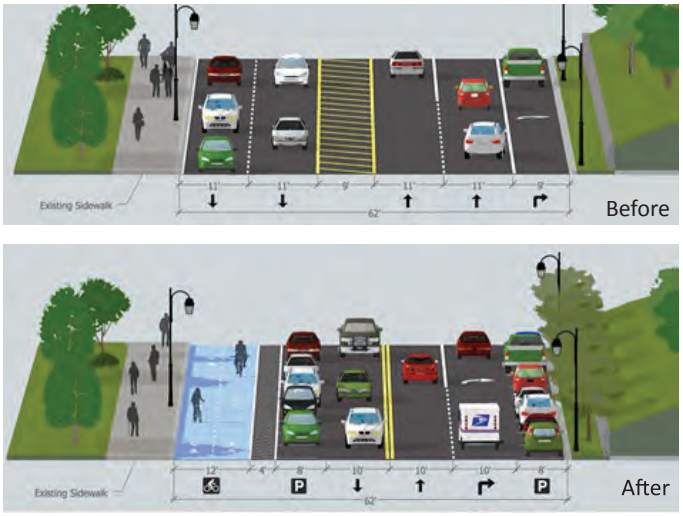
ROAD DIET ANALYSIS

WHAT IS A ROAD DIET ANALYSIS?

Road diets reduce the number of through lanes when those lanes are not needed to meet the existing traffic demand. By reducing the number of through lanes, excess pavement is created. This excess area can then be re-purposed to provide:

- Additional on-street parking
- Dedicated turning lanes
- Additional pedestrian and bicycle infrastructure
- Bulb-outs and patio areas

Where applicable, road diets provide a safer, more efficient use of public right of way that is more consistent with the existing travel demand.



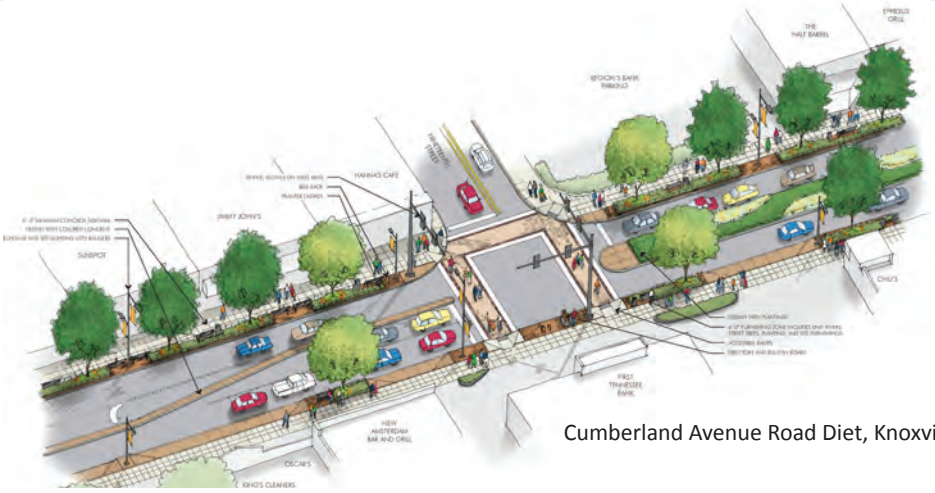
Proposed road diet for Riverside Drive in Memphis.

WHY DO A ROAD DIET ANALYSIS?

Road diets have multiple safety and operational benefits:

- Decreased distance for pedestrian crossings
- Providing room for a pedestrian crossing island
- Improving safety for bicyclists by providing dedicated space for bicycle travel
- Providing the opportunity for on-street parking
- Reducing rear-end and side-swipe crashes
- Improving speed limit compliance and decreasing crash severity when crashes do occur

When appropriately applied, road diets have generated benefits to users of all modes of transportation.



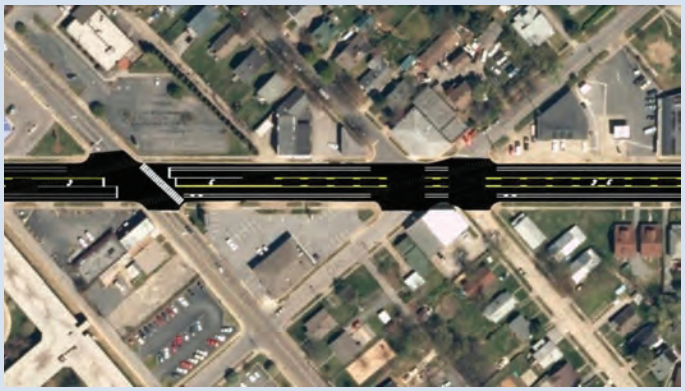
Cumberland Avenue Road Diet, Knoxville, TN

TENNESSEE EXAMPLE OF ROAD DIET: KINGSPORT

In 2013, the City of Kingsport, Tennessee commissioned a study for a road diet on Center Street. TDOT had planned to repave Center Street in 2014. Kingsport wanted to take an additional look at maximizing the efficiency of the existing roadway through a road diet analysis. Kingsport hoped to combine their analysis with the existing TDOT project to minimize costs associated with restriping the roadway if the analysis proved feasible.

The study looked at the traffic impacts of reassigning travel lanes for alternative uses. The primary alternative was the removal of one through lane in each direction and the addition of a dedicated left turn. The study determined that this recommendation would improve traffic operations.

Kingsport determined the road diet would result in a more efficient use of lanes without negative impacts to traffic capacity or mobility. Additional benefits include the provision of bicycle lanes, additional parking/loading/bus stop areas, and statistically fewer traffic crashes.



HOW TO CREATE LOCAL ROAD DESIGN GUIDELINES

STEP 1: PROJECT DEVELOPMENT

Leadership Commitment Community leaders must demonstrate a clear commitment to support the project.

Visioning and Consensus Establishing a shared vision allows the community to set project goals and objectives. Understanding needs and developing support from the community is vital to start the planning, design, and implementation processes.

Planning and Design Communities should leverage local resources and knowledge to assist in guiding project activities to best meet the needs of their community. Tailoring best practices to meet local conditions and desires will assist in developing an implementable, successful planning study.

STEP 2: PROJECT IMPLEMENTATION

Funding for Implementation Communities should seek diverse funding sources to implement their road diet. Partnering with private industry as well as seeking funding from other state and federal sources.

- **Surface Transportation Program:** Funding for roadway construction and improvements, operational improvement, transportation systems, bicycle and pedestrian facilities, transit, ridesharing programs and facilities and transportation planning and studies
- **Transportation Alternatives:** The Transportation Alternatives Program functions as the main funding source for general pedestrian and bicycling infrastructure projects.
- **Safety:** Program that implements projects that reduce fatalities and serious injuries on all public roadways.

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