




INDOT's Access Management Study






Presented to
2006 Road School
Presented by
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What is Access Management?

The Control and Regulation of the Spacing and Design of:

-  DRIVEWAYS
-  MEDIANS
-  MEDIAN OPENINGS
-  TRAFFIC SIGNALS
-  FREEWAY INTERCHANGES





What happens if you don't manage access?

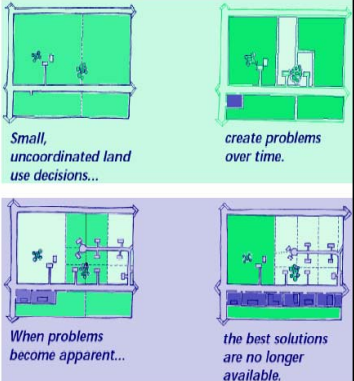


Purpose of the Study

To develop and implement an access management strategy that supports INDOT's Long-Range Transportation Plan and Statewide Mobility Corridor concept.



Need for Local Coordination



Small, uncoordinated land use decisions... create problems over time.

When problems become apparent... the best solutions are no longer available.



Study Efforts Leading to Recommended Actions

- Identify Current Process
 - Driveway Permits
 - Local Coordination
- Establish Legal Framework
- Meet with Stakeholders & Advisory Committee






Implementation Plan Elements

- Access Classification System
- Access Spacing and Design Criteria
- Improved Local Coordination
- Training and Education
- Retrofit Techniques
- Other Actions





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Movement / Access Balance






Considerations for Defining Access Categories

- Roadway functional classification
 - Role of the roadway in the transportation system
 - Arterial, collector, etc.
- Roadway design characteristics
 - Geometric features (median)
 - Speed
- Degree of urbanization
 - Development intensity
 - Intersection frequency



INDOT Mobility Corridor Concept

- Statewide Mobility Corridors
- Regional Corridors
- Sub-Regional Corridors



The map shows the state of Indiana with a network of corridors. A legend in the bottom right corner identifies the following categories:

- Statewide Mobility Corridor (thick blue line)
- Regional Corridor (medium blue line)
- Sub-Regional Corridor (thin blue line)
- Local Road (thin grey line)
- Arterial Road (medium grey line)
- Interstate (thick red line)
- State Route (thin red line)
- County Road (thin black line)
- Local Road (thin black line)

Overview of INDOT Access Classification System


Access Category	Cross-Section
Interstate Highways and Freeways	
Tier 1: Statewide Mobility Corridors	Multi-Lane
	Two-Lane
Tier 2: Regional Corridors	Multi-Lane
	Two-Lane
Tier 3: Sub-Regional Corridors	Multi-Lane
	Two-Lane
Special Transportation Areas (STAs)	

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Access Criteria

- Where access is allowed
- Allowable movements
- Signal spacing
- Unsignalized access spacing
- Corner clearance
- Dealing with non-conforming access



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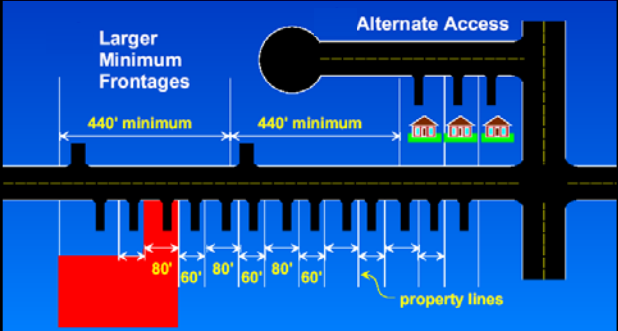



Improved Local Coordination

- Rezoning actions and land use approvals
- Residential subdivisions
- Commercial developments
- Site plan review
- Other intergovernmental coordination

Improved Subdivision Regulations



The diagram illustrates subdivision regulations with the following details:

- Larger Minimum Frontages:** Two segments are marked with "440' minimum".
- Alternate Access:** A circular driveway provides access to three houses.
- Property Lines:** A series of setbacks are shown with dimensions: 80', 60', 60', 60', 60', 60'.



