

Growing Smart with Access Management



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Access, Congestion & Safety on Louisiana Roads

- 28% of LA roads are congested
- Traffic fatality rate 40% higher than national average
- Many arterials with 60 to 80 access points per mile



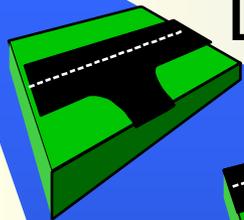
Source: J. Broemmelsiek, "Access Management,"
The Louisiana Civil Engineer, Vol 15, No 4, August 2007.

What is Access Management ?

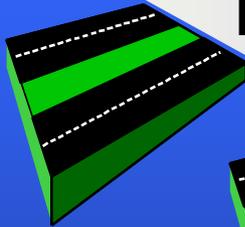


The systematic control of the spacing, location, operation, and design of:

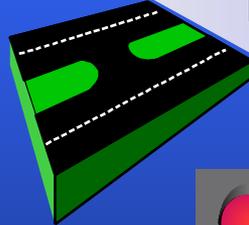
Driveways and Street Connections



Medians



Median Openings



Traffic Signals



Freeway Interchanges



Roadway Function & Access



Why is Access Management Important?



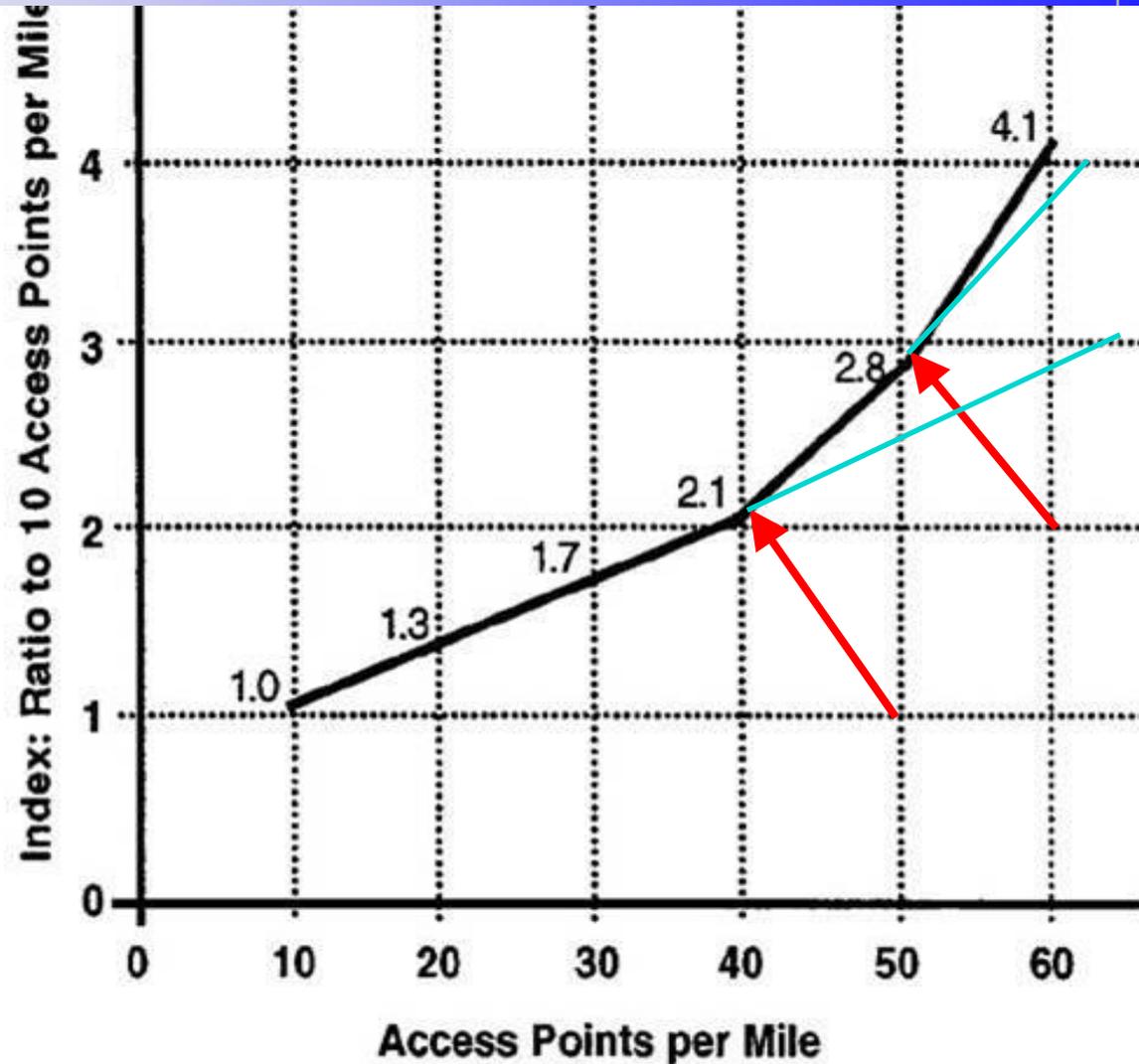
- **Safety**
 - Reduces crashes up to 50%
- **Mobility**
 - Increase roadway capacity 23% to 45%
 - Reduce travel time and delay 40% to 60%
- **Economic**
 - Increased market area for businesses
 - Improved customer safety and convenience
- **Aesthetic**
 - More area for landscaping
 - More attractive corridors

Access Management and Safety

As access points increase, so does the frequency of highway crashes...

