}{2}$ mile on RPA highways with posted speeds of 40 mph or less, and is 1 mile on RPA highways with posted speeds of 45 mph or more. Preference is given to through traffic movement and progression bandwidths of 45 to 50 percent for two-way travel are required. See Sub-Section 15.F, Table 15.F-1.
- (5) **Spacing of Unsignalized Accesses - Full Access:** The minimum spacing of full-access unsignalized intersections is $\frac{1}{4}$ mile on RPA highways with posted speed limits of 40 mph or less, and is $\frac{1}{2}$ mile on RPA highways with posted speeds of 45 mph or more. On highways with non-traversable medians, this represents the allowable spacing between median openings. See Sub-Section 18.C, Table 18.C-1, and Sub-Section 18.D.
- (6) **Spacing of Unsignalized Access - Partial Access:** The minimum spacing of unsignalized access points and driveways where some turn movements may be restricted, depending on the type of median control, varies by posted speed limit as follows (see Sub-Section 18.C, Table 18.C-1):
 - ≤ 30 mph: 225 feet
 - 35 to 40 mph: 350 feet
 - 45 to 50 mph: 500 feet
 - ≥ 55 mph: 775 feet
- (7) **Corner Clearance:** When property is adjacent to an intersection, proposed access points on the approach or departure sides of the intersection should be controlled. Corner clearances should be consistent with the access spacing standards defined in Table 18.C-1.
- (8) **Left-turn and Right-turn Acceleration Lanes:** The need for left-turn and right-turn acceleration lanes is based on safety conditions associated with site-specific conditions. The Department may require acceleration lanes wherever safety concerns occur at a proposed access.

- (9) **Left-turn Deceleration Lanes:** Left-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of left-turns expected at an access (see Sub-Section 17.B, Table 17.B-3 and Table 17.B-4). Left-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following left-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	26 left-turns per hour	36 left-turns per hour
35 to 40 mph	21 left-turns per hour	26 left-turns per hour
45 to 55 mph	16 left-turns per hour	21 left-turns per hour
> 55 mph	11 left-turns per hour	16 left-turns per hour

- (10) **Right-turn Deceleration Lanes:** Right-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of right-turns expected at an access (see Sub-Section 17.B, Table 17.B-5 and Table 17.B-6). Right-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following right-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	31 right-turns per hour	36 right-turns per hour
35 to 40 mph	31 right-turns per hour	36 right-turns per hour
45 to 55 mph	26 right-turns per hour	31 right-turns per hour
> 55 mph	21 right-turns per hour	21 right-turns per hour

- (11) **Other References to Sections of the Manual**

- Definitions of Terms: Section 7
- Access Categories: Section 10
- Permitting Process: Section 14
- Traffic Study Requirements: Section 16
- Design Specifications: Section 18
- Access Control Review Procedures: Section 19

I. ACCESS CATEGORY: Rural Minor Arterial (RMA)

- (1) **Functional Description:** The rural minor arterial system provides linkages between cities, larger towns and other traffic generators serving interstate, intrastate and intercounty travel needs. Rural minor arterials provide for relatively high travel speeds and minimum interference to through movement.
- (2) **General Access Characteristics:** Direct access service to abutting land is subordinate to providing service to through traffic movements.
- (3) **Performance:** The operational performance of RMA facilities should meet LOS C standards at a minimum, with the exception of unsignalized access points which should meet LOS D standards. See Sub-Section 15.C, Table 15.C-1.
- (4) **Traffic Signal Spacing:** The minimum spacing of signalized intersections varies by posted speed limit and is 1/3 mile for 30 mph or less, 1/2 mile for 35 to 50 mph, and 1 mile for 55 mph or more. Preference is given to through traffic movement and progression bandwidths of 35 to 45 percent for two-way travel are required. See Sub-Section 15.F, Table 15.F-1.
- (5) **Spacing of Unsignalized Accesses - Full Access:** The minimum spacing of full-access unsignalized intersections varies by posted speed limit and is 660 feet for 40 mph or less, 1,320 feet for 45 to 50 mph, and 2,640 feet for 55 mph or more. On highways with non-traversable medians, this represents the allowable spacing between median openings. See Sub-Section 18.C, Table 18.C-1, and Sub-Section 18.D.
- (6) **Spacing of Unsignalized Access - Partial Access:** The minimum spacing of unsignalized access points and driveways where some turn movements may be restricted, depending on the type of median control, varies by posted speed limit as follows (see Sub-Section 18.C, Table 18.C-1):
 - ≤ 30 mph: 200 feet
 - 35 to 40 mph: 325 feet
 - 45 to 50 mph: 450 feet
 - ≥ 55 mph: 725 feet
- (7) **Corner Clearance:** When property is adjacent to an intersection, proposed access points on the approach or departure sides of the intersection should be controlled. Corner clearances should be consistent with the access spacing standards defined in Table 18.C-1.
- (8) **Left-turn and Right-turn Acceleration Lanes:** The need for left-turn and right-turn acceleration lanes is based on safety conditions associated with site-specific conditions. The Department may require acceleration lanes wherever safety concerns occur at a proposed access.

- (9) **Left-turn Deceleration Lanes:** Left-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of left-turns expected at an access (see Sub-Section 17.B, Table 17.B-3 and Table 17.B-4). Left-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following left-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	26 left-turns per hour	36 left-turns per hour
35 to 40 mph	21 left-turns per hour	26 left-turns per hour
45 to 55 mph	16 left-turns per hour	21 left-turns per hour
> 55 mph	11 left-turns per hour	16 left-turns per hour

- (10) **Right-turn Deceleration Lanes:** Right-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of right-turns expected at an access (see Sub-Section 17.B, Table 17.B-5 and Table 17.B-6). Right-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following right-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	31 right-turns per hour	36 right-turns per hour
35 to 40 mph	31 right-turns per hour	36 right-turns per hour
45 to 55 mph	26 right-turns per hour	31 right-turns per hour
> 55 mph	21 right-turns per hour	21 right-turns per hour

- (11) **Other References to Sections of the Manual**

- Definitions of Terms: Section 7
- Access Categories: Section 10
- Permitting Process: Section 14
- Traffic Study Requirements: Section 16
- Design Specifications: Section 18
- Access Control Review Procedures: Section 19

J. ACCESS CATEGORY: Rural Collector Highways (RCOL)

- (1) **Functional Description:** Rural collector routes generally serve travel of primarily intra-county rather than statewide importance, and constitute those routes on which predominant travel distances are shorter than on arterial routes. More moderate travel speeds are typical of collector routes. The rural collector system fulfills intra-county travel needs that are not served by the arterial street system.
- (2) **General Access Characteristics:** Rural collector highways balance the need to provide traffic movement with the need to provide property access. A higher level of property access is allowed on the collector highway system than is allowed on the principal and minor arterial street systems.
- (3) **Performance:** The operational performance of RCOL highway segments should meet LOS B standards while LOS C standards are acceptable for signalized and unsignalized intersections on RCOL facilities, at a minimum. See Sub-Section 15.C, Table 15.C-1.
- (4) **Traffic Signal Spacing:** The minimum spacing of signalized intersections varies by posted speed limit and is 1/4 mile for 30 mph or less, 1/3 mile for 35 to 40 mph, and 1/2 mile for speeds of 45 mph or more. Progression bandwidths for through traffic movement are 30 to 45 percent for two-way travel depending on the posted speed. See Sub-Section 15.F, Table 15.F-1.
- (5) **Spacing of Unsignalized Accesses - Full Access:** The minimum spacing of full-access unsignalized intersections on RCOL highways varies by posted speed and is 330 feet at 30 mph or less, is 660 feet for 35 to 40 mph, and is 1,320 feet on RCOL highways with posted speeds equal to or greater than 45 mph. On highways with non-traversable medians, this represents the allowable spacing between median openings. See Sub-Section 18.C, Table 18.C-1, and Sub-Section 18.D.
- (6) **Spacing of Unsignalized Access - Partial Access:** The minimum spacing of unsignalized access points and driveways where some turn movements may be restricted, depending on the type of median control, varies by posted speed limit as follows (see Sub-Section 18.C, Table 18.C-1):
 - ≤ 30 mph: 200 feet
 - 35 to 40 mph: 300 feet
 - 45 to 50 mph: 425 feet
 - ≥ 55 mph: 550 feet
- (7) **Corner Clearance:** When property is adjacent to an intersection, proposed access points on the approach or departure sides of the intersection should be controlled. Corner clearances should be consistent with the access spacing standards defined in Table 18.C-1.

- (8) **Left-turn and Right-turn Acceleration Lanes:** The need for left-turn and right-turn acceleration lanes is based on safety conditions associated with site-specific conditions. The Department may require acceleration lanes wherever safety concerns occur at a proposed access.
- (9) **Left-turn Deceleration Lanes:** Left-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of left-turns expected at an access (see Sub-Section 17.B, Table 17.B-3 and Table 17.B-4). Left-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following left-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	26 left-turns per hour	36 left-turns per hour
35 to 40 mph	21 left-turns per hour	26 left-turns per hour
45 to 55 mph	16 left-turns per hour	21 left-turns per hour
> 55 mph	11 left-turns per hour	16 left-turns per hour

- (10) **Right-turn Deceleration Lanes:** Right-turn deceleration lane requirements vary by posted speed and are based on the traffic volume on the highway and the number of right-turns expected at an access (see Sub-Section 17.B, Table 17.B-5 and Table 17.B-6). Right-turn deceleration lanes are required, regardless of the traffic volume on the highway, when the following right-turning volumes are expected:

<i>Posted Speed</i>	<i>Two-lane Highway</i>	<i>Multi-lane Highway</i>
≤ 30 mph	31 right-turns per hour	36 right-turns per hour
35 to 40 mph	31 right-turns per hour	36 right-turns per hour
45 to 55 mph	26 right-turns per hour	31 right-turns per hour
> 55 mph	21 right-turns per hour	21 right-turns per hour

(11) **Other References to Sections of the Manual**

- Definitions of Terms: Section 7
- Access Categories: Section 10
- Permitting Process: Section 14
- Traffic Study Requirements: Section 16
- Design Specifications: Section 18

CHAPTER FIVE

PERMITTING PROCESS

Section 14

Overview

A state highway access permit is required to obtain permission to construct, modify, relocate or close a vehicular access where such work will be within state highway right-of-way. A complete application must be submitted to the appropriate NMSHTD District office to obtain permission. Application requirements can be obtained from the District Traffic Engineer or the District Permit Agent responsible for the highway segment where access is requested. Construction may not begin until the access permit is approved and issued by the Department. Incomplete applications may be rejected and unlawful access points may be closed.

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:**
 - (1) Existing Lawful Access, Modification or Transfer:** An existing lawful access includes any access for which the property owner, or local governmental agency, has obtained a proper access permit from the Department. Physical improvements to a lawful access may be made with the permission of the Department. A lawful access permit may be transferred when a property interest is sold, or otherwise traded, when use of the access does not change (see Sub-Section 7.O) and permission is granted by the Department. Permission to modify or transfer a lawful access permit shall be obtained by application.
 - (2) New Private Access (Individual Use):** A new private access is an entrance to and/or exit from a residential dwelling or dwellings, farm, or ranch adjacent to a state highway for the exclusive use and benefit of the owners.
 - (3) New Subdivision Access:** A new private subdivision access is an entrance to and/or exit from a tract of land which has been subdivided in accordance with the laws of the State of New Mexico.
 - (4) New Public Access:** A new public access includes all approaches to a state highway from roads and streets not currently implemented that will be dedicated or maintained by local government agencies. New access drives to schools and other public places or buildings of a like character proposed along a state highway are also considered new public access.

- (5) **New Commercial Access:** A new commercial driveway is an entrance to and/or exit from any proposed commercial, industrial or retail business, or similar type of establishment, adjacent to a state highway.
- (6) **Temporary Construction Access:** A temporary construction access is a time-limited driveway provided for a specific property until construction of a lawful access is complete pursuant to permit requirements.
- (7) **Temporary Access:** A temporary access is a time-limited driveway for a specific property, use and estimated traffic volume. The duration of a temporary access permit is determined by the District Traffic Engineer on a case-by-case basis.
- (8) **Emergency Access:** An emergency access is a driveway that is provided for exclusive use by police, fire, and emergency service vehicles when responding to an emergency service situation. Such driveways do not include the access to a police station, firehouse, or emergency service facility.
- (9) **Field Access:** A field access is an access to undeveloped or agricultural property that has a yearly average use of less than two vehicle trips per day.
- (10) **Access Breaks in Established Access Control Lines:** New access permits may be requested along state highways where access control lines have been established (e.g., controlled-access highways, interstate highways). In addition to compliance with the permitting procedures described in this section, review and approval of the access break shall be required by the Access Control Review Committee according to 18.31.6.19 NMAC.
- (11) **Illegal Access:** Illegal access includes any direct access to a state highway that was constructed without an access permit approved and issued by the Department. The Department may notify the property owner, or illegal access user, of pending action, but may install physical barriers to prohibit use of the access until a Department-approved permit is obtained. If an approved permit is not obtained, the Department has the authority to close and remove the 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 (Sub-Section 7.O):** 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 Section 16, 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.

- (2) **Permit Application Form:** All applications shall be made on the approved NMSHTD permit application form, "Application for Permit to Construct an Access or Median Opening on Public Right-of-Way." A copy of the permit form is provided in Appendix C, and can be found on the NMSHTD Access Management web site.
- (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. District boundaries and headquarters are shown Appendix C. Addresses of the District offices are listed below.
 - (a) District 1 Traffic Engineer
New Mexico State Highway and Transportation Department
P. O. Box 231
Deming, New Mexico 88031-0231
(505) 546-2603
 - (b) District 2 Traffic Engineer
New Mexico State Highway and Transportation Department
P. O. Box 1457
Roswell, New Mexico 88202-1457
(505) 624-3300
 - (c) District 3 Traffic Engineer
New Mexico State Highway and Transportation Department
7500 East Frontage Road
P. O. Box 91750
Albuquerque, New Mexico 87199-1750
(505) 841-2700
 - (d) District 4 Traffic Engineer
New Mexico State Highway and Transportation Department
P. O. Box 10
Las Vegas, New Mexico 87701-0030
(505) 454-3600
 - (e) District 5 Traffic Engineer
New Mexico State Highway and Transportation Department
P. O. Box 4127
Coronado Station
Santa Fe, New Mexico 87502-4127
(505) 827-9500
 - (f) District 6 Traffic Engineer
New Mexico State Highway and Transportation Department
P. O. Box 2159
Milan, New Mexico 87021-2159
(505) 285-3200

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 Paragraph 14.E.1). 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 follows:
 - (a) Highway and driveway plan and profile.
 - (b) Site grading plan.
 - (c) Drainage plan for the site showing impact to highway right-of-way.
 - (d) Map and letters detailing utility locations in and along the highway before and after the access drive construction.
 - (e) Subdivision zoning or development plan.
 - (f) Property map indicating other access and abutting public roads and streets.
 - (g) Proposed access design details.
 - (h) Environmental reports/Archeological review.
 - (i) Certification that contaminated property has been cleaned.
- (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 Section 15 and Section 16. 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 this 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 this 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 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 Section 19. The Department should work with the applicant in an attempt to resolve all difficulties prior to taking final action on the application. 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 Sub-Section 14.I. 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 Sub-Section 14.N.

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 Paragraph 14.I.2.

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. Refer to Sub-Section 16.F for a discussion of contributory costs by the permittee. 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 on Uniform Traffic Control Devices for Streets and Highways* (Sub-Section 9.D). 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 Paragraph 14.J.12). 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 18.31.6 NMAC (see Paragraph 14.C.1.).
- (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 Paragraph 14.N.10 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.

CHAPTER SIX

TRAFFIC ENGINEERING DATA AND IMPACT STUDIES

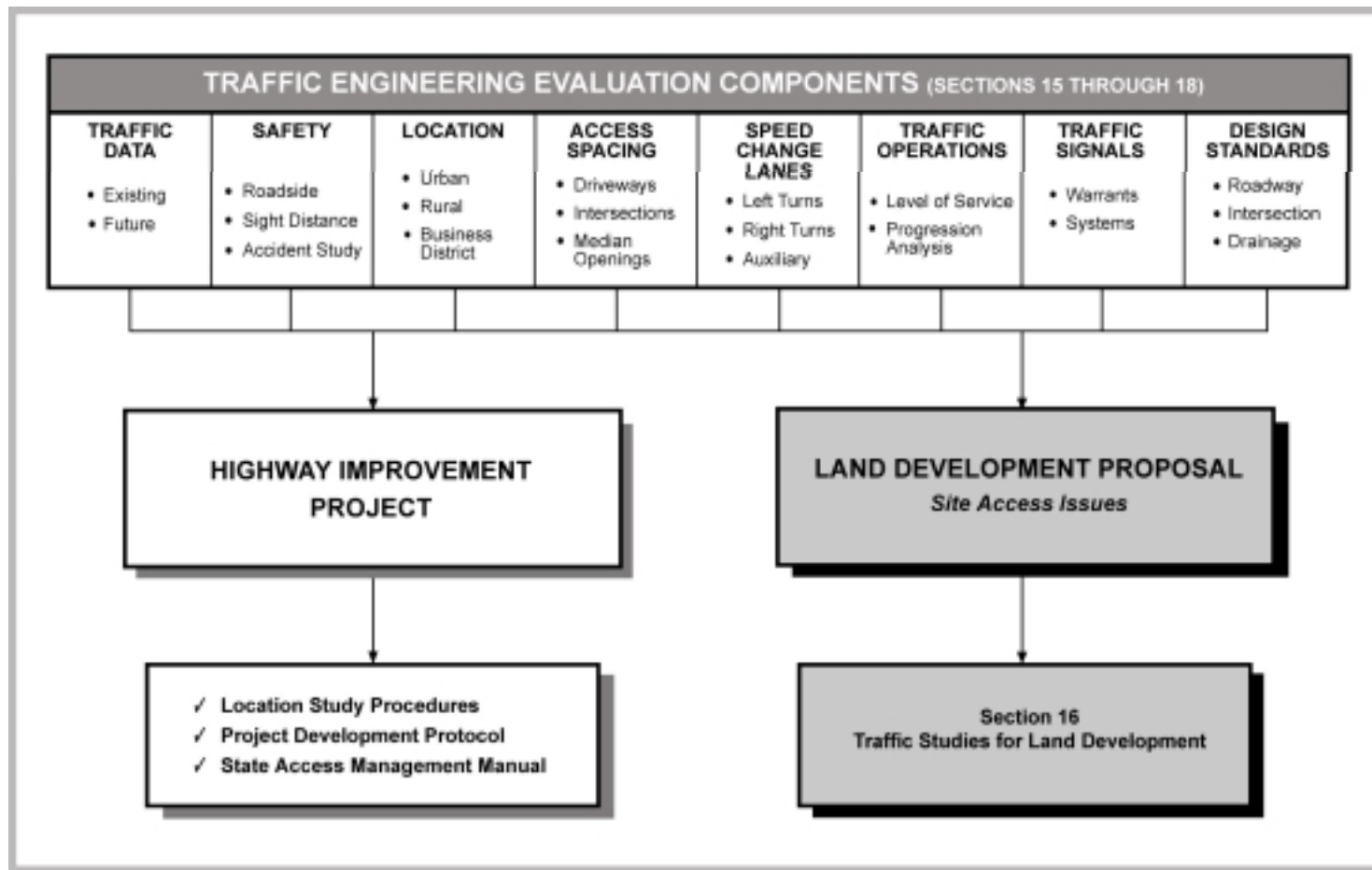
Sections 15 and 16

Overview

A traffic engineering evaluation is required for all proposed access points that are requested along the state highway system. The extent of the traffic engineering evaluation is directly related to the scope of the highway improvement under consideration, or to the size and type of land use for which access is requested. For small development proposals, a simple traffic study will likely be sufficient to address the required traffic evaluation, while for large developments, a comprehensive traffic impact analysis will be required. Section 15 discusses the traffic performance standards for highways and intersections, the traffic data required to complete the evaluation, and information regarding traffic signal control at intersections. Section 16 describes the three-tiered study approach that is used to determine the type and extent of the traffic study required for a proposed land development project.

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 Paragraph 14.D.1). 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. Section 16 describes the specific traffic study process that shall be followed to address the traffic engineering evaluation requirement for a land development project. Section 17 defines the criteria used to determine when speed-change lanes are required or should be considered at existing or proposed access points along the state highway system. Design standards applicable to the traffic engineering evaluation are provided in Section 18. A summary illustration of the traffic engineering evaluation components is provided on the following page.
- B. Scope of Evaluation:** The location and design of driveways, intersections and median openings can affect the ability of a highway to operate within its functional classification. 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 Sub-Section 7.AV). 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).



SUMMARY ILLUSTRATION OF TRAFFIC ENGINEERING EVALUATION COMPONENTS

- (1) **Land Development Projects:** A land development project includes any project to develop or redevelop property adjacent or in close proximity to a state highway where direct or indirect access to the property is requested from the state highway. The traffic engineering evaluation is conducted to address specific access issues associated with the proposed development. Sections 15 and 16 describe the traffic study procedures to be followed when new or modified access is requested along a state highway for property access.
- (2) **Highway Improvement Projects:** Highway improvement projects include projects to improve a roadway segment or intersection facility to protect and maintain the safe and efficient operation of the state transportation system. The traffic engineering evaluation is conducted to collectively address access issues of the facility as well as other transportation needs. The project development process for highway improvement projects is described in other Department and federal guidebooks. The *NMSHTD Location Study Procedures, A Guidebook for Alignment and Corridor Studies*, should be referenced for such projects (see Paragraph 9.B.9.). Rule 18.31.6 NMAC supercedes other Department guidebooks when resolving access issues.

C. Traffic Operational Performance:

- (1) **Level of Service:** 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 analyses should be performed using the current versions of the Highway Capacity Software, TeaPac, or other analysis packages approved by the NMSHTD Traffic Technical Support engineer. Level of service calculations should be based on the operational analysis techniques of the software.
- (2) **Level of Service by Access Category:** Level of service standards are defined by Access Category. Table 15.C-1 identifies the minimum acceptable LOS standards by access category and facility type. Level of service (LOS) F shall not be accepted for individual movements.
 - (a) **Performance Measures:** Performance measures for each facility type are defined in the *Highway Capacity Manual (HCM)* with the following clarifications:
 - i. **Signalized Intersections:** Performance statistics should be reported for each intersection approach and for the overall intersection.
 - ii. **Unsignalized Intersections:** Performance statistics should be reported for each movement and intersection approach for which a delay and level of service estimate is calculated.
- (3) **Exception to Minimum Acceptable LOS Requirements:** Where existing condition or future-year base condition (i.e., no-build) levels of service are below the minimum acceptable standards defined in Table 15.C-1, mitigation is required to maintain level of service at existing/base condition levels, at a minimum. Further deterioration of level of service is not acceptable.

Table 15.C-1 Minimum Acceptable Level of Service Standards								
Facility Type ¹	Access Categories (see Sub-Section 10.D)							
	UINT	UPA	UMA	UCOL	RINT	RPA	RMA	RCOL
Freeway Sections	D	-	-	-	C	-	-	-
Ramp Junctions	D	- 2	- 2	- 2	C	- 2	- 2	- 2
Weaving Areas	D	- 2	- 2	- 2	C	- 2	- 2	- 2
Multi-lane Highways	-	D	D	C	-	C	C	B
Two-Lane Highways	-	D	D	C	-	C	C	B
Signalized Intersections	-	D	D	D	-	C	C	C
Unsignalized Intersections	-	D	D	D	-	D	D	C

Notes: 1. The Facility Types are per the Highway Capacity Manual.

2. Evaluate safety and operational concerns using the best available technique.

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 used for an engineering evaluation should be collected consistent with the current edition of the *New Mexico State Traffic Monitoring Standards* (NMSTMS). 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. The District Traffic Engineer may extend the one-year period based on site-specific conditions.

- (1) **Defining the Data Collection Period:** At the traffic analysis scoping meeting held between the permittee and the District Traffic Engineer, which is described in greater detail in Section 16, the permittee should recommend the periods for traffic data collection. The periods for traffic data collection may include typical weekday conditions, special traffic conditions, or both. Concurrence from the District Traffic Engineer should be obtained prior to data collection activities.
- (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. Typical weekday traffic data should include average weekday traffic (AWDT) volume and peak hour traffic volumes. A peak one-hour travel period should be defined during the morning (AM) and the afternoon/evening (PM) peak periods of a weekday, at a minimum. Intersection turn movement counts should be conducted on typical weekdays between 0600 and 1900 hours using one of two methods.
 - (a) Turn movement counts should be conducted for a total of nine hours if a standard 48-hour volume count for the highest-volume leg of the intersection is not available to identify the peak one-hour travel periods. The nine-hour count should be comprised of three-hour counts during the AM (0700 to 1000), Noon (1100 to 1400) and PM (1500 to 1800) peak periods. The time frames may be adjusted with concurrence of the District Traffic Engineer when the peak travel periods are expected to occur earlier or later than the time frames specified in the NMSTMS.

- (b) Intersection turn movement counts may be conducted for a minimum of six hours if the peak one-hour travel periods have been established based on a standard 48-hour volume count conducted on the highest-volume leg of the intersection. For each peak period of the traffic analysis, two-hour counts should be conducted to capture one-half hour before and one-half hour after the established peak hours.
 - (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. When special traffic conditions exist or are expected, the traffic count duration(s) should be specified at the scoping meeting held between the permittee and the District Traffic Engineer. The duration of special intersection turn movement counts should be based on the activity or event and be sufficient to capture the peak travel condition. Coverage counts should be conducted for the entire weekend in accordance with the NMSTMS, or consistent with Sub-Paragraph 15.D.2.b when the special event occurs on a weeknight. Average weekend daily traffic (AWET) volume should be obtained when the special traffic condition occurs on Saturday or Sunday.
 - (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.
 - (5) **Unbiased Traffic:** Traffic data should be collected along each state highway segment and each major intersection within the project study area (the study area for land development projects is defined in Section 16). Unless specifically requested by the District Traffic Engineer, traffic counts should not be conducted on or near holidays when traffic may not be representative of average daily traffic, or when special conditions exist that could affect traffic volumes such as incidents, construction activity, detours, or inclement weather.
 - (6) **Adjustment Factors:** Existing condition traffic count data may be adjusted for seasonal variation using monthly adjustment factors (MAFs), if appropriate. The appropriate MAFs may be obtained from the NMSHTD Planning Division, or the Metropolitan Planning Organization (MPO) or municipality having jurisdiction over the highway facility.
- E. Design Hour Volume:** For the purposes of this manual, design hour volume (DHV) is synonymous with the term peak-hour volume that is used for traffic operations analysis. Design hour volumes 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. The District Traffic Engineer may reduce the DHV requirement for a typical weekday to either the AM peak or the PM peak, whichever is critical. For land development projects,

the DHV should be based on the traffic data collected to establish existing traffic conditions, as specified in Paragraphs 15.D.2. and 15.D.3., 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. Refer to Section 16 for further information on design hour volumes for land development projects.

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 study shall be conducted in accordance with the MUTCD, as clarified in sections of this manual, and shall include a traffic signal warrant analysis.

(1) Traffic Signal Warrants: A traffic signal warrant analysis should be conducted for all access points where an unsignalized access level of service is or is expected to be lower than the minimum level designated in Table 15.C-1. Additionally, warrants should be examined at intersections where safety concerns are identified. The signal warrants contained in the *Manual on Uniform Traffic Control Devices* (MUTCD), current edition (Sub-Section 9.D), shall be used for the evaluation. The warrant analysis should be based on imminent conditions. The NMSHTD Traffic Technical Support Section will review and approve all signal warrant studies.

