

Access Management Issues for Local Communities

Working with WisDOT



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WisDOT Access Management Course

This presentation is a summary of a much more detailed training program recently developed by the Wisconsin Department of Transportation (WisDOT) with the goal of educating professionals across many transportation and land use disciplines. This presentation will cover the following topics:

- ▶ What is Access Management?
- ▶ Ten principles for addressing access
- ▶ Wisconsin state law for access management
- ▶ Economic benefits for communities and businesses
- ▶ How to work with WisDOT for access decisions
- ▶ Resources, conclusion and Q & A



Acknowledgments

Special thank you to members of the WisDOT Access Management Team who contributed their input, images, stories and time to development of this training program:

- ▶ Mike Roach - Statewide Access Engineer
- ▶ Sue Voight - Southeast Access Coordinator
- ▶ Dave Nielsen - Northeast Access Engineer
- ▶ Tom Beekman - Northwest Region Planning Chief
- ▶ Ernie Peterson - Consultant (retired DOT Statewide Access Engineer)
- ▶ Robert Fasick - State Right-of-Way Permits Engineer
- ▶ John Sobotik - Assistant General Counsel
- ▶ Kathy Batha - Assistant General Counsel



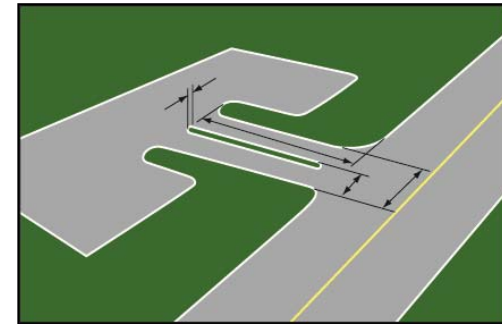
Consultants:

- ▶ Brad Strader, MKSK, member of the TRB Access Management Committee
- ▶ Charles (Chuck) Wade, TranSmart, consultant for WisDOT 2005 Access Management Training program
- ▶ Bill Eisele, TTI and past member of the TRB Access Management Committee
- ▶ Karen Dixon, TTI and co-author of the TRB Access Management Manual
- ▶ Josh Penn, LSL Planning, A SAFEbuilt Company

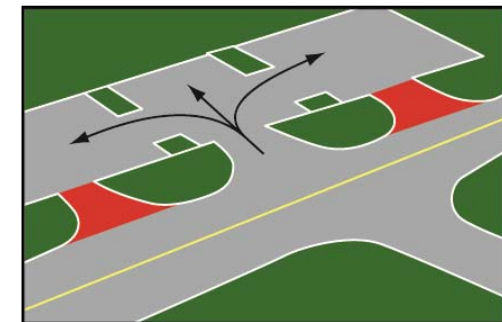


Access Management (what/why)

- ▶ Standards for the number, location, spacing and design of access points to:
 - Maximize existing street capacity
 - Reduce potential for crashes
 - Improve overall corridor conditions
 - Provide reasonable access to land uses
- ▶ WisDOT manages access to:
 - Extend highway life by minimizing congestion
 - Improve safety as much as possible
 - No such thing as “safe” access



Proper driveway design maximizes benefits of access management.



Shared access reduces conflicts along the WisDOT Highway

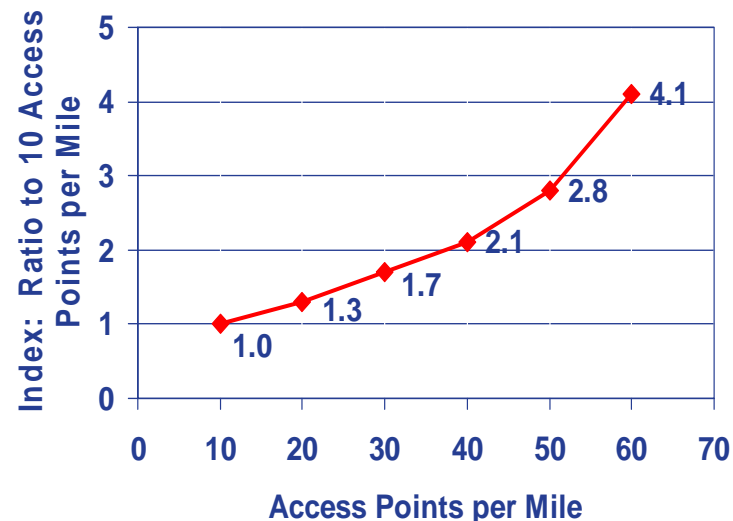


What is Access Management?

Benefits of Access Management

Health • Safety • Welfare

- ▶ Improved safety - Direct relationship between the # of driveways and # of crashes
- ▶ Mobility - Preserves or restores highway capacity
- ▶ Cost-effective - Can reduce need for, or cost of, highway improvements
- ▶ Welfare - Balance public need for safe and efficient operations with landowners rights to reasonable access.



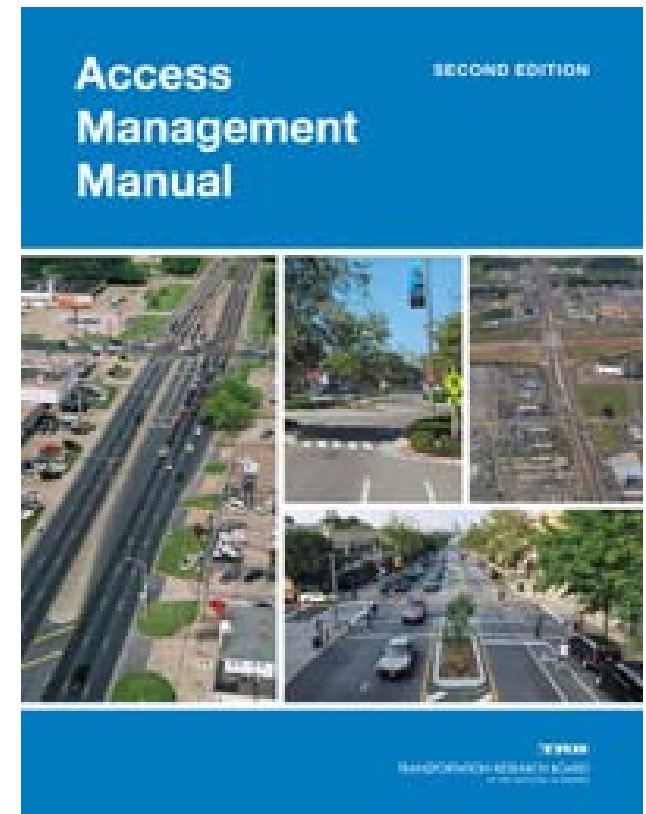
Balance the rights of property owners with public rights



What is Access Management?

Access Management Principles

- ▶ Principles are identified in the TRB Access Management Manual (2nd Edition)
 - 20-chapter Manual covering all aspects of Access Management
- ▶ Adapted into WisDOT Facility Development Manual (FDM) Chapter 11-5-5

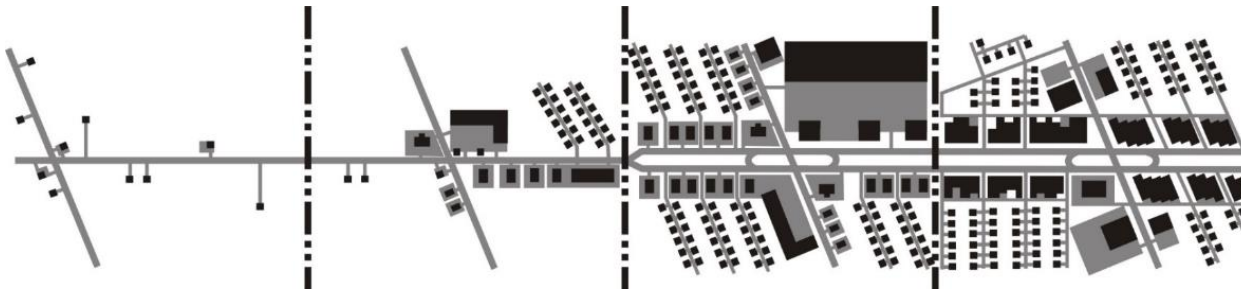


Ten Principles to Address Access

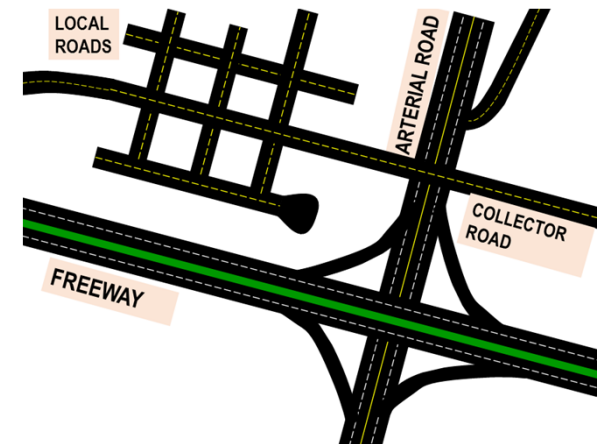
Principle 1

Provide a Specialized Roadway System

- ▶ Preserve roadway function
- ▶ Applicable access standards are influenced by the situation
 - Developed vs. developing vs. rural corridors
 - Highway design and R/W
 - Types of traffic today and projected



