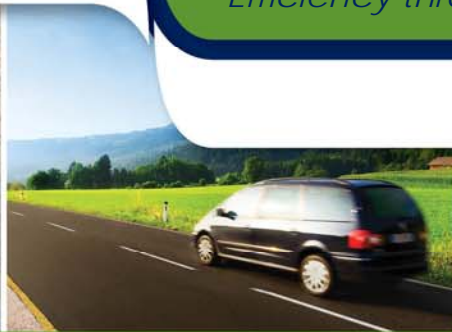


ROAD DIET



Efficiency through technology and collaboration



Becky Crowe - FHWA

Brian Chandler, P.E., PTOE - Leidos

DeWayne Carver, AICP - Florida DOT

INFORMATIONAL GUIDE

safety.fhwa.dot.gov



U.S. Department of Transportation
Federal Highway Administration

Safety – A Central Goal for USDOT



Photo Source: VHB



U.S. Department of Transportation
Office of Public Affairs
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News

FHWA 30-14
Friday, August 29, 2014
Contact: Doug Hecox
Tel: 202-366-0660

New Data Show U.S. Driving at Highest Level in Six Years

*Nearly Three Trillion Miles Traveled Over Last 12 Months
Supports Call for Greater Transportation Investment*

WASHINGTON - New estimates released today by the U.S. Department of Transportation's Federal Highway Administration (FHWA) show that American driving between July 2013 and June 2014 is at levels not seen since 2008, fueling calls for greater investment in highways that must bear growing



Road Diets – A Proven Safety Countermeasure

Office of Safety Proven Safety Countermeasures



These nine countermeasures address crashes that occur in the focus areas of intersections, pedestrians, and roadway departure.



[Roundabouts](#)



[Corridor Access Management](#)



[Backplates with Retroreflective Borders](#)



[Longitudinal Rumble Strips and Stripes on Two-Lane Roads](#)



[Enhanced Delineation and Friction for Horizontal Curves](#)



[Safety Edge_{SM}](#)



[Medians and Pedestrian Crossing Islands in Urban and Suburban Areas](#)



[Pedestrian Hybrid Beacon](#)



[Road Diet](#)



Safety – A Central Goal for USDOT



Photo Source: USDOT

“Safety is our highest priority and that commitment is the same regardless of which form of transportation people choose, including walking and biking.”

**Secretary Anthony Foxx
ProWalk ProBike ProPlace
Conference
September 10, 2014**



Road Diet Informational Guide



FHWA Safety Program



U.S. Department of Transportation
Federal Highway Administration

Safe Roads for a Safer Future
Investment in roadway safety saves lives
www.safety.fhwa.dot.gov