- (a)** A traffic signal may be installed if an MUTCD traffic signal warrant is met. The Department will determine the need for traffic signal control based on the warrant analysis.
- (b)** 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 Sub-Section 14.J). The funding requirements will be determined by the Department.

(2) Traffic Signal Systems: A traffic signal system is any series of two or more signals that are interconnected to facilitate continuous travel along a highway. The aspects of a traffic signal system that should be addressed when traffic signal control is required include the traffic signal spacing, through traffic progression, and system interconnection requirements.

- (a) 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. The following factors should be addressed when determining the proper location for traffic signal control.

- i. *Minimum Spacing Requirements* – Table 15.F-1 contains the minimum signalized intersection spacing requirements by access category and posted speed.
 - ii. *Existing Signal Systems* – New traffic signals should be approved only where the signalization will fit into the current signal system with minimal effect on progression speed and through bandwidth. Progression speeds may not decrease by more than 5 mph in each travel direction for a given bandwidth. Minimum progression bandwidth requirements are defined in Table 15.F-1.
 - iii. *Progression Bandwidth* – Traffic signal installations should comply with the minimum progression bandwidth requirements defined in Table 15.F-1. Progression bandwidth is the percent of the signal cycle length during which a vehicle may safely progress through a series of coordinated intersections along a highway at or near the posted speed limit. Where two major routes with signal systems intersect within the study area, bandwidths along each route must be calculated. Where existing optimized progression bandwidths are below the minimum requirements, additional signal installations should maintain existing bandwidths, at a minimum.
 - iv. *Central Business District* – Traffic signal control may be provided at each intersection within a central business district area if the MUTCD traffic signal warrant criteria are satisfied. The resulting signal spacing should be no more than one signal per city block. A central business district occurs in an urban area where business and pedestrian activity is concentrated. Locations of central business districts should be determined in cooperation with local governments.
 - v. *Potential Signal Need* – Major access points to land development that will initially function under stop-sign control but that will likely require signalization should be located based on the minimum signalized intersection spacing requirements defined in Table 15.F-1. Additionally, new signal installations should not conflict with future public streets that have been planned but not implemented by local and/or state government.
- (b) **Progression Analysis:** A traffic signal system progression analysis may need to be performed to ensure that traffic flow can be maintained through signal systems operating on state highways. The progression analysis should produce measures of effectiveness that include average vehicle delay and progression speeds and bandwidths for both travel directions along the corridor. Progression analyses should be performed using the current edition of the Traffic Network Study Tool (TRANSYT-7F), or other traffic signal system analysis tools approved by the Traffic Technical Support Section. The analysis tool should be calibrated to existing traffic conditions prior to use.

**Table 15.F-1
Traffic Signal System Parameters**

Access Category	Posted Speed	Minimum Signalized Intersection Spacing (feet)	Ranges of Minimum Acceptable Progression Bandwidth as a Percentage of the Signal Cycle Length	
			Two-Way Balanced Progression <i>Directional Split ≤ 65/35</i>	One-Way Directional Progression <i>Directional Split > 65/35</i>
UPA	≤ 40 mph	2,640	40 - 45 %	60 - 65 %
	45 to 50 mph	2,640	45 - 50 %	65 - 70 %
	≥ 55 mph	5,280	<i>not required</i>	<i>not required</i>
UMA	≤ 40 mph	1,760	30 - 35 %	50 - 55 %
	45 to 50 mph	2,640	35 - 40 %	55 - 60 %
	≥ 55 mph	5,280	<i>not required</i>	<i>not required</i>
UCOL	≤ 30 mph	1,100	25 - 30 %	45 - 50 %
	35 to 40 mph	1,320	25 - 30 %	45 - 50 %
	45 to 55 mph	1,760	30 - 35 %	50 - 55 %
RPA	≤ 40 mph	2,640	45 - 50 %	65 - 70 %
	≥ 45 mph	5,280	<i>not required</i>	<i>not required</i>
RMA	≤ 30 mph	1,760	35 - 40 %	55 - 60 %
	35 to 50 mph	2,640	40 - 45 %	60 - 65 %
	≥ 55 mph	5,280	<i>not required</i>	<i>not required</i>
RCOL	≤ 30 mph	1,320	30 - 35 %	50 - 55 %
	35 to 40 mph	1,760	35 - 40 %	55 - 60 %
	≥ 45 mph	2,640	40 - 45 %	60 - 65 %

Note: Minimum cross street green time must be adequate for a pedestrian crossing of the highway unless otherwise directed by the NMSHTD Traffic Technical Support Section.

- (c) **Signal Interconnection:** Signal interconnection should be required for all highways where the spacing between successive traffic signals is equal to or less than one-half mile. The applicant may be required to install interconnection equipment, including conduit, pull boxes/vaults and communication cable, up to the nearest signal in each direction from the proposed access.
- (2) **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.

16. TRAFFIC STUDIES FOR LAND DEVELOPMENT:

A. Purpose: As stated in Section 15, a traffic engineering evaluation shall be required for all land development proposals that may directly or indirectly impact a state highway facility. Impacts may result from the need for access along a state highway or because a proposed development is expected to increase the traffic volume on a state highway. 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 Paragraph 14.D.1).

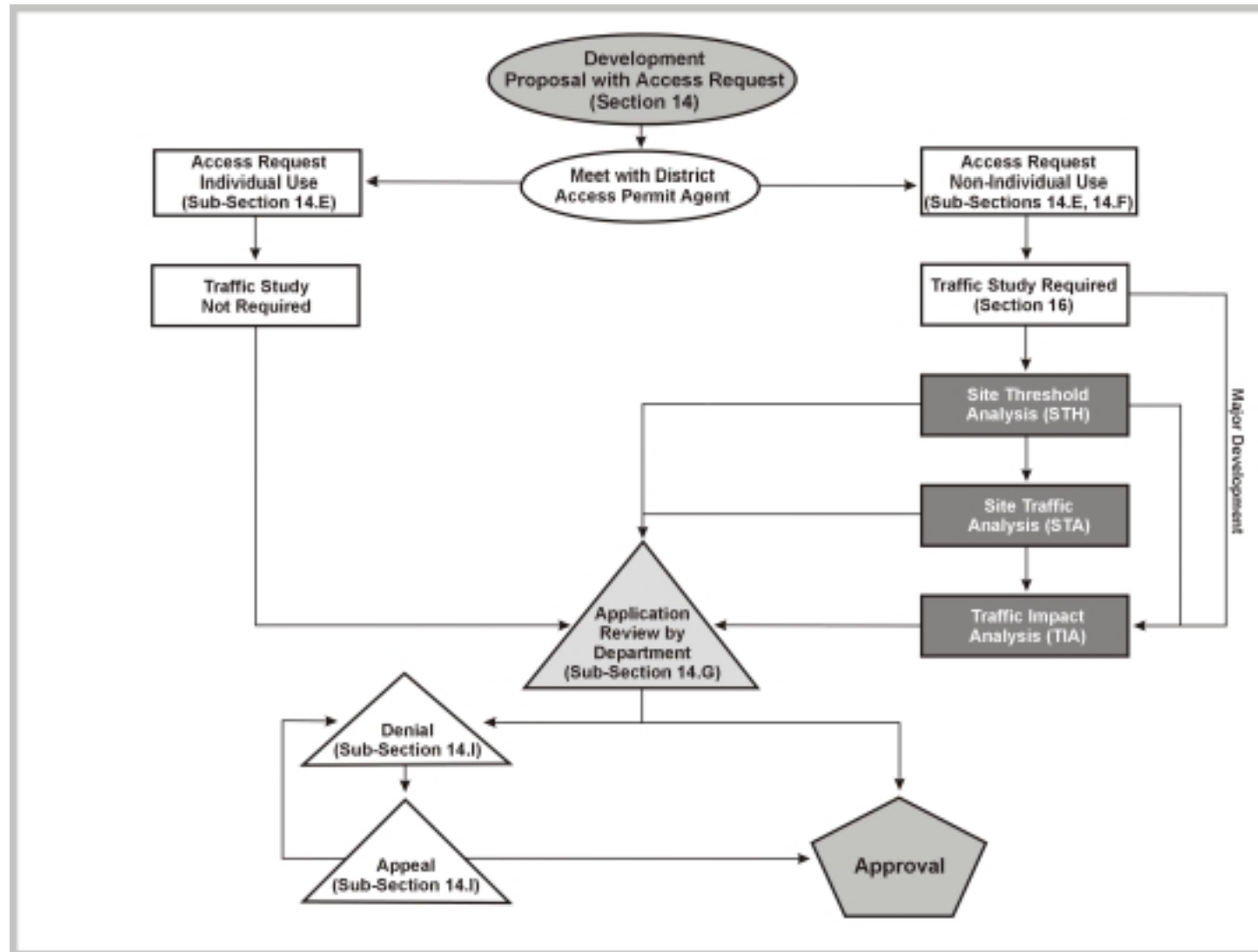
B. Traffic Study Approach: A three-tiered approach shall be utilized to satisfy the NMSHTD traffic study requirement for a proposed land development project. Traffic impact study requirements of local governments shall also be followed, where applicable. The general type of traffic analysis required for each tier are listed below. A simplified traffic study process flow chart for an access request is provided on the following page.

- (1) **First Tier: *Site THreshold Assessment* (STH)** - A screening-level analysis to determine if additional traffic analysis is required. Consists of a one-page worksheet (Form STH in Appendix D).
- (2) **Second Tier: *Site Traffic Analysis* (STA)** - A focused traffic study to assess site-specific impacts of a proposed development. Consists of an engineering evaluation and the preparation of a traffic study report.
- (3) **Third Tier: *Traffic Impact Analysis* (TIA)** - A detailed traffic impact analysis of all traffic operations, access and safety impacts within the prescribed study area for a proposed development. Consists of an engineering evaluation and the preparation of a traffic study report.

C. Site Threshold Assessment: A STH shall be required of all developing or redeveloping properties that directly or indirectly access a state highway. The requirements for the STH are described in the following subsections.

- (1) The STH should examine existing roadway volumes and trip generation estimates to determine if additional traffic analysis is required. The following information is needed to complete Form STH, which is included in Appendix D:
 - A detailed description and location of the proposed development
 - Existing daily traffic volumes for the adjacent state highway
 - Trip generation estimates for the proposed development

Existing daily traffic volume information for state highway segments may be obtained from the NMSHTD Consolidated Highway DataBase (CHDB). Data obtained from other sources must be current or have been collected within two years of the STH.



SIMPLIFIED TRAFFIC STUDY FLOW CHART FOR AN ACCESS REQUEST

- (2) The completed STH form 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 study 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 (Table 15.C-1) 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:** The requirements for all site traffic analyses follow. Additional requirements may be imposed by the District Traffic Engineer on a project-specific basis.

- (a) **Traffic Analysis Scoping Meeting:** A scoping meeting should be held between the permittee and the District Traffic Engineer, and any local jurisdiction that has authority over the proposed development. The meeting should be held when a preliminary site plan is available. It should be the responsibility of the permittee to schedule and prepare for the scoping meeting. Specific aspects of the traffic analysis that should be discussed at the scoping meeting include:

- the proposed land use types and the development phasing;
- the number, type, and location of access points;
- the anticipated level of traffic analysis;
- the anticipated level of safety analysis;
- the study area limits;
- the analysis years and peak periods;
- the background traffic growth rate;
- the trip generation methodology;
- the basis for trip distribution;
- other ongoing development activity;
- pertinent programmed highway improvements;
- the traffic operations analysis techniques (e.g., isolated intersections versus signal systems);
- the documentation requirements; and,
- any special conditions that should be considered.

- (b) **STA Study Area:** The STA study area should be defined at the traffic analysis scoping meeting. The study area for analysis should be proposed by the permittee and approved by the District Traffic Engineer in coordination with any local jurisdiction representatives that have authority over the proposed development. Guidelines for defining the study area for urban and rural conditions follow. When both urban and rural conditions exist within the study area, the guidelines for urban conditions should be used.

- i. **Urban Study Areas:** The STA study area for developments located on highways in Access Categories UPA, UMA and UCOL should include all site access points plus the first adjacent major intersection in each direction from the site.
- ii. **Rural Study Areas:** The STA study area for developments located on highways in Access Categories RPA, RMA and RCOL should include all site access points plus the first adjacent intersection in each direction from the site expected to be used by development traffic to access the regional highway system, if any. Rural

developments along isolated roadway segments, having no intersecting collector or higher classified roadways within 5 miles in either direction, should have the study area defined as the site access points.

- (c) **Safety Analysis:** Three years of accident history should be reviewed for the major study area intersections. Intersection collision diagrams should be prepared showing the number of accidents, accident type, date and time of each accident, and accident severity. The intersection accident rate per million entering vehicles (acc/MEV) should be indicated on the collision diagram. The safety analysis should include a field review of the site.
- (d) **Analysis Years:** The analysis years to be evaluated for site traffic analyses should be as follows:
 - i. Existing Year Conditions
 - ii. Implementation Year without the Proposed Development
 - iii. Implementation Year with the Proposed Development
- (e) The existing year is defined as the year the existing condition traffic counts are obtained. The implementation year should be defined as the calendar year that the proposed development is expected to commence operation.
- (f) **Analysis Peak Periods:** Traffic analysis should be performed for the AM peak hour and the PM peak hour of a typical weekday, or for the design hour associated with special traffic conditions, or both (refer to Sub-Sections 15.D and 15.E).
- (g) **Trip Generation:** Trip generation estimates should be based on the type and intensity of the proposed land use, and should include estimates of daily and peak-hour travel. The ITE *Trip Generation Manual* (Sub-Section 9.F) should be used when the proposed land use is reasonably consistent with the land use categories and descriptions contained in the *Trip Generation Manual*. When the land use categories of the *Trip Generation Manual* clearly do not apply or the rates are not appropriate for a proposed development, locally derived trip generation rates should be used. Trip generation rates that are based on local conditions should be developed according to the methodology described in the *Trip Generation Manual*.
- (h) **Trip Distribution and Assignment:** Trip distribution and assignment may be performed using manual techniques or a computer model. The trip distribution methodology should consider the area population, locations of similar land use, and travel distances. Trips should be assigned to the major street system based on logical routing patterns. The major street system includes streets classified as collectors and

above. Trips may be assigned to the local street system when the local street provides direct access to the proposed development. Refer to Section 7 for definitions of trip distribution and trip assignment.

- (i) **Traffic Projections:** Implementation year traffic projections should include background traffic growth, trips generated by other known development projects in the study area, and trips generated by the proposed development, as appropriate. Other known developments should be considered built out or, if a phased development, built out according to the phasing schedule. Other known development projects within the study area should be included when:
- A development existed but was inactive when the existing condition traffic counts were collected, or
 - A development was under construction at the time the existing condition traffic counts were collected, or
 - A development opened since the existing condition traffic counts were collected, or
 - A development was issued an access permit by the Department since the existing condition traffic counts were collected. (The District Traffic Engineer should inform the applicant of this condition at the scoping meeting.)
- (j) **Intersection Traffic Analysis:** Signalized and unsignalized intersections should be analyzed consistent with the current *Highway Capacity Manual* methodologies. The analyses may be performed using the current versions of the Highway Capacity Software, TeaPac, or other analysis packages approved by the NMSHTD Traffic Technical Support Section.
- (k) **Measuring Impacts:** The STA should include an impact assessment for the intersections analyzed comparing implementation year conditions without and with the proposed development. Impacts should be measured based on the following comparisons:
- Isolated intersection performance statistics by approach movement and for the overall intersection.
 - Magnitude and percent change in traffic volume by intersection approach movement.
- (l) **Graphics:** The STA documentation should contain a vicinity map showing all arterial and collector roadways within a reasonable influence area of the site, a study area map denoting the intersections included in the analysis, and a site plan that details the site access location(s) and internal circulation patterns. In addition to proposed land use details, the site plan should include dimensions to adjacent property boundaries and to adjacent access points along the site frontage, and should indicate locations of access points along the frontage on the opposite side of the highway.

- (m) **Documentation:** All required site traffic analyses should include documentation in the form of a bound report. A sample outline for STA documentation is provided in Appendix D. The STA documentation should discuss the following:

- Study Purpose;
- Development description;
- Study area land use description;
- Existing roadway and traffic conditions;
- Safety analysis (3-years);
- Background traffic growth;
- Trip generation, distribution and assignment;
- Traffic projections;
- Traffic analysis, including traffic signal warrants;
- Impact assessment;
- Proposed site circulation and parking plan;
- Access design specifications;
- Summary of deficiencies and proposed mitigation; and,
- Appended materials.

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 will be below the LOS standards in Table 15.C-1, 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 (Table 15.C-1) 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:** The requirements for all traffic impact analyses follow. Additional requirements may be imposed by the District Traffic Engineer on a project-specific basis.
 - (a) **Traffic Analysis Scoping Meeting:** A scoping meeting should be held between the permittee and the District Traffic Engineer, and any local jurisdiction that has authority over the proposed development. The meeting should be held when a preliminary site plan is available. It should be the responsibility of the permittee to schedule and prepare for the scoping meeting. Specific aspects of the traffic analysis that should be discussed at the scoping meeting include:
 - the proposed land use types and the development phasing;
 - the number, type, and location of access points;
 - the anticipated level of traffic analysis;
 - the anticipated level of safety analysis;
 - the study area limits;
 - the analysis years and peak periods;
 - the background traffic growth rate;
 - the trip generation methodology;
 - the basis for trip distribution;
 - other ongoing development activity;
 - pertinent programmed highway improvements;
 - the traffic operations analysis techniques (e.g., isolated intersections versus signal systems);
 - the documentation requirements; and,
 - any special conditions that should be considered.
 - (b) **TIA Study Area:** The TIA study area should be defined based on the location and complexity of the proposed development, and should progressively expand with the complexity of proposed development. The TIA study area should be defined at the traffic analysis scoping meeting. The study area should be proposed by the permittee and approved by the District Traffic Engineer in coordination with any local jurisdiction representatives that have authority over the proposed

development. Guidelines for defining the study area for urban and rural conditions follow. When both urban and rural conditions exist within the study area, the guidelines for urban conditions should be used.

- i.* **Urban Study Areas:** The TIA study area for developments located on highways in Access Categories UPA, UMA and UCOL should be determined based on the following guidelines for urban conditions. Typically, in urban areas, a TIA study area extending 1 mile from the proposed development site should be sufficient.

 - The minimum urban study area size should include all site access points, the off-site intersections where a developer may reasonably be required to implement physical improvements, plus one additional major intersection in all directions. The study area may be expanded beyond the minimum to include intersections where high turning conflicts are anticipated.
 - The study area for urban developments that propose access points within or adjacent to an interconnected traffic signal system, and that will require a progression analysis as part of a TIA, should include the intersections comprising the signal system. Where a signal system consists of more than three signalized intersections, the extent of the progression analysis should be determined by the District Traffic Engineer.
 - The study area for urban developments located in close proximity to an interstate highway facility should include the interchange ramps, ramp terminal intersections and adjacent freeway segments that are expected to be impacted by development traffic.
- ii.* **Rural Study Areas:** The TIA study area for developments located on highways in Access Categories RPA, RMA and RCOL should be determined based on the following guidelines for rural conditions.

 - Rural study areas should include all site access points, the roadway segments immediately adjacent to the access points and major intersections expected to be used by development traffic to access the regional highway system, if any.
 - The study area for rural developments located in close proximity to an interstate highway facility should include the interchange ramps, ramp terminal intersections and adjacent freeway segments that are expected to be impacted by development traffic.
 - Rural developments along isolated roadway segments, having no intersecting collector or higher classified roadways within 5 miles in either direction and which generate 200 design hour trips or less, should have the study area defined as the site access points plus the roadway segments immediately adjacent to the access points.

- Rural developments along isolated roadway segments, having no intersecting collector or higher classified roadways within 5 miles in either direction and which generate more than 200 design hour trips, should have the study area defined as the site access points plus the adjacent roadway segments and the first collector or higher classified cross-street intersection in each direction.
- (c) **Safety Analysis:** Three years of accident history should be reviewed for the major study area intersections. Intersection collision diagrams should be prepared showing the number of accidents, accident type, date and time of each accident, and accident severity. The intersection accident rate per million entering vehicles (acc/MEV) should be indicated on the collision diagram. The safety analysis should include a field review of the site.
- (d) **Non-Phased Development Analysis Years:** The TIA analysis years to be evaluated for non-phased developments are defined below.
- i. Existing Year Conditions
 - ii. Implementation Year without the Proposed Development
 - iii. Implementation Year with the Proposed Development
 - iv. Horizon Year without the Proposed Development
 - v. Horizon Year with the Proposed Development

The existing year should be defined as the year the existing condition traffic counts are obtained. The implementation year should be defined as the calendar year that the proposed development is expected to commence operation. The horizon year should be the implementation year plus ten years.

- (e) **Phased Development Analysis Years:** A phased development should require the same TIA analysis years as described in Sub-Paragraph 16.E.3.d. (above), except the horizon year should be the year of full development plus 10 years. Additionally, the horizon year should not be greater than the existing year plus 20 years. Depending on the type and scale of the proposed phased development, and considering study area conditions, additional implementation year analyses may be required. The additional analysis years should be identified at the TIA scoping meeting. The total number of analysis years for a phased development should not exceed four (i.e., there are currently two excluding existing conditions; no more than two additional analysis years may be required).
- (f) **Analysis Peak Periods:** Traffic analysis should be performed for the AM peak hour and the PM peak hour of a typical weekday, or for the design hour associated with special traffic conditions, or both (refer to Sub-Sections 15.D and 15.E). For future-year analyses beyond the initial implementation year analysis, the permittee may request that the future-year analyses be performed only for the critical peak hour, identified based on the existing conditions analysis and the anticipated trip

generation characteristics of the proposed development. The permittee should be prepared to make this request at the traffic analysis scoping meeting.

- (g) **Trip Generation:** Trip generation estimates should be based on the type and intensity of the proposed land use, and should include estimates of daily and peak-hour travel. The ITE *Trip Generation Manual* (Sub-Section 9.F) should be used when the proposed land use is reasonably consistent with the land use categories and descriptions contained in the *Trip Generation Manual*. When the land use categories of the *Trip Generation Manual* clearly do not apply or the rates are not appropriate for a proposed development, locally derived trip generation rates should be used. Trip generation rates that are based on local conditions should be developed according to the methodology described in the *Trip Generation Manual*.
- (h) **Trip Distribution and Assignment:** Trip distribution and assignment may be performed using manual techniques or a computer model. The trip distribution methodology should consider the area population, locations of similar land use, and travel distances. Trips should be assigned to the major street system based on logical routing patterns. The major street system includes streets classified as collectors and above. Trips may be assigned to the local street system when the local street provides direct access to the proposed development. Refer to Section 7 for definitions of trip distribution and trip assignment.
- (i) **Traffic Projections:** Implementation year and horizon year traffic projections should include background traffic growth, trips generated by other known development projects in the study area, and trips generated by the proposed development, as appropriate. Other known developments should be considered built out or, if a phased development, built out according to the phasing schedule. Other known development projects within the study area should be included when:
 - A development existed but was inactive when the existing condition traffic counts were collected, or
 - A development was under construction at the time the existing condition traffic counts were collected, or
 - A development opened since the existing condition traffic counts were collected, or
 - A development was issued an access permit by the Department since the existing condition traffic counts were collected. (The District Traffic Engineer should inform the applicant of this condition at the scoping meeting.)
- (j) **Intersection Traffic Analysis:** Signalized and unsignalized intersections should be analyzed consistent with the current *Highway Capacity Manual* methodologies. Signalized intersections that are not part of a traffic signal system should be analyzed as isolated intersections. These

analyses may be performed using the current versions of the Highway Capacity Software, TeaPac, or other analysis packages approved by the NMSHTD Traffic Technical Support Section. Signalized intersections that are part of a coordinated traffic signal system should require a progression analysis to be performed using TRANSYT-7F, or other traffic signal system analysis tools approved by the Traffic Technical Support Section (see Sub-Section 15.F).

- (k) **Roadway Segment Traffic Analysis:** The capacity of specific roadway segments on two-lane highways and multi-lane highways should be evaluated when the traffic flow along the facility is not influenced by signalized intersection operations. This occurs where the average spacing of signalized intersections is greater than one signal installation per mile. Where a proposed access point is more than 500 feet from an isolated signalized intersection (i.e., there are no adjacent signalized intersections within one mile), roadway segment capacity analysis may be required. A roadway segment traffic analysis may be required for any traffic analysis when the directional volume passing the proposed access exceeds 1,200 vehicles per hour per lane.
- (l) **Measuring Impacts:** The analysis years of a TIA should include an impact assessment by intersection and/or roadway segment. The TIA should include a discussion of how the impacts were identified for a particular development. Impacts should be measured based on one or more of the following comparisons:

 - Isolated intersection performance statistics without and with the proposed development.
 - Roadway segment performance statistics without and with the proposed development.
 - Traffic signal progression analysis results without and with the proposed development.
 - Traffic volume comparison without and with the proposed development showing the magnitude and percent change in traffic volume by intersection approach movement.
- (m) **Graphics:** The TIA documentation should contain a vicinity map showing all arterial and collector roadways within a reasonable influence area of the site, a study area map denoting the intersections included in the analysis, and a site plan that details the site access location(s) and internal circulation patterns. In addition to proposed land use details, the site plan should include dimensions to adjacent property boundaries and to adjacent access points along the site frontage, and should indicate locations of access points along the frontage on the opposite side of the highway.

(n) **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 Appendix D. The TIA documentation should discuss the following:

- Study Purpose;
- Development description;
- Study area land use description;
- Existing roadway and traffic conditions;
- Safety analysis (3-years);
- Background traffic growth;
- Trip generation, distribution and assignment;
- Traffic projections;
- Detailed traffic analysis for each analysis year, including traffic signal warrants;
- Impact assessment for each analysis year;
- Proposed site circulation and parking plan;
- On-site and off-site queue lengths;
- Non-motorized impacts;
- Access design specifications;
- Summary of deficiencies and proposed mitigation for each analysis year; and,
- Appended materials.

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 Sub-Section 14.J 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.

CHAPTER SEVEN

SPEED-CHANGE LANES

Section 17

Overview

Conflicts are created along state highways wherever driveways, intersections and other access points are introduced. These conflicts involve traffic traveling on the highway and traffic turning into and out of an access. To reduce conflicts at access points, right-turn and left-turn speed-change lanes are used. Speed-change lanes provide a separate facility for turning vehicles to decelerate or accelerate and to queue while waiting to turn. As a result, speed-change lanes minimize the interference between through traffic and turning traffic along the highway creating a safe environment for the traveling public. This chapter defines the criteria for determining when speed-change lanes are required or should be considered at existing or proposed access points along the state highway system.

17. SPEED-CHANGE LANE REQUIREMENTS:

- A. Purpose:** Speed-change lanes supplement the basic number of lanes provided on a roadway to facilitate movements to and from the roadway at access points. Their function is to minimize interference with through traffic and to reduce the conflict potential associated with motorists exiting or entering a highway facility. 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 in this manual (see Sub-Section 17.C). Design specifications for speed-change lanes are provided in Sub-Section 18.K.
- B. State Highways with At-Grade Intersections:** At-grade intersections are provided along state highways in access categories UPA, RPA, UMA, RMA, UCOL and RCOL. 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 are provided in Appendix E. The illustrations show the design components of the speed-change lanes with references to pertinent sections of the manual.
 - (2) Design Period:** The need for speed-change lanes should be assessed using the design hour 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. The analysis years for traffic analysis are defined in Paragraphs 16.D.3.d., 16.E.3.d., and 16.E.3.e.