Source: LSL Planning



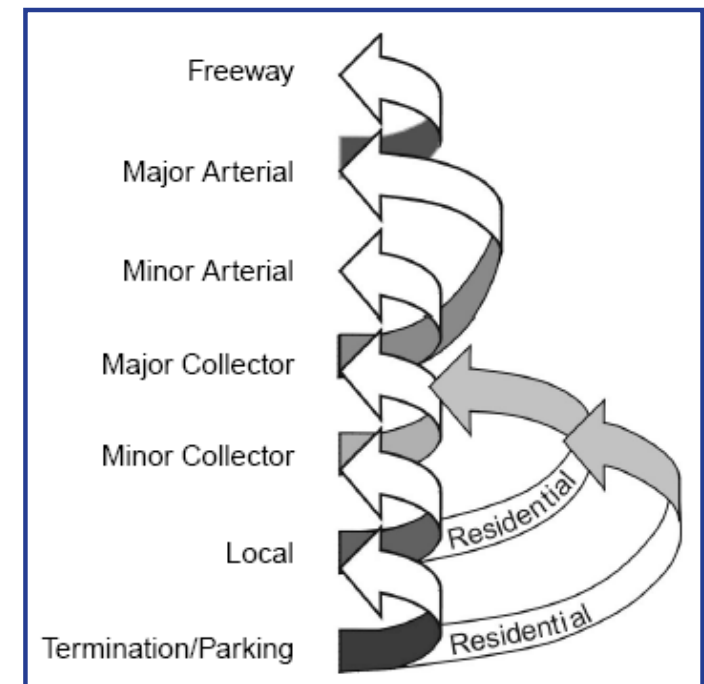
Ten Principles to Address Access

Principle 2

Promote Intersection Hierarchy

The goal is to:

- ▶ Avoid connecting a roadway of low classification directly to a roadway of a much higher classification
- ▶ Allow direct connections to the next higher, or lower, functional classification



TRB Access Management Manual



Ten Principles to Address Access

Principle 3

Locate Signals to Favor Through Movements

- ▶ Poor spacing can cause congestion and collisions
- ▶ Consider pedestrian crossing needs
- ▶ Provide gaps for movement between signals

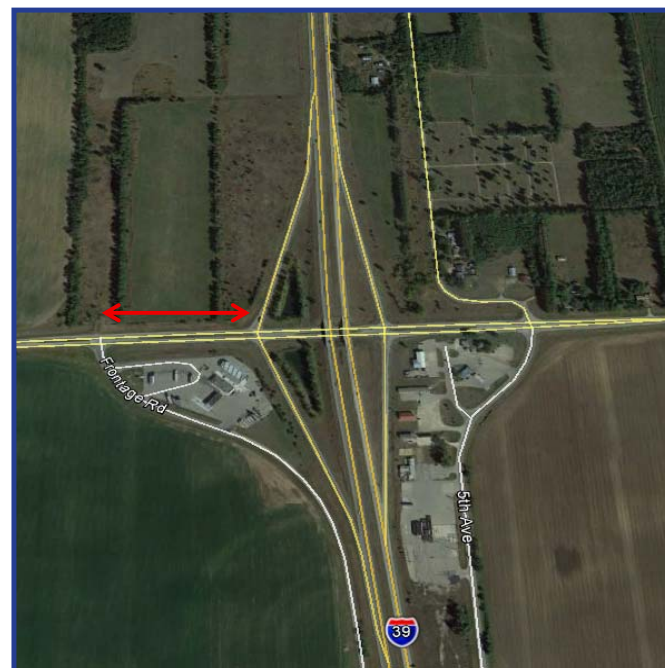
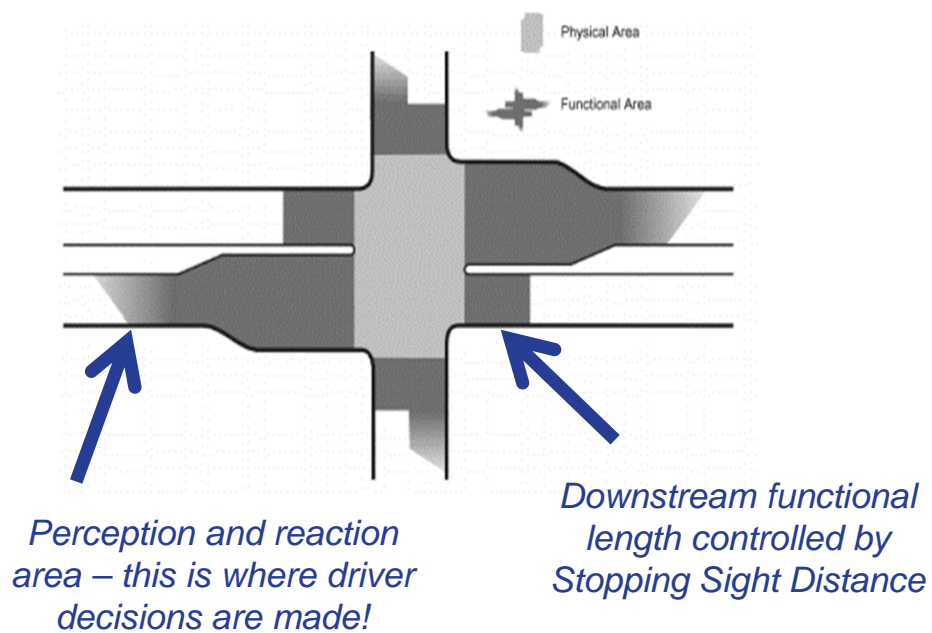


Madison, Wisconsin



Principle 4

Preserve the Functional Area of Intersections and Interchanges



TRB Access Management Manual
and FDM 11-25-2

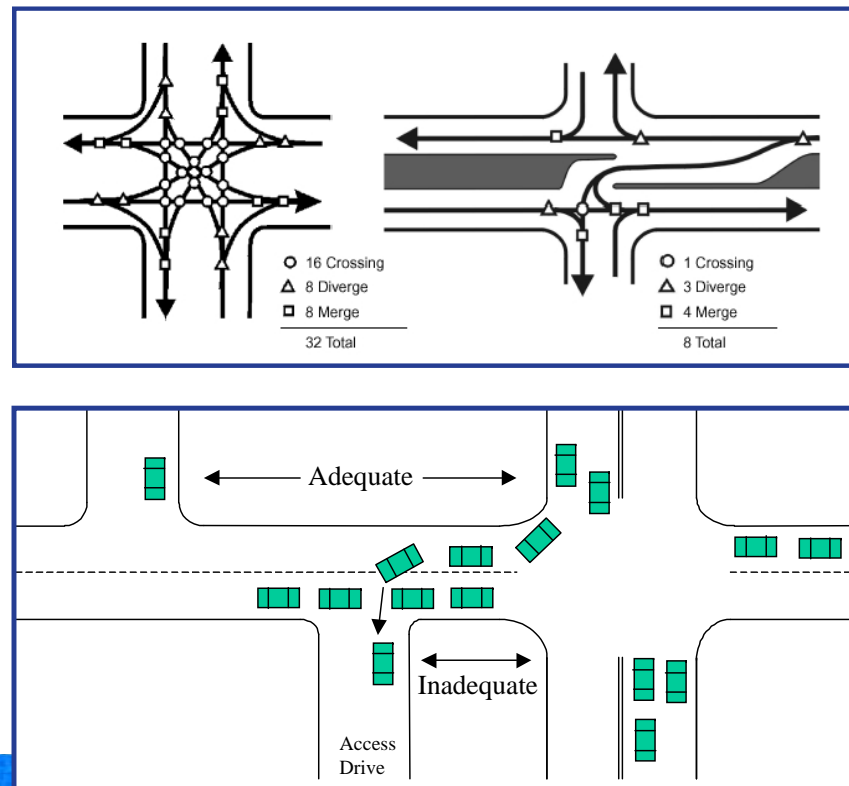


Ten Principles to Address Access

Principles 5 and 6

Limit the Number of Conflict Points and Separate Conflict Areas

Conflict points are locations where the paths of vehicles, pedestrians, or bicycles cross, merge or diverge.