And the rate also increases

Source: NCHRP Report 420 1999 (national estimate based on numerous state studies and analysis of 37,000 crashes)



Medians vs. Two-Way Left-Turn Lanes

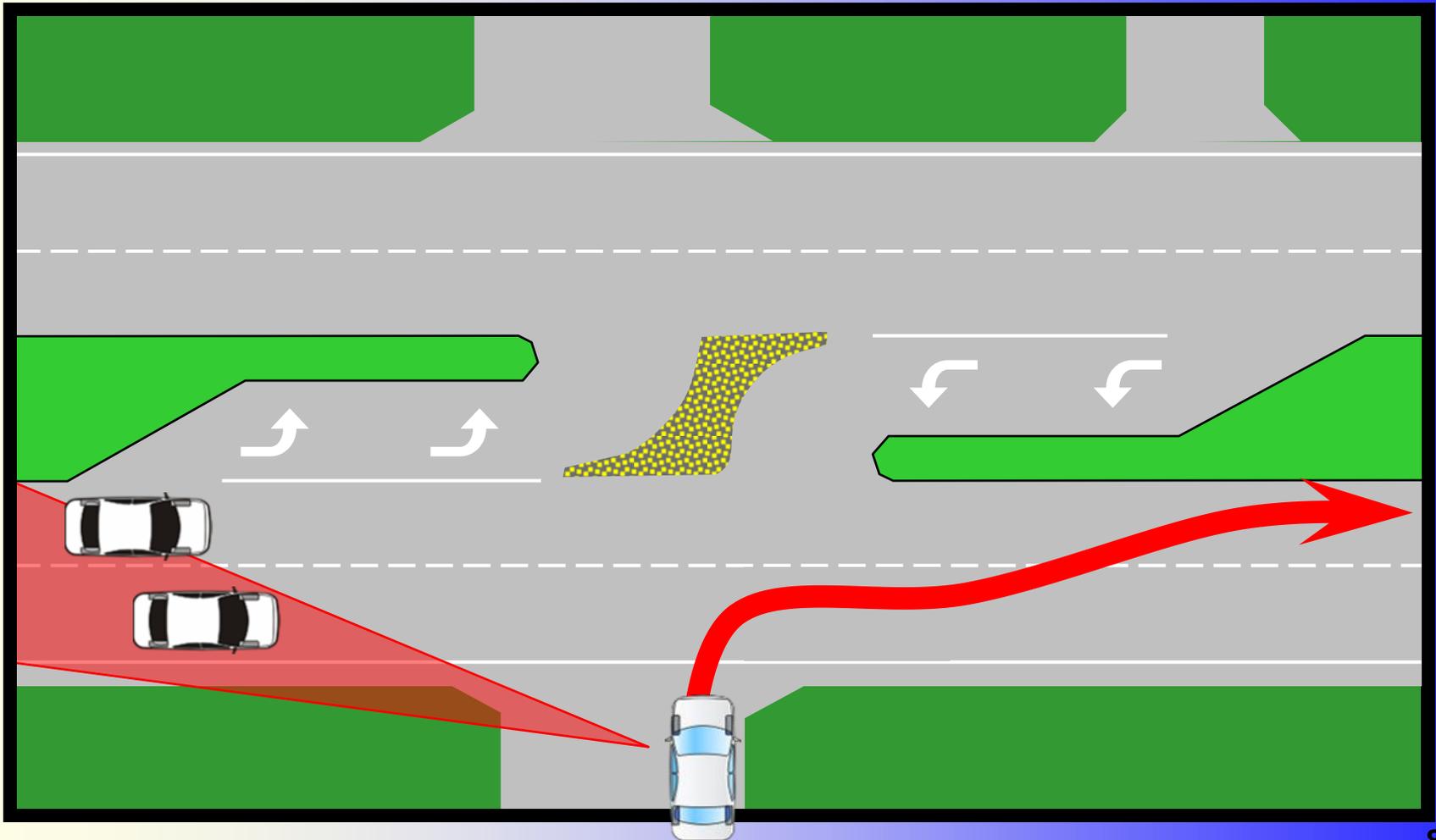
- Major roads with a median are about 30% safer than those with a TWLTL

