

MINNESOTA DEPARTMENT OF TRANSPORTATION REPORT TO THE 1999 MINNESOTA LEGISLATURE



HIGHWAY ACCESS MANAGEMENT POLICY STUDY

ACCESS MANAGEMENT STEERING COMMITTEE

Dave Ekern - Chair - Director, Mn/DOT Engineering Services

Pat Murphy - Vice Chair - Director, Mn/DOT State Aid

Dennis Berg - Anoka County Commissioner

Nacho Diaz - Director, Transportation Planning, Metropolitan Council

Wayne Fingalson - Wright County Engineer

David Jessup - City Engineer, Woodbury

Bob Johns - Deputy Director, Center for Transportation Studies, U of M

Karl Rasmussen - Mn/DOT State Traffic Engineer

Louis Robards - Assistant Attorney General

Bill Schreiber - Director, Mn/DOT Intergovernmental Policy

Julie Skallman - Mn/DOT State Aid Division Engineer

Dick Stehr - Mn/DOT Metropolitan Division Engineer

Dave Trooien - Mn/DOT District 8 Engineer, Willmar



Mn/DOT OFFICE OF ACCESS MANAGEMENT

Cecil Selness, Director

Peggy Reichert, Land Use Planning

Dave Engstrom, Engineering

Donna Lindberg, Communications and Public Involvement

Marlene Sommerdorf, Administrative Support

***MINNESOTA DEPARTMENT
OF TRANSPORTATION
REPORT TO THE
1999 MINNESOTA LEGISLATURE***

***HIGHWAY
ACCESS MANAGEMENT
POLICY STUDY***

Prepared by the Minnesota Department of
Transportation Office of Access Management.
For further information or additional copies,
please contact:



Minnesota Department of Transportation

Office of Access Management

555 Park Street, Suite 200

Mail Stop 125

St. Paul, MN 55103

(651) 297-3888

January 15, 1999

TABLE OF CONTENTS

Mn/DOT'S ACCESS MANAGEMENT INITIATIVE.....	1
MAJOR FINDINGS.....	2
RECOMMENDATIONS	8
WHY MANAGE ACCESS?.....	12
TRANSPORTATION APPROACHES TO MANAGE ACCESS.....	18
LAND USE APPROACHES TO MANAGE ACCESS.....	27
OBSTACLES TO EFFECTIVE COORDINATION	32
PARTNERSHIPS FOR ACCESS MANAGEMENT	34
LOCAL GOVERNMENT WORKSHOPS.....	36
Appendix	
ACCESS MANAGEMENT INITIATIVE ADVISORY STRUCTURE.....	42
ACCESS MANAGEMENT INITIATIVE TECHNICAL REPORTS.....	46



January 1999,

Pursuant to 1997 Minnesota Session Laws chapter 143 Sec. 19, I am pleased to submit the final report of the Highway Access Management Policy Study. Over the last year and a half, we have gathered information, conducted research, and consulted with the counties, cities, and townships to develop a broad-based approach to improve access management statewide.

Research findings indicate broad public support for access management in Minnesota, but improved cooperation between transportation and land use decision-making is needed to get the job done. Many officials do not have a clear understanding of the impact of their decisions on major roadways. Practitioners in the area of planning and engineering want information, tools, and resources to manage access more effectively.

The study recommendations address the need for education and training to increase awareness of access management issues and techniques. Consistent access management guidelines are needed to coordinate access management-related decisions across jurisdictions.

The recommended strategy requires no special legislative action at this time. It is based on feedback received through intergovernmental workshops held around the state and focuses on what Mn/DOT can do both internally and in cooperation with local governments to manage access more effectively.

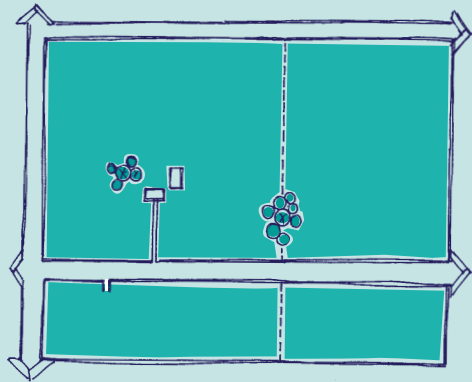
While Mn/DOT is viewed as the appropriate leader to promote access management efforts across jurisdictions, we can't do it alone. Mn/DOT needs to form partnerships with local jurisdictions to coordinate access management with community planning, and encourage appropriate local use of regulatory authority.

Mn/DOT's goal is to develop consistent, coordinated, and comprehensive access management policies and practices that can help us protect the public's investment and better manage Minnesota's roadway system into the 21st Century.

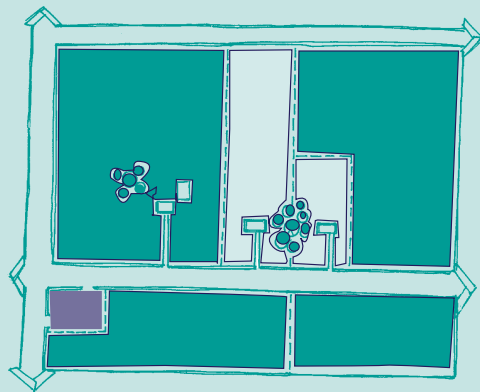
Sincerely,

A handwritten signature in black ink, appearing to read 'Edwin H. Cohoon'.

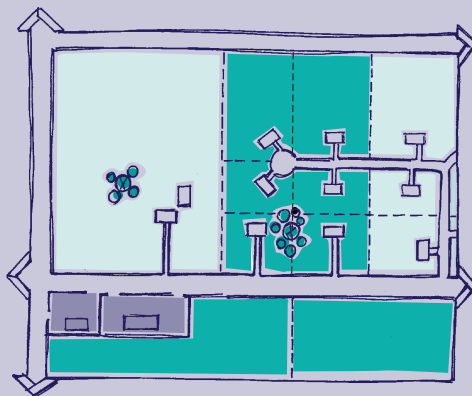
Edwin H. Cohoon,
Acting Mn/DOT Commissioner



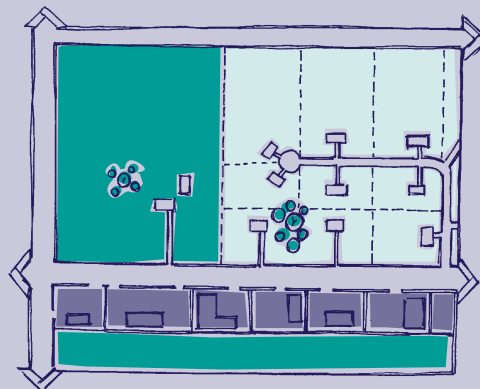
*Small,
uncoordinated land
use decisions...*



*create problems
over time.*



*When problems
become apparent...*



*the best solutions
are no longer
available.*

MN/DOT'S ACCESS MANAGEMENT INITIATIVE

Origins of the Initiative

The 1997 Minnesota Legislature directed the Minnesota Department of Transportation (Mn/DOT) to study and develop recommendations for integrating land use planning, engineering, and legal practices to maximize the operational efficiency and safety of all functional categories of roadways. Mn/DOT established the Office of Access Management (OAM) in March 1997, to work on developing this comprehensive statewide access management policy. The goals of the Mn/DOT Access Management Initiative were to increase awareness about access management issues; assess the extent of the problem in Minnesota; identify potential barriers to the implementation of access management policies; and develop strategies to overcome these barriers.

A Collaborative Approach

From the beginning, Mn/DOT recognized that improving access management would require a collaborative approach because it involves coordinating land use and transportation. Therefore, a broad-based steering committee was formed to provide policy direction. Technical committees were also organized to help analyze engineering, land use, and legal issues. Workshops were conducted around the state to better understand access management issues in each region. Consultations with transportation and land use planning officials at all government levels across the state helped determine the level of need for improved access management and also helped develop recommendations for this report.

Access management is an effort to maintain the effective flow of traffic and the safety of all roads while accommodating the access needs of adjacent land development.

1997 MINNESOTA SESSION LAWS – Chapter 143.

Section 19. [HIGHWAY ACCESS MANAGEMENT STUDY.]

The commissioner of transportation shall gather information and consult with public officials of towns, cities, counties, and other political subdivisions to consider views and proposals for establishing a comprehensive, statewide highway access management policy. The commissioner shall make findings and prepare a report to the Legislature, with recommendations covering a wide range of interrelated land use, engineering, and legal procedures and planning designed to maximize the operational efficiency and safety of all functional categories of roadways. The commissioner of transportation shall submit the report to the Legislature by January 15, 1999.

