

Ohio  
Transportation Engineering  
Conference

Positive Economic Impacts of  
Access Management

October 23, 2007



# What is Access Management?



# Access Management is...

- The control and regulation of the spacing and design of:
  - Driveways
  - Medians
  - Median openings
  - Traffic signals
  - Freeway interchanges

What happens over time if you  
don't manage access?  
In the beginning ...



What happens over time if you  
don't manage access?  
As time progresses ...



What happens over time if you  
don't manage access?  
The result





# “The Real World”





# “The Real World”



# Poor Signal Coordination





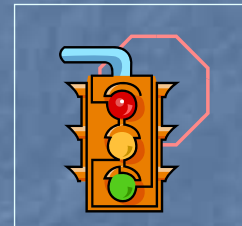
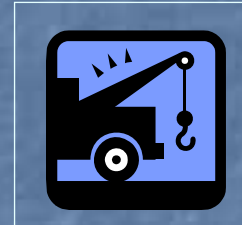
# "The Real World"



What are the economic benefits of  
Access Management?

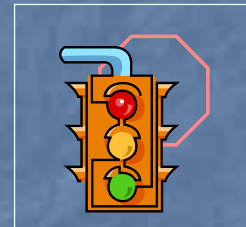
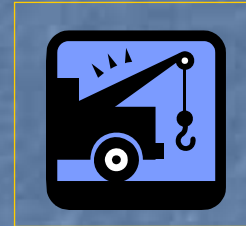
# Economic Benefits of Access Management

- Roadway safety
- Traffic operations
- Business operations
- System preservation
- Environmental