(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. Factors to be considered include traffic volume, highway speed, highway type (two-lane or multi-lane), level of service, commercial truck percentage, sight distance conditions, the influence of nearby access as well as any other pertinent site-specific issues.
- (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. An illustration of a typical ingress/egress lane application is provided in Appendix E.
- (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. Sufficient acceleration length is provided when the design vehicle is able to reach a speed within 10 mph of the posted speed on the highway.
- (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:** Speed-change lanes are provided at unsignalized at-grade intersections to minimize the speed differential between vehicles traveling along a roadway and vehicles entering or exiting a roadway. 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 as specified under Paragraph 17.B.3, General Criteria.

(a) **Urban Versus Rural Conditions:** For state highways which provide at-grade access, the criteria for determining the need for speed change lanes is defined separately for urban highways and rural highways. The criteria should be applied to New Mexico highways according to the Access Categorization System defined in Section 10.

(b) **Urban Conditions:** The need for speed-change lanes on highways in Access Categories UPA, UMA and UCOL is based on the criteria established for urban conditions.

i. **Left-turn Deceleration Lanes:**

- Urban Two-lane Highways: Left-turn deceleration lanes should be provided on urban two-lane highways based on the criteria stated in Table 17.B-1.
- Urban Multi-lane Highways: Left-turn deceleration lanes should be provided on urban multi-lane highways based on the criteria stated in Table 17.B-2.

ii. **Right-turn Deceleration Lanes:**

- Urban Two-lane Highways: Right-turn deceleration lanes should be provided on urban two-lane highways based on the criteria provided in Table 17.B-1.
- Urban Multi-lane Highways: Right-turn deceleration lanes should be provided on urban multi-lane highways based on the criteria provided in Table 17.B-2.

iii. **Right-turn Acceleration Lanes:** Right-turn acceleration lanes may be required at unsignalized at-grade access points on urban two-lane and multi-lane 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.

iv. **Left-turn Acceleration Lanes:** Left-turn acceleration lanes may be required at unsignalized at-grade access points on urban two-lane and multi-lane 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. The acceleration lane must not interfere with left-turn movements to any other access.

**Table 17.B-1
Criteria for Deceleration Lanes on
URBAN TWO-LANE HIGHWAYS**

Turning Volume ¹ (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Directional Volume in the Through Lane (vphpl) ²			Minimum Directional Volume in the Through Lane (vphpl) ²		
	≤ 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
	<i>Left-turn Deceleration Lanes are Required on Urban Two-lane Highways for the following Left-turn Volumes:</i> <ul style="list-style-type: none"> • ≤ 30 mph : 46 vph or more • 35 to 40 mph : 36 vph or more • 45 to 55 mph : 26 vph or more 			<i>Right-turn Deceleration Lanes are Required on Urban Two-lane Highways for the following Right-turn Volumes:</i> <ul style="list-style-type: none"> • ≤ 30 mph : 46 vph or more • 35 to 40 mph : 41 vph or more • 45 to 55 mph : 36 vph or more 		

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 ¹ (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Volume in the Adjacent Through Lane (vphpl) ²			Minimum Volume in the Adjacent Through Lane (vphpl) ²		
	≤ 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
	<i>Left-turn Deceleration Lanes are Required on Urban Multi-lane Highways for the following Left-turn Volumes:</i> <ul style="list-style-type: none">• ≤ 30 mph : 56 vph or more• 35 to 40 mph : 46 vph or more• 45 to 55 mph : 36 vph or more			<i>Right-turn Deceleration Lanes are Required on Urban Multi-lane Highways for the following Right-turn Volumes:</i> <ul style="list-style-type: none">• ≤ 30 mph : 56 vph or more• 35 to 40 mph : 46 vph or more• 45 to 55 mph : 41 vph or more		
Notes: <ol style="list-style-type: none">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.						

- (c) **Rural Conditions:** The need for speed-change lanes on highways in Access Categories RPA, RMA and RCOL is based on the criteria established for rural conditions.

i. **Left-turn Deceleration Lanes:**

- Rural Two-lane Highways: Left-turn deceleration lanes should be provided on rural two-lane highways based on the criteria provided in Table 17.B-3.
- Rural Multi-lane Highways: Left-turn deceleration lanes should be provided on rural multi-lane highways based on the criteria provided in Table 17.B-4.

ii. **Right-turn Deceleration Lanes:**

- Rural Two-lane Highways: Right-turn deceleration lanes should be provided on rural two-lane highways based on the criteria provided in Table 17.B-5.
- Rural Multi-lane Highways: Right-turn deceleration lanes should be provided on rural multi-lane highways based on the criteria provided in Table 17.B-6.

iii. **Right-turn Acceleration Lanes:** Right-turn acceleration lanes may be required at unsignalized at-grade access points on rural two-lane and multi-lane 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.

iv. **Left-turn Acceleration Lanes:** Left-turn acceleration lanes may be required at unsignalized at-grade access points on rural two-lane and multi-lane 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. The acceleration lane must not interfere with left-turn movements to any other access.

- (5) **Signalized Intersections:** Speed-change lanes are provided at signalized intersections to improve intersection operational efficiency, to provide vehicle storage area for left-turn and right-turn movements, to increase the capacity (throughput) of the intersection, and to reduce incident potential. The lane requirements at a signalized intersection should be based on intersection capacity analysis, signal system progression analysis and actual field observations. The proximity of adjacent signalized intersections should also be considered. Refer to Section 15, Traffic Engineering Evaluation, for further information regarding the operational characteristics, spacing requirements and analysis of signalized intersections.

**Table 17.B-3
Criteria for Left-turn Deceleration Lanes on
RURAL TWO-LANE HIGHWAYS**

Left-Turn Volume ¹ (vph)	LEFT-TURN DECELERATION LANE			
	Minimum Directional Volume in Through Lane (vphpl) ²			
	≤ 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
	<i>Left-turn Deceleration Lanes are Required on Rural Two-lane Highways for the following Left-turn Volumes:</i> <ul style="list-style-type: none">• ≤ 30 mph : 26 vph or more• 35 to 40 mph : 21 vph or more• 45 to 55 mph : 16 vph or more• > 55 mph : 11 vph or more			
Notes: <ol style="list-style-type: none">1. Use linear interpolation for left-turn volumes between 5 and 25 vph.2. The directional volume in the through lane includes through vehicles and turning vehicles.				

Table 17.B-4
Criteria for Left-turn Deceleration Lanes on
RURAL MULTI-LANE HIGHWAYS

Left-Turn Volume ¹ (vph)	LEFT-TURN DECELERATION LANE			
	Minimum Volume in Adjacent Through Lane (vphpl) ²			
	≤ 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
	<i>Left-turn Deceleration Lanes are Required on Rural Multi-lane Highways for the following Left-turn Volumes:</i> <ul style="list-style-type: none">• ≤ 30 mph : 36 vph or more• 35 to 40 mph : 26 vph or more• 45 to 55 mph : 21 vph or more• > 55 mph : 16 vph or more			
<i>Notes:</i> <ol style="list-style-type: none">1. Use linear interpolation for left-turn volumes between 5 and 35 vph.2. The volume in the adjacent through lane includes through vehicles and turning vehicles.				

**Table 17.B-5
Criteria for Right-Turn Deceleration Lanes on
RURAL TWO-LANE HIGHWAYS**

Right-Turn Volume ¹ (vph)	RIGHT-TURN DECELERATION LANE			
	Minimum Directional Volume in Through Lane (vphpl) ²			
	≤ 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">• ≤ 30 mph : 31 vph or more• 35 to 40 mph : 31 vph or more• 45 to 55 mph : 26 vph or more• > 55 mph : 21 vph or more			
<i>Notes:</i> <ol style="list-style-type: none">1. Use linear interpolation for left-turn volumes between 5 and 30 vph.2. The directional volume in the through lane includes through vehicles and turning vehicles.				

**Table 17.B-6
Criteria for Right-Turn Deceleration Lanes on
RURAL MULTI-LANE HIGHWAYS**

Right-Turn Volume ¹ (vph)	RIGHT-TURN DECELERATION LANE			
	Minimum Volume in Adjacent Through Lane (vphpl) ²			
	≤ 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
	<i>Right-turn Deceleration Lanes are Required on Rural Multi-lane Highways for the following Right-turn Volumes:</i> <ul style="list-style-type: none">• ≤ 30 mph : 36 vph or more• 35 to 40 mph : 36 vph or more• 45 to 55 mph : 31 vph or more• > 55 mph : 21 vph or more			
<i>Notes:</i> <ol style="list-style-type: none">1. Use linear interpolation for left-turn volumes between 5 and 35 vph.2. The volume in the adjacent through lane includes through vehicles and turning vehicles.				

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 are provided below. The guidelines apply to all access categories except UINT and RINT. Situations where guidelines vary by access category are noted.

- (a) **Exclusive Right-turn Lanes:** Exclusive right-turn lanes should be considered at signalized intersections under the following conditions:
 - i. Where the right-turn design hour volume (DHV) equals or exceeds 300 DHV and the volume in the outside general purpose travel lane equals or exceeds 300 DHV (i.e., the total volume in the outside travel lane is equal to or greater than 600 DHV including a right-turn volume of at least 300 DHV); or,
 - ii. Where the right-turn volume equals or exceeds 150 DHV and the volume-to-capacity (v/c) ratio for the adjacent through movement(s) is expected to be 0.85 or greater based on accepted analysis methodologies; or,
 - iii. Where the right-turn volume equals or exceeds 100 DHV and the posted speed is 45 mph or above.
- (b) **Exclusive Left-turn Lanes:**
 - i. Exclusive left-turn lanes should be provided at all intersections along state highways where new or modified traffic signal control will be implemented.
 - ii. For Access Categories UPA, UMA, RPA and RMA, dual exclusive left-turn lanes should be considered at signalized intersections where the left-turn volume equals or exceeds 250 DHV and the volume-to-capacity (v/c) ratio for a single-lane left-turn movement is determined to be equal to or greater than 0.95 for the left-turn movement based on accepted analysis methodologies.
- (c) **Right-turn Acceleration Lanes:** In urban areas, signalized intersections should generally be designed to avoid the need for right-turn acceleration lanes. In rural areas, right-turn acceleration lanes should be considered at signalized intersections under the following conditions:
 - i. Where a free-moving, channelized right-turn movement from the cross street does not result in an additional lane on the mainline roadway (this does not include yield-controlled right-turn movements); or,
 - ii. Where sight distance is limited and the posted speed on the highway is greater than 40 mph; or,
 - iii. Where a speed-change lane is required to transition a dual right-turn movement into the mainline roadway general-purpose lanes.
- (d) **Left-turn Acceleration Lanes:** Left-turn acceleration lanes are typically not provided at signalized intersections.

- 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* (Sub-Section 9.C), and based on detailed traffic operations analyses of the grade-separated facilities according to *Highway Capacity Manual* (Sub-Section 9.E) methodologies. The need for and function of speed-change lanes should be documented in an Interchange Management Plan for the interchange (refer to Section 12). New or modified access to a controlled-access highway must comply with Administrative Directive (AD) 222. Additional information on interstate highway facilities is provided in Sub-Section 13.D, Access Category Standards for urban and rural interstates.
- (1) Application Guidelines:** Speed-change lanes on grade-separated highway facilities are referred to as acceleration lanes, deceleration lanes, or as an auxiliary lane. The term “lane” may refer to a taper or a lane of uniform width depending on site-specific conditions and the design-type of the lane (i.e. taper or parallel). Speed-change lanes are generally provided along grade-separated highways (which may include highways in access categories UINT, RINT, UPA or RPA) for the situations listed below. At a minimum, speed-change lanes should enable a driver to make the necessary transition between the speed on a ramp roadway and the speed of operation on the mainline highway in a safe and comfortable manner.
- (a)** A deceleration lane should be provided for a movement exiting the highway's mainline lanes to an off-ramp roadway (diverge movements). An acceleration lane should be provided for a movement entering the mainline lanes from an on-ramp roadway (merge movements).
 - (b)** Ramp-to-ramp auxiliary lanes may be required where interchanges are too closely spaced and/or where the distance between the end of the on-ramp taper and the beginning of the off-ramp taper is short.
 - (c)** Auxiliary lanes may be required to provide lane continuity between interchanges along short segments of the freeway (i.e., generally segments less than one-mile in length).
 - (d)** Ramp-to-ramp auxiliary lanes may be used to provide additional freeway capacity between ramps to extend the service life of the facility prior to the implementation of extensive improvements to the facility.

CHAPTER EIGHT

ACCESS LOCATION AND DESIGN STANDARDS

Section 18

Overview

This chapter defines access location and spacing standards that apply when access is requested along a state highway facility, and provides standards for the design of proposed access points. When applied, the standards will reduce conflicts along state highways that occur at access points and will result in the consistent application of design techniques used for state highway facilities. The design information provided is not all encompassing and should be supplemented by other highway and intersection design guidelines, in particular, the AASHTO document “A Policy on Geometric Design of Highways and Streets.”

18. ACCESS LOCATION AND DESIGN STANDARDS:

- 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. 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 Section 14 for additional requirements regarding construction within state highway right-of-way.
 - (3) **Units:** The design criteria are specified in English units: miles per hour (mph) for speed limits, and feet for distance measurements. Metric equivalents are provided in Appendix F.
 - (4) **References:** The references listed in Section 9 are provided to supplement the design criteria contained herein. Where specific design criteria are not provided, the design approach should be based on nationally accepted standards and should be consistent with Department specifications.
- B. Access Location:** Access points should be located along state highways based on the spacing criteria defined in Sub-Section 18.C and on the sight distance requirements in Sub-Section 18.F. Factors to consider when locating access points are described below. In general, access points should be located to minimize turning movement conflicts between adjacent access facilities, and to provide adequate separation of conflicts for oncoming motorists.

- (1) **Direct Access:** Direct access to a state highway may be considered when adequate access to other roadway facilities is not available. When access is required along a state highway, 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 defined in Table 15.C-1.
 - (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 corner clearances. Corner clearances should be consistent with the access spacing standards defined in Section 18.C. These distances may require modification such as at locations where speed change lanes are provided or where vehicle queuing needs exist. Refer to Sub-Section 7.U for a definition and illustration of corner clearance.
 - (5) **Edge Clearance:** The location of access points relative to frontage property lines (Sub-Section 7.AN) 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. Shared access driveways should be provided across property lines of adjoining parcels. Refer to Sub-Section 7.AJ for a definition and illustration of edge clearance.
- C. Access Spacing:** Criteria for determining the required spacing of access points along state highways are described below. These criteria should be applied together with the access location factors discussed in Sub-Section 18.B and the median opening requirements described in Sub-Section 18.D.
- (1) **Non-Developed and Developing Areas:** Access spacing standards for new access points in non-developed and developing areas (i.e., highway segments with few existing access points) are defined in Table 18.C-1 by access category and posted speed. The spacing distances are measured from centerline to centerline of adjacent access points. An applicant may request a variance to the spacing requirements when physical characteristics of a property preclude access spacing based on the standards in Table 18.C-1.
 - (2) **Developed Areas:** In developed or redeveloping areas where existing driveway locations preclude access spacing based on the standards in Table 18.C-1, 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. No more than one access per property should be allowed.

Table 18.C-1 Access Spacing Standards for Intersections and Driveways (centerline to centerline spacing in feet)						
Access Category	Posted Speed (mph)	Intersection Spacing (feet) ¹		Driveway Spacing (feet) ²		
		Signalized	Unsignalized ³	Non-Traversable Median		Traversable Median ⁴
				Full Access	Partial Access	
Controlled-Access, Non-Interstate Highways	All Speeds	5,280	2,640	2,640	2,640	-NA-
UPA	≤ 30 mph	2,640	1,320	1,320	200	200
	35 to 40 mph	2,640	1,320	1,320	325	325
	45 to 50 mph	2,640	1,320	1,320	450	450
	≥ 55 mph	5,280	1,320	1,320	625	625
UMA	≤ 30 mph	1,760	660	660	175	175
	35 to 40 mph	1,760	660	660	275	275
	45 to 50 mph	2,640	660	660	400	400
	≥ 55 mph	5,280	1,320	1,320	600	600
UCOL	≤ 30 mph	1,100	330	330	150	150
	35 to 40 mph	1,320	330	330	225	225
	45 to 55 mph	1,760	660	660	350	350
RPA	≤ 30 mph	2,640	1,320	1,320	225	225
	35 to 40 mph	2,640	1,320	1,320	350	350
	45 to 50 mph	5,280	2,640	2,640	500	500
	≥ 55 mph	5,280	2,640	2,640	775	775
RMA	≤ 30 mph	1,760	660	660	200	200
	35 to 40 mph	2,640	660	660	325	325
	45 to 50 mph	2,640	1,320	1,320	450	450
	≥ 55 mph	5,280	2,640	2,640	725	725
RCOL	≤ 30 mph	1,320	330	330	200	200
	35 to 40 mph	1,760	660	660	300	300
	45 to 50 mph	2,640	1,320	1,320	425	425
	≥ 55 mph	2,640	1,320	1,320	550	550

- Notes: 1. Intersection - Public street or other access serving a large area or a major traffic generator(s) where full access is typically provided.
2. Driveway - Public or private access serving a limited area where traffic signal control is not required.
3. In urban areas, spacing should be consistent with the established street spacing along the state highway facility.
4. Includes highways with no median or a painted median. The type of access, full or partial, is determined at the discretion of the Department. See Sub-Sections 7.AO and 7.BP.

- (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. 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.
[NMSA 1978, 66-1-4.2.d.]
- (4) **Signalized Access Spacing:** Signalized intersection spacing standards are defined in Table 18.C-1. Refer to Sub-Section 15.F, Traffic Signals, for requirements pertaining to traffic signal installations.
- (5) **Opposing Driveway Spacing:** Driveways on opposite sides of a highway should be aligned to create a four-legged access intersection. Offset driveway locations should be avoided.
 - (a) **Non-Traversable Median:** When driveways are on opposite sides of a highway with a non-traversable median, the driveway centerlines should be centered approximately on the median opening. Where offset driveway locations are expected to result in turning movement conflicts at the median opening, access restrictions should be considered. Schematic illustrations of access channelization alternatives are provided in Appendix E.
 - (b) **Traversable Median:** When driveways are on opposite sides of a highway with no median or a traversable median, the driveway centerlines should be located to minimize conflict potential based on site-specific conditions.

D. Median Openings: New median openings on state highways with non-traversable medians should not be allowed unless a traffic engineering study analyzing all related traffic and safety issues is prepared and approved by the Department.

- (1) **Median Opening Spacing:** 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 as defined in Table 18.C-1. The following criteria should also be considered.
 - (a) **Speed Change Lanes:** Adequate storage, deceleration and taper lengths should be provided for each speed change lane installed at a median opening based on site-specific conditions (see Sub-Sections 18.K and 18.L).
 - (b) **Local Jurisdiction:** Where a local jurisdiction has established by ordinance or resolution a more stringent median opening spacing standard than required by the Department, the local standard should govern with the concurrence of the Department.

- (2) **Median Opening Length:** Median openings should be designed to accommodate the largest design vehicle anticipated to use the opening. A median opening may be designed to permit U-turn movements. If the opening is too narrow to safely permit a U-turn, based upon storage and vehicle turning characteristics, U-turns should be addressed in design or restricted through signage (R3-4). Sign use and placement requires Department approval. Details regarding the design of median openings should be obtained from the AASHTO guideline, *A Policy on Geometric Design of Highways and Streets* (Sub-Section 9.C).
- (3) **Access Restrictions:** Median openings typically accommodate left-turn ingress and egress at an access point. Restrictions to full left-turn access may be required due to safety or operational deficiencies that would be expected if a full access median were implemented. Restricted movements should be prohibited through geometric design and channelization supplemented by signing in accordance with the MUTCD. Schematic illustrations of access channelization alternatives are provided in Appendix E. U-turns should be prohibited at all partial-access median openings.

E. Selection of Design Vehicle: The design vehicle should be used to determine the geometric characteristics of a roadside access or a 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. Design vehicles should be consistent with the classifications specified by the AASHTO guideline, *A Policy on Geometric Design of Highways and Streets* (Sub-Section 9.C). Suggested design vehicles, generalized by land use type, are listed in Table 18.E-1. When a larger design vehicle than is suggested in Table 18.E-1 is expected to use a proposed access, design criteria for the larger vehicle should be used. For example, for developments near interstate highways, a WB-62 design vehicle should be used in the design of truck stops as well as the interchange that is used to access the truck stop instead of the WB-50 design vehicle. Selection of the design vehicle is subject to the approval of the District Traffic Engineer.

**Table 18.E-1
Design Vehicle by Land Use**

Land Use(s) Served by Access	Design Vehicle
Residential	Passenger Car/Pickup
Residential on Bus Route	Single Unit Truck
Office with Separate Truck Access	Passenger Car/Pickup
Office without Truck Access	Single Unit Truck
Commercial/Retail with Separate Truck Access	Passenger Car/Pickup
Commercial/Retail without Truck Access	WB-50 Truck
Industrial with Separate Truck Access	Passenger Car/Pickup
Industrial without Separate Truck Access	WB-50 Truck
Recreational without Water or Camping	Passenger Car/Pickup
Recreational with Water or Camping	Motor Home/Boat
Agricultural Field Access	Single Unit Truck
Municipal and County Roads	WB-50 Truck

- "with Separate Truck Access" indicates truck prohibition from primary access.
- "without Water" indicates no recreational watercraft.

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.

(1) Stopping Sight Distance: For the purposes of access design, stopping sight distance (SSD) is an estimate of the distance required for a motorist to perceive a vehicle in the roadway at the access and come to a complete stop before striking the vehicle.

(a) Table 18.F-1 should be used to determine the required SSD as measured from the vehicle traveling on the highway to the access. Grade-adjusted distances are provided in the table. The values are applicable to all design vehicles. The design SSD values are based on wet pavement conditions.

(b) For calculating and measuring SSD for *access design* purposes, a height of 3.5 feet shall be used for the driver's eyes and a height of 4.25 feet shall be used for a vehicle assumed to be on the centerline of the access, five feet back from the edge of the traveled way. The driver's eye shall be assumed to be at the centerline of the outside travel lane on the highway (i.e., the lane furthest from the highway centerline).

(c) For calculating and measuring SSD for *highway design* purposes, a height of 3.5 feet shall be used for the driver's eyes and a height of 2.0 feet should be used for an object in the traveled way.

Table 18.F-1 Stopping Sight Distance Design Values (feet)										
Grade	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
> +5%	120	160	200	260	320	380	440	520	580	680
+3% to +5%	140	180	230	290	360	430	500	590	650	770
-3% to +3%	150	200	250	325	400	475	550	650	725	850
-5% to -3%	180	240	300	390	480	570	660	780	870	1,020
< -5%	200	270	340	440	540	640	740	880	980	1,150

Level terrain values are based on Table III-1 in AASHTO (see Sub-Section 9.C). These values are applicable to all design vehicles.

(2) **Entering Sight Distance:** Entering sight distance corresponds to the distance that an approaching vehicle, traveling at the posted speed limit, must be seen from the access point to permit a vehicle to safely enter the roadway and accelerate to the posted speed without being overtaken by an oncoming vehicle, or to cross the roadway. Entering sight distance applies to vehicles exiting a site by turning left or right, or crossing a roadway, from a stopped condition.

- (a) Table 18.F-2 contains minimum and desirable criteria that should be used to determine the required entering sight distance for the design vehicle specified for the access.
 - i. Minimum criteria are applicable to access points located in rolling or mountainous terrain or other situations where the desirable criteria cannot be reasonably attained.
 - ii. Desirable criteria are applicable to access points located in level terrain and/or where 100 total trips are expected to utilize the access during the design hour.
- (b) The entering sight distance values provided in Table 18.F-2 should be adjusted for any grade of three percent or greater using the grade adjustment factors for deceleration in Table 18.K-2.
- (c) For calculating and measuring entering sight distance, a height of 3.5 feet shall be used for the driver's eyes at the access location, and a height of 4.25 feet shall be used for the oncoming vehicle. The entering driver's eyes should be assumed to be 15 feet back from the edge of the traveled way.
- (d) If there is no median or if the median is too narrow to safely store a left-turning or crossing vehicle (a 20-foot minimum for passenger cars), both directions of through lane travel should be considered from the access location.
- (e) If the median can safely store the turning or crossing vehicle, then sight distance may consider a two-stop condition. The vehicle will stop once at the outside edge of the outside lane and again within the median. Each one-way highway direction may be considered separately.

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. Table 18.E-1 lists recommended design vehicles by type of land use. Access radii apply to driveways that are not urban section driveway cuts. The radius may be designed as a simple curve, a simple curve/taper

Table 18.F-2
Required Sight Distance for Vehicles
Entering and/or Crossing a Highway (feet)

Roadway Condition (see text, Paragraph 18.F.2.a)	Posted Speed of the Highway (mph)									
	25	30	35	40	45	50	55	60	65	70
PASSENGER CAR/PICK-UP										
Minimum Criteria										
2-lane highway	250	300	350	400	450	500	550	600	650	700
4-lane highway	300	360	420	480	540	600	660	720	780	840
6-lane highway	325	390	455	520	585	650	715	780	845	910
Desirable Criteria										
2-lane highway (no median)	250	300	390	490	600	750	870	1090	1280	1560
3-lane highway (incl. 16' median)	270	320	400	500	610	760	890	1110	1290	1580
4-lane highway (no median)	280	340	400	500	610	760	880	1100	1290	1570
4-lane highway (incl. 16' median)	310	370	430	520	630	770	900	1120	1310	1590
6-lane highway (incl. 16' median)	330	400	460	530	640	790	910	1130	1320	1600
SU TRUCK										
Minimum Criteria										
2-lane highway	325	390	455	520	585	650	715	780	845	910
4-lane highway	375	450	525	600	675	750	825	900	975	1050
6-lane highway	425	510	595	680	765	850	935	1020	1105	1190
Desirable Criteria										
2-lane highway (no median)	340	410	480	610	760	960	1120	1420	1680	2070
3-lane highway (incl. 16' median)	380	450	520	630	770	970	1140	1440	1690	2080
4-lane highway (no median)	390	470	550	630	770	970	1140	1430	1690	2080
4-lane highway (incl. 16' median)	420	510	590	680	780	990	1150	1450	1700	2090
6-lane highway (incl. 16' median)	460	550	640	730	830	1000	1160	1460	1720	2110
COMBINATION TRUCK										
Minimum Criteria										
2-lane highway	425	510	595	680	765	850	935	1020	1105	1190
4-lane highway	500	600	700	800	900	1000	1100	1200	1300	1400
6-lane highway	525	630	735	840	945	1050	1155	1260	1365	1470
Desirable Criteria										
2-lane highway (no median)	450	540	630	720	890	1130	1330	1690	1990	2460
3-lane highway (incl. 16' median)	490	590	680	780	910	1150	1350	1700	2010	2480
4-lane highway (no median)	510	610	720	820	920	1140	1340	1700	2000	2470
4-lane highway (incl. 16' median)	550	650	760	870	980	1160	1360	1720	2020	2490
6-lane highway (incl. 16' median)	590	710	830	950	1060	1180	1370	1730	2030	2500

The desirable criteria assumes near right-angle intersections and level cross-street intersection approaches, and is based on Intersection Decision Sight Distance, Cases III A and III B, AASHTO, Sub-Section 9.C.

combination, or a 3-centered compound curve. The simple curve/taper combination is preferred for driveways designed for large trucks. Table 18.H-1 contains the minimum radii for a 90 degrees turn by design vehicle. Criteria for other angles and design vehicles may be obtained from the AASHTO guideline, *A Policy on Geometric Design of Highways and Streets* (Sub-Section 9.C), Tables IX-1 and IX-2. The radius is measured from the travel lane edge line or curb line, or from the terminus of the speed change lane.