MAJOR FINDINGS

Access management is a key strategy to preserve and maintain the state's highway system

- 1** Access management is a key feature of Mn/DOT's strategy to preserve and maintain the safety, capacity, and mobility of the state's highway system and link the communities and businesses it serves.
 - This focus on access management is part of a growing national trend, as individual states and communities realize that we can no longer build our way out of congestion.
 - Transportation agencies are seeking better ways to manage their existing systems to meet the demands of continued growth in population, employment, and associated traffic.
 - The proper spacing and design of access along our highways can improve safety, protect capacity, and prevent costly and premature reconstruction that is highly disruptive to communities and business interests.
 - The public expects all governmental agencies to work together to address issues that threaten their safety and mobility.
- 2** The continued growth and vitality of the entire state of Minnesota depend largely on the ability of our transportation system to provide the mobility we need.
 - Minnesota's growth and economic expansion put tremendous pressure on our state highways, especially around the edges of the Twin Cities and our other metropolitan and regional centers.
 - Almost 60% of the travel throughout the state is concentrated on 9% of all the roads—the state's trunk highways. An additional 21% of the travel is on major county roads that make up 23% of the statewide road network.
 - Safe, free-flowing highways are essential for the continued growth of the statewide economy and the viability of each local community.
 - Few additional roads are being built and the capacity of our existing major roadways is being gradually consumed. Uncoordinated and unplanned access accelerates this process, leading to increased congestion and decreased traveling speeds.

- The major highways and arterials must be reserved for inter/intra-state and regional travel. Access management is critical to protecting the essential function of these roadways and to linking them to the communities and businesses they serve.

3 Access-related crashes cost lives, injure people, and damage property.

- Vehicular crashes at access points along Minnesota state highways led to an estimated 183 fatalities, 10,814 personal injuries, and 20,236 incidents of property damage each year in 1996 and 1997.
- Increasing the number of accesses to the highway increases the number of conflict points, resulting in more crashes.
- Analysis of crashes in Minnesota indicates that as access points increase along a stretch of highway, the crash rate also increases.
- This positive relationship between access and crash rate holds true whether the highway is a low-volume, two-lane rural road or a highly traveled, four-lane urban expressway.

4 Managing access involves the use of medians, turn lanes, and traffic signals; the spacing and design of intersections and driveways; and the construction of service roads and supporting local streets.

- Each of these techniques eliminates conflict points and separates traffic movements for safety, efficiency, and ease of access.
- To be most effective, these techniques need to be applied with consistency during the initial phase of a community's development process.
- Currently, there are no commonly accepted and consistently applied guidelines for managing access to the various types of roadways throughout Minnesota. Access management practices and definitions of appropriate access levels vary throughout the state, leaving local communities, land owners, and developers without clear expectations and predictability.
- Fixing access-related problems along the highway after development occurs is very costly and disruptive to the local community.

Road authority tools to manage access are essential but not sufficient to do the job.

5 Authority to regulate access under the police powers of the state is limited by the constitutionally protected access rights of abutting land owners.

- Access is a property right, protected by the U.S. and Minnesota Constitutions. It may be regulated, but not “taken” without compensation.
- Minnesota courts have established that abutting land owners have a right to “reasonably convenient and suitable access to the main roadway in at least one direction.”
- There are no clear guidelines for interpreting the right of access. It is decided by the courts on a case-by-case basis.
- The road authority may regulate property access by permit subject to the property owner retaining reasonably suitable and convenient access. Depending on the circumstances, access may be limited in terms of the number and location of driveways; access may be limited to right-in/right-out only; access may be somewhat circuitous via a service road or local street.

6 Purchasing access control is effective if done before major development has occurred, but is very costly and disruptive if required to address retrofit situations.

- The most straightforward way for Mn/DOT to ensure the proper spacing and design of access along the state’s major highways would be to purchase the access rights of abutting land owners.
- The purchase price for access control along all the major highways and arterials serving high-growth areas, where the need is greatest, would far exceed reasonably available resources.
- The cost of purchasing access control along developing and fully developed corridors is escalating rapidly as land values increase.

7 Successful access management requires careful coordination between land use and transportation objectives. In Minnesota, the responsibilities for managing transportation and land use are segmented.

- Mn/DOT and the counties have primary responsibility to manage the safety and operations of the state's highways and major arterials.
- Cities, townships, and counties within unincorporated areas have the authority to plan and manage land use.

8 Local government land use decisions have major impacts on the access conditions along the highway.

- Every time the local jurisdiction approves a land subdivision, a new bundle of access rights is endowed on each newly created lot.
- If the subdivision has been well designed, these lots will be accessed via internal streets connected to the highway at properly spaced intersections, and not by individual, direct driveways onto the highway.
- Cities, townships, and counties have broad authority to plan and regulate land use through zoning and subdivision controls and thereby manage access, if they choose to do so.

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

- Lack of knowledge and understanding. Many local officials are simply not aware of the problems that can result from poorly spaced or designed access along the major highways. Others seem to feel that highway operation issues are not their concern or responsibility. Many are not aware of the techniques of access management and do not have adequate technical support for their development review process.
- Problem time lags. Access-related problems may not show up immediately. Large problems arise from many small, uncoordinated decisions over time. When the problem becomes apparent, the best solutions are usually no longer available.

Mn/DOT cannot manage access on its own; local governments throughout Minnesota must share the responsibility.

- Local desire for development. Developers and businesses may press local officials for more direct access to the highway because it is quicker and cheaper than constructing local streets or service roads, or because they believe direct access is essential to the success of their enterprise.
- Lack of shared vision and common guidelines. Mn/DOT and county road authorities have not developed a shared vision of appropriate access spacing and design with local communities. There are no uniform guidelines in place to provide the basis for consistent access management practice across jurisdictions.
- Complex access laws. The laws of access are complex and require interpretation on a case-by-case basis. Without clear guidelines, local officials are understandably cautious when dealing with the very sensitive issue of property rights.
- Limited funding options. Access management may be cost effective in the long run, yet requires up-front expenditures for planning and local roadway improvements. Limited funding options may constrain the local community's ability to plan and construct an adequate supporting road network.

10 At present, few formal linking mechanisms exist to encourage and support coordination and partnership between those jurisdictions responsible for managing the major highways—Mn/DOT and the counties—and those jurisdictions responsible for managing land use—primarily cities and townships.

- Mn/DOT's role in local land use decisions is generally limited to review and comment on new plats only. There is no formal requirement for local communities to obtain Mn/DOT input prior to decisions on comprehensive plans, rezonings, or land subdivisions by other means than platting.
- Mn/DOT's comments are not binding on local land use authorities. If a local authority approves a development with poorly designed or located access to the state highway, Mn/DOT may have no choice but to issue an access permit, if no other "reasonably convenient and suitable" access is available.
- Counties throughout Minnesota are similarly constrained in their authority to influence the access-related features of new development within their municipalities. County officials have suggested that they should be given a stronger role in the approval process for plats adjacent to county roadways.

11 Strengthening the partnership among Mn/DOT, counties, cities, and townships will require a comprehensive strategy. There is no simple solution to address the full range of obstacles.

- Workshop participants throughout the state cited the lack of coordination and common vision among the partners as major obstacles to effective access management. They supported various approaches to improving communication, coordination, and collaboration across jurisdictions and said that Mn/DOT should take the lead in fostering partnerships.
- Participants were split on whether cooperation should be gained voluntarily or by legislated mandate.
- In either case, they supported broad-based educational programs, a statewide access classification system, and expanded funding options for access management planning and related roadway improvements. Many suggested an incremental approach, beginning with information and incentives for cooperation, and moving to mandates if needed at a later date.

As long as land use and transportation responsibilities remain segmented, intergovernmental partnerships will be essential.

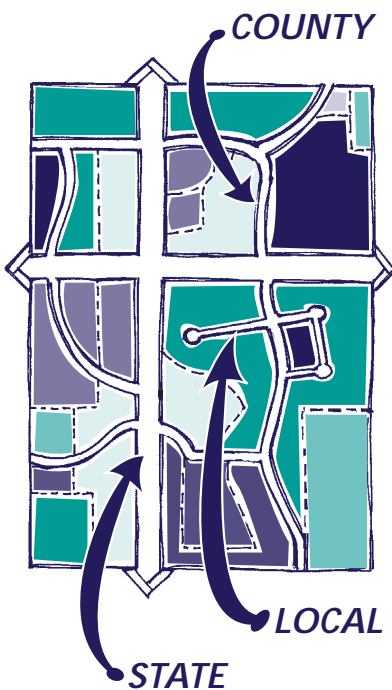
RECOMMENDATIONS

Mn/DOT Should Take the Lead

Mn/DOT should take the lead to improve access management practices across all jurisdictions as a key strategy to maintain the safety and mobility of the state's highways and major arterials.

Take an Incremental Approach

Based on the findings from our research and workshops, an incremental approach is recommended, beginning with efforts to achieve voluntary cooperation among governmental jurisdictions, and moving to stronger intervention through legislative mandates only if deemed necessary to obtain full coordination.



The goal is to improve cooperation on a voluntary basis.

