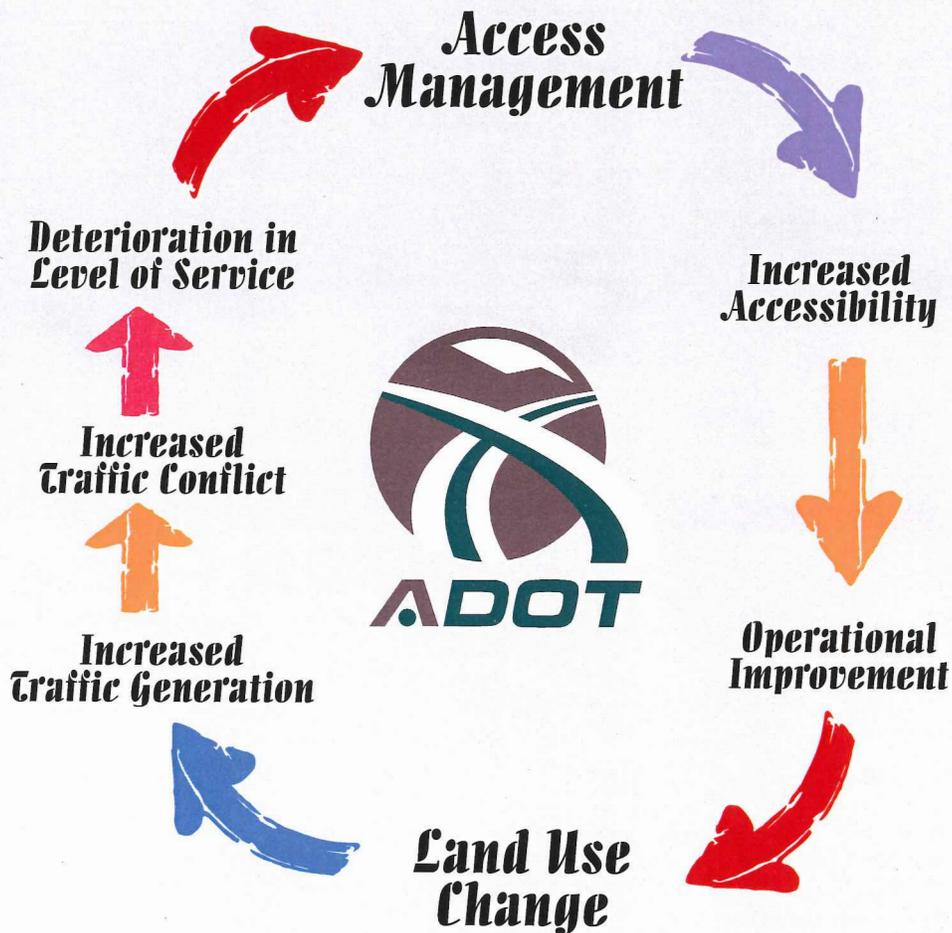


# ARIZONA STATE HIGHWAY ACCESS POLICY AND LEGISLATION STUDY



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## **INTRODUCTION AND SUMMARY OF FINDINGS**

### **THE CHALLENGE**

Arizona has experienced unprecedented growth throughout the state during the past decade growing from 3.7 million in 1990 to 4.9 million in 1999, approximately 34 percent. The population of the largest area in the state, Maricopa County, has increased to 2.9 million residents during this period. Rural and small urban areas throughout the state have kept the pace with the statewide growth. For example, Prescott Valley has grown from 8,858 residents to 21,265 residents between 1990 and 1999. For the same period, Lake Havasu City has grown from 24,363 residents to 41,045 residents. This rapid growth has resulted in sprawling development and significant increases in traffic. This increasing travel demand accompanying Arizona's rapid growth continues to challenge the State's best efforts to maintain the safety and functional integrity of the State Highway system. These challenges are particularly acute on the fringe of sprawling urban areas and in historically rural areas now in urban transition. Growing congestion on the State Highway System is attributable to increasing traffic and the proliferation of new roads, streets, and driveways accessing the System.

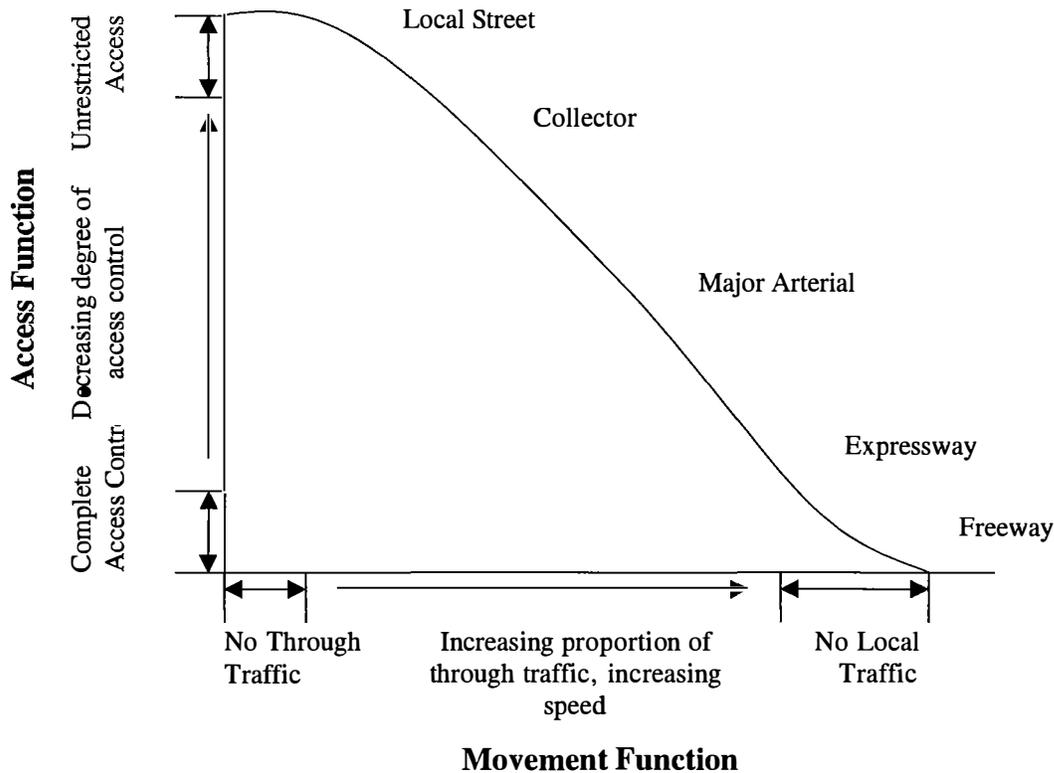
### **FUNCTIONS OF THE STATE HIGHWAY SYSTEM**

Figure 1-1 illustrates the mobility and access functions of various types of highways. Local streets with the least access control allow complete access from adjacent parcels. On the other hand, expressways and freeways have the highest degree of access control and therefore provide the highest mobility. The primary function of the State Highway System should be to provide for the safe and efficient mobility of Arizona's residents and visitors. State highways are intended to provide high speed, uninterrupted service for interregional travel between urban areas and major activity centers, as well as interstate travel.

The *ADOT Transportation Board Policies, 1995 Edition*, outlines the criteria of State level significance which are used to designate routes as State highways:

- Serves a major number of trips entering, traveling through, or leaving the State;
- Serves corridor movements generally characterized by long trip lengths and high traffic volumes indicative of Statewide, interstate, or international travel;
- Connects an urban area of over 50,000 population or a County seat with the existing State Highway System;
- Connects to a rural traffic generator which produces 500,000 or more annual trips with the existing State Highway System; or
- Serves as part of a regionally adopted urban controlled access system.

**FIGURE 1-1. ACCESS FUNCTION OF STREET TYPES**



Source: Institute of Transportation Engineers, *Transportation Planning Handbook*, 1992.

**WHAT IS ACCESS MANAGEMENT?**

The degree of access control on state highways can be categorized as uncontrolled, partial control, or full access control. Uncontrolled access means that all abutting properties can have direct access to the highway. SR 89 through the Town of Chino Valley is an example of uncontrolled access with literally hundreds of driveways accessing the highway. Partial access control permits some crossing at grade and some private driveway connections. The reconstructed SR 69 between Cordes Junction and Dewey is an example of a highway with partial access control. Full access control means that properties abutting a highway do not have direct access to the highway and that access is provided only at grade separated interchanges. The Interstate freeways in the State and the urban freeways in the Phoenix metropolitan area are examples of full access control highways with access provided only at grade separated interchanges.

The purpose of managing access on state highways is to control the number of access points to maintain the capacity of state highways, maintain a high degree of safety on those highways, while also providing access to private land. Access is managed through the regulation of vehicular access to public roadways from adjoining property. In general, travel efficiency and safety are best with fewer access points to the highway.

Access management is provided through legal, regulatory, and technical strategies available to ADOT and local political jurisdictions under their police powers in order to maintain the health, safety, and welfare of the jurisdictions' residents. The types of possible access management strategies are as follows:

- Legal strategies including implementing legislation to manage access and require access permits.
- Regulatory strategies including zoning and subdivision regulations and access permit regulations.
- Technical strategies including constructing medians, providing right and left turn lanes, and providing grade separation. Buying access rights from adjacent property owners allows the state to completely limit access to the highway.

## **WHAT ARE THE BENEFITS OF ACCESS MANAGEMENT?**

The primary benefits of access management are improved safety, more efficient operations, improved aesthetics, and improved local economy. Each of these benefits is discussed below.

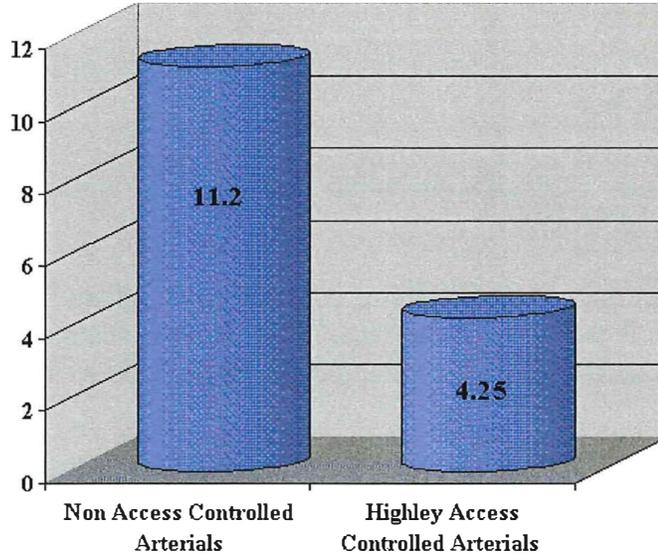
### **Improve Safety**

**Effective access management improves safety by reducing accidents.** Access management minimizes vehicle and pedestrian conflicts through the reduction and management of access points. The results on reducing accidents can be dramatic. Figures 1-2 and 1-3 illustrate how accidents are significantly reduced with a high degree of access management compared to unmanaged access. As Figure 1-2 shows, accidents along a Denver highway were reduced by more than two and one-half times by implementing a high degree of access management. Figure 1-3 shows that a reduction from 40 connections per mile to 10 connections per mile would reduce accidents from 2 to 1 accidents per million vehicle miles, a 50 percent reduction.

### **Improve Efficiency**

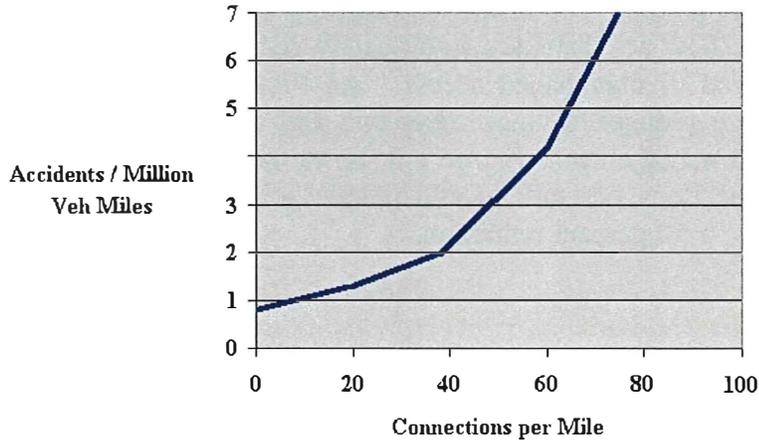
**Access management improves traffic operations – speeds are increased and travel time is reduced.** With reduced access points, traffic is uninterrupted and relatively high speeds can be maintained. The impact of access management on speed is illustrated by Figure 1-4. Speed is significantly improved from 26.2 mph with low access management to 47 mph with high access management. In general, as speeds increase, air quality improves.

**FIGURE 1-2. AVERAGE ACCIDENTS PER MILLION VEHICLE MILES – DENVER**



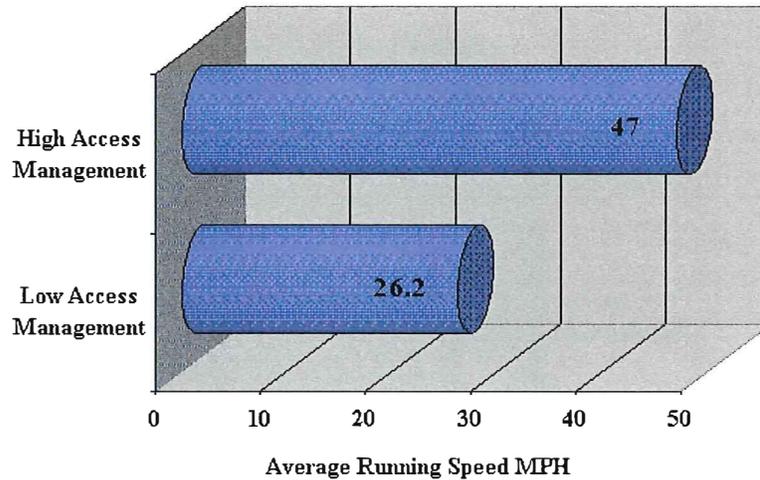
Source: Graphic Modified based on Colorado Access Control Demonstration Project, 1985

**FIGURE 1-3. CRASHES VERSUS NUMBER OF CONNECTIONS US 41, LEE COUNTY, FLORIDA**



Source: Graphic modified based on Millard, W., (1993)

**FIGURE 1-4. INCREASED SPEED THROUGH ACCESS MANAGEMENT**



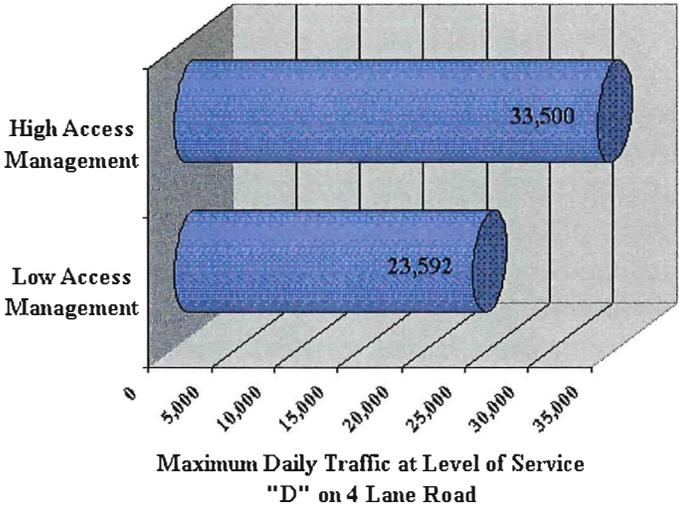
Source: Graphic modified based on Colorado Access Control Demonstration Project, 1985

Figure 1-5 illustrates how level of service is improved through increased access management. This figure illustrates that a four lane arterial with a low level of access management could only serve 23,592 vehicles per day. However, with high access management the same four lane arterial could serve 33,500 vehicles per day at the same level of service, approximately 10,000 more vehicles per day. Access management also can save significant dollars that would be need to provide additional highway capacity. Figure 1-6 shows that the same level of service can be provided by a four-lane highway with high access management than for two-thirds the cost of a six lane highway without access management;

### **Improve Aesthetics**

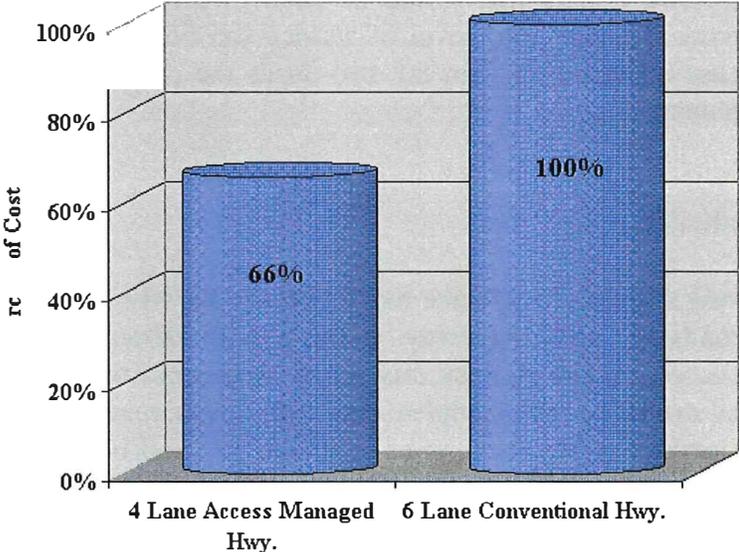
**Frontages along state highways are more visually pleasing with fewer driveways, more controlled roadway and driveway design, and better design of adjacent sites.** Uncontrolled access results in many driveways, sometimes two or more per parcel, or even no real defined driveway with complete access to the parcel from the roadway. This is not only visually unpleasant but also can be confusing to the driver. Good access management can control the spacing of driveways and the design of the driveways. In addition, as part of access management sound planning and subdivision regulations can influence how buildings and parking lots are located in regard to the highway to improve aesthetics.

**FIGURE 1-5. INCREASED CAPACITY THROUGH ACCESS MANAGEMENT**



Source: Graphic modified based on FDOT and 1985 Highway Capacity Manual

**FIGURE 1-6. RELATIVE COST TO PROVIDE THE SAME CAPACITY ON AN ACCESS MANAGED VERSUS CONVENTIONAL HIGHWAY**



Source: Graphic modified based on Colorado Access Control Demonstration Project, 1985

## **Improve Local Economy**

**The better travel times and safety obtained with good access management improves the local economy by expanding the local market area.** Customers of local businesses are not interested in visiting locations if they experience travel delays due to congested roadways and the safety risk of making difficult turning movements. In response to congestion, some businesses tend to relocate to areas that offer better accessibility. Frequently as economic activity declines in the congested area, so does the property value and tax base. As illustrated above, access management results in lower travel times from one place to another. This means that accessibility to local business is improved and customers will be more attracted to the business. In addition, the local market area is expanded - **more customers can travel to a local business in the same time before access management is implemented.** Moreover, a safer trip to a local business means that a customer probably will not divert to another business in fear of an accident.

## **WHAT IS THE NATIONAL EXPERIENCE IN ACCESS MANAGEMENT?**

### **Federal Support for Access Management**

The *Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21)* provides solid federal support of improved access management and the coordination of land use and transportation. TEA-21 emphasizes the need for the states to carry out a transportation planning process that culminates in projects and strategies that:

- ...increase the safety and security of the transportation system for motorized and non-motorized users;**
- ...increase the accessibility and mobility options available to people and for freight,**
- ...promote efficient system management and operation;**
- ...emphasize the preservation of the existing transportation system.**

These broad objectives are clearly recognized as being in the national interest, and all are goals of comprehensive access management.

### **Experience of the Other States**

Access management problems have been clearly identified in most states and these states have some degree of access management in place. Moreover, severe funding limitations have made it imperative for states to preserve existing infrastructure and access management has become an important way to preserve the infrastructure.

### *Clear Legal Authority to Manage Access*

Over the past two decades, various states have modernized access management policy and supporting legislation to better manage access. Key states that have comprehensive access management legislation are Colorado, Florida, and New Jersey. Other states including Delaware, Minnesota, Nevada, and Oregon have developed or are developing comprehensive access policies and access guidelines.

The access management legislation in the three states of Colorado, New Jersey, and Florida clearly defines the policy framework, legal authority, and administrative process to manage access on state highways. Moreover, these three states have prepared formal access codes that provide procedures, guidelines and standards for access management. In addition, these access codes have set clear access permit regulations. Access management of state highways in these states has been greatly strengthened by the clear legal authority, well-defined access management process and requirements, and definitive access management guidelines.

### *Consistent Access Management Guidelines and Standards*

The access management legislation and codes in Colorado, Florida and New Jersey have become “models” for other states. The State of Nevada, for example, has developed draft access management guidelines based on the access codes of Colorado, Florida, and New Jersey. The State of Oregon has developed draft comprehensive access management policies based on the policies of the three key states. The State of Minnesota is developing a comprehensive approach to access management modeled on the approach of the three key states.

### *Coordination and Regulation of Land Use*

Since land use adjacent to state highways significantly impact traffic operations, states have taken strong measures to coordinate and regulate development along state highways. Colorado, for example, requires subdivisions along state highways to be designed with internal street systems. Florida requires the development of an access management program that will assist in the coordination of land use planning decisions by local governments. The New Jersey Highway Access Management Code requires consistency of local master plans and circulation plans with state access management requirements, and prohibits access when the subdivision of property on a state highway is not consistent with state access standards.

### *Coordination with Local Governments*

The states that have implemented comprehensive access management legislation and/or policies, and procedures require significant ongoing coordination with local governments.

These states have undertaken extensive statewide outreach programs to prepare policy, legislation, procedures, and guidelines. Through these outreach programs, transportation stakeholders have become aware of the extent of access problems and how access management can successfully address these problems. In addition to the outreach programs to develop access management policies, states required continuing coordination with local governments. Colorado, as an example, allows local governments in consultation with the State Department of Transportation to issue permits for state highways. States have also entered into intergovernmental agreements to jointly prepare access management plans for state highways.

## **WHAT IS THE CURRENT ARIZONA SITUATION?**

State highways allow activities to take place through the safe and efficient movement of people and goods at high speeds over great distances. However, the rapid growth and mostly unplanned development along Arizona's state highways have taken a large toll on the efficiency and safety of those highways. Over time the addition of more traffic signals and curb cuts with resulting turning movements have degraded the intended function of many state highways. Land-use activities along these highways have been developed to be heavily dependent upon direct vehicle access to the highway. Local streets systems are often uncoordinated and the individual land-use activities are frequently isolated from adjacent land uses that can only be accessed from the state highway. As a result, more trips are forced onto the state highway. As the travel congestion has increased, the level of service of the highways has decreased. In addition, accidents along these highways have generally increased due to the large number of turning and other conflicts along the corridor.

In previously rural communities, Arizona state highways have become "Main Streets" serving adjacent development rather than providing the important functions that state highways should provide. These highways now operate as city streets with many access points and experience vehicle conflicts, safety problems, and congestion. As the motoring public has experienced increasing travel delays, requests for solutions have been made to transportation officials including adding more travel lanes, and constructing raised medians. However, these retrofitting techniques are expensive to implement and disrupt the motoring public. Often the deterioration of a state highway has resulted in the ultimate need for a "bypass" of the area – a very costly solution.

US 93 through the Town of Wickenburg is a prime example of how a state highway no longer provides the functions of high speed and uninterrupted traffic. As the development within the Town has generally evolved as strip development along US 93, the functionality of the highway has deteriorated from that of an efficient state highway to a city street providing slow speeds and interrupted traffic flow. Moreover, safety deteriorated with increased accidents. Another example of this "Main Streeting" of state highways is US 95 through Bullhead City. As the City developed around US 95, access driveways and streets connecting directly to US 95 increased significantly and consequently the number of traffic

signals along US 95 also increased. Travel speeds decreased significantly and travel became interrupted through Bullhead City. Again, safety deteriorated with increased accidents. Yet another example, is the Prescott-Prescott Valley area. SR 89 traverses through downtown Prescott with many traffic signals and on-street parking. Travel on SR 89 through downtown Prescott is slow and is often stop-and-go. Along SR 69 between Prescott and Prescott Valley, development has significantly increased requiring new access points and new traffic signals. Safety has also deteriorated. For example, accidents have increased on SR 69 along the Frontier Village, a major shopping center.

The highways in the areas discussed above have transitioned from efficient state highways to city streets. This transition has been accompanied by congestion, increased accidents, and restricted mobility. As a result, bypasses of the existing sections of the state highways through these areas have been considered to maintain the functionality of the state highways – again, a very costly solution. For example, the Arizona Department of Transportation (ADOT) is studying a bypass of US 93 around the Town of Wickenburg. In response to traffic congestion and increased accidents on US 95, Bullhead City funded and constructed a bypass of the highway. The City has requested to transfer this bypass segment to the State Highway System. Local governments in the Prescott-Prescott Valley area are currently partnering with ADOT to plan a system of new state routes bypassing existing segments of SR 69 and SR 89. An important point is that access must be limited on a new bypass or traffic operations will deteriorate similar to the deterioration on existing state routes. If access is not limited, the investment in the bypass will not be cost effective.

## **WHAT ARE ARIZONA’S PRACTICES IN ACCESS MANAGEMENT?**

### **Arizona Legal Authority**

In general, property owners have a right of reasonable access to an adjacent roadway. However, Governments may restrict the use of private property to protect or advance the public safety and general welfare to prevent public injury or where demanded by public interest. Private rights of abutting landowners to access their property are generally subservient to the rights of the public to free and safe use of the public street system.

The Arizona of Transportation (ADOT) is given authority to manage access through its police powers authorized by the Arizona Revised Statutes (ARS). Currently, Arizona Statutes do not codify specific access management authority and guidelines. Rather, the director of ADOT is given the authority through the Arizona Revised Statutes (ARS) to exercise powers and duties as are necessary to carry out fully the policies, activities and duties of the Transportation Department. The director exercises complete and exclusive operational control and jurisdiction over the use of State highways and routes and prescribes rules as are necessary for public safety and convenience (ARS 28-363). In addition, the director has the authority to coordinate the design, right-of-way purchase, and construction of controlled-access highways and related grade separations of controlled-

access highways, and the extension and widening of arterial streets and highways (ARS 28-363). On a controlled access highway (ARS 28-732), the State can regulate entrances and exits as well as the use of the facility by pedestrians, bicycles, or other non-motorized traffic, or by any person operating a motor-driven cycle.

The State may buy access rights from property owners – a costly solution. The State also has the right of eminent domain for transportation purposes (ARS 28-7093). However, the property owner is due compensation for the property taken and could be due compensation concerning change of access.

The current statutes do not give specific authority for managing access control other than giving the Director the authority to assert the police powers of the Department. As a result, the interpretation of the authority given by the statutes is often ambiguous and not clearly defined.

## **Arizona Administrative Procedures and Guidance**

### *Issuance of Access Permits*

ADOT regulates access on State highways by administrative rule. *Rule R17-3-712, Encroachments in Highway Rights-Of-Way* guides the granting of encroachment permits. Permits for intersections and driveways onto a State highway are granted by ADOT's Engineering Districts in accordance with Rule R17-3-712. ADOT Districts are responsible for issuing access permits and enforcing the permitted access.

The following problems associated with the ADOT permit process have been identified:

- The rules used for issuing permits are sometimes inconsistent among the ADOT Districts.
- Specific requirements are lacking for the review of site plans.
- The Districts do not have a consistent set of access management guidelines concerning driveway location and number of driveways.
- The requirements for a Traffic Impact Analysis (TIA) to obtain a permit are not consistently applied.

### *Planning and Designing for Access Management Plans*

ADOT does not have specific access management policies other than those enunciated for the Regional Area Road Fund (RARF) for Maricopa County. The Department of Transportation currently does not have a separate access management section to administer access management practices. ADOT also does not have a statewide access control plan

for State highways. The ADOT Transportation Planning Division prepares access management plans for segments of some State highways that were identified as candidates for access management by either ADOT personnel or local governments. Moreover, access management considerations are not generally incorporated into other ADOT studies such as the Corridor Profile Studies and Design Concept Reports (DCRs). In addition, ADOT has identified segments of State Highways for access control on an as-needed basis where there are opportunities for access control. However, funds to purchase access rights are very limited. The responsibility for developing limited access facilities has been primarily carried out by the Roadway Design Section.

### *Technical Procedures*

As noted above, the ADOT Districts are responsible for issuing access permits. However, there is no clear set of access management guidelines that outline specific steps, requirements, and standards to be used for planning and designing access. In addition, procedures are general and are sometimes administered inconsistently among ADOT Districts. The standards for designing intersections, access driveways, and other elements are included in the ADOT Roadway Design Guidelines and construction standards. However, these standards are not integrated into an overall access strategy. In addition, the standards were developed without specific needs for access management in mind. Rather they are stand alone design and construction standards. Comprehensive access management guidelines are needed that will integrate design standards and access management concepts.

## **MOVING TOWARD BETTER ACCESS MANAGEMENT IN ARIZONA**

The Arizona Department of Transportation is responsible to ensure safe state highways and protecting the integrity of the State Highway System to move people and goods efficiently. In so doing, ADOT acts to promote the economic development of the state and protects the massive public investment in transportation. To meet its responsibilities, ADOT seeks to improve its ability to manage the State Highway System by developing an effective access management policy to reduce congestion, improve highway safety and convenience, and protect the functional integrity of Arizona's highways.

A new approach to access management in Arizona is needed. The tinkering with the current approach in Arizona will not help solve access problems on state highways. A comprehensive multi-pronged approach is needed that integrates access management policy, legislation, process, and access standards. The key elements of this integrated approach are:

- Clear legal authority to the State through access management legislation
- A coherent, consistent access management process based on sound access management principles

More intense coordination with local governments to manage access on state highways

- Clear concise access management guidelines and standards that are consistently and fairly administered
- Specific administrative responsibility for planning, designing, administering, and enforcing access management

## **PURPOSE OF THIS STUDY**

The purpose of this study is to present approaches to improve access management through more effective legal and administrative tools. All of the products prepared for this study are intended to be a beginning, not necessarily an end, to a more comprehensive dialogue within ADOT, with the State Transportation Board, with other state and federal agencies, with local jurisdictions, and with private citizens. The policies, legislation, procedures and guidelines have to be reviewed and revised based on ADOT induced comments as well as the publisher's input.

One primary objective of the study was to develop draft access management policies to provide overall policy guidance to ADOT for managing access on State highways. Another key objective was to prepare draft "Model" Access Management Legislation that provides the legal "teeth" of enacting and enforcing access management on State highways. A third objective was to develop Draft Access Management System and Standards that provide guidelines to planners and designers for implementing access management techniques.

All access management legislation and/or policies are to be developed in compliance with Environmental Justice regulations.

## **ORGANIZATION OF REPORT**

This report is organized in seven chapters with an addendum. To gain an understanding of how access management is practiced in other states, the next chapter, Chapter 2, presents a review of the legal and administrative access management practices of selected states. Arizona access management practices are discussed in Chapter 3 to provide a base line of where Arizona currently is in regard to access management of Arizona's state highways. Chapter 4 summarizes the legal issues of access management and is the basis for draft Arizona legislation introduced in Chapter 7. A discussion of possible access management classifications scheme is introduced in Chapter 5 followed by recommended policies in Chapter 6. A technical supplement presents Draft Access Management System and Standards that provide guidelines to planners and designers for implementing access management techniques.

## **SUMMARY OF FINDINGS AND RECOMMENDATIONS**

The following section provides an overview of the findings and recommendations of the study. Detail for each of the issues is presented in the individual chapters of this document.

### **Access Policy and Legal Authority**

At present, the lack of specific goals and strategies for access management combined with the insufficient statutory provisions do not allow for effective access management in Arizona. The current statutes do not adequately address access management and control. Currently, Arizona legislation does not codify specific access management authority and guidelines.

#### *Recommendation*

- **Based on the fact that the current statutory provisions are ambiguous, new comprehensive Access Management legislation should be introduced to strengthen access management.**
- **The State's overall goals and strategies must be defined in regard to access management and a policy framework has to be established.**

### **Permit Procedures**

The rules for issuing permits are sometimes inconsistent among the ADOT Districts. In addition, the Districts do not have a consistent set of access control guidelines concerning driveway location and number of driveways. The Districts also lack specific requirements for the review of site plans. Moreover, the requirements for a Traffic Impact Analysis (TIA) to obtain a permit are not consistently applied.

#### *Recommendations*

- **Revise the existing encroachment rule in regard to access permits and address the shortfalls that have been identified for the permitting process:**
  - **Time limits should be established for how long a permit application remains open.**
  - **A fee structure for permits should be established.**
  - **A standardized application of reviewing and approving permits should be established throughout the ADOT Districts.**

- **The responsibility and reason for a particular request must be defined.**
  - **Define the use of required documentation such as site plans or traffic impact analysis and provide clear guidelines.**
  - **Establish a formal appeal process.**
  - **Make permit applications more clear for the applicants.**
- **Establish an access management classification system and access standards to ensure consistency throughout the state.**

### **Planning and Designing for Access Management**

Currently, ADOT does not have a statewide access management plan that could guide the planning, designing, and implementation of access management on State highways. Moreover, access management should be integrated into the statewide long-range plan. The long-range plan should consider alternative routes to existing routes that have become congested. Access management considerations are not generally incorporated in the Corridor Profile Studies or Design Concept Studies (DCRs). In addition, Access management considerations are not included in the project selection and programming process for the five-year construction program.

The State also does not have an access classification system to ensure uniformity in the implementation of access management. At present, the Department does not have a central section to coordinate access management activities.

### *Recommendation*

- **Prepare a statewide access management plan and integrate access management into the statewide long-range plan.**
- **Make access management studies a part of an overall statewide access management plan outlining priorities, implementation, and funding of access management.**
- **Include access management considerations in the project selection and programming process for the five-year construction program.**
- **Develop a statewide access classification system.**
- **Prepare comprehensive access guidelines and standards.**
- **Provide central coordination for access management activities.**

## **Designation of Controlled and Limited Access Highways**

Recently ADOT has used the existing State Statutes to implement access control on specific segments of the State Highway System such as portions of US 60. Right-of-way resolutions by the State Transportation Board were used to designate specific limited segments of State highway as an access controlled highway. However, there is no statewide plan that identifies the highway segments that should be designated as access controlled highways. Nor, are there a set of procedures to develop and implement right-of-way resolutions and purchase access rights.

### *Recommendation*

- **As previously recommended, develop a statewide access management plan.**
- **Investigate further the procedures for using the mechanism of the right-of-way resolution to implement access control on state highways.**

## **Financial Strategy and Resources**

Based on interviews with ADOT Management, District Engineers, and Permit Technicians, it is apparent that there are not enough resources in place to adequately administer and enforce the current access permitting process. In addition, there is very limited funding to purchase access rights to provide access control. Also, the existing access management efforts are not supported through a dedicated financial access management strategy. As previously noted, no state wide access management plan is in place outlining priorities and funding mechanism for the implementation of access management.

### *Recommendation*

- **Develop an overall access management plan including an implementation and funding section.**
- **Identify financial strategies and improve funding for access management including for planning, administration, enforcement, and purchasing access rights.**

## **Coordination with Stakeholders**

Many of the recommended aspects of access management have to be developed in close coordination with local governments and especially with citizen involvement and input.

Political resistance often emerges because many stakeholders are not well informed or educated about access management. Coordination could be improved by the use of Intergovernmental Agreements to regulate access management with local jurisdictions. In addition, it is vital to coordinate with all relevant Federal and State agencies, and the Indian Tribes to successfully implement access management. In regard to the coordination of development along State highways, the Department has been the most successful in coordinating with developers of large sites. Similar to larger jurisdictions, large developers generally are more knowledgeable of the benefits of access management.

#### *Recommendation*

- **Develop an outreach and education strategy to coordinate the development and implementation of access management tools with the key stakeholders. The education program should focus on small jurisdictions and developers to improve their understanding of the benefits of access management.**
- **Develop procedures for continuing coordination with stakeholders on access management.**

#### **Improve Land Use Regulations in Regard to Access Management**

Current local land use regulations are weak or are not aggressively implemented to ensure that subdivisions include internal street systems and connect to local streets rather than to the State highway. The current Arizona regulations for lot splits allow parcels to be split into relatively small lots without conforming to subdivision regulations. Moreover, the coordination of development master planning with ADOT is sporadic at best.

#### *Recommendation*

- **Require by statute subdivisions to include an internal street system.**
- **Revise the current Arizona Statutes on lot splits to limit the number of splits.**
- **Require by statute and administrative rule that ADOT and local governments coordinate on access management.**

# ACCESS MANAGEMENT PRACTICES OF SELECTED STATES

## INTRODUCTION

This Chapter summarizes the access management practices of selected states. The practices reported here are updated from those reported in a research report entitled *Access Management: Practices in Other States and Improvements for Arizona*, published by the Transportation Planning Division of the Arizona Department of Transportation (ADOT TPD) in December, 1990.

This 1990 report reviewed and analyzed the access management practices of other states and how those practices might be implemented in Arizona. The primary focus of the report was a review of the access management legislation of Colorado, Florida, and New Jersey. Since the 1990 report was completed, major mandates of the Access Management Acts in these three states have been implemented including access classification standards, and access codes. Since 1990, additional states have made significant efforts to develop access management policy and standards including Delaware, Minnesota, Nevada, and Oregon.

Several legislative and administrative tools are used to implement access management. Some states have enacted through legislation "Access Management Acts" which provide the legal basis for access management. While these Acts vary in detail and issues addressed, many require the State Department of Transportation to establish rules and regulations as well as standards for the implementation of access management. These documents are often referred to as "Access Management Codes" and contain administrative procedures such as the permit process as well as access management classifications. Policies concerning access management are found in the legislation as well as in the rules/code. In some states, however, the policies addressing access management are enumerated in a stand-alone document guiding the development of legislation as well as the access management code/guidelines. The remainder of this chapter provides an overview of the various mechanisms as they are used by selected states.

## PROPERTY RIGHTS VERSUS RIGHT TO MANAGE ACCESS

The access rights of property owners are at the heart of managing access on public highways. Access management legislation enacted in Colorado, Florida, and New Jersey specifically recognizes that property owners have the right of reasonable access to the general street system. The *New Jersey Access Management Act*, for example states that: **Every owner of property which abuts a public road has a right of reasonable access to the general system of streets and highways in the State, but not to a particular means of access.** However, the legislation in all three states specifies that access can be regulated for the public good. As the New Jersey Act states: **The right of access is subject to regulation for the purpose of protecting the public health, safety and welfare.** Other

states also specifically recognize the right of reasonable access in their access rules and standards.

In order for access management to succeed, a balance must be found between the individual property rights and the regulation of access for the common benefit of the public through the authority of the State government.

## **AUTHORITY TO MANAGE ACCESS ON STATE HIGHWAYS**

The legal authority to manage access is conferred on jurisdictions by state statutes in various ways. Some states such as Colorado, Florida, and New Jersey have taken an innovative approach by enacting comprehensive access management legislation that gives specific authority to the States for managing access on state highways. Other states, such as Oregon, have enacted less comprehensive access management statutes, but have developed a comprehensive approach for developing access policies and standards. Still other states, such as Nevada, are implementing access management within their existing statutes that give certain police powers to the Department of Transportation. Applicable statutes of the selected states are provided in Appendix A.

### **Colorado**

Colorado's legislation regarding access management is far reaching and is based on two major components. First, *Colorado Revised Statutes 43-2-147*, Colorado's Highway Access Law, defines the authority of the Department to regulate vehicular access to or from any public highway under their respective jurisdiction. Second, all State highways are declared to be controlled access highways. Controlled-access is defined as:

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

The Colorado Act also requires the development of an access classification system and an Access Code.

### **Delaware**

The Delaware Department of Transportation, Division of Highways is given the authority to control all access onto state-maintained highways by the *Delaware Code*, Title 17, Chapter 146:

The Department is authorized to adopt standards and regulations for the location, design, construction, reconstruction, maintenance, use and control of vehicular

and pedestrian access to and from any State Maintained Highway in order to protect public safety, to maintain smooth traffic flow, to maintain highway right-of-way drainage, to regulate drainage from property leading into or carried by the highway drainage system and any other public purpose, as determined by the Department.

## **Florida**

Florida's legislative provisions regarding access management are detailed and define access management in several statutes. The *Florida Statute 335 – Access Management Act* from 1993 outlines the regulation of access to the State Highway System, the legislative findings, subsequent policies, and the purpose of the act. Also the regulation of connections to roads on the State Highway System are defined. The access permit process and its requirements is defined as well as the authority to close un-permitted connections. The statutes also regulate permit application fees, the access permit review process, permit denial, administrative review, permit conditions, and their expirations. In addition, the statutes require that access management standards, an access control classification system, and criteria be developed.

The goal of access control in Florida is to protect the public health, safety, and welfare, to preserve the functional integrity of the State Highway System, and to promote the safe and efficient movement of people and goods within the State. To achieve access control the legislature has mandated the development of an access management program. The program is intended to assist in the coordination of land use planning decisions by local governments and therefore help to develop an effective transportation system and increase the traffic-carrying capacity of the State Highway System. The policy of the legislature states that every owner of property that abuts a road on the State Highway System has a right to reasonable access to the abutting State highway.

## **New Jersey**

The New Jersey Act outlines the following reasons for access management:

- The purpose of the State Highway System is to serve as a network of principal arterial routes for the safe and efficient movement of people and goods in the major travel corridors of the State.
- The existing State highways, which comprise the State Highway System, were constructed at great public expense and constitute irreplaceable public assets.
- The State has a public trust responsibility to manage and maintain effectively each highway within the State Highway System to preserve its functional integrity and public purpose for the present and future generations.

- Land development activities and unrestricted access to State highways can impair the purpose of the State Highway System and damage the public investment in that system.

The New Jersey Act further recommends that the Department of Transportation establish through regulation a system of access management which will protect the functional integrity of the State Highway System and the public investment in that system.

The New Jersey Act also requires that a State highway access management code be prepared providing for the regulation of access to State highways. An advisory committee was established and at least five public hearings on the access code were required. The Act also requires the establishment a general classification system for the State Highway System based on a set of criteria.

## **Nevada**

Nevada's statutes are general in terms of access management. The statutes recognize that safe and efficient highway transportation is a matter of important interest to all the people of the State. Therefore, the efficient management, maintenance, and control of the State Highway System are a necessity. The legislature places a high degree of trust in those officials who plan, develop, operate, maintain, control, and protect the highways and roads of the State. The board of directors of the Department of Transportation is responsible for the State Highway System and therefore is provided with sufficient broad authority to enable the board to function adequately and efficiently. The director of the Department of Transportation is equipped with several tools regarding access control. To control highway access the director may:

- Divide or separate any highway
- Lay out and construct frontage roads
- Remove any unlicensed encroachments from the highway
- Issue permits for encroachments.

Also, the State highways and State rights-of-way are protected by law from encroachments and a written permit from the director is required for approach roads and driveways. The permitting process is defined by conditions and regulations prescribed by the director.

## **Oregon**

Oregon currently does not have separate access management legislation. However the State statutes address several components of access management. The purpose of the statutes is to improve conditions on State highways in regard to safety, convenience, and type and class of service provided on State routes. To achieve this goal, three main aspects of access management are defined. First, the law identifies the roadway category

of “Throughways” which represent access controlled or limited access facilities. Second, the law defines the access permitting authority of the Department of Transportation in regard to the “Throughways” and the remainder of the system. The third component regulates the property rights of parcels abutting State highways.

However the main access management component in Oregon’s statutes is the provision that the Department of Transportation shall adopt reasonable rules and regulations supported through a permitting process for the use of the rights-of-way of State highways. The issuance of such permits is determined by the judgement of the Department representing the best interest of the public. Criteria for issuing permits include the protection of the highway and the benefits to the traveling public.

## **Minnesota**

In Minnesota, the authority to regulate access is under the police powers of the State limited by the constitutionally protected access rights of abutting landowners.

## **ACCESS MANAGEMENT STANDARDS**

### **Access Classification System**

As reported in the 1990 ADOT report, the access management legislation in Colorado, Florida, and New Jersey mandated the development of an access classification system. The purpose of an access classification system is to define specific categories of access management tied to criteria for classifying specific segments of highways including the following:

- The current functional classification of each road on the State Highway System
- Existing and projected traffic volumes
- Existing and projected state, local, and metropolitan planning organization transportation plans and needs
- Drainage requirements
- The character of lands adjoining the highway
- Local land use plans and zoning, as set forth in comprehensive plans
- The type and volume of traffic requiring access
- Other operational aspects of access
- The availability of reasonable access to a State highway
- The cumulative effect of existing and projected connections on the State Highway System's ability to provide for the safe and efficient movement of people and goods within the State

The New Jersey Act defines the following criteria for establishing an access classification system:

- The function that segments of State highway serve and are planned to serve within the State highway system and within the general system of streets and highways.
- The environment within which highways are located, including but not limited to urban and rural environments.
- The appropriate and desirable balance between facilitating safe and convenient movement of through traffic and providing direct access to abutting property.
- The desirable rate of speed and the degree to which through traffic should be protected from major variations in speed. Each State highway segment shall have its classification identified in the access code.

The *New Jersey State Highway Access Management Code* also requires the establishment of standards for each highway classification.

The *Delaware Draft Statewide Access Management Policy* establishes a functional and area classification system for managing specific highway segments. The classification system is based on the following criteria:

- Current Functional Class
- Intended Future Function
- Degree Of Urbanization
- Transportation Investment Area Designation (Areas Based On Types Of Transportation Investment And Management Strategies)
- Center Designation (Higher Density Areas In Transportation Investment Areas)

### **Access Management Standards**

Various states have developed access management standards to better manage access on State highways. The States of Colorado, New Jersey, and Florida for example have developed access codes or administrative rules that are formal rules promulgating guidelines and standards for access management. These codes regulate vehicular access to or from any public highway under their respective jurisdiction from or to property adjoining a public highway. Types of access standards included in these codes are listed in Table 2-1. Other states such as Delaware, Nevada, Minnesota, and Oregon have also prepared or are in the process of developing access management standards.

**TABLE 2-1. TYPICAL CATEGORIES FOR  
ACCESS MANAGEMENT STANDARDS**

<b>Standard Category</b>
Sight Distance
Access Spacing
Access Width
Access Radii
Access Surfacing
Speed Change Lanes
Turning Lanes
Median Design
Channelized Islands
Emergency Access
Drainage
Location of Interchanges
Location of Signalized and Unsignalized Intersections
Pedestrian Crossings

## **Delaware**

The draft Delaware Policy provides guidance on how transportation access shall be provided to properties along Delaware's streets, roads, and highways. The Policy provides the highway access management policies and procedures to achieve the following:

- Protect Public Safety
- Maintain Efficient Transportation Operations
- Maintain Highway Right-Of-Way Drainage
- Protect The Functional Integrity Of The State's Arterial Highways
- Provide Reasonable Access To Abutting Property

The Delaware Policy supports the following goal of the Statewide Long-Range Transportation Plan:

To provide a safe transportation system that supplies a level of access and mobility that sustains or improves 1995 levels.

The Delaware Policy establishes an access classification system and procedures to implement a multimodal access management program. Access design standards and regulations will be contained in a manual entitled *The Access Management Technical Design Manual*.

## **Colorado**

The *Colorado State Highway Access Code* provides procedures and standards to aid in the management of the transportation infrastructure investment and to protect the public health, safety and welfare. The Code attempts to maintain smooth traffic flow and highway right-of-way drainage, and to protect the functional level of State highways while considering state, regional, and local transportation needs and interests. The Code recognizes several issues:

- An environment of population growth.
- Property owners have the right of reasonable access to the general street system.
- An effective access management system must recognize the role that local streets and roads play in the overall network.
- The system users should have the ability to move freely and safe on the highway system and expect the efficient expenditure of public funds.
- An effective access management system is especially needed at locations where significant changes to the transportation system and/or adjacent land use have occurred or are proposed.
- The access management system has to work in close cooperation with property owners and local governments.

The Code is outlined in four major sections:

1. An introduction describing the authority, purpose, and organization of the Code.
2. An administration section outlining the overall process, access category determinations, permit application process, access construction, application review committee, permit fees, and others.
3. An Access Category Standards section defining the access categories, standards, and access category classification hierarchy.
4. The design standards and specification section setting standards for design and specifications of access facilities.

The New Jersey Access Code, the Florida Rule, and access standards other states are set up in a manner similar to that of the Colorado Access Code.

## **Florida**

The State of Florida adopted an access classification system and standards to implement the *State Highway System Access Management Act of 1988* for the regulation and control of vehicular ingress to, and egress from, the State Highway System. (Florida Department Of

Transportation, Chapter 14-97, *State Highway System Access Management Classification System and Standards*) The implementation of the classification system and standards is intended to protect public safety and general welfare, provide for the mobility of people and goods, and preserve the functional integrity of the State Highway System. All segments of the State Highway System shall be assigned an access classification and standard.

## **Minnesota**

The Minnesota Department of Transportation was directed, as stated in the Highway Access Management Policy Study, by the Legislature in 1997 to study and recommend approaches for integrating land use planning, engineering, and legal practices in order to **...maximize the operational efficiency and safety of all functional categories of roadways**. In order to address the directive of the legislature, the Department established the Office of Access Management (OAM) to develop recommendations for access management. In addition, a broad-based approach was taken by establishing a steering committee and various technical committees. Workshops were also held by the Minnesota Department of Transportation with local governments to present information on access management and to gather feedback on strategies to manage access.

## **Nevada**

The Nevada Department of Transportation is currently developing a *Draft Access Management System and Standards Policy*. The Draft outlines the authority, the purpose, and the administration of access management in Nevada. Subsequent chapters in the document define access category standards and design standards and specifications.

## **Oregon**

Like other states, Oregon is in the process of developing access management standards and has developed an access management policy (*Draft Oregon Access Management Policy, Oregon Department of Transportation, January 1998*). The Department is currently drafting rules defining highway approaches, access control, spacing standards, and medians. Although Oregon's legislation is limited with respect to specifics on access management, the Department of Transportation has made use of its authority to develop administrative rules. The *Oregon's Attorney General's Administrative Law Manual* defines rules to include the following:

**...directives, standards, regulations or statements of general applicability that implement, interpret or prescribe law or policy or describe the agency's procedure or practice requirement. Agencies can adopt, amend, repeal, or renumber rules, permanently or temporarily using set procedures.**

Oregon’s Department of Transportation is currently revising the existing rules affecting access management and a Senate Bill (SB 773 B June of 1999) was introduced. This Bill would require the Department to adopt rules governing the standards and process for issuing permits for approaches to highways. The Bill specifies that the standards have to be consistent with local comprehensive plans, transportation system plans, safety, and highway function. Additionally the Bill specifies a time limit on decisions and outlines an appeal process. Also, according to the Bill, the Oregon Department of Transportation would allow local governments to issue access permits for regional or district State highways under intergovernmental agreements. In addition a hearing process is outlined to allow comment from local governments and adjacent property owners affected by issuance of possible permit.

Managing access on the State Highway System is an essential strategy of the Oregon Access Management Policy to protect the safety, efficiency and investment of Oregon’s existing and planned highways. The Policy defines Access Management as balancing access to develop land while ensuring movement of traffic in a safe and efficient manner, through reusing, reclaiming and restoring existing roadways, and properly planning new roadways. Oregon’s Access Management Policies are listed in Table 2-2.

**TABLE 2-2. OREGON ACCESS MANAGEMENT POLICIES**

<b>Access Management Policy</b>
<p><b>Classification and Spacing Standards Policy</b>            It is the policy of the State of Oregon to manage the location, spacing and type of street intersections, approach roads, median openings, and traffic signals.</p>
<p><b>Median Policy</b>            It is the policy of the State of Oregon to manage the placement of medians and the location of median openings on State highways to enhance the efficiency and safety of the highways, and influence and support land use development patterns that are consistent with approved Transportation System Plans.</p>
<p><b>Interchange Access Management Area Policy</b>            It is the policy of the State of Oregon to manage grade-separated interchange areas to ensure safe and efficient operation between connecting highways.</p>
<p><b>Variance Policy and Procedures</b>            It is the policy of the State of Oregon to manage requests for minor and major deviations from adopted access management standards and policies through an application and appeals process to ensure statewide consistency.</p>

Source: Oregon Department of Transportation, Draft Oregon Access Management Policy, January 1998

## **THE PERMIT PROCESS**

The process of issuing access permits is critical for the successful implementation of access management. A clear permit approval process, specific guidelines, and enforcement procedures ensure the effective adherence to access management goals.

