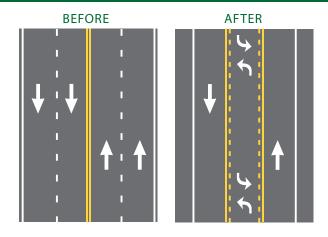
What is a Road Diet?

A typical Road Diet converts an existing four-lane undivided roadway segment to a three-lane segment consisting of two through lanes and a center two-way left-turn lane (TWLTL). This reduction of lanes allows for other uses such as bike lanes, pedestrian refuge islands, transit stops, or parking. A Road Diet can reduce crash rates compared to a traditional four-lane undivided roadway.



A Road Diet can be a **low-cost safety** solution, particularly in cases where only pavement marking modifications are required to make the traffic control change. In other cases, the Road Diet may be planned in conjunction with reconstruction or overlay projects, and the change in cross section allocation can be incorporated at little or no additional cost.

We planned our Road Diet installation as part of the overlay, so there was no additional cost to the construction budget.

- Robert Rocchio, Rhode Island DOT

Resources

Road Diet Informational Guide

FHWA-SA-14-028

http://safety.fhwa.dot.gov/

Proven Safety Countermeasure Road Diet Fact Sheet

FHWA-SA-12-013

http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_013.htm

Contact

Rebecca Crowe

FHWA Office of Safety rebecca.crowe@dot.gov (804) 775-3381

Visit www.safety.fhwa.dot.gov

to learn more about Road Diets.

Sources:

- ¹ FHWA "Evaluation of Lane Reduction 'Road Diet' Measures on Crashes." FHWA Report No. FHWA-HRT-10-053. (Washington, D.C: 2010)
- ² Stout, Thomas B., Before and After Study of Some Impacts of 4-Lane to 3-Lane Roadway Conversions. March 2005.

Cover image source: Virginia DOT

FHWA-SA-15-001

ROAD DIETS



FHWA Safety Program





Benefits of Road Diets

Road Diets provide benefits
to users of all modes of
transportation, including bicyclists,
pedestrians, and motorists.
Benefits can include the following:

- Crash reduction of 19 to 47 percent.
- **Reduction of rear-end and left-turn crashes** through the use of a center two-way left-turn lane (TWLTL).
- **Reduced right-angle crashes** as side street motorists must cross only three lanes of traffic instead of four.
- Reduced speed differential due to one lane of traffic in each direction.
- Encourages a more community-focused,
 "Complete Streets" environment.
- Fewer lanes for pedestrians to cross and an opportunity to install pedestrian refuge islands.
- The opportunity to install bicycle lanes within existing cross section.
- The opportunity to allocate the "leftover" roadway width for on-street parking, transit stops, or other functions.
- Simplifying road scanning and gap selection for motorists making left turns from side streets or the mainline.

Case Study

Reston, Virginia



Lawyers Road, before and after a 2009 Road Diet Source: Randy Dittberner, Virginia DOT

Reston, Virginia, a suburb of Washington, DC, is a planned community with a larger emphasis on non-motorized travel than many suburbs. The need for multi-modal accessibility has increased with the opening of a nearby rail transit station

The Virginia Department of Transportation (VDOT) implemented a Road Diet on a 2-mile segment of Lawyers Road in Reston in conjunction with a repaving project in 2009. Although community reaction was mixed before the project, views shifted to strong support after implementation. In addition to the clear benefits of dedicated bicycle infrastructure and left-turn space, the project helped reduce crashes in the corridor by nearly 70%. Community support was so strong that a second Road Diet was installed on nearby Soapstone Drive in 2011, and Soapstone has also achieved a 70% crash reduction. The resulting linked network of bicycle accommodations provides an excellent travel option for access to the transit station. The success of the Reston projects is leading VDOT to expand its use of Road Diets regionwide.

Road Diets

A Proven Safety Countermeasure

Four-lane undivided highways have a history of relatively high crash rates, especially as traffic volumes and turning movements increase. The main issue is that the left (inside) lane is shared by higher-speed through traffic and left-turning vehicles. Road Diets reduce the number of vehicle-to-vehicle conflict points that contribute to rear-end, left-turn, and sideswipe crashes.

Studies indicate a 19 to 47 percent reduction in overall crashes when a Road Diet is installed on a previously four-lane undivided facility as well as a decrease in crashes involving drivers under 35 years of age and over 65.^{1,2}

BEFORE

AFTER