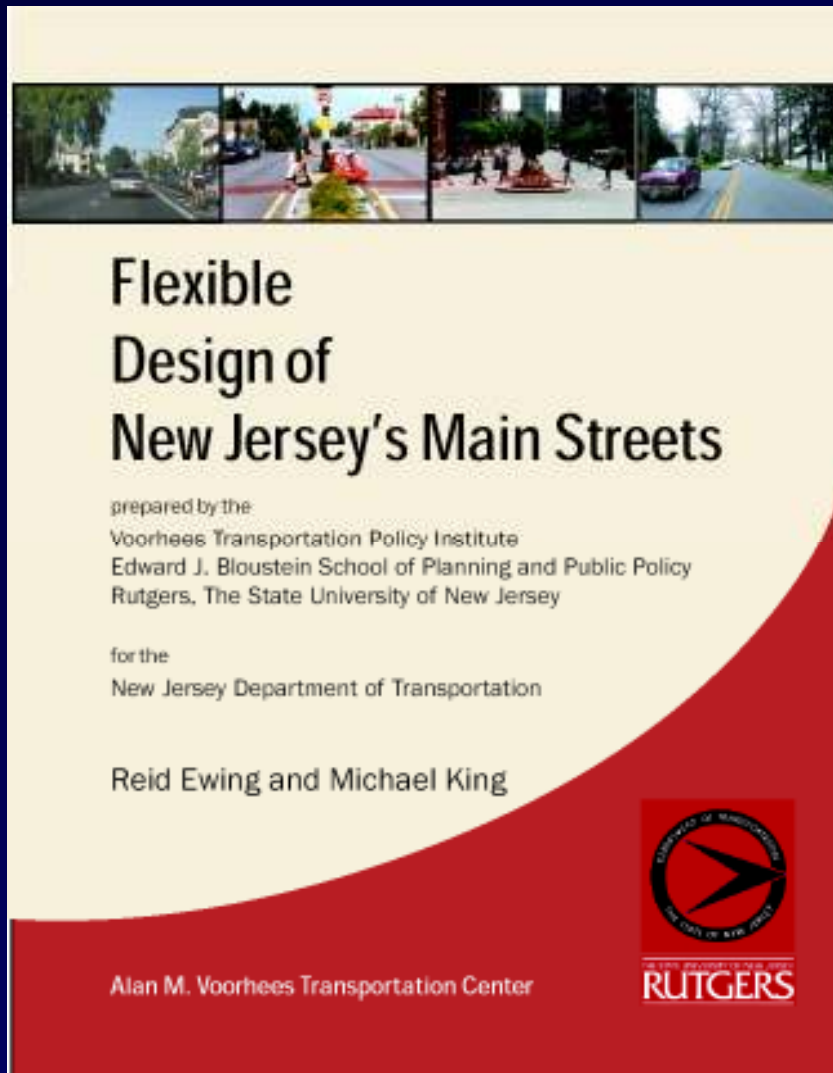

Legality of Livable Streets

Reid Ewing

University of Utah

***NACTO's Designing Cities: Leading
the Way to World Class Streets***

New Jersey's Mix



New Policies, Standards, and Case Studies

www.state.nj.us/transportation/publicat/

State Highways Serving as Main Streets



Few Traditional Main Streets



Roadway Design

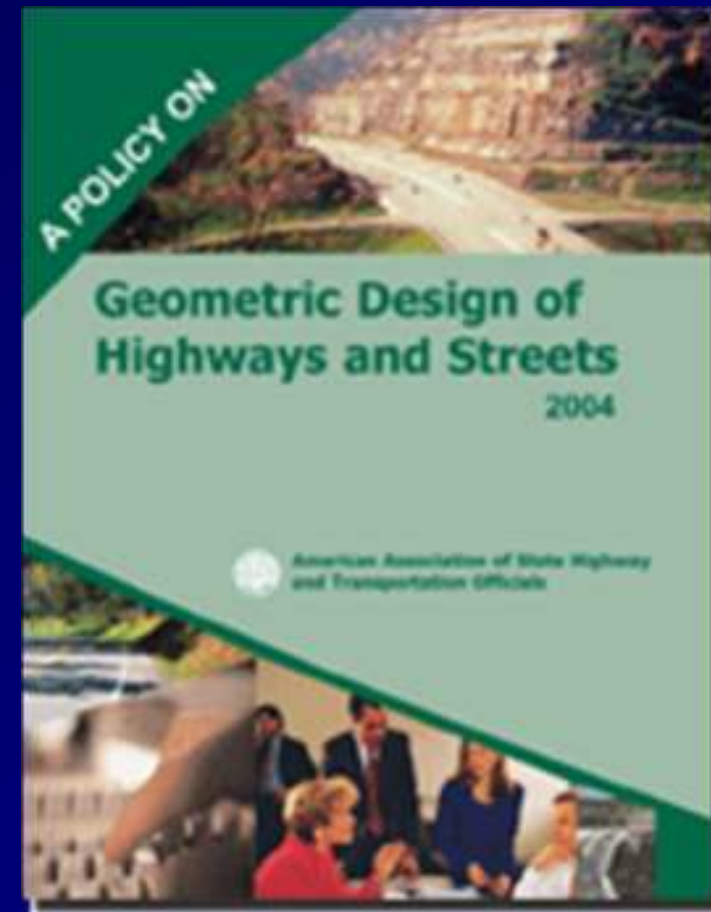
***Less Forgiving Designs in Urban
Areas***

The Conventional Wisdom:

Passive Safety Paradigm

Wider, Straighter, Longer, Faster

“every effort should be made to use as high a design speed as practical to attain a desired degree of safety”