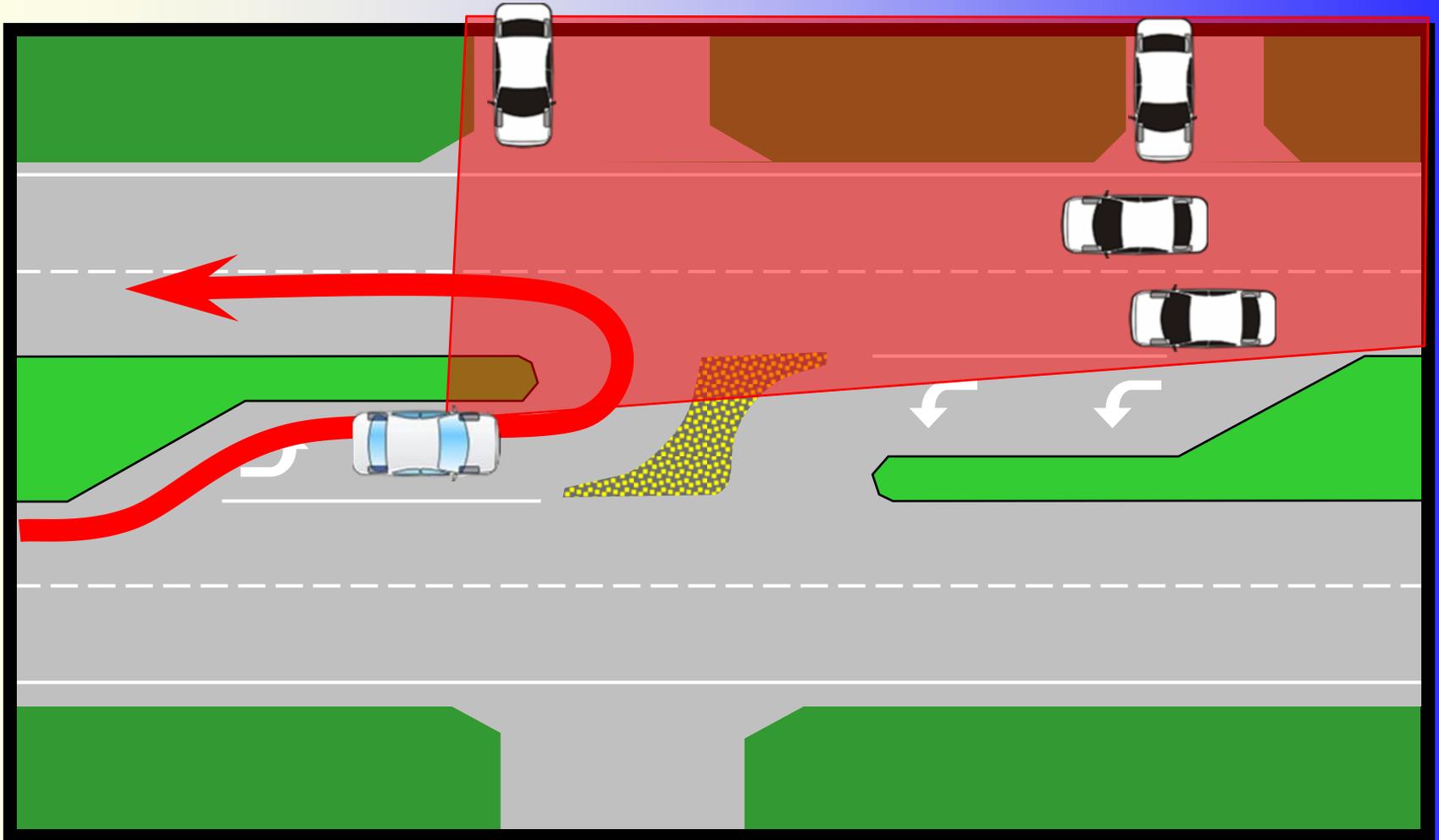


Source: NCHRP Report 420

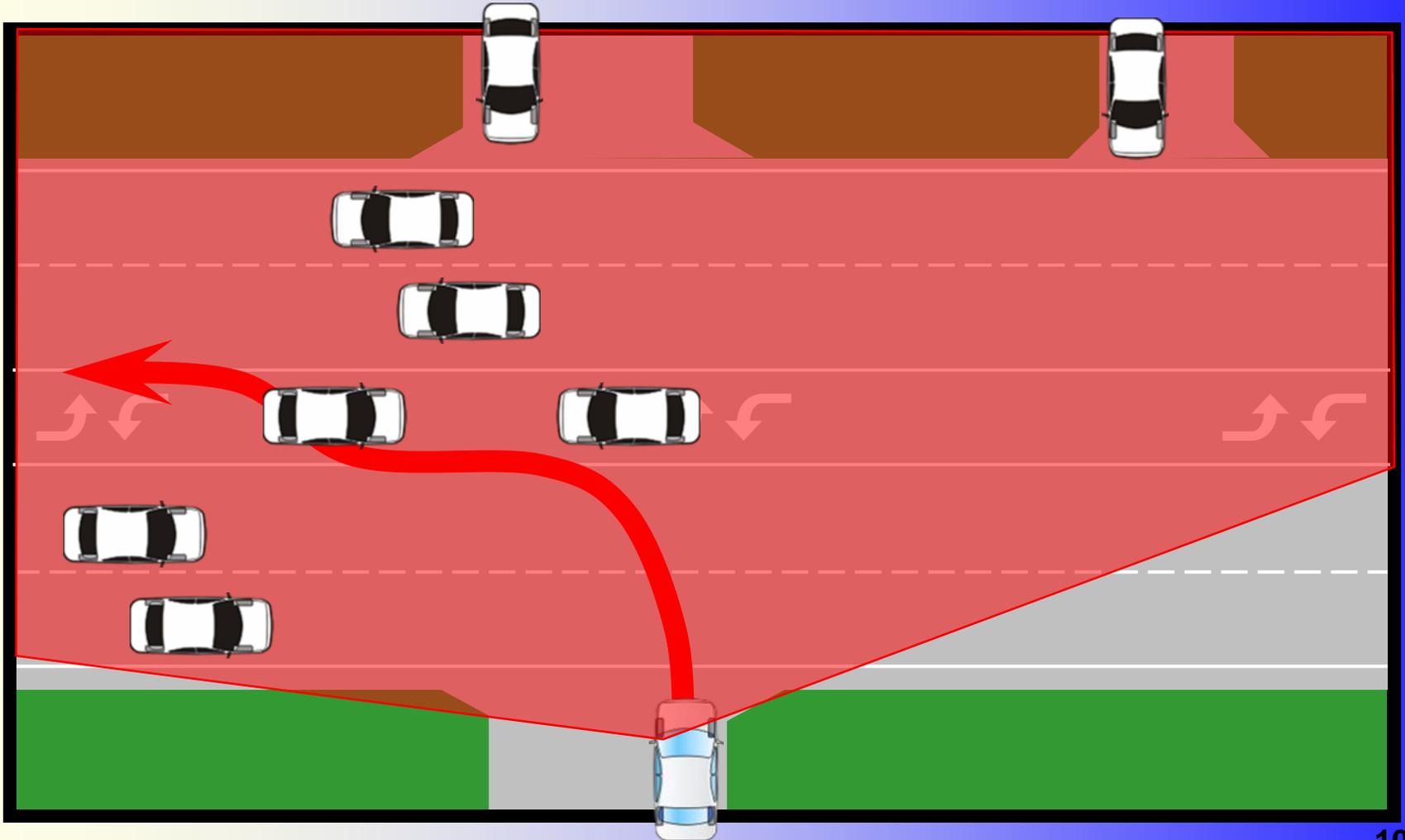


Medians Reduce Potential Conflicts





Two Way Center Left Turn Lane Problems

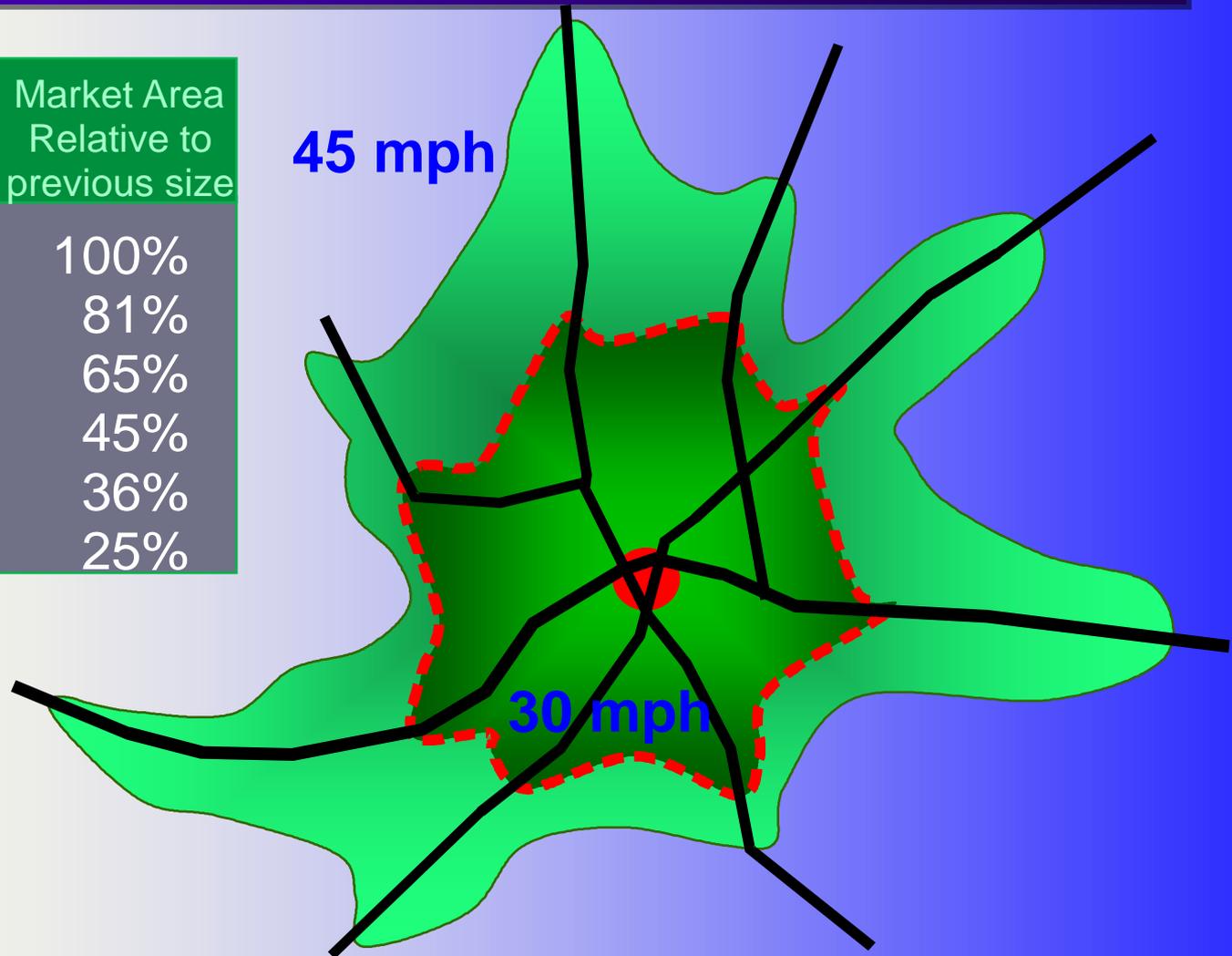


Economic Impact Studies of Ac. Mgt. in Kansas, Texas, Florida, and Iowa show:

- No evidence of adverse impacts on corridor business activity
 - Trends follow economy as a whole
 - Left turns already limited during peak hours
 - Higher vacancies and less activity more likely in older strips with poor access & circulation design
- Pass-by businesses more sensitive to access changes than destination businesses
 - Cross access and local street networks improve customer convenience

Roadway Efficiency and Market Area

Reduction in Avg. System Speed	Market Area Relative to previous size
0%	100%
10%	81%
20%	65%
30%	45%
40%	36%
50%	25%



