NCHRP SYNTHESIS 351

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Access Rights

A Synthesis of Highway Practice

TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

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Access Rights

A Synthesis of Highway Practice

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FOREWORD

By Staff Transportation Research Board Highway administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to highway administrators and engineers. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire highway community, the American Association of State Highway and Transportation Officials—through the mechanism of the National Cooperative Highway Research Program—authorized the Transportation Research Board to undertake a continuing study. This study, NCHRP Project 20-5, "Synthesis of Information Related to Highway Problems," searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute an NCHRP report series, *Synthesis of Highway Practice*.

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

PREFACE

This synthesis will be of interest to state transportation agency personnel, as well as to others who are involved in acquiring access rights along roadways other than freeways. This report documents the state of the practice with the intent to limit the amount of access to the roadway for the purpose of managing highway safety and mobility. Successful practices are documented along with current policies, legal and real estate literature, and other publications that address this subject. The findings focus on the three main areas of acquisition, management, and disposal. Lessons learned and information gaps are also explored.

This synthesis of the Transportation Research Board contains information culled from the responses to a survey questionnaire of 32 state transportation agencies, supplemented by the material collected as part of a literature review. Personal interviews were also conducted to provide specific case studies that demonstrate the issues facing practitioners today.

A panel of experts in the subject area guided the work of organizing and evaluating the collected data and reviewed the final synthesis report. A consultant was engaged to collect and synthesize the information and to write the report. Both the consultant and the members of the oversight panel are acknowledged on the title page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

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ACCESS RIGHTS

SUMMARY

The purpose of this synthesis is to document the state of the practice in acquiring access rights along roadways other than freeways with the intent to limit the amount of access to the roadway. To achieve this objective the synthesis was prepared using a nationwide survey, followed by interviews with selected respondents, to identify issues and practices, as well as a review of current policies and relevant literature. The findings focus on three main areas: (1) acquisition of access rights, (2) management of access rights, and (3) disposal of access rights.

Issues related to valuation of access rights and the use of eminent domain, which is the legal power that allows property to be taken for public use provided the loss is compensated, and police power, which is the authority of the government agency to regulate or restrict individual actions for the protection of the public, are intertwined with the subject matter and included throughout the synthesis. A discussion on full control of access as compared with partial control of access is also included to identify lessons learned.

Access control by the acquisition of property rights is federally mandated on the Interstate Highway System. Each state possesses or acquires full control of access rights between the highway and adjacent property owners. Along entirely new highway alignments, many states developed legislation that did not allow property owners access to the new roadway. Along highways that were upgraded to the access-controlled Interstate system, properties that became landlocked were often acquired or an alternate means of reasonable access was developed to serve the property.

A considerable amount of literature developed in the 1950s and 1960s served as guidance for state agencies when preserving or acquiring the rights of access for these facilities. A 1955 report, *A Ten Year National Highway Program*, made the following statement on access control.

One of its principal features in the provision for adequate right-of-way is to permit control of access to the highway itself. Otherwise, experience shows that the facility becomes prematurely obsolete due to developments crowding against the roadway which make it unfit for the purposes for which it was designed. Control of access to the degree required by traffic conditions is essential to the protection of life and property. It is also essential to preserve the capacity of the highway. So far as the investment of funds in major roads is concerned, provisions for control of access to the extent required by traffic are fundamental.

The responses to the synthesis questionnaire revealed that acquiring rights of access along the Interstate Highway System from the adjacent property owner has been very successful. At-grade intersections or driveways onto Interstate highways have effectively been prevented in the approximately 50 years since the road system was constructed.

All of the responding state agencies apply similar techniques of acquiring access rights along other types of highways and crossroads that intersect freeways as a means to limit access. However, unlike the Interstate Highway System, the states may allow access by public intersections and/or driveways to these roadways and may also provide a process to allow additional access. Therefore, this strategy is referred to as partial control of access.

States generally apply partial access control through statutory designation or the acquisition of access rights, or a combination of the two. This strategy is not meant to increase the property owners' right of access to the roadway, but rather limit where the property owner has a right to request a driveway.

Five of the 32 states responding to Question 1d have passed legislation giving the highway agency the authority to control access through a designation, as an exercise of their police power. This means that an official application of a designation on a highway would preclude additional access to the highway and/or allow the authority to close access to those properties that have another means of access. Responses to the synthesis questionnaire revealed that limiting access through a specific designation has been successful. Property owners adjacent to the highway may request driveway access, but will likely be denied such access when reasonable alternative access is available. This technique of limiting access has the benefit of providing flexibility as highway conditions, traffic volumes, travel speeds, and driveway spacing standards evolve over time.

All of the state agencies that responded to Question 1d determined that a more reliable system would include the actual acquisition of access rights along the roadway. Although all states acquired complete access control along freeways, a few states such as California and some East Coast states have developed systems of roads, often referred to as expressways. The agencies acquire all rights of access on expressways from adjacent property owners and only allow well-spaced public road connections. The property owners abutting the access-controlled roadway gain access from an alternative road or street network. This type of access-control strategy has worked well to preserve the roadway for the intended function. Usually, with the exception of freeways and some expressways, states found that they could not afford to purchase all rights of access along the existing highway system, because such an action would have left large numbers of properties landlocked. With no other means of access except the state highway, access rights were acquired along the property frontage, while simultaneously leaving gaps or openings in the access control line for existing and/or proposed driveways. This action was usually memorialized in a property deed and would therefore run concurrently with the property ownership. The action by the state limits where a property owner might request a driveway but did not convey an increased right of access at that location. An application for a driveway permit can be denied at this specific location without any compensation, if there is an alternate means of access. Responses to the synthesis questionnaire showed that property owners sometimes disagree and believe that specific language in a property deed relating to an access guarantees that a driveway will be allowed. Also, property owners sometimes believe that they do not need to request permission to construct a driveway to the highway at the location identified in the property deed.

The responses to the synthesis questionnaire revealed that limiting access through the acquisition of partial control has varying degrees of success. Much of the concern surrounds the certainty of a gap or opening in the access control line with the uncertainty of being able to construct a driveway at that specific location. States often specify the width of the opening, the number of trips allowed, and, in some cases, may even describe the type of land use that the opening can serve. This appears to increase the belief that the state agency has conducted all the necessary analysis and will always allow a driveway at the location.

The results of the synthesis revealed that the wording used to describe access rights in the property deed can convey unintended additional rights to the property owner. Denials for driveways at these openings in the partial access control line have led to court challenges, inverse condemnations, compensation by states, and specific laws to rectify perceived wrong doing.

States, counties, and cities that use eminent domain do so to acquire both complete and partial control of access. In the case of partial control of access, the governmental authorities use regulatory control under police power to regulate whether or not a driveway will be allowed at a specific location.

The literature review revealed that courts have noted that it is sometimes difficult to make the distinction between the application of eminent domain, which is compensable, and regulatory authority under police power, which is not.

INTRODUCTION

BACKGROUND

The ability to use access control as a technique to manage access to a highway or roadway is an important component of a comprehensive access management program within an agency. The technique can also be employed by agencies that do not presently have an access management program, although careful consideration should be given to the roadways where it is applied and the desired objective.

Access control by the acquisition of property rights has been used on the Interstate Highway System since it was mandated by the Federal-Aid Highway Act of 1956. However, a growing number of agencies are recognizing the benefits of acquiring property rights to control access on other important arterial highways for the purpose of preserving safety and mobility.

The purchase of property rights can prevent undesirable accesses at the locations where the property rights were acquired. If the property rights are not acquired, the property owner is often under the impression that there is a right to access at all locations along the property frontage. This oftenexpressed sentiment by the abutting landowner has evolved over many centuries and continues to evolve today. Much of American law on the subject is based on English law. The understanding of property rights as stated in late 13th century English law afforded abutting landowners few rights.

"For as long as English law has been systematically recorded, it has held that the owner of land abutting a public highway owes various duties toward the user of the highway, which duties must, when necessary, override the owner's private uses of the roadway or roadway lands" (1). The Statute of Winchester (1285) required land owners with property adjacent to the roadway to cut back brush and trees to a distance of 200 ft on each side of the road, "so that there may be neither dyke, tree, nor bush, whereby a man may lurk to do hurt."

Later, property owners were required to clean and maintain roadside ditches. If the construction of a roadway caused water flow across the adjacent property, they could be required to receive the diverted water as well as the runoff water from the roadway. Court decisions in the 15th century allowed highway users to cut through adjacent properties when the road became impassable, even if it meant breaking down fences and crossing over cultivated fields (2).

Evolution of Access Rights in the United States

In the United States in the early nineteenth century, the responsibility of building and maintaining roads was given to local governments. The local governments had the ability to levy local residents for labor, materials, and money to construct and repair these roads. This was an expensive endeavor that limited the construction of roads. At the same time, the first controlled access highways, or turnpikes, were developed. Turnpikes had the advantage of being fully funded by users, so that the responsibility of building and maintaining them was not dependent on the adjacent property owners. To protect the investment and toll revenue, special laws prohibited unauthorized entries and exits to the road. Thus, the first access control was developed. With the development of turnpikes, it was recognized that access control was important to achieving efficiency. However, the planning of the turnpikes or toll roads was not enough to shift the financial and maintenance burden from the local landowners (2).

With continued industrialization, the expansion and improvement of roads became a priority in the United States, because the national economy depended on the links between rural and urban areas. As a result, the existing system was assessed and several conclusions were reached. One was the realization that toll financing and private landowner financing were not feasible ways to build roads. Another realization was that the highways needed to be classified according to their purpose, which was the beginning of functional classification (2). Eventually, this led to the need for controlledaccess highways, which were designed for optimum mobility. As a result, the access of adjacent landowners was restricted and allowed only at points permitted by the governing agency.

Abutter's Rights

During the middle to late 19th century this evolution of abutter's rights led to the understanding that

[O]wnership or occupancy of premises abutting on a highway ... carries with it certain rights in and to the use thereof, distinct from the general easement of passage. Generally these rights are described as (1) the right of access to and from the highway, (2) the right to have light and air come into abutting property across the highway, (3) the right to see and be seen from the highway, and (4) the right to lateral support of abutting land during construction of the highway (2) However, a ruling by the U.S. Supreme Court in 1906 decreed that the Federal Constitution did not require the states to give access rights to abutting landowners along new highway alignments. It is the states' responsibility to determine whether access rights are a property right within their state laws. As a result, the states' approaches on access control varied, although most chose to establish access control through their police power in the mid-1940s (2).

With the development of the Federal-Aid Highway Act of 1956, 41,000 mi of the National System of Interstate and Defense Highways were funded. One of the conditions for the grant of aid to the states was that states must fully control access to the highway facility and prohibit construction within the right-of-way. This meant that no private accesses were permitted and all public street accesses occurred at grade-separated interchanges. This led to the development of a highway system across the nation in which each state possessed complete control of access between the roadway and the adjacent property owners.

For states to obtain the access rights to construct Interstate highways, they had to be mindful of the Due Process Clause and Taking Clause in the 5th Amendment of the U.S. Constitution. This clause states that, "No person shall be deprived of life, liberty, or property without due process of law, nor shall private property be taken for public use without just compensation" (*3*). The 14th Amendment made due process a requirement applicable to all states and local governments. "The requirement that one could not be deprived of property without due process of law referred to the exercise of police power, and the requirement of just compensation applied when property was taken for public use through eminent domain" (*3*).

As stated in Nichols on Eminent Domain,

Although the ultimate issue of what constitutes a taking in federal cases is a federal question governed by federal law, the meaning of "property" as used in the Fifth Amendment will normally obtain its content by reference to state law. Consequently, in considering whether a property owner's potential access to an existing or future highway is a compensable property right, the law of the state will determine the nature of the property and federal law will determine whether the acts of the sovereign constitute a taking or the mere exercise of police power (4).

Most states currently have a "taking" clause similar to the one in the federal constitution. However, "some state constitutions require the payment of compensation for the 'damaging' as well as the 'taking' of property" (5).

The concept of purchasing access rights as a means of managing the highway system was a popular concept in the 1950s and 1960s, confirmed with the success of the design and construction of the Interstate system that allowed no driveways. At this time, many western states had hundreds of miles of urban and rural two-lane highways where the acquisition of access rights was applied. Because the majority of property owners along these roadways had no other means of access, the cost to acquire all access rights would have been prohibitive, as it would have left the properties landlocked. Rather than construct an alternate roadway system, or acquire crossover easements to provide another means of access, state agencies often acquired rights of access except at mutually agreed on locations and/or where existing driveways were located.

Before an agency acquired access along a roadway, the landowner could apply for access at any point along their site frontage. The acquisition of access limited the locations at which landowners could apply for access. The act of acquisition was the owner selling or granting access rights along the entire site frontage with the exception of various segments.

This technique meant that states could acquire limited access rights for a minimal cost, such as \$100 to \$500 for each abutting property, because the property still maintained reasonable access. This acquisition was almost always memorialized in a property deed that would run with the property title. The deed defined where access was acquired and where the openings occurred.

Even though the property owner enjoys a right of access at a specific location, it does not generally guarantee that the property owner may construct a driveway to the highway at the opening in the access control line, because this is subject to police power. Although constructing a driveway is within the property rights of an owner, the driveway is placed on public property, and therefore needs to meet engineering and safety standards. The property owner is almost always required to request permission from the controlling agency to construct a driveway at the location because the agency has the authority of police power. The agency regulates how the driveway is constructed, which may include the denial of a driveway at the specific location.

This process can be difficult for abutting owners to understand. Although an agency may not be required to allow access onto a road facility, it is the landowner's perception that they have a right to access any road that is adjacent to their land. Thus, a landowner often expects to be compensated for the denial of direct access to an adjacent facility. A landowner does, however, have a right to reasonable access to the roadway system. Reasonable access may not be the most convenient or direct access and may be provided through a side street.

An agency uses eminent domain authority to purchase the right of access with compensation from properties adjacent to the roadway. Eminent domain is the acquiring of access rights with compensation because it is useful to the public. The agency uses its police power authority to approve or deny the application for a driveway. Police power allows agencies to limit access, usually through prohibition or regulation, to preserve the public interest. The concept of using total or partial access control as a means to limit access to a roadway is a critical component of a successful access management program within an agency or, at a minimum, developed in coordination with an access management program. This can help to ensure that the acquisition of access is consistent with the overall access management objectives. In the event that an access management policy or program does not exist in an agency, careful thought should be given to decisions on where access rights are purchased to ensure that the purchase meets the long-term objectives for the agency, other affected agencies, and the users of the roadway system.

SYNTHESIS OBJECTIVE

This synthesis (1) documents successful practices in acquiring property rights for managing highway safety and mobility and (2) reviews current policies, legal and real estate literature, and other publications that address this subject. In addition, a nationwide survey was conducted to identify issues and practices as well as lessons learned and information gaps. Specific objectives of the synthesis included:

- Summarizing the access rights acquisition, management, and disposal practices of each state;
- Providing case examples of state programs; and
- Identifying issues in current practice and lessons learned.

METHODOLOGY

The synthesis was developed through a comprehensive survey of state agencies, a review of published literature, and follow-up interviews with specific individuals to explore the practices in the acquisition, management, and disposal of access rights. The questionnaire was not intended to focus on the Interstate freeways, toll roads, turnpikes, or other major roads that are normally fully access controlled. Instead, it was developed to document how and when agencies purchase access rights along other roadways. In the event that access rights are managed within the agency. Finally, the survey determined if access rights are ever disposed of and, if so, the process that allows these rights to be transferred back to the abutting property.

Overall, 36 sets of responses to the questionnaire were received, which included 32 states and 1 city. Several states sent more than one response. Appendix B provides a list of responding agencies. In addition, survey respondents were asked to provide copies of applicable statutes, rules, and policies relating to the acquisition, management, and disposal of access rights. These materials supplemented the material collected as part of the literature review process. Finally, interviews were conducted to provide specific case studies that demonstrate the issues facing practitioners today.

QUESTIONNAIRE DEVELOPMENT

The questionnaire was divided into three basic sections: (1) acquisition of access rights, (2) management of access rights, and (3) disposal of access rights. The questionnaire is included in Appendix A.

Acquisition of Access Rights

In this section, the questions were crafted to determine if agencies acquired complete control of access along non-Interstate highways, eliminating all existing and future intersections and driveways, or if they elected to acquire partial control of access on those roadways, allowing certain intersections and driveways to remain in place. Questions 1b and 2b relate to decisions on how access rights are acquired and were compared with Questions 22b and 23b to determine if an agency has the same guidance when they dispose of access rights. It was also important to determine who within the state agency provided the authority to acquire access rights and the enabling statute or rules that allowed them to do so. The questionnaire addresses valuation and potential payment; however, as this varies greatly across the United States, the topic was not explored in depth.

Question 6 relates to the Interstate Highway System and was included to determine how successful agencies had been in implementing complete access control as a means to prevent access to a roadway once rights had been acquired. The responses provide a comparison of the success rate of preventing access to the Interstate highways as compared with other transportation facilities where only partial access control was acquired.

Management of Access Rights

The second section quantifies the level of effort that agencies commit to the management of access rights as a resource. Questions 7 and 8 were designed to discover if agencies used the authority of police power or other means to limit the number of driveways. This section indicates that agencies are required to allow a property owner a driveway whenever and wherever there is an opening in the access control line.

If a driveway is not allowed at an opening in the partial access control line, the questionnaire sought to determine under what criteria an agency could deny an application and if denied, whether or not the agency must compensate the property owner. If compensation is owed, the questionnaire sought to establish how the value is generated.

Because the ownership of access rights is truly a resource, the questionnaire sought to determine how an agency manages this resource and the amount of communication and coordination that is required among staff. The questionnaire also attempted to learn if the coordination is top down only or requires all staff to communicate regardless of hierarchy within the agency. This is also meant to establish if the acquisition and management of the access right is housed in the same department as the staff who ultimately have authority to permit driveways at these locations. If not, then the questionnaire attempted to discover the communication link to ensure that decisions are made appropriately. Other questions relate to management procedures that agencies use to store, maintain, and retrieve information on access rights.

Question 19 addresses multimodal considerations and was specifically included because it is widely accepted that pedestrians and cyclists cannot breach an access control line on an Interstate highway without specific and significant approval processes. The question sought to learn if agencies allow pedestrians and cyclists to cross those areas where they have acquired partial access control along roadways and, if so, the process that allows this activity to occur.

Questions 20 and 21 were constructed to determine if a purchased access right remains the property of the agency when the highway is realigned or the right-of-way is modified.

Disposal of Access Rights

In this section, questions were developed to determine if agencies have established a process for the disposal of access and the processes that enabled that to happen. The term "disposal" used throughout this synthesis means the sale or release of property rights. In addition, Questions 22c and 23c attempted to determine where the authority lies within the agency to determine when access rights may be disposed of and if there is a division of authority between the purchase and disposal of property. Questions were also asked about how an agency determines a value for an access right when it is being disposed. Questions 22e and 23e were included to determine if the property owner was successful in achieving an opening in the access control line, would they be guaranteed a driveway at that specific location and would they still be required to go through the permit process. Finally, the questionnaire asked about those circumstances when an entire road whose access rights had been previously acquired is transferred to another agency. The questionnaire sought to establish who owns the right of access after the transfer of the roadway is complete. These questions were meant to determine if agencies had given long-term thought to what might happen if highways with partial access control become functionally obsolescent to the point where the agency no longer has any need to manage the access to the roadway.

DEFINITIONS

Both partial access control and complete access control are acquired on various types of facilities including freeways, highways, arterials, and crossroads at interchanges as depicted in Figure 1. This synthesis focuses on the acquisition, management, and disposal of partial access control. Many different terms are used among the various surveyed transportation agencies. Therefore, for the purpose of this synthesis, the following definitions were used:

- Access rights—legal ability of a property owner to access (or not access) an adjacent roadway.
- Crossroads at interchanges—roadway that crosses over or under a freeway or arterial that is connected by ramps and is secondary to the main highway. The crossroad may be under the jurisdiction of another agency.
- Disposal of access—sale or release of property rights. (The terminology used in the questionnaire referred to both disposal and relinquishment of access. During the process of developing the synthesis, it was determined that the word relinquishment conveyed a different meaning than was intended. Therefore, relinquishment has been omitted throughout the remainder of the document.)
- Eminent domain—legal power that allows a public agency to take property for public use provided an owner is compensated for his/her loss (6).
- Full control of access—preference is given to through traffic by providing access connections by means of ramps with only selected public roads and by prohibiting all crossings at-grade and direct private driveway connections. Generally, full access control is accomplished by legally acquiring the access rights from the abutting property owners (usually at the time of purchase of the right-of-way) or by the use of frontage roads (6).
- Interstate freeways—Divided highways with all access limited to grade-separated interchanges. These highways are part of the Interstate Highway System.
- Non-Interstate freeways—divided highways with all access limited to grade-separated interchanges. These highways are not part of the Interstate Highway System.
- Nonfreeways and arterials—frontage roads, expressways, and divided and undivided roadways, usually with at-grade intersections. Although other roadway connections and driveways are not always preferred, they may be allowed to access these facilities. (Note: These are referred to as non-Interstate highways and arterials in the appendices.)
- Partial control of access—preference is given to through traffic to a degree. Access connections, which may be at-grade or grade-separated, are provided with selected public roads and private driveways. Access on expressways is usually limited to public road intersections. Generally, partial access control is accomplished by legally obtaining the access rights from the abutting property owners (usually at the time of purchase of the right-of-way) or by the use of frontage roads (6).
- Police power—authority of the government agency that owns or manages the roadway to regulate or restrict individual actions for the protection of health, safety, and general welfare of the public, including restrictions on access for adjacent property owners and the requirement that any and all persons seeking a driveway to the roadway go through an approval or permitting process.





FIGURE 1 Facilities addressed in this synthesis.

REPORT ORGANIZATION

To fully address the current practice and issues related to the acquisition, management, and disposal of access rights, the report has been divided into the six chapters described here.

- Chapter one provides a brief historical overview and current trends in the acquisition, management, and disposal of access rights. In addition, this section highlights the report focus and summarizes the report organization.
- Chapter two focuses on the acquisition of access rights. This chapter includes a discussion of the various ways in which access rights can be acquired and an overview of current practices among jurisdictions. In addition, it addresses the varying criteria for acquiring access rights,

the factors used in valuation and negotiation of access rights, the various practices owing to the differences in underlying state law, and the relationship between the exercise of police power and the acquisition of access rights.

- Chapter three examines the management of access rights. The managerial element is discussed with regard to the administration of access rights and the organizational characteristics that ensure that access rights acquisition, management, and disposal are used effectively to meet long-term goals.
- Chapter four provides information on the disposal of access rights. This chapter focuses on the existing agency policies surrounding disposal and the factors used in valuation and negotiation when access rights are no longer required.

- Chapter five provides several case studies to demonstrate the specific benefits and potential problems associated with various access rights acquisition, management, and disposal techniques. In addition, a summary of lessons learned from these specific projects is provided.
- Chapter six provides a final discussion of findings based on the literature review, survey questionnaire responses, and case studies. In particular, this chapter summarizes the current practices in the acquisition, management, and disposal of access rights. The synthesis report is completed with conclusions and suggestions for further research.

ACQUISITION OF ACCESS RIGHTS

This chapter discusses acquisition of access rights based on questionnaire responses received from the various agencies, a review of additional materials provided by the agencies, and information collected in the literature review process. Based on these efforts, the chapter is divided into four sections: (1) Acquisition of Access, (2) Results from Questionnaire, (3) Criteria for Acquiring Access Rights, and (4) Factors in Valuation and Negotiation.

ACQUISITION OF ACCESS

Most relevant access information was written in the 1950s and 1960s when the current concepts of acquiring access rights were being developed. The majority of the writing centered on the acquisition of access rights; the methods; the process; and, to some degree, the different ways to determine the value of the acquisition. The writing also centered on the process to achieve complete access control along roadways; most often, the process necessary to facilitate the building of the Interstate Highway System or other freeways.

Examples of Full Control of Access as Compared with Partial Control of Access

The responses to the questionnaire for this synthesis revealed that the terminology surrounding the subject of access rights varied considerably across the nation. Hypothetical examples are provided to describe the features of full control and partial control of access rights. An example of a complete restriction of access is illustrated in Figure 2.