General goal is:

- ▶ Reduce number of conflict points
- ▶ Separate intersections to avoid overlapping traffic



Ten Principles to Address Access

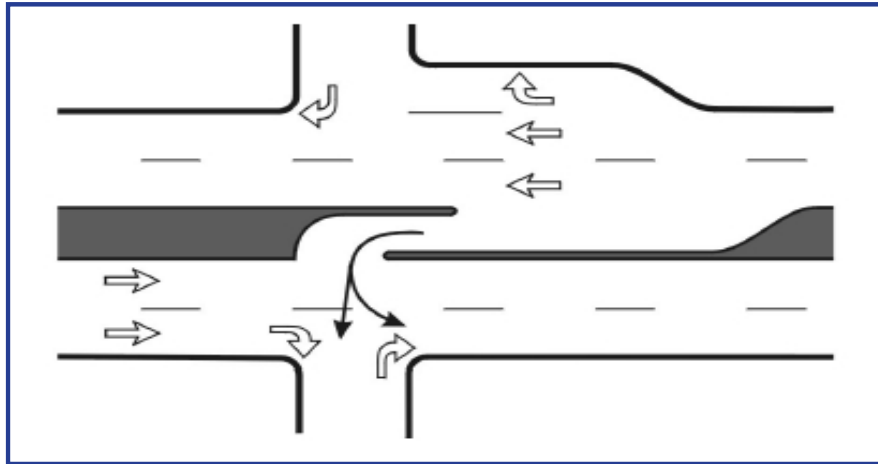
Principle 7

Remove Turning Vehicles from Through-Traffic Lanes



Principle 8

Use Nontraversable Medians on Major Roadways



Principle 9

Provide a Supporting Street Network

- ▶ Separate local trips from regional trips
- ▶ Reduce congestion, improve safety
- ▶ Preserve useful life of the State Trunk Highway (STH) system
- ▶ Separate conflicting activities



Photo source: TTI

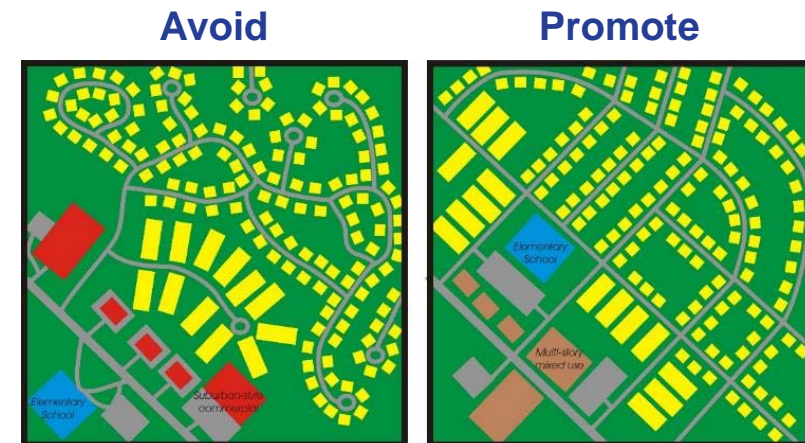


Ten Principles to Address Access

Principle 10

Provide Unified Access and Circulation Systems

- ▶ Unified access and circulation systems:
 - Eliminate or reduce the need for motorists to circulate on major roadways when traveling from one parcel to another
 - Support bicycle and pedestrian circulation
 - Can be provided by public street networks or by private circulation systems



Source: *TRB Access Management Manual*



Applying the Principles – Pop Quiz



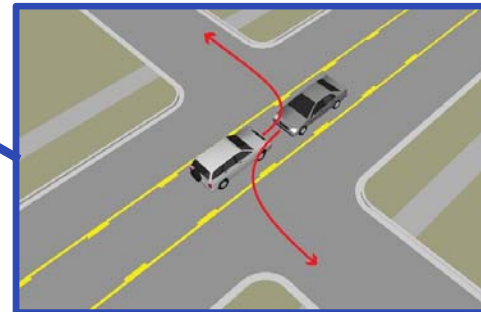
- ▶ High crash rate at intersection along state road
- ▶ Queuing at signals frequently blocks existing driveways
- ▶ Low volume side street
- ▶ Property owner wants two driveways for small strip center
- ▶ High activity shopping center across street
- ▶ What problems do you see considering these factors?



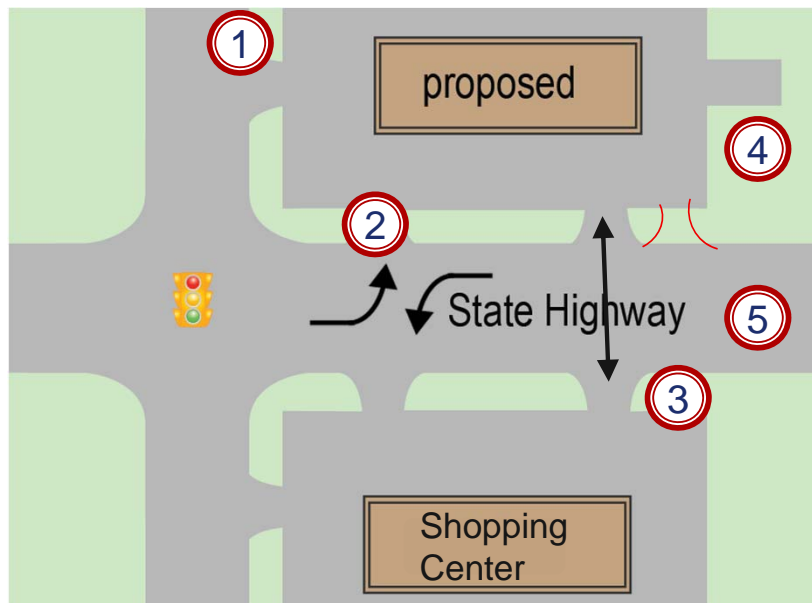
Pop Quiz - Considerations



- ▶ Access spacing from intersection?
- ▶ Offsets with driveways across the street?
- ▶ Other considerations?



Pop Quiz - Solution

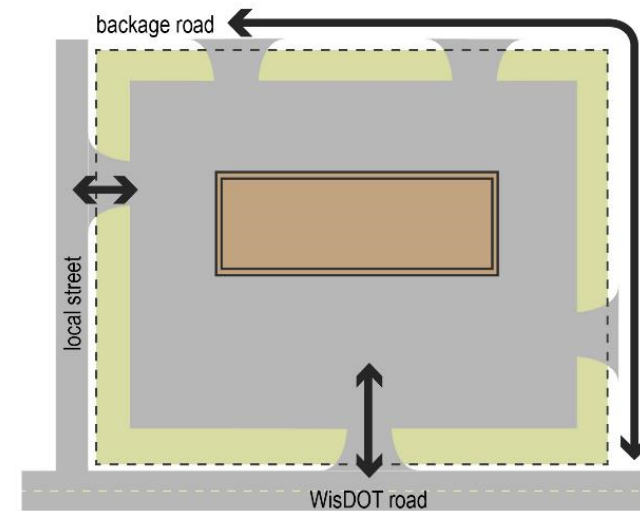


1. Access from local street
2. Eliminate access in the intersection functional area
3. Shift driveway left to align with access across the street
4. Access to adjacent property
5. Consider a median
6. Other ideas?