Without Access Management

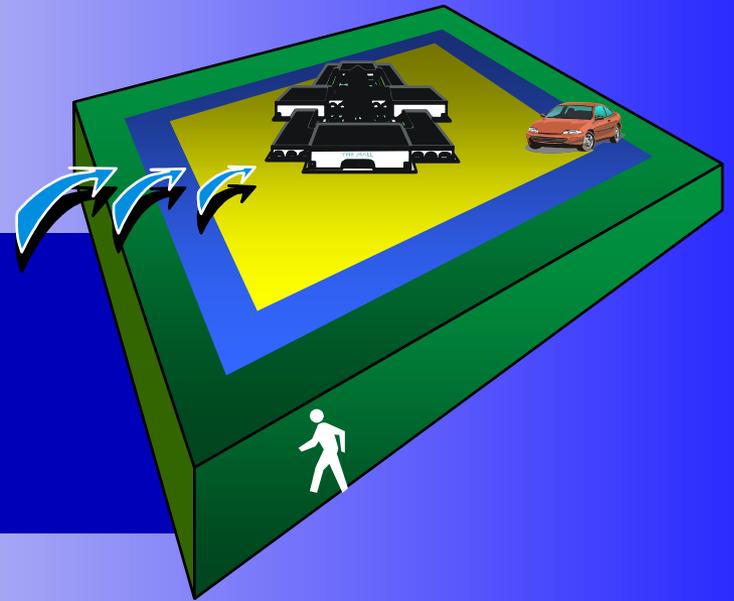


With Access Management

- Safety
- Efficiency
- Livability
- Vitality
- All Modes

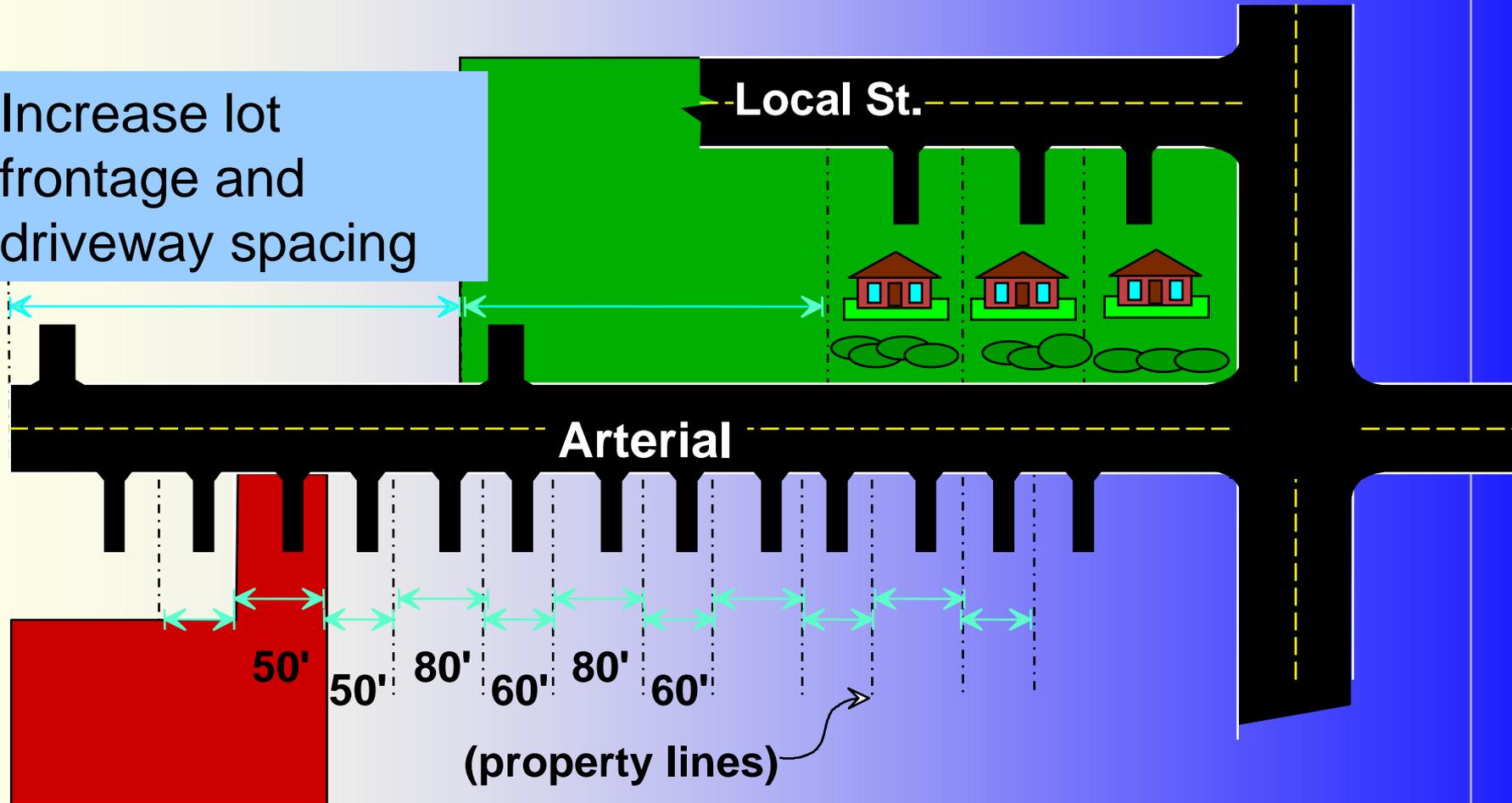


Strategies you can use



Improved Land Development Regulations