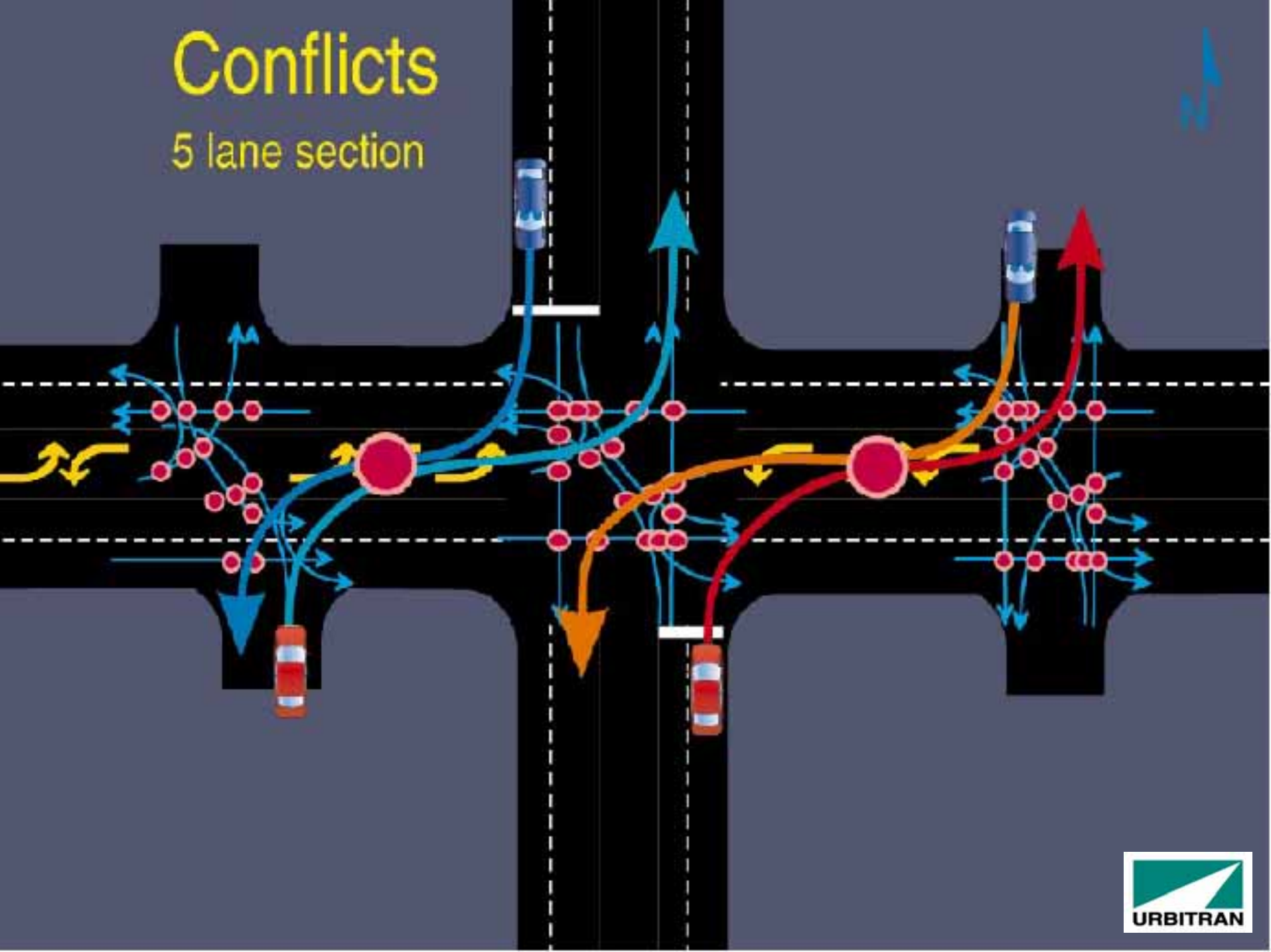
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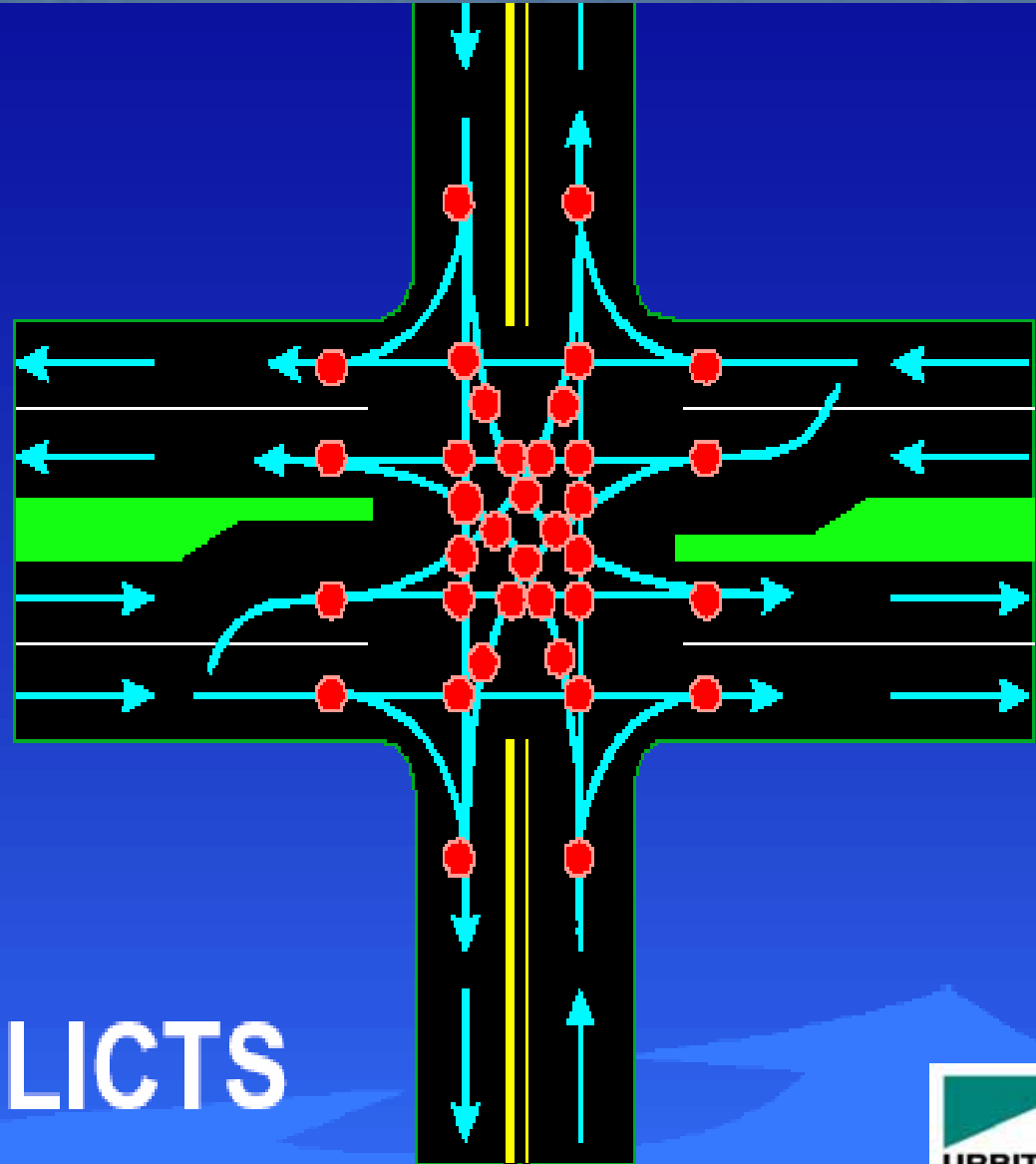