The authority for permitting access in Colorado, Florida, and New Jersey is given by State statutes. The Access Codes of Colorado and New Jersey provide additional procedures for permits. The Florida Department Of Transportation, Chapter 14-96, State Highway System Connection Permits, Administrative Process describes the connection permit application process and procedures, a voluntary preapplication process, and requirements for modification or closure of connections to the State Highway System. Colorado allows the local governments to issue permits with the review by the Department of Transportation. Oregon's statutes provide that the Department of Transportation shall adopt reasonable rules and regulations supported through an permitting process for the use of the rights-of ways of State highways. The issuance of such permits is determined by the judgement of the Department representing the best interest of the public.

The following sections discuss how various states address elements of the permit process including:

- Permit Timetable
- Authority to Charge Permit Fees
- Authority to Close Un-permitted Access
- Authority to Revoke or Modify a Permit
- Treatment of Pre-existing Access Points
- Appeal Process
- Variance Procedure
- Other Permit Procedures

### **Permit Timetable**

The access management statutes enacted by Colorado, Florida, and New Jersey provide for the issuance of permits by the issuing authority within a stated time frame. In addition, the three states specify time limits for completing construction on the access point. If construction is not completed within the specified time, then the permit expires. The draft *Oregon Rules for Highway Approaches, Access Control, Spacing Standards, and Medians* also states a time frame for issuing permits.

### **Authority to Charge Permit Fees**

Access management statutes enacted by Colorado and Florida provide that the issuing authority shall establish a reasonable schedule of fees for access permits. The purpose of

the fees is to cover the administration of access permits. New Jersey Legislation does not specify the establishment of a fee structure for access permits, however, the legislation states that: **...the Access Code shall set forth administrative procedures for the issuance of access permits.** New Jersey's Access Code defines permit fees by providing a fee schedule according to access type. The Oregon Draft Rules also specify fees for permits.

### **Authority to Close Un-permitted Access**

Access management statutes enacted by Colorado, Florida, and New Jersey allow the issuing authority of the Department of Transportation to close driveways without an access permit. The draft rules for Nevada also provide for the closing of driveways without an access permit.

### **Authority to Revoke or Modify a Permit**

Access management legislation of Colorado allows the issuing authority of the Department of Transportation to revoke permits if the permitted driveway does not meet requirements of the Access Code. New Jersey's legislation also provides for the revocation of access permits for existing driveways, after determining that reasonable alternative access is available that would be consistent with the intent of the Access Code. In their draft rules, both Nevada and Oregon include provisions for revoking or modifying a permit.

### **Treatment of Preexisting Access Points**

The three states of Colorado, Florida, and New Jersey have "grandfather" clauses that exempt driveways. In addition, if the use of the property changes in these three states, then the access point may be required to be reconstructed or relocated to conform to standards. In New Jersey those existing permits can only be revoked if reasonable alternative access to the general system of streets and highways exists. The Oregon Draft Rules also have provisions covering the "grandfathering" of access points and the cases where property use changes.

### **Appeal Process**

Only Colorado allows for the appeal of the decision on the access permit by statute. New Jersey provides for such an appeal through its access code. Nevada and Oregon include an appeal process in their draft rules.

## **Variance Procedure**

Colorado legislation allows for a variance to be granted to the property owner if such variance is reasonably necessary for the convenience, safety, and welfare of the public. If failure to grant a variance would deny reasonable access to the general street system, such denial may be subject to the provisions of section 43-1-208 and section 15 of article II of the state constitution. New Jersey's legislation **allows for nonconforming lot access for a property for certain reasons and if the denial would leave the property without reasonable access to the general street system.** Nevada and Oregon also provide for variance in access standards.

## **Other Permit Procedures**

Through their access codes and rules, Colorado, Florida, New Jersey, and Oregon require traffic impact studies to be conducted as part of the permit process. Oregon's Draft Rules define the determination for a transportation impact study as the responsibility of the Regional Manager. Oregon's permitting process also includes a hearing process to determine what is in the best interest of the public in terms of safety, convenience, and the general welfare.

## **ACCESS MANAGEMENT COORDINATION**

### **Agency Coordination and Public Participation**

All of the States reviewed have initiated significant coordination with local governments. For example, the Colorado Act mandated that the Access Code be developed in consultation with local governments. The Colorado Act also has provisions for coordinating land use which are discussed later in this section. Similarly, the Florida Act mandated that the access control classification system be developed in cooperation with local governments, counties, and regional agencies.

In Delaware, a broad-based approach to develop an Access Management Policy was taken by establishing a steering committee and various technical committees. A series of public meetings were held to present the draft policy and obtain feed back from citizens. Workshops were also held by the Minnesota Department of Transportation with local governments to present information on access management and to gather feedback on strategies to manage access.

The *Draft Oregon Access Management Policy* is the result of an extensive research and public participation process. Individual aspects of access management were researched and described in several working papers. The objective in developing these working papers was to stimulate discussion among interested individuals, and to provide technical

background information for policies on the topic of access management. To facilitate the development of the access management policy an Access Management Advisory Committee was instituted. This committee was comprised of about 30 representatives from various interest groups. The interest groups ranged from the business community to representation of partnering jurisdictions, property owners, and developers. Information on the Access Management Advisory Committee is published on the ODOT Web site.

### **Access Management and Land use Coordination**

The Colorado Access Management Act clearly intended that the coordination between land use and highway development be improved:

The development of an access management program, in accordance with this Act, will assist in the coordination of land use planning decisions by local governments with investments in the State Highway System and will serve to enhance managed growth and the overall development of commerce within the state as served by the State Highway System. Without such a program, the health, safety, and welfare of the residents of this state may be placed at risk, due to the fact that unregulated access to the State Highway System is one of the contributing factors to the congestion and functional deterioration of the system.

While the provisions of the access management acts provide for a certain linkage between local land use planning and access management on the local level, some State agencies extend that relationship in the overall context of access management. The State of Minnesota addresses the relationship between land use planning and access management extensively in its *Highway Access Management Policy Study* and identifies several strategies:

- Consider land use and transportation together.
- Identify and plan for growth areas.
- Invest in adequate local road systems.
- Protect the functional integrity of the road system.
- Avoid strip commercial development.
- Seek opportunities to retrofit problem corridors over time.
- Incorporate access management standards and requirements in local zoning and subdivision ordinances.
- Consult with the affected road authority.

The State of Florida has been a leader in developing approaches for coordinating access management and land use. For example, the State of Florida DOT in cooperation with the Center of Urban Research developed *Model Land Development & Subdivision Regulations that Support Access Management for Florida Cities and Counties*. The document includes model regulations, model corridor agreements, and a sample Cross Access Agreement, and was developed based on the following context:

Effective local access management requires planning as well as regulatory solutions. Communities should establish a policy framework that supports access management in the local comprehensive plan, prepare corridor or access management plans for specific problem areas, and encourage good site planning techniques. Land development and subdivision regulations should be amended accordingly and communities may also consider a separate access management ordinance. Access management programs should address commercial development along thoroughfares, as well as flag lots, residential strips, and other issues related to the division and subdivision of land. Comprehensive and sub-area plans provide the rationale for access management programs and can serve as the legal basis for public policy decision.

### **Local Land Use Plans**

The states of Colorado, New Jersey, and Florida have various land use regulations in regard to access management. For example, the Colorado Act requires that a subdivision plan or plat provide **...that all lots and parcels created by the subdivision will have access to the state highway system in conformance with the State Highway Access Code.**

New Jersey requires that approval by the planning board of either subdivisions or site plans shall conform with the State Highway Access Management Code, or any Access Management Code adopted by a county, or any municipal access management code. In addition, New Jersey requires that if the subdividing of a property abutting a State highway creates additional lots abutting that highway, then the abutting lots shall be in accord with the standards established in the access code. Moreover, a building permit can not be issued if the proposed access does not conform with the standards of the State Highway Access Management Code.

Florida's Rule 14-97 defines the necessity for the coordination with local government comprehensive planning and land development regulations. Because local land use decisions can impact the department's ability to meet the access standards assigned to a particular segment of highway, coordination with local government land use planning, development and subdivision regulations are necessary for successful access management.

## **ACCESS MANAGEMENT PLANS**

None of the states reviewed require that access management plans be prepared. However, rules for various states do allow for the preparation of access management plans and do prescribe requirements for the preparation of such plans. Examples of how some states address access management plans are presented below.

### **Delaware**

The Delaware Access Management Policy allows the Department of Transportation to cooperate with counties, municipalities, property owners and concerned members of the public to prepare transportation access improvement plans. These improvement plans would document how transportation access to properties within a corridor can be provided, improved and enhanced to enable greater mobility for persons and goods.

### **New Jersey**

*New Jersey's State Highway Access Management Code* defines in detail Access Management Plans. Subchapter 6 of the Access Code defines the components of New Jersey's access management plans including authority, adoption, contents, process, incorporation, revisions, and coordination. Several main provisions guide the establishment of access management plans. For the State Commissioner to adopt an Access Management plan, the plan

- Must comply with or exceed the standards established in the New Jersey's Access Management Code.
- Must be incorporated by the participating jurisdiction into its land development ordinances and master plans.
- Must provide appropriate means of access to every lot subject to the Access Management Plan.

The provisions outline the effects of adoption of an Access Management Plan, the provision that the access management code will determine decisions on permit application until the adoption of such Access Management Plan, and a very detailed list of content requirements for an Access Management Plan. The process of developing an Access Management Plan is one of coordination and cooperation among the State and the participating jurisdictions. The Access Management Code also calls for distinct procedures on how to develop, finance, solicit public comment, and approve an Access Management Plan in a joint planning process. Termination or withdrawal, adoption and revision of Access Management Plans are separately defined.

## **Colorado**

Colorado's Access Code addresses access control plans which are intended to develop access design plans for selected portions of state highways with the purpose of bringing that section in conformance with its established access category. The access control plans are developed jointly between the State Department and the local jurisdiction with the goal to achieve the optimum balance between state and local transportation planning objectives. The plan must receive the approval of both the Department and the appropriate local authority to become effective.

## **Florida**

In Florida Corridor Access Management Plans are used to define site specific access management features for a particular roadway segment and are developed in coordination with the appropriate local government(s) and are adopted by the Department in cooperation with the appropriate local government(s).

## **ADMINISTRATIVE RESPONSIBILITY**

Various states have established clear administrative responsibility for access management at both the statewide and regional levels.

The Colorado Department of Transportation has a separate Access Management Section that oversees access management practices. The Access Program Administrator resides in the Safety and Traffic Engineering Branch of the Colorado Department of Transportation. In addition, the Department has six regional offices that have an Access Manager or an Access Unit in the respective traffic section.

In New Jersey, the responsibilities for access management are divided into Major Access Permits, Minor Access Permits, and Highway Occupancy Permits. The DOT's regional maintenance offices are the initial point of contact within the Department. Minor permits are reviewed and determined by the regional maintenance office. Major permits are reviewed by the Maintenance and the Major Permits Unit of the Regional Design staff and if determined necessary by the Division of Comprehensive Transportation Planning at the Departments headquarters.

The statewide Access Management program in Florida is located in the Systems Management section of the Planning Office. The Access Management program is defined as a comprehensive approach to the management and regulation of driveways, medians, median openings, traffic signals, and freeway interchanges. The goal of the program is to limit and separate traffic conflict points and therefore increases the safety and traffic operations of the State Highway System.

The draft of Nevada's *Access Management System and Standards* was developed by the Traffic Engineering Division of the Department. The document does not specify any particular responsibility for the administration of access management.

The Oregon Department of Transportation is presently developing access management policies and guidelines. Currently neither the statutes nor the policies specifically identify the organization or responsibilities for access management. The draft rules, however, refer to the Region Manager and the Region Engineer as responsible to the administration of access management.

The Minnesota Department of Transportation (MNDOT) established the Office of Access Management (OAM) to develop recommendations for access management.

## **OTHER APPROACHES AND INNOVATIONS**

The Minnesota Legislature took an innovative approach by MNDOT to study and recommend approaches for integrating land use planning, engineering, and legal practices in order to **...maximize the operational efficiency and safety of all functional categories of roadways**. In order to address the directive of the legislature, the Department established the Office of Access Management (OAM) to develop recommendations for access management

Minnesota is taking an incremental approach focused on voluntary cooperation among governmental jurisdictions and moving toward intervention through legislative mandates if necessary. The State is placing emphasis on education, training, and technical support. If voluntary efforts do not achieve sufficient success in managing access, then legislative intervention may be necessary.

The New Jersey Access Code has separate sections on the designation of limited access highways and on interchange access management.

The New Jersey Access Code also has a section on fair share financial contributions on the cost of implementing capacity improvements to the State Highway System as a result of development of lots.

According to the *Access Management: Practices in other States and Improvements for Arizona*, the Wisconsin DOT has developed an innovative process of interrelating access management and land use planning.

Wisconsin DOT has been given statutory authority to monitor and review the subdivision of lands adjoining the designated State Highway System. Developers and builders must submit plans outlining the development's effect on the highway. Regulations require that subdivisions provide adequate internal circulation so as to limit the number of connections to the highway. Each individual parcel

(residential) is not permitted to gain access via its own driveway; the builder may even be required to limit direct access by placing a deed restriction on the purchase contract. The DOT may provide recommendations as to street configuration, setbacks, and drainage requirements during subdivision plan review.

## **LESSONS LEARNED FROM DEVELOPING LEGISLATION AND POLICY**

The States developing and implementing access management policy and legislation have learned important lessons that are vital to other states that desire to develop their own policy and legislation.

### **New Jersey**

New Jersey's former Commissioner of Transportation, Hazel Frank Gluck, explained that the creation of public policy follows a general path:

- Identification of a problem
- Development of suggested solutions
- Enactment of the preferred remedy

The identification of the problem and the development the New Jersey State Highway Access Management Act as a solution involved extensive research and coordination. As NJDOT's Mark L. Stout notes:

The New Jersey State Highway Access Management Act was the product of more than a year of study and drafting and more than two years of legislative deliberation. The process demonstrated the importance and complexity of land use issues in a densely populated state like New Jersey.

The successful enactment of the preferred remedy, in this case the New Jersey State Highway Access Management Act, depends on how well the remedy is sold to the constituents. The New Jersey legislature drew up three drafts of the access management legislation. Then, in Ms. Gluck's words:

We asked the legislature to conduct public hearings and we made the rounds of the editorial boards of every newspaper—large and small—which would have us. And I began an 18-month dog 'n pony show literally "taking the show on the road" to build support for this concept.

Arthur Eisdorfer, New Jersey Department of Transportation, noted that putting together comprehensive legislation and a systematic program takes significant time. Half of that time, according to him, will be in education.

Based upon the New Jersey experience, Stout makes the following four recommendations for any state considering the development of Access Management legislation:

1. Review current state law, with the assistance of the attorney general's office, to see if a new statute is really needed. In New Jersey, the laws governing access were so deficient that a broad new legislative mandate was needed. This may not be the case everywhere.
2. Get a thorough grounding in the law governing eminent domain, compensable taking, and police power regulation. Consultation with the attorney general's office and land use attorneys in private practice and careful review of state and federal court decisions are important. Any new law in this sensitive area must be ready to meet tough judicial scrutiny.
3. Clearly articulate, in legislative language, legislative testimony, and public statements, the public purpose and benefits behind the legislation. Clear statements of purpose will help to focus legislative discussion as well as to prepare for future litigation.
4. Be prepared to participate in a long and complicated legislative process with unexpected twists. Many interests are affected by access management legislation and each of these must be addressed and, where possible, accommodated in the legislative process.

As an initial step toward developing and implementing an access management program, NJDOT officials identified the following four goals of the proposed regulations.

1. Consistency. The application of the Code should achieve the same result every time the same set of facts arises. The outcome should not vary based on the personnel performing the analysis on the geographical location of the property. Similar outcomes should also result from work performed by applicants through the permitting process and the Department through its projects.
2. Predictability. The public should be able to anticipate the likely response to an access question. The universe of potential responses should be readily apparent.
3. Timeliness. The public should receive a response to an inquiry or a State Highway Access Permit in a reasonable period of time. At the time a question is asked, the Department should be able to indicate when a response should be expected.
4. Simplicity. The Code should be easy to understand. Both the public and the Department should be able to read and apply the requirements.

## **Delaware**

For the development of a draft Access Management Policy and Classification Maps Delaware established an Access Management Task Force in 1995 comprised of various state and local government representatives. The purpose of the Task Force was to guide the Department in defining the Program and to identify how the program would relate to other work the Department was doing. Draft Policy and Classification Maps were presented to the public in August of 1997. The following public participation techniques were used in the public outreach:

- A Public Comment Period
- Formal Public Hearing Workshops
- Miscellaneous Presentations and Briefings

The Department received extensive comments on the draft Policy and Classification Maps. Based on these comments, the Department of Transportation substantially revised the Policy and Classification Maps and released them to the public a second time. The second outreach effort included the following:

- Two Separate Workshops and an Extended Public Comment Period
- A Formal Public Hearing
- Miscellaneous Presentations and Briefings

Version 6.0 of the Draft Policy and Classification Maps was presented at the Public Hearing held on January 25, 1999. The Department of Transportation published a report on the public outreach on December 21, 1999 on the public comments and the Department's response to those comments.

## **OVERVIEW OF PRACTICES OF SELECTED STATES**

The goal of the various approaches discussed above can be summarized in the following manner. The State's responsibility is to manage access to and from State highways, to keep traffic moving safely and efficiently, to minimize the need to construct additional lanes, and to protect investments in the highway system by maintaining and extending its functioning capacity.

The previous discussion indicates that the various states take different approaches to access management. A comparison of the access management policy and legislative elements of the selected states is presented in Table 2-3. Some states such as New Jersey, Florida and Colorado have very specific legislative procedures concerning access management and control. Other states have enacted little or no legislation on access management but have, instead, emphasized the concept of rule making by individual departments. Examples for the later approach are Nevada and Oregon. In these cases, the definition of access management lies largely in the police powers of the Departments of Transportation rather than in separate legislation.

**TABLE 2-3. COMPARISON OF POLICY AND LEGISLATIVE ELEMENTS**

<b>Element</b>	<b>Colorado</b>	<b>Florida</b>	<b>Nevada</b>	<b>New Jersey</b>	<b>Oregon</b>
Separate Access Management Legislation	In Place	In Place		In Place	
Statutes With Implied Powers			In Place		In Place
Statutes With Specific Access Management Language					In Place
Access Code Or Access Rule	In Place	In Place	Draft	In Place	Draft
Permit Rule	Part of Access Code	Part of Access Code	Draft	Part of Access Code	Draft
Statewide Access Classification	In Place	In Place	Draft	In Place	Draft
Statewide Access Control Guidelines	Part of Access Code	Part of Access Code	Draft	Part of Access Code	Draft

The *Draft Nevada Access Management System and Standards* is an example of access management guidelines that have not been specifically mandated by legislation. Rather, the access management system and standards are rather defined under the power of the director of the Department of Transportation to establish rules and regulations for the management of the State Highway System. Similarly, Oregon's legislation is fairly limited in regard to access management. However, the legislative provision to adopt rules and regulations in respect to highways is extensively used and Oregon is developing far reaching rules for access management.

Colorado's legislative approach is a model approach that has been adopted in New Jersey and Florida. Colorado's legislation is supported by the *State Highway Access Code*, a 62 page document defining the necessary tools for access management. The State's Access Code has been used as a model for other states such as Delaware, Nevada, and Oregon. Table 2-4 compares the components of the various state statutes. Table 2-5 presents the outline of the Colorado Access Code along with noting which elements of the Code are contained in documents of other states.

## **FINDINGS IN REGARD TO ACCESS MANAGEMENT PRACTICES OF SELECTED STATES**

### **Access Policy and Legal Authority**

The authority to manage access on state highways must be clearly stated. All the states reviewed have, or are in the process of, establishing clear authority for access management by either state statute or administrative rule. In addition, all of the states reviewed have a systematic statewide approach that include the following components:

- Access Classification System
- Administrative procedures and standards in the form of Access Codes, Rules, or guidelines
- Statewide Access Management Standards
- Clear and Comprehensive Permit Rules and Procedures
- Public Coordination
- Land Use Coordination

The access management legislation of Colorado, New Jersey, and Florida clearly spell out the purposes of the legislation thereby laying the policy groundwork and defining goals for access management. In addition, Delaware and Oregon have developed access policies to guide the development of administrative procedures, access classification maps, and access standards.

**TABLE 2-4. ELEMENTS WITHIN ACCESS MANAGEMENT LEGISLATION**

<b>Element</b>	<b>Colorado</b>	<b>Florida</b>	<b>New Jersey</b>	<b>Oregon</b>
Purpose	X	X	X	X
Declaration Of Reasons	X	X	X	X
Declaration Of Reasonable Access	X	X	X	X
Declaration of Right of State to Manage Access	X	X	X	
Definitions	X	X	X	
Requirement For An Access Code	X	X	X	
Adoption Rules For Access Code	X	X	X	
Administrative Requirements For Access Code	X	X	X	
Requirement For Guidelines And Standards	X	X	X	
Procedure For Revising Access Code	X	X	X	
Requirement For An Access Management Program/Plan			X	
Subdividing (lot splitting)	X		X	
Access categories defined			X	X
Right-of-way issues addressed			X	X
Permitting process addressed	X	X	X	X

**TABLE 2-5. OUTLINE OF COLORADO ACCESS CODE**

Element in Colorado Access Code	Elements Contained in Documents of Other States			
	Florida	New Jersey	Oregon	Nevada
<b>1. Section One Introduction</b>	X		X	X
1.1 Authority	X		X	X
1.2 Purpose	X		X	X
1.3 Organization of Code				X
1.4 Implementation			X	X
1.5 Definitions and Abbreviations	X	X	X	X
1.6 Computation of Time				
1.7 Incorporation by Reference				X
<b>2. Section Two Administration</b>	X	X	X	X
2.1 Purpose				X
2.2 Access Category Determinations	X	X		
(1) The Commission Shall Maintain an Access Category Assignment Schedule				
(2) The Initial Assignment Process - Category Determinations				
(3) Subsequent Changes in Assigned Categories				
2.3 Permit Application Process, Obtaining a Permit	X	X	X	X
(1) Determining the Issuing Authority	X			
(2) Pre-application Meetings	X			
(3) Preparing an Application	X	X	X	
(4) Sources, Data and Information Requirements	X	X	X	
(5) Traffic Impact Studies	X	X	X	
(6) Submitting an Application When the Department is the Issuing Authority	X	X	X	

**TABLE 2-5. OUTLINE OF COLORADO ACCESS CODE (continued)**

Element in Colorado Access Code	Elements Contained in Documents of Other States			
	Florida	New Jersey	Oregon	Nevada
(7) Processing of an Access Permit Application When the Department is the Issuing Authority	X	X	X	
(8) Submitting an Application When the Local Authority is the Issuing Authority				
(9) Processing of an Access Permit Application When the Local Authority is the Issuing Authority				
(10) Contents of an Access Permit		X		
(11) General Permit Issues				
(12) Access Requests by Local Authorities				
2.4 Issuing a Notice to Proceed		X	X	
2.5 Access Construction	X		X	
2.6 Changes in Land Use and Access Use	X		X	X
2.7 Maintenance & Permit Transfer	X			
2.8 Access Violations	X	X	X	X
2.9 Appeals	X	X	X	X
2.10 Internal Administrative Review Committee			X	X
2.11 Permit Fees, Forms and Records	X	X	X	
2.12 Access Control Plans		X	X	X
2.13 Interchange Management Plans			X	X
2.14 Department And Local Government Highway Construction Projects				

**TABLE 2-5. OUTLINE OF COLORADO ACCESS CODE (continued)**

Element in Colorado Access Code	Elements Contained in Documents of Other States			
	Florida	New Jersey	Oregon	Nevada
<b>3. Section Three Access Category Standards</b>				
3.1 Purpose and Use		X	X	X
3.2 Access to Designated Freeways				
3.3 Emergency Access				
3.4 Field Approaches				
3.5 Auxiliary Turn Lanes				
3.6 CATEGORY F-W - Interstate System, Freeway Facilities	X*	X*	X*	X*
3.7 CATEGORY E-X - Expressway, Major Bypass	X*	X*	X*	X*
3.8 CATEGORY R-A - Regional Highway	X*	X*	X*	X*
3.9 CATEGORY R-B - Rural Highway	X*	X*	X*	X*
3.10 CATEGORY NR-A - Non-Rural Principal Highway	X*	X*		
3.11 CATEGORY NR-B - Non-Rural Arterial				
3.12 CATEGORY NR-C - Non-Rural Arterial	X*	X*		
3.13 CATEGORY F-R - Frontage Road	X*	X*		

\* Similar categories used.

## **Permit Procedures**

One vital key to managing access on highways is a well defined permit procedure. The states that were reviewed all have specific and detailed permit rules and procedures. In general, these rules include the following:

- Permit Timetable
- Authority to Charge Permit Fees
- Authority to Close Un-permitted Access
- Authority to Revoke or Modify a Permit
- Treatment of Preexisting Access Points
- Appeal Process
- Variance Procedure

## **Designation of Controlled and Limited Access Highways**

The classification of highways in accordance for access management identifies various levels of access management and criteria for assigning these levels to highway segments. All of the states reviewed have established or are establishing statewide access classification systems. These classification systems clearly identify categories of access management and the criteria for designating categories for highway segments. Colorado designated all state highways as controlled access highways. New Jersey Access Code sets forth procedures for designating limited access highways.

## **Planning and Designing for Access Management**

Another key to the successful implementation of access management is that the planning and designing of access management strategies be based on consistent procedures and standards. The various policies, access codes and rules, and access standards discussed above present such consistent guidelines for the planning and design of access on state highways. In addition, these procedures provide for the coordination of land use with access management and for the preparation of access management plans.

## **Coordination with Stakeholders**

Successful access management clearly depends on the coordination among all the stakeholders. The access management legislation described above requires that access management be coordinated among state, regional, and local stakeholders. Access legislation and access codes and rules have or are being developed through extensive coordination among the stakeholders. Colorado goes one more step and allows local governments to issue permits with review by the Department of Transportation. In

addition, access management rules require the coordination of access management strategies with regional and local stakeholders.

### **Land Use Regulations in Regard to Access Management**

Access management can only succeed if land use is regulated along a highway. The access management legislation of Colorado, Florida, and New Jersey require that access management be coordinated with land use planning. New Jersey statutes go further by requiring subdivisions to be designed with an internal circulation system.

### **Responsibility for Implementing Access Management**

The responsibility for implementing access management must be clearly defined. Various states discussed above have clear statewide and regional lines of responsibility for access management.

### **Public Outreach and Education**

A critical lesson learned from developing legislation and access rules is that a constituency must be built among the stakeholders through extensive outreach and education about access management.

### **3. ARIZONA'S ACCESS MANAGEMENT PRACTICES**

This chapter describes Arizona's practices with respect to access management on the Arizona State Highway System. First, the current authority to manage access on Arizona highways is summarized and the administrative authority and the procedures for issuing access permits by the ADOT Districts are discussed. ADOT's approaches for planning and designing for access management is presented. Major issues concerning managing access on Arizona State Highways are then reviewed and analyzed based on interviews that were conducted with ADOT management. The experience of ADOT's permit technicians in issuing access permits and the issues involved in regulating and enforcing access on Arizona State highways are presented and major findings of the review of Arizona's practices in managing access are then summarized.

#### **AUTHORITY TO MANAGE ACCESS ALONG ARIZONA STATE ROUTES**

The Arizona Revised Statutes (ARS) as implemented and revised by the legislative process, give the Arizona of Transportation (ADOT) authority to control access through its police powers. Currently, Arizona statutes do not codify specific access management authority and guidelines. Applicable statutes for Arizona are provided in Appendix B.

The director of ADOT is given the authority through the Statutes to exercise powers and duties as are necessary to carry out fully the policies, activities and duties of the Transportation Department. The director exercises complete and exclusive operational control and jurisdiction over the use of State highways and routes and prescribes rules as are necessary for public safety and convenience (ARS 28-363). In addition, the director has the authority to coordinate the design, right-of-way purchase, and construction of controlled-access highways and related grade separations of controlled-access highways, and the extension and widening of arterial streets and highways (ARS 28-363). On a controlled access highway (ARS 28-732), the State can regulate entrances and exits as well as the use of the facility by pedestrians, bicycles, or other non-motorized traffic, or by any person operating a motor-driven cycle.

The State may buy access rights from property owners. The State also has the right of eminent domain for transportation purposes (ARS 28-7093). However, the property owner is due compensation for the property taken and could be due compensation concerning change of access. A discussion of property rights was presented under the section entitled Summary of Legal Issues of Access Management in the previous chapter.

The current authority for partial access control is through ADOT Administrative Rule (*Rule R17-3-712, Encroachments in Highway Rights-Of-Way*). Other methods to control access along a highway include subdivision approval and site plan review through local government ordinance.

## **ACCESS PERMIT PROCEDURES**

ADOT regulates access on state highways, which do not have access-control by administrative rule. *Rule R17-3-712, Encroachments in Highway Rights-Of-Way* guides the granting of encroachment permits. Permits for driveways onto a state highway are granted by ADOT's Engineering Districts in accordance with Rule R17-3-712.

The following are the major points of the rule in regard to access control:

- No access will be granted where access control rights have been legally established unless waived by the State Engineer in accordance with Federal Highway Administration Standards.
- Access to abutting property from within Interstate or other freeway rights-of-way where permitted will be limited to:
  - Frontage roads except the merging entrance and exit ramp areas that will be subject to traffic engineering evaluation.
  - Intersecting or nearby public roads and streets within Interstate rights-of-way. At interchanges control for connections to the crossroad is normally effected beyond the ramp terminals by purchasing of access rights. Such control should extend along the crossroads beyond the ramp terminal 100 feet or more in urban areas and 300 feet or more in rural areas subject to traffic engineering evaluation.
- Access from within primary, secondary or other conventional highway rights-of-way will be permitted in accordance with appropriate standards.
- Median openings may be allowed on divided highways except Interstate or other freeways provided they conform to ADOT policy regarding the design and spacing of such openings. This policy will be provided to applicants upon request.
- Permits shall be only for the construction of new turnouts and driveways or changing the location of an existing driveway. They shall not be issued for the purpose of providing a parking area or for servicing of vehicles on highway right-of-way.
- Landowners of adjacent properties may require a joint driveway to serve both properties. Only one of the two adjacent landowners needs to apply for the access permit, but a notarized written mutual agreement—signed by all parties involved—must accompany the application form.

## **Access Permit Approval Process**

The following is the general process for approving permits for access to State highways:

- The property owner requests access.
- Prior to submission of the application for access, the property owner meets with the District Permit Coordinator.
- The property owner submits the application.
- The District reviews the application and related site plans, studies, and other information.
- The District requires a Traffic Impact Analysis (TIA) if needed.
- The District reviews the site plans and TIA if applicable.
- If appropriate, recommendations are made to the property owner concerning access location and design.
- The District approves or rejects the access permit.

## **Responsibility for Issuing Permits**

The ADOT Districts have the responsibility for issuing and enforcing access permits. Currently, there is no central position coordinating the permitting activity of the Districts. The Department of Transportation does not have a separate access management section to administer access management practices.

## **Problems Associated with the Access Permit Procedures**

The following general administrative problems were previously identified with respect to access permitting procedures along State highways:

- The rules for issuing permits are sometimes inconsistent among the ADOT Districts.
- Specific requirements for the review of site plans are lacking.
- The Districts do not have a consistent set of access control guidelines concerning driveway location and number of driveways.
- The requirements for a Traffic Impact Analysis (TIA) to obtain a permit are not consistently applied.

Issues related to the access permitting process are discussed in more detail in later section of this chapter.

## **PLANNING AND DESIGNING FOR ACCESS ON ARIZONA STATE ROUTES**

The planning and designing for access management for Arizona State highways are carried out on a project by project basis. Currently, ADOT does not have specific access management policies other than those enunciated for the Regional Area Road Fund (RARF) for Maricopa County. In addition, the Department does not have a statewide access plan that designates degrees of access control for State highways. Moreover, the Department does not have a separate access management section to administer access management practices. The ADOT Transportation Planning Division prepares access management plans for segments of some state highways that were identified as candidates by either ADOT personnel or local governments. Moreover, access management considerations are not generally incorporated into other ADOT studies such as the Corridor Profile Studies and Design Concept Reports (DCRs). ADOT has identified segments of State highways for access control on an as-needed basis where there are opportunities for access control. However, funds to purchase access rights are very limited. The responsibility for developing limited access facilities has been primarily assigned to the Roadway Design Section.

### **Technical Procedures**

As noted above, the ADOT Districts are responsible for issuing access permits. However, there is no clear set of access management guidelines that outline specific steps, requirements, and standards to be used for planning and designing access. Next to the *Encroachment Rule* the Districts use the C-6.10 construction standards to evaluate access applications. Individual Districts are also using checklists to ensure that permit applications are compliant with the established rules and District internal guidelines. Another document used in the review process is the FHWA publication, *Access Management for Streets and Highways from 1982*. In addition, access permit procedures are general and are sometimes administered inconsistently among ADOT Districts.

The standards for designing intersections, access driveways, and other elements are included in the ADOT Roadway Design Guidelines and construction standards. However, these standards are not integrated into an overall access strategy. In addition, the standards were developed without specific attention to access management in mind. Rather these are stand-alone design and construction standards. Comprehensive access management guidelines are needed that will integrate design standards and access management.

## **DESIGNATION OF CONTROLLED AND LIMITED ACCESS HIGHWAYS**

Currently, access controlled facilities in Arizona include Interstate highways and the urban freeways in the Phoenix metropolitan area. The State Transportation Board has the power to designate access controlled highways. The State Transportation Board adopted *Policies for Controlled Access Highway Projects*. These policies are comprised of two main

components. The “*Controlled Access Fund Policy*” identifies the funds used for access controlled facilities, programming criteria, and defines the level and continuity of access control (see Appendix C). The second main policy is the RARF/Urban controlled Access System Policy which defines the components of the system. The system as well as its design features are described. Furthermore the following sub-policies are identified:

- Development Policy
- Right-Of-Way Policy
- Construction Policy
- Safety Policy
- Environmental Policy
- Noise Abatement Policy
- HOV Facilities Policy

Recently, several existing non-controlled access highway segments have been identified by ADOT to be designated as access controlled highways. One of these segments is US 60 from Apache Junction to Florence Junction. A right-of-way resolution was passed by the State Transportation Board to designate this segment of US 60 as a controlled access highway. The right-of-way resolution was based on two statutes. First, ARS 28-7046 **Opening, altering or vacating highway; review of order** defines the power of the director or the board to establish, open, relocate, alter, vacate, or abandon a State Highway or a portion of a State Highway. The Statute defines that it is in the authority of the Transportation Board to approve such actions. The second Statute is ARS 28-7092 **Land acquisition; transportation purposes**. This Statute defines the power of the director of the Department of Transportation to acquire real property that the director considers necessary for transportation purposes. The Statute defines the mechanism of acquisition as well as the transportation purposes for which land can be acquired. Other highways identified as candidates for access control include portions of SR 85 and SR 89A. Currently such facilities are being access controlled on an as-needed basis and whenever opportunities arise. However, there is no long-range plan in place identifying future access management and access control corridors on a statewide level.

## **PREPARATION OF ACCESS MANAGEMENT PLANS**

ADOT has conducted several access management studies and plans over the past decade on an as-needed basis. Generally, either ADOT or a local jurisdiction has identified a need for an access management study and requested that the study be conducted. The studies listed in Table 3-1 are summarized and compared in the following discussion.

**TABLE 3-1. PREVIOUS ADOT ACCESS MANAGEMENT STUDIES**

<b>Report Title</b>	<b>Consultant(s)</b>	<b>Year Completed</b>
SR 68 AM Plan	DMJM	2000
SR 89A AM Plan	DMJM	2000
SR 69 AM Plan	Lima & Associates and JHK & Associates	1997
SR 89 AM Plan	Lima & Associates and JHK & Associates	1997
SR 89A AM Plan	Lima & Associates and JHK & Associates	1997
SR 169 AM Plan	Lima & Associates and JHK & Associates	1997
SR 169 AC Plan	Lima & Associates and JHK & Associates	1997
Mariposa Road - SR 189 AM Plan	ADOT In House	1992
SR 69 AM Study	DMJM	1992
US 89 AC Study	JHK & Associates	1991
SR 260 AC Plan, Camp Verde, AZ.	BRW, Inc.	1990

### **SR 68 Access Management Study**

This study was prepared for the Arizona Department of Transportation and Mohave County by Daniel, Mann, Johnson & Mendenhall (DMJM) in association with Lima & Associates. The study addresses a 27-mile section of SR 68 from the Laughlin Bridge to the SR 68/US 93 Junction and a 4-mile section of US 93 from the SR 68/US 93 Junction to the Kingman City Limits. The purpose of the study was to develop an access management plan for the corridor to preserve roadway capacity and safety by managing access to the highway.

The plan serves as a guide for ADOT and Mohave County when reviewing proposed developments and permits. The draft plan recommends:

- One mile spacing of access points, ½ mile minimum
- Development of alternative access routes that may include collector/arterial streets, frontage roads, or parallel roads to connect to major access points
- Purchase of access rights between major access points
- Encouragement of future development to conform to plan
- Median construction in urbanized areas

This study includes an implementation plan that will guide the adoption and management of the plan.

## **SR 89A Access Management Study**

This study was prepared for the Arizona Department of Transportation and Yavapai County by DMJM in association with Lima & Associates. This study addresses a 16-mile section of SR 89A from Cottonwood to Sedona. The purpose of the plan is to identify techniques that can be used to manage access to the highway, while preserving roadway safety and capacity.

Once the access management plan is adopted it will serve as a guide for the zoning and permitting agencies reviewing proposed developments. The study consists of an Access Management Plan and an Implementation Plan. The access management plan recommends:

- One mile to ½ mile spacing of major access points
- Development of frontage roads or alternate access ways connecting to major access points
- Purchase of access rights between all major access points
- Encouragement of future developments to conform with plan
- Installation of medians within urbanized areas
- Typical intersection design

Implementation Plan suggests that:

- ADOT and Yavapai County adopt the Access Management Plan
- The access management plan be implemented with ongoing design projects
- Candidate projects for future funding will be identified

Additionally, the study is also reviewing the existing permitting process.

## **State Route 169 Access Control Study, Final Report**

This study was prepared for the Arizona Department of Transportation by Lima & Associates in association with JHK & Associates in August 1997. The State Route 169 Access Control Study encompassed a 15-mile section of SR 169 from Dewey to I-17. This corridor is considered ideal for the implementation of an access control policy because it had few existing intersections and driveways. Much of the corridor is within National Forest lands, and Yavapai County was preparing a community plan for the Dewey area. The main recommendation for SR 169 is to obtain full access control for the entire corridor length, excluding the urbanized areas. In the rural portion intersections should be spaced at a two-mile interval and no other access points to the highway should be approved. To successfully implement the plan, the study recommended that ADOT, Yavapai County, and the National Forest Service formally adopt the recommended access management plan. Also a partnership between the three agencies should be formed and it is recommended that the Central Yavapai Transportation Planning Organization (CYTPO) will be the coordinating body for the access management plan.

Formation of an Access Management Team was recommended to formalize access permitting procedures, such as identifying responsibilities, reviewing development plans, coordinating on planning new and relocated roadways, and updating the access management plan. The plan also identified the need for the ADOT Prescott District to review its permit application procedures and revise the procedures where necessary to conform with the access management plan. Additionally all levels of District personnel should be familiar with the access management plan and the permitting procedures to ensure consistency.

The plan recommended that ADOT develop access control procedures including an update of Arizona's *Rule R17-3-712, Encroachments in Highway Rights-Of-Way*. The update should include the following:

- Decision making authority
- Access control guidelines
- Procedures to prepare access management plan
- Permitting procedures
- Land use plans
- Procedures for intergovernmental cooperation

The study stressed the importance of coordinating planning efforts among agencies in regard to land use and transportation planning. The recommended access management plan also included an action plan for implementation. This action plan defined specific steps to achieve the goals of the access plan, the corresponding agency responsibilities, and a potential time-line for accomplishment. A Design Concept Report (DCR) was recommended to better define the roadway improvements for SR 169.

### **State Route 69 Access Management Plan**

The plan was prepared for the Arizona Department of Transportation, Yavapai County, City of Prescott, and Town of Prescott Valley. JHK & Associates furnished the plan in June 1997 for the 15 mile segment of SR 69. It was determined that the current number of 15 traffic signals in the corridor could increase to ultimately 24 signals in the urbanized areas. These signals would be spaced within from one-third mile to nearly two miles from each other. In the undeveloped portions a signal spacing of one-mile is recommended. The plan did not specify the purchase of access rights. Overall the implementation recommendation was brief, and emphasizing that the plan must be adopted by all agencies involved and that land use planning has to be coordinated with the Access Management plan. Additionally a procedure for access application was provided.

### **State Route 89 Access Management Plan**

The plan was prepared for Arizona Department of Transportation, Yavapai County, City of Prescott, and Town of Prescott Valley and was put together by JHK & Associates in

June of 1997. The plan covers a corridor of SR 89 from Prescott north to Paulden and the Prescott National Forest Boundary. Because of the corridors location the access management plan had to address urban, small urban and rural environments in regard to access management. Therefore the plan recommends various strategies for different areas along the corridor, which was divided into six segments. For each of the segments recommendations were made based on the individual segment characteristics. In more detail the following recommendations are made.

Through the Prescott area, south of Granite Dells, the plan identifies four potential locations for future traffic signals. These are spaced approximately ½ mile apart. Through Granite Dells, where numerous driveway accesses exist, the plan recommends consolidation of driveways when the land uses change or roadway improvements are performed.

One-half mile spacing between signalized intersections is recommended for the Prescott Airport area, and a list of three potential locations is provided. Between the Airport to Chino Valley, the plan recommends adhering to one-mile spacing of major, signalized intersections and non-major intersections with right-in, right-out, and left-in access at half-mile spacing.

Chino Valley is a much more urbanized area with over 200 existing driveways with direct access to SR 89. Therefore, the plan recommends eliminating as many driveways as possible by providing alternate access via town streets and driveway consolidation. The ultimate goal through Chino Valley is major, signalized intersections at one-half mile spacing and non-major intersections with right-in, right-out, and left-in access at one-quarter-mile spacing. From Chino Valley to Paulden and the Prescott National Forest boundary, the plan calls for major, signalized intersections to be located at least one-mile apart, and existing access should be consolidated or eliminated when possible.

### **State Route 89A Access Management Plan**

This plan was also prepared for Arizona Department of Transportation, Yavapai County, City of Prescott, and Town of Prescott Valley, by JHK & Associates in June 1997. It addresses the 13 mile section of SR 89A from the SR 89A/SR 89 traffic junction to the Prescott National Forest Boundary. The corridor is relatively rural in nature, with little existing development. The plan recommends major signalized intersection to occur at one-mile spacing when warranted. Only right-in, right-out, left-in access will be permitted at non-major intersections on the half-mile intervals. Typical intersection geometrics are provided for major and non-major intersections. A local street network is encouraged for development between the major access points as part of land development. Any existing driveway points that do not conform with the recommendations of the access management plan should be eliminated as redevelopment occurs, and no new driveway access on the corridor will be permitted.

## **Mariposa Road State Route 189 Access Management Plan**

The Mariposa Road plan was prepared by ADOT for the City of Nogales in May 1992. The document is an edited version of the Town of Camp Verde Access Management Report, which was modified for the City of Nogales. The report discusses, generically, the benefits of access management. The report calls for all curb cuts, driveways, intersections, and medians to conform to Maricopa Association of Governments Standards, City of Nogales' Ordinances, all Arizona Department of Transportation standards, and any requirements by the City Engineer. Each standard is then reproduced in the document. However, no specific access management plan was developed for SR 189 defining recommended access points or spacing requirements.

## **US 89 Access Control Study**

This access control study was commissioned by the Arizona Department of Transportation and prepared by JHK & Associates in May 1991.

This study evaluates access issues within a sixteen-mile corridor of US 89 from Ina Road to Oracle Junction. The plan recommends that signalized intersection be spaced no closer than one-half mile, preferably one mile apart. Non-signalized intersections should be no closer than 1,200 feet, preferably one-half mile apart. Future at grade intersections may be warranted at Ina Road, Magee Road, and Tangerine Road. Beyond a twenty-year planning horizon, additional grade separations may be necessary. Direct access of driveways and curb cuts to US 89 should be discouraged unless the access is of such a significant nature as to be considered a collector roadway. There are many undeveloped parcels adjacent to US 89, which may be served by a frontage road rather than be given direct access. Additional planning for the provision of access to existing, yet undeveloped, parcels should be considered in a more detailed comprehensive corridor study of US 89.

The study recommended median openings should be spaced no closer than 1,200 feet, and no further than one-mile intervals. Proposed signals are shown at one-half and one-mile spacing. The alternatives for a frontage road or alternate road system are also shown through the Catalina area.

## **SR 260 Access Control Plan**

The SR 260 Plan was prepared for the Town of Camp Verde by prepared by BRW, Inc. in March 1990. This document focused more on the design requirements of each access management feature and does not provide specifics on where to implement each feature along SR 260 within the town limits of Camp Verde.

The plan recommends that a traffic impact study be prepared for any property desiring access to SR 260, especially if desiring access with varying configurations from the

minimum standards set forth in the access control plan. The plan does define minimum site sizes for requirements of a traffic impact study.

The plan, also, defines set guidelines on curb cuts and driveway design features and recommends that neither should be installed without a written highway access permit, approved by ADOT and the Town of Camp Verde.

The plan recommends that existing intersections on SR 260 should be reconstructed when the opportunity arises, to bring them in concurrence with the requirements of the plan. At grade arterial roadway intersections with SR 260 are recommended to be limited to one intersection per mile. Intermediate intersections with collector and local roadways and major access points should be limited to a maximum of five per mile. Some intersections may be allowed at spacings less than these designated minimums with special treatment, such as the design of island channelization requiring right-in and right-out movements only.

For the undeveloped areas, outside of the Central Business District, the plan recommends that new local roadways be designed to intersect with frontage roads that will parallel SR 260 wherever possible. Connections from the frontage road to SR 260 should be located a minimum of one-half mile apart.

No on-street curb parking shall be allowed on SR 260. Parking can be accomplished on side streets. Medians or two-way left turn lanes should be used on SR 260 whenever the roadway is widened to a four-lane cross section for through traffic and in special cases when a physical barrier is necessary to control turning traffic.

### **Summary of Access Management Studies**

These access management studies address roadways in various environments, from corridors in rural settings with little existing development to corridors in urban settings with many existing access points and intersections. The recommended of access control tools and measures reflect these circumstances. Table 3-2 lists the recommendations of the various studies. Spacing in urbanized areas ranges usually from one mile for major intersections to  $\frac{1}{4}$  to  $\frac{1}{2}$  miles for minor intersections. If little or no development exists, the main alternative access should be provided in the form of frontage roads and internal circulation systems for future developments. In urbanized areas with existing driveways and intersections, the majority of studies recommend consolidation of driveways and, where possible, additional frontage roads.

The methods used in these studies ranged from recommended purchase of access rights, the elimination and discouragement of driveways, intersection design, installation of medians, to the requirement for Traffic Impact Analysis for proposed access points. Some of the studies and plans provided design features such as typical intersections and median design. An important recommendation in several studies was the need for improved

coordination between land use planning and zoning and transportation planning. Other important implementation strategies were the adoption of the access management studies/plans and the implementation of given recommendations. Two studies recommended revisions and improvements to the existing permit process and procedures for access applications.

The analysis of the access management studies indicates that the access and policy recommendations vary significantly among the studies. As Table 3-2 shows, recommendations are not consistent across the studies. For example, the recommended intersection spacing varies across each of the studies. Some studies do not address certain recommendations made in other studies, such as, recommendations for how the access plan should be implemented. These make it apparent that there is a definite need for statewide access management guidelines, standards and procedures. These standards should reflect various environments for access management such as rural versus urban conditions. Also, many of the recommendations lack the legal backing for implementation and enforcement. A legal framework must be developed which will guide and strengthen the access management efforts in the State.

## **MAJOR ACCESS MANAGEMENT ISSUES**

This section discusses the major issues regarding access management of Arizona State highways. Personnel from the Arizona Department of Transportation (ADOT) were interviewed in order to identify key issues and possible solutions to access problems, as shown in Table 3-3. Several members of ADOT management were interviewed, in person, regarding their opinion on access management. In addition, seven District Engineers were contacted and interviewed as well as the Permit Supervisors of each district. The following summarizes the results of the interviews and discussions.

### **Issues Identified by ADOT Management Personnel**

All of the ADOT management interviewed agree that access management and access control are very important issues in today's operations of the State Highway System, and that there is a definite need for access management policy and guidelines and consistent standards.

The opinions regarding the need for access management legislation differed. While some of the participants saw the need for legislation, others suggested that new tools such as guidelines could be developed without new legislation. In regard to the legislation, it was mentioned that an access management policy and legislation will have implications for programming and cost consequences that have to be evaluated. The majority of respondents saw the need for additional documents, such as a statewide access management plan identifying:

**TABLE 3-2. COMPARISON OF RECENT ACCESS MANAGEMENT STUDIES/PLANS**

AM Measure	SR 89A AM Study	SR 169 AC Study	SR 68 AM Study	SR 69 AM Plan	SR 89 AM Plan	SR 89A AM Plan	US 89 AC Study	SR 260 AC Plan
Intersection spacing	1 to ½ miles	2 miles	1 to ½ miles	rural: 1 mile urban: 1/3 to 2 miles	Rural: 1 mile Urban: ½ to 1 miles	major: 1 mile minor: ½ miles	major: 1 to ½ mile minor: ¼ to ½ miles	major 1 mile; minor: 1/5 to ½ mile
Alternative Access	frontage road or alternative access	not recommended	frontage road or alternative access		Consolidation of driveways; alternative access;		frontage road	frontage roads; no on- street parking; medians
Method of Access Management	purchase access rights	obtain access rights	purchase access rights	purchase access rights	Eliminate driveways if possible	eliminate driveways if possible	discourage driveway access	prepare TIA for new access point;
Coordination	coordinate land use - transportation	form partnership & coordinate	Coordinate future development with plan				recommends detailed corridor study	
Design I	install medians in urbanized area		Medians in urbanized areas				median openings	guidelines on curbcuts and driveways
Design II	typical intersection design					typical intersection design		island channelization
Implementation plan	adopt study implement recommendation over time	adopt study & prepare AM plan		recommends adoption and co- ordination procedure for access application				
Process improvement		revise permitting process & establish access control procedures						

Note: SR 189 Access Management Plan is not listed in the table because it did not specify local Access Management measures but rather recommended to conform to MAG standards, City ordinances, ADOT standards and City Engineer requirements.

**TABLE 3-3. ADOT PERSONNEL INTERVIEWED**

<b>Person Interviewed</b>	<b>Title</b>
Arnold Burnham	Manager Priority Programming
Dale Buskirk	Manager Long Range Planning
George Wallace	Roadway Predesign
John Louis	Assistant State Engineer
Bill Higgins	Deputy State Engineer Operations
Dan Lance	Acting Deputy State Engineer Valley Transportation
Richard Powers	Globe District Engineer
Donald Dorman	Flagstaff District Engineer
Dennis Alvarez	Tucson District Engineer
Tom Foster	Prescott District Engineer
Debra Brisk	Kingman District Engineer
Ron Caspar	Safford District Engineer
William Alfier	Yuma District Engineer
Permit Supervisors	

- Location of controlled access facilities
- Funding mechanisms
- Implementation strategies
- Educational efforts
- Coordination with local jurisdictions
- Involvement of citizens

Another important aspect of access management, identified in the interviews, is the coordination with local land use planning and zoning. The current practice of lot splitting was identified as a major factor in access management, and the purchase of access rights seemed to be one mechanism to control access. Access management coordination between the State and local jurisdictions is very important and the extent of this coordination should be incorporated in the project selection and programming process for the five-year construction program. In addition, some interviewees emphasized the need for an integration of access management in a 20-year statewide long-range plan. Also suggested was to coordinate any access management efforts with State Land Department, Bureau of Land Management (BLM), US Forest Service, the Indian Tribes, Federal Highway Administration (FHWA), and the regional Traffic Engineers. One interviewee also stated that to be successful in access management, ADOT would need to establish consistency and a focal point, or person, who would be the interface between the public, developers, other stakeholders, and jurisdictions in all matters of access management.