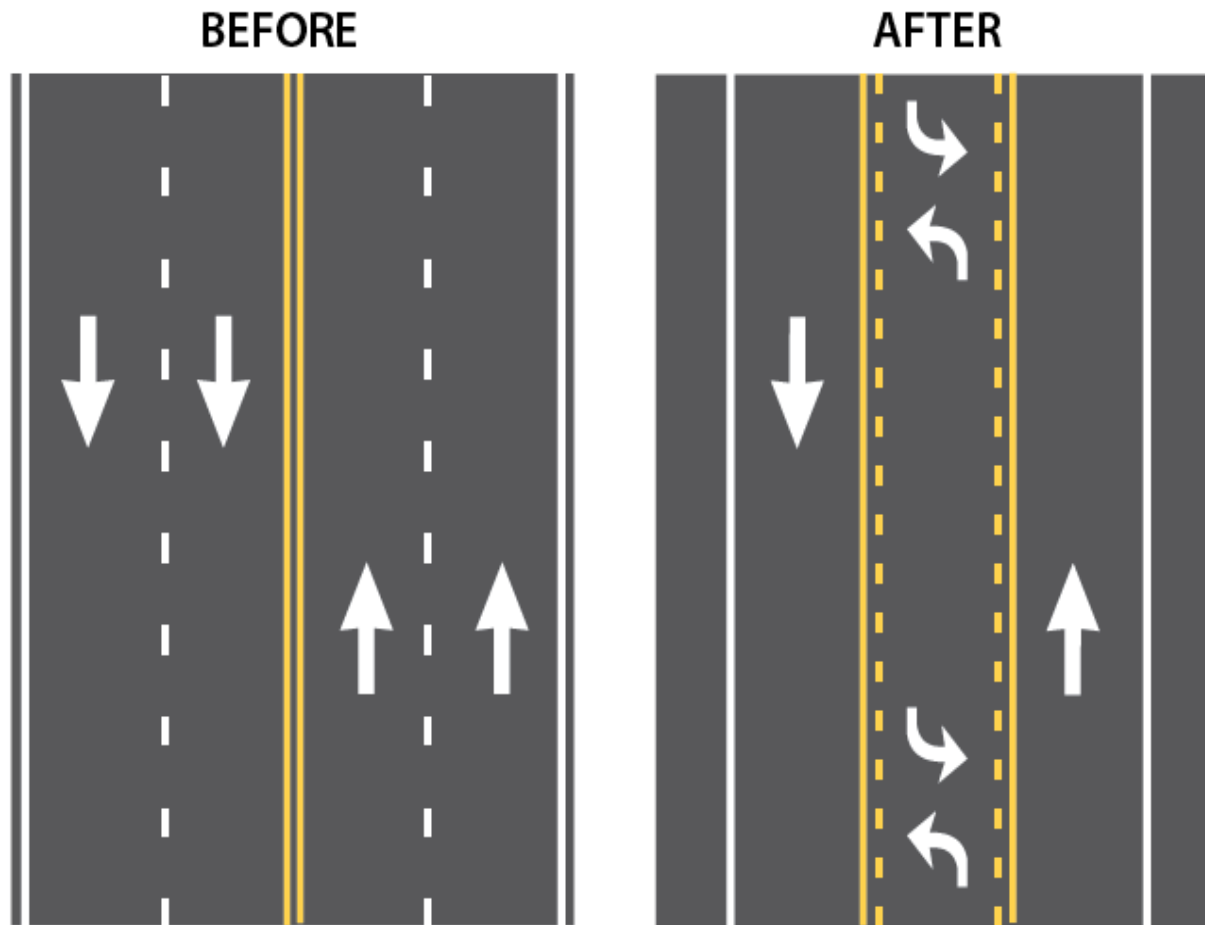


Road Diet Informational Guide: Contents

1. Introduction
2. Why Consider a Road Diet?
3. Road Diet Feasibility Determination
4. Designing a Road Diet
5. Determining if a Road Diet is Effective



What is a Road Diet?



What is a Road Diet?

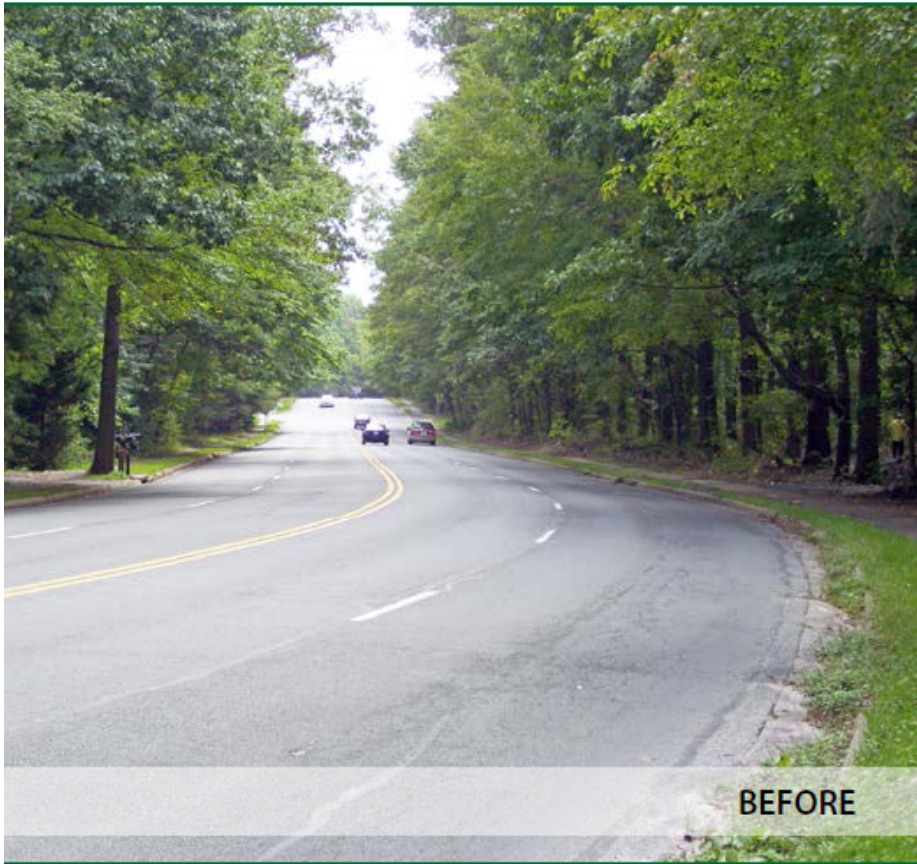
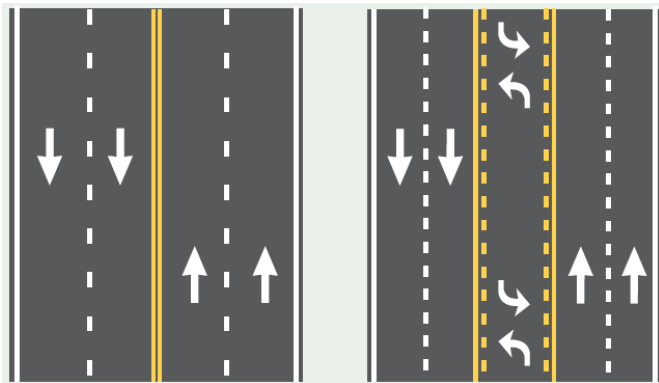


