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The False Hope of Comprehensive Planning

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Some commentators on sprawl and smart growth speak of municipal comprehensive plans and sprawl as polar opposites: for example, I have heard various car-oriented cities referred to as “unplanned.”

But in fact, the correlation between planning and smart growth is quite weak. For example, Florida has required cities to comply with their comprehensive plans since 1985, so as a legal matter Florida is one of the most “planned” states in the U.S. But public transit ridership in every Florida metropolitan area is below the U.S. average, and according to the “Mean Streets” study issued every few years by smart growth organizations, Florida’s metro areas are among the most dangerous for pedestrians. By contrast, there are five metro areas where over 10 percent of commuters use public transit- and only one of them (San Francisco) is in a state where cities must comply with comprehensive plans.

Why have comprehensive plans failed to reduce sprawl? Because a comprehensive plan is merely a tool, just like a zoning code. So if a zoning code can promote sprawl as well as more pedestrian-friendly development, so can a comprehensive plan. In this speech, I am using one city’s plan as an example of how a plan can promote low-density, car-oriented development. That city is Jacksonville, Florida, where I lived from 2006 to 2011.

The Jacksonville plan includes a future land use map that allocates over 138,000 acres to low-density residential land use, as opposed to about 23,000 acres for medium-density residential and only 74 acres to high-density residential.

How low is Jacksonville’s low density? The maximum density in the city’s low-density areas is 7 dwelling units per acre. But the plan adds that because zoning regulations will allow numerous types of low-density districts, the average residential density allowed will be much lower.

These density restrictions inevitably lead to automobile-dependent sprawl. If there is a bus stop on block A, and a neighborhood can have only a few residents per block, very few people can live within walking distance of that bus stop.

Of course, a comprehensive plan can allow enough density to support decent bus service. But the sources I have read suggest that at least 7-15 units per acre is necessary to support regular bus service with a decent level of ridership. But Jacksonville’s comprehensive plan makes it clear that most places will have fewer than 7 units per acre- not enough to support much bus service. So it shouldn’t be too surprising that most Jacksonville buses only run once every half hour during rush hour and once every hour during the rest of the day, and that most routes stop running about 8:30 or 9 PM.
Jacksonville’s plan combines low density with single-use zoning: that is, the plan’s land use maps separate residential and commercial areas so such an extent that many people will not live within walking distance of commercial zones. For example, the map shows that in one area in the city’s southern edge, everything between San Jose Boulevard and I-95, a distance of about six miles, is low-density residential.

Obviously, most people living in such a house-only monoculture will not be willing to walk several miles to a shop, job or bus stop. Thus, the size of the single-use zones created by Jacksonville’s plan reinforces the city’s dependence on cars.

The comprehensive plan also contains pro-sprawl street design rules. The plan’s transportation section contains generous right-of-way minimums, such as a 150-foot minimum for major arterials (that is, the most heavily-trafficked streets) and a 120-foot minimum for minor arterials. The plan also requires travel lanes to be 12 feet wide (except for outside lanes, which have to be 16 feet wide to make room for a turn lane).

What does this mean in practice? Assuming that each road has 10 or 15 feet on each side for sidewalks and shrubbery, a major arterial could have about 120-130 feet of right-of-way, which means as many as ten lanes on each side. Even minor arterials could have as many as six lanes.

These wide streets make Jacksonville both inconvenient and dangerous for pedestrians—convenient because a wide road takes more time to cross than a narrower street, and dangerous because the more time a pedestrian spends on such a street, the more time he or she spends exposed to fast traffic.

And the wide streets do promote fast traffic; for example, San Jose Boulevard (the commercial street closed to my apartment) had a speed limit of around 45 miles per hour (mph). Such fast driving increases the risk of pedestrian injury in three ways.

First, a motorist has a narrower field of vision the faster he or she drives. A motorist driving 30 mph has a 150-degree field of vision. By contrast, someone driving twice that fast has only a 50-degree field of vision. So a fast driver is less likely than a slower driver to notice someone crossing the street (or, for that matter, another driver).

Second, even a motorist who does notice a pedestrian is less likely to be able to stop in time if he or she is driving rapidly. A motorist going 40 mph will be able to stop 120 feet after noticing a pedestrian or another driver. By contrast, one driving half that speed will be able to stop only 40 feet after seeing the other road user.

Third, a fast car is more likely to kill or maim a pedestrian than will a slower-moving car. A pedestrian has a 3.5 percent chance of death from a car traveling 15 mph, but his or her likelihood of death increases to over 80 percent from a car traveling three times that speed.

So I’ve shown you how Jacksonville’s plan promotes sprawl: by favoring low density, single-use zoning, wide streets and fast traffic. In future research I would like to discuss
plans designed to favor more pedestrian-friendly development and whether those plans are likely to be successful.

In sum, the existence of a municipal comprehensive plan does not dictate a substantively pro-smart growth result, because a plan is just a procedural tool like a zoning code or any other tool: it can be used to make development more pedestrian-friendly, but can just as easily be used to make development more sprawling and car-oriented.