1. Effective access management will require closer cooperation and coordination among agencies responsible for managing the major roadways (primarily Mn/DOT and the counties) and agencies responsible for managing land use (primarily cities and townships).
2. Education, training, and technical support are essential first steps that may go a long way toward achieving the necessary level of cooperation and consistency among the jurisdictions on a voluntary basis.
3. An initial two-to three-year education and demonstration effort should be carried out to build a common base of understanding throughout the state. Mn/DOT should establish an advisory committee of state, county, and local officials to assist in the oversight and evaluation of this first stage and the identification of necessary next steps.
4. Full statewide consistency among jurisdictions may not be achievable through education and voluntary cooperation alone. Stronger intervention by the Legislature may be required, such as mandating local adoption and enforcement of statewide access standards or giving Mn/DOT and the counties stronger oversight of local decisions impacting access to the major highways. This option should be reserved for later consideration, after a strong effort has been initiated to develop a broader understanding among local governments of the benefits and techniques of access management.

Start with Guidelines, Education, and Demonstration Projects

1. Establish an access classification system and spacing guidelines.
 - a. To provide a common basis for decision-making by all jurisdictions, Mn/DOT has begun developing an access classification system and recommended spacing guidelines. These draft guidelines need to be further tested and expanded to include procedures for application to both the design of new and reconstructed roadways and the evaluation of proposed plats or access permits. Mn/DOT should consult with the affected local jurisdictions when assigning access classifications to roadways, and use this opportunity to communicate the fundamental benefits and methods of access management.
 - b. Mn/DOT should appoint an intergovernmental committee of engineers, planners, and economic development officials to advise the department on the completion of the access classification system and spacing guidelines. This broad committee membership is intended to ensure that all perspectives are considered and the guidelines are appropriate across all functional classes of roads and in different urban and rural settings.
 - c. After this period of testing and further refinement, the guidelines should be established as policy for the state's trunk highway system. The guidelines should be published as advisory recommendations for use by county and city road authorities as well as metropolitan and regional transportation planning agencies.



2. Provide education, training, and technical support.

- a. Mn/DOT should initiate a broad-based access management education and training program for both professionals and elected officials working at all levels of government as well as developers, the business community, and the general public. Mn/DOT districts should also be available to provide ongoing, hands-on technical assistance as requested by local communities dealing with access management issues.
- b. Mn/DOT should work with established venues for outreach, including the Minnesota League of Cities, Association of Minnesota Counties, Association of Minnesota Townships, University of Minnesota, Local Road Research Board, Government Training Service, and various professional planning and engineering associations.
- c. Technical assistance should be provided to planning and engineering practitioners through training seminars, written materials such as handbooks and model ordinances, and access to specialized expertise within Mn/DOT, local governments, and the consulting community.
- d. To assist both practitioners and elected officials, Mn/DOT should conduct and disseminate case studies that document the impacts of various access management improvements in terms of resulting highway safety, congestion reduction, adjacent business activity, and local community satisfaction.



3. Evaluate the potential for intergovernmental collaboration through demonstration projects.

- a. Mn/DOT should conduct a series of demonstration pilot projects over the next two years to test the feasibility of a comprehensive corridor access management plan. Pilot projects should be conducted on segments of several different interregional corridors across the state and involve the affected cities, townships, and counties. Each plan should identify the most appropriate and cost-effective mix of potential access management tools for the corridor, including:
 - Purchase of access control
 - Access-related improvements to the trunk highway (e.g., medians, turn lanes, signals)
 - Access-related improvements to the local supporting road system (e.g., service roads, extension of local arterials)
 - Regulation of new or consolidated access through local subdivision and zoning ordinances
- b. Each pilot should also seek to develop a unified plan agreed upon by all affected parties, including an implementation schedule and funding strategy.

4. Ensure that capital funding is available for access management efforts.

- a. Mn/DOT should review the trunk highway and state aid funding eligibility and criteria to ensure that access management improvements can be effectively funded. This review should use the pilot projects as case studies for identifying potential gaps in current funding criteria and eligibility.
- b. Each Mn/DOT district and the Metropolitan Division should continue to assess the most cost-effective approaches to access management and ensure that funding is allocated properly among programs that provide 1) trunk highway improvements and purchase of access control, 2) incentives for local cooperation and supporting road networks.

WHY MANAGE ACCESS ?

Minnesota is Growing

Minnesota is one of the fastest-growing states in the Midwest. Minnesota's population increased 7.1% between 1990 and 1997 compared with 7.3% growth during the full ten years between 1980 and 1990. The greatest increase has been focused around the metropolitan areas of the state including St. Cloud, Rochester, and the twin cities of Minneapolis and St. Paul. But communities in the high-amenity North Lakes region are also experiencing rapid growth. Even in counties with little net population increase, economic development on the urban edges is creating access-related problems.

Recent demographic studies indicate that Minnesota will continue to grow in its urban and urban-fringe areas over the next 30 years. By the year 2010, there will be 40% more miles of travel on our road system. However, because of limited resources and concerns for the environment, the 130,000 miles of roadway constructed over the last 40 years in Minnesota will not increase significantly. The challenge into the next millennium will be to manage our existing roadway system in an environment of rising demands.

The Problem

- *Many major roads are congested.*
- *Traffic is increasing in our urban areas and tourism centers.*
- *Safety is being compromised on all roads.*
- *Fixing access-related problems is costly.*



WHY MANAGE ACCESS ?

Growth Puts Pressure on Our Highways

All this growth puts pressure on our highway system. The Minnesota trunk highway system accounts for 9% of the state's total road miles but carries almost 60% of the traffic. The county state aid highway system accounts for 23% of the total system and carries 21% of the traffic. The bulk of traffic is concentrated on a small, dense portion of our system - a system that is becoming more congested every day.

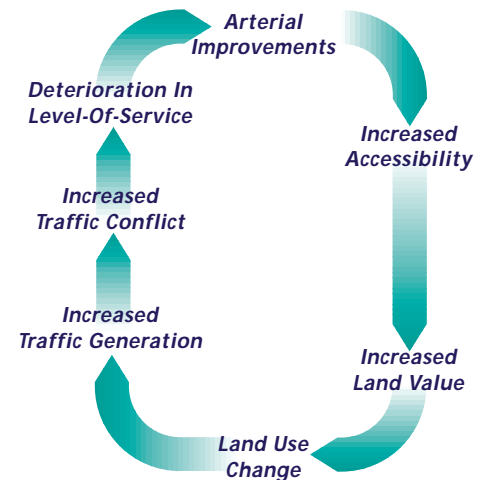
In the past, we solved traffic congestion and safety problems caused by poor access by widening roads or adding new roads. But new businesses locate along these new, improved roads and attract additional traffic. Sooner than later, the road again becomes congested and the cycle begins anew. Access management can help communities break this cycle.

Statewide Mobility is Essential

The entire state's economy is affected by how safely and quickly people, goods, and services can travel within the community and between communities around the state. By balancing mobility and access, our entire roadway system will work more efficiently.

Communities in every corner of the state depend on this balance for their economic vitality:

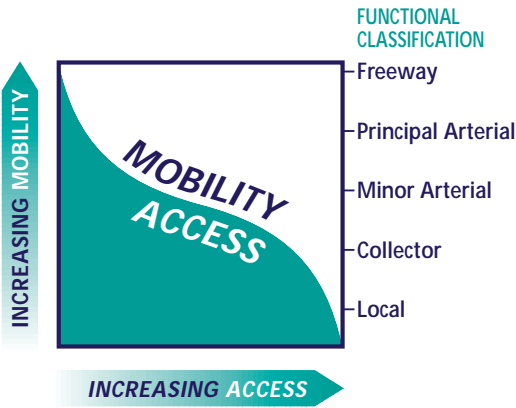
- Tourism areas of the state depend on travelers getting to their cabins, resorts, and recreational spots safely and in a timely manner.
- Retail sales are also dependent on an efficient roadway system. Traffic congestion on roads around retail centers or along strip malls can turn customers away from businesses.
- Access-related problems can also have an effect on the employment base. Congestion and backups reduce the distances that people are willing and able to travel to get to work. This is particularly important in greater Minnesota where jobs and employees are more widely dispersed.
- The trucking industry relies on a safe, reliable interconnecting road system to move goods around the state. If trucks get caught in congestion or are involved in crashes, delivery costs go up. The price we pay for our products reflects those costs.



Transportation/ Land Use Cycle

Safe, free-flowing highways are essential for the continued growth of the state's economy and the viability of each local community.

WHY MANAGE ACCESS?



Different Roads Serve Different Purposes

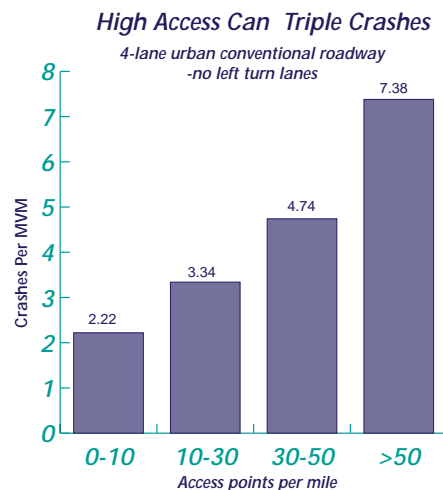
Mobility and access become competing forces on the roadway system. It's impossible to provide a high level of both on the same road. An integrated system of roads is needed in which different roads can be designed to serve different purposes. Freeways and highways should provide a quick connection between communities. Local streets and minor roads should provide the access needed to businesses and services within a community. In Minnesota, many principal and minor arterials are not serving their intended purpose because of increased or poorly planned local access and an insufficient local road network.

