

INTRODUCTION

Connectivity is a common term used by planners and developers to describe the connection of streets and sidewalks to housing, schools, workplaces and retail.

One measurement of connectivity in a given area is the number of intersections along a segment.

Well-connected and efficient streets provide alternative routes for vehicles as well as safe options for transit and non-motorized transportation.

Connectivity is often seen as part of "Smart Growth," which describes diverse, inclusive, efficient and sustainable development.

Smart Growth policies encourage walkability, mixed land uses, natural resource protection and connectivity among developments.

Smart Growth is the opposite of sprawl, which is a land use pattern that generates low-density development and an increased dependency on automobile use.

Connectivity planning regulates block length, sidewalks and transit locations in new developments and limits the number of cul-de-sacs. Shorter block lengths increase the number of intersections and options for pedestrians/cyclists.

A 2005 TND Design Rating Standards Publication noted that the ideal block length is between 250 and 400 feet, while block lengths over 800 feet are not advised.

To create more access for all users and reduce vehicular traffic, municipalities should also encourage sidewalk construction.

A connected street system is a definite prerequisite for an efficient and effective transit system. Connecting

streets for all modes of transportation between housing, work, school and shopping is essential for a vibrant and sustainable community.



BENEFITS

- Reduces congestion on collector streets and arterials by providing alternative routes;
- Creates more efficient routes, saving drivers time and fuel;
- Saves municipal labor costs such as routine maintenance and snow removal;
- Alternative routes benefit emergency responders, delivery trucks, school buses and solid waste collectors.

DRAWBACKS

- Can be difficult to coordinate between residents, planners and developers;
- More connections on local roads can increase traffic through residential areas;

- Developers may be reluctant to install sidewalks due to the cost;
- Connecting cul-de-sacs to new or existing developments can be difficult due to cost, land cover and push-back from residents.

RESOURCES

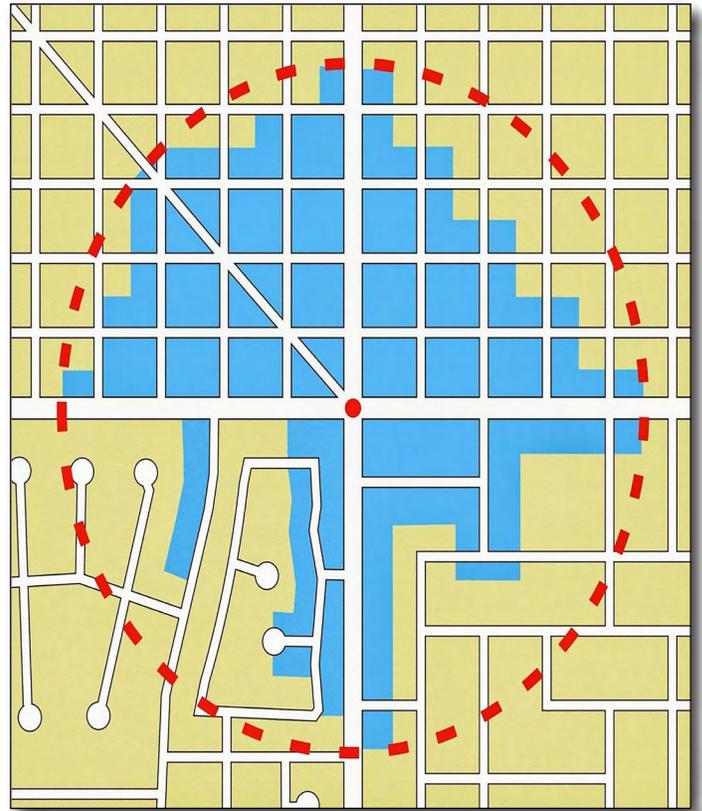
- [Improving Connectivity & System Function Through Local Planning \(PennDOT\)](#)
- [Street Connectivity: Improving Function & Performance \(Lehigh Valley Planning Commission\)](#)
- [Connectivity Sprawl & the Cul-de-sac](#)
- [SRTS Guide: Connectivity](#)
- [Smart Growth America](#)
- [Manatee County Connectivity Study \(Florida\)](#)

RELATED FACT SHEETS ON PLANNINGTOOLKIT.ORG

- Complete Streets
- Main Street Programs
- Official Maps
- Traffic Calming
- Transit-Oriented Development
- Walkability

TIPS TO CONSIDER

- MUNICIPALITIES CAN REQUIRE “STUB STREETS” IN NEW HOUSING DEVELOPMENTS TO CREATE CONNECTIONS TO FUTURE SUBDIVISIONS OR LAND DEVELOPMENTS;
- REGULATING THE NUMBER OF CUL-DE-SACS CAN REDUCE DEAD-ENDS AND INCREASE CONNECTIVITY;
- REQUIRING SIDEWALKS IN NEW DEVELOPMENTS HELPS TO ENCOURAGE PEDESTRIAN MOVEMENT AND DECREASE VEHICLE USAGE;
- DEVELOP TOOLS SUCH AS CONNECTIVITY INDEXES, SIDEWALK INVENTORIES AND OFFICIAL MAPS TO UNDERSTAND AND IMPLEMENT CONNECTIVITY.



Visit our toolkit page at www.planningtoolkit.org for more planning topics:

PLANNING TOOLKIT

TCRPC launched this online planning toolkit in 2022 as a service to Central Pennsylvania's municipalities, as well as citizens and local governments around the commonwealth.

The downloadable files, organized by topic, offer a wide range of policies and techniques that promote Smart Growth principles and good government practices. Each includes an overview of the topic along with resources available at the local, regional and state levels.

We've also included a section of model ordinances that can be adapted for local needs.

If there's a topic you'd like us to include, please [let us know](#).



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