## **Issues Identified by ADOT District Engineers**

Throughout the State, the District Engineers recognize inconsistent access management as a major problem with the following impacts on the State Highway System:

- Degradation of state-level functionality, congestion and speed
- Definite safety concerns
- Liability issues
- Additional cost and reduced cost effectiveness of investments

The current situation is the result of various factors impacting the operations of the State Highway System:

- Rapid, mostly unplanned development.
- Lack of coordination between land use and transportation.
- Current lot split legislation.
- Safe and reasonable access has to be provided.
- Insufficient access management rules and regulations.
- Lack of consistent standards.
- Lack of resources to enforce.
- Lack of dedicated funding for access management.
- Lack of effective policies, legislation, or consistent guidelines in place.

The following suggestions were made in regard to possible improvements:

- Develop consistent standards and guidelines.
- Develop access management policy and legislation.
- Improve resources.
- Establish fee structure and timelines for permits.
- Develop a statewide access management plan to categorize and prioritize routes.
- Develop a statewide long-range plan and incorporate access management.
- Develop an access management implementation plan identifying strategies and funding mechanisms.
- Include access management planning in corridor profile studies, corridor studies, Design Concept Reports.
- Require Traffic Impact Analysis and mitigation universally.
- Establish mechanism for joint master planning.

- Establish Intergovernmental Agreements to regulate access management with local jurisdictions.
- Examine the need for assessment of true costs of development and possibly impact fees.
- Develop improved communication and education.
- Identify variance procedures.
- Implement growth management.
- Solicit public input and support.
- Build consensus that access management has to be addressed jointly.
- Coordinate with BIA, Tribes, Forest Service, State Land, and BLM.

To assess the situation of permit procedures in the individual Districts input was solicited from the District Permit Supervisors. The following section summarizes these findings.

### **Issues Identified by Permit Supervisors**

The Permit Supervisor of each Engineering District was contacted by e-mail or by telephone regarding their perspective on access management and permitting process. Additionally, the status of the study and its purpose were presented at the Permit Supervisors' meeting in Phoenix on November 17, 1999. At the same meeting, the issue of access management was discussed with the group and additional input was solicited. A total of nine Permit Supervisors were interviewed.

The following issues were addressed in the interviews and at the meeting.

The access management process, the effects of random access, and the current permitting process are perceived as major issues in regard to highway safety and capacity. In the opinion of the interviewees the strength of the current process is:

- Large developers and corporations are more likely to support access management.
- Larger jurisdictions usually coordinate well with the Districts on access management.
- Districts use ADOT rule, C-6.10 design standards, Traffic Impact Analysis, and in some cases internal checklists for the permitting process.

The interviewees identified the following weaknesses in the current process:

- Lack of resources to enforce access management.
- Political interference.
- Need for a controlling set of rules/statutes for all property abutting state highways.

- Inconsistent coordination between small jurisdictions and ADOT.
- Lack of standardized guidelines.
- Existence of conflicting rules: State Statutes, State Real Estate rules, BLM or State Land Department rules.
- Need for more precise design standards.

The major aspects to improve the process are:

- Limit political interference.
- Apply standard guidelines.
- Improve communications; District should have input on land use plans, and Planning & Zoning in regard to state highways.
- Make permitting process more understandable for applicant.
- Plan for alternate routes and frontage road system to relieve the State Highway System.

Additionally the following comments were made:

- Strengthen the language in the update of the encroachment rule.
- Buy access control on undeveloped portions of highways.
- Commit funding to implement access management studies and plans.
- Resolve sensitive issue of access to state highways on Indian Lands.
- Develop funding for compliance with access standards.

In summary, it seems that while regulations exist, they are from various sources, are in some instances not specific enough, and in other cases are too specific for the targeted constituency. The various regulations should be consolidated in one reference document and consistently applied. This document should also clarify the relationship between the various agencies issuing access permits. The regulations should be written in a stronger language and should be supported by ADOT Management.

In day-to-day operations, it is easier to communicate with, and have large companies comply with access regulations. The level of understanding of the benefits of access management seems to be higher with the recognition of the potential problems. Large communities are also more supportive to cooperate in terms of access management. However, improved ways of communications, even if mandatory would help the permitting process.

The political climate and the lack of resources for the administration and enforcement of access permits are two major obstacles. Educational programs and better resources are

key to the improvement of overall access management. An overall access management policy and guidelines as well as individual access management plan would be beneficial for the permitting process.

## **SUMMARY OF ARIZONA'S ACCESS MANAGEMENT PRACTICES**

Access management plans and studies were developed over the last decade on an as-needed basis for selected sections of the State Highway System. However, the corridor by corridor approach itself—as well as the results of the studies—reveals that Arizona lacks a consistent approach to access management. Through research, interviews, and the review of the existing access management studies several main issues can be identified.

All of the ADOT personnel contacted agreed that access management and control are very important issues in today's operation of the state highway system. Nearly all of the interviewees agreed that there is an immediate need for strong access management policies, standards, and guidelines. Legislation addressing access management is also perceived as a necessary tool to strengthen the process. Additionally, the uniformity in the application of access management techniques is an important aspect to successful access management.

## **FINDINGS IN REGARD TO ARIZONA'S ACCESS MANAGEMENT PRACTICES**

### **Access Policy and Legal Authority**

At present the lack of specific goals and strategies for access management combined with the insufficient statutory provisions does not allow for effective access management in Arizona. The current statutes do not adequately address access management and control. Currently, Arizona legislation does not codify specific access management authority and guidelines.

### *Recommendation*

- **Based on the fact that the current statutory provisions are ambiguous, new comprehensive legislation should be introduced to strengthen access management.**
- **The State's overall goals and strategies must be defined in regard to access management.**

### **Permit Procedures**

The rules for issuing permits are sometimes inconsistent among the ADOT Districts. In addition, the Districts do not have a consistent set of access control guidelines concerning

driveway location and number of driveways. The Districts also lack specific requirements for the review of site plans. Moreover, the requirements for a Traffic Impact Analysis (TIA) to obtain a permit are not consistently applied. Other issues identified include:

- Time limits should be established for how long a permit application remains open.
- A fee structure for permits should be established.
- A standardized application of reviewing and approving permits should be established throughout the ADOT Districts.
- The responsibility and reason for a particular request are not sufficiently defined.
- The use of required documentation such as site plans or traffic impact analysis is not standardized and no clear guidelines exist.
- Currently there is no formal appeal process in place.
- Make permit applications more clear for the applicants.

#### *Recommendation*

- **Revise the existing encroachment rule in regard to access permits.**
- **Address the shortfalls that have been identified for the permitting process.**
- **Establish an access management classification system and access standards to ensure consistency throughout the state.**

#### **Planning and Designing for Access Management**

Currently, ADOT does not have a statewide access management plan that could guide the planning, designing, and implementation of access management on State highways. Moreover, access management should be integrated into the statewide long-range plan. The long-range plan should consider alternative routes to existing routes that have become congested. Access management considerations are not generally incorporated in the Corridor Profile Studies or Design Concept Studies (DCRs). In addition, access management consideration is not included in the project selection and programming process for the five-year construction program.

The State also does not have an access classification system to ensure uniformity in the implementation of access management. In addition, the analysis of the access management studies demonstrate the definite need for statewide access management guidelines, standards and procedures. Also, many of the recommendations made in the studies lack the legal backing for implementation and enforcement.

The Department has stand alone standards for intersections, driveway spacing, and other design elements, but does not have comprehensive access guidelines that integrate these

standards with access management concepts. At present, the Department does not have a central section to coordinate access management activities.

#### *Recommendation*

- **Prepare a statewide access management plan and integrate access management into the statewide long-range plan.**
- **Make access management studies a part of an overall statewide access management plan outlining priorities, implementation, and funding of access management.**
- **Include access management considerations in the project selection and programming process for the five-year construction program.**
- **Develop a statewide access classification system.**
- **Prepare comprehensive access guidelines and standards.**
- **Provide central coordination for access management activities.**

#### **Designation of Controlled and Limited Access Highways**

Recently ADOT has used the existing State Statutes to implement access control on specific segments of the State Highway System such as portions of US 60. Right-of-way resolutions by the State Transportation Board were used to designate specific limited segments of a State highway as an access-controlled highway. However, there is no statewide plan that identifies the highway segments that should be designated as access controlled highways. Nor, is there a set of procedures to develop and implement right-of-way resolutions and purchase access rights.

#### *Recommendation*

- **As previously recommended, develop a statewide access management plan.**
- **Investigate further the procedures for using the mechanism of the right-of-way resolution to implement access control on state highways.**

#### **Financial Strategy and Resources**

Based on interviews with ADOT Management, District Engineers, and Permit Technicians, it is apparent that there are not enough resources in place to adequately

administer and enforce the current access permitting process. In addition, there is very limited funding to purchase access rights to provide access control. Also, the existing access management efforts are not supported through a dedicated financial access management strategy. As previously noted, no state wide access management plan is in place outlining priorities and funding mechanism for the implementation of access management.

#### *Recommendation*

- **Develop an overall access management plan that addresses implementation and funding.**
- **Identify financial strategies and improve funding for Access Management including for planning, administration, enforcement, and purchasing access rights.**

#### **Coordination With Stakeholders**

Many of the recommended aspects of access management have to be developed in close coordination with local governments and especially with citizen involvement and input. Political resistance often emerges because many stakeholders are not well informed or educated about access management. Coordination could be improved by the use of intergovernmental agreements to regulate access management with local jurisdictions. In addition, it is vital to coordinate with all relevant Federal and State agencies, and the Indian Tribes to successfully implement access management. In regard to the coordination of development along state highways, the Department has been the most successful in coordinating with developers of large sites. Similar to larger jurisdictions, large developers generally are more knowledgeable of the benefits of access management.

#### *Recommendation*

- **Develop an outreach and education strategy to coordinate the development and implementation of access management tools with the key stakeholders. The education program should focus on small jurisdictions and developers to improve their understanding of the benefits of access management.**
- **Develop procedures for continuing coordination with stakeholders on access management.**

#### **Improve Land Use Regulations in Regard to Access Management**

Current local land use regulations are weak or are not aggressively implemented to ensure that subdivisions include internal street systems and connect to local streets rather than to

the state highway. The current Arizona regulations for lot splits allow parcels to be split into relatively small lots without conforming to subdivision regulations. Moreover, the coordination of development master planning with ADOT is sporadic at best.

*Recommendation*

- **Require by statute subdivisions to include an internal street system.**
- **Revise the current Arizona Statutes on lot splits to limit the number of splits.**
- **Require by statute and administrative rule that ADOT and local governments coordinate on access management.**

## SUMMARY OF LEGAL ISSUES OF ACCESS MANAGEMENT

The development of access legislation, procedures, and standards must be accomplished within the context of the legal issues regarding access rights. This Chapter, therefore, presents an overview of legal issues in regard to access management. This information has been taken largely from Chapter Five, Legal Considerations, of the *National cooperative highway research synthesis (NCHRP) Synthesis 233, Land Development Regulations that Promote Access Management*, published by the Transportation Research Board of the National Research Council in 1996. Additional research was accomplished through [www.loislaw.com](http://www.loislaw.com) State Law Library. The following discussion is based on a review of case law on access management. A more detailed summary of individual case law is presented in Appendix E.

Access rights are property rights protected by the U.S. Constitution as well as the Arizona State Constitution. According to the Arizona Constitution (Article 2, Section 17):

**...no property shall be taken or damaged for public or private use without just compensation...**

An owner of a property abutting a public highway has a private right or easement for the purpose of ingress and egress to and from his property. This easement may not be taken or substantially impaired without compensation. Property right of access is not an absolute right and is subject to the public's right of passage.

All private property rights, including access rights are susceptible to condemnation through the State's power of eminent domain. Access rights are also always subject to reasonable regulation through police powers of local governments and the State for the public health, safety, and welfare. The right of access is a **right of reasonable access** and is not a private right of direct access. However, once a direct access has been provided to a controlled access highway, the property owner has an access easement. Any destruction or unreasonable restriction of that access requires compensation. The landowner must retain reasonable access that is suitable for the highest and best use of the property. Arizona courts have held that an owner is deemed to have a right to access to a public street system, but not to any specific street or to any specific point of access.

Governments may restrict the use of private property to protect or advance the public safety and general welfare to prevent public injury or where demanded by public interest. Private rights of abutting landowners to access their property are generally subservient to the rights of the public to free and safe use of the public street system. The Arizona Supreme Court has said that direct access to a highway is not a private property right within the contemplation of the Arizona Constitution. In some states, whether or not property is actually taken is immaterial to the issue of damages, because compensation is only required when the remaining property is damaged by substantial limitation or loss of access. States have the final say when it comes to inconsistencies between State and local governments in driveway permitting on State highways. The State can manage access through the purchase of access rights from the property and has the right of eminent domain.

The following are key points concerning the right of a property owner to reasonable access:

- Has access been substantially diminished? Damage could range from minor route changes to extremely circuitous routing.
- A complete loss of access is always necessary to demonstrate a taking.
- Loss of the most convenient access, or increase in circuit of access, is not usually compensable where other suitable access continues to exist.
- Installation of a raised median is not a taking.
- Damages must be peculiar to that property and not common to the public at large for compensation to be paid.
- Recoverable damages are limited to the reduction in property value caused by the loss of access, but if the property is landlocked the entire parcel may have to be purchased.
- Effects of access on the site design may be compensable such as limitation of design options, circuitry of travel within site.

Local governments and the state have the power to regulate traffic on the highway including the following:

- Curbing highways and restricting driveway location, spacing, size, and design
- Regulating traffic flow
- Determining the types of vehicles that may use a highway
- Restricting traffic movement to one direction of travel
- Striping a highway or constructing a median divider which permanently limits property
- Ingress and egress to one direction of travel

Local governments and the state may close direct access to a property and provide alternative indirect access via a frontage road or another public road abutting the property. If the indirect access provides reasonable access for the highest and best use of the property, the owner is not entitled to damages. Also, the property owner is not necessarily due compensation **even if the access is more circuitous** unless the property owner suffers a unique injury.

Aspects of access management has been viewed by Arizona and other courts as falling within the legitimate purview of police powers including the following:

- Installing medians
- Converting two-way streets to one-way streets
- Upgrading two- or four-lane highways to freeways

**An implication of the case law is that the State's police power can be used for broad policy objectives.** However, access regulation should advance legitimate state interest and should only be as restrictive as necessary.

The next chapter discusses how various states have addressed access management within the context of the legal issues. The chapter reviews access management legislation and access administrative rules that have been developed or are in the process of being developed by several selected states.

## **DISCUSSION OF ACCESS MANAGEMENT CLASSIFICATION**

### **BACKGROUND**

Creation of access management categories and classification of highways in accordance with those categories are essential tools for the implementation of access management. The purpose of such classification is to provide a mechanism for the application of guidelines and standards recognizing the functional characteristics and the level of roadside development of a particular roadway. The classification system, together with the associated guidelines, will provide tools for planning, administering, and enforcing access management in Arizona.

This chapter introduces the importance of access management categories and classification systems, compares existing Arizona roadway classification systems with each other, introduces examples for possible classification schemes, and outlines a possible classification system for Arizona.

### **PURPOSE OF THE ACCESS CLASSIFICATION SYSTEM IN RELATIONSHIP TO EXISTING ROADWAY CLASSIFICATIONS IN ARIZONA**

An access classification system provides a means of classifying each segment of roadway so that a set of applicable guidelines for access and intersection spacing can be applied. The system recognizes the functional characteristics of the roadway and seeks through the access/intersection spacing guidelines to preserve that functionality. Currently several roadway classifications exist for the Arizona State Highway System, and the following section examines the degree to which these classification schemes could serve as a guide for possible access management strategies.

The following roadway classification schemes are currently used by the Department:

- Functional Classification
- National Highway System (NHS)
- The ADOT Level of Development concept (LOD)
- Classifications used in the ADOT design manual

All of the above listed classifications are based on the concept of grouping the streets and highways in the system into classes, or systems, according to the character of service they provide. The functional classification groups roadways based on their hierarchy in the roadway system, the NHS identifies the importance of roadways on a national level, and the LOD defines the level of importance of a roadway in regard to funding priorities. The classifications used in the ADOT design manual group roadways based on design factors. All of these classification schemes contain elements important to the development of such a scheme and are discussed in terms of their suitability for categorizing highway segments for access management.

## **FUNCTIONAL CLASSIFICATION**

Transportation facilities are classified by the relative importance of the movement and access functions assigned to them. The classification of streets is essentially a determination of the degree to which access functions are to be emphasized at the cost of the efficiency of movement.

The federal functional classification uses a hierarchical approach based on the degree of movement on and access to a roadway. Roadways with the highest degree of mobility and least access are classified the highest. The Federal Highway Administration's report, *FHWA Highway Functional Classification: Concepts, Criteria, and Procedures (1989)* distinguishes four major categories of roadways:

- Principal Arterial
- Minor Arterial
- Collector Road
- Local Road

The principal arterial category is further stratified in Interstates and other arterials, and the rural collector category is subdivided into major and minor roads. The differences in the nature and intensity of development between rural and urban areas cause these systems to have characteristics that are somewhat different from each other. Therefore, the federal functional classification distinguishes three area types, in which roadways are located:

- Rural
- Urban
- Small urban

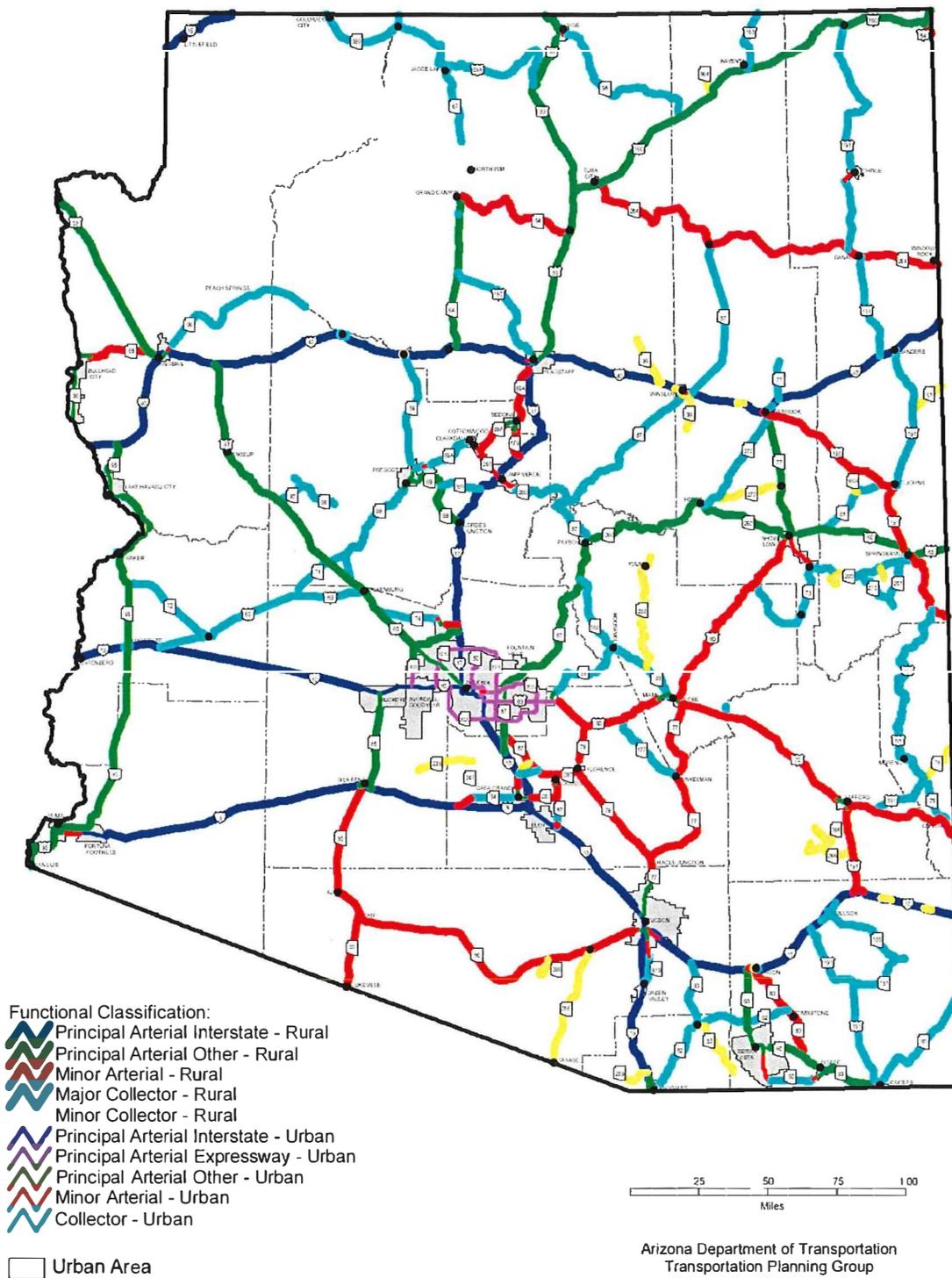
## **ADOT'S IMPLEMENTATION OF THE FUNCTIONAL CLASSIFICATION**

The functional classification of all roads in Arizona is based on the federal guidelines and is consistent with the federal functional classification. ADOT uses the federal classification scheme and differentiates between rural, urban, and small urban environments. For purposes of mapping the functional classification of state highways, the urban and small urban categories are folded together and displayed as urban roadways. ADOT's functional classification is shown in Figure 5-1. The four major types are defined as follows:

### *Principal Arterial*

Limited access principal arterial highways link major population, industrial, and defense centers. They provide the highest level of mobility at highest speeds for long, uninterrupted distances.

**FIGURE 5-1. 1997 FUNCTIONAL CLASSIFICATION**  
**1997 Functional Classification**



Source: ADOT, Transportation and Planning Group, 1998

### *Minor Arterial*

Minor arterial streets provide access to abutting properties at a lower level of travel mobility. Geometric design and traffic control measures are used to expedite safe movement of through traffic.

### *Collector*

Collectors are streets that gather and disperse traffic between larger arterial highways and smaller streets. They have intersections at grade and provide access to abutting properties.

### *Local*

Local streets provide a high level of access for pedestrians and vehicles to properties that front on these streets. They provide limited mobility and are not intended for use by through traffic.

These four functional classification categories are further divided according to their environment (urban and rural).

## **Rural Roadways**

### *Rural Principal Arterials*

All rural Interstates are in this category and are the ~~principal corridors~~ of interstate travel. There are relatively few of these corridors and they are used by most travelers going to and from adjacent states or Mexico. These rural principal arterials serve the highest traffic volume on mostly long distance trips. Rural principal arterials/Interstates in Arizona are I-8, I-10, I-15, I-17, I-19, and I-40. The non-interstate routes identified as principal arterials serve the same basic purposes as the Interstates, but at lower volumes and speeds. Examples of this type of state highway in Arizona are US 60, US 89, SR 87, and SR 260.

### *Rural Minor Arterials*

These roads serve most of the larger communities not served by the principal arterial system and provide intra-state and inter-county service. The trip length and travel density is larger than on the collector systems. Travel is at relatively high speeds with minimal interference to through movement. Rural minor arterials in Arizona include SR 85, US 60/SR 77, US 70.

### *Rural Major Collectors*

The travel on these roads is of intra-county and regional importance, rather than of statewide importance. Rural major collectors provide service to larger communities not directly served by the higher level roadways and to any county seat not on an arterial road. Rural major collectors usually connect to rural arterials. Examples of this type of road in Arizona are SR 89, US 191, and SR 177.

### *Rural Minor Collectors*

Rural minor collectors typically collect traffic from local roads and feed it onto major collectors or arterials. With lower traffic volumes than major collectors, minor collectors provide service for shorter trips. Rural Minor Collectors connect important traffic generators, or parallel a route having a higher classification. State highways in this category are SR 286, SR 288, and SR 277.

## **Urban Roadways**

### *Urban Principal Arterials*

There are three types of urban principal arterials: Interstate, other freeways and expressways, and others with little or no access control. The primary function of these roads is to provide the greatest mobility for through movement, and any direct access to adjacent land is restricted. This system serves the highest volume traffic generators and trips of longer length. These roads are characterized by a high proportion of urban area travel on a minimum of system mileage. State highways in this category include I-10 through Tucson, US 60 in Phoenix, and SR 51 in Phoenix.

### *Urban Minor Arterials*

Urban Minor Arterials provide trips of moderate length and trips of lower travel mobility than urban principal arterials. Consequently, the speed limit is lower than on urban principal arterials. SR 86 in Tucson, as well as Business Route B 19, represent this category.

### *Urban Collectors*

Urban Collectors distribute traffic from arterials and funnel traffic from local streets onto the arterial system. Frontage roads to controlled access facilities are usually classified as collectors on the State highway system. Only very few roadways are classified as urban collectors in the State system.

## *Local Roads*

Local roads in both urban and rural areas serve as access routes to the higher level system. There are no roads on the State highway system that are functionally classified as local roads.

## **LEVEL OF DEVELOPMENT**

Level of Development (LOD) is a planning tool introduced as an integrative concept in the *Arizona State Highway System Plan*. LOD provides a hierarchical ordering of system routes into five categories in terms of the relative importance of routes to the system as a whole. This hierarchy has implications for a variety of administrative, operational, and investment decisions. For example, LOD is important when defining appropriate construction or reconstruction projects, and when establishing priorities among routes competing for limited funds. The assignment to an LOD category takes into account the route's functional classification, level of significance, current and future daily traffic, current and future truck traffic, and other unique route characteristics (e.g., recreational use). The five LOD categories are described briefly below and the LOD classification of State highways is shown in Figure 5-2.

### **Level of Development 1**

Interstate and urban controlled access facilities form the backbone of the state system. Among many functions served, LOD 1 routes provide the principal means of interstate travel, serve the greatest volume of traffic, link the state's metropolitan areas, and provide the major truck routes. These routes are built and maintained to the highest standards.

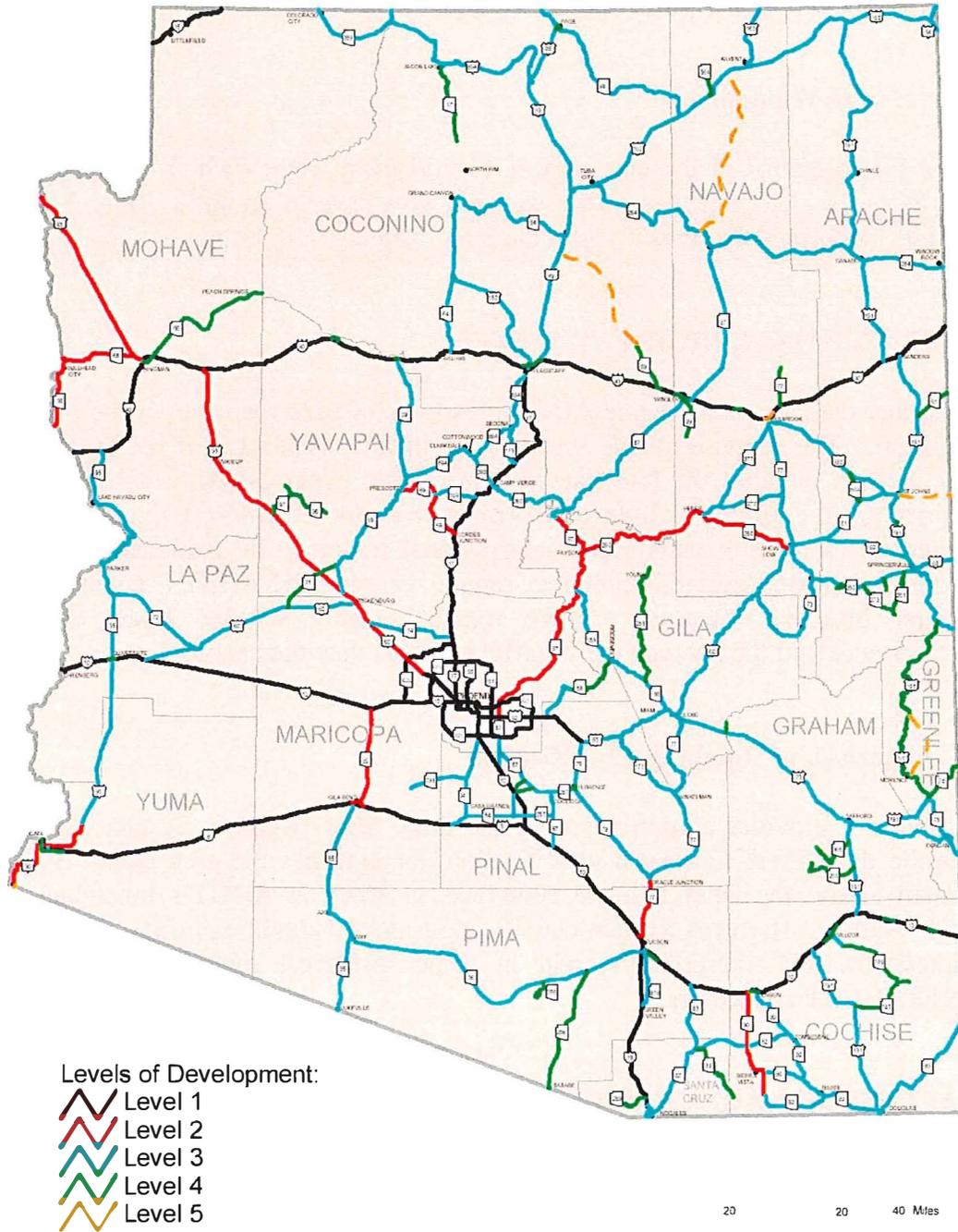
### **Level of Development 2**

In terms of both use and function, LOD 2 routes are the most important non-controlled access routes statewide. Most of these routes were constructed as two-lane rural highways designed to accommodate relatively low traffic volumes. With continuing growth, new demands are being placed on these highways to accommodate increased automobile and truck traffic. Hence, these routes are prime candidates for major reconstruction projects to provide the additional capacity to maintain both highway safety and performance.

### **Level of Development 3**

Routes without unique travel or service characteristics comprise the LOD 3 category. These are mainly two-lane rural routes that may be expanded to four lanes in urban areas. Most of the routes on the system are in this category.

**FIGURE 5-2. 1997 LEVELS OF DEVELOPMENT**  
**1997 Levels of Highway Development**



Arizona Department of Transportation  
 Transportation Planning Group



tpg/g/101493

Source: ADOT, Transportation Planning Group, 1998

#### **Level of Development 4**

Highways carrying low traffic volumes and serving primarily as feeder routes with local significance compose the LOD 4 category.

#### **Level of Development 5**

The last category in the hierarchy is comprised of routes which no longer serve a state level service role, together with routes that have never been built. Thus, LOD 5 routes are prime candidates for transfer from the State system.

### **THE NATIONAL HIGHWAY SYSTEM**

Another classification scheme ADOT uses to categorize roadways is the National Highway System. The purpose of this system is to identify roadways of national importance, and the system includes the Interstate system routes, congressionally designated high priority corridors, the Strategic Highway Corridor Network (STRAHNET), and important arterial highways serving interstate and interregional travel. The National Highway System in Arizona encompasses all Interstate routes, various STRAHNET connectors and several major principal arterials. These roadways were selected based on their regional importance and the average daily traffic volumes they are carrying.

#### **Comparison of Roadway Classification**

Table 5-1 provides a comparison of the three State Highway System classified schemes. While the federal functional classification distinguishes the area types: rural, urban, and small urban, the latter two are combined as urban in ADOT's functional classification. The National Highway System classification mainly identifies principal arterials, including interstates and expressways, and in some instances, minor arterial or collectors as STRAHNET connectors.

### **ACCESS MANAGEMENT CLASSIFICATION SCHEMES OF OTHER STATES**

Access management should vary with the circumstances in which a roadway is situated. Whether a roadway is situated in an urbanized or rural area, and what type and intensity of occurring and projected development about the roadway, are important factors. Other aspects to consider are the number, spacing, type, and location of existing access and traffic signals. These can significantly impact the capacity, speed, and safety of a highway or highway segment. The level of access control can, therefore, change frequently along a particular route. Because the existing classifications structure the State Highway System in

**TABLE 5-1. COMPARISON OF ROADWAY CLASSIFICATIONS**

<b>Area Type</b>	<b>Federal and ADOT Functional Classification</b>	<b>Corresponding National Highway System</b>	<b>Corresponding ADOT LOD</b>
<b>RURAL</b>  Areas outside the boundaries of small urban or urbanized areas.	Principal Arterial	Principal Arterial	LOD 1
	<ul style="list-style-type: none"> <li>• Interstate</li> <li>• Other</li> </ul>	<ul style="list-style-type: none"> <li>• Interstate</li> <li>• Other</li> </ul>	LOD 2,3
	Minor Arterial Road	Possible STRAHNET Connector	LOD 3
	Collector Road	Possible STRAHNET Connector	LOD 3,4
	<ul style="list-style-type: none"> <li>• Rural Major</li> <li>• Rural Minor</li> </ul>		LOD 4
	Local Road	No equivalent	No equivalent
<b>URBAN</b>  Are designated as such by the Bureau of the Census.	Principal Arterial	Principal Arterial	LOD 1
	<ul style="list-style-type: none"> <li>• Interstate</li> <li>• Freeway/Expressway</li> <li>• Other</li> </ul>	<ul style="list-style-type: none"> <li>• Interstate</li> <li>• Freeway/Expressway</li> <li>• Other</li> </ul>	LOD 1
	Minor Arterial Road	Possible STRAHNET Connector	LOD 2,3
	Collector Road	Possible STRAHNET Connector	LOD 4
	Local Road	No equivalent	LOD 4
		No equivalent	No equivalent

more general ways and for broader purposes, they do not provide enough detail to serve as the sole means of determining access management levels and techniques. What is needed is a scheme that considers both roadway function and roadside development. Therefore, a combination of the existing classifications with additional consideration of existing roadway development is needed to appropriately assign access categories. The access management classification system adopted by the State of Colorado and the system proposed by Minnesota provide examples of possible schemes.

**STATE OF MINNESOTA EXAMPLE**

The access classification system proposed in Minnesota (see Table 5-2) is based upon the FHWA’s functional classification. The system recognizes the hierarchy of the road system and the need to preserve the functional service levels of roadways. The system is jurisdictionally blind, although the majority of the principal arterials will be state highways. The Minnesota access classification system is based upon the basic functional class: principal arterials, minor arterials, collectors, and locals.

The State of Minnesota has classified all of its roads by this system. Principal arterials are subdivided into those of freeway design and all others. Freeways are separated from other principal arterials, because access is controlled through regulation. Guidelines are established for all classes except local roads. The reason Minnesota local roads is not included in the classification system is because the primary function of local roads is to provide access to adjacent properties and any associated guidelines would be unnecessarily prohibitive in many cases. Local conditions and policies are used for access locations and

**TABLE 5-2. MINNESOTA DOT'S ACCESS CLASSIFICATION SYSTEM**

Functional Class	Principal Arterial (Freeway)	Principal Arterial (Other)		Minor Arterial		Collector	
	Divided	Divided	Undivided	Divided	Undivided	Divided	Undivided
Median Treatment	Divided	Divided	Undivided	Divided	Undivided	Divided	Undivided
Land uses	Rural	Rural	Rural	Rural	Rural		Rural
	Urban	Urban	Urban	Urban	Urban	Urban	Urban
	Urban	Urban	Urban	Urban	Urban	Urban	Urban
	Core	Core	Core	Core	Core	Core	Core

Source: Minnesota Department of Transportation

design on these local roads. The exception to this is when a local road intersects a minor or principal arterial. Under these circumstances, the connection (driveway or public street) nearest the arterial along the local road should meet the spacing requirements of a collector in that particular environment.

Minnesota further divides the functional classes by median treatment. The presence or absence of a continuous median significantly affects the number of traffic movements at intersections and, consequently, the inherent safety of the route. For the classification system, median treatments are considered to be full or none. Full median treatment is defined by a barrier median for the full length of the route in question. Barrier medians prohibit traffic from crossing opposing traffic streams, or serve as a way to channelize traffic flow. Curbing, Jersey barriers, and wide grass medians (usually greater than 50 feet) are considered barrier type medians. Painted or traversable medians are not considered to be barrier medians. In addition, routes that have barrier medians at key intersections, but not along the entire segment, would be considered as having no median control under this classification system. Minnesota's access classification system divides adjacent land uses into three categories: rural, urban, and urban core.

**Rural Areas**

1. The rural classification is proposed to be applied to those roadway segments not planned for urbanization within the next 20 years. This class will generally be applied to agricultural or very sparsely developed areas with low-density residential uses.
2. The rural classification is proposed to also be applied to highways that have been designed as bypasses of urban areas. It is important for state and local agencies to recognize the need to restrict direct access to these rural bypasses and to establish appropriate setbacks for development along the route.

## **Urban Areas**

1. The urban classification is proposed to be applied to those areas that are currently either urbanized or planned for urbanization over the next 20 years. Generally, the urban classification would apply to road segments that extend through areas of municipalities, where urban services will be provided to support additional development. Such services may include public water, sewer, and local arterial and collector street systems.
2. The urban classification would not be applied to roadway segments that extend through unincorporated townships in the county, unless the adjacent land area is planned for urbanization within the next 20 years.
3. The urban classification may also be applied to areas planned or anticipated undergoing major redevelopment within the next 20 years. These segments will generally demonstrate an existing distribution of access points that exceeds the recommended guidelines.

## **Urban Core Areas**

1. The urban core classification is proposed to be reserved for those areas of cities or towns that are fully developed in a dense, compact, pedestrian-oriented manner. Development adjacent to these segments is characterized by a highly urban form, with many buildings constructed right up to the right-of-way. Building lots are narrow and do not typically accommodate on-site parking. Sidewalks and on-street parking are common. A grid pattern of local cross streets is typically found.
2. The urban core classification is proposed to be limited to the existing or planned pedestrian-oriented urban core, and not extended out into more suburban portions of the community or to those areas planned to urbanize in a more auto-oriented development pattern.

## **STATE OF COLORADO EXAMPLE**

*Colorado's Access Code* provides eight access management categories. The functionality of a roadway, the importance of the roadway in the overall system, current and future conditions, and traffic engineering features play roles in defining the access category assignments. The eight categories are listed below with their corresponding functional characteristics and category assignment criteria. Table 5-3 summarizes the categories.

**TABLE 5-3. SUMMARY OF COLORADO'S ACCESS MANAGEMENT CATEGORIES**

Category	Speed	Volumes	Trip Characteristic	Access Level	Type of Roadway	Possible Equivalent in Arizona
Interstate system, freeway facilities	High	High	Medium to long interstate, interregional, intra-regional, inter-city trips and large urban areas intra-city trips	Private direct access is prohibited, access only on directional ramps	Interstates, freeways	I-10, I-17
Expressway, major bypass	High	High	Interstate, interregional, intra-regional, inter-city	Direct access service to abutting land is subordinate	Expressways, major bypasses	SR 51,
Regional highway	Medium to high	Medium to high	Medium to long interregional, intra-regional, inter-city trips	Direct access service to abutting land is subordinate	NHS routes, significant regional routes in rural areas, other routes of regional or state significance	SR 87, US 60
Rural highway	Moderate to high	Low	Local rural travel needs	Balance between safety, direct access and mobility needs	Low volume Arterials, secondary collectors, local highway sections, which do not provide for significant regional, state, or interstate trips	SR 89, US 70
Non rural principal highway	Medium to high	Medium to high	Medium to long interregional, intra-regional, inter-city, and intra-city trips	Direct access service to abutting land is subordinate	Arterials in suburban and urban areas, important major Arterials in smaller cities and towns, Routes on National Highway system and other routes of regional or state significance	SR 87 in Metro Phoenix or Payson
Non rural arterial	Moderate	Moderate to high	Medium and short inter-city, intra-city, and inter-community trips within developed urban portions and established roadside development	Allows higher degree of direct access	Short sections of regional highways passing through rural communities located along routes of regional, state, and national significance.	US 60 in Wickenburg
Non rural arterial	Low to moderate	Low to moderate	Medium to short inter-city, intra-city, and inter community trips	Balance between direct access and mobility	Portions of rural highways with extensive established roadside development	US 70 through Safford
Frontage road	Low to moderate	Low to moderate	Short intra-city or intra-community trips	Provide reasonable and safe access	Frontage and service roads	

## **Interstate System, Freeway Facilities**

This category is appropriate for use on highways that have the capacity for high speed and relatively high traffic volumes over medium and long distances in an efficient and safe manner. They provide for interstate, interregional, intra-regional, inter-city and, in larger urban areas, intra-city travel. Interstate freeways are typical of this category.

## **Expressway, Major Bypass**

This category is appropriate for use on highways that have the capacity for high speed and relatively high traffic volumes in an efficient and safe manner. They provide for interstate, interregional, intra-regional, and inter-city travel needs and, to a lesser degree, some intra-city travel needs. Direct access service to abutting land is subordinate to providing service to through traffic movements.

## **Rural Regional Highway**

This category is appropriate for use on highways that have the capacity for medium to high speeds and relatively medium to high traffic volumes over medium and long distances in an efficient and safe manner. They provide for interregional, intra-regional, and inter-city travel needs. Direct access service to abutting land is subordinate to providing service to through traffic movements. This category is normally assigned to National Highway System routes, significant regional routes in rural areas, and other routes of regional or state significance.

## **Rural Highway**

This category is appropriate for use on highways that have the capacity for moderate to high travel speeds and low traffic volumes providing for local rural travel needs. Speed limits vary based on roadway design, location, and travel speeds. There is a reasonable balance between safety, direct access and mobility needs within this category. This category may be assigned to low volume minor arterials, secondary collectors, and local highway sections that do not normally provide for significant regional, state or interstate travel demands. These highways typically provide for rural transportation needs including farm to market and farm to farm, and may include high-speed rural frontage roads.

## **Non-Rural Regional Highway**

This category is appropriate for use on non-rural highways that have the capacity for medium to high speeds and provide for medium to high traffic volumes over medium and long distances in an efficient and safe manner. They provide for interregional, intra-regional, inter-city, and intra-city travel needs in suburban and urban areas as well as

serving as important major arterials in smaller cities and towns. Direct access service to abutting land is subordinate to providing service to through traffic movements. This category is normally assigned to National Highway System routes, and other routes of regional or state significance.

### **Non-Rural Arterial (Type 1)**

This category is appropriate for use on non-rural highways that have the capacity for moderate travel speeds and relatively moderate to high traffic volumes over medium and short travel distances providing for inter-city, intra-city and inter-community travel needs. These routes are generally not of regional, state or national significance. This category is typically assigned within developed portions of cities and towns where there is established roadside development making the assignment of a higher functional category unrealistic.

This category is also appropriate for short sections of regional highway passing through rural communities that may be located along route of regional, state and national significance where assignment to a higher category is unrealistic. While this category provides service to through traffic movements, it allows more direct access to occur.

### **Non-Rural Arterial (Type 2)**

This category is appropriate for use on non-rural highways that have the capacity for low to moderate travel speeds and relatively moderate volumes over medium and short travel distances providing for inter-city, intra-city and inter-community travel needs. These routes are not of regional, state or national significance. This category is typically assigned where there is extensive established roadside development and street systems such as a 'downtown' area, making the assignment of a higher category unrealistic. This category provides a reasonable balance between direct access and mobility needs.

### **Frontage Roads (both urban and rural)**

This category is assigned only to roadways that are designated as frontage or service roads where there is no intended purpose of providing for long distance traffic movements. Access needs will take priority over through traffic movements without compromising the public health, welfare, or safety. Providing reasonable and safe access to abutting property is the primary purpose of this access category. At the request of the local authority, the Department may assign any frontage or service road to a higher access category when desirable to meet local transportation plans and needs.

## **DISCUSSION OF EXISTING CLASSIFICATION SCHEMES AS BASIS FOR POSSIBLE ACCESS MANAGEMENT CATEGORIES IN ARIZONA**

The following section provides a brief summary of the findings in regard to possible classification schemes for the categorization of roadways for access management.

### **FUNCTIONAL CLASSIFICATION**

The functional classification has an advantage as it is already established, in place, and most importantly, widely accepted and used throughout the jurisdictions and agencies in the State. As defined by the Federal Highway Administration, the functional classification of streets is essentially a determination of the degree to which access functions are to be emphasized at the cost of efficiency of movement. This purpose of the functional classification ties therefore directly into the goals of access management and also differentiates the roadways by their urban and rural settings. In Arizona, the functional classification hierarchy corresponds well with the routes designated as part of the National Highway System and the major corridors, as they are identified in the *State Transportation Plan (1999)*. However, the functional classification scheme lacks the necessary level of detail for the application of access management measures. Since functional classification is used to determine eligibility for inclusion in the National Highway System and federal funding, federal guidance has restricted the proportion of roads and streets classified as arterial or collector roads. To meet federal guidelines, ADOT has been required to classify numerous state highways as collector roads when in fact most function as arterials. Based on these circumstances the functional classification does not provide enough detail and accuracy to serve as the sole guiding scheme for access management classification in Arizona.

### **LEVEL OF DEVELOPMENT**

By definition, the LOD classification takes into account the route's functional classification, level of significance, current and future daily traffic, current and future truck traffic, and other unique route characteristics (e.g., recreational use). However, this scheme does not differentiate between rural and urban settings an important distinction. Also, LOD does not always correspond directly with the functional classification and the National Highway System categories. For example, rural principal arterials may be LOD 1, 2, or 3. US 95 from I-40 to Yuma and the Mexican Border is classified as one of the LOD 3 routes. In the current functional classification, US 95 is defined as a principal arterial other—rural. Additionally, the roadway is designated as a principal arterial-other in the National Highway System. Similar discrepancies between functional classification and Level of Development are found on SR 89 from Page to Flagstaff and on SR 77 from Show Low to Holbrook.

## NATIONAL HIGHWAY SYSTEM

The main purpose of the National Highway System is to determine routes of national significance and does not provide for the needed detail a access management classification scheme requires.

## THE APPROACHES TAKEN BY THE STATE OF COLORADO AND MINNESOTA

Table 5-4 compares the access management categories used by Colorado and proposed by Minnesota in relationship with the functional classification system. Minnesota strictly adheres to the functional classes and further stratifies by median treatment and area type. Colorado, on the other hand, attempts to capture area type, level of roadside development, and hierarchy through the introduction of “stand-alone” access categories.

**TABLE 5-4. COMPARISON OF ADOT FUNCTIONAL CLASSIFICATION AND COLORADO AND MINNESOTA ACCESS MANAGEMENT CATEGORIES**

Functional Class	Colorado Equivalent	Minnesota Equivalent
Principal Arterial Interstate – Rural	Interstate system, freeway facilities	Principal Arterial (Freeway) - Rural divided
Principal Arterial Other – Rural	Regional highway Non rural arterial	Principal Arterial Other – Rural divided     undivided
Minor Arterial – Rural	Rural highway	Minor Arterial – Rural divided     undivided
Major Collector – Rural	Rural highway	Collector – Rural     undivided
Minor Collector – Rural	Rural highway	
Principal Arterial Interstate – Urban	Interstate system, freeway facilities	Principal Arterial (Freeway) urban   urban core divided   divided
Principal Arterial Other – Urban	Non rural principal highway	Principal Arterial (Other) urban   urban core divided   undivided   divided   undivided
Minor Arterial - Urban	Non rural arterial	Minor Arterial urban   urban core divided   undivided   divided   undivided
Collector - Urban	Frontage road	Collector urban   urban core divided   undivided   divided   undivided

The introduced access management classification schemes are based on the hierarchy of the roadway system, and therefore, to various degrees, based on the functional classification.

The functionality of the roadway determines the degree of access management measures proposed. Also, the access management categories attempt to capture the level of roadside development. The stratification by area type serves the purpose of determining the level of access to developed areas. Additionally, the inclusion of the area type accounts for existing access conditions, which might make it unrealistic to enforce higher access management standards.

### **STRATIFICATION BY LEVEL OF ROADSIDE DEVELOPMENT AND SPEED INTERVALS**

A possible approach to stratify the initial functional classification of the roadway system to access management categories can be accomplished by using posted speed limits or level of roadside development as determining factor. Table 5-5 stratifies the functional classification by level of roadside development and speed intervals.

**TABLE 5-5. FUNCTIONAL CLASSIFICATION STRATIFIED BY LEVEL OF ROADSIDE DEVELOPMENT AND SPEED INTERVALS**

<b>Functional Classification</b>	<b>Stratification by Level of Roadside Development</b>
Principal Arterial	Rural
• Interstate	Transitional
• Other	Urbanized
	Metropolitan
Minor Arterial	Rural
	Transitional
	Urbanized
	Metropolitan
Collector Road	Rural
	Transitional
	Urbanized
	Metropolitan
<b>Stratification by Speed Category</b>	
Principal Arterial	Up to 70 mph
• Interstate	55 mph
• Other	45 mph
Minor Arterial	55 mph
	45 mph
	35 mph
Collector Road	45 mph
	35 mph
	25 mph

Access management measures would then be determined by the functional class of the roadway and the applicable area type or the applicable speed category. Also possible is a combination of the two factors: area type and speed category. In most cases area type and applicable speed will be correlated and a combination of both variables is proposed.

## **RECOMMENDED ACCESS MANAGEMENT CLASSIFICATION SCHEME FOR ARIZONA**

As discussed, the existing classification schemes all have specific shortfalls and do not provide sufficient guidance for a access management classification. A combination of the elements used in the classification schemes has to be applied to most accurately classify roadways and roadway sections for access management. The classification system developed by the State of Colorado is based on such a combination of elements and best reflects the flexibility needed for access management. Certain variations from the Colorado model are recommended to account for the specific situation in Arizona:

- Include volume characteristics in the trip characteristics of the individual categories
- Differentiate between urban and rural interstate
- Eliminate the “major bypass” category
- Define “significant regional and state routes”
- Add another category to “Rural Highway” to differentiate low and very low volume roadways
- Add speed ranges

Table 5-6 presents the proposed access management categories for Arizona.

**TABLE 5-6. PROPOSED ACCESS MANAGEMENT CATEGORIES FOR ARIZONA**

Category	Speed Ranges	Trip Characteristic	Access Level	Type of Roadway	Arizona Example
Interstate system rural	High	Medium to long interstate, interregional, intra-regional, inter-city trips with medium to high volumes	Private direct access is prohibited, access only on directional ramps	Interstates	I-10, I-17
Interstate system urban	High	Medium to long large urban areas intra-city trips with high volumes	Private direct access is prohibited, access only on directional ramps	Interstates, freeways	I-10, I-17, SR 51
Expressway	45-55 mph 55-65 mph 65+ mph	Interstate, interregional, intra-regional, inter-city with high volumes	Direct access service to abutting land is subordinate	Expressways	US 60/Grand Ave.
Regional highway	45-55 mph 55-65 mph 65+ mph	Medium to long interregional, intra-regional, inter-city trips with medium to high volumes	Direct access service to abutting land is subordinate	NHS routes, significant* regional routes in rural areas, other routes of regional or state significance	SR 87, US 60
Rural highway I	35-45 mph 45-55 mph 65+ mph	Local rural travel needs with low volumes	Balance between safety, direct access and mobility needs	Low volume arterials, secondary collectors, local highway sections	SR 89, US 70
Rural highway II	35-45 mph 45-55 mph 65+ mph	Local rural travel needs with very low volumes	Balance between safety, direct access and mobility needs	Very low volume arterials, secondary collectors, local highway sections	SR 288
Non rural principal highway	35-45 mph 45-55 mph 65+ mph	Medium to long interregional, intra-regional, inter-city, and intra-city trips with medium to high volumes	Direct access service to abutting land is subordinate	Arterials in suburban and urban areas, important major arterials in smaller cities and towns, Routes on NHS and other routes of regional or state significance	SR 87 in Metro Phoenix or Payson
Non rural arterial I	35-45 mph 45-55 mph	Medium and short inter-city, intra-city, and inter-community trips within developed urban portions and established roadside development with moderate to high volumes	Allows higher degree of direct access	Short sections of regional highways passing through small communities located along routes of regional, state, and national significance.	US 60 in Wickenburg
Non rural arterial II	35-45 mph 45-55 mph	Medium to short inter-city, intra-city, and inter community trips with low to moderate volumes	Balance between direct access and mobility	Portions of highways with extensive established roadside development	US 70 through Safford
Frontage road	25-35 mph	Short intra-city or intra-community trips with low to moderate volumes	Provide reasonable and safe access	Frontage and service roads	

\*Significant regional and state routes are defined by a functional classification as “Principal Arterial” or being identified as “Transportation Corridors of Statewide Significance” in the State Transportation Plan (1994).

