

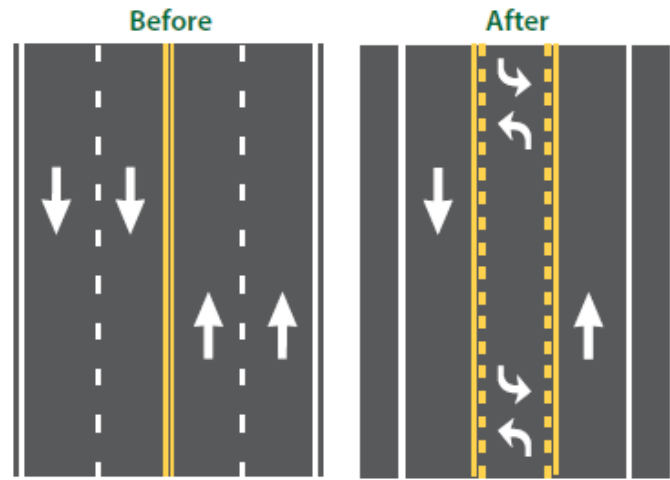
# ROAD DIETS

A road diet is generally described as removing vehicle lanes from a roadway and reallocating the extra space for other uses or travelling modes, such as:

- ◆ Bicycle lanes, cycle tracks, buffered bike lanes, etc.
- ◆ Wider sidewalks for pedestrians
- ◆ Street furniture (e.g., streetscape patios)
- ◆ Landscaping buffers between the sidewalk and travel way
- ◆ On-street parking
- ◆ Turn-outs at transit stops
- ◆ Transit stop amenities such as shelters and benches

A classic road diet typically involves converting an existing four-lane, undivided roadway to a three-lane roadway consisting of two through lanes and a center, two-way left-turn lane. The concept of road diets emerged as a response to a common practice of expanding two-lane urban arterials into four lanes once vehicular traffic hit a certain point—roughly 6,000 cars a day by some estimates.

The original thinking held that wider roads meant better traffic flows, especially at rush-hour, but new lanes also attracted new traffic, and outside the peak periods there was excessive pavement and wasted road space. An analysis of road widening in the small city of Fort Madison, Iowa, showed an increase in traffic volumes, as well as an increase in delays, speed, and crash and injury rates. These unintended outcomes in Fort Madison and other localities lead to the implementation of road diets reconfiguring the four lanes (two in each direction) into three (one each way plus a shared turn lane in the middle). The change dramatically reduced the number of "conflict points" on the road—places where a crash might occur. Whereas there might be six mid-block conflict points in a common four-lane arterial, between cars turning and merging, there were only two after the road diet.



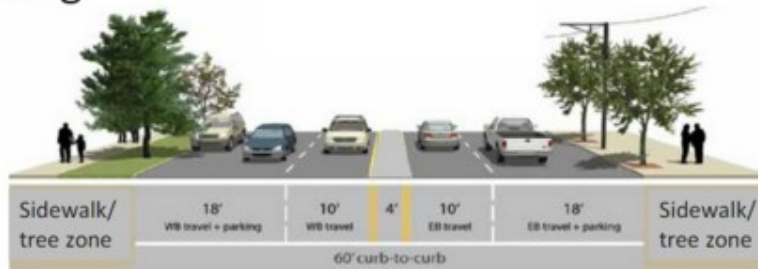
**main avenue**  
road diet

*City of Sioux Falls, SD*

Four-lane undivided highways experience relatively high crash frequencies — especially as traffic volumes and turning movements increase over time — resulting in conflicts between high-speed through traffic, left-turning vehicles and other road users. The Federal Highway Administration has deemed road diets a proven safety countermeasure and promotes them as a safety-focused design alternative to a traditional four-lane, undivided roadway. When a Road Diet is planned in conjunction with reconstruction or simple overlay projects, the safety and operational benefits are achieved essentially for the cost of restriping. A road diet is a low-cost solution that addresses safety concerns and can benefit all road users.