# Conflicts

5 lane section

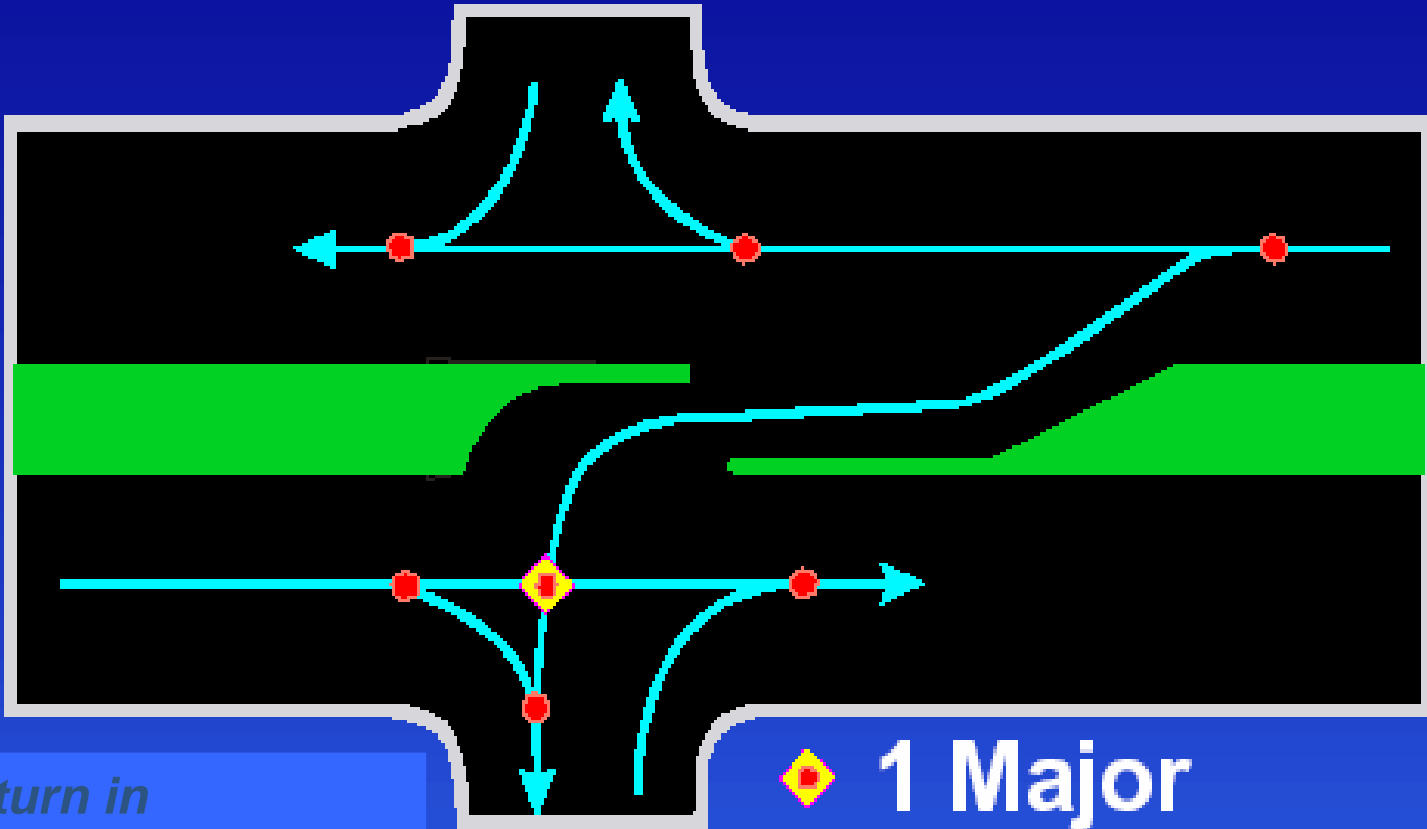


# Conflicts at 4-way intersection



**36** CONFLICTS

# Conflicts at Directional Median Opening

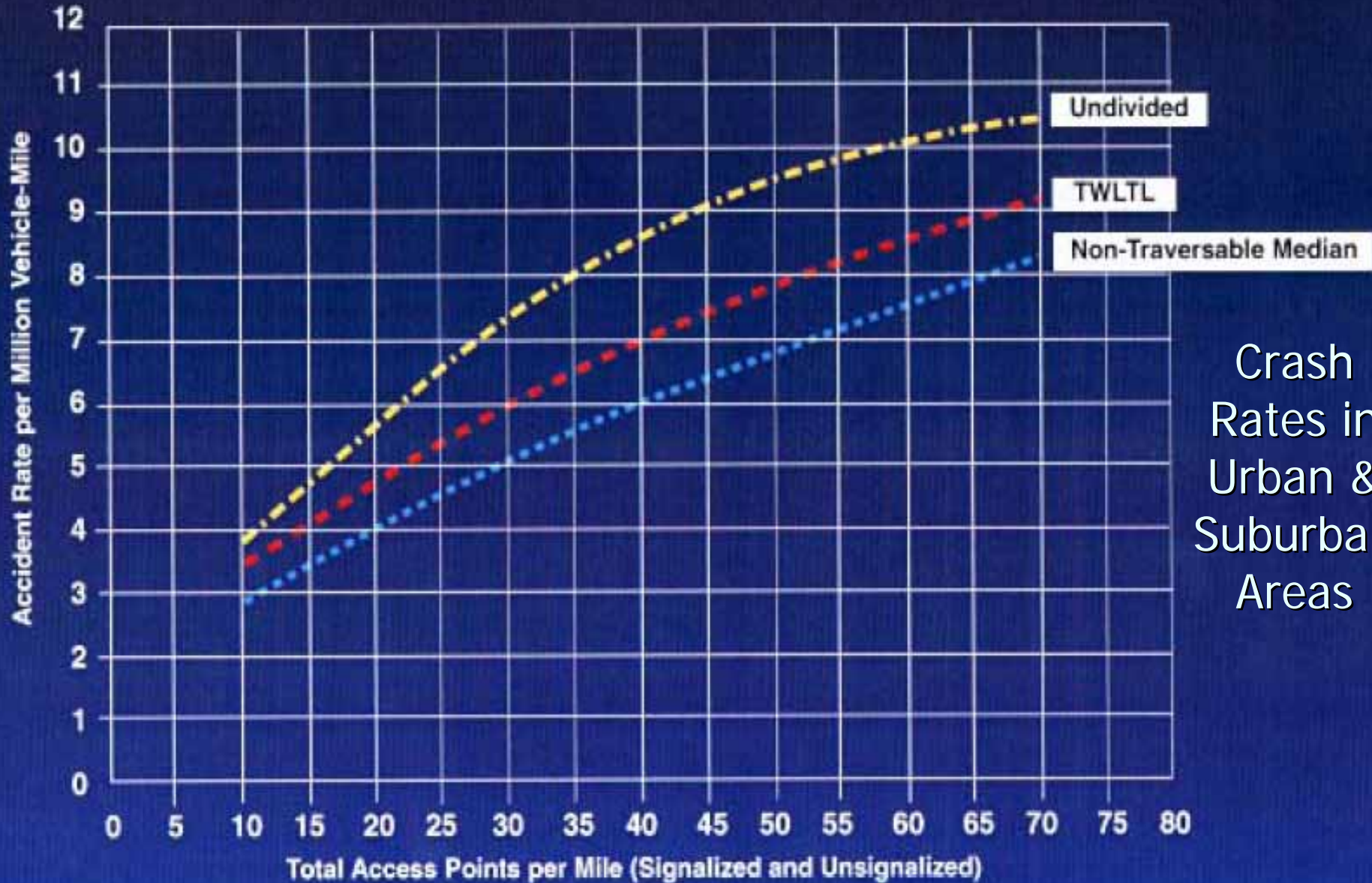


*Right-turn in*  
*Right-turn out*  
*Left-turn in (1 direction)*

◆ 1 Major  
● 6 Minor

