

BICYCLING & WALKING

in the United States



Alliance
for
Biking & Walking

2016



BENCHMARKING REPORT



BICYCLING AND WALKING IN THE UNITED STATES

2016

BENCHMARKING REPORT

Principal funding for this report was provided by the Centers for Disease Control and Prevention.

The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention or the Agency for Toxic Substances and Disease Registry.

Additional funding for this report has been provided by AARP, Bike/Walk Alliance of Missoula, City of Fort Collins, City of Missoula, Community Cycles (Boulder, CO), Nelson\Nygaard Consulting Associates, and TrailNet, Inc (St Louis, MO).

Cover photo: Seattle, Washington. Second Avenue.
Courtesy of Seattle Department of Transportation, SDOT @Flickr (CC BY-NC 2.0)



Alliance for Biking & Walking

The Alliance creates, strengthens, and unites state and local bicycling and walking advocacy organizations throughout North America. Since our founding in 1996, we have grown from 12 to over 200 member organizations across United States, Canada, and Mexico. Alliance members inform and organize their communities to improve conditions for bicycling and walking, promoting these as healthy and enjoyable ways to travel. From advocating for better policies to conducting safety courses, our member organizations are impacting the social, political, and environmental conditions for us all. The Alliance staff supports these advocates with leadership training, campaign guidance, funding, and key resources such as the Benchmarking Report.



Participants in the 2014 Alliance Leadership Retreat
Photo by Maggie Smith



Report Credits

Benchmarking Project Team

Andrea Milne, Project Manager
Maggie Melin, Research Assistant

Additional Contributions

Akia Burnett	Nutrition, Physical Activity and Obesity Program, Michigan Department of Community Health
Barb Chamberlain	Washington Bikes
Julie Dudley	Division of Community Health Promotion, Florida Department of Health
Darren Flusche	Toole Design Group
Ted Graves	National Association of City Transportation Officials
Christy Kwan	Alliance for Biking & Walking / Advocacy Advance
Josh Martinez	Office for State, Tribal, Local and Territorial Support, CDC
Laura Padalino	PEAC (formerly known as Programs to Educate All Cyclists)
Sylvia Pirani	Office of Public Health Practice, New York State Department of Health
Joe Ralph	Healthy Community Design Initiative, NCEH, CDC
Ariane Reeves	Office for State, Tribal, Local and Territorial Support, CDC
James Rojas	Place It! and Latino Urban Forum
Leah Shahum	Vision Zero Network
Carolyn Szczepanski	Alliance for Biking & Walking

Project Advisors

Tegan Boehmer	Healthy Community Design Initiative, NCEH, CDC
Philip Caruso	Institute of Transportation Engineers
Dan Grunig	Bicycle Colorado / Alliance for Biking & Walking
Adonia Lugo	Bicicultures
Brigid O'Keane	Alliance for Biking & Walking / Advocacy Advance
Stefanie Seskin	National Complete Streets Coalition
Stephen Skowronski	Healthy Community Design Initiative, NCEH, CDC
JJ Trout	PeopleForBikes
Arthur Wendel	Agency for Toxic Substances and Disease Registry Region 10, CDC

Data and Research Reviewers

Ralph Buehler	School of Public and International Affairs, Virginia Tech
Courtney Day	Institute of Transportation Engineers
Christopher Douwes	Recreational Trails Program / Transportation Alternatives Program, FHWA, USDOT
Dan Goodman	Office of Human Environment, FHWA, USDOT
Yung Koprowski	Lee Engineering, LLC / Institute of Transportation Engineers
Jana Lynott	Transportation and Livable Communities, AARP
Brian McKenzie	Housing and Household Economic Statistics Division, US Census Bureau
Ken McLeod	League of American Bicyclists / Advocacy Advance
Bob Murphy	RPM Transportation Consultants / Institute of Transportation Engineers
John Pucher	Edward J. Bloustein School of Planning and Public Policy, Rutgers University (Professor Emeritus)
Matthew D. Ridgway	Fehr & Peers / Institute of Transportation Engineers
Matthew Roe	National Association of City Transportation Officials
Gabe Rousseau	Office of Safety Technologies, FHWA, USDOT
Shawn M. Turner	Texas Transportation Institute / Institute of Transportation Engineers
Sara Zimmerman	Safe Routes to School National Partnership

Copyright © 2016 by Alliance for Biking & Walking
The Library of Congress, United States Copyright Office
All rights reserved.

This report may be reproduced or transmitted with the
written permission of the Alliance. Send request to:
P.O. Box 65150, Washington, DC 20035
Phone: (202) 449-9692
Benchmarking@BikeWalkAlliance.org



Austin, Texas. Lance Armstrong Bikeway.
Photo by Adam Coppola Photography, courtesy of
Green Lane Project @Flickr (public domain)

This report is the result of hundreds of people working together

The Alliance for Biking & Walking extends special thanks to our partners at the Centers for Disease Control and Prevention (CDC) whose generous funding ensures the continuation and growth of the Benchmarking Project. In particular, we would like to thank Arthur Wendel, Stephen Skowronski, and Tegan Boehmer of the CDC's National Center for Environmental Health, Healthy Community Design Initiative, for their guidance throughout the report development and for their continued support of the project vision.

The Benchmarking Report undergoes a rigorous review by a team of researchers and professionals who work with these topics daily in various fields of study. Our review team deserves much appreciation for the time and attention they give to each draft they receive. Their technical critique brings a much-needed multidisciplinary approach to the report. The team includes representatives from the Federal Highway Administration, Institute of Transportation Engineers, U.S. Census Bureau, League of American Bicyclists, Advocacy Advance, Safe Routes to School National Partnership, and National Association of City Transportation Officials. Many thanks especially to Dr. John Pucher of Rutgers University and Dr. Ralph Buehler of Virginia Tech for their evaluation of the data analyses throughout the report.

Thank you to Andrea Milne and Maggie Melin for their diligent work researching, collecting, and analyzing the mounds of raw data that are the heart of the report. Thank you to Nicole Wynands, Bill Nesper, and Ken McLeod of the Bicycle Friendly America Program at League of American Bicyclists for their ongoing collaboration on data collection and review.

Lastly, but most importantly, we thank the leaders of Alliance member organizations and the many state and local officials who supported this project by tracking down data for the benchmarking surveys. This project would not have been possible without them, and it is in support of their vital work that this report has been produced.

The following pages list the many people were directly involved in providing the data for this report, including submitting surveys for states and cities we study.

Thank you!

4J Eugene School District Shane MacRhodes
Active Transportation Alliance / Chicago Department of Transportation Charles Short
Alabama Department of Transportation Mary Crenshaw
Alaska Department of Transportation Bob Laurie and Marcheta Moulton
Anchorage Metropolitan Area Transportation Solutions Joni Wilm
Arizona Department of Transportation Michael Sanders
Arkansas State Highway and Transportation Department Kim Sanders
Baltimore City Department of Transportation Caitlin Doolin
Bicycle Coalition of Maine Nancy Grant
Bicycle Colorado Dan Grunig
Bicycle Indiana Nancy Tibbett
Bicycle Transportation Alliance Gerik Kransky
Bike Anchorage Brian Litmans
Bike Baton Rouge Mark Martin
Bike Cleveland Jacob VanSickle
Bike Delaware John Bare
Bike Denver Molly North
Bike Walk Alliance of New Hampshire Tim Blagden
BikeWalkKC Eric Rogers
Bike Walk Mississippi Melody Moody
Bike/Walk Connecticut Kelly Kennedy
Bikemore Greg Hinchliffe
BikePGH Eric Boerer
BikeTexas Robin Stallings
Caltrans Paul Moore
Capital Improvements and Transportation / City of Miami Carlos Cruz-Casas
Charlotte Department of Transportation Scott Curry and David Harrison
Chattanooga-Hamilton County Regional Planning Agency Melissa Taylor
City and County of Denver Public Works Dan Raine
City and County of Honolulu Christopher Sayers
City of Albany Department of Planning Kate Lawrence
City of Albuquerque Debbie Bauman, Carrie Barkhurst, and Charles Malagodi
City of Arlington, Texas Christina Sebastian
City of Atlanta Stosh Kozlowski and Jonathan Lewis
City of Austin Marissa Monroy, Laura Dierenfield, and Nathan Wilkes
City of Baton Rouge Parish Planning Commission Gilles Morin
City of Bellingham Kim Brown
City of Boston Nicole Freedman
City of Boulder Marni Ratzel and Dave Kemp
City of Burlington Nicole Losch
City of Chattanooga / Chattanooga Department of Transportation / Outdoor Chattanooga Ben Taylor and Ruth Thompson
City of Colorado Springs Brian Shevock and Tim Roberts
City of Columbus Leslie Strader
City of Dallas Ashley Haire and Jared White
City of Davis Brian Mickelson and Roxanne Namazi
City of El Paso Fred Lopez
City of Eugene Reed Dunbar
City of Fort Collins / FC Moves Tessa Greegor, Becky Moriarty, and Nancy Nichols
City of Fort Worth Julia Ryan
City of Fresno Department of Public Works Jill Gormley and Leslie Barkley
City of Houston Anita Hollmann
City of Indianapolis Jamison Hutchins
City of Jacksonville Denise Chaplick and Bill Joyce
City of Kansas City, MO Deb Ridgway
City of Las Vegas Public Works Connie Diso, Diane Phomnin, and Greg McDermott
City of Madison, Traffic Engineering Division Arthur Ross
City of Memphis Kyle Wagenschutz
City of Mesa Jim Hash, Ashley Barinka, and Mark Venti
City of Miami Collin Worth
City of Milwaukee Kristin Bennett
City of Minneapolis Simon Blenski
City of Missoula Ben Weiss
City of New Orleans Department of Public Works Louis Haywood
City of Oakland Public Works Department Jason Patton and Jennifer Stanley
City of Oklahoma City Randy Entz
City of Omaha Derek Miller
City of Phoenix Joseph Perez
City of Raleigh Jennifer Baldwin and Eric Lamb
City of Sacramento Ed Cox
City of San Antonio Timothy Mulry
City of San Diego Brian Genovese, Tanner French, and Donald Pornan
City of San Jose Ryan Smith
City of Spokane Louis Meuler
City of St. Louis John Kohler
City of Tucson Ann Chanecka
City of Tulsa Engineering Services Brent Stout and Matt Liechti
City of Virginia Beach Chad Morris

Cleveland City Planning Commission Martin Cader
 Coalition of Arizona Bicyclists Bob Beane
 Colorado Department of Transportation Betsy Jacobsen
 Community Cycles Sue Prant
 Connecticut Department of Transportation Kevin Tedesco
 Consider Biking Jess Mathews
 Delaware Bicycle Council Amy Wilburn
 Delaware Department of Transportation Anthony Aglio
 Denver Public Works Rachael Bronson
 District of Columbia Department of Transportation Mike Goodno, Jennifer Hefferan, and Jim Sebastian
 Fatality Analysis Reporting System Lorenzo Daniels
 Federal Highway Administration / Fiscal Management Information System Joy Williams
 Federal Highway Administration Lori Porreca
 Florida Department of Transportation DeWayne Carver
 Georgia Bikes! Brent Buice
 Georgia Department of Transportation Katelyn DiGioia and Kathy Zahul
 Great Rivers Greenway Elizabeth Simons
 Hawaii Bicycling League Daniel Alexander and Chad Taniguchi
 Health By Design Joan Cook
 Idaho Transportation Department Brian Shea
 Idaho Walk Bike Alliance Cynthia Gibson
 Illinois Department of Transportation Gabriel Sulkes, Bola Delano, and Michael Brand
 Indian Nations Council of Governments James Wagner
 Indiana Department of Transportation Jay Mitchell
 IndyCog Kevin Whited
 Iowa Bicycle Coalition Mark Wyatt
 Iowa Department of Natural Resources Whitney Davis
 Iowa Department of Transportation Milly Ortiz
 Kansas Department of Transportation Joel Skelley
 Kentucky Transportation Cabinet Troy Hearn
 League of American Bicyclists Nicole Wynands and Ken McLeod
 Livable Memphis John Paul Shaffer
 Live Well Omaha Julie Harris
 Los Angeles County Bicycle Coalition Eric Bruins and Shawn Cheng
 Louisiana Department of Transportation Brian Parsons
 Louisiana Public Health Institute Jennifer Ruley
 Louisville Metro Government Public Works and Assets Rolf Eisinger
 Louisville Metro Public Works and Assets Alissa Wakefield
 Maine Department of Transportation Patrick Adams
 Maryland Department of Transportation Michael Jackson
 Maryland State Highway Administration Dustin Kuzan
 Massachusetts Department of Conservation and Recreation Paul Jahnige
 Massachusetts Department of Transportation Josh Lehman
 MassRIDES Kristin Slaton
 Miami-Dade County David Henderson
 Michigan Department of Transportation Josh DeBruyn
 Mid-Region Council of Governments Julie Luna
 Midwest Bike Share / Bublr Bikes
 Minnesota Department of Transportation Tim Mitchell
 Mississippi Department of Transportation Lindsey Netherland and Cookie Leffler
 Missoula Metropolitan Planning Agency Aaron Wilson
 Missouri Bicycle and Pedestrian Federation Dr. Brent Hugh
 Missouri Department of Transportation Ron Efland and Jeff Cremer
 Montana Department of Transportation Angie Zanin
 Municipality of Anchorage Lori Schanche
 Nashville Mayor's Office Laurel Creech
 National Center for Safe Routes to School Colleen Oliver
 National Complete Streets Coalition Stefanie Seskin
 Nebraska Bicycle Alliance Brent Davis
 Nebraska Department of Roads David Schoenmaker and Jeffrey Soula
 Nevada Department of Transportation Bill Story and Tim Rowe
 New Hampshire Department of Transportation Erik Paddleford and Larry Keniston
 New Jersey Bicycle and Pedestrian Resource Center Charles Brown
 New Jersey Bike Walk Coalition Cyndi Steiner
 New Jersey Department of Transportation Debbie Kingsland
 New Mexico Department of Transportation Rosa Kozub and Jessica Griffin
 New Orleans Regional Planning Commission Dan Jatres
 New York Bicycling Coalition Josh Wilson
 New York City Department of Transportation Hayes Lord
 New York State Department of Transportation Thomas Benware
 North Carolina Department of Transportation Lauren Blackburn and Bryan Poole
 North Dakota Department of Transportation Pam Wenger
 Ohio Bicycle Federation Tricia Kovacs
 Ohio Department of Transportation Julie Walcoff
 Oklahoma Department of Transportation Jessica Scott
 Oklahoma League Certified Instructor Pete Kramer
 Oregon Department of Transportation Sheila Lyons and Rodger Gutierrez
 Palmetto Cycling Coalition Amy Johnson

Pennsylvania Department of Conservation and Natural Resources Diane Kripas
 Pennsylvania Department of Transportation Brian Sanders and Christopher Metka
 Philadelphia City Planning Commission Jeannette Brugger
 Philadelphia Mayor's Office of Transportation & Utilities Charles Carmalt and Ema Yamamoto
 Portland Bureau of Transportation Timo Forsberg
 Rails to Trails Conservancy Eric Oberg
 Rhode Island Bicycle Coalition Matt Moritz
 Rhode Island Department of Transportation Steven Church
 Salt Lake City Transportation Division Becka Roolf
 San Francisco Bicycle Coalition Tyler Frisbee
 San Francisco Municipal Transportation Agency Neal Patel
 Seattle Department of Transportation Kristen Simpson, Craig Moore, and Kyle Rowe
 South Carolina Department of Transportation Thomas Dodds
 South Dakota Department of Transportation Nancy Surprenant and Jerry Ortbahn
 State of Connecticut Department of Energy & Environmental Protection Laurie Giannotti
 Tennessee Department of Environment and Conservation Bob Richards
 Tennessee Department of Transportation Jessica Wilson
 Texas Department of Transportation Teri Kaplan
 Trailnet Rhonda Smythe
 University of Tennessee Casey Langford
 Utah Department of Transportation Evelyn Tuddenham and Bill Lawrence
 Vermont Agency of Transportation Jon Kaplan and Gina Campoli
 Vermont Bicycle and Pedestrian Coalition Dave Cain
 Virginia Beach Parks & Recreation Wayne Wilcox
 Virginia Department of Conservation and Recreation Jennifer Wampler
 Virginia Department of Transportation John Bolecek and Robert Williams
 Walk/Bike Nashville Nora Kern and Liz Thompson
 WALKSacramento Teri Duarte
 Washington State Department of Transportation Paula Reeves and Jay Alexander
 Washington Traffic Safety Commission MJ Haught
 West Virginia Department of Transportation Perry Keller and Ryan Burns
 Wichita Area Metropolitan Planning Organization Kristen Zimmerman
 Wichita Police Department J.W. Metcalf
 Wichita-Sedgwick County Metropolitan Area Planning Department Scott Wadle
 Wisconsin Bike Fed Sarah Gaskell, Jessica Binder, and Jake Newborn
 Wisconsin Department of Natural Resources Brigit Brown
 Wisconsin Department of Transportation Jill Mrotek Glenzinski and Larry Corsi
 Wyoming Department of Transportation Sara Janes
 Wyoming Pathways Tim Young
 Yay Bikes! Catherine Girves



PAY HERE

MudBay

URGENT CARE

Capitol Hill
Pharmacy





Table of Contents

vi Acknowledgements

xii Executive Summary

Part I. Introduction

2 The Benchmarking Project

10 Active Transportation Trends

Part II. Find Your Angle

20 People Powered Movement

Part III. Make Your Case

30 Healthy Communities

36 Safe Transportation

44 Strong Economies

48 Connected Routes

52 Multimodal Infrastructure

58 Effective Governance

64 Dedicated Resources

68 Engaged Public

Part IV. Show Your Data

78 Trends at the State Level

118 Trends at the City Level

Part V. Tool Box

156 Summary Worksheet

160 Benchmarking Project State Survey

166 Benchmarking Project City Survey

172 Overview of Data Sources

174 Biking & Walking Counts

178 Online Resources

EXECUTIVE SUMMARY

The Benchmarking Project

The Alliance for Biking & Walking has been tracking data across the U.S. through the Benchmarking Project since 2003.

