

SAFERoad SOLUTIONS

EFFECTIVE ROAD DESIGNS EXPLAINED



Double Crossover Diamond



A Double Crossover Diamond (DCD) is an interchange with two signalized intersections, where traffic between the intersections crosses over to the left side of the roadway. As vehicles exit the interchange, they return to the right side of the road.

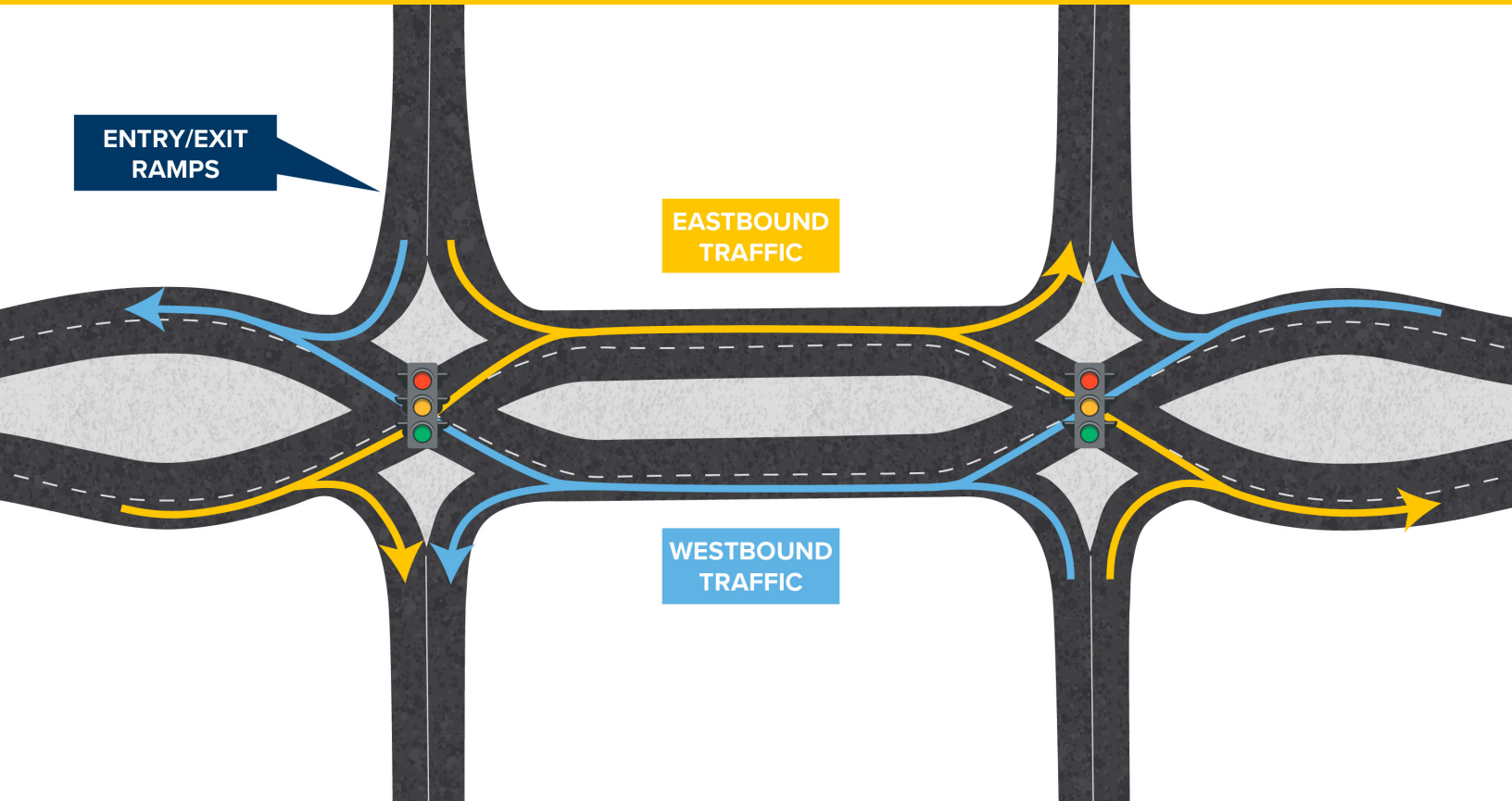


BENEFITS

- **Enhanced safety** — a DCD design reduces wrong-way entries to ramps and the potential number of crash points for vehicles. The curved design also reduces speeds so crashes are less severe.
- **Increased efficiency** — DCDs operate with fewer traffic signal phases, decreasing delays.
- **Cost effective** — a DCD reconfigures existing interchanges, reducing construction expenses.



Double Crossover Diamond



WHAT TO KNOW ABOUT DCDS

- DCDS are safer and more efficient for vehicles entering, traveling through and exiting the interchange.
- Vehicles can easily access freeway ramps before or after the crossover junctions.
- DCDS can be either an overpass or underpass depending on need.
- They are also known as a diverging diamond interchange, or DDI.

WHEN TO USE A DCD

DCDs are effective solutions for intersections with:

- High traffic volumes and crash frequencies.
- Vehicles waiting through several signal cycles due to queuing.
- A need for increased vehicle capacity for left-turn and straight-moving traffic.