**7 CONFLICTS**

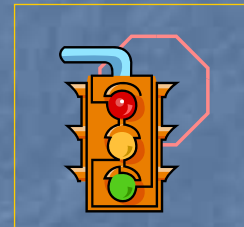
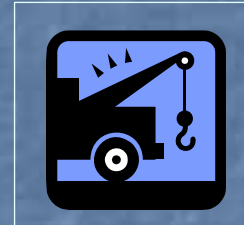
# Safety Benefits



Crash Rates in Urban & Suburban Areas

# Economic Benefits of Access Management

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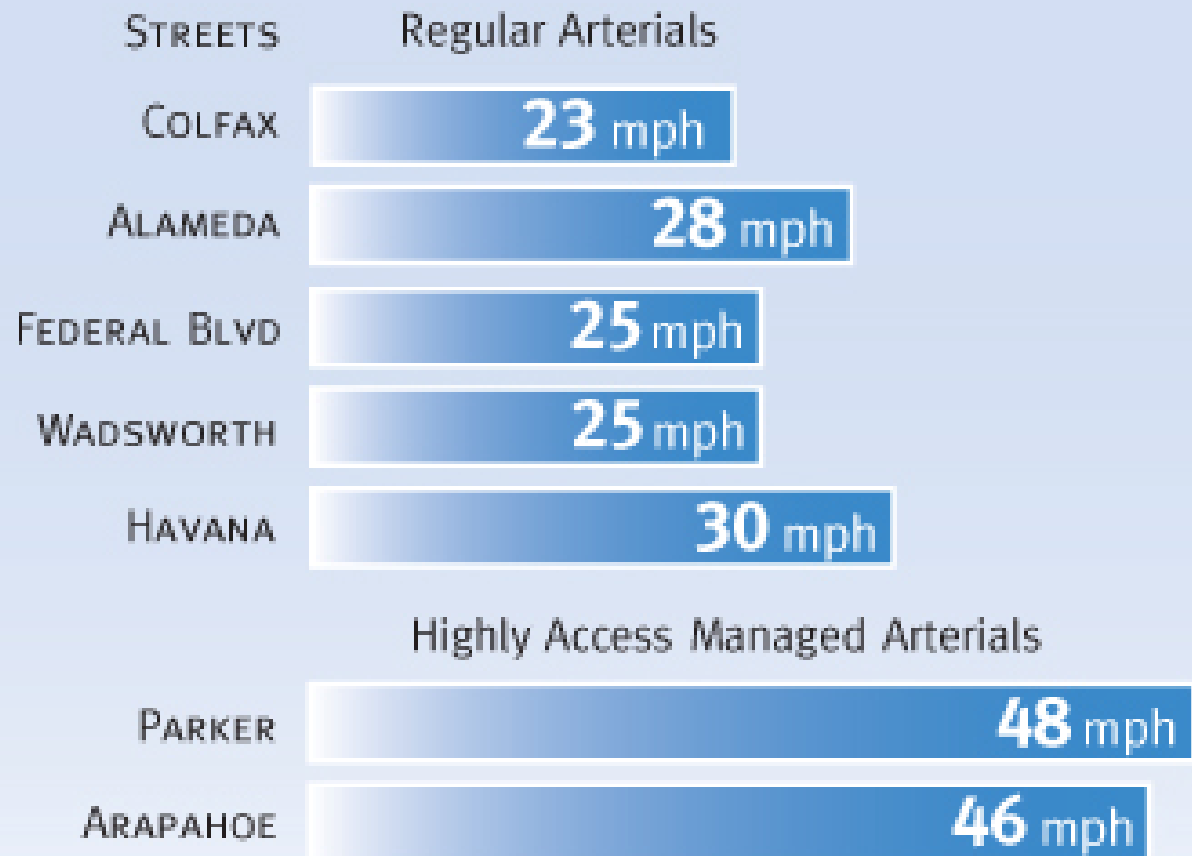


# Traffic Operations Benefits: Signal Spacing

Signals Per Mile	Percent Increase in Travel Time (compared to 2 signals per mile)
2	0
3	9
4	16
5	23
6	29
7	34
8	39

# Traffic Operations Benefits: Reduced Delay

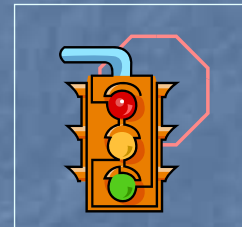
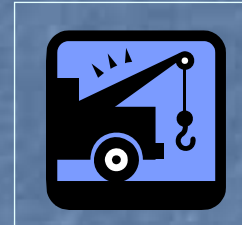
Good access management allows traffic to move closer to posted speed limits, thereby reducing delay.