## **POSSIBLE ADOT POLICIES IN REGARD TO ACCESS MANAGEMENT**

### **BACKGROUND**

The following chapter provides draft policies in regard to access management. Each policy is supplemented with background information, which led to the development of the individual policy. Once adopted, these policies could build the framework for the implementation of access management throughout ADOT.

### **PROPOSED POLICY STATEMENTS**

**ADOT recognizes that every owner of property which abuts a State highway has the right to reasonable access but does not have the right of unregulated access.**

Background:

- In considering access management ADOT must fulfill its responsibility to protect the rights of the traveling public as well as the rights of the individual property owner.

Implementation of traditional engineering approaches to managing access, such as provision of medians and restrictions on left and right turns, constitute the lawful exercise of the State's police powers.

- Although traffic management techniques may affect access to individual properties, they do not constitute a taking. For a compensable taking to occur, damages must be peculiar to a property, and not common to the public at large.

**ADOT will implement access management to preserve and maintain the safety, capacity, and mobility of the State's Highway System and link the communities and businesses it serves.**

Background:

- The focus on access management is part of a growing national trend as individual states and communities realize that we can no longer build our way out of congestion.
- Transportation agencies are seeking better ways to manage their existing systems to meet the demands of continued growth in population, employment, and associated traffic.

- The proper spacing and design of access along highways can improve safety, protect capacity, and prevent costly and premature reconstruction that is highly disruptive to communities and business interests.
- The public expects all governmental agencies to work together to address issues that threaten their safety and mobility.

**ADOT seeks to preserve the functional integrity of the State Highway System through the implementation of access management.**

Background:

- The continued growth and vitality of Arizona depends largely on the ability of our transportation system to provide the mobility we need.
- Arizona's growth and economic expansion place, and will continue to place, tremendous pressure on state highways in rural as well as in urban settings.
- A large percentage of travel throughout the state is concentrated on the State Highway System.
- Safe, free-flowing highways are essential for the continued growth of the statewide economy and the viability of each local community.
- Few additional roads are being built, and the capacity of our existing major roadways is being gradually consumed. Uncoordinated and unplanned access accelerates this process, leading to increased congestion and decreased traveling speeds.
- The major state highways must be reserved for inter/intra-state and regional travel. Access management is critical to protecting the essential function of these roadways and to linking them to the communities and businesses they serve.

**ADOT will implement access management to reduce the number of accidents and increase the safety of the State Highway System.**

Background:

- Access-related crashes cause fatalities, personal injuries and property damage.
- Increasing the points of access to a highway increases the number of conflict points, resulting in more accidents.

- Analysis of accident indicates that as access points increase along a stretch of highway, the accident rate also increases.
- This positive relationship between access and accident rate holds true whether the highway is a low-volume, two-lane rural road or a highly traveled, four-lane urban expressway.

**ADOT will implement guidelines and standards, and will define and regulate access to the State Highway System. Additionally, ADOT will adequately support, and provide resources for, the permitting process and the enforcement of access management.**

Background:

- Managing access involves the use of medians, turn lanes, and traffic signals; the spacing and design of intersections and driveways; and the construction of service roads and supporting local streets.
- Each of these techniques eliminates conflict points and separates traffic movements for safety, efficiency, and ease of access.
- To be most effective, these techniques need to be applied with consistency during the initial phase of a community's development process.
- Currently, there are no commonly accepted and consistently applied guidelines for managing access to the various types of roadways throughout Arizona. Access management practices and definitions of appropriate access levels vary throughout the state, and local communities, landowners, and developers are unable to anticipate how guidelines will be applied.
- Fixing access-related problems along the highway after development occurs is very costly and disruptive to the local community.
- Uniform permitting standards are needed for the implementation of access management.
- Staff resources are necessary to enforce permits and close driveways that are not permitted.

**ADOT will seek legislative action and the enactment of an Access Management Act.**

Background:

- Authority to regulate access under the police powers of the state is limited by the constitutionally protected access rights of abutting landowners.
- Access is a property right, protected by the U.S. and Arizona Constitutions. It may be regulated, but not "taken" without compensation.

- Arizona courts have established that abutting landowners have a right to “reasonable access”.
- There are no clear guidelines for interpreting the right of access. It is decided by the courts on a case-by-case basis.
- The road authority may regulate property access by permit subject to the retention of reasonable access by the property owner. Depending on the circumstances, access may be limited.

**ADOT will use the purchase of access control, when feasible, to implement access management.**

Background:

- Purchasing access control is effective if done before major development has occurred, but is very costly and disruptive if required to address retrofit situations.
- The most straightforward way for ADOT to ensure the proper spacing and design of access along the state’s major highways would be to purchase the access rights of abutting landowners.
- The purchase price for access control along all the major highways serving high-growth areas, where the need is greatest, would far exceed reasonably available resources.
- The cost of purchasing access control along developing and fully developed corridors is escalating rapidly as land values increase.

**ADOT recognizes that land use and transportation are mutually dependent and that successful access management requires the linkage of land use and transportation decisions. To encourage local access management support ADOT will incorporate the level of access management in its project selection and programming process.**

Background:

- Land use activities place demands on the transportation system.
- Transportation systems provide accessibility and therefore determine land uses and real estate patterns.
- Local jurisdictions have the authority to plan and manage land use.

- At present, few formal linking mechanisms exist to encourage and support coordination and partnership between ADOT and the jurisdictions responsible for managing land use.
- ADOT's role in local land use decisions is generally limited to review and comment on new development proposals only. There is no formal requirement for local communities to obtain ADOT input prior to decisions on comprehensive plans, rezonings, or land subdivisions.

**ADOT will implement access management in consultation, coordination, cooperation with the local jurisdictions and stakeholders.**

Background:

- Successful access management requires careful coordination between land use and transportation objectives.
- Cities, towns, and counties within unincorporated areas have the authority to plan and manage land use.
- Local government land use decisions have major impacts on the access conditions along the highway.
- Every time the local jurisdiction approves a subdivision, a new bundle of access rights is endowed on each newly created lot.
- If the subdivision has been well designed, these lots will be accessed via internal streets connected to the highway at properly spaced intersections, and not by individual, direct driveways onto the highway.
- Cities, towns, and counties have broad authority to plan and regulate land use through zoning and subdivision controls and thereby manage access, if they choose to do so.

**ADOT will develop access management plans for segments of State Highways in coordination with the jurisdictions in which the highway is located. ADOT will adopt the access management plan only if it is incorporated in the jurisdictions general plan and zoning ordinance.**

Background:

- Although some local governments consider access management in their land use decisions, many do not, for a variety of reasons:

- ✓ Lack of knowledge and understanding. Many local officials are simply not aware of the problems that can result from poorly spaced or designed access along the major highways. Others seem to feel that highway operation issues are not their concern or responsibility. Many are not aware of the techniques of access management and do not have adequate technical support for their development review process.
- ✓ Problem time lags. Access-related problems may not show up immediately. Large problems arise from many small, uncoordinated decisions over time. When the problem becomes apparent, the best solutions are usually no longer available.
- ✓ Local desire for development. Developers and businesses may press local officials for more direct access to the highway because it is quicker and cheaper than constructing local streets or service roads, or because they believe direct access is essential to the success of their enterprise.
- ✓ Lack of shared vision and common guidelines. ADOT has not developed a shared vision of appropriate access spacing and design with local communities. There are no uniform guidelines in place to provide the basis for consistent access management practice across jurisdictions.
- ✓ Complex access laws. The laws of access are complex and require interpretation on a case-by-case basis. Without clear guidelines, local officials are understandably cautious when dealing with the very sensitive issue of property rights.
- ✓ Limited funding options. Access management may be cost effective in the long run, yet requires up-front expenditures for planning and local roadway improvements. Limited funding options may constrain the local community's ability to plan and construct an adequate supporting road network.

**ADOT supports the implementation of access management through outreach, public participation and educational processes.**

Background:

- At present, few formal linking mechanisms exist to encourage and support coordination and partnership between ADOT and the jurisdictions responsible for managing land use.
- ADOT's role in local land use decisions is generally limited to review and comment on new development proposals only. There is no formal requirement for local communities to obtain ADOT input prior to decisions on comprehensive plans, rezonings, or land subdivisions.

**ADOT will strive to ensure that capital funding is available for access management efforts.**

Background:

- Access management plans and strategies must be supported by adequate funding for implementation of the measures.
- A dedicated funding source would allow for budgeting and staging of access management projects.
- A statewide access management plan should be used to determine funding needs, prioritize strategies and determine access management techniques.

### **SCOPE OF THE POLICIES**

- The access management policies and subsequent standards, guidelines, and criteria shall be applied in the development of all Department projects and incorporated as appropriate into all Department planning processes. Including corridor profile and corridor studies, Design Concept Reports, design, state and local transportation system plans, as well as local comprehensive plans.
- The standards, guidelines, and criteria in the access management policies shall be applied where any rehabilitation or reconstruction work is done.
- The interchange prioritization policy provides standards to be employed in the review, evaluation, and design of new interchanges, and modifications to existing interchanges and crossroad operations.

# **DRAFT ARIZONA LEGISLATION IN REGARD TO ACCESS MANAGEMENT ON STATE HIGHWAYS**

## **INTRODUCTION**

The following presents draft legislation for the implementation of access management in Arizona. Several access management acts and legislation from states, innovative in regard to the issue, such as Florida, New Jersey, and Colorado were examined and used as guidelines for the draft Arizona legislation. The draft legislation is rather extensive and addresses the following major issues:

- Legislative findings, policy, and purpose
- Declaration of reasonable access
- Declaration of the right of the State to manage access
- Definitions
- Permit process
- Access management rule, standards and classification scheme
- Access control plan and access management plans
- Lot splits and subdivision circulation
- Controlled Access Highways
- Coordination with local jurisdictions
- Establishment of an access management unit

The draft is based on the establishment of an Access Management Act and the following proposed legislative statement:

**Regulation of access to the State Highway System is necessary in order to protect the public health, safety, and welfare, to preserve the functional integrity of the State Highway System, and to promote the safe and efficient movement of people and goods within the State.**

The Access Management Act calls for the development of a comprehensive access management rule which will:

- Assist in the coordination of land use planning decisions by local jurisdictions
- Support the overall development of commerce
- Limit the further increase in congestion and functional deterioration of the transportation system

The basis of the Access Management Act is the declaration of reasonable access, which is defined as follows:

Every owner of property which abuts a road on the State Highway System has a right to reasonable access to the abutting state highway but does not have the right of unregulated access to such highway.

Therefore:

The access rights of an owner of property abutting the State Highway System are subject to reasonable regulation to ensure the public's right and interest in a safe and efficient highway system.

To implement the Access Management Act, the legislation calls for the adoption of an administrative rule for the administration of access permits. The access management act itself defines in detail aspects of the permitting process, such as:

- Requirement for access permit
- Authority to close unpermitted connections
- Permit application fee
- Permit review process
- Permit denial
  - Criteria
- Permit justification
- Permit administrative review
- Permit appeal and variance procedure
- Permit expiration
- Unpermitted connections
- Existing access permits
- Non conforming permits
- Modification and revocation of permits

To implement access management, the act requires the Department of Transportation to develop an access control classification system. Subsequent access management standards will be developed based on the classification system. Additionally, the Department of Transportation is required to adopt rules governing the implementation of the access control classification system and the rules shall be:

- Developed in a coordinated manner with other jurisdictional and planning entities
- Developed with public input and notification
- And shall incorporate the findings of the legislation

Additionally the Draft Arizona Access Management Act includes statutes regarding:

- The definition of access management plans and their implementation
- Regulation of lot splits along state highways and the requirement of sufficient internal circulation for new subdivisions
- The construction of state highways as controlled access highways

The legislation authorizes the establishment of an access management unit within the Department of Transportation for the implementation of the access management act, access management rule, access management classification system, access management classification assignment, the establishment of a statewide access control plan and the management of access management plans. Additionally the access management unit will facilitate the required coordination with local jurisdictions, other impacted agencies, stakeholders, and the general public in regard to access management. Funding for access management and its implementation is provided through the establishment of a dedicated funding source. The legislation defines dates of completion for each of the tasks.

## **DRAFT ARIZONA ACCESS MANAGEMENT ACT**

### **XX.001 Regulation of access to State Highway System; legislative findings, policy, and purpose.**

(1) It is the finding of the Legislature that:

(a) Regulation of access to the State Highway System is necessary in order to protect the public health, safety, and welfare, to preserve the functional integrity of the State Highway System, and to promote the safe and efficient movement of people and goods within the State.

(b) The development of an access management rule including policies, in accordance with this act, will assist in the coordination of land use planning decisions by local governments with investments in the State Highway System and will serve the overall development of commerce within Arizona as served by the State Highway System. Without such a program, the health, safety, and welfare of the residents of Arizona may be placed at risk, due to the fact that unregulated access to the State Highway System is one of the contributing factors to the congestion and functional deterioration of the system.

(c) The Legislature further finds and declares that the development of an access management rule including policies in accordance with this Act will enhance the development of an effective transportation system and increase the traffic-carrying capacity of the State Highway System and thereby potentially reduce the incidences of traffic accidents, personal injury, and property damage or loss; mitigate environmental degradation; promote sound economic growth and the growth management goals of the State; reduce highway maintenance costs and the necessity for costly traffic operations measures; lengthen the effective life of transportation facilities in the State.

(2) It is the policy of the Legislature that:

(a) Every owner of property which abuts a road on the State Highway System has a right to reasonable access to the abutting State highway but does not have the right of unregulated access to such highway. The operational capabilities of an access connection may be restricted by the Department. However, a means of reasonable access to an abutting State highway may not be denied by the Department, except on the basis of safety or operational concerns as provided in A.R.S. XX.006

(b) The access rights of an owner of property abutting the State Highway System are subject to reasonable regulation to ensure the public's right and interest in a safe and efficient highway system. This paragraph does not

authorize the Department to deny a means of reasonable access to an abutting State highway, except on the basis of safety or operational concerns as provided in A.R.S. XX.006. Property owners are encouraged to implement the use of joint access where legally available.

(3) The Legislature further declares that it is the purpose of this Act to provide a coordinated planning process for the permitting of access points on the State Highway System to effectuate the findings and policy of this act.

(4) Nothing in this act shall affect the right to full compensation under s. *(determine)*, Art. *(determine)* of the State Constitution.

(5) Nothing in this Act limits the power of eminent domain vested in the Department pursuant to A.R.S. *(determine)*

(6) This Act does not create any additional property rights. The denial of reasonable direct access to an abutting State highway pursuant to A.R.S. XX.006 is not compensable under the provisions of this Act unless the denial would be otherwise compensable absent the provisions of this Act. The denial in and of itself of an access permit by the Department of Transportation shall not be the only substantive allegation in support of a petition to state a cause of action pursuant to A.R.S. *(determine)*, Art. *(determine)* of the State Constitution.

(7) A property owner whose land abuts a service road is entitled to reasonable access to such service road pursuant to s. A.R.S. XX.006. However, nothing in this Act requires that a property owner whose land abuts a service road be given direct access across the service road to the State highway served thereby.

#### **XX.002 Regulation of connections to roads on State Highway System; authority**

(1) Vehicular access and connections to or from the State Highway System shall be regulated by the Arizona Department of Transportation in accordance with the provisions of this act in order to protect the public health, safety, and welfare.

(2) The Department shall, no later than *DATE (determine)*, adopt, by rule, administrative procedures for its issuance and modification of access permits, closing of unpermitted connections, and revocation of permits in accordance with this Act.

#### **XX.003 Regulation of connections to roads on State Highway System; definitions**

As used in this Act, the term:

“Access”, defined, is any driveway, approach or connecting street, road or highway that connects to a State highway.

“Access control classification system”, defined, is a classification system describing the type and degree of access control assigned to any road in a given roadway network.

“Access, Control *of*” defined, is the condition where public authority fully or partially controls the right of abutting owner’s access to the highway right-of-way. Full control of access is exercised to give preference to through traffic by providing access connections with selected public roads only and by prohibiting crossings at grade or direct private driveway connections. Partial control of access is exercised to give preference to through traffic to a degree rather than in addition to access connections with selected public roads. There may be some crossings at grade and some private driveway connections.

“Access control plan, statewide”, defined, is the statewide plan identifying level of access control for all segments of the State Highway System including a implementation plan, priorities and funding mechanisms.

“Access management”, defined, is the process of defining the degree of “access control” on a given roadway or roadway system.

“Access management act”, defined, are the Arizona Revised Statutes concerning access management.

“Access management plan”, defined, is a roadway design plan which designates access locations and designs and is cooperatively developed with the local jurisdiction(s) the roadway is located in.

“Access management rule”, defined, is the administrative rule developed by the Department of Transportation to define, specify and implement the requirements of the access management act.

“Access management standards”, defined, are the design standards associated with each of the “Access control classification” categories.

“Access permit”, also “permit”, defined, is the written permission of the Arizona Department of Transportation to establish an access point in accordance to the Departments rules.

“Access point”, defined, is the location of the intersection of a highway, street, road, driveway, or approach with a state highway.

“Alternate access”, defined, is another established roadway which allows a vehicle to indirectly access a State highway instead of direct access from an adjoining lot.

“Connection”, defined, means driveways, streets, turnouts, or other means of providing for the right of reasonable access to or from the State Highway System.

“Controlled-access highway”, defined, is every highway to or from which owners or occupants of abutting lands and other persons are prohibited from having direct access to or from the highway. Access is allowed only at selected public roads.

“Department, or Department of Transportation”, defined, is the Arizona Department of Transportation.

“Driveway”, defined, also approach, is an access that is not a public street, road, or highway.

“Functional classification”, defined, is a hierarchical system of public roadways according to the purpose and hierarchy of each roadway in the local or Statewide Highway System.

“Functional deterioration”, defined, is the process of degrading ability of a roadway to serve according to its purpose and hierarchy in the roadway system.

“Functional integrity”, defined, is the ability of a roadway to serve according to its purpose and hierarchy in the roadway system.

“Highway, arterial”, defined, as a primary, continuous highway for through traffic, with various levels of access control.

“Highway, controlled-access”, defined, is a highway for through traffic on which access is limited to exit and entrance ramps at interchanges. Interstate highways and the urban freeway systems are controlled-access highways.

“Intersection”, defined, is the location where two or more roadways meet, at grade.

“Level of Service (LOS)”, defined, is a description of traffic flow conditions ranging from “A”, which is best, to “F”, which is the worst. The *Highway Capacity Manual*, Transportation Research Board Special Report No. 209, as amended, gives detailed descriptions of the levels of service and the calculations involved in establishing them.

“Local government”, defined, is the Board of County Supervisors if the facility is located in an unincorporated area of a county and the governing board of a municipality if the facility is located in an incorporated municipality.

“Local road or street”, defined, is primarily for access to residence, business or other abutting property.

“Person”, defined, is an individual, agency, corporation, partnership, or other entity.

“Private access”, defined, is access from an abutting parcel that is privately owned and is for the private or commercial use of the property owner.

“Reasonable access”, defined, is access that is generally considered a matter of physical necessity for use of the property, not a matter of convenience or competitiveness in the marketplace. If alternative access locations and routes are available, and do not significantly impair access to the property, the criteria for reasonable access is generally considered satisfied. Circuity of route and off site turning movements, in route to the site, are not factors, which should be used when determining reasonable access.

“Road”, defined, is a thoroughfare that is generally located in a rural area and may have surface conditions that range from dirt to pavement.

“Roadway”, defined, is that portion of a highway improved, designed and ordinarily used for vehicular travel, excluding the sidewalk, shoulder, and slopes.

“Service road”, defined, is any public street or road providing service and access from areas adjacent to a freeway or highway.

“Significant change” defined, means a change in the use of the property, including land, structures or facilities, or an expansion of the size of the structures or facilities causing a significant increase in the trip generation of the property.

“State highway”, defined, is any road, street, or highway which is on the State Highway System.

“State Highway System”, defined, are all streets, roads, and highways in the jurisdiction of the State of Arizona.

“Traffic control device”, defined, is any sign, traffic signed or pavement marking placed for the purpose of regulating, warning or directing traffic.

”Traffic signal”, defined, is an electrically operated device that controls or directs the flow of traffic.

**XX.004 Access permit required; authority to close unpermitted connections.**

(1) A connection may be constructed or substantially altered only after the permittee obtains an access permit in accordance with this act in advance of such action. The Department will permit access to the State Highway System, if the access permit is in compliance with this act and permit rule. The Department however, has the authority to restrict or deny access to the State highway system, in accordance with the provisions of this Act, at the location specified in the permit until the permittee constructs or alters the connection in accordance with the permit requirements.

(2) The cost of construction or alteration of a connection shall be borne by the permittee, except for alterations which are not required by law, but are made at the request of and for the convenience of the Department. However, the permittee shall bear the cost of alteration of any connection, which is required by the Department due to increased or altered traffic flows generated by changes in the facilities or nature of business conducted at the location specified in the permit, if the Department establishes the need for such alteration.

(3) Except as otherwise provided in this act, an unpermitted connection is subject to closure by the Department, which shall have the right to install barriers across or remove the connection. When the Department determines that a connection is unpermitted and subject to closure, it shall provide reasonable notice of its impending action to the owner of property served by the connection. The Department's procedures for providing notice and preventing the operation of unpermitted connections shall be adopted by rule.

(4) The Department may initiate injunctive proceedings as provided in A.R.S. (*determine*) to enforce the provisions of this section or any rule or order issued or entered pursuant thereto.

**XX.005 Permit application fee.**

The Department shall establish, by rule, a graduated schedule of fees for permit applications made to the Department. Such fees shall be nonrefundable and shall be used to offset the costs of administering the access permit review process and the costs associated with administering the provisions of this Act.

**XX.006 Access permit review process by the Department; permit denial; justification; administrative review.**

The review process for access permit applications made by the Department shall be as follows:

(1) Any person seeking an access permit shall file an application with the Department in the District in which the property for which the permit being requested is located. The Department, by rule, shall establish application form and content requirements. The fee as required by A.R.S. XX.005 must accompany the application.

(2) All permit applications shall be reviewed in conformity with A.R.S. XX.013 .

(3) A property owner shall be granted a permit for an access connection to the abutting State highway, unless the permitting of such access connection would jeopardize the safety of the public or have a negative impact upon the operational characteristics of the highway or is in direct conflict with an adopted access management plan. Such access connection and permitted turning movements shall be based upon standards and criteria adopted, by rule (A.R.S. XX.013), by the Department.

(a) In making the determination of whether to deny access to an abutting property owner, the Department may consider, but is not limited to considering:

1. The number or severity of traffic accidents occurring on the segment of the highway to which access is sought, and the impact thereon from providing such access;
2. The operational speed on the segment of the highway to which such access is sought and the level and amount of deceleration which such access would cause;
3. The geographic location of the segment of the highway to which such access is sought;
4. The operational characteristics of the segment of the highway to which such access is sought and the impact thereon from providing such access; or
5. The level of service of the segment of the highway to which such access is sought and the impact thereon from providing such access.
6. The access control classification assigned of the highway section access is sought to.
7. Provisions established in any adopted access management plan.

(b) If the Department denies an application for an access permit, it must send written notification of such denial to the applicant. Such notification must include the specific reasons for the denial and inform the applicant of his or her rights under paragraphs (c) and (d).

(c) An applicant whose permit has been denied may, within 7 days after the receipt of notification of such denial, request a meeting with Department personnel to determine whether any means exist by which the reasons for denial of a permit may be mitigated so that the permit may be issued. Upon the timely, as defined in the adopted rule, receipt of a written request for such meeting, the appropriate Department personnel shall meet with the applicant to attempt such mitigation. Such request or the failure to make such request, any statements made during such meeting, and the results of such meeting shall not be admissible in any subsequent judicial or administrative proceeding regarding the denial of an access permit.

(d) The denial of an access permit pursuant to this section shall be subject to administrative review under the provisions of the access management rule

Nothing in this subsection limits the Department's authority to restrict the operational characteristics of a particular means of access.

#### **XX.007 Permit conditions; expiration.**

(1) The Department may issue an access permit subject to any reasonable conditions necessary to carry out the provisions of this Act. The Department may revoke an access permit if the applicant fails to comply, within 1 year, with the conditions upon which the issuance of the permit was predicated.

(2) All access permits issued pursuant to this Act shall automatically expire and become invalid if the connection is not constructed within 1 year after the issuance of the permit, unless the Department extends the date of expiration, for good cause, upon its own initiative or upon the request of a permittee.

#### **XX.008 Unpermitted connections; existing access permits; nonconforming permits; modification and revocation of permits.**

(1) Unpermitted connections to the State Highway System in existence on *DATE (determine)*, which have been in continuous use for a period of 1 year or more shall not require the issuance of a permit and may continue to provide access to the State Highway System. However, the Department may require that a permit be obtained for such a connection if a significant change occurs in the use, design, or traffic flow of

the connection as defined by the Department's access management rule. If a permit is not obtained, the connection may be closed pursuant to A.R.S. XX.004(3).

(2) Access permits in effect on *DATE (determine)*, shall remain valid until modified or revoked. The Department may, after written notification and a hearing, as provided for in the access management rule, modify or revoke an access permit granted prior to *DATE (determine)*, by requiring relocation, alteration, or closure of the connection if a significant change occurs in the use, design, or traffic flow of the connection, as defined by the Department's access management rule.

(3) The Department may issue a nonconforming access permit after finding that to deny an access permit would leave the property without a reasonable means of access to the State highway system. The Department may specify limits on the maximum vehicular use of the connection and may be conditioned on the availability of future alternative means of access for which access permits can be obtained.

(4) After written notice and the opportunity for a hearing, as provided for in the access management rule, the Department may modify or revoke an access permit issued after *DATE (determine)*, by requiring relocation, alteration, or closure of an existing connection if a significant change occurs in the use, design, or traffic flow of the connection.

(5) A means of reasonable access to an abutting State highway may not be denied to a property owner, except on the basis of safety or operational concerns as provided in A.R.S. XX.006

**XX.009 Access management standards; access control classification system; criteria.**

(1) The Department shall develop, adopt, and maintain an access control classification system for all routes on the State Highway System, the purpose of which shall be to provide for the implementation and continuing application of the provisions of this Act.

(2) The access control classification system shall be used to define access management standards, the purpose of which shall be to provide specific standards and criteria to be adhered to in the planning for and approval of access to roads on the State Highway System.

(3) The control classification system shall be developed consistent with the following:

(a) The Department shall, no later than *DATE (determine)*, adopt rules setting forth procedures governing the implementation of the access control classification system required by this Act. The rule shall provide for input from the entities described in paragraph (b) as well as for public meetings to discuss

the access control classification system. Nothing in this Act affects the validity of the Department's existing or subsequently adopted rules concerning access to the State Highway System. Such rules shall remain in effect until repealed or replaced by the rules required by this act.

(b) The access control classification system and its assignment shall be developed in cooperation with all stakeholders, including:

- Counties,
- Municipalities
- State and federal agencies
- Regional planning councils
- Metropolitan planning organizations
- Indian tribes
- and other Governmental entities.

(c) The rule required by this section shall provide for notification by publication in a local newspaper of general circulation prior to a change in the assignment of a road segment to a specific access category. The assignment or reassignment of a road segment to a specific level of access control shall be made in consideration of the following criteria:

1. The current functional classification of each road on the State Highway System;
2. Existing and projected traffic volumes;
3. Existing and projected state, local, and metropolitan planning organization transportation plans and needs;
4. Drainage requirements;
5. The character of lands adjoining the highway;
6. Local land use plans and zoning, as set forth in comprehensive plans;
7. The type and volume of traffic requiring access;
8. Other operational aspects of access;
9. The availability of reasonable access to a State highway by way of county roads and city streets, as applicable to the classification of such roadway segment only; and

10. The cumulative effect of existing and projected connections on the State Highway System's ability to provide for the safe and efficient movement of people and goods within the state.

(d) An access control category shall be assigned to each segment of the State Highway System by *DATE (determine)*.

(4) The Department shall develop access management standards to include, but not be limited to, connection location standards, safety factors, design and construction standards, traffic control devices, and effective maintenance of the roads. The standards shall also contain criteria for the spacing of connections, intersecting streets, roads, and highways.

#### **XX.010 Access control and access management plan.**

(1) The Department shall establish a statewide access control plan for all segments of the State Highway System. The statewide access control plan shall incorporate the access classification assignment identified under A.R.S. XX.009 and the subsequent level of access control for each segment of the State Highway System.

(2) The Department shall develop consistent standards, by rule, for the preparation of the access control plan and the access management plans.

(3) The Department may adopt access management plans for segments of a State Highway. These access management plans are supplemental to the statewide access control plan and have to be jointly developed by the Department of Transportation and the jurisdiction(s) where the highway is located. Prior to adoption, the Department shall determine:

1. That the access management plan recommendations have been incorporated in the jurisdictions general plan and zoning ordinance.
2. That the access management plan complies with or exceeds the standards established in the access management act and access management rule.

#### **XX.011 Lot splits and subdivision circulation.**

(1) After the adoption of the access management act, no property abutting a state highway shall be subdivided in a manner which would create additional lots abutting that highway unless all the abutting lots so created are in accord with the standards established in the access management act and access management rule.

(2) After the adoption of the Access Management Act and Rule, no subdivision adjacent to a state highway shall be approved without a sufficiently designed internal circulation system.

**XX.012 Controlled access highways.**

(1) The Department shall construct every state highway, or portion thereof, located on a new alignment as a controlled access highway. When the Department constructs a controlled access highway, the Department shall have the authority to arrange with landowners, at the time of purchase of the rights-of-way for such highway or portion thereof, for the control of public or private access or complete exclusion of direct access of abutters to the state highway right-of-way. Such arrangements shall be made part of the purchase contract. In the event that no agreements can be reached between parties, the Department shall have the power to acquire said rights of access by condemnation.

(2) No right of access exists to a highway constructed on new alignment unless the construction of the highway results in the creation of a remnant parcel of property, which has no access to a public street or highway. Arrangements made with landowners for exclusion of direct access by the Department of this subsection, shall not be subject to compensation, unless it is determined that the construction of the highway has had the effect of eliminating all reasonable access to the system of streets and highways from the remainder parcel of land.

(3) Property needed for any controlled access highway is declared to be all those lands or interests therein required for the traveled way, together with those lands or interests therein necessary or desirable for service, maintenance and protection of present and future use of the highway. Included are those lands or interests therein necessary or desirable in connection with:

- Grade separations
- Connecting roadways at an intersection with another main highway
- Land between roadways
- Occasional parking areas
- Treatment of borders and landscape areas
- Recreational facilities
- Parallel service roads
- Railroad crossing elimination or reallocations
- Any other lands determined necessary

(4) With respect to controlled access highways, the Department shall permit access only from infrequently spaced intersections with public streets and highways in accordance with the access management act and rule. Intersections shall be especially

designed to minimize interference with through traffic and shall be located in a manner, which facilitates regional access to the highway.

(5) The Department may by order and after public hearing, designate any existing state highway, or portion thereof, a controlled access highway and thereafter shall have the authority to acquire, either by purchase or condemnation, such property rights, easements and access rights as may be necessary to make such existing highway or portion thereof a controlled access highway. The provisions 1 through 4 of this statute shall apply for the designation of an existing State highway as controlled access highway.

### **XX.013 Develop an access management rule.**

The Department of Transportation shall develop an administrative rule for the implementation of the access management act by DATE (*determine*). At a minimum, the access management rule shall develop or specify procedures for:

- Access management policies
- Access management classification system
- Access management classification assignment schedule
- Access management standards
- Standards for the preparation of access management plans
- Coordination process with stakeholders
- Access permit process
  - Issuance and modification of access permits
  - Application denial
  - Access permit denial and administrative review
  - Development of access permit application fee schedule and time schedule
  - Establishment of access permit application and context requirements
  - Identifying non-conforming access permits
- Establishment of uniform standards for the application of traffic impact analysis as a method to determine significant change in the use of a property
- Development of access control plan
- Development of standards for access management plans
- Establishment of controlled access highways
- Establishment of a uniform and cooperative access management planning process
- Specifications of the functions, authority, and work processes for the access management unit within the Department of Transportation, as defined by XX.015.

**014 Establishment of a uniform cooperative access management planning process.**

The Department shall develop a uniform and cooperative planning process for the implementation of access management in the state under consideration of the provisions in A.R.S. XX.009. The access management planning process shall also address the general public, interest groups and all other stakeholders.

**XX.015 Establishment of an access management unit.**

The Department of Transportation shall establish an access management unit within the Department. The access management unit, headed by an access management coordinator, will coordinate the implementation of access management on a statewide basis through corresponding positions at the district level. The access management unit will be responsible to define, develop, implement, co-ordinate all components of the access management rule as defined in A.R.S. XX.013.

**XX.016 Dedicated funding source.**

The Department of Transportation shall establish a dedicated funding source for the implementation of access management in Arizona.

## **APPENDIX A. SELECTED STATE STATUTES**

Note: The statutes listed in this appendix were quoted from the latest available Revised Statutes of the selected States.

## STATE OF COLORADO

### The Statutes of the State of Colorado regarding Access Control: Colorado's "Highway Access Law"

#### 43-2-147 - Access to public highways.

- (1) (a) The department of transportation and local governments are authorized to regulate vehicular access to or from any public highway under their respective jurisdiction from or to property adjoining a public highway in order to protect the public health, safety, and welfare, to maintain smooth traffic flow, to maintain highway right-of-way drainage, and to protect the functional level of public highways. In furtherance of these purposes, all state highways are hereby declared to be controlled-access highways, as defined in section 42-1-102 (18), C.R.S.
  - (b) Vehicular access to or from property adjoining a state highway shall be provided to the general street system, unless such access has been acquired by a public authority. Police, fire, ambulance, and other emergency stations shall have a right of direct access to state highways. After June 21, 1979, no person may submit an application for subdivision approval to a local authority unless the subdivision plan or plat provides that all lots and parcels created by the subdivision will have access to the state highway system in conformance with the state highway access code.
  - (c) The provisions of this section shall not be deemed to deny reasonable access to the general street system.
- (2) After consultation with units of local government, the commission, on or before November 15, 1979, shall submit a state highway access code to the legislative council. The legislative council may appoint a committee to review the code and it shall transmit the code and any findings thereon to the senate committee on transportation and the house of representatives committee on transportation and energy at the beginning of the 1980 session of the general assembly.
  - (3) In reviewing the state highway access code, the legislative committees of reference may approve, approve with modifications, or reject the code. Failure of either or both committees to act on or before March 15, 1980, shall be deemed approval thereof. Should, however, either or both committees specifically reject the code, the committee shall make necessary changes in the access code and resubmit it to the committee of reference at the next regular session of the general assembly.
  - (4) The commission shall adopt a state highway access code, by rule and regulation, for the implementation of this section, on or after March 16, 1980. The access code shall address the design and location of driveways and other points of access to

public highways. The access code shall be consistent with the authority granted in this section and shall be based upon consideration of existing and projected traffic volumes, the functional classification of public highways, adopted local transportation plans and needs, drainage requirements, the character of lands adjoining the highway, adopted local land use plans and zoning, the type and volume of traffic to use the driveway, other operational aspects of the driveway, the availability of vehicular access from local streets and roads rather than a state highway, and reasonable access by city streets and county roads.

- (5) (a) After the effective date of the access code, no person shall construct any driveway providing vehicular access to or from any state highway from or to property adjoining a state highway without an access permit issued by the appropriate local authority with the written approval of the department of transportation. If the local authority fails to act within forty-five days after an access permit has been requested, such permit shall be deemed issued subject to written approval of the department of transportation. If the department of transportation does not act upon an access permit within twenty days after notice by the local authority, or within twenty days after local authorities should have acted, whichever is the lesser, such permit shall be deemed approved. Upon written request by a local authority, the department of transportation shall administer or assist in the administration of access permits in that jurisdiction. If the department of transportation undertakes to administer access permits in a jurisdiction, it shall act upon requested access permits within forty-five days of request. If the department of transportation fails to act within forty-five days upon a requested access permit, such permit shall be deemed approved. Access permits shall be issued only in compliance with the access code and may include terms and conditions authorized by the access code.
- (b) The issuing authority shall establish a reasonable schedule of fees for access permits issued pursuant to the access code and this section, which fees shall not exceed the costs of administration of access permits.
- (c) When a permitted driveway is constructed or utilized in violation of the access code, permit terms and conditions, or this section, either the issuing authority or the department of transportation or both may obtain a court order enjoining violation of the access code, permit terms and conditions, or this section. Such access permits may be revoked by the issuing authority if, at any time, the permitted driveway and its use fail to meet the requirements of this section, the access code, or the terms and conditions of the permit. The department of transportation may install barriers across or remove any driveway providing direct access to a state highway which is constructed without an access permit.
- (6) (a) The provisions of this section shall not apply to driveways in existence on June 30, 1979, unless specifically stated otherwise. Driveways constructed between July 1, 1979, and the effective date of the access code shall comply with the

driveway code adopted by the department of transportation pursuant to statutory authority prior to July 1, 1979.

- (b) Any driveway, whether constructed before, on, or after June 30, 1979, may be required by the department of transportation with written concurrence of the appropriate local authority to be reconstructed or relocated to conform to the access code, either at the property owner's expense if the reconstruction or relocation is necessitated by a change in the use of the property which results in a change in the type of driveway operation or at the expense of the department of transportation if the reconstruction or relocation is necessitated by changes in road or traffic conditions. The necessity for the relocation or reconstruction shall be determined by reference to the standards set forth in the access code.
  - (c) Any party who has received an adverse decision by the department of transportation may request and shall receive a hearing before the transportation commission or before an administrative law judge from the department of personnel, at the discretion of the transportation commission. Such hearing shall be conducted in accordance with the provisions of article 4 of title 24, C.R.S. Decisions by the transportation commission or by an administrative law judge shall be considered final agency action.
  - (d) Reconstruction or relocation of a driveway shall be administered in the same manner as the revocation of a license under the "State Administrative Procedure Act".
- (7) The boards of county commissioners may, by resolution, and other local authorities may, in the manner prescribed in article 16 of title 31, C.R.S., adopt by reference the state highway access code, in whole or in part, or may adopt separate provisions, for application to local roads and streets that are not a part of the state highway system.
- (7.5) The issuing authority shall grant a variance from the state highway access code if such variance would not be inconsistent with paragraph (a) of subsection (1) of this section and if such variance is reasonably necessary for the convenience, safety, and welfare of the public. If failure to grant a variance would deny reasonable access to the general street system, such denial may be subject to the provisions of section 43-1-208 and section 15 of article II of the state constitution.
- (8) As used in this section, unless the context otherwise requires:
- (a) "Access control plan" means a roadway design plan which designates preferred access locations and their designs for the purpose of bringing those portions of roadway included in the access control plan into conformance with their functional classification to the extent feasible.

- (b) "Appropriate local authority" means the board of county commissioners if the driveway is to be located in the unincorporated area of a county and the governing body of the municipality if the driveway is to be located within an incorporated municipality.
- (c) "Functional classification" means a classification system that defines a public roadway according to its purposes in the local or statewide highway plans. The commission shall determine the functional classification of all state highways. The functional classification of county roads and city streets shall be determined by the appropriate local authority.
- (d) "General street system" means the interconnecting network of city streets, county roads, and state highways in an area.
- (e) "Issuing authority" means the entity which issues access permits and includes the board of county commissioners, the governing body of a municipality, and the department of transportation.
- (f) "Local road" means a county road, as provided in sections 43-2-108 and 43-2-109, and "local street" means a municipal street, as provided in sections 43-2-123 and 43-2-124.

42-1-102 - Definitions.

As used in articles 1 to 4 of this title, unless the context otherwise requires:

- (18) "Controlled-access highway" means every highway, street, or roadway in respect to which owners or occupants of abutting lands and other persons have no legal right of access to or from the same except at such points only and in such manner as may be determined by the public authority having jurisdiction over such highway, street, or roadway.

## FLORIDA

### Statutes of State of Florida regarding Access Control: “State Highway System Access Management Law”

#### 335.181 Regulation of access to State Highway System; legislative findings, policy, and purpose.

- (1) It is the finding of the Legislature that:
  - (a) Regulation of access to the State Highway System is necessary in order to protect the public health, safety, and welfare, to preserve the functional integrity of the State Highway System, and to promote the safe and efficient movement of people and goods within the state.
  - (b) The development of an access management program, in accordance with this act, will assist in the coordination of land use planning decisions by local governments with investments in the State Highway System and will serve to enhance managed growth and the overall development of commerce within the state as served by the State Highway System. Without such a program, the health, safety, and welfare of the residents of this state may be placed at risk, due to the fact that unregulated access to the State Highway System is one of the contributing factors to the congestion and functional deterioration of the system.
  - (c) The Legislature further finds and declares that the development of an access management program in accordance with this act will enhance the development of an effective transportation system and increase the traffic-carrying capacity of the State Highway System and thereby reduce the incidences of traffic accidents, personal injury, and property damage or loss; mitigate environmental degradation; promote sound economic growth and the growth management goals of the state; reduce highway maintenance costs and the necessity for costly traffic operations measures; lengthen the effective life of transportation facilities in the state; prevent delays in public evacuations for natural storms and emergencies; enhance disaster-response readiness; and shorten response time for emergency vehicles.
- (2) It is the policy of the Legislature that:
  - (a) Every owner of property which abuts a road on the State Highway System has a right to reasonable access to the abutting state highway but does not have the right of unregulated access to such highway. The operational capabilities of an access connection may be restricted by the department. However, a means of reasonable access to an abutting state highway may not be denied by the department, except on the basis of safety or operational concerns as provided in s. 335.184.

- (b) The access rights of an owner of property abutting the State Highway System are subject to reasonable regulation to ensure the public's right and interest in a safe and efficient highway system. This paragraph does not authorize the department to deny a means of reasonable access to an abutting state highway, except on the basis of safety or operational concerns as provided in s. 335.184. Property owners are encouraged to implement the use of joint access where legally available.
- (3) The Legislature further declares that it is the purpose of this act to provide a coordinated planning process for the permitting of access points on the State Highway System to effectuate the findings and policy of this act.
- (4) Nothing in this act shall affect the right to full compensation under s. 6, Art. X of the State Constitution.
- (5) Nothing in this act limits the power of eminent domain vested in the department pursuant to s. 337.27.
- (6) This act does not create any additional property rights. The denial of reasonable direct access to an abutting state highway pursuant to s. 335.184 is not compensable under the provisions of this act unless the denial would be otherwise compensable absent the provisions of this act. The denial in and of itself of an access permit by the Department of Transportation shall not be the only substantive allegation in support of a petition to state a cause of action pursuant to s. 6, Art. X of the State Constitution.
- (7) Nothing in this act prohibits the construction of service roads along a highway on the State Highway System so long as such service roads provide reasonable access to such highway. A property owner whose land abuts a service road is entitled to reasonable access to such service road pursuant to s. 335.184. However, nothing in this act requires that a property owner whose land abuts a service road be given direct access across the service road to the state highway served thereby.

History.--s. 4, ch. 88-224; s. 36, ch. 91-221; s. 99, ch. 92-152.

335.182 Regulation of connections to roads on State Highway System; definitions.--

- (1) Vehicular access and connections to or from the State Highway System shall be regulated by the department in accordance with the provisions of this act in order to protect the public health, safety, and welfare.
- (2) The department shall, no later than July 1, 1989, adopt, by rule, administrative procedures for its issuance and modification of access permits, closing of unpermitted connections, and revocation of permits in accordance with this act.

(3) As used in this act, the term:

- (a) "Connection" means driveways, streets, turnouts, or other means of providing for the right of reasonable access to or from the State Highway System.
- (b) "Significant change" means a change in the use of the property, including land, structures or facilities, or an expansion of the size of the structures or facilities causing an increase in the trip generation of the property exceeding 25 percent more trip generation (either peak hour or daily) and exceeding 100 vehicles per day more than the existing use.

History.--s. 5, ch. 88-224; s. 100, ch. 92-152.

335.1825 Access permit required; authority to close unpermitted connections.--

- (1) A connection may not be constructed or substantially altered without obtaining an access permit in accordance with this act in advance of such action. The department has the authority to restrict or deny access to the State Highway System, in accordance with the provisions of this act, at the location specified in the permit until the permittee constructs or alters the connection in accordance with the permit requirements.
- (2) The cost of construction or alteration of a connection shall be borne by the permittee, except for alterations which are not required by law, but are made at the request of and for the convenience of the department. The permittee, however, shall bear the cost of alteration of any connection which is required by the department due to increased or altered traffic flows generated by changes in the facilities or nature of business conducted at the location specified in the permit, if the department establishes the need for such alteration.
- (3) Except as otherwise provided in this act, an unpermitted connection is subject to closure by the department which shall have the right to install barriers across or remove the connection. When the department determines that a connection is unpermitted and subject to closure, it shall provide reasonable notice of its impending action to the owner of property served by the connection. The department's procedures for providing notice and preventing the operation of unpermitted connections shall be adopted by rule.
- (4) The department may initiate injunctive proceedings as provided in s. 120.69 to enforce the provisions of this section or any rule or order issued or entered pursuant thereto.

History.--s. 6, ch. 88-224; s. 3, ch. 89-232; s. 101, ch. 92-152.

335.183 Permit application fee.

The department shall establish, by rule, a graduated schedule of fees for permit applications made to the department. Such fees shall be nonrefundable and shall be used to offset the costs of administering the access permit review process and the costs associated with administering the provisions of this act. In no event shall a fee be more than \$5,000.

History.--s. 7, ch. 88-224; s. 102, ch. 92-152.

335.184 Access permit review process by the department; permit denial; justification; administrative review.

The review process for access permit applications made by the department shall be as follows:

- (1) Any person seeking an access permit shall file an application with the department in the district in which the property for which the permit being requested is located. The department, by rule, shall establish application form and content requirements. The fee as required by s. 335.183 must accompany the application.
- (2) All permit applications shall be reviewed in conformity with s. 120.60.
- (3) A property owner shall be granted a permit for an access connection to the abutting state highway, unless the permitting of such access connection would jeopardize the safety of the public or have a negative impact upon the operational characteristics of the highway. Such access connection and permitted turning movements shall be based upon standards and criteria adopted, by rule, by the department.
  - (a) In making the determination of whether to deny access to an abutting property owner, the department may consider, but is not limited to considering:
    1. The number or severity of traffic accidents occurring on the segment of the highway to which access is sought, and the impact thereon from providing such access;
    2. The operational speed on the segment of the highway to which such access is sought and the level and amount of deceleration which such access would cause;
    3. The geographic location of the segment of the highway to which such access is sought;
    4. The operational characteristics of the segment of the highway to which such access is sought and the impact thereon from providing such access; or
    5. The level of service of the segment of the highway to which such access is sought and the impact thereon from providing such access.

- (b) If the department denies an application for an access permit, it must send written notification of such denial to the applicant. Such notification must include the specific reasons for the denial and inform the applicant of his or her rights under paragraphs (c) and (d).
- (c) An applicant whose permit has been denied may, within 7 days after the receipt of notification of such denial, request a meeting with department personnel to determine whether any means exist by which the reasons for denial of a permit may be mitigated so that the permit may be issued. Upon the timely receipt of a written request for such meeting, the appropriate department personnel shall meet with the applicant to attempt such mitigation. Such request or the failure to make such request, any statements made during such meeting, and the results of such meeting shall not be admissible in any subsequent judicial or administrative proceeding regarding the denial of an access permit.
- (d) The denial of an access permit pursuant to this section shall be subject to administrative review under the provisions of chapter 120.

Nothing in this subsection limits the department's authority to restrict the operational characteristics of a particular means of access.

History.--s. 8, ch. 88-224; s. 103, ch. 92-152; s. 492, ch. 95-148.

335.185 Permit conditions; expiration.--

- (1) The department may issue a permit subject to any reasonable conditions necessary to carry out the provisions of this act. The department may revoke a permit if the applicant fails to comply with the conditions upon which the issuance of the permit was predicated.
- (2) All permits issued pursuant to this act shall automatically expire and become invalid if the connection is not constructed within 1 year after the issuance of the permit, unless the department extends the date of expiration, for good cause, upon its own initiative or upon the request of a permittee.

History.--s. 9, ch. 88-224; s. 104, ch. 92-152.

335.187 Unpermitted connections; existing access permits; nonconforming permits; modification and revocation of permits.--

- (1) Unpermitted connections to the State Highway System in existence on July 1, 1988, which have been in continuous use for a period of 1 year or more shall not require the issuance of a permit and may continue to provide access to the State Highway

System. However, the department may require that a permit be obtained for such a connection if a significant change occurs in the use, design, or traffic flow of the connection. If a permit is not obtained, the connection may be closed pursuant to s. 335.1825(3).

- (2) Access permits in effect on July 1, 1988, shall remain valid until modified or revoked. The department may, after written notification and a hearing, as provided for in s. 120.60, modify or revoke an access permit granted prior to July 1, 1988, by requiring relocation, alteration, or closure of the connection if a significant change occurs in the use, design, or traffic flow of the connection.
- (3) The department may issue a nonconforming access permit after finding that to deny an access permit would leave the property without a reasonable means of access to the State Highway System. The department may specify limits on the maximum vehicular use of the connection and may be conditioned on the availability of future alternative means of access for which access permits can be obtained.
- (4) After written notice and the opportunity for a hearing, as provided for in s. 120.60, the department may modify or revoke an access permit issued after July 1, 1988, by requiring relocation, alteration, or closure of an existing connection if a significant change occurs in the use, design, or traffic flow of the connection.
- (5) A means of reasonable access to an abutting state highway may not be denied to a property owner, except on the basis of safety or operational concerns as provided in s. 335.184.

History.--s. 10, ch. 88-224; s. 105, ch. 92-152.

335.188 Access management standards; access control classification system; criteria.--

- (1) The department shall develop, adopt, and maintain an access control classification system for all routes on the State Highway System, the purpose of which shall be to provide for the implementation and continuing application of the provisions of this act.
- (2) The principal component of the access control classification system shall be access management standards, the purpose of which shall be to provide specific standards and criteria to be adhered to in the planning for and approval of access to roads on the State Highway System.
- (3) The control classification system shall be developed consistent with the following:
  - (a) The department shall, no later than July 1, 1990, adopt rules setting forth procedures governing the implementation of the access control classification system required by this act. The rule shall provide for input from the entities

described in paragraph (b) as well as for public meetings to discuss the access control classification system. Nothing in this act affects the validity of the department's existing or subsequently adopted rules concerning access to the State Highway System. Such rules shall remain in effect until repealed or replaced by the rules required by this act.

- (b) The access control classification system shall be developed in cooperation with counties, municipalities, the state land planning agency, regional planning councils, metropolitan planning organizations, and other local governmental entities.
- (c) The rule required by this section shall provide for notification by publication in a local newspaper of general circulation prior to a change in the assignment of a road segment to a specific access category. The assignment or reassignment of a road segment to a specific access category shall be made in consideration of the following criteria:
  - 1. The current functional classification of each road on the State Highway System;
  - 2. Existing and projected traffic volumes;
  - 3. Existing and projected state, local, and metropolitan planning organization transportation plans and needs;
  - 4. Drainage requirements;
  - 5. The character of lands adjoining the highway;
  - 6. Local land use plans and zoning, as set forth in comprehensive plans;
  - 7. The type and volume of traffic requiring access;
  - 8. Other operational aspects of access;
  - 9. The availability of reasonable access to a state highway by way of county roads and city streets, as applicable to the classification of such roadway segment only; and
  - 10. The cumulative effect of existing and projected connections on the State Highway System's ability to provide for the safe and efficient movement of people and goods within the state.
- (d) Access management standards shall include, but not be limited to, connection location standards, safety factors, design and construction standards, traffic control devices, and effective maintenance of the roads. The standards shall also contain criteria for the spacing of connections, intersecting streets, roads, and highways.
- (e) An access control category shall be assigned to each segment of the State Highway System by July 1, 1993.

History.--s. 11, ch. 88-224; s. 4, ch. 89-232; s. 106, ch. 92-152.