Every two years, the project team releases an updated report with the most recent data available, providing a comprehensive snapshot of biking and walking in the U.S.

Since its beginning, the Benchmarking Project has been guided by three primary objectives:

1. Promote data collection and availability;
2. Measure progress and evaluate results; and
3. Support efforts to increase bicycling and walking.

Two additional objectives motivate this work: make the connection between active transportation and healthy communities; and strengthen the network of Alliance advocacy organizations who rely on the Benchmarking Report as a resource for the work they do.

The 2016 Benchmarking Report has made significant changes to the layout of the information within. Based on feedback from advocates, officials, researchers, and others who use the report, this edition has been structured to improve accessibility for users of various perspectives. The first half of the report contains a review of relevant research, with the intent of helping the reader to identify and make their case for biking and walking improvements. The second half of the report digs into the numbers, first at the state level, then at the city level. At the end of the report, a “tool box” of resources helps readers take the next step in applying these data to their own situation.

Part I. Introduction

Part One of the report provides a deeper explanation of the Benchmarking Project and the methodologies used throughout the data collection and review. A look at the most recent data on levels of biking and walking shows that some communities (e.g., people of color, people with low income, and people age 65 and older) are walking as their primary mode of transportation at higher rates than their distribution within the population. Youth (under age 16) are biking at higher rates, while women are biking at lower rates—at least according to the data.

The Benchmarking Report shows these data, while acknowledging major limitations in the data that are available for analysis. The American Community Survey (ACS), for example, only asks for the primary travel mode a commuter used on the day of the survey. Thus, we are limited to data that capture survey respondents who walk or bike for the majority of their commute to work. These data miss pedestrian and bike trips for utility and recreation, as well as multimodal trips (e.g., a trip that includes a walk to a transit station).

Improving data availability is a key goal of the Benchmarking Project and of this report. While the increased efforts of researchers, advocacy organizations, and public agencies have improved data on biking and walking levels, there is still a large gap between what we see in the data and what we see in our communities.

Part II. Find Your Angle

The work of biking and walking professionals and advocates is diverse. Some are motivated by health and safety concerns when pushing for improvements; others come from a perspective of equal opportunity and accessibility to resources. Part Two of the report brings in many such perspectives and encourages thinking broadly about how the mode of transportation we prioritize in our communities has many wide-reaching effects. By telling our stories about our work and our motivations, we help each other to see a clearer picture.

Advocates and professionals in the field helped the project team to identify leaders who represent the diversity of the active transportation movement. About forty people were invited to provide insight into how their work impacts biking and walking and to share advice for others who work in a similar field.

Part III. Make Your Case

From the health and safety impacts to an economic boost, improving our communities for biking and walking has many benefits. Part Three of the report delves into the many studies that have been published, attempting to understand, for example, how a bike lane can both reduce traffic injuries and improve business sales. Research shows that community design (i.e., street density and connectivity) directly impacts the health of the surrounding communities and that our daily trips are more multimodal than is often acknowledged. Many of the questions that planners and engineers wonder about their work's impact can be seen through studies of strategy effectiveness.

Part IV. Show Your Data

For those who just want to see what a certain city has accomplished or what policies and funding strategies are being adopted around the country, Part Four summarizes the data for all 50 states, the 50 most populous cities, and the additional 18 cities of various sizes. The realities of working for better biking and walking conditions are very different for advocates and professionals working at the state and city levels. Each state and city further has its own unique situation, which is highlighted at the beginning of the states section and the cities section as a look “in context.” The Benchmarking Project attempts to illustrate an enormous amount of data, but it is important to remember that funding doesn't just come from a budget; low rates of biking are not separate from the rates of poverty; healthy communities are not only where trails are built. This part of the report, the bulk of the Benchmarking Project, illustrates the raw numbers, providing insight into where are the bicycle- and pedestrian-friendly communities.

Highlighted Trends, Input Benchmarks: 2005–2014

Benchmarking Report Year:

2007 2010 2012 2014 2016

Data Source – Point in Time

Administrative Priorities

State Level

Number with published goal to increase walking	16 ⁽¹⁾	22	29	32	36	● – 1 Year
Number with published goal to increase bicycling	16 ⁽¹⁾	22	29	32	36	● – 1 Year
Number conducting counts and/or surveys of pedestrians	-	-	24	36	37	● – 1 Year
Number conducting counts and/or surveys of bicyclists	-	-	24	37	37	● – 1 Year
Number with bicycle and/or pedestrian master plan	-	25	28	32	34	● – 1 Year
Number with Complete Streets policy	9	17	26	27	30	NCSC – 1 Year
Number with annual spending target for bicycling and walking	5	6	12	14	15	● – 1 Year

In the 50 Most Populous Cities

Number with published goal to increase walking	24 ⁽¹⁾	19	33	36	41	● – 1 Year
Number with published goal to increase bicycling	24 ⁽¹⁾	32	44	44	47	● – 1 Year
Number conducting counts and/or surveys of pedestrians	-	-	25	34	37	● – 1 Year
Number conducting counts and/or surveys of bicyclists	-	-	35	39	41	● – 1 Year
Number with bicycle and/or pedestrian master plan	-	35	39	45	46	● – 1 Year
Number with Complete Streets policy	8	18	19	23	28	NCSC – 1 Year
Number with annual spending target for bicycling and walking	8	6	9	10	16	● – 1 Year

Available Resources

State Level

Average, bike/ped staff (state DOT) per 100K pop	0.1	0.1	0.1	0.2	0.3	● – 1 Year
Average, obligated federal funds for bike/ped per capita	\$1.41	\$1.58	\$2.73	\$3.10	\$2.52	FHWA FMIS – 4 years
Average, percentage of federal transportation \$ for bike/ped	1.3%	1.4%	1.9%	2.1%	2.0%	FHWA FMIS – 4 years
Number with statewide advocacy organization	32	35	43	43	50	ABW – 1 Year
Number with state bicycle and/or pedestrian advisory committee	-	18	24	37	37	● – 1 Year

In the 50 Most Populous Cities

Average, bike/ped staff (city employees) per 100K pop	0.4	0.6	0.8	0.8	1.0	● – 1 Year
Number with citywide advocacy organization	32	34	36	39	58	ABW – 1 Year
Number with city bicycle and/or pedestrian advisory committee	-	32	36	36	40	● – 1 Year

Implementation

State Level

Number with annual statewide bike and/or pedestrian conference	-	14	24	26	33	● – 1 Year
Number with state-sponsored bike ride	-	14	17	17	22	● – 1 Year
Number with driver test questions on motorist / cyclist interaction	-	24	33	38	46	● – 1 Year

In the 50 Most Populous Cities

Average, miles of bicycle facilities per square mile	0.9	1.2	1.4	1.6	1.8	● – 1 Year
Average, bicycle parking spaces at transit stops per 10K pop	1.7	2.3	3.4	9.7	9.4	● – 1 Year
Number with bicycle racks on 100% of buses	30	39	41	44	45	● – 1 Year
Number with a bikeshare system	-	-	5	18	25	● – 1 Year
Number with Bike to Work Day events	-	36	43	50	48	● – 1 Year
Number with Open Streets initiatives	-	10	20	27	30	● – 1 Year
Number with Bicycle Friendly Community designations ⁽²⁾	-	-	30	35	37	LAB – 1 Year
Number with Walk Friendly Community designations ⁽²⁾	-	-	-	9	12	PBIC – 1 Year

Notes: Previous Benchmarking Reports reported city averages including additional cities that are no longer one of the 50 most populous. This report summarizes large city data for only the most populous cities at the time of each report. For example, data summarized here for the 2014 report does not include New Orleans and Honolulu since they were not one of the 50 most populous cities when that report was published. Due to corrections received since publication of the 2014 report, some data may differ from what was previously reported. (-) Data not available. (1) Walking and bicycling were combined in this survey question. (2) Designations include Platinum, Gold, Silver, and Bronze. (3) All bike/ped mode share calculations for the 2007 Benchmarking Report use 1-yr data (ACS 2005). Data for Arlington TX, Memphis, Raleigh were not available for the city mode share calculations for the 2007 report. (4) Fatality and injury rates were calculated by averaging the number of pedestrian or bicyclist fatalities or injuries in the 3-year time span indicated and dividing by the estimated number of commuters walking or biking to work (using corresponding ACS 3-year estimates). The accuracy of fatality and injury rates is limited due to the potential for inaccurate and incomplete reporting of fatalities and injuries and due to the use of commuter data in the rate calculations. Reported fatalities and injuries may occur during other types of walking or bicycle trips, which are not counted by the ACS.

Highlighted Trends, Output Benchmarks: 2005–2014

Benchmarking Report Year:

2007 2010 2012 2014 2016

Data Source – Point in Time

Mode Share

Average of All States

Percentage of commuters who walk	2.5% ⁽³⁾	2.8%	2.9%	2.8%	2.8%	ACS – 3 Years
Percentage of commuters who bike	0.4% ⁽³⁾	0.4%	0.5%	0.5%	0.6%	ACS – 3 Years

Average of the 50 Most Populous Cities

Percentage of commuters who walk	4.4% ⁽³⁾	4.8%	4.8%	5.0%	5.0%	ACS – 3 Years
Percentage of commuters who bike	0.7% ⁽³⁾	0.7%	0.9%	1.0%	1.2%	ACS – 3 Years

Public Health

Percentage of U.S. Population...

Meeting physical activity level recommendations	49.1%	49.5%	51.0%	51.7%	50.8%	CDC BRFSS – 1 Year
Living with obesity (BMI over 30)	24.4%	26.3%	26.9%	27.8%	28.8%	CDC BRFSS – 1 Year
Living with hypertension	25.5%	27.8%	28.7%	30.8%	31.4%	CDC BRFSS – 1 Year
Living with diabetes	7.3%	8.0%	8.3%	9.5%	9.7%	CDC BRFSS – 1 Year
Living with asthma	8.0%	8.4%	8.8%	9.1%	9.0%	CDC BRFSS – 1 Year

Traffic Safety

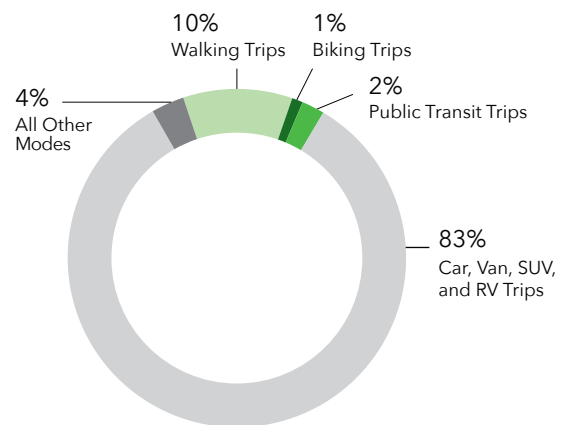
U.S. Population

Percentage of roadway fatalities that are pedestrians	11.2%	11.3%	11.7%	12.9%	14.1%	NHTSA FARS – 3 Years
Percentage of roadway fatalities that are bicyclists	1.7%	1.8%	1.8%	1.9%	2.2%	NHTSA FARS – 3 Years
Pedestrian fatality rate (fatalities per 10k commuters) ⁽⁴⁾	–	–	11.0	11.0	11.9	NHTSA FARS – 3 Years
Bicyclist fatality rate (fatalities per 10k commuters) ⁽⁴⁾	–	–	9.2	8.5	8.7	NHTSA FARS – 3 Years
Pedestrian injury rate (injuries per 10k commuters) ⁽⁴⁾	326	309	352	438	400	CDC WISQARS – 1 Year
Bicyclist injury rate (injuries per 10k commuters) ⁽⁴⁾	3,497	3,179	2,626	2,950	2,511	CDC WISQARS – 1 Year

Key to Data Source Abbreviations (See page 172 for more details)

●	Alliance Benchmarking Project Surveys
ABW	Alliance Member Organization Profiles Database
ACS	American Community Survey
CDC BRFSS	Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System
CDC WISQARS	Centers for Disease Control and Prevention Web-based Injury Statistics Query and Reporting System
FHWA FMIS	Federal Highway Administration Fiscal Management Information System
LAB	League of American Bicyclists
NCSC	National Complete Streets Coalition
NHTSA FARS	National Highway Traffic Safety Administration Fatality Analysis Reporting System
PBIC	Pedestrian and Bicycle Information System

U.S. Trips, by Mode of Transportation



Source: NHTS 2009

Part I.

Introduction

National trends in active transportation



Chicago, Illinois. Go Bronzeville walkers.
Photo courtesy of Chicago Department of Transportation

THE BENCHMARKING PROJECT

Introduction and Project History

The Alliance for Biking & Walking's Benchmarking Project has compiled data on bicycling and walking trends in the United States since initiating a pilot study in 2003. By 2007, the Alliance released the first comprehensive report on bicycling and walking with data from all 50 states and the 50 most populous U.S. cities, highlighting levels of bicycling and walking; adopted policies and funding sources; advocacy and education efforts; and health and safety indicators.

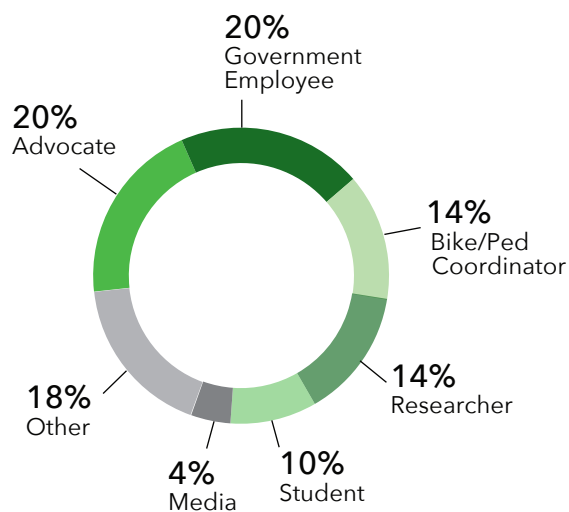
Over the years, the Benchmarking Project has expanded to include additional cities of varying sizes and discussion of economic benefits, access to public transit, and equity for diverse populations. Each report provides a picture of progress made and benchmarks set to-date. This 2016 report is the fifth edition, updating data and analyses from the previously released reports in 2007, 2010, 2012, and 2014.

Project Goals and Objectives

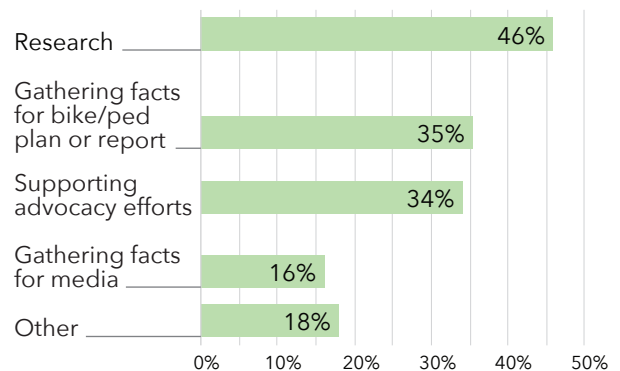
The Benchmarking Project documents, measures, and evaluates conditions for bicycling and walking. The report supports many overlapping goals of advocates, public officials, planners, engineers, and educators who work to improve our communities for people who bike and walk. The project aligns with and tracks progress towards the goals of national public health and safety initiatives by focusing on increased physical activity and reduced roadway fatalities as key measures of success. The broad scope of data and analyses presented here further support cross-sector collaboration and data-driven decision-making among professionals, and promote multi-agency investment in bicycling and walking projects. The following five objectives guide the project toward these goals.