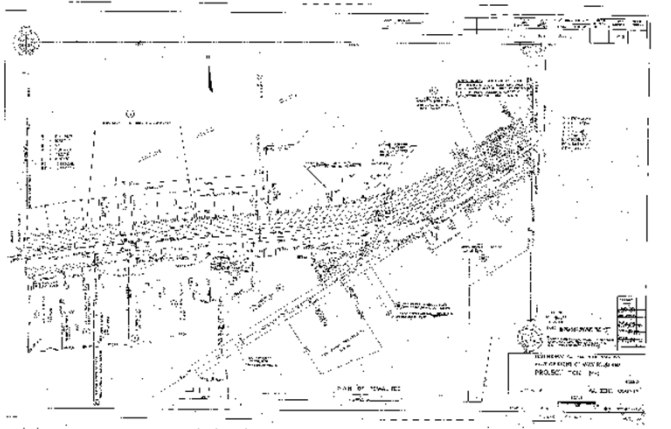


Basic Legal Principals

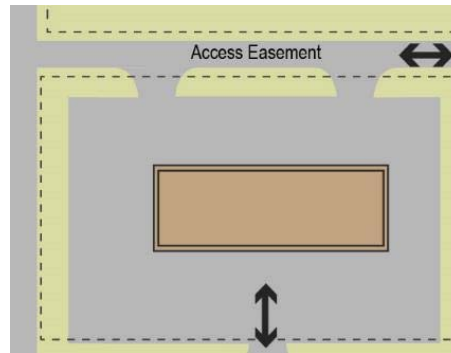
- ▶ WisDOT can control access through ownership of access rights or land, subdivision enforcement rights, or under its police power authority. (e.g. connection permits)
- ▶ Abutting owners may have a common law right to access abutting roads but it may be indirect
- ▶ That common law right can be controlled by exercise of the police power, including highway design and regulation.
- ▶ WisDOT risk can be minimized by consistent application of regulations and procedures, and good documentation



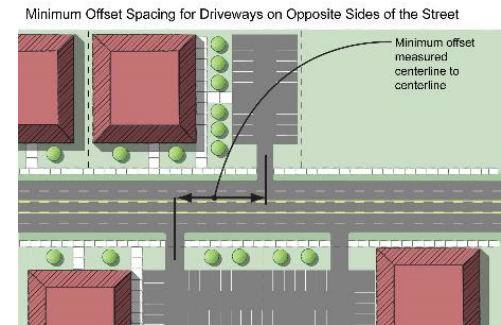
Types of Access Regulations



1. Publicly owned access rights (acquired, etc.)



2. Self-Imposed private property restrictions (e.g. deed restrictions, mutually enforceable restrictions)



3. Police Power regulation & design (subdivisions, STH connection permits, site plans)



Access-Related Wisconsin Statutes

s. 66.1001 ✓ Comprehensive Planning

{ s. 84.09 ✓ Acquisition of Lands and Interests Therein }

*Eminent domain
acquisition of access*

{ s. 84.25 ✓ Controlled-Access Highways }

{ s. 84.29 ✓ National System of Interstate Highways }

{ s. 84.295 ✓ Freeways and Expressways }

{ s. 86.05 ✓ Entrances to Highways Restored }

{ s. 86.07(2) ✓ Digging in Highways... (Permits) }

{ s. 86.073 ✓ Review of Denial of Permit (Appeals) }

*Most
common
police power
regulation of
access*

{ s. 86.09 ✓ Access to Cemetery Preserved }

Ch. 236

Trans 233 ✓ Platting Lands and Recording & Vacating Plats

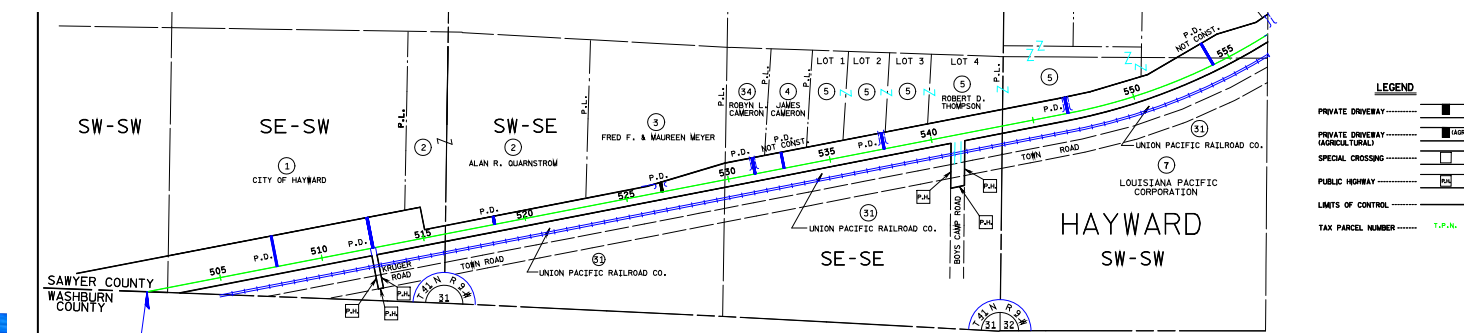


Wisconsin State Law for Access
Management



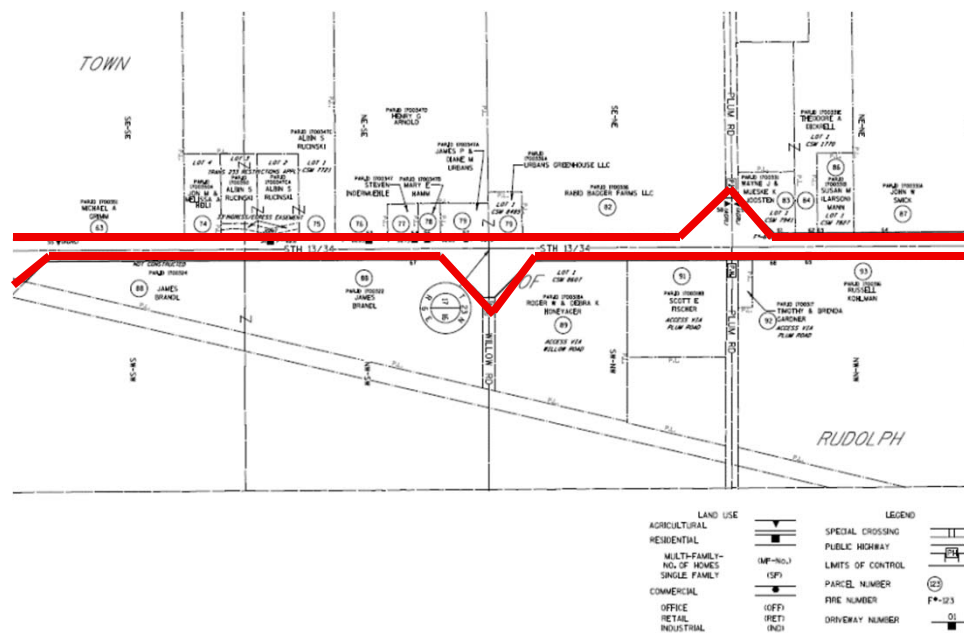
s. 84.25 Controlled-Access Highways

- ▶ Authorizes WisDOT to place access controls on properties abutting a highway by following administrative procedures
- ▶ Once designated it is recorded and the highway is considered a controlled-access highway
- ▶ No rights of access remain except the “controlled right of access”
- ▶ Gives WisDOT “administrative control” to manage access while the highway is still in its rural state



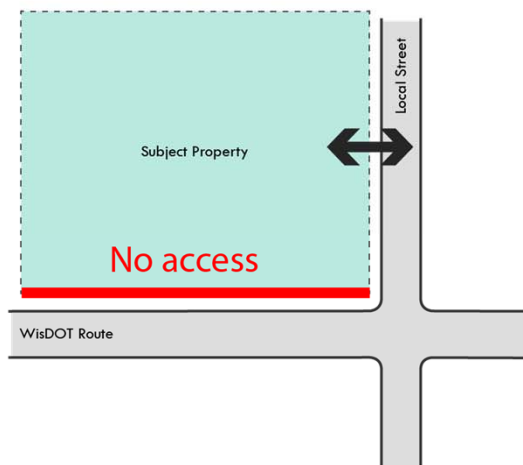
WisDOT Ownership of Access Rights & Sale of Surplus Land

- ▶ WisDOT can acquire access rights thru:
 - Acquisition under eminent domain (s. 84.09)
 - Dedication by deed or plat
 - Donation
 - Non-accrual to abutting owner when highway is located on a new alignment.
 - Reservation of access rights when property is sold, such as a surplus land sale.