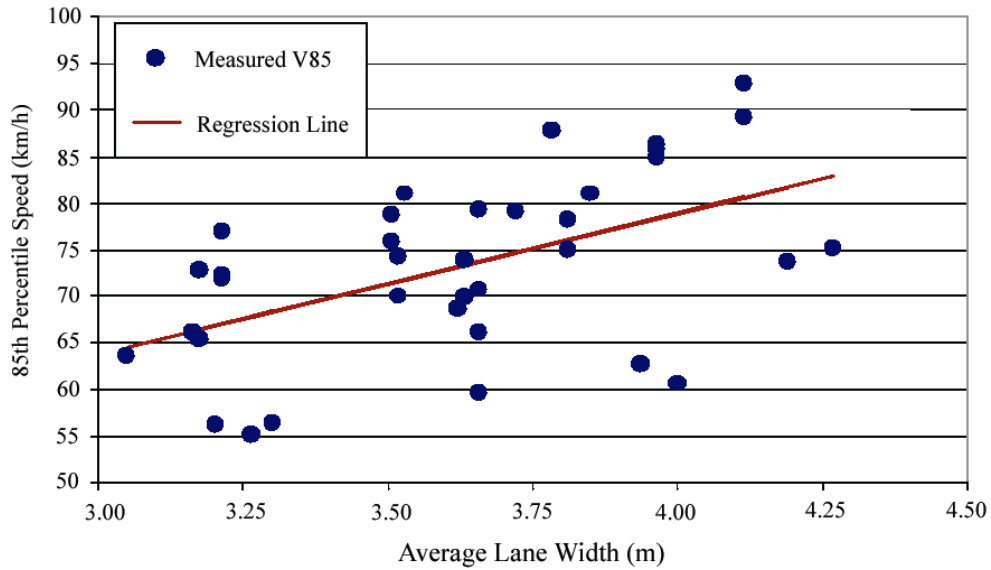
Urban =/ Rural



The Alternative

Active Safety Paradigm

Wide Lanes



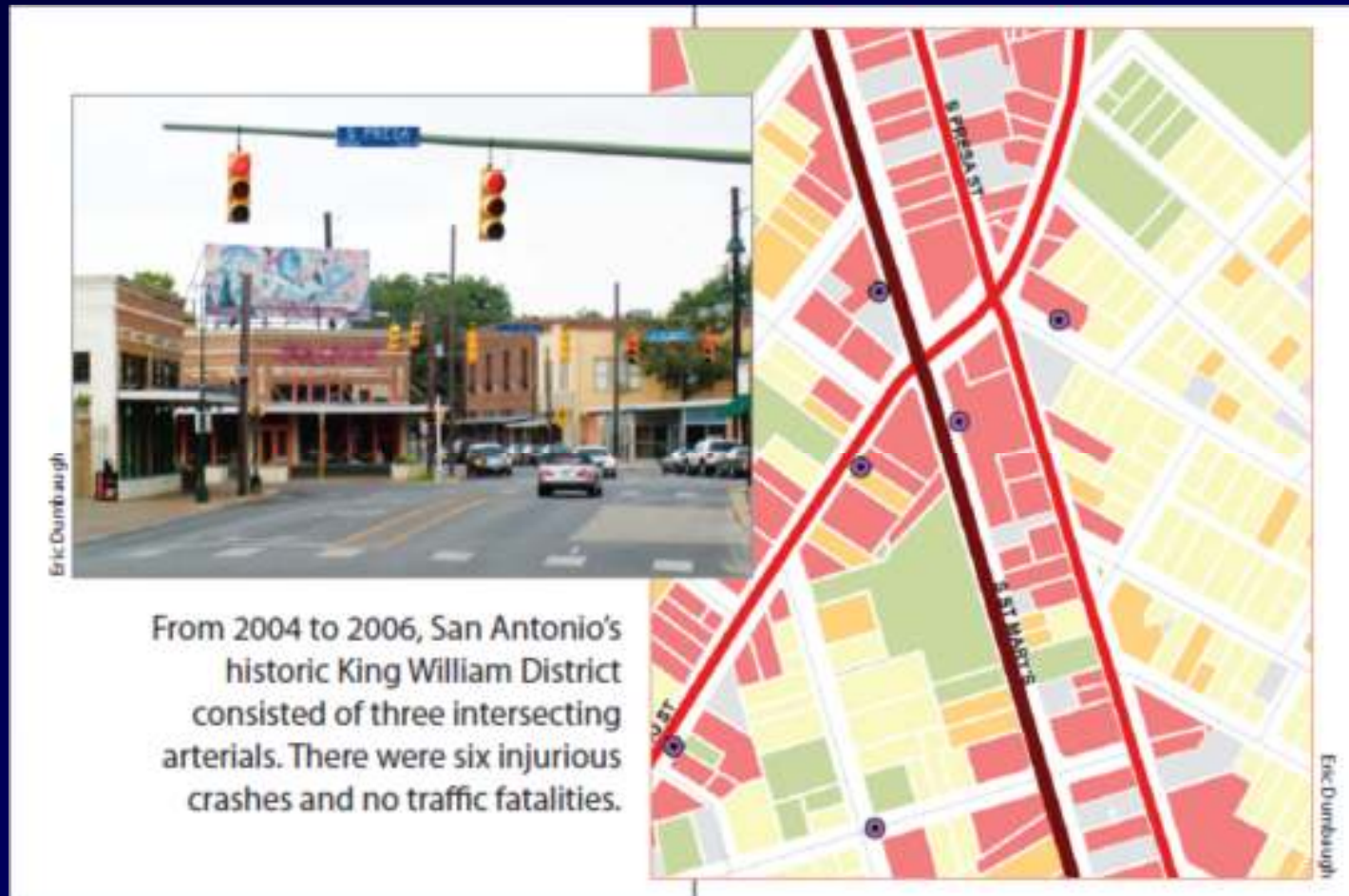
Wide Corners



Wide Clear Zones



Safe Urban Form



E. Dumbaugh and R. Rae, "Safe Urban Form: Revisiting the Relationship between Community Design and Traffic Safety," JAPA, Summer 2009.

Lower Serious Crash Rates

- ***Higher Densities***
- ***Pedestrian-Oriented Retail Uses***
- ***Interconnected Streets***

Which Is Safer?



Liability Cases -- Key Distinction

- ***Discretionary functions of government involve a choice among valid alternatives***
- ***Ministerial functions of government involve operational decisions that leave minimal leeway for personal judgment***

16 State Survey

- *In only one state are highway design decisions treated as operational*
- *In two states, design immunity may lapse as highway conditions change*

New Jersey's Tort Law

Tort Claims Act

Neither the public entity nor a public employee is liable...for an injury caused by the plan or design of a public property, either in its original construction or any improvement thereto, where such a plan or design has been approved in advance of the construction or improvement by the Legislature or governing body of a public entity or some other body or a public employee exercising discretionary authority to give such approval.

Manna v. State (1992)

“Immunity is not lost even if new knowledge demonstrates the dangerousness of the design, or the design presents a dangerous condition in light of a new context.”

Not the Green Book's Fault

AASHTO Minimums for Urban Arterials

- ***Design Speed – 50 kph (30 mph) in CBDs***
- ***Design Vehicle – SU Truck***
- ***Lane Width – 3.0 m (10 ft) for light truck traffic and speeds up to 60 kph (37 mph)***
- ***Shoulder Width – desirable but not required***
- ***Corner Radii -- 3.0-4.5 m (10-15 ft) under constrained conditions***
- ***Curbs – vertical curbs up to 60 kph (37 mph)***

AASHTO Minimums for Urban Arterials

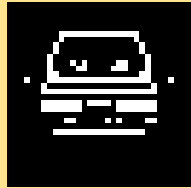
- ***Sidewalks – 1.2 m (4 ft) - 2.4 m (8 ft) border width***
- ***Clearance – .5 m (1.5 ft) with vertical curb***
- ***Pedestrian Crossings – no restriction***
- ***On-Street Parking – when required by existing conditions***
- ***Textured Surfacing – no restriction***
- ***Refuge Islands – encouraged where space permits***
- ***Curb Extensions/Bulbouts – no restriction***

What Is At Fault

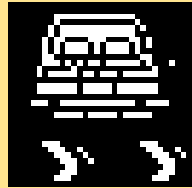
- ***Higher State Standards***
- ***Limited Use of Design Exceptions***
- ***Reliance on Single Typical Sections***
- ***Minimum LOS Standards***
- ***Misclassification of Highways***
 - ***With Respect to Function***
 - ***With Respect to Context***
- ***Maintenance Concerns***
- ***Treatment of 4R Projects***

