

Road Diet

SAFE TRANSPORTATION FOR EVERY PEDESTRIAN

COUNTERMEASURE TECH SHEET



Before



After



Multilane roads can take longer to cross and vehicle speeds may be high.



Road Diets can decrease the lane crossing distance and reduce vehicle speeds.



Road Diets can reduce total crashes by

19-47%*

*19% in urban areas, 47% in suburban areas.

FEATURES:

- Reduced crossing distance and exposure.
- Reduced vehicle speeds.
- Promote Complete Streets.
- Provide space for installing curb extensions and widening sidewalks.
- Create space for bicycle, transit, and/or parking lanes.



U.S. Department of Transportation
Federal Highway Administration



June 2018, Updated

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EDC-4 STEP: https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/step.cfm

A typical Road Diet converts an existing four-lane, undivided roadway to two through lanes and a center, two-way left turn lane. This design allows left-turning drivers to exit the traffic stream while waiting for a gap to complete their turn and frees up space that can be reallocated to other uses, including:

- » Pedestrian refuge island
- » Crosswalk visibility enhancements, such as curb extensions
- » On-street parking, with parking restrictions on crosswalk approaches
- » Widened sidewalks and landscaped buffers
- » Bicycle lane and/or transit lanes

A Road Diet can be a relatively low-cost safety solution, particularly where only pavement marking modifications are required to implement the reconfigured roadway design. When planning in conjunction with reconstruction or overlay projects, the change in cross section may be completed without any additional cost.

CONSIDERATIONS

While Road Diets are effective countermeasures for midblock collisions, they are not recommended for all multilane roadways. Typically, a suitable roadway has a current and future average daily traffic (ADT) equal to or less than about 20,000. In some instances, Road Diets have been successfully used on roads with ADTs as high as 25,000.

FHWA's Road Diet Informational Guide provides a closer look at the safety and operational benefits of Road Diets to help agencies determine if this countermeasure may suit their needs. Communities will need to consider a range of factors, including:

- » Vehicle speed
- » Level of Service (LOS)
- » Quality of Service
- » Vehicle volume (ADT)
- » The operation and volume of pedestrians, bicyclists, transit, and freight
- » Peak hour and peak direction traffic flow
- » Vehicle turning volumes and patterns
- » Frequency of stopping and slow moving vehicles
- » Presence of parallel roadways

Since Road Diets may be new or uncommon in a community, consider conducting an outreach effort to educate the public on the purpose and potential benefits.

COST

The cost associated with a Road Diet can vary widely. Restriping costs for the three lanes plus bicycle lanes are estimated at \$25,000 to \$40,000 per mile, depending on the amount of lane lines that need to be repainted. When a Road Diet involves geometric features like extended sidewalks, curb extensions, a raised median or refuge island, the costs can increase to \$100,000 or more per mile.

References

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