Source: Colorado Access Control Demonstration Project, 1985.

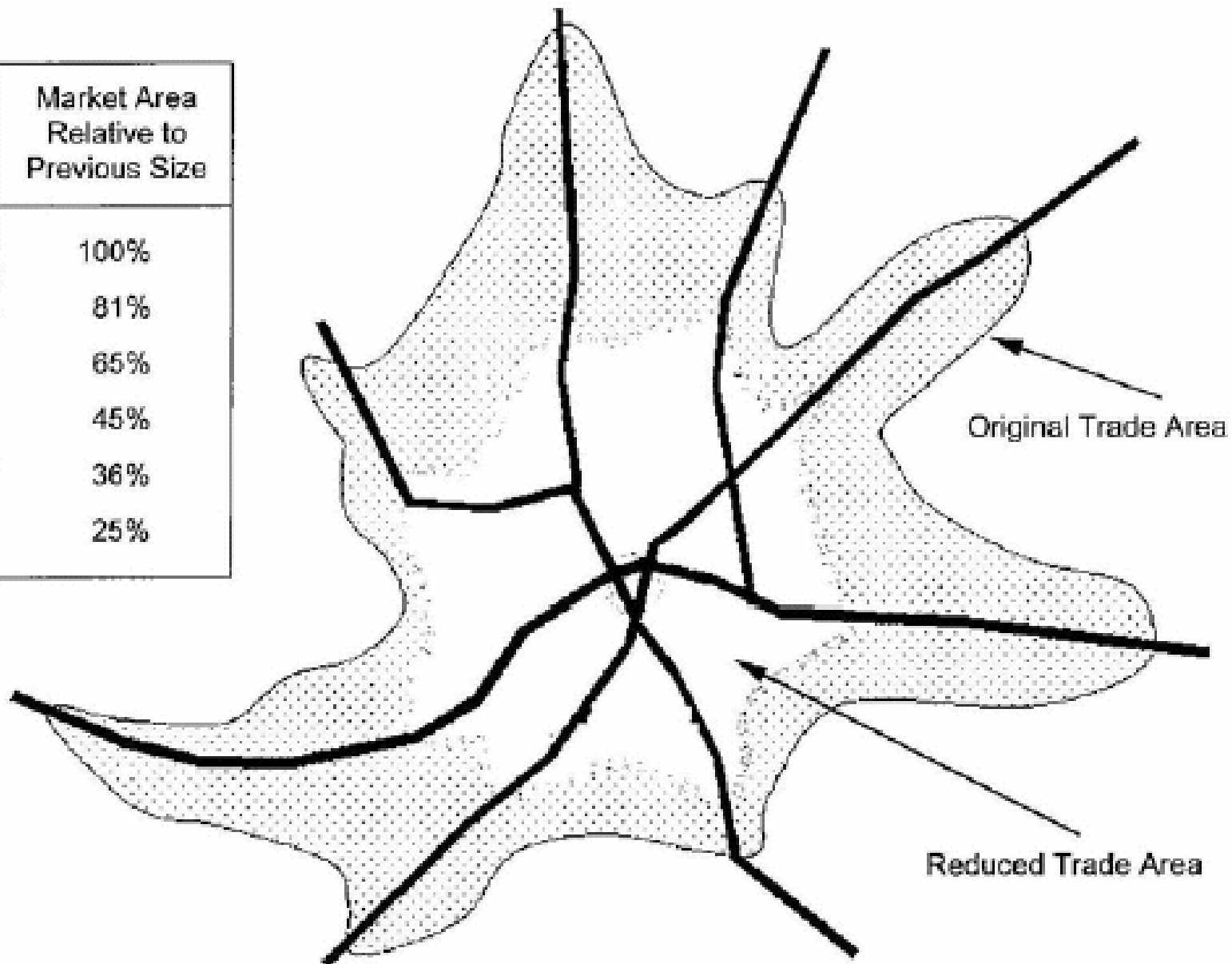
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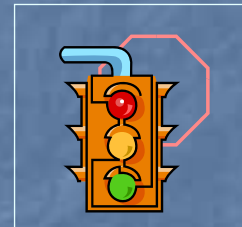
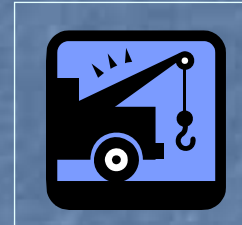
# Market Area Benefits