Lower State Highway Design Standards

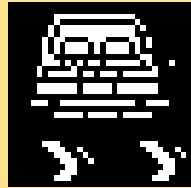
VAOT's Approach



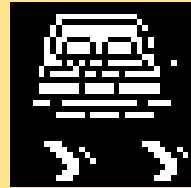
8'
parking



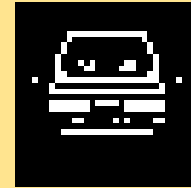
9'
travel



9'
turn

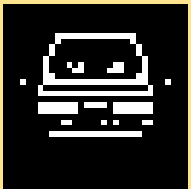


9'
travel

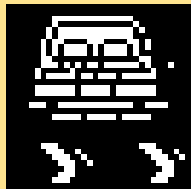


8'
parking

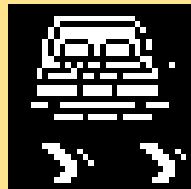
43'
VERMONT



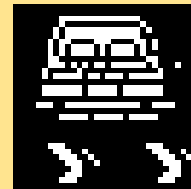
8'
parking



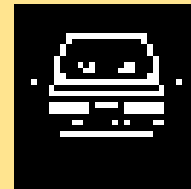
10'
travel



10'
turn



10'
travel



8'
parking

46'
AASHTO

***Use Design Exceptions Liberally To
Preserve Context***

NJDOT Design Exceptions – 1997-1999

81 Projects

81

Costs

Considered

80

**Costs Were
Primary
Justification**

50

Impacts

Considered

1

**Impacts Were
Primary
Justification**

CSDs for 50 Projects

Vertical Clearance	7
Vertical Curve SSD	13
Intersection SD	2
Travel Lane Width	5
Auxiliary Lane Width	6
Horizontal Curve Radius	12
Shoulder Width	20
Superelevation	13
Bridge Width	4
Horizontal Curve SSD	3
Grade	1
Cross Slope	0

15th Avenue (Anchorage, AK)



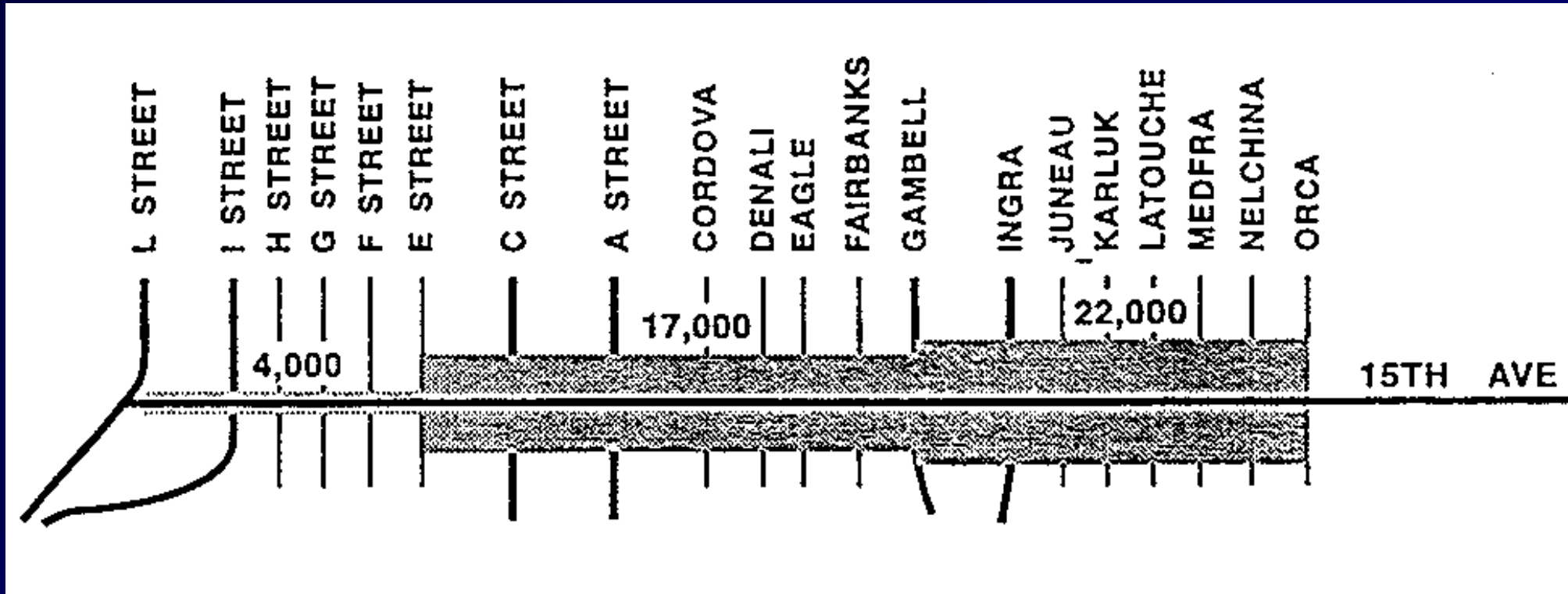
Safety Study

Lack of Left-Turn Lanes or Pockets

Existing Substandard Elements

- ***Curb Return Radii (1.3-8.3 m)***
- ***Clear Zone (0.1-.5 m)***
- ***Corner Sight Distances (52-76m)***
- ***Grades (0.2-9.7%)***

Varying Traffic Volumes



Four-Lane Section



Three-Lane Section



At 1/3rd The Cost

Standard Elements (Built to Minimums)

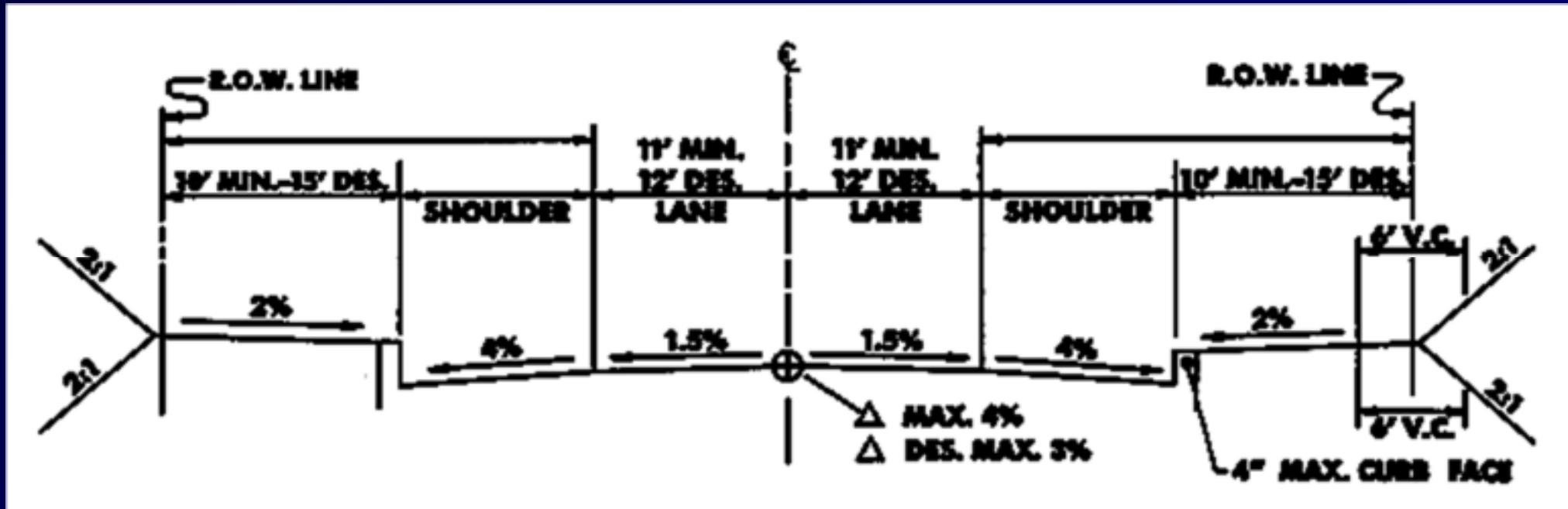
- ***Lane Width (3 m)***
- ***Shoulder Width (0 m)***

