COLLECTOR-DISTRIBUTOR ROADS

Description
Collector-distributor (C-D) roads are extra lanes between the freeway mainlanes and the frontage roads. Their primary purpose is to move vehicle lane changing away from the high-speed traffic on the freeway mainlanes. Lane changes occur on the C-D roads as vehicles move from the freeway to the frontage road or other connecting roadways (and vice versa). C-D facilities can be used to:

- Allow a single freeway exit ramp to feed vehicles into two or more crossing roadways.
- Collect vehicles from several crossing roadways so that they can enter the freeway at a single entrance ramp.

Target Market
- Larger freeway interchanges where lane changes cause mainlane traffic to slow down unnecessarily.
- Freeways in areas with closely spaced major roadways and little room for entrance and exit ramps.

How Will This Help?
- Increases traffic flow and speed on freeways and their entrance and exit ramps.
- Improves safety by reducing freeway mainlane merging and lane changes.

Implementation Issues
The primary design issue is that C-D facilities require extra road space, as well as extra shoulders and buffer space.

More Information: tti.tamu.edu/policy/how-to-fix-congestion

SUCCESS STORIES
San Antonio, Texas
Several major freeway-to-freeway interchanges (IH 35/Loop 1604 and IH 35/Loop 410) in the San Antonio area have C-D roads.

In addition to minimizing lane changing and merging on the freeway, the C-D roads can act as a storage area for exiting traffic waiting at cross-street intersections and freeway-to-freeway interchange ramps.