



Project Summary Report 1847-S
Project O-1847: Identify the Legal Issues and
Regulatory Requirements Needed to Establish an Access
Management Plan for Texas

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Summary of Access Management Programs and Practices in the United States

PROJECT SUMMARY REPORT

Access management is a proven successful strategy for state departments of transportation (DOTs) or other transportation entities to improve safety and preserve the functional integrity of arterial streets and highways. Several states have adopted access management programs, implemented access management plans, or used some types of access management techniques. Previous research has addressed related issues, such as the specific benefits of crash reduction, economic impacts on businesses, and operational effects of various access management techniques. However, the research team found no previous significant effort to document established programs in states and the related activities of other states.

The Texas Department of Transportation (TxDOT) strives when possible to improve safety on highways and preserve and improve capacity on roads without having to build parallel or relief routes. With that in mind, TxDOT is starting an investigation into the concept of developing and implementing a

comprehensive access management program for its highway system. This endeavor will likely be very challenging and have widespread effects. As preparation for such a process, TxDOT needs to know what it can legally do now, considering current legislation. TxDOT has also decided that it would be beneficial to learn from other states' experiences of developing and operating access management programs.

What We Did . . .

In the first year of this two-year report, researchers

identified states that had successful access management programs in place or were working toward developing programs. Using contacts made through previous research projects and professional activities, researchers notified DOT staff members in certain states of the project and began discussions about the programs. Five states—Colorado, New Jersey, Wisconsin, Michigan, and Montana—were chosen for in-depth studies, including in-person interviews with DOT staff and observations of



Figure 1. Left-turn lanes remove speed differentials on arterial streets



techniques being used. Researchers asked representatives from each of these states questions from a survey instrument developed during the project. This effort provided a great amount of information about access management programs and activities in the various states.

Two additional states, Oregon and Hawaii, were investigated to lesser degrees. Oregon was studied before the formal survey instrument was developed due to the convenience of being able to interview that state's access management coordinator at a conference. Conversations with another state

DOT staff member led to a contact with Hawaii DOT. That individual provided information about access management activities there.

Also, beginning in the first year of the project, the research team investigated the legislative environment in Texas. Researchers also identified pertinent legal cases from around the country. This effort resulted in a white paper, "Access Management Strategy in Texas: Legal and Policy Considerations," which was completed in the second year of the project.

The research team created a survey instrument for TxDOT District staff in the second year of the project. This survey asked 10 questions that were designed to determine levels of knowledge among various employees in the District Offices. Seventy staff members from 22 of the 25 District Offices responded to the survey, providing interesting and valuable insight into their perspectives and understandings of access management issues.



Figure 2. Access management treatments separating driveways from through traffic



Figure 3. U-turn jughandle facility

What We Found . . .

The interviews with state DOT staffs showed that there are several different ways to develop an access management program. Some specific variances are due to political, legislative, and prioritization situations from state to state. In general, the states that have had the most success with access management have comprehensive programs and supporting legislation.

One observation that was made several times in different places was the fact that fast food restaurants, gasoline stations, and big box stores



were located on streets where direct access was not present. In these cases indirect access was provided via shared driveways on side streets. In other locations, similar establishments were built in locations where shared, indirect access was provided to the arterial street. These examples contradict the commonly heard statements of business owners that indirect access, especially as the result of retrofit projects, is detrimental to their businesses.

The research team also identified physical treatments that state DOTs use to implement their access management programs and plans. Some of these treatments are somewhat traditional, such as the left-turn lane (shown in [Figure 1](#)) that is used to separate turning vehicles from through traffic. Another traditional treatment is the separation of driveways from through traffic, as presented in [Figure 2](#). Researchers also found some innovative treatments, such as a jughandle U-turn facility in New Jersey, shown in [Figure 3](#). [Figure 4](#) illustrates the use of an auxiliary lane on an arterial street, as well as an entrance with a large turning radius into a shopping center. The sweeping design of this entrance allows vehicles to enter the driveway at relatively high speeds, decreasing the speed differential between turning and non-turning vehicles.

Finally, the research team learned lessons from the experiences of state DOTs that had already developed and implemented access management programs, as well as those that were in the process of establishing programs. One of the lessons learned was to involve as many internal and external

stakeholders as possible as early as possible in the process. Researchers also found it important to obtain and present data, such as crash data and related costs, to the public, as well as costs of building parallel or relief routes and street capacity improvements that support the benefits of access management strategies. These lessons and others led the research team to make several recommendations.

The Researchers Recommend . . .

The research team developed the following recommendations for TxDOT consideration as it prepares to develop a comprehensive access management program:

- Identify internal and external stakeholders that will be involved.
- Involve all stakeholders from the earliest points in the process as possible.
- Form committees of TxDOT staff members to participate in program development.

- Gather statistical and other supporting information (e.g., crash records and related financial benefits, costs of building alternate facilities instead of implementing access management techniques).

- Develop a consistent theme throughout the program that includes issues such as safety, mobility, design, and right-of-way.

- Obtain as much administrative support for the program as possible.

- Inform/educate stakeholders about access management issues.

- Develop specific supporting legislation at some point in the process.

- Develop enforceable regulations.

- Enforce regulations consistently throughout the state, with minimal necessary flexibility.



Figure 4. Auxiliary lane and large turning radius for shopping center entrance



For More Details . . .

This research is documented in the following reports:

1847-1, *Access Management Programs and Practices in the United States*
1847-2, *Access Management Strategy in Texas: Legal and Policy Considerations*

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Related Research:

3904-1, *A Methodology for Determining Economic Impacts of Raised Medians: Initial Development.*
3904-2, *A Methodology for Determining Economic Impacts of Raised Medians: Data Collection for Additional Case Studies.*
3904-3, *A Methodology for Determining Economic Impacts of Raised Medians: Data Analysis on Additional Case Studies.*
3904-4, *A Methodology for Determining Economic Impacts of Raised Medians: Final Project Results.*
Research Project 0-4141, "Techniques for Managing Access on Arterials."

To obtain copies of the reports, contact Dolores Hott, Texas Transportation Institute, Information & Technology Exchange Center, (979) 845-4853, or e-mail d-hott@tamu.edu. See our on-line catalog at <http://tti.tamu.edu>.

TxDOT Implementation Status August 2001

Two products were identified for this project:

1. An assessment of current access management programs in other states and recommendations for developing a Comprehensive Access Management Program for Texas, and
2. A Legislative White Paper. (A legislative action plan and/or draft regulations. Based on experience from other states modified for the Texas context.)

Both products have been received. The first product is being used as guidance as TxDOT continues to develop an access management plan for Texas. It is also providing input for Project 0-4141, "Techniques for Managing Access on Arterials" (TTI, 09/00-08/02). The second product was not received in time for TxDOT to make a proposal to the 2001 Texas Legislative Session. TxDOT will use it to prepare for the 2003 session.

For more information, please contact Dr. Khali Persad, P.E., RTI Research Engineer, at (512) 465-7908 or e-mail kpersad@dot.state.tx.us.

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DISCLAIMER

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