Making the Case for Complete Streets
FHWA’s 9 Proven Countermeasures:
Safety improvements focused on intersections, pedestrians, and roadway departures

Evidence-based infrastructure design techniques and roadway features

Application is most effective using a data-driven approach

Eligible for Highway Safety Improvement Program (HSIP) funding

- Pedestrian Hybrid Beacons
- Medians and Pedestrian Crossing Islands
- Road Diets

### Proven Safety Countermeasures

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

Improving safety is a top priority for the U.S. Department of Transportation, and FHWA remains committed to reducing highway fatalities and serious injuries on our Nation’s highways. We are highly confident that certain processes, infrastructure design techniques, and highway features are effective and their use should be encouraged.

In January 2012, FHWA issued a "Guidance Memorandum on Promoting the Implementation of Proven Safety Countermeasures". This guidance takes into consideration the latest safety research to advance a group of countermeasures that have shown great effectiveness in improving safety. Safety practitioners are encouraged to consider this set of countermeasures that are research-proven, but not widely applied on a national basis.

Click on one of the nine countermeasures below for more information and a downloadable fact sheet. Each fact sheet provides more detailed descriptions, related research studies, and evaluations of each of these countermeasures. Further information on each countermeasure can also be found at the Crash Modification Factors Clearinghouse [here](http://www.cmfclearinghouse.org/).
FHWA Proven Countermeasure: Pedestrian Hybrid Beacon

When designed and applied properly:

- May reduce pedestrian crashes by up to 69%
- May reduce motor vehicle crashes by up to 29%
- Should only be used in conjunction with a marked crosswalk
- Good for transit & school locations

More than 80 percent of pedestrians die when hit by vehicles traveling at 40 mph or faster

Billings, MT
FHWA Proven Countermeasure:
Medians and Pedestrian Crossing Islands in Urban and Suburban Areas

When designed and applied properly:

- May reduce pedestrian crashes by 46%
- May reduce motor vehicle crashes by up to 39%
- Allow pedestrians a safe place to stop at the mid-point
- Enhance visibility of crossing pedestrians

Vanderbilt Avenue, Brooklyn, NY
http://nacto.org/publication/urban-street-design-guide/streets/neighborhood-main-street/

Midblock locations account for more than 70 percent of pedestrian fatalities
Classic Road Diet:
conversion of a four-lane undivided road into a three-lane road, two thru lanes and a center-left turn lane

Benefits

• Low cost (striping only)
• Reduced speed
• Better accommodation of turning traffic
• Improved safety, fewer conflict points
• Newly available roadway space can be used for complete streets elements like bike lanes

A “road diet” proposal for Delta Avenue

The city is considering a new lane configuration for Delta Avenue between Columbia Parkway and Erie Avenue (excluding Mount Lookout Square): one travel lane in each direction; a center two-way left turn lane; bike lanes; and parking on both sides of the street.

Existing

Proposed

Delta Avenue, Cincinnati, OH
When designed and applied properly:

- Studies indicate that a reduction in total crashes of between 19% and 47% is possible
- Road Diets typically result in speed reductions which means fewer and less severe crashes

An analysis of 45 Road Diet sites in California, Iowa, and Washington showed a 29 percent reduction in total crashes.
City of Philadelphia
Spruce and Pine Street Bike Lanes

Crash data from the first year of the new bike lanes:

• 44% reduction in serious car crashes
• 58% reduction in pedestrian crashes
• 7% reduction in all total crashes

City officials found bike lanes were successful in:

• reducing speeding
• increasing bicycle flow

Adding bike lanes to Spruce and Pine Streets did not adversely impact (vehicle) traffic flow.
Ocean Park Boulevard, Santa Monica, CA

A reconfiguration in 2008 reduced vehicle travel lanes from four to two, introduced a center left turn lane at intersections, parallel parking, and bicycle lanes resulted in dramatically improved safety:

- Total crashes dropped by 65% in the first nine months after the changes occurred
- Injury crashes plummeted by 60% during that same nine-month timeframe
Case Study: Parkside Avenue - City Of Philadelphia, Pa

Study Area: Parkside Avenue meets Girard Avenue just west of the Philadelphia Zoo

TAMING TRAFFIC
Parkside Avenue, Philadelphia

City: Philadelphia, Pa
Girard Avenue and 49th Street

Delaware Valley Regional Planning Commission
Thank you!

Kevin S. Murphy
Assistant Manager, Safety Programs
Office of Safety and Congestion Management
DVRPC
kmurphy@dvrpc.org