

# **Install Bicycle Lanes**

Bicycle lanes are designated portions of the roadway, marked by pavement striping and signs, that provide space for bicyclists to travel separately from motor vehicles.

## Implementation Strategy

#### How and Where to Apply

- Bicycle lanes can be installed on arterial or collector roads with sufficient width or through road diet conversions.
- They are most effective in urban or suburban areas with moderate to high bicycle activity and crash risk.
- According to FHWA guidance, bike lanes should be included during repaving or restriping projects to improve multimodal safety and comfort.

Use in a Safe System Approach

This countermeasure supports Safer Users and Safer Roads by physically or visually separating bicyclists from faster-moving vehicles. Dedicated lanes encourage predictable behavior, increase visibility, and reduce exposure to severe conflicts.

## **Key Stakeholders**

Municipal and regional transportation agencies Bicycle and pedestrian safety coordinators

#### **Proactive Implementation**

Bicycle lanes can be implemented proactively in corridors identified through bicycle crash analysis or multimodal gap studies. They can be part of complete streets policies, Safe Routes to School programs, or bike network expansions. Agencies can target roads with high cyclist volumes or known safety concerns, especially near schools, parks, and transit hubs.

#### **Countermeasure Overview**

Objective: Reduce bicycle crashes along roadways

Strategy: Provide safe roadway facilities for parallel travel

# **Targeted Solution**



Lack of dedicated space for bicyclists



**Bicyclist** 





ALL



Urban

# Safety Linkage



Pedestrian and **Bicyclist** 



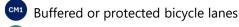
Safer Vulnerable Users

**98250** SAFE SYSTEM **APPROACH** Safe Road Users **SAFE SYSTEM** 

**ROADWAY DESIGN** TIER 1

Tier 2

### **Selected Related Countermeasures**



Bicycle boxes at intersections

Reduced speed limits on shared roadways

Cost: \$ (Moderate)

**Service Life:** 20 years

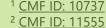
Benefit-Cost Ratio: 5.9:1

Reduce bicycle/vehicle crashes<sup>1</sup>



Reduce total crashes on urban four-lane undivided collectors and local roads<sup>2</sup>

<sup>1</sup> CMF ID: 10737





Safety Benefits

#### Resources

- **Bicycle Lanes**
- FHWA Bicycle-Lane