## NEVADA

### **The statutes of the State of Nevada regarding access control**

#### *NRS 408.100 Declaration of legislative intent.*

Recognizing that safe and efficient highway transportation is a matter of important interest to all the people of the state, and that an adequate highway system is a vital part of the national defense, the legislature hereby determines and declares that:

1. An integrated system of state highways and roads is essential to the general welfare of the state.
2. Providing such a system of facilities, its efficient management, maintenance and control is recognized as a problem and as the proper prospective of highway legislation.
3. Inadequate highways and roads obstruct the free flow of traffic, resulting in undue cost of motor vehicle operation, endangering the health and safety of the citizens of the state, depreciating property values, and impeding general economic and social progress of the state.
4. In designating the highways and roads of the state as provided in this chapter, the legislature places a high degree of trust in the hands of those officials whose duty it is, within the limits of available funds, to plan, develop, operate, maintain, control and protect the highways and roads of this state, for present as well as for future use.
5. To this end, it is the express intent of the legislature to make the board of directors of the department of transportation custodian of the state highways and roads and to provide sufficiently broad authority to enable the board to function adequately and efficiently in all areas of appropriate jurisdiction, subject to the limitations of the constitution and the legislative mandate proposed in this chapter.
6. The legislature intends:
  - (a) To declare, in general terms, the powers and duties of the board of directors, leaving specific details to be determined by reasonable regulations and declarations of policy, which the board may promulgate.
  - (b) By general grant of authority to the board of directors to delegate sufficient power and authority to enable the board to carry out the broad objectives contained in this chapter.
7. The problem of establishing and maintaining adequate highways and roads, eliminating congestion, reducing accident frequency and taking all necessary steps to ensure safe and convenient transportation on these public ways is no less urgent.

8. The legislature hereby finds, determines and declares that this chapter is necessary for the preservation of the public safety, the promotion of the general welfare, the improvement and development of facilities for transportation in the state, and other related purposes necessarily included therein, and as a contribution to the system of national defense.
9. The words "construction," "maintenance" and "administration" used in section 5 of Article 9 of the constitution of the State of Nevada are broad enough to be construed to include and as contemplating the construction, maintenance and administration of the state highways and roads as established by this chapter and the landscaping, roadside improvements and planning surveys of the state highways and roads.

(Added to NRS by 1957, 664; A 1965, 998; 1977, 156; 1979, 1762; 1987, 1798; 1989, 1298)

*NRS 408.210 Powers of director: Closing and construction of highways; removal of encroachments.*

1. The director may restrict the use of, or close, any highway whenever he considers the closing or restriction of use necessary:
  - (a) For the protection of the public.
  - (b) For the protection of such highway from damage during storms or during construction, reconstruction, improvement or maintenance operations thereon.
  - (c) To promote economic development or tourism in the best interest of the state or upon the written request of the executive director of the commission on economic development or the commission on tourism.
2. The director may:
  - (a) Divide or separate any highway into separate roadways, wherever there is particular danger to the traveling public of collisions between vehicles proceeding in opposite directions or from vehicular turning movements or cross-traffic, by constructing curbs, central dividing sections or other physical dividing lines, or by signs, marks or other devices in or on the highway appropriate to designate the dividing line.
  - (b) Lay out and construct frontage roads on and along any highway or freeway and divide and separate any such frontage road from the main highway or freeway by means of curbs, physical barriers or by other appropriate devices.
3. The director may remove from the highways any unlicensed encroachment which is not removed, or the removal of which is not commenced and thereafter diligently prosecuted, within 5 days after personal service of notice and demand upon the owner of the encroachment or his agent. In lieu of personal service upon that person or his agent, service of the notice may also be made by registered or certified mail and by

posting, for a period of 5 days, a copy of the notice on the encroachment described in the notice. Removal by the department of the encroachment on the failure of the owner to comply with the notice and demand gives the department a right of action to recover the expense of the removal, cost and expenses of suit, and in addition thereto the sum of \$100 for each day the encroachment remains beyond 5 days after the service of the notice and demand.

4. If the director determines that the interests of the department are not compromised by a proposed or existing encroachment, he may issue a license to the owner or his agent permitting an encroachment on the highway. Such a license is revocable and must provide for relocation or removal of the encroachment in the following manner. Upon notice from the director to the owner of the encroachment or his agent, the owner or agent may propose a time within which he will relocate or remove the encroachment as required. If the director and the owner or his agent agree upon such a time, the director shall not himself remove the encroachment unless the owner or his agent has failed to do so within the time agreed. If the director and the owner or his agent do not agree upon such a time, the director may remove the encroachment at any time later than 30 days after the service of the original notice upon the owner or his agent. Service of notice may be made in the manner provided by subsection 3. Removal of the encroachment by the director gives the department the right of action provided by subsection 3, but the penalty must be computed from the expiration of the agreed period or 30 day period, as the case may be.

(Added to NRS by 1957, 669; A 1967, 824; 1969, 95; 1979, 1766; 1985, 619)

*NRS 408.423 Permit required to excavate state highway; exception; fee.*

1. No state highway or right of way may be disturbed, dug up, crossed, encroached upon or otherwise used for the laying or re-laying of pipelines, ditches, flumes, sewers, poles, wires, approach roads, driveways, railways or for any other purpose, without the written permit of the director, and then only in accordance with the conditions and regulations prescribed by the director. All such work must be done under the supervision and to the satisfaction of the director. All costs of replacing the highway in as good condition as previous to its being disturbed must be paid by the persons to whom or on whose behalf such permit was given or by the person by whom the work was done.
2. In case of immediate necessity therefor, a city or town may dig up a state highway without a permit from the director, but in such cases the director must be first notified and the highway must be replaced forthwith in as good condition as before at the expense of such city or town.
3. The department shall charge each applicant a reasonable fee for all administrative costs incurred by the department in acting upon an application for a permit, including costs for the preparation and inspection of a proposed encroachment.

(Added to NRS by 1957, 689; A 1979, 1777; 1981, 707)

## STATE OF NEW JERSEY

### **The Statutes of the State of New Jersey regarding Access Management: the “State Highway Access Management Act”**

#### 27:7-89. Short title

Sections 1 through 10, inclusive, and sections 27, 28, 30, 31 and 32 of this act shall be known and may be cited as the "State Highway Access Management Act."

L. 1989, c. 32, s. 1.

#### 27:7-90. Findings, declarations

The Legislature finds and declares that:

- a. The purpose of the State highway system is to serve as a network of principal arterial routes for the safe and efficient movement of people and goods in the major travel corridors of the State.
- b. The existing State highways which comprise the State highway system were constructed at great public expense and constitute irreplaceable public assets.
- c. The State has a public trust responsibility to manage and maintain effectively each highway within the State highway system to preserve its functional integrity and public purpose for the present and future generations.
- d. Land development activities and unrestricted access to State highways can impair the purpose of the State highway system and damage the public investment in that system.
- e. Every owner of property which abuts a public road has 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 public health, safety and welfare.
- f. Governmental entities through regulation may not eliminate all access to the general system of streets and highways without providing just compensation.
- g. The access rights of an owner of property abutting a State highway must be held subordinate to the public's right and interest in a safe and efficient highway.
- h. It is desirable for the Department of Transportation to establish through regulation a system of access management which will protect the functional integrity of the State highway system and the public investment in that system.

i. Areas characterized by extensive commercial activity oriented toward and dependent upon a State highway should not be classified by reason of that level of activity as urban environments for access management purposes, and where an area is also characterized by excessive driveway openings, excessive traffic congestion, excessive accident rates, or undesirably low average rates of speed the Department of Transportation should manage the State highway within the area to mitigate these nuisances.

j. The Department of Transportation should, in implementing an access management program, avoid undue burdens on property owners and should, where feasible, incorporate mitigation measures into comprehensive highway improvement programs.

k. Improved access management is beneficial for streets and highways of every functional classification, and a statutory plan providing for improved management should enable counties and municipalities to take full advantage of its provisions.

L. 1989, c. 32, s. 2.

27:7-91. Access code

a. The Commissioner of Transportation shall, within one year of the effective date of this amendatory and supplementary act, adopt as a regulation under the "Administrative Procedure Act," P.L. 1968, c. 410 (C. 52:14B-1 et seq.), a State highway access management code (hereinafter, "access code") providing for the regulation of access to State highways. The commissioner shall hold at least five public hearings in various locations throughout the State to receive public comment on the proposed access code, and shall give notice of these hearings at least 15 days in advance thereof in newspapers having general circulation in the localities in which the hearings are to be held. At one of these hearings the members of the Senate Transportation and Communications Committee, or its successor, and at another hearing the members of the Assembly Transportation and Communications Committee, or its successor, shall be invited to sit with the commissioner and participate in the public hearing. In each case the commissioner shall preside at the hearing and it shall be the commissioner's duty to give reasonable notice to the members of the appropriate committee of the time and place of the holding of the hearing. Prior to the holding of the public hearings the commissioner shall submit the draft access code to the advisory committee established pursuant to subsection i. of this section for its comments and recommendations. The advisory committee shall also be afforded the opportunity to provide additional comments and recommendations following the completion of these hearings and before the access code is proposed for adoption under the provisions of the "Administrative Procedure Act."

The Senate Transportation and Communications Committee, or its successor, and the Assembly Transportation and Communications Committee, or its successor, shall also be notified by the commissioner of the provisions of the access code at the time it is proposed for adoption under the provisions of the "Administrative Procedure Act." In addition,

following the adoption of the access code, the commissioner shall notify the Senate Transportation and Communications Committee, or its successor, and the Assembly Transportation and Communications Committee, or its successor, of any proposed revisions to the access code at the time these revisions are proposed for adoption under the provisions of the "Administrative Procedure Act."

b. The access code shall establish a general classification system for the State highway system. The classification system shall be based upon the following criteria:(1) the function that segments of State highway serve and are planned to serve within the State highway system and within the general system of streets and highways, (2) the environment within which highways are located, including but not limited to urban and rural environments, (3) the appropriate and desirable balance between facilitating safe and convenient movement of through traffic and providing direct access to abutting property, and (4) the desirable rate of speed and the degree to which through traffic should be protected from major variations in speed. Each State highway segment shall have its classification identified in the access code.

c. For each highway classification identified, the access code shall establish standards for:

(1) The geometric design of driveways and of intersections and interchanges with other streets and highways, (2) the desirability of constructing driveways and interchanges with grade separations, and (3) minimum and desirable spacing of driveways and intersections and interchanges.

The access code also shall set forth alternative design standards for each highway classification which, combined with limits on vehicular use, can be applied to lots which were in existence prior to the adoption of the access code and which cannot meet the standards of the access code.

d. The access code shall set forth administrative procedures for the issuance of access permits. The code shall include a provision providing for a period of time for the renewal, issuance, modification or denial of these permits, not to exceed 200 days from the date of receipt of the completed application for a major access permit and not to exceed 45 days from the date of receipt of the completed application for a minor access permit.

e. The access code shall contain standards suitable for adoption by counties and municipalities for the management of access to streets and highways under their jurisdiction.

f. The commissioner may adopt, as supplements to the access code, site-specific access plans for individual segments of a State highway. Any access plan adopted in accordance with this subsection shall be developed jointly by the Department of Transportation and the municipality in which the highway segment is located and, where a county road intersects the State highway, by the county in which the State highway segment is located. Prior to incorporating a site-specific access plan into the access code, the commissioner shall determine:(1) that the access plan conditions have been incorporated into the master plan

and development ordinances of the municipality, (2) that the access plan complies with or exceeds the standards established in the access code, and (3) that an appropriate means of access has been identified for every lot currently having frontage on the highway segment.

g. The access code shall include provision under which any person may submit to the commissioner, in writing, a request for a change in the classification of a specified segment of State highway. This provision shall also require the commissioner to notify affected counties and municipalities of such a request, require the commissioner to respond in writing to the request within a specified time, specify what data, evidence, information, comments, or arguments the commissioner is to consider in evaluating the request, and affirm that any request made by any person is in addition to, and not in lieu of, any other administrative or other remedy that person may have under the "Administrative Procedure Act" or any other law.

h. The access code may require financial contributions toward the cost of constructing public improvements of streets and highways but no permit applicant shall be required to contribute an amount that exceeds his fair share of the costs of off-site improvements that have a rational nexus with the proposed development on the property for which the permit is requested. The "fair share" shall be based upon the added traffic growth attributable to the development.

i. There is established in the Department of Transportation an Access Code Advisory Committee which shall consist of 11 members, three of whom shall be appointed by the Governor upon recommendation of the President of the Senate, no more than two of whom shall be of the same political party; three of whom shall be appointed by the Governor upon recommendation of the Speaker of the General Assembly, no more than two of whom shall be of the same political party; and five of whom shall be appointed by the Governor from among the following: one shall be a traffic engineer, one shall be a developer engaged substantially in residential construction, one shall be a developer engaged substantially in commercial, industrial or office building construction, one shall represent the State Chamber of Commerce, and one shall represent the New Jersey Business and Industry Association. Of the 11 members no more than two shall be developers or represent the interests of developers. The chairman of the committee shall be appointed by the Governor from among the members of the committee. It shall be the duty of the committee to make comments and recommendations on the access code as provided in subsection a. of this section, which shall include analysis of methods and procedures to assure the timely and equitable consideration and processing by the department of access permit requests, and to otherwise consult with and advise the commissioner on the code. The members of the committee shall not receive compensation for their services as members of the committee. Each member shall be reimbursed by the department for his actual expenses necessarily incurred in attending meetings of the committee. The committee shall be dissolved on the 30th day following the adoption of the access code.

L. 1989, c. 32, s. 3.

27:7-92. Access permit

a. Any person seeking to construct or open a driveway or public street or highway entering into a State highway shall first obtain an access permit from the commissioner.

b. Every access permit, including street opening permits, in effect on the effective date of this amendatory and supplementary act shall remain valid and effective until revoked or replaced.

c. Every State highway intersection with a driveway or public street or highway in existence prior to January 1, 1970 shall be assumed to have been constructed in accordance with an access permit, even if no permit was issued.

d. Access permits issued under this amendatory and supplementary act may contain whatever terms and conditions the commissioner finds necessary and convenient for effectuating the purposes of this amendatory and supplementary act, including but not limited to, the condition that a permit shall expire when the use of the property served by the access permit changes resulting in a significant increase in traffic or is expanded. Any increase in traffic that adds the greater of 100 movements during the peak hour, or 10 percent of the previously anticipated daily movements shall be considered significant. For projects for which a completed application has been made to the department for an access permit and which have received preliminary site plan approval or subdivision approval from the municipal approval authority pursuant to "The Municipal Land Use Law," P. L. 1975, c. 291 (C. 40:55D-1 et seq.), as of the date of the adoption of the access code, permit applications for that project shall be reviewed and approved according to the permit requirements in effect immediately prior to that date.

e. Any person constructing, maintaining or opening a driveway or public street or highway entering into a State highway, except as authorized by law, is subject to a civil penalty of \$100. Each day in which an unauthorized driveway or public street or highway entering into a State highway is open, following written notice from the commissioner that the driveway or public street or highway is not authorized by law, is a separate violation. The commissioner may, in addition to or in conjunction with initiating a civil action for collection of this penalty, initiate an action in the Chancery Division of the Superior Court for injunctive relief.

L. 1989, c. 32, s. 4.

27:7-93. Nonconforming lot access permit

The commissioner shall issue a nonconforming lot access permit for a property a. on his own motion or b. after finding that:(1) the property otherwise would not be eligible for an access permit under the access code because of insufficient frontage or other reason; (2) the lot on which the property is located was in existence prior to adoption of the access code; and (3) denial of an access permit would leave the property without reasonable

access to the general system of streets and highways. Every nonconforming lot access permit shall specify limits on the maximum permissible vehicular use of any driveway constructed or operated under that permit.

L. 1989, c. 32, s. 5.

27:7-94. Revocation of permit; alternative access

a. The commissioner may, upon written notice and hearing, revoke an access permit after determining that alternative access is available which meets the standards provided in subsection c. of this section for the property served by the access permit and that the revocation would be consistent with the purposes of this amendatory and supplementary act.

b. The commissioner shall provide to the affected property owner and lessee or lessees, at least 90 days prior to the hearing, a plan depicting how such alternative access shall be obtained after revocation of the current permit, and the improvements which will be provided by the department to secure the alternative means of access. A copy of the plan shall also be filed with the municipal clerk and the planning board secretary of the municipality.

c. For the purposes of this section, alternative access shall be assumed to exist if the property owner enjoys reasonable access to the general system of streets and highways in the State and in addition, in the case of the following classes of property, the applicable following condition is met:

(1) For property zoned or used for commercial purposes, access onto any parallel or perpendicular street, highway, easement, service road or common driveway, which is of sufficient design to support commercial traffic to the business or use, and is so situated that motorists will have a convenient, direct, and well-marked means of both reaching the business or use and returning to the highway. For the purposes of this subsection, "property used for commercial purposes" shall include, but not be limited to, property used for wholesale facilities, retail facilities, service establishments or office or research buildings, and property used for residential purposes consisting of developments in excess of four residential units per acre with a total acreage of 25 or more acres.

(2) For property zoned or used for industrial purposes, access onto any improved public street, highway or access road or an easement across an industrial access road, provided that the street, highway or access road is of sufficient design to support necessary truck and employee access as required by the industry.

(3) For property zoned or used for residential or agricultural purposes, except as provided in paragraph (1) of this subsection, access onto any improved public street or highway.

If a property is used for a purpose other than that for which it is zoned, the property shall be classified in accordance with the higher use.

If the use or zoning of a property changes, the owner may apply for a new access permit pursuant to section 4 of this amendatory and supplementary act, which permit may not be unreasonably withheld.

d. When the commissioner revokes an access permit pursuant to this section, the commissioner shall be responsible for providing all necessary assistance to the property owner in establishing the alternative access, which shall include the funding of any such improvements by the department. Until the alternative access is completed and available for use, the permit shall not be revoked. The commissioner shall also erect on the State highway and on connecting local highways suitable signs directing motorists to the new access location. The commissioner may enter into agreements with property owners for phased development and provisions of this subsection shall not supersede any such agreements.

As provided in this subsection, necessary assistance shall include but not be limited to the costs and expenses of relocation and removal associated with engineering, installation of access drives in a new location or locations, removal of old drives, on-site circulation improvements to accommodate changes in access drives, landscaping, replacement of directional and identifying signs and the cost of any lands, or any rights or interests in lands, and any other right required to accomplish the relocation or removal.

L. 1989, c. 32, s. 6.

27:7-95. Expansion, change in use

a. Any property owner who expands or changes the use of property subject to an access permit issued before the effective date of this amendatory and supplementary act shall be required to file an application for a new access permit if the expansion or change in the use will result in a significant increase in traffic. Any increase in traffic that adds the greater of 100 movements during the peak hour, or 10 percent of the previously anticipated daily movements shall be considered significant. Any such property owner who has not been granted such a new access permit shall be subject to enforcement in accordance with subsection e. of section 4 of this amendatory and supplementary act.

b. When the commissioner either denies an application for an access permit in accordance with section 4 or 5 of this amendatory and supplementary act because alternative access is available, or revokes an existing permit in accordance with section 6 of this amendatory and supplementary act because alternative access is available, the decision of the commissioner as to the appropriate location for an access driveway shall be final, the action of any municipal or county body to the contrary notwithstanding.

Any subsequent county or municipal review of the development which may be required shall abide by the commissioner's decision on this matter. The county or municipality may require additions or changes in the design of the development in accordance with any applicable provisions of its development review ordinances; provided that such additional requirements do not conflict with the commissioner's decision.

L. 1989, c. 32, s. 7.

27:7-96. New subdivisions

After adoption of the access code, as provided by section 3 of this amendatory and supplementary act, no property abutting a State highway shall be subdivided in a manner which would create additional lots abutting that highway unless all the abutting lots so created are in accord with the standards established in the access code.

L. 1989, c. 32, s. 8.

27:7-97. Provision of alternative access

The Commissioner of Transportation and every county and municipality may build new roads or acquire access easements to provide alternative access to existing developed lots which have no other means of access except to a State highway.

L. 1989, c. 32, s. 9.

27:7-98. Acquisition of right of access

In addition to any powers granted to him under this amendatory and supplementary act or any other provision of law, the commissioner may acquire, by purchase or condemnation, any right of access to any highway upon a determination that the public health, safety and welfare require it.

L. 1989, c. 32, s. 10.

27:7A-1. Definitions

a. As used in this act:

"Limited access highway" means a highway especially designed for through traffic over which abutters have no easement or right of light, air or direct access, by reason of the fact that their property abuts upon such way;

"Commissioner" means the Commissioner of Transportation.

b. The definitions in this section shall not be construed as restricting the ability of the commissioner to provide for the design of any State highway or element thereof, according to design standards in conformity with accepted engineering practice as determined by the commissioner.

c. The term "freeway" or "parkway," as used in any law which went into effect before the effective date of P.L. 1989, c. 32 (C. 27:7-89 et seq.), which designates any State highway as a "freeway" or "parkway" shall be construed to mean a "limited access highway" as defined in subsection a. of this section.

L. 1945, c. 83, s. 1; amended 1948, c.461, s. 2, 1989, c. 32, s. 14.

27:7A-2. Limited access highway

a. The commissioner shall construct every State highway, or portion thereof, located on new alignment as a limited access highway unless he shall determine that the public interest requires otherwise.

b. When the commissioner or the governing body of a county constructs a limited access highway, the commissioner or governing body shall have authority to arrange with landowners, at the time of purchase of the rights-of-way for such highway or portion thereof, for the control of public or private access or for complete exclusion of direct access of abutters to the highway right-of-way. Such arrangements shall be made part of the purchase contract. In the event that no agreement can be reached between the parties, the commissioner or the governing body of the county shall have the power to acquire said rights of access by condemnation.

c. No right of access exists to a highway constructed on new alignment unless the construction of the highway results in the creation of a remainder parcel of property which has no access to a public street or highway. Arrangements made with landowners for exclusion of direct access by the commissioner, or by the governing body of a county under subsection b. of this section, shall not be subject to compensation unless it is determined that the construction of the highway has had the effect of eliminating all reasonable access to the system of streets and highways from the remainder parcel of land.

L. 1945, c. 83, s. 2; amended 1989, c. 32, s. 15.

27:7A-3. Necessary property

a. Property needed for any limited access highway is declared to be all those lands or interests therein required for the traveled way together with those lands or interests therein necessary or desirable for service, maintenance and protection of the present and future use

of the highway, including those lands or interests therein necessary or desirable in connection with grade separations, connecting roadways at an intersection with another main highway, land between roadways, occasional parking areas, treatment of borders and landscape areas, recreational facilities, parallel service roads and railroad crossing eliminations or relocations, and for those areas referred to in section 8 of this act.

b. Except as provided in subsection c. of this section, the commissioner, with respect to limited access highways under his jurisdiction, and the governing body of a county, with respect to limited access highways under its jurisdiction, shall permit access only from infrequently spaced intersections with public streets and highways. Intersections shall be especially designed to minimize interference with through traffic and shall be located in a manner which facilitates regional access to the highway.

c. The commissioner, or the governing body of the county, as appropriate, may allow construction or continuation of driveway access to a remote or isolated facility owned or operated by a governmental agency or authority or by a public utility or to an agricultural building or land, if the commissioner or governing body determines that the use of the driveway would be infrequent and would not pose a hazard or inconvenience to the public and that the creation or continuation of the driveway would not be in conflict with the purposes of P.L. 1989, c. 32 (C. 27:7-89 et seq.). No driveway access shall be provided to a facility which consists of an establishment providing employment to more than five persons.

L. 1945, c. 83, s. 3; amended 1948, c.461,s.3, 1989, c. 32, s. 16.

#### 27:7A-4.1. Acquisition of entire parcel

In connection with the acquisition of property or property rights for any limited access highway or portion thereof, the commissioner, with respect to limited access highways under his jurisdiction, and the governing body of a county, with respect to limited access highways under its jurisdiction, may, in his or its discretion, acquire by gift, devise, purchase or condemnation, 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 needed for transportation purposes, but only if the portion not needed for transportation purposes is landlocked or is so situated that the cost to the State will be practically equivalent to the total value of the whole parcel of land. For purposes of this section, "transportation purposes" means all uses of property which are, in the judgment of the commissioner, useful or beneficial in promoting an efficient, integrated, and balanced transportation system.

L. 1952, c. 21, s. 1; amended 1989, c. 32, s. 17.

27:7A-5. Existing State highways

The commissioner may, by order and after public hearing, designate any existing State highway, or portion thereof, a limited access highway and thereafter shall have the authority to acquire, either by purchase or condemnation, such property rights, easements and access rights as may be necessary to make such existing highway or portion thereof a limited access highway.

L. 1945, c. 83, s. 5; amended 1989, c. 32, s. 18.

27:7A-6. Restricted use

The commissioner, with respect to limited access highways under his jurisdiction, and the governing body of a county, with respect to limited access highways under its jurisdiction, shall have the authority to restrict the use of roadways in limited access highways to passenger motor vehicles, to prohibit the use of any roadway in limited access highways by certain classes of vehicles or by pedestrians, bicycles or other nonmotorized traffic or by any person operating a motorized bicycle or motorcycle and to make such other regulations as may be proper or necessary to carry out the provisions of this act; provided, however, if any highway or any portion or portions thereof over which autobuses lawfully operate is designated a limited access highway, or a part of a limited access highway, no such restriction or regulation shall prevent the use by autobuses, in accordance with other laws applicable thereto, of such portion or portions of such limited access highway as include such highway or portion or portions thereof, or of such portion or portions of such limited access highway as shall be necessary to provide ingress and egress for such autobuses in connection with such use.

L. 1945, c. 83, s. 6; amended 1989, c. 32, s. 19.

27:7A-8. Service facility sales, leases

No commercial enterprises or activities shall be conducted by the commissioner or any other agency of the State within or on the property acquired for or in connection with a limited access highway, as defined in this act, nor shall such commercial enterprises or activities be authorized except as hereinafter provided but nothing herein shall prevent the operation, in the manner provided by law, of autobuses within or on the property used for or designated as a limited access highway as defined in this act.

The commissioner, in order to permit the establishment of adequate fuel or other service facilities by private owners or their lessees, for the users of a limited access highway, may acquire suitable areas for such facilities even though such areas are not needed for the right-of-way proper and, in the manner hereinafter provided, shall sell or lease as lessor

such portions thereof as in his judgment the public interest shall then require. Such sales and leases shall be made under the following terms and conditions:

- a. Each purchaser and lessee shall be a person who has been continuously a resident of this State for a period of at least two years immediately preceding such sale.
- b. Subject to the conditions and restrictions imposed by this act, the premises shall be sold or leased at public sale to the highest responsible bidder.
- c. The commissioner shall have the right to incorporate in any deed conveying premises so sold covenants running with the land requiring the purchasers, their grantees, and successors (1) to erect and maintain any buildings thereon in conformity with specified exterior design, (2) to provide services reasonably required by the users of the limited access highway subject to usual sanitary and health standards, and (3) to conduct no business other than that for which the property was originally sold, without the written consent of the commissioner.
- d. Such premises shall not be sold or leased to a person who owns, directly or indirectly, or holds under lease any premises in the same service area on the same side of a limited access highway purchased or leased for a similar purpose.
- e. In acquiring areas for the purposes aforesaid and in subdividing such areas into smaller premises for sale to the purchasers thereof, the commissioner shall provide a sufficient number of separate premises to encourage free and open competition among all suppliers of each service involved who desire to purchase or lease premises for the furnishing of such services along each limited access highway, subject to any restrictions herein above stated.
- f. The commissioner shall provide access roads from the limited access highway to the service areas, the location of which shall be indicated to users of the limited access highway by appropriate signs, the style, size, and specifications of which shall be determined by the commissioner.
- g. Each purchaser or lessee of such premises may arrange to have the services for which such premises were sold or leased performed through lessees or sublessees or other third persons; provided that such purchasers or lessees shall remain liable for failure to comply with the covenants contained in the deed affecting such premises.

For the purpose of this section, "person" shall include any individual and those related to him by blood, marriage or adoption, and partnerships and corporations and all individuals affiliated therewith through ownership or control, directly or indirectly, of more than fifty per centum (50%) of any outstanding corporate stock.

L. 1945, c. 83, s. 8; amended 1948, c.461,s.5, 1989, c. 32, s. 20.

27:7A-9. Additional powers

The powers contained in this act are in addition to all the powers that the commissioner has at the time this act becomes effective and in addition to the powers granted to him by the "State Highway Access Management Act," P.L. 1989, c. 32 (C. 27:7-89 et seq.), and any limitation herein contained shall be interpreted as applying only to limited access highways created under this act.

L. 1945, c. 83, s. 9; amended 1989, c. 32, s. 21.

27:7A-10. Designation as freeways of routes included in national system of interstate highways

The State Highway Commissioner may designate as freeways, in accordance with chapter 83, Public Laws of 1945, routes in the State approved by the United States Department of Commerce, Bureau of Public Roads, as a part of the interstate highway system in the National System of Interstate Highways, dated September 15, 1955.

## STATE OF OREGON

### The Statutes of the State of Oregon regarding Access Management

#### *Throughways*

374.005 Policy and purpose of ORS 374.005 to 374.095. (1) The kind, character and volume of traffic now moving over public highways, the speed at which such traffic moves, the prime and essential factors such as speed, safety and convenience to which transportation of persons and property over public highways is entitled, the relation which such transportation bears to the transportation systems of other states and of the nation as a whole, the ever-increasing toll of injury to and death of persons and the destruction of and damage to property caused by and resulting from accidents on public highways constitute and are conditions and elements which demand of highway officials a program of highway designing, highway regulations, highway use and operation, highway controls and highway safeguards which will make possible and insure a degree of safety and convenience and a type and class of service not possible under existing law.

(2) To the end that human lives may be saved, property damage minimized, transportation by motor vehicle promoted and highway travel in general safeguarded, the legislature finds, determines and declares that ORS 374.005 to 374.095 is necessary for the preservation of public safety, the improvement and development of transportation facilities in the state, the protection of highway traffic from the hazards of unrestricted and unregulated entry from adjacent property, the elimination of hazards due to highway grade intersections and in general the promotion of public welfare.

374.010 "Throughway" defined. As used in ORS 374.005 to 374.095, "throughway" means a highway or street especially designed for through traffic, over, from or to which owners or occupants of abutting land or other persons have no easement of access or only a limited easement of access, light, air or view, by reason of the fact that their property abuts upon the throughway or for any other reason.

374.015 Department of Transportation to establish and maintain throughways; highways to be designated throughways. (1) The Department of Transportation, in addition to and without restricting, limiting or repealing any powers and authority which it now has, may lay out, locate, relocate, adopt, establish, construct, designate, maintain and supervise the use and operation of new highways known as throughways.

(2) Any relocated section of an existing highway and such portions of existing highways, which at the time they are designated as throughways have less than 10 commercial businesses abutting thereon catering to the motoring public in any one mile of such existing highway, may be designated and constructed as or converted into a throughway by the department. As used in this subsection, "relocated" means a highway or section thereof so located that for its construction an entirely new right of way is necessary.

(3) The authority and power of the department extends to and includes state highways within the corporate limits of cities, and with the approval of the municipal authorities may extend to and include city streets.

374.020 Interference with railroad facilities prohibited. No throughway shall be established upon or across the tracks, yards, station grounds or other operating properties of any common carrier railroad, or upon or across any industrial or business property served by railroad industrial trackage, or upon or across any property at such a location as to unduly interfere with the reasonable access of shippers, passengers or the public to railroad depots, team tracks or other facilities for receiving or delivering freight or passengers transported by railroad unless the Department of Transportation and the railroad agree on a proposed throughway project. [Amended by 1995 c.733 s.94]

374.025 Change from throughway to highway. Any state highway or section thereof which has been located, established, designated and constructed as a throughway may, in whole or in part, be changed from a throughway to an ordinary highway by the Department of Transportation if in its judgment such action will best serve public needs.

374.030 Separation of throughways into separate roadways; ingress and egress. (1) The Department of Transportation may so design a throughway and so regulate, restrict or prohibit access thereto and use thereof as to best serve the traffic for which the throughway is intended. In this connection and for such purpose the department may divide and separate any throughway into separate roadways or lanes by the construction of raised curbs, central dividing sections or other physical separations, or by designating separate roadways or lanes by signs, markers or stripes and the proper lanes for traffic by appropriate signs, markers, stripes or other devices.

(2) After any highway has been so marked or designed no person has any right of ingress or egress to, from or across the highway to or from abutting lands, except at such points as may be designated by the department.

374.035 Acquisition of real property; effect of resolution. (1) The Department of Transportation may, in the name of the state, acquire by agreement, donation or exercise of the power of eminent domain, fee title to or any interest in any real property, including easements of air, view, light and access, which in the opinion or judgment of the department is deemed necessary for the construction of any throughway, the establishment of any section of an existing state road or highway as a throughway or the construction of a service road. The department may accomplish such acquisition in the same manner and by the same procedure as real property is acquired for state highway purposes, except that in case the acquisition is by proceedings in eminent domain the resolution required under such procedure shall specify, in addition to other provisions and requirements of law, that the real property is required and is being appropriated for the purpose of establishing, constructing and maintaining a throughway.

(2) A resolution adopted by the department stating and setting forth that a proposed highway is to be constructed as a throughway is conclusive evidence that the highway

when constructed is a throughway with all the characteristics and incidents prescribed by and provided for in ORS 374.005 to 374.095.

374.040 Acquisition of land not immediately needed. Whenever it becomes necessary to acquire any real property for use in connection with the location, relocation, construction, reconstruction, improvement and maintenance of any throughway or section thereof or for a service road, the Department of Transportation may, in its discretion, acquire an entire lot, block or tract of land if by so doing the interests of the owner and the state will be best served, even though the entire tract is not immediately needed for the highway proper. This provision and authority shall apply to and be effective whether the real property is acquired by purchase, agreement or exercise of the power of eminent domain.

374.045 Payment for land acquired. The Department of Transportation may pay the cost incident to the acquisition of real property or any interest therein for the establishment, location and relocation of throughways and their construction, reconstruction and maintenance out of state highway funds in the same manner that such funds are disbursed for other highway purposes by the department.

374.050 Parties bringing eminent domain proceedings. In case an agreement provided for in ORS 374.080 has been entered into, proceedings in eminent domain for the acquisition of real property or any interest therein deemed necessary therefor, may be brought in the name of the state by the Department of Transportation, alone or jointly with any city, county or city and county which are parties to the agreement.

374.055 Evidentiary purposes of improvement plan. In any proceeding in eminent domain evidence of the entire plan of improvement is admissible for the purpose of determining:

- (1) Value of property taken.
- (2) All damages by reason of deprivation of right of access to any highway to be constructed, established or maintained as a throughway.
- (3) The damages which, if the property sought to be condemned constitutes a part of a larger parcel, will accrue to the portion not sought to be condemned by reason of its severance from the portion sought to be condemned and by reason of the construction of the improvement in the manner proposed.

374.060 Power of Department of Transportation as to intersecting streets and roads. The Department of Transportation, with the official approval of municipal authorities of cities with respect to city streets and with the official approval of the county court or board of county commissioners of any county with respect to county roads, may:

- (1) Close any street, highway or road at or near the point of its intersection with a throughway; or
- (2) Make provision for carrying the street or road over or under the throughway; or

- (3) Provide a connection with a throughway by means of a utility or service road to a suitable point of connection; and
- (4) Do any and all work on the street, highway or road as is necessary therefor.

374.065 Intersection of throughways and county roads. (1) The Department of Transportation shall provide for the intersection of throughways by county roads running into or across throughways.

(2) Any county road may be closed at the points where it runs into or intersects the throughway if the consent of the county court or board of county commissioners of the county in which the road is located is first obtained.

(3) After the establishment of a throughway, no county road shall be constructed running into or intersecting the throughway unless its plans and specifications have first been submitted to and approved in writing by the department. This approval shall be made a matter of record by the department and by the county court or board of county commissioners.

374.070 Throughways in cities; intersecting streets. (1) Should any portion or section of a throughway be within the corporate limits of a city, provision shall be made for access thereto from existing streets at points designated by the municipal authorities of the city. In the event plans and specifications are submitted to the municipal authorities of the city by the Department of Transportation and the municipal authorities fail to designate such points within 60 days thereafter, the designation may be made by the department.

(2) After establishment of any throughway in or through a municipality, no street shall be constructed turning into or intersecting the throughway unless the plans and specifications therefor have first been submitted to and approved in writing by the department and made a matter of official record.

(3) Nothing in this section prohibits the closing of any street at the point where it runs into or intersects any throughway by the proper municipal authorities in the manner provided by law.

374.075 Cooperation of municipal and county authorities with Department of Transportation. The municipal authorities of cities and the county court or board of county commissioners of any county may do anything or all things necessary to cooperate with the Department of Transportation for laying out, acquiring and constructing any section or portion of any street or highway within their respective jurisdiction as a throughway and to convert any existing street or highway into a throughway.

374.080 Agreements with Federal Government, counties and cities. The Department of Transportation may enter into cooperative agreements with the Federal Government and with any county or city for the location, adoption, construction and maintenance of a throughway either within or without the corporate limits of any city, with respect to

highways under the exclusive jurisdiction of the department, roads under the jurisdiction of the county court or board of county commissioners and streets under the exclusive jurisdiction of cities, and may, in such agreements, agree upon the allocation of costs of the project, the manner and method of maintenance and all other relevant matters.

374.085 Severance by throughway of agricultural land. Wherever by the location, relocation, establishment and construction or reconstruction of a throughway under ORS 374.005 to 374.095 real property, title to which is held under one ownership, is severed and the land is being used for farm or other agricultural purposes, provision shall be made by the Department of Transportation for crossing the highway from one such tract to the other or compensation for the severance of the tract shall be paid. Should such tracts at any time cease to be held under one ownership, the department may terminate and discontinue the road crossings. No such connecting-road crossing shall be used for or in connection with the conduct of any roadside business or enterprise, but shall be available and used solely for passage from one of the severed tracts to the other.

374.090 Destruction by throughway of access to agricultural property. Whenever a throughway is located, relocated, constructed or reconstructed through or over farm or agricultural property and thereby all reasonable ingress and egress have been destroyed, the Department of Transportation shall provide access from the abutting properties to the throughway by a service road or by direct access, unless by agreement with the owners of the abutting properties access to the throughway has been waived by the property owner or has been acquired by the state by agreement or exercise of the power of eminent domain.

374.095 Utility roads where access to abutting property affected. If under ORS 374.005 to 374.095 any existing highway or section of existing highway is converted into a throughway, by reason thereof real properties then occupied and used are affected and such abutting real properties are dependent upon the existing highway or section of highway for ingress and egress, the Department of Transportation shall provide a utility or service road to serve the properties. This utility or service road shall be constructed and maintained by the state at state expense and shall follow a location or route immediately parallel to and adjoining the throughway. After the service or utility road has been constructed the abutting land owner's right of reasonable view shall not be impaired.

374.205 [Repealed by 1967 c.497 s.7]

374.210 [Repealed by 1967 c.497 s.7]

374.215 [Repealed by 1967 c.497 s.7]

374.220 [Amended by 1957 c.459 s.3; repealed by 1967 c.497 s.7]

374.225 [Repealed by 1967 c.497 s.7]

374.230 [Repealed by 1967 c.497 s.7]

374.235 [Repealed by 1967 c.497 s.7]

374.240 [Repealed by 1967 c.497 s.7]

374.245 [Repealed by 1967 c.497 s.7]

374.250 [Repealed by 1967 c.497 s.7]

374.255 [Repealed by 1967 c.497 s.7]

374.260 [Repealed by 1967 c.497 s.7]

374.265 [Renumbered 374.335]

374.270 [Renumbered 374.340]

*Approach roads, private crossings and other facilities upon right of way*

374.305 Necessity of permission to build on rights of way. (1) No person, firm or corporation may place, build or construct on the right of way of any state highway or county road, any approach road, structure, pipeline, ditch, cable or wire, or any other facility, thing or appurtenance, or substantially alter any such facility, thing or appurtenance or change the manner of using any such approach road without first obtaining written permission from the Department of Transportation with respect to state highways or the county court or board of county commissioners with respect to county roads.

(2) After written notice of not less than 10 days to the permittee and an opportunity for a hearing, the department with respect to crossings over a state highway and the county court or board of county commissioners with respect to crossings over a county road may abolish any crossing at grade by a private road or may alter or change any private road crossing when the public safety, public convenience and the general welfare require the alteration or change.

(3) As used in ORS 374.305 to 374.330:

(a) "Approach road" includes a private road that crosses a state highway or a county road.

(b) "Private road crossing" means a privately owned road designed for use by trucks which are prohibited by law from using state highways, county roads or other public highways. [Amended by 1955 c.424 s.1; 1957 c.323 s.1; 1967 c.497 s.1]

374.307 Removal or repair of installation constructed without permission. (1) If any person, firm or corporation builds or constructs on the right of way of any state highway or county road any approach road or any other facility, thing or appurtenance without first obtaining the written permission required by ORS 374.305, the Department of

Transportation or the county governing body shall, after the expiration of 30 days following the transmittal of a written notice to such person, firm or corporation, at the expense of such person, firm or corporation, remove all such installations from the right of way or reconstruct, repair or maintain any such installation in accordance with or as required by the rules and regulations. This expense may be recovered from such person, firm or corporation by the state or county in any court of competent jurisdiction.

(2) Notwithstanding subsection (1) of this section, if the Department of Transportation, county governing body or designated agent of the department or governing body, whichever is applicable, determines that a traffic or pedestrian hazard is created by the construction which causes imminent danger of personal injury, it may:

(a) Order the construction removed, repaired or maintained to eliminate the hazard, within 24 hours after delivery of written notice to the person, firm or corporation which caused the construction, and to the owner of the property on which the construction occurred.

(b) If the hazard is not removed within the time set under paragraph (a) of this subsection, remove the hazard and recover the expenses of any removal, repair or maintenance from any such person, firm or corporation in any court of competent jurisdiction. [1955 c.424 s.5; 1979 c.873 s.1]

374.310 Rules and regulations; issuing permits. (1) The Department of Transportation with respect to state highways and the county court or board of county commissioners with respect to county roads shall adopt reasonable rules and regulations and may issue permits, not inconsistent with law, for the use of the rights of way of such highways and roads for the purposes described in ORS 374.305. However, the department shall issue no permit for the construction of any approach road at a location where no rights of access exist between the highway and abutting real property.

(2) Such rules and regulations and such permits shall include such provisions, terms and conditions as in the judgment of the granting authority may be in the best interest of the public for the protection of the highway or road and the traveling public and may include, but need not be limited to:

(a) Provisions for construction of culverts under approaches, requirements as to depth of fills over culverts and requirements for drainage facilities, curbs, islands and other facilities for traffic channelization as may be deemed necessary.

(b) With respect to private road crossings, additional provisions for the angle of intersection, crossing at grade or other than grade, sight distances, safety measures including flaggers, crossing signs and signals, reinforcement for protection of the highway, maintenance of the crossing and for payment by the applicant of the costs of any of the foregoing.

(c) With respect to private road crossings, the granting authority may also require the applicant to furnish public liability and property damage insurance in a sum fixed by the

granting authority, which insurance shall also indemnify the members, officers, employees and agents of such authority from any claim that might arise on account of the granting of the permit and the crossing of the highway or road by vehicles operating under the permit; and the granting authority may also require the applicant to furnish indemnity insurance, an indemnity bond or an irrevocable letter of credit issued by an insured institution as defined in ORS 706.008 in a sum fixed by the granting authority, indemnifying such authority for any damage to the highways or roads that may be caused by the use of the crossing.

(3) The powers granted by this section and ORS 374.315 shall not be exercised so as to deny any property adjoining the road or highway reasonable access. [Amended by 1955 c.424 s.2; 1957 c.323 s.2; 1967 c.497 s.2; 1991 c.331 s.59; 1997 c.249 s.119; 1997 c.631 s.467]

374.315 Construction under permits; maintenance after construction. All construction under the permits issued under ORS 374.310 shall be under the supervision of the granting authority and at the expense of the applicant. After completion of the construction of the particular approach road, facility, thing or appurtenance, they shall be maintained at the expense of the applicant and in accordance with the rules and regulations adopted pursuant to ORS 374.310.

374.320 Removal or repair of installation on right of way at expense of applicant. (1) Upon failure of the applicant to construct or maintain the particular approach road, facility, thing or appurtenance in accordance with the rules and regulations and the conditions of the permit, the Department of Transportation or the county governing body shall, after the expiration of 30 days following the transmittal of a written notice to the applicant, at applicant's expense, remove all such installations from the right of way or reconstruct, repair or maintain any such installation in accordance with or as required by such rules and regulations and the conditions of such permit. This expense may be recovered from the applicant by the state or county in any court of competent jurisdiction.

(2) Notwithstanding subsection (1) of this section, if the Department of Transportation, county governing body or designated agent of the department or governing body, whichever is applicable, determines that a traffic or pedestrian hazard is created by the noncompliance which causes imminent danger of personal injury, it may:

(a) Order the construction removed, repaired or maintained to eliminate the hazard, within 24 hours after delivery of written notice to the applicant, and to the owner of the property on which the noncompliance occurred.

(b) If the hazard is not removed within the time set under paragraph (a) of this subsection, remove the hazard and recover the expenses of any removal, repair or maintenance from the applicant in any court of competent jurisdiction. [Amended by 1955 c.424 s.3; 1979 c.873 s.2]

374.325 Effect of ORS 374.305 to 374.325. Nothing in ORS 374.305 to 374.325 shall:

(1) Limit or affect any of the powers granted to, or duties imposed upon, the county courts or boards of county commissioners, the Department of Transportation or the Public Utility Commission by ORS 758.010 and 758.020, or any rights granted or authorized under those statutes.

(2) Grant any right for the construction or placing of an approach road, structure, pipeline, ditch, cable or wire, or other facility, thing or appurtenance on the right of way of any highway. [Amended by 1957 c.323 s.3]

374.330 Prior status preserved. (1) Nothing in ORS 374.305, 374.310 and 374.325, as such sections were amended by chapter 323, Oregon Laws 1957, shall be deemed to affect any approach road, structure, pipeline, ditch, cable or wire, or other facility, thing or appurtenance lawfully placed or constructed upon the right of way of any highway prior to August 20, 1957.

(2)(a) Nothing in ORS 374.305 or 374.310 as such sections are amended by chapter 497, Oregon Laws 1967, shall be deemed to affect any approach road, structure, pipeline, ditch, cable or wire, or other facility, thing or appurtenance lawfully placed or constructed upon the right of way of any state highway or county road prior to September 13, 1967.

(b) Except as provided in paragraph (a) of this subsection, private road crossings authorized by the Public Utility Commission under ORS 374.205 to 374.260 (1965 Replacement Part) are subject to ORS 374.305 to 374.330 after September 13, 1967. [1957 c.323 s.4; 1967 c.497 s.3]

374.335 Driving certain motor vehicles across public highway not deemed operation thereon. Where any private road crosses or is crossed by a public highway the driving of a motor vehicle across the public highway or upon the public highway for a distance of not to exceed 1,200 feet in the use of the private road shall not be subject to ORS 811.450, 815.155, 815.160, 815.170, 818.020, 818.060, 818.090, 818.110, 818.160, 818.300, 818.320, 818.340, 818.350, 818.400 and ORS chapter 825, provided such vehicle or vehicle use is:

(1) Subject to permit issued pursuant to ORS 374.310 or a person authorized by such permittee; or

(2) A farm tractor or implement of husbandry. [Formerly 374.265; 1971 c.391 s.1; 1983 c.338 s.923; 1987 c.158 s.66]

374.340 Cattle crossings under public road. Any person owning, using or occupying lands on both sides of any public road is entitled to the privilege of making a crossing under the road for the purpose of letting the person's cattle and other domestic animals cross the road. A crossing may be installed as provided under ORS 374.305 to 374.330. [Formerly 374.270; 1981 c.153 s.74]

*Rights appurtenant to property abutting certain highways and roads*

374.405 Access rights of property abutting on state highways. No rights in or to any state highway, including what is known as right of access, shall accrue to any real property abutting upon any portion of any state highway constructed, relocated or reconstructed after May 12, 1951, upon right of way, no part of the width of which was acquired prior to May 12, 1951, for public use as a highway, by reason of the real property abutting upon the state highway.

374.410 Department of Transportation to prescribe access rights of abutting property. In connection with any acquisition of real property for right of way of any state highway, the Department of Transportation shall prescribe and define the location, width, nature and extent of any right of access that may be permitted by the department to pertain to real property described in ORS 374.405.

374.415 Action to prevent entering or leaving state highways in manner not authorized. The Department of Transportation may commence and prosecute to final determination any suit, action or proceeding in the name of the state by and through the department, which in its judgment is necessary to enjoin and prevent any person, whether acting individually or by agent, from entering upon or departing from any state highway mentioned in ORS 374.405, at any location, for any use or in any manner not authorized by any grant of a right of access, as provided in ORS 374.410.

374.420 County throughways; rights of abutting property owners. (1) The county court or board of county commissioners may acquire by purchase, agreement, donation or exercise of the power of eminent domain, fee title or any interest in real property, including easements of air, view, light and access, which is necessary for the construction of a throughway or the establishment of a section of an existing county road as a throughway.

(2) When right of way is acquired for a throughway after August 13, 1965, no rights in or to the throughway, including what is known as right of access, accrue to real property merely because the property abuts upon that part of the right of way so acquired. This subsection also applies to right of way acquired, prior to August 13, 1965, pursuant to ORS 374.420 to 374.430 (1963 Replacement Parts).

(3) "Throughway," as used in this section, means a proposed or existing county road especially designed for through traffic, which has been designated by resolution of the county court or board of county commissioners as a throughway, over, from or to which owners or occupants of abutting land or other persons have no easement of access or only a limited easement of access, light, air or view, merely because of the fact that their property abuts upon the throughway or for any other reason. [Amended by 1965 c.364 s.1]

374.425 County court to prescribe access rights of abutting property. In connection with the acquisition of real property for right of way for a throughway described in ORS 374.420, the county court or board of county commissioners may prescribe the location,

width, nature and extent of any right of access that pertains to such real property.  
[Amended by 1965 c.364 s.2]

374.430 Action to prevent entering or leaving county roads in unauthorized manner. The county court or board of county commissioners may commence and prosecute to final determination any suit, action or proceeding which in its judgment is necessary to enjoin and prevent any person, whether acting individually or by agent, from entering upon or departing from any throughway under its jurisdiction, mentioned in ORS 374.420, at any location, for any use or in any manner not authorized by any grant of a right of access, as provided in ORS 374.425. [Amended by 1965 c.364 s.3]

#### *Penalties*

374.990 Penalty for violation of ORS 374.305 or of regulation adopted under ORS 374.310. In addition to the liability for expenses under ORS 374.307 and 374.320, violation of ORS 374.305 or of any rule or regulation adopted under ORS 374.310 is a misdemeanor. [1955 c.424 s.6]

**APPENDIX B. SELECTED ARIZONA STATE STATUTES IN  
REGARD TO ACCESS MANAGEMENT**

The following are selected statutes regarding Access Management from the *Arizona Revised Statutes*, 1998 Edition.

28-101. Definitions

50. “Right-of-way” when used within the context of the real property upon which transportation facilities and appurtenances to such facilities are constructed or maintained means the lands or interest in lands within the right-of-way boundaries. (ARS 28-101)

62. “State highway” means any state route, or portion of a state route, that is accepted and designated by the transportation board as a state highway and maintained by the state. (ARS 28-101)

63. “State route” means any right-of-way, whether actually used as a highway or not, designated by the transportation board as a location for the construction of a state highway. (ARS 28-101)

*Controlled Access*

28-602. Definitions

2. “Controlled -access highway” means a highway, street or roadway in respect to which owners or occupants of abutting lands and other persons have no legal right of access to or from except at such points only and in the manner determined by the public authority having jurisdiction over the highway, street or roadway. (ARS 28-602)

28-701.01. Definitions

1. “Freeway” means a highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement of access, and which is declared to be such by the director of the department of transportation. (ARS 701.01)

28-108. Powers And Duties

a. The Director Shall:

5. Prescribe such rules as he deems necessary for public safety and convenience. (ARS 28-108)

13. Exercise such other powers and duties as are necessary to fully carry out the policies, activities and duties of the department. ARS(28-108)

19. Exercise complete and exclusive operational control and jurisdiction over the use of state highways and routes and prescribe such rule regarding such use as he deems necessary to prevent the abuse and unauthorized use of such highways and routes. (ARS 28-108)

20. Coordinate the design, right-of-way purchase and construction of controlled-access highways which are either state routes or state highways and related grade separations of controlled-access highways and the design, right-of-way purchase, construction, standard and reduced clearance grade separation, extension and widening of arterial streets and highways under chapter 9 of this title and assist counties and municipalities in the counties in the development of their regional transportation plans under chapter 9 of this title to ensure that the streets and highways within each county form a regional system. (ARS 28-108)

28-732. Restricted access.