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



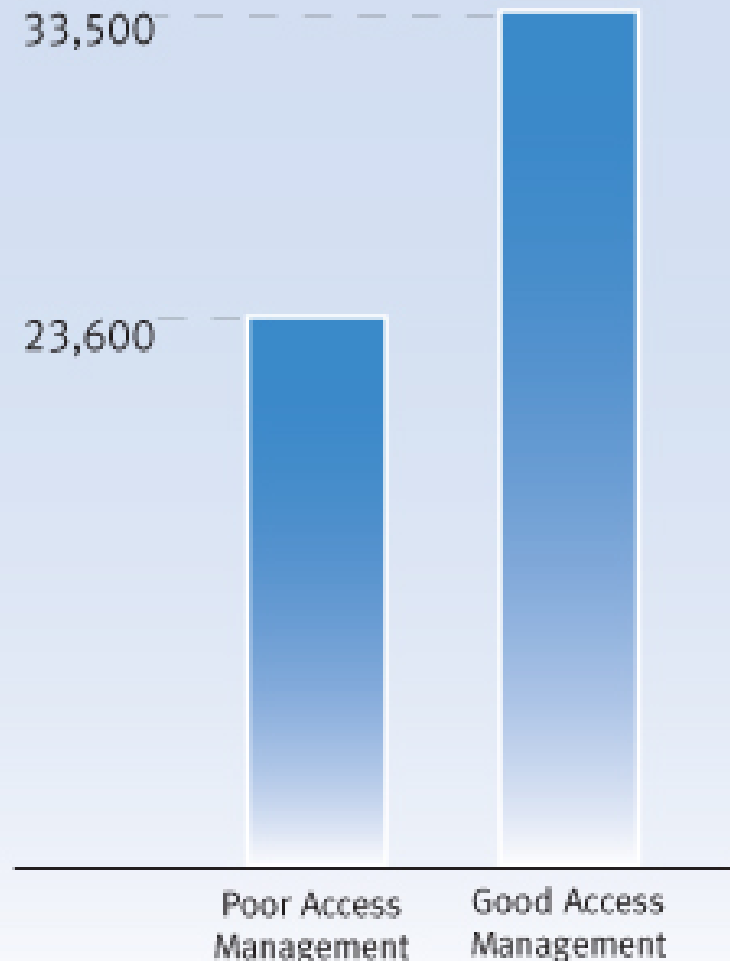
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# System Preservation Benefit: Increased Capacity

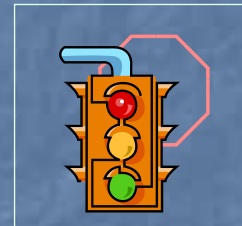
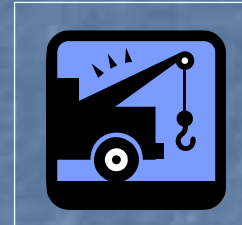
A typical four-lane arterial road with good access management can handle nearly 10,000 more vehicles per day.



