



# Pedestrian Walkways and Bike Paths

Construct, update, and/or maintain pedestrian walkways and bike paths/lanes to encourage alternative commuting options

## WHAT IS IT?

According to a 2009 survey of US households, 11 percent of all trips were taken on foot and 1 percent were taken by bicycle. Real and perceived safety concerns can be a central barrier to bicycling and walking. However, safe, well-maintained bicycle and pedestrian infrastructure can help encourage active transportation as an alternative form of mobility and address safety concerns. This growing trend is known as the “safety in numbers” effect; pedestrian safety increases as the amount of pedestrian traffic also increases in a given area.

Protection from cars should be a primary goal of any infrastructure improvements to prioritize the safety of pedestrians and bicyclists. There are multiple types of infrastructure improvements that can be used to encourage bicycling and walking including:

## BICYCLING

- **Shared lanes** denote traffic lanes that are used by motorized vehicles and bicycles. Over 75 percent of all accidents with bicycles occur in shared lanes. Safety can be improved through shared lane markings and signage that indicates bicyclists' priority.
- **Bicycle boulevards** utilize shared lane markings, wayfinding signage, and traffic calming features to prioritize cyclists on low-traffic local streets.
- **Advisory bicycle lanes** are continuously dashed areas for cyclist use, but that motor vehicles can temporarily enter.
- **Bicycle lanes** are marked lanes designated solely for bicyclists. Overall, bicycle lanes improve safety outcomes, reducing crashes where installed.
- **Separated bicycle lanes** are bicycle facilities that physically separated other types of travel. The separation can include painted barriers, plastic markers, or raised curbs.

## WALKING

- **Slow speed zones** are designated areas, usually in residential areas or shopping districts, that limit vehicle traffic to 20mph or less.
- **Parklets** are placemaking tools that extend the sidewalk into on-street parking spaces that provide extra space for pedestrians. Parklets typically include spaces to sit or urban greenery and encourage pedestrian traffic.
- **Pedestrian crossing signs** are positioned along the street that provide a visual cue for drivers to decrease their speed and increase caution.
- **Curb radius tightening** describes the extension of the curb along intersections with paint or concrete, which shortens the crossing distance as well.

## WHY IS IT IMPORTANT?

- **Improve public health:** Active transportation can significantly improve health outcomes; 3 hours of walking per week can reduce risk of cardiovascular disease by 16 percent and for individuals who actively commute have an 11 percent reduced risk.
- **Reduce carbon emissions:** A 2015 study found that if 14 percent of trips in cities were taken by bicycle by 2050, the share of carbon emissions from the urban transportation sector would be reduced by 11 percent.
- **Encouraging active commuting:** In 2017, the average one-way commute time was 26.9 minutes in the United States.
  - A study of over 40 US cities found that one mile of bike lane per square mile was correlated with a one-percent increase in a share of commute by bicycle.

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## BENEFITS



**Improved health outcomes,  
including a decrease in  
chronic disease**



**Decrease in carbon emissions from  
single occupancy vehicles and other  
carbon emitted transportation  
sources transportation**



**Increase in pedestrian and  
bicyclist safety**



**Reduce traffic congestion**



**Improves quality of life**



**Builds community**

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## HOW CAN COMMUNITIES IMPLEMENT THIS POLICY?

To encourage active transportation, the main tools are urban planning considerations, changes to infrastructure, and policies and standards for pedestrian and bicycle safety. Strategies to consider include:

- Analyze streets to plan infrastructure improvements that encourage bicycle and pedestrian traffic. The improvements listed above are some solutions that can be used to enhance existing infrastructure to be safer and more attractive to active transportation. Cities have created strategic frameworks and roadmaps called “Active Transportation Plans” to map out implementation.
- Integrate pedestrian walkways and bicycle paths/lanes into transit systems. Planned pedestrian or bicycle paths with proximity to major transit stops can assist with the “first mile, last mile” issue of public transit.
- Identify potential marketing or community engagement tools to encourage alternative transportation methods and driving safety. Potential programs may include:
  - Vehicle mile reduction campaigns can encourage residents to explore alternative modes of transportation. Cities sometimes utilize “Bike to Work” days or similar events to garner public support of active transportation. After a “Bike to Work” day in San Francisco, bicyclist counts were still 25.4% higher one month after the event.
  - Vehicle travel awareness marketing can encourage drivers to be more cautious of pedestrians and bicyclists. Vision Zero is a global campaign that raises awareness of traffic fatalities and encourages drivers to be more cautious, especially in residential areas.
  - Safe Routes to School is a national program that teaches children basic pedestrian and bicyclist safety tips, extending the outreach to parents and community members as well. The educational strategy is proven to reduce traffic fatalities near schools.
- Improve bicycle access through public-private partnerships to provide bikeshare services. It is important to consider equity in designing the bikeshare programs; low-income communities may be most in-need of bicycle access programs, but may have barriers including unbanked status, lack of access to mobile devices, or lower levels of engagement.
- Utilize traffic data to plan infrastructure improvements and policy changes. By utilizing traffic data, the City can prioritize improvements to areas where traffic accidents occur most frequently and adjust solutions to an identified problem. Furthermore, the City can change traffic laws, including speed limits, in residential areas with high amounts of traffic fatalities.