No person shall drive a vehicle onto or from any controlled access roadway except at entrances and exits established by public authority. (ARS 28-732)

28-733. Restriction on use of controlled-access highway.

- A. The director may by administrative rule or regulation and local authorities may by ordinance with respect to any controlled-access highway under their respective jurisdictions prohibit the use of any part of the highway by pedestrians, bicycles or other nonmotorized traffic or by any person operating a motor-driven cycle. (ARS 28-733)
- B. The director or the local authority adopting the prohibitory regulation shall erect and maintain official signs on the controlled-access roadway on which the regulations are applicable, and when erected no person shall disobey the restrictions stated on the signs. (ARS 28-733)

**APPENDIX C. ARIZONA STATE TRANSPORTATION BOARD  
POLICIES FOR CONTROLLED ACCESS HIGHWAY  
PROJECTS**

# **TRANSPORTATION BOARD POLICIES 1997**

## **POLICIES FOR CONTROLLED ACCESS HIGHWAY PROJECTS**

### **1. CONTROLLED ACCESS FUND POLICIES**

The following guidelines are the basis for the programming of ADOTs 12.6 %, Special 2.6%, and Regional Area Road Funds (RARF), collectively referred to as Controlled Access Funds. These programming criteria are applicable within the MAG Region only. PAG has its own 12.6%, and Special 2.6% fund policies, which do not follow these guidelines.

#### **A. PROGRAMMING CRITERIA:**

- 1) The Transportation Board will employ the criteria defined in Statute by the Arizona Legislature when determining which facilities are eligible for ADOTs 12.6% Funds.
- 2) The Transportation Board is responsible for the adoption of the Life Cycle Program for Controlled Access Funding in accordance with the selection criteria and corridor priorities established by the MAG Regional Council.
- 3) No monies will be programmed for facilities not located on planned permanent alignments.
- 4) The Transportation Board has determined that an additional 2.6% of the ADOT share of highway user revenues shall be programmed for controlled access projects, and known as "Special" 2.6% Funds.
- 5) In the case of joint-funded projects, Special 2.6% Funds may be used as ADC)Ts contribution to total project cost

#### **B. LEVEL AND CONTINUITY OF ACCESS CONTROL:**

Any facility not initially constructed to the ultimate level of access control throughout the entire corridor, as defined in the adopted Regional Transportation Plait, may be programmed to receive Controlled Access Funds on a staged basis.

### **2. RARF / URBAN CONTROLLED ACCESS SYSTEM POLICIES**

The following policy definitions and development policies are applicable to Urban Controlled Access System facilities in counties which have passed a transportation excise tax that is administered by the ADOT.

A. URBAN CONTROLLED ACCESS SYSTEM DESCRIPTIONS

1) SYSTEM DESCRIPTION:

- a) Urban Controlled Access facilities provide for safe and efficient high-speed regional trips and increased traffic capacity for the movement of goods and travelers.
- b) RARF funded Urban Controlled Access facilities become part of the State Highway System and therefore remain the maintenance responsibility of the State.
- c) Staged construction may be employed in the development of Urban Controlled Access facilities. Phasing of construction which impacts local facilities and services will be coordinated with local jurisdictions.

2) DESIGN DESCRIPTION:

- a) Urban Controlled Access facilities incorporate major design features which are significantly higher than the urban area's major streets.
- b) Urban Controlled Access facilities provide for a higher level of through-traffic movement than the major street system by controlling access to the facilities and thus minimizing interference from adjacent development and related traffic movements.
- c) Urban Controlled Access facilities provide grade-separated interchanges with appropriate major streets where traffic volumes, access to important regional land uses, and/or significant street system circulation needs dictate.
- d) Urban Controlled Access facilities allow grade-separations with other cross streets where traffic volumes, access to important regional land uses, and/or significant street system circulation needs dictate.
- e) Urban Controlled Access facilities are designed and developed in a manner that will accommodate, where feasible and cost effective, preferential access, lanes, and adjacent parking for surface transit and high-occupancy vehicles.

## B. URBAN CONTROLLED ACCESS DEVELOPMENT POLICIES

### 1) DEVELOPMENT POLICY:

- a) ADOT will establish and maintain intergovernmental liaison with all impacted local jurisdictions throughout the highway development process for the determination of specific facility location and design features, including mitigation measures, for each Urban Controlled Access facility.
- b) ADOT will coordinate with local governments for the design and construction of joint use drainage facilities where such facilities act to reduce the cost of the Urban Controlled Access facility,
- c) Urban Controlled Access facilities are intended to be developed in a manner that will allow for future lane additions, interchange modifications, and other transportation corridor needs.

### 2) RIGHT-OF-WAY POLICY:

- a) ADOT will plan for, obtain, and clear all of the right-of-way needed for the construction of Urban Controlled Access facilities, attendant ramps, frontage roads, noise abatement landscaping features, and drainage management and other features agreed to by the Department. The right-of-way within the control of access limits and the improvements within its bounds will be the on-going maintenance responsibility of ADOT.
- b) ADOT will coordinate with the Regional Public Transportation Authority and/or other appropriate transit agencies in identifying joint highway and transit uses of rights-of-way. When non-highway transit facilities are justified, the right-of-way may be acquired if- there is reimbursement made; there is negligible additional cost; there is an easily recoverable cost should the transit facilities not be developed; or there is an alternative use of the right-of-way that is highway related.
- c) ADOT will coordinate with private developers and the local governments in obtaining right-of-way contributions, in planning land uses and in developing circulation plans in order to reduce the cost of developing Urban Controlled Access facilities.

- d) As part of the project development process, ADOT may, upon request act as the purchasing agent for the rights-of-way beyond the control of access limits and as the contracting agent for the construction of adjacent transportation features.
  - e) Upon completion of development the ownership, liability and maintenance responsibilities for land and improvements outside of the control of access right-of-way acquired for the Urban Controlled Access facility will be transferred or sold to the local jurisdiction.
- 3) CONSTRUCTION POLICY:
- a) In an effort to provide timely traffic service to the motoring public, staged or interim construction may be pursued.
  - b) Local government/private developer financial participation will be encouraged to accelerate ADOTs construction activities as appropriate.
- 4) SAFETY POLICY:
- a) Urban Controlled Access facilities are designed and developed in a manner that will enhance the safety of the motoring public, as well as the safety of the movement of goods and services throughout the urban areas of the state.
- 5) ENVIRONMENTAL POLICY:
- a) Urban Controlled Access facilities will be planned and designed in such a manner that specific air quality and environmental mitigation measures will be incorporated.
  - b) Alternative alignments within Urban Controlled Access corridors will be studied on a route- by-route basis for environmental impacts.
- 6) NOISE ABATEMENT POLICY:
- a) ADOT will use the "Noise Abatement Policy for State-Funded Projects" for determining noise abatement standards. These standards vary with the type of current adjacent land use. Noise mitigation measures will be used where required to reduce highway noise impacts on current adjacent land uses.

7) LANDSCAPING POLICY:

- a) ADOT will use landscaping in a cost-conscious manner to enhance Urban Controlled Access facilities.
- b) ADOT will use low water plant materials, in accordance with the applicable State Water Resources Management Plan.
- c) Agreements will be made with local governments for them to furnish the water for plant materials provided and maintained by ADOT within the facility right-of-way.

8) HOV FACILITIES POLICY:

- a) ADOT will analyze and consider HOV lanes in the design of all new freeways and existing freeway segments where capacity is being expanded. Adequate cross section width will be provided if HOV lanes are deemed to be appropriate.
- b) HOV lanes will be reserved for motorcycles, buses and vehicles with more than one occupant. The exact number of occupants which qualify a vehicle as an "HOV" will be evaluated periodically with a view to optimizing system performance.
- c) The option for special and specific HOV entrances will be provided on all freeways except in areas where such construction is not feasible, demand does not warrant or funds do not permit.
- d) All freeway on-ramps will be designed to permit HOV bypass of non-HOV vehicles in order to reduce HOV delay time in accessing the freeway mainline.

**APPENDIX D. REVIEW OF CASE LAW**

## **REVIEW OF CASE LAW**

The purpose of this section is to discuss legal concepts that have been supported by various state courts with respect to access management. This information has been taken largely from Chapter Five, Legal Considerations, of the *National Cooperative Highway Research Synthesis (NCHRP) Synthesis 233, Land Development Regulations that Promote Access Management*, published by the Transportation Research Board of the National Research Council in 1996. Development of the aspects of a state highway system, such as controlled access roadways, that create access related issues and concerns has occurred comparatively recently in Arizona. Therefore a significant portion of the case law regarding this issue is law from other states. Indeed, most of the Arizona cases reviewed for this report tend to refer to cases from other states as precedents when ruling on access issues.

### **Exercise of Police Power**

In regulating land division and access, state and local governments strive to maintain a balance between (1) public police power and (2) private property rights. The legal basis for the protection of property rights is found in the taking clause of the Fifth Amendment of the U. S. Constitution and similar provisions in state constitutions. In general, when government takes property for public benefit, compensation is required. *Pennsylvania Coal Co. v. Mahon* (260 U.S. 393, at 415, 43 S. Ct. 158, 67 L.Ed. 322 (1922)) held that when a government exercises its police powers to prevent harm and protect public welfare, compensation is not required unless that government goes "too far." The distinction and balance between these two is at the core of most litigation in this area.

Several Arizona Supreme Court cases cited in this document to support the concept of the right of ADOT and other public agencies to manage certain aspects of roadway access reaffirm the implicit right of the state to exercise police power with respect to access issues.

For example, the *State ex. rel. Miller v. J. R. Norton Co.*, 158 Ariz. 50 (App. 1988) 760 P.2d 1099, was an Arizona Court of Appeals Case in which the State appealed the decision of the lower court permitting the jury to consider a change in access an element of damage. Writing for the majority, Judge Hathaway agreed with the State's contention: "Damage to land resulting from the exercise of a state's police power is noncompensable. The placement of a median is a valid exercise of police power."

### **Property Owner's Right to Access**

In most states an owner of property is deemed to have a right to access to a public street system, but not to any specific street or to any specific point of access.

In Arizona, this concept was upheld by the State Court of Appeals in *Udovich v. Arizona Board of Regents*, 9 Ariz. App. 400 (1969) 453 P.2d 229. This was a condemnation case in which the property owners—the Udovichs—appealed from an adverse judgement of the Pima County Superior Court. The Plaintiffs had alleged that the Arizona Board of Regents' decision, in connection with expanding the University of Arizona campus, to close a portion of Hawthorne Street in Tucson that had been used as a means of "direct and easy means of ingress and egress" to the Udovich property and the "business conducted thereon" constituted a compensable taking. The Court of Appeals upheld the lower court's decision that, since Hawthorne Street was not the *sole* means of access to the Udovich property that the action of the Board of Regents was non-compensable.

In Colorado, this concept was upheld by *Department of Highways v. Denver* (791 P.2d. 1119, (Colo. 1990)), and *People v. Ayon* (54 Cal 2d 217, 352 P.2d 519.5 Cal.Rptr. 151 (1960)).

The Arizona Supreme Court, interpreting a "just compensation" provision in the Arizona Constitution said: "We hold in agreement with the ever increasing trend of authority—that direct access to a highway is not a private property right within the contemplation of Article 2, Section 17 of the Arizona Constitution" (*State Ex. Rel. Herman v. Schaffer*, 105 Ariz. 478, p. 481.). (Emphasis added)

Additional discussion of this concept is found in Covey, *Frontage Roads: To Compensate or Not to Compensate*, 56 N.W.L. Rev 587 (1961); Campbell, *The Limited Access Highway-Some Aspects of Compensation*, 8 Utah L. Rev. 12 (1961); 2A J Sackman, *Nichols on Eminent Domain*, §6.4443(4)(rev. 3d ed. 1976); and 1, Orgel, *Validation Under the Eminent Domain*, §1 (2d ed. 1953).

A number of jurisdictions do not consider access rights as property rights and their regulation tends to be non-compensable according to *Access to Highways-Compensable Limitation* (42 A.L.R. 3d 13 (1972)). This is significant in light of the Supreme Court decision in *Lucas v. South Carolina Coastal Council* (376. 404 S.E. 2nd 895 (SC 1991; cert granted 502 U.S. 966, 112 S.Ct. 439; 116 L.Ed. 2d 455 (1991) Rev'd 112 S.Ct. 2886, 1220 L.Ed. 2d 778, 505 U.S. (1992)). This case anchors its decision on whether the background of property law in the state would permit the prohibition, according to comments made by Daniel Mandelker, David Calies, Michael Berger and Jerold Kayden in the *Land Use Law and Zoning Digest*, Vol. 44, 3 at 5, September 1992.

### **Whether Property Owners Must be Compensated for Access Control**

Whether or not there is a "taking" of property for which compensation is due may relate to whether or to what extent access or a specific use of access is recognized as property. In addition, a use of access that would constitute a nuisance is not a property right because no one has a right to create a nuisance, according to *Mugler v. Kansas* (123 U.S. 623, 665, 8 S.Ct. 273, 32 L.Ed. 305 (1887)). Still other state cases hold that whether or not property is

actually taken is immaterial to the issue of damages, because compensation is only required when the remaining property is damaged by substantial limitation or loss of access. (*State Dept. of Highways v. Davis*, 626 P.2d 661, at 665 (Colo. 1961); *State Commission of Transportation v. Charles Investment Corp.* 143 N.J. Super. 541, 363 A.2d 944 (1976); and *State v. Easley*, 215 Va. 197, 207 S.E.2d 870 (1974)).

In Arizona, the Court noted that the owner must prove the actual damages, that he is not entitled to an award of nominal damages just because there was a change in grade (*Pima County v. Bilby*, 87 Ariz. 366, 351 p.2d 647 (1960)). However, in another case the court found that the loss of access resulting from a change in grade is compensable, even if the previous grade was never "officially established" by the City (*City of Yuma v. Lattie*, 117 Ariz. 280, 572 P.2d 108 (Ariz. App. 1997)). In another case, the County found that the State's condemnation took all access rights of the parcels, with no plans to build frontage roads; the court held that defendants' rights to access were compensable. *State v. McDonald*, 88 Ariz. 1, 352, P. 2d 343 (1960). In a case regarding circuitous access, the court found that access after a roadway change was not unreasonably circuitous as a matter of law in light of the highest and use of the property (*Tucson Title Insurance Co. v. State ex rel. Herman*, 15 Arizona App. 452, 489 P.2d 299 (1971)).

### **Access Regulation Should Advance "Legitimate State Interest"**

The regulation of access, both as applied and as regulatory policy, should "substantially advance a legitimate state interest" and have some "nexus" between the burden of the regulation and that state interest, according to *Nolan v. California Coastal Commission* (483 U.S. 825, 107 S.Ct. 3141, 97 L.Ed. 2d 677 (1987)). A 1994 Supreme court decision, *Dolan v. City of Tigard* (114 S.Ct. 2309, 129 L.Ed. 2d 304, 62 U.S.L.W. 4576 (1994)), requires that the burden of the conditions imposed by the regulation have some "rough proportionality" to the impacts caused by the affected property owner.

### **Access Regulation Should Only be as Restrictive as Necessary**

*Dolan v. City of Tigard* (p. 2316) holds that the regulatory action should not be more restrictive than necessary to accomplish the desired public purpose. Governments should not require individuals to bear a burden that is better borne by the public as a whole, and regulations, of any exceptions to these regulations, must be administered fairly and equally. This view is also supported by *Armstrong v. United States* (364 U. S. 40 p. 49 (1960)).

### **Authority to Engage in Planning and Regulation**

Historically, public authority to engage in planning and regulation is derived from the inherent power of the sovereign to exercise police power to protect the public according to Linde, Without "Due Process," 49 Or.L. Rev. 125 (1970).

This view is supported by Administrative Law Treatise Sec. 3.14 at 204-206 (Davis, K., 2nd Ed. 1978) and Administrative Law: A Case Book, 59-60 (Schwartz, 1984). Today state statutes, limited by state constitutions, provide express substantive and procedural planning authority. Governments must assess whether they have statutory authority to engage in any program of regulation, and also whether it is consistent with any procedural requirements provided in state statutes. A general rule of administrative law is where an explicit statutory authorization exists, it must be followed and the local government or state agency cannot imply different authority or different powers

Where the statute is silent, local authority to engage in access control may be implied from its general police power. In the majority of states, this authority resides in the planning and zoning enabling legislation stemming back to the 1920s and 1930s. (*Village of Euclid Ohio v. Ambler Realty Co.* 272, 365, 47 S.Ct. 114,71, L.Ed. 303 (1926)). Although local access and subdivision controls fall within the scope of these statutes, some related practices may not. These include impact fees, development agreements, transfer of development rights, and off-site exactions. Local regulatory authority is typically broader in states that require local governments to engage in comprehensive planning or growth management.

### **Driveway Permitting on State Highways**

Where inconsistencies arise between state and local governments in driveway permitting on state highways, unless statutes have declared otherwise (Oregon Revised Statutes 197.185), courts have determined that states have the final say. In *White v. Westage Development Group* ((N.Y. App. 1993) 2d 687, 595 N.Y.S. 2d 507 (N.Y.A.D. 2 Dept 1993; leave to appeal dismissed by 82 N.Y. 2d 706, 619 N.E. 2d 663, 663 N.Y.S. 2d 585 (1993)), the court held that the authority of the Department of Transportation to impose conditions on a driveway permit under highway law was in no way affected by the Township Planning Board's removal of those same conditions.

### **Private Property Rights and Police Power**

Under the rubric of police power, according to an article entitled Freeways and Rights of Abutting Owners, published in the Stanford Law Review, (3 Stan.L.Rev. 298 (1951)), and an article entitled Limiting Access to Highways published in the Oregon Law Review, (33 OR.L.Rev 16,19 (Duhaine 1953)) governments may restrict the use of private property to protect or advance the public safety and general welfare, to prevent public injury or where demanded by the "public interest." Private rights of abutting land owners to access their property are generally subservient to the rights of the public to free and safe use of the public street system. However, permanent denial of all beneficial use of property is almost always compensable (*First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 107 S.Ct. 2378, 96 L.Ed. 2d 250(1987)).

The exercise of Arizona jurisdictions' police powers for the safety and welfare of the community have been upheld in the courts. The court ruled that the construction of a median divider was not compensable (*State ex rel. Miller v. J.R. Norton Co.*) In another case, the conversion of a two-way traffic to one-way and installation of median divider were found to be not compensable (*Rayburn v. State ex rel. Willey*, 93 Ariz. 54, 378 P.2d 496.)

### **Access Management as Congestion Management Tool**

Access management is also a congestion management tool, and prevention of excessive congestion has been viewed by the courts as falling within the legitimate purview of police power. In the words of Supreme Court Justice Scalia: "the common zoning regulations requiring subdividers to observe lot-size and setback restrictions, and to dedicate certain areas to public streets, are in accord with our constitutional traditions because the proposed property use would otherwise be the cause of excessive congestion" (*Pennell v. City of San Jose* 108 S.Ct. 849, 862 (1988) (Concurring Opinion)). **The implication is that the police power basis for access management is not limited to individual site safety determination, but can be used for broad policy objectives, such as congestion management.**

### **Access Rights Not Always Property Rights**

Article 2, Section 17 of the Arizona Constitution says in part: "...No private property shall be taken or damaged for public or private use without just compensation having first been made..." The Arizona Supreme Court, interpreting this provision, said: "**We hold-in agreement with the ever increasing trend of authority-that direct access to a highway is not a private property right within the contemplation of Article 2, Section 17 of the Arizona Constitution**" (*State Ex. Rel. Herman v. Schaffer*, 105 Ariz. 478, p. 481,). (Emphasis added)

In *State Highway Commission. v. Central Paving Co.* (Or. 71, 399 P.2d 1019 (1965)) the Oregon Supreme Court found that landowners could not recover for circuitry of travel resulting from construction of a limited-access highway when access to a frontage road was provided. The Court decided that defendants could not recover under any police power analysis or under eminent domain, because they do not have an interest in land:

*Since we do not regard the limitation on defendant's access to their land from the throughway as the deprivation of an interest in land we need not decide whether, if it were, the state could appropriate the interest without compensation under the police power.*

In states where the courts or statutes treat access as a property right, this property right of access is often viewed as a right of reasonable access. The Florida Supreme Court, for example, has defined the right of access as "the reasonable capacity of a landowner to

reach the abutting public way by customary means of locomotion and then to reach the general system of public ways" (*Palm Beach County v. Tessler*, 538 So.2d 846, (Fla. 1989)).

### **The Right of Eminent Domain**

Governments have the right of eminent domain that allows them to take private property for public use with just compensation. This occurs through condemnation and public acquisition and does not require a property owner's consent. Even in a condemnation setting, a Colorado court has recently found an owner not entitled to compensation for condemnation of an access point because he had another one (*Dept. of Transportation v. First Interstate Mortgage*, 881 P.2d 473 (Col. App. 1994)). Alternatively, property owners may initiate a condemnation action, in response to a government action that they feel is so harsh it warrants compensation. This is known as inverse condemnation, and is the basis for many takings lawsuits related to changes in highway access.

### **What is Reasonable Access?**

To the extent states recognize property interest in access, they tend to recognize a property interest in "reasonable access." Because circumstances of individual properties vary widely, the availability of reasonable access must be determined on a case-by-case basis. In defining reasonable access, some state courts may look to whether access has been substantially diminished (*Florida Department of Transportation and Pinellas County v. ABS Inc*, 336 So. 2d 1278 (Fla. App. 1976)), whereas others look to whether the value of the remaining property has been substantially diminished (*State Dept. of Highway v. Davis*, 626 P.2d 661 (Colo. 1981)., *State Dept. of Highway v. Interstate-Denver West*, 791 P.2d 1119 (Colo. 1990)).

In the *Udovich v. Arizona Board of Regents* case, for instance, the Court stated:

*It may be stated as a general rule that one whose property does not abut on the closed street ordinarily has no right to compensation for the closing or vacation of the street if he still has reasonable access to the general system of streets.*

Whether "reasonable access" has been affected is evaluated on a continuum from relatively minor route changes, which are not usually compensable, to extremely circuitous rerouting of access or denial of access to a public street, which are compensable. Regardless of a state court's latest pronouncement on what is reasonable access, the old adage that bad cases make bad law, is still valid. Extreme cases involving unusual hardships invite courts to provide caveats and refinements that can erode otherwise clear judicial standards.

## **Circuitous Routing**

Whether circuitous rerouting will require compensation is a state-by-state determination and will depend on how the state court defines access rights as property rights and specific statutory requirements. The legislature can always create special compensation rights, even if the state or federal constitution does not require compensation. In Oregon, the legislature created a right to compensation based on change of grade if the alternative access is not "reasonably equal" to the access denied.

*Rayburn v. State ex rel. Willey*, 93 Ariz. 54, 378 P.2d 496 (1963), is an instance where the state had condemned a portion of Rayburn's property during the construction of the Black Canyon Freeway in Phoenix. The state has also changed the traffic flow in front of Rayburn's property from two-way to one-way. The Supreme Court, in affirming an award of severance charges, stated:

"While there can be no doubt from the evidence that the alteration in the traffic flow on Twenty-third Avenue and Buckeye Road as they abut the appellant's property adversely affected her from a pecuniary standpoint, it is well established that not all elements of damage resulting from a highway improvement are compensable. *State ex rel. Sullivan v. Carrow*, 57 Ariz. 434, 114 P.2d 896. The cases are virtually unanimous in holding that an owner is not entitled to compensation when the traffic flow on an abutting street is converted from two-way traffic to one-way traffic only, *Walker v. State*, 48 Wash.2d 587, 295 P.2d 328; *State v. Peterson*, 134 Mont. 52, 328 P.2d 617; *People ex rel. Dept. of Public Works v. Ayon*, 54 Cal.2d 217, 5 Cal. Rptr. 151, 352 P.2d 519; or when a traffic divider or island is constructed on the abutting street, *Holman v. State of California*, 97 Cal. App.2d 237, 217 P.2d 448; *People v. Sayig*, 101 Cal. App.2d 890, 226 P.2d 702; *State v. Fox*, 53 Wash.2d 216, 332 P.2d 943; *Springville Banking Co. v. Burton*, 10 Utah 2d 100, 349 P.2d 157; *Dept. of Public Works & Bldgs. v. Mabee*, 22 Ill.2d 202, 174 N.E.2d 801." See also, *Hendrickson v. State*, 267 Minn. 436, 127 N.W.2d 165."

A request for severance damages due to loss of direct highway access following construction of an overpass and service road also arose in *Florida Department of Transportation and Pinellas County v. ABS Inc.*, (Fla. App. 1976). The court concluded that where access to property is still available, the right to compensation depends on whether "a substantial diminution in access" has occurred. Because patrons would only have to travel about 100 more yards via a new service road for access to the shopping center, the court found no substantial diminution in access had occurred.

Based on a survey of various state cases and related articles, general guidelines of takings and compensation commonly applied by the courts in access cases can be described as follows:

- A complete loss of access is always necessary to demonstrate a taking.
- A substantial loss of access to private property may result in a taking and warrant compensation, although no physical appropriation of property has occurred.
- Loss of the most convenient access, or increase in circuitry of access, is not usually compensable where other suitable access continues to exist.
- Governmental actions that diminish traffic flow on an abutting road, such as installation of a raised median, are not a taking.
- Damages must be peculiar to that property and not common to the public at large for compensation to be paid.
- Recoverable damages are limited to the reduction in property value caused by the loss of access, but if the property is landlocked the entire parcel may have to be purchased.

### **Access to Abutting Roadway**

The compensability of access changes is construed differently from state to state. Courts in some states, such as Georgia, Wisconsin, Ohio, and North Carolina, have held that elimination of access to any existing abutting street or highway is a taking that warrants compensation. In other states, such as Colorado and Oregon, the courts have established that loss of access to an abutting road does not constitute a taking unless the overall right of access to that property was substantially diminished or denied. In *Department of Highways v. Interstate-Denver West*, (Colo. 1990), for example, the court upheld elimination of access to one of two abutting streets as a valid exercise of the state's police power. In New Jersey a revocation of direct state highway access is not generally compensable if, for a commercial property, the alternative access is onto a parallel or perpendicular street and is convenient, direct, well-marked, and of sufficient design.

The *State Ex. Rel. Herman v. Schaffer* case illustrates the importance of understanding the limits of police power with respect to affecting the access of abutting property owners. Writing for the Majority, Justice McFarland explains:

We hold that under the principles of law, set forth herein, relating to the standards of reasonable ingress and egress, the frontage road provided by the State for the benefit of these defendants was not unreasonably circuitous. Therefore, the limitation of access is not compensable

However, a contractual element is injected into this case. The defendants claim, and the State concedes, that the consideration for the original taking of land for the Casa Grande Highway in 1950 included agreement by the State that it would install and maintain seven crossovers for the benefit of the abutting properties. They further claim that the elimination of these crossovers constitutes a breach of this agreement, which would be a matter quite distinct from limiting access under the police power. Assuredly, the police power does not give the State authority to

make and breach contracts with impunity. If the State considers it advantageous to agree to construct and maintain crossovers at the time of taking land as part of the consideration rather than pay the full and just compensation in money, it should not subsequently complain that it is being held to this agreement or to responding in damages for the breach thereof. In *State ex rel. Herman v. Tucson Title Insurance Company*, 101 Ariz. 415, 420 P.2d 286, we said:

"While it is true that the Highway Department has the right and power to abandon or change any part of the state highway system, *Rowland v. McBride*, 35 Ariz. 511, 281 P. 207 (1929) the state must respond in damages if it acquires property in consideration of an agreement to construct an interchange and thereafter fails to construct such interchange. *State v. McDonald*, 88 Ariz. 1, 352 P.2d 343 (1960); *Williams v. North Carolina State Highway Commission*, 252 N.C. 772, 114 S.E.2d 782 (1960)."

It is no less a breach of agreement to fail to maintain crossovers than to fail to construct an interchange.

### **Effects of Access Controls Upon On-Site Conditions**

Some courts are also considering the effect of access controls upon on-site conditions. In a condemnation case entitled *State of New Jersey v. Van Nortwick*, which was decided prior to adoption of New Jersey's access code, the court held that on-property conditions, such as limitation of design options and on-site maneuverability, caused by diminution of access are compensable (Super. 555, 617 A.2d 284 (N.J. Super A.D. 1995)). See also, *Castrataro v. City of Lyndhurst*, (1992 Ohio App) (209758 (Ohio App. 1992; Dismissed 65 OHIO St.) 3rd 1496,605 N.E.2d 949 (Ohio 1993)), where the court held that an access change created circuitry of travel within, rather than to and from a property and thus is a burden placed solely on the property owner, which is compensable.

### **Temporary Moratoria**

The constitutionality of interim moratoria in relation to access improvements was addressed in *Woodbury Place Partners v. City of Woodbury, Minnesota*, (Minn. App. 1992) (NW.2d 258 (Minn. App. 1992)). Woodbury Place Partners had purchased a tract of unimproved, commercially zoned land near the I-494 interchange to construct a retail and office center. In 1988, they applied to the City of Woodbury for the necessary development permits.

The City had retained a consultant in 1987 to conduct an access improvement study for the interchange area due to concerns about traffic congestion. In 1988, the City Council imposed a moratorium on consideration of proposed development plans, plan amendments, or rezoning applications adjacent to I-494 for a period of two years. The purpose of the

moratorium was to protect the planning process and prohibit construction that could adversely affect road design and public health and safety.

Citing the categorical rule established in *Lucas*, Woodbury Place Partners argued that the regulation denied all economically beneficial or productive use of their land. The City argued that "economic viability was delayed, rather than destroyed." The court agreed, stating that "when measured against the value of the property as a whole, rather than against the two-year time frame, the moratorium did not deny the partnership all economically viable use of its property. Turning to the analysis established in *Penn Central* (104,98 S.Ct. 2646, 57 L. Ed.2d 631 (1978)), the court remanded the case to the district court for further analysis of potential investment backed expectations and the relative economic impact on the partnership.

### **Joint and Cross Access**

Courts tend to view requirements for joint access and parking lot cross access as a legitimate exercise of the police power and compatible with the economically beneficial use of land. In *Kostenborder v. City of Salem* (Or. LUBA 440 (1993).), the Oregon Land Use Board of Appeals upheld a municipal decision to condition a land division approval along a major arterial upon the consolidation of four access drives into a single two-way drive. Petitioners argued that the condition was not properly based on existing regulations and was unreasonable because there were no immediate plans for redevelopment or intensified uses on the parcels being divided. They also questioned the assumption that the partition would increase traffic flow along the arterial.

The board agreed with the City's position that future redevelopment on the divided parcels was highly likely for two reasons: (1) the purpose of dividing the land was to finance and sell the parcels to individual tenants; and (2) because the existing structures on the land were old and prime for redevelopment, it was reasonable to expect the new owners to either redevelop or intensify the use. The board also agreed that the condition would achieve a valid planning purpose. It had foundation in the City's Revised Code, in its Comprehensive Plan, and in the Salem Transportation Plan and it served to further the City's expressed goals to "facilitate safety and traffic on the fronting arterial," "minimize the adverse impacts of traffic on residential areas," and "(limit) or (control) access wherever possible" along principal arterials.

In *Holmes v. Planning Board of the Town of New Castle*, (NY AD. 1980) (2d 587 (App. Div. 1980)), the court held that conditioning development approval on the provision of interconnected parking lots and common access drives along a portion of an arterial "is not inherently confiscatory. The burdened property is capable of a reasonable return and no evidence has been presented by the petitioners to contradict this conclusion."

Nonetheless, the court rejected the condition because it was based solely on a vague concept plan that failed to address how the requirements would be applied to individual

properties. The court required the town to prepare an implementation strategy, stating that, "conditions must be certain and unambiguous. . . . It would be grossly unfair to require petitioners to consent to a common access easement when the implications of their consent are unknown and potentially unconstitutional."

Joint access requirements have been upheld in situations where the implementation process is clear and equitable. An Ohio court upheld PUD zoning that required installation of a shared rear-access drive along a highway corridor on the basis that, "the ability to control all of the traffic serving the subject site and the 11 lots north of the site is greatly enhanced by the uses of the access roads and the single traffic light... Such circuitry of access and the resulting inconvenience is not a compensable taking." *O'Neal, et A vs. City of Sharonville*, (1992 Ohio App) (LEXIS 13330, 1992 W.L. 63302 (Ohio. App. Ist Dist., 3/25/1992)).

In this case, objectives of the rezoning were clearly stated (to reduce commercial strip development and limit curb cuts to reduce potential collisions involving left turns onto the subject sites). In addition, an equitable program for implementation had been established involving agreements with each property owner within the PUD, and allowances for temporary access to the highway until the shared access drive was complete.

### **Easement Disputes**

A substantial body of case law addresses the particulars of easement disputes. In *Kline v. Bernardsville Assn., Inc.*, (N.J. 1993), for example, the New Jersey Supreme Court held that relocation of an easement without the mutual consent of the parties "should be grounded in a strong showing of necessity." (Super. 473 (N.J. 1993).) The court also held that "a planning board is not vested with the power to compel relocation of an easement at the expense of a property owner who is not an applicant." (Super. 473 (N.J. 1993)) It added, however that courts may compel properties adjacent to a development site to relocate an existing easement, where the change is minor and the easement holder's right-of-way is not significantly burdened.

*Paradyne Corporation v. Florida Department of Transportation* (So. 2d 921 (Fla. App. 1988).), involved a challenge to a state connection permit condition requiring Paradyne Corporation to share access at its boundary line with the adjacent property (M&B). The court held that Paradyne may be required to concede its property rights only where the condition "furthers a public purpose related to the permit requirement, the elimination of undue disruption of traffic or the creation of safety hazards. The condition cannot be imposed simply to further the private interests of an abutting landowner." The court further upheld the right of FDOT to deny an access permit if a connection would not be safe.

### **Thoroughfare Plans and Ordinances**

Traditionally, local governments have reserved future right-of-way through thoroughfare plans, transportation plans, official maps, and associated regulations. This process,

together with access controls, can reduce the public and private costs of constructing or widening transportation corridors. When combined with access management, this can serve as an overall corridor preservation strategy.

Whether these strategies work the same way as in the past in light of Lucas and Dolan has not been fully tested. It is necessary, therefore, to consider what each property owner is being asked to contribute and to analyze that in light of that development's impact on congestion and road capacity, as well as future benefits derived by the property owner. The widespread practice of reserving right-of-way through setback requirements has met with varying reactions in the courts. Usually, where right-of-way is reserved through setback requirements that are speculative and not related to a specific plan or project, the courts have interpreted this as a veiled taking of private property. To reduce takings liability related to right-of-way reservation programs, Daniel Mandelker, in a 1989 publication, suggests the following:

1. Include provisions that compensate landowners for existing improvements within a mapped street;
2. Provide for short time periods for reservation of the right-of-way based on a public commitment to acquire the right-of-way (generally the shorter the better);
3. Provide remedial measures, including variances and an option for public acquisition of the property when a building permit is requested.

Courts may be more likely to find a right-of-way reservation program is reasonable, where it is based on a comprehensive plan and has been adopted in accordance with due process considerations. A frequent objection to a dedication requirement is that there is no plan to develop the property; and, therefore, dedication is perceived by property owners as highly speculative and arbitrary.

The validity of protecting future right-of-way through the planning and regulatory process was recently addressed in *Palm Beach County v. Wright*, (Fla. 1994) (So.2d 50 (Fla. 1994)). The Florida Supreme Court upheld the thoroughfare map calling it "an invaluable tool for planning purposes" and a proper subject of the local police power. In its analysis, the court stated that the thoroughfare map outlines generalized corridors, and therefore a takings claim cannot be determined until the property owner submits an actual development application. At that point, when the implementation program affects a specific property, an aggrieved owner could bring an inverse condemnation proceeding to determine if a taking had occurred.

This represented a departure from previous opinions related to state efforts to reserve future right-of-way. In *Joint Ventures, Inc. v. Florida Department of Transportation* (So. 2d 622 (Fla. 1990)), the Florida Supreme Court weighed a state statute prohibiting issuance of development permits within mapped right-of-way for 5 years after recording an official map for the state big highway system. The Court concluded that the statute was "a thinly veiled attempt to 'acquire' land by avoiding the legislatively mandated procedural

and substantive protection," and a deliberate attempt to "depress land values in anticipation of eminent domain proceedings."

Still typical in this regard is the Supreme Court of Nebraska's opinion in *Simpson v. North Platte* (Neb. 240, 245, 292, N.W. 2d 297, p. 301 (1980)) where the court held that a city may not require a property owner to dedicate private property for some future public use as a condition of obtaining a building permit when such future use is not "occasioned by the construction sought to be permitted." Similarly, a Kansas case *Ventures in Property v. City of Wichita* (1979) (Kan. 698, 594 P.2d 671 (1979)) indicates that a city may not deny approval of a subdivision when a subdivider refuses to reserve land for a highway that is not planned and when its construction is uncertain.

### **Ripeness Rules**

Variations and other administrative remedies may provide the property owner an escape valve from unreasonable hardship posed by the regulatory framework. Some jurisdictions have stringent criteria for variances, in which hardship must be related to the condition of land and cannot be self-inflicted. Courts typically require property owners to first exhaust available administrative remedies, including appeals to the appropriate local authority before the case may be heard in a court of law. If appeal procedures exist and the property owner sues before first pursuing a variance or other remedial action, the case may be invalidated on this basis (*Harris v. City of Wichita*, 862 F.Supp. 287, 290 (D.Kan. 1994)).

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# ARIZONA STATE HIGHWAY ACCESS POLICY AND LEGISLATION STUDY

**Access  
Management**

**Increased  
Accessibility**

**Deterioration in  
Level of Service**

**Increased  
Traffic Conflict**

**Increased  
Traffic Generation**

**Operational  
Improvement**

**Land Use  
Change**



**TECHNICAL  
SUPPLEMENT**

**Prepared by:**



**DMJM HARRIS**

**March 2001**

## **FOREWARD**

### **TECHNICAL SUPPLEMENT**

The Technical Supplement presents Draft Access Management System and Standards that provide guidelines to planners and designers for implementing access management techniques. Based on practices of other states, combined with procedures ADOT has already in place, the Access Management System and Standards are based on an assumed access classification. The discussion of a possible access classification of ADOT roadways as presented in Chapter Five, would have to be finalized to implement the Access Management System and Standards. The shaded sections in this document represent items that would be new to ADOT existing procedures.

The Technical Supplement is organized in four sections:

- Section One describes the authority, purpose and structure of the Access Management System and Standards.
- Section Two describes the administrative procedures for implementation of the Access Management System and Standards.
- Section Three defines the roadway categories, access classifications, and the access allowed for each category and classification.
- Section Four provides the standards for the design and construction of all access to the Highway System.

STATE OF ARIZONA  
DEPARTMENT OF TRANSPORTATION

**DRAFT**

ACCESS MANAGEMENT SYSTEM AND STANDARDS

SECTION ONE  
INTRODUCTION

1.1 Purpose

1. Comprehensive access management is a new response to the congestion, the loss of arterial capacity, and the serious access-related accident experience that is plaguing our nation's roadways. Access Management is the careful control of the location, design and operation of all driveways, median openings and street connections to a roadway. This control achieves a significant improvement in transportation service because the lack of access control is the largest single cumulative design element reducing roadway safety and capacity. For access management to be successful, land use planning and development entities must work cooperatively with the transportation agencies. The challenge is to develop effective access policies and standards that find a balance between land development plans and the preservation of the functional integrity of the roadway that serves the development and the region.
2. The purpose of these standards is to regulate access onto state highways in order to protect the health, safety and welfare of the public, to maintain the highway rights-of-way, and to preserve the functional level of state highways while meeting the needs of the motoring public.
3. Access points are the main source of crashes and congestion. The number of crashes at driveways is disproportionately higher than at other types of intersections. The location, spacing, and frequency of access points have significant impact on traffic patterns and public safety. Too many accesses increase accident potential and delays, and adversely affect efficient traffic signal timing and operations. Too few accesses inhibit access and over concentrates traffic entering the highway. By helping to reduce congestion, a proficient access management program can help to reduce the need to add additional lanes to highways. Proper spacing of access points balances access and mobility, improves capacity, and reduces crashes and lost time.

1.2 Organization

1. Section One describes the authority, purpose and structure of the Access Management System and Standards.
2. Section Two describes the administrative procedures for implementation of the Access Management System and Standards.
3. Section Three defines the roadway categories and access classifications, and the access allowed for each category and classification.
4. Section Four provides the standards for the design and construction of all access to the highway system.

1.3 Implementation

This Access Management System and Standards will become effective on xx/xx/xxxx.

#### 1.4 Definitions, Abbreviations and Acronyms

1. “85<sup>th</sup> percentile speed”, defined, is that speed at which 85% of the traffic is traveling at or slower. 15% of the traffic is traveling faster than this speed.
2. “AADT”, defined, is the two-way annual average daily traffic volume. It represents the total annual traffic volume divided by the days in the year.
3. “Acceleration Lane”, defined, is a speed change lane, including tapered area, to enable a vehicle entering the traffic stream to accelerate to a speed where it can safely merge with traffic.
4. “Access”, defined, is any driveway, approach or connecting street, road or highway that connects to a state highway.
5. “Access Classification”, defined, is any of the four classifications which describes the type of access.
6. “Access, Control of”, defined, is the condition where public authority fully or partially controls the right of abutting owner’s access to the highway right-of-way. Full control of access is exercised to give preference to through traffic by providing access connections with selected public roads only and by prohibiting crossings at grade or direct private driveway connections. Partial control of access is exercised to give preference to through traffic to a degree rather than in addition to access connections with selected public roads. There may be some crossings at grade and some private driveway connections. Uncontrolled access over a highway, street or road does not limit the number of points of ingress or egress, except through the exercise of control over the placement and the geometrics of connections as necessary for the safety of the traveling public.
7. “Access Control Plan”, defined, is a roadway design plan which designates access locations and designs.
8. “Access permit”, also “permit”, defined, is a permit for ‘Encroachment in Highway Right-of-Way’ from the Arizona Department of Transportation (Rule No. R17-3-702).
9. “Access point”, defined, is the location of the intersection of a highway, street, road, driveway, or approach with a state highway.
10. “Alternate access”, defined, is another improved roadway which allows a vehicle to indirectly access a state highway instead of direct access from an adjoining lot.
11. “Applicant”, defined, is any person, business, or agency applying for an access permit.
12. “Approach”, defined, also “driveway”, is an access that is not a public street, road, or highway.

13. “Appropriate local authority”, defined, is the Board of County Supervisors if the access is located in an unincorporated area of a county or the governing body of the municipality if the access is located in an incorporated municipality.
14. “A.R.S.”, defined, is Arizona Revised Statute, which is a law enacted by the Legislature of the State of Arizona and signed into law by the Governor of the State of Arizona.
15. “Average Annual Daily Traffic (AADT)”, defined, is the total yearly volume divided by the number of days in the year.
16. “Average Daily Traffic (ADT)”, defined, is the two-way average traffic volume counted over a period of time, two days or greater, but less than one year, and divided by the number of days that traffic was counted.
17. “Average Peak Hour Volume” ,defined, for the purpose of these standards, will be the same as design hour volume (DHV).
18. “Auxiliary lane”, defined, also “speed change lane” and “turn lane”, is a lane striped for use by decelerating or accelerating vehicles and for storing vehicles that are waiting to make a turn from the roadway. These lanes are not for use by through traffic.
19. “Bandwidth”, defined, is the width, represented as time in seconds or the percent of traffic signal cycle of a pair of parallel speed lines which delineate a progressive movement on a time-space diagram and indicating the period, or percent, of time available for traffic to flow within the band. It is a measurement of the through traffic capacity of a signal progression system.
20. “Bike Lane”, or “Bicycle Lane”, defined, is a portion of the roadway which has been designated, by striping, signing, and pavement markings, for the exclusive use of bicycles.
21. “Bike Path”, or “Bicycle Path”, defined, is a shared use path which is separated from, and restricted from use by, motorized vehicular traffic. It can be used by pedestrians, skaters, wheelchairs, joggers, and bicycles.
22. “Board”, defined, is the State Transportation Board of the Arizona Department of Transportation.
23. “Capacity, Basic or Under Ideal Conditions”, defined, is the maximum number of passenger cars that can pass a given point on a lane or a roadway under ideal traffic and roadway conditions in one hour. Ideal prevailing roadway and traffic conditions are characterized by:
  - Uninterrupted flow free of side interference from vehicles or pedestrians;
  - Passenger cars only in the traffic stream;
  - Traffic lanes of 12 feet in width with adequate shoulders and no lateral obstructions within 6 feet of the edge of pavement; and

- Rural highways having horizontal and vertical alignment satisfactory for average highway speeds of 60 miles per hour or greater and no restricted (less than 1510 feet) passing sight distances on two-lane and three-lane highways.
24. “Capacity, Design (Highways)”, defined, is the maximum capacity that is commensurate with the Level of Service chosen for design; this is synonymous with service volume.
  25. “Capacity, or Possible Capacity (Highway)”, defined, is the maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or a roadway in one direction (or in both directions for a two-lane or three-lane highway) during a given time period, usually one hour, under prevailing roadway and traffic conditions.
  26. “Channelization”, defined, is the separation or regulation of conflicting traffic movements into definite paths of travel by use of pavement markings, raised islands or other suitable means to facilitate the safe and orderly movement of traffic, both vehicular and pedestrian.
  27. “Consulting engineer”, or “Engineer”, defined, is an Arizona Licensed Professional Engineer.
  28. “Control of access”, defined, is when the right of access to property adjacent to a highway is partially or fully controlled by public authority.
  29. “Controlled-access highway”, defined, is every highway to which owners or occupants of abutting lands and other persons are prohibited from having direct access to or from the highway. Access is allowed only at selected public roads.
  30. “Corner clearance”, defined, is the distance measured along the curblines between the curvature of the corner radius (curb return) or curb cut and the point of curvature of the corner radius (curb return) of the nearest intersection.
  31. “Curb, Barrier”, defined, is a curb designed to discourage vehicles from leaving the pavement. Type “A” and “D” curbs shown in the ADOT Construction Standard Drawings are of this type. Barrier curbs over four inches in height should not be used adjacent to travel ways with design speeds over 40 miles per hour.
  32. “Curb cut”, defined, is an opening in a curb for access purposes.
  33. “Curb, Mountable”, defined, is a curb that a moving vehicle can readily climb. Type “B”, “C” and “G” are of this type. Type “B” is to be used where there is a back slope adjacent to the curb. Type “C” is to be used where there is no back slope adjacent to the curb. Type “G” may be used adjacent to a roadway with a design speed of 50 miles per hour or greater.
  34. “Curblines”, defined, is the line, whether curbing exists or not, which is the outer edge of the paved portion of a highway.
  35. “Deceleration lane”, defined, is a speed change lane, including the tapered areas, which allow vehicles exiting the through traffic lanes a safe area to slow to a safe

speed, or stop, before turning from the highway.

36. "Department", defined, is the Arizona Department of Transportation.
37. "Design Hour Volume", defined, also "DHV", is the 30<sup>th</sup> highest hour traffic (vehicle) volume during a one year period for the design year. Highways are designed to accommodate this volume of traffic.
38. "Design Hour Volume, Directional (DDHV)", defined, is the future design hourly volume in the predominant direction of travel.
39. "Design Manual" defined, is the State of Arizona Department of Transportation Roadway Engineering Group *Roadway Design Guidelines*, (May 1996).
40. "Design Speed", defined, is a speed determined for design; the maximum safe speed when conditions are so favorable that the design features of the highway govern.
41. "Design Vehicle, Turning", defined, is a representative vehicle used primarily to determine minimum radii to be used in the design of turning intersecting roadways.
42. "Directional Distribution (D)", defined, as one-way volume in predominant direction of travel expressed as a percentage of two-way DHV.
43. "District", defined, is the engineering district of the Department that oversees the area where access onto a state highway is being contemplated.
44. "District Engineer", defined, is the senior officer of an engineering district of the Department, or an authorized representative, in whose district the access onto a state highway is being contemplated.
45. "Divided highway", defined, is a highway with opposing traffic movements physically separated by medians, concrete barriers, raised traffic islands, or pavement markings. Due to conflicting traffic movements a two-way left-turn lane does not establish a divided highway.
46. "Driveway", defined, also approach, is an access that is not a public street, road, or highway.
47. "Emergency access", defined, is an access for the exclusive use by police, fire, and emergency service vehicles when responding to an emergency service situation. Such accesses shall not include the access to a police station, fire station, or other emergency service facility.
48. "Encroachment in Highway Right-of-Way" (Rule No. R17-3-702), defined, is the application form that is filled out when applying for a permit for access. This same form is also used for applying for all other uses of state highway rights-of-way. Upon approval this application form becomes the permit.
49. "Entering Sight Distance", defined, is the distance that drivers need, when safely entering a highway from an intersection or driveway, to see along the highway in

both directions without requiring approaching traffic to reduce speed.

50. "Expressway", defined, is a high speed, divided highway that may have partial or full control of access, limited at grade intersections, and may have interchanges at major intersections.
51. "Federal Highway Administration", or "F.H.W.A.", defined, is the branch of the United States Department of Transportation that administers Federal Aid Highways and Federal Aid Interstate Highways.
52. "Field approach", or "Field access", defined, is an access to undeveloped or agricultural property that has an average traffic volume of less than one vehicle per day.
53. "Freeway", defined, is a highway with full control of access and the only access points are at interchanges.
54. "Frontage road", defined, is any public street or road providing service and access from areas adjacent to a freeway or highway.
55. "Functional classification", defined, is a classification system that classifies a public roadway according to its purpose and hierarchy in the local or statewide highway system.
56. "General street system", defined, is the overall system of streets, roads, and highways in an area.
57. "Grade separation", defined, is a crossing of two roadways, or a roadway and railroad, at different elevations.
58. "Gradient", or "Grade", defined, is the rate or percent of change in slope from or along a highway. It is measured along the centerline of the highway or access.
59. "Highway, Arterial", defined, as a highway primarily for through traffic, usually on a continuous route, not having full access control.
60. "Highway, Controlled-Access", defined, is a highway for through traffic on which access is limited to exit and entrance ramps at interchanges. Interstate highways and the urban freeway systems are controlled-access highways.
61. "Highway, Divided", defined, as a highway with separated roadways for traffic moving in opposite directions.
62. "Highway (Street), Major", defined, is an arterial, with intersections at grade and driveway access to adjoining property, on which traffic control and geometric design measures are used to expedite the through traffic.
63. "Highway (Street), Through", defined, is any street or highway protected by stop or yield signs, or other traffic control devices, from intersecting traffic.

64. "Interchange", defined, is a facility that grade separates intersecting roadways and provides directional ramps for movements between the roadways. The grade separation structure and ramps are considered to be part of the interchange.
65. "Interchange Turning Roadways", defined, are roadways providing access between the mainline and other controlled-access highways.
66. "Intersection", defined, is the location where two or more roadways meet, at grade.
67. "Lane", defined, is the portion of a roadway for the movement of a single line of vehicles and does not include the gutter or shoulder of the roadway.
68. "Lane, Median", defined, as a lane within the median primarily used for speed change and temporary storage of left-turning vehicles.
69. "Lane, Parking", defined, as an auxiliary lane primarily for parking.
70. "Lane, Speed Change", defined, as an auxiliary lane, including taper, for use in entering or leaving through lanes.
71. "Level of Service (LOS)", defined, is a description of traffic flow conditions ranging from "A", which is best, to "F", which is the worst. The *Highway Capacity Manual*, Transportation Research Board Special Report No. 209, as amended, gives detailed descriptions of the levels of service and the calculations involved in establishing them.
72. "Local government", defined, is the Board of County Supervisors if the facility is located in an unincorporated area of a county, and the governing board of a municipality if the facility is located in an incorporated municipality.
73. "Local Road or Street", defined, is primarily for access to residence, business or other abutting property.
74. "Median", defined, is that portion of a highway separating opposing traffic flows.
75. "MPH", defined, means a rate of speed expressed in miles per hour.
76. "M.U.T.C.D." defined, is the *Manual on Uniform Traffic Control Devices* referenced.
77. "Parkway", defined, is an arterial located in a park or park-like development and restricted to non-commercial traffic with full or partial control of access.
78. "Peak Hour Factor (PHF)", defined, is the hourly volume during the maximum-volume hour of the day divided by the peak 15-minute flow rate within the peak hour. It is a measure of peaking characteristics whose maximum attainable value is 1.0. The term must be qualified by a specified short period with the hour; this is usually five minutes for freeway operation and 15 minutes for intersection operation.
79. "Peak hour volume", defined, is, for the purpose of these standards, the same as design hour volume (DHV).