Source: Florida Department of Transportation

# Economic Benefits of Access Management

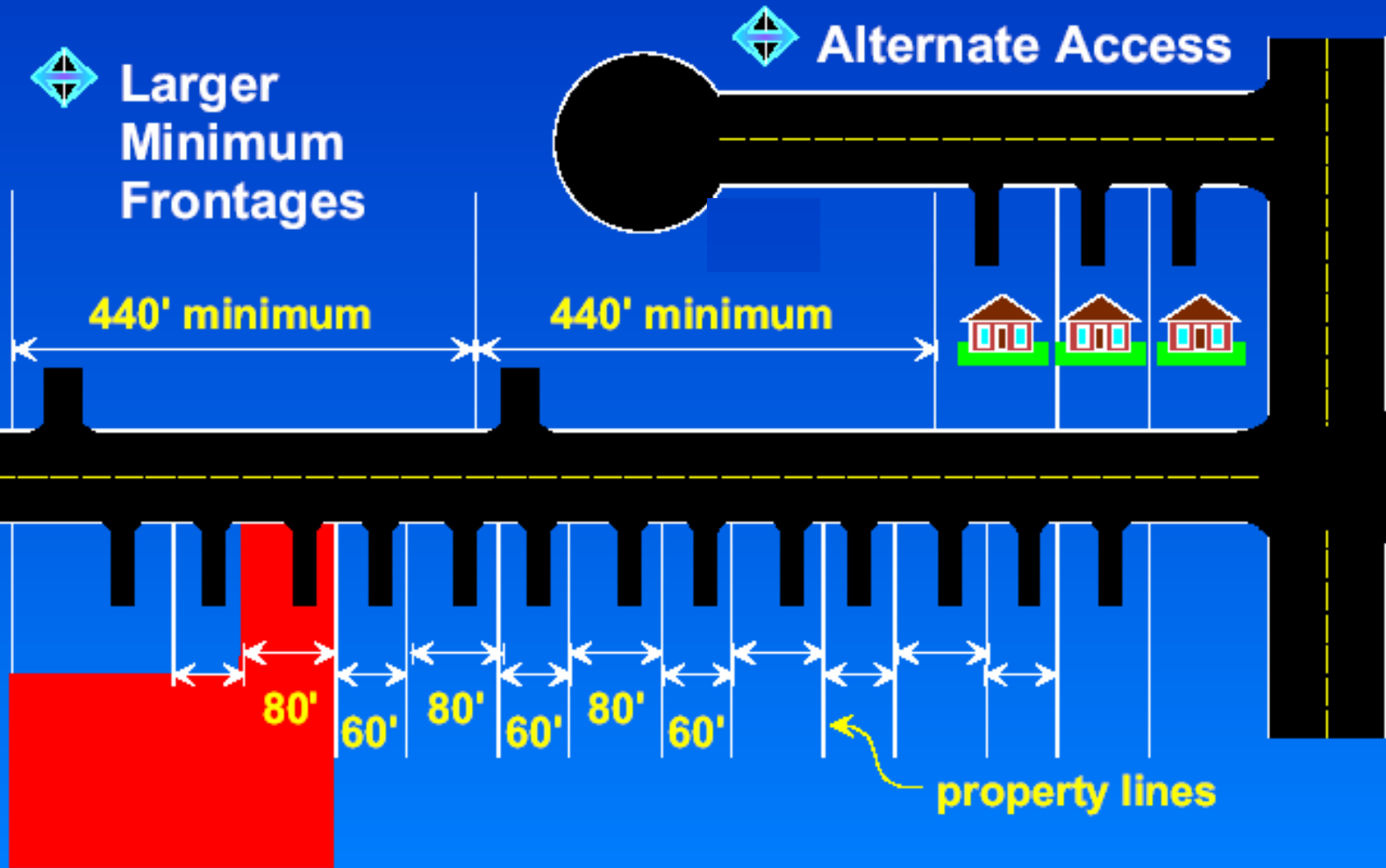
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# Environmental Benefits of Access Management

- Reduced pollution emissions
- Less gas consumption
- Improved aesthetics

# Improved Subdivision Regulations



# Who Benefits?

# Who Benefits?

- **Motorists**

- Fewer conflict and decision points
- Driving task safer and more simplified

- **Cyclists and Pedestrians**

- Fewer conflicts with vehicles
- Median refuge
- Safer environment

# Who Benefits?

- **Business persons**
  - Broader market area and more stable property values
- **Freight delivery carriers**
  - Shorter transport times and lower delivery costs
- **Government agencies**
  - Lower cost to deliver safe & efficient transportation system
- **Communities**
  - Safer and more attractive driving environment

# Experience of Business Owners with Frontage along Roadway?

- Kansas
- Texas
- Iowa

# Resources

- **TRB Access Management Manual**
- **NCHRP Project 3-52: Impacts of Access Management Techniques**
  - **NCHRP Report 420**
  - **Software: Impacts Calculator**
- **TRB Access Management Committee website**
- **FHWA Primer and Video: Safe Access is Good for Business**

# Questions