Benchmarking Report User Information

Users self-identify as...¹ (N=4,608)



Users say they access the report for the purpose of...² (N=4,602)



Source: Alliance for Biking & Walking, survey of people who downloaded the 2014 Benchmarking Report. Notes: (1) Survey question allowed only one choice per respondent. (2) Survey question allowed more than one choice per respondent.

Objective 1: Promote Data Collection and Availability

The Benchmarking Project compiles bicycling and walking data, which are otherwise widely dispersed among various agencies and institutions. The project team collects additional datasets through Benchmarking-specific surveys of states and cities. This report is designed intentionally to improve data accessibility for diverse users from diverse perspectives. In addition to the analyses presented through the text and graphics of this report, the Alliance also makes the compiled datasets available to researchers who would like to perform their own analyses.

Objective 2: Measure Progress and Evaluate Results

The Benchmarking Report provides a comprehensive assessment of bicycling and walking in the U.S. The project team compares current data to previously reported data, highlighting key trends that inform policy decisions at the local and national levels. Because the project has been collecting data for more than a decade, the biennially updated report has a unique opportunity to illustrate the changes that impact bicycling and walking over time, including changes in public support through investment and engagement. Trends illustrated in this report allow communities to compare their progress to the experience of other communities and to evaluate the results of their efforts.

Objective 3: Support Efforts to Increase Bicycling and Walking

The Benchmarking Project compiles data, research, and tools that help make the case for investing in bicycling and walking. The report illustrates current conditions, expands on public knowledge, highlights new initiatives, and identifies remaining challenges to overcome. Through city-to-city and state-to-state comparisons, the project helps advocates, public officials, and agency staff to set and track goals to increase bicycling and walking in their communities.

Objective 4: Make the Health Connection

The Benchmarking Project partners with Centers for Disease Control and Prevention (CDC) in an effort to highlight the connection between healthy lifestyles and bicycling and walking. The report emphasizes the many health benefits of bicycle- and pedestrian-friendly communities, including lower levels of obesity, high blood pressure, diabetes, asthma, and roadway fatalities. The analyses presented in this report make the case for increased investment in bicycling and walking improvements by focusing on the positive health impacts expected.

Objective 5: Strengthen the Alliance Network

The Benchmarking Project strengthens the growing network of bicycle and pedestrian advocacy organizations by helping to identify talking points and best practices that support their work. The many graphics throughout the report illustrate data at the city, state, and national levels to address the diverse audiences Alliance members engage. Advocates share these ready-made graphics, including full citations to additional research, to gain credibility with representatives and public agency staff.

Study Areas and Data Collection

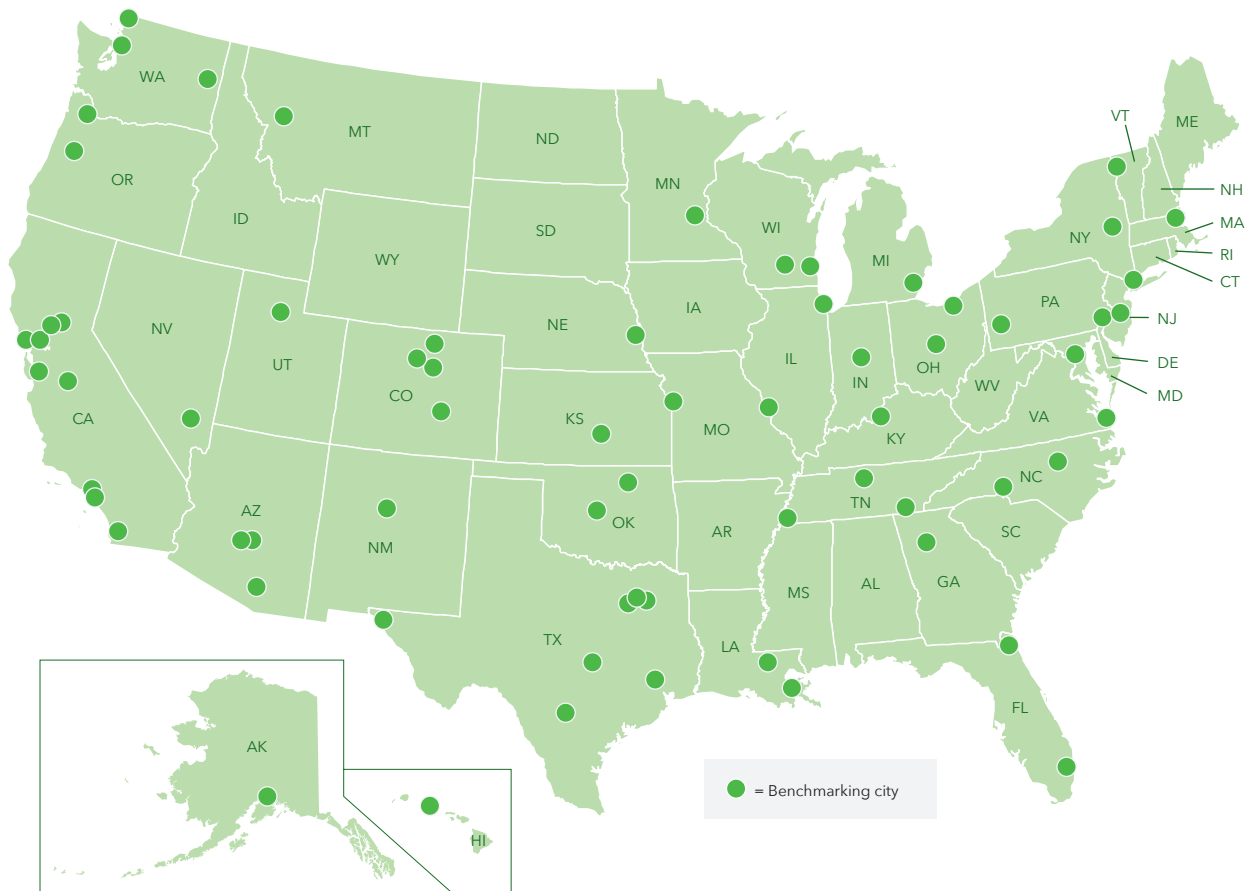
The Benchmarking Project focuses data collection efforts on the 50 United States and the 50 most populous U.S. cities. City populations for this report were determined using American Community Survey (ACS) 2013 3-year population estimates at the place level.¹

¹ The Benchmarking Project tracks data for cities at the “place” level rather than “urbanized area” or Metropolitan Statistical Area (MSA). This focuses the analyses on trends in the city cores, which are generally more densely developed than suburban and rural communities, and so may have greater opportunities for conversion of car trips to bicycling and walking.

The cities studied for this project have shifted over the years, due to changing populations and the addition of small and midsized cities to the 2014 Benchmarking Report. Raleigh and Wichita have replaced New Orleans and Honolulu, which were in the original 50 most populous cities included in earlier reports. Raleigh was added to the 2010 Benchmarking Report due to the dramatic population decrease in New Orleans following Hurricane Katrina. Wichita is among the 50 most populous cities as of the 2014 report.

Though New Orleans and Honolulu are no longer among the 50 largest cities, they are included in

Study Area Locations



Study Area Populations

U.S. States	Population
1 California	38,000,360
2 Texas	26,049,971
3 New York	19,576,660
4 Florida	19,319,031
5 Illinois	12,868,770
6 Pennsylvania	12,759,859
7 Ohio	11,557,868
8 Georgia	9,905,993
9 Michigan	9,884,242
10 North Carolina	9,749,266
11 New Jersey	8,867,909
12 Virginia	8,184,299
13 Washington	6,896,071
14 Massachusetts	6,648,138
15 Arizona	6,548,856
16 Indiana	6,541,673
17 Tennessee	6,449,754
18 Missouri	6,026,255
19 Maryland	5,884,640
20 Wisconsin	5,725,352
21 Minnesota	5,382,376
22 Colorado	5,192,076
23 Alabama	4,817,624
24 South Carolina	4,723,923
25 Louisiana	4,600,933
26 Kentucky	4,380,635
27 Oregon	3,899,266
28 Oklahoma	3,817,296
29 Connecticut	3,592,264
30 Iowa	3,076,519
31 Mississippi	2,985,181
32 Arkansas	2,949,238
33 Kansas	2,882,966
34 Utah	2,856,839
35 Nevada	2,754,148
36 New Mexico	2,082,250
37 West Virginia	1,855,392
38 Nebraska	1,855,209
39 Idaho	1,597,222
40 Hawaii	1,390,348
41 Maine	1,328,217
42 New Hampshire	1,321,050
43 Rhode Island	1,050,722
44 Montana	1,006,086
45 Delaware	916,929
46 South Dakota	834,236
47 Alaska	729,603
48 North Dakota	703,203
49 Vermont	626,303
50 Wyoming	575,535

Most Populous Cities	Population
1 New York, NY	8,341,122
2 Los Angeles, CA	3,852,816
3 Chicago, IL	2,711,992
4 Houston, TX	2,162,268
5 Philadelphia, PA	1,546,770
6 Phoenix, AZ	1,488,669
7 San Antonio, TX	1,383,716
8 San Diego, CA	1,337,522
9 Dallas, TX	1,239,268
10 San Jose, CA	983,775
11 Austin, TX	862,876
12 Jacksonville, FL	836,087
13 Indianapolis, IN	833,900
14 San Francisco, CA	826,626
15 Columbus, OH	810,387
16 Fort Worth, TX	777,512
17 Charlotte, NC	774,433
18 Detroit, MI	696,922
19 El Paso, TX	671,058
20 Memphis, TN	653,020
21 Boston, MA	637,625
22 Seattle, WA	636,270
23 Denver, CO	634,685
24 Washington, DC	633,167
25 Nashville, TN	623,895
26 Baltimore, MD	621,836
27 Louisville, KY	605,429
28 Portland, OR	603,047
29 Oklahoma City, OK	600,044
30 Milwaukee, WI	598,325
31 Las Vegas, NV	595,906
32 Albuquerque, NM	554,305
33 Tucson, AZ	524,904
34 Fresno, CA	505,649
35 Sacramento, CA	475,536
36 Long Beach, CA	467,580
37 Kansas City, MO	464,448
38 Mesa, AZ	451,306
39 Virginia Beach, VA	445,561
40 Atlanta, GA	441,064
41 Colorado Springs, CO	433,619
42 Omaha, NE	428,781
43 Raleigh, NC	423,198
44 Miami, FL	414,144
45 Oakland, CA	401,278
46 Tulsa, OK	395,209
47 Minneapolis, MN	393,661
48 Cleveland, OH	391,317
49 Wichita, KS	385,154
50 Arlington, TX	375,555

Additional Cities Studied	Population
1 New Orleans, LA	369,765
2 Honolulu, HI	344,907
3 St Louis, MO	318,892
4 Pittsburgh, PA	305,999
5 Anchorage, AK	298,384
6 Madison, WI	240,301
7 Baton Rouge, LA	229,491
8 Spokane, WA	209,876
9 Salt Lake City, UT	189,601
10 Chattanooga, TN	172,110
11 Eugene, OR	158,169
12 Fort Collins, CO	148,975
13 Boulder, CO	101,871
14 Albany, NY	98,261
15 Bellingham, WA	82,128
16 Missoula, MT	68,425
17 Davis, CA	65,890
18 Burlington, VT	42,323

Source: ACS 2013, 3-yr est.

Notes: The Benchmarking Project uses the U.S. Census Bureau urban place codes to identify the data for cities in this report.

this report, along with 16¹ previously studied cities with smaller populations, to take advantage of the already-collected data. Throughout the report, Washington, DC, is discussed as one of the 50 most populous cities, rather than the states, due to its closer similarities with the way cities function.

Unless otherwise noted, all averages in this report are weighted. This means that the calculations of state and city averages give appropriate weight to each state or city based on their population size. Averages of the states are calculations of only the 50 United States, not including territories or the District of Columbia.

Selected Benchmarks

The Benchmarking Project uses measures of mode share, public health, and traffic safety (output benchmarks) to determine progress among states and cities. The project team also tracks a number of input benchmarks, which research has shown influence levels of walking, bicycling, health, and safety. These input benchmarks include administrative priorities (e.g., policies and planning); available resources (e.g., funding and personnel); and implementation (e.g., infrastructure and education). A full list of the metrics used to define these benchmarks is included on page 7.

National Data Sources

Whenever possible, the Benchmarking Project team collected data for this report from uniform national sources managed by public agencies and organizations. All sources are identified throughout the text and with tables and graphics as relevant. See page 172 in the Tool Box for a summary explanation of each dataset collected. In some cases, data come from independent studies. Full citations for these studies are listed at the end of the section containing a reference.

¹ The 2014 Benchmarking Report included a pilot study of 17 small and midsized cities. Charleston, SC, did not complete a survey for the 2016 Benchmarking Report and, therefore, is not included in the summaries of city data in this report.

State and City Surveys

The Benchmarking Project team has developed survey tools to gather additional datasets, not available elsewhere at the state and city levels. These surveys compile locally recorded data, such as funding spent on bicycling and walking projects, number of staff employed to work on bicycle and pedestrian projects, extent of bicycling and walking facilities, city and state education efforts, and policies and goals adopted.

In September 2014, the project team distributed surveys to respondents in all states and cities studied for the 2016 report. Respondents were asked to provide data for 2013 and 2014 calendar years. Surveys were completed by department of transportation staff, metropolitan planning organization staff, city officials, and Alliance advocacy leaders. In many cases, surveys required input from multiple offices because the requested data were not easily accessible in one place. The project team reached out to survey respondents throughout the data collection period and closed the surveys in February 2015.

All data were entered into the Benchmarking Project's data collection tool, reviewed for quality control, and analyzed over the next several months. Alliance advocacy leaders across the country were instrumental in ensuring a high survey response rate and that submitted surveys were as complete as possible. Please note: these surveys collect self-reported data. While the Alliance has made efforts to verify submitted data, accuracy cannot be guaranteed.

The Alliance for Biking & Walking and the League of American Bicyclists collaborate on gathering state-level data. Since 2013, the two organizations distribute one form that combines the states benchmarking survey and the Bicycle Friendly States application. This partnership administers both organizations' efforts efficiently and reduces strain on state department of transportation staff who previously had completed two separate, but similar forms.