The major state highways and arterials must be reserved for inter/intra-state and regional travel.



Safety is Compromised

Access-related crashes are costing lives, injuring people, and damaging property. An estimated 183 fatalities, 10,814 injuries, and 20,236 property damage crashes were associated with access movements annually during 1996 and 1997. This translates to almost \$½ billion dollars in costs to Minnesota drivers. Workshop participants almost unanimously agreed that safety was one of the most compelling reasons for better access management.



Adding access creates conflict points that increase the potential for crashes. The relationship is direct. A recent Mn/DOT study, “The Statistical Relationship Between Vehicular Crashes and Highway Access,” documents the correlation between density of access and crash rates for different types of roadways in different environments. The major conclusion from the report is that increasing density of access results in increasing crash rates on all roadways, but it is more severe in urban environments. Similar studies in the states of Colorado, Connecticut, Michigan, Oklahoma, and Oregon have also determined that frequency of access affects crash rates.

Participants in our market research study expressed their understanding of these safety concerns by identifying high access areas that they felt were unsafe. The majority of motorists on our roadways live in the surrounding communities and have to deal with access problems on a regular basis. As the population ages, the need to provide safe ways to get on and off of the road will increase. Reducing accesses can be an effective tool in limiting the number of vehicular crashes.

WHY MANAGE ACCESS?

The challenge now is to preserve and manage our existing transportation system.

Access Management is a Key Strategy to Manage the Highway System

America has completed the longest public works project ever undertaken - constructing the interstate freeway system. In Minnesota, we now have a complete network of freeways and principal arterials linking all parts of the state. Few additional major links are planned to be added. Our challenge now is to manage and preserve our tremendous investment from the past 40 years. Mn/DOT's strategy for the 21st Century is to operate, manage, and preserve the existing transportation system in coordination with local governments. Access management is a key element of that strategy.

Access Management is a Nationwide Effort

This focus on access management is part of a growing national trend, as individual states and communities realize that we can no longer build our way out of congestion. Transportation agencies are seeking better ways to manage their existing systems to meet the demands of continued growth in population, employment, and associated traffic. The proper spacing and design of access along our highways can improve safety, protect capacity, and prevent costly and premature reconstruction that is highly disruptive to communities and business interests. The public expects all governmental agencies to work together to address issues that threaten their safety and mobility.

Minnesota Drivers Support Improved Access Management

Market research was used to gain a better understanding of Minnesota drivers' views of access management. Public discussions in focus groups were conducted in early 1998, in four study areas adjacent to state highways in Minnesota. The discussions confirmed that the public understands that poor access management contributes to congestion and accidents. Participants said state highways should be designed to serve the longer state and regional trips. They want good access to local destinations, but do not expect direct access from the highway to local land uses. They are willing to drive farther to achieve safe, convenient access. Participants expressed the belief that Mn/DOT should be responsible for managing access and assumed that the agency had authority to regulate access.

Benefits of Access Management

Good access management practices can help:

- Reduce congestion and accidents
- Preserve road capacity and postpone costly reconstruction
- Reduce travel time for the delivery of goods and services
- Provide easy movement to destinations
- Promote sustainable community development
- Reduce stress and environmental impacts

TRANSPORTATION APPROACHES TO MANAGE ACCESS

Transportation-Related Approaches to Manage Access Include Engineering, Regulatory, and Financial Tools

Mn/DOT and local road authorities can take three basic approaches to manage access on their roads:

- 1) The design of the roadway itself and the application of traffic management techniques
- 2) The regulation of access through permitting
- 3) The purchase of access control

Each of these approaches has its strengths and limitations. While each is important for effective access management, no one approach can stand alone. Even used together, they cannot overcome the effects of uncoordinated development.



Reducing Traffic Conflicts Promotes Safety and Protects Capacity

Every intersection or driveway represents a potential point of conflict between vehicles entering, exiting, or crossing the roadway. As these access points along a roadway increase, the potential for conflict rises, leading to an increase in crashes and congestion. A variety of common roadway design and traffic engineering techniques are used to reduce potential vehicular conflicts.

These tools are applied to limit the total number of conflict points, separate the conflict points in order to provide sufficient reaction time, remove turning vehicles and queues from through movements, and reduce conflicting traffic trying to cross, enter, or exit the roadway.

For example, a typical four-way intersection poses a total of 32 potential conflict points. Extending a median through the intersection would eliminate left turns and reduce the potential conflict points to four. To strike the right balance between the need for safety and the need for access, these design and engineering techniques need to be applied in a systematic manner along a roadway corridor.

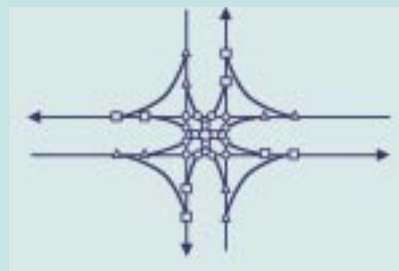
The roadway design and traffic engineering tools to manage access include:

- *Driveway closings or consolidation*
- *Driveway spacing*
- *Turn lanes*
- *Traffic Signals*
- *Medians*
- *Front or back service drives*
- *Bypasses*

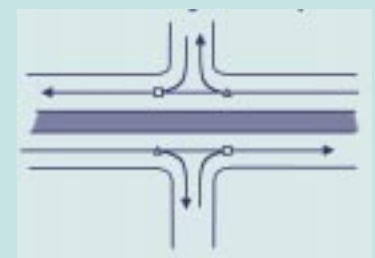
Conflicts = Crashes



A Typical Intersection Has 32 Conflict Points



A Center Median Reduces Conflicts From 32 to 4



Traffic Engineering Tools Have Limits

Roadway design and traffic engineering tools will only be effective if applied in a consistent manner across jurisdictions. Even if a roadway is originally designed well, it can be corrupted over time by adding too many or poorly designed driveways and intersections. Accidents and congestion will increase. Eventually, the road may need to be widened or reconstructed to handle all the additional traffic and turning movements generated by these accesses.

Too often, traffic engineering approaches have been considered only to solve existing problems, after they become apparent, rather than to prevent problems. To be most effective, traffic engineering for access management should be applied early in the community development process. Fixing problems after the fact can be very expensive and disruptive to a community.

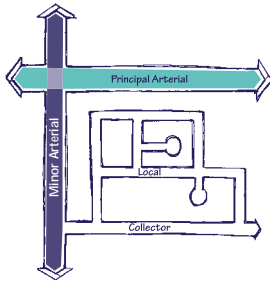


Access Classification System Proposed to Support a Common Approach

Current roadway design and traffic engineering approaches to access management vary widely across jurisdictions in Minnesota. The Engineering Technical Committee found that the lack of commonly accepted and applied access guidelines creates a major gap in current statewide practice. They have recommended that Mn/DOT develop an access classification system with associated guidelines to provide a common basis for coordinated action.

The proposed approach to an access classification system reflects the basic concept that different roads are needed to serve different purposes. Each roadway would be segmented and categorized based on three factors:

• Functional Class of Roadway



• Character of Surrounding Development



• Roadway Design

- Divided
- Undivided

The spacing of intersections and driveways would vary according to the access classification of the road. The proposed access classification system is designed to apply to all roads in the state regardless of jurisdiction. The guidelines would address how the recommended access spacing and design should be applied in:

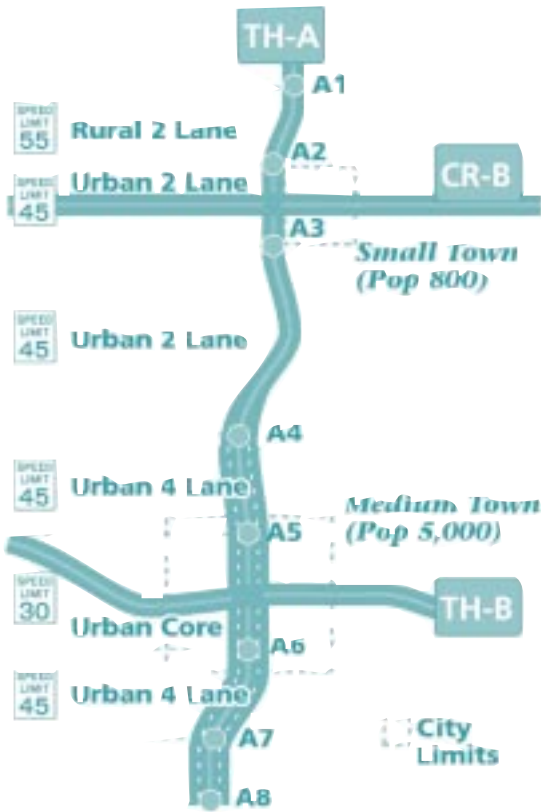
- The design of new or reconstructed roads
- The design of access to new development and the layout of local road systems
- The design of redevelopment along fully developed corridors
- The regulation of access through permits

**Access
classification
of a roadway**

Roadways Must Be Classified Cooperatively

To be effective, classifying the roadways must be a cooperative effort. Mn/DOT, and other road authorities, in cooperation with cities, counties, and townships, need to classify all major roadways according to their function and the adjacent land use. All partners need to agree on the assigned classification and understand the implications for access spacing and design.