Increase lot frontage and driveway spacing

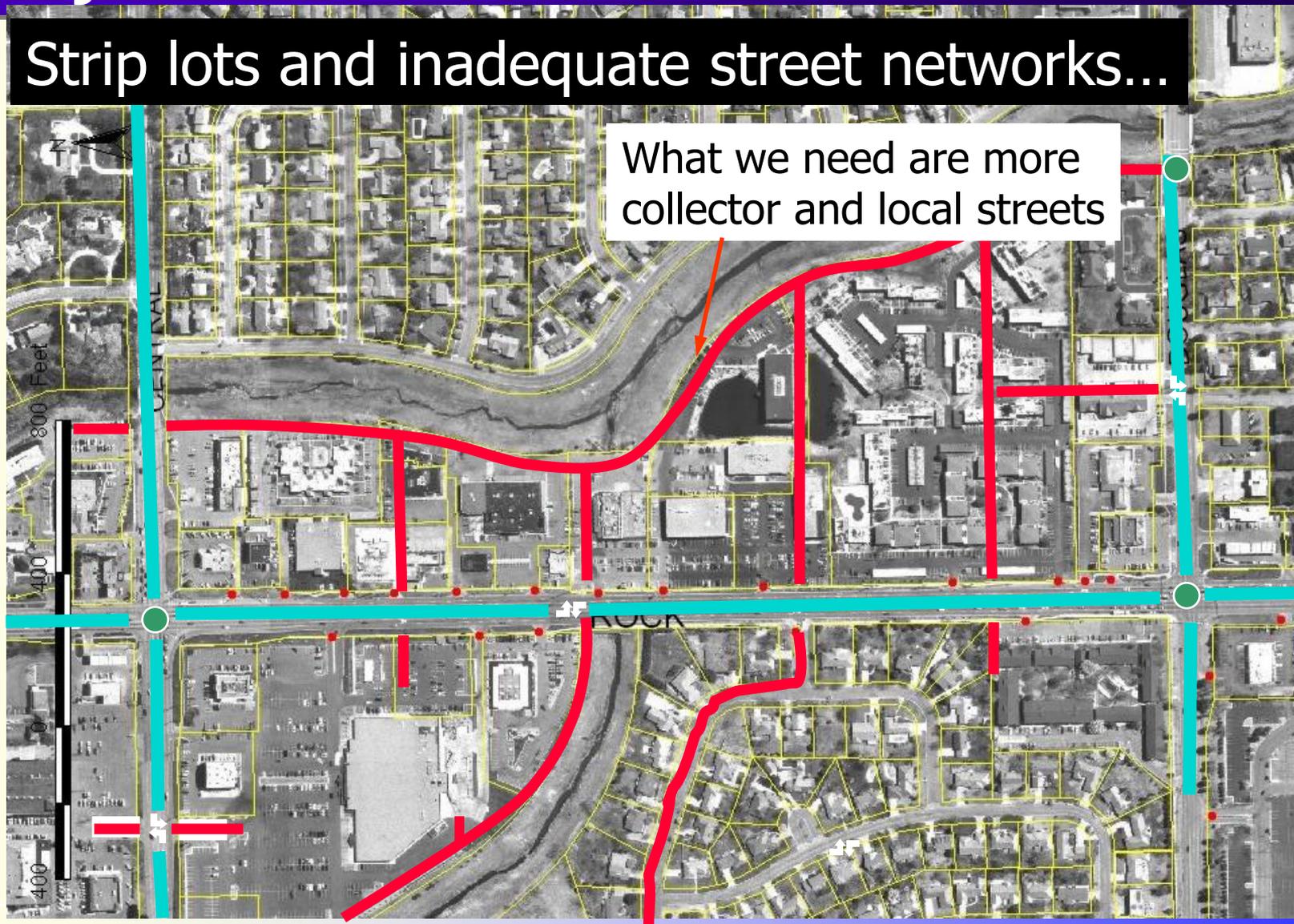


Avoid small lot frontages with no alternative access

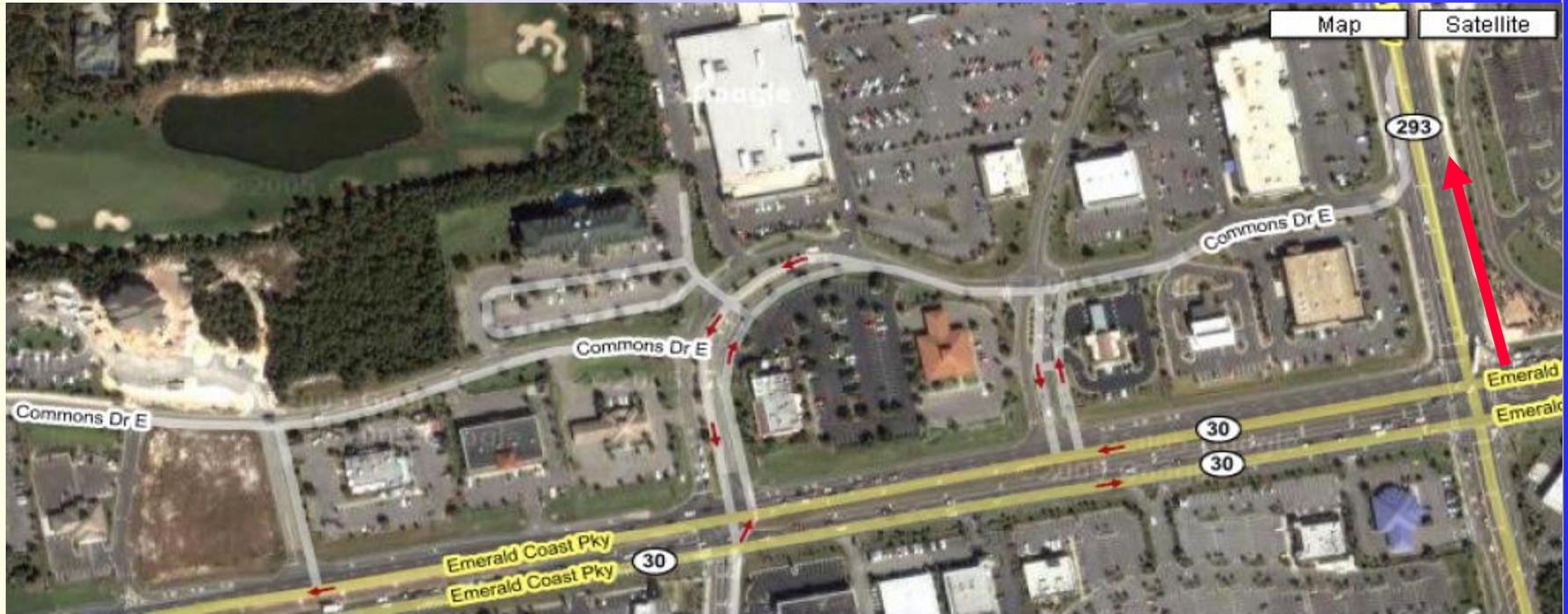
Provide supporting street networks on major roads

Strip lots and inadequate street networks...