Photo Source: Virginia DOT

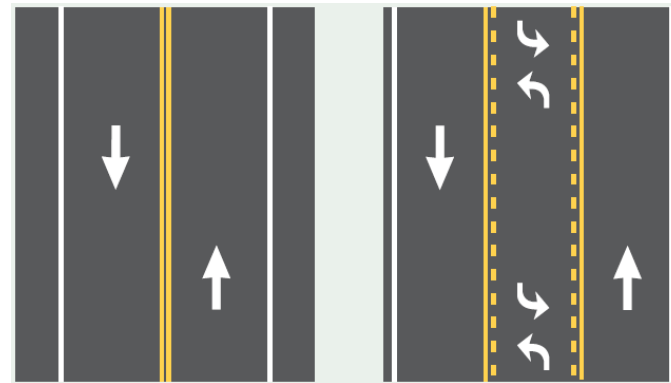


Other Roadway Reconfigurations

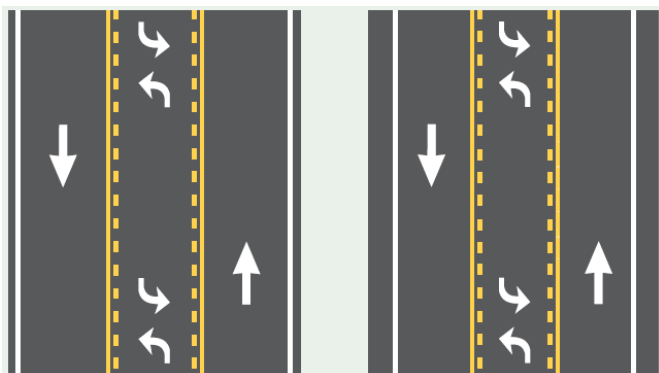
4-Lane to 5-Lane



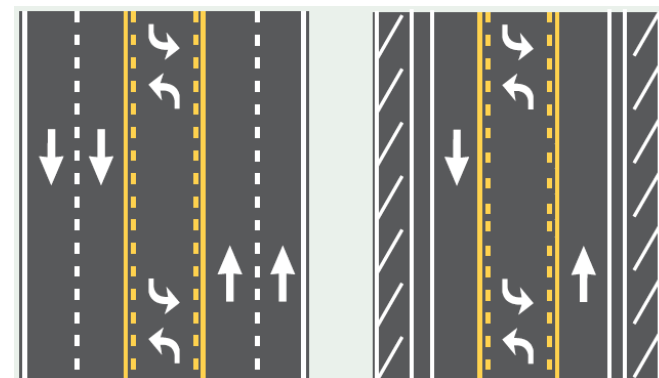
2-Lane to 3-Lane



3-Lane to 3-Lane

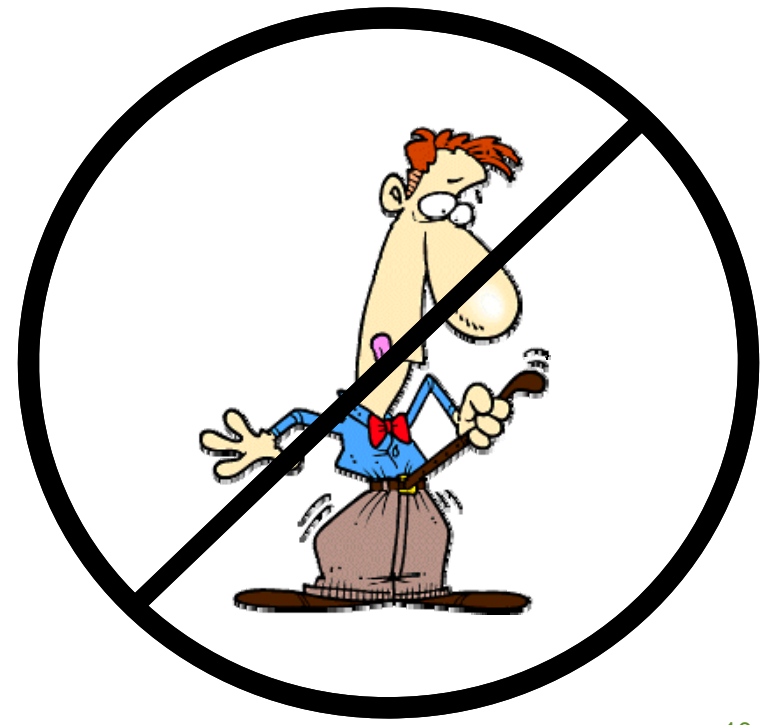


5-Lane to 3-Lane



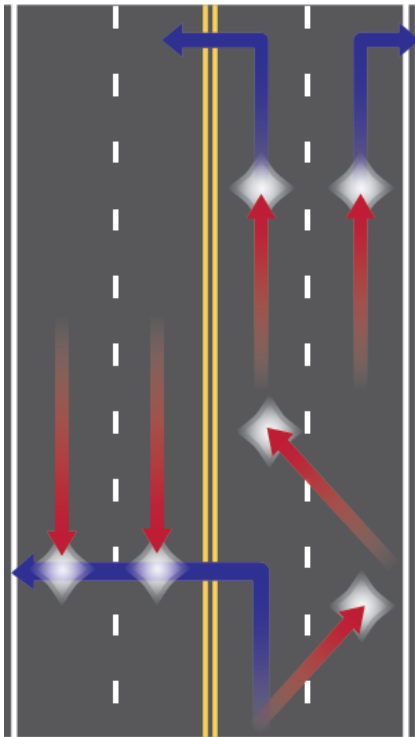
What a Road Diet is NOT

- No cross section reduction
- No lane width reduction required
 - Though not disallowed
- Think about it like this:
 - Lane Reallocation
 - Lane Rebalancing
 - Conversion