# ROAD DIETS

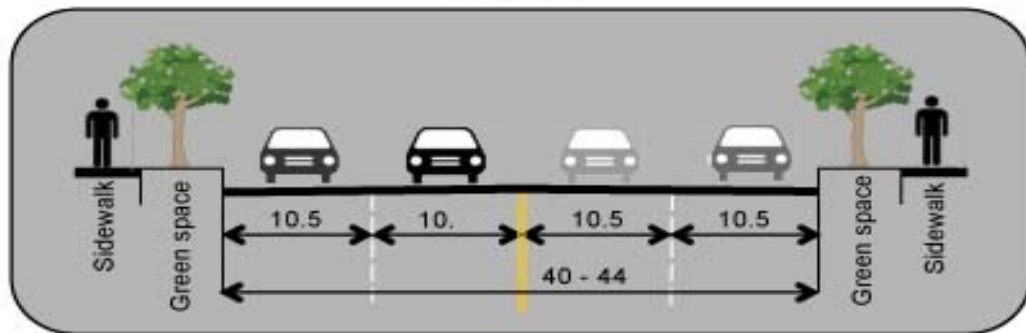
- Existing:



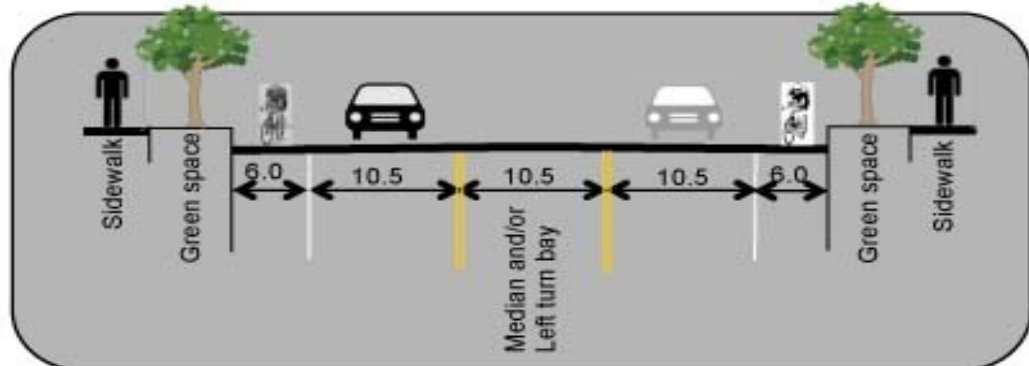
- Recommended Alternative:



Before



After



Essentially road diets make streets “complete” — designed to accommodate all potential users including bicyclists, drivers, transit riders and pedestrians of every age and ability. — Institute For Local Government

# BENEFITS OF ROAD DIETS

Road diets can benefit users of all modes of transportation, including bicyclists, pedestrians, and motorists:

- **Crash reduction**
  - **Reduction of rear-end and left-turn crashes** through the use of a center two-way left-turn lane
  - **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**.  
*A complete street is a road that is designed to be safe for drivers, bicyclists, transit vehicles and users, and pedestrians of all ages and abilities. The complete streets concept focuses not just on individual roads but on changing the decision-making and design process so that all users are routinely considered during the planning, designing, building and operating of all roadways.*
- **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 install **sidewalks** within existing right of way
- 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

Bicycle and pedestrian traffic tends to soar at these sites, as the recaptured road space gives way to bike lanes or street parking that provides a sidewalk buffer from moving traffic or crossing islands, and as vehicle speeds decline. Traffic volumes, meanwhile, typically stay the same in such a corridor: some drivers divert to other parts of the street network, while other drivers quickly soak up any vacated space. Best of all, these kinds of changes don't cost much. When timed with regular road maintenance and re-paving, road diet policies require little more than the paint needed to re-stripe lanes.

In addition to increased road safety, a larger number of pedestrians and cyclists can be good for the economic vitality of a community. According to *The Economic Benefits of Bicycling*, a 2008 report published by Portland State University, customers who arrive by bike to shop spend 24 percent more per month than those who arrive by car. A study of Toronto merchants found that people arriving on foot or by bicycle make more visits to local merchants and spend more money than their counterparts who arrive in cars.



Carlisle, PA Road Diet

*“Why, when our leadership has expressed so clearly the enormous financial gap we have in funding a “world class” transportation system, are road diets not an obsession of transportation departments everywhere?”*

*- Charles Marohn, Planner, Strong Towns*

Sources: Federal Highway Administration, Pennsylvania Department of Transportation, CityLab, Smart Growth America, WesternCity.Com, City of Ashland, City of Sioux Falls, City of Carlisle, Institute for Local Government

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