What we need are more collector and local streets

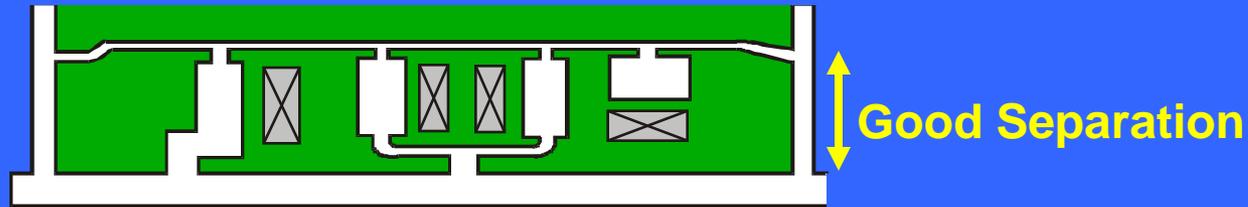


Service Road Network

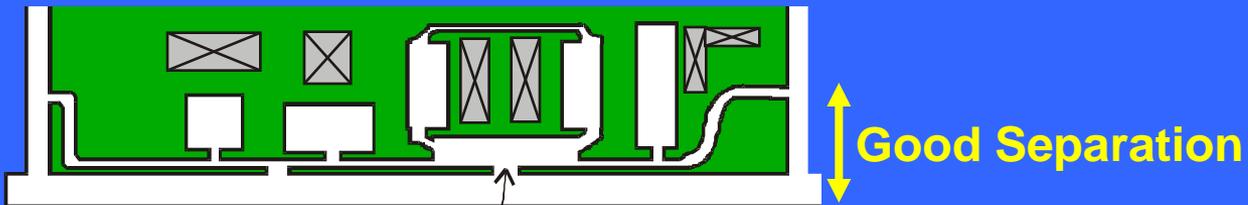


Service roads behind businesses result in better separation at the side street than frontage roads.

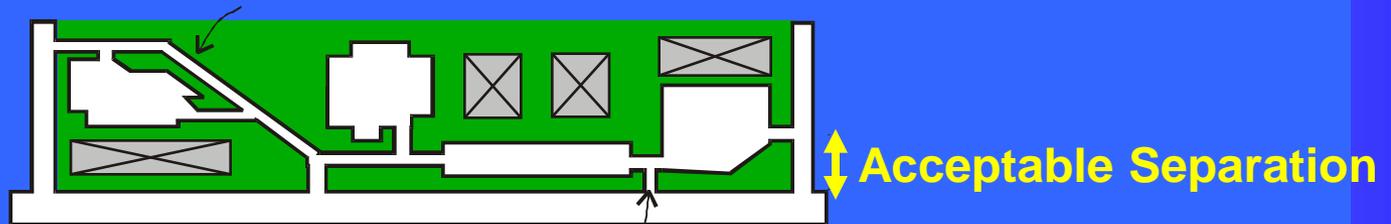
Connect parking lots and consolidate driveways



Rear Cross Access Drive



Front Cross Access Drive



Zig-Zag Cross Access Drive

Lack of Interconnection



Traffic between these two shopping centers is forced onto a congested highway, due to lack of cross access.