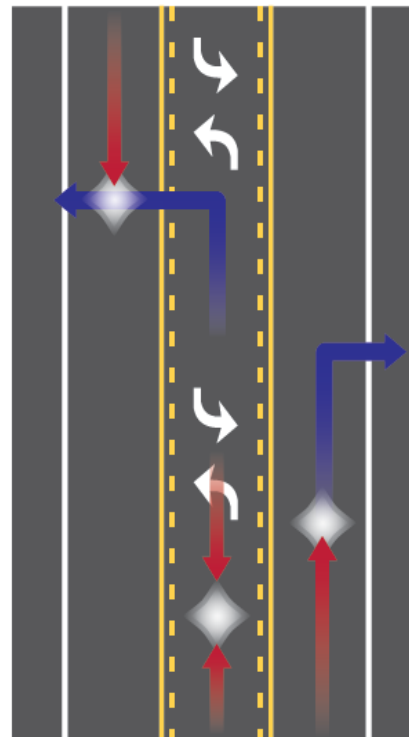


Benefits: Safety

4-Lane



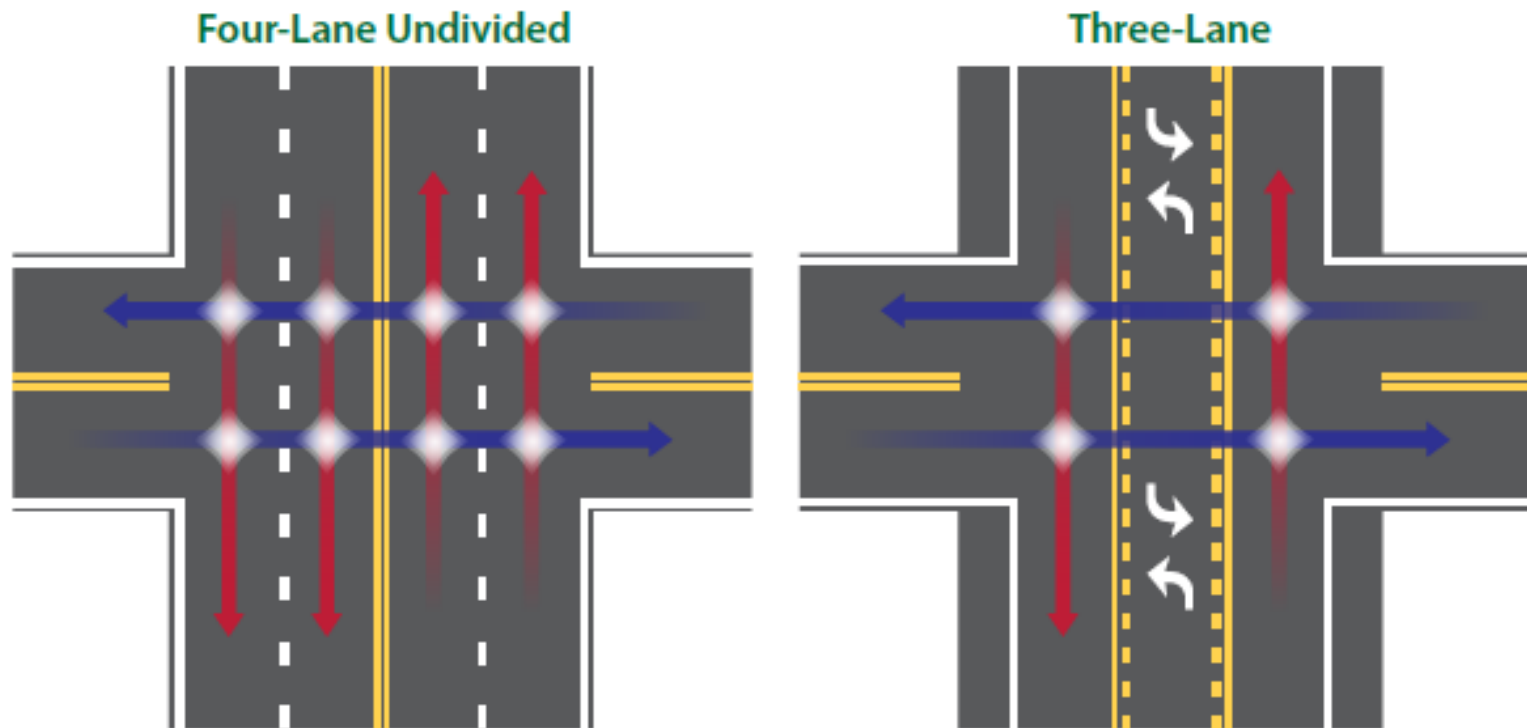
3-Lane



19 - 47%
overall
crash
reduction



Benefits: Reduced Conflict Points



Benefits: Non-motorized Safety & Accessibility

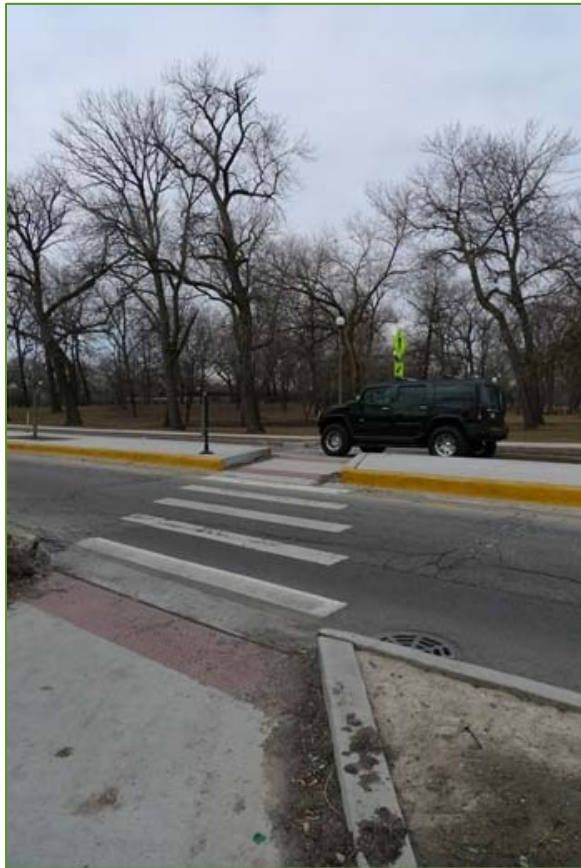


Photo Source: Stacy Meekins



Photo Source: City of Seattle



Benefits: Livability



Photo Source: Jennifer Atkinson



Benefits: Low-cost Installation

Most Road Diets are installed on existing pavement within the right-of-way.



Reston, Virginia



Lawyers Road

Photo Credit: VDOT

Objective: Improve Safety



Photo Credit: VDOT

Soapstone Road



Grand Rapids, Michigan

Objective: Improve Livability



Photo Credit: City of Grand Rapids

Division Street



Grand Rapids, Michigan

Objective: Accommodate Transit



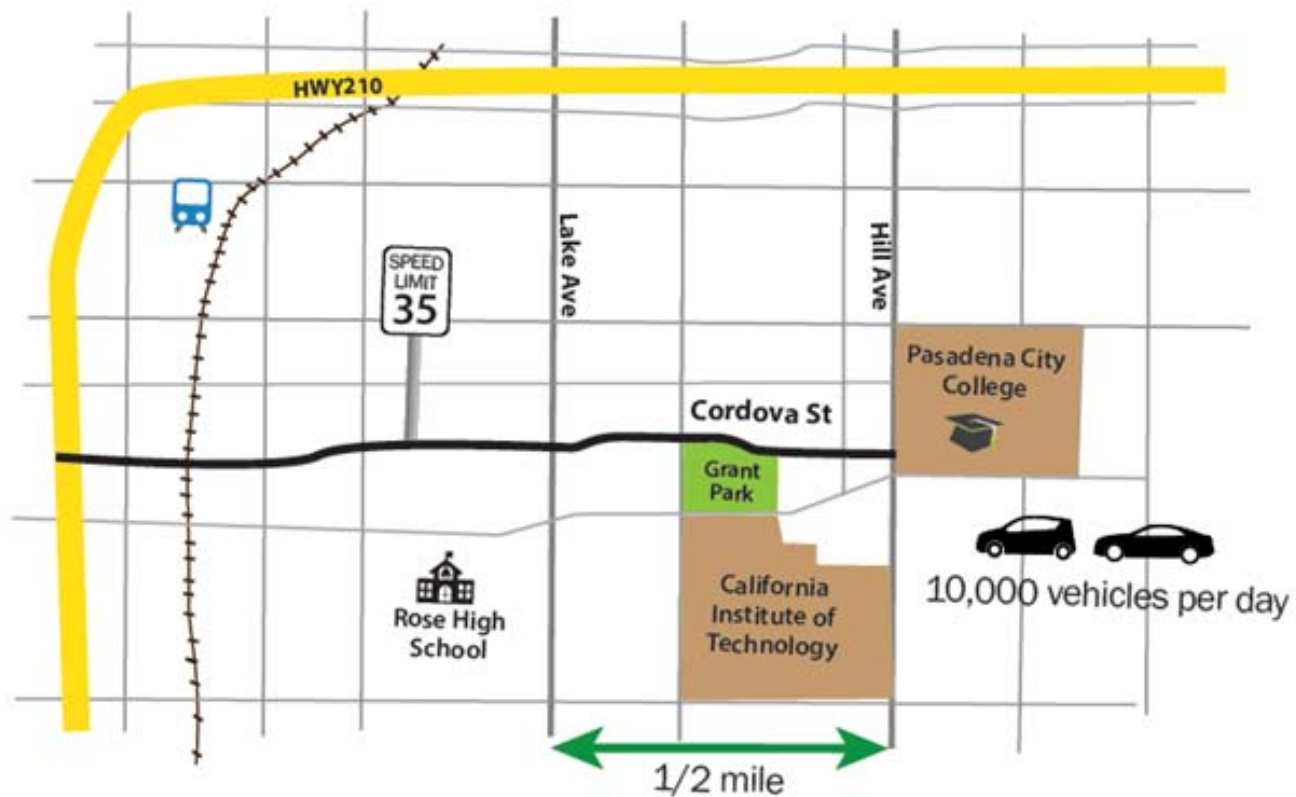
Burton Street

Photo Credit: City of Grand Rapids



Los Angeles, California

Objective: Increase Bicycle Use



Los Angeles, California



Bicycle
use
TRIPLED

Photo Credit: LADOT

7th Street



New York City



*Objective:
Improve
Pedestrian
Safety*

Photo Credit: NYCDOT

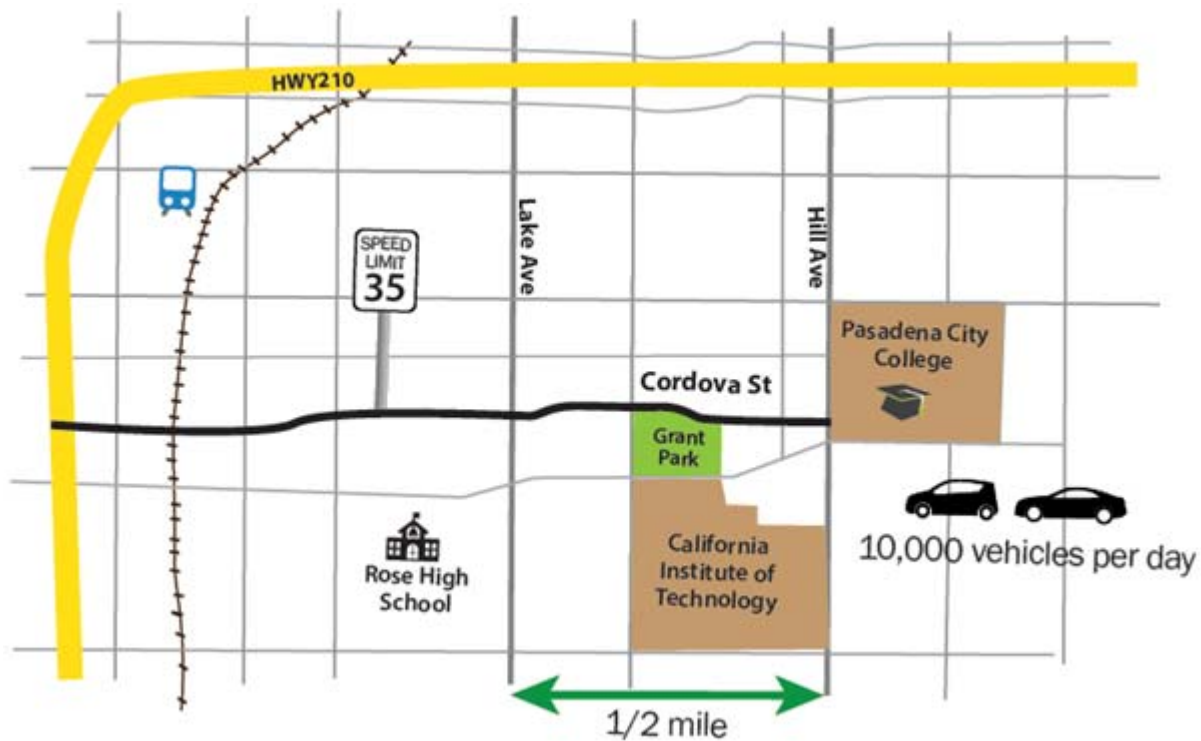


Photo Credit: NYCDOT



Pasadena, California

Objectives: Increase Ped Safety, Enhance Curb Parking



Pasadena, California



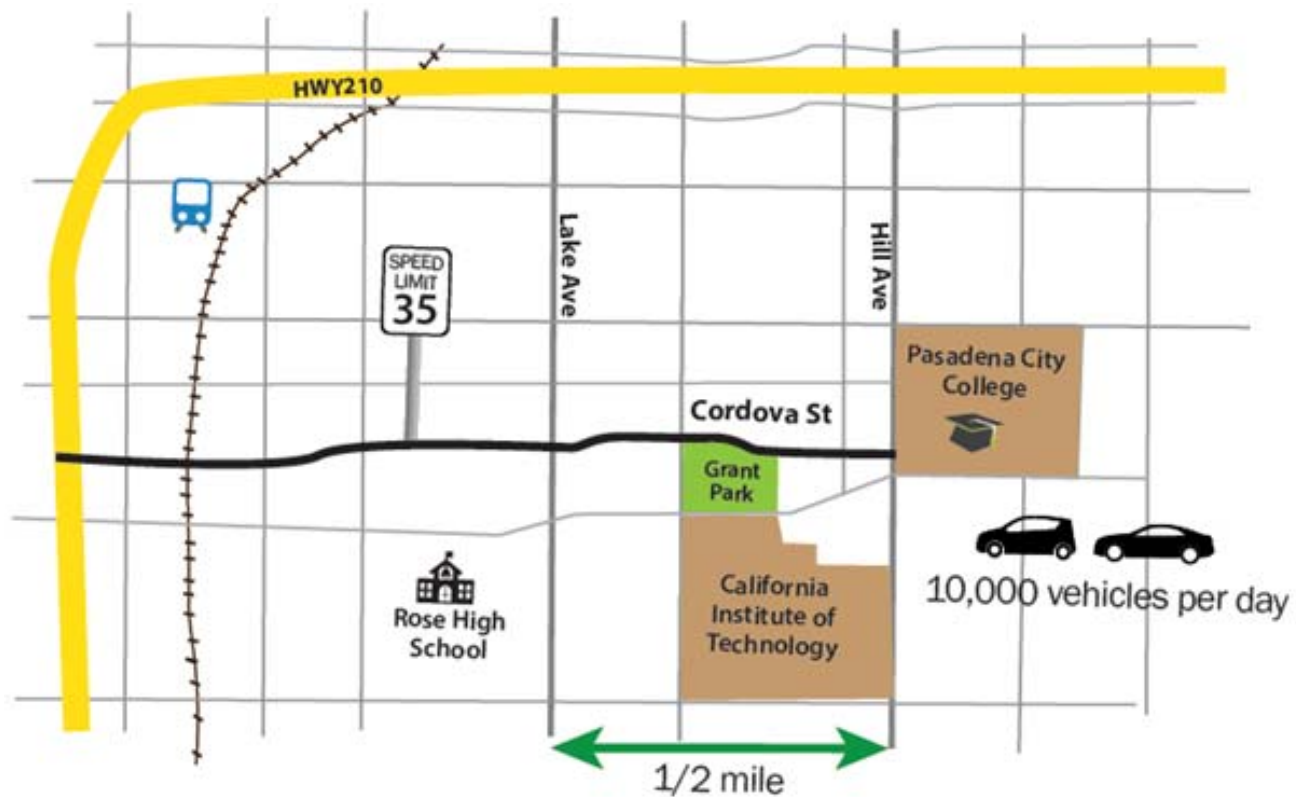
Photo Credit: City of Pasadena

Cordova Street



Los Angeles, California

Objective: Increase Bicycle Use



Los Angeles, California



Bicycle
use
TRIPLED

Photo Credit: LADOT

7th Street



Determining Road Diet Feasibility

Identify the Road Diet's objectives:

- Improve safety
- Reduce speed differential
- Reduce queues caused with left-turners
- Improve pedestrian environment
- Improve bicyclist accessibility
- Enhance transit stops



Determining Road Diet Feasibility

Context Sensitive Solutions and Complete Streets

- The street network should be planned, designed, maintained, and operated in a way that accommodates all road users and those who use the surrounding environment.



Photo Credit: City of Chicago

Complete Streets Commitment

More than 600 State, regional, and local jurisdictions have adopted Complete Streets policies or have made a written commitment to do so.



Determining Road Diet Feasibility

Traffic Operations: What about Capacity?

- Some 4-lane roads = “de facto 3-lane roads”
- Case-by-case analysis
- Meet the current and expected needs

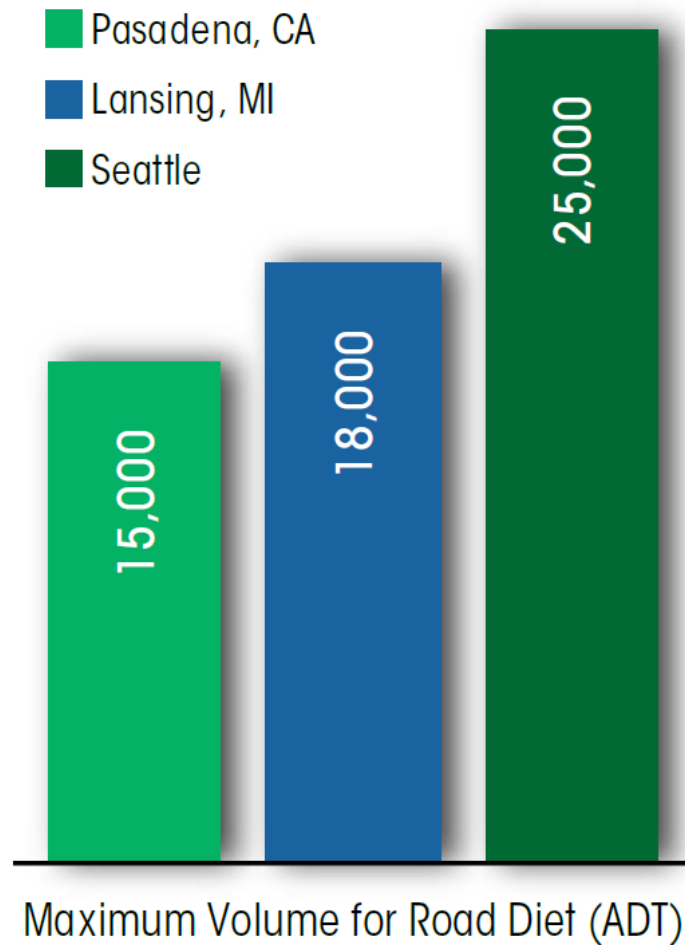


Photo Credit: Tom Welch



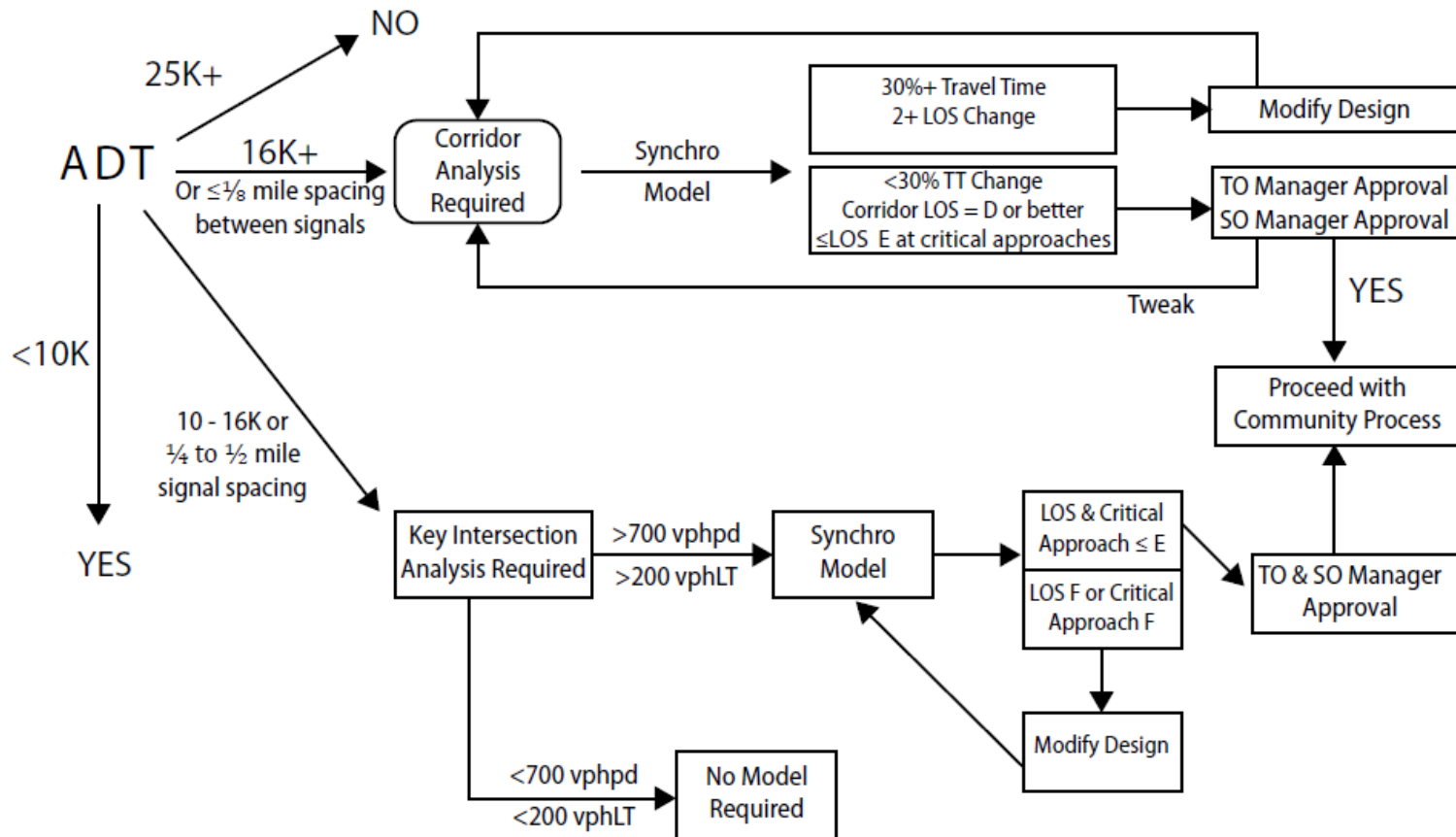
Determining Road Diet Feasibility

Operational Factors: How many vehicles?



Determining Road Diet Feasibility: Seattle

Modeling Flow Chart for Road Diets
[from 4/5 lanes to 3 lanes]



NOTES: vphpd = Vehicles per hour per direction
vphLT = Left-turning vehicles per hour
ADT = Average Daily Traffic
LOS = Level of Service



Determining Road Diet Feasibility

Photo Credit: Stacy Meekins

Transit Factors

- A Road Diet should not result in undue traffic delay due to transit stops
- Bus stops can be located along the curb with on-street parking removed
 - This is sometimes not desired by bus drivers
- Tapered pull-outs can help transit ingress



Photo Credit: City of Seattle

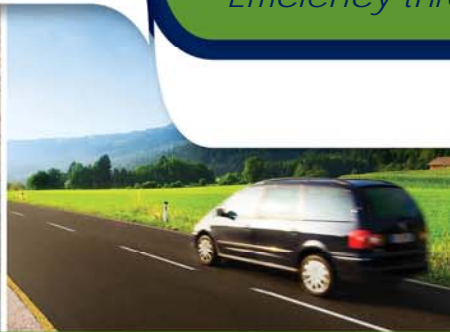


Florida DOT

ROAD DIET



Efficiency through technology and collaboration



U.S. Department of Transportation
Federal Highway Administration

Determining Effectiveness: Re-visit Objectives

- Safety
 - Crash reduction?
 - Certain crash types reduced?
 - Speed differential changed?
- Operations
 - Level of service? For all users?
- How were these road users affected?
 - Bicyclists
 - Pedestrians
 - Transit
 - Others



Resources

Road Diet Informational Guide

http://safety.fhwa.dot.gov/road_diets/info_guide/

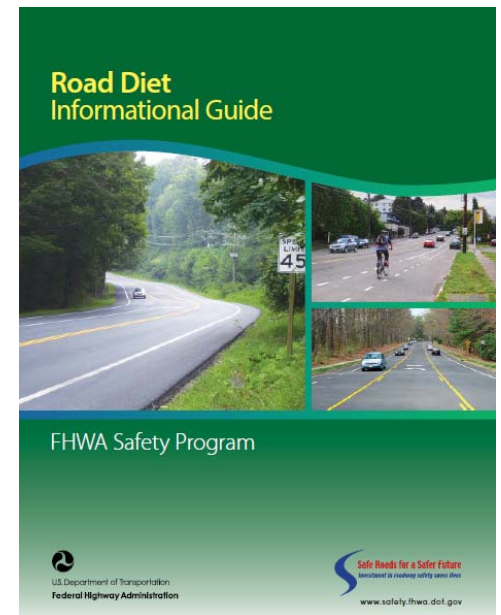
Road Diet Brochure

http://safety.fhwa.dot.gov/road_diets/brochure/

Road Diet Case Studies & Desk Reference

Coming Soon

http://safety.fhwa.dot.gov/road_diets



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