- (1) **Delineation:** The edge of each access radius should be delineated with permanent edge line striping or curbing. The edge line striping material shall be approved by the Department.
- (2) **Driveway Cuts:** Driveway cuts should only be installed in urban areas with curb, gutter and sidewalk along the frontage. If traffic volumes require a right-turn deceleration or acceleration lane, a driveway cut should not be used.

Table 18.H-1 Minimum Access Radius by Design Vehicle for 90-degree Turn (feet)			
Design Vehicle	Simple Curve Radius	Simple Curve Radius with Taper	Compound Curve Radii and Offset
Passenger Car/Pickup	30	20 / 2.5 / 10:1	100 – 20 – 100 / 2.5
Single Unit Truck	50	40 / 2.0 / 10:1	120 – 40 – 120 / 2.0
WB-50 Truck	N/A	60 / 4.0 / 15:1	180 – 60 – 180 / 6.0

Simple Curve Radius with Taper: radius (ft) / offset (ft) / taper (ft:ft)

Compound Curve Radii: radius 1 – radius 2 – radius 3 / symmetric offset, in feet

- 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 vehicle's off-tracking. Table 18.I-1 contains the driveway throat width criteria in feet. Paragraphs 18.I.1 through 18.I.3. provide further guidance on driveway widths.

Table 18.I-1 Driveway Throat Width Criteria (feet)			
Design Vehicle	Driveway Cut	Two-way Access	One-way Access
Passenger Car/Pickup	16 - 30 ft.	20 - 30 ft.	16 - 24 ft.
SU Truck	30 - 40 ft.	25 - 35 ft.	16 - 24 ft.
WB-50 Truck	40 - 50 ft.	30 - 40 ft.	20 - 30 ft.

Driveway throat width varies based upon the return radius required for the design vehicle, see Table 18.H-1, and on the intensity of use.

- (1) **Turn lanes:** Left and/or right-turn lanes may be added to the standard driveway width at major generator sites. Where the need for an additional turn lane(s) can be demonstrated, the driveway throat width may exceed the ranges stipulated in Table 18.I-1. Turn lanes should only be added to driveways that require mitigation for LOS deficiency, but may be added for site circulation purposes

with approval of the Department. The need for additional driveway lanes should be documented in a traffic study report.

- (2) **Driveway Medians:** Driveway medians should be used when two or more lanes are required for both the entering and the exiting movements at the driveway, or when an estimated daily traffic volume of 4,000 vehicles per day is expected to use the driveway.

- (a) Driveway medians may vary in width from a minimum of 4 feet to a maximum of 25 feet. Adjacent one-way drives should not be separated by more than 25 feet. The median width is not considered part of the driveway width.
- (b) All curbing within the highway clear zone shall be of a type approved by the District Traffic Engineer and appropriate for the operational speeds of the facility. In addition, signs shall not be placed in the portion of a driveway median located within NMSHTD right-of-way, or within the highway clear zone, and shall not restrict intersection sight distances.
- (c) A driveway median should not contain structures, signs, or landscaping which restrict sight distance. The desirable minimum size of a driveway median island is 100 square feet. The absolute minimum size of a driveway median island shall be 50 square feet.

- (3) **Pavement:** Driveways should be paved with asphalt pavement, portland cement concrete or a combination thereof, from the roadway edge line to the right-of-way line. The pavement design is subject to approval by the Department.

- 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 (see illustration below). 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. Suggested connection depths, generalized by land use type, are provided in Table 18.J-1.

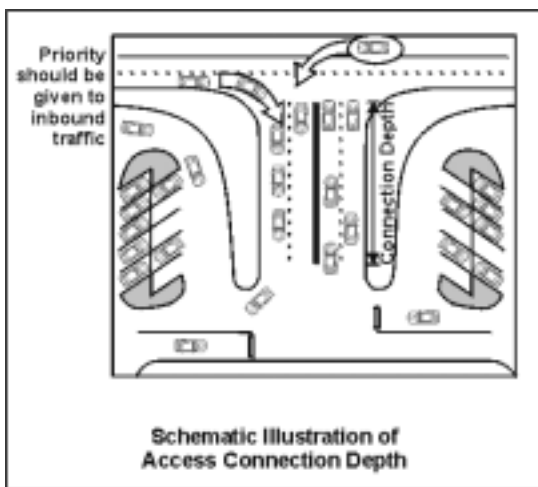


Table 18.J-1
Access Connection Depths (feet)

Land Use(s) Served by Access	Connection Depth
Regional Shopping Centers (malls)	250 feet
Community Shopping Center (supermarket, drug store, etc.)	80 feet
Small Strip Shopping Center	30 feet
Regional Office Complex	250 feet
Office Center	80 feet
Other Smaller Commercial Developments	30 feet

K. Speed Change Lanes: Speed change lanes should be designed based on the following specifications. The criteria for determining the need for speed change lanes are described in Section 17. Schematic illustrations of speed-change lanes are included in Appendix E.

- (1) **Length of Deceleration Lanes:** Deceleration lanes typically consist of three components: transition taper, deceleration distance, and queue storage. Each of these components are described below. Deceleration lanes should be designed so that a turning vehicle will develop a speed differential of 10 mph or less at the point it clears the through traffic lane. The length of the lane should allow the vehicle to come to a comfortable stop prior to reaching the end of the expected queue in the lane. Table 18.K-1 contains standard deceleration distances and transition tapers. Vehicle queue storage lengths are discussed in Paragraph 18.K.1.c.

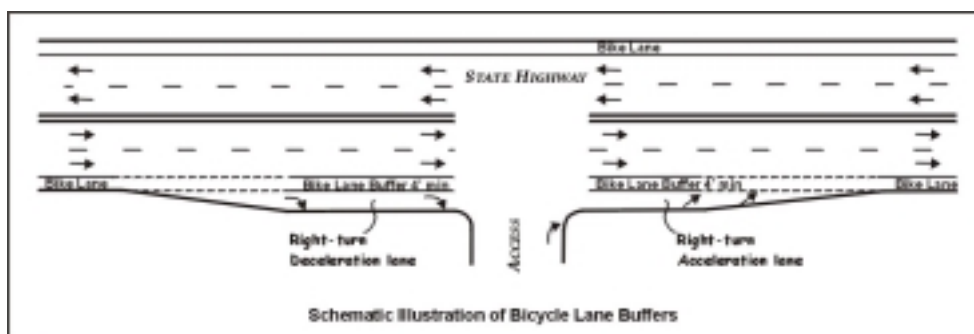
Table 18.K-1 Deceleration and Acceleration Lengths (feet)										
Speed Change Lane Condition	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
<u>Deceleration Distance</u>										
Stop Condition	150	200	250	325	400	475	550	650	725	850
Slow to 15 mph	130	175	230	300	370	450	525	620	700	820
<u>Deceleration Taper</u>										
Length for 12-foot Lane	50	75	100	125	150	175	200	225	250	250
Straight Line Ratios (L:W)	4:1	6:1	8:1	10.5:1	12.5:1	14.5:1	16.5:1	18.5:1	21:1	21:1
Acceleration Lane Length	NA	190	270	380	550	760	960	1,170	1,380	1,590
<u>Acceleration Taper</u>										
Length for 12-foot Lane	NA	100	120	150	170	180	230	270	300	300
Straight Line Ratios (L:W)	NA	8:1	10:1	12.5:1	14:1	15:1	19:1	22.5:1	25:1	25:1

This table assumes level terrain and acceleration distances for the passenger car/pickup design vehicle. Refer to the text discussion of Sub-Section 18.K for additional guidance regarding the design of speed change lanes.

- (a) **Transition Taper:** Deceleration tapers should be straight line tapers with rounded beginning and ending points. Deceleration taper lengths and ratios are provided in Table 18.K-1. Deceleration taper lengths do not require adjustment for grade. Exceptions to the deceleration tapers in Table 18.K-1 include:
- i. On urban highways with posted speed limits between 45 mph and 55 mph, left-turn deceleration tapers may be designed using 300-foot radius/600-foot radius asymmetric reverse curve tapers according to the width of the speed-change lane and/or median.

- ii.* Minimum straight line tapers may be used on urban highways with posted speeds below 40 mph where space is limited and maximum vehicle storage is required.
 - iii.* Partial tangent tapers, symmetrical reverse curve tapers, or asymmetrical reverse curve tapers may be used on state highways with posted speeds below 45 mph provided that a radius of at least 150 feet is used in curve calculations.
- (b) Deceleration Distance:** Deceleration lanes are designed for two conditions; slowing a vehicle from the posted speed to 15 mph, or to a stop. For uncontrolled turning movements at an access point, deceleration lanes should include sufficient distance for vehicles to slow to 15 mph in the lane with the corresponding access turning radius adequate for a 15-mph turn. For turning movements controlled either by signs or a traffic signal, adequate distance for vehicles to stop should be provided in the deceleration lane. The deceleration distances in Table 18.K-1 may require adjustment where rolling or mountainous terrain exists, as stated in Paragraph 18.K.6, or where high truck use is expected, as stated in Paragraph 18.K.7.
 - i.* In some instances, physical or legal constraints may necessitate eliminating all or part of the deceleration distance and providing only the taper and queue storage lengths. This minimum design criterion should be used only on highways posted below 45 mph when the requirements of Sub-Section 18.K are not feasible, and the highway has four or more intersections per mile per side creating a driver expectancy of speed-change lanes, turning movements and weaving movements along the highway segment.
 - ii.* In urban areas, the deceleration lane length may be designed based on the greater of the required vehicle queue storage length or the required deceleration distance. Standard transition tapers should be used.
- (c) Queue Storage:** Left-turn deceleration lanes should provide adequate length for the storage of vehicles waiting to turn. Right-turn deceleration lanes should provide for vehicle storage only when there is a controlled stop condition. Queue storage needs should be based on site-specific conditions according to a methodology approved by the Department. The absolute minimum storage that should be provided in urban areas and in rural areas is 50 feet.
 - i.* To allow for the impact of larger trucks, buses and recreational vehicles, “passenger car equivalents” should be used. Use a passenger car equivalent of 3 for each bus and all trucks and truck combinations of 40 feet in length or longer. Use a passenger car equivalent of 2 for each vehicle or combination at or over 20 feet in length but less than 40 feet.

- (2) **Length of 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. Table 18.K-1 contains standard acceleration distances and transition tapers.
- (a) **Acceleration Lane:** A stop condition should be assumed when determining the length of an acceleration lane for an at-grade access. The length of an acceleration lane is the same for a right-turn acceleration lane or for a left-turn acceleration lane.
- (b) **Transition Taper:** Acceleration tapers should be straight line tapers with rounded beginning and ending points. Acceleration taper lengths and ratios are provided in Table 18.K-1, and do not require adjustment for grade.
- (3) **Channelization:** Standard roadway signing and marking should be installed for all speed change lanes. Retro-reflective, white gore stripe, 8 inches wide, should separate the speed change lane from the travel lane. Acceleration lanes should have a gore stripe from the beginning to the end of the lane. Deceleration lane gore striping should begin 50 feet past the end of the approach taper and continue to the lane terminus. A minimum of two directional lane-use arrows should be placed in all deceleration lanes, one 5 feet past the beginning of the gore and one 30 feet before the terminus. Additional lane-use arrows should be installed at 200 foot spacing for long deceleration lanes. The pavement word marking “ONLY” may be used to supplement the lane-use arrows in deceleration lanes. Straight lane-use arrows, angled at 30 degrees from the travel direction toward the mainline, should be placed 50 feet before the end of the full width acceleration lane continuing in 200-foot placements over the length of the taper.
- (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. See illustration below.



- (6) **Grade Adjustment:** Adjustments should be made to the speed change lane lengths based on the roadway grade. A level roadway is defined as a roadway with a grade greater than -3% and less than +3%. Adjustments should only be applied to the lane length, not the taper length. The adjustments are calculated by multiplying the length found in Table 18.K-1 times the appropriate factor from Table 18.K-2 and rounding the result to the nearest 10 feet.

Table 18.K-2 Grade Adjustment Factors				
Type of Speed Change Lane	Grade			
	< -5%	- 5% to -3%	+3% to +5%	> +5%
Deceleration Lane	1.35	1.2	0.9	0.8
Acceleration Lane:				
25 to 45 mph	0.60	0.70	1.3	1.5
50 mph	0.55	0.65	1.4	1.8
55 mph	0.55	0.65	1.5	2.0
60 mph	0.50	0.60	1.5	2.3
65 mph	0.50	0.60	1.7	2.5
70 mph	0.50	0.60	1.8	3.0

- (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.
- (a) **Deceleration Lanes:** Deceleration lane lengths are typically not adjusted for different design vehicles, but may require adjustment for large trucks when horizontal sight restrictions exist on a downgrade.
- (b) **Acceleration Lanes:** Where a combination truck is the design vehicle, the acceleration lane lengths in Table 18.K-1 should be adjusted based on the desired speed as follows: by a factor of 5 for 30 to 35 mph; by a factor of 6 for 40 to 50 mph; or, by a factor of 9 for 55 mph (assumes level terrain). Adjustments for grade should also be made consistent with Paragraph 18.K.6. Tapers do not require adjustment for truck design. If the resulting acceleration lane is unreasonably long, the access location may not be appropriate for use by large trucks and alternatives should be considered.
- (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.

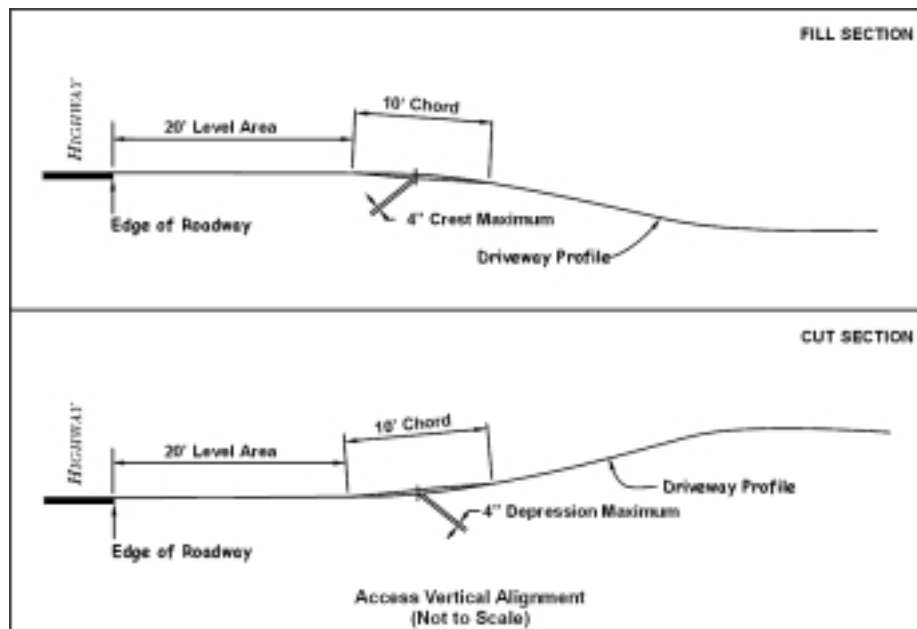
- (9) **Width:** Speed change lanes should be 12 feet wide, measured from the adjacent travel lane to the gutter pan or shoulder. Additional width may be required where horizontal curvature exists. Where right-of-way or median width is limited or if local standards apply, a reduced width may be permitted with the approval of the Department provided that a minimum of 10 feet of width is attained. A minimum of 11 feet should be provided for speed-change lanes on highways with posted speeds above 40 mph or where there is a high percentage of large trucks using the highway.
- (10) **Redirect Tapers:** Where it is necessary to establish a left-turn lane or median island, or otherwise redirect the vehicles on the traveled way, redirect tapers for redirecting through travel lanes should be installed. Redirect tapers should be constructed as straight line tapers, with the beginning and ending points rounded, based on a length-to-width ratio of the posted speed limit to one (SL:1). If the speed limit ratio would create a horizontal curve design deficiency for the through movement, the horizontal curve should be corrected in addition to the use of redirect tapers.

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 (see Sub-Section 18.D.).

- (1) **Median Width:** Where a single left-turn lane is necessary along a state highway, a minimum median width of 16 feet should be provided. The median width should consist of a 12-foot turn lane and a minimum 4-foot separator.
 - (a) Where a left-turn lane is required along a state highway and a median does not exist or the median is less than 16 feet wide, the roadway should be widened to provide a median of at least 16 feet to accommodate the left-turn lane. If it is necessary to widen a highway to construct a proper median and public right-of-way is made available, the highway should be widened equally on both sides to maintain the existing highway centerline alignment.
 - (b) If a barrier median is required, the median area should consist of a 12-foot lane exclusive of gutter, and a minimum 6-foot raised median divider (i.e., the 6-foot median is measured from inside edge line to inside edge line). Where the existing median is a non-traversable barrier design, any new median construction should also be of similar barrier design, and width, unless otherwise instructed by the Department.
 - (c) These design features may be modified at the discretion of the Department where physical constraints, curbs, sidewalks, structures, or lack of available right-of-way restricts installation.
- (2) **Channelization:** Positive channelization should be provided for all median openings. Standard striping in accordance with the MUTCD should be used for all openings and speed change lanes in medians without raised channelization. Medians with raised channelization require mountable curbing on the nose

section and the mountable curb should be marked with yellow paint containing retro-reflective glass beads. If new curbing is required in addition to the nose sections, it should match the existing curb type of the median. Median openings on rural, high-speed highways should be signed with Do Not Enter (R5-1) and One-Way (R6-1) signs.

- (3) **U-turns:** The median width may be designed to permit U-turn movements. If a facility is too narrow to safely permit a U-turn, these movements should be addressed in design or restricted through signage (R3-4). Sign use and placement require Department approval. Schematic illustrations of U-turn design options are provided in Appendix E.
 - (4) **Pavement:** Median paving should be full depth and match the pavement section design of the existing roadway.
 - (5) **Drainage Function:** Medians frequently provide a conveyance, detention, or retention function for roadways. The installation of a median opening should not reduce the conveyance or storage capacity of the median.
- 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. The minimum setback from the right-of-way line for all structures and sight obstructions should be the clear zone, but in no case less than 12 feet. At all driveways and intersections, an adequate sight triangle shall be provided. The minimum setback point for the sight triangle should be 20 feet from the near-side extended highway edge line or curb line.
- 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% for a low volume residential driveway and 8% for all other access locations. Steeper access drives require special Department approval. A level area (maximum 2% grade) 20 feet in length should be provided at each access to ensure proper sight distance from the access. The level area is measured from the highway edge of pavement or from the back of sidewalk, whichever is appropriate based on site-specific conditions. See the illustration on the following page.
 - (1) **Driveway Cuts:** The maximum vertical curve, crest or sag, should have a maximum 4-inch vertical offset over a 10-foot chord length. A standard vertical curve should be designed for all driveway profiles that exceed 3.3 %. Site runoff into state right-of-way shall be prohibited and access grades should reflect drainage considerations.
 - (2) **Driveway Drainage:** Drainage should be considered in the design of driveway grades. Roadways with curb-and-gutter sections that convey storm water runoff within the roadway prism should use driveway pans or valley gutters to carry the runoff across the driveway opening.



- (3) **ADA:** Where pedestrian use may be expected across an access point, the vertical and horizontal design characteristics of the access shall be designed in accordance with the *Americans with Disabilities Act* (see Sub-Section 9.J) and applicable NMSHTD standards (see Paragraph 18.P.3).

- O. Roadside Safety:** Careful consideration shall be given to the roadside clear zone. The permittee shall provide adequate clear zones. The access permit may require that roadway hazards in the clear zone, such as fixed objects or steep embankments, be removed, reconstructed or shielded by a proper barrier. In urban areas with speeds of 40 mph or less and vertical barrier curbs, a clear zone of at least 18 inches should be provided beyond the face of the curb. Where there is no curb in urban and rural areas and the speed is 40 mph or less, a minimum 7-foot clear zone should be provided. At speeds of 45 mph or greater, the clear zone may vary from 8 to 50 feet according to average daily traffic volume, travel speeds, roadway and roadside design. The roadside clear zone should be designed per the *AASHTO Roadside Design Guide* (see Sub-Section 9.G). The design and installation of protective devices to shield obstacles is the responsibility of the permittee and is subject to approval by the Department.
- 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. Proper signing and markings of the access/non-motorized facility intersection is required.

- (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* (see Sub-Section 9.O). 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* (see Sub-Section 9.J) and applicable NMSHTD standards. Curb ramps shall be provided on urban sections where sidewalk and curb returns exist.
- (a) **Ramps:** Access/curb ramps should be no steeper than 12:1 except on roadways with grades steeper than +6%. Where a road grade exceeds +6%, the maximum ramp length should be 25 feet. For steep down grades, the minimum ramp length should be 3.5 feet. Table 18.P-1 contains ramp lengths based upon a 6-inch barrier curb height. The equation for Table 18.P-1 is $H_c / (0.08333 - G)$ where H_c is the curb height (in feet) and G is the grade of the roadway, access, or sidewalk. Curb ramps should be designed using the applicable NMSHTD standard drawings.

Table 18.P-1 ADA Ramp Lengths (feet)			
Grade	Length	Grade	Length
-7%	3.50	0%	6.00
-6%	3.50	+1%	7.00
-5%	3.75	+2%	8.00
-4%	4.00	+3%	9.50
-3%	4.50	+4%	11.50
-2%	5.00	+5%	15.00
-1%	5.50	+6%	21.50

- (b) **Curb Return Radius:** If the curb return radius is less than or equal to 20 feet, directional ramps should be installed. If the curb return radius is greater than 20 feet, diagonal ramps may be installed in the middle of the radius.
- (c) **Signalized Access:** Where an access is signalized, curb ramps should be provided in all quadrants of the intersection.

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; see Appendix A). The lighting design shall use full cut-off fixtures, and be consistent with AD 226, Roadway Lighting (see Appendix B).

- (1) **Signalized Access:** Illumination should be provided at all signalized intersections in accordance with AASHTO's *An Informational Guide to Roadway Lighting* (see Sub-Section 9.Q) 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* (Paragraph 9.B.5).

- (1) **Documentation:** Access permit applicants shall submit drainage analysis documentation to the Department prior to changing site drainage conditions. The submittal should contain the following information:

- (a) A report including a narrative description of the existing drainage conditions, the proposed revisions, and the effect of the proposed changes upon the existing conditions. This report should include but not be limited to the following information:
 - i. Maps and design plans;
 - ii. Hydrologic and hydraulic calculations;
 - iii. Discussion of proposed drainage structures, demonstrating that they are adequate to carry the design runoff within the existing roadside system; and,
 - iv. Provision that the culvert end treatments within the roadside clear zone are designed in accordance with the Department's culvert end treatment design guidelines.
- (b) Maps and/or drawings containing all drainage modifications. This may include but not be limited to a site plan, drainage area map, contour map, grading plan, roadway elevations, structure profiles and channel profiles.
- (c) Hydrologic and hydraulic calculations where applicable for the design discharge, channel or culvert headwater and tailwater elevations, channel flow depths and velocities, culvert flow depths and velocities.

- (2) **Local Standards:** Drainage design should conform to all applicable local regulations and requirements.

- (3) **Pipe Culverts:** General requirements for pipe culverts installed parallel to roadways are as follows.
- (a) The turnout embankment slope at the pipe culvert should not exceed 8:1.
 - (b) All pipes should have a concrete blanket placed on each end of the structure. The concrete blanket should be designed so that the grates can be raised or removed for cleaning purposes.
 - (c) All pipes greater than 30-inches in diameter should be constructed to terminate outside of the vehicle recovery area. Where this is not practical, the structure shall be protected from vehicle intrusion by traffic barrier. The traffic barrier should be designed in accordance with the *AASHTO Roadside Design Guide* (see Sub-Section 9.G) and requires Department approval.

S. Fencing:

- (1) **Existing 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 breaks in an existing right-of-way fence should have the end posts properly reinforced per NMSHTD Serial Drawing FAC-001. All cattle guards should be designed according to Serial Drawings CG-001-1/3.
- (2) **New Fencing:** 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 (see Sub-Section 18.M). New fencing should be constructed according to NMSHTD Serials FAC-001 and FCL-001, and should be placed according to Serials FP-001 and FPS-001 through 003.
- (3) **Gated Access:** Gated access should be permitted only where adequate storage is provided between the near-side roadway edge line or curb line and the front of the gate. The minimum length of the storage area should be 40 feet and gates should open inward or perpendicular to the driveway (on a slider or with wheels). Table 18.S-1 contains the design lengths for five design vehicles. Gates should be constructed according to NMSHTD Serials FG-001 and FG-002.

Table 18.S-1 Minimum Storage Lengths for Gated Access (feet)	
Vehicle Classification	Storage Length
Passenger Car/Pickup Truck	40 feet
SU Bus	60 feet
SU Truck	50 feet
WB-50 Truck	75 feet
WB-62 Truck	90 feet

- 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 (see Serial MB-001). AASHTO's *A Guide for Erecting Mailboxes on Highways* (Sub-Section 9.I), should also be used for the location and design of mailbox installations. General guidance is provided below.
- (1) All mailboxes located within the roadside clear zone should have a breakaway design with the maximum sized single mailbox post being a 4" x 4" wood post or a 2-inch round steel post. The minimum offset from the near-side edge line to the front of the mailbox should be 8 feet. Where a shoulder of 6 feet or greater is constructed, the minimum offset from the edge of pavement should be 2 feet.
 - (2) Where a cluster of mailboxes is needed, the design and installation is subject to review and approval by the Department. Where installed along a state highway, a minimum usable shoulder or turnout width of 10 feet should be provided. The surface of the shoulder or turnout should be adequate for all weather conditions. The roadside face of the mailbox should be offset a minimum of 8 inches behind the edge of the shoulder or turnout. Mailbox clusters should be located based on the applicable access location and spacing criteria described in Sub-Sections 18.B and 18.C.
- 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*.

CHAPTER NINE

ACCESS CONTROL REVIEW PROCEDURES

Section 19

Overview

Throughout New Mexico, several state highways are referred to as access-controlled facilities, which means that the access rights to the facility have been purchased by the State or other governmental entity. Access rights may be purchased by the State along existing highways as well as along newly developed highways. This chapter defines the procedures that the Department follows when considering requests (1) for permanent breaks in existing access control lines, and/or (2) for establishing or modifying access control limits on new or existing state, federal and interstate highways. Access control matters are addressed by a special committee of the Department known as the Access Control Review Committee.

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. The responsibility of Department staff, the membership of the Access Control Review Committee, and the operating procedures of the Access Control Review Committee are described in this section.
- 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 or their alternates be in attendance for a quorum. The respective Division Directors may replace a representative of the Committee at any time. When the Committee loses a member through attrition or transfer within the Department, the Chairperson shall request the respective Division Director to select a new representative.

- (4) **Representatives:** The Committee members and Chairperson shall be selected by the Deputy Secretary of Highways or the respective Division Directors. The Committee members shall make every effort to attend scheduled meetings, but each Committee member shall select an alternate to attend Committee meetings in their absence. The Access Control Review Committee shall consist of representatives from the following Bureaus and Sections:
- (a) Right of Way Bureau (Voting)
 - (b) Traffic Services Section (Voting)
 - (c) Traffic Technical Support Section (Voting)
 - (d) Internal Design Bureau (Voting)
 - (e) Drainage Section (Voting)
 - (f) Engineering Operations Division (Voting)
 - (g) Surveying and Lands Engineering Section (Voting)
 - (h) Preliminary Design Bureau (Voting)
(Rotating according to project assignment)
 - (i) Advanced Planning Bureau (Urban projects only)
(Voting)
 - (j) District Engineer of District involved (Voting)
(Rotating according to District where project or access control is located)
 - (k) District Traffic Engineer of District involved (Voting)
(Rotating according to District where project or access control is located)
 - (l) FHWA (Non-voting)
 - (m) Office of General Counsel (Non-voting)

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 (at time of granting access break) edition of 18.31.6 NMAC, the *Interstate Access Control Policy* (CP 65), and any other applicable statutes, policies or procedures (such as those federal policies listed in the federal register).
- (3) **Office of Record and files:** The office of record for the Access Control Review Committee shall be the office of the Right of Way Bureau Chief where all information pertinent to the actions of the committee shall be stored. These records shall contain a summary of Access Control Review Committee actions by route and milepost.