Design Exceptions

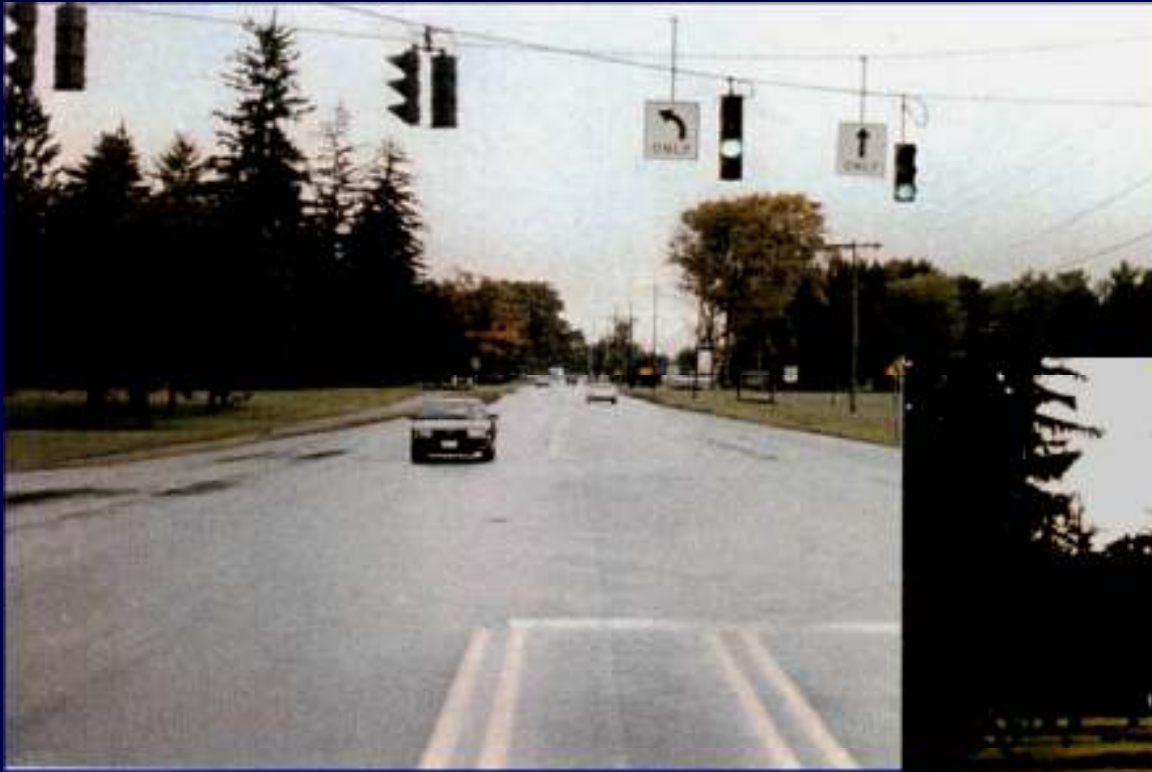
- ***Curb Return Radii at Minor Streets***
- ***Clear Zones***
- ***Intersection Sight Distances***
- ***Vertical Stopping Sight Distances***

***Fit Cross Sections to Roadway Function
and Context***

One Cross-Section Presently



South Broadway/US 9 (Saratoga Springs, NY)



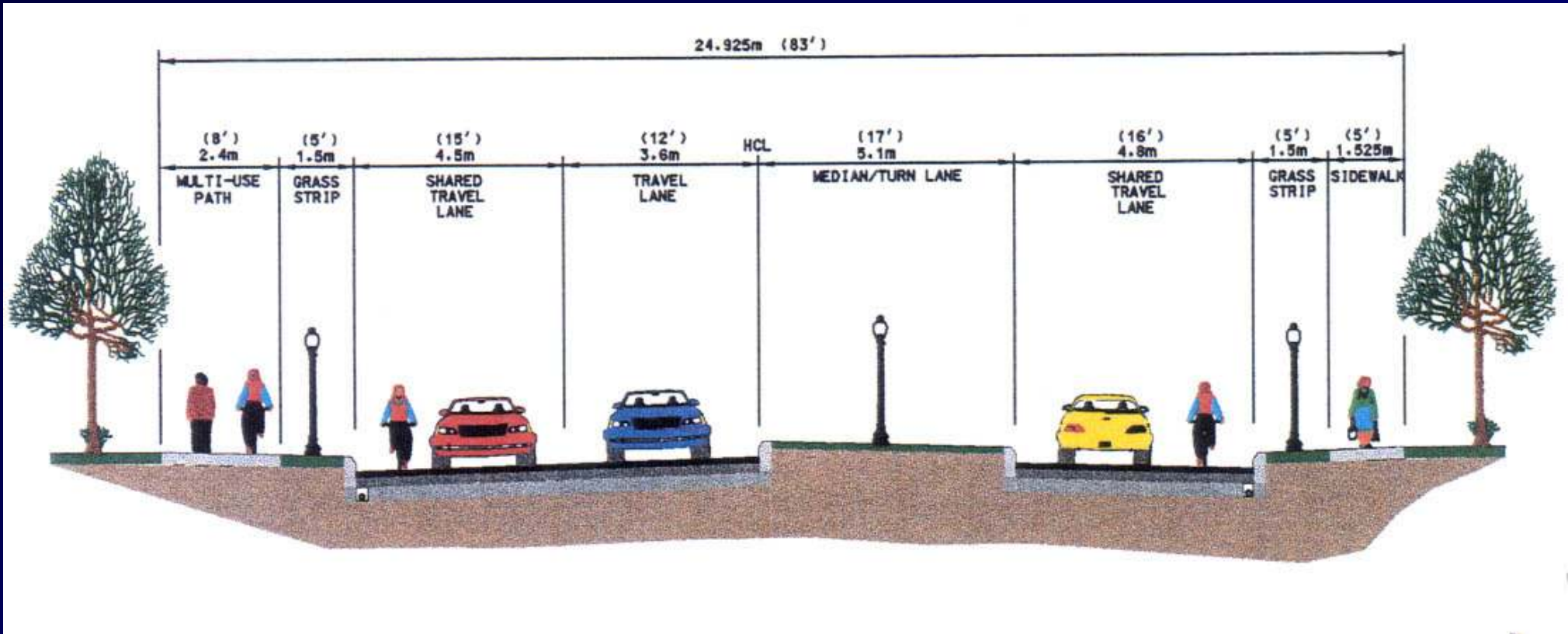
Fifth Objective

“To enhance the historic, recreational, and visual aspects of the Saratoga State Park and establish the corridor as a gateway to SSP and the City of Saratoga Springs”