Classifying the roads for access purposes is not intended to limit development or to immediately change existing access. Bringing a roadway into conformance with the appropriate access spacing for its classification will be a long-term process as opportunities arise to improve conditions. For example, as older properties are redeveloped, it may be possible to consolidate driveways or relocate them to achieve safer spacing.



**Preliminary Guidelines
Need Testing**

The access classification guidelines are now in preliminary draft form. The Engineering Advisory Committee did the initial work of establishing the classes and associated spacing standards. Now the guidelines need to be reviewed by local stakeholders and then tested in the field for a while before they are finalized. They should then be established as Mn/DOT policy for road improvements and construction and be made available as guidelines for counties and cities.

Property Access to Highways is Regulated

The second major approach that Mn/DOT and other road authorities use to manage access is the regulatory permit process. When faced with an access permit request, however, the road authority can't just say "No." The authority to regulate access is limited by the constitutionally protected access rights of abutting landowners. In Minnesota, as in every other state in the United States, access is considered a property right protected by the state and federal constitutions. Access may be regulated, but not "taken" without compensation.

The legal framework for managing access is complex and defined largely by an evolving body of case law. As such, the laws of access management are not easily understood and applied by local officials and permitting practitioners. Two primary legal concepts are involved:

- An abutting property owner's right of access
- The public's right to safe and efficient movement on the roadway

Access to the Abutting Roadway is a Property Right

Minnesota case law has established that abutting property owners are entitled to "reasonably convenient and suitable access to the main thoroughfare in at least one direction." The definition of "reasonably convenient and suitable" is not precise and is decided by the courts on a case-by-case basis. The courts consider the access needs of the specific property use. The court's view of "reasonable" access evolves over time. In recent decisions, the court seems to recognize the increasing scale and intensity of urban development and the need for a more sophisticated network of different types of roads serving different purposes. What constitutes "reasonable" access may not only vary by individual property use but also by the intended purpose of the abutting roadway.

The United States Constitution, 5th Amendment states, "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."

The Minnesota Constitution, Article 1, Section 13 provides, "Private property shall not be taken, destroyed, or damaged for public use without just compensation therefor, first paid or secured."

Access Can Be Regulated For Public Safety

Access management involves the exercise of general police powers of the state to provide for safe use of the highway. If a regulation or restriction falls within the state's police power, no compensable loss has occurred. This regulatory authority is generally restricted to actions that apply to all motorists.

Over the years, Minnesota courts have found a number of the traditional engineering approaches to managing access to constitute the lawful exercise of the state's police powers. These include the provision of medians, restrictions on left and right turns, and the construction of bypasses that divert traffic to alternative roads. Although these traffic management techniques may affect access to a given property, they do not constitute a taking. For a compensable taking to occur, damages must be peculiar to a property, and not common to the public at large.

The authority to regulate property access by permit is also derived from the general police powers of the state. Minnesota Statute 160.18 further specifies that property access to the highway is subject to "reasonable regulation" and permit as necessary to promote public safety.

Permitting Must Promote Public Safety While Respecting Property Rights

In considering whether to issue a permit for a specific access request, Mn/DOT, or any other road authority, must continue to fulfill its responsibility to protect the rights of the traveling public as well as the rights of the property owner. Case law, as it has evolved over the years in Minnesota, provides the parameters for defining these related responsibilities.



Current Minnesota case law generally supports that:

- The denial of complete access to a property will constitute a taking, requiring compensation to the landowner for the value of the loss in access.
- An abutting landowner does not have the right of access to any and all points along the highway. The permitting authority may limit the size, number, and location of driveways serving an individual parcel.
- Access need not be the most convenient or direct. Somewhat circuitous, indirect access via a system of local roads may be reasonable and suitable.
- Access may be limited in one direction—allowing only right-in and right-out access.

Guidelines and Early Consultation Can Improve Permitting Practice

The evaluation of permitting practice around the state revealed a number of areas for potential improvement. Currently, access permitting standards and practices vary widely across Minnesota jurisdictions and Mn/DOT's districts. Many permitting authorities lack written policies and guidelines. Too often, each access request is treated as a unique issue for negotiation, with the outcome reflecting the power of personalities or the threat of a lawsuit, rather than the application of consistent guidelines and criteria. Developing common guidelines for access classification and spacing should improve coordination and consistency across jurisdictions. Training for permitting officials should provide guidance in applying spacing guidelines within the legal parameters of case law.

Permitting officials also expressed frustration with not being involved early enough in the local community development process to be effective. Too often, the last step in a developer's approval process is requesting an access permit. By then, the development plans are not easily changed to accommodate good access design. The spacing guidelines should provide local landowners and developers with clearer expectations as they design access to their individual real estate projects. Consistent guidelines across jurisdictions should also provide the predictability and level playing field in terms of allowable access that developers want.

Purchase of Access Control is Effective But Costly

The most straightforward approach to assuring the proper spacing and design of access along the state's major highways is to purchase the access rights of abutting land owners and prohibit access.

Mn/DOT, and other road authorities, may purchase access rights in order to prevent additional future access to an existing roadway or to close an existing access that poses an immediate safety hazard. Access rights may also be purchased as part of the right-of-way acquisition for new or reconstructed roads.

While the purchase of access rights may be very effective, it is also very expensive. The purchase price for access rights along all the major highways and arterials serving high-growth areas, where the need is greatest, would far exceed reasonably available resources. In the urban centers of the state, the land abutting the major highways and arterials is already developed or developing. Land values are high and rapidly escalating. The cost to acquire access rights may equal the full value of the entire parcel. In urban areas, the purchase of access control is usually only justified when required as part of right-of-way acquisition for roadway construction.



LAND USE APPROACHES TO MANAGE ACCESS

Road Authorities Cannot Manage Access Alone

A key finding of this Initiative is that Mn/DOT, and other road authorities, cannot manage access on their own. Local governments throughout Minnesota must share the responsibility because their land use decisions profoundly impact the character of access along our roadways.

Land Use and Transportation are Mutually Dependent

Land use activity places demands on the transportation system. At the same time, the accessibility provided by the transportation system is one of the major determinants of land use and real estate patterns. For long-term success, decisions made in one arena must take into account the potential impacts on the other. A community's long-term development prospects can be diminished by an inadequately planned transportation system. On the other hand, poorly planned development can severely reduce the effectiveness of an otherwise adequate transportation system.

Land Use and Transportation Responsibilities are Segmented

One of the major hurdles to fully coordinating land use and transportation is that management responsibilities are segmented. Mn/DOT and the counties have the primary responsibility for managing the safety and operation of the state's highways and major arterials. They have only a limited advisory role in land use decisions.

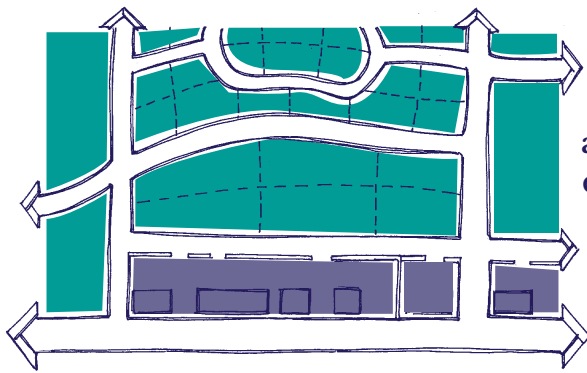
Cities, townships, and counties within unincorporated areas have the authority to plan and manage land use. Throughout most of Minnesota, community-wide planning and land use regulation is a local option. The Twin Cities metro area is the major exception where state statute requires local comprehensive planning.

*Successful
access
management
requires
linking land
use and
transportation
through
improved
coordination
between state
and local
governments.*

Local Land Use Decisions Impact Transportation

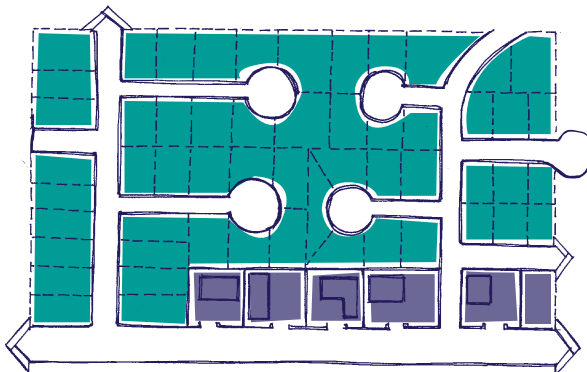
Local government land use decisions have a major impact on the access conditions along the major state and county highways throughout the state. Every local land use plan amendment, subdivision, rezoning, conditional use permit, or site plan involves access and creates potential impacts on the safety and mobility of the transportation system. Local communities exercise exclusive authority over the access features of these land use developments.