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:

- (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 the following:
 - (a) Location: identified by stationing, distances and proposed right-of-way map.
 - (b) Specific Purpose: feasibility study or corridor study.
 - (c) Source of Funding: for all costs including engineering.
- (2) The Chairperson shall request the Right-of-Way Manager, or his/her designee, to review the right-of-way map showing proposed access control limits, and Lands Engineering shall prepare a draft Administrative Determination prior to the meeting for consideration by the Committee. The draft Administrative Determination shall describe the limits of access control or shall refer to the right-of-way map or plans that show the limits of access control. The draft Administrative Determination should be reviewed by the Project Development Engineer (requestor) and the NMSHTD Traffic Technical Support Engineer prior to consideration by the Committee.
- (3) The Project Development Engineer shall review the request with reference to the scope of the project and the Traffic Technical Support Engineer shall review the request with reference to adequate geometrics, safety and operational characteristics should a driveway be requested just beyond the proposed access-controlled right-of-way limits. A copy of the Project Development Engineer's and the Traffic Technical Support Engineer's comments should be provided with the draft Administrative Determination to be considered by the Committee.
- (4) Once all information is received, the request shall be placed on the agenda for the next Access Control Review Committee meeting.
- (5) The Access Control Review Committee shall consider all pertinent data available concerning the request for establishment of access control with special emphasis on the proposed limits of access control.
- (6) 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. Administrative Determinations shall specify any necessary conditions (i.e., existing accesses to remain, etc.). 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.

- (7) 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.
- (8) The request must be sent to FHWA for approval if on a federal or interstate highway.
- (9) 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.
- (10) 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.
- (11) 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 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 and in the procedures listed below under Paragraphs 19.F.3 through 11. As listed in Administrative Directive (AD) 222, an Access Control Study Team shall be formed to review the feasibility study submitted for interchange modifications or requests for new access. The feasibility study shall also address the Federal Policy Statement shown in Appendix B and shall be forwarded to the Access Control Review Committee for their review and comment prior to acceptance by the Study Team. Since the study will determine if an access break is feasible, the Committee shall review the study and request to make sure it addresses all their concerns before final acceptance by the Study Team.

F. Requests For Non-Interstate Access Control Breaks: Operating procedures of the Access Control Review Committee for requests for permanent access control breaks within 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 Impact Analysis or other reports to determine if the requested access is feasible.

- (2) For access requests that appear to be minor to the Chairperson, the Chairperson may ask, prior to the scheduled meeting, the Right-of-Way member to gather and review existing right-of-way maps in the area of the request and determine if damages were paid to the landowners. The Chairperson may also ask Lands Engineering to prepare a draft Administrative Determination for consideration by the Committee. If the Committee determines the access may have major or intermediate impacts, they may request a report for their review.
- (3) Once all information listed above is received, the request shall be placed on the agenda for the next Access Control Review Committee Meeting.
- (4) The Access Control Review Committee shall consider all pertinent data available concerning the request for a break in the existing access control line. The Committee shall consider the following as a minimum:
 - (a) Is another access available which does not require a break?
 - (b) Will the access have an adverse effect on the operation of the highway system?
 - (c) Is the construction of a frontage road to another access point a feasible alternative?
 - (d) Were damages paid by the state to the original land owner to establish access control, and what is the current appraisal difference that must be paid back to the state and FHWA if the break is permitted?
- (5) The Access Control Review Committee shall either: 1) recommend approval of the access control break as presented; 2) recommend approval based upon committee discussions and recommended modifications; 3) 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 as outlined in Administrative Memorandum (AD) 222 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.
- (6) 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.
- (7) 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.

- (8) The Chairperson shall send a request for approval to FHWA for all interstate or federal highways.
- (9) 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.
- (10) The Right of Way Bureau Chief shall request the appropriate appraisal difference be paid back to the Department.
- (11) 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. If temporary access breaks are not incorporated in the plans, they can be reviewed and recommended by the respective District with concurrence by the State Construction Bureau Chief and approved by an FHWA representative for that project. Use the Form No. C-196, Interstate Access Permit Request on Ongoing Construction Project, as shown in Appendix C.

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 Section 19.
- (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 Committee Procedures shall not be effective until acted on as set forth herein.



FORM TO SUBMIT SUGGESTED CHANGES STATE ACCESS MANAGEMENT MANUAL



NMSHTD District: _____

TOPIC OF SUGGESTED CHANGE:

General Topic:

Specific Subject Matter:

Rationale for Change:

MANUAL LOCATION/REFERENCE:

Page Number(s): _____ **Section Reference(s):** _____

Other Manual Reference: _____

Current Revision Date: _____

RECOMMENDATION (*attach additional pages as required*):

DISTRICT TRAFFIC ENGINEER REMARKS:

**ARTICLE 3
STATE HIGHWAY COMMISSION**

Section

- 67-3-1. Reimbursement of state highway commissioners.
- 67-3-2. State highway commissioners; number; appointment; powers; term of office; bond.
- 67-3-3. Highway commission districts; one member appointed from each district; residence requirements.
- 67-3-4. Method and time of appointment of commissioners.
- 67-3-5. Removal of commissioners; grounds.
- 67-3-6. Creation of state highway and transportation department.
- 67-3-7. State highway engineer; appointment; qualifications; bond.
- 67-3-8. Powers and duties of engineer'.



67-3-6. Creation of state highway and transportation department.

A department of government within the executive branch to be known as the "state highway and transportation department" is established. Except for the powers expressly granted to the state highway commissioners in Chapter 67, Article 3 NMSA 1978, the state highway and transportation department shall exercise all the power, authority and duty granted to the state highway commission in Chapter 67 NMSA 1978. All references contained in the NMSA 1978, as amended, and which refer to the "state highway commission" or "commissioners" shall, wherever appropriate, be construed to refer to or to mean the state highway and transportation department as designated in this section.

History: 1953 Comp., § 55-2-1.5, enacted by Laws 1967, ch. 266, § 5; 1987, ch. 268, § 35.

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ARTICLE 11 CONTROLLED-ACCESS FACILITIES

Section

- 67-11-1. Definition of a controlled-access facility.
- 67-11-2. Authority of state highway commission.
- 67-11-3. Agreement to reroute streets or county highways.
- 67-11-4. Design of controlled-access facility.
- 67-11-5. Acquisition of property and property rights.
- 67-11-6. Preference of condemnation cases.
- 67-11-7. New or existing facilities; elimination of grade crossings.
- 67-11-8. Authority of local units to enter into agreements.
- 67-11-9. Local service roads.
- 67-11-10. Unlawful use of controlled-access facilities; penalties.

67-11-1. Definition of a controlled-access facility.

As used in this act [67-11-1 to 67-11-10 NMSA 1978], "controlled-access facility" means a highway or street especially designed for through traffic and over, from or to which owners or occupants of abutting land or other persons have no right or easement or only a controlled right or easement of access, light, air or view by reason of the fact that their property abuts upon such controlled-access facility or for any other reason. Such highways or streets may be freeways open to use by all customary forms of street and highway traffic or they may be parkways from which trucks, busses and other commercial vehicles shall be excluded.

History: 1953 Comp., § 55-10-1, enacted by Laws 1957, ch. 234, § 1.

67-11-2. Authority of state highway commission.

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.

History: 1953 Comp., § 55-10-2, enacted by Laws 1957, ch. 234, § 2.

67-11-3. Agreement to reroute streets or county highways.

The state highway commission is authorized and directed to enter into an agreement with the authority exercising jurisdiction over the street or highway and, in accordance with the terms of this agreement, when essential, to close any street or highway or to reroute such street or highway over and under or to reroute to a connection with the freeway or controlled-access highway.

History: 1953 Comp., § 55-10-3, enacted by Laws 1957, ch. 234, § 3.

67-11-4. Design of controlled-access facility.

The highway authorities of the state or of any county, city, town or village are authorized to so design any controlled-access facility and to so regulate, restrict or prohibit access as to best serve the traffic for which such facility is intended. In this connection such highway authorities are authorized to divide and separate any controlled-access facility into separate roadways by the construction

of raised curbs, central dividing sections or other physical separations, or by designating such separate roadways by signs, markers, stripes and the proper lane for such traffic by appropriate signs, markers, stripes and other devices. No person shall have right of ingress or egress to, from or across controlled-access facilities to or from abutting lands except at such designated points at which access may be specified.

History: 1953 Comp., § 55-10-4, enacted by Laws 1957, ch. 234, § 4.

67-11-5. Acquisition of property and property rights.

For the purposes of this act [67-11-1 to 67-11-10 NMSA 1978], the state highway commission, alone, or in agreement with any county, city, town or village, may acquire private or public property and property rights for controlled-access facilities and service roads, including rights of access, air, view and light, by purchase or condemnation in the same manner as such units are now or hereafter may be authorized by law to acquire such property or property rights in connection with highways and streets within their respective jurisdictions. All property rights acquired under the provisions of this act shall be in fee simple, except in circumstances where fee simple cannot be obtained an appropriate easement in perpetuity shall be acceptable. In connection with the acquisition of property or property rights for any controlled-access facility or portion thereof, or service road in connection therewith, the state highway commission, alone, or in agreement with any county, city, town or village highway authority, may, in its discretion, acquire an entire lot, block or tract of land if by so doing the interests of the public will be best served even though said entire lot, block or tract is not immediately needed for the right-of-way proper.

History: 1953 Comp., § 55-10-5, enacted by Laws 1957, ch. 234, § 5.

67-11-6. Preference of condemnation cases.

Court proceedings necessary to acquire property or property rights for purposes of this act [67-11-1 to 67-11-10 NMSA 1978] shall take precedence over all other causes not involving the public interest in all courts, to the end that the provision of controlled-access facilities may be expedited.

History: 1953 Comp., § 55-10-6, enacted by Laws 1957, ch. 234, § 6.

67-11-7. New or existing facilities; elimination of grade crossings.

The state highway commission, alone, or in agreement with any county, city, town or village may designate and establish controlled-access highways as new and additional facilities or may designate and establish existing streets or highways as included within a controlled-access facility. The state or any of its subdivisions shall have authority to provide for the elimination of intersections at grade or controlled-access facilities with existing state and county roads and city or town or village streets, by grade separation or service road, or by closing off such roads and streets at the right-of-way boundary line of such controlled-access facility; and after the establishment of any controlled-access facility, no highway or street which is not part of said facility shall intersect the same at grade. No city, town or village street, county or state highway or other public way shall be opened into or connected with any such controlled-access facility without the consent and previous approval of the state highway commission. Such consent and approval shall be given only if the public interest shall be served thereby.

History: 1953 Comp., § 55-10-7, enacted by Laws 1957, ch. 234, § 7.

67-11-8. Authority of local units to enter into agreements.

The highway authorities of the state, city, county, town or village are authorized to enter into agreements with each other, or with the federal government, respecting the financing, planning, establishment, improvement, maintenance, use, regulation or vacation of controlled-access facilities or other public ways in their respective jurisdictions, to facilitate the purposes of this act [67-11-1 to 67-11-10 NMSA 1978].

History: 1953 Comp., § 55-10-8, enacted by Laws 1957, ch. 234, § 8.

67-11-9. Local service roads.

No commercial enterprises or activities shall be conducted, permitted or authorized on publicly owned land or land leased by the state, county, city, town or village highway authorities or by any other governmental agency, for the purpose of providing goods and services to the users of the controlled-access facilities, nor shall gasoline service stations or other commercial establishments be built on the property acquired for or in connection with the controlled-access facilities. However, in connection with the development of any controlled-access facility the state, county, city, town or village highway authorities are authorized to plan, designate, establish, use, regulate, alter, improve, maintain and vacate local service roads and streets or to designate as local service roads and streets any existing road or street, in such manner as to facilitate the establishment and operation of competitive gasoline service stations and other commercial enterprises on private property abutting such service roads and streets. The state highway commission is authorized to exercise jurisdiction over such service roads and streets in the same manner as is authorized over controlled-access facilities under the terms of this act [67-11-1 to 67-11-10 NMSA 1978]. Such local service roads and streets shall be of appropriate design, and shall be separated from the controlled-access facility proper by means of all devices designated as necessary or desirable by the proper authority.

History: 1953 Comp., § 55-10-9, enacted by Laws 1957, ch. 234, § 9.

67-11-10. Unlawful use of controlled-access facilities; penalties.

A. It is unlawful for any person:

- (1) to drive a vehicle over, upon or across any curb, central dividing section or other separation or dividing line on controlled-access facilities; or
- (2) to make a left turn or a semicircular or u-turn except through an opening provided for that purpose in the dividing curb section, separation or line; or
- (3) to drive any vehicle except in the proper lane provided for that purpose and in the proper direction and to the right of the central dividing curb, separation, section or line; or
- (4) to drive any vehicle into the controlled-access facility from a local service road except through an opening provided for that purpose in the dividing curb or dividing section or dividing line which separates such service road from the controlled-access facility proper.

B. Any person who violates any of the provisions of this section is guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than one hundred dollars (\$100) nor less than five dollars (\$5.00) or by imprisonment in the county jail for not more than ninety days nor less than five days, or by both fine and imprisonment in the discretion of the judge.

History: 1953 Comp., § 55-10-10, enacted by Laws 1957, ch. 234, § 10.

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The Legislature
of the
State of New Mexico

44th Legislature, 1st Session

LAWS 1999

CHAPTER 197

HOUSE BILL 39, as amended

Introduced by

REPRESENTATIVE PAULINE K. GUBBELS AND REPRESENTATIVE RHONDA S. KING

REPRESENTATIVE J. "ANDY" KISSNER
REPRESENTATIVE TERRY T. MARQUARDT
REPRESENTATIVE R. DAVID PEDERSON
REPRESENTATIVE GLORIA C. VAUGHN
REPRESENTATIVE MARY HELEN GARCIA



CHAPTER 197

AN ACT

RELATING TO THE ENVIRONMENT, ENACTING THE NIGHT SKY PROTECTION
ACT; PROVIDING A PENALTY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF NEW MEXICO:

Section 1. SHORT TITLE.--This act may be cited as the
"Night Sky Protection Act".

Section 2. PURPOSE.--The purpose of the Night Sky
Protection Act is to regulate outdoor night lighting fixtures
to preserve and enhance the state's dark sky while promoting
safety, conserving energy and preserving the environment for
astronomy.

Section 3. DEFINITIONS.--As used in the Night Sky
Protection Act:

A. "outdoor lighting fixture" means an outdoor
artificial illuminating device, whether permanent or portable,
used for illumination or advertisement, including
searchlights, spotlights and floodlights, whether for
architectural lighting, parking lot lighting, landscape
lighting, billboards or street lighting; and

B. "shielded" means a fixture that is shielded in
such a manner that light rays emitted by the fixture, either
directly from the lamp or indirectly from the fixture, are
projected below a horizontal plane running through the lowest
point on the fixture where light is emitted.

1 Section 4. SHIELDING OF OUTDOOR LIGHT FIXTURES.--All
2 outdoor lighting fixtures installed after January 1, 2000
3 shall be shielded, except incandescent fixtures of one hundred
4 fifty watts or less and other sources of seventy watts or
5 less.

6 Section 5. NONCONFORMING LIGHT FIXTURES.--

7 A. In addition to other exemptions provided in the
8 Night Sky Protection Act, an outdoor lighting fixture not
9 meeting these provisions shall be allowed, if the fixture is
10 extinguished by an automatic shutoff device between the hours
11 of 11:00 p.m. and sunrise.

12 B. No outdoor recreational facility, whether
13 public or private, shall be illuminated after 11:00 p.m.
14 except for a national or international tournament or to
15 conclude any recreational or sporting event or other activity
16 conducted, which is in progress prior to 11:00 p.m. at a
17 ballpark, outdoor amphitheater, arena or similar facility.

18 Section 6. USE OF MERCURY VAPOR LIGHTING FIXTURES.--No
19 new mercury vapor outdoor lighting fixtures shall be sold or
20 installed after January 1, 2000.

21 Section 7. EXEMPTIONS.--

22 A. The following are exempt from the requirements
23 of the Night Sky Protection Act:

24 (1) outdoor lighting fixtures on
25 advertisement signs on interstates and federal primary

1 highways:

2 (2) outdoor lighting fixtures existing and
3 legally installed prior to the effective date of the Night Sky
4 Protection Act; however, when existing lighting fixtures
5 become unrepairable, their replacements are subject to all the
6 provisions of the Night Sky Protection Act;

7 (3) navigational lighting systems at
8 airports and other lighting necessary for aircraft safety; and

9 (4) outdoor lighting fixtures that are
10 necessary for worker safety at farms, ranches, dairies,
11 feedlots or industrial, mining or oil and gas facilities.

12 B. The provisions of the Night Sky Protection Act
13 are cumulative and supplemental and shall not apply within any
14 county or municipality that, by ordinance or resolution, has
15 adopted provisions restricting light pollution that are equal
16 to or more stringent than the provisions of the Night Sky
17 Protection Act.

18 Section 8. CONSTRUCTION INDUSTRIES DIVISION--
19 DUTIES.--The construction industries division of the
20 regulation and licensing department shall review the outdoor
21 lighting provisions in the uniform building codes used in New
22 Mexico and make recommendations for appropriate changes to
23 comply with the provisions of the Night Sky Protection Act.

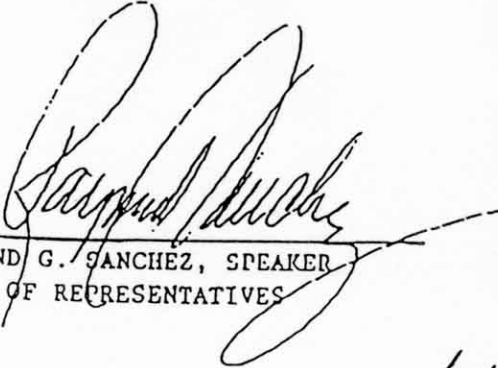
24 Section 9. COSTS OF REPLACEMENT--RECOVERY.--If public
25 utilities are required pursuant to the provisions of the Night
HB 39
Page 3

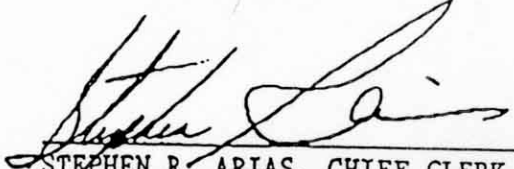
1 Sky Protection Act or by local government ordinances to
2 accelerate replacement of lighting fixtures, the cost of such
3 replacement shall be included in rates approved by the public
4 regulation commission.

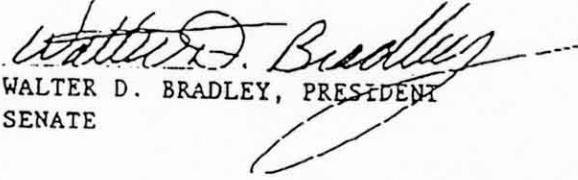
5 Section 10. VIOLATIONS--PENALTY.--Any person, firm or
6 corporation violating the provisions of the Night Sky
7 Protection Act shall be punished as follows:

8 A. for a first offense, the offender may be issued
9 a warning; and

10 B. for a second offense or offense that continues
11 for thirty days from the date of the warning, twenty-five
12 dollars (\$25.00) minus the replacement cost for each offending
13 fixture.



RAYMOND G. SANCHEZ, SPEAKER
HOUSE OF REPRESENTATIVES


STEPHEN R. ARIAS, CHIEF CLERK
HOUSE OF REPRESENTATIVES


WALTER D. BRADLEY, PRESIDENT
SENATE


MARGARET LARRAGOITE, CHIEF CLERK
SENATE

Approved by me this 6 day of April, 1999


GARY E. JOHNSON, GOVERNOR
STATE OF NEW MEXICO

NEW MEXICO STATE HIGHWAY COMMISSION



Commission Policy

Effective Date: 10/16/97

John O. Bursman
Chairperson

Edward T. Beaman
Vice-Chairperson

Robert C. Moch
Secretary

Jim Atchison
Member

Albert R. Sanchez
Member

Shirley L. Gallows
Member

Number and Subject: CP 65 Interstate Access

Reference: Sections 67-11-4 through 67-11-5 and 67-11-7 through 67-11-9, NMSA 1978

This Commission Policy supersedes Commission Policy No. 65 dated December 3, 1992.

It is the policy of the New Mexico State Highway Commission that new or modified interstate accesses shall be approved provided no impact or minimal impact on public safety can be assured.

- A. Local governmental agencies and private interests working with local governmental agencies may request a new or modified interstate access through the Department's Secretary.
 - 1. The requesting local governmental agency shall certify available funding for the feasibility study.
 - 2. The requesting local governmental agency shall execute a memorandum of understanding for design, construction and maintenance funding responsibilities.
 - a. Design, construction and maintenance for new or modified interchanges determined by systematic traffic engineering studies shall be at the Department's expense.

- b. Design, construction and maintenance for new or modified interchanges requested by a local governmental agency to accommodate new business development shall be at the local governmental agency's expense.
 - c. Design, construction and maintenance for new or modified interchanges determined by progressive population growth with increased traffic flow and new business development shall be shared proportionately to the increased traffic flow by the Department and the requesting local governmental agency.
 - B. The Secretary shall review the request, including the certification and memorandum of understanding, for compliance with applicable rules, regulations and standards.
 - C. The Secretary shall present the request to the Commission with an analysis and recommendation.
 - D. Requests approved by the Commission shall be submitted to the Federal Highway Administration for approval and subsequent inclusion in the Department's five year plan.
 - E. The Secretary is delegated the authority to construct temporary or emergency access points as necessitated.
 - F. The Secretary shall formulate suitable directives and procedures for the implementation of this Policy.
-

NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT



AD 222
03/01/99

HIGHWAY ACCESS CONTROL


Pete K. Rahn, Secretary NMSHTD

Supersedes Administrative Directive No. 222/160 dated December 6, 1993

- AUTHORITY:** 1.00 Commission Policy No. 65
- PURPOSE:** 2.00 To provide guidelines when a request for modification or new access to a controlled access highway is submitted by local governmental agencies, other state and federal agencies.
- DEFINITIONS:** 3.00 N/A
- DIRECTIVE:** 4.00 A request for modification to or new access to a controlled access highway may be submitted to the Department by:
- 4.00a Local governmental agencies or private interests working through local governmental agencies, whose jurisdiction includes the controlled highway where access is requested, or
 - 4.00b Other state and federal agencies.
- 4.01 Requests for change of control access shall identify the specific location for the proposed access modification, outline the purpose or need for the change and certify available funding for the feasibility study.
- 4.02 Requests for minor modifications to a controlled access highway shall be submitted to the Department's Access Control Review Committee and shall require:
- 4.02a A study in compliance with the Department's Access Control Procedures,
 - 4.02b Concurrence by the Access Control Review Committee, and
 - 4.02c Review and approval by the Secretary.
- 4.03 New access or major modifications to a controlled access highway.
- 4.03a Requests for new access or major modifications shall require an independent feasibility study by a private consultant.

- 4.03b Requesting agencies shall enter into a joint powers agreement with the Department and provide funding for the project-level feasibility studies.
- 4.03c A five member Access Control Study Team shall be established to review each feasibility study. The study team shall consist of the following members:
 - 4.03c1 Three from within the Department; one each from the Preliminary Design Bureau, the appropriate District and the Traffic Design Section;
 - 4.03c2 One from the Federal Highway Administration;
 - 4.03c3 One from the requesting agency; and
 - 4.03c4 Advisory members from other highway disciplines as requested.
- 4.03d The Department shall issue the Request for Proposal (RFP) to select an independent consultant for the project-level feasibility study which will include the following elements:
 - 4.03d1 Purpose,
 - 4.03d2 The impact of the request to the access controlled facility from a system-wide and local perspective on a short and long-term basis,
 - 4.03d3 Relationship to other highway improvement plans and programs,
 - 4.03d4 Distances to and size of communities/regions or activities directly served,
 - 4.03d5 Description of existing and proposed access:
 - Configuration of the existing and proposed interchange,
 - Distances to adjacent interchanges,
 - Alternatives that have been considered,
 - Interstate main line and crossroad traffic volumes (peak hour and ADT), including turning movements and ramp volumes, for current implementation and design years, and
 - Number of main line and crossroad lanes, including auxiliary lanes or collector-distributor roads.
 - 4.03d6 Traffic and operational analysis of existing and proposed conditions, including crossroads, ramps and other roads and streets that effectively collect and distribute traffic from the new access. All capacity analyses shall be in accordance with the latest revision of the Highway Capacity Manual (SR209),
 - 4.03d7 Any additional information that might help explain and/or support the request,
 - 4.03d8 Safety analysis,

- 4.03d9 Preliminary layout,
- 4.03d10 Impact on sensitive land uses,
- 4.03d11 A recommendation of funding source based upon traffic generation and other relevant factors, and
- 4.03d12 Any information necessary to assess preliminary social, economic, environmental and engineering impacts and costs associated with the request.
- 4.03e The Department Consultant Selection Committee shall select an independent consultant to conduct the project-level feasibility study. The rotating voting member of the Consultant Selection Committee shall be an employee of the requesting agency.
- 4.03f The selected consultant shall report to the Department, work within the standards of the Department and submit findings to the Access Control Study Team.
- 4.03g The Access Control Study Team shall:
 - 4.03g1 Determine funding responsibilities for design, construction and maintenance. This determination shall be documented by a Memorandum of Understanding between the Department and the requesting agency,
 - 4.03g2 Submit urban access request recommendations to the appropriate Metropolitan Planning Organization (MPO)/Regional Planning Organization (RPO) and the appropriate municipality for review and comments,
 - 4.03g3 Review feasibility study findings for rural access requests, and
 - 4.03g4 Make recommendations and forward to the Access Control Review Committee
- 4.03h The Access Control Review Committee shall review the final report and forward the final Department recommendations to the Secretary. The Committee representation shall consist of:
 - 4.03h1 Right of Way Bureau
 - 4.03h2 Traffic Services Section
 - 4.03h3 Traffic Technical Support Section
 - 4.03h4 Design Bureau
 - 4.03h5 Preliminary Design Bureau
 - 4.03h6 Advanced Planning Bureau
 - 4.03h7 Drainage Section
 - 4.03h8 Engineering Operations Division

4.03h9 Surveying and Lands Engineering Section

4.03h10 District

4.03h11 FHWA (Advisory capacity)

4.03h12 Office of General Counsel (Advisory capacity)

4.03i The Secretary shall submit the proposals and recommendations to the New Mexico State Highway Commission for approval.

4.03j Requesting agencies shall enter into a joint-powers agreement with the Department to initiate project development and include but not be limited to environmental documentation, design, construction and maintenance responsibility. This agreement should be executed prior to the inclusion of the project in the appropriate State Transportation Improvement Program (STIP).

4.03k Requests approved by the Commission shall be submitted to the Federal Highway Administration for final approval (if required) and subsequent inclusion in the appropriate Transportation Improvement Program (TIP).

