

We Need to Think Bigger About Transit-Oriented Development

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The growing popularity of bike-share represents a shift toward embracing shared-transport networks. But there's a much larger picture to consider.



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When we think about transit-oriented development, we typically think of rail stations. We know that in certain environments with density levels of X and height limits of Y, we can predict levels of investment of Z. But how would that equation hold up if Transit Oriented Development centered on a bike-share station, for instance, rather than rail stop? To answer that question, we need a better sense of how well bike-share performs as part of the larger transit system.

We know that Americans have a deeply ingrained view of biking as a fun, recreational activity. (The [Outdoor Association estimates](#) that Americans spend \$81 billion a year on bike-related expenses; airline tickets generate \$51 billion by comparison.) I have theorized that this is why some people have such vitriolic reactions to cyclists. It's like they're angry that anyone could be having that much fun on their commute, when everyone should be suffering in traffic.

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With the advent of bike-share, there's a move towards seeing cycling as a more basic form of transportation, especially in cities. The [case for bike-share as transit](#) is getting easier: A forthcoming study from Susan Shaheen and Elliot Martin reports that 40 percent to 55 percent of bike-share trips are work commutes. Their analysis shows that Capital Bikeshare in Washington, D.C., has displaced public transit trips—particularly Metro trips in the urban core—thereby increasing capacity on the congested rail network. It also increased transit ridership in less dense parts of the city and in the suburbs, providing a key first-to-last mile connection to rail and bus nodes.

So bike-share, combined with the proliferation of [safer bike infrastructure](#) and facilities, flips the recreation-first, commute-second association with cycling on its head. By associating bike-share with work trips, it's easier to see stations as mobile-modular mini-TOD sites that extend the length (and therefore value) of traditional rail and bus stops. You already see developers making the connection with Divvy in Chicago or Capital Bikeshare in D.C.—with buildings advertised as being "within a block or two" of bike-share.

This raises bigger questions about the role of TOD in shared transport networks. One of the reasons services like Uber and Lyft, not to mention autonomous cars, make some planners nervous is because they don't have a fixed node associated with them. So how do we continue to plan around them and for them? What is their relationship to transit? And, by extension, to transit-oriented development?

To answer these questions we need to re-think what transit is, just as we're re-thinking what TOD is. If a [chain of autonomous vehicles](#) with vehicle-to-vehicle communications operate in a train-set type format, is that functioning just as transit would? Is that more or less efficient than the current local bus systems in some cities? I know this scares some people to talk about, and the answer often seems to be some sort of litmus test as to whether or not you really support public transportation, but I think to have an honest conversation we have to get rid of the sacred cows.

My utopian vision is to rededicate a lot of city space to active transportation.

If we operate a bit fearlessly—and the public policy people work together with private industry and shape the rollout of technologies and services, as we have with bike-share in D.C. and Chicago—I think we will have a more ideal, equitable, and useful outcome for metro-area populations. The less we worry, and the more we implement these systems in different environments and at different levels of density, people will use them as they need them and show us the patterns, as the Shaheen-Martin study shows. Then, cities can adjust offerings and move stations to fulfill constituent demand.

My utopian vision of how this could play out is to rededicate a lot of space in cities that was de facto applied to cars in the 1950s, after the death of the streetcars and the explosion of expressways, over to active transportation. Cars entering city limits would [have to be autonomous](#) or switched to driverless mode, as these will be deemed safe for all users of the transportation system and will operate in much less road space than drivers need now. (As a reference point, auto accidents are the [leading killer of young people worldwide](#).) Parking needs could decrease dramatically, too, as most autonomous vehicles will be on-demand and active, compared to the 95 percent of time that current cars sit parked. We would have a transit backbone consisting of heavy and light rail/streetcars, and regional/arterial buses. The rest of the network and space would be slanted towards walking, bike-share, and other alternative modes.

People will always want to see a city at human-scale and control the experience. Walking and biking will likely be the only way you can do that in the future in urban areas, as the other options will be an electric-powered self-driving vehicle or mass transit. (For those of you that doubt this vision, the EU is [already looking to ban](#) gas-powered cars in their downtowns by 2050.) I hope we keep embracing bike-share and other sharing services as a primary form of transit, and see traditional TOD as malleable and evolving.

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