Local Governments Can Choose to Manage Access



Every time a local jurisdiction approves a land subdivision, each newly created parcel is endowed with access rights. If the local community supports good design, these new lots will be provided access from neighborhood streets connected to the highway at properly spaced intersections.

Do



If the local community fails to consider access, the same subdivision may be designed with a series of lots with direct driveway access to the adjacent highway. Even though this manner of access would degrade the safety and mobility of the roadway, once the plat is approved by the local government, each lot has access rights. Legally, Mn/DOT, or the road authority, will have no choice but to approve a driveway permit for each individual lot if there is no alternative method to provide “reasonably convenient and suitable access.”

Don't

Required Coordination of Land Use and Transportation is Limited

Statutory requirements for linking local land use decisions to transportation system impacts are limited. Local communities are required to submit proposed plats abutting state and county roads to the affected road authority for review and comment prior to final local approval. But these comments are advisory only, and are not binding on the local jurisdiction.

Transportation impacts are also evaluated for certain large-scale developments that require environmental impact assessment. But the information generated is also largely advisory in nature.

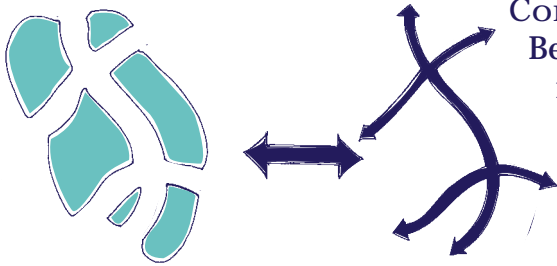
The greatest need for coordination is between cities and the road authorities. But cities are not even required to consult with Mn/DOT or the county before adopting comprehensive plans or approving rezonings, conditional use permits, or site plans.

Nevertheless, many cities and townships voluntarily seek and follow the advice of road authorities concerning the access implications of their land use. These communities realize that good access management is not only the concern of transportation agencies, but has a local payoff as well.

Community Benefits Of Access Management:

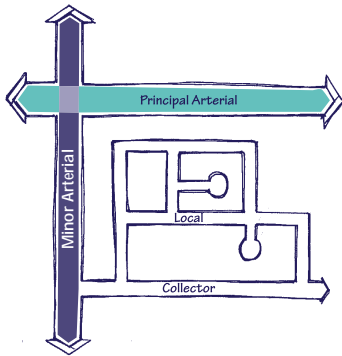
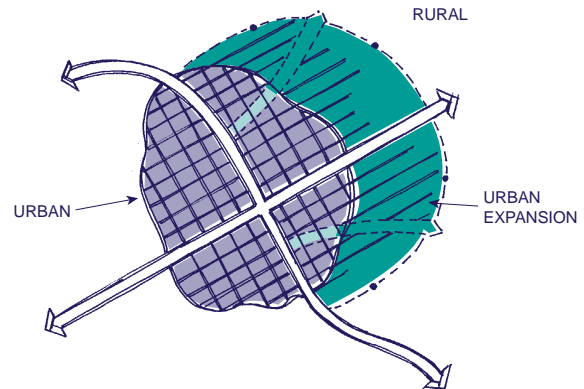
- Supports desired development
- Provides landowners and businesses with safe access
- Prevents the need for costly, disruptive reconstruction
- Protects neighborhoods from unplanned through traffic
- Expands the market area of the local business community
- Sustains land values and economic base
- Enhances community appearance

What Can the Local Community Do To Ensure That Good Access Management is Part of Its Land Use Practice?



Consider land use and transportation together. Before approving a subdivision or rezoning land for a new use, consider what type of supporting road system is needed to support the development and link it to the surrounding area or neighborhood.

Identify and plan for growth areas. Incremental and uncoordinated development will not lead to a livable community and healthy business climate. Support individual private investment decisions by providing a community plan for land use and transportation.



Invest in an adequate local road system. A viable community requires a variety of roadway types organized as an integrated system. Different roads serve different purposes. Develop an adequate network of collectors and minor arterials to carry community-wide trips. This will protect residential areas from unplanned through traffic and preserve the capacity of principal arterials and highways for longer regional travel.

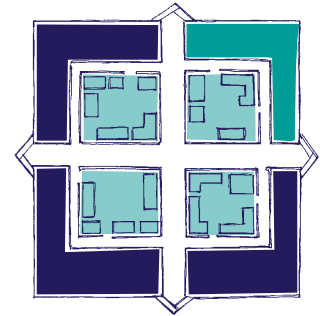
Protect the functional integrity of the roadway system. Establish access management policies in your comprehensive plan. Recognize that the greatest access control is needed for principal and minor arterials that serve longer trips and through traffic.

<i>Roadway</i>	<i>Mobility</i>	<i>Access</i>
<i>Principal</i>	<i>Highest</i>	<i>No Direct</i>
<i>Minor</i>	<i>High</i>	<i>Limited</i>
<i>Collector</i>	<i>Moderate</i>	<i>Some</i>
<i>Local</i>	<i>Low</i>	<i>Unrestricted</i>

LAND USE APPROACHES TO MANAGE ACCESS

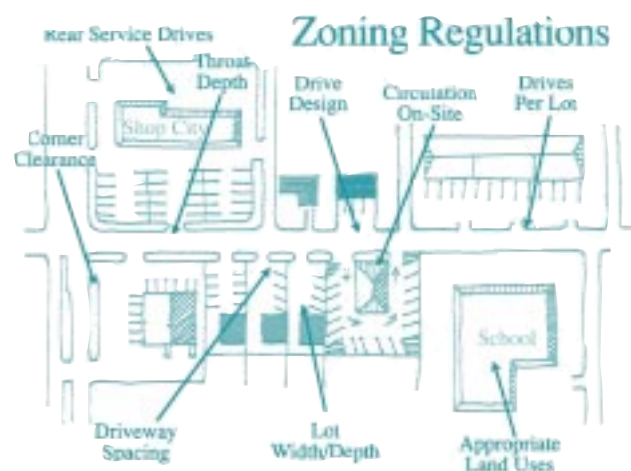
Avoid strip commercial development designed with direct driveway access to the highway or major arterials.

Commercial development can be located adjacent to and visible from the highway. But it should be planned as clusters with access provided from adjacent local streets and internal circulation among individual parcels.



Seek opportunities to retrofit problem corridors over time. Develop a long-range vision for improving access spacing along a roadway segment. Correct substandard access situations as individual parcels are expanded or redeveloped. Work with affected property owners to consolidate drives, provide joint or cross access between parcels, and fill in the supporting roadway system.

Incorporate access management standards and requirements in local zoning and subdivision ordinances. Prohibit residential driveways on principal and minor arterials. Restrict the number of driveways per lot. Require local street connections between subdivisions and internal access connections between adjacent parking lots. Set standards for driveway location, spacing, and design.

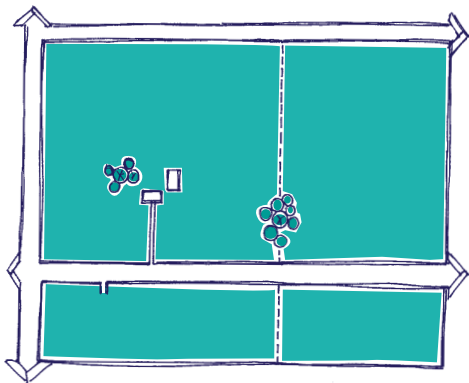


Consult with the affected road authority early and often in the planning and development review process.

OBSTACLES TO EFFECTIVE COORDINATION

Many local communities around the state work closely with Mn/DOT to consider access as part of their local development planning and review process. But the degree of coordination, cooperation, and consistency in approach across jurisdictions and levels of government is not sufficient for successful access management.

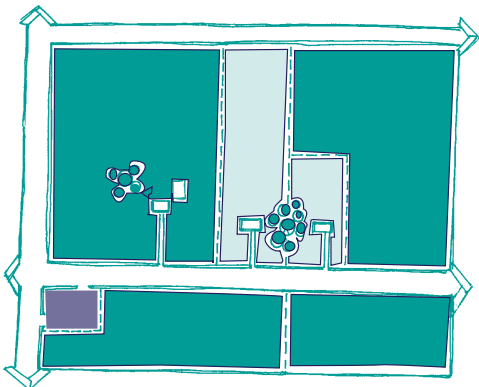
Our investigation over the past year identified a variety of obstacles to effective coordination for access management between Mn/DOT and local communities.



*Small,
uncoordinated land
use decisions...*

Access management involves many players, each having somewhat differing goals and perspectives—landowners, developers, neighborhood groups, local elected officials, county road authorities, and Mn/DOT. Each tries to maximize its benefits and minimize its costs, often seeking to shift costs from one to another or even to future generations by postponing recommended infrastructure investments.

There are problem time lags. Large problems arise over time, from many small, uncoordinated decisions. Many local officials are simply not aware of the problems that can result from poorly spaced or designed access along the major highways. Access related problems may not show up immediately. But when the problem becomes apparent, the best solutions are usually no longer available.