As shown in Figure 2, Town X is bisected by a freeway where full access control was purchased. The freeway separates residential developments to the north from farmland to the south. To provide reasonable access to the parcels of land, multiple techniques are shown. On the north side of the freeway, an alternate street system is provided to allow the properties access to the freeway by means of local roads to the interchange crossroad. In addition, a frontage road is provided to the crossroad that allows properties "D," "E," and "F" to access the freeway. In the example, the ravine made it too costly to construct a crossing to extend the frontage road, making it less expensive to acquire the entire parcels "B" and "C." An easement was purchased on property "D" to allow property owner "A" to access the frontage road. Because the construction of the highway would result in property "A" being severed, the agency was able to develop a means of access along the side of the ravine under the highway. Thus, the property owner was able to secure access to the field on the north side of the roadway. In this example, the cost to achieve full access control was relatively inexpensive when the agency was able to provide some other means of reasonable access to the property.

Figure 3 depicts the same town used in Figure 2, with a two-lane highway rather than a freeway running through town. In this example, the agency determined that some amount of access to the highway would be acceptable; therefore, they acquired partial access rights as a means to limit access to specific locations. Figure 3 is an example of poor access management. Less than desirable spacing is provided between openings in the access control line and few openings align on the north and south sides of the highway.

These openings or gaps in the partial access control line were planned to accommodate existing and future intersections and driveways. The agency did not leave any properties landlocked as in the previous example. Rather, openings in the access control line allowed each property to have a minimum of one driveway to the highway, as illustrated for lots "D" and "E." Multiple openings were allowed for lots "A" and "F." A single opening or gap was left to jointly serve lots "B" and "C." Furthermore, property owners "A," "D," and "E" have additional openings in the access control line for future driveways designated by the letter A within a circle. Unlike the previous example, the city streets in Town X connect directly to the highway.

In this example, the openings in the partial access control line were determined primarily by the land ownership patterns and individual negotiations with property owners, rather than determining where a driveway might be located when applying a driveway spacing standard.

RESULTS FROM QUESTIONNAIRE

Although full control of access was purchased along Interstate highways, agencies purchase access differently on nonfreeways and arterials. Table 1 shows the percentage of responding



FIGURE 2 Full access control.



FIGURE 3 Partial access control.

TABLE 1 PERCENTAGE OF RESPONDING AGENCIES THAT ACQUIRE FULL AND/OR PARTIAL ACCESS CONTROL ON NONFREEWAYS AND ARTERIALS AND CROSSROADS AT INTERCHANGES

	Yes	No
Nonfreeways and		
Arterials		
Full control	88%	12%
Partial control	100%	0%
Crossroads at		
Interchanges		
Full control	81%	19%
Partial control	90%	10%

agencies that acquire full and/or partial access control on nonfreeways and arterials. A summary of the agency responses is included in Appendix C. As shown in the table, 88% of the responding agencies purchase full access control, and all responding agencies purchase partial access control on nonfreeways and arterials.

Table 1 shows that most responding agencies acquire both full and partial access control on crossroads at interchanges, although some states do not acquire any. Five of the responding agencies do not acquire full control of access but do acquire partial control on these crossroads, two of the responding agencies indicated that they acquire full control but not partial access control, and one agency (Maine) indicated that they do not acquire any access control on crossroads at interchanges. As shown by Table 1, partial control is purchased more often on nonfreeways and arterials when compared with crossroads at interchanges.

Once the decision is made to acquire access, responding agencies indicated that they do so through purchase or eminent domain. Figure 4 depicts the percentage of agencies that use each acquisition technique. In addition to using eminent domain, some agencies use statutory designation, and several agencies indicated the use of deeds.



FIGURE 4 Answers to Questions 1d and 2d: "How do you acquire access rights along nonfreeways and arterials?" (Note: Multiple responses were possible.)

Statutory Designation

Several agencies acquire access through statutory designation, which is an exercise of police power. Five of the responding agencies use statutory designation on nonfreeways and arterials, whereas only three use statutory designation on crossroads at interchanges.

Oregon uses statutory designation on nonfreeways and arterials, but not on crossroads at interchanges. The state may designate its highways as "throughways," which have specific restrictions and provide the ability to regulate access. As an example, throughways are limited to 10 commercial business accesses per mile. The Oregon Department of Transportation (DOT) has the authority to separate the directions of travel on a throughway and thus regulate, restrict, or prohibit access to best serve the traffic on the throughway (7). The same authority is not applicable to crossroads at interchanges where, for example, the Oregon DOT use eminent domain to acquire access.

Eminent Domain

Eminent domain is defined by AASHTO as a legal power that allows a public agency to take property for public use provided an owner is compensated for his or her loss (6). Components of eminent domain are included in the U.S Constitution and in the constitutions of various states. No private property is exempt from the applicability of eminent domain. The only limit is that the property to be acquired must be for public use.

Eminent domain refers not only to the physical ownership of a piece of property, but it can also include the means of access to that property. It usually occurs through two situations: when a government agency condemns a property or when a public agency through governmental action causes injury to an owner and the owner brings an "inverse condemnation" suit to demand recovery of the costs of the damages (e.g., denial of access and nonissuance of entrance permit).

There is often some confusion between eminent domain and police power. The police power is the power of government to act in the furtherance of the public good, either through legislation or by the exercise of any other legitimate means, in the promotion of the public health, safety, morals, and general welfare, without incurring liability for the resulting injury to private individuals. Eminent domain is the power of the sovereign to take or damage private property for a public purpose upon payment of just compensation. Police power is the power to restrict a property because it is necessary. Eminent domain is the power to appropriate a property right because it is useful. Whether it is the police power or eminent domain that is being exercised in a particular case is sometimes difficult to determine. This is in part due to the fact that it is extremely difficult to tell where the police power ends and where the power of eminent domain begins (8).

Police power may also be used to manage access through implied general police power authority given to several levels of government (9). When a property owner requests a driveway, it is through police power that a state or local agency will determine the location of an allowable driveway, limits to the driveway, the methods for driveway construction, or even if the driveway can be allowed. If an agency's rules and regulations are so rigorous so as to prevent any reasonable access to the property, it is likely that it would rise to a "taking" under eminent domain rather than a use of police power. Many agencies have specific statutes that require agencies to provide reasonable access to a property, the agency is typically required to acquire the access rights through a condemnation process through the authority of eminent domain.

A consideration of the application of eminent domain and the exercise of police power is especially important when acquiring and managing partial access control along nonfreeways and arterials, because the governmental agencies will usually be required to apply both techniques.

Bundle of Sticks

In 1922, the U.S. Supreme Court introduced a concept of a bundle of sticks in relation to rights that a property owner may enjoy where each of the sticks represents common rights that flow or stay with the property (10). (see Figure 5a). The court also made it clear that some of the sticks are more important than others, with four essential types of property rights: (1) possession, (2) use, (3) exclusion of others, and (4) disposal (11).

This analogy helps to communicate how individual rights may be sold or acquired by another entity, while the property owner retains the remaining sticks in the bundles. Governments have the right of eminent domain, which allows them to take private property (one of the sticks) for public use with just compensation. (see Figure 5b). This occurs through condemnation and does not require a property owner's consent (12).

As the analogy of a bundle of sticks is applied to access, property owners that have frontage along a roadway are generally ensured of an abutter's right of access. This right can be considered one of the property rights in the bundle and, like any other right, can be conveyed to another party. In the case of the building of the Interstate Highway System, states were required to have laws that prevented direct access to properties when the highway was built to receive federal funding. The states also had to ensure that all existing direct access would be eliminated and no future direct access would be allowed to adjacent properties when existing highways were upgraded to become part of the Interstate Highway System, thus removing the right of access stick from the bundle of sticks (rights) along the frontage between the Interstate highway and the abutting property.



FIGURE 5 (a) Bundle of sticks, (b) Bundle of sticks: Acquisition of access rights, (c) Bundle of sticks: Disposal of access rights.

Because all access was acquired from the adjacent property owners that fronted the Interstate highway (see Figure 2), the state agency had two options: (1) leave the property landlocked or (2) provide some means of reasonable access. This was accomplished in several ways, including constructing frontage roads, securing crossover easements from neighboring properties, and constructing local street systems.

Partial access control means that the local agency has the eminent domain authority to acquire the right of access along the highway segment as necessary, but may leave openings in the access line where access to the property may be allowed. States have accomplished this in two general methods: first, by a highway designation where access is not allowed to adjacent properties, and second, and the more common technique, the physical acquisition of access rights except at specific locations along the frontage. In this case, the state acquires the right of access from the bundle of sticks, and through a prior decision or negotiation replaces the stick that specifies access at an exact location in the bundle, as shown in Figure 5c. This decision is often memorialized in a deed. Samples of typical deeds and deed language are provided from several state agencies in Appendix D.

The practice of acquiring access rights while leaving an opening in the access control line intertwines the eminent domain authority during the acquisition and the application of police power when making the decision to allow or deny a driveway.

The purchase of access rights is often constrained by funding;, therefore, often more openings than are desirable are left in the access control line. Figure 6 depicts an actual right-of-way map of a highway in a western state where the state purchased partial access control. Through the purchasing process, the DOT left numerous openings in the access control line for existing and future potential access to the highway. These locations are identified with an A within a circle. Some of these openings are located on the edge of the property, whereas other times several openings are provided to one property. As shown in the figure, 13 openings were provided in the access control line within the 815-ft section of highway. The DOT depicted these openings by specifying the centerline and width of the opening. In the example of the accesses at stations 707+10 and 707+50, the map indicates that both openings are 35 ft wide. Therefore, although the centerlines of the openings are spaced 40 ft apart, the actual length of access control purchased between these two openings is 5 ft. If accesses were permitted at each opening in the access control line, this facility would be burdened with the safety and operational implications of closely spaced driveways on a highway.

Some states have experienced particular challenges with the use of eminent domain to acquire access rights. For example, in North Carolina in the mid-1950s, before the concept of Interstate freeways and access control had fully developed, the North Carolina Highway Commission entered into a number of agreements regarding access. "The language in the agreements changed about every two weeks and most of it was devised by various Right-of-Way Agents to cover what they thought the ultimate access situation would be. They range[d] all the way from promises to build [a] service road to a grant of access at points two and three miles distant from the property" (13). This led to several challenges to the wording of the agreements. An example is in Williams v. Highway Commission (14) where the North Carolina Highway Commission purchased rightof-way along the frontage of the Williams property. The language in the agreement stated that, "It is further



FIGURE 6 Excerpt of an actual state right-of-way map showing partial access control.

understood and agreed that the undersigned and their heirs and assigns shall have no right of access to the highway constructed on said right-of-way except at the following survey stations: 761+00 right." When Williams later attempted to locate an access at this point and it was denied, he brought about a civil action for a breach in contract. The court stated that the point of access previously granted was an easement for access and to deny Williams the use of it constituted a taking. Thus, Williams was compensated through inverse condemnation (13). As this example shows, when access control is purchased, it is important to consider the wording of the agreement. In this case, the wording implied a right to access at any openings within the access control line.

Montana is in the process of transitioning away from outright acquisition of access rights and is moving toward regulatory control. Its previous process required the appraisal and purchase of access. Once access rights were acquired, they were placed in a deed to memorialize the decision. If the access was appraised at this time, it usually received the nominal \$300 value, because the state generally left the property owner with the pre-existing driveway or driveways to serve the property. However, when a property owner attempted to acquire additional access rights to serve a different use for the property, the department would determine the value of the additional access based on the value as determined by a before-and-after appraisal based on existing and proposed land use and access. In many instances, the appraisal for the "after condition" resulted in a substantial increase in value. This increase was assumed to be the result of the additional access and was therefore the cost to the property owner for the change in use. The Montana DOT is responsible for preserving the safety and through mobility of their highway facilities, not the general use of the adjacent

land. As part of its new program, it is recognized that all adjacent landowners have a right to reasonable access to the public highway, but not necessarily direct access. As long as reasonable access is achieved, no access rights need to be purchased.

CRITERIA FOR ACQUIRING ACCESS RIGHTS

Current Practice

Agencies use various techniques to determine when access rights will be acquired. These techniques were surveyed in the questionnaire and include statutes, rules, agency policies, corridor plans, design plans, and individual analysis. Responding agencies also indicated safety concerns and techniques not specifically addressed in the questionnaire such as access management plans, corridor agreements, environmental policies, and engineering design guidelines. These techniques vary depending on whether the facility is a nonfreeway and arterial or a crossroad at an interchange. Figure 7 depicts the various techniques used by the responding agencies.

Most agencies use more than one technique to determine when access rights are acquired. A brief explanation for each technique addressed in the questionnaire is provided here.

Statutes

Statutes are those laws that have been developed that qualify how an agency may (or may not) develop access-controlled roadways. The responding agencies indicated that this technique is used less than half the time on nonfreeways and arterials, and crossroads at interchanges.



FIGURE 7 Answers to Questions 1b and 2b: "Which of the following does your agency use to determine whether or not access rights are required?" (Note: Multiple responses were possible.)

As an example, the state of Virginia uses its statutes in addition to agency policies, and corridor plans, to determine the need for access rights acquisition. Virginia's statutes allow it to acquire or designate any part of an existing highway as a limited access highway, whereas their policy establishes the rules pertaining to limited access control.

The use of statutes for the preservation of roadways at the state level has increased. Statutes usually deal with the coordination needed between land use and transportation planning agencies. For example, some may establish a notification procedure to ensure that transportation officials are advised of current developments and land use changes. "Although the process varies by state, the agency upon receiving notice of a land-use change is provided the opportunity, within a specified time, to take action to provide protection for any planned development that may affect the corridor" (15).

Rules

Rules are text developed by the regulating agency to implement the purpose of statutes and laws. Approximately one-third of the responding agencies indicated the use of rules on nonfreeways and arterials, and crossroads at interchanges.

Agency Policies

Many states have policies that were developed within an agency to provide direction on when access rights will be acquired. As shown in Figure 7, the responding agencies use this technique more than 50% of the time on both nonfreeways and arterials, and interchange crossroads.

The Nebraska Department of Roads uses its Access Control Policy to determine when to acquire access. This policy specifies a need to purchase access rights on expressways and other multilane divided highways. The policy also allows selected public roads and accesses from abutting properties at approved locations. All other highways may be considered for access acquisition when they reach a minimum 20-year forecast volume, when the highway is within specific limits of cities, where there are fewer than 3 mi between the Interstate and the connecting parallel highway, and where it is deemed appropriate (*16*).

Corridor Plans

Corridor plans are plans developed along a highway or a segment of a highway that define the long-term objective. The responding agencies indicated that this technique is used more often on nonfreeways and arterials when compared with interchange crossroads.

Design Plans

Design plans are an agency standard followed when a highway is constructed or reconstructed. The responding agencies indicated that this technique is used more than 50% of the time.

Individual Analysis

Individual analysis is usually conducted in response to a specific concern and could be related to safety, weather, politics, or other factors. Responding agencies indicated the use of this technique more often on nonfreeways and arterials when compared with crossroads at interchanges.

Other

Additional responses indicated the use of access management plans, corridor agreements, engineering guidelines, environmental documents, and safety concerns. A few states use environmental documents as a technique to determine when access rights are acquired. In Montana, the decision to pursue limited access control is made at the preliminary field review of the proposed project. With some projects, environmental documents completed before the preliminary field review determine whether limited access control is required.

Several agencies have only one technique they use to determine when access rights are required on nonfreeways and arterials, such as Connecticut, Georgia, and Louisiana (design plans); Minnesota and Vermont (individual analysis); Missouri and Nebraska (agency policies); and Tennessee (design guidelines).

Fewer agencies rely on only one technique to determine when access rights are required on crossroads at interchanges including, Missouri and Nebraska (agency policies), North Dakota (individual analysis), Louisiana (design plans), and Tennessee (design guidelines).

Approximately one-third of the 31 responding agencies indicated that they do not have statutes or policies in place to identify how a decision to acquire access is reached on nonfreeways and arterials, and interchange crossroads.

The criteria for acquiring access rights are similar for nonfreeways and arterials, and crossroads at interchanges. However, approximately 20% more agencies use corridor plans and 15% more agencies use individual analysis to determine when access rights will be acquired for nonfreeways and arterials as compared with crossroads at interchanges.

When agencies decide on a distance to acquire the access rights along crossroads at interchanges, many rely on the guidance provided in the 1991 AASHTO publication, *A Policy on Design Standards—Interstate System*, which speci-



FIGURE 8 Answers to Questions 1c and 2c: "If you acquire access rights, who in your agency is responsible to ensure that access rights are acquired?" (Note: Multiple responses were possible.)

fies a minimum spacing of 100 ft in urban areas and 300 ft in rural areas (17). NCHRP Synthesis of Highway Practice 332: Access Management on Crossroads in the Vicinity of Interchanges addresses current state practices in greater detail (18).

From the responses in the questionnaire, it appears that agencies do not consistently use the same criteria to determine when access rights are acquired as they do when they dispose of access rights. Further discussion follows in chapter four under Disposal Management. Figure 8 shows the percentage of responding agencies that give the responsibility of acquiring access to various people within an agency. Although most responding agencies indicated that only one person was responsible, several agencies give this responsibility to multiple people. Generally, the same people are responsible for acquiring access rights on nonfreeways and arterials as on crossroads at interchanges; the right-of-way director is responsible for the majority of the decisions. Others who might have exclusive responsibility or might work with the right-of-way director in the acquisition include the chief engineer, traf-



FIGURE 9 Answers to Questions 1e and 2e: "If you are required to pay for the access rights along nonfreeways and arterials, how do you arrive at a value?" (Note: Multiple responses were possible.)

fic engineer, project manager, and planning manager. A number of responding agencies indicated that other individuals not covered by these titles are also in charge of the acquisition of access rights. In Oregon, a Project Development Team is responsible for ensuring that access rights are acquired. The responsibility for acquiring the access belongs to the Right-of-Way section at the Oregon DOT. In other states, such as Washington, the Access Unit is responsible for ensuring the acquisition of access rights.

FACTORS IN VALUATION AND NEGOTIATION

When required to pay for access rights, nearly all responding agencies noted that they use an appraisal to determine the value of the access. Nine of the responding agencies (Colorado, Florida, Louisiana, Missouri, Montana, New Jersey, Pennsylvania, South Carolina, and Virginia) (27%) also use negotiation. Figure 9 shows the percentage of agencies responding to each technique.

The access required for a particular property, and therefore the value of the access to that property, depends on the land use. Netherton stated in the book, *Control of Highway Access*, that the courts and legislation have little background on the data relating to this aspect of land use and therefore rely on valuation without taking into account compensation policies and concepts (2).

Different land uses have vastly different access needs. Netherton noted that the major categories of land uses generally are farmland, suburban residential areas, urban residential areas, industrial sites, institutional sites, commercial neighborhood establishments, and highway commercial establishments (2). CHAPTER THREE

MANAGEMENT OF ACCESS RIGHTS

This chapter discusses the management of access rights and, because the available literature is limited, is based on information provided by the questionnaire responses. This chapter is organized into four sections: (1) Administration of Access Rights, (2) Organizational Characteristics, (3) Records Management, and (4) Additional Techniques to Manage Access.

The application of police power as a means to manage access is used extensively by the responding agencies. However, the use of police power and eminent domain are often intertwined, especially where agencies have acquired partial access rights along roadways through eminent domain and then apply police power regulations in driveway permitting decisions. The last section of this chapter includes a discussion that addresses the differences surrounding eminent domain and police power.

ADMINISTRATION OF ACCESS RIGHTS

Where an agency owns partial control of access and the abutting owner has an opening in the access control line, 94% of the responding agencies require the owner to request permission for a driveway at that location pursuant to its police power. This can be confusing to the landowners, who often believe that an opening in the access control means an unconditional right of access.

Most responding agencies (75%) are not required to provide the owner with a driveway at each opening in the access control line. In Minnesota, the driveways are permitted only if they are necessary to provide suitable access to the site. In other states, such as Montana, the openings in the access control line were historically treated as undeniable access rights; therefore, if it was to deny access to a landowner, compensation for that potential access would be owed.

Sometimes a driveway is requested by a property owner at an opening in the access control line that is not consistent with standards or agency policy. When this happens, 10% of responding agencies approve the request. In Oregon, the request may be denied. However, the affected property owner can file a claim for relief. Montana and Georgia may work by statute with the landowner to allow the driveway, but in a different location depending on the need to provide reasonably convenient and suitable access and whether alternate access is available. A dilemma can arise for an agency when an opening in the access control line is located in an area where a driveway would be unsafe. In such cases, it is likely that the agency would be required to limit the usage, turn movements, or may be required to deny the driveway entirely.

In Kentucky, a request for a driveway in an opening of the partial access control line is approved if the opening in the partial access control line is consistent with the agency policies. However, if the subject opening in the access line is not approved, the request is denied. The Massachusetts Highway Department will approve the request for a driveway assuming that there are no safety issues. Where there are safety concerns, they may require modifications to be made. In the event that the modifications cannot satisfy the safety concern, the application is denied. The New York State DOT will often deny the request or grant an approval with modifications.

In Texas, the request is denied by the DOT pending a dispute resolution process, whereas the Utah DOT analyzes requests on a case-by-case basis. The Utah DOT also requires that the request for a driveway be consistent with the local adopted plan or the Transportation Master Plan.

In Colorado, the request will be denied if it does not meet agency policies. Some denials have led to challenges when the denial of a driveway is based on safety concerns. In some cases, the Colorado courts have ordered the state agency to issue a driveway permit even though it is not consistent with the DOT's policies.

Compensation Considerations

If the request for a driveway at an opening in the access control line is denied, 30% of the responding agencies indicated that they would be required to pay compensation to the landowner, because the opening is considered a property right. It appears that the courts or legislature determined that a denial at an opening in the access control line constituted a "taking." In Missouri, a denial is viewed as an inverse condemnation and therefore the state is required to pay compensation or allow the driveway. In these instances, Missouri DOT staff works to resolve access issues through negotiation and/or modification. Similarly, in Nebraska it would be considered a "taking" and the owner has a right to receive damages. Most responding agencies indicated that they are required to pay compensation if the landowner is left with no other reasonable access. If access to another public road is available and the property is not landlocked, the landowner is generally not compensated, such as in Texas where circuity of travel is not compensable. Other states including Colorado, Rhode Island, South Dakota, and Virginia are not required to pay compensation when other access is available. In Oregon, they allow the property owner to "reserve" access points at specific locations. If the Oregon DOT decides to deny a permit for a driveway at the "reservation of access," the affected property owner can file a claim for relief. In Iowa and Nebraska a closure would require compensation because it is considered a "taking," because the property maintained a right to access the highway.

The Florida DOT does not pay compensation for the denial unless the denial constitutes substantial diminution of beneficial use and enjoyment of the property based on reasonable remaining access.

If compensation is required, most responding agencies value the access based on an appraisal. Two responding agencies (Florida and Montana) also use negotiation as a tool for determining the value of an access. Montana uses courts to determine the value.

In North Dakota, the state has never been required to pay compensation, because all requests for driveways at an opening in the access control line have been approved.

Transferability of Access Control Rights

Many agencies began to acquire access rights along roadways in the 1950s and 1960s. There are many occasions where road realignments or widening have occurred since that time that require a modification to the right-of-way line and could affect the previously acquired access rights.

Where an agency owns the access rights along a roadway and the agency acquires additional right-of-way, approximately half of the responding agencies indicated that the access control line would automatically convert to the new location. In Minnesota, the access control line would usually shift to the new location, but the impact of that shift would be evaluated using an appraisal to determine if it created new damages. Any shift in the location of the access control line would be identified in the property deed. In Colorado and Washington, the determination on whether or not the access line is automatically relocated would depend on the situation, whereas in Utah the access control line does not automatically convert to a new location. Agency staff would negotiate with the affected property owner to determine the value of the new access control location. The process used in Utah is similar to approximately half of the responding agencies.

Level of Success

In a paper published in 1953 on methods used to manage right-of-way for future use, Leroy Moser, the Right-of-Way Engineer for the Maryland State Roads Commission, recommended that the acquisition of access rights not only be used for freeways, but also be used more extensively on other highways and city bypasses (19). Since that time, many agencies have acquired access much more extensively on nonfreeways and arterials and crossroads at interchanges reaching varying levels of success.

To evaluate the success of agency experiences, the questionnaire asked respondents to rate the level of success the agency had on preventing or precluding access to these types of roadways. Figure 10 summarizes the responses of the agencies.

As shown in Figure 10, all but one responding agency, a city, noted that their practices and experiences with highways



FIGURE 10 Answers to Questions 3–6: "Where access has been acquired, what is the level of success in preventing or precluding access to the roadway?"

and freeways were very successful. Less success was reported for nonfreeways and arterials, and interchange crossroads.

