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Safe Bicycle Lane Design Principles: Responding to Cycling Needs in Cities during COVID and Beyond

This guide aims to assist with the design of high-quality, safe, temporary cycling measures that also create the foundation for systemic and lasting changes that nurture a culture of cycling, facilitate the development of quality cycling networks, and move cities and urban mobility toward a sustainable future.

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This Guidebook is part of Urban Mobility within WRI Ross Center for Sustainability Cities. Reach out to Nikita Luke for more information.

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Cycling has become a popular, resilient and reliable travel option during the pandemic in cities around the globe. The implementation of emergent, or pop-up, bike lanes has received an overwhelming response since early 2020 and has also created a growing desire for safe and efficient bicycle infrastructure. Between March and July 2020, 394 cities, states and countries reported interventions that reallocated street space for people to cycle and walk more easily, directly and safely. This shift to cycling comes at a perfect time when cities have been making efforts to meet greenhouse gas emissions reduction targets.



Pop-up bike lanes are typically implemented with temporary materials to segregate a traffic lane for the use of cyclists only. Despite this initial temporary condition, any new cycling infrastructure must be designed and implemented thoughtfully and to the highest standards to reduce or eliminate risks that cyclists face during trips, especially novice cyclists who might be biking in the city for the first time. When a crash occurs between a vehicle and a bicycle, it's the cyclist who is most likely to be injured. According to the WHO, every year 41,000 cyclists die in road traffic-related incidents worldwide, representing 3% of global road traffic deaths.

Temporary and quickly designed bike lanes should not compromise on safety. Bike lanes that are deployed now may have a significant impact on travel patterns and safety in cities for years to come, especially as the broad range of temporary materials available can be rapidly installed yet offer a semipermanent solution.

For this reason, it is important to get the design and planning right. And right means safe. This guidance equips government agencies, designers, and civil society organizations that are participating in the health crisis response with an understanding of how to protect cyclists through safe and appropriate design. Cities are investing

considerable effort and resources to implement safe cycling lanes under very challenging conditions, and this energy should not be wasted.

The guidance provided here is based on the broad experience of the global team of authors, led by the WRI Ross Center for Sustainable Cities in collaboration with the Dutch Cycling Embassy, the League of American Bicyclists, Urban Cycle Planning (Denmark), and Asplan Viak (Norway).

Highlights

Cycling has become an appealing option due to reduced public transport capacity and ridesharing options under physical distancing requirements, lower vehicle traffic volumes during various forms of “lockdown,” increased awareness of the link between physical activity and mental health, and increased comfort provided by temporary bike lanes.

- Cities need to consider two public health issues when planning for immediate and future cyclist needs: road safety and physical distancing.
- Temporary, or “emergent,” cycling lanes are an excellent way to address the increased demand for safe cycling and support increased cycling volumes even as traffic levels increase or the necessity for physical distancing is reduced.
- Cycling is one the cleanest and healthiest modes of transportation. This surge in cycling is here to stay.
- Temporary bike lanes must meet safe design standards, be linked with speed management, and fit within the city’s cycling and mobility network and strategies.
- The purpose of this guide is to help cities make quick, effective, and safe decisions and actions to make cycling a safe and appealing transport option during and beyond the current global health emergency.

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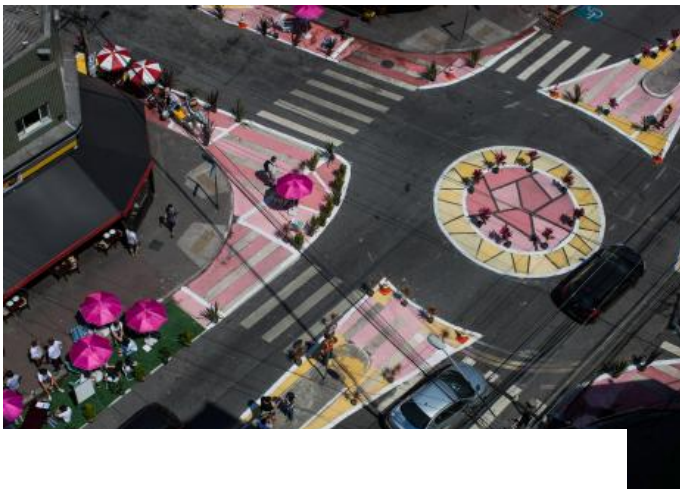


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