

Road “Diets”

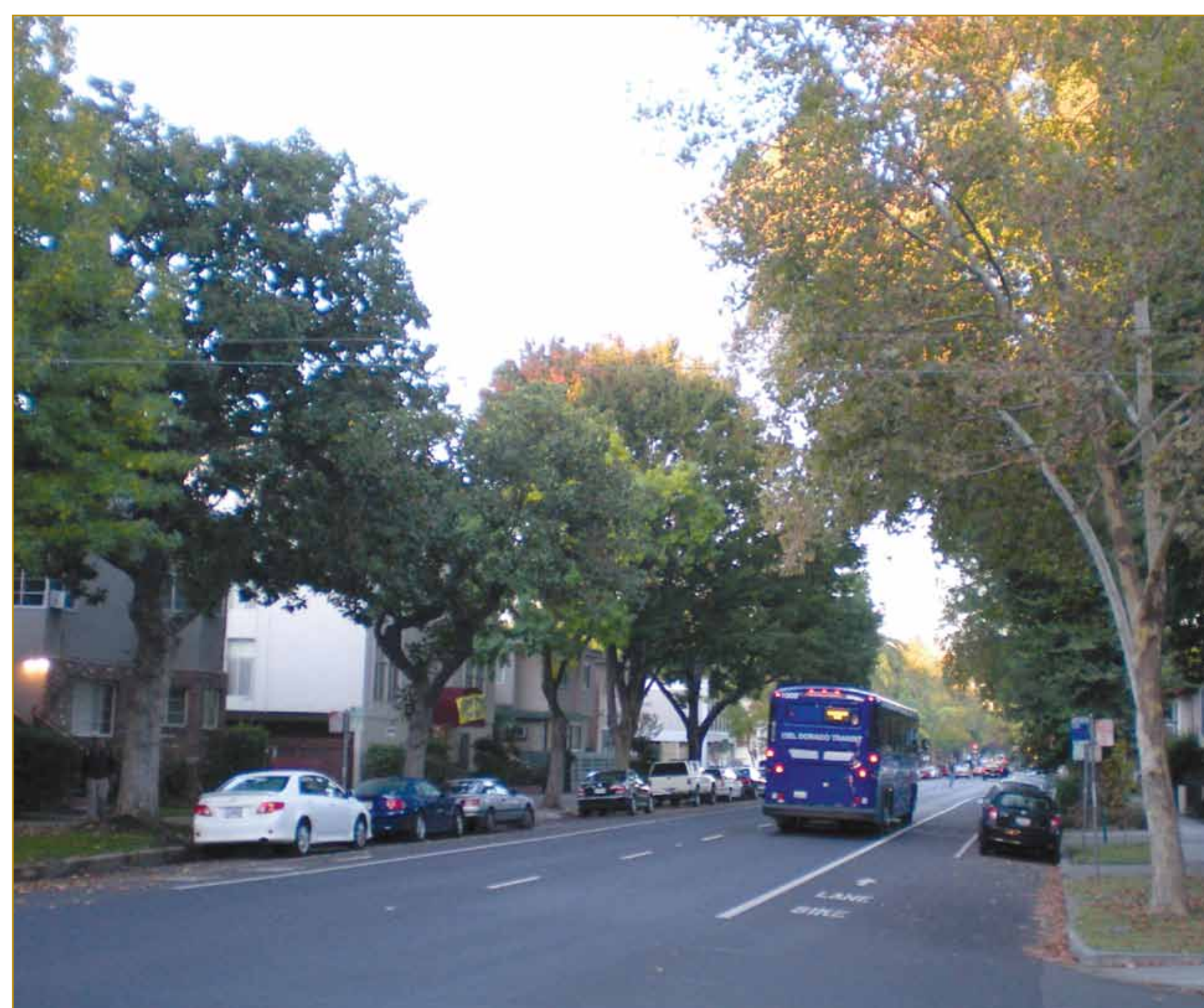
Local Strategies to Reduce Greenhouse Gas Emissions from the Transportation Sector

WITH STATE AND FEDERAL FOCUS on decreasing greenhouse gas emissions and U.S. dependence on foreign oil, implementation of local road projects that facilitate well-planned non-motorized transportation options will be critical.

“Road diets” have recently gained attention as a viable strategy to expand non-motorized mobility options including biking and walking, while reducing greenhouse gas emissions from vehicle travel. A road diet optimizes road capacity for all users by reducing a multi-lane road (usually four-lanes) to two vehicle lanes, with a center left hand turn lane, and dedicated bike and pedestrian paths in both directions. [1]

Studies have shown that, after the road diet has been implemented, non-motorized modes of transportation increase, sometimes substantially. [1,2, 3]

Location	Brief Project Description	Increases in Bicycle Use	Changes in vehicle use	Changes in Pedestrian Use
Edgewater Drive, Orlando, FL (5)	BEFORE: 4 vehicle lanes AFTER: 2 vehicle lanes, dedicated center left turn lane, 2 bicycle lanes	30% (Daily average)	-12% (Daily average)	23% (Daily average)
Burrard Bridge, Vancouver Canada (6)	BEFORE: 6 vehicle lanes and 1 shared bike/ped lane AFTER: 5 vehicle lanes, one dedicated bicycle path and one dedicated pedestrian path	24% (an additional 200,000 trips/yr)	No significant change	Declines in pedestrian collisions; No significant change in use
Stone Way N Rechannelization, Seattle, WA (7)	BEFORE: 4 vehicle lanes AFTER: 2 vehicle lanes and 2 dedicated bike lanes	35% (Daily average)	-6% (Daily average)	Declines in pedestrian collisions; Change in use not documented
Valencia Street, San Francisco, CA (8)	BEFORE: 4 vehicle lanes AFTER: 2 vehicle lanes, dedicated center left turn lane, 2 bicycle lanes	144% (during the PM peak hour)	-10% (Daily average)	Declines in pedestrian collisions; Change in use not documented
Polk Street, San Francisco, CA (9)	BEFORE: 3 vehicle lanes AFTER: 2 vehicle lanes, 2 bicycle lanes	41% (AM Peak Hour) 28% (PM Peak Hour)	-1% (Daily average)	Change in use not documented



▲ One example of a roadway reduced from four vehicle lanes to accommodate pedestrian and bicycle uses. (Sacramento, CA)

▲ Above are several road diet case studies where jurisdictions reduced vehicle lanes and increased bicycle and pedestrian amenities along particular roadways. The result is generally an improvements in access for pedestrians and cyclists and improvements in overall roadway safety.



▲ The City of Davis is working to convert a major corridor that currently consists of four vehicle lanes, to a roadway that consists of two vehicle lanes, two bicycle lanes, and enhanced pedestrian amenities.

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