

Managing to Avoid Congestion

The world's population is by no means decreasing and engineers have to come up with new, outside-the-box solutions to create a built environment that will healthily sustain more people.

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The plot of the movie, *The Truman Show*, concerns the life of a man who lives in a television show, but does not know it. The producers of the show constructed an imaginary village covered by a huge dome and populated this set with actors. Everyone except the star of the show, Truman, is a performer playing a scripted role. Truman lives his life not knowing that his wife, employer and neighbors are all actors working from the producer's script. The proceedings are cleverly filmed and presented to the voyeuristic public, which watches the show waiting to see each new development in the soap opera of Truman's life.

This movie is not a great one to see if you are paranoid.

The village that Truman lives in — the "set" — is supposed to be an idealized, sunny,

perfectly-built place. Gentle waves lap the shore of this seacoast village, which has cheerful, inviting architecture, palm trees and friendly people. The village is presented as Utopian. In reality, the movie set is not a set at all, but an actual place. The movie was filmed at Seaside, Florida, a newly built town on the coast of the Gulf of Mexico. This village is at the vanguard of the New Urbanism movement. This uncommon village has certain zoning and design features that can be summarized as follows:

- Stores and offices are permitted in some areas along with houses and apartments. The design allows for mixed usage.
- The street grid has features that lead to pedestrian comfort, such as reduced street width, traffic "calming" devices, trees, sidewalks and benches.
- Garages do not face the street, but are set back in alleys.
- The houses are built more densely, and are designed to shape the public street space, which is accomplished with relatively small front yards, front porches and cupolas that lead to a transition from outside to inside. Building position and massing helps the street to feel like an outside room and not a speedway.

The New Urbanism design guidelines that were in place for the building of Seaside are ille-

gal in much of the U.S. Most towns and cities have strict zoning guidelines that separate stores from offices from housing. Even the types of housing are strictly separated by area: apartments from townhouses from single-family homes from really exclusive single-family homes. Required lot sizes and setbacks lead to today's standard suburban housing developments, strip malls and office parks. Today's dominant form of urban design is sprawl. One of the ramifications of sprawl is traffic congestion. Because everything is separated and widely spaced, you have to drive large distances to go shopping, to go to work, to do anything. You cannot walk, and there is usually not a subway or bus system near the 1-acre zoned lots.

Yet, the utopian world of *The Truman Show* wasn't filmed at Levittown or at a strip mall. When the movie producers needed an idealized place for their imaginary world, they selected a town that violates all of today's suburban development guidelines. It is ironic that, at the end of the movie, Truman escapes from his fishbowl existence and chooses to live in the outside world. What the movie does not show is Truman's subsequent life in a housing subdivision with a ninety-minute one-way commute in heavy traffic.

Probably most people suspect that there is something wrong with the present development scheme. They muse in bumper to bumper traffic, and are uneasy cruising by dreary strip

malls and the vast parking lots that define modern suburban spaces. They go to visit Main Street at Disney World and marvel at what a great place it is, not really understanding why they cannot live around Main Street in real life.

The public at large may be uncomfortable and dissatisfied, and not understand why. Civil engineers have a greater responsibility. It is our business to design and shape the built environment. Therefore, we need to better understand how the design pieces fit together, and act on this knowledge. In February 1999, the U.S. Environmental Protection Agency (EPA) sponsored a day-long conference, "Smart Growth Strategies for New England." Speakers discussed strategies for containing sprawl and focusing urban development. Even here in New England, which is arguably in the best shape of any region in the country when it comes to sprawl, the landscape is being plowed over by strip malls and subdivisions. Dealing with this problem will require the skills and participation of engineers as well as planners.

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