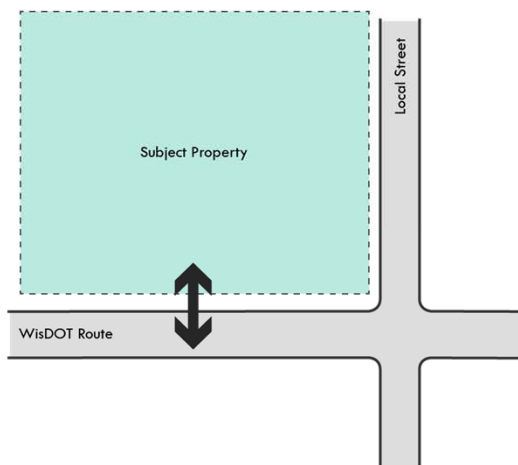


Wisconsin State Law for Access
Management

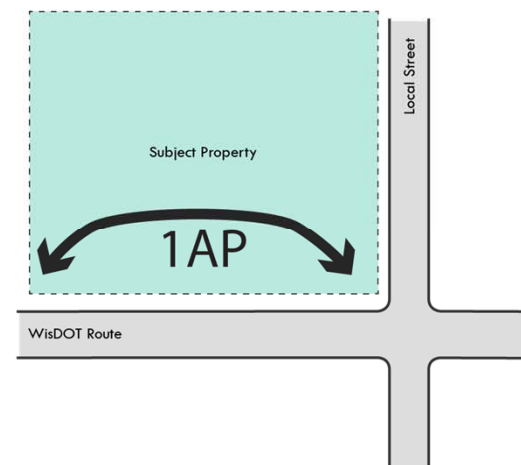
Examples of Acquired Access (s. 84.09)



1. No access allowed to state highway; access via side street (always shown on project RE plat)



2. One specifically located access allowed (may be shown on plat)



3. One access allowed between two points, as determined by WisDOT (No longer used)

In examples 2 and 3, a connection permit will be required to construct the access point.



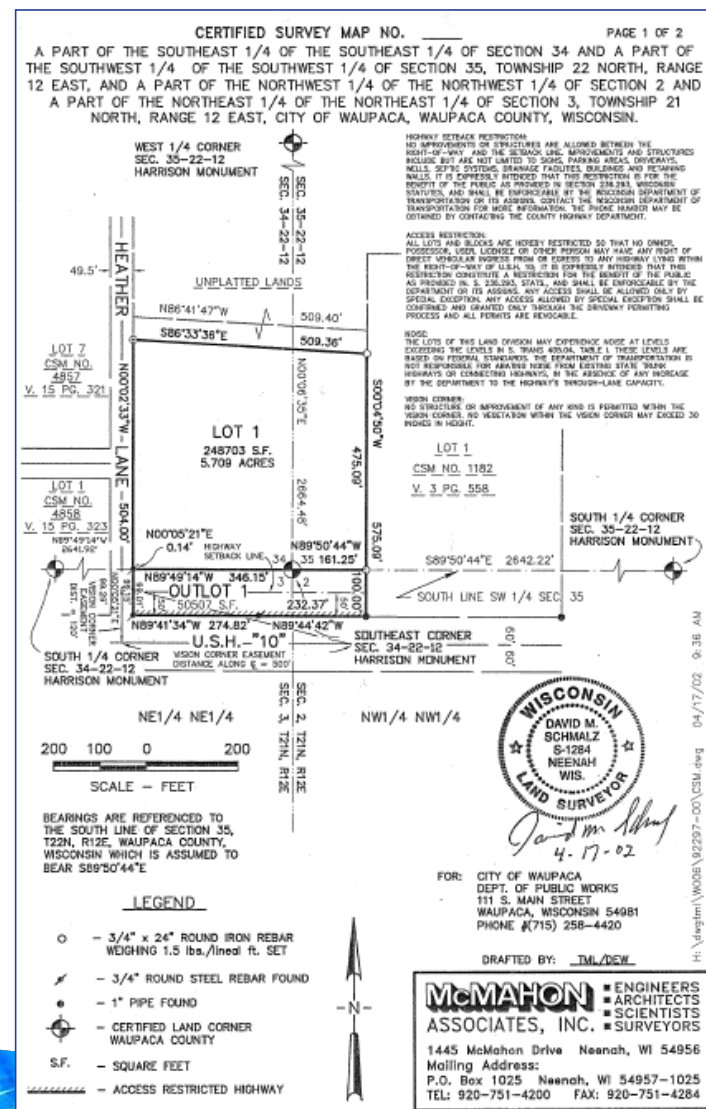


Trans 233 Division of Land Abutting a STH or Connecting Highway

- ▶ Review the land division to ensure it will not compromise WisDOT's objectives
- ▶ Appropriate requirements are placed on a property to mitigate the potential impact of the development on the highway system
- ▶ Has always applied to subdivisions
- ▶ Land divisions reviewed between Feb 1999 and Jan 2004 may have access restrictions in place



Wisconsin State Law for Access Management



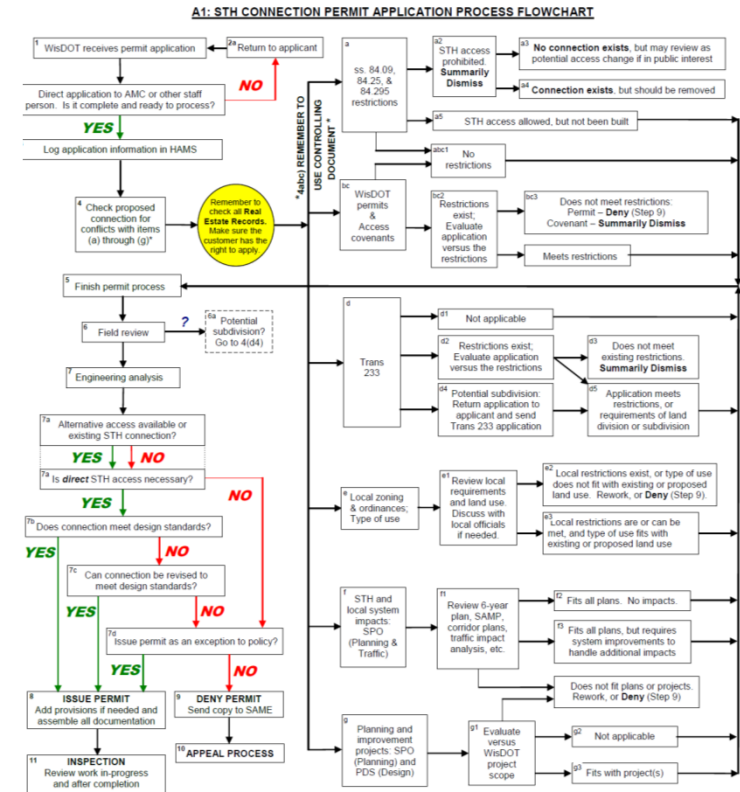
When Local Officials Should Notify WisDOT

- ▶ When WisDOT owns any abutting parcel
- ▶ When the STH R/W is located adjacent to an affected parcel where a zoning change is proposed
- ▶ Both of the above when located within ¼ mile of a Certified Survey Map (CSM) – A lot split other than a new subdivision
- ▶ When local roads connecting to the STH are proposed to be vacated