Gradual Transitions



Asymmetric Design

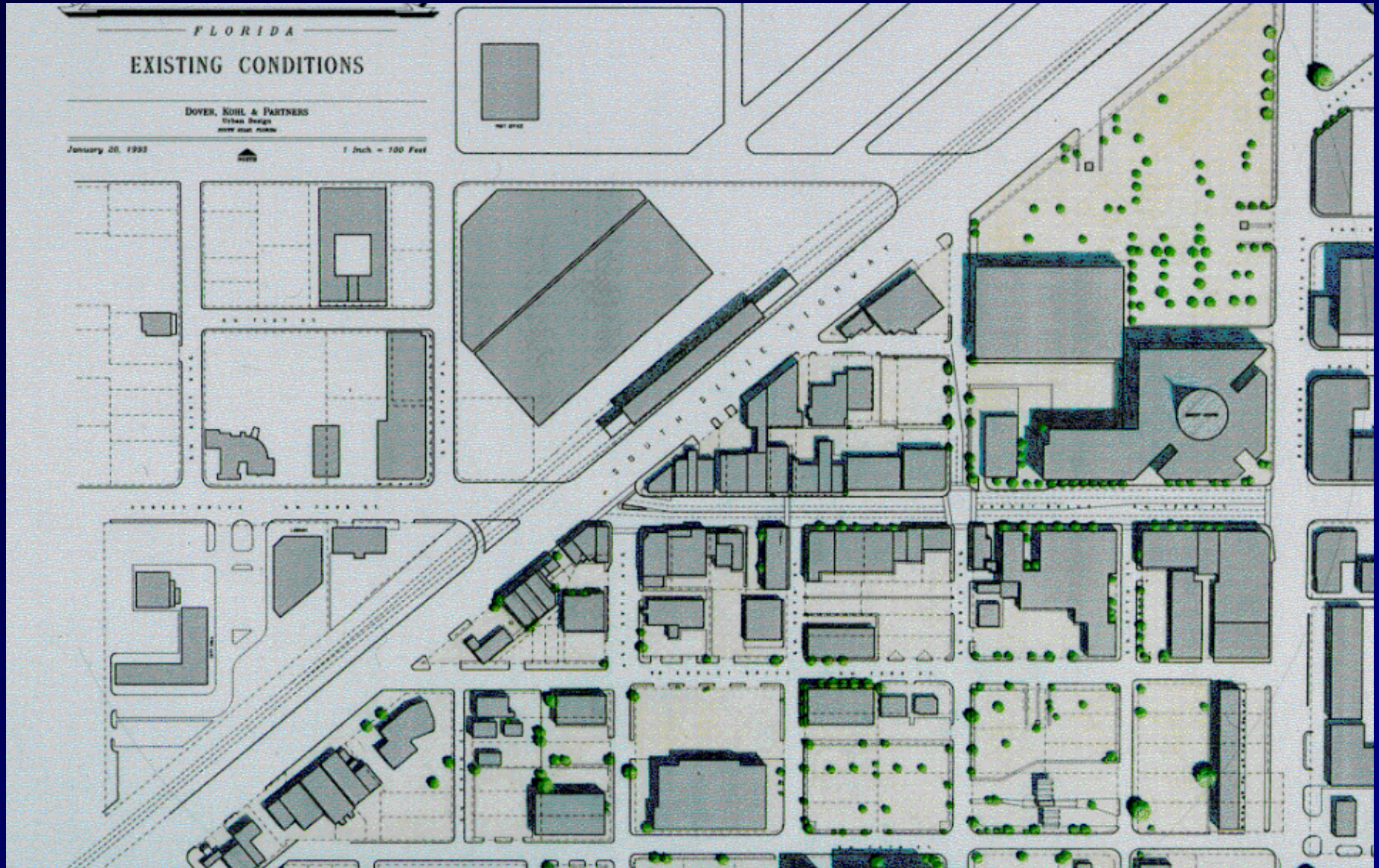


Breakaway Elements and Beveled Curb



Relax LOS Standards As Necessary

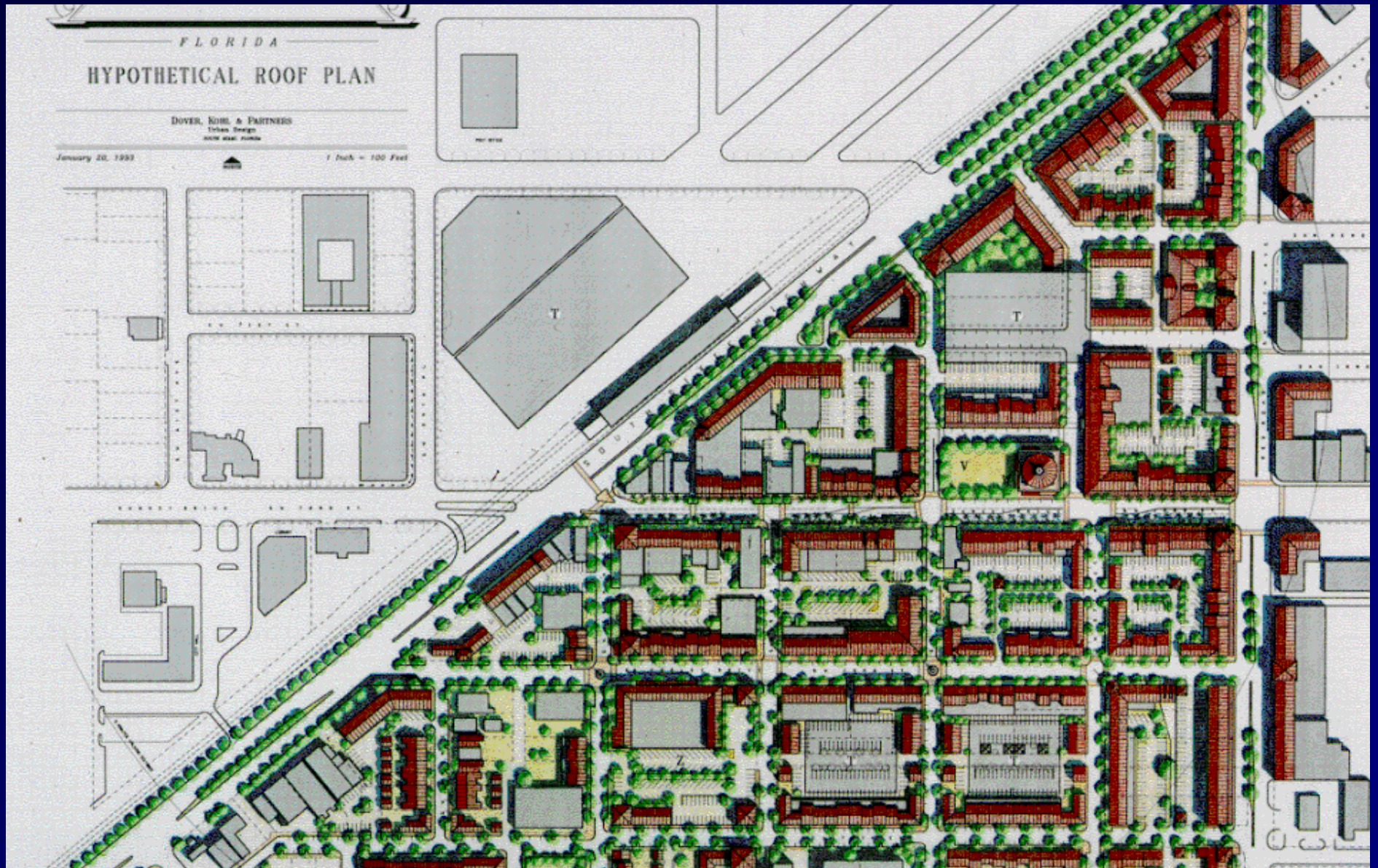
Sunset Drive/SR 986 (South Miami, FL)



Poor Main Street Environment



Downtown Redevelopment Plan



4 -> 3 Lane Conversion



Wide Sidewalks and Small Corners



LOS Comparison

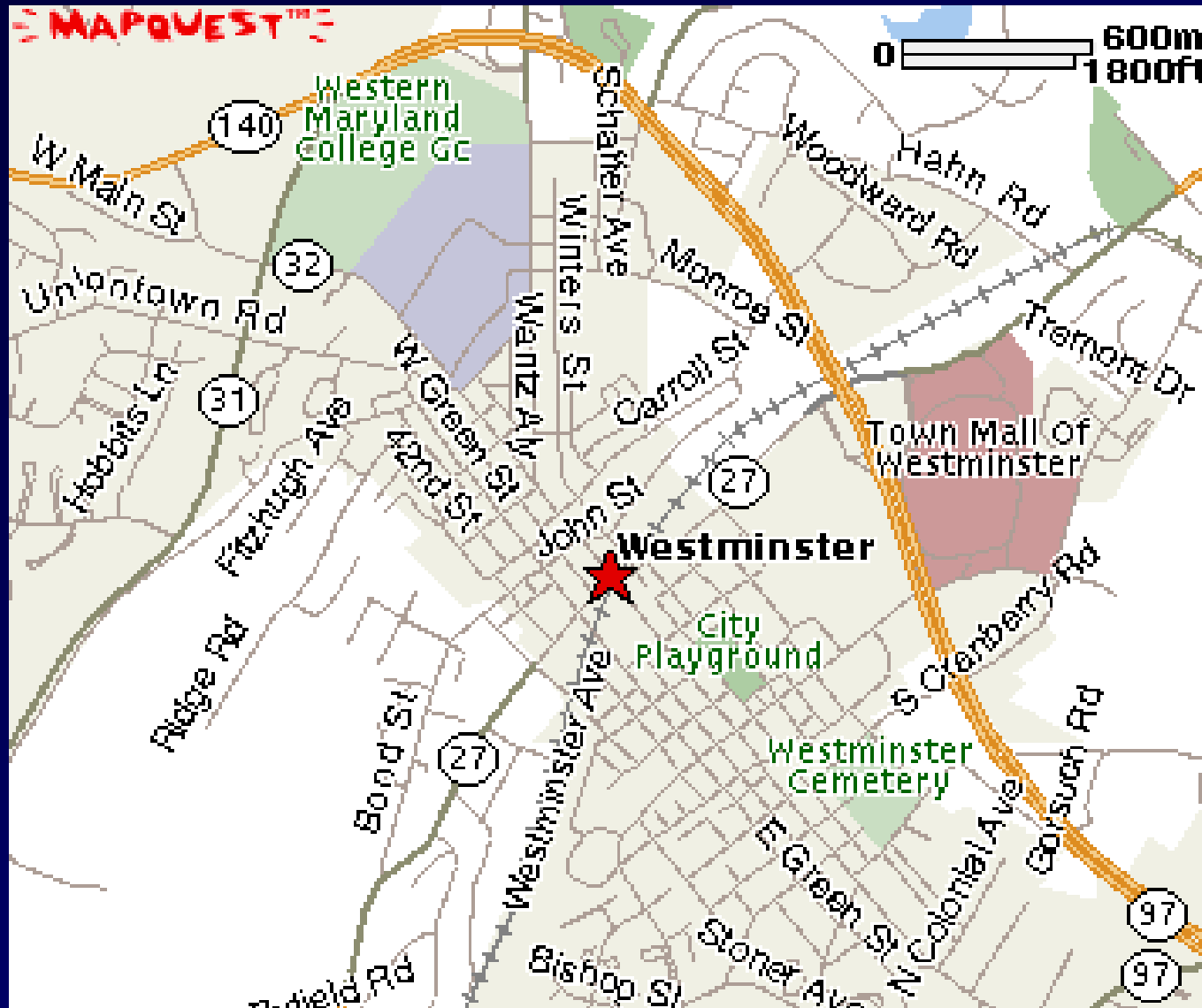
	<i>LOS by Approach (PM Peak Hour)</i>			
	<i>NB</i>	<i>SB</i>	<i>EB</i>	<i>WB</i>
<i>Existing Conditions</i>	<i>B</i>	<i>E+</i>	<i>E+</i>	<i>E+</i>
<i>Projected with Current Cross Section</i>	<i>B</i>	<i>E+</i>	<i>E+</i>	<i>E</i>
<i>Projected with New Cross Section</i>	<i>B</i>	<i>E+</i>	<i>E+</i>	<i>F</i>

***Reclassify or De-Designate Main Streets
That Are No Longer Critical***

East Main Street/MD 32 (Westminster, MD)



Change In Function With a Bypass



First CSD Project In Maryland



Issues for MSHA

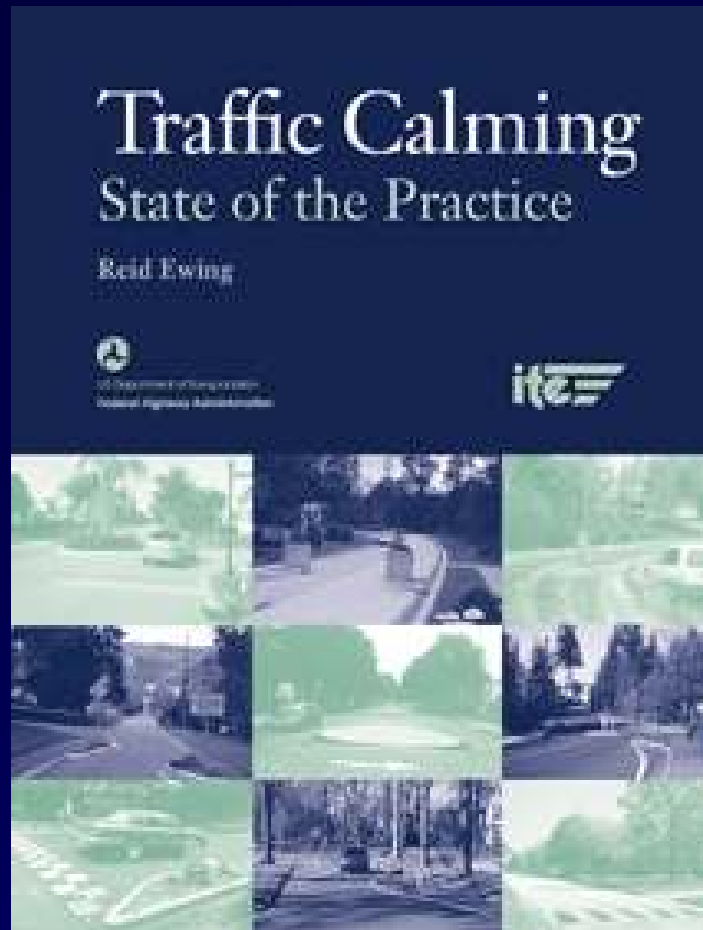


Within the Envelope – MD 144 (Hancock, MD)



Traffic Calming Case Study

ITE



<http://www.ite.org/traffic/tcstate.asp#tcsop>

First Legal Challenge

-in-law, Carter Harrison, Jr. to do something - hence the bump

GLENCOE BUMPS ARE VINDICATED BY COURT

INTER OCEAN. 9/30/05

Judge Mack Rules That Automobil-
ists Must Either Ride Over Them
or Take Another Road—Village
Has Right to Cross-Walks.

LAW PARTNERS ARE ARRAYED
ON OPPOSITE SIDES IN CASE

One Time-Apprentice Wins Legal
Victory Over Man Who Taught
Him His Blackstone—Complain-
ants Take an Appeal:

The Glencoe "bumps," the pride of the
north shore suburb and the terror of speed-
ing automobilists, have been vindicated.

Sept 30 1905

Examiner. SATURD

GLENCOE PRESIDENT DEFEATS PARTNER IN 'BUMPS' CASE.

Judge Mack Decides Obstacles
Are Not Menace and Shall
Not Be Torn Out—Fight Pro-
duces a Peculiar Situation

Glencoe's famous—or infamous—bumps
are not to be torn out by the minions of
the law. Judge Mack put his judicial
"O. K." upon them yesterday. But Gor-
don E. Ramsay, president of the village

checked with Helms Seaberg. On day by
Meyer T. had been driving in Glencoe.