*create problems
over time.*

Compromises are made to “do the deal.” The local community’s desire for economic development may outweigh access management concerns. Developers and businesses may press local community officials for more direct access to the highway because it is quicker and cheaper than constructing local streets or service roads, or because they believe direct access to the highway is essential for customer service.

The benefits and techniques of access management are not well known. Many local elected officials are not aware of the importance of access management to preventing accidents, congestion, and travel delays. They may not be fully acquainted with the planning strategies and regulatory techniques to manage access.

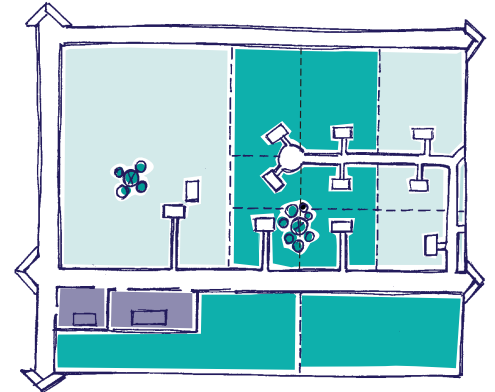
OBSTACLES TO EFFECTIVE COORDINATION

There are no commonly accepted and applied access spacing guidelines. Mn/DOT has not defined and shared a vision of appropriate access spacing and design with local communities, landowners, and developers. There is no clear process in place through which Mn/DOT and local communities can discuss their respective land use and transportation objectives and reach a common base of understanding for ongoing coordination. Developers and property owners don't know what the rules are, and can't easily factor statewide safety and mobility objectives into their property access designs.

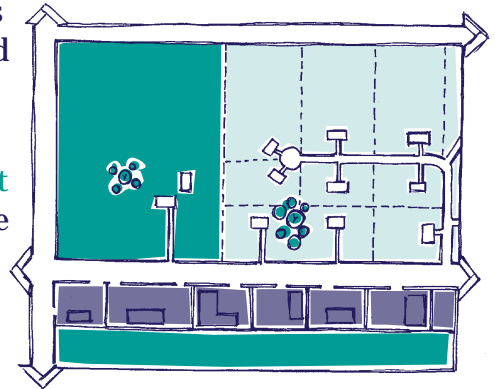
The laws of access are complex and not easily understood or applied. Legal principles of access rights are applied on a case-by-case basis by the courts. Practitioners lack clear guidelines, resulting in divergent administrative practice around the state. Land use regulations and property rights are sensitive issues and the potential for costly lawsuits is always a concern to local officials as well as Mn/DOT.

Coordination takes time and resources. Staff resources always seem to be in short supply. Many smaller communities and rural townships have no staff trained to deal with access management issues.

Access management may be cost-effective in the long run but requires up-front investment. Local communities recognize that managing access through land use planning and regulation has costs. There are costs for planning and for constructing an adequate system of local roadways. Developers may be unable or unwilling to bear the full costs. Local funding options through assessments or general taxes may be limited. Mn/DOT has no established method to determine when investments in local roadways may be justified based on benefit to the trunk highway system.



When problems become apparent...



the best solutions are no longer available.

PARTNERSHIPS FOR ACCESS MANAGEMENT

Road Authorities Need Local Government Cooperation

Mn/DOT and the county transportation agencies need the support and cooperation of the cities and townships to manage access successfully. By working together, and recognizing the interdependence of land use and transportation, everyone can benefit.

Our investigation over the past year has determined that the voluntary approach to coordination works very well in many cases, but not all. For this reason, the Association of Minnesota Counties has suggested that new legislation is needed giving county boards approval over the access-related features of proposed plats adjacent to county roads within municipalities. Currently, only Dakota County has been given this authority under special legislation.

City and township associations have generally resisted such oversight of local land use decisions. They have supported efforts that would strengthen the platform for voluntary coordination including statewide access guidelines.

An alternative approach to state or county oversight of local land use decisions could involve state mandates for local adoption and enforcement of statewide access standards. This approach was used in Minnesota for shoreland management. Cities and counties are required to adopt local zoning and subdivision controls for land abutting designated lakes, consistent with state guidelines.



Stronger Partnerships Will Be Needed

As long as the responsibilities for managing land use and transportation remain segmented between state and local jurisdictions, successful access management can only be realized through stronger intergovernmental partnerships. Based on the findings from our research and workshops, an incremental approach is recommended, beginning with efforts to achieve voluntary cooperation among governmental jurisdictions and moving to stronger intervention through legislative mandates only if necessary to obtain full cooperation.



As long as land use and transportation responsibilities are segmented, partnerships will be required.

Strengthening the partnership among Mn/DOT, counties, cities, and townships will require a comprehensive strategy. There is no single, simple solution. The obstacles are many and varied around the state. Over the next two to three years, efforts to strengthen coordination should focus on four key areas:

- Access classification and spacing guidelines to provide a common basis for coordinated decision-making
- Education, training, and technical support for professionals and elected officials at all levels of government
- Pilot projects to test and demonstrate collaborative approaches to access management
- Expanded funding options for access management planning and related transportation improvements

Many transportation officials doubt that full, statewide consistency and coordination can be realized on a voluntary basis alone. Nevertheless, most agree that the key pieces of the initial strategy are needed, even if we must move to stronger legislative mandates for coordinated access management in the future.

LOCAL GOVERNMENT WORKSHOPS



To begin the discussion among the partners, Mn/DOT Districts hosted local government workshops.

Because this report includes recommendations for developing a comprehensive access management policy in Minnesota, it will impact every level of government. The cooperation and support of all stakeholders were very important in determining how recommendations would work in different parts of the state.

A daylong workshop for local government officials was hosted by each of the eight Mn/DOT districts in 1998. The workshops were sponsored by Mn/DOT's Office of Access Management, the Association of Metropolitan Municipalities, the Association of Minnesota Counties, the League of Minnesota Cities, the Metropolitan Council, and the Minnesota Association of Townships.

The workshops were attended by a total of 452 people including city, county, township, and state transportation, planning, and elected officials. The purpose of the workshops was to present information regarding access management issues and current practices and to gather feedback on alternative strategies for implementation of a comprehensive access management program in Minnesota. Feedback from these workshops helped shape the recommendations in this report.

1998 ACCESS MANAGEMENT WORKSHOPS

<i>September 1</i>	<i>Bemidji</i>	<i>September 29</i>	<i>Willmar</i>
<i>September 3</i>	<i>Duluth</i>	<i>October 1</i>	<i>Mankato</i>
<i>September 11</i>	<i>Brainerd</i>	<i>October 12</i>	<i>Rochester</i>
<i>September 24</i>	<i>Detroit Lakes</i>	<i>October 15 & 20</i>	<i>Metro Division</i>

Workshop Findings

There were many similarities in the issues and approaches to access management among the workshops. Common themes emerged among the participants, but there were differences in emphasis. There was strong agreement on the need for better access management. The sense of urgency related to the issues differed and may be related to the amount of growth each community is facing. There were major differences in the strategies or approaches that were recommended.

Generally, workshop participants said that:

- There is broad acceptance of a need to manage access in Minnesota.
- Mn/DOT is viewed as the appropriate leader to promote, support, and coordinate access management efforts.
- Improved coordination and partnership between Mn/DOT and local jurisdictions are required for the success of an access management program.
- Many local communities lack a clear understanding of the impact of their decisions on the major highways.
- Incentives will be needed to bring local units to the table.
- There was general support for an incremental approach beginning with information and incentives with state oversight or control as a last resort.
- Strategies employed need to relate to specific areas of the state.

Workshop participants most frequently indicated that these key elements of a comprehensive access management program were needed:

- Establish an access classification system that respects differences in roadway function within the adjacent land use
- Provide education, training, and research
- Encourage and support local access management efforts
- Expand capital funding options

The common responses to questions discussed in the workshops follow:

Question #1: What are the most compelling reasons for better access management in this area?

Responses:

Access management can provide:

- Safer roadways for travelers and local residents
- More efficient movement of traffic
- Guidelines for a consistent approach across jurisdictions
- Coordinated and managed growth along major roadways
- Balanced land use and transportation
- Improved mobility and a way to meet business access needs
- Better roadway design
- Coordination among jurisdictions
- Cost effectiveness

Question #2: What are the major obstacles to good access management in your area?

Responses:

- Communication, coordination, and collaboration across jurisdictions are ineffective.
- Growth outstrips the capacity to respond to it.
- Local funding and staff resources are inadequate.
- Land use and transportation planning are uncoordinated.
- Officials, professional staff, developers, and users are uninformed.
- Developers desire direct access.
- Standards, rules, and procedures for access management are inconsistent.
- Local officials are politically pressured to provide access.
- Access management stakeholders and interests vary.
- Reconstruction of congested or unsafe roadways is difficult.





Question #3: Which approaches to access management would work best in your area and what are your choices for the top five?

