Spectacular Seven





A

Road Diet / Roadway Reconfiguration



- Reduce crossing distance
- Eliminate /reduce "multiple threat" crash types
- Install crossing island to cross in 2 simple steps



Road Diet / Roadway Reconfiguration



- Reduce top end travel speeds
- Buffer sidewalk from travel lanes (parking or bike lane)
- Reclaim street space for "higher and better use" than moving peak hour traffic



Road Diet CMF = 0.47 & 0.71 CRF = 53% & 29%

 Countermeasure: Converting four-lane roadways to three-lane roadways with center turn lane (road diet)

CMF	CRF (%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.47	53	****	All	All	Suburban	Persaud et. al, 2010	
 Countermeasure: Road diet (Convert 4-lane undivided road to 2-lanes plus turning lane) 							
CMF	CRF (%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.71 ^[B]	29	*****	All	All	Urban	Harkey et al., 2008	

Source: CMF Clearinghouse www.cmfclearinghouse.org





Implementing Road Diets in New Jersey video



Road Diet Informational Guide & Road Diet Case Studies



https://safety.fhwa.dot.gov/road_diets/g uidance/info_guide/



https://safety.fhwa.dot.gov/road_diets/case_studies/

New Jersey Road Diet



https://www.youtube.com/watch?v=Im_zrAfRj20

General Guidelines for Traffic Volumes

LESS THAN 10,000 ADT Great candidate for Road Diet 10,000 – 15,000 ADT Very good candidate for Road Diet 15,000 – 20,000 ADT Good candidate for Road Diet **GREATER THAN** 20,000 ADT Potential candidate for Road Diet

In most instances traffic will likely not be negatively affected. Agencies should conduct intersection analysis to study potential traffic operational effects and consider signal retiming as needed. Agencies should conduct a corridor analysis since traffic operations may be affected at this volume depending on the "before" condition. Agencies should complete a feasibility study to determine whether this is a good location for a Road Diet. Operations may be affected at this volume.

There are examples across the country where Road Diets have been successful with ADTs as high as 26,000



Road Diets



Maximum Volume for Road Diet (ADT)

Figure 12. Road Diet Implementation Maximum Volume Thresholds by Agency

EDC

Considerations

- Safety
- Operations
 - Peak Hour
- Design
 - Signalized Intersection
 Adjustments
- Resurfacing
- Context Sensitive Solutions/Complete Streets

A four-lane roadway may already operate like a three-lane road.

Some four-lane roads operate essentially like a three-lane road (defacto one lane in each direction) and do not experience a reduction in capacity.



A four-lane undivided road operating as a de facto three-lane cross section.



A Road Diet providing a two-way left-turn lane.

When a corridor contains a large number of access points (driveways) the majority of through traffic will tend to utilize the outside lanes to avoid being delayed by left-turning vehicles slowing and stopping in the inside lanes.



Intersections "Control" Capacity

Converting four through lanes to two through lanes may make it possible to install dedicated turn lanes at the intersection



Intersections

- Signal timing or phasing changes at intersections to optimize operations and safety benefits
- Roundabouts Single Lane

• ~ 20,000 ADT







LaJolla Blvd – Bird Rock Community (San Diego, CA)

Prior to 2003, La Jolla Boulevard was a four-lane boulevard moving 20,000 cars per day with average speeds of 38-42 mph. The roadway configuration and speed of traffic created a setting uninviting for pedestrians and unable to stimulate growth among local businesses. In response to numerous community members demanding a safer walking environment, the City of San Diego, in partnership with the community, embarked upon a project to improve safety along the boulevard.

> Source: Arnold, M., Chui, G., and Lupo, D., P.E. "Roundabout Product Demonstration Showcase" Presentation on December 10, 2008, City of San Diego Engineering & Capital Projects Department



LaJolla Blvd – San Diego, CA





LaJolla Blvd – Bird Rock Community (San Diego, CA)

Narrower travel lanes, five roundabouts, landscaped medians and angled parking have slowed traffic speeds, improved pedestrian safety, and also revitalized the businesses!!!









LaJolla Blvd – Photo Credit: Mark Doctor FHWA