PROCEDURES:

5.00 NMSHTD Access Control Procedures

**CROSS
REFERENCE:**

6.00 N/A



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
NEW MEXICO DIVISION
604 West San Mateo Road
Santa Fe, New Mexico 87505
REGION SIX

February 23, 1998

In Reply Refer To:
HDA-NM
510

SUBJECT: Additional Interchanges to the Interstate System

Mr. Pete K. Rahn
Secretary of Highway and
Transportation Department
P.O. Box 1149
Santa Fe, New Mexico 87504

Dear Mr. Rahn:

Enclosed for your information and use is a revision to the FHWA policy statement regarding requests for additional access to the existing Interstate System. This revision was published in the Federal Register dated February 11, 1998, and became effective that date. The policy includes guidance for the justification and documentation needed for requests to add access (interchanges and ramps).

Sincerely yours,

REUBEN S. THOMAS

Reuben S. Thomas
Division Administrator

Enclosure

cc:

Mr Ronald Gaines, NMSHTD, w/enclosure
Mr. Charlie Trujillo, NMSHTD, w/enclosure
Mr. Leroy Sandoval, NMSHTD, w/enclosure
Mr. George Herrera, NMSHTD, w/enclosure
Mr. Bennie Garcia, NMSHTD, w/enclosure
Mr. John Nitzel, NMSHTD, w/enclosure

evaluate the No Build, and a Light Rail Transit alternative (including highway improvements and transportation management solutions) in the I-25 Southeast Corridor study limits from Broadway to Lincoln Avenue, which includes I-225 from I-25 to Parker Road, and determine the estimated costs and potential impacts associated with each. CDOT will be the local lead agency for the preparation of the EIS. The EIS also will satisfy the requirements of the 1999 Clean Air Act Amendments. Scoping will be accomplished through coordination with affected parties, organizations, federal, state and local agencies and through three public meetings which will be held from 5:00 p.m. to 8:00 p.m. at the following locations and dates:

Tuesday, March 31, 1998, Castlewood Public Library, 6739 South Uinta Street, Denver, CO 80112

Thursday, April 2, 1998, Most Precious Blood Catholic School, 2250 South Harrison, Denver, CO 80210

Tuesday, April 7, 1998, Hebrew Educational Alliance, 3600 South Ivanhoe, Denver, CO 80237

A 45-day scoping period will begin on March 4, 1998 and conclude on April 17, 1998. Written comments on the scope of the alternatives and impacts to be considered must be received by CDOT by April 17, 1998.

Written comments on project scope should be sent to:

Mr. Robert Sakaguchi, Region 6 Planning and Environmental Manager
CDOT, 2000 South Holly Street,
Denver, CO 80222 Telephone: (303) 757-9818

or

Mr. John Basner, Region 6 South Area Program Engineer, CDOT, 2000 South Holly Street, Denver, CO 80222, Telephone: (303) 757-9387

FHWA, FTA, CDOT, and other local agencies invite interested individuals, organizations, and federal, state and local agencies to participate in defining the alternatives to be evaluated in the EIS and identifying any significant social, economic, or environmental issues related to the alternatives. An information packet describing the purpose of the project, the proposed alternatives, the areas to be evaluated, the citizen involvement program, and the preliminary project schedule will be developed. These scoping materials may be requested by contacting Mr. Robert Sakaguchi, Region 6 Planning and Environmental Manager, or Mr. John Basner, Region 6 South Area Program Engineer, at the address and phone numbers above. Scoping comments may be made verbally at the public scoping

meetings or in writing. The public will receive notices on location and time of the scoping meetings through newspaper advertisements and individual correspondence.

To ensure that a full range of issues related to this proposed action are addressed and all significant issues are identified, comments and suggestions are invited from all interested parties. If you wish to be placed on the mailing list to receive further information as the project develops, contact Mr. Robert Sakaguchi, or Mr. John Basner, as previously described.

The proposed action is consistent with the recently completed Southeast Corridor Major Investment Study. It begins at approximately I-25 and Broadway and proceeds south and southeast to Lincoln Avenue following the general alignment of I-25. Also included is a segment along I-225 from I-25 to Parker Road. The proposed action excludes any proposed roadway improvements near I-25 from 6th Avenue to approximately the Logan Street crossing, including the I-25 interchanges at Alameda, Santa Fe, and Broadway. Transit and highway improvements are intended to alleviate traffic congestion in the Southeast Corridor, address safety problems and help achieve regional air quality goals by providing an alternative to the single occupant vehicle.

The alternatives to be evaluated include the following. The No-Build alternative will serve as the baseline for environmental analysis and consists of the existing transit and highway systems and all projects contained in the federally approved Transportation Improvement Program (TIP) for the Denver metropolitan area. The Light Rail Transit (LRT) alternative will generally use the I-25 right-of-way between Broadway and Lincoln Avenue, and the I-225 right-of-way between I-25 and Parker. This alternative, designed to accommodate future transportation needs, also includes improvements to the highway, transportation systems management, and pedestrian facilities in the study area.

FHWA, FTA, and CDOT will evaluate all significant social, economic, and environmental impacts of the alternatives. The primary areas of examination will include transit ridership, the capital outlays needed to construct the recommended alternative, the cost of operating and maintaining facilities created by the project, and the financial requirements on the funding agencies. Environmental and social impacts to be evaluated in the analysis include land use and neighborhood impacts, traffic and parking impacts

near stations, visual impacts, hazardous material impacts, impacts on cultural and paleontological resources, and noise and vibration impacts. Impacts on natural areas, threatened and endangered species, air and water quality, groundwater, and geological forms will also be covered. The impacts will be evaluated both for the construction period and for the long-term period of operation. Measures to mitigate significant adverse impacts will be developed.

In accordance with the Federal Transit Act, as amended, and FHWA and FTA policy, the draft EIS will be prepared with required engineering design studies necessary to complete the document. After its publication, the draft EIS will be available for public and agency review and comment, and a public hearing will be held. On the basis of the Draft EIS and the comments received, a preferred alternative will be selected and preparation of the Final EIS and Record of Decision will proceed.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research, Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program)

Issued on: February 5, 1998.

Ronald A. Sperial,
Environmental/ROW Program Manager
Colorado Division
Federal Highway Administration,
Lakewood, Colorado.

Louis F. Mraz, Jr.,
Regional Administrator,
Federal Transit Administration,
Region VIII
Denver, Colorado.

[FR Doc. 98-3409 Filed 2-10-98; 8:45 am]

BILLING CODE 4910-22-M

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Additional Interchanges to the Interstate System

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of policy statement.

SUMMARY: This document issues a revision of the FHWA policy statement regarding requests for added access to the existing Interstate system. The policy includes guidance for the justification and documentation needed for requests to add access (interchanges and ramps) to the existing Interstate System. The policy statement was

originally issued in the **Federal Register** on October 22, 1990 (55 FR 42670).

DATES: The effective date of this policy is February 11, 1998.

FOR FURTHER INFORMATION CONTACT: Mr. Seppo I. Sillan, Federal-Aid and Design Division, Office of Engineering, (202) 366-0312, or Mr. Wilbert Baccus, Office of Chief Counsel, (202) 366-0780, Federal Highway Administration, 400 Seventh Street SW., Washington DC 20590. Office hours are from 7:45 a.m. to 4:15 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Background

Section 111 of title 23, U.S.C., provides that all agreements between the Secretary and the State highway department for the construction of projects on the Interstate System shall contain a clause providing that the State will not add any points of access to, or exit from, the project in addition to those approved by the Secretary in the plans for such project, without the prior approval of the Secretary. The Secretary has delegated the authority to administer 23 U.S.C. 111 to the Federal Highway Administrator pursuant to 49 CFR 1.48(b)(10). A formal policy statement including guidance for justifying and documenting the need for additional access to the existing sections of the Interstate System was published in the **Federal Register** on October 22, 1990 (55 FR 42670).

The FHWA has adopted the AASHTO publication "A Policy on Design Standards—Interstate System" as its standard for projects on the Interstate System. This publication provides that access to the Interstate System shall be fully controlled by constructing grade separations at selected public crossroads and all railroad crossings. Where interchanges with selected public crossroads are constructed, access control must extend the full length of ramps and terminals on the crossroad.

Summary of Changes

The changes in the policy statement are being made to reflect the planning requirements of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA, Pub. L. 102-240) as implemented in 23 CFR part 450, to clarify coordination between the access request and environmental processes, and to update language at various locations. The following specific revisions are made to the existing policy statement:

1. An additional sentence is added to item 5 under "Policy" that ensures requests for new or revised access are

consistent with 23 CFR part 450 and 40 CFR parts 51 and 93.

2. Text in item 5 pertaining to future interchange additions has been moved to item 6 because it covers a different subject.

3. Item 6 is redesignated as item 7.

4. A new item 8 is added so that those reviewing the access request have the information necessary to process the request.

5. The fifth paragraph under "Application" is revised to clarify coordination with the environmental process.

The revised policy statement also includes various editorial changes to enhance clarity and readability. The revised policy statement is as follows:

Policy

It is in the national interest to maintain the Interstate System to provide the highest level of service in terms of safety and mobility. Adequate control of access is critical to providing such service. Therefore, new or revised access points to the existing Interstate System should meet the following requirements:

1. The existing interchanges and/or local roads and streets in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design-year traffic demands while at the same time providing the access intended by the proposal.

2. All reasonable alternatives for design options, location and transportation system management type improvements (such as ramp metering, mass transit, and HOV facilities) have been assessed and provided for if currently justified, or provisions are included for accommodating such facilities if a future need is identified.

3. The proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility based on an analysis of current and future traffic. The operational analysis for existing conditions shall, particularly in urbanized areas, include an analysis of sections of Interstate to and including at least the first adjacent existing or proposed interchange on either side. Crossroads and other roads and streets shall be included in the analysis to the extent necessary to assure their ability to collect and distribute traffic to and from the interchange with new or revised access points.

4. The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" for special purpose access for transit vehicles, for HOV's, or into

park and ride lots may be considered on a case-by-case basis. The proposed access will be designed to meet or exceed current standards for Federal-aid projects on the Interstate System.

5. The proposal considers and is consistent with local and regional land use and transportation plans. Prior to final approval, all requests for new or revised access must be consistent with the metropolitan and/or statewide transportation plan, as appropriate, the applicable provisions of 23 CFR part 450 and the transportation conformity requirements of 40 CFR parts 51 and 93.

6. In areas where the potential exists for future multiple interchange additions, all requests for new or revised access are supported by a comprehensive Interstate network study with recommendations that address all proposed and desired access within the context of a long-term plan.

7. The request for a new or revised access generated by new or expanded development demonstrates appropriate coordination between the development and related or otherwise required transportation system improvements.

8. The request for new or revised access contains information relative to the planning requirements and the status of the environmental processing of the proposal.

Application

This policy is applicable to new or revised access points to existing Interstate facilities regardless of the funding of the original construction or regardless of the funding for the new access points. This includes routes incorporated into the Interstate System under the provisions of 23 U.S.C. 139(a) or other legislation.

Routes approved as a future part of the Interstate system under 23 U.S.C. 139(b) represent a special case because they are not yet a part of the Interstate system and the policy contained herein does not apply. However, since the intention to add the route to the Interstate system has been formalized by agreement, any proposed access points, regardless of funding, must be coordinated with the FHWA Division Office. This policy is not applicable to toll roads incorporated into the Interstate System, except for segments where Federal funds have been expended, or where the toll road section has been added to the Interstate System under the provisions of 23 U.S.C. 139(a).

For the purpose of applying this policy, each entrance or exit point, including "locked gate" access, to the mainline is considered to be an access point. For example, a diamond

interchange configuration has four access points.

Generally, revised access is considered to be a change in the interchange configuration even though the number of actual points of access may not change. For example, replacing one of the direct ramps of a diamond interchange with a loop, or changing a cloverleaf interchange into a fully directional interchange would be considered revised access for the purpose of applying this policy.

All requests for new or revised access points on completed Interstate highways must be closely coordinated with the planning and environmental processes. The FHWA approval constitutes a Federal action, and as such, requires that the National Environmental Policy Act (NEPA) procedures are followed. The NEPA procedures will be accomplished as part of the normal project development process and as a condition of the access approval. This means the final approval of access cannot precede the completion of the NEPA process. To offer maximum flexibility, however, any proposed access points can be submitted in accordance with the delegation of authority for a determination of engineering and operational acceptability prior to completion of the NEPA process. In this manner, the State highway agency can determine if a proposal is acceptable for inclusion as an alternative in the environmental process. This policy in no way alters the current NEPA implementing procedures as contained in 23 CFR part 771.

Although the justification and documentation procedures described in this policy can be applied to access requests for non-Interstate freeways or other access controlled highways, they are not required. However, applicable Federal rules and regulations, including NEPA procedures, must be followed.

Implementation

The FHWA Division Office will ensure that all requests for new or revised access submitted by the State highway agency for FHWA consideration contain sufficient information to allow the FHWA to independently evaluate the request and ensure that all pertinent factors and alternatives have been appropriately considered. The extent and format of the required justification and

documentation should be developed jointly by the State highway agency and the FHWA to accommodate the operations of both agencies, and should also be consistent with the complexity and expected impact of the proposals. For example, information in support of isolated rural interchanges may not need to be as extensive as for a complex or potentially controversial interchange in an urban area. No specific documentation format or content is prescribed by this policy.

Policy Statement Impact

The policy statement, first published in the **Federal Register** on October 22, 1990 (55 FR 42670), describes the justification and documentation needed for requests to add or revise access to the existing Interstate System. The revisions made by this publication of the policy statement reflect the planning requirements of the ISTEA as implemented in 23 CFR part 450, clarify coordination between the access request and environmental processes, and update language at various locations. The States will have to take these factors into consideration when making future requests for new or revised access points, but the overall effort necessary for developing the request will not be significantly increased.

Authority: 23 U.S.C. 315; 49 CFR 1.48.

Issued: February 4, 1998.

Kenneth R. Wykle,

Administrator, Federal Highway Administration.

[FR Doc. 98-3460 Filed 2-10-98; 8:45 am]

BILLING CODE 4910-22-P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[Notice 97-1]

Safety Advisory: Unauthorized Cargo Tanks Used to Transport Hazardous Materials

AGENCY: Federal Highway Administration (FHWA) DOT.

ACTION: Notice.

SUMMARY: This is to notify the public that certain specification DOT 407 and DOT 412 cargo tank motor vehicles manufactured by Prairie State Equipment, doing business as Petro Steel, in Mitchell, SD, are not

authorized for the transportation of hazardous materials unless the original accident damage protection devices have been modified to improve their structural strength. Failure of these devices during a collision could result in serious injury, death, and property damage.

FOR FURTHER INFORMATION CONTACT: Mr. Bill Quade, Office of Motor Carrier Safety and Technology, (202) 366-0476; Federal Highway Administration, U.S. Department of Transportation, 400 Seventh Street S.W., Washington, D.C. 20590-0001. Office hours are from 7:45 a.m. to 4:15 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION: Cargo tanks represented, marked, certified, or sold for use in the bulk transportation of hazardous materials must conform with the Hazardous Materials Regulations (HMR) (49 CFR 171-180). Specification DOT 407 and DOT 412 cargo tanks are authorized to transport numerous hazardous materials including flammable liquids (e.g., toluene), poisonous liquids (e.g., pesticides), corrosive liquids (e.g., sulfuric acid), and others. Due to the risk of transporting these types of materials in bulk, the DOT 407 and DOT 412 cargo tank specifications require these tanks to be protected from damage during rear-end or rollover accidents. Requirements concerning the size and strength of these accident damage protection devices are set forth in § 178.345-8.

During a compliance review of Prairie State Equipment, doing business as Petro Steel, in Mitchell, SD, the FHWA discovered that rollover protection devices and rear-end protection devices as manufactured and installed on some cargo tanks did not meet the requirements of the DOT specifications. Since these tanks were not equipped with adequate accident damage protection devices required by the specifications, they may not be represented as specification cargo tanks and may not be used to transport hazardous materials which require a specification cargo tank. Specifically, as manufactured by Petro Steel, the rollover damage protection devices installed on the following cargo tanks did not meet the requirements of the specifications:

Vehicle identification No./serial No.	DOT specification	Design type
93115	DOT 407	CVA-5-TM
1P9TAR203R2021217	DOT 407	CVT-25
1P9TAR208R2021214	DOT 407	CVT-25
1P9TAR20XS2021219	DOT 407	CVT-25

10/01/95

Engineering

ROADWAY LIGHTING

Supersedes Administrative Memorandum No. 174 dated December 11, 1989

- AUTHORITY:** 1.00 AASHTO, FHWA and Department guidelines and standards for Roadway Lighting Systems.
- PURPOSE:** 2.00 The purpose of "Roadway Lighting" is to provide guidelines for improving visibility on roadways and associated facilities.
- DEFINITIONS:** 3.00 "Associated facilities" - include parallel or connecting travel ways or access points utilized by pedestrians or other non-motorized transportation modes, such as bicycles.
- 3.01 "Cross Road" - is a street crossing at an access controlled facility.
- 3.02 "Lighting Project Categories" - are defined as freeways, access controlled routes other than freeways, non-access controlled routes, intersections, pedestrian facilities, railroad grade crossings and park and ride facilities.
- 3.03 "Maintenance" - includes replacement of damaged lighting standards and luminaries, continuous electrical service and future relocation of roadway luminaries and standards.
- 3.04 "Public Entity" - means the federal government or any federal department or agency, this state, an adjoining state or any state department or agency, an Indian tribe or pueblo, a county, municipality, public corporation or public district of this state or an adjoining state and any school district or state educational institution in this state.
- 3.05 "Roadways" - are Department maintained freeways and roadways.
- 3.06 "Urban, suburban and rural conditions" - Urban conditions exist in areas designated on maps as approved by FHWA. Suburban conditions exist in areas contiguous to designated urban areas. Rural conditions refer to all other areas.
- 3.07 "Users" - includes vehicle operators and other transportation modes which utilize the roadway and pedestrian ways within Department right-of-way.
- DIRECTIVE:** 4.00 The primary function of roadway lighting is to supplement vehicle headlights thereby extending the visibility of the roadway and associated features.
- 4.00a Roadway lighting should not be expected to produce a day time equivalent in terms of visibility or illumination.

- 4.00b On most highway facilities, including all rural roadways and a significant number of suburban and urban roadways, headlight illumination is adequate for night time driving.
- 4.01 Roadway lighting on a state route should only be considered for those locations where the project scope of work extends outside the travel way and/or the Department and public entity concur that the lighting would contribute to the efficiency, safety and comfort of vehicles and other traffic.
- 4.02 Lighting warrant studies may be performed by a public entity, the entity's qualified consultant engineer or Department staff. The Traffic Design Section shall be responsible for the review of these studies and recommend candidate improvements.
- 4.03 A public entity is responsible for the energy and maintenance costs for all roadway lighting.
- 4.04 The Department may assume responsibility for 100% of the roadway light installation cost if the facility on the highway system satisfies a warrant, attached as Addendum No. 1 to this Directive. Department participation in project construction cost shall be limited to the use of standard equipment in accordance with Department specifications and design procedures. The public entity is responsible for any incremental cost difference due to different design practices or the use of other than standard equipment.
- 4.05 If subject location does not satisfy any warrant, attached as Addendum No. 1, the Department may participate in funding for the below ground portion of the street lighting. The public entity shall be responsible for the above ground portion and related energy and maintenance costs.
- 4.06 A permit shall be required from the Department if a public entity intends to install lighting on a state highway right-of-way. Lighting may be installed by a private property owner at the intersection of a private access point, intersection or along a route if a permit is obtained and/or such work is required by Department standards. The lighting installation shall be subject to Department review and approval. The lighting installation may be performed by the public entity, a contractor or an electrical utility. The cost of installation, maintenance, electrical usage and relocation shall be borne by the public entity and/or private property owner and so stipulated in the permit.
- 4.07 Prior to completion of design and letting, the Department shall prepare Energy and Maintenance Agreements and Joint Powers Agreements. If an agreement cannot be executed between the public entity and the Department, the Department shall not automatically assume responsibility for the lighting installation.
- 4.08 Excess roadway lighting or roadway lighting not in use may be removed when approved by the appropriate District and Traffic Design Section. The public entity shall be responsible for the associated removal costs.
- 4.09 The scope of a roadway lighting project consists of the underground installation of the lighting system including conduit, wiring, pull boxes,

foundations and above ground installa- : : : but not limited to,
light standards and luminaries.

PROCEDURES : 5.00 N/A

CROSS
REFERENCE : 6.00 Administrative Directive No. 205



PETE K. RAHN, SECRETARY NMSHTD

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ADDENDUM NO. 1

WARRANTS FOR ROADWAY LIGHTING

A. Freeway Lighting.

1. Complete freeway interchange lighting is considered to be warranted based on the criteria contained in the AASHTO publication entitled "An Informational Guide for Roadway Lighting" under the section entitled "Complete Interchange Lighting".
2. Partial interchange lighting is considered to be warranted based on the criteria contained in the AASHTO publication entitled "An Informational Guide for Roadway Lighting" under the section entitled "Partial Interchange Lighting".
3. Continuous freeway lighting is considered to be warranted based on the criteria described in the AASHTO publication "An Informational Guide for Roadway Lighting" under the section entitled "Continuous Freeway Lighting".
4. Lighting at freeway ramps and cross roads. Lighting of a freeway ramp or cross road is considered warranted if either of Sections A1 or A2 above is satisfied.

B. Lighting for Access Controlled Routes other than Freeways.

1. Interchanges. Lighting is considered to be warranted under the same criteria as in Section A1, A2 or A4.
2. Intersections and roadway sections. Lighting is considered to be warranted based on the criteria for sections below.

C. Lighting for non-access controlled routes. Lighting may be provided for highway sections based on the following guidelines.

1. Sections currently with continuous lighting. If replacement is needed, lighting should be upgraded to current appropriate AASHTO guidelines.
2. New roadway sections or where no continuous lighting exists. Continuous lighting may be provided for new roadway sections if one of the following conditions is satisfied.
 - a. The subject section satisfies volume criteria stated in Warrant 2 of the Manual on Uniform Traffic Control Devices (MUTCD) for the major street.

<u>Major Street—Number of through lanes</u>	<u>Vehicles per hour on major street both directions</u>
1	750
2	900

This warrant is satisfied when, for each of 6 hours of an average day the above traffic volumes exist. This warrant applies to urban and suburban areas. If the subject route is located within a built up area of an isolated community with a population of less than 10,000, the warrant is 70% of the above.

- b. Continuous lighting in urban or suburban areas may be warranted if the night to day total accident rate has a ratio of 2:1 or more. Also, the volume warrant above should be satisfied to the extent of 70 per cent or more of the traffic volumes in item C2a above.

- c. Continuous lighting. Limited on non-access controlled facilities in rural areas. In special cases, continuous lighting may be installed in rural areas based on a documented safety need that can be improved with lighting. Traditionally these needs are justified by a benefit-cost evaluation which indicates a benefit/cost ratio greater than 1. Highway safety funds have been used in the past to program such a project.
- D. Existing intersection. Street lighting may be installed at an existing intersection if one of the following conditions is met:
1. Any of the warrants for signalization contained in the MUTCD are satisfied for a single hour which may be in darkness (consider seasonal variations, e.g. winter months).
 2. Four or more night time accidents in any recent twelve month period has occurred.
 3. When a traffic signal or an intersection flashing beacon is installed.
 4. Where a combination of sight distance, or horizontal or vertical curvature of the roadway, channelization or other factors constitute a potentially confusing or unsatisfactory condition that may be improved with lighting. A project report evaluating the need should include an investigation of the factors constituting those conditions.
- E. New Intersection. Lighting may be installed at new intersections if it is forecast that any of the warrants listed above will be satisfied within five years after the opening of the project to traffic.
- F. Railroad Highway Grade Crossing. Lighting may be installed at railroad-highway grade crossings consistent with provisions in the MUTCD.
- G. Pedestrian Facilities. Lighting for pedestrian facilities may be considered at urban or suburban crossing locations where conflicts with vehicular traffic constitute a potentially confusing or unsatisfactory situation. Such situations could include crosswalk locations where documented night time pedestrian or bicycle activities take place. Other locations where lighting is considered warranted pedestrian overpasses and tunnels.
- H. Park-and-Ride Lots. Lighting of these facilities is desirable, not mandatory. There needs to be an evaluation to determine if it is feasible and cost effective, e.g. line extension charges are costly.