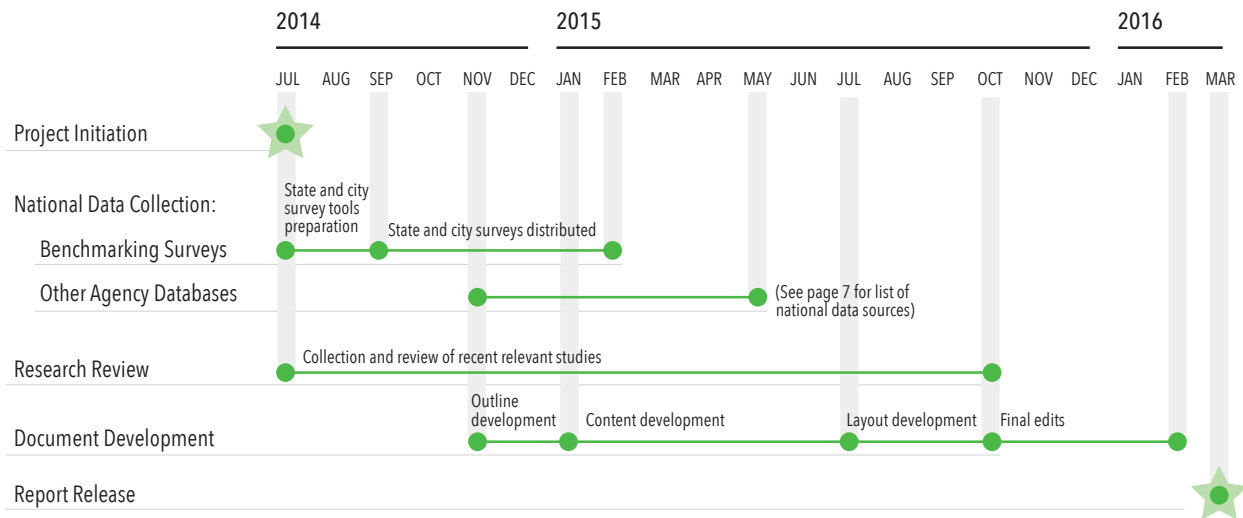
Selected Benchmarks

	Data Sources
Administrative Priorities	
Pedestrian- and bicycle-friendly legislation and policies	● GHSA, LAB, NCSC
Spending targets for pedestrian and bicycle projects	●
Design guides adopted for pedestrian and bicycle facilities	●
Long-term plans for pedestrian and bicycle improvements	●
Local counts and surveys of pedestrians and bicyclists	●
Goals to increase pedestrian and bicyclist mode share	●
Goals to improve public health by increasing walking and biking	●
Goals to improve safety of pedestrians and bicyclists	●
Available Resources	
Staffing levels for pedestrian and bicycle projects	●
Staff training for pedestrian and bicycle activities and enforcement	●
Obligated federal funds for pedestrian and bicycle projects	● FHWA FMIS, NCSRTS, SRTSNP
Budgeted local funds for pedestrian and bicycle projects	●
Sources of funding for pedestrian and bicycle projects	● FHWA FMIS
Bicycle and pedestrian advisory committees	● SRTSNP
Pedestrian and bicycle advocacy organization staffing levels	ABW
Pedestrian and bicycle advocacy organization membership levels	ABW
Pedestrian and bicycle advocacy organization gross revenue	ABW
Pedestrian and bicycle advocacy organization sources of revenue	IRS 990 Forms
Implementation	
Pedestrian-specific and bicycle-specific facilities and design	● PFB, RTC
Multimodal integration (pedestrian-bicycle-transit)	●
Pedestrian and bicycle wayfinding and informational materials	●
Pedestrian and bicyclist education courses	●
Safe Routes to School programming	● NCSRTS, SRTSNP, STN
Pedestrian and bicycle events and encouragement initiatives	● NCSRTS, SRTSNP
Enforcement of motorist violations	●
Enforcement of pedestrian and bicyclist violations	●
Pedestrian-friendly and bicycle-friendly awards and recognition	● LAB, NCSC, PBIC, W/B/T Score
Mode Share	
Pedestrian and bicycle trips as a share of all trips	NHTS
Pedestrian and bicycling commuters as a share of all commuters	ACS, US Census
Demographics of pedestrians and bicyclists	ACS, NHTS, US Census
Licensed drivers	BTS RITA
Economics of transportation	● ACS, BLS
Public Health	
Physical activity levels	CDC BRFSS
Overweight and obesity levels	CDC BRFSS
Hypertension levels	CDC BRFSS
Diabetes levels	CDC BRFSS
Asthma levels	CDC BRFSS
Demographics of healthy communities	ACS, CDC BRFSS
Traffic Safety	
Pedestrian and bicyclist fatalities	NHTSA FARS
Pedestrian and bicyclist injuries	CDC WISQARS
Fatality rates (fatalities per 10k commuters)	ACS, NHTSA FARS
Injury rates (injuries per 10k commuters)	ACS, CDC WISQARS
Demographics of fatalities and injuries	ACS, CDC WISQARS, NHTSA FARS

Key to Data Source Abbreviations (See page 172 for more details)

●	Alliance Benchmarking Project Surveys
ABW	Alliance Member Organization Profiles Database
ACS	American Community Survey
BLS	Bureau of Labor Statistics
BTS RITA	Bureau of Transportation Statistics Research and Innovative Technology Administration
CDC BRFSS	Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System
CDC WISQARS	Centers for Disease Control and Prevention Web-based Injury Statistics Query and Reporting System
FHWA FMIS	Federal Highway Administration Fiscal Management Information System
GHSA	Governors Highway Safety Association
LAB	League of American Bicyclists
NCSC	National Complete Streets Coalition
NCSRTS	National Center for Safe Routes to School
NHTS	National Household Travel Survey
NHTSA FARS	National Highway Traffic Safety Administration Fatality Analysis Reporting System
PBIC	Pedestrian and Bicycle Information System
PFB	PeopleForBikes
RTC	Rails-to-Trails Conservancy
SRTSNP	Safe Routes to School National Partnership
STN	School Transportation News
US Census	United States Census Bureau
USDOE	United States Department of Education
W/B/T Score	Walk Score / Bike Score / Transit Score

2016 Benchmarking Project Timeline



Alliance Member Organization Profiles Database

Each year, member organizations of the Alliance for Biking & Walking are asked to provide their annual membership numbers, revenue, spending, and activity priorities. The Alliance compiles this information into a database shared with the Benchmarking team. The Benchmarking Report relies on these data to gauge advocacy capacity across the country.

Data Corrections

Due to the nature of this project, the Benchmarking Report is continuously updating data as they become available. Occasionally, the more recent data conflicts with previously reported findings. This report represents the most accurate data available at the time of writing and includes corrected findings that may or may not differ from those reported in previous editions of the report.

For example, while one or two cities may have changed their previous responses to whether or not a policy was in place, the overall finding that most cities have the policy in place may remain true.

The most common corrections made are to data submitted in the benchmarking state and city surveys. As respondents change and interpret questions differently, discrepancies occur.

Project Team

In addition to Alliance staff, the Benchmarking Project team includes many individuals who guide the scope of the project and evaluate the findings for accuracy and effectiveness. Members of the advisory committee and the data review committee are researchers and professionals from diverse specializations and perspectives. The names and affiliations of these distinguished team members are listed in the credits at the beginning of this report.



Advocacy walk hosted by WalkBoston.
Photo courtesy of WalkBoston.

ACTIVE TRANSPORTATION TRENDS

In 1980, journey-to-work data from the U.S. Census reported that 5.6% of commuters walked to work. Nationally, the percentage of adults walking to work has since declined to 2.8%. However, the Benchmarking Project has tracked a gradual increase from 2005 (2.5%) to 2013 (2.8%). Among the most populous cities, the percentage of commuters walking to work has always been higher than the average across states and increased from 4.4% in 2005 to 5.0% in 2013.

The percentage of adults biking to work decreased slightly from 1980 (0.5%) to 2000 (0.4%), but has also seen an increase from 2005 (0.4%) to 2013 (0.6%). Commuters in the large cities studied for this report saw a steeper increase during these years, from 0.7% in 2005 to 1.2% in 2013.

Women

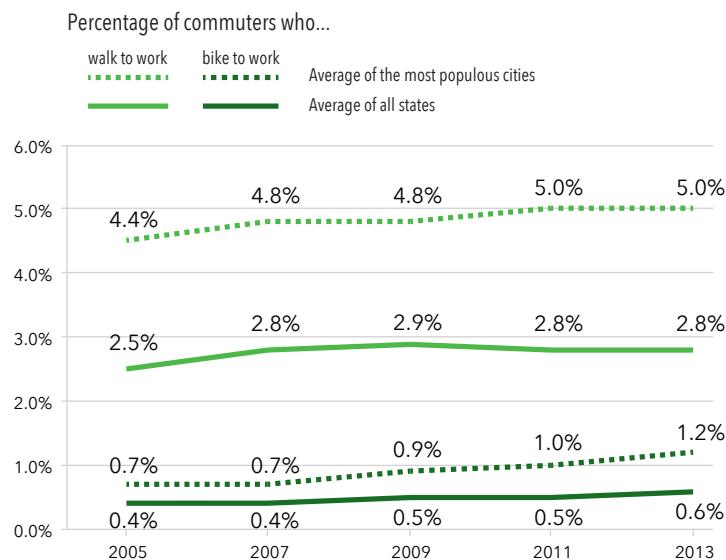
Data from the 2009 NHTS suggest there is no gender gap among walking trips; 51% of walking trips were reported by females. However, women represented a much lower percentage of biking trips (24%) than men (76%). Among commuters, the difference varies slightly. Women make up only 47% of commuters (ACS 2013) and represent 46% of commuters who walk and 27% of commuters who bike. In large cities, their percentage is slightly higher, representing 49% of commuters who walk and 29% of commuters who bike.

School Aged Children

Another way to gauge change in biking and walking is to observe the trends in how children get to and from school. In 2011, the National Center for Safe Routes to School (NCSRTS) published a report, highlighting the trend away from walking and biking to school over forty years. Whereas in 1969, 48% of children in grades K-8 regularly traveled to school on foot or bike, by 2009 only 13% of children in grades K-8 walked or biked to school (NCSRTS, 2011).

A recent updated study, however, suggests that this trend is turning around, at least for the percentage of children walking to and from school. In 2007, the study reports, 11.9% of children walked to school and 15.2% walked home. By 2013, following a steady increase over the years, 15.2% of children walked to school and 18.4% walked home (NCSRTS, 2015). Biking to school dropped between 2007 and 2009, but has since been

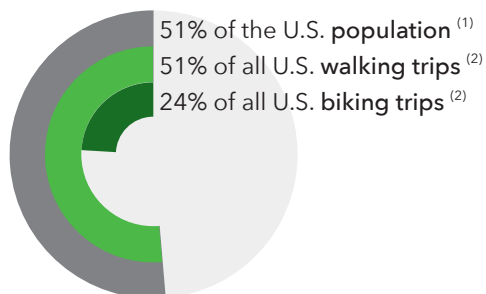
U.S. Commuter Trends (2005-2013)



Sources: ACS 2005 (1-yr est), ACS 2007, 2009, 2011, 2013 (3-yr est)

Trips by Foot and Bike: Females

Females represent...



Sources: (1) ACS 2013, 1-yr est; (2) NHTS 2009

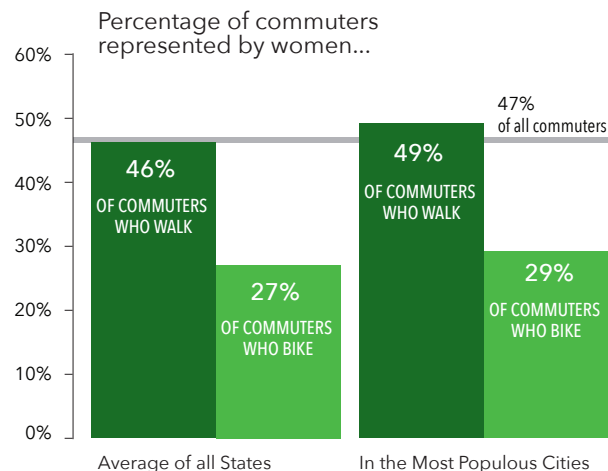
increasing very slightly year by year, to 2.2% of children biking to and from school in 2013. The percentage of children being driven to and from school has also increased during these years, and at a faster rate than the percentage walking or biking, though not as steeply as the percentage of children arriving at and departing school by bus has decreased (NCSRTS, 2015).

Seniors

Many studies report that older Americans do not walk or bike as much as other age groups; some suggest this is a result of community design. A recent study from AARP Public Policy

Over two-thirds (68%) of the U.S. population now own a smart phone with standard global positioning system (GPS) capabilities (Anderson, M., 2015). With mobile apps providing real-time transit information and transportation-scheduling apps, we have access to information that expands our transportation options, including minute-by-minute public transit schedules and bike share availability. Studies show that these new and broadly used technologies have encouraged a shift away from car travel and towards active transportation (Dutzik et al, 2013).

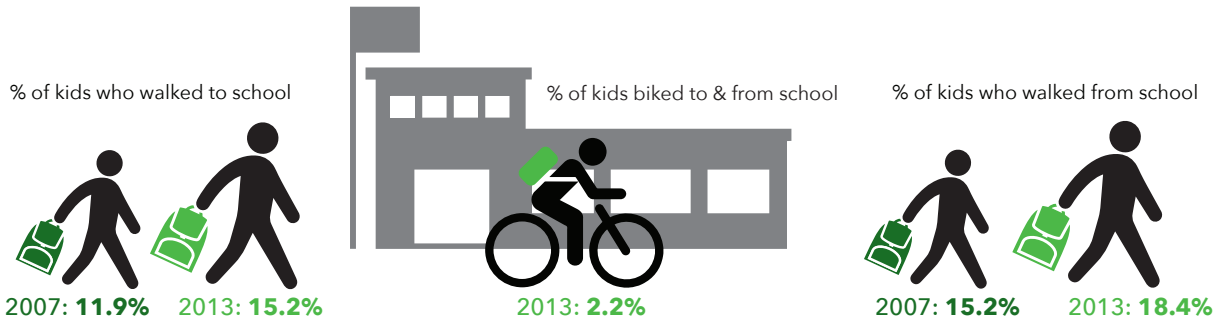
Women Walking and Biking to Work



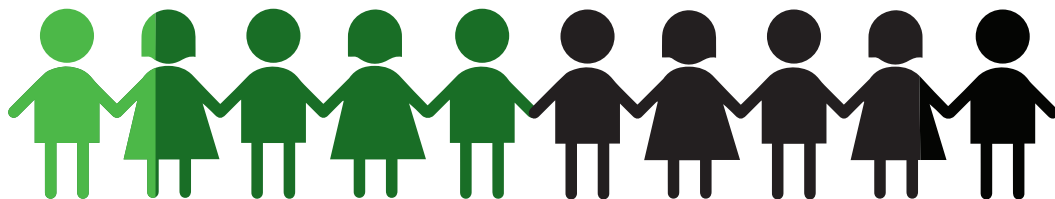
Source: ACS 2013 (3-year est)

Institute reported that about 40% of U.S. adults age 50 and older feel their neighborhood is not pedestrian-friendly (Harrell et al, 2014). The study pointed out that a higher percentage of older adult drivers, compared to non-drivers, favored improvements to make their community more pedestrian-friendly. However, non-drivers were more likely to report that they currently live in a pedestrian-friendly community, which may explain their priority for bettering other aspects of where they live (Harrell et al, 2014).

Biking and Walking to School Trends



1969: 48% of kids walked or biked to school

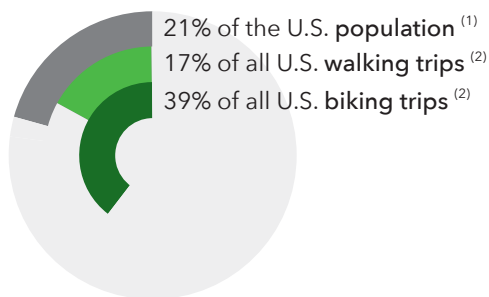


2009: 13% of kids walked or biked to school

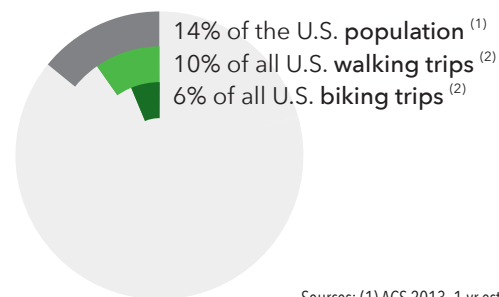
Sources: NCSRTS 2011, NCSRTS 2015

Trips by Foot and Bike: Youth and Seniors

Youth (under 16) represent...



Seniors (65 and older) represent...



Sources: (1) ACS 2013, 1-yr est; (2) NHTS 2009

In 2014, the Pew Research Center asked respondents to imagine living in a community with large houses, spaced farther apart with schools, stores, and restaurants several miles away or a community with smaller houses, closer to each other with schools, stores and restaurants within walking distance. Of those age 65 and older, 58% (more than any other age group) preferred the idea of living in a walkable community

with smaller houses compared to 48% of all age groups (Pew Research Center, 2014a). A report from the TransitCenter, though, suggests these preferences may not match their reality. Most (58%) Americans over age 60 live in suburban communities; more than one-third of them (37% of all Americans over age 60) are in residential-only communities (TransitCenter, 2014).

Millennials

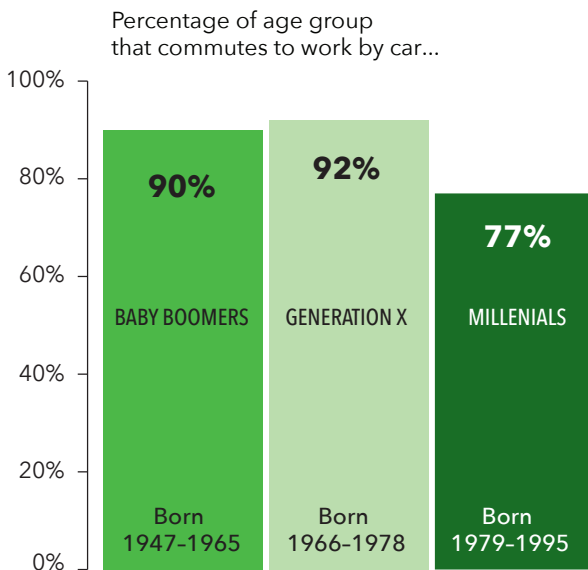
The generation referred to as “Millennials”¹ has gained a lot of attention in recent years as the generation that is choosing a less car-centric lifestyle. Studies released by U.S. Public Interest Research Group (PIRG) Education Fund and Frontier Group in 2013 and 2014 highlight significant cultural shifts among younger Americans affecting what young adults desire and require for their daily life. Millennials are getting married later (or not at all), having children later in life (or not at all), and going to college at higher percentages. Compared to previous generations in their youth, Millennials have reported a greater attraction to living in urban areas and walkable communities (Dutzik et al, 2014).

