

Making the Connection

by Hannah Twaddell

Legend has it that a group of nineteenth century American tycoons were developing a town way out on the edge of the Wild West and decided to try something new. They'd found that corner buildings were worth more than those located mid-block, so it stood to reason that a town with more corners would do well. The result? A downtown with a tight street grid and intersections as little as 200 feet apart.

I don't know if those side-burned fellows actually made the fortune they wanted, but that town did indeed grow up to be a prosperous city that enjoys some of the highest rates of walking, biking, and transit ridership in the nation. The story of Portland, Oregon is essential for planners seeking to understand the key to developing walkable, transit-friendly communities: a well-connected street network featuring short blocks and numerous intersections.

I know what you're thinking: "Yeah, that's nice, but we're not Portland." Do shorter blocks and more intersections — that is, greater street connectivity — provide any benefits for communities that don't have a dense urban core?

In a recent report "Planning for Street Connectivity: Getting From Here to There," transportation planning experts Susan Handy, Robert G. Paterson, and Kent Butler analyzed thirteen communities (including four with populations in the 6,000 to 32,000 range) that have connectivity ordinances.¹

CREATING MORE DIRECT
CONNECTIONS SHORTENS
TRAVEL TIME, WHICH
EFFECTIVELY BRINGS
PEOPLE CLOSER TO THEIR
DESTINATIONS.

Most of the cities and towns in the study have set block length limits for local streets, generally falling in the range of 500 to 600 feet. Some have also placed maximum distance limits on spacing between intersections along arterial streets. Requirements vary according to the roadway context: higher-speed, wide streets such as commercial arterials need

¹ *Planning for Street Connectivity: Getting From Here to There* (American Planning Association PAS Report #515).

more space between intersections and driveways in order for traffic to flow properly, while more frequent cross streets in residential areas can help to slow traffic down.

Regardless of their size, communities can realize three major benefits from better connectivity: shorter trips; a wider variety of travel choices; and more cost-effective public services and infrastructure.

Creating more direct connections shortens travel time, which effectively brings people closer to their destinations. With more available connections, community residents can get to schools, shopping centers, and other spots that may have simply been off their radar before — not because these places were too far away, but because they were too far out of the way.

Meanwhile, firefighters, police, and ambulance services can save precious minutes reaching the scene of an emergency, and can serve a broader area without driving up their operating costs. Similarly, greater connectivity can reduce costs of providing other services, such as waste collection, by decreasing travel time and mileage. According to Jim Parajon, former planning manager for Cary, North Carolina, the goal of achieving cost savings in public services was the number one priority behind the town's adoption of a connectivity ordinance in 1999.²

Another benefit: by creating more ways for people to get from point A to point B, communities can diversify the flow of traffic and, in many cases, also enable travel choices other than driving. This improves overall mobility and helps reduce congestion on overworked arterials.

But what about that popular subur-

² Remarks during session at April 2004 American Planning Association conference in Washington, DC.



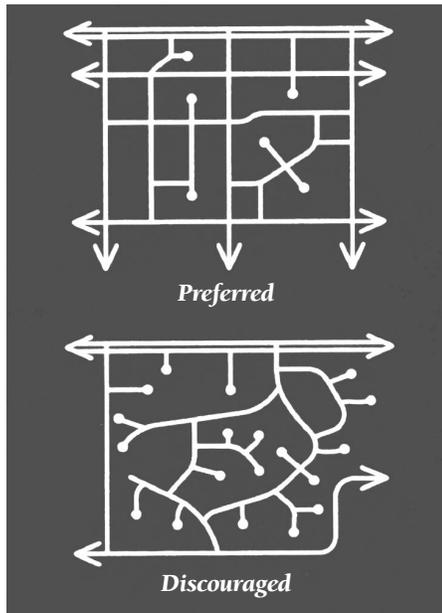
Portland, Oregon, circa 1923, with Mt. Hood in the distance. Short 200-foot long downtown blocks have been a boon to Portland's development.

ban street type: the cul-de-sac? By definition (“bottom of the bag” in French), these streets are closed. And people often choose houses on them for that very reason.

All the communities in the connectivity study do allow cul-de-sacs, but restrict their lengths, from as little as 200 feet to as much as 1,000. Several also direct developers to create multiple entrances to their site, and/or include stubs to indicate future connections.

That being said, it’s really not necessary to force open every subdivision in order to improve community-wide connectivity. It would be counter-productive (not to say, poor planning) to insist on a rigid connectivity principle applicable to every block. The key is to create strategically located links that benefit broad cross-sections of the community.

As respected transportation planner Walter Kulash notes, “Good connectivity does not necessarily mean eliminating every last cul-de-sac. The real purpose of connectivity is to provide a variety of routes for daily travel, such as to schools, grocery stores, and after school activities.” Kulash further observes: “Proposed street connections that face strong opposition are often a scapegoat for the things people don’t like about their community.



Local street connectivity patterns compared — from diagram by City of Salem, Oregon (based on Tri-County Metropolitan Transportation District).

If you’re connecting a quiet old neighborhood to an ugly strip shopping center, people aren’t going to like it. Focus on the overall question of what you want for your community.”³

And there’s the heart of it. In many communities, people feel the only way they can get peace and quiet is to buy a house on a cul-de-sac, even if it means taking on a higher mortgage and buying a third car. It’s not that cul-de-sacs and private neighborhoods are bad. It’s that there are so often no desirable alternatives. If the only good places kids can gather to play in our communities are asphalt turnarounds, we have a bigger problem than a lack of connectivity.

To take true advantage of the benefits of connectivity, we must first establish a vision for development patterns that work for all of our community’s residents — those here now, and those we want to attract. Then we can focus on investments and connections that meet the needs and desires of not only those who love cul-de-sacs, but also those longing for pleasant, safe, connected communities: seniors who can’t drive; young professionals drawn to vibrant urban centers; and families who want their kids to be able to walk to playgrounds, schools, and ice cream shops.

The process of creating a community is rather like weaving a tapestry. Upon a framework of natural and built boundaries — rivers, mountains, and streets — we weave a fabric of buildings, private and public spaces, and natural areas.

We can change the fabric of our community as it evolves, but our options for so doing are largely defined by its framework. Connected street networks provide a framework for cohesive communities



Do cul-de-sacs set the framework for much of your community?

that can provide public services in a highly efficient way and can adapt to change without losing their core identity.

Whether the vision is to revitalize a flagging rural town, maintain character in a fast-growing village, or corral suburban sprawl, the quality and characteristics of the street network are, quite literally, the foundation for a community’s success. It was true for the tycoons of yesteryear, and it’s true for us today: good connections are fundamental for a community’s long-term prosperity. ♦

Hannah Twaddell is a Senior Transportation Planner in the Charlottesville, Virginia, office of Renaissance Planning Group. Her “Forward Motion” column appears regularly in the Planning Commissioners Journal.



³ First quote by Kulash from recent email to author; second quote from remarks by Kulash during session at April 2004 APA conference.