Responses:

- Methods need to be developed to improve coordination between land use and transportation decision makers.
- An access classification system can help assure a consistent approach across jurisdictions.
- Education is necessary to help local officials in all jurisdictions understand the importance of access management and how to include it in their planning and decision making.
- More sources of capital funding need to be identified to augment the limited local resources available for access management.
- The state and counties should be given the authority to approve land use adjacent to their roads
- Statutorily define “reasonably suitable and convenient access.”
- A graduated approach to access management should be taken, beginning with education and incentives and moving to mandates only as a last resort.

A report of the proceedings from the workshop breakout sessions was produced for Mn/DOT by the Minnesota Department of Administration’s Management Analysis Division.

APPENDIX

ACCESS MANAGEMENT INITIATIVE ADVISORY STRUCTURE

A Collaborative Approach

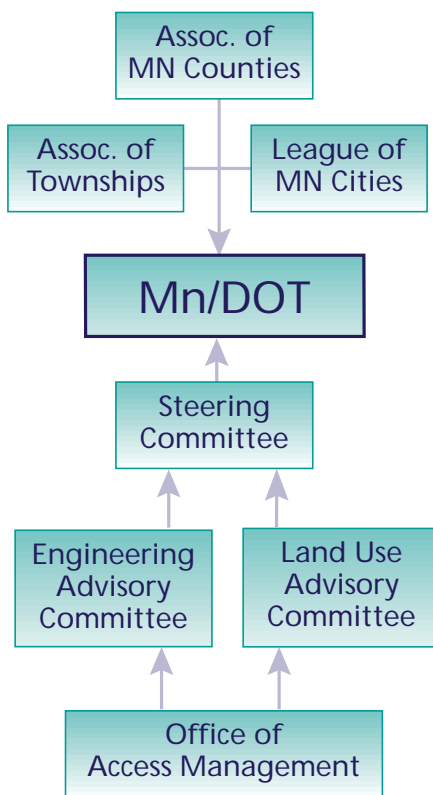
Mn/DOT's Access Management Initiative has been structured as a collaborative effort. A broad cross section of elected officials and professionals from around Minnesota served as advisors on both the policy and technical levels.

Steering Committee

In October of 1997, an Access Management Steering Committee was formed with representatives from Mn/DOT, counties, cities, the University of Minnesota, and the Minnesota Attorney General's office. The committee's function was to review the legislative charge, approve the goals and objectives for the Initiative, and provide guidance on issues that arose. They reviewed and approved advisory and technical committee reports as well as this final report.

Steering Committee Membership

Dave Ekern - Chair - Director, Mn/DOT Engineering Services
 Pat Murphy - Vice Chair - Director, Mn/DOT State Aid
 Dennis Berg - Anoka County Commissioner
 Nacho Diaz - Director, Transportation Planning, Metropolitan Council
 Wayne Fingalson - Wright County Engineer
 David Jessup - City Engineer, Woodbury
 Bob Johns, Deputy Director, Center for Transportation Studies, U of M
 Karl Rasmussen - Mn/DOT State Traffic Engineer
 Louis Robards - Assistant Attorney General
 Bill Schreiber - Director, Mn/DOT Intergovernmental Policy
 Julie Skallman - Mn/DOT State Aid Division Engineer
 Dick Stehr - Mn/DOT Metropolitan Division Engineer
 Dave Trooien - Mn/DOT District 8 Engineer, Willmar



Technical Advisory Committees

Technical advisory committees made up of state and local representatives were formed in 1997 to look at current and best practices regarding access management in the areas of land use planning and engineering principles.

Land Use Planning Committee

The Land Use Planning Advisory Committee consisted of planners and consultants from Mn/DOT, counties, and cities representing different regions of the state and different development scenarios. The charge to the committee was to advise the Office of Access Management staff in the development of recommendations to the Steering Committee for policies, programs, projects, or procedures that could improve the linkage between transportation and land use within the major corridors of the state, resulting in a more sustainable balance between the dual objectives of mobility and access.

Land Use Committee Membership

Peggy Reichert - Chair - Land Use Planner, Mn/DOT Office of Access Management

Kathy Bongard - Planning Manager, Scott County

Fred Dock, P.E. - Barton Aschman Associates

Virginia Harris - Former Carver County Planner

Terry Humbert - Planning Engineer, Mn/DOT District 3, St. Cloud

Dean Johnson - Resource Strategies Corporation

Randy Jorgensen - Executive Director, Southwest RDC

Tim Kennedy - Planning Director, Cook County

Connie Kozlak - Transportation Systems Manager, Metropolitan Council

Karen E. Marty - Attorney-at-Law

Sherry Narusiewicz - Planner, Mn/DOT Metropolitan Division

Tom O'Keefe - Planning Engineer, Mn/DOT Metropolitan Division

Steve Reckers - Policy Planner, Minnesota Planning Agency

Charles Reiter - Rochester-Olmsted County Planning Department

Dan Rogness - Community Development Director, City of Rosemount

Tina Rosenstein - Environmental Services Director, Nicollet County

Brian Shorten - Executive Director, Fargo-Moorhead Council of Governments

Linda Zemotel - Planning Director, Mn/DOT Investment Management

Engineering Advisory Committee

The Engineering Advisory Committee consisted of engineering and technical staff from Mn/DOT, counties, and cities who represent functional groups involved with access management issues. Committee membership reflected the different geographic areas of the state as well as the different regional and corridor development scenarios that typify access management issues.

Engineering Membership Committee

Dave Engstrom - Chair - Engineer, Mn/DOT Office of Access Management

Stephen Alderson - Planning Director, Mn/DOT District 6, Rochester

Dean Beeman - Project Engineer, City of Duluth

Tom Behm - State Aid Engineer, Mn/DOT District 8, Willmar

Lyle Berg - Traffic and Transportation Engineer, City of Bloomington

Lisa Bigham - Project Manager, Mn/DOT District 7, Mankato

Roger Busch - Engineering Specialist, Mn/DOT District 3, St. Cloud

Bob Byers - Senior Transportation Planner, Hennepin County

George Eckenroth - Valuation Manager, Mn/DOT Land Management

Ron Erickson - Geometrics Engineer, Mn/DOT Technical Support

Wayne Fingalson - Wright County Engineer

Loren Hill - Traffic Safety Engineer, Mn/DOT Traffic Engineering

Dave Kopacz - Safety and Traffic Operations Engineer, FHWA

Sue Mulvihill - Maintenance Operations Engineer, Mn/DOT Metropolitan Division

Dave Pickett - Traffic Engineer, Mn/DOT District 1, Duluth

John Rodeberg - City Engineer, Hutchinson

Gary Shannon - Senior Traffic Engineer, HNTB Companies

Keith Slater - Right-of-Way Manager, Mn/DOT Metropolitan Division

Lezlie Vermillion - Transportation Engineer, Dakota County

Steve Voigt - Lyon County Engineer

Consultations with Partner Organizations

Throughout the Initiative, Mn/DOT also consulted with three key partner organizations: the Association of Minnesota Counties, the League of Minnesota Cities, and the Minnesota Association of Townships. These groups, together with the Metropolitan Council and the Association of Metropolitan Municipalities, also co-sponsored the series of statewide workshops. In addition, OAM staff briefed numerous interest groups and professional organizations on the status of research efforts and policy options under discussion. Finally, staff within the various functional groups at Mn/DOT, from right-of-way agents to traffic engineers and permitting administrators, were consulted at every stage of the effort.

ACCESS MANAGEMENT INITIATIVE TECHNICAL REPORTS

To provide a basic framework for evaluating the issues and opportunities surrounding access management in Minnesota, a series of technical studies were conducted by Mn/DOT.

- Market research was conducted to determine the driving public's view of access management. A report **Public Understanding of State Highway Access Management Issues** was produced.
- An intensive **Systems Thinking** process took place with various stakeholders to determine the relationship of access management to external forces and how they drive or depend on each other.
- A study **Statistical Relationship Between Vehicular Crashes and Highway Access** was done to determine how the occurrence and frequency of access onto a roadway affect vehicular crash rates.
- An **Access Classification System** with access spacing guidelines has been developed that identifies how driveways, medians, and intersections should be addressed on all highways.
- A **Permitting Practices Analysis** includes recommendations for improved roadway entrance permitting processes and techniques.
- **Land Use Approaches** were developed that include strategies for strengthening the link between local land use decisions and state highway design and management.
- A **Legal Analysis** was done that addresses the issues of the public's right to safe and efficient movement on the highway and an abutting property owner's right to reasonable access.

- Workshops were held in all eight Mn/DOT districts in the fall of 1998 for state, county, city, and township transportation, planning, and elected officials. A report **Access Management Local Government Workshops** was created based on feedback received during workshop breakout sessions. Report findings indicate the most commonly perceived reasons, obstacles, and preferred approaches to improving access management in Minnesota. These report findings were used to develop the recommendations for an access management program outlined in this report.

All reports are available upon request.

E-mail us at: access.management@dot.state.mn.us.

Or visit our Web site at

www.dot.state.mn.us/engserv/access/

Layout and graphics by Kim Lanahan-Lahti, Mordechai Dorfman, and Paula Gustafson. Photography by Peggy Blake, David Larson, Andy McDonald, and Jason Serck.