Conventional suburban development uses a stem pattern of streets. Like a tree, main branches (arterials) lead to the trunk but not to each other; stems go to the branches (collector streets) but are dead ends, with no other connections. Travel is planned to be most efficient from the outskirts to the center. Often neighboring development projects do not connect. With only single routes available, traffic congestion can lead to a demand for increasingly wider arteries.

The Neighborhood Model suggests a network of streets which is more web-like, more adaptable, and less vulnerable to pressures for widening. Streets are interconnected within and between developments, providing multiple routes to any destination.

In addition to streets, pedestrian paths and bikeways can interconnect areas. They do not have to be vehicular in nature. For example, as shown in the section on parks and open space, open space corridors can link neighborhoods to each other and to other sites. Bus and train routes also provide for connection and, when used, reduce reliance on the single-occupancy vehicle.

There are five types of transportation networks: 1) streets and roads, 2) pedestrian paths, 3) bikeways, 4) bus routes, and 5) light rail lines. The primary network is the road system and in many cases the other networks will parallel the roads.

Figure 2:11 These two upper and lower alternatives depict identical densities and land uses. However, the bottom half provides interconnectivity through a network of thoroughfares minimizing travel distances and the burden on any one road, while assuring discrete locations for differing land uses. The upper half relies on a conventional cul-de-sac, collector, and arterial system for planning thoroughfares. Used with permission, Duany, Plater-Zyberk, Architects.