

# ROAD DIETS AND REPURPOSING STREET SPACE

## What are road diets?

The planning field commonly uses the term 'road diet' to refer to a reduction in the number or width of travel lanes on a street (or both). The most common application of road diets is when four-lane streets with no median island are converted to three lanes: one travel lane per direction and a center two-way left turn lane.

## Why are road diets used?

These street conversions are considered when a street's traffic volumes are less than the street's car-carrying capacity, and they are undertaken for multiple reasons: to improve traffic operations by providing a dedicated lane for turning vehicles, to increase safety by aligning turning vehicles in a common path, and to convert space that may no longer be needed for moving vehicles to bicycle lanes, sidewalk extensions, or other enhancements of the street.

## Are road diets common?

Road diets have emerged as a street design treatment over the last 20 years, and by 2014 enough have been implemented throughout the United States and Canada to allow transportation agencies to study their effectiveness. These studies have shown that not only do road diets handle the levels of traffic that used the streets before their conversion, but sometimes handle even greater numbers.

## When are road diets possible?

A general planning rule of thumb used in identifying road diet candidates is that they are highly likely to be feasible when daily traffic volumes are 20,000 vehicles per day (vpd) or less. Many road diets in larger American cities have been implemented on streets with higher volumes than this, although research suggests that 24,000 vpd is a general upper limit for feasibility and that more detailed information needs to be given to the street when volumes range from 20,000 to 24,000 vehicles per day.

To put US 278 into this perspective, the road just west of Sams Crossing had a volume of 21,500 in 2013, with volumes varying between 17,000 and 22,000 over the last 10 years.

### 4-lane to 3-lane diets

(typical application in many communities)

### 5-lane to 3-lane diets

(proposed for E. College Avenue/US 278)

#### Safety

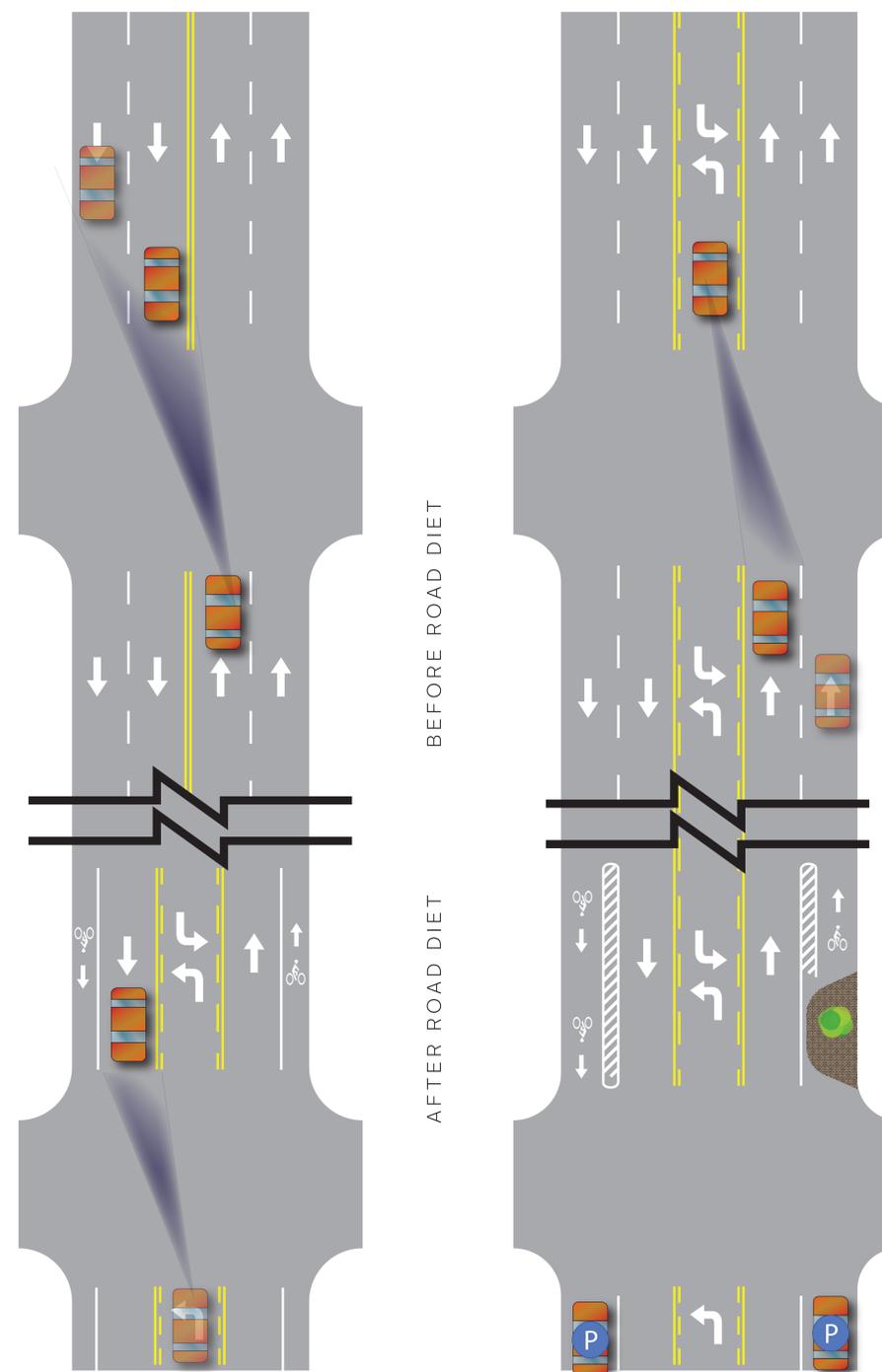
In four-lane cross-sections, vehicles turning left must use the inner lane, blocking it if a driver is waiting on oncoming moving traffic. Vehicles waiting to turn may not see all oncoming traffic, leading to potential crashes if an oncoming vehicle is obscured.

#### Reclaiming Space

The reduction of one travel lane can give up to 12 feet back to other users of the street, allowing striping of on-street bicycle lanes or potentially on-street parking.

#### Safety

With road diets, left-turning vehicles have a place to wait for oncoming traffic—and they can see all oncoming traffic as it is now in a single lane.



#### Safety

In five-lane cross-sections, vehicles turning left already have a dedicated storage lane, although they may not see all oncoming traffic. If traffic volumes suggest that a road diet is feasible, reduction of four moving travel lanes to two can address problems of visibility and improve roadway safety.

#### Reclaiming Space

The reduction of two travel lanes can give 20 to 24 feet back to other users of the street, allowing striping of on-street bicycle lanes with buffer protection, the installation of curb extensions (bulbouts) that can add landscaping to the street and shorten crossing distances for crosswalks.

In areas where on-street parking is important, this reclaiming of space can add parking on two sides, potentially even allowing both bike lanes and parking if there is adequate space.