A 2014 Pew Research Center study reports that 38% of respondents ages 18 to 29 preferred the idea of living in a city compared to 24% of all age

groups (Pew Research Center, 2014b). Similarly, a survey from TransitCenter found that 32% of those under age 30 identify city neighborhoods (residential or downtown) as their “ideal” neighborhood types compared with 16% of those over age 30 (TransitCenter, 2014). These trends are all associated with lower levels of dependency on car transportation (Dutzik et al, 2014).

A 2013 study by the Urban Land Institute (ULI) found 77% of Millennials (here they are referred to by their other name, “Generation Y”) commute by car versus 92% and 90% of Generation X and Baby Boomers, respectively (ULI, 2013). Even the percentage of those choosing to get a driver’s license has decreased. Between 1996 and 2010, the percentage of high school seniors with a driver’s license dropped from 85% to 73%, with fewer miles driven overall (Dutzik et al, 2014).

Car Commutes by Generational Age Group



Source: Urban Land Institute, 2013

¹ The Millennial generation is typically defined as those born between 1983 and 2000; however, birthdates and definitions vary.

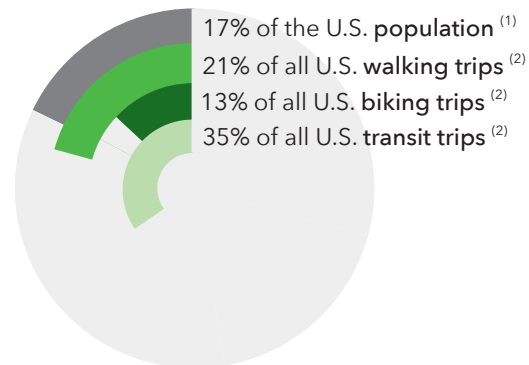
Low-Income Households

Results of the 2009 National Household Transportation Survey (NHTS) show that trips taken by households of low income are more likely to be on foot or public transit than households of higher income. Furthermore, the trips low-income households make by

Trips by Foot, Bike, and Transit: Low-Income Households

Low-income households represent...*

* Households with an annual income less than \$20,000



Sources: (1) ACS 2013, 1-yr est; (2) NHTS 2009

walking or biking are more likely to be for daily errands, work, school, or church than for social or recreational purposes. Only 36% of walking trips made by households with an annual income of less than \$20,000 were reported as social or recreational purposes, compared to 45–52% of walking trips by households of higher incomes. Similarly, only 47% of biking trips made by households with an annual income of less than \$20,000 were reported for social or recreational purposes, compared to 63–68% of biking trips by households of higher income (NHTS 2009).

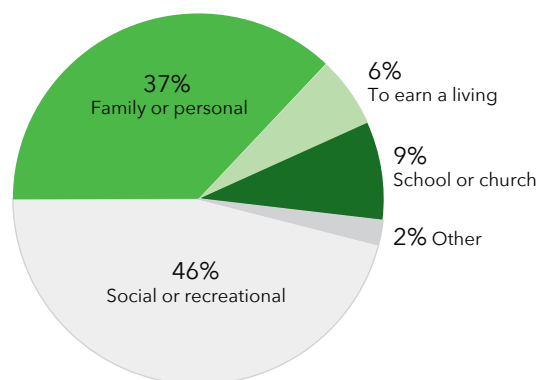
Communities of Color

Analysis of NHTS data suggest that people of color, including those of Hispanic origin, represent up to 30% of all walking trips and 23% of all biking trips (NHTS 2009). Considering these communities make up about 37% of the U.S. population (ACS 2013), it would seem that they are not biking and walking at rates as high as people who are non-Hispanic white. However, travel data disaggregated by racial and ethnic groups are often unreliable due to small sample sizes. A recent report from the Safe Routes to School National Partnership, “At the Intersection of Active Transportation and Equity,” provides a thorough look at the difficulty of accurately representing transportation trends by race and ethnicity (Zimmerman et al, 2015).

We Need Better Data

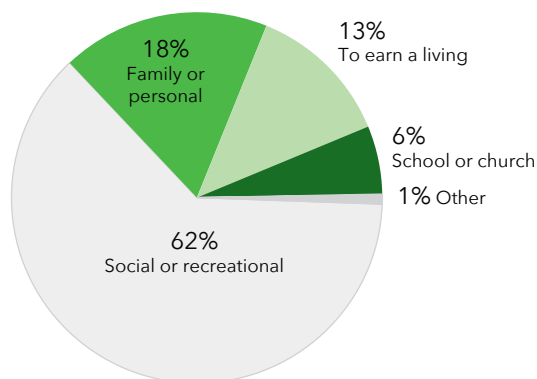
Just as traffic counts help planners, engineers, and elected officials to provide sufficient facilities to meet the needs of motorized traffic, planning and providing facilities for nonmotorized traffic also depend on having an accurate understanding of bicyclist and pedestrian travel patterns. Historically, though, these counts have been mostly conducted ad hoc, for special projects, and have not been collected or reported with consistent methodologies, making broad analysis difficult. Several agencies and organizations collect data nationally on bicycling and walking as modes of transportation. However, the data

Walking Trips, by Purpose



Source: NHTS 2009. Notes: “Social or recreational” combines the following NHTS response categories: “vacation,” “visit friends/relatives,” and “other social/recreational.” “Family or personal” combines the following NHTS response categories: “shopping,” “medical/dental,” and “other family/personal business.” “To earn a living” combines the following NHTS response categories: “to/from work” and “work-related business.” “School or church” represents the single NHTS response category “school/church.”

Biking Trips, by Purpose

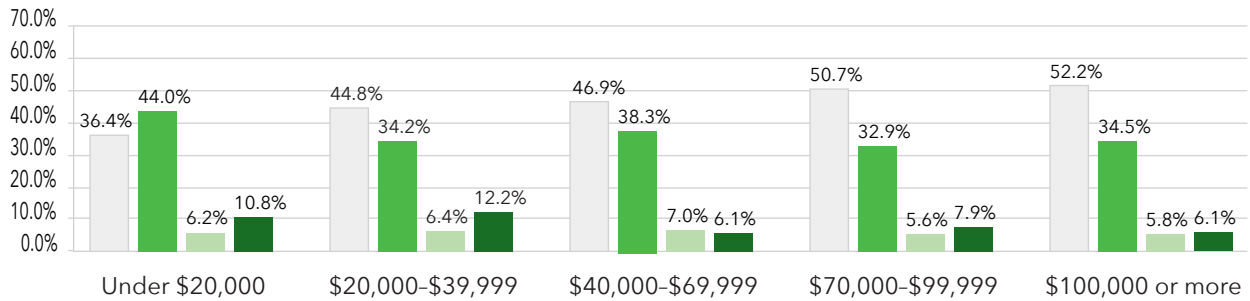


Source: NHTS 2009. Notes: “Social or recreational” combines the following NHTS response categories: “vacation,” “visit friends/relatives,” and “other social/recreational.” “Family or personal” combines the following NHTS response categories: “shopping,” “medical/dental,” and “other family/personal business.” “To earn a living” combines the following NHTS response categories: “to/from work” and “work-related business.” “School or church” represents the single NHTS response category “school/church.”

Walking Trips, by Income and Purpose

Purpose Category

■ Social or Recreational⁽¹⁾
■ Family or Personal⁽²⁾
■ To Earn a Living⁽³⁾
■ School or Church⁽⁴⁾

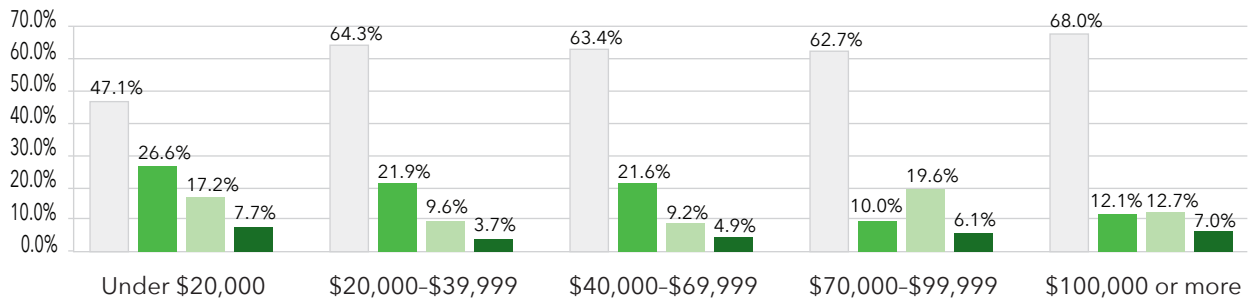


Source: NHTS 2009. Notes: Travel data disaggregated by respondent income and trip purpose may be unreliable due to small sample sizes. Percentages do not add up to 100% because "other" and unknown responses are omitted. (1) Combines the following NHTS response categories: "vacation," "visit friends/relatives," and "other social/recreational." (2) Combines the following NHTS response categories: "shopping," "medical/dental," and "other family/personal business." (3) Combines the following NHTS response categories: "to/from work" and "work-related business." (4) Represents the single NHTS response category "school/church."

Bicycling Trips, by Income and Purpose

Purpose Category

■ Social or Recreational⁽¹⁾
■ Family or Personal⁽²⁾
■ To Earn a Living⁽³⁾
■ School or Church⁽⁴⁾



Source: NHTS 2009. Notes: Travel data disaggregated by respondent income and trip purpose may be unreliable due to small sample sizes. Percentages do not add up to 100% because "other" and unknown responses are omitted. (1) Combines the following NHTS response categories: "vacation," "visit friends/relatives," and "other social/recreational." (2) Combines the following NHTS response categories: "shopping," "medical/dental," and "other family/personal business." (3) Combines the following NHTS response categories: "to/from work" and "work-related business." (4) Represents the single NHTS response category "school/church."

available through each of these sources are limited in several ways that make it inaccurate to generalize trends based on these data alone, particularly for small communities, which often are represented by small sample sizes.

Soon, for the first time, the Federal Highway Administration Traffic Monitoring Analysis System (TMAS), a database of locally collected traffic count data for state-owned roads, will accept counts of bicyclists and pedestrians. Guidelines for collecting these counts are already published in the Travel Monitoring Guide released in 2013. See page 174 for a summary of these guidelines. As these recommended methodologies for nonmotorized traffic counts become integrated into business-as-usual for all communities, we will have a more accurate picture of true mode share in the U.S.

Reading List

- Anderson, M. (2015, October). "Technology Device Ownership: 2015." Pew Research Center. <http://www.pewinternet.org/2015/10/29/technology-device-ownership-2015>.
- Dutzik, T., Madsen, T., & Baxandall, P. (2013). "A New Way to Go: The Transportation Apps and Vehicle-Sharing Tools that Are Giving More Americans the Freedom to Drive Less." <http://www.uspirg.org/reports/usp/new-way-go>.
- Dutzik, T., Inglis, J., & Baxandall, P. (2014, October). "Millennials in Motion: Changing Travel Habits of Young Americans and the Implications for Public Policy." <http://www.uspirg.org/sites/pirg/files/reports/Millennials%20in%20Motion%20USPIRG.pdf>.
- Griffin, G.P., Jiao, J. (2015). Where does bicycling for health happen? Analyzing volunteered geographic information through place and plexus. *Journal of Transport & Health*. <http://dx.doi.org/10.1016/j.jth.2014.12.001>.
- Harrell, R., Lynott, J., Guzman, S., & Lampkin, C. (2014, April). "What Is Livable? Community Preferences of Older Adults." AARP Public Policy Institute. http://www.aarp.org/content/dam/aarp/research/public_policy_institute/liv_com/2014/what-is-livable-report-AARP-ppi-liv-com.pdf.
- McKenzie, B. (2014, May). "Modes Less Traveled: Commuting by Bicycle and Walking in the United States: 2008-2012." <http://www.census.gov/prod/2014pubs/acs-25.pdf>.
- National Center for Safe Routes to School. (2011, November). "How Children Get to School: School Travel Patterns From 1969 to 2009." http://www.saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf.
- TransitCenter. (2014). "Who's on Board? 2014 Mobility Attitudes Survey." <http://transitcenter.org/wp-content/uploads/2014/08/WhosOnBoard2014-ForWeb.pdf>.
- Zimmerman, S., Lieberman, M., Kramer, K., & Sadler, B. (2015). "At the Intersection of Active Transportation and Equity: Joining Forces to Make Communities Healthier and Fairer." Safe Routes to School National Partnership. <http://saferoutespartnership.org/sites/default/files/pdf/At-the-Intersection-of-Active-Transportation-and-Equity.pdf>.

Availability of National Travel Data

The **American Community Survey (ACS)** is an ongoing survey facilitated by the U.S. Census Bureau, which gathers social, economic, housing, and demographic data of U.S. households, including commuter modes of transportation. The ACS differs from the Census in that ACS data are collected annually, throughout the year. The Census, on the other hand, is conducted only once per decade on one day in April. The time of year travel data are collected likely influence reported biking and walking trips. For this reason, ACS data may be more accurate for analyzing transportation mode share. However, the survey only addresses commuter trips, which significantly limits generalizations regarding biking and walking trips for other purposes. Furthermore, respondents are asked to report only the primary mode of transportation, omitting more detailed information regarding multimodal trips, such as walking to a bus stop. Approximately 3.5 million households participate in the ACS survey every year. Data are released annually as 1-year, 3-year, and 5-year rolling estimates and are available online at <http://www.census.gov/acs> and <http://factfinder.census.gov>.

The **National Household Travel Survey (NHTS)** is a national survey conducted by the U.S. Department of Transportation every five to seven years. The survey collects data on transportation patterns in the United States including trip mode, purpose, distance and duration for a given 24-hour period. The survey is conducted by telephone and in 2009 approximately 150,000 landlines were randomly selected to participate. States and MPOs have the option to purchase an add-on of additional household travel samples. In 2009, fourteen states purchased increased sample sizes, increasing their samples by between 1,200 and 20,000 depending on the state. The larger samples are useful in providing a more accurate description of travel behavior for specific geographic areas and assists in more detailed local planning and transportation forecasting efforts. Data compiled by the Federal Highway Administration (FHWA) are available online at <http://nhts.ornl.gov>.

The **National Bicycle and Pedestrian Documentation Project (NBPD)** is a joint effort by Alta Planning + Design and the Institute of Transportation Engineers (ITE). The project aims to establish a consistent methodology for conducting bicycle and pedestrian counts and to establish a national database for these data to better estimate existing and future bicycle and pedestrian demand. Any community using Eco-Counter technology can submit their data to the project for a free summary report. For guidelines on conducting counts and submitting data to the project, visit <http://bikepeddocumentation.org>.

Strava Metro, a mobile application, collects over 2.5 million GPS-tracked bicycle and running trips every week. These data have helped DOTs and advocacy groups better understand the preferred travel routes of people who walk and bike in their community. Though the service is marketed to track recreational trips for runners, walkers, and bicyclists, it provides valuable data for broader infrastructure planning and analysis. The Strava Metro website illustrates detailed travel data using geographical information systems (GIS) to quickly view active transportation networks and patterns on a city map. The data are obtained through Strava users who track their trips through a mobile application on their smartphone or GPS device. Heat maps that visualize Strava data are available online free of charge and the more detailed travel data can be purchased for a fee at <http://metro.strava.com>.



Volunteer at Los Angeles annual bicyclist & pedestrian count. Photo courtesy of Los Angeles County Bicycle Coalition

Part II.

Find Your Angle

Stakeholders in different sectors share how they promote bicycling and walking



New York City Mayor Bill de Blasio with advocate Laura Solis. Photo by Dmitry Gudkov

PEOPLE POWERED MOVEMENT

The statements made by individuals presented in this section do not necessarily represent the views of the Centers for Disease Control and Prevention. The perspectives of elected officials are included to highlight the role they have in promoting biking and walking. Their inclusion is not an endorsement for public office.

Bicycling Advocate

Nedra Deadwyler
Civil Bikes, Atlanta, GA

I am a bicycling educator and advocate. I support new riders and help those who know how to ride to gain confidence in their bike handling skills and knowledge of the rules and laws that support bicycling. Most people walk away having learned something and feeling empowered.

If asked by others how I get around, I tell them, generally I walk or bike. I share that when I went into an office for work, biking or walking was the best part of the day, allowing me to wake up and get energized. In the evening, I would ride off the stress and complexities that happened during the day.

I support the increase of bikeways because most people say they would ride more if there were more

accessible trails and paths. I am also an advocate for equity. Not all communities have bikeways and in building new facilities we need to ensure they are being created, not as a means of development and pricing people out of their communities, but as a means to support their current ridership and help it increase. Building healthy communities across the city means getting involved in issues such as affordable housing and access to better education and other issues that disproportionately impact less advantaged communities.

When I began Civil Bikes, my excitement was high. But working constantly and often alone comes with a lot of pressures. My advice? No matter what you do to increase biking and walking, it's important to reconnect to the fun; reconnect to your spirit and where you find freedom. Make that a weekly practice.