Shared Access and Signage



Joint Driveway



Shared Service Drive



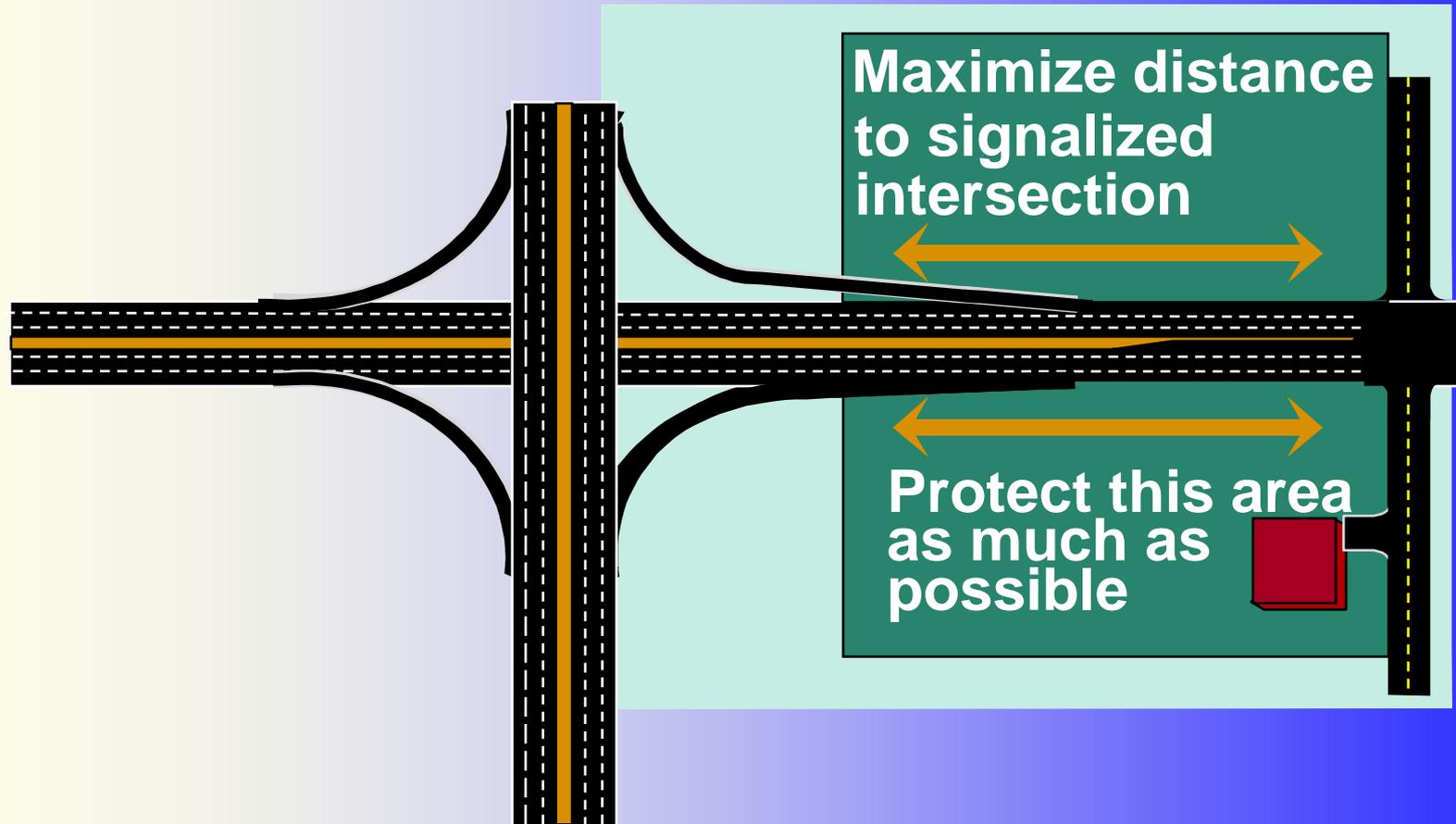
Driveway too Close to Intersection



Locate Driveways Away from Intersections



Move Crossroads and Driveways Away from Interchange Ramps

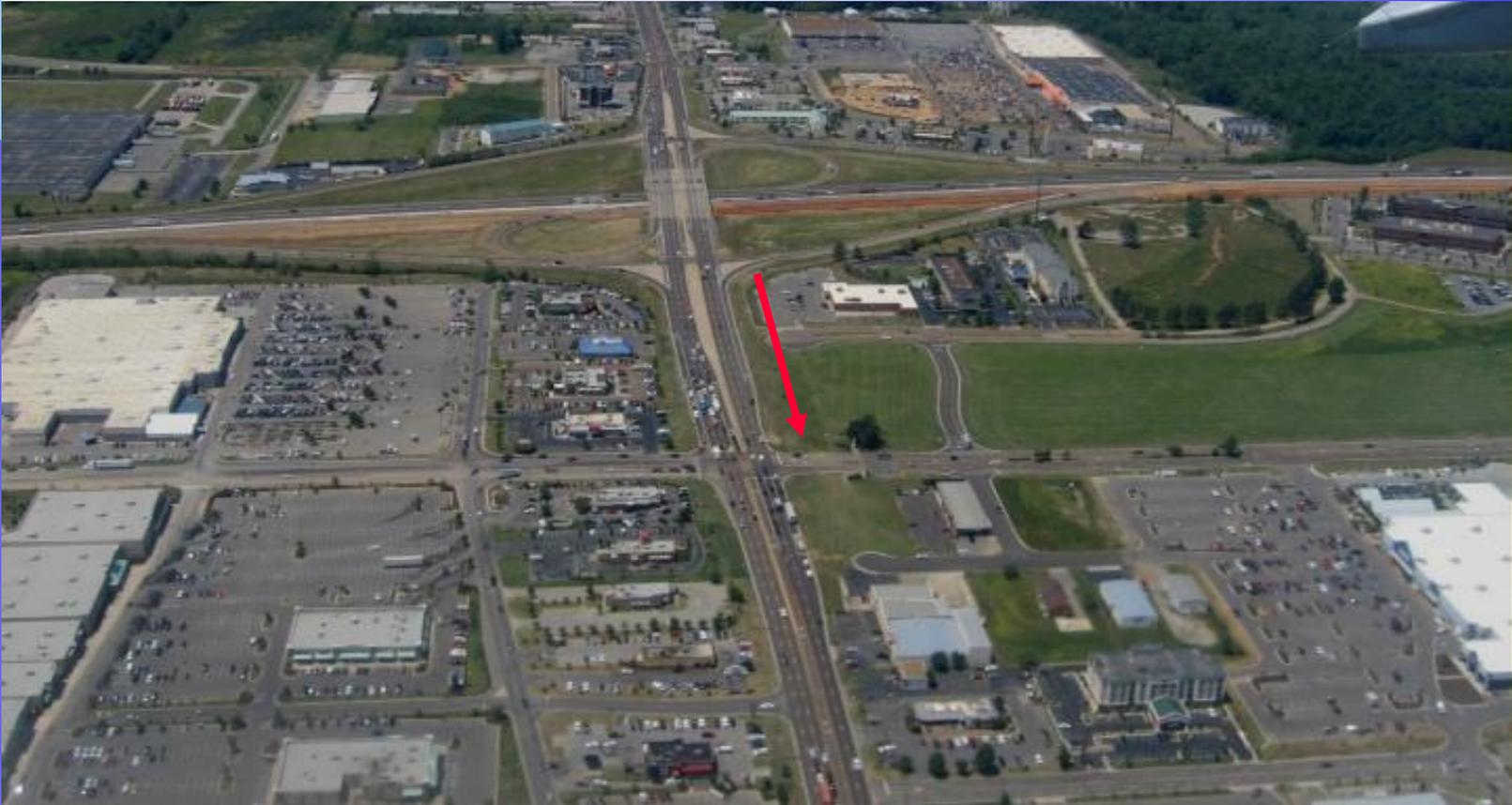


Signal too Close to Ramp



Traffic merging onto Lee Road near Wymore Rd. intersection frequently backs up onto the interstate.

Well Planned Interchange Network



What you can do

- Spearhead efforts to advance state and local implementation
 - Legislation
 - Regional policies and guidelines
 - Intergovernmental agreements
 - Model regulations
- Corridor access management plans and safety studies
- Project selection criteria for LRTP and TIP
- Public outreach and education

Questions?

www.cutr.usf.edu

Research Programs,
Planning & Corridor Management



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