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- **Training and Education**
- Retrofit Techniques
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Training for INDOT Staff

- Technical workshops and short-courses for technical staff
- "Executive overview" training for non-technical staff





Educational Efforts for Stakeholders

- Includes both local government representatives and consultant community
- Training sessions and workshops with emphasis on:
 - The importance and basic principles of access management
 - Policies and procedures applicable in Indiana
- Could include local technical assistance
 - Model ordinances
 - Other reference materials





Implementation Plan Elements

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- Improved Local Coordination
- Training and Education
- **Retrofit Techniques**
- Other Actions



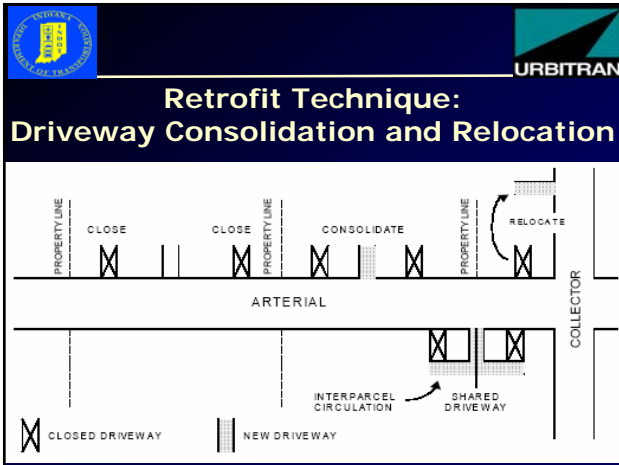
Potential for Retrofit?

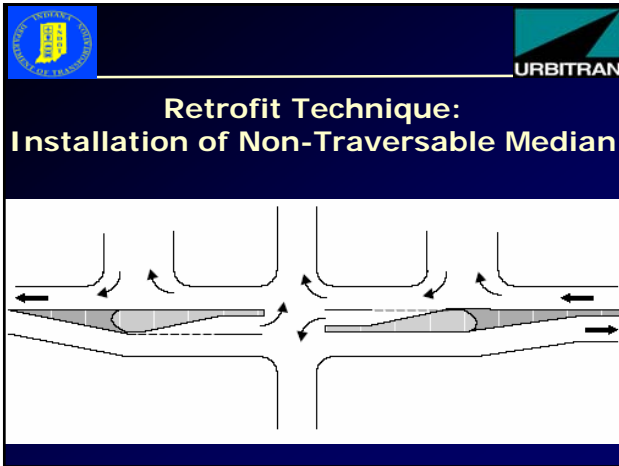






Retrofit Techniques

- Apply general principles of access management:
 - Limit the number of conflict points
 - Separate basic conflict areas
 - Reduce the impedance of through traffic by turns
 - Provide sufficient spacing between intersections
 - Maintain progression speeds along arterials
 - Provide adequate storage areas for queued vehicles
 - Encourage access to streets with the lowest functional classification, where this option exists





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Other Actions

- Purchase access rights in priority corridors
- Prioritize projects with access management benefits
- Prepare Access Management Plans for selected high-priority segments

Route 34 Access Management Plan



When Can We Implement Access Management?

- Permitting
- Road improvements
- Cooperation with local governments






When Can We Implement Access Management?

Permitting

- New developments
- Expanded developments






When Can We Implement Access Management?

Road Improvements

- Major road widening
- Intersection upgrades
- Installing new restrictive medians
- New roads







When Can We Implement Access Management?

Cooperation with Local Governments



- Site plan review
- Improved subdivision regulations
 - Larger minimum frontages
 - No more "flag" lots
- Joint access/Cross access

 **VERMONT AGENCY OF TRANSPORTATION**

SOUTH BURLINGTON CASE STUDY

PROJECT: Dorset Street
LOCATION: So. Burlington, VT

Challenge

Over time traffic in each direction was creating difficulties for the City of South Burlington throughout the 1970's and 1980's. Traffic was causing left hand access across the opposing lanes, often leading to the opportunity to make left hand passing maneuvers. At the same time, the traffic was causing difficulties for businesses and offices along Dorset Street and the existing program was not providing for the most efficient access to businesses and offices along Dorset Street and the existing program was not providing for the most efficient access to businesses and offices along Dorset Street.

Objectives



In response to these issues of traffic flow, the City of South Burlington has undertaken a study to determine the number of phases and how traffic could be more efficiently managed by making a major change. The number of traffic lights was reduced and as a result of these changes, the local governing agency has been simplified.


Benefits


The study has been successful. Accident counts have been reduced significantly. The Dorset Street Corridor Study Implementation has been successful in reducing traffic congestion and providing better access to businesses and offices along Dorset Street. The study has also provided for higher quality development and more efficient access to businesses and offices along Dorset Street.

“Dorset Street before the project was a challenge for drivers and business owners alike, with high accident counts, difficult access to local businesses, and a challenge for pedestrians and bicyclists. Since the project's completion, accidents have dropped dramatically, property values have risen, and we've been able to create a commercial zone that's attractive to businesses and residents. It's been a win-win for South Burlington.”

John Fuller
City Manager
South Burlington, VT

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