"No matter what you do to increase biking and walking, it's important to reconnect to the fun; reconnect to your spirit and where you find freedom."

- Nedra Deadwyler

Photo: Nedra is fourth from the right



Walking Advocate, Seniors

Jaime Fearer
California Walks

California Walks advocates for walking because walking is a fundamental mode of transportation—nearly everyone walks every day, including those who walk on two feet and those who use an assistive device. The bottom line is that walkable communities are an essential element of healthy communities. Our strategies combine equity, engagement, education, advocacy, and collaboration. Our partners include communities, community-based organizations, and government agencies.

We work specifically with seniors because walkable communities provide older adults with improved physical and mental health, increased independence, and socialization opportunities that can prevent isolation. At the same time, seniors are particularly vulnerable in traffic collisions—while the average statistics show that 10-20% of pedestrians hit by a car traveling 40 mph will survive, seniors have just an 8% chance of survival under the same circumstances. In some urban areas in California, seniors represent as high as 50% of pedestrian injuries and deaths. Walkability is an integral component of broader goals across the nation to

establish Age-Friendly Communities and create more opportunities for seniors to age in place.

Statewide, we've been working for a number of years with the California Alliance for Retired Americans (CARA) on initiatives like "Senior Safety Zones" which are similar to school zones and on updating the California Manual of Uniform Traffic Control Devices (California MUTCD) standard to provide longer crossing signal timing. Partnerships like this have enabled us to work closely with local CARA Action Teams and other senior advocates.

As in all communities we work with, actively listening to older adults is key to better understanding how transportation, including walkability, ties in to their key concerns. Often these concerns include access to healthcare, healthy food, and affordable housing. Senior citizens can be powerful advocates, addressing decision makers with this messaging. Providing specific, local crash data also resonates strongly, particularly in communities where seniors are disproportionately injured and killed while walking.

Frame your response in a way that resonates with the myriad concerns of our seniors—if walkability is proposed as a goal in a vacuum, you'll have minimal buy-in at best. Work to establish multi-generational coalitions where no one person or organization has to bear the brunt of the work, and where decision makers are held accountable to a

more diverse constituency. Empower your senior advocates to become pros at a three-pronged approach: Share their story, use illustrative data, and make an ask. And don't forget to celebrate and lift up their successes, no matter how big or small.



"We work specifically with seniors because walkable communities provide older adults with improved physical and mental health, increased independence, and socialization opportunities that can prevent isolation."

- Jaime Fearer

Transportation and Health Researcher, Advocate

Eloisa Raynault
Seattle, WA

I engage with transportation and public health professionals from across the globe through the Transportation Research Board Health and Transportation Subcommittee and through work I've done with the U.S. Department of Transportation, Centers for Disease Control and Prevention, and the American Public Health Association. I also work with the staff at Feet First to develop walking programs and activities that benefit those living in Washington State.

My work emphasizes making walking and biking the safe and easy choice for people of all ages and all abilities, because encouraging more walking and biking supports better health outcomes in our communities. The policies, solutions, and strategies that help create communities with safe and active transportation can improve equity, as well.

We have strong evidence to leverage for creating policies—and ultimately communities—that make walking and biking an easy option for everyone, but there's still more work to do. I work to connect emerging research and lessons learned with implementable strategies. For example, I ask the question, how can we measure the travel needs of diverse users, and then apply those findings toward better health outcomes across all populations?

Communicating the results of emerging research and case studies can be challenging, especially when different audiences use different terminology. It's all about staying in context, without diluting the strength of the overall messages.

Find the time to connect with peers with different backgrounds who also are working to support walking and biking. Working with those in public health, community development, architecture, academia, etc. could bring new and



"Communicating the results of emerging research and case studies can be challenging, especially when different audiences use different terminology. It's all about staying in context, without diluting the strength of the overall messages."

- Eloisa Raynault

interesting solutions to the mix. Think about where there may be synergies in some key areas: communications, fundraising, research. You never know where you may find your strongest allies!

Community Organizer

Chema Hernández Gil
San Francisco Bicycle Coalition

I am happy to advocate for biking because biking is so modestly elegant. A bike can make an immense difference to an individual by providing affordable transportation that can even be enjoyable. That's huge. But biking can be much more than that.

It can be a way of rebuilding our communities by getting us out on our streets and seeing each other's faces and hearing each other's voices. It is a way of becoming active and healthy, of reducing our environmental impact, and ultimately of fomenting autonomy. This is the vision that motivates me and inspires me to address the everyday challenges and barriers to biking here in San Francisco.

In my work, I try to understand the community, its constituents and their priorities. The easiest way of achieving this is to be more than a simple "bike advocate" and become part of the community. This changes the dynamics significantly. I am no longer an outsider proposing something that folks don't want or need, but another legitimate community stakeholder with authentic concerns that just happens to bike and wants others to be able to do

so safely and comfortably. This process of self-integration also helps me propose solutions that are more responsive, because I have a better understanding of the community.

Having the support of the community (or at least a significant part of it) is the quickest way of getting decision-makers to support biking. I take an interpretative role, taking community anecdotes and presenting data that affirms these community experiences, like collision or demographic data. Highlighting inequities is also very useful, particularly when it comes to safety. Sometimes it is also a question of acknowledging that an incremental process is not a bad thing and in fact can be a way to expedite our mission in a broader sense.

Livability Advocate, Community Development

John Paul Shaffer
Livable Memphis

Livable Memphis focuses on neighborhood livability and vitality, including access to a complete, equitable transportation system. We work closely with local, state, regional, and national advocates to raise bicycle and pedestrian issues to the forefront of transportation and development discussions. We promote smarter public policy and investments by our city leaders to strengthen infrastructure and programs that provide safe space for and encourage people to use active transportation. This can be in the form of increased spending for bicycle and pedestrian infrastructure, innovative practices in roadway design, or



"In my work, I try to understand the community, its constituents and their priorities. The easiest way of achieving this is to be more than a simple "bike advocate" and become part of the community."

- Chema Hernández Gil

land use policy that supports more active transportation.

A lot of our advocacy and program work relies on volunteers, students, neighborhood leaders, and members. We're lucky to have a strong network of partners. Sometimes the most rewarding are the on-the-ground projects. For instance, we organized an event in a downtown neighborhood where, over the course of six weeks, we implemented a road diet, with bike lanes and giant reclaimed pavement areas for pedestrian plazas. Demonstrating how these projects work and how much they can transform a neighborhood is really key.

Whether we're focusing on policy, education, or engagement, we try to involve as broad a set of stakeholders

as possible. I try to convey the message that walking and biking for transportation are essential to a balanced transportation system and to a healthy city. While not everyone might ride a bicycle, nearly everybody walks or rolls and can relate to the idea of active transportation in some way. The message is clear: streets and

"The message is clear: streets and places that are safe for people who walk and bike are safer for everyone, whether they're driving, riding transit, or just hanging out."

- John Paul Shaffer



places that are safe for people who walk and bike are safer for everyone, whether they're driving, riding transit, or just hanging out. Some audiences respond better to economic arguments, or to safety, or to the civil rights aspects of safe transportation for all. But at the core of the message is that safer streets make for safer, more engaged, and more livable communities.

Be adaptable and willing to experiment, and encourage others—especially engineers and planners—to do the same. Look for inspiration and new ideas everywhere, and take others along with you to see them, even if it's just digitally.

City Administrator

Mayor A C Wharton, Jr.
City of Memphis, TN

We are investing time, money, and effort into making Memphis a better place to walk and bicycle because it's good for our health, economy, and quality of life. Being able to get around safely and efficiently without relying on an automobile is a key strategy in addressing poverty in Memphis and can't be accomplished only with buses and street cars—it also takes a robust bicycle and pedestrian network to support good public transportation.

Memphis now has more than 200 miles of dedicated bicycle lanes, trails, and neighborhood routes, which have measured success as both an increase in daily bicycle use and an overall decrease in the rate at which crashes are occurring. More than 140 miles of new bicycle-oriented infrastructure is now under design and is expected to be completed by 2017. Recent completion of the Memphis Pedestrian and School Safety Action Plan establishes a new paradigm towards the construction of a quality pedestrian realm. This plan prioritizes \$200

million in pedestrian improvements over the next twenty years, and upon completion will ensure all children in Memphis have safe, convenient, and accessible routes for walking to school.

We always talk about making Memphis a city of choice—where new residents feel drawn to work and live based on the wide diversity of choices available not only in employment, but also in how people recreate, worship, and engage in the community. Transportation, specifically biking and walking, is part of that package of choice to help us attract and retain people who enjoy and value not being in a car.

Additionally, we discuss how these policies may not be built on the current generation of users, but that we shouldn't be building a city for ourselves—we have to think about the next generation, and the generation after that. Research indicates that those future generations value infrastructure for biking and walking to a higher degree than car ownership and we want to make sure that the future Memphis reflects that.

I would remind other mayors that doing the right thing isn't always easy, but that investments in helping people get around, regardless of how they do so, is always the right thing. You'll find that even if the journey is difficult at the beginning, diligence and hard work will pay off as even the staunchest critics come to enjoy the successes being built around people-powered transportation.

"We always talk about making Memphis a city of choice—where new residents feel drawn to work and live based on the wide diversity of choices available... Transportation, specifically biking and walking, is part of that package of choice to help us attract and retain people who enjoy and value not being in a car."

- Mayor A C Wharton, Jr.



Multimodal Transportation Advocate

Rebecca Serna
Atlanta Bicycle Coalition

Biking and walking are good ways to get around, but too often get short shrift when it comes to funding and building transportation networks. Biking and walking are more affordable forms of transportation than owning a car, they help you meet people in your community, and they provide the opportunity for daily adventures. Getting out of your car, even if it's just every once in awhile, can be liberating.

We highlight everyday people who bike, trying to reflect ordinary clothes and people in our images and language, and not making anyone feel excluded. You shouldn't have to be brave or dress up to ride a bike—it should be just one of your choices for getting around and having fun. We also encourage city leaders and officials to get on bikes, so they can have that experience riding as they're planning.

My focus is getting more protected bike lanes and multiuse trails in my city, and trying to shift our transportation culture from one that is car-dominant to one that is multimodal and balanced. One way we've worked towards this is through the open streets initiative, Atlanta Streets Alive. In 2010, people said it was a crazy idea and Atlanta wasn't ready, but five years later, our largest turnout topped 100,000 and we've won several "best of Atlanta" awards.

Change is hard and doesn't happen overnight. Even people who initially oppose you or don't "get it" may come around. Give them multiple opportunities and avoid making them feel bad for not supporting you initially.

At the same time, don't back away from a challenge or from controversy if it's important. A lot of times you'll be pushing for something and will be told it's too costly or will add too much delay for other modes. That's a misplaced priority. Life is the highest value, and safety should always come before convenience.



"Even people who initially oppose you or don't "get it" may come around. Give them multiple opportunities and avoid making them feel bad for not supporting you initially."

- Rebecca Serna

Urban Planner

Drusilla van Hengel
Nelson\Nygaard Consulting Associates

I lead Nelson\Nygaard's Active Transportation sector for the West Coast. I do citywide planning, corridor development and transportation programs focused on improving walking and bicycling connections, from Safe Routes to School programs to collision reduction or access to transit.

I work with advocates, agency staff, parents, and policymakers. Through my work in this field for more than 20 years, I've come to understand that each city needs a unique blend of projects, programs, and people to make transportation investment choices that not only address safety and connectivity for all modes, but also serve to reduce health and wealth disparities. The conversations need to include people from a variety of personal and professional perspectives in order to make the hard decisions easier for policymakers.

We all have to make choices on how we get what we need, based on the places we have to go and the travel options to get there. And once we choose our travel mode, we generally move along in a way that makes us feel the most safe and comfortable.

For example, when a person on a bicycle rides on the sidewalk, generally they're not saying, "I want to be in the way of pedestrians." They're saying, "I don't feel safe on the street." I try to help people see that having choices is a community benefit, even if you'll never consider yourself a person who walks, rides a bike, or uses transit. None of us should be subject to threats to our safety and economic well-being just because we didn't drive a car. This is a social justice issue.

Some people fear that by improving these modes with separated facilities or slower traffic speeds, something bad will happen. I say, never argue with that emotion. Hear it, understand it, and, when the heat passes, lead authentic conversations about the tradeoffs.



"The conversations need to include people from a variety of personal and professional perspectives in order to make the hard decisions easier for policymakers."

- Drusilla van Hengel

"In our city, 1 in 3 people are diabetic and 80% are either obese or overweight. The built environment and the ability to walk or bicycle is imperative."

- Rose M Gowen, MD



Physician, City Commissioner

Rose M Gowen, MD
Brownsville, TX

As a City Commissioner, I advocate aggressively and passionately for building a walkable and bikeable community that is safe and inviting to all. In our city, 1 in 3 people are diabetic and 80% are either obese or overweight. The built environment and the ability to walk or bicycle is imperative.

Our message and our goal is to have multimodal transportation that is safe, accessible, and inviting. Why? Because communities that have and foster this are more vibrant and economically prosperous. We don't talk about health just for the sake of health. We tailor our messages to the audience.

If we're speaking to businesses, we talk about the increased revenue they will see when there is more pedestrian and bicycle traffic. When we speak to educators we talk about how test scores and dropout rates are lower if students are active on a regular basis; hence, walking and biking to school are important. Those are just two examples.

Think outside the box. If you're a health advocate, try to speak about biking and walking without using the word "health." That will encourage you to develop other messages and reasons to support people who walk and bike.

"We know that we must have coalitions broader than just cycling advocates to get the changes needed to make streets safe, have better health outcomes, and improve local economies and quality of life."

- Texas State Senator
Rodney Ellis



State Legislator

Senator Rodney Ellis
Houston, TX

I promote biking and walking for transportation and recreation because it's important for safety, public health, local economies, equity, and quality of life. Bicycling and walking can relieve traffic congestion, reduce pollution, and offers a healthy and convenient way for my constituents to get around.

During my tenure in the Texas Senate, I've fought to make biking safer and more accessible for all Texans. In 2009, we passed legislation to require a bicycle safety component to the state drivers' license exam. We've also adopted a safe-passing law and a statewide Complete Streets policy.

Today, words like "environment" and "social justice" can be divisive. Active transportation initiatives, economic benefits, health, children, and families can bridge the divide. With a growing and aging population, childhood obesity on the rise, and overstressed infrastructure, these arguments for biking are starting to resonate with my legislative colleagues in Texas.

Bipartisan coalitions are important; almost every piece of cycling legislation I have introduced has had a Republican joint author. Our friends at BikeTexas have helped build broad support for Complete Streets and other legislation. We know that we must have coalitions broader than just cycling advocates to get the changes needed to make streets safe, have better health outcomes, and improve local economies and quality of life.

Almost any time someone wants to have face-time with me, I ask them to go on a bike ride. For many of them, it's the first time they've been on a bike in years, and they remember how much fun it can be. This is how we get people to care about safe facilities, and it's a great way to make advocates. I host bipartisan bike rides for legislators, and staff at the local, state, and national levels. To grow and diversify cycling, we need to get role models on bikes and build protected bike lanes and trails.

When we can get elected officials to become passionate about biking on a personal level as a way to have fun, get exercise, or as a mode of transportation, they can make the next step to being passionate about policies and facilities that make biking safe and universal.

Part III.

Make Your Case

Studies and analysis on critical trends, important considerations and multi-faceted benefits of bicycling and walking



PICO HOUSE



ciclavia.org



CICLAVIA



CicLAvia Kickoff in Los Angeles, Calif.
Photo by Allan Crawford.

HEALTHY COMMUNITIES

Active Transportation for Healthy Lifestyles

Numerous studies show a positive association between physical activity and public health, including improved physical health, mental health, and social stability (Cohen, Boniface, and Watkins, 2014; Mindell et al, 2014).

National Institutes of Health (NIH) found that not only are higher levels of moderate to vigorous physical activity associated with lower rates of obesity, but for women higher proportions of people walking to work were associated with lower body mass index (BMI) and, for men, higher proportions of people biking to work were associated with lower BMI. The study concluded that if these associations are causal, increasing walk-to-work proportions from 2% to 4% could reduce the average weight for women by about 1.5 pounds. Increasing bike-to-work proportions from 0.4% to 0.8% could reduce the average weight for men by about 2.3 pounds (Brown et al, 2013).¹

Positive health outcomes from increased active transportation may have the greatest impact on low-income communities and youth. A recent national study of children commuting to school found that kindergarten children from less safe neighborhoods² who walk or bike to school have significantly lower BMI scores than their peers who traveled to school by car or public transportation. This difference was not found among children from safer neighborhoods. The researchers speculate that the greater impact of active transportation to

school on children from less safe neighborhoods may be due to less access to other forms of physical activity (Mendoza and Yiu, 2014).