ROUTES1

53

02/09/98

POSTED ROUTE NAME	BEGIN MILEPNT	ENDING MLPNT	LENGTH	NTWK CLAS	L O C	TERMINUS
-------------------------	------------------	-----------------	--------	--------------	-------------	----------

NM0028	27.581	27.888	0.307	MNAR	LU	JCT. N.M. 373
NM0028	27.888	28.000	0.112	MNAR	LU	
NM0028	28.000	28.086	0.086	MNAR	LU	
NM0028	28.086	28.532	0.446	MNAR	LU	JCT. NM101 (UNIVERSITY AVENUE).
NM0028	28.532	28.651	0.119	MNAR	LU	
NM0028	28.651	29.000	0.349	PRAR	LU	JCT. NM 292
NM0028	29.000	29.100	0.100	PRAR	LU	
NM0028	29.100	29.274	0.174	PRAR	LU	
NM0028	29.274	29.395	0.121	PRAR	LU	
NM0028	29.395	29.411	0.016	PRAR	LU	
NM0028	29.411	29.511	0.100	PRAR	LU	
NM0028	29.511	29.631	0.120	PRAR	LU	
NM0028	29.631	29.807	0.176	PRAR	LU	JCT I-10 EXIT 140 INTERCHANGE.
NM0028	29.807	29.886	0.079	PRAR	LU	
NM0028	29.886	29.934	0.048	PRAR	LU	
NM0028	29.934	30.234	0.300	PRAR	LU	JCT. NM188 (VALLEY DRIVE)
NM0028	30.234	30.320	0.086	PRAR	LU	
NM0028	30.320	30.346	0.026	PRAR	LU	

** control break (1) **

sum NM0028 30.346

NM0029	0.000	0.100	0.100	MNCL	M	JCT.NM 17 WEST THEN NORTH TO END OF ROUTE.
NM0029	0.100	0.852	0.752	MNCL	M	
NM0029	0.852	1.050	0.198	MNCL	R	

** control break (1) **

sum NM0029 1.050

NM0030	0.000	0.026	0.026	MNAR	R	JCT NM 502, NORTH TO JCT US 84/285 IN ESPANOLA.
NM0030	0.026	3.808	3.782	MNAR	R	
NM0030	3.808	4.894	1.086	MNAR	R	SANTA FE\RIO ARriba COUNTY LINE.
NM0030	4.894	6.500	1.606	MNAR	R	JCT ROAD TO PUYE CLIFF DWELLINGS (BIA RD #602).
NM0030	6.500	8.209	1.709	MNAR	R	
NM0030	8.209	8.254	0.045	MNAR	SU	
NM0030	8.254	8.317	0.063	MNAR	SU	
NM0030	8.317	8.388	0.071	MNAR	SU	
NM0030	8.388	8.431	0.043	MNAR	SU	
NM0030	8.431	8.512	0.081	MNAR	SU	

** control break (1) **

sum NM0030 8.512

NM0031	0.000	0.151	0.151	MJCL	R	JCT.US 285 NORTH TO JCT. US 62\180.
NM0031	0.151	3.442	3.291	MJCL	R	
NM0031	3.442	3.978	0.536	MJCL	R	JCT. COUNTY ROAD 150740 TO END OF ROUTE.
NM0031	3.978	5.399	1.421	MJCL	R	
NM0031	5.399	7.314	1.915	MJCL	R	
NM0031	7.314	7.631	0.317	MJCL	R	
NM0031	7.631	14.222	6.591	MJCL	R	JCT.NM 128 EAST TO JAL.
NM0031	14.222	17.900	3.678	MJCL	R	
NM0031	17.900	19.952	2.052	MJCL	R	
NM0031	19.952	22.676	2.724	MJCL	R	

** control break (1) **

sum NM0031 22.676

Department Use Only

District No. _____	Permit No. _____	State Highway No. _____
Project No. _____	Station No.(s) _____	Mile Post(s) _____
Posted Speed _____	Highway ADT _____	Sight Distance _____
Type of Vehicle _____	Estimated Driveway ADT _____	

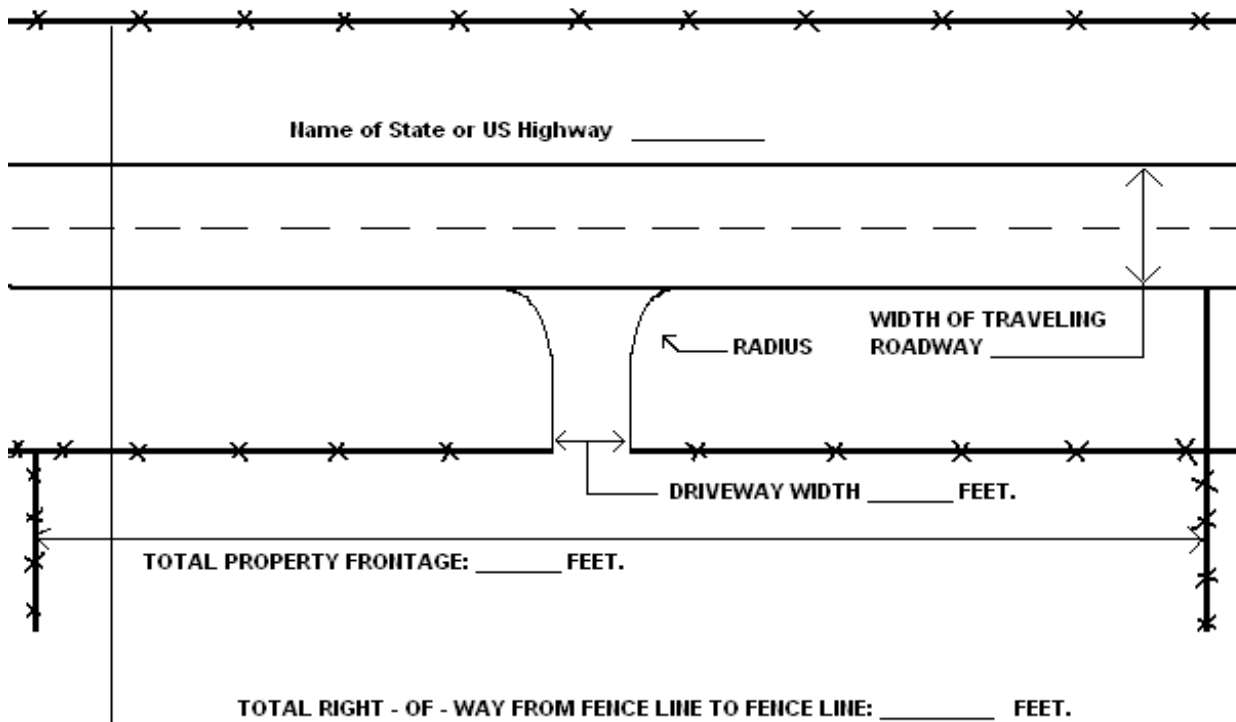
ACCESS INFORMATION		
NAME:		
ADDRESS:		
CITY:	STATE:	ZIP:
COUNTY:	PHONE:	

1. ROUTE NO. (S.R./US):	State Road
2. LOCATION (NEAREST MILE POST):	Mile Post
3. ACCESS WIDTH:	
4. LENGTH OF PROPERTY FRONTAGE:	
5. ACCESS TYPE (commercial/residential/other):	
6. ACCESS RADIUS:	
7. GATE/CATTLE GUARD/OTHER:	
8. TYPE OF SURFACE MATERIAL:	

*****FOR OFFICIAL USE ONLY*****	
1. POSTED SPEED:	
2. SIGHT DISTANCE:	
3. DRAINAGE:	
4. CULVERT SIZE:	
5. CONC. END BLANKETS:	
6. R.O.W TO R.O.W. WIDTH:	
7. DRIVING LANE WIDTH:	SHOULDER WIDTH:
8. HIGHWAY A.D.T.:	ESTIMATED ACCESS A.D.T.:

SPECIAL NOTES AND OR CONDITIONS

STANDARD TYPE DRIVEWAY DRAWING



**THE ABOVE DRAWING IS TO BE USED ONLY AS A GUIDE IN ACCOMPLISHING A
DRAWING OF YOUR OWN**

1. Type of Access: _____ Residential, _____ Commercial, _____ Other
2. If Commercial, type of business _____
3. If Other, describe _____
4. Speed limit for the area: _____
5. Location to the nearest mile post: _____
6. Sight distance for the area: _____
7. Will surface be gravel or better: _____ gravel _____ other (please specify)
8. Type of drainage if any: _____
9. Concrete End Blankets required: _____ Yes _____ No

NOTES:

New Mexico State Highway and Transportation Department

**INTERSTATE ACCESS PERMIT REQUEST
ON ONGOING CONSTRUCTION PROJECT**

I/We request your approval of interstate access in connection with my/our contract on New Mexico Project No. _____. A vicinity map is attached identifying the location of the access break and all roads, interchanges, medians, crossovers, major drainages, fences, pipelines, power lines, and any previously approved access breaks that may be affected by this access break. Also attached is a traffic control plan identifying all traffic items, spacings, distances, vehicle paths, flagmen, etc., that relate to the traffic control operations.

1. Location of Access Break (station or milepost): _____
2. Purpose of Break: _____
3. Type of Vehicles Using Access Break: _____
4. Contractor's ADT: _____
5. Days and Time of Operation During the Week: _____
6. Approximate Duration of Access Break: _____
7. Work Required to Construct and to Return Access Break to Original Condition: _____
8. Additional Cost to The Department: _____
9. Consequences of Denial: _____
10. Other Available Alternatives: _____
11. Standard Conditions of Approval:
 - a. The access break will be closed during nonworking hours.
 - b. The median, fence, structures, roads, etc., will be returned to their original state unless otherwise approved by the department.
 - c. No loaded scrapers will be allowed on the paved portion of the interstate.
 - d. There will be no hauling in the direction of opposing traffic unless it is conducted at least twenty five (25) feet from the edge of the traveled lane.
12. Additional Conditions of Approval (to be filled in by FHWA and Department Personnel): _____

I/we certify that I/We will comply with the traffic control plan submitted, with the standard conditions of approval and with the additional conditions of approval.

I/we understand that this approval can be cancelled at any time by the Department if I/We fail to comply with the traffic control plan submitted, with the standard conditions of approval or with the additional conditions of approval in this request.

Name of Contracting Firm

Signature and Title of Official from Contracting Firm

Date

Recommended

Project Manager

Date

District Engineer or Designee

Date

Concurred

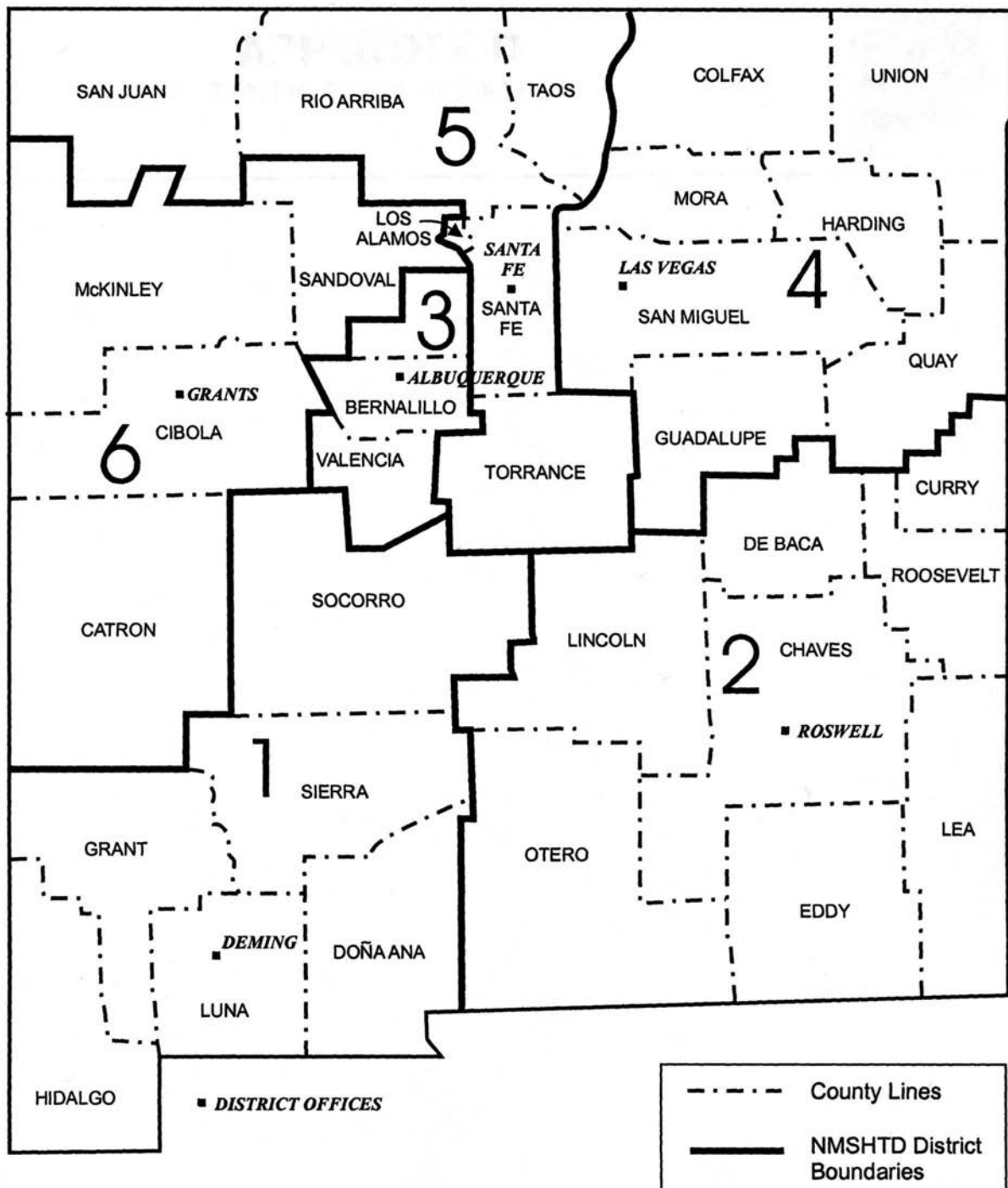
Approved

Construction Support Bureau Chief

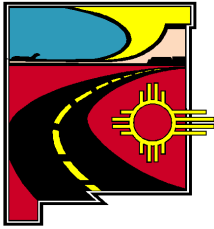
Date

FHWA District Engineer

Date



NMSHTD DISTRICTS AND DISTRICT OFFICES



Site Threshold Assessment (STH)

A Site Threshold Assessment (STH) is required of all developing or redeveloping properties that directly or indirectly access a state highway.

District No. _____

Project No. _____

Permit Applicant

Date: _____

Applicant Name: _____

Business Name: _____

Business Address: _____

City: _____ State: _____ Zip Code: _____ - _____

Site Description

Development Type

Residential _____
Retail _____
Office _____
Industrial _____
Institutional _____
Lodging _____
Restaurant _____
Convenience/Gas _____
Other _____

Site Information (fill in all that apply)

Building Size (SF) _____
Parcel Size (ac) _____
Roadway Frontage (ft) _____
Parking Spaces _____
Employees _____
Other _____

Dwelling Units _____
Rooms _____
Beds _____
Students _____
Seats _____
Fuel Pumps _____
Courts _____
Storage Units _____

The STH examines existing roadway volumes and anticipated site trip generation for the purpose of determining if additional analyses are required. If the site characteristics and the trip generation estimate for a proposed development do not satisfy the requirements for a STA or a TIA 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.

Existing Roadway Data

Highway No.: _____

Site Mile Post: _____

Highway ADT: _____

Count Year: _____

Number of Lanes (two-way): _____

Func. Class.: _____

Trip Generation

ITE Trip Generation Land Use Category: _____

AM Peak Hour Trips Enter: _____

Exit: _____

PM Peak Hour Trips Enter: _____

Exit: _____

Exceeds Threshold: Y or N → If Yes, is a STA or TIA Required?

Thresholds

STA: 25 to 99 peak-hour total trips and more than 1,000 vehicles per lane per day on adjacent highway.

TIA: 100 or more peak-hour total trips.

Other Requirement Basis / DTE Comments: _____



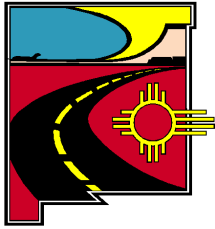
Site Traffic Analysis (STA) Documentation Outline

The following provides a general outline for STA documentation. The report should address the traffic issues and impacts that are pertinent to each development. Modifications to the report content may be required where unique circumstances exist for a particular site.

- I. Introduction
 - a. Purpose of report and study objectives
 - b. Project location including legal description
 - c. Vicinity map
- II. Description of Proposed Development
 - a. Land use and intensity
 - b. Existing and planned zoning
 - c. Expected year of opening/occupancy
 - d. Number, type, and location of access points
 - e. Site plan (legible graphic)
- III. Study Area Conditions
 - a. Study area definition
 - b. General description of existing land use
 - c. Other known development activity
 - d. Existing roadway system characteristics (highways and intersections)
 - e. Programmed transportation improvements
 - f. Alternative travel modes discussion (transit, bicycles, pedestrians)
- IV. Analysis of Existing Conditions
 - a. Daily and peak-hour traffic volumes including data sources
 - b. Level of service criteria by facility type, as appropriate
 - c. Existing levels of service
 - d. Safety, if required
 - e. Operational and/or safety deficiencies
 - f. Results of special studies (e.g. delay, gap, speed, queue lengths, etc..), if conducted
- V. Traffic Projections
 - a. Background traffic
 - b. Trip generation by trip type (i.e., new trips, pass-by trips, diverted-link trips)
 - c. Trip distribution and assignment
 - d. Total traffic without proposed development/No Build condition (graphic)
 - e. Total traffic with proposed development/Build condition (graphic)
- VI. Implementation Year Traffic Analysis
 - a. No Build and Build conditions for each analysis period
 - b. Intersections and proposed access points
 - c. Traffic signal warrant review
 - d. LOS results, identified deficiencies, and proposed improvements for both the No Build and the Build conditions
 - e. Quantify anticipated impact of the proposed development using comparison tables
- VII. Access Design Specifications
 - a. Speed-change lane requirements
 - b. Vehicle storage needs
 - c. Sight distance evaluation
 - d. Site access improvements/modifications
 - e. Pedestrian/bicycle considerations
- VIII. Summary of Deficiencies, Anticipated Impacts, and Recommendations (*optional*, depends on length of report)

APPENDICES

- scoping meeting summary
- traffic count data
- intersection collision diagrams, if required
- traffic analysis output reports organized separately for the No Build and Build conditions
- other pertinent supporting documentation



Traffic Impact Analysis (TIA)

Documentation Outline

The following provides a general outline for TIA documentation. Due to the comprehensive nature of a TIA report, an executive summary should be provided. Modifications to the report content may be required where unique circumstances exist for a particular site.

Executive Summary

- Site location and study area
- Development description
- Analyses results by analysis year/phase
- Summary of impacts and recommendations

I. Introduction

- a. Purpose of report and study objectives
- b. Project location including legal description
- c. Vicinity map

II. Description of Proposed Development

- a. Land use and intensity
- b. Development phasing and timing
- c. Existing and planned zoning
- d. Number, type, and location of access points
- e. Site plan or plans (legible graphics)

III. Study Area Conditions

- a. Study area definition
- b. General description of existing land use
- c. Other known development activity
- d. Existing roadway system characteristics (highways and intersections)
- e. Programmed transportation improvements
- f. Description of traffic signal system, if applicable
- g. Alternative travel modes discussion (transit, bicycles, pedestrians), as applicable

IV. Analysis of Existing Conditions

- a. Daily and peak-hour traffic volumes including data sources
- b. Level of service criteria by facility type, as appropriate
- c. Existing levels of service
- d. Safety
- e. Operational and/or safety deficiencies
- f. Results of special studies (e.g., delay, gap, speed, queue lengths, etc.), if required

V. Analysis of Implementation Year Conditions

- a. Traffic Projections
 - Background traffic
 - Development assumptions for implementation year conditions
 - Trip generation by trip type (i.e., new trips, pass-by trips, diverted-link trips)
 - Trip distribution and assignment
 - Total traffic without proposed development/No Build Condition (graphic)
 - Total traffic with proposed development/Build Condition (graphic)
- b. Traffic Analysis
 - No Build and Build conditions for each analysis period
 - Intersections and proposed access points
 - Roadway segments/other highway facilities, if required
 - Traffic signal progression analyses
 - Traffic signal warrant review
 - LOS results, identified deficiencies, and proposed improvements for both the No Build and the Build conditions



Traffic Impact Analysis Outline, continued

- c. Impact Assessment
 - Quantify anticipated impact of the proposed development

- d. Access Design Specifications
 - Speed-change lane requirements
 - Vehicle storage needs
 - Sight distance evaluation
 - Site access improvements/modifications
 - Pedestrian/bicycle considerations

VI. Analysis of Horizon Year Conditions (address each development phase, as appropriate)

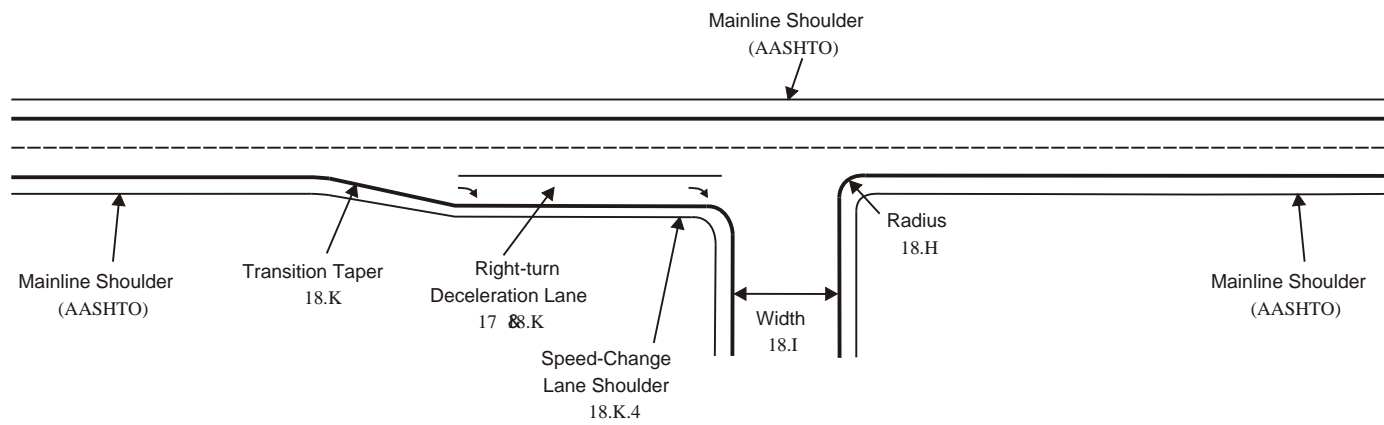
- a. Traffic Projections
 - Background traffic
 - Development assumptions for horizon year conditions (full build out)
 - Trip generation by trip type (i.e., new trips, pass-by trips, diverted-link trips)
 - Trip distribution and assignment
 - Total traffic without proposed development/No Build condition (graphic)
 - Total traffic with proposed development/Build condition (graphic)
- b. Traffic Analysis
 - No Build and Build conditions for the critical analysis period(s)
 - Intersections and proposed access points
 - Roadway segments/other highway facilities, if required
 - Traffic signal progression analyses
 - Traffic signal warrant review
 - LOS results, identified deficiencies, and proposed improvements for both the No Build and the Build conditions
- c. Impact Assessment
 - Quantify anticipated impact of the proposed development
- d. Access Design Specifications
 - Discuss key issues identified based on the horizon year analysis that should be considered when designing access points based on findings of the implementation year analysis (i.e., to ensure that sufficient space will be available if additional improvements are anticipated in the long term).

VII. Summary of Deficiencies, Anticipated Impacts, and Recommendations

- a. Existing Conditions
- b. Implementation Year Conditions
- c. Horizon Year Conditions

APPENDICES

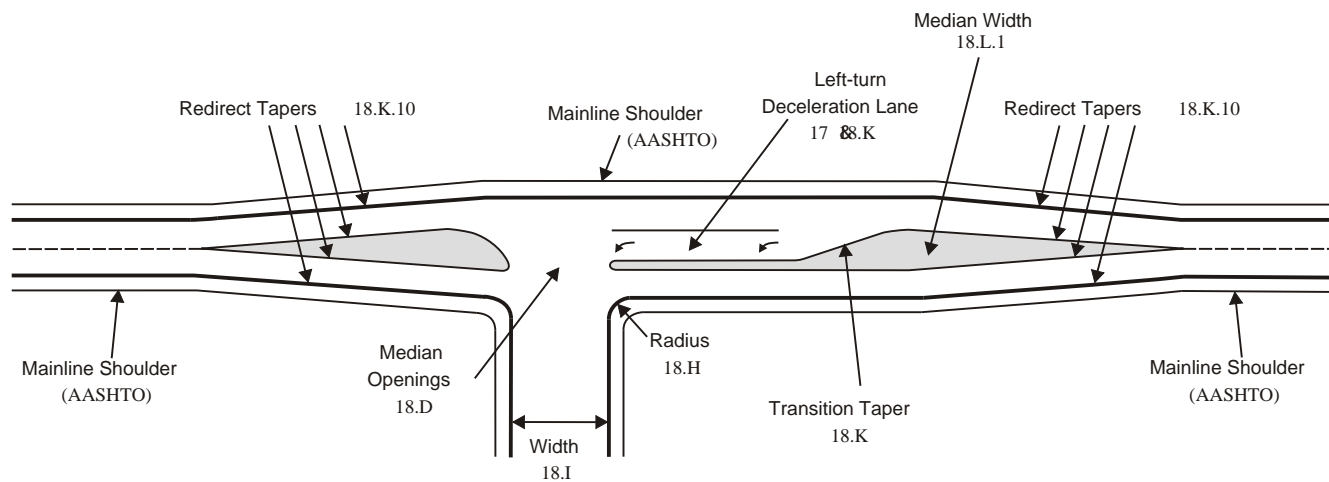
- scoping meeting summary
- traffic count data
- intersection collision diagrams
- traffic signal warrant worksheets
- supporting information for the development of future-year traffic projections
- traffic analysis output reports organized by analysis year/phase



* Schematic - Not to Scale

KEY	
"Radius"	- Design Component
"18.K"	- Manual Section Reference

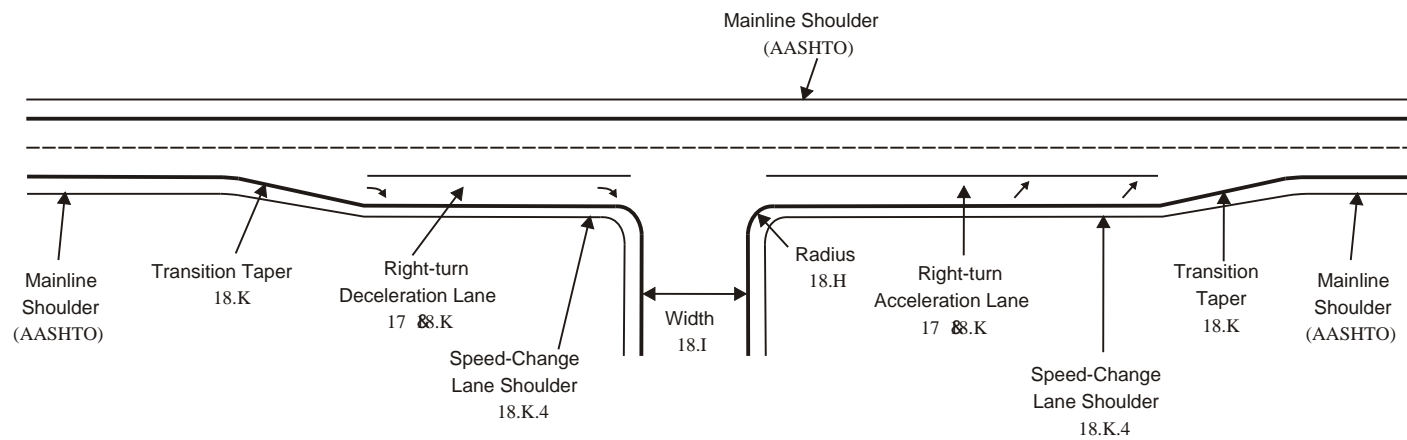
Figure E1
Typical Application of a
Right-turn Deceleration Lane