STH Connection Permit Process

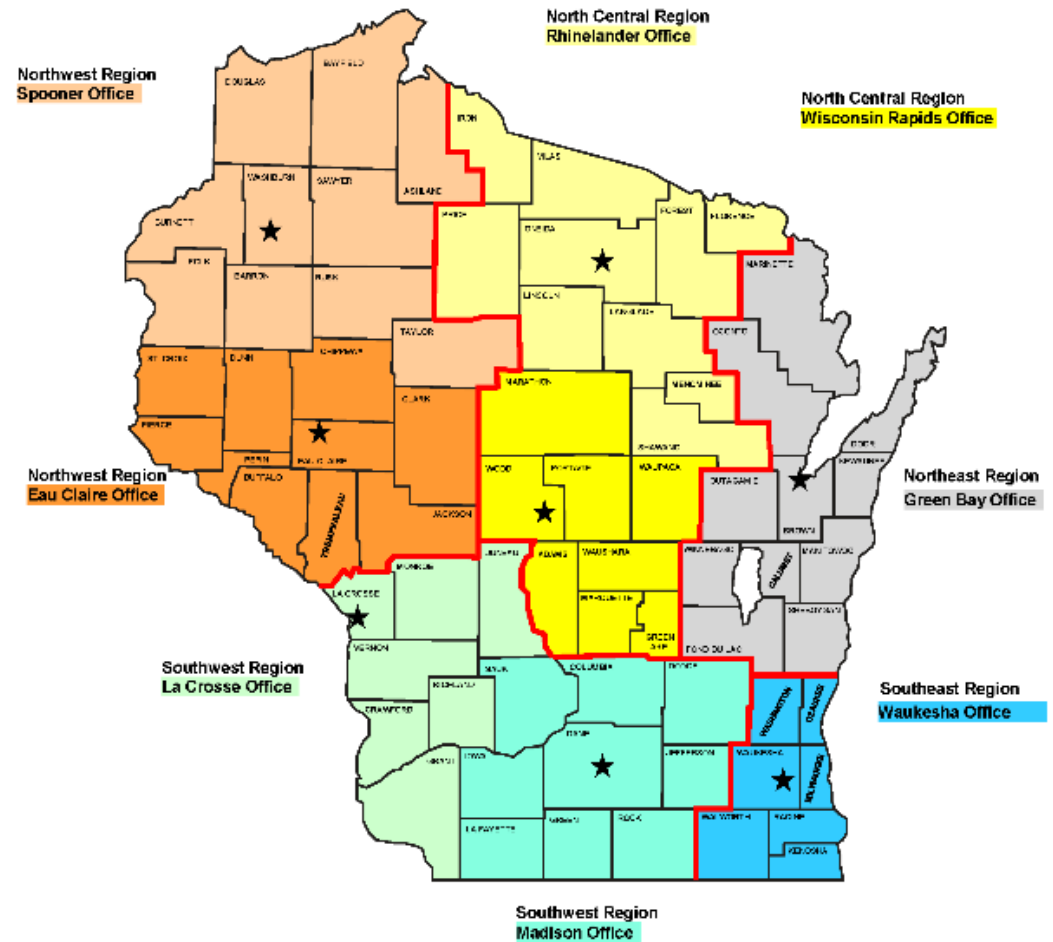
1. WisDOT receives application
2. Determine if applicant has the right to request a connection (any restrictions application etc.)
3. Decision to approve, approve with conditions, or deny
4. Applicant has 30 days to appeal a denial
5. Inspection



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STH Connection Permit Contacts

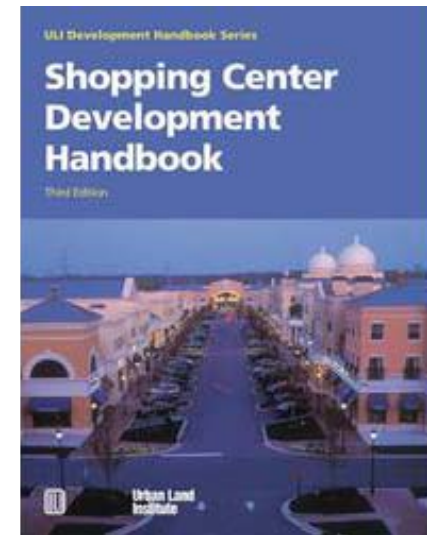
- ▶ Please contact the appropriate region office that has jurisdiction in the county where the connection is or will be located



Working with WisDOT

Safe Access is Good for Business Primer

- ▶ In general, access management has no impact on the overall demand for goods and services
- ▶ Main reason businesses fail is lack of management expertise (USA Today, 2004)
- ▶ Main reasons businesses succeed:
 - Experience of management
 - Customer service
 - Quality of the products and services
 - Financial backing and investment
 - Well-trained employees
 - Keeping costs competitive



Source: FHWA Safe Access is Good for Business



Economic Benefits for Communities and Businesses

Economic Development Considerations

Perception is less access=less business

- ▶ Business impact depends upon type of business and design of access
- ▶ Reasonable access may not be the design the business prefers
- ▶ Access Management can preserve capacity and relieve congestion to support business vitality
- ▶ Shared access systems encourages multiple shopping stops
- ▶ Businesses are often more willing for circuitous exits than entries



Safe Access is Good for Business

- ▶ A well-designed corridor with good traffic flow is good for business
- ▶ Too many driveways can lead to congestion and over time a decline in the business district
- ▶ Less congestion can extend the commercial market area
- ▶ Numerous studies show businesses do as well or better after an access management project (IA, MN, TX)



**SAFE ACCESS
IS GOOD FOR
BUSINESS**

Reduction in Average Speed	Market Area Relative to Previous Size
0%	100%
10%	81%
20%	65%
30%	45%
40%	36%
50%	25%

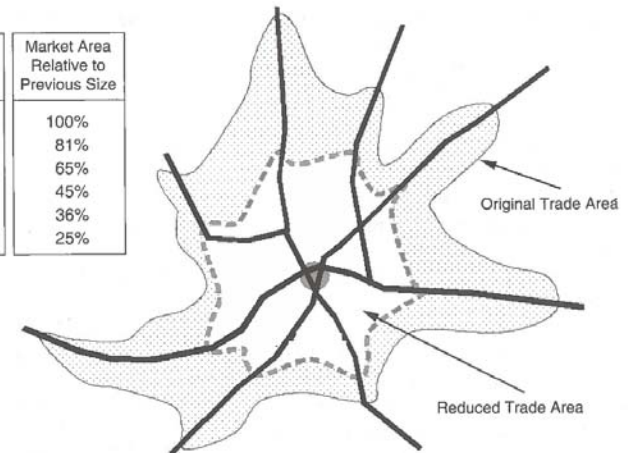


EXHIBIT 2-17 Effects of travel time on market area (28).



Tips for Working with Businesses

- ▶ Alert owners about access standards early in the process
- ▶ Workshops and materials to explain:
 - Access Management
 - Safety
 - Examples of success
- ▶ On-site visits to understand options
- ▶ Alert WisDOT about development and changes in use
- ▶ Collaboration between municipalities and WisDOT



Access Management Impacts on Business Districts

USH 151 East Washington Avenue, Madison, WI

1. AADT = 44,000 to 50,000 vehicles per day
2. Access density = **13 access points / mile**
3. Corridor Crash Rate = **375 crashes / HMVM**



East Washington Ave (USH 151)

USH 18 Bluemound Road, Brookfield, WI

1. AADT = 40,000 to 43,000 vehicles per day
2. Access density = **28 access points / mile**
3. Corridor Crash Rate = **680 crashes / HMVM**



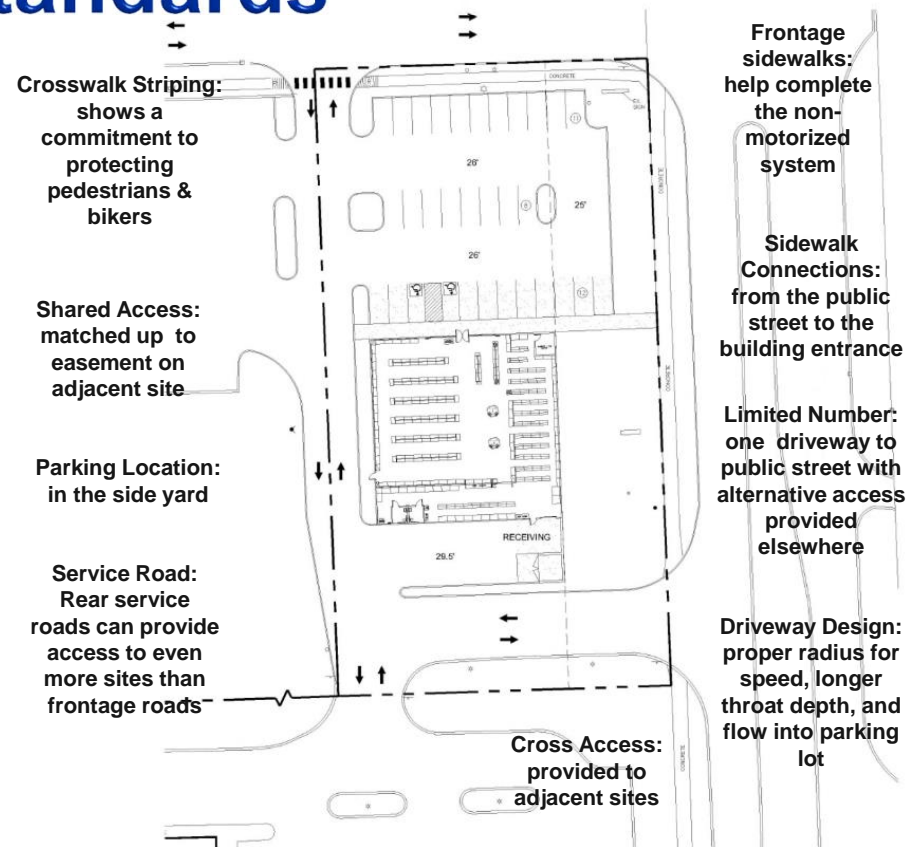
Blue Mound Rd (USH 18)



