

Lane Modifications

Lane modifications seek to repurpose space to provide benefits to users of all modes of transportation, including bicyclists, pedestrians and motorists. Lane modifications often include modifying existing vehicle lanes to improve bicycle, pedestrian, and transit infrastructure.

Benefits of implementing a lane modification may include:



Reduction in crashes and crash severity



Reduction of and left-turn crashes through removal of travel lanes and conflict points with other vehicles



Increased safety with fewer lanes for pedestrians to cross and an opportunity to install bike lanes



Reduced right-angle crashes as side street motorists must cross only three lanes of traffic instead of five



Traffic calming and reduced speeds, which can decrease the number of crashes and reduce the severity of crashes if they occur



The opportunity to repurpose segments of the roadway to create **on street parking, bike lanes and transit stops**



Encouraging a more **community-focused environment** for all users



Simplifying decision-making for motorists making left-turns from or onto the mainline

Source: FHWA Safety Program | Road Diets Brochure

State Road (S.R.) 406 Conceptual Rendering



Lane modifications "can reduce crash rates compared to a traditional four-lane roadway."



Crash Reduction 19%-47%

- FHWA Office of Safety

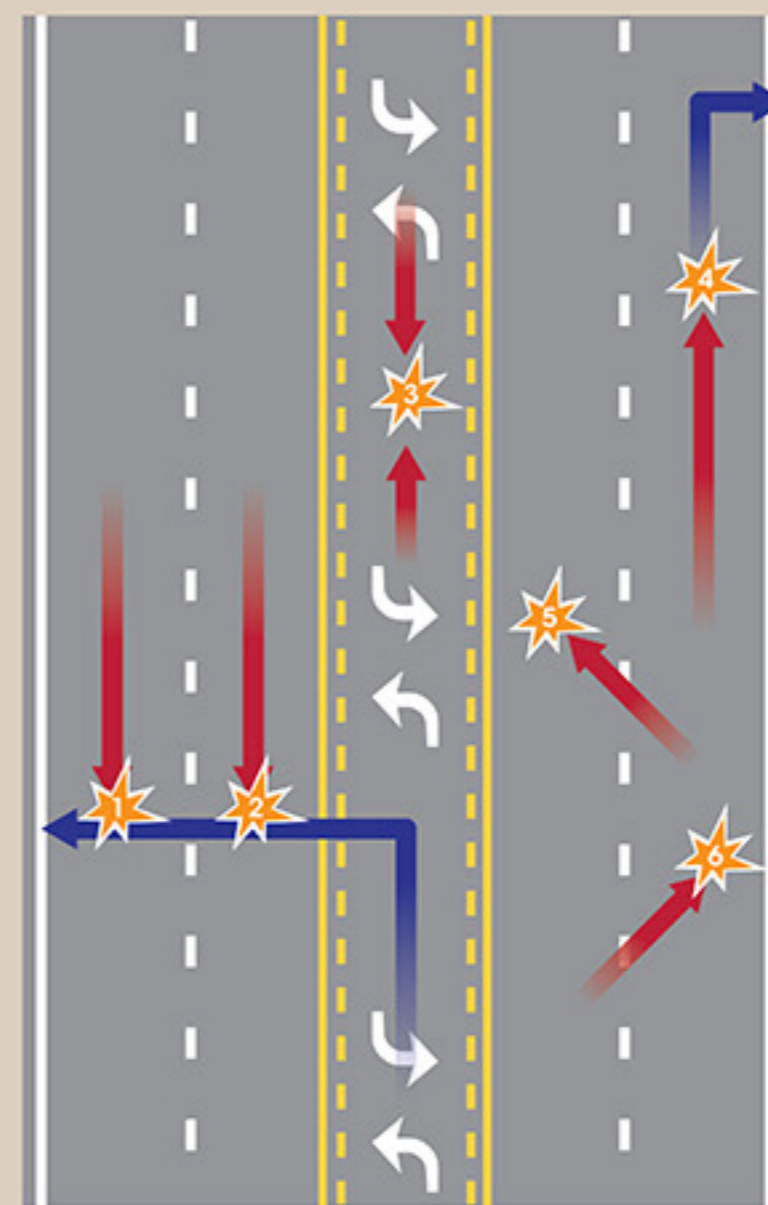
Case Study | Edgewater Drive (Orlando, FL)

A 1.5-mile section of Edgewater Drive underwent a lane modification in 2000, converting four lanes to three. The results:

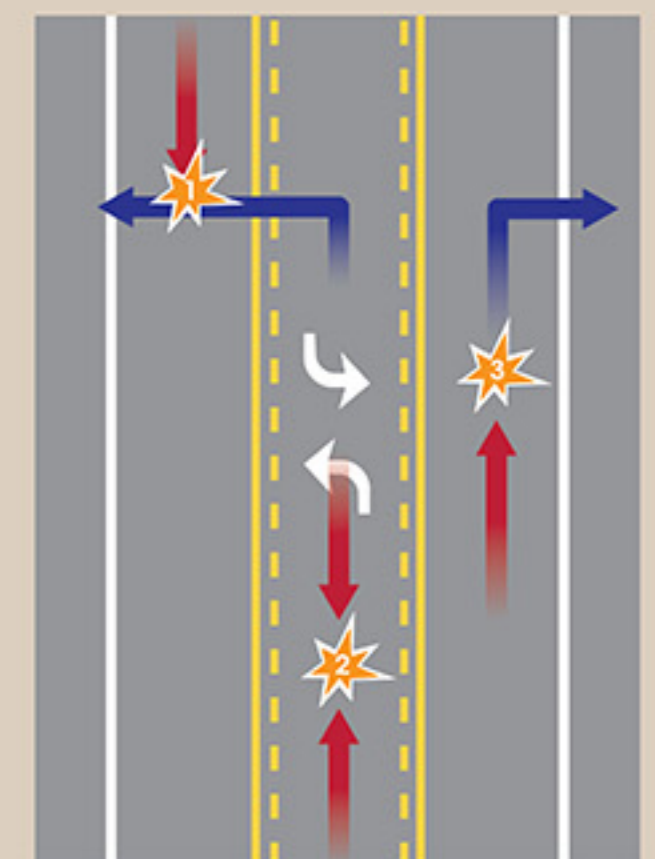
- ✓ 34% fewer crashes
- ✓ 68% fewer injuries
- ✓ Speeds decreased by up to 10%
- ✓ Increased property values
 - 8-10% (Residential)
 - 1-2% (Commercial)
- ✓ Travel times through the corridor reduced by 25 seconds (even with an increase in traffic volume)
- ✓ Walking and bicycling rates rose by 56% and 48%, respectively

Source: AARP Livable Communities Road Diets Fact Sheet

Before



After



Lane modifications **reduce the number of vehicle-to-vehicle conflict points** that contribute to rear-end, left-turn and sideswipe crashes.

Source: FHWA Safety Program



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S.R. 406 and U.S. 1 Concept Development and Evaluation Studies