* Schematic - Not to Scale

KEY	
"Radius"	- Design Component
"18.K"	- Manual Section Reference

Figure E2
Typical Application of a
Left-turn Deceleration Lane



* Schematic - Not to Scale

KEY	
"Radius"	- Design Component
"18.K"	- Manual Section Reference

Figure E3
Typical Application of
Right-turn Acceleration and Deceleration Lanes

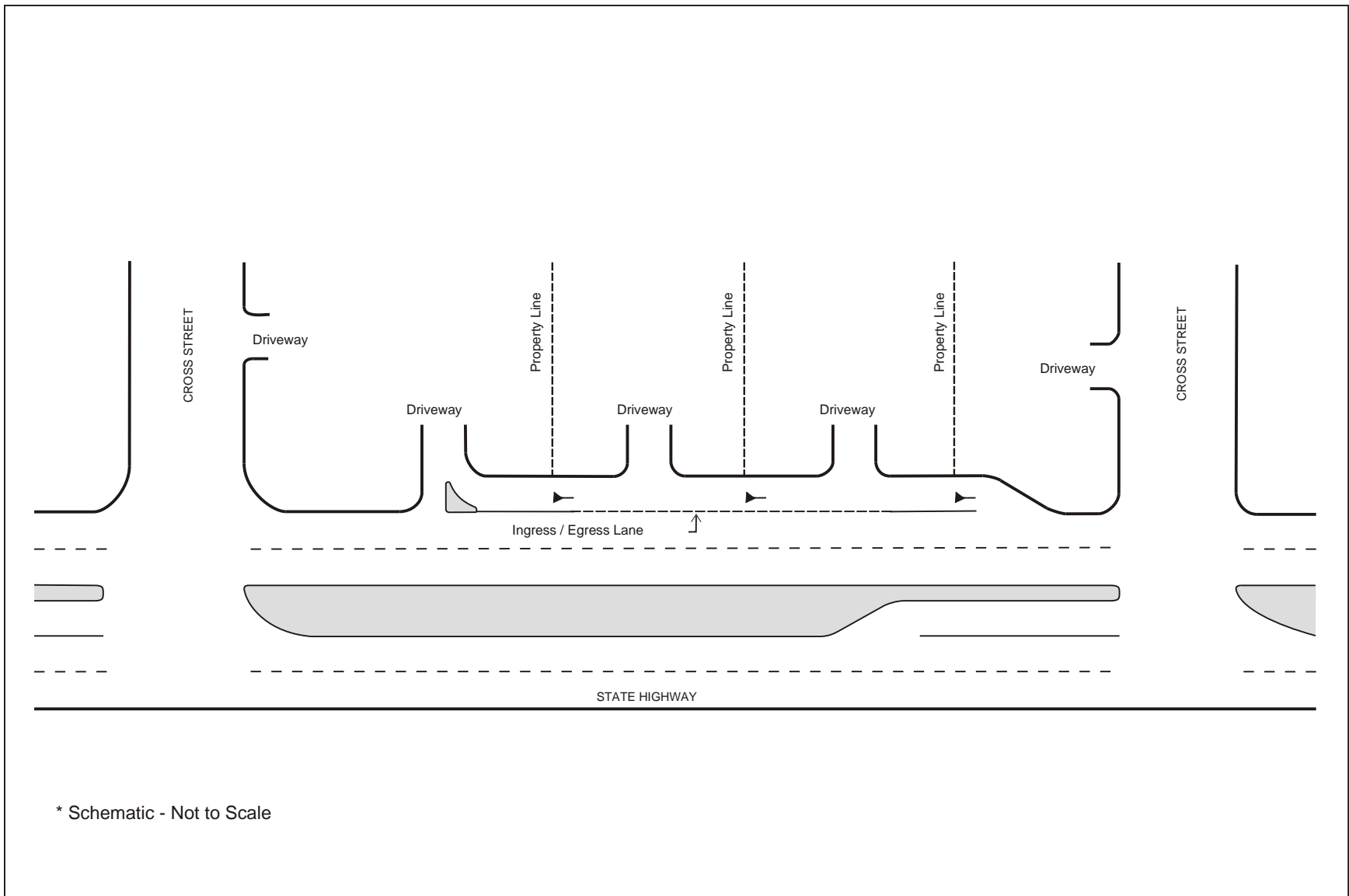


Figure E4
Ingress / Egress Lane Illustration

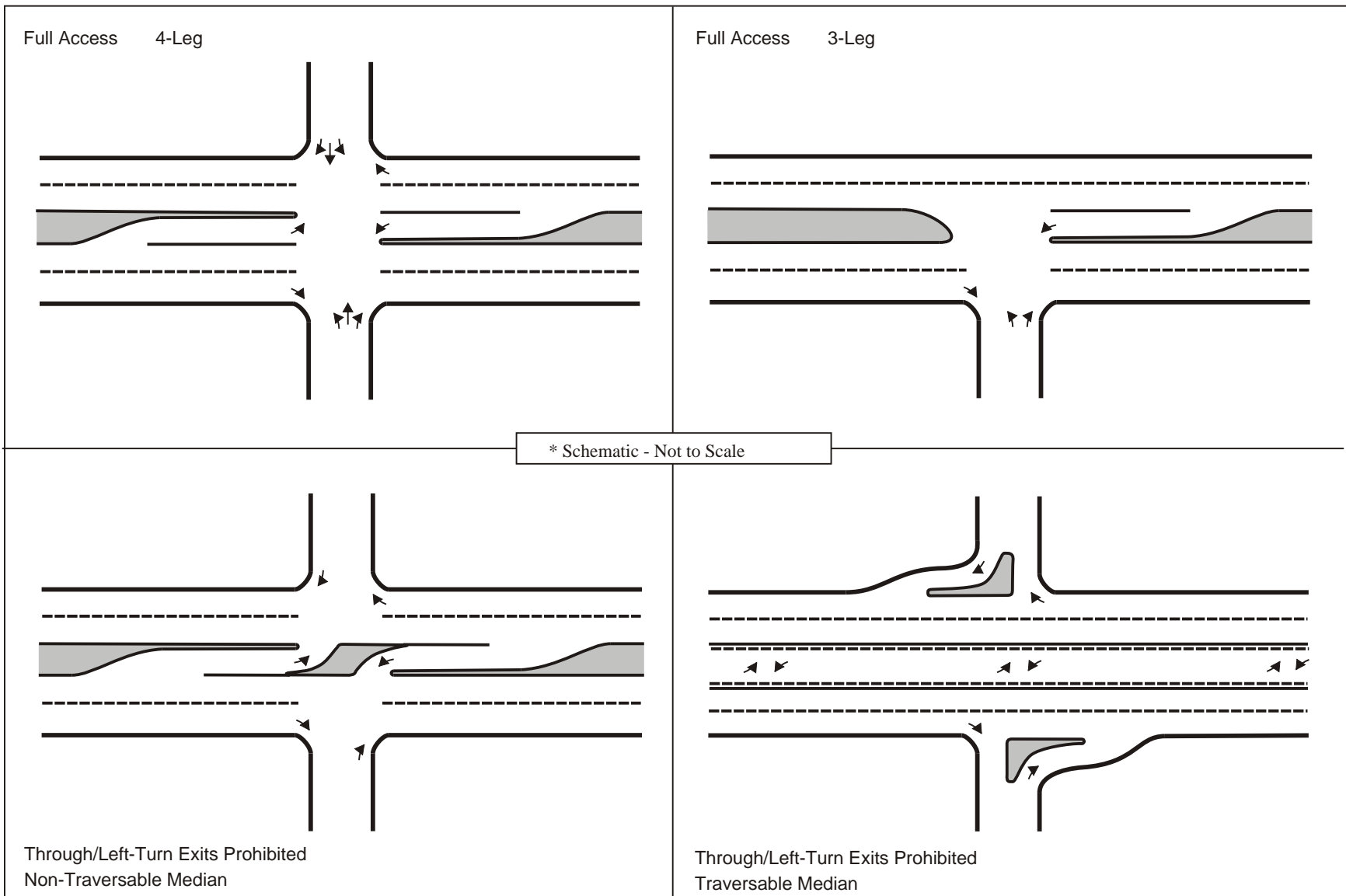


Figure E5
Types of Access Channelization

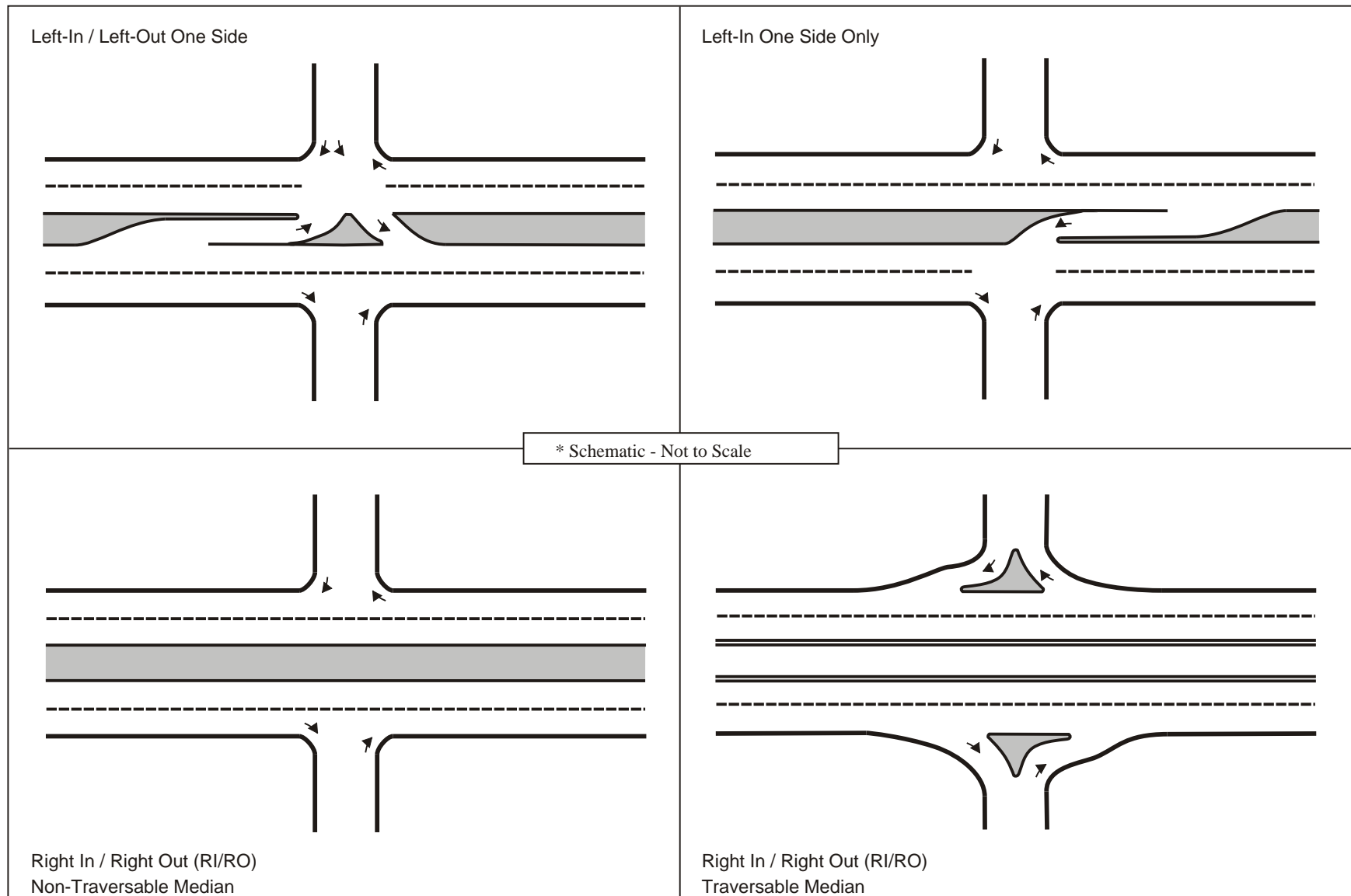
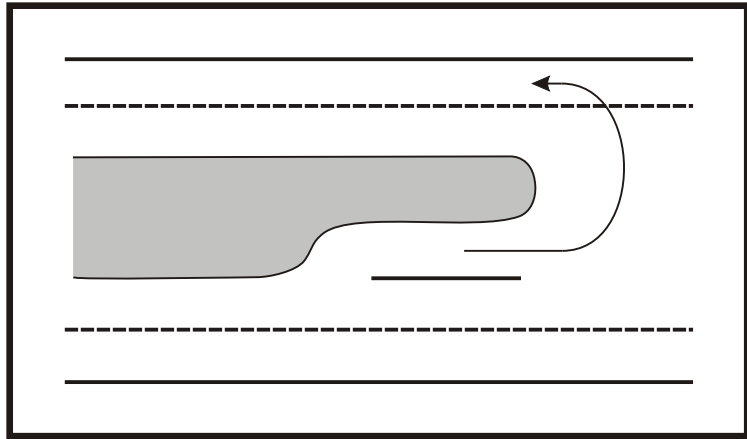
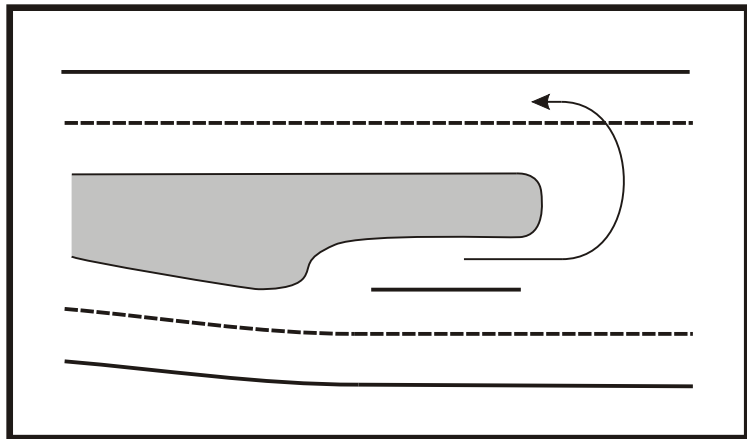


Figure E5 (continued)
Types of Access Channelization

1. Wide Medians



2. Median "Bulb-Out"



3. Flare-Out
(Jug Handles)

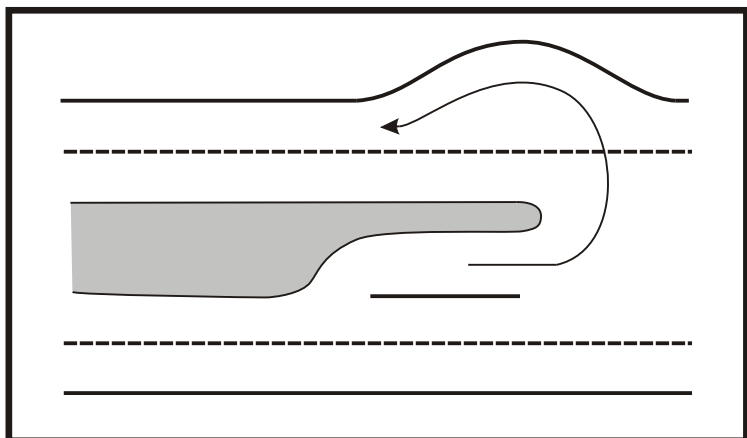


Figure E6
Schematics of U-Turn Design Options

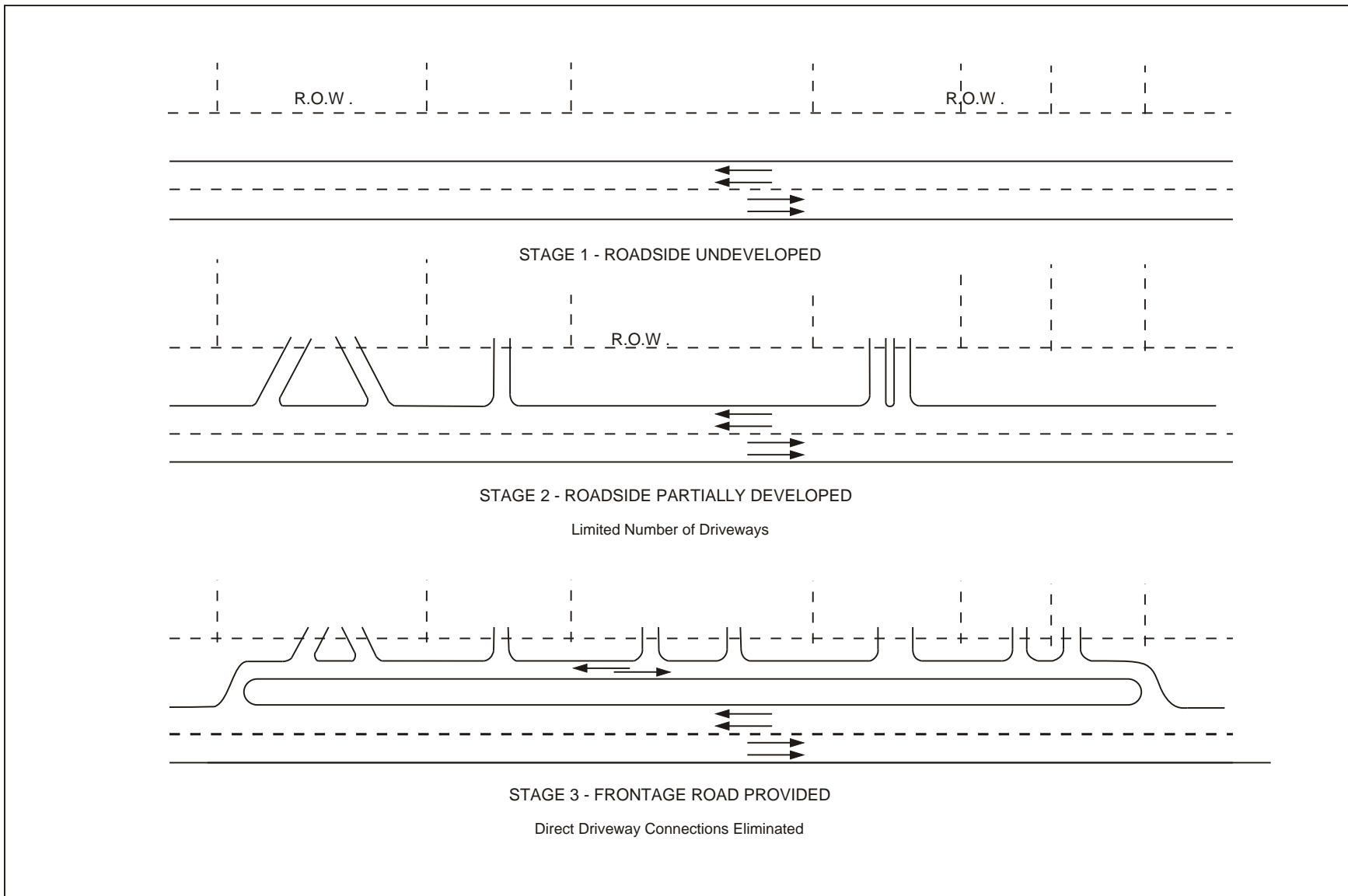


Figure E7
Example of an Access Development Scenario along a State Highway

Table 15.F-1 Traffic Signal System Parameters				
Access Category	Posted Speed	Minimum Signalized Intersection Spacing (meters)	Ranges of Minimum Acceptable Progression Bandwidth as a Percentage of the Signal Cycle Length	
			Two-Way Balanced Progression <i>Directional Split ≤ 65/35</i>	One-Way Directional Progression <i>Directional Split > 65/35</i>
UPA	≤ 40 mph	805	40 - 45 %	60 - 65 %
	45 to 50 mph	805	45 - 50 %	65 - 70 %
	≥ 55 mph	1609	<i>not required</i>	<i>not required</i>
UMA	≤ 40 mph	536	30 - 35 %	50 - 55 %
	45 to 50 mph	805	35 - 40 %	55 - 60 %
	≥ 55 mph	1609	<i>not required</i>	<i>not required</i>
UCOL	≤ 30 mph	335	25 - 30 %	45 - 50 %
	35 to 40 mph	402	25 - 30 %	45 - 50 %
	45 to 55 mph	536	30 - 35 %	50 - 55 %
RPA	≤ 40 mph	805	45 - 50 %	65 - 70 %
	≥ 45 mph	1609	<i>not required</i>	<i>not required</i>
RMA	≤ 30 mph	536	35 - 40 %	55 - 60 %
	35 to 50 mph	805	40 - 45 %	60 - 65 %
	≥ 55 mph	1609	<i>not required</i>	<i>not required</i>
RCOL	≤ 30 mph	402	30 - 35 %	50 - 55 %
	35 to 40 mph	536	35 - 40 %	55 - 60 %
	≥ 45 mph	805	40 - 45 %	60 - 65 %

Note: Minimum cross street green time must be adequate for a pedestrian crossing of the highway unless otherwise directed by the NMSHTD Traffic Technical Support Section.

Table 18.C-1 Access Spacing Standards for Intersections and Driveways (centerline to centerline spacing)						
Access Category	Posted Speed (mph)	Intersection Spacing (meters) ¹		Driveway Spacing (meters) ²		
		Signalized	Unsignalized ³	Non-Traversable Median		Traversable Median ⁴
				Full Access	Partial Access	
Controlled-Access, Non-Interstate Highways	All Speeds	1609	805	805	805	-NA-
UPA	≤ 30 mph	805	402	402	61	61
	35 to 40 mph	805	402	402	99	99
	45 to 50 mph	805	402	402	137	137
	≥ 55 mph	1609	402	402	191	191
UMA	≤ 30 mph	536	201	201	53	53
	35 to 40 mph	536	201	201	84	84
	45 to 50 mph	805	201	201	122	122
	≥ 55 mph	1609	402	402	183	183
UCOL	≤ 30 mph	335	101	101	46	46
	35 to 40 mph	402	101	101	69	69
	45 to 55 mph	536	201	201	107	107
RPA	≤ 30 mph	805	402	402	69	69
	35 to 40 mph	805	402	402	107	107
	45 to 50 mph	1609	805	805	152	152
	≥ 55 mph	1609	805	805	236	236
RMA	≤ 30 mph	536	201	201	61	61
	35 to 40 mph	805	201	201	99	99
	45 to 50 mph	805	402	402	137	137
	≥ 55 mph	1609	805	805	221	221
RCOL	≤ 30 mph	402	101	101	61	61
	35 to 40 mph	536	201	201	91	91
	45 to 50 mph	805	402	402	130	130
	≥ 55 mph	805	402	402	168	168

- Notes:
1. Intersection - Public street or other access serving a large area or a major traffic generator(s) where full access is typically provided.
 2. Driveway - Public or private access serving a limited area where traffic signal control is not required.
 3. In urban areas, spacing should be consistent with the established street spacing along the state highway facility.
 4. Includes highways with no median or a painted median. The type of access, full or partial, shall be determined at the discretion of the Department. See Sub-Sections 7.AO and 7.BP.

Table 18.E-1 Design Vehicle by Land Use	
Land Use(s) Served by Access	Design Vehicle
Residential	Passenger Car/Pickup
Residential on Bus Route	Single Unit Truck
Office with Separate Truck Access	Passenger Car/Pickup
Office without Truck Access	Single Unit Truck
Commercial/Retail with Separate Truck Access	Passenger Car/Pickup
Commercial/Retail without Truck Access	WB-15 Truck
Industrial with Separate Truck Access	Passenger Car/Pickup
Industrial without Separate Truck Access	WB-15 Truck
Recreational without Water or Camping	Passenger Car/Pickup
Recreational with Water or Camping	Motor Home/Boat
Agricultural Field Access	Single Unit Truck
Municipal and County Roads	WB-15 Truck

- “with Separate Truck Access” indicates truck prohibition from primary access.
- “without Water” indicates no recreational watercraft.

Table 18.F-1 Stopping Sight Distance Design Values (meters)										
Grade	Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
> +5%	37	49	61	79	98	116	134	158	177	207
+3% to +5%	41	55	69	89	110	130	151	178	199	235
-3% to +3%	46	61	76	99	122	145	168	198	221	259
-5% to -3%	55	73	91	119	146	174	201	238	265	311
< -5%	62	82	103	134	165	195	226	267	298	351

Level terrain values are based on Table III-1 in AASHTO (see Section 9.C). These values are applicable to all design vehicles.

Table 18.F-2 Required Sight Distance for Vehicles Entering and/or Crossing a Highway (meters)										
Roadway Condition (see text, Paragraph 18.F.2.a)	Posted Speed of the Highway (mph)									
	25	30	35	40	45	50	55	60	65	70
PASSENGER CAR/PICK-UP										
Minimum Criteria										
2-lane highway	76	91	107	122	137	152	168	183	198	213
4-lane highway	91	110	128	146	165	183	201	219	238	256
6-lane highway	99	119	139	158	178	198	218	238	258	277
Desirable Criteria										
2-lane highway (no median)	76	91	119	149	183	229	265	332	390	475
3-lane highway (incl. 4.877 m median)	82	98	122	152	186	232	271	338	393	482
4-lane highway (no median)	85	104	122	152	186	232	268	335	393	479
4-lane highway (incl. 4.877 m median)	94	113	131	158	192	235	274	341	399	485
6-lane highway (incl. 4.877 m median)	101	122	140	162	195	241	277	344	402	488
SU TRUCK										
Minimum Criteria										
2-lane highway	99	119	139	158	178	198	218	238	258	277
4-lane highway	114	137	160	183	206	229	251	274	297	320
6-lane highway	130	155	181	207	233	259	285	311	337	363
Desirable Criteria										
2-lane highway (no median)	104	125	146	186	232	293	341	433	512	631
3-lane highway (incl. 4.877 m median)	116	137	158	192	235	296	347	439	515	634
4-lane highway (no median)	119	143	168	192	235	296	347	436	515	634
4-lane highway (incl. 4.877 m median)	128	155	180	207	238	302	351	442	518	637
6-lane highway (incl. 4.877 m median)	140	168	195	223	253	305	354	445	524	643
COMBINATION TRUCK										
Minimum Criteria										
2-lane highway	130	155	181	207	233	259	285	311	337	363
4-lane highway	152	183	213	244	274	305	335	366	396	427
6-lane highway	160	192	224	256	288	320	352	384	416	448
Desirable Criteria										
2-lane highway (no median)	137	165	192	219	271	344	405	515	607	750
3-lane highway (incl. 4.877 m median)	149	180	207	238	277	351	411	518	613	756
4-lane highway (no median)	155	186	219	250	280	347	408	518	610	753
4-lane highway (incl. 4.877 m median)	168	198	232	265	299	354	415	524	616	759
6-lane highway (incl. 4.877 m median)	180	216	253	290	323	360	418	527	619	762

The desirable criteria assumes near right-angle intersections and level cross-street intersection approaches, and is based on Intersection Decision Sight Distance, Cases III A and III B, AASHTO, Section 9.C.

Table 18.H-1 Minimum Access Radius by Design Vehicle for 90° Turn (meters)			
Design Vehicle	Simple Curve Radius	Simple Curve Radius with Taper	Compound Curve Radii and Offset
Passenger Car/Pickup	9	6 / 0.8 / 10:1	30 – 6 – 30 / 0.8
Single Unit Truck	15	12 / 0.6 / 10:1	36 – 12 – 36 / 0.6
WB-15 Truck	N/A	18 / 1.2 / 15:1	55 – 18 – 55 / 2.0

Simple Curve Radius with Taper: radius (m) / offset (m) / taper (m:m)

Compound Curve Radii: radius 1 – radius 2 – radius 3 / symmetric offset, in meters

Table 18.I-1 Driveway Throat Width Criteria (meters)			
Design Vehicle	Driveway Cut	Two-way Access	One-way Access
Passenger Car/Pickup	4.9 - 9.1 m	6.1 - 9.1 m	4.9 - 7.3 m
SU Truck	9.1 - 12.2 m	7.6 - 10.7 m	4.9 - 7.3 m
WB-15 Truck	12.2 - 15.2 m	9.1 - 12.2 m	6.1 - 9.1 m

Driveway throat width varies based upon the return radius required for the design vehicle, see Table 18.H-1, and on the intensity of use.

Table 18.J-1 Access Connection Depths (meters)	
Land Use(s) Served by Access	Connection Depth
Regional Shopping Centers (malls)	76.2 m
Community Shopping Center (supermarket, drug store, etc.)	24.4 m
Small Strip Shopping Center	9.2 m
Regional Office Complex	76.2 m
Office Center	24.4 m
Other Smaller Commercial Developments	9.2 m

Table 18.K-1 Deceleration and Acceleration Lengths (meters)										
Speed Change Lane Condition	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
<u>Deceleration Distance</u>										
Stop Condition	46	61	76	99	122	145	168	198	221	259
Slow to 15 mph	40	53	70	91	113	137	160	189	213	250
<u>Deceleration Taper</u>										
Length for 3.658-meter Lane	15	23	30	38	46	53	61	69	76	76
Straight Line Ratios (L:W)	4:1	6:1	8:1	10.5:1	12.5:1	14.5:1	16.5:1	18.5:1	21:1	21:1
<u>Acceleration Lane Length</u>										
Length for 3.658-meter Lane	NA	58	82	116	168	232	293	357	421	485
<u>Acceleration Taper</u>										
Length for 3.658-meter Lane	NA	30	37	46	52	55	70	82	91	91
Straight Line Ratios (L:W)	NA	8:1	10:1	12.5:1	14:1	15:1	19:1	22.5:1	25:1	25:1

This table assumes level terrain and acceleration distances for the passenger car/pickup design vehicle. Refer to the text discussion of Section 18.K for additional guidance regarding the design of speed change lanes.

Table 18.P-1 ADA Ramp Lengths (meters)			
Grade	Length	Grade	Length
-7%	1.067 m	0%	1.829 m
-6%	1.067 m	+1%	2.134 m
-5%	1.143 m	+2%	2.438 m
-4%	1.219 m	+3%	2.896 m
-3%	1.372 m	+4%	3.505 m
-2%	1.524 m	+5%	4.572 m
-1%	1.676 m	+6%	6.553 m

Table 18.S-1 Minimum Storage Lengths for Gated Access (meters)	
Vehicle Classification	Storage Length
Passenger Car/Pickup Truck	12.2 m
SU Bus	18.3 m
SU Truck	15.2 m
WB-15 Truck	22.9 m
WB-18 Truck	27.4 m