*Economic Benefits for Communities
and Businesses*

Local Plans, Ordinances and Approvals: Local Site Plan Review Standards

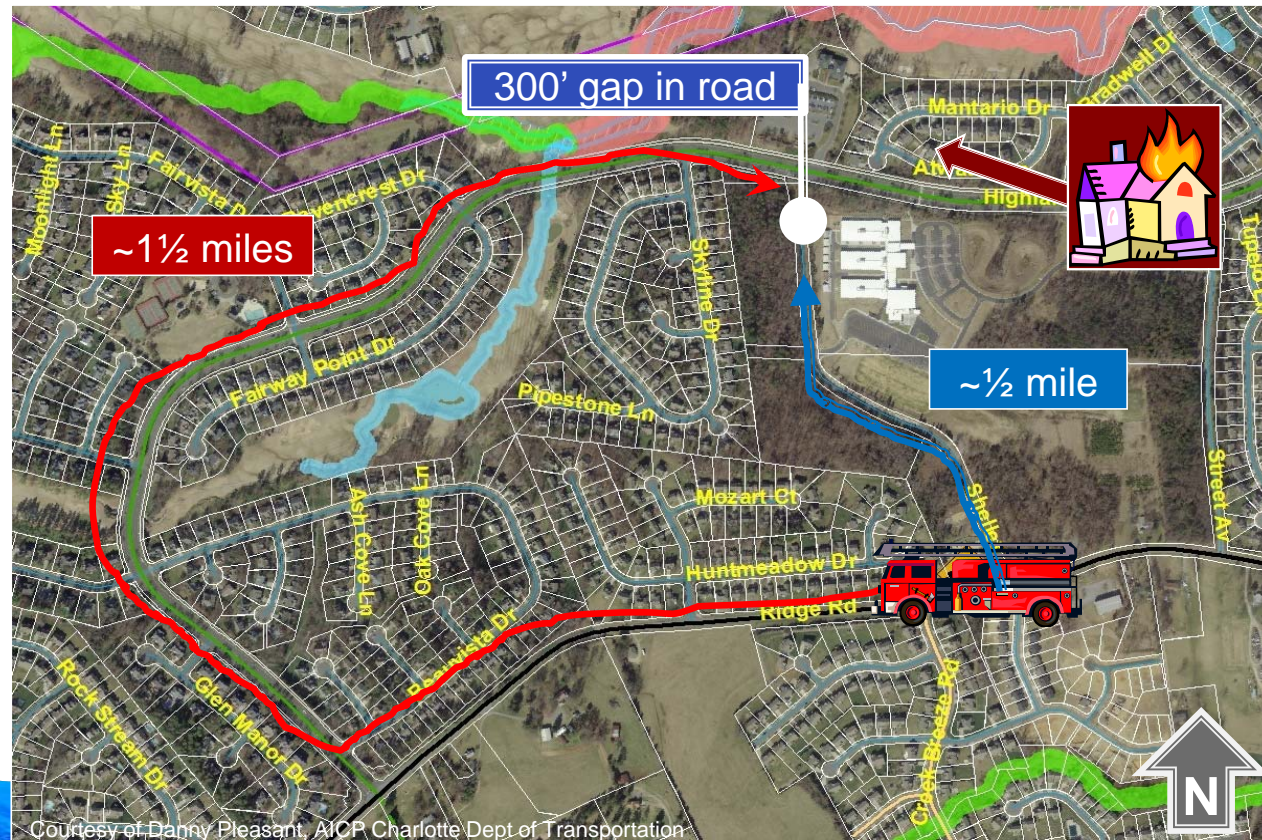
- ▶ Refer applicant to WisDOT standards
- ▶ Avoid internal conflicts around driveway (e.g. parking maneuvers)
- ▶ Look for options for (future) shared access
- ▶ Coordinate the review and approval of access and traffic studies



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Local Plans, Ordinances and Approvals: Benefits of Connectivity

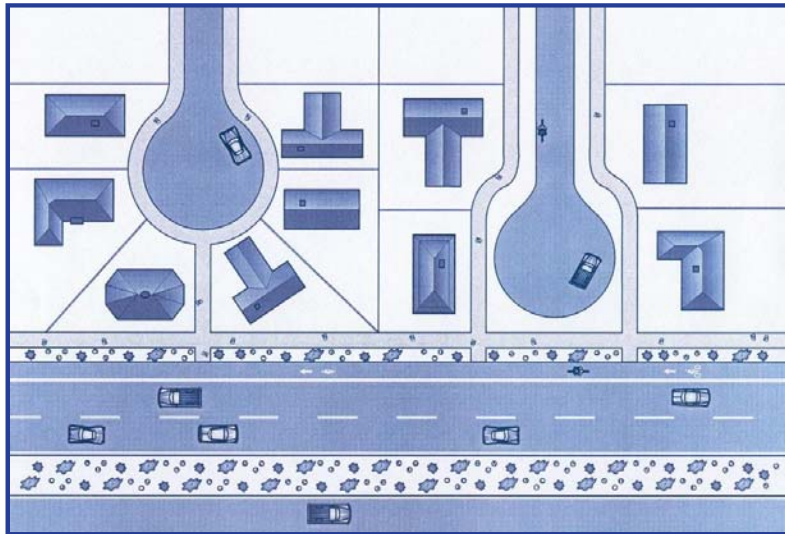
Charlotte, NC study showed cost for fire protection for areas with disconnected streets and cul-de-sacs was 4x greater than areas with connected streets (fewer stations, vehicles, firefighters)



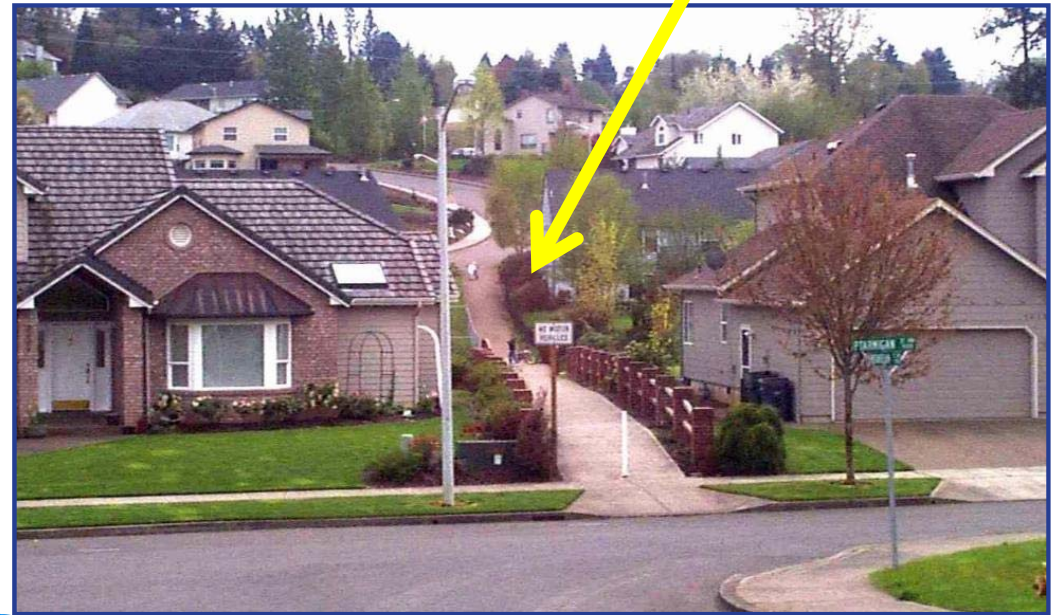
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Local Plans, Ordinances and Approvals: Bike/Pedestrian Connectivity

