

Creating Safe, Healthy, and Active Transportation

How Cities & Local Public Works Agencies Can Design for Health



Health is a Transportation Issue

A healthy transportation system allows for pedestrians, cyclists, motorists, and transit riders of all ages to travel safely and easily to every destination. Cities and local public works agencies can play an essential and unique role in protecting community health. By incorporating public health strategies into plans, policies, and projects, cities and public works agencies can ensure that all roadways are designed safely and effectively.

Over a 20-year period, a \$30 million investment in bicycle and pedestrian infrastructure and education will have a return on investment of over \$353 million – a cumulative return of nearly 1200%.ⁱ

Designing for Health and Safety Works

- > Sidewalks prevent 88% of “walking along roadway crashes.”ⁱⁱ
- > Children living on a street with speed bumps have a 53% to 60% lower chance of being injured or killed by motorists.ⁱⁱⁱ
- > Narrowing wide roads reduces crash rates by 47% on major arterials.ⁱⁱⁱ
- > One mile of reduced automobile travel provides 12.2¢ worth of crash reductions and 5.6¢ worth of reduced air, noise, and water pollution.^{iv}
- > There’s safety in numbers: As the number of people walking and bicycling in a community increases, bicycle and pedestrian injuries and deaths decrease.^v

Strategies for Safer Streets

Bicycle & Pedestrian Infrastructure

- Sidewalks
- Clear, visible traffic signs
- Bike lanes

Safe & Visible Crossings

- Marked crosswalks
- Pedestrian medians

Reduced Driving Speeds

- Roundabouts
- Speed humps
- Lower speed limits

Narrowed Roads

- Fewer lanes
- Reduced lane widths

What Cities & Local Public Works Agencies Can Do

Local transportation policies and plans that support healthy community design can provide positive dividends and enhance the health of all community members. Below are three actions cities and local public works agencies can take to improve safety and promote health:

☆ Integrate Safe and Active Transportation into Local Plans, Policies, and Projects

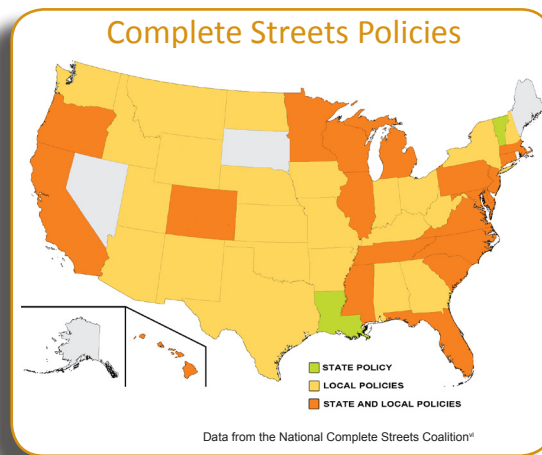
Cities can promote community health through their land use policies, plans, and implementation tools by:

- Integrating public health and active transportation goals and policies into the comprehensive plan.
- Considering healthy community design in the development review process.
- Developing pedestrian, trail, and bicycle master plans.

☆ Adopt a Complete Streets Policy

To date, 172 towns/cities and 25 counties in the U.S. have adopted a Complete Streets policy. Complete Streets policies require that streets are designed and operated to provide safe access for users of all ages and abilities, including pedestrians, cyclists, motorists, and transit riders. To effectively implement these policies, cities and local public works agencies should:

- Restructure procedures.
- Re-write design manuals.
- Train planners and engineers.
- Establish performance measures.



☆ Implement Comprehensive and Collaborative Safe Routes to School (SRTS) Programs

SRTS programs maximize both safety and physical activity for children and exemplify a successful public health and transportation collaboration. To best facilitate SRTS programs, cities and local public works agencies should:

- Plan and implement non-infrastructure efforts in coordination with engineering improvements.
- Improve non-infrastructure activities by applying best practices, training stakeholders, and utilizing staff with expertise in community education.
- Collaborate with community members and public health agencies to identify priority issues and engineering solutions for SRTS projects.



REFERENCES

- ⁱ Kansas City Regional TIGER Application, Appendix, Appendix D: KC Bicycle/Pedestrian Project, http://www.marc.org/Recovery/assets/tiger/APPENDIX_D_Bicycle_Pedestrian.pdf
- ⁱⁱ P. McMahon, et al. FHWA, Analysis of Factors Contributing to Walking Along Roadside Crashes, 2002.
- ⁱⁱⁱ Highway Safety Information System (HSIS), Evaluation of Lane Reduction "Road Diet" Measures on Crashes, <http://www.fhwa.dot.gov/publications/research/safety/10053/10053.pdf>
- ^{iv} T. Litman, VTPI, Transit Health Benefits Calculator Spreadsheet, www.vtpi.org/thbc.xls
- ^v P. Jacobsen, "Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling," *Injury Prevention*, (2003), 9: 205-209.
- ^{vi} National Complete Streets Coalition. Complete Streets Policy Analysis, 2010, <http://www.completestreets.org/webdocs/resources/cs-policyanalysis.pdf>