

[ OUTSIDE IN ]

# Street Smarts

Why "white-knuckle" roads are a driver's safest bet **By Emily Anthes**



**SWERVES AHEAD:**  
Wide, luxurious lanes can lead to reckless driving.

**I**MAGINE A SAFE street, one you'd feel utterly comfortable driving on. What do you see? A pin-straight road? A long, flat vista? "We assume that safety is the result of 'forgiving' roads," says Eric Dumbaugh, a civil and environmental engineer at Texas A&M University. "We figure straightening out streets and widening shoulders make a road safe."

The problem is that our instincts are completely wrong. When roads look more perilous, drivers exert more care and the motorways become safer. "If you build something that looks like a highway, every instinct in a driver's body tells him to go fast," says Ian Lockwood, a traffic engineer in Orlando. In the last decade or so, a few iconoclasts have begun making streets more hazardous—narrowing

them, reducing visibility, and removing curbs, center lines, guardrails, and even traffic signs and signals. These roads, research shows, are home to significantly fewer crashes and traffic fatalities.

When Latton, a British town, removed the center dividing line from its roads, average car speed dropped by 8 mph. A Danish city redesigned a major intersection, adding a traffic circle and fountains, narrowing roads, and reducing signs and signals. The result? Injuries at the spot have fallen from eight per year to just one.

Meanwhile, the United States has been slow to embrace the "white-knuckle" approach. American traffic design centers on improving traffic flow, which often means creating roads that cars can zoom through effortlessly, Dumbaugh says. In Europe, moving vehicles quickly through the environment has never been the goal (think: hairpin Gothic alleys and cobblestone streets). Lockwood speculates that our litigious culture may be to blame: Engineers are loathe to remove signs, for instance, because they're afraid of being sued if an accident occurs.

But a few U.S. cities, including Portland, Oregon, and West Palm Beach, Florida, are embracing the counterintuitive design principles. Organizations like the National Complete Streets Coalition are lobbying for changes that would make streets more complicated for drivers.

## ROAD TIPS

Some elements make a big difference in behind-the-wheel behavior.

**LANES:** On-street parking or bike lanes prompt drivers to proceed carefully.

**CURVES:** "A straight road looks like a gun barrel, so drivers drive like bullets," Lockwood says. An island or fountain breaks up the view of the horizon.

**TREES:** Planting foliage along a road produces the illusion of a narrow street.

**BUILDINGS:** Buildings that abut the street make drivers feel all eyes are on them, so they behave. And varying the façades keeps them alert. "If the surroundings are boring, the driver will check out mentally," Lockwood says.