80. "Permit issue date", or "date of issue", defined, is the date when the authorized Department official signs and approves the permit.
81. "Permittee", defined, is the person to whom an access permit is issued.
82. "Person", defined, is an individual, agency, corporation, partnership, or other entity.
83. "Potential for signalization", defined, is an access point along the route that, at a 20-year projection or at build-out, is determined that the volumes would be within 25% of those for meeting the warrants for a traffic signal as defined in the M.U.T.C.D.
84. "Private access", defined, is access from an abutting parcel that is privately owned and is for the private or commercial use of the property owner.
85. "Public access", defined, is a roadway connection provided for a public way.
86. "Public way", "public road", "public street", "public intersection", defined, is a highway open for use by the general public and under the control and jurisdiction of a local government or the Department.
87. "Ramp", defined, is a directional roadway that connects an intersecting roadway to a freeway, or a freeway to a freeway.
88. "Reasonable access", defined, is access that is generally considered a matter of physical necessity for use of the property, not a matter of convenience or competitiveness in the marketplace. If alternative access locations and routes are available, and do not significantly impair access to the property, the criteria for reasonable access is generally considered satisfied.
89. "Road", defined, is a thoroughfare that is generally located in a rural or urban area, and may have surface conditions that range from dirt to pavement.
90. "Roadway", defined, is that portion of a highway improved, designed and ordinarily used for vehicular travel, and it excludes the sidewalk, shoulder, and slopes.
91. "Roundabout", defined, is an unsignalized intersection with a circulatory roadway around a central island with all entering vehicles yielding to the circulating traffic.
92. "Sidewalk", defined, is a paved walkway for pedestrians, which runs parallel to a street.
93. "Sight Distance, Passing", defined, is the distance a vehicle travels while the average driver recognizes a safe passing situation, overtakes the slower vehicle, and returns to the normal traffic lane. The difference in speeds between the two vehicles is assumed to be 10 miles per hour.
94. "Sight Distance, Stopping", defined, as the distance which a vehicle travels during the time that the average driver requires to recognize a stopping situation and bring the vehicle to a controlled stop.

95. "Signal" and "Signalization", defined, is a traffic control signal.
96. "Signal progression", defined, is the movement of vehicular traffic without stopping, at a planned speed, through contiguous signalized intersections.
97. "Signal spacing", defined, is the distance between traffic signals, along a roadway.
98. "Speed change lane", defined, also "auxiliary lane", is a separate lane, including the tapered areas, which allows a vehicle exiting or entering the through traffic lanes a safe area to decrease or increase its speed with minimal interference to through traffic.
99. "Standard Plans", defined, is the Arizona Department of Transportation *Construction Standard Drawings* (July 1994).
100. "Standard Specifications", defined, is the Arizona Department of Transportation *Standard Specifications for Road and Bridge Construction* (1990 and 1996).
101. "State highway", defined, is any road, street, or highway which is on the state highway system and to which a current state route number has been assigned.
102. "Stopping sight distance", defined, is the distance required by a vehicle, traveling at a given speed, to come to a stop after an object on the highway becomes visible to the driver of the vehicle. It is the sum of the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied and the distance required to stop the vehicle from the instant brake application begins.
103. "Storage lane", defined, is the additional length required to store the maximum number of vehicles calculated to be stopped at any time during the peak traffic volume movement in a deceleration or turn lane.
104. "Street", defined, is a thoroughfare, generally in a city or town, that is wider than an alley and usually is paved and includes sidewalks. Boulevards and parkways are types of streets.
105. "Time-space diagram", defined, is a chart on which the relative distances between traffic signals and the signal timing is plotted and referenced to time. The chart indicates the through-bandwidth, signal progression, and traffic (band) speed.

106. “Traffic Control Device”, defined, is any sign, traffic signed or pavement marking placed for the purpose of regulating, warning or directing traffic.
107. “Traffic Impact Report”, “Traffic Impact Study” or “Traffic Impact Analysis” defined, is a report generated by a Arizona Licensed Professional Engineer in accordance with the requirements of the *Encroachment in Highway Right-of-Way* (Rule No. R17-3-702).
108. “Traffic Island”, defined, is any restricted area, permanently located in the roadway, for the purpose of separating and sorting traffic streams.
109. “Traffic signal”, defined, is an electrically operated device that controls or directs the flow of traffic.
110. “Traveled way”, defined, is that portion of the highway available to the through movement of traffic. It does not include shoulders, sidewalks, gutters, medians, or auxiliary lanes.
111. “Vehicles per day”, also “vpd”, defined, is AADT or ADT.
112. “Vehicles per hour”, also “vph”, defined, is the design hour volume.
113. “Working day”, defined, is a normal day of work, excluding weekends and legal holidays.

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  24. Nevada Department of Transportation, *Draft Access Management System and Standards* (July 1999).

## SECTION TWO ADMINISTRATION

### 2.1 Purpose

To provide the administrative procedures for the implementation of the Access Management System and Standards.

### 2.2 Access Category Assignments

The classification of roadways into categories for defining minimum spacing standards shall be based on the existing or projected use of the highway. The information used for classifying roadways will be based on master plans, master street and highway plans, and projected traffic volumes, or existing traffic volumes, destinations, land uses and zoning, and recommendations of state and local authorities.

### 2.3 Permits for Access

A Permit for 'Encroachment in Highway Right-of-Way' (Rule No. R17-3-702) is required for all points of access onto any street, road or highway that is a part of the state highway system. A Traffic Impact Study must be completed before approval is granted.

#### Pedestrian, Bicyclist, and Disabled Facilities

All proposed developments along a state highway must take into consideration and comply with all local, state, and federal standards for these facilities. Existing facilities, such as sidewalks, bike lanes, or bike paths, will be perpetuated and new facilities will be installed as needed.

### 2.4 Cooperation with Local Authorities

All proposed developments/land use must comply with the requirements of, and be approved by, local governmental agencies. These may include, but not be limited to, Planning Commissions, Community Development Departments, Building Departments, Regional Transportation Commissions, City Councils, Boards of Supervisors, and Board of County Supervisors.

### 2.5 Access Requests by Local Authorities

Requests by local authorities for new access or for reconstruction of existing access will require application for a permit in accordance with subsection 2.3.

## 2.6 Design Waivers

1. A design waiver may be granted to allow direct access to a highway when a property would not have reasonable access if the minimum access spacing requirements were adhered to.
2. A request for a design waiver must be submitted as an attachment to the Application for Encroachment in Highway Right-of-Way (Rule No. R17-3-702) to the District Engineer. The request for the design waiver must state the specific reasons why a design waiver should be granted and include appropriate documentation to support the request.
3. The Department will consider the following when reviewing the design waiver request:
  - a. If there would be an undue and exceptional hardship on the applicant if the design waiver is not granted, and;
  - b. A design waiver would not compromise the safety of the general public, or;
  - c. The design waiver is reasonably necessary for the convenience or welfare of the public.
4. The approval of the design waiver will be a part of the normal review, recommendation and approval process of a building occupancy permit.
5. The building occupancy permit may contain provisions for the expiration of the design waiver if the reasons which authorized the design waiver no longer exist or if the land use changes.
6. If the design waiver is not approved and the occupancy permit cannot be approved without approval of the design waiver, the occupancy permit will also not be approved.

## 2.7 Appeals

If the design waiver applicant objects to the denial thereof or to the restrictions placed on the occupancy permit, an appeal may be filed within sixty(60) days of the denial of the design waiver or issuance of the permit. The appeal process starts with the District Engineer, who may, at his discretion, approve the appeal, or forward it to the State Engineer for further review.

## 2.8 Use of Access

1. It is the permittee's or property owner's responsibility to ensure that the use of the access to the property is not in violation of these standards or encroachment terms and conditions. If any significant changes are made, or proposed, in the use of the property which will effect volumes or type of traffic the permittee or property owner must contact the Department's District office to determine if a new encroachment permit, or modification to the existing encroachment permit, is required.
2. When changes in property use result in changes in the type of access, peak hour volume increase of the access, or type of traffic using the access and access is not in compliance with the standards or occupancy permit terms and conditions, the reconstruction, relocation, modification, closure, or compliance with the standards or occupancy permit terms and conditions may be required. The required changes will be the responsibility of the permittee or property owner. Changes in property use may be, but are not limited to, structural modification or additions, remodeling, change in type of business, change in zoning or land use, or changes in property lines resulting in new parcels. This subsection applies to all accesses constructed before, on, or after implementation of these standards.
3. The Department may, when necessary for the safety of the motoring public, require the permittee or property owner to reconstruct, modify, relocate, or close the access, or add turning lanes or auxiliary lanes to the street or highway served by the access, in accordance with the provisions of this document.

## 2.9 Access Violation

1. In accordance with the provisions of A.R.S. XXX, the Department may close, remove, or install barriers across any illegal access. Any access onto any state highway which is not permitted may be considered illegal. Any person driving onto or from a highway, except at a permitted access, shall be a violation of A.R.S. XXX. All points of access, including 'grand fathered access' are required to be permitted.
2. If closure of an access would constitute an undue hardship on users of the access, other than the permittee, the Department may perform the modifications to the access necessary for the safety of the motoring public. The property owner shall be required to reimburse the Department all costs incurred by the Department, including but not limited to design, construction, inspection, and legal expenses.

## 2.10 Access Control Plans

1. The Department, or appropriate local authority, may at its discretion develop an access control plan or master streets and highway plan for a designated portion of a state highway. This plan provides the Department and local authority a comprehensive design plan for bringing that portion of highway into conformance with its access category, functional classification, and these standards. The Department has the authority to approve or reject that portion of any access control plan or master street and highway plan, proposed by a local authority, which includes a portion of a state highway.
2. The access control plan shall include all existing and proposed points of access,

traffic signals, and roadway design elements. It shall specify the proposed roadway category and classification of each access. All abutting property owners of record shall be notified by the Department, or appropriate local authority, of the proposed changes and at least one advertised public meeting shall be held to present the proposed changes.

3. The Department and the appropriate local authority must approve the access control plan for it to become effective. All changes to the access control plan must be approved by both the Department and the appropriate local authority.

#### 2.11 Improvements to or Modifications of a Permitted Access

The permittee or property owner must submit a new Application for Encroachment in Highway Right-of-Way (Rule No. R17-3-702), and receive an approved permit prior to commencing improvements to, or modification of, an existing access. Denial of this permit does not revoke the original permit, the provisions of which shall remain in affect. The costs of the improvements shall be at the permittee's expense.

#### 2.12 Interchanges

1. A concept plan must be submitted to the Department whenever a developer or local authority seeks to install any new interchange or modify an existing interchange. This concept plan must be approved by the Department. Interchanges on Federal Aid Interstate Highways will also require the approval of the Federal Highway Administration.
2. Access onto a freeway will not be considered if it does not comply with the Federal Highway Administration's Interstate System Access Policy.
3. The concept plan is a simplified roadway and right-of-way design plan for the interchange. Such plan shall include all current and future points of access, traffic patterns and volumes, signal systems, signing and striping, right-of-way limits, and alignment. Property and access rights which must be acquired will also be shown.
4. The design of the plan shall be developed using desirable level of service traffic operation planning and roadway design standards. Access rights should be obtained for a distance of 660 feet, but no less than 100 feet in urban areas or 300 feet in rural areas, along the intersecting street, measured from the ramp pavement radius point of any ramp along the cross road.

### 2.13 Department Construction Projects

1. During the course of a highway construction project it may become necessary to reconstruct, relocate, combine, close, or otherwise bring into conformance with these standards an existing access or accesses. The Department will initiate the appropriate procedures, permits, or agreements.
2. Access permits applied for during an active design or construction project shall be reviewed by District Staff and may require further review by various divisions in Headquarters.
3. An existing access may be removed, and will not be improved during a highway construction project, unless a permit has been applied for and approved for the improvements to the access.
4. Installation of and construction of new accesses, by permittee, will not be allowed to interfere with construction of a state highway.

## SECTION THREE ACCESS CATEGORY STANDARDS

### 3.1 Purpose

This section describes eight levels of roadway categories and classifications and four levels of access classification. The design standards within each category are necessary to ensure that the highway will continue to operate at the functional level assigned to it. Also, see Tables 4.1 and 4.3.

### 3.2 Roadway Category One, Freeways

#### 1. Functional Characteristics

Highways in this category have the capacity for high volumes and speeds of traffic and support traffic movements over long distances. The traffic movement may be interstate, interregional, intercity and in large urban areas intracity. The interstate freeways are typically in this category.

#### 2. Design Standards

All opposing traffic movements are separated by physical constraints, such as medians or concrete barrier rail. All cross traffic is separated by grade separation structures. Access to the facility is limited to directional ramps which are designed and spaced to provide a minimal speed differential for the through traffic stream and the entering or exiting traffic. Design of access to this type of facility will be determined on an individual basis by the Department. Each category one access must be approved by the Director and the Board of Directors of the Department of Transportation. Access to federal-aid freeways must comply with federal regulations and be approved by the Federal Highway Administration. Temporary emergency access, or construction access within a construction zone, does not require approval of the Board or the Federal Highway Administration; however, approval is required through the normal encroachment permitting process.

### 3.3 Roadway Category Two, Expressways

#### 1. Functional Characteristics

Highways in this category have the capacity for high speed and high traffic volume movements and provide for interstate, intrastate, interregional, intercity, and in large urban areas, intracity travel needs. Traffic movement along these routes is the primary consideration, with direct access from abutting property being closely regulated. At grade intersections are allowed at widely spaced intervals. High volume intersections may require an interchange.

## 2. Design Standards

- a. The design of these highways should allow speed limits of 30 to 50 mph in urban areas, 40 to 60 mph in suburban areas, and 55 to 70 mph in rural areas. Spacing of at-grade intersections range from one-half mile in urban areas to one mile in rural areas. Closer spacing is allowed only when there is no reasonable alternate access to the general street system. Access may be restricted to right in and right out turns.
- b. Private, direct access will only be permitted when the property retains access rights and the property has no other reasonable access available. The access permit will contain the provision that the access will be closed when an alternate, reasonable access becomes available, or if the access is no longer necessary. If known, the future access and date of closure will be specified.
- c. Any permitted direct private access will be for right turns, only, unless the intersection does not have the potential for signalization, and the out of direction travel would be more than two miles, and an intersection can be designed and constructed that, in the opinion of the Department, meets all safety standards and requirements.
- d. No additional access will be allowed if existing parcels, or contiguous parcels under one ownership or control, are split or divided. All access to the new parcels will be provided internally to the existing access. The method to provide internal access will be determined by the property owner.
- e. Opposing traffic movements should be separated.
- f. Intersections with heavy intersecting traffic volumes should have grade separations or interchanges.
- g. Turning lanes and access points in the vicinity of at-grade railroad crossings will be designed and located so that they do not interfere with traffic movements across the railroad crossing.
- h. Livestock control will be utilized in rural areas.
- i. Traffic signals should be programmed to coincide with the posted speed limit and have a progression bandwidth of at least 50%.

### 3.4 Roadway Category Three, Regional Highways

#### 1. Functional Characteristics

These highways are rural arterials and can be two lane or multilane facilities and have the capacity to carry moderate to high volumes of traffic at medium to high speeds over medium to long distances. The primary function is to provide for interregional, interregional, and intercity traffic movements. Access to abutting property is secondary to through traffic movements. Highways in this category are significant

regional routes and are normally part of the National Highway System.

## 2. Design Standards

- a. The design of these highways should allow speed limits of 30 to 50 mph in developed areas, 40 to 60 mph in lightly developed areas, and 55 to 70 mph in rural areas.
- b. Private direct access will not be permitted if alternate, reasonable access is available or obtainable to the general street system. If the alternate access would cause unacceptable traffic operations or safety in the general street system, and the access meets minimum spacing standards for this category of roadway for public access, direct access may be permitted. This access may be terminated when acceptable, alternate reasonable access becomes available. Only one access will be allowed per parcel or for contiguous parcels under one ownership. The criteria for determining reasonable access from a local road or street will include consideration of the function, purpose, capacity, operation, and safety concerns, the possibility of improvements to the local road or street, and whether or not the alternate access would cause operational problems within the local road or street system.
- c. No additional access will be allowed if existing parcels, or contiguous parcels under one ownership or control, are split or divided. All access to the new parcels will be provided internally to the existing access. In accordance with the provisions of section 2.9, changes in property usage or traffic volumes may require reconstruction, improvements, or relocation.
- d. Accesses allowed under 3.4.2.b will generally be restricted to right turns, only. One or both left turns will be considered if (1) the intersection created by the access does not have the potential for signalization, and (2) the left turn will not create unreasonable congestion and safety problems, and (3) alternatives to the left turn would cause unacceptable traffic operations and safety problems on the general street system, or (4) the access meets the spacing criteria for a public access, and an intersection can be designed and constructed that, in the opinion of the Department, meets all safety standards and requirements and does not interfere with access to nearby property or with public way intersections.
- e. When local regulations require a secondary access for emergency services, the Department may allow a gated emergency access. Such an access shall not be open for non-emergency uses, shall be maintained by the permittee as a closed access, will be located off the highway right-of-way, and will not be considered for conversion to a full time access.
- f. Because intersecting public ways may in time meet signalization warrants, all intersecting streets, roads, and highways and all direct private access that have the potential for signalization (see definition) must meet the minimum signalized intersection spacing of one-half mile and minimum bandwidth as provided in Section Four, Design Standards and Specifications.
- g. Exceptions to the one-half mile spacing will be considered on a case by case basis and spacings must not be less than specified in Section Four, Design Standards

and Specifications, sub-section 4.6.

- h. Any access which meets the M.U.T.C.D. warrants for a traffic signal, but does not meet minimum spacing or bandwidth requirements, will be limited to right turns, only.

### 3.5 Roadway Category Four, Rural Highway

#### 1. Functional Characteristics

These highways are generally two lane facilities and have the capacity to carry low to medium volumes of traffic at medium to high speeds. The primary function is to provide for a balance between rural traffic needs, safety, and direct access. These highways are typically the 'farm to market' roads or provide access to small rural communities. They may also be high speed rural frontage roads.

#### 2. Design Standards

- a. The design of Category Four highways should allow speed limits of 30 to 50 mph in developed areas, and 40 to 60 mph in rural areas.
- b. One direct access point will be permitted to each parcel unless the Department establishes that the access would create a significant operational or safety problem or that the access would not meet acceptable design standards.
- c. Additional access may be allowed if the length of frontage of the existing parcel allows the additional access to meet spacing standards and if the trip generation potential of the parcel requires an additional access to maintain acceptable traffic operations on the roadway. Additional access and changes in the parcel use must also comply with section 2.9 of this standard.
- d. Access points under this roadway category will generally be allowed to have all turning movements if the access meets sight distance requirements, auxiliary lane requirements are met, and if the twenty year traffic volume projection indicates that the intersection volumes would be less than 75 percent of those required for M.U.T.C.D. traffic signal volume warrants.
- e. When local regulations require a secondary access for emergency services, the Department may allow a gated emergency access. Such an access shall not be open for non-emergency uses, shall be maintained by the permittee as a closed access, and will not be considered for conversion to a direct access.
- f. Because intersecting public ways may in time meet signalization warrants, all intersecting streets, roads, and highways and all direct private access that have the potential for meeting 75 percent of the volumes required for M.U.T.C.D. traffic signal volume warrants for signalization must meet the minimum signalized intersection spacing of one-half mile and minimum bandwidth as provided in Section Four, Design Standards and Specifications, Sub-Section 4.6.
- g. Exceptions to the one-half mile spacing will be considered on a case by case basis and spacings must not be less than specified in Section Four, Design Standards and Specifications, Sub-Section 4.6.

- h. Any access which has the potential of generating 75 percent of the volumes required for M.U.T.C.D. traffic signal volume warrants, but does not meet minimum spacing or bandwidth requirements, will be limited to right turns, only.
- i. Roundabouts may be considered in this roadway category on a case by case basis, as an alternative to public intersections. They may be used in lieu of a signalized intersection or at an intersection, which would not otherwise allow left turning movements.

### 3.6 Roadway Category Five, Principal Arterials

#### 1. Functional Characteristics

Highways in this category are principal arterials and have the capacity for medium to high speeds and high traffic volume movements and provide for intraregional, interregional, intercity, and in large urban areas, intracity travel needs. Traffic movement along these routes is the primary consideration, with direct access from abutting property being closely controlled. At grade intersections are allowed at widely spaced intervals.

#### 2. Design Standards

- a. The design of these highways should allow speed limits of 30 - 50 mph in urban areas, 40 to 60 mph in suburban areas, and 40 to 60 mph in rural areas. Spacing of at-grade intersections range from one-half mile in urban areas to one mile in rural areas. Closer spacing is allowed only when there is no reasonable alternate access to the general street system and may be restricted to right in and right out turns.
- b. Private, direct access will only be permitted when the property has no other reasonable access available. The access permit will contain the provision that the access will be closed when an alternate, reasonable access becomes available, or if the access is no longer necessary. If known, the future access and date of closure will be specified. The criteria for determining reasonable access from a local road or street will include consideration of the function, purpose, capacity, operation, and safety concerns, the possibility of improvements to the local road or street, and whether or not the alternate access would cause operational problems within the local road or street system.
- c. Any permitted direct private access will be for right turns only unless the intersection does not have the potential for signalization, the out of direction travel would be more than two miles, and an intersection can be designed and constructed that, in the opinion of the Department, meets all safety standards and requirements.
- d. No additional access will be allowed if existing parcels, or contiguous parcels under one ownership or control, are split or divided. All access to the new parcels will be provided internally to the existing access. With the approval of the Department the primary access may be relocated if such relocation will be

beneficial to the highway and remain in conformance with these standards. In accordance with the provisions of Section 2.9, changes in property usage or traffic volumes may require reconstruction, improvements, or relocation.

- e. Opposing traffic movements should be separated by medians.
- f. Turning lanes and access points in the vicinity of at-grade railroad crossings will be designed and located so that they do not interfere with traffic movements across the railroad crossing.
- g. Existing livestock control will be perpetuated in rural areas.
- h. Traffic signals should be programmed to coincide with the posted speed limit and have a progression bandwidth of greater than 45%.

### 3.7 Roadway Category Six, Minor Arterials

#### 1. Functional Characteristics

These highways may be two lane or multi-lane highways, are minor arterials, and have the capacity to carry medium to high volumes of traffic at medium speeds over short to medium distances. The primary function is to provide for intercity, intracity, and intercommunity traffic movements. This category is typically assigned to roadways within developed portions of communities where the extensive roadside development makes assigning these roadways to a higher category impractical. Access to abutting property is secondary to through traffic movements, although it allows more direct access.

#### 2. Design Standards

- a. The design of these highways should allow speed limits of 35 to 45 mph in urban areas and 50 to 55 mph in suburban areas. These highways may have medians to separate opposing traffic flows and to control left turning movements.
- b. Private direct access will be permitted, at a minimum, for right turns if the access meets minimum spacing standards for this category of roadway. Only one access will be allowed per parcel or for contiguous parcels under one ownership. The access may also have left turns in, if the addition of the left turning movement will improve the operation of an adjacent full-movement intersection and not compromise safety at the access.
- c. Both left turns will be considered if (1) the intersection created by the access does not have the potential for signalization, and (2) the left turn will not create unreasonable congestion and safety problems, and (3) alternatives to the left turn would cause unacceptable traffic operations and safety problems on the general street system, or (4) the access meets the spacing criteria for a public access, and an intersection can be designed and constructed that, in the opinion of the Department, meets all safety standards and requirements and does not interfere with access to nearby property or with public way intersections.

- d. Signalized intersections will be allowed only where the signalized intersection spacing requirements are met or the two way signal progression will allow a minimum 40 percent bandwidth through the signal network.
- e. Additional right turn access may be allowed where required auxiliary lanes can be provided and the additional access will relieve traffic congestion on the highway. Additional access will only be allowed when existing parcels, or contiguous parcels under one ownership or control, that are split or divided will meet minimum spacing requirements. Otherwise, all access to the new parcels will be provided internally to the existing access. With the approval of the Department the primary access may be relocated if such relocation will be beneficial to the highway and remain in conformance with these standards. In accordance with the provisions of Section 2.9, changes in property usage or traffic volumes may require reconstruction, improvements, or relocation.
- f. Turning lanes and access points in the vicinity of at-grade railroad crossings will be designed and located so that they do not interfere with traffic movements across the railroad crossing.
- g. Existing livestock control will be perpetuated in rural areas.
- h. Because intersecting public ways may in time meet signalization warrants, all intersecting streets, roads, and highways and all direct private access that have the potential for signalization must meet the minimum signalized intersection spacing of one-half mile and minimum bandwidth as provided in Section Four, Design Standards and Specifications, Sub-Section 4.6.
- i. Exceptions to the one-half mile traffic signal spacing will be considered on a case by case basis and spacings must not be less than specified in Section Four, Design Standards and Specifications, Sub-Section 4.6.
- j. Any access which meets the M.U.T.C.D. warrants for a traffic signal, but does not meet minimum spacing or bandwidth requirements, will be limited to right turns, only.
- k. Roundabouts may be considered, in this roadway category on a case by case basis, as an alternative to public intersections. They may be used in lieu of a signalized intersection or at an intersection, which would not otherwise allow left turning movements.

### 3.8 Roadway Category Seven, Collectors

#### 1. Functional Characteristics

Category Seven highways balance direct access with travel needs. Travel speeds and volumes are moderate and distances traveled are short to medium and provide for intercommunity, intercity and intracity traffic movements.

#### 2. Design Standards

- a. The design of roadways in this category is characterized by roadways with posted speed limits of 25 to 45 mph. The posted speed limits will be used to determine access requirements unless there are plans by the Department or local authority to improve the roadway to a higher category or speed limit and then the access criteria for that planned category or speed limit shall be used.
- b. Generally, only one access will be allowed per parcel, or two for contiguous parcels if spacing requirements can be met. Additional access may be permitted if the Department determines that it will not be detrimental to the safety and operation of the highway and the additional access will not cause a hardship to property adjacent to or across the highway from the property under consideration. Primary access to the local street system will be considered to be an additional access. Permittees will be encouraged to share access with the adjacent property owner(s).
- c. No additional access will be allowed if existing parcels, or contiguous parcels under one ownership or control, are split or divided. All access to the new parcels will be provided internally to the existing access.
- d. When local regulations require a secondary access for emergency services, the Department may allow a gated emergency access. Such an access shall not be open for non-emergency uses, shall be maintained by the permittee as a closed access, and will not be considered for conversion to a direct access.
- e. Accesses allowed under 3.8.2.b will generally be restricted to right turns, only. One or both left turns will be considered if (1) the intersection does not have the potential for signalization, and (2) the left turn will not create unreasonable congestion and safety problems, and (3) alternatives to the left turn would cause unacceptable traffic operations and safety problems on the general street system, or (4) the access meets the spacing criteria for a public access, and an intersection can be designed and constructed that, in the opinion of the Department, meets all safety standards and requirements and does not interfere with access to nearby property or with public way intersections. In accordance with the provisions of Section 2.9, changes in property usage or traffic volumes may require reconstruction, improvements, or relocation.
- f. Turning lanes and access points in the vicinity of at-grade railroad crossings will be designed and located so that they do not interfere with traffic movements across the railroad crossing.
- g. Existing livestock control will be perpetuated in rural areas.

- h. Because intersecting public ways may in time meet signalization warrants, all intersecting streets, roads, and highways and all direct private access that have the potential for signalization must meet the minimum signalized intersection spacing as provided in Section Four, Design Standards and Specifications.
- i. Any access which meets the M.U.T.C.D. warrants for a traffic signal, but does not meet minimum spacing or bandwidth requirements, will be limited to right turns, only.
- j. Roundabouts may be considered, in this roadway category on a case by case basis, as an alternative to public intersections. They may be used in lieu of a signalized intersection or at an intersection which would not otherwise allow left turning movements.

### 3.9 Roadway Category Eight, Frontage or Service Roads

#### 1. Functional Characteristics

Category Eight roads are frontage roads, service roads and local roads that provide low to moderate volumes of traffic at low to moderate speeds. The primary purpose of these roads is to provide safe and reasonable land access.

#### 2. Design Standards

- a. The design of highways in this category is characterized by highways with the design of a local street. The 85<sup>th</sup> percentile speed will be used to determine access design requirements unless there are plans by the Department or local authority to improve the roadway to a higher category or speed limit and then the access criteria for that planned category or speed limit shall be used.
- b. Generally, only one access will be allowed per parcel. Additional access may be permitted if the Department determines that it will not be detrimental to the safety and operation of the highway, spacing requirements are met, and the additional access will not cause a hardship to property adjacent to or across the highway from the property under consideration. Permittees should be encouraged to consider shared access with the adjacent property owner(s). In accordance with the provisions of Section 2.9, changes in property usage or traffic volumes may require reconstruction, improvements, or relocation.
- c. All turning movements, including left turns, may be allowed, providing adequate design and safety standards, such as sight distances, widths, and no current accident history, are met.
- d. Turning lanes and access points in the vicinity of at-grade railroad crossings will be designed and located so that they do not interfere with traffic movements across the railroad crossing.
- e. Existing livestock control will be perpetuated in rural areas.
- f. Minimum spacing between signals shall be whatever is necessary for the safe

operation and proper design of adjacent accesses. Traffic signal timing and operation priority shall be given to highways and cross streets with a higher roadway category.

- g. Roundabouts may be considered, in this roadway category on a case by case basis, as an alternative to public intersections. They may be used in lieu of a signalized intersection or at an intersection which would not otherwise allow left turning movements.

### 3.10 Access Classification One

#### 1. Functional Characteristics

This class of access is for non-commercial use and may serve a single family dwelling, or multiple family dwellings of three or less dwelling units, or an agricultural land and field access.

#### 2. Design Standards

- a. In areas with existing curb and gutter and serving a single residence, a “Single Family Driveway with Curb” with a minimum driveway width of 10 feet shall be used. Multiple family dwellings shall use a “Commercial Driveway” (see *ADOT Standard Drawing C-06.10*) with curb returns with a minimum radius of 20 feet and a minimum width of 25 feet shall be used. The maximum width allowed is 40 feet.
- b. In areas without curb and gutter construct driveways in conformance with *ADOT Standard Drawing C-06.10*. Minimum width of single family dwelling driveway shall be 10 feet. For multiple family and agricultural and field access the minimum width shall be 25 feet. If the access is in a developing area, the permittee may be required to widen the roadway to the ultimate design width, and/or install curb and gutter for the length of property frontage.
- c. In areas of curb and gutter, single family residences shall, at a minimum, pave the driveway from the front face of the curb to the right-of-way line. Multiple family driveways shall be paved from the front face of the curb to the right-of-way line. In areas without curb and gutter, single family driveways and agricultural and field access shall be paved with plantmixed or asphalt surface with a minimum depth of 3 inches on an aggregate base with a minimum depth of 3 inches. All multiple family driveways shall be paved with plantmixed or asphalt surface with a minimum depth of 3 inches on an aggregate base with a minimum depth of 3 inches. As an alternative, a concrete driveway with a depth of 6 inches may also be installed.

### 3.11 Access Classification Two

#### 1. Functional Characteristics

Driveways in this classification serve commercial or residential subdivision properties which generate less than 500 vehicle trips per day. All driveways in this classification shall be paved, from the end of the curb returns to the right-of-way line.

#### 2. Design Standards

- a. A traffic impact report is required for access points in this classification. Access onto Category Two, Three, Five and Six Roadways will require a traffic impact report. Access onto Category Four Roadways may require a traffic impact report, depending on proximity of other accesses, street intersections, and signalized intersections and proposed traffic volumes that will be generated.
- b. Plans for access in this category shall be prepared and sealed by an Arizona Licensed Engineer.
- c. Access in areas with curb and gutter will be constructed per the requirements given in *ADOT Standard Drawing C-06.10*.
- d. Access in areas without curb and gutter will be constructed per the requirements given in *ADOT Standard Drawing C-06.10*. Approaches serving passenger cars shall be a minimum width of 20 feet. Approaches serving single unit vehicles and trucks with semi-trailers shall be a minimum width of 25 feet. If the access is in a developing area, the developer may be required to widen the roadway to the ultimate design width and/or install curb and gutter for the length of property frontage.
- e. All access in this classification shall be paved in accordance with the appropriate drawing in the *Standard Drawings*.

### 3.12 Access Classification Three

#### 1. Functional Characteristics

Driveways in this classification serve commercial or residential subdivision properties which will generate 500 or more vehicle trips per day.

#### 2. Design Standards

- a. A traffic impact report is required for all access points in this classification.
- b. The access will be designed and sealed by an Arizona Licensed Engineer and use the same minimum standards previously detailed in subsections 3.9.2.b, c, and d.

### 3.13 Access Classification Four

1. Functional Characteristics

Access in this category consists of streets, roads, or highways. They may be either installed by a governmental agency or a private developer.

2. Design Standards

All access in this classification requires a Traffic Impact Study and shall be designed and sealed by an Arizona Licensed Engineer in accordance with the State of Arizona Department of Transportation *Roadway Design Guidelines*.

SECTION FOUR  
DESIGN STANDARDS AND SPECIFICATIONS

4.1 Purpose

The Department has developed the following design and construction standards and specifications to provide standards for the design, development, and construction of accesses onto state highways.

All installations within the Department’s right-of-way, shall conform to the current editions of the Department’s *Standard Specifications for Road and Bridge Construction*, *ADOT Construction Standard Drawings*, and *ADOT Roadway Design Guidelines*.

Table 4.1 gives a brief synopsis of the Roadway Categories and Classifications. Refer to Section Three for a full explanation.

**Table 4.1 Roadway Category and Classification**

<b>Category</b>	<b>Roadway Classification</b>	<b>Function</b>	<b>General Design Features</b>
<b>1</b>	<b>Freeway</b>	Interstate and Interregional Traffic Movements	Multi-Lane with Medians, Interchange access
<b>2</b>	<b>Expressway</b>	Interstate, Intrastate, Interregional, Intraregional, Intercity and Intracity Traffic Movements	Multi-Lane with Median Widely spaced public access points
<b>3</b>	<b>Regional Highway</b>	Primary: Interregional, Intraregional, and Intercommunity Traffic Movements Secondary: Land Access	May be Two or Multi-Lane Facilities
<b>4</b>	<b>Rural Highway</b>	Balances rural travel needs with land access	Generally Two Lanes
<b>5</b>	<b>Principal Arterial</b>	Primary: Inter- and Intra-city and Inter- and Intra-regional Traffic movement Secondary: Land Access	Multi-Lane with Median
<b>6</b>	<b>Minor Arterial</b>	Primary: Intercommunity and intracity traffic movement Secondary: Land access	May be Two or Four Lanes, may have median
<b>7</b>	<b>Collector</b>	Balances traffic movement with land access	Two or four lanes
<b>8</b>	<b>Frontage or Service Road</b>	Land Access	Two lanes

Source: Nevada *Draft Access Management System and Standards*

## 4.2 Access Spacing

Access spacing is an important aspect of access management. Spacing standards vary by roadway category, with the higher (lower numerically) category of roadways being more restrictive.

These minimum spacing standards take into consideration the safety of the traveling public, as well as access to the street and highway system by private land owners. If reasonable access is not available by the use of these standards, sub-section 2.7 outlines the procedures for applying for a design waiver.

The speeds used for determining spacing are based on the 85<sup>th</sup> percentile speed of the traffic at the access location.

Sub-sections 4.3, 4.4 and 4.5, and their accompanying tables, should also be reviewed for further information and spacing requirements.

Table 4.2 presents a synopsis of access spacing requirements. For full details, refer to the appropriate section of Section Three.

**Table 4.2 Minimum Access Spacing**

Roadway Category	Location	Public Road Spacing	Private Direct Access	Private Access Spacing	Private Access Geometrics	Private Access Remarks
<b>1</b> <b>Freeways</b>	Urban	1 mile	No	N/A	N/A	All interchanges must meet public road spacing and comply with FHWA Policy.
	Suburban	2 miles				
	Rural	3 miles				
<b>2</b> <b>Expressways</b>	45 mph	0.5 mile	No	N/A	See Section 3.3	Allowed only when no other access is available.
	50-60 mph	0.75 mile				
	65+ mph	1 mile				
<b>3</b> <b>Regional Highways</b>	35-45 mph	0.25 mile	Limited	See Tables 4.3, 4.4, and 4.5	See Section 3.4	Allowed only when no other access is available.
	50-60 mph	0.50 mile	Limited			
	65+ mph	1 mile	Limited			
<b>4</b> <b>Rural Highways</b>	35-45 mph	660 feet	Allowed	250 feet minimum	Right turns allowed, turn lanes may be required. See section 3.5 for left turns.	One access per parcel, two for large development when spacing standards can be met.
	50-60 mph	0.25 mile	Allowed	450 feet minimum		
	65+ mph	0.50 mile	Allowed	1000 feet minimum		
<b>5</b> <b>Principal Arterials</b>	35-45 mph	0.25 mile	Limited	250 feet minimum	Right turns only allowed, turn lanes may be required.	Allowed only when no other access is available.
	50-55 mph	0.50 mile	Limited	450 feet minimum		
	60-70 mph	1 mile	Limited	800 feet minimum		
<b>6</b> <b>Minor Arterials</b>	35-45 mph	0.25 mile	Limited	250 feet minimum	Right turns allowed, turn lanes may be required. See section 3.7, 2c for left turns.	One access per parcel, two for large development when spacing standards can be met.
	50-55 mph	0.50 mile	Limited	450 feet minimum		
<b>7</b> <b>Collector Roads</b>	25-35 mph	660 feet	Allowed	150 feet minimum	Right turns allowed, turn lanes may be required. See section 3.8, 2e for left turns.	One per parcel
	40-45 mph	0.25	Allowed	300 feet minimum		
<b>8</b> <b>Service Roads</b>	25-35 mph	660 feet	Allowed	150 feet minimum	Left and right turns, turn lanes may be required.	One per parcel

Source: Nevada Draft Access management System and Standards

#### 4.3 Street and Driveway Classification

Breaking street and driveway intersections down into classifications allows spacing standards to be assigned to driveways based on volume of traffic generated and speeds of through traffic. Table 4.3 presents a brief synopsis of driveway classifications. For a complete detailed description refer to sections 3.10 to 3.13.

**Table 4.3 Access Classification**

Classification	Type of Connection	Driveway Use
<b>Class I</b>	Non-commercial	For access to single family dwellings Multiple family dwellings of three or less dwelling units Agricultural land and field access
<b>Class II</b>	Minor Commercial	Medium volume generator (less than 500 trips per day) Access to property other than Class I or Class III Driveways
<b>Class III</b>	Major Commercial	High volume generators (500 or more trips per day) Shopping centers, industrial parks, office parks, colleges, residential complexes and subdivisions and etcetera
<b>Class IV</b>	Public or Private Roads	New public roads or streets

Source: Nevada *Draft Access Management System and Standards*

#### 4.4 Driveway Clearances and Spacing

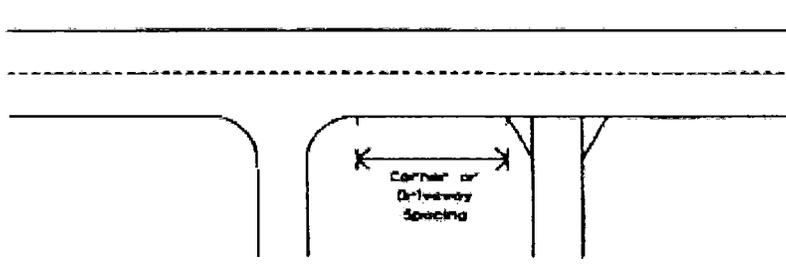
The driveway clearances establishes the minimum distance that the various class of driveways may be placed from the nearest intersection. The distance from the intersection is measured from the point of curvature of the radius of the intersection to the point of curvature of the radius for the driveway. In the case of a depressed curb driveway the distance is measured to the beginning of the depressed curb.

**Table 4.4 Minimum Corner Clearances**

Classification	Front Corner (Intersection)	Comments
<b>Class I</b>	150 feet	One per lot
<b>Class II</b>	Use Spacings in Table 4.5	Depending on Roadway Category, one per lot, two for contiguous parcels
<b>Class III</b>	Use Spacings in Table 4.5	Depends on Roadway Category
<b>Class IV</b>	660 feet min.	Depends on Roadway Category

Source: Nevada *Draft Access Management System and Standards*

**Figure 4.1 Corner Clearances**



Source: Nevada *Draft Access Management System and Standards*

**4.5 Non-Signalized Driveway Spacing**

Driveway spacings are based on speed to reduce collision potential due to right-turn conflict overlaps, as well as providing reasonable egress capacity. The spacing for signalized driveways must meet the spacing requirements of signalized intersections, see subsection 4-6. Class III driveways which meet the M.U.T.C.D. warrants for signalization, but do not meet the spacing requirements of subsection 4.6 shall be right in and right out driveways, only.

Streets or roads that are required by local authorities through street spacing standards or a master street and highway plan will not be considered to be one of the driveways for contiguous parcels, but will be considered a public thoroughfare.

Table 4.5 spacing criteria is to be used for determining the driveway spacing from public intersections and from other driveways.

**Table 4.5 Spacing for Driveways**

<b>85<sup>th</sup> Percentile Speed (mph)</b>	<b>Minimum Separation (feet)</b>
<b>25</b>	150
<b>30</b>	200
<b>35</b>	250
<b>40</b>	300
<b>45</b>	350
<b>50</b>	450
<b>55</b>	600
<b>60</b>	800
<b>65</b>	1000
<b>70</b>	1200

Source: Nevada *Draft Access Management System and Standards*

#### 4.6 Signalized Intersection Spacing

The values in Table 4.6 lists the optimum signalized intersection spacing for signal progression timing. All signalized intersections will require separate left turn lanes. Accesses which cannot meet these spacing requirements shall be right in and right out driveways, only. One-half mile spacing may be used for all spacing greater than 2640 feet.

**Table 4.6 Optimum Signalized Spacing**

Cycle Length (seconds)	Operating Speed (mph)									
	20	25	30	35	40	45	50	55	60	65
	Distance in Feet									
60	880	1100	1320	1540	1760	1980	2200	2430	2640	2860
70	1020	1280	1540	1800	2050	2310	2560	2830	3080	3340
80	1160	1460	1760	2050	2350	2640	2930	3230	3520	3815
90	1310	1640	1980	2310	2640	2970	3300	3630	3960	4290
100	1460	1820	2200	2570	2930	3300	3670	4030	4400	4765
110	1610	2010	2420	2830	3220	3630	4040	4430	4840	5245
120	1760	2200	2640	3080	3520	3960	4400	4840	5280	5720
150	2200	2750	3300	3850	4400	4950	5500	6050	6600	7150
180	2640	3300	3960	4620	5280	5940	6600	7260	7920	8580

Source: Nevada *Draft Access management System and Standards*

Table 4.6a lists the minimum acceptable bandwidths which will be used when evaluating signal locations. These values will give acceptable signal progression timing.

**Table 4.6a Minimum Through Bandwidths**

Roadway Category	Classification	Speed (mph)	Minimum Bandwidth
2	Expressways	45-65	50%
3	Regional Highway	35-65	45%
4	Rural Highway	35-65	40%
5	Principal Arterial	45-65	45%
6	Minor Arterial	35-55	40%
7	Collector	25-45	30%
8	Frontage Road	25-35	Not Required

Source: Nevada *Draft Access Management System and Standards*

#### 4.7 Minimum Entry Widths

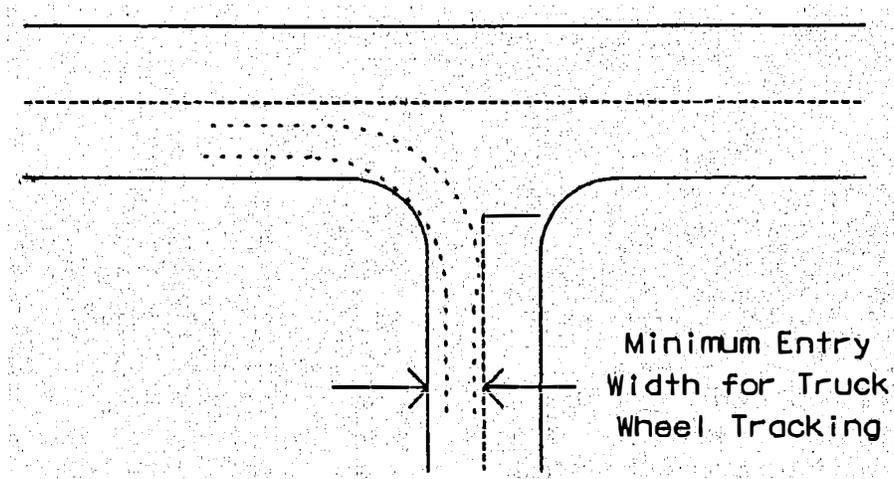
1. Class I, Single Family Residential access, where curb and gutter is present, shall have a minimum “Residential Driveway” (see *ADOT Standard Drawing C-06.10*) width of 10 feet and a maximum width of 30 feet. Access along roadways without curb and gutter shall have a minimum width of 10 feet and a maximum width of 30 feet (see *ADOT Standard Drawing C-6.10*). Multiple family dwellings, with three or less units, shall have a minimum “Commercial Driveway” width of 25 feet and curb return radii of 20 feet and minimum widths of 25 feet and a maximum width of 40 feet.
2. Class II, Minor Commercial access, shall have minimum “Commercial Driveway” widths of 25 feet and minimum curb return radii of 25 feet. Minimum approach widths shall be 25 feet (passenger cars only) and shall have a minimum width of 32 feet. Refer to Table 4.7 for minimum entry widths and curb return radii. The maximum access width shall be minimum entry width plus 16 feet for the egress.
3. Class III, Major Commercial, shall have minimum “Commercial Driveway” widths of 25 feet, with wider widths and curb return radii based on type of vehicle usage in Table 4.7. The maximum width shall be based on the lane requirements as per the Traffic Impact Study. The minimum design vehicle shall be a single unit truck or bus (SU). Figure 4.2, Minimum Entry Width, shows the truck wheel tracking in relation to the commercial driveway.
4. Table 4.7 shows the minimum entry widths required for SU and WB-50 vehicles at various curb return radii. These values are for one way, the exiting vehicle lane width, minimum 16 feet, must be added to these figures for the total driveway width. The listed values are for driveways which intersect the highway at 90° and require a minimum two feet shoulder width on the highway.

**Table 4.7 Minimum Commercial Entry Width**

<b>Curb Radius (Feet)</b>	<b>SU Single Unit Truck or Bus</b>	<b>WB-50 Semi-Trailer Truck</b>
<b>25</b>	22	
<b>30</b>	18	
<b>35</b>	16	26
<b>40</b>		22
<b>45</b>		18
<b>50</b>		16

Source: Nevada *Draft Access Management System and Standards*

**Figure 4.2 Minimum Entry Width**



Source: Nevada *Draft Access Management System and Standards*

4.8 Left-Turn Lane Requirements, Two-Lane Unsignalized Roads

Table 4.8 lists the projected 20 year design hour volumes and the operating speeds of traffic which necessitate the installation of left-turn lanes. The traffic volumes to be considered in making this determination are the opposing (oncoming) traffic volumes, the advancing traffic volumes, and the percent of advancing traffic which is turning left. Turn lanes may be required at lower volumes by a traffic impact study or by the Department to protect the traveling public.

**Table 4.8 Left-Turn Lane Requirements for Two-Lane Roads**

Opposing Volume (ddhv)	Advancing Volume (ddhv) with			
	5% Left Turns	10% Left Turns	20% Left Turns	30% Left Turns
<b>40 mph (or less) Operating Speed</b>				
800	330	240	180	160
600	410	305	225	200
400	510	380	275	245
200	640	470	350	305
100	720	515	390	340
<b>50 mph Operating Speed</b>				
800	280	210	165	135
600	350	260	195	170
400	430	320	240	210
200	550	400	300	270
100	615	445	335	295
<b>60 mph Operating Speed</b>				
800	230	170	125	115
600	290	210	160	140
400	365	270	200	175
200	450	330	250	215
100	505	370	275	240
<b>70 mph Operating Speed</b>				
800	180	140	100	95
600	230	165	125	110
400	290	210	160	140
200	355	260	200	170
100	400	300	220	190

Source: Nevada *Draft Access Management System and Standards*

#### 4.9 Left-Turn Lane Requirements, Four-Lane, Undivided, Unsignalized Roads

Table 4.9 lists the projected 20 year design hour volume of traffic which necessitate the installation of left-turn lanes. The traffic volumes which are to be considered in making this determination are the opposing (oncoming) traffic volumes, the advancing traffic volumes, and the percent of advancing traffic which is turning left. Turn lanes may be required at lower volumes, by a traffic study or by the Department, to protect the traveling public.

**Table 4.9 Left-Turn Lane Requirements for Multilane Undivided Roads**

<b>Left-Turn Lane Requirements for Multilane Roads (unsignalized)</b>				
<b>Opposing Volume (ddhv)</b>	<b>Advancing Volume (ddhv) with</b>			
	<b>5% Left Turns</b>	<b>10% Left Turns</b>	<b>20% Left Turns</b>	<b>30% Left Turns</b>
<b>800</b>	140	110	80	70
<b>600</b>	220	160	120	100
<b>400</b>	350	250	190	160
<b>200</b>	530	380	290	250
<b>100</b>	650	480	350	310

Source: Nevada *Draft Access Management System and Standards*

#### 4.10 Left-Turn Lane Requirements, Four-Lane, Divided, Unsignalized Roads

Table 4.10 lists the projected 20 year design hour volumes of traffic which necessitate the installation of left-turn lanes. The traffic volumes which are to be considered in making this determination are the opposing (oncoming) traffic volumes, the advancing traffic volumes, and the percent of advancing traffic which is turning left. Turn lanes may be required at lower volumes, by a traffic study or by the Department, to protect the traveling public.

**Table 4.10 Left-Turn Lane Requirements for Multilane Divided Roads**

<b>Opposing Volume (ddhv)</b>	<b>Advancing Volume (ddhv) with</b>			
	<b>5% Left Turns</b>	<b>10% Left Turns</b>	<b>20% Left Turns</b>	<b>30% Left Turns</b>
<b>800</b>	210	150	110	100
<b>600</b>	340	240	180	150
<b>400</b>	520	380	290	250
<b>200</b>	800	580	440	390
<b>100</b>	1000	720	550	480

Source: Nevada *Draft Access Management System and Standards*

#### 4.11 Right-Turn Lane Requirements, All Roads

Treatments for right turning traffic movements are based on the classification of the access and the speed. The appropriate treatment will reduce the exposure and accident potential created by right turning vehicles. These are the minimum requirements and turn lanes may be required at lower speeds and classifications, by a traffic study or by the Department, to protect the traveling public.

**Table 4.11 Right-Turn Lane Requirements**

Access Classification	Speed (mph)	Treatment
<b>I</b>	25-35	Radius (none with curb and gutter)
	45-55	50 foot Taper, 25 foot Radius
	55+	100 foot Taper, 60 foot Radius
<b>II</b>	25-35	100 foot Taper, 60 foot Radius
	45+	Taper, Deceleration Lane (see Section 4.12), Radius based on Table 4.7
<b>III</b>	25	150 foot Taper, 60 foot Radius, Add Deceleration Lane for >750 vpd (see Section 4.12)
	35+	Taper, Deceleration Lane, (see Section 4.12), Radius based on Table 4.7

Source: Nevada *Draft Access Management System and Standards*

#### 4.12 Deceleration Lanes

Deceleration lanes allow vehicles which are turning into an intersection, a safe area in which to slow prior to making the turn, thereby reducing the accident potential with through traffic.