More on Glencoe Bumps

Sudden Jolt May Be Avoided.

The "bumps," about which so much has been written, are brick walks across Sheridan road at street intersections. They are arched to shed water, the crown of the arch in the five foot walk being two and three-quarter inches higher than the street level.

The spring of the arch is level with the macadam on the street, so that there is no sudden jolt given the automobilist unless he is going faster than the speed limit of fifteen miles an hour.

Mr. Ramsay, while he has vigorously defended the right of the council to erect the walks, is liberal in his views toward automobilists.

He says that they are free to the use of the streets when going at a speed of fifteen miles an hour, but that the villagers should not be expected to walk in mud while crossing the streets simply to allow automobiles to run at a high rate of speed.

Bumps Are Gentle "Cure."

That the Glencoe bumps are the best cure for speedy automobilists is the opinion of Special Counsel Tolman, and he believes that the suburb has found the solution of the problem.

"I think the raising of the cross walks is the proper cure for automobile speeding," Mayor Tolman asserted last night.

- **Brick Crosswalks**
- **Arched to Shed Water**
- **5 feet x 2 3/5 inches**
- **15 mph design speed**
- **"Villagers should not be expected to walk in mud while crossing the streets simply to allow automobiles to run at a high rate of speed."**

Court Ruling

Judge Mack had gone over the bumps himself in an automobile. He had been brought out there by the complainants during the progress of the case, which has-been going on for a week.

But his experience did not convince him that the bumps are obstructions. As a matter of fact, it convinced him that the cross walks are really a convenience and a necessity for the villagers, and that if they constituted a slight inconvenience for automobilists, the latter would have to put up with it.

"Bump" for the Complainants.

Not only did the court rule that the bumps were not a menace and that the court had no grounds for the exercise of its judicial powers against the discretion of the village council of Glencoe, but the complainants had to pay the costs in the suit.

- *Served a public purpose*
- *Not a public threat*
- *No ground to override council discretion*

Case Law

- ***Lack of Legal Authority***
- ***Tort Liability***
 - Negligence in Design, Operation,
or Maintenance***
- ***Unconstitutionality***
 - Taking of Property/Loss of Access***
 - Due Process***
 - Equal Protection***

Legal Authority -- Berkeley Case

- ***California Supreme Court ruled that half closures and diagonal diverters are traffic control devices not authorized by state law***
- ***Ruling became moot when the California State Legislature:***
 - ***gave local governments the authority to block entry to or exit from any street by means of islands, curbs, traffic barriers, or roadway design features***
 - ***excluded traffic calming measures from the definition of traffic control devices and hence from state regulation***

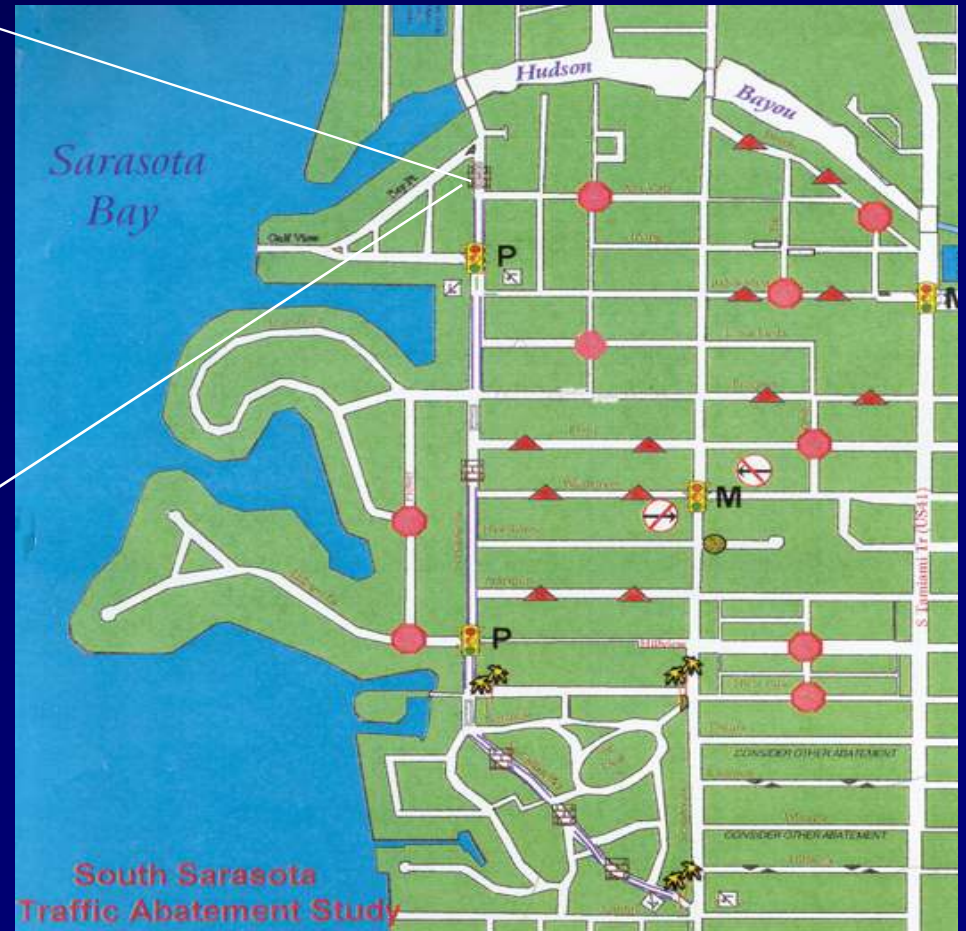
A Confusing Ruling



Legal Authority -- Sarasota Case

- ***Florida circuit court ruled that speed humps and speed tables are traffic control devices not authorized by state law***
- ***Court rejected city's claims of sovereign immunity and broad home rule and police powers***
- ***Decision reversed upon appeal for lack of standing***

The Real Issues in Sarasota



Traffic Control Devices by Definition

“Traffic control devices are used to direct and assist vehicle operators in the guidance and navigation tasks required to traverse safely any facility open to the public.”

Manual

on Uniform Traffic Control Devices

Liability Cases -- Key Distinction

- ***Discretionary functions of government involve a choice among valid alternatives***
- ***Ministerial functions of government involve operational decisions that leave minimal leeway for personal judgment***

From Discretionary to Ministerial

- ***Decision to Calm Traffic***
- ***Choice of Traffic Calming Measures***
- ***Design of Traffic Calming Measures***
- ***Adequate Warning of Measures***
- ***Adequate Maintenance of Measures***

California Code Section 830.6

No liability for injury caused by a plan or design if:

(a) Plan or design is approved by legislative body or other entity with discretionary authority

or

(b) Plan or design is in conformity with standards previously approved

and

(c) Such approval has a rational basis

Tort Liability -- Portland Case

- ***Jury found that the city was not liable for a fatal collision that might have been averted if a diverter had been installed at the accident location***
- ***City exercised its discretion and instead installed an island and traffic circles farther down the street -- the neighborhood had specifically rejected a diverter at that location***

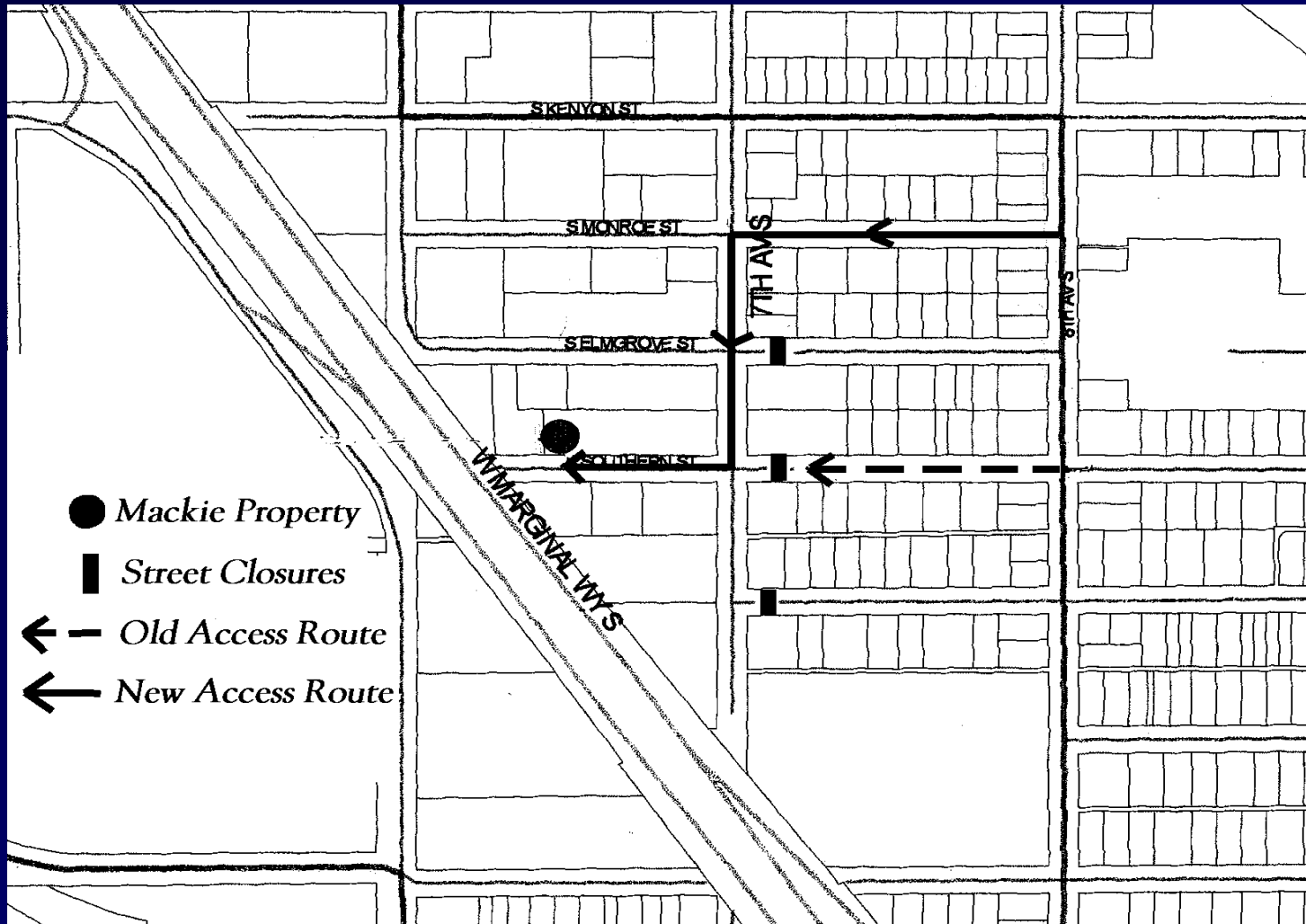
Portland's Treatment



Loss of Access -- Seattle Case

- ***Washington State Court of Appeals ruled that a street closure did not rise to the level of a taking***
- ***The closure advanced a legitimate public purpose of reducing “noise, traffic hazards and litter” in a residential area***
- ***Access to the business was maintained, albeit not the most convenient access***

Access Still Adequate



Loss of Access -- Montgomery County

Case

- ***U.S. District Court dismissed a lawsuit under the Americans with Disabilities Act***
- ***A disabled veteran claimed that the proliferation of speed humps interfered with his use of public roads due to the discomfort they caused him***
- ***Court held that while the humps presented the man with difficulty, they did not “totally bar his use of the roads” nor deny him “meaningful access”***

The Real Issues in Montgomery County



Failure to Calm Traffic -- Sacramento

Friends of H Street v. City of Sacramento, 24 Cal.2d 607.

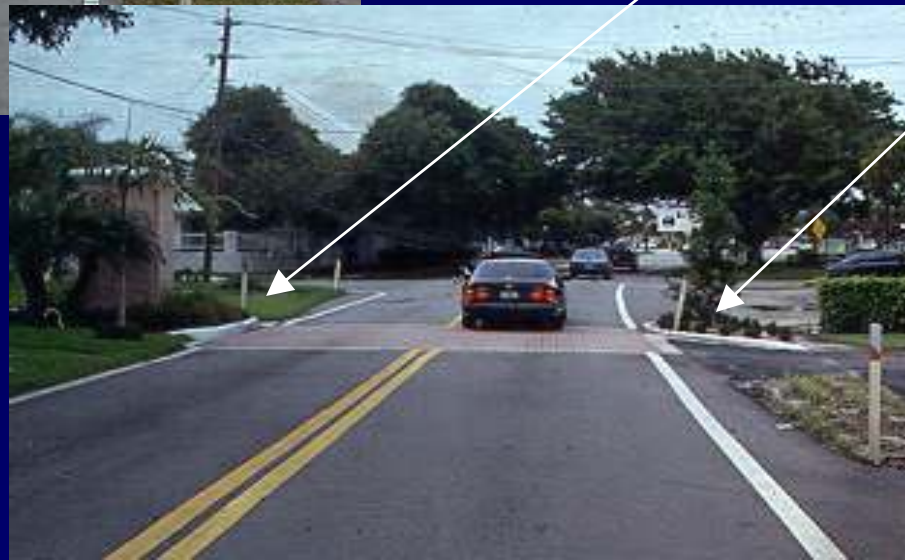
“... loss of peace and quiet is a fact of life which must be endured by all who live in the vicinity of freeways, highways, and city streets.”



Damage Claims

- ***The Most Common Bases for Paid Claims:***
 - ***Inadequate Signage***
 - ***Flawed Design of Measures***
- ***Arguably Both Involve Failure of Local Governments to Perform Ministerial Duties***

Problem Choker



2004 Update

- ***City of Albuquerque, NM***
- ***City of Austin, TX***
- ***City of Bellevue, WA***
- ***Broward County, FL***
- ***City of Charlotte, NC***
- ***City of Charlottesville, VA***
- ***City of Colorado Springs, CO***
- ***City of Eugene, OR***
- ***Gwinnett County, GA***
- ***Howard County, MD***
- ***Los Angeles County, CA***
- ***City of Minneapolis, MN***
- ***Montgomery County, MD***
- ***City of Portland, OR***
- ***Pima County, AZ***
- ***City of Riverside, CA***
- ***City of Sacramento, CA***
- ***City of Seattle, WA***
- ***City of Vancouver, WA***
- ***City of Walnut Creek, CA***

Recent Action

- ***Montgomery County - person injured on a speed hump received a \$10k out-of-court settlement***
- ***Portland - driver claiming injury due to “incomplete speed humps” lost his lawsuit***
- ***Seattle - boy hit at an intersection where a traffic circle had been requested lost his suit***
- ***Bellevue – threatened lawsuit over the removal of speed tables***