Biking and walking also produce a greater sense of wellbeing over other modes. A 2015 study found that among walking, driving, and transit, walking was perceived as the least stressful mode of transportation (Legrain, Eluru, and El-Geneidy, 2015). Researchers at Clemson University found that, controlling for physical health, 67% of people who bike or walk to work enjoyed their trip, compared to 58% of those who commute by car (Morris and Guerra, 2015).

Inequities in Public Health

Physical inactivity has been linked to heart disease, certain cancers, diabetes, stroke, depression, anxiety, and osteoporosis (Cohen, Boniface, and Watkins, 2014; Mindell et al, 2014). Many factors contribute to disparities of health, including environmental impacts (i.e., air quality), individual physical activity levels, healthcare availability, nutrition, and stress.

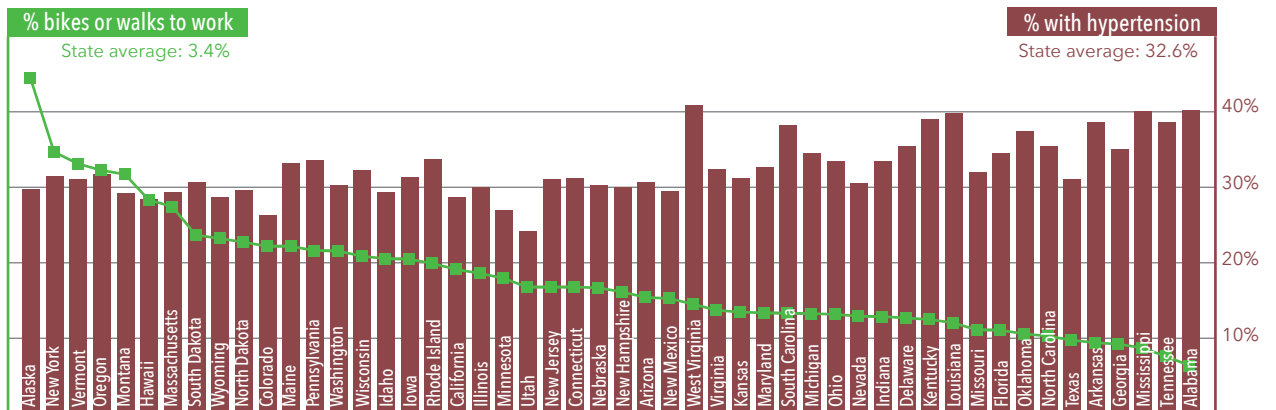
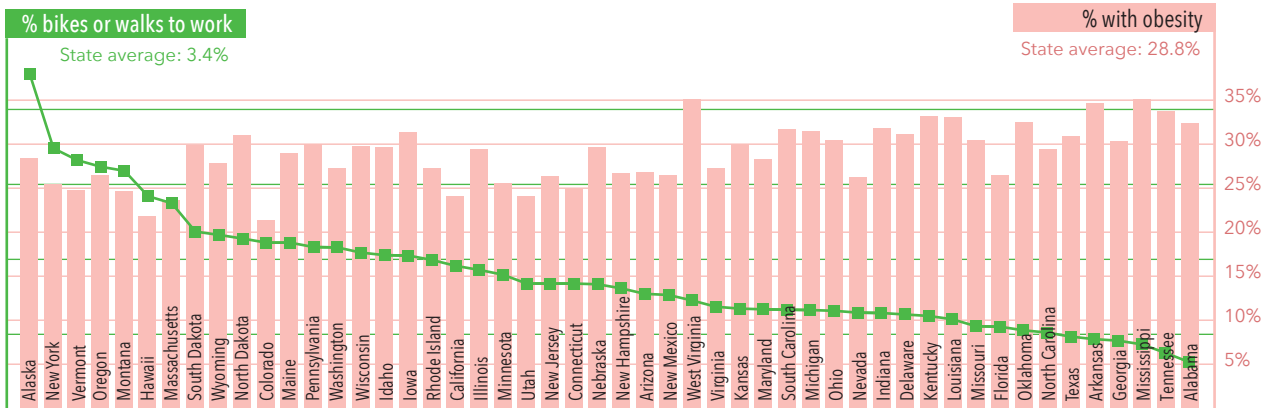
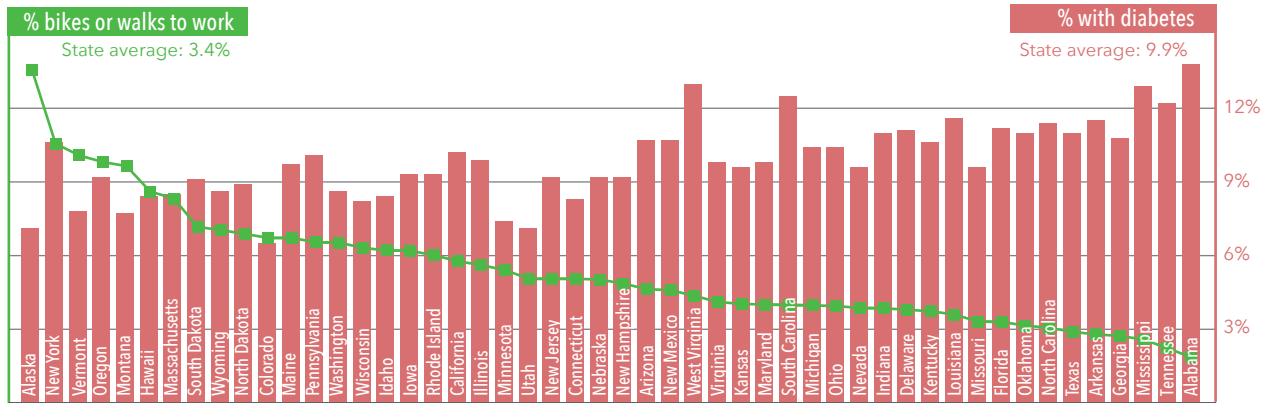
The percentage of Americans who are overweight or obese continues to increase, regardless of sex, race, or income. In 2013, more than 65% of the adult population had a body mass index above a healthy level for their height and weight. Nearly 30% were at obese levels (BMI at 30.0 or above) (BRFSS 2013). The trend of increasingly unhealthy weights has many negative impacts on public health, including higher rates of heart disease, diabetes, and hypertension.

Some communities see higher rates of obesity than the overall population. Over time, higher percentages of black women and women of Mexican origin, consistently have high BMI scores compared to black men, white women, white men, and men of Mexican origin. During 1988–1994, over 38% of black women and 35% of women of Mexican origin were at

¹ The findings of this study are based on data for the 90 most populous cities.

² Neighborhood safety was assessed from the parents' perceptions of the following: (1) safety for children to play outside; (2) presence of garbage/ broken glass; (3) drug use/ excessive drinking; (4) burglary or robbery; (5) violent crimes (i.e., drive-by-shootings); and (6) vacant houses/ buildings.

Active Transportation Compared to Health Indicators



Sources: ACS 2013, 3-yr est; BRFSS 2013



Photo courtesy of GirlTrek

GirlTrek: Walking back health disparities

By Darren Flusche for the League of American Bicyclists

Walking advocate Vanessa Garrison is taking on the crisis of inactivity. "Everything we do is around a broader discussion about black community—household stability, health, women with chronic diseases, and the crisis of inactivity," Garrison, the founder of GirlTrek, says of her work.

It's not about walking, per se, but about how people walking more and creating environments where people walk can impact our society.

GirlTrek is a network of more than 25,000 women across the country who organize to "heal our bodies, inspire our girls, and reclaim the streets of our communities." Each month GirlTrek identifies a challenge and rewards women for getting out and walking. It's all based on the idea that, to address the health crisis among African American women, "we have the obligation to lace up our sneakers and walk out our doors," Garrison says.

But, at the outset, GirlTrek members pushed back. What about the crime in Chicago? What about the dangerous traffic in Memphis? These barriers are real, and Garrison and her GirlTrek colleagues realized they'd take powerful advocacy to address. To do that, GirlTrek has created a peer network to identify and address

these dangers—everything from the need for crosswalks to reducing gun violence and street harassment.

"We got women active for fitness, but many of them said 'my neighborhood is not that walkable,'" Garrison says. "We realized we were creating advocates." People who spend time walking and biking in their communities know what they like and don't like, even if they don't ever think of themselves as advocates.

We need to stop defining advocacy in narrow terms," Garrison says. "If you ask people what they want, you'll hear them say: I have ideas."

Walking advocate Vanessa Garrison is taking on the crisis of inactivity.

"Everything we do is around a broader discussion about black community—household stability, health, women with chronic diseases, and the crisis of inactivity," Garrison, the founder of GirlTrek, said of her work.

It's not about walking, per se, but about how people walking more and creating environments where people walk can impact our society. Sound familiar? It should. It's the shift that's happening in bicycling advocacy right now, too.

obese levels; by 2009–2012, the percentages increased to over 57% of black women and 46% of women of Mexican origin (NCHS, 2015).

The percentages of black men and men of Mexican origin living with obesity have only recently become higher than among adults who are white only.¹ In 1988–1994, 21% of black men were obese (lower than the 20% of white men and 23% of white women). By 2003–2006, this percentage had risen to 36% for black men (compared to 32% of both white men and white women) (NCHS, 2015).

Similarly, the percentage of men of Mexican origin who are obese has recently surpassed the percentages of white only men and women, as well as black men. In 1988–1994, 24% of men of Mexican origin were obese and during the years 1999–2002 and 2003–2006, their percentages were lower (28% and 29%,

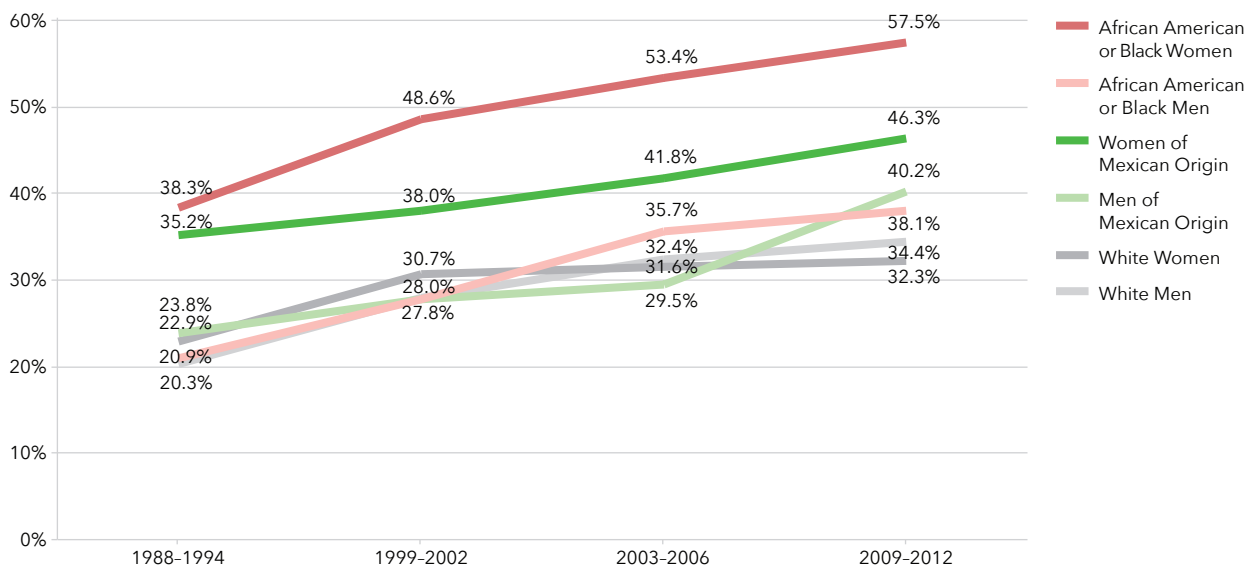
respectively) than the percentages of white men and women during the same years. However, during 2009–2012, the percentage of men of Mexican origin living with obesity rose to over 40%, a nearly 11-percentage point increase from the previous time period (NCHS, 2015).

Higher percentages of people with low income are living with obesity than people with higher incomes. Since 1988–1994, people living with income less than 400% of the federal poverty level² have had higher percentages of obesity, with a consistent difference of several percentage points. Interestingly, percentages of obesity had been clearly stratified by poverty level in the late 1980s; however, recently all levels below the 400% mark are showing similar percentages and are seven to ten percentage points higher than those above 400% of the poverty level (NCHS, 2015).

¹ Note that “white only” includes people of Mexican and other Hispanic origins.

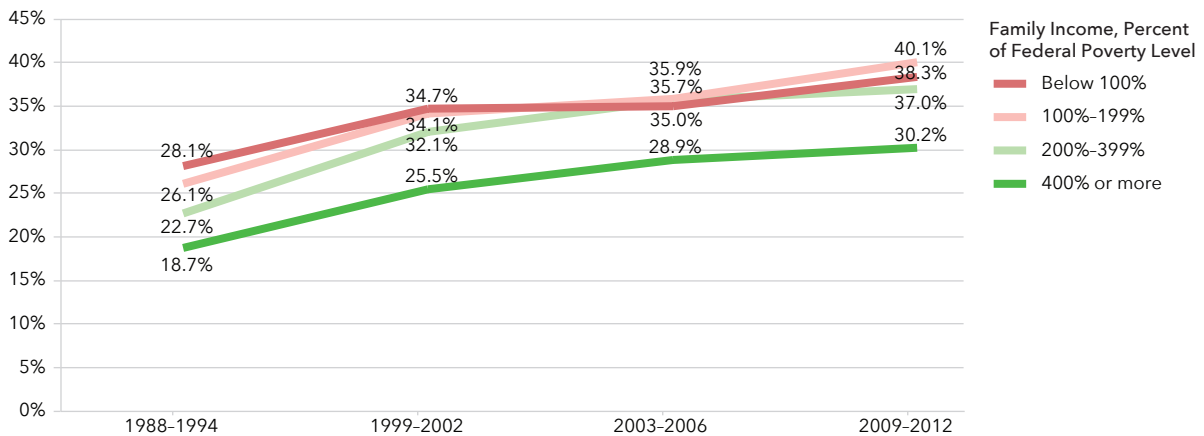
² In 2015, 400% of the federal poverty level for a single person was \$47,080 and for a family of four was \$97,000. (See <http://familiesusa.org/product/federal-poverty-guidelines>).

Percentage Obesity Among Adults, by Race and Ethnicity



Source: NCHS, 2015

Percentage Obesity Among Adults, by Poverty Level



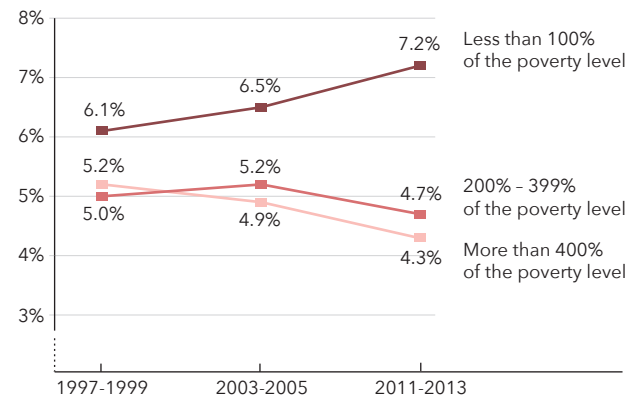
Source: NCHS, 2015

Among children under 18 years, 8.7% currently live with asthma and 5.3% reported having had an attack in the previous year (NCHS, 2015). Children who are black or multiracial are more likely to have suffered a recent asthma attack. During the 2011–2013 reporting period, 8.5% of black children and 7.1% of multiracial children reported a recent asthma attack, compared to 4.7% of white children and 3.2% of Asian children (NCHS, 2015).

Similarly, children in families with lower income are more likely than children in families with higher incomes to suffer from asthma and the gap among income levels is worsening. In 1997–1999, the range by poverty level was between 5.0% of children in families making 200%–399% of the poverty level and 6.1% of children in families living below the poverty line. In 2011–2013, though, the percentage of children with asthma among the lowest-income families increased to 7.2% while all other income categories decreased to as low as 4.3% of children among the highest-income families (NCHS, 2015).

Percentage Children Living with Asthma, Trends by Race and Poverty Level

Percentage of children reporting an asthma attack in the past 12 months, by poverty level...



Source: NCHS, 2015. Note: (1) Data for children of two or more races were not available for the 1997–1999 reporting period.