##### **Left-Turn Lanes**

In some instances it may be necessary to add the required widening to only one side of the roadway as shown in Figure 4.3A. When widening only one side, the taper length is determined by the formula:

$$T = S \times W \quad \text{for speeds of 45 mph or greater}$$

and by

$$T = \frac{S^2 \times W}{60} \quad \text{for speeds under 45 mph}$$

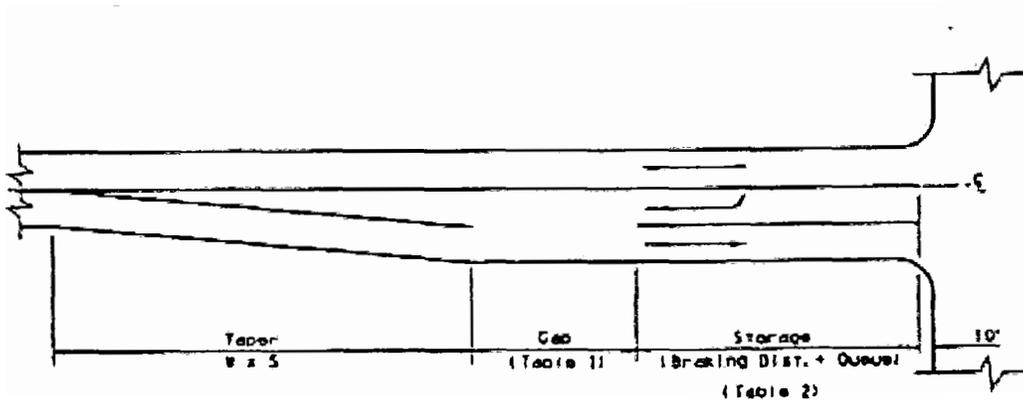
where:

T = length of taper

W = width of the added lane

S = posted speed for existing roadways, or design speed for new or reconstructed roadways.

**Figure 4.3 A Widening One Side Only**

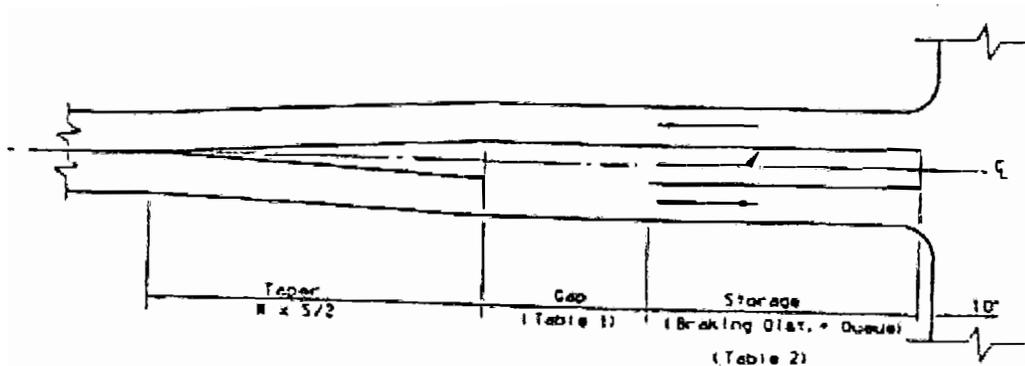


Source: ADOT *Traffic Manual*

The preferred way of creating a left-turn lane is by widening the roadway on both sides equally as shown in Figure 4.3 B. This minimizes the amount of lateral shifting required for through traffic.

Taper lengths will be reduced by a proportional amount based on the proportion of widening on each side, e.g., by  $\frac{1}{2}$  for symmetrical widening. Similar adjustments must be made for other lane widths than the standard 12 foot illustration.

**Figure 4.3 B Symmetrical Widening**



Source: ADOT *Traffic Manual*

Example:  $W = 12'$

Gap = 140'

Storage =  $415' * + 50' = 465'$

$$S = 65 \text{ mph} \quad (\text{From Table 430-1})$$

$$T = \frac{12 \times 65}{2} = 390'$$

\*From Table 4.3 B

### Gap Length

Table 4.12A provides the length of the gap for left-turn lanes. A new turn lane standard drawing has been developed and approved for use in February, 2001.

**Table 4.12A Gap Lengths**

Posted Or Design Speed (mph)	GAP (feet)
<40	60
40 – 50	90
>50	140

Source: ADOT *Traffic Manual*

### Storage Length

The storage length is a combination of the braking distance (Table 4.3B) and a queue length dependent on the anticipated traffic control for the intersection and the traffic demand at the turn.

$$\text{Storage length} = \text{braking distance} + \text{queue length}$$

**Table 4.12B Braking Distance**

<b>Posted Or Design Speed (mph)</b>	<b>Desirable</b>		<b>Minimum</b>		
	<b>Braking Speed (mph)</b>	<b>Braking Distance (feet)</b>	<b>Entering Speed (mph)</b>	<b>Braking Speed (mph)</b>	<b>Braking Distance (feet)</b>
30	29	80	20	20	20
35	34	115	25	25	40
40	38	150	30	29	50
45	43	200	35	34	85
50	47	245	40	38	120
55	52	300	45	42	145
60	56	360	50	47	200
65	60	415	55	52	265
70	64	490	60	56	315
75	70	585	65	61	400

Source: ADOT *Traffic Manual*

The “Desirable” braking distance shown in Table 4.12B is based on the assumption that a vehicle will have lost a few miles per hour through retardation by the vehicle’s engine and drive train prior to braking and that braking will actually begin when the vehicle is fully into the turn lane. The “Minimum” braking distance shown is based on the assumption of: (a) a drop of 10 mph in the average speed of a vehicle by the time it begins to enter the opening of “gap” of the turn lane; (b) there will be a further reduction in speed through engine retardation while entering the turn lane; and (c) assumed braking will begin once the vehicle is 2/3 of the way into the turn lane (see Figure 4.3C, Minimum Braking Distance).

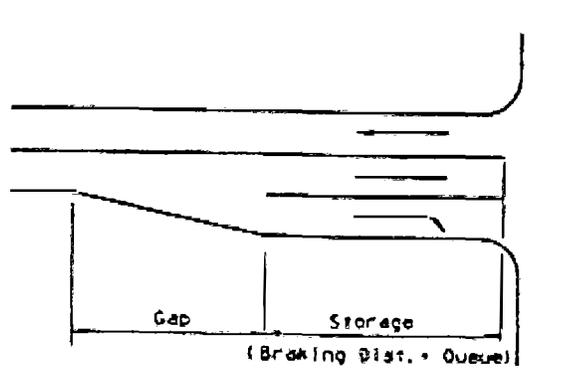


Each passenger vehicle and each truck are assumed to be 25 and 60 feet in length, respectively.

The minimum queue length for all traffic control situations shall accommodate two passenger vehicles or one passenger vehicle and one truck when the truck percentage is greater than 10%, i.e., 50 foot and 85 foot minimum queue lengths, respectively.

When a two-way left-turn lane is to be interrupted with a one-way left-turn lane, the two-way left-turn lane shall end a sufficient distance in advance of the interruption to allow the placement of a minimum gap and necessary storage (see the turn lane standard drawing).

**Figure 4.3 D Right-Turn Lanes**



Source: ADOT *Traffic Manual*

### **Taper Length**

Lengthy tapers are generally not required for right-turn lanes since the lane may be simply added to the outside of the traveled way; however, a shorter taper equal in length to the gap (Table 4.12A) is provided to transition the edgeline from the normal pavement cross section to the edge of the turn lane.

### **Gap Length**

The gap for right-turn lanes is the same as that for left-turn lanes (see Table 4.12A).

## Storage Length

The storage length for right-turn lanes is the same as that for left-turn lanes; however, when space available for a turn lane is limited and a yield condition or free-flowing right-turn is provided, it may be appropriate to assume that braking continues, not to a stop as with left turns, but rather to the turning speed at the intersection radius return. Where traffic slows to 10 mph to turn right, 20 feet may be deducted from the right-turn lane queue length.

### 4.13 Median Design

1. Median lanes are necessary for the installation of left-turn lanes, providing a lane for deceleration and storage of vehicles making left turns from the roadway. Acceleration lanes for vehicles turning left onto the roadway may utilize the median, also. The minimum width for a painted or raised median (edge of gutter pan to edge of gutter pan) is four feet. The minimum widths required for left-turn lanes are shown in Table 4.14, Minimum Median Widths.
2. If an existing median is of sufficient width to accommodate the proposed left-turn lane(s) the existing median may be used without further widening. When it is necessary to widen the roadway to accommodate left-turn lanes the roadway will be widened symmetrically on both sides of the roadway.

**Table 4.14 Minimum Median Widths**

<b>Minimum Median Widths for Left-Turn Lanes</b>	
Single Left-Turn Lane	16 feet
Dual Left-Turn Lanes	28 feet
Triple Left-Turn Lanes	40 feet
Two-Way Left-Turn Lanes	14 feet (max)

Source: Nevada *Draft Access Management System and Standards*

### 4.14 Median Openings

1. Median openings are necessary to accommodate left turning and cross traffic. A semicircular median end may be used on medians of less than ten feet in width. All medians that are ten feet or wider in width must use a bullet nose median end for a median opening at a cross road, or a parabolic curve at a "T" intersection.
2. Table 4.15, Minimum Median Openings, gives the minimum length of median openings, based on a single unit truck (SU) and occasional semi-trailer/trucks (WB-50) and perpendicular intersections. The length must be increased for skewed intersections and predominant semi-trailer/truck usage in accordance with Chapter IX, At Grade Intersections, of the current edition of *A Policy on Geometric Design of*

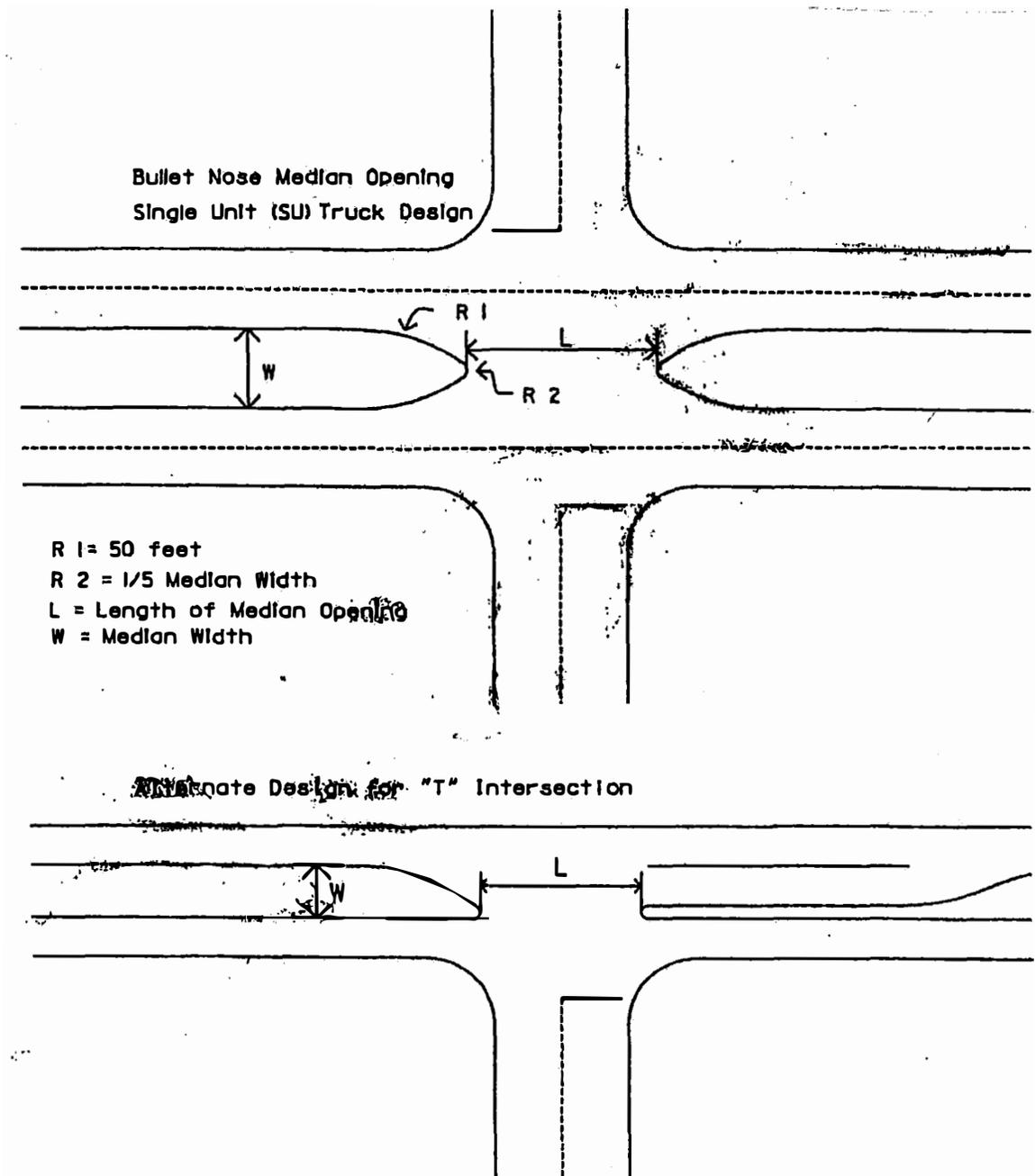
*Highways and Streets.* Figure 4.4, Median Widths and Openings, shows the median opening design for a four-legged and for a “T” intersection.

**Table 4.14 Minimum Median Openings**

Median Width	Lengths of Minimum Median Openings (feet)	
	Semicircular	Bull Nose
4	96	96
6	94	76
8	92	68
10	N/A	62
12	N/A	58
14	N/A	53
16	N/A	50
20	N/A	44
24	N/A	40 (min.)
>24	N/A	40 (min.)

Source: Nevada *Draft Access Management System and Standards*

**Figure 4.4 Median Widths and Openings**



Source: Nevada *Draft Access Management System and Standards*

4.15 Intersection Sight Distance

The drivers of vehicles which are preparing to enter a highway from a driveway or intersection must be able to see in both directions. This will enable them to have time to pull into the through lane and accelerate without requiring approaching traffic to reduce speed. This is called the entering sight distance.

If Entering Sight Distances are not obtainable, Stopping Sight Distances must be achieved as an absolute minimum. Stopping Sight Distance is defined as the distance required by a vehicle traveling at a given speed to come to a stop after an object on the highway becomes visible to the driver of the vehicle. Table 4.15 and Figure 4.5 give the Stopping Sight Distance by speed and grade.

Sight distances are calculated from driver's 'eye' height of 3.50 feet, 18 feet from edge of the nearest travel lane, to an approaching vehicle 4.25 feet above the pavement. These sight distances are for perpendicular intersections with entering vehicle stopped and are for passenger cars.

Stopping sight distance is the distance required to stop, after recognizing the need to stop, including the distance traveled during a reaction time of 2 ½ seconds and then braking to a stop.

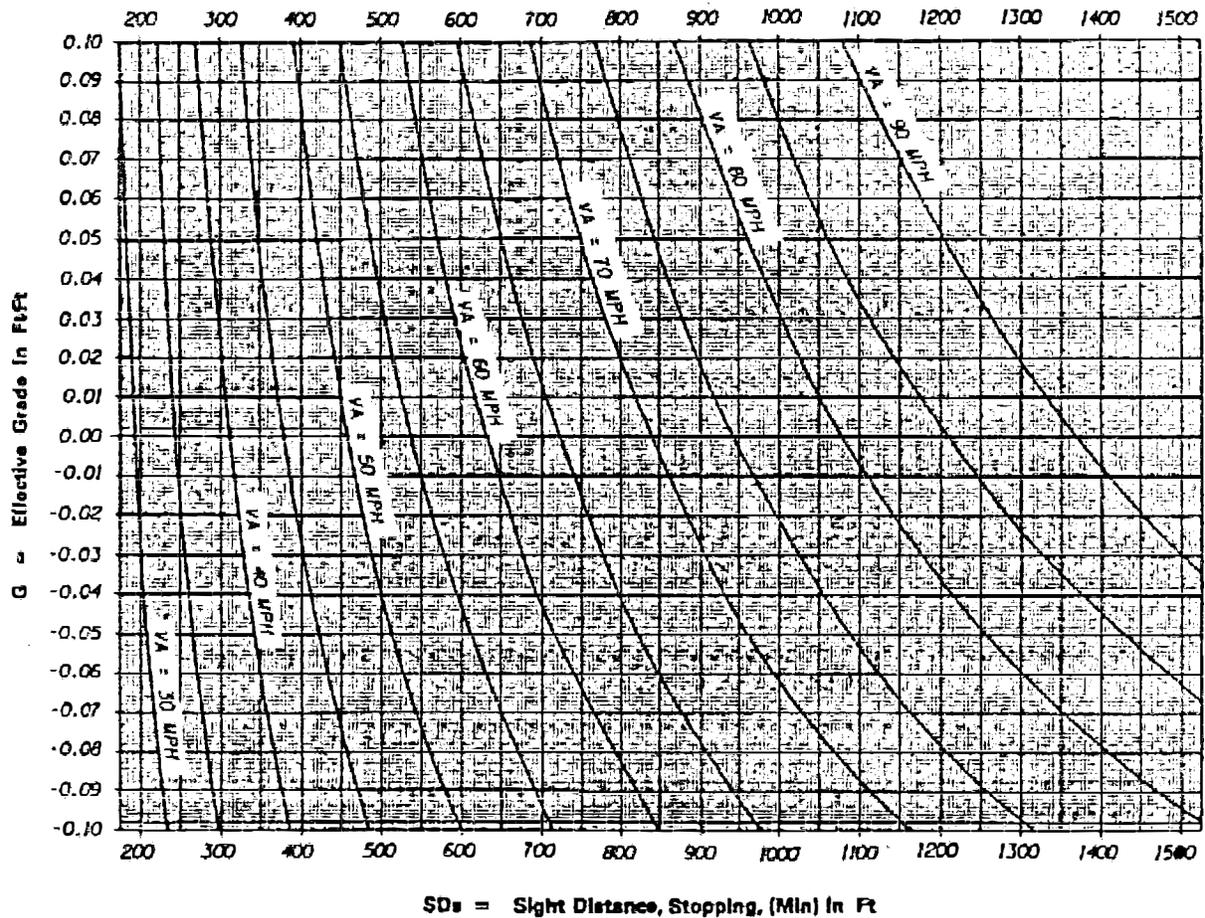
If neither intersection sight distance is obtainable, an acceleration lane may be considered.

**Table 4.15 Entering Intersection Sight Distance**

Preferred Intersection Sight Distance								
Speed (mph)	Sight Distance (feet)	Stopping Sight Distance (feet)						
		Level	Upgrade			Downgrade		
		0±2%	+3%	+6%	+9%	-3%	-6%	-9%
20	245	125	120	115	115	130	130	130
25	305	150	150	145	140	155	160	165
30	365	200	200	195	190	215	225	240
35	425	250	245	235	225	265	280	300
40	485	270	265	255	245	290	310	330
45	545	350	345	335	320	390	415	445
50	605	450	435	415	-	490	525	-
55	670	550	525	495	-	595	640	-
60	730	650	635	600	-	725	790	-
65	790	725	695	665	-	785	855	-
70	850	810	755	710	-	875	960	-

Source: ADOT Roadway Design Guidelines

**Figure 4.5 Relation of Stopping Sight Distance to Design Speed and Effective Grade**



**SIGHT DISTANCE, STOPPING**

$$SD_s = 1.467 V_A (2.5) + \frac{V_A^2}{30(r \pm G)}$$

*SDs* = Stopping Distance, (Min) In Feet

*V<sub>A</sub>* = Assumed Speed For Wet condition In MPH.

*r* = Wet Coefficient Of Friction Between Tires And Roadway.

*G* = Grade Of Roadway In Decimal Form (Ft/Ft)

Source: ADOT Roadway Design Guidelines

**4.16 Intersection Sight Triangle**

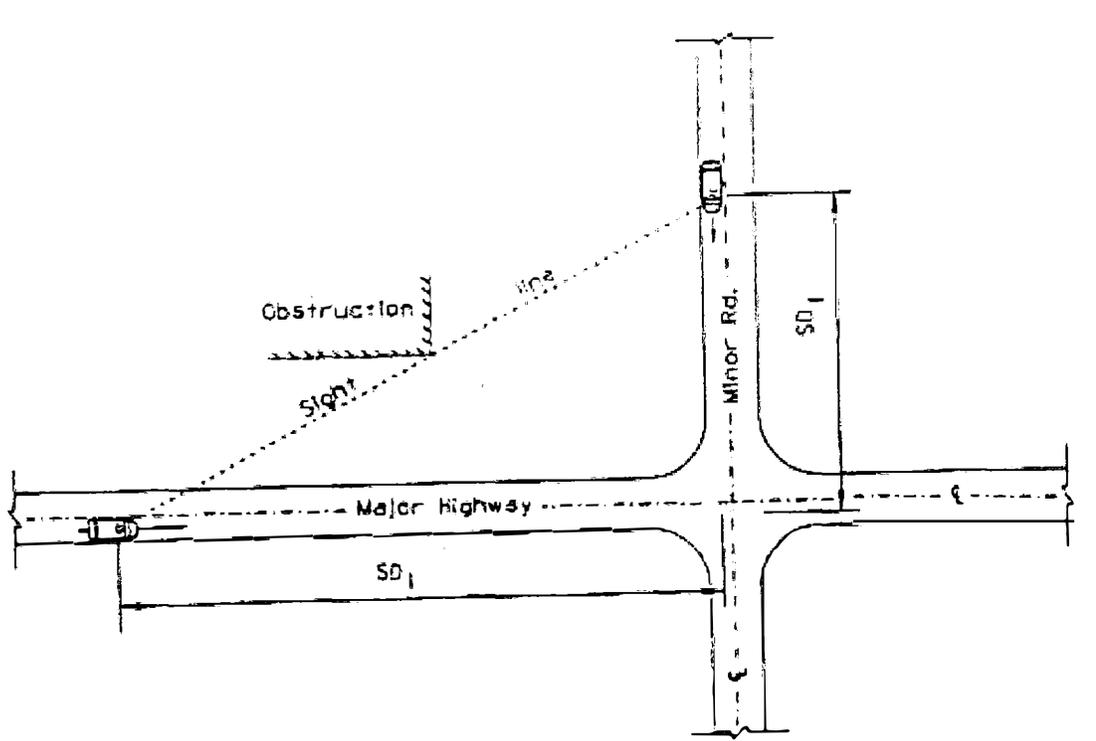
The sight triangle is the distance which must be kept clear from a point 18 feet from the edge of the nearest travel lane to the distance along the travel lane, in Table 4.16, to give stopped passenger cars adequate distance to pull into the travel lanes and accelerate, and through traffic time to slow 15%. The distance is based on 12-foot lanes with a 4-foot wide median for four lane roads, and for perpendicular approaches. Figures 4.6A and 4.6B show the intersection sight triangle for approaching and departing vehicles.

**Table 4.16 Intersection Sight Triangle**

Speed (mph)	Left (feet)	Right, Two Lane Road (feet)	Right, Four Lane Road (feet)
20	185	125	90
25	230	160	110
30	290	200	140
35	360	250	175
40	445	305	215
45	545	375	265
50	645	440	310
55	760	520	365
60	885	605	425
65	1040	710	500
70	1200	820	580

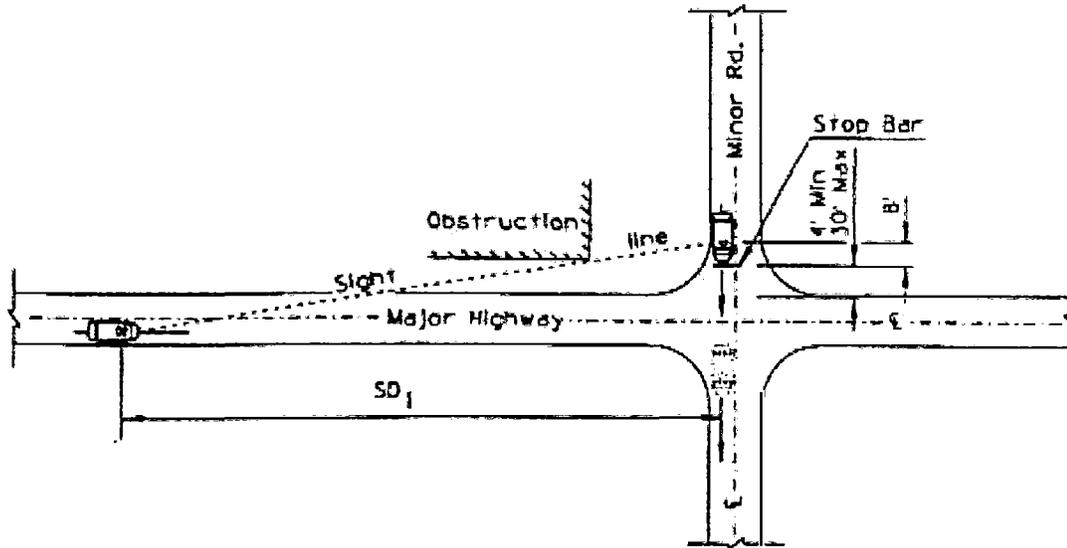
Source: Nevada Draft Access Management System and Standards

**Figure 4.6 A Intersection Sight Triangle for Approaching Vehicle**



Source: ADOT Roadway Design Guidelines

**Figure 4.6 B Intersection Sight Distance for Departing Vehicle**



Source: ADOT *Roadway Design Guidelines*

#### 4.17 Acceleration Lanes

Acceleration Lanes should be used on high speed ( $\geq 45$  mph), high volume ( $\geq 10,000$  vpd, based on a 20 year projection) roads, when required by a traffic study, or when entering vehicles do not have a sufficient gap to enter traffic safely during the peak hour. Acceleration lanes should also be considered for use on roads with restricted sight distance.

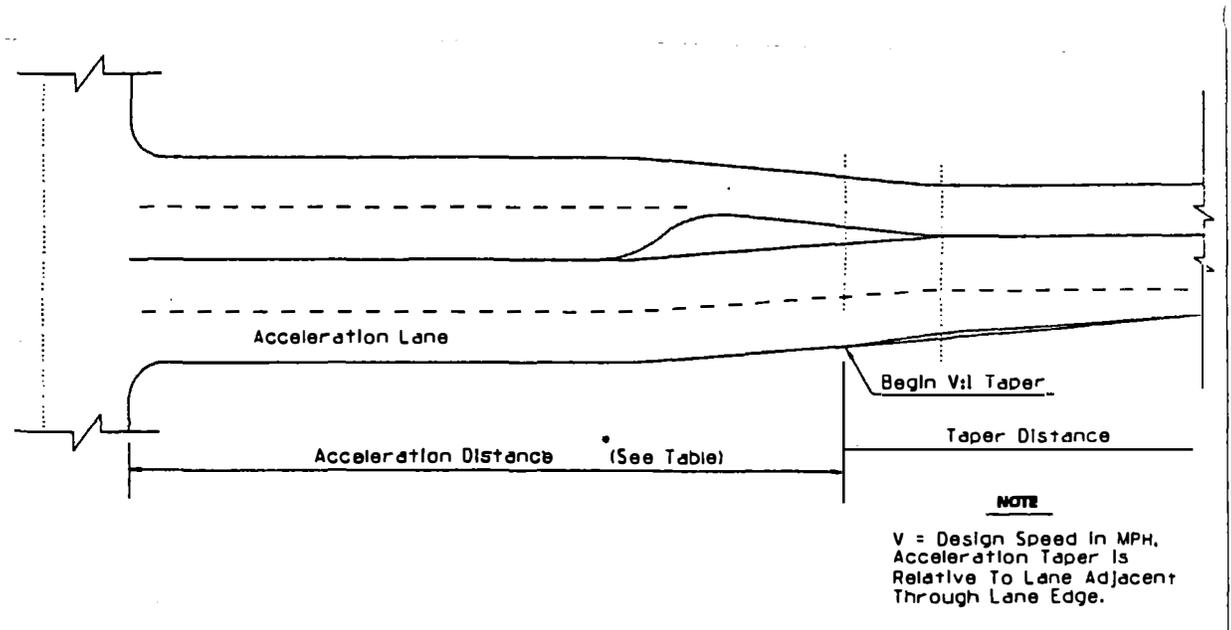
Tapers should be 0.65 V:1 for speeds less than 45 miles per hour and 25:1 for 45 miles per hour and higher.

For long upgrades, where entering trucks cannot achieve a speed within 10 mph of the 85<sup>th</sup> percentile speed, an acceleration lane may be required to be lengthened for a truck climbing lane.

The acceleration lane should be transitioning into the outside through lane using a taper rate of 0.65 V:1. One third of the taper length may overlap the acceleration length.

Table 4.17 gives the acceleration distances and Figures 4.7A and 4.7B show the acceleration lane configurations. Table 4.17B and Figure 4.7C show the acceleration lane lengths by grade and the tapers.

**Figure 4.7A Acceleration Lane Configuration**



Source: ADOT *Roadway Design Guidelines*

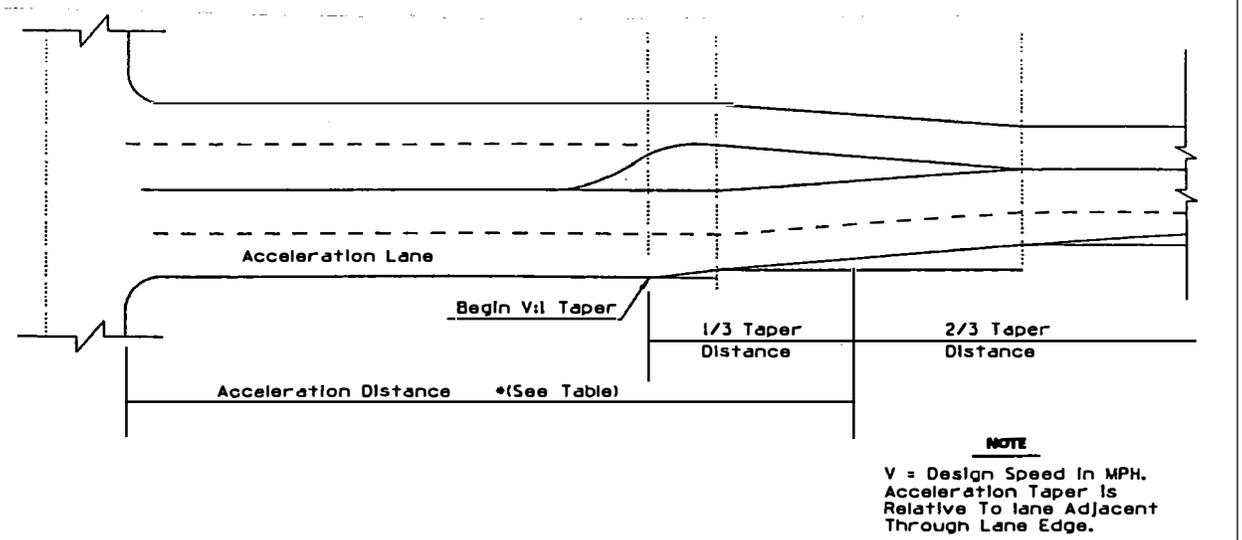
**Table 4.17A Acceleration Distance**

Design Speed (mph)	Desirable (Ft.)	Minimum (Ft.)
20	100	100
30	150	100
40	300	150
45	400	220
50	500	300
55	650	430
60	800	560
70	1300	1000

Source: ADOT *Roadway Design Guidelines*

Figure 4.7 B

Minimum Acceleration Lane Configuration



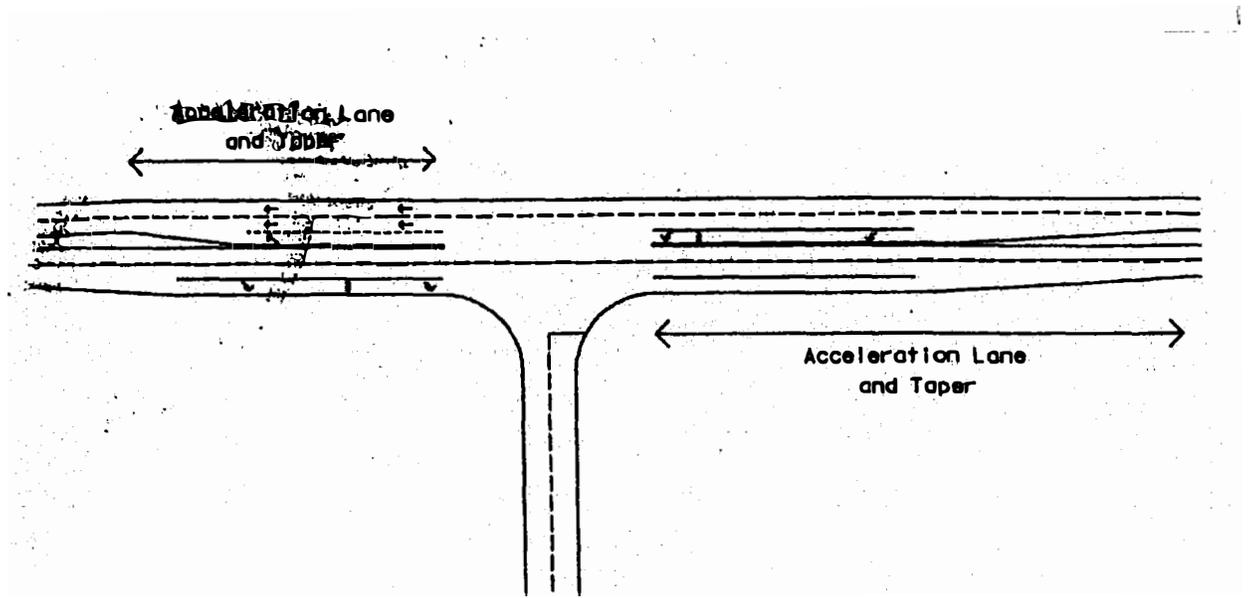
Source: ADOT Roadway Design Guidelines

Table 4.17B Acceleration Lane Lengths

For Level Grades ( $\pm 2\%$ or less)			Multipliers for Other than Level Grades			
Highway Design Speed	Speed Reached (mph)	Length Required (feet)	3 to 4% Upgrade	5 to 6% Upgrade	3 to 4% Downgrade	5 to 6% Downgrade
30	23	190				
40	31	380	1.3	1.5	0.7	0.6
50	39	760	1.4	1.9	0.65	0.55
60	47	1170	1.6	2.5	0.6	0.5
70	53	1590	1.8	3.0	0.6	0.5

Source: Nevada Draft Access management System and Standards

**Figure 4.7C Acceleration Lane Tapers**



Source: Nevada *Draft Access Management System and Standards*

## **APPENDIX**

## EXHIBIT 2



Florida Department of Transportation

### ACCESS MANAGEMENT CLASSIFICATION CHECKLIST

THIS CHECKLIST FORM IS BASED ON THE GUIDANCE IN ADMINISTRATIVE RULE CHAPTER 14 - 97 AND 335.18 F. S.

CHECKLIST ITEMS: CHECK BOXES AND FILL IN BLANKS AS APPROPRIATE	COMMENTS OR SPECIAL NOTATION																
<p><b>A. Analyst Identification:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Name _____</td> <td style="width: 20%;">Date _____</td> <td style="width: 40%;">Phone _____</td> </tr> </table>		Name _____	Date _____	Phone _____													
Name _____	Date _____	Phone _____															
<p><b>B. Corridor Identification:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">1. Common Name _____</td> <td colspan="2">State Road Number: _____</td> </tr> <tr> <td colspan="2">2. FROM: Common Name _____</td> <td colspan="2">Highway Section Number _____</td> </tr> <tr> <td>Mile Post _____</td> <td>3. TO: Common Name _____</td> <td>Mile Post _____</td> <td></td> </tr> <tr> <td>4. Miles _____</td> <td>5. Local Government(s) _____</td> <td colspan="2">6. County(ies) _____</td> </tr> </table>		1. Common Name _____		State Road Number: _____		2. FROM: Common Name _____		Highway Section Number _____		Mile Post _____	3. TO: Common Name _____	Mile Post _____		4. Miles _____	5. Local Government(s) _____	6. County(ies) _____	
1. Common Name _____		State Road Number: _____															
2. FROM: Common Name _____		Highway Section Number _____															
Mile Post _____	3. TO: Common Name _____	Mile Post _____															
4. Miles _____	5. Local Government(s) _____	6. County(ies) _____															
<p><b>C. Method(s) used in analysis:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">                     1. Field Review <input type="checkbox"/> Date: _____                      2. Video Log Data <input type="checkbox"/> Date: _____                      3. Aerial Photo <input type="checkbox"/> Date: _____                      4. RC/SLD <input type="checkbox"/> Date: _____                      5. Other (Specify) <input type="checkbox"/> Date: _____                 </td> <td style="width: 40%; vertical-align: top;"> <p style="text-align: center;"><i>Reference or Notes on Methods</i></p> <div style="border: 1px solid black; height: 60px;"></div> </td> </tr> </table>		1. Field Review <input type="checkbox"/> Date: _____ 2. Video Log Data <input type="checkbox"/> Date: _____ 3. Aerial Photo <input type="checkbox"/> Date: _____ 4. RC/SLD <input type="checkbox"/> Date: _____ 5. Other (Specify) <input type="checkbox"/> Date: _____	<p style="text-align: center;"><i>Reference or Notes on Methods</i></p> <div style="border: 1px solid black; height: 60px;"></div>														
1. Field Review <input type="checkbox"/> Date: _____ 2. Video Log Data <input type="checkbox"/> Date: _____ 3. Aerial Photo <input type="checkbox"/> Date: _____ 4. RC/SLD <input type="checkbox"/> Date: _____ 5. Other (Specify) <input type="checkbox"/> Date: _____	<p style="text-align: center;"><i>Reference or Notes on Methods</i></p> <div style="border: 1px solid black; height: 60px;"></div>																
<p><b>D. Existing Conditions:</b></p> <p>1. Functional Classification:                      a) Principal Arterial <input type="checkbox"/> b) Minor Arterial <input type="checkbox"/> c) Other (Specify) <input type="checkbox"/> _____</p> <p>2. Number of through lanes: _____</p> <p>3. Signals per mile: _____</p> <p>4. Median: a) Centerline <input type="checkbox"/> b) TWLTL <input type="checkbox"/> c) Restrictive <input type="checkbox"/></p> <p>5. Median openings per mile: _____</p> <p>6. Driveway density indicators:                      a) Light <input type="checkbox"/> b) Medium <input type="checkbox"/> c) Heavy <input type="checkbox"/> d) Other <input type="checkbox"/> _____</p> <p>7. Roadway Section: a) Urban (Curb &amp; Gutter) <input type="checkbox"/> b) Rural <input type="checkbox"/></p> <p>8. Significant drainage problem encountered? a) YES <input type="checkbox"/> b) NO <input type="checkbox"/></p> <p>9. Posted speed limit: a) 35 <input type="checkbox"/> b) 40 <input type="checkbox"/> c) 45 <input type="checkbox"/> d) 50 <input type="checkbox"/> e) 35 <input type="checkbox"/> f) Other <input type="checkbox"/> _____</p> <p>10. Existing land use: a) Commercial <input type="checkbox"/> b) Residential <input type="checkbox"/> c) Rural/Agricultural <input type="checkbox"/>                      d) Mixed <input type="checkbox"/> (Specify mix) _____                      e) Other <input type="checkbox"/> (Specify) _____</p> <p>Source: _____ Date: _____</p> <p>11. Development density: a) Generally Undeveloped <input type="checkbox"/> b) Generally Developing <input type="checkbox"/>                      c) Generally Developed <input type="checkbox"/></p> <p>12. Safety concerns? a) YES <input type="checkbox"/> b) NO <input type="checkbox"/>                      If YES, Describe: _____</p> <p>13. Access/Service roads? a) None <input type="checkbox"/> b) Poor <input type="checkbox"/> c) Fair <input type="checkbox"/> d) Good <input type="checkbox"/></p>																	



**EXHIBIT 3**

**SAMPLE ADVERTISEMENT**

The ARIZONA DEPARTMENT OF TRANSPORTATION announces an Access Management Classification public hearing to which all interested persons are invited.

DATE: November \_\_\_\_\_, 1999

TIME: 7:00 PM

PLACE:

(WITH A LITTLE MODIFICATION, MULTIPLE HEARING LOCATIONS COULD BE LISTED WITHIN THE SAME NOTICE. THERE MAY BE A DISTRICT PLAN WHICH WOULD REQUIRE MULTIPLE HEARINGS AT DIFFERENT MAJOR METROPOLIAN AREAS.)

PURPOSE/AGENDA: This Access Management Classification public hearing is being conducted pursuant to the provisions. The public hearing is being conducted exclusively to give all interested parties an opportunity to comment on the proposed access management classifications for State Roads in \_\_\_\_\_ County, Urbanized Area, or Other Location \_\_\_\_\_.

A list of the proposed access management classifications may be obtained from:

District Official \_\_\_\_\_.  
ADOT Address \_\_\_\_\_  
\_\_\_\_\_  
Telephone \_\_\_\_\_.

**Table B3 Minimum Spacing Standards Applicable to Freeway Interchanges with 2-Lane Cross Roads**

Category of Mainline	Type of Area	Spacing Dimension			
		A	X	Y	Z
FREEWAY	Fully Developed Urban	1.6 km (1 mi.)	230 m (750 ft.)	400 m (1320 ft.)	230 m (750 ft.)
	Urban	1.6 km (1 mi.)	400 m (1320 ft.)	400 m (1320 ft.)	300 m (990 ft.)
	Rural	3.2 km (2 mi.)	400 m (1320 ft.)	400 m (1320 ft.)	400 m (1320 ft.)

Notes: 1) If the cross street is a state highway, these distances may be superseded by the Access Management Classification and Spacing Standards Policy, providing the distances are greater than the distances listed in the above table.

2) No four-legged intersection may be placed between ramp terminals and the first major intersection.

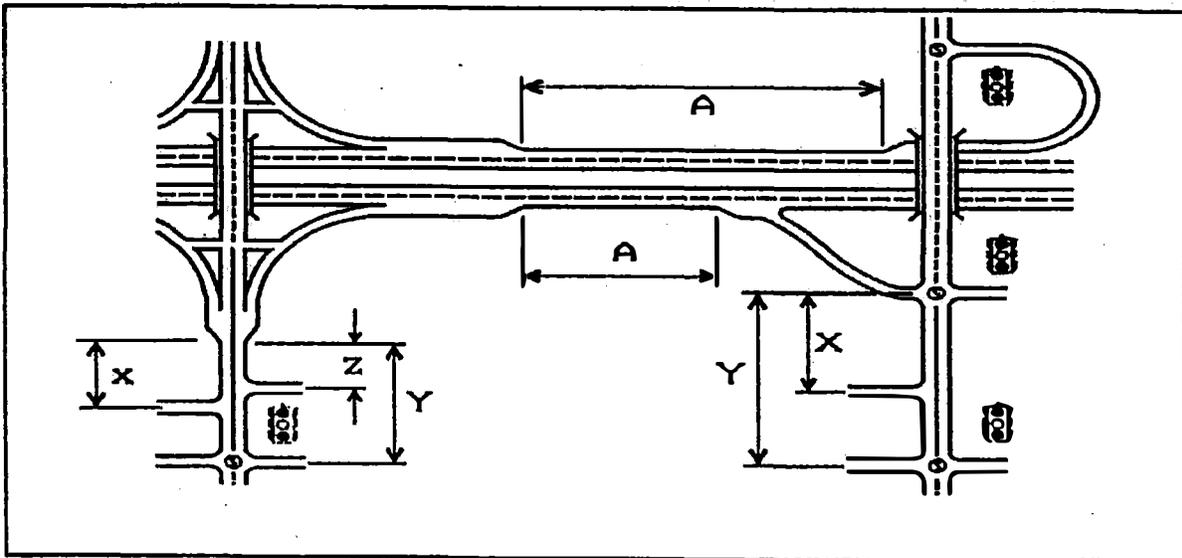
A = Distance between the start and end of tapers of adjacent interchanges.

X = Distance to first approach on the right, right in/ right out only.

Y = Distance to first major intersection; no left turns allowed in this roadway section.

Z = Distance between the last right in/ out approach road and the start of the taper for the on-ramp.

**Figure B1: Measurement of Spacing Standards for Table B3**



**Table B4 Minimum Spacing Standards Applicable to Freeway Interchanges with 4-Lane Cross Roads**

Category of Mainline	Type of Area	Spacing Dimension			
		X	Y	Z	M
FREEWAY	Fully Developed Urban	230 m (750 ft.)	800 m (2640 ft.)	300 m (900 ft.)	400 m (1320 ft.)
	Urban	400 m (1320 ft.)	800 m (2640 ft.)	400 m (1320 ft.)	400 m (1320 ft.)
	Rural	400 m (1320 ft.)	800 m (2640 ft.)	400 m (1320 ft.)	400 m (1320 ft.)

- Notes: 1) If the cross street is a state highway, these distances may be superseded by the Access Management Classification and Spacing Standards Policy, providing the distances are greater than the distances listed in the above table.
- 2) No four-legged intersections may be placed between ramp terminals and the first major intersection.

A = Distance between the start and end of tapers of adjacent interchanges.

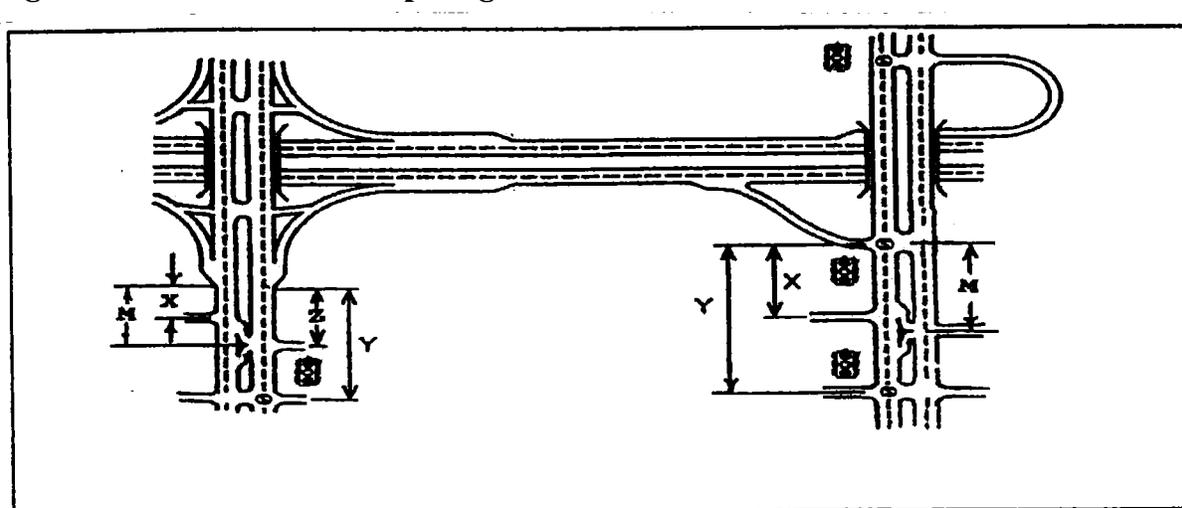
X = Distance to first approach on the right, right in/ right out only.

Y = Distance to first major intersection.

Z = Distance between the last approach road and the start of the taper for the on-ramp.

M = Distance to first directional median opening. No full median openings are allowed in non-traversable medians to the first major intersection.

**Figure B2: Measurement of Spacing Standards for Table B4.**



**Table B5 Minimum Spacing Standards Applicable to Non-Freeway Interchanges with 2-Lane Cross Roads**

Category of Mainline	Type of Area	Speed of Mainline	Spacing Dimension				
			B	C	X	Y	Z
LIMITED ACCESS HIGHWAY	Fully Developed Urban	70 kph (45 mph)	800 m (2640 ft.)	1.6 km (1 mi.)	230 m (750 ft.)	400 m (1320 ft.)	230 m (750 ft.)
	Urban	70 kph (45 mph)	800 m (2640 ft.)	1.6 km (1 mi.)	400 m (1320 ft.)	400 m (1320 ft.)	300 m (990 ft.)
	Rural	90 kph (55 mph)	1.6 km (1 mi.)	3.2 km (2 mi.)	400 m (1320 ft.)	400 m (1320 ft.)	400 m (1320 ft.)

- Notes: 1) If the cross street is a state highway, these distances may be superseded by the Access Management Classification and Spacing Standards Policy, providing the distances are greater than the distances listed in the above table.
- 3) No four-legged intersection may be placed between ramp terminals and the first major intersection.
- 4) Use four-lane cross road standards for urban and suburban locations that are likely to be widened.
- 5) No at-grade intersections are permitted between continuous interchanges less than 5 miles apart.

B = Distance between the start and end of tapers.

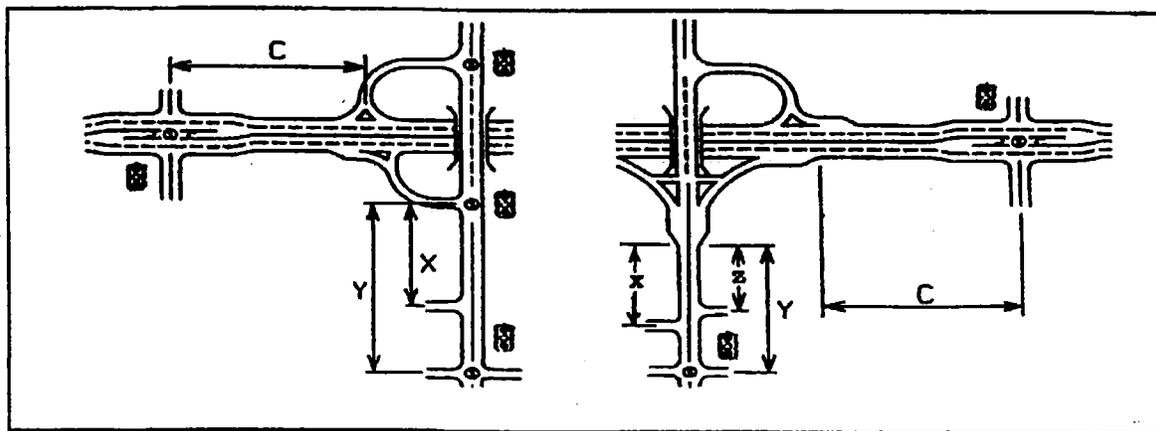
C = Distance between nearest at-grade and ramp terminal intersections or the end/ start of the taper section.

X = Distance to first approach on the right, right in/ right out only.

Y = Distance to first major intersection.

Z = Distance between the last right in/ out approach road and the start of the taper for the on-ramp.

**Figure B3: Measurement of Spacing Standards for Table B5.**



**Table B6 Minimum Spacing Standards Applicable to Non-Freeway Interchanges with 2-Lane Cross Roads**

Category of Mainline	Type of Area	Speed of Mainline	Spacing Dimension					
			B	C	X	Y	Z	M
LIMITED ACCESS HIGHWAY	Fully Developed Urban	70 kph (45 mph)	800 m (2640 ft.)	1.6 km (1 mi.)	230 m (750 ft.)	800 m (2640 ft.)	300 m (990 ft.)	400 m (1320 ft.)
	Urban	70 kph (45 mph)	800 m (2640 ft.)	1.6 km (1 mi.)	400 m (1320 ft.)	800 m (2640 ft.)	400 m (1320 ft.)	400 m (1320 ft.)
	Rural	90 kph (55 mph)	1.6 kph (1 mi.)	3.2 km (2 mi.)	400 m (1320 ft.)	800 m (2640 ft.)	400 m (1320 ft.)	400 m (1320 ft.)

- Notes: 1) If the cross street is a state highway, these distances may be superseded by the Access Management Classification and Spacing Standards Policy, providing the distances are greater than the distances listed in the above table.
- 2) No four-legged intersection may be placed between ramp terminals and the first major intersection.
- 3) No at-grade intersections are permitted between continuous interchanges less than 5 miles apart.

B = Distance between the start and end of tapers.

C = Distance between nearest at-grade and ramp terminal intersections or the end/ start of the taper section.

X = Distance to first approach on the right, right in/ right out only.

Y = Distance to first major intersection.

Z = Distance between the last right in/ out approach road and the start of the taper for the on-ramp.

M = Distance to first directional median opening. No full median openings are allowed in non-traversable medians to the first major intersection.

**Figure B4: Measurement of Spacing Standards for Table B6.**