- ▶ Consider even if vehicular connection not practical



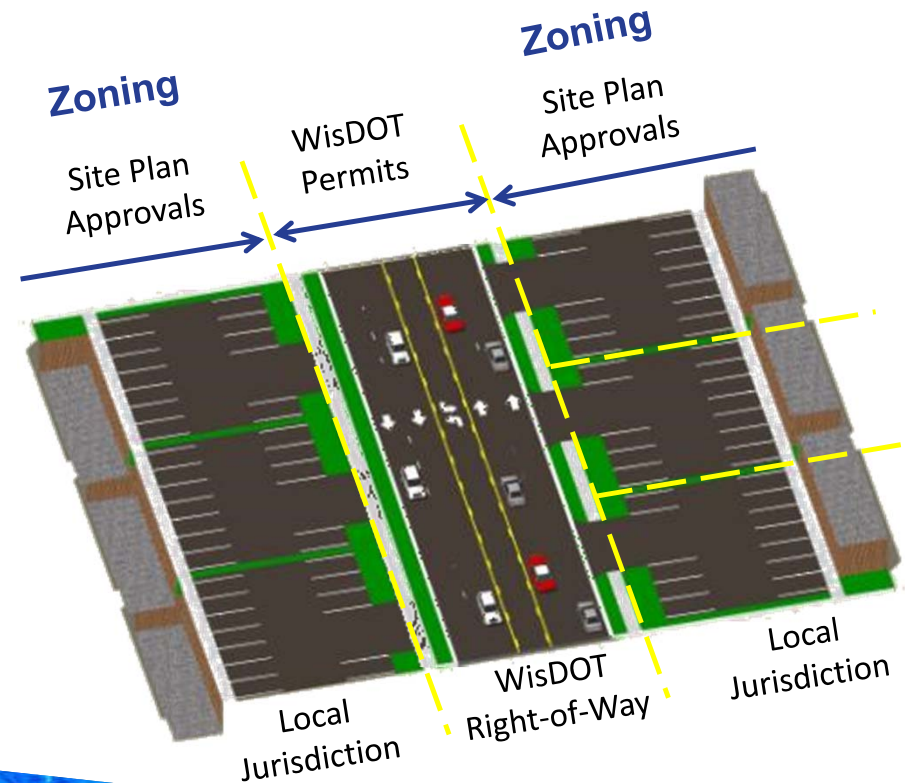
Bike/Ped Trail connecting
neighborhood/local
streets



Working with WisDOT

Collaboration Between Communities & WisDOT

- ▶ WisDOT controls state Right-of-Way
- ▶ Local Government regulates local zoning, lot splits and site plans
- ▶ Most effective with partnership between municipalities and WisDOT
- ▶ Alert WisDOT about:
 - Rezoning and new development
 - Requested lot splits
 - Change or expansions that might increase traffic



Working with WisDOT

Implementation Opportunities

- ▶ Joint Corridor Planning
- ▶ Local Regulations and Development Review
- ▶ Site Plan Review:
 - Retrofit = Gradual implementation
 - Access improvements through site plan review as businesses change/expand
- ▶ Road Projects:
 - Close/consolidate/relocate when road improved
- ▶ Communication:
 - Alert WisDOT staff of change and vice versa



Change of Use:

- ☐ No major increase in traffic
- ☐ Require cross-access easement
- ☐ Close unsafe driveways



Building Expansion:

- ☐ Additional traffic generated
- ☐ Require cross-access
- ☐ Close most problematic driveways



Full Redevelopment:

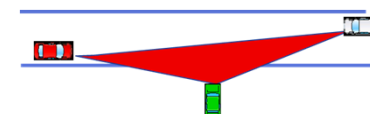
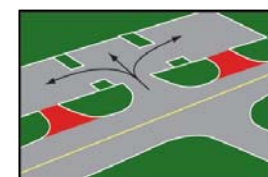
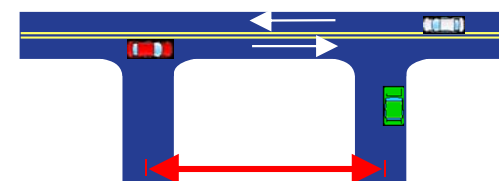
- ☐ Full compliance required
- ☐ Cross-access provided
- ☐ Allow temporary access if needed



Working with WisDOT

Top 10 ways WisDOT and municipalities can work to manage access

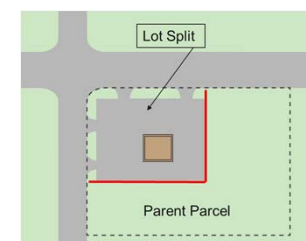
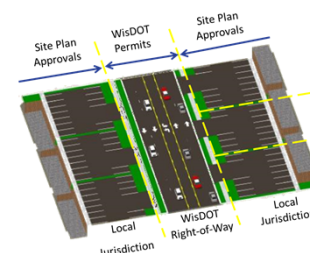
1. Lay foundation for Access Management in the local comprehensive or corridor plan
2. Locate driveways away from intersections and other driveways
3. Consider access to future parcels when lot splits are requested
4. Promote shared access (connect parking lots, consolidate driveways, use frontage/ backage roads)
5. Ensure site plan reviews reduce traffic conflicts (especially design near driveways)



Working with WisDOT

Top 10 ways WisDOT and municipalities can work to manage access

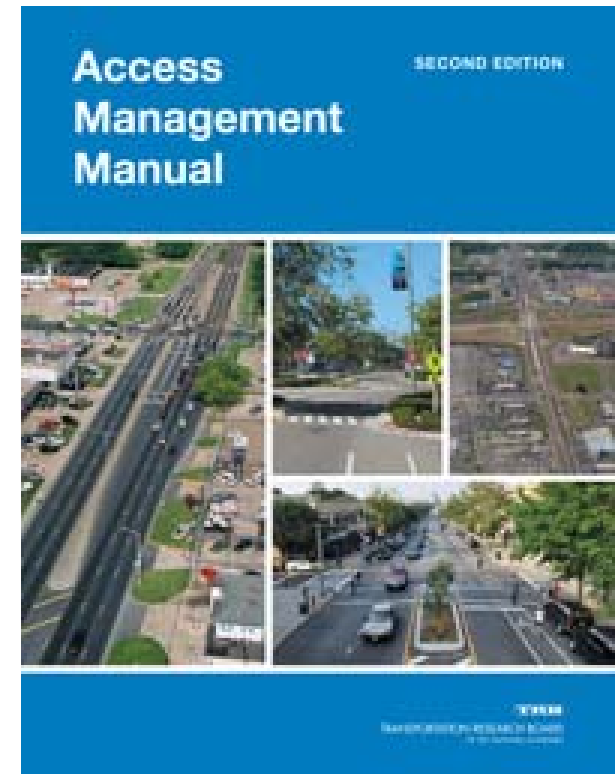
6. Set lot frontage on major roads so spacing standards can be met
7. Promote connected streets
8. Place access at side streets where practical
9. Regulate driveway location, spacing, design under local zoning and other ordinances
10. Notify WisDOT of land use, zoning and access changes



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Key Resources - TRB

- ▶ TRB Access Management Manual (2nd Edition)
 - To purchase:
<http://www.trb.org/Main/Blurbs/171852.aspx>
- ▶ TRB Access Management Committee Website
 - <http://www.accessmanagement.info/>



Key Resources - WisDOT FDM

- ▶ Chapter 7 (Access Control)
- ▶ Chapter 11 (Design)
 - 11-5 (General Design Considerations)
 - 11-10 (Design Controls)
 - 11-15 (Cross-section Elements for Rural Highways and Freeways)
 - 11-20 (Cross Section Elements for Urban Highways)
 - 11-25 (Intersections at Grade)
 - 11-26 (Roundabouts)
- ▶ FDM Link: <http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/fdm.aspx>



Key Resources – WisDOT Access Management Website

<http://wisconsindotgov/pages/doing-bus/real-estate/access-mgmt/default.aspx>



Resources, Conclusion and Q&A

12th National Access Management Conference

<http://wisconsindot.gov/2018accessconference>

12th National Access Management Conference

Madison, Wisconsin

July 17-19, 2018



Questions

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Resources, Conclusion and Q&A

Questions for you

- ▶ What can WisDOT do to foster a collaboration with your communities?
- ▶ What are the most pressing access related needs in your communities?