2014 Advocacy walk hosted by WalkBoston.
Photo by Carla Osberg Photography.

Reading List

- Brown, B.B., Smith, K.R., Hanson, H., Fan, J.X., Kowaleski-Jones, L., & Zick, C.D. (2013, March). "Neighborhood Design for Walking and Biking: Physical Activity and Body Mass Index." *American Journal of Preventive Medicine*, 44(3). <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3690570/pdf/nihms-437549.pdf>.
- Cohen, J., Boniface, S., & Watkins, S. (2014, March). "Health implications of transport planning, development and operations." *Journal of Transport and Health*. <http://www.sciencedirect.com/science/article/pii/S2214140513000169>.
- Legrain, A., Eluru, N., & El-Geneidy, A.M. (2015). "Am stressed, must travel: The relationship between mode choice and commuting stress." *Transportation Research Part F: Traffic Psychology and Behaviour*. <http://www.sciencedirect.com/science/article/pii/S1369847815001370>.
- Mendoza, J.A. & Yiu, Y. (2014, February). "Active Commuting to Elementary School and Adiposity: An Observational Study." <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3922227/pdf/chi.2013.0133.pdf>.
- Mindell, J.S., Cohen, D.L., Shelton, N.J., Sutaria, S., Hayward, A., & Watkins, S.J. (2014, March). "Transport and clinical practice." *Journal of Transport and Health*. <http://www.sciencedirect.com/science/article/pii/S2214140513000066>.
- Morris, E. & Guerra, E. (2015, January). "Mood and mode: does how we travel affect how we feel?" *Transportation*. <http://link.springer.com/article/10.1007/s11116-014-9521-x>.
- National Center for Health Statistics. (2015). *Health, United States, 2014: With Special Feature on Adults Aged 55-64*. [http://www.cdc.gov/nchs/data/14.pdf](http://www.cdc.gov/nchs/data/hus/14.pdf).

SAFE TRANSPORTATION

Inequities in Traffic Safety

National Complete Streets Coalition makes a clear point; “in the decade from 2003 through 2012, almost 68% of all pedestrian fatalities were on roadways funded in some part by federal money and designed in accordance with federal guidelines” (NCSC, 2014).

Even as the Americans With Disabilities Act celebrated its 25th year of improvements to accessibility (and safety) for all people, many cities are severely lacking in compliance of their transportation networks (Alpert Reyes, 2015).

In 2013, 4,735 people died as pedestrians on U.S. roads; 743 people died as bicyclists (FARS 2013). Among these, communities of color, seniors, children, low-income populations, and rural communities are disproportionately affected. For example, Anderson, C. L. et al. (2010) found that census tracts with higher poverty rates had four times as many pedestrian collisions as census tracts with lower poverty rates. Similarly, Governing (2014) published a study noting that pedestrian fatalities were higher in neighborhoods with low per capita income and in census tracts with high poverty.

Collisions are preventable

The National Highway Traffic Safety Administration (NHTSA) regularly updates a guide of effective, science-based traffic safety countermeasures as a resource to state highway safety offices. Countermeasures That Work reviews education and enforcement strategies for their effectiveness in reducing crashes and, to a lesser extent, changing behavior.

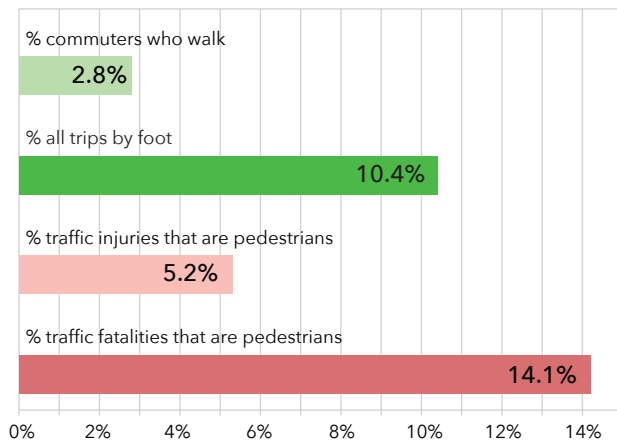
Of the strategies reviewed in the guide, the one that has demonstrated the highest effectiveness in reducing pedestrian crashes is development of pedestrian safety zones (Goodwin et al., 2013). This strategy identifies and characterizes high crash areas and then targets resources to the specific area or audience most affected. Proper development of safety zones requires extensive resources and has only been implemented in a few cities. Several studies, though, show that these programs have reduced crashes and injuries for youth and senior pedestrians, as well as pedestrians impaired by drugs or alcohol (Blomberg and Cleven, 1998, 2000; Zegeer et al., 2008a, 2008b).

Other strategies likely to be effective in reducing pedestrian injuries include improving visibility of pedestrians, reducing and enforcing speed

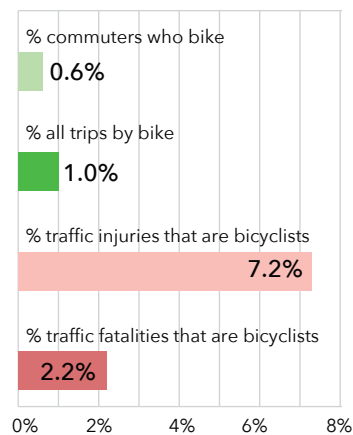


Source: Goddard et al

Overview of U.S. Walking and Pedestrian Safety



Overview of U.S. Biking and Bicyclist Safety



Sources: ACS 2013, 3-yr est; NHTS 2009; WISQARS 2011-2013; FARS 2011-2013

limits, and targeted enforcement of traffic laws. According to the NHTSA resource, reducing speed limits is generally most effective when paired with education initiatives to ensure the public sees the change and understands the need. Similarly, targeted enforcement is most effective as a strategy when paired with education initiatives directed to pedestrians and drivers, as well as training for law enforcement officers, prosecutors, and judges (Goodwin et al., 2013).

Bicyclist safety countermeasures reviewed in the NHTSA guide are mostly focused on changing bicyclist behavior (e.g., through education, helmet laws, and rider responsibility for own visibility) (Goodwin et al., 2013). While these are all important considerations for bicyclists, this review leaves out the function of well-designed infrastructure, including protected bike lanes (Monsere et al., 2014), fewer motorized traffic lanes (Smart Growth America, 2015), and higher density of intersections (Marshall and Garrick, 2011).

Impacts of perception

Feeling safe is not solely a product of physical infrastructure or traffic speeds. Psychological and social identity-related factors have been shown to influence drivers' behaviors toward pedestrians. A study from Portland State University, for example, found that black pedestrians were passed by twice as many cars and experienced wait times that were 32% longer than white pedestrians (Goddard, 2014).

A 2012 survey conducted by the National Highway Traffic Safety Administration found that 17% of Hispanic pedestrians “felt threatened for their personal safety” the last time they walked compared to 6% of white walkers and 9% of black walkers. In addition, while 73% of white pedestrians consider it safe to walk in their neighborhood, only 61% of black pedestrians and 63% of Hispanic walkers felt safe (NHTSA, 2013).

These perceptions are influenced by forces that are not explicitly tied to the physical act of biking

and walking, but the context in which it occurs. For instance, low-income neighborhoods suffer disproportionately high rates of crime and violence and one analysis found that “people restricted their physical activity and outdoor time due to violence and fear of violence, causing people to walk and bike less frequently” (Swanson et al, 2013). A 2014 survey found that 65% of all women have experienced street harassment,

perhaps providing some context for the lower participation in active transportation for women than for men (Stop Street Harassment, 2014). However, studies have also shown that per capita crime rates tend to decline in more compact, mixed, walkable communities, partially due to more “eyes on the street” and residents looking out for each other (Litman, 2015).

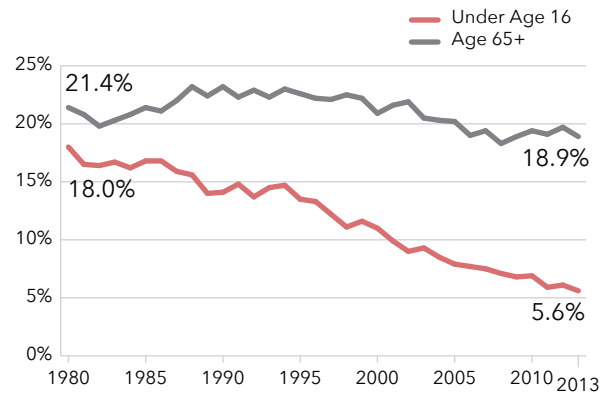


Seniors mobilizing for safer streets with California Walks. Read more on page 21.

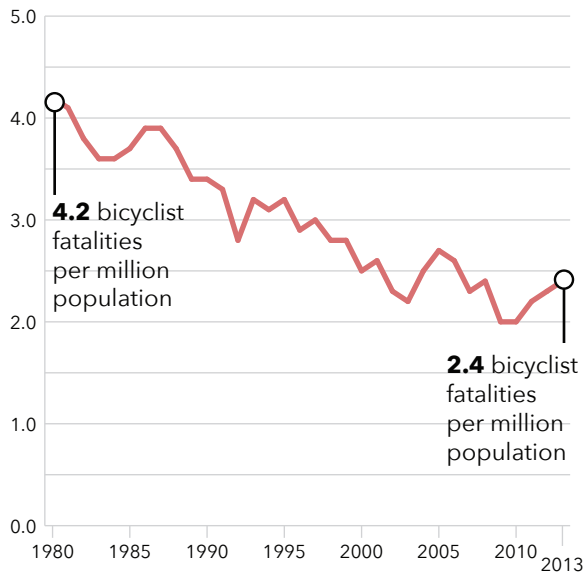
Pedestrian Fatality Rate (1980-2013)



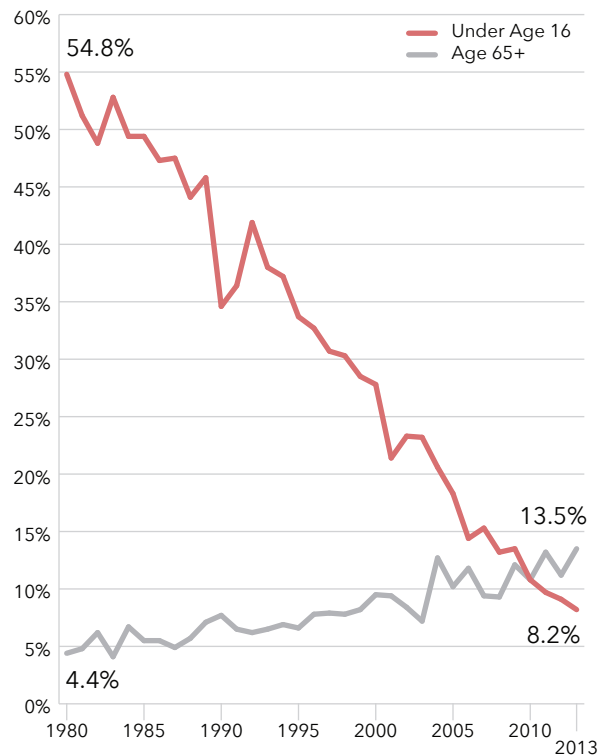
Pedestrian Fatalities, Percent by Age (1980-2013)



Bicyclist Fatality Rate (1980-2013)



Bicyclist Fatalities, Percent by Age (1980-2013)

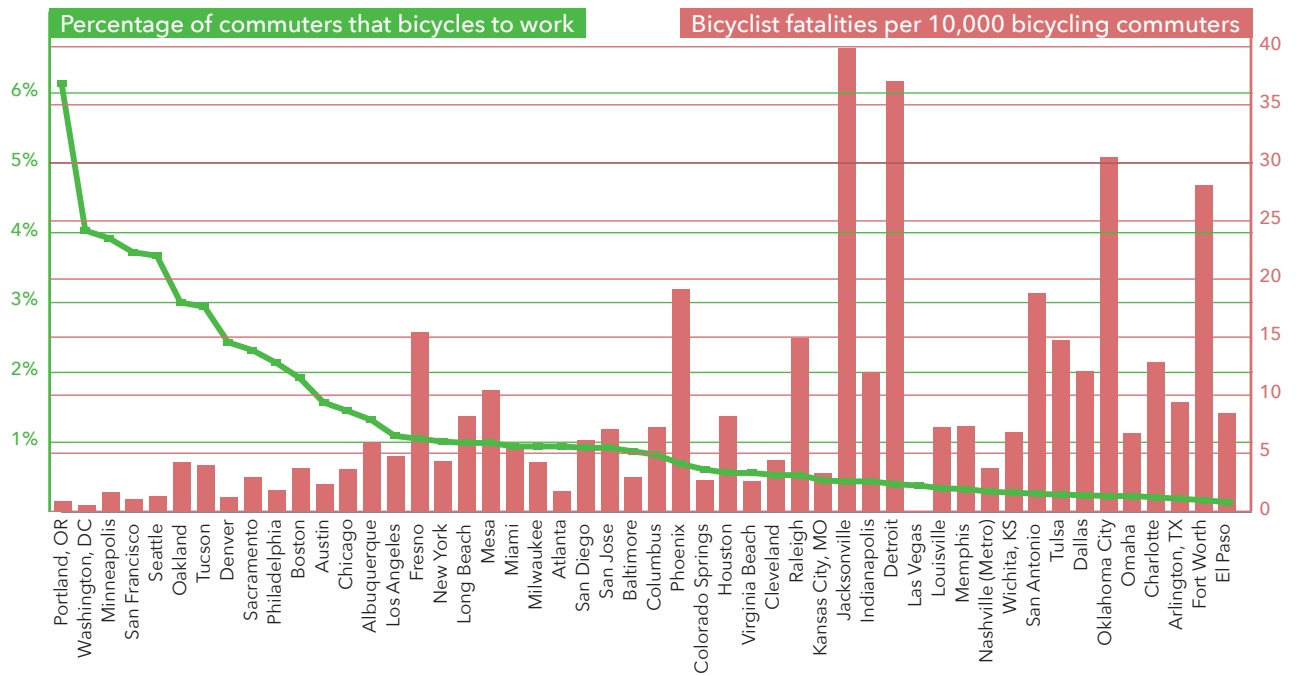
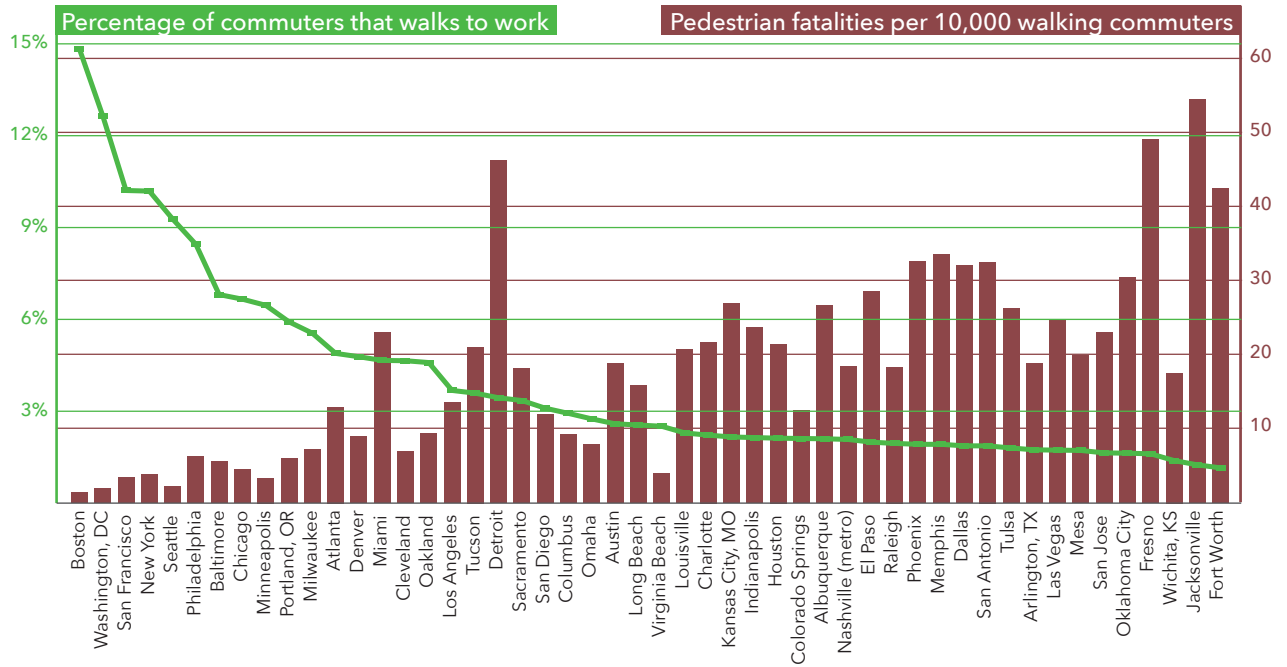


All graphics, this page:

SOURCES: FARS, ACS 1980-2013

NOTES: Fatality rates were calculated by averaging the number of pedestrian or bicyclist fatalities from 2011 to 2013 and dividing by the estimated annual number of commuters walking or biking to work. The accuracy of fatality rates is limited due to the potential for inaccurate and incomplete reporting of fatalities and due to the use of commuter data in the rate calