

THE STEADY BEACON

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At a lone intersection with three approaches, a single luminaire spills light onto the roadway forming the stem of the "T". An approaching car rolls into the photonic bath and coasts through a right-hand turn at a speed of roughly 25 feet per second, without stopping, despite the operator facing a well-maintained and duly-erected R1-1.

This happens all the time.

Every day, thousands upon thousands of vehicle operators navigate their vehicles through rolling right turns at locations where the law requires them to come to a complete standstill. In the vast majority of those cases, collisions involving vehicles turning at a reasonable speed are rarely imminent. This reasonable speed happens to correlate to the roadway geometry, road user capabilities *and preferences*, and vehicle limitations. At an intersection in Seattle, a place that exhibits perhaps the foremost juxtaposition of social compliance and disdain for authority, hundreds of bicycle operators disregard intersection traffic control, preferring instead to maintain momentum, awareness, and vehicle control through the art of the rolling stop. Juxtapositions abound.

So what is really happening here? Are all of these people merely crass lawbreakers who deserve the disdain of self-righteous transportation officials? Or are they perhaps inferring some rules from observation of the roadway network configuration and assuming priority at a node? Continuous movement of vehicles in turns is common in European countries, a mark of vehicle operator competence and uniform expectations.

Road users infer meaning from the texture of the pavement, the presence of geometric design features such as aprons, curbs, islands, and the marked traveled way. Users indeed react even to the perceived gravity of such control measures. Just as road users infer a 100 mile-per-hour operating speed to be acceptable on a rural motorway, they will likewise infer a 14-mile-per-hour turning speed from a curb radius, signs and restrictions and ordinances notwithstanding. Thus, then, the work of the traffic operations engineer is to design systems that accommodate what we can readily observe. Reality will intervene where the ideal model for system interactions remains in conflict with traffic control devices, indicating disrespect of the road user who respects the design of the road itself.