Follow-up conversations were made with each of the agencies that identified responses of "Somewhat Successful" and "Somewhat Unsuccessful" in preventing additional access to the adjacent properties. Because all but one agency reported that the techniques used along the Interstate Highway System were very successful, they were asked to compare the Interstate highways with other roadways and explain why the techniques used on the Interstate highways were more successful than the techniques used on the other roadways.

When asked what made the acquisition of access rights along the Interstate highway so successful at preventing atgrade intersections and driveways, agency responses fell into three categories: national standards, respect for the facility, and roadway environment.

Several agencies indicated that the national standards provided by AASHTO clearly outlined what would and would not be considered allowable access to the Interstate Highway System. Also, AASHTO stipulates that any and all accesses be spaced appropriately. In addition, the involvement of the federal government aids in the preservation of Interstate highways. Owing to the national focus on adequate spacing and proper access through interchanges on Interstate highways, there are minimal requests for driveways on an Interstate highway.

A number of agencies also indicated that people generally have great respect for the Interstate system. They understand the higher order class facility of the Interstate and the safety implications of at-grade intersections on these facilities. As one responding agency stated, "no one asks for a driveway to the Interstate, it just wouldn't happen."

According to several agencies, the roadway environment also plays a role in the success of the Interstate system. One agency noted that "The secret of access control along the interstate is that it is complete access control. No one has a driveway." Other agencies also noted that when the character of the roadways creates an environment where no access is allowed, everyone, including developers and the public, understands the purpose of the highway and knows that they will not be allowed access. In addition, the placement of fencing along the entire Interstate highway adds to the sense that no access will be allowed.

The responses to the question of what made the acquisition of partial access rights along nonfreeways and crossroads at interchanges less successful at preventing at-grade intersections and driveways were less conclusive.

One major issue raised by several agencies was that of roadway environment. When property owners see frequent atgrade intersections and driveways it is difficult for them to understand that access is controlled. The roadways are not completely fenced off as they are with the Interstate Highway System, and therefore the environment appears to allow additional access. Agencies also struggle with the political and development pressures to allow access. There is more pressure for access on other roadways as compared with Interstate highways. Developers want prime locations adjacent to interchanges and do not understand the need for partial access control. For some agencies, projects attempting to require developers to use alternative access can result in litigation. As one respondent mentioned, "developed areas along the roadway are not preferred locations to try to acquire partial access control. [These areas] may require other techniques such as frontage roads and medians. Instead, acquire access rights before the development fronts the highway." Other respondents have had similar experiences and recommend purchasing the entire road frontage when possible. To further complicate the process, the development is often needed in the area to promote economic growth. Another respondent stated that, "The highway needs to encourage and support commerce, communities, and the citizens that it serves."

Agencies struggle with many additional issues. The following comments were made to explain why the acquisition of partial access rights along freeways and crossroads at interchanges is less successful than Interstate freeways at preventing at-grade intersections.

- "If [one] only operated under police power, [one] could make decisions that were specific to each individual site."
- "Retrofits are difficult to achieve when attempting to close a direct access."
- "[One] need[s] an economic analysis to determine if it is a good investment. [It is necessary] to weigh out the cost with safety, economics, and shrinking resources."
- "Since there is no physical barrier, the permitting staff may not always review the plans to identify that there is no right of access."
- "Inconsistent right-of-way acquisitions from property owners."
- "The property owner believes they have a driveway when they see it in the property deed."
- "There are political pressures to sell access rights back to property owners."
- "There is pressure to rescind the access control line."
- "You cannot vacate the property right, you bought it and you cannot just give it away."
- "Whenever [one] acquire[s] access rights with federal dollars, [one] need[s] federal approval to sell the access rights."

ORGANIZATIONAL CHARACTERISTICS

More than 75% of responding agencies indicated that the Right-of-Way Director was responsible for the acquisition of access. The remaining respondents gave the responsibility to

the Chief Engineer, Project Manager, and/or Planning Manager. Figure 8 in chapter two provides a summary of the number of agencies assigning this responsibility in the acquisition of access rights along nonfreeways and arterials. A number of agencies assigned the responsibility to multiple persons. For example, Louisiana gives the responsibility to the Chief Engineer, Right-of-Way Director, Project Manager, and Planning Manager.

Interestingly enough, one-half of the responding agencies indicated that different people coordinate the acquisition of access and the disposal of access. Fewer states give the responsibility to the Right-of-Way Director and more states give responsibility to the Chief Engineer and/or Transportation Commission.

During the acquisition of access rights, approximately half of the responding agencies require coordination between the permitting staff and right-of-way staff, including Colorado, Iowa, North Dakota, Texas, and Utah. In South Dakota, both staff units are housed in the same building and collaborate on decisions. Other states, such as Minnesota and Montana, often include additional functional groups in the decision process including planning and design. Oregon has official access lists that are approved by the Project Development Team and Area Manager. Both the right-of-way and permitting staff work off of the approved list to maintain consistency. The process also allows for both staffs to provide input into the development of the access list. In Connecticut, Nebraska, New Hampshire, South Carolina, and Virginia the permitting staff is not involved in decisions regarding the acquisition of access rights.

During the permitting phase of driveways, 66% of the agencies require coordination between the permitting staff and right-of-way staff. In Washington State, the coordination may be required, but depends primarily on the project type. Minnesota involves additional resources in the decision, including expertise from planning, design, and traffic units. In Nebraska, the permitting staff reviews the request and, if approved, the right-of-way staff issues the permit.

After the purchase of access control, it is important to ensure that staff does not approve a driveway where an agency owns access rights. Most respondents indicated that they have policy direction to ensure that agency staff does not inadvertently approve access where the agency owns access control. A small percentage of respondents indicated that no controls were in place, and another small percentage indicated that it was voluntary if staff chose to conduct the research on the access ownership.

Most agencies have a system in place to review driveway permits relative to where an agency owns access rights. Sixty percent of the agencies accomplish this through a policy direction, whereas only one agency has incorporated an automated check before the application can be approved. Iowa has all driveway permits reviewed by the Access/ Utility Policy Administrator as a double check to avoid this problem. In Kentucky, the permits branch within the Division of Traffic is responsible for reviewing the location and checking to ensure that no control of access is violated. In Nebraska, the right-of-way staff is responsible for checking each application to determine if access rights are owned.

Wisconsin does not have a system in place to prevent this situation and relies on staff to voluntarily conduct the research. However, the state is developing a new database of all access rights with a map interface. This will prevent the inadvertent approval of driveway permits in locations where the property owner does not have a right of access. The Oregon DOT has an automated system that sends an e-mail copy of each driveway application to the right-of-way section. Right-of-way staff then researches the files and maps and responds to the permitting staff as to property owner's right of access.

RECORDS MANAGEMENT

Access rights are a valuable resource to an agency and require proper recording to ensure the longevity of the resource. Agencies manage their records in various ways: electronic records, electronic right-of-way maps, paper or hard copy right-of-way maps, paper tabulations, spreadsheets, and paper or hard copy files. Figure 11 summarizes the techniques used.

As shown in Figure 11, the vast majority of records (more than 80%) are part of the hard copy or paper files and right-of-way maps. This is not surprising considering that this was the most common method to store data over the past several decades. Wisconsin is developing a database of all state access rights with a map interface as a means to eliminate several tasks.

The Kansas DOT has implemented an Enterprise Wide Records and Workflow Management (RWM) system. This system acts as a central library for electronic documents and currently contains more than 1 million entries. Approximately 5 years ago, Kansas embarked on an effort to reengineer its access permit application and approval process. During the design phase, it was decided that this effort would capitalize on the RWM system under development. All access permitrelated forms were converted to an electronic format. The workflow of an access permit was also modeled so that it could be forwarded, reviewed, approved, denied, or consulted with the push of a button. The signatures on the permit forms were made electronic and are protected by login identification and password protection. When the workflow stops, all documents associated with the permit are rendered into a PDF format and are stored in the document management library.

As a result of this process, any permit or document related to a permit can be recalled from the document management library by a search function. In addition, this system also



FIGURE 11 Answers to Question 18: "Where your agency has acquired a right of access, how do you manage the records?" (Note: Multiple responses were possible.)

creates a record table in the Kansas DOT's central planning database. The tables contain a complete inventory of all atgrade intersections and access points on the Kansas State Highway System. These points are located spatially and have a number of attribute fields associated with them. The RWM and database systems communicate with one another such that the inventory is automatically maintained.

The Kansas DOT is considering a Geographic Information System component as a potential future improvement. This would allow driveway permitting staff to download and view the DOT's right-of-way and determine whether or not it owns access control for a section of roadway.

Once access is acquired from property owners, the decision is almost always memorialized in property deeds and on the right-of-way map, as shown in Figure 12. Other methods include public records, agency records, and spreadsheets. Only 19% of the respondents identified electronic records as a means to memorialize the decision. The Utah DOT has initiated a project to scan the existing right-of-way maps into an electronic database to help assist in the research of access rights.

At one time, Montana included the location of access points directly in its property deeds; however, this proved to be a challenge when the request for a driveway resulted in a denial. They now require property owners to sign an access control deed that will reserve the right to reasonable access as shown on right-of-way plans, but no actual access points will be identified.

In the 1950s and 1960s when many agencies acquired full and partial access rights, they often did not address what the access control was controlling other than vehicular access by means of an intersection or driveway. The responses to this question revealed a broad continuum of practice; 54% of the agencies allow pedestrian and cyclist facilities to cross the access control line, whereas the remaining 46% do not.

Some agencies reported that the acquisition of access rights is meant to limit vehicular ingress and egress from the highway and specify when it is permissible for pedestrians and cyclists to cross the partial access control line. Other agencies noted that the partial access control line is meant to keep all modes of traffic from crossing the control line and out of the right-of-way entirely.

Connecticut, Georgia, and Iowa do not allow pedestrians and cyclists to cross the access control line except at openings, whereas Louisiana cited liability concerns if it were allowed.

Colorado addresses the concern by issuing a revocable license agreement to allow pedestrians and cyclists to cross over the access control line. This preserves property rights and prevents any future claims of prescriptive rights by use. Both Maine and South Dakota issue permits. In Washington State a request goes through a review process to determine if the use affects the safety and operational efficiency of the route. Virginia will rarely grant an approval and only at the request of a local government. Pennsylvania completes an analysis and, if approved, the owner or sponsor of the pedestrian or bicycle facility must sign a legal agreement before access will be allowed.

Missouri, Montana, and Nebraska all view the access control as a means to restrict vehicular access to and from the roadway (except on the Interstate system) and therefore allow pedestrians and cyclists to cross the access control line.

Based on the potential inconsistencies in definition between modes, an agency should clearly define its objectives before acquiring partial access rights along a given facility. If



FIGURE 12 Answers to Question 16: "Where your agency has acquired a right of access, how do you memorialize the decision?" (Note: Multiple responses were possible.)

the purpose is to prevent motorists from entering and leaving the roadway it may still be appropriate to allow pedestrians and cyclists to access the right-of-way to cross and/or traverse parallel to the roadway.

ADDITIONAL TECHNIQUES TO MANAGE ACCESS

The majority of responding agencies (67%) reported the use of both the acquisition of access rights and the exercise of police power to manage property owners' access to highways. Police power techniques used include corridor designations, acquisition of development rights, land use controls, access covenants, land division review, driveway policy, and access management. Figure 13 depicts the various agency techniques used to manage access. Although police power is often used by various agencies to manage access, there is often confusion on the distinction between police power and eminent domain. To address the ambiguity surrounding these two techniques, the following section provides additional information gleaned from the literature review.

Confusion Between Eminent Domain and Police Power

Carlson, in a publication on eminent domain and police power, writes that "legal commentators as well as court decisions have stated that it is difficult to distinguish consistently between the power of eminent domain and the police power" (20). However, the two powers are distinct. Eminent domain



FIGURE 13 Answers to Questions 7 and 8: "What other techniques are used to limit or manage access?" (Note: Multiple responses were possible.)

takes property because it is useful to the public, whereas police power regulates the use of the property because the free use of that property would be detrimental to the public interest (20). In research delving into highway protection laws, "it was found that in actual operation police power actions and the exercise of eminent domain are often intertwined. It was found that a neat eminent domain formula may mislead even an able court into overlooking police power aspects" (21).

This issue continues to prove difficult. Proponents on both sides of the issue fail to be satisfied by recent court rulings (22). "Some courts have suggested that the police power ends when the injury to the property owner in not being paid for his property is greater than the injury to the public in having to pay for the property. It is only by weighing and balancing the need for the property, the injury to the property owner, and the burden of compensation upon the public that it can be decided in any case whether a right ought to be taken without paying for it" (8).

There is no set formula for determining whether a court case follows police power or eminent domain; instead, it is necessary to examine the cases by categories on a case-bycase basis (20). Generally, there are two areas where court cases have almost uniformly upheld police power by denying compensation. The first is that the highway by design may be regulated by traffic signals, center medians, turning restrictions, parking restrictions, and other regulations. These restrictions may interfere with access or even cause circuity of travel for abutting landowners. In the *City of Phoenix v. Wade* (23), and most other similar court cases, it was found that the abutters have no legally protected interest in the flow of traffic past their property. The diversion of traffic is an exercise of a governing agency's police power (20).

The second area where compensation is almost uniformly denied is where direct access is restricted. As stated in *Nichols on Eminent Domain*,

Interference with passage along a public way under an exercise of government action by (1) installing a median strip limiting the mode and type of traffic; (2) designating a one-way traffic street; (3) prohibiting or regulating parking; (4) prohibiting turns; or (5) restricting the speed, weight, size, and character of vehicles allowed on certain highways is generally a valid exercise of the police power and is not compensable (4).

A governing agency has the power to limit the number of driveways along a transportation facility for safety reasons. As long as abutting landowners have reasonable access there is no need for compensation. Abutters cannot expect to have access at every point along their property (20). This restriction is normally regulated under the exercise of police power.

Police power enabled states to regulate access for public health, safety, and welfare (22). It was recognized that limiting the amount of access on transportation facilities was needed to improve safety and maintain operations. Thus, police power, which is usually exercised through prohibition or regulation, was an appropriate tool to limit access on these facilities. For the most part, police power is used in a regulatory manner except in the case of emergencies. It has been difficult for the courts to identify the boundaries of police power, as it is considered the "reserve power." As a result, police power may sometimes restrict individual rights. Compared with the benefits to the community as a whole, these restrictions are considered a negligible loss (20).

Historically, to have property "taken" meant an invasion of the physical property or occupation of the land (3). Unless a property was landlocked, courts expected (1) risks associated with highway designs changing, (2) reasonable access only, (3) traffic diversion, (4) compliance with required safe traffic control, and (5) limited access that limited the abutters rights (24).

As stated in Nichols on Eminent Domain,

Generally, the "right of access" has been recognized through the United States as a property right which cannot be taken, or materially interfered with, without just compensation.

In instances where an abutting landowner is totally deprived of his access to an existing road (i.e., a way of necessity), courts have generally found a compensable taking (4).

It was not until the 1920s that the concept of regulatory taking was recognized. In the 1922 U.S. Supreme Court Case, *Pennsylvania Coal Company v. Mahon (10)*, the concept of regulatory taking emerged. When police power goes so far as to violate constitutional property rights, it is no longer an exercise of police power, but constitutes a taking and should be compensated under eminent domain (3). Eminent domain requires just compensation when the government takes property rights for a public purpose (22).

As stated in Nichols on Eminent Domain,

While the state can regulate access to some extent through the police power, clearly a point may be reached where compensation for a taking is mandated. The historic rule is the police power ends and the power of eminent domain begins when the injury to the property owner in not being paid for his property is greater than the injury to the public in having to pay for the property (4).

It is the responsibility of the agency to monitor the impacts of police power and it is the purpose of the court to protect the person and the property from the improper exercise of police power.

DISPOSAL OF ACCESS RIGHTS

A freeway or a segment of the Interstate highway is unlikely to become obsolete and limiting access no longer a priority. The same may not be true for other roadways where an agency has acquired limited access rights from properties abutting those roadways. The literature search conducted for the synthesis revealed that there is a lack of information available on the disposal of access rights. This chapter includes a discussion on the (1) Disposal of Access, (2) Factors in Valuation and Negotiation, and (3) Complexities of Disposal.

During the life of an agency-owned transportation facility, access rights may become unnecessary for a number of reasons. One reason may be when an agency decides to allow a driveway where it was previously not allowed. Another type of event could include the construction of a parallel freeway, highway, or bypass that serves the function of a highspeed, access-controlled facility. Access rights may also become unnecessary with the growth and expansion of communities along roadways that used to be predominately rural highways serving farms. In situations where the roadway is now meant to accommodate local street connections and adjacent properties within the community, there may not be a need to retain access control that supported unimpeded through traffic. The partial access control strategy may have been appropriate in the 1950s when the access rights were acquired and the farmland was 3 mi from the downtown. As the communities expand along these roadways, the travel speeds are usually reduced and the function of the roadway often becomes more oriented to serve local needs and the land uses adjacent to the roadway. The long distances between openings in the partial access control line may have been suitable for farms with significant roadway frontage, but the driveway spacing may not be appropriate for pedestrian- and bicyclist-oriented communities.

Table 2 shows the percentage of responding agencies that have a process for a property owner to acquire an access right where an agency had already acquired full and/or partial access control on nonfreeways and arterials and interchange crossroads.

In general, most agencies have a process for a property owner to acquire an access right to the roadway at a later date after the agency has acquired full access rights on both nonfreeways and arterials and crossroads. Approximately one-third do not have a process for disposal when full access control is acquired.

TABLE 2

PERCENTAGE OF RESPONDING AGENCIES THAT HAVE A PROCESS FOR A PROPERTY OWNER TO ACQUIRE AN ACCESS RIGHT WHERE THE AGENCY HAS ACQUIRED FULL AND/OR PARTIAL ACCESS CONTROL ON NONFREEWAYS AND ARTERIALS AND CROSSROADS AT INTERCHANGES

Yes	No
70%	30%
94%	6%
65%	35%
91%	9%
	Yes 70% 94% 65% 91%

DISPOSAL OF ACCESS

Most responding agencies have a process and organizational structure for the disposal of access rights. These issues are addressed in the following two sections on disposal policy and disposal management.

Disposal Policy

When agencies have a process for disposal, most have either statutes or policies to guide them in this process. Figure 14 depicts the various techniques used to determine when and how to dispose of access rights on nonfreeways and arterials and crossroads.

The Minnesota DOT is guided by Minnesota Statute 161.43 (25) on the disposal of highway easements. The statute allows the commissioner of transportation to dispose of easements when it is determined that they are no longer needed. The abutting landowner is able to pay the appraised value for the rights. If the owner refuses to purchase the access rights, the transportation commission may transfer the easement to another agency when the terms and conditions are agreed on.

Unlike Minnesota, some states have a process for disposal, but have no statutes or polices in place to guide them. These states often rely on their state rules and individual analysis. In addition to these guiding practices, Oregon uses a statewide Grant Review Committee. Depending on the type of facility, Colorado will use corridor plans, design plans, or its right-of-way manual.



FIGURE 14 Answers to Questions 22b and 23b: "Which of the following do you use to determine when and how to dispose of access rights?" (Note: Multiple responses were possible.)

An agency might also decide to transfer ownership of a section of roadway, or possibly the entire roadway, through a type of interjurisdiction transfer mechanism to another agency. In those situations where the agency has acquired rights of access, there may need to be special provisions on how to deal with the access rights.

Disposal Management

Figure 15 shows the percentage of agencies using specific individuals for administering the process of the disposal of

access rights. As shown in the figure, the Right-of-Way Director is most often responsible for the disposal of access rights, although the responsibility can also belong to multiple persons including chief engineers, project managers, traffic engineers, and others. Approximately half of the agencies give the responsibility of the disposal of access to the same people as those that are responsible for acquiring it. The remaining agencies either assign these responsibilities to different people or give the responsibility to multiple persons, of which only some can acquire and dispose of access. It would seem logical to allow the same persons to acquire and dispose of access unless the disposal is considered a more important action.



FIGURE 15 Answers to Questions 22c and 23c: "If you dispose of access rights, who is responsible to administer this process for your agency?" (Note: Multiple responses were possible.)

It is of interest to note that during the acquisition of access rights, the Chief Engineer is involved in four of the responding states, but was required by six states to participate when the access rights were disposed of. The agency Right-of-Way Director could make the decision to acquire in 26 of the agencies, but only 22 of the Right-of-Way Directors could determine disposal of access. Commissioners were never part of the process to acquire access, but were required to participate in four states when access was disposed of. These numbers suggest that there is a more formal and formidable process for disposal than for acquisition.

If the agency approves the access right, the property owner is not necessarily ensured of being allowed to construct a driveway at this location: approximately half of the responding agencies ensure a driveway at this location. Figure 16 presents the agency responses. Some of those not ensuring a driveway require a permit and approve the access if it is reasonably convenient and suitable where alternative access is not available.

There are occasions when it may be necessary to transfer the ownership of a roadway to another jurisdiction, such as a city or county, where the jurisdiction had previously acquired access rights. When this happens, most responding states indicated that the access rights are automatically transferred to the new owner along with the ownership. Several of the responding agencies indicated that the access rights remained with their agency even though the ownership was transferred. In Massachusetts, this issue has not been decided legally, so that the access rights remain with the state. Sometimes the ownership of the access rights is negotiated. In Wisconsin, if the access was controlled in the past by statute, the control can be vacated if it is no longer being used for state highway travel. If the county decides to maintain the control, the access rights can be transferred under a separate statute.

If the access rights are transferred to the new owner, approximately one-half of the responding agencies indicated that the access rights are still subject to the state's rules, procedures, and/or policies in the management of the access rights. For example, in Kentucky the access rights are still subject to Kentucky Administrative Regulations. In Maine, they are still subject to the existing statute.

FACTORS IN VALUATION AND NEGOTIATION

When agencies dispose of access rights, most of the responding agencies use an appraisal to determine a valuation. Negotiation is used less frequently. Wisconsin uses both negotiations and appraisals to determine a valuation. Appraisals are used for a change to an existing access right that was previously purchased, whereas negotiations are used for a change to an existing access right that was previously controlled by statute. Figure 17 depicts the methods used by the various responding agencies to determine a valuation.

Several agencies use other techniques in addition to negotiation and appraisal to determine a valuation. In addition to an appraisal, Louisiana relies on a property management officer to determine a valuation for access rights on both nonfreeways and arterials and crossroads. Montana uses negotiation, appraisal, and the court system to determine a valuation on crossroads at interchanges.

COMPLEXITIES OF DISPOSAL

When agencies were asked about their level of success with purchasing partial access control as compared with their experiences on Interstate freeways, they brought up the issue of disposal. One respondent indicated that once the access right is purchased, the property right cannot be vacated. In some states, access is acquired through eminent domain with



FIGURE 16 Answers to Questions 22e and 23e: "If an access right is approved, will the property owner be ensured of being allowed to construct a driveway to the highway or arterial at this location?"


FIGURE 17 Answers to Questions 22d and 23d: "If you dispose of access rights to an abutting property owner, how do you determine the value?" (Note: Multiple responses were possible.)

the use of federal funds. When an agency wishes to dispose of access, it needs federal approval to sell the access right. As a result, disposal can be difficult.

Various state transportation agencies are uncertain as to how to dispose of access rights when they were originally acquired through federal funds or from a trust fund. It is not clear if the agencies are aware that there is a process if these rights were disposed of and/or a roadway was transferred to another jurisdiction in the future. Section 1303 of the Transportation Equity Act for the 21st Century (TEA-21) states that the net income received from the sale or lease of property can be used on any Title 23 eligible project (26). Once received, the federal share of the net income should be held in an account until an eligible Title 23 project is available.

CASE STUDIES

This chapter presents three case studies that illustrate specific access control practices, specific issues, and current transitions that some agencies are making. These case studies (Montana, Ohio, and Oregon) were selected based on the range of experiences and current directions each agency is taking and are based on the answers to the survey questionnaire and follow-up interviews.

MONTANA

The Montana Department of Transportation (MDT) is in the process of transitioning away from its old system of managing and acquiring access to its new system of incorporating police power.

Existing Program

Historically, MDT acquired access through the purchase of access control and specified openings across the access control line in deeds. Access was viewed as a property right, and any restriction of the access was considered a taking. MDT experienced many challenges with this program:

- When a facility was considered for access control, the Access Control Resolution went directly to the Transportation Commission, before public review and comment. As a result, the facility often became access controlled without any public input to the MDT commissioner.
- When MDT determined that a project was going to include access control, there was no clear or documented approach for implementing limited access control on a project.
- During the acquisition of access, access points were a negotiated item in the right-of-way process between the individual property owner and the agency. This process led to discrepancies between neighbors and no consistency within the corridor.
- In their old program, the format included access threshold levels for individual projects. This created a firstcome, first-serve approach, as landowners who requested accesses first used the available number of accesses for the facility. As a result, some parcels of land had an excessive number of access points, whereas others were left with a few.

- Similar to the state of Oregon, when openings in the access control line are specified in the deed it is difficult to deny property owners access. The language in the deed is interpreted by the landowners and often by the courts to mean that the openings in the access control are points of access for adjacent property owners. If Montana is successful in denying the landowners the use of the opening in the access control, it is often considered a taking and just compensation is due. This has become expensive for the state.
- In addition, MDT's program did not have any control over the use of the access. If the access was previously granted as an acceptable access, and the character of the road and the access changed, it was difficult for MDT to close it once it became unsafe, because this was considered a deeded right. The only way to close the access was to purchase it and compensate the landowner.

New Program Direction

Montana is currently transitioning away from acquisition of access rights and is heading in a new direction with an approach of regulatory control. With the new program, landowners are ensured of reasonable access at the time of right-of-way acquisition. Any development that occurs afterward is subject to the guidelines developed specifically for that corridor. This usually requires owners to use the existing acceptable access points. If the redevelopment creates a situation where additional access or an access reconfiguration is required, the department is able to allow changes, as long as the owners mitigate any adverse impact to the facility. Although the owner has to cover the costs associated with mitigation, the access itself is not an expense to the landowner. If at any point the access needs to be closed, it can be. As long as alternative reasonable access can be provided to the property, no compensation for the access rights is needed. With the new program, MDT expects in general to no longer acquire access rights, except in the case of environmental documentation that explicitly requires that access rights be purchased.

To address some of the problems with the old system, MDT plans to use a public involvement process before designating a limited access facility. The public involvement process is planned to address the needs of the landowners and conveys their concerns to their commissioner before the commission acts.

Potential Problems

MDT has anticipated some potential new problems with this system. The new system does not indicate an access on a deed, whereas the earlier system indicated where the access was allowed on a recorded document. MDT is addressing this by including a reference to the right-of-way plans and the access control resolution on every deed.

In addition, there have been concerns about additional requests for access during right-of-way negotiations. Although not shown in the plans, right-of-way agents receive requests for additional accesses. The new guidelines are written in such a manner that if additional access is desired, and if landowners can show a need, additional access points can be allowed. Although a concern, these issues are not new to the program. The old program received the same requests; however, there were no guidelines for the process. Many times the additional access was granted as a method to complete the negotiations. The new program requires that the right-of-way agent obtain permission before approving the additional access. If the additional access is inconsistent with the plan developed for the corridor, MDT can use its police powers to deny the landowners additional access. This process ensures fair and consistent treatment for all property owners within a project.

Next Steps

MDT is currently implementing the police powers approach on a project-by-project basis. As part of the process, MDT plans to update their manuals and other documentation to support their new direction.

OHIO

The Ohio DOT (ODOT) may acquire access rights on any type of project that is constructed, whether it is an Interstate freeway or other roadway. The decision to acquire access by complete or partial access control is made at the time the project plans are being developed and depends on the situation. Through right-of-way acquisition, ODOT uses the opening width in the access control line to memorialize their control of access. For example, ODOT will leave 12-ft openings for a single residence, but wider openings for other land uses. Although ODOT may only allow for a driveway that is a specific width depending on the desired land use, they will provide a wider limited access break to accommodate curb radii when necessary. This is defined in the deed, as shown by examples from Ohio in Appendix D.

Once the decision is made to acquire access rights, it is the right-of-way acquisition staff's responsibility to acquire them. The rights are appraised, and ODOT pays the full fair market value as defined to the landowners under Ohio law. This can sometimes be very expensive when there is a total loss of access or a major degradation in highest and best use to the landowners' residual land. In an extreme example, ODOT once had to compensate a landowner \$2.5 million for the land taken and damages to the remaining property when it was necessary to acquire all access from a commercial development to establish a freeway, even though the property owner did not become landlocked.

In other instances, purchasing access rights is not a costly investment. This can occur when ODOT only purchases control at specific accesses and/or when the landowner maintains acceptable access to alternate roads in the "after" situation.

Once access is acquired, ODOT prefers not to dispose of it. However, in limited circumstances, ODOT will allow a modification to existing access control. To do this, abutting property owners must apply for a permit to access the road. Permits are granted by ODOT at no charge; however, they often come with requirements and restrictions. The property owner must locate their access where ODOT finds the least disruption to the through traveling public. They may also be required to build crossovers, acceleration and deceleration lanes, or install traffic signals and signs. Often, for significant developments, ODOT requires Traffic Impact Studies at the applicant's expense.

If the access rights are owned by ODOT in easement or fee simple, the department must also convey the necessary access rights at the same time the permit is issued. If the access rights are owned in fee simple, then the rights are appraised to determine their fair market value, and the landowner must agree to pay for these rights before the transfer of ownership of the access rights and the issuance of any necessary permits. Fair market value of the fee owned access rights to be conveyed are established by an appraisal that considers the value of the property without the new access and the value of the property with the access. The appraiser also accounts for necessary zoning change costs, utility costs, construction costs, and entrepreneurial profits. Once the value is determined through this process, ODOT will settle for that amount from the landowner as compensation for ODOT's conveyance of the access property rights.

Statutorily, ODOT cannot charge for easement vacations; therefore, there is no landowner payment when the access rights are owned solely by easement. FHWA does not participate in the acquisition of easements in Ohio. Additionally, FHWA cannot approve the disposal of easements (or release of access controls) where federal funds were used in the acquisition of easements, because ODOT cannot charge for the release of easements.

If a landowner desires an access where ODOT does not own access control rights, the landowner is still required to apply for a permit. If the permit is approved, the landowner is provided with a permit to do the necessary work in the right-of-way. If the permit is not approved, the property owner has a right to appeal the decision. (When ODOT does not own access control rights and denies a request, it is relying on its police powers.) The appeal board consists of the central office Access Management Coordinator, the Administrator of the Office of Real Estate, and the Chief of Staff. The board reviews the issues and provides a final answer on all applications. If the application is denied, and the landowner's application does not qualify for a variance, the administrative appeals process is completed. If there are no other means for the property owner to gain entry to their property, they may have to take legal action. In some circumstances they may file a claim against the person who sold them the landlocked land. In other instances, the landowner may seek legal action against ODOT either by means of a mandamus to gain an access permit or an inverse condemnation action. In the latter case, ODOT may seek to have the property appraised to determine the availability of compensable damages for the access restriction.

Ohio has found the acquisition of access to be a successful means of controlling access on ODOT facilities. Because the transaction is recorded in each county office as part of the chain of title, there is a clear understanding between ODOT and the abutting landowner (both current and future) that preserves the access rights into perpetuity.

ODOT will continue to use the various tools available to it when controlling access. Each project brings its own unique set of circumstances that demand specifically tailored solutions. In some instances, ODOT will continue to rely solely on its police powers to regulate access. In others, it may elect to acquire total or partial access control to ensure that access is not affected by future land development in the project corridor. In addition, on some projects they will use both police powers and acquisition to control access. Both police powers and acquisition of access rights play an integral part in ODOT's overall access control strategy.

OREGON

The Oregon DOT has acquired partial access rights from properties adjacent to the state highways that were determined to be "Throughways" following legislative authority granted to it in 1949.

A selection of related Oregon Revised Statues follows (7). (Italics have been added for emphasis.)

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.

374.025 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 curbings, 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.

Although the Oregon DOT could have relied on the throughway designation to limit access, it elected to also acquire partial access rights from all properties along state designated throughways. This designation resulted in thousands of miles of highway frontage in urban and rural areas and involved a large number of individual acquisitions from abutting property owners during the 1950s and 1960s. These purchases were often accomplished with the benefit of federal monies.

The cost to purchase complete access rights from each abutting property owner would have been prohibitive as it would have left the vast majority of properties landlocked. To purchase access rights while leaving driveway opportunities for the property the agency left a "reservation of access" to the highway. This action was memorialized in the property deed and also recorded on a right-of-way map and shows up in a title search.

A reservation of access was often established at each location where the property owner had a driveway to the state highway. In addition, a property owner could negotiate for additional reservations of access at locations where they might later want or need an additional driveway to the highway.

A reservation of access did not guarantee that the property owner would be allowed to have a driveway at the specific location. The property owner must still go through the application process for a driveway to the state highway. The state agency, acting under police power, could deny an application for a driveway at a reservation for any number of reasons, including if the property owner had other reasonable access to the property. In addition to the acquisition of partial access rights from the adjacent property owner, the Oregon DOT also used the process to condition the type of land use that the reservation of access would serve. The following is an excerpt from a presentation made by Leonard I. Lindas, Assistant Attorney General and Chief Counsel, Oregon State Highway Department, at the 1962 TRB Annual Meeting.

In those cases where, after conveyance by the grantor of all of his access rights, it is desirable to allow him certain rights of access, the language used provides for

Reserving for service of the said remaining property the right of access from the Grantor's remaining property to the highway right of way at the following places and for the following widths.

It is of extreme importance that the language describing the rights of access being allowed the property owner be exact, complete, and unambiguous. There is a cogent reason for this—there are many and varied types of "rights of access" that can be granted, such as

- 1. Unrestricted—This includes industrial, commercial, and all lesser uses.
- Commercial—Generally "unrestricted" could be used here inasmuch as the greater includes the lesser.
- Residential—This includes ingress and egress to a place of residence, which would not include motels where one does not, as a general rule, reside.
- 4. Agricultural—Width may become a point of concern here because the width of farm machinery dictates large approaches. In wheat county, for instance, a width of 75 to 100 ft is not uncommon to accommodate large harvesting equipment.
- Harvesting of Timber Products—This is a common purpose in Oregon where access will be allowed only for the purpose of hauling out timber.
- 6. Farm Crossings—These are granted to provide the farmer with a grade crossing for animals and equipment in ordinary husbandry where the farm has been severed by construction of the highway. Ordinarily granted in lieu of providing an under crossing via a tunnel or tube (27).

It is not clear if property owners understood that the Oregon DOT could disallow a driveway at a reservation of access if the driveway was to serve a land use that would generate more traffic than the stipulation in the property deed. Over time, the agency found that it was too difficult to manage adjacent land uses through an access restriction in the property deed. With the exception of a farm crossing restriction, the Oregon DOT discontinued the practice of restricting the reservation of access to a specific use as in the 1970s and adopted a process for a property owner to request the removal of the land use restriction. The farm crossing restriction in the deed remained in place because it restricted the reservation of access to only serve farm equipment crossing the highway and prevents the property owner from entering or leaving the highway at that specific location. In instances where the Oregon DOT had purchased partial access rights since the 1970s, they often described the reservation of access as "unrestricted as to use."

It is also unclear if property owners were always aware that they would be required to go through an application and permit process, because the property deed stated that they had a reservation of access to the state highway at a specific location. In addition, the property owner may not have known that the Oregon DOT could deny the application for a driveway if there was some other means of reasonable access to the property.

In one specific case, a property along a section of rural two-lane highway had a reservation of access in an area where the Oregon DOT had since determined the need to construct a passing lane on an uphill section. In the late 1990s, the property owner built a house and went to the agency to have a driveway permitted at the reservation of access. Owing to safety concerns resulting from allowing a driveway to a section of highway with a passing lane, the agency denied the application, because there was alternative access to the state highway by means of the county road system.

The property owner challenged the decision in circuit court. The judge instructed the jury that the Oregon DOT was under an obligation to deny the application if a driveway resulted in a safety concern for the traveling public; however, a denial could result in damages to the property owner. The jury determined that the driveway should not be allowed but found that damages were warranted to the amount of approximately \$75,000. The state agency appealed the decision to the Appellate Court, which in turn affirmed the decision of the lower court.

In this specific case, the property owner had only one reservation of access to the highway because the state had acquired all remaining access rights from the remainder of the highway frontage. The court determined that in this situation, when the Oregon DOT denied any access at this location, a taking had occurred and compensation was required even though reasonable access was available by another roadway system. However, there are numerous instances across Oregon where a property owner abutting the state highway has two or more reservations of access. It is less clear if the court decision of compensable damages would apply if the Oregon DOT allowed a driveway at one reservation of access but denied a request for a driveway at another reservation of access to the same property.

Simultaneous to the court proceedings, the Oregon Legislature became concerned that Oregon DOT staff was denying applications for driveways at locations where they had previously left an opening in the partial access control line. Some of the concern by the legislature was because the Oregon DOT had negotiated with property owners adjacent to the highway as to the value of the partial access control rights and made a determination where a reservation of access(es) could be allowed. A subsequent decision by Oregon DOT staff to deny an application for a driveway at the reservation of access appeared to violate the rights of the property owner. As a result, the legislature passed the following statute to provide the property owner with a means to request compensation when the application for a driveway is denied.

374.313 Claim for relief after closure of approach road; mediation; appraisal. (1) When the Department of Transportation closes an approach road for which a permit was issued under ORS 374.310 or denies an application for an approach road permit submitted pursuant to a grant or reservation of access contained in a contract, condemnation judgment or recorded deed, and the closure or denial is not the result of conditions contained in a contract, condemnation judgment, recorded deed or permit, a person holding an interest in the real property benefited by the access or proposed access may file a claim for relief as a contested case under ORS 183.415 to 183.500 (7).

The agency had operated under a belief that a reservation of access in a partial access control line did not result in any additional rights but limited where a property owner could apply for a driveway. Oregon DOT staff used police power regulations to determine if an approach (driveway) would be allowed to the state highway at a reservation of access, and often denied the request. The denials escalated after 1991 when the agency adopted driveway spacing standards for all of the state highways. These denials were often caused by the dilemma of where the reservations of access established in the 1950s and 1960s were and continue to be, inconsistent with the driveway spacing standards. The appellate court decision and the statute have resulted in a situation where a reservation of access within the partial access control line has risen to a property right of some value that is now greater than when the access right was first acquired by the agency; therefore, it has become a complex process for the state to deny an application for a driveway at a reservation of access. A denial may result in a compensable taking or the property owner may file a claim for relief as a contested case.

The benefits of retaining the partial access control rights as a means to limit access to the critical highway corridors in the state may outweigh the potential impacts of the recent court decision and legislation. It is less clear if retaining the partial access control rights on those highways that have become functionally obsolescent will remain beneficial. The potential impact of the court decision and legislation could cost the agency an excessive amount in litigation, appraisals, compensation, and staff time in those instances where they deny an application for a driveway at a reservation of access.

The Oregon DOT used a dedicated public trust fund to acquire the partial access rights and therefore it is not allowed to vacate this property right. Rather, funds need to be replaced in the trust in the event that the agency sells the right of access to another entity or person. It is unlikely that the Oregon DOT could unilaterally "release" or convey back access control where reservations of access exist to adjacent property owners without their consent. In effect, the properties that have reservations of accesses may have an elevated right beyond just the abutters right of access. It may mean that the agency will be in a position where it approves each application for a driveway at a reservation of access along its facilities even though it violated their driveway spacing standard and only deny a request for a driveway at a reservation of access to those highways where it is dictated by traffic volumes, speeds, and safety concerns. It may be more difficult and expensive for the agency when they reconstruct or modernize a section of highway with a goal of achieving their existing driveway spacing standards.

LESSONS LEARNED

The case studies from Montana, Ohio, and Oregon illustrate the variety of experiences and the directions that state agencies are taking. All three states had similar programs of access acquisition in the past. In Oregon, the courts and legislature have set clear direction that an opening in an access control line results in a property right that is more significant than an abutter's right of access. Owing to particular challenges with its program in Montana, the state is moving toward a police powers approach of access control. In the cases in Oregon and Montana, the access rights that were acquired have prevented access to the state highway; the problems in the two states have almost always arisen where the agency allowed an opening or openings in the access control line. The experience in Ohio has shown that the acquisition of partial access control has been successful and has allowed the DOT to limit roadside use based on the width of the opening that was originally provided to the abutting property owner. It is clear from the case studies that regardless of the methods used the management of access control should consider the following:

- The agency should be aware that the acquisition of partial access control and a separate driveway permitting process result in the use of both eminent domain and police power authority. It may be difficult to distinguish where the one ends and the other begins. This often leads to complexities for the agency, the adjacent property owner, and the courts.
- The program should have a clear understanding of the access control approach and should educate agency staff, landowners, and other involved parties.
- Openings in the partial access control line convey an understanding that a driveway will be allowed at that specific location; therefore, openings should only be allowed where the agency can approve a driveway.
- A stated width of the opening in the access control line can provide the transportation agency with the ability to only allow driveways consistent with the width of the opening.
- The program should consider the future and changing characteristics of the facility and have a plan to address the changing access needs.
- A program should also include a process for openings in the partial access control line to be revised in the event that access spacing standards are adopted or modified by the agency.
- Considerable thought should be given to the legal description that defines the opening or break in the access control line. The meaning or intent of the description may tend to evolve over time and may grant more rights to the property owner than was originally intended.
- A statute or agency policy should define if a property owner will be allowed a driveway at each opening in the partial access control line when they have other access to the highway or some other means of reasonable access to the property.

CONCLUSIONS

The ability to use access control as a technique to manage access to a roadway is an important component of a comprehensive access management program within a transportation agency. The technique can also be employed by agencies that do not presently have an access management program, although careful consideration should be given to the roadways where it is applied and the desired objective.

Although a significant amount of literature is available to lead agencies in acquiring complete access control along transportation facilities, there is less guidance on the best method for agencies to acquire partial access rights. There is even less guidance on how to arrive at a value for the property right, how to manage the access right once it is acquired, how an agency might dispose of the property right in the event it is no longer needed, and how to arrive at a value if the access right is to be disposed of.

The process of acquiring partial access rights is fairly consistent across the responding agencies, whereas the subsequent management of the access rights, organizational structures within agencies, disposal, and valuation of access vary considerably.

The strategy of limiting access to roadways through partial access control generally occurs in one of two ways and, because it is key to the synthesis review, a significant portion of this chapter is devoted to the topic.

The first method of achieving partial access control is by designation only. This means that the governing agency may limit private property access to the roadway without compensation within its' jurisdiction when another means of reasonable access is available to the property. The second method is to go through the process whereby the agency acquires partial access rights from the property owner adjacent to the roadway and may include leaving a provision for potential access to the roadway. The agency is generally required to compensate the property owner for the acquisition.

Although the strategy of creating access control highways with police power by "statutory designation" is used by a small number of agencies across the country (15% on nonfreeways and arterials and 9% on interchange crossroads), it appears to be a successful means of limiting access to the roadway system. An apparent benefit of this strategy is that there is no specific gap or opening in the partial access control line conveyed to the adjacent property owner that lasts for perpetuity. As a result:

- A designation of a partial access-controlled roadway does not require the agency to initiate negotiations with each property owner adjacent to the roadway relating to appraisal, determination of value, and acquisition of a property right.
- Each application for a driveway is reviewed on a caseby-case basis, allowing agency staff to determine if reasonable access is available to the property. Where it is determined that reasonable access is available, the agency is generally not obligated to approve the request for a driveway. The denial would generally not constitute a taking and therefore would not be compensable.
- In the event that the agency elects to allow access to the roadway, it can determine the best location to site the driveway based on spacing standards and safety concerns on a case-by-case basis.
- There is no deed record that runs with the property title that a right of access exists at a specific location along the roadway frontage.
- As driveway standards are developed or revised by an agency, it does not create a dilemma that openings in the access control line are incongruent with the driveway spacing standards or current sight distance requirements. As there are no legal documents specifying a precise location of where access is allowed, the agency may require property owners to modify or relocate existing driveways that do not meet spacing standards as opportunities arise. These opportunities may include a rezoning of the property or any action that allows the agency to revisit conditions identified in the driveway permit.
- Management of the access control records can generally be accomplished with a right-of-way map, which results in a fairly simple records search to determine access rights for a particular property. There should be no need to address the access control limitations in each individual property owner's right-of-way file.
- Disposal of partial access control requires a removal or lifting of the designation of the partial access control. Because there was no payment of public funds to an individual property owner, an agency may make a decision to rescind the partial access control designation for any number of reasons.

- Disposal of partial access control at a specific location may be allowed for those properties that are considered landlocked, where a driveway can be sited appropriately and safely.
- In the event of a transfer of a roadway to another jurisdiction, the receiving agency may or may not decide to manage the roadway with the partial access control designation.
- A designation of partial access control treats all property owners consistently. This is not to say that there may be occasions where agency staff is inconsistent in dealing with individual property owners under police power when addressing a specific request for a driveway.
- A potential downside of not having recorded deeds to define precise access locations may result in the lowering of access standards by current policy makers to allow additional access, whereas a deed makes this more difficult.
- If no other reasonable access is available and a driveway cannot be permitted, an agency may be found to have affected a "taking" for which compensation is due.

The second method to achieve access control is for an agency to acquire access rights from the property owner adjacent to the roadway. Based on the responses to the questionnaire for this synthesis, this process has been very successful along non-Interstate freeways and expressways, but not quite as successful when the technique is applied along other highways and arterials.

States in the eastern United States and California have had success with the partial access strategy employed to develop expressways. All rights of access were acquired from the abutting property owners. Careful forethought and planning was used to develop an alternate road and street network to provide access to properties that would otherwise be landlocked. Public road connections were provided at designated intervals. This type of roadway has not seen a proliferation of access to adjacent properties over time and continues to serve the intended function.

The technique of acquisition of partial access rights has been an effective method to limit access along the property frontage where the access rights have been acquired, especially on expressways. When concerns do arise, they often relate to issues dealing with the gap or opening in the access control line. Some respondents indicated that they have experienced problems as the opening in the partial access control line lasts for perpetuity and the precise location of the access opening is generally recorded in a legal instrument. This document may be misconstrued by the property owner who may believe that the document is an implied consent that a driveway will be allowed.

Over the years, the purpose of a roadway, along with standards and policy, often evolve; however, the exact location of a gap or opening in the access control line does not. Additional findings from the questionnaire follow:

- Some agencies acquire partial access rights from the abutting property owners and leave an opening for a driveway to serve a specific use. In the event that the land use is changed (e.g., from farmland to commercial), the agency may choose to prohibit direct access where the new use would result in additional vehicular traffic. It may also provide the agency with an opportunity to participate in the process when a change of land use is being considered by a local land use agency.
- The acquisition of partial access control rights can help prevent newly created subdivisions and partitions of properties from relying solely on the roadway for direct access to each lot. The underlying property owner may be required to provide a roadway network or some means of access to each of the newly created lots because direct access to the highway or arterial is limited to certain locations.
- The acquisition of a partial access-controlled roadway requires the agency to initiate negotiations with each property owner adjacent to the roadway relating to appraisal, determination of value, and payment for a property right.
- An application for a driveway is limited to an exact location in the partial access control line irrespective of current driveway spacing standards or safety concerns. A request for a driveway at any other location requires a process within the agency to consider indenturing or moving the gap or opening to a revised location. A revision to the location requires that the language in the recorded legal instrument be corrected or amended to reflect the new location of the gap or opening.
- An application for a driveway at the specific gap or opening in the partial access control may be denied if there is reasonable access available to the property. Reasonable access may include an existing or planned driveway to the same roadway at another location. A denial can lead to confusion and frustration for the property owner, because he/she previously negotiated for the gap or opening in the access control line when the agency acquired partial access rights.
- There is some form of a deed record that runs with the property title that a right of access exists at a specific location along the roadway frontage. This may convey to the property owner that the agency has applied appropriate engineering and planning analysis and has determined that driveways can be approved at each of the specific gaps or openings in the partial access control line when this may or may not be the case.
- As driveway standards are developed or revised by an agency, it can create a dilemma, because openings in the partial access control line are often incongruent with the driveway spacing standards or current sight distance requirements.

- Management of the partial access control records can be very complex for an agency. A legal instrument is used, often right-of-way maps and/or right-of-way files, to record each gap or opening in the access control line. The agency often has a procedure that allows the agency and/or the property owner to go through a process to close or move the location of the specific gap or opening to a more desirable location. This process requires the agency to update some form of legal instrument to reflect the new location of the gap or opening in the access control line. Research for the access rights of a specific property can be complex and time consuming.
- · Because acquisition of the access rights is normally purchased, disposal of those rights usually requires a determination of the value and purchase of the access rights to allow a gap or opening in the access control line. This often occurs by an appraisal process of the value of the property with and without the right of access. The difference between these two appraisals is often considered the value of the break in the access control line and the subsequent cost to receive a right of access. The appraised value for one access may be much higher than the original amount provided to the property owner when the partial access control was acquired. This can be especially true if the access rights were purchased when the adjacent property was farmland or forestland, but the property has since been rezoned for industrial or commercial uses.
- Several agencies responded that even in those cases where a property owner went through a process to achieve an additional gap or opening in the access control line the agency was not required to allow a driveway at this location. This can lead to a significant public perception issue, especially if the property owner went through a costly process to achieve a gap or opening in the access control line.
- More than half of the agencies that responded to the questionnaire reported that the rules, policies, and procedures associated with access rights that had been previously purchased would not be applicable to another agency when the roadway was transferred to its jurisdiction. One-third of respondents stated that the rules and policies associated with previously purchased access rights would apply when the roadway was transferred to another jurisdiction. However, three responding agencies were unsure what rules, policies, and procedures would apply. In cases where an agency that has previously acquired access rights along a roadway decides to transfer jurisdiction of the roadway to another agency, consideration should be given to the ownership and management and potential disposal of the access rights and the associated legal requirements. Because the access rights were often acquired using some type of public funds, it is unlikely that an agency can simply vacate those property rights.
- The process of the acquisition of partial access control along the roadway may not always be applied consis-

tently to each property owner. A property owner may accept whatever offer the agency provides, although the adjacent property owner may negotiate for several gaps or openings in the access control line or an additional amount of money for the property rights that the agency has acquired.

- The agency, applying regulatory authority under police power, may be inconsistent when approving or denying driveway applications at a gap or opening in the access control line when compared with adjacent property owners.
- The gap or opening in the access control line may have been acceptable at the time that the partial access control was acquired based on traffic speeds and volumes, especially if the acquisition occurred decades ago. That specific gap or opening may no longer be in a safe location based on the increase of traffic speeds and/or traffic volumes.

Most information on the acquisition of access rights was produced in the 1950s and 1960s and centered on the processes and procedures necessary to facilitate the development of the Interstate Highway System. Based on the questionnaire responses, the guidance that was provided and the subsequent ability to acquire complete access rights to prevent access to the highway system has been overwhelmingly successful when compared with those areas where partial access rights have been acquired.

It would appear that much can be learned from the success of the Interstate system and, if possible, some of the same principles can be applied when using a strategy of partial access control to limit access to the roadway.

Follow-up conversations with questionnaire respondents revealed that the roadway environment itself played a large role in people's expectations as to whether or not they would be allowed a driveway. There are no driveways to the Interstate Highway System and, if someone applied, the application would be denied. A highway with partial access control and numerous driveways creates an environment suggesting that more access will be allowed. It can be very difficult for an agency to refuse additional access to these types of roadways. This can be made even more difficult if the decision is an economic one.

Other issues related to partial access control include the continuing evolution of access needs on a roadway, multimodal concerns, the wording used within the legal instrument, and the application of eminent domain versus police power.

As the evolution of land use, city boundaries, travel mode options, traffic volumes, speeds and travel demands develop, a transit agency's need to limit access on roadways may change. This may even include changes of a more global nature, such as possible revisions to AASHTO's *Green Book* sight distance requirements. A specific, defined location for a gap or opening in the access control line has the potential to be located inappropriately. Conversely, as cities and communities expand along major roadways, a well-planned and implemented acquisition of partial access rights can be an effective method to limit access where mobility is desired over accessibility to adjacent properties.

The survey responses show that there is no consistency on how cyclists and pedestrians are considered relative to access rights. Some agencies reported that the acquisition of access rights is meant to limit vehicular ingress and egress from the highway, and it is permissible for pedestrians and cyclists to cross the partial access control line. Other agencies noted that the partial access control line is meant to keep all modes of traffic from crossing the control line and entirely out of the rightof-way. Because of this apparent inconsistency, an agency should clearly define its objectives before acquiring partial access rights along a given facility. If the purpose is to prevent motorists from entering and leaving the roadway, it may still be appropriate to allow pedestrians and cyclists to access the rightof-way and travel parallel to the roadway. Considerations should include the type of roadway facility and how the pedestrians and cyclists would interact with motor vehicles. Parallel pedestrian/bike paths and grade-separated crossings may be appropriate along freeways, although sidewalks and bike lanes might be provided on urban and suburban arterials.

The survey results suggest that the wording used to define the opening in the partial access control line can be critical. Well-intentioned staff may add language in the legal instrument to qualify a high degree of specificity to the exact width of the opening and may even describe the type of land use that the opening will be allowed to serve. Although this may be seen as an additional step in limiting access to the roadway, the exactness in the legal description can create the impression that the agency has applied engineering and planning analysis to the process. It can also evolve into a situation where it creates a right of access to the property owner that is greater than a common abutter's right of access. In Oregon, the state department of transportation formerly described the openings as reservations of access and included the type of use that the reservation could serve. Using the reservation of access to limit land use became such a complex process to administer that the wording in the legal document was revised to "unrestricted" in reference to land use. Over time, many people have argued that the unrestricted wording in the legal document prevents the Oregon Department of Transportation from denying an application for a driveway at a reservation of access, and at a minimum, imposing any conditions on a driveway. A strategy now employed by some agencies is to only describe the beginning and ending points of the access control line and not to address the gap or opening in the access control line.

The acquisition of partial access rights requires an agency to use the authority of eminent domain. The agency then almost always uses police power authority to approve or deny a driveway at the specific location. Court decisions have stated that it is sometimes difficult to recognize the difference between eminent domain and police power, although the two powers are distinct. Eminent domain takes property because it is useful to the public, whereas police power regulates the use of the property because the free use of that property would be detrimental to the public interests. Agencies, property owners, and the courts continue to find this issue difficult to understand.

In conclusion, the acquisition of complete access control along a roadway has been a very successful technique to eliminate existing and future access to a roadway. A key to the success is the requirement of the agency to either purchase the adjacent property when the action results in a landlocked parcel or to ensure that some other means of reasonable access is available to serve the property. This can require a large initial investment, but effectively reduces future pressure on the agency to allow individual driveways to the highway or new road corridors.

The practice of acquiring partial access control while providing openings or gaps in the access control line as a means to provide access to the roadway has not been as successful for some agencies. Although historically it was relatively inexpensive to acquire, partial access control can lead to significant issues for the agency and property owner in cases where the agency decides to deny a request for a driveway at an opening in the access control line that was previously agreed on. The agency uses eminent domain authority to acquire the access rights and the application of police power when considering the request for an individual driveway. The two concepts are often difficult to understand for the agency, the property owner, and the courts. This can lead to misapplication of the techniques and rulings by the courts that increase the property rights for an individual beyond what they had previously enjoyed and may include compensation for the property owner when the agency denies an application for a driveway.

The acquisition of partial access rights can be very effective if there has been engineering and planning analysis to determine where each driveway can be safely located and openings in the access control line are limited to those specific locations. This type of analysis allows an agency to provide a driveway at each opening in the access control line that would remain in the future, regardless of the type of land use that the driveway serves. If the agency determines that the opening in the access control line is not an appropriate location to allow a driveway in the future, or if additional traffic on the driveway would require the agency to close the driveway, it would seem unwise for the agency to leave an opening in the partial access control line. The general consensus among the right-of-way agency directors who responded to the survey was that the acquisition of access was a successful technique to reduce the amount of future access to the roadway.

In the event that an agency desires to limit access to a roadway but is unable to acquire complete access control, the agency should consider the application of access control by police power only. This generally requires the agency to have the authority to designate a roadway or highway as access controlled, although no acquisition of property rights is required, no valuation or appraisals are conducted, and no monies are exchanged between the agency and the abutting property owner. This technique allows the agency to use police power on a case-by-case basis when requests for driveways are submitted. Where the property has other reasonable access, the agency can deny the application without any form of compensation or approve the application for a driveway at the most ideal location along the roadway. When an application is submitted for a property with no other reasonable access, the agency may develop reasonable access to the property, allow a driveway to the roadway in the most ideal location, deny the application entirely, or, in certain cases, purchase the entire property.

The subject of access rights is so complex that the questionnaire distributed as part of this synthesis was purposely limited owing to the size of the project and the desire to obtain high response rates from the various agencies. There were many areas where additional questions would have allowed further exploration. Based on the research documents reviewed as part of the literature review presented herein and the information gathered from the surveyed transportation agencies across North America it is suggested that the following areas be considered for future research:

- Explore the various techniques and successes of each technique to quantify the most successful techniques to limit or manage nonfreeway and arterial access.
- Evaluate the strengths and challenges of various organizational structures within agencies in the management of access rights.
- Explore the most successful practices in managing the records of the ownership of access rights through data retention and retrieval.
- Conduct research to understand if there are occasions when the ownership of access rights can become a liability for an agency.

REFERENCES

- 1. Clay, L.D., A Ten-Year National Highway Program: A Report to the President, Washington, D.C., 1955.
- Netherton, R.D., *Control of Highway Access*, The University of Wisconsin Press, Madison, 1963.
- 3. NCHRP Legal Research Digest 44: Reexamination of the Line Between Governmental Exercise of the Police Power and Eminent Domain, Transportation Research Board, National Research Council, Washington, D.C., 2000, 64 pp.
- Nichols on Eminent Domain, 3rd ed., Matthew Bender & Company, Inc., New York, N.Y., 1976.
- NCHRP Research Results Digest 165: Legal Techniques for Reserving Right-of-Way for Future Projects Including Corridor Protection, Transportation Research Board, National Research Council, Washington, D.C., 1987, 44 pp.
- A Policy on Geometric Design of Highways and Streets—2001, American Association of State Highway and Transportation Officials, Washington, D.C., 2001, 947 pp.
- Selected Transportation Laws, 2001–2002 ed., Chapter 374, Oregon Department of Transportation, Salem.
- Erbe, N.A., "A Review and Some New Thinking on Control of Highway Access," *Highway Research Board Bulletin 232*, Highway Research Board, National Research Council, Washington, D.C., Jan. 1959, pp. 49–78.
- Access Management Manual, Transportation Research Board, National Research Council, Washington, D.C., 2003, 387 pp.
- 10. Pennsylvania Coal Company v. Mahon, 160 U.S. 393, 1922.
- Meltz, R., D.H. Merriam, and R.M. Frank, *The Taking Issue: Constitutional Limits on Land Use Control and Environmental Regulation*, Island Press, Washington, D.C., 1999, 595 pp.
- Williams, K.M. and J.R. Forester, NCHRP Synthesis 233: Land Development Regulations That Promote Access Management, Transportation Research Board, National Research Council, Washington, D.C., 1996, 45 pp.
- Lewis, H., Highway Research Special Report 76: The Future of Abutters' Rights: Access, Highway Research Board, National Research Council, Washington, D.C., 1962, pp. 163–178.
- Williams v. Highway Commission, 252 N.C. 772, 114
 S.E. 2d 782, 1960.

- Corridor Preservation: Case Studies and Analysis Factors in Decision-Making, Report FHWA-PD-96-044, Federal Highway Administration, Washington, D.C., 1996, 216 pp.
- 16. Access Control Policy to the Highway System, Nebraska Department of Roads, Lincoln, Nov. 2002.
- 17. A Policy on Design Standards—Interstate System, American Association of State Highway and Transportation Officials, Washington, D.C., July 1991, 14 pp.
- Butorac, M.A. and J.C. Wen, NCHRP Synthesis 332: Access Management on Crossroads in the Vicinity of Interchanges, Transportation Research Board, National Research Council, Washington, D.C., 2004, 82 pp.
- Moser, L.C., "Methods Used to Protect, Reserve, and Acquire Rights-of-Way for Future Use in Maryland," *Highway Research Board Bulletin* 77, Highway Research Board, National Research Council, Washington, D.C., Nov. 1953, pp. 51–59.
- Carlson, R.F., "Where Does Police Power End and Eminent Domain Begin?" *Selected Studies in Highway Law*, Highway Research Board, National Research Council, Washington, D.C., 1976, Vol. 1, pp. 1–23.
- Feifarek, A., "Administration of Highway Protection Laws," *Highway Research Board Bulletin 140*, Highway Research Board, National Research Council, Washington, D.C., 1956, pp. 72–75.
- Bowman, D.L. and C.C. Rushing, Access Management: Transportation Policy Considerations for a Growing Virginia, Virginia Transportation Research Council, Virginia Department of Transportation, Charlottesville, Nov. 1998, 88 pp.
- 23. *City of Phoenix v. Wade*, 5 Ariz. App. 505, 428 P.2d 450, 453 (1967).
- Koepke, F.J. and H.S. Levinson, NCHRP Report 348: Access Management Guidelines for Activity Centers, Transportation Research Board, National Research Council, Washington, D.C., 1956, pp. 72–75.
- 25. State of Minnesota, Minnesota Statutes 2003, Statute 161.43, 2003.
- Transportation Equity Act for the 21st Century, PL 105-178, Sec. 1303, U.S. Department of Transportation, Washington, D.C., 1998.
- Netherton, R.D., "A Summary and Reappraisal of Access Control," *Highway Research Board Bulletin* 345, Highway Research Board, National Research Council, Washington, D.C., Jan. 1962, pp. 1–14.
- 28. Colorado Revised Statutes 43-2-147, Jan. 1995.

BIBLIOGRAPHY

- Bartelsmeyer, R.R., *Highway Research Board Special Report 76: Highway Laws Research*, Highway Research Board, National Research Council, Washington, D.C., 1962, pp. 1–4.
- "Constitutional Law Fifth Amendment Eminent Domain Clause—Compensation for Partial Regulatory Takings," *Tennessee Law Review*, Winter 1995, pp. 403–424.
- Dunbar, D.W., "An Attorney General Looks at Highway Law," *Highway Research Board Bulletin 237*, Highway Research Board, National Research Council, Washington, D.C., 1960, pp. 8–15.
- Feifarek, A., "Judicial Review of Administrative Decisions in Highway Access Control," *Highway Research Board Bulletin 345*, Highway Research Board, National Research Council, Washington, D.C., 1962, pp. 21–26.
- Frierson, M., "Michigan DOTs Policies and Practices Regarding Appraisal and Appraisal Reviews for Condemnation Litigation," *Proceedings of the 1997 AASHTO/FHWA Right of Way Conference*, American Association of State Highway and Transportation Officials, Federal Highway Administration, Washington, D.C., 1997, pp. 68–71.
- Hattan, D.E., T.S. Frisbie, R.W. Felsburg, and J.R. Kullman, US 85 Access Control Plan, ITE 2001 Annual Meeting and Exhibit, Chicago, Ill., Aug. 19–22, 2001, 13 pp.
- Kockelman, K.M., et al., "Frontage Roads: Assessment of Legal Issues, Design, Decisions, Costs, Operations, and Land-Development Differences," *Journal of Transportation Engineering*, Vol. 129, No. 3, May 2003, pp. 242–252.
- Kockelman, K.M., et al., Frontage Roads in Texas: A Comprehensive Assessment, FHWA/TX-0-1873-2, University of Texas, Austin; Texas Department of Transportation, Austin; Federal Highway Administration, Washington, D.C., Oct. 2001, 192 pp.
- Lindas, L.I., "Conveyancing Techniques for Acquisition of Access Rights," *Highway Research Board Bulletin 345*, Highway Research Board, National Research Council, Washington, D.C., Jan. 1962, pp. 26–32.
- Mandelker, D. and B.W. Baessler, *Corridor Preservation Study of Legal and Institutional Barriers*, Report FHWA-PD-96-045, Federal Highway Administration, Washington, D.C., 1995, 194 pp.
- Morrow, H., "Constitutional and Case Law Principles Guiding Access Control: Access Modifications in Projects and Project Related Eminent Domain Proceedings," *First National Access Management Conference*, Colorado Department of Transportation, Transportation Research Board, Federal Highway Administration, 1993, pp. 35–37.
- Munro, J., "Valuation of Access Rights," *Highway Research Board Bulletin 345*, Highway Research Board, National Research Council, Washington, D.C., Jan. 1962, pp. 33–34.
- Nissel, S.N., "Control of Access and Police Power," *Highway Research Board Bulletin 205*, Highway Research Board, National Research Council, Washington, D.C., 1958, pp. 29–34.

- Powers, L., "Regulation of Access vs. Control of Access in Oklahoma," *Highway Research Board Bulletin 140*, Highway Research Board, National Research Council, Washington, D.C., 1956, pp. 55–59.
- Richardson, M., "The Role of the Public Trust Doctrine in Eminent Domain Decisions," *Detroit College of Law Review*, Spring 1995, pp. 58–68.
- Rose, D., J. Gluck, P. Demosthenes, B. Koepke, H. Levinson, and R. Armour, *Review of SDDOT's Highway Access Control Process*, SD99-01-F, Final Report, Dye Management Group, Inc., South Dakota Department of Transportation, Pierre, Feb. 2000, 214 pp.
- Saito, M., D.A. Thomas, R.S. Payne, and G.J. Thurgood, "Utah's Legal Framework for Corridor Preservation Activities," *Transportation Research Record 1706*, Transportation Research Board, National Research Council, Washington, D.C., 2000, pp. 29–37.
- Scheib, D., Access Management in Maryland, Third National Access Management Conference, Ft. Lauderdale, Fla., Oct. 4–7, 2000, pp. 227–230.
- Stanhagen, W.H. and J.J. Mullins, "Application of Police Power and Planning Controls to Arterial Streets," *Highway Research Board Bulletin 271*, Highway Research Board, National Research Council, Washington, D.C., 1960, pp. 14–28.
- Thomas, L., "Legal Implications of Control of Access to Uncontrolled-Access Highways," *Selected Studies in Highway Law*, Transportation Research Board, National Research Council, Washington, D.C., 1979, Vol. 2, 38 pp.
- Towcimak, K.M., "Management of the Appraisal Process in a High Volume Eminent Domain Litigation Environment," *Proceedings of the 1997 AASHTO/FHWA Right of Way Conference*, New Orleans, La., May 12–15, 1997, pp. 62–67.
- Vance, J.C., "Rights of Abutting Property Owner Upon Conversation of Uncontrolled-Access Road into Limited-Access Highway," *Selected Studies in Highway Law*, Vol. 2, Transportation Research Board, National Research Council, Washington, D.C., 1987, 23 pp.
- Wagner, T., "Business Relocation and Reestablishments in Wisconsin," *Proceedings of the 1997 AASHTO/FHWA Right of Way Conference*, New Orleans, La., May 12–15, 1997, pp. 100–101.
- Williams, K.M., NCHRP Synthesis of Highway Practice 304: Driveway Regulation Practices, Transportation Research Board, National Research Council, Washington, D.C., 2002, pp. 83.

Websites

www.accessmanagement.gov www.fhwa.dot.gov/realestate www.ops.fhwa.dot.gov/access_mgmt

NCHRP PROJECT 20-5 SYNTHESIS TOPIC 35-06

ACCESS RIGHTS QUESTIONNAIRE

PURPOSE OF SYNTHESIS

The purpose of this synthesis is to document the current state of the practice in the acquisition, management, and relinquishment of access rights throughout the United States. While acquisition of access rights has been used extensively along the Interstate System and other freeway and fully controlled roadways, there is a growing interest to use partial control of access along other important non-Interstate highways and arterials. This survey is a part of a National Cooperative Highway Research Program (NCHRP) Synthesis project, funded by various transportation agencies. In addition to the results of the survey, the final report will include a literature review, and may include case studies if submitted by the respondents. As a result of this effort, information regarding this topic should become more readily available to individuals and agencies interested or pursuing the control of access rights along non-Interstate highways and arterials.

RESPONDING AGENCY/ORGANIZATION INFORMATION

Please provide the following information to help us identify the specific agency or organization you are affiliated with and to contact you in the future regarding the outcome of this project.

Agency/organization:					
Questionnaire completed by:					
Position/title:	Position/title:				
Address:					
City:	State:	Zip:			
Telephone:	E-mail:	-			
Fax:					

PLEASE RETURN THE COMPLETED QUESTIONNAIRE BY MAIL, FACSIMILE, OR E-MAIL NO LATER THAN MARCH 31, 2004

TO:	Del Huntington, P.L.S.		
Via Mail:	Kittelson & Associates, Inc.	Via Fax:	(503) 273-8169
	610 SW Alder, Suite 700		
	Portland, OR 97205	Via E-mail:	dhuntington@kittelson.com

If you have any questions regarding the questionnaire, please call Del Huntington at (503) 228-5230.

Access rights: The legal ability of a property owner to either access or not access an adjacent roadway.

Crossroads at interchanges: A roadway that crosses another roadway or freeway, is connected by ramps, and is secondary to the main highway. The crossroad may or may not be under the jurisdiction of another agency.

Eminent domain: A legal power that allows a public agency to take property for public use provided an owner is compensated for his/her loss (*A Policy on Geometric Design of Highways and Streets* 2001).

Full control of access: Full control of access means that preference is given to through traffic by providing access connections by means of ramps with only selected public roads and by prohibiting crossings at grade and direct private driveway connections. Generally, full access control is accomplished by legally obtaining the access rights from the abutting property owners (usually at the time of purchase of the right-of-way) or by the use of frontage roads (*A Policy on Geometric Design of Highways and Streets* 2001).

Interstate freeways: Divided highways with all access limited to grade-separated interchanges. These highways are part of the Interstate System.

Non-Interstate freeways: Divided highways with all access limited to grade-separated interchanges. These highways are not part of the Interstate System.

Partial control of access: With partial control of access, preference is given to through traffic to a degree. Access connections, which may be at-grade or grade-separated, are provided with selected public roads and private driveways. Generally, partial access control is accomplished by legally obtaining the access rights from the abutting property owners (usually at the time of purchase of the right-of-way) or by the use of frontage roads (*A Policy on Geometric Design of Highways and Streets* 2001).

Police power: The authority of the governmental agency that owns or manages the roadway to regulate or restrict individual actions for the protection of health, safety, and general welfare of the public, including restrictions on access for adjacent property owners and the requirement that any and all persons seeking a driveway to the roadway go through an approval or permitting process.

Non-Interstate highways and arterials: This consists of frontage roads, and divided and undivided roadways, usually with at-grade intersections. While other roadway connections and driveways are not always preferred, they may be allowed to access these facilities.

The purpose of this questionnaire is not to focus on the Interstate freeways, toll roads, turnpikes, or other major roads that are normally fully access controlled (the exceptions are questions 3 and 4, which are meant for comparison purposes). Instead, the questionnaire is meant to determine how and when agencies purchase access rights along other roadways. In the event that access rights are acquired, the survey then seeks to determine how the access rights are managed within the agency. Finally, the survey seeks to determine if access rights are ever relinquished and, if so, the process that allows that to occur.

This survey is divided into the following three parts:

- Acquisition of Access Rights
- Management of Access Rights
- Relinquishment of Access Rights

Please check all that apply.

Acquisition of Access Rights

1. a) Does your agency acquire access rights along non-Interstate highways and arterials?

Full control of access?	□ Yes	🗌 No
Partial control of access?	□ Yes	🗌 No

b) Which of the following techniques does your agency use to determine whether or not access rights are required along non-Interstate highways and arterials? *Please provide copies of or links to applicable materials*.

☐ Statutes	Rules	□ Agency policies	Corridor plans
Design plans	Individual analysis	□ Other	

c)	If you acquire access rights along non-Interstate highways and arterials, who in your agency is responsible to ensure that access rights are acquired?					
	☐ Chief engineer☐ Planning manager	□ R/W director □ Other	☐ Traf	fic engineer	Project manager	
d)	How do you acquire the ac	ccess rights along non	-Interstate highv	vays and arterial	s?	
	□ Statutory designation	Purchase/eminer	nt domain	□ Other		
e)	If you are required to pay for	or the access rights alo	ong non-Interstate	e highways and a	arterials, how do you arrive	at a value?
	□ Negotiation □ App	oraisal				
2. a)	Does your agency acquire	access rights along c	rossroads at inter	changes?		
	Full control of access? Partial control of access?	□ Yes □ □ Yes □] No] No			
b)	Which of the following teo crossroads at interchanges	chniques does your ag ? Please provide copi	gency use to dete ies of or links to	rmine whether c applicable mate	or not access rights are requ rials.	uired along
	□ Statutes□ Rules□ Agency policies□ Corridor plans□ Design plans□ Individual analysis□ Other					
c)	c) If you acquire access rights along crossroads at interchanges, who in your agency is responsible to ensure that access rights are acquired?				that access	
	☐ Chief engineer☐ Planning manager	□ R/W director □ Other	☐ Traf	fic engineer	Project manager	
d)	How do you acquire the ac	ccess rights along cros	ssroads at intercl	nanges?		
	□ Statutory designation	Purchase/eminer	nt domain	□ Other		
e)	If you are required to pay	for the access rights a	long crossroads	at interchanges,	how do you arrive at a val	ue?
	□ Negotiation □ App	oraisal 🗌 Other_				
Wh atte	ere you have acquired acce mpts) your agency had in p	ess rights along roadv reventing or precludi	vays, please rate	the level of suc roadway.	ccess (percentage of succes	sses out of
		Very Successful 100%–75%	Somewhat Successful 75%–50%	Somewhat Unsuccessf 50%–25%	t Very ul Unsuccessful 25%–0%	N/A
3. In	terstate freeways					
4. No	on-Interstate freeways					

5. Other highways & arterials

6. Crossroads at interchanges

Management of Access Rights

7.	Along non-Interstate highway	vs and arterials, what other tee	chniques do you use to limit or manage access?
	Police powerLand use controls	☐ Corridor designations ☐ Other techniques	☐ Acquisition of development rights
8.	Along crossroads at interchan	ges, what other techniques de	o you use to limit or manage access?
	Police powerLand use controls	☐ Corridor designations ☐ Other techniques	☐ Acquisition of development rights
9.	Where you own partial control they have to ask permission to	ol of access and the abutting o have a driveway at that loca	property owner has an opening in the access control line, do ation?
	□ Yes	🗌 No	□ N/A
10.	Is your agency required to pro-	ovide an abutting property ow	ner with a driveway at each opening in the access control line?
	□ Yes	🗌 No	□ N/A
11.	What happens when an adjace the opening is not consistent	ent property owner requests a with standards or agency poli	driveway at an opening in the partial access control line, when cy?
	 Request approved Other 	Request denied	□ Request approved with modification
12.	If you deny a request for a data access, are you required to par Please explain.	riveway at an opening in the y compensation?	access control line where the agency owns partial control of Yes INO
13.	If you do pay compensation w at a value?	hen you deny a driveway req	uest at an opening in the access control line, how do you arrive
	□ Negotiation	□ Appraisal	□ Other
14.	During acquisition of access r staff? Please explain.	rights, does your agency requi □ Yes	ire coordination between the permitting staff and right-of-way □ No
15.	During permitting of drivewa right-of way staff? Please explain.	ys to the roadway, does your □ Yes	agency require coordination between the permitting staff and \Box No
16.	Where your agency has acqui	red a right of access, how do	you memorialize the decision?
	Property deedSpreadsheets	 Electronic records Public record 	□ R/W maps □ Agency record □ Other
17.	What controls do you have in owns the access rights?	place to ensure that agency sta	aff does not approve a driveway in a location where the agency
	 No controls Staff reporting system 	 Policy direction Voluntary if staff choose 	☐ Automated check ☐ Other

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18. Where your agency has acquired a right of access, how do you manage the records?

	 Electronic records Paper tabulations Other 	 Electronic R/W maps Spreadsheets 	 Paper or hard copy R/W maps Paper or hard copy files 	
19.	If you own the access rights al Yes Please explain.	long a roadway, do you allow pedes □ No	strian or bicycle facilities to cross the access control line	?
20.	In areas where the agency ow	vns the access rights along the roa	dway, and the agency acquires additional right-of-way	y,

🗌 No □ Yes

21. Are you required to negotiate access with a property owner when you determine a need for additional right-of-way where you previously owned access rights? ☐ Yes □ No

Relinquishment of Access Rights

22. a) If your agency has acquired access rights from abutting properties, is there any process for a property owner to acquire an access right to the roadway at a later date along non-Interstate highways and arterials where you own:

Full control of access?	□ Yes	🗌 No
Partial control of access?	□ Yes	🗌 No

does the access control automatically convert to a new location?

b) Which of the following do you use to determine when and how to relinquish access rights along non-Interstate highways and arterials? Please provide copies of or links to applicable materials.

Statutes		Agency policies	Corridor plans
Design plans	🗌 Individual analysis	Other	

c) If you relinquish access rights along non-Interstate highways and arterials, who is responsible to administer this process for your agency?

☐ Chief engineer
Planning manager

R/W director □ Other

Traffic engineer	Project

manager

d) If you relinquish access rights along non-Interstate highways and arterials to an abutting property owner, how do you determine the value?

□ Negotiation

□ Appraisal

□ Other

e) If an access right is approved to a non-Interstate highway or arterial, will the property owner be ensured of being allowed to construct a driveway to the highway or arterial at this location?

☐ Yes □ No

23. a) If your agency has acquired access rights from abutting properties, is there any process for a property owner to acquire an access right to the roadway at a later date along crossroads at interchanges where you own:

Full control of access?	∐ Yes	∐ No
Partial control of access?	🗌 Yes	🗌 No

b) Which of the following techniques do you use to determine when and how to relinquish access rights along crossroads at interchanges? *Please provide copies of or links to applicable materials.*

		 Statutes Design plans 	 □ Rules □ Individual analysis 	☐ Agency policies ☐ Other	Corridor plans	
	c)	If you relinquish access agency?	rights along crossroads at in	terchanges, who is responsi	ble to administer this process for your	
		☐ Chief engineer ☐ Planning manager	□ R/W director □ Other	Traffic engineer	Project manager	
	d)	If you relinquish access the value?	rights along crossroads at in	terchanges to an abutting p	roperty owner, how do you determine	
		□ Negotiation		Other		
	e)	If an access right is appro- road at this location?	oved, will the property owner	r be ensured of being allowe	ed to construct a driveway to the cross-	
		□ Yes	🗌 No			
24.	If y ha	your agency transfers own ppens to the access rights	nership of a roadway to anot s?	her agency where you had p	reviously acquired access rights, what	
		Remains with the agency Negotiation	y Automatic transfe	er of ownership to the other —	agency	
25.	If jec	another agency takes over t to your rules, procedure	er the roadway, including the es, and/or policies in the mat	e access rights that your ag nagement of those access ri	ency previously owned, are they sub- ghts?	
		Yes	🗌 No	□ Other		
Ple	ase	provide any additional na	mes and telephone numbers	of contacts in your agency th	nat are involved in access rights and/or	
per	permitting of driveways that we should contact for this synthesis project.					

Thank you very much for your time and participation in this synthesis study.

Please return the completed survey by mail, facsimile, or e-mail by March 31, 2004 to:

Del Huntington	Phone: (503) 228-5230
Kittelson & Associates, Inc.	Fax: (503) 273-8169
610 SW Alder, Suite 700	Email: dhuntington@Portland, OR 97205
Portland, OR 97205	

APPENDIX B

List of Responding Agencies

The research team would like to express their appreciation to the following agencies and their staffs for completing the survey questionnaire and providing valuable information throughout the preparation of this synthesis report.

Colorado Department of Transportation - Bob Grube and Christine Furr Connecticut Department of Transportation - Thomas J. O'Hala Delaware Department of Transportation - V. Wayne Rizzo Florida Department of Transportation - Kenneth M. Towcimak Georgia Department of Transportation - Georgene Geary, Jimm Hitt, and Mickie McJunkin Iowa Department of Transportation - Dave Widick Kansas Department of Transportation - Chris Huffman Kentucky Department of Transportation - David Jones Louisiana Department of Transportation - Charles Hudson Maine Department of Transportation - Fred Paganucci and Ray Quimby Massachusetts Highway Department - Christopher Quinn MassHighway Planning - Charles O'Brien Minnesota Department of Transportation - Peggy Reichert Missouri Department of Transportation - Mac Finley Montana Department of Transportation

- Ivan B. Ulberg

Nebraska Department of Roads - R. F. Needham

Nevada Department of Transportation - *Heidi Mireles*

New Hampshire Department of Transportation - *William Janelle*

New Jersey Department of Transportation - Nicholas Monahan

New York Department of Transportation - Anne Flowers

North Dakota Department of Transportation - Donald H. Wolf

Ohio Department of Transportation - James J. Viau

Oregon Department of Transportation - *Richard Dunlap*

Pennsylvania Department of Transportation - Gary Fawver

Rhode Island Department of Transportation - *Robert Smith*

South Carolina Department of Transportation - Oscar Rucker

South Dakota Department of Transportation - *Rick Laughlin*

Tennessee Department of Transportation - Mike Phillips

Texas Department of Transportation - *Bob Appleton*

Utah Department of Transportation - James Baird

Vermont Agency of Transportation - Allen Wright

Virginia Department of Transportation - Stuart A. Waymack

Washington State Department of Transportation - Darlene Sharar

Wisconsin Department of Transportation - *Ron Nohr*

City of Scottsdale, Arizona - Robert Brown

ACQUISITION OF ACCESS RIGHTS

1. a) Does your agency acquire access rights along non-Interstate highways and arterials?

Full control of access?	29 - Yes	4 - No
Partial control of access?	33 - Yes	0 - No

- Yes, does not include arterials. (Massachusetts Highway)
- Yes, if we are converting to a freeway, but only as part of ROW for an improvement project and at specific locations—not stand alone acquisition of access rights. (Minnesota)
- Yes, while we do purchase access rights and have historically done so, we as a department are shifting away from this practice, going instead to a police power theory where we allow reasonable access, and therefore are not infringing on any property right (and therefore are not required to compensate for it). (Montana)
- Yes, both sometimes. (Rhode Island)
- b) Which of the following techniques does your agency use to determine whether or not access rights are required along non-Interstate highways and arterials? *Please provide copies of or links to applicable materials*.

Agency	Statutes	Rules	Agency Policies	Corridor Plans	Design Plans	Individual Analysis	Other
Scottsdale (AZ)			Х				
Colorado	Х	Х	Х	Х	Х	Х	
Connecticut					Х		
Delaware		Х	Х	Х	Х		
Florida	Х	Х	Х		Х	Х	
Georgia					Х		
Idaho							
Iowa		Х	Х	Х		Х	
Kentucky			Х	Х	Х	Х	
Louisiana					Х		
Maine			Х		Х		Х
Massachusetts					Х	Х	Х
Minnesota						Х	
Missouri			Х				
Montana			Х		Х	Х	Х
Nebraska			Х				
Nevada			Х	Х	Х	Х	
New Hampshire					Х	Х	
New Jersey	Х	Х			Х		
New York	Х	Х	Х	Х	Х	Х	
North Dakota			Х			X	
Ohio			Х	Х	Х	X	

Agency	Statutes	Rules	Agency Policies	Corridor Plans	Design Plans	Individual Analysis	Other
Oregon	Х		Х		Х	х	
Pennsylvania			Х		Х	Х	
Rhode Island				Х		х	
South Carolina	Х		Х		Х	Х	
South Dakota			Х	Х			
Tennessee							Х
Texas		Х	Х				
Utah		Х	Х	Х	Х		Х
Vermont						Х	
Virginia	Х		Х	Х			
Washington	Х	Х		Х			
Wisconsin	Х	Х	Х	Х	Х	Х	Х
Total	10	10	22	13	20	18	6

- Other: Access management (Maine)
- Other: Engineering design standards AASHTO (Massachusetts)
- Individual analysis: We do not feel this is a perfect situation. (Minnesota)
- Other: Environmental documents. The determination of whether or not limited access control is to be pursued is made at the time of the preliminary field review (PFR) of the proposed project. There are specific projects that will have limited access control required as part of the environmental document completed before the PFR. MDT has some limited policy documents that recommend when to pursue limited access control, but they are not well supported or recognized on a consistent basis. (Montana)
- Other: http://www.nebraskatransportation.org/roway/pdfs/accesscontrol.pdf (Nebraska)
- Other: Design guidelines (Tennessee)
- Other: Corridor/signal agreements (Utah)
- Other: Access management plan (Wisconsin)
- c) If you acquire access rights along non-Interstate highways and arterials, who in your agency is responsible to ensure that access rights are acquired?

4 - Chief engineer	26 - R/W director	1 - Traffic engineer	7 - Project manager
3 - Planning manager	8 - Other		

- Other: ROW agent (Colorado, Utah)
- Other: District right-of-way manager (Florida)
- Other: Access management engineer. The effort is coordinated through my office. (Montana)
- Other: Project development team decision. Right-of-way section responsible for securing access rights. (Oregon)
- Other: Access unit (Washington)
- Other: District SPO chief (for 84.25 plats) or District PD chief (for 84.09 plats)—See attached FDM 7-10-1 for an explanation of 84.25 and 84.09. (Wisconsin)
- Other: Transportation planner (City of Scottsdale, AZ)
- d) How do you acquire the access rights along non-Interstate highways and arterials?

Agency	Statutory Designation	Purchase/Eminent Domain	Other
Scottsdale (AZ)			Х
Colorado		Х	Х
Connecticut		Х	
Delaware		Х	
Florida		Х	

Agency	Statutory Designation	Purchase/Eminent Domain	Other
Georgia		Х	
Idaho			
Iowa		Х	
Kentucky		Х	
Louisiana		Х	
Maine		Х	Х
Massachusetts		Х	
Minnesota		Х	
Missouri		Х	
Montana	Х	Х	Х
Nebraska		Х	
Nevada		Х	
New Hampshire		Х	
New Jersey	X	Х	
New York		Х	
North Dakota		Х	
Ohio		Х	
Oregon	Х	Х	
Pennsylvania	Х	Х	
Rhode Island		Х	
South Carolina		Х	
South Dakota		Х	
Tennessee		Х	
Texas		Х	
Utah		Х	
Vermont		Х	
Virginia		X	
Washington		X	
Wisconsin	Х	X	
Total	5	32	4

- Other: By deed, donation, and through development plans. (Colorado)
- Other: Deed (Maine)
- Purchase/eminent domain: Eminent domain only (Massachusetts)
- Other: Police power. There is a requirement in statute that states only the Transportation Commission has the authority to designate a highway a controlled access facility. MDT has purchased (eminent domain) access rights in the past, and is doing so on one active project. All other new access control projects are being done under our police powers approach. (Montana)
- e) If you are required to pay for the access rights along non-Interstate highways and arterials, how do you arrive at a value?

9 - Negotiation 32 - Appraisal 3 - Other

- Other: If access restriction is part of a development proposed by proponent (shopping center) no payment is made. (Massachusetts)
- Appraisal: Usually access would be purchased only as part of property acquisition for ROW expansion related to a project. (Minnesota)
- Negotiation and appraisal: There is an obligation to purchase any property right at fair market value, so an appraisal must address the access rights if they are being purchased. After that, everything is negotiable! (Montana)

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• Other: Both negotiation and appraisal (Virginia)

2. a) Does your agency acquire access rights along crossroads at interchanges?

Full control of access?	26 - Yes	6 - No
Partial control of access?	27 - Yes	3 - No

- Partial control of access: Yes, as part of ROW acquisition for a project. (Minnesota)
- Yes, as a general rule, full access control is extended 300 ft beyond the ramp termini on the crossroads. Limited access is sometimes extended beyond this 300-ft limit if deemed appropriate. No actual design guidelines exist for this. (Montana)
- Partial control of access: Yes, in some urban locations. (North Dakota)
- b) Which of the following techniques does your agency use to determine whether or not access rights are required along crossroads at interchanges? *Please provide copies of or links to applicable materials*.

6 - Statutes	11 - Rules	21 - Agency policies	6 - Corridor plans
18 - Design plans	14 - Individual analysis	6 - Other	

- Other: CFR Title 23, Section 625.4, ref. to policy on design standards—Interstate System—AASHTO 1991 (Georgia)
- Other: Access management (Maine)
- Other: AASHTO standards (Massachusetts)
- We are developing guidelines for access management at interchanges. (Minnesota)
- http://www.modot.state.mo.us/business/projectdevelopment.htm (see Chapter 4); http://www.modot.state.mo.us/ newsandinfo/documents/AccessMgmtGuidelines1003.pdf (Missouri)
- Other: Design guidelines (Tennessee)
- Other: Design policy—See attached FDM 11-5-5, especially Figure 3. (Wisconsin)
- Other: Plan review (City of Scottsdale, AZ)
- c) If you acquire access rights along crossroads at interchanges, who in your agency is responsible to ensure that access rights are acquired?
 - 3 Chief engineer26 R/W director0 Traffic engineer7 Project manager2 Planning manager8 Other
 - Other: District right-of-way manager (Florida)
 - Other: ROW agent (Colorado, Utah)
 - Other: Project development team decision. Right-of-way section responsible for securing access rights. (Oregon)
 - Other: Access management engineer (Montana)
 - Other: Access unit (Washington)
 - Other: District technical services chief (Wisconsin)
- d) How do you acquire the access rights along crossroads at interchanges?
 - **3** Statutory designation **32** Purchase/eminent domain **4** Other
 - Other: Deed, donation through development plans (Colorado)
 - Other: Deed (Maine)
 - Purchase/eminent domain: Eminent domain only (Massachusetts)
 - Other: Police power (Montana)
 - Other: Donation/occupancy permits (Nevada)
- e) If you are required to pay for the access rights along crossroads at interchanges, how do you arrive at a value?
 - 9 Negotiation 31 Appraisal 1 Other
 - Negotiation and appraisal: See above discussion regarding negotiations vs. appraisal. (Montana)
 - Other: Both—Appraisal and negotiation (Virginia)

Where you have acquired access rights along roadways, please rate the level of success (percentage of successes out of attempts) your agency had in preventing or precluding access to the roadway.

	Very Successful 100%–75%	Somewhat Successful 75%–50%	Somewhat Unsuccessful 50%–25%	Very Unsuccessful 25%–0%	N/A
3. Interstate freeways	32	0	0	0	0
4. Non-Interstate freeways	29	2	0	0	1
5. Other highways & arterials	23	5	4	0	0
6. Crossroads at interchanges	23	8	1	0	0

• Other highways & arterials: Can end up with openings that are in the wrong place in the future; confusing, inconsistent. (Minnesota)

Management of Access Rights

7. Along non-Interstate highways and arterials, what other techniques do you use to limit or manage access?

24 - Police power	7 - Corridor designations	6 - Acquisition of development rights
8 - Land use controls	17 - Other	

- Other techniques: Access code (Colorado)
- Other techniques: Cooperation of local jurisdictions (Iowa)
- Other techniques: Permit process (Kentucky)
- Other techniques: Access management (Maine)
- Other techniques: None (Massachusetts, Nebraska)
- Other techniques: Cooperating local government use of land use controls (Minnesota)
- Other techniques: Permits (Nevada)
- Other techniques: Access permits are required. (North Dakota)
- Other techniques: Driveway regulations (PA Code, Title 67, Transportation, chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads). (Pennsylvania)
- Other techniques: Driveway policy (Tennessee)
- Other techniques: Corridor access and signal plan agreements (Utah)
- Other techniques: Denial of entrance permits (Virginia)
- · Other techniques: Scenic easements, access covenants, land division review (Wisconsin)
- Other techniques: Work with local governments for land use control. (South Dakota)
- 8. Along crossroads at interchanges, what other techniques do you use to limit or manage access?

23 - Police power	4 - Corridor designations	5 - Acquisition of development rights
8 - Land use controls	15 - Other	

- Other techniques: Access code (Colorado)
- · Other techniques: Cooperation of local jurisdictions (Iowa)
- Other techniques: Permit process (Kentucky)
- Other techniques: Access management (Maine)
- Other techniques: None (Massachusetts, Nebraska)
- Land use controls: If local. Other: This would depend on who has jurisdiction over the crossroad—Mn/DOT or local government. (Minnesota)
- Other techniques: Permits (Nevada)
- Other techniques: Access permits are required. (North Dakota)
- Other: Driveway regulations (PA Code, Title 67, Transportation, chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads). (Pennsylvania)

- Other techniques: Corridor access and signal plan agreements (Utah)
- Other techniques: Denial of entrance permits (Virginia)
- Other techniques: Work with local governments for land use control and local access management. (South Dakota)
- 9. Where you own partial control of access and the abutting property owner has an opening in the access control line, do they have to ask permission to have a driveway at that location?
 - **31** Yes **1** No **1** NA
 - Yes, apply for access permit. (Colorado)
 - Yes, generally will be that a new permit is required because of a change in use, but this is very confusing to property owners who think their deed with an opening in access control means they have a right to access no matter what. (Minnesota)
 - Yes, if the approach was not built during construction, they are required to obtain an approach permit. (Montana)
- 10. Is your agency required to provide an abutting property owner with a driveway at each opening in the access control line?
 - 8 Yes 23 No 1 NA
 - No, a driveway would only be permitted if necessary to provide reasonably convenient and suitable access. This will depend on the specific situation. (Minnesota)
 - Yes, it has historically been treated as a property right. If we were to deny it, compensation would be due. However, they are not guaranteed full movement access by deed. (Montana)
- 11. What happens when an adjacent property owner requests a driveway at an opening in the partial access control line, when the opening is not consistent with standards or agency policy?

3 - Request approved	18 - Request denied	13 - Request approved with modification
10 - Other		

- Other: Request reviewed and approved by permit. (Georgia)
- Other: If the opening is according to the plans, it would be consistent with agency policy. If the issue is an unapproved opening, then the request would be denied. (Kentucky)
- Other: Use access management (Maine)
- Other: Request approved with modification assuming no safety issues. If the modification cannot solve the safety issue the request will be denied. (Massachusetts)
- Other: May allow the driveway at a different location (swap the location of the opening). Approval would be based on the need to provide reasonably convenient and suitable access and whether alternate access is available. (Minnesota)
- Other: If it is the deed for the property, they pretty much get it. MDT's approach standards are fairly lenient, so it rarely comes up where the approach location violates driveway standards. (Montana)
- Request denied *or* request approved with modification. (New York)
- Other: If the request is denied, we must purchase the access right. (Nebraska)
- Other: We can deny, but we may have to compensate the landowner. Other modifications may be made, including necessary upgrades to our facility, to make the proposed drive acceptable. (Ohio)
- Other: Depends on specifics. If not approved by agency, we are obligated to purchase the reservation of access. (Oregon)
- Other: Request denied pending dispute resolution process. (Texas)
- Other: Case by case (Utah)
- Other: Request analyzed with options (Transportation Master Plan of Local) required. (Utah)
- 12. If you deny a request for a driveway at an opening in the access control line where the agency owns partial control of access, are you required to pay compensation? Please explain.

12 - Yes **19** - No

- No response; if owner has opening in limited access and it is legal and if we deny request and owner has no other access, we pay. (Virginia)
- No response; if we are buying new rights then yes we compensate, otherwise if we own them then no. (Maine)

- No response; the department usually does not deny access when an existing access break is present, except at locations where access could create a potential safety and operational problem. In these cases, the department would consider shifting the access breaks to a more suitable location along the property owner's frontage. (Georgia)
- No response; this would depend on whether reasonably convenient and suitable alternate access is available. If so, no compensation would be provided. If not, compensation would be provided. (Minnesota)
- No, I am not aware of an instance where a driveway at an existing opening was denied, unless the driveway itself did not meet criteria. (Kentucky)
- No, if access to another public road is available, they are not landlocked and circuity of travel is not legally compensable. (Texas)
- No, if denied, it is because of the design standards used for the driveway. Once the design standards are met the access would be approved. (South Carolina)
- No, not if partial control and reasonable access afforded elsewhere *and* access noted in Transportation Master Plans as connection. (Utah)
- No, not unless the denial constitutes substantial diminution of beneficial use and enjoyment of the property based on reasonable remaining access. (Florida)
- No, only if there are no other options available for access. (Rhode Island)
- No, the owner can always apply to the District Permit office for an encroachment permit. (Connecticut)
- No, we have never been involved with having to pay compensation. Access has always been approved at approved openings. (North Dakota)
- Yes, provided the property has obtained permission and the access sought is legal and safe. (Delaware)
- Yes, denial is viewed as inverse condemnation; therefore, we are obligated to allow the driveway. We normally resolve the issues through negotiation and/or modification. Cooperation with the local zoning authority and enforcement of their rules often helps. (Missouri)
- Yes, if we desire to close an access point that we had previously allowed, we would either provide alternative access (for 84.25) or purchase the access rights (84.09). (Wisconsin)
- Yes, it is a negotiated property right and, as such, if it is not allowed, it is a taking and compensation is due. (Montana)
- Yes, depending on the circumstances. If the landowner was granted an opening, we'll most always allow the drive as long as the property owner makes any necessary modifications to our highway. However, if we cannot allow the access at all, then we must acquire the right to completely limit access at that site. The amount we pay depends on the material damage this creates to the property. (Ohio)
- Yes, it would be considered a "taking" since they had a right to an access. (Iowa)
- Yes, it's a taking of a property right and the owner has a constitutional right to receive damages. (Nebraska)
- Yes, only if no other access is available. (South Dakota)
- Yes, Oregon allows the property owner to "reserve" access rights at specific points. If we later close a driveway or deny a permit at a reservation of access Oregon state law says this rises to a taking and we then are obligated to pay just compensation. (Oregon)
- Yes, possibly, if an access point was granted and a driver was denied, usually modifications can be made to the drive to make it acceptable. (New Hampshire)
- 13. If you do pay compensation when you deny a driveway request at an opening in the access control line, how do you arrive at a value?

2 - Negotiation 19 - Appraisal 6 - Other

- Other: Regions report having almost no experience with this. (Colorado)
- Negotiation, Appraisal, Other: Courts (Montana)
- Other: No compensation required. (New Jersey)
- 14. During acquisition of access rights, does your agency require coordination between the permitting staff and right-of-way staff?

17 - Yes 16 - No

- No response; district planning, project, and ROW staff would be involved, not permitting. If acquisition of access rights becomes the appropriate action in response to a permit request, many functional groups get involved—planning, design, ROW, and permitting. (Minnesota)
- No response; highway opening permits are done by our maintenance and operations staff. (Maine)

- Yes and no; three of the regions report "yes" and three of the six report "no" for this question. (Colorado)
- No, access control is a design feature placed on the plans. (South Carolina)
- No, design staff and ROW staff. (New Hampshire)
- No, the decision to limit access is made by the district planning and production departments. The actual acquisition of access rights is handled by our right-of-way acquisition staff. (Ohio)
- No, here access is a deeded, not permitted right. No permits are issued for accesses allowed to remain. They are noted on the parcel deed and on our ROW. Limit access plans. (Washington)
- No, normally district design staff incorporates the access management policies into the design. Traffic/permitting staff occasionally participated on design teams, but the level of participation varies from district to district and even project to project. (Missouri)
- No, not legally required, but as a practice there would be coordination. (Massachusetts)
- No, permitting staff is not involved in decisions concerning the acquisition of new access rights. (Nebraska)
- No, real estate staff does the actual purchasing of access rights. Requests for a driveway permit are usually reviewed by a district team led by a district access management coordinator. The district access management coordinator is aware of efforts to purchase access rights and would inform the permitting staff. (Wisconsin)
- No, right-of-way and access acquisition is the right-of-way director's responsibility and only after project is complete do permits come into play. (Virginia)
- No, the right-of-way map will be updated to reflect access acquired upon completion of the acquisition. (Connecticut)
- Yes, access approaches are reviewed and approved by the designer on the project and the district office before they are approved. (North Dakota)
- Yes, coordination occurs at local level between ROW and operations staff within the same office. (South Dakota)
- Yes, it is coordinated between ROW staff and the access/utility policy administrator. (Iowa)
- Yes, provided the property has obtained permission and the access sought is legal and safe. (Delaware)
- Yes, our current process requires close coordination between this office and all other staff. Prior to 1999/2000, this position was not active and most of the acquisition was a negotiation process of ROW field agents attempting to close the parcel. (Montana)
- Yes, permitting staff reviews ROW plans. (Colorado)
- Yes, projects have official access lists that are approved by the project development team and the area manager. Both ROW and permitting staff work from this approved access list. Both also have input into the development of the access list. (Oregon)
- Yes, region permit officer and region ROW agent to review; if acquisition, then headquarters' ROW and permit officer review also. (Utah)
- Yes, we have local offices for both functions and they communicate. (Texas)
- 15. During permitting of driveways to the roadway, does your agency require coordination between the permitting staff and right-of-way staff? Please explain.

24 - Yes 15 - No

- Yes, we work closely together in the process. (Colorado)
- No, the district permit section has their own procedures for granting encroachment permits. (Connecticut)
- No, driveways are permitted under requirements and restriction dictated by administrative rules. Records of those permits are made available to right-of-way staff. (Iowa)
- Yes, we try to. (Maine)
- Yes, we involve many functional groups-planning, design, traffic, ROW, and permit techs. (Minnesota)
- Yes, ROW prepares deeds, for changes on limited access rights-of-way and conducts appraisals for changes in access that are not covered by our value determination schedule. (Missouri)
- Yes, no approach permits should be issued in limited access areas without review by this office. (Montana)
- Yes and No; minimal, typically copies of acquisition documents are forwarded to permitting staff when the acquisition occurs. (New Hampshire)
- Yes, right-of-way staff issues the permit after proper review by the permitting staff. (Nebraska)
- Yes, see Question 14 above. (North Dakota)
- Yes. When we own a limited access feature on our roadways and someone wants to access the road at those points, the district permits staff first reviews the application for normal engineering issues. If they determine that an access modification can be granted, then they contact the right-of-way department to have our property rights appraised. Once fully

approved, the applicant receives a permit to work on the access drive and an access grant instrument to record in the county recorder's office. Permits and right-of-way work together to issue these documents simultaneously. (Ohio)

- Yes, right-of-way research staff is alerted electronically for every approach permit application. They research access rights and provide that information to the district permit specialist. (Oregon)
- Yes, region permit officer and region ROW agent to review, if acquisition then headquarters ROW and permit officer review also. (Utah)
- Yes, only when there is a question concerning the limits of the limited access line. (Vermont)
- Yes and no; permitted connections are regulated under our managed access program. The answer is yes and no depending on the type of project. (Washington)
- Yes, requests for driveway permit are usually reviewed by a district team led by a district access management coordinator. The district team usually includes a member of the real estate section. (Wisconsin)
- Yes, there are times that coordination is necessary based on the existing legal documents. (South Carolina)
- Yes, permitting staff checks whether right of access has been acquired. (South Dakota)
- 16. Where your agency has acquired a right of access, how do you memorialize the decision?

27 - Property deed	6 - Electronic records	26 - R/W maps	
1 - Spreadsheets	19 - Public record	13 - Agency record	9 - Other

- Property deed, public record, agency record, Other: Record plans (Kentucky)
- Other: One region noted use of "electronic records" and one region reported "Agency Record." (Colorado)
- Other: Recordation of documents (Maine)
- Other: Highway plan sheets (Missouri)
- Other: Access control resolution filed at county (Montana)
- Other: Occupancy permits (Nevada)
- Other: Fencing and bounds (New Hampshire)
- Electronic records: Just beginning scan images (plan sheets) as part of DOT highway project, ROW maps. (Utah)
- Other: Department is now working on a new database of all access rights, with a map interface. (Wisconsin)
- 17. What controls do you have in place to ensure that agency staff does not approve a driveway in a location where the agency owns the access rights?
 - 3 No controls21 Policy direction1 Automated check8 Staff reporting system5 Voluntary if staff choose15 Other
 - Other: All driveway permits are reviewed by the access/utility policy administrator as a double check. (Iowa)
 - Other: ROW plans are checked. (Colorado)
 - Other: Permits branch in the division of traffic reviews the location and checks to make sure no control of access is violated. (Kentucky)
 - Other: The areas that are controlled are on spreadsheets that are available to the staff. (Maine)
 - Other: Records are checked as a part of access review process. (Minnesota)
 - Other: Right-of-way checks each application to determine if access rights are owned or not. (Nebraska)
 - Other: Research of access rights for every approach permit request. (Oregon)
 - Other: Freeway line on highway plat (recorded). (Rhode Island)
 - Other: Permitting groups review the latest project plans. (South Carolina)
 - Access rights shown on original plan sheets are reviewed for this purpose. (Tennessee)
 - Other: Project research (Washington)
 - Other: Department is now working on a new database of all access rights, with a map interface. This should prevent the inadvertent approval of driveway permits. (Wisconsin)
 - Other: Check ROW plans (Colorado)
 - Other: Access rights shown on original plan sheets are reviewed for this purpose. (Tennessee)
 - Other: Need system (Utah)
- 18. Where your agency has acquired a right of access, how do you manage the records?

14 - Electronic records	13 - Electronic R/W maps	26 - Paper or hard copy R/W maps
5 - Paper tabulations	4 - Spreadsheets	21 - Paper or hard copy files

- Other: Final Mylar roadway plans and microfilm (Kentucky)
- Other: Hard copy of the warranty deed (Tennessee)
- Electronic ROW maps: Just beginning to scan images (plan sheets) as part of DOT highway project. (Utah)
- Other: Department is now working on a new database of all access rights, with map interface. This should eliminate a number to the existing methods. (Wisconsin)
- 19. If you own the access rights along a roadway, do you allow pedestrian or bicycle facilities to cross the access control line? Please explain.

19 - Yes **16** - No

- No, break in access line must be requested and granted for facility. (Connecticut)
- No, if we did so, liability problems would become too big an issue. (Louisiana)
- No, no pedestrians or bicycles are allowed within limited access right-of-way. (Georgia)
- No, not if they create an intersection with the roadway. (Texas)
- No, when ODOT acquires limited access, it is for all modes of travel. (Ohio)
- No, those crossings are only allowed at openings in the access control line. (Iowa)
- Yes and no; yes, where appropriate. The request goes through a review process to see if the proposal does not affect safety and operational efficiency of the route. (Washington)
- Yes, a situation has not occurred, but we would allow pedestrians and bike facilities to cross the line by permit. (South Dakota)
- Yes, access rights are viewed as rights of motorized vehicular ingress and egress. We have had rare discussions regarding pedestrian gates on non-Interstate fenced segments. (Missouri)
- Yes, an analysis is completed and a legal agreement (Highway Occupancy Agreement) is signed by the owner or sponsor of the pedestrian or bicycle facility prior to the department allowing access. (Pennsylvania)
- Yes, bikeways, sidewalks, pedestrian overpasses are all not subject to access control lines. (New Jersey)
- Yes, depends on the type and degree of access control. (Florida)
- Yes, if feasible on partial control. Full control is analyzed. (Utah)
- Yes, it is only the limited access facilities where this is allowed. (South Carolina)
- Yes, on occasion, but rarely, and only at the request of local governments. (Virginia)
- Yes, our primary concern is vehicular access to our facility. (Nebraska)
- Yes, policy statement allowing these facilities in the ROW of an access controlled section as long as permitted by the district manager. FHWA approval also necessary on Interstate System. (Oregon)
- Yes, sidewalk and bike trails might be allowed on non-freeway designs. (Minnesota)
- Yes, sometimes it is permitted. (Maine)
- Yes, we are concerned with vehicular access only in our limited access areas. On the Interstate system, of course, this is different. (Montana)
- Yes, we have a license agreement that allows it. (Colorado)
- 20. In areas where the agency owns the access rights along the roadway, and the agency acquires additional right-of-way, does the access control automatically convert to a new location?

15 - Yes 19 - No

- No response, generally access control would shift, but the impact of that shift would be evaluated using an appraisal to determine if it created new damages. The shift would be accomplished by deed. (Minnesota)
- Yes and no (Colorado, Washington)
- No, negotiation and show reasonable access available. (Utah)
- 21. Are you required to negotiate access with a property owner when you determine a need for additional right-of-way where you previously owned access rights?

18 - Yes 16 - No

- No response, not unless there are new impacts on the property's right to reasonably convenient and suitable access. (Minnesota)
- Yes and no (Washington)

• Yes, but the amount would not be increased unless we were adding to the limited access control features. Simply moving the line back to the new right-of-way limits, where it existed before, wouldn't result in increased compensation over what new land we were acquiring. (Ohio)

Relinquishment of Access Rights

22. a) If your agency has acquired access rights from abutting properties, is there any process for a property owner to acquire an access right to the roadway at a later date along non-Interstate highways and arterials where you own:

Full control of access?	23 - Yes	10 - No
Partial control of access?	31 - Yes	2 - No

- Full control of access: Only in the crossroad areas (Montana)
- b) Which of the following do you use to determine when and how to relinquish access rights along non-Interstate high-ways and arterials? *Please provide copies of or links to applicable materials*.

11 - Statutes	9 - Rules	27 - Agency policies	
4 - Corridor plans	11 - Design plans	19 - Individual analysis	$10\ \text{-}\ \text{Other}$

- Other: ROW manual (Colorado)
- Other: Release map (Connecticut)
- Other: FHWA approval (Louisiana)
- Other: MRSA Title 23 sect 704 #6 (Maine)
- Other: Minnesota Statutes 161.43 regulates process for reconveyances. (Minnesota)
- Other: http://www.modot.state.mo.us/business/projectdevelopment.htm (see Chapter 4);
- http://www.modot.state.mo.us/newsandinfo/documents/AccessMgmtGuidelines1003.pdf (Missouri)
- Other: FHWA (Montana)
- Other: www.state.nj.us/transportation/eng/documents/NJHAmc (New Jersey)
- Other: Statewide grant review committee (Oregon)
- Other: Corridor and signal plan agreements (Utah)
- Other: We can alter access on a controlled access highway (84.25) as discussed in FDM 7-15-5 or on a highway with purchased access (84.09) as discussed in FDM 7-20-5. (Wisconsin)
- Other: Plan review (City of Scottsdale, AZ)
- c) If you relinquish access rights along non-Interstate highways and arterials, who is responsible to administer this process for your agency?

6 - Chief engineer	22 - R/W director	5 - Traffic engineer
4 - Project manager	0 - Planning manager	17 - Other

- Other: State highway engineer and commissioner of highways (Kentucky)
- Other: State property manager (Colorado)
- Other: Property management officer (Louisiana)
- Other: Commissioner (Georgia)
- Other: Access policy administrator (Iowa)
- Other: Initiated by district ROW staff; coordinated with and sign-off by state ROW director. (Minnesota)
- Other: Action by the Missouri Transportation Commission. (Missouri)
- Other: Access management engineer (Montana)
- Other: State traffic engineer chairs the committee for operational decisions. ROW manager is responsible for the sale of the access rights. (Oregon)
- Other: Requires approval action by governing commission. (Texas)
- Other: Permit officer (Utah)
- Other: Access unit (Washington)
- Other: Any change to existing access rights (that were purchased in the past) must be approved by the Director of the Bureau of Real Estate ("R/W Director") and the Director of the Bureau of Highway Development ("Chief Engi-

neer"). Any change to an existing access (that was controlled by statute in the past) must be approved by the Director of the Bureau of Highway Development ("Chief Engineer"). (Wisconsin)

- Other: Corridor preservation specialist (South Dakota)
- Other: District right-of-way manager (Florida)
- d) If you relinquish access rights along non-Interstate highways and arterials to an abutting property owner, how do you determine the value?
 - **6** Negotiation **29** Appraisal **7** Other
 - Other: Property management officer determines. (Louisiana)
 - Other: The value of a change to existing access rights (that were purchased in the past) are determined by an appraisal. The value of a change to an existing access (that was controlled by statute in the past) is determined by negotiation. (Wisconsin)
- e) If an access right is approved to a non-Interstate highway or arterial, will the property owner be ensured of being allowed to construct a driveway to the highway or arterial at this location?

17- Yes 16 - No

- Yes and no. Regions are split, depends on the situation. (Colorado)
- No, requires a permit. Access would be approved if reasonably convenient and suitable alternative access was not available. (Minnesota)
- 23. a) If your agency has acquired access rights from abutting properties, is there any process for a property owner to acquire an access right to the roadway at a later date along crossroads at interchanges where you own:

Full control of access?	20 - Yes	11 - No
Partial control of access?	29 - Yes	3 - No

b) Which of the following techniques do you use to determine when and how to relinquish access rights along crossroads at interchanges? *Please provide copies of or links to applicable materials.*

11 - Statutes	12 - Rules	19 - Agency policies	5 - Corridor plans
10 - Design plans	19 - Individual analysis	9 - Other	

- Other: Release map (Connecticut)
- Other: ROW manual (Colorado)
- Other: Property management officer recommendation (Louisiana)
- Other: Statewide grant review committee (Oregon)
- Other: Corridor access and signal plan agreement (Utah)
- Other: See FDM 7-15-5 and 7-20-5 discussed previously. (Wisconsin)
- c) If you relinquish access rights along crossroads at interchanges, who is responsible to administer this process for your agency?
 - 6 Chief engineer20 R/W director6 Traffic engineer4 Project manager0 Planning manager18 Other
 - Other: District right-of-way manager (Florida)
 - Other: Statewide property manager (Colorado)
 - Other: Commissioner (Georgia)
 - Other: Access policy administrator (Iowa)
 - Other: State highway engineer and commissioner of highways (Kentucky)
 - Other: Property management officer (Louisiana)
 - Other: District and right-of-way staff (Minnesota)
 - Other: Action by the Missouri Transportation Commission. (Missouri)

- Other: Access management engineer (Montana)
- Other: District and Central Office permits staff also plays a key role in granting access modifications. (Ohio)
- Other: Same as Question 22b (Oregon)
- Other: Corridor preservation specialist (South Dakota)
- Other: Same as above—Texas Transportation Commission approval (Texas)
- Other: Permit officer (Utah)
- Other: Access unit (Washington)
- Other: Any change to existing access rights (that were purchased in the past) must be approved by Director of the Bureau of Real Estate ("R/W Director") and the Director of the Bureau of Highway Development ("Chief Engineer"). (Wisconsin)
- Other: Transportation planning and traffic engineering (City of Scottsdale, AZ)
- d) If you relinquish access rights along crossroads at interchanges to an abutting property owner, how do you determine the value?
 - 5 Negotiation **28** - Appraisal 8 - Other
 - Other: Property management officer determines (Louisiana)
 - Other: Courts (Montana)
 - Other: No cash value (City of Scottsdale, AZ)
- e) If an access right is approved, will the property owner be ensured of being allowed to construct a driveway to the crossroad at this location?

18 - Yes 14 - No

- No, requires a permit. Access would be approved if reasonably convenient and suitable alternative access was not available. (Minnesota)
- Yes and no; the regions are evenly divided. (Colorado)
- Yes, if meets standards of state highway access. (Utah)
- 24. If your agency transfers ownership of a roadway to another agency where you had previously acquired access rights, what happens to the access rights?
 - 23 Automatic transfer of ownership to the other agency **5** - Remains with the agency 7 - Other
 - **2** Negotiation
 - Other: Legally, this has not been ruled on. Our position is the access rights remain. (Massachusetts)
 - Other: Sometimes portions of the access rights are reserved to the state. (Iowa)
 - Other: This is not an issue in Montana. (Montana)
 - Other: Access rights transfer by deed to other agency. (Tennessee)
 - Other: If the access rights were purchased in the past, transfer of those rights is subject to negotiation. If the access was controlled by statute in the past, the control can be vacated if the highway no longer is used for STH travel or, in the case of county that desires to maintain the control, transferred to the county under a different statute. (Wisconsin)
- 25. If another agency takes over the roadway, including the access rights that your agency previously owned, are they subject to your rules, procedures, and/or policies in the management of those access rights?

10 - Yes 17 - No 8 - Other

- Other: Unknown (Colorado)
- Other: Sometimes portions of the access rights are reserved to the state. (Iowa)
- Other: Subject to Kentucky administrative regulations. (Kentucky)
- Other: Subject to existing statute. (Maine)
- Other: This is not an issue in Montana. (Montana)
- Other: Not available (South Carolina)
- Other: Sometimes this is not followed by cities, as they act independently. (Virginia)
- Other: Unless the jurisdictional transfer agreement contains language that would continue the previous rules. (Wisconsin)

APPENDIX D Sample Deeds

These deeds have been provided by topic panel members and survey respondents as examples of deed language that has been successful in their respective agencies. The synthesis project team has not conducted any review of the sample deeds and makes no judgment or qualitative statement as to the legal sufficiency of these documents.
WARRANTY DEED

 THIS DEED, dated

 between
 DILLON REAL ESTATE CO., INC., A KANSAS CORPORATION,

 a corporation duly organized and existing under and by virtue of the laws of the State of KANSAS, grantor,

 and
 DEPARTMENT OF TRANSPORTATION, STATE OF COLORADO

 whose legal address is
 4201 E. ARKANSAS AVENUE DENVER, COLORADO 80222

 of the CITY AND *County of DENVER and State of COLORADO, grantee:

WITNESS, that the grantor, for and in consideration of the sum of \$10.00

TEN DOLLARS (\$10.00) AND OTHER GOOD AND VALUABLE CONSIDERATION,

the receipt and sufficiency of which is hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm unto the grantee, his heirs and assigns forever, all the real property, together with improvements, if any, situate, lying and being in the _____ County of <u>EL PASO</u> and State of Colorado, described as follows:

See attached Exhibit "B" dated August 4, 2003 for: Project Number: IM 0252-310 Parcel Number: AC-2D-X Project Code: 11964

also known by street and number as: assessor's schedule or parcel number:

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances; **TO HAVE AND TO HOLD** the said premises above bargained and described, with the appurtenances, unto the grantee, his heirs and assigns forever. The grantor, for itself, its successors and assigns, does covenant, grant, bargain and agree to and with the grantee, his heirs and assigns, that at the time of the enseling and delivery of these presents, it is used as the premised of the previous down assigns that at the time of the enseling and delivery of these presents, it is not applied of the previous down assigns and a previous applied of the previous down assigns and a previous previous the previous down assigns applied on the previous down applied of the previous down ap

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the grantee, his heirs and assigns forever. The grantor, for itself, its successors and assigns, does covenant, grant, bargain and agree to and with the grantee, his heirs and assigns, that at the time of the ensealing and delivery of these presents, it is well seized of the premises above conveyed, has good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and authority to grant, bargain, sell and convey the same in manner and form as aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, encumbrances and restrictions of whatever kind or nature soever, except

The grantor shall and will WARRANT AND FOREVER DEFEND the above bargained premises in the quiet and peaceable possession of the grantee, his heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof.

The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF, the grantor has caused its corporate name to be hereunto subscribed by its ______ President, and its corporate seal to be hereunto affixed, attested by its ______ Secretary, the day and year first above written.

Attest:

	DILLON REAL I A KANSAS COF	ESTATE CO., INC., PORATION	
Secretary			
	Ву	<u></u>	
			President
STATE OF COLORADO			
County of			
The foregoing instrument was acknowledged before me	this day of	, 20,	
and		as	President Secretary of
		a corporation.	
	Witness my hand an My commission exp	d official seal. ires:	
	<u> </u>		Notary Public

Name and Address of Person Creating Newly Created Legal Description (§38-35-106.5, C.R.S.)

EXHIBIT "B" PROJECT NUMBER: IM 0252-310 PARCEL NUMBER: AC-2D-X PROJECT CODE: 11964 DATE: August 4, 2003

DESCRIPTION

EACH AND EVERY RIGHT OR RIGHTS OF ACCESS OF THE GRANTOR to and from any part of the right of way of Colorado Highway Interstate 25, a freeway established according to the laws of the State of Colorado, and from and to any part of the real property of the Grantor in the Southwest Quarter of Section 8, Township 13 South, Range 66 West of the 6th Principal Meridian in the City of Colorado Springs, El Paso County, Colorado, abutting upon said Highway, along or across the access line or lines described as follows:

IM 0252-310	AC-2D-X	Easterly Line				
(Project No)	(Parcel No)	(Location of Line)				

Commencing at the southwest corner of said Section 8 (an 83mm aluminum cap, PLS 4842-1997), thence North 02°55'02" East, a distance of 692.957 meters (2,273.48 feet) to a point on the South line of Lot 1 extended Westerly of American Furniture At Woodmen Road Subdivision, City of Colorado Springs, Colorado, as recorded December 29, 2000 at Reception Number 200156382, El Paso County, Colorado, the POINT OF BEGINNING:

1. Thence South 10°43'57" West a distance of 54.238 meters (177.95 feet).

Basis of Bearings: All bearings are based on the North line of Lot 1, American Storage Subdivision, City of Colorado Springs, Colorado, as recorded at Reception Number 97128486, El Paso County, Colorado. The Northwest corner is monumented by a 38mm Alum. Cap (LWA PLS 28658) and the Northeast corner is monumented by a 16mm rebar w/plastic cap (WK Clark LS 4842) and has a bearing of North 89°33'01" East.

NO ACCESS POINT

W&C Project: X031000326 For and on Behalf of Colorado Department of Transportation Region 2 WILSON & COMPANY 455 Pikes Peak Avenue, Suite 200 Colorado Spring, CO 80903-3675 719-520-5800 Walter E. Pachak, Jr., PLS 28659

> REAL PROPERTY (AC-2D-X) PAGE 1

Notice of Confidentiality Rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your Social Security Number or your Driver's License Number.

Teas Department For Transportation For ROW-N-14 Rev. 8/2003 Replaces Forms D-15-11, D-15-14, D-15-141, D-15-142, ROW-N-12PT,ROW-N-14, ROW-N-141, and ROW-N-142 GSD-EPC Page 1 of 4

DEED

§ § §

THE STATE OF TEXAS

COUNTY OF

WHEREAS, the Texas Transportation Commission has been authorized under the Texas Transportation Code Chapters 203, 224, and 361 to purchase land and such other property rights (including requesting that counties and municipalities acquire highway right of way) deemed necessary and convenient to a state highway or turnpike project to be constructed, reconstructed, maintained, widened, straightened, or extended, or to accomplish any other purpose related to the location, construction, improvement, maintenance, beautification, preservation, or operation of a state highway or turnpike project, and including the acquisition of such other property rights deemed necessary to facilitate the flow of traffic and promote the public safety and welfare on both non-controlled access facilities, as well as facilitating the construction, maintenance and operation of designated controlled access highways and turnpike projects;

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That, of the County of , State of Texas, hereinafter referred to as Grantors, whether one or more, for and in consideration of the sum of Dollars (\$) to Grantors in hand paid by the State of Texas, acting by and through the Texas Transportation Commission, receipt of which is hereby acknowledged, and for which no lien is retained, either expressed or implied, have this day Sold and by these presents do Grant, Bargain, Sell and Convey unto the State of Texas all that certain tract or parcel of land lying and being situated in the County of

, State of Texas, more particularly described in Exhibit "A," which is attached hereto and incorporated herein for any and all purposes.

SAVE and **EXCEPT**, **HOWEVER**, it is expressly understood and agreed that Grantors are retaining title to the following improvements located on the property described in said Exhibit "A" to wit: None.

Grantors covenant and agree to remove the above-described improvements from said land by the day of _______, subject, however, to such extensions of time as may be granted by Grantee, its successor and assigns, in writing; and if, for any reason, Grantors fail or refuse to remove same within said period of time prescribed, then, without any further consideration, the title to all or any part of such improvements not so removed shall pass to and vest in the Grantee, its successors and assigns, forever.

Grantors reserve all of the oil, gas and sulphur in and under the land herein conveyed but waive all rights of ingress and egress to the surface thereof for the purpose of exploring, developing, mining or drilling for same; however, nothing in this reservation shall affect the title and rights of the Grantee, its successors and assigns, to take and use all other minerals and materials thereon, therein and thereunder.

Form ROW-N-14 Rev. 8/2003 Page 2 of 4

Grantors hereby acknowledge that their use of and access to the state highway facilities and/or turnpike project (hereafter called highway facility) to be constructed in conjunction with the highway facility of which the land hereby conveyed shall become a part, shall be and forever remain subject to the same regulation by legally constituted authority as applies to the public's use thereof; and Grantors further acknowledge that the design and operation of such highway facility requires that rights of ingress and egress and the right of direct access to and from Grantors' remaining property (if any) to said Highway facility, shall hereafter be governed by the provisions set out in said Exhibit "A", **SAVE AND EXCEPT** in the event access, or access points may be specifically allowed or permitted in said Exhibit "A", such access shall be subject to such regulation as is determined by the Texas Department of Transportation and/or the Texas Turnpike Authority Division to be necessary in the interest of public safety and in compliance with approved engineering principles and practices and subject to compliance with any applicable local municipal or county zoning, platting and/or permit requirements.

TO HAVE AND TO HOLD the premises herein described and herein conveyed together with all and singular the rights and appurtenances thereto in any wise belonging unto the State of Texas and its assigns forever; and Grantors do hereby bind ourselves, our heirs, executors, administrators, successors and assigns to Warrant and Forever Defend all and singular the said premises herein conveyed unto the State of Texas and its assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof.

IN WITNESS WHEREOF, this instrument is executed on this the day of ,

Form ROW-N-14 Rev. 8/2003 Page 3 of 4

Acknowledgemo	ent
State of Texas County of	
This instrument was acknowledged before me on	
by	·
	Notary Public's Signature
Corporate Acknowle	dgment
State of Texas County of	
This instrument was acknowledged before me on	by
of	
a	corporation, on behalf of said corporation.

Notary Public's Signature

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Form ROW-N-14 Rev. 8/2003 Page 4 of 4

[ADDITIONAL WORDING FOR AN EXHIBIT "A" WHERE WHOLE TAKE (NO REMAINDER) INVOLVED—INCLUDE THE FOLLOWING PARAGRAPH AS AN ADDITIONAL PAGE TO THE EXHIBIT "A" PROPERTY DESCRIPTION IMMEDIATELY AFTER THE LEGAL DESCRIPTION AND PLAT MAP]

The property described above relates to a "whole" property acquisition, so that there is no remainder or remaining property owned by the Grantors that was originally out of or a part of the property described above. Therefore, there are no access rights retained or remaining in Grantors, their successors and assigns, out of or relating to the property described above. All access rights associated with all of the above described property are owned and retained by the State, with the access denial line being co-existent with the Right of Way boundary line.

Note to District Personnel: If this page is unnecessary, unlock the form (CTRL-U) and delete this page.

Page 1 of 3 November 6, 2001

EXHIBIT "A"

County:HarrisHighway:Interstate Highway No. 10ROW CSJ:0271-07-264CCSJ:0271-07-260

Parcel 100 Property Description

BEING a 0.7536 acre (32,825 square feet) parcel of land located in the T.A. Hoskins Survey, Abstract No. 342, Harris County, Texas, and being out of that certain called 3.020 acre tract of land conveyed to Witte Plaza, Ltd., by deed recorded under Harris County Clerk's File No. T912418, Film Code No. 527 51 0784 and dated August 13, 1999; said 0.7536 acre parcel being more particularly described by metes & bounds as follows:

COMMENCING for reference at an 'X" in concrete found in the existing easterly right-of-way of Witte Road (based on a width of 60 feet), being the northwest comer of said called 3.020 acre tract of land;

South 02 deg. 34 min 25 sec. East, along easterly right-of-way line of said Witte Road, a distance of 261.70 feet to a 5/8 inch iron rod with TxDOT aluminum cap set for the proposed northerly cut back corner and marking the POINT OF BEGINNING of the herein described tract of land and also being the beginning of a Control of Access Line;

- THENCE, South 47 deg. 19 min 00 sec. East, along the proposed north right of way line of Interstate Highway No. 10, also being a Control of Access Line, a distance of 35.51 feet to a 5/8 inch iron rod with TxDOT Aluminum cap set marking the southeast cut back comer of the intersection of Witte Road and the proposed north right-of-way of Interstate Highway No. 10;
- 2) THENCE, North 87 deg. 56 min 24 sec. East, along the proposed right-of-way line of Interstate Highway No. 10, passing at a distance of 244.92 feet a 5/8 inch iron rod with TxDOT Aluminum cap stamped "C.O.A." set marking the end of this Control of Access Line, and continuing for a total distance of 346.62 feet to an "X" cut in concrete, in the common line of the said 3.020 acre tract and a 1.827 acre tract of land conveyed to Gaylor Investment Trust PTNR, recorded under Harris County Clerk's File No. U035790 of the Harris County Deed Records;
- 3) THENCE, South 02 deg. 32 min 40 sec. East, along said common line, a distance of 90.28 feet to a 5/8 inch iron rod found in the existing northerly right-of-way line of Old Katy Road (based on a width called 60-feet) marking the southerly common configr of the said 3.020 acre tract and the said 1.827 acre tract;

Page 2 of 3 November 6, 2001 Parcel 100

- 4) THENCE, South 88 deg. 42 min 20 sec. West, along the existing northerly right-of-way line of Old Katy Road, a distance of 356.66 feet to a point marking the existing easterly cut-back corner of the intersection of the existing northerly right-of-way line of Old Katy Road, and the easterly right-of-way of Witte Road:
- 5) THENCE, North 47 deg. 06 min 49 sec. West, along the existing cut back line, a distance of 21.38 feet to a 5/8 inch iron rod found marking the northwesterly cut-back comer of the existing northerly right-of-way line of Old Katy Road and the existing easterly rightof-way line of said Witte Road;
- 6) THENCE, North 02 deg. 34 min 25 sec. West, along the existing easterly right-of-way line of said. Witte Road, a distance of 95.41 feet to the POINT OF BEGINNING and containing 0.7536 acres of land, more or less.

Note: The Point of Beginning of this description has coordinates of X=3,066,281.06 and Y=13,851,110.89; All bearings are based on the Texas State Plane coordinate system, NAD 83 (1993 Adj.), South Central Zone. All coordinates shown are surface and may be converted to grid by Dividing by TxDOT conversion factor of 1.00013;

Access is prohibited along "Control of Access Line".

I, John R. Doe, a Registered Professional Land Surveyor, Hereby certify that the legal description hereon and the accompanying plat of even date represent an actual survey made on the ground under my supervision.

John R. Doe, R.P.L.S. Date Texas Registration No. 1234



MODIFICATION OF AN EXISTING EASEMENT ACCESS

GRANT OF ACCESS

IN THE MATTER OF THE RELOCATION AND WIDENING OF AN ACCESS POINT, UNITED STATES ROUTE 23, SECTION (3.79-8.69) **DELAWARE COUNTY, OHIO**

FILE COPY WHEREAS, by permit application dated February 29, 1996 on file in the Ohio Department of Transportation, Columbus, Ohio, JAS Team Partnership, an Ohio general partnership, requested that the State of Ohio (Ohio Department Of Transportation) grant them permission to modify an access point located on limited access right of way, State Parcel # 59A, as follows: The existing 10 foot access in Parcel # 59A with its centerline at the left of Sta. 293+40 will be relocated so that its centerline is to the left of Sta. 293+42.66, and will have an access break of 54 feet with a maximum permissible pavement width of 46 feet, and

WHEREAS, Held Team Partnership, an Ohio general partnership, is the successor to JAS Team Partnership and current owner of Parcel 59A, and

WHEREAS, said limited access right of way was purchased by the State of Ohio in conjunction with the reconstruction of United States Route 23, Section (3.79-8.69) as follows: Parcel # 59A, from Kerby O. and Carrie A. Kessler in August of 1953. This parcel is recorded in the Delaware County Courthouse in Deed Volume 248 Page 31.

WHEREAS, the State of Ohio found that the access point, as hereinbefore described, can be modified without impairing the integrity of United States Route 23, Section (3.79-8.69) and

WHEREAS, said Held Team Partnership, an Ohio general partnership, has compensated the State of Ohio, Ohio Department of Transportation, the Fair Market Value of the enhancement to their underlying property by the modification of the aforementioned access point, in the sum of Fifty Three Thousand Six Hundred Thirty One Dollars and Sixty Nine cents (\$53,631.69).

NOW THEREFORE, I, Gordon Proctor, Director of Transportation, pursuant to Chapter 5501 of the Ohio Revised Code, do hereby determine and declare that the modification as hereinbefore described, is now approved and finalized.

GRANT OF ACCESS

IN THE MATTER OF THE RELOCATION AND WIDENING OF AN ACCESS POINT, UNITED STATES ROUTE 23, SECTION (3.79-8.69) DELAWARE COUNTY, OHIO

WITNESS my hand and Official Seal this 16^{TH} day of May, 2002.

1 gemt Gordon Procto Director of

STATE OF OHIO))ss: DELAWARE COUNTY)

Before me, a Notary Public in and for said County and State, personally appeared Mr. Jack R. Marchbanks acting as an authorized agent for Gordon Proctor, Director of Transportation of the State of Ohio, who executed the foregoing instrument, who acknowledged that he did sign said instrument as such authorized agent for the Director of Transportation in behalf of the state of Ohio and by the authority of Section 5501 of the Ohio Revised Code, and that signing said instrument is his free act and deed.

IN WITNESS WHEREOF, I hereunto subscribed my name and affixed my Official seal at Delaware, Ohio this // day of May, 2002.

martha X. Contulli



MARTHA K. CANTRELL NOTARY PUBLIC, STATE OF OHIO NY COMMISSION EXPIRES <u>8-5-04</u>

This instrument was prepared by the State of Ohio, Ohio Department of Transportation in Delaware Ohio.

Sheet 2 of 2

GRANT OF ACCESS

IN THE MATTER OF THE CREATION OF AN ACCESS POINT, UNITED STATE ROUTE 35, SECTION 12.00 FAVETTE COUNTY, OHIO

WHEREAS, by permit application received June 9, 2000 on file in the Ohio Department of Transportation, Delaware, Ohio, R. G. Properties, Inc. on behalf of Wal-Mart Stores East, Inc., current owner of land at the southeast quadrant of USR-35 and USR-62 in Fayette County, requested that the State of Ohio (Ohio Department Of Transportation) grant them permission to create a new access point located on limited access right of way, State Parcel # 62-WL, as follows: A new access will be created with its centerline at the right of Sta. 611+80.29 on USR-62. This access will be directly opposite the north distributor road of the US-35, US-22 and US-62 interchange. The access will be 50 feet wide with a maximum pavement width of 39 feet, and

WHEREAS, the above stationing is taken from a 1971 plan known as FAY-35-12.00 on file in Delaware, Ohio at the Ohio Department of Transportation District Six office, and

WHEREAS, said limited access right of way was purchased by the State of Ohio in conjunction with the construction of United States Route 35, Section 12.00 as follows: State Parcel # 62WL was purchased by the State of Ohio from Judith B. Robinson via Fayette County Deed Volume # 125 Page 21, dated January 4, 1972, and

WHEREAS, the State of Ohio found that the access point, as hereinbefore described, can be created without impairing the integrity of US Route 35, Section 12.00, and

WHEREAS, by letter dated October 10, 2000, on file in the Ohio Department of Transportation, Delaware, Ohio, The Federal Highway Administration granted concurrence in the modification of the access points, and

WHEREAS, an analysis of this proposal was conducted which showed that no enhancement of the value of Wal-Mart's property would result from this modification, and

WHEREAS, Wal-Mart, has compensated the State of Ohio, Ohio Department of Transportation, by complying with all conditions required of it in connection with the modification of the aforementioned access point, and

NOW THEREFORE, I, Gordon Proctor, Director of Transportation, pursuant to Chapter 5501 of the Ohio Revised Code, and for and in consideration of Wal-Mart Stores East, Inc. complying with all conditions previously agreed upon for the access modification, do hereby determine and declare that the modification as hereinbefore described, is now approved and finalized.

IN THE MATTER OF THE CREATION OF AN ACCESS POINT. UNITED STATE ROUTE 35, SECTION 12.00 FAYETTE COUNTY, OHIO

GRANT OF ACCESS

WITNESS my hand and Official Seal this 1314 day of October, 2000.

actor. Gordon Practor **Director of Transportation** WITNESS: TRANSFER NOT NECESBARY 10_17 20 00 PENNY S. JOHNSON B. DAL. **FAVETTE COUNTY AUDITOR** By: M.B.L. 200000005056 Filed for Record in FAYETTE COUNTY, OHIO AL 20005MA On 10-17-2000 At 02:20 pm. 14.00 74 Page 766 - 767 OR Book STATE OF OHIO) 200000005056 MAIL: LAWYERS TITLE INSURANCE CORPORATION 8250 WASHINGTON VILLAGE DR DAYTON, OH 45458)95: **DELAWARE COUNTY**)

Before me, a Notiry Public in and for said County and State, personally appeared Mr. Jack R. Marchbanks acting as an authorized agent for Gordon Prostor, Director of Transportation of the State of Ohio, who executed the foregoing instrument, who acknowledged that he did sign said instrument as such authorized agent for the Director of Transportation in behalf of the state of Ohio and by the authority of Section 5501 of the Ohio Revised Code, and that signing said instrument is his free act and deed.

IN WITNESS WHEREOF, I hereunto subscribed my name and affixed my Official seal at Delaware. Ohio this 13 day of October, 2000.



NOTIVEL PUBLIC - ANDIJ. DILORETO, T. MY COMMISSION EXPIRES : JANUARY 81, 200

This instrument was prepared by the State of Ohio, Ohio Department of Transportation in Delaware Ohio.

Sheet 2 of 2

Instrument Book Page 200000005056 OR 74 767

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WARRANTY DEED

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TO BE EXECUTE! 7

Judith S. Robfuson (widow, not remarried) the other

hereinsfor minred to up the graniar (as used havein, Gruntar insinder the plural and words in the masculine in-

eludes the faminine) in consideration of the sum of Eleven thousand two hundred fifty one and no/100-

Dallary (s. 11, 251.00-----) to him mid by the State of Ohio, the Grimten, the receipt whereof is hereby sciencededed, does hereby grant, bargain, sell and convey to the said Grantus, its successors and assigns forever, the following described real estate:

Union Situated in the Township of Controty of . . h. '

Town V Obio and in Berlion Renge , sui brunded and descabed as follows: 62 WL and a surger in the part of the for PARCIE HOLE

Being a parcel of land lying on the ______ Fight _____ of the controline of a survey, male by the Depart-ment of Highways, and monoided in Book. 3 ______ Fage 107-8 of the records of ______ Fityette ______ County

along the proposed southerly limited access right of way line.of U.S.R. 62 to a point in the granter i Westerly property line; thence North 00-14:-29" East, a distance of 89.57 fest along the granter's westerly property line, to the place of beginning. المشاطنة والمحمد والعام والعام والمعاركة والمعاركة والمعاركة والمعاركة والمعاركة والمعاركة والمعاركة والمعاركة

It in undershipd that the above described parcel of land contains 0, 39 acres, more or loss , inclusive of the present road which occupies 0, 21 acres, more or less. Being - 25 a mrt of V. M. S. No. 7088.

The description for this parcel of land is based on a conterline survey made by Oscur L. Willis, Registered Surveyor No. 5097.

This C Gran e	information to transform and the
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	CIT I
MA	The Andrew County Auditor

128, Payatte County Recorder's ź9 Granter claims title by instrument(s) of record in D. B. Page Office.

Granter, for himself, his beirs, executors, administrators and assigns does hereby Release to the State of Ohio, its successory and assigns any and all abuttor's rights, including access rights, in, over and to the above described real estate bachading such rights with respect to any highway facility constructed thereon.

TO HAVE AND TO HOLD the real estate with all the rights, privileges and appurtenances thereto belonging to the Grantus, its monsours and actigon forever.

And the said granter, for kinself and his heirs, executors, administrators and assigns does hereby covenant with the said Grantee, its successors and assigns, that he is the true and lawith owner of the said premises, and has whatsonver.

OKIO DEPARTMENT OF NULHWAYS By Liten & Incle) : VAL 125 PLEE 21

and further, that he does Warrant and will Defend the same against all claims of all persons whomsoever. IN WITNESS WHEREOF, the said granter, who hereby releases all right and expectancy of dower herein,

has hereunto set his hand this day of	January 19.72
Cather Museum	Sudith & Polasson
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BIRIE OF CHIO, COURTY	
BE IT REMEMBERED, That on this day at	January 1972, balire me the
abscriber, a Notary Public in and for said county, pr	remaily came the above paraed
Tudiah V Tabiasan Widau unt da	
Juaita B. Robinson, Widow, Not re	
ad acknowledged the signing of the foregoing deed to be	her voluntary act and deed.
In testimony whereof, I have hereinto subscribed my	y name and minzed my official scal on the day and year
at alorewid.	t. J. Cruchiden
10 Martin	Notary Public R. L BAUSARE
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STATE OF OHIO, COUNTY	di.
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Bellen 10 4: 2 2.	Ohio.	To the County Recorder: As soon as this easement has been recorded, it should be mailed to the Department of Highways, Columbus,	NOTE	Recorder's Free, \$ / e.c.	Record of Deeds, Vol. 248 Page 31	in Deletare County	At /2: 3- 0'clock 19.55-	Received AUG 18 1953, 19	Incounty in a start of the star	TRANSFERRED	Section 3,79 Parcel No. 59A	Anthe No. 23 County Delawers	STATE OF OHIO	62	Chalaware, Ohio	Kerby O. and CEFFIC A.	HIGHWAI LOW COM	FOR	EASEMENT OS	6/200	
		KNOW ALL M	en B	Y THESE	PRESE	NTS:															
										4 77											

That Kerby O. Kenler and Carrie A. Kesler

___, the grantor <u>s</u>____

for and in consideration of the sum of Three thousand two hundred dodlars

Dollars (\$ 3200.00 _____) and for other good and valuable considerations to _______ paid by the State of Ohio, the Grantee, the receipt whereof is hereby acknowledged, do_______hereby grant, bargain, sell, convey and release to the said Grantee. its successors and assigns forever, a perpetual casement and right of way for public highway and road purposes in, upon and over the lands hereinafter described, including loss of direct access as hereinafter provided, situated in _______Olaware County, Ohio, _______ Berlin ______ Township, \$7584585 Live 33 _______, Town ship 4, Range 18 _______ Quarter 3

PARCEL NO. 59A

Being a parcel of land lying on the <u>left</u> side of the centerline of a survey, made by the Department of Highways, and recorded in Hook <u>4</u>. Page 222, of the records of <u>Doloware</u> County and being tocated within the following described points in the boundary thereof:

Beginning in the grantors southerly property line at station 289+05 in the contorline of a survey made in 1940 by the Ohio Department of Highways of U. S. Noute 23, Section 3.79-8.69 in Delaware County, also known as the Columbus-Sandusky Road; thence westerly along said property line to a point 95 feet left of station 289+31.05; thence northwesterly to a point 95 feet left of station 291+00; thence northerly to a point 85 feet left of station 295+00; thence northwesterly to the grantors northerly property line at a point 85 feet left of station 293+92.09; thence sactorly along said northerly property line to station 293+71 of the center line of survey; thence southeasterly along said center line to the place of beginning.

In consideration of the sum of <u>Three thousand two hundred dollars 4 00/100</u> Dollars (<u>\$ 3200.00</u>), hereinbefore mentioned, <u>do</u> hereby specifically waive and release any and all right or rights of direct access, or claims thereof, to the present highway improvement to be constructed, or to the ultimote highway improvement to be constructed in the future, as colled for by the plans herein referred to, and the execution of this conveyance shall act automatically as a waiver to the State of Ohio in the elimination of any direct access to said highway either for present or future construction, except for a driveway 10 feet in width left of station 293+40.

It is further understood and agreed that the consideration for Parcol No. 598....., in addition to the limitation of access as provided above, includes compensation for land taken and all damages accruing from the taking of said Parcel No. 554.

Sheet 3 of 3 sheets.

their heirs, executors, and administrators.

R /77 Form 7 Acknowledgement Revised 9-20-26-C.

assigns forever.

And the said Grantor⁸, for them

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lawful owner.8... of said premises, and are.....lawfully seized of the same in fee simple, and have good right and full power, to grant, bargain, sell, convey and release the same in manner aforesaid, and that the same are free and clear from all liens and encumbrances whatsoever, and that they will warrant and defend the same against all claims of all persons whomsoever. And for the consideration aforesaid Kerby O Kesler and Carrie A. Kesler, husband and wife hereby relinquish to said Grantee, its successors and assigns, all right and expectancy of Dower in the above described premises. Kerby O Kesler and Carrie A Kesler, husband IN WITNESS WHEREOF and wife 25 have hereunto set. their hand "the..... April .day of... in the year of our Lord one thousand nine hundred and. fifty-two Signed and sealed in presence of: do STATE OF OHIO, SS. 3 G COUNTY Wotary Cullic_ in and for said County and State, personally Before me, a appeared the above named Kerky O. Kesler arrie a Kesler act and deed. IN TESTIMONY WHEREOF I have hereunto set my hand and official seal at. ih D 10 11 COV "Harney man My Commission expires. 19

TO HAVE AND TO HOLD said easement and right of way unto the Grantee, its successors and

..and..

POSC LEPPERT NOTARY FUELIC, FRANKLIN COUNTY, OHIO MY LOGARAGION TXPIRES (NOV. 13, 1952)

Abbreviations us	sed without definitions in TRB publications:
Abbreviations us AASHO AASHTO ADA APTA ASCE ASME ASTM ATA CTAA CTAA CTBSSP DHS DOE EPA FAA FMWA FMCSA FRA FTA IEEE	sed without definitions in TRB publications: American Association of State Highway Officials American Association of State Highway and Transportation Officials Americans with Disabilities Act American Public Transportation Association American Society of Civil Engineers American Society of Mechanical Engineers American Society for Testing and Materials American Trucking Associations Community Transportation Association of America Commercial Truck and Bus Safety Synthesis Program Department of Homeland Security Department of Energy Environmental Protection Agency Federal Aviation Administration Federal Motor Carrier Safety Administration Federal Transit Administration Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991 Institute of Transportation Engineers
NASA NCHRP	National Aeronautics and Space Administration National Cooperative Highway Research Program
NCTRP NHTSA NTSB	National Cooperative Transit Research and Development Program National Highway Traffic Safety Administration National Transportation Safety Board
SAE SAFETEA-LU	Society of Automotive Engineers Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
TCRP TEA-21 TRB TSA	Transportation Equity Act for the 21st Century Transportation Research Board Transportation Security Administration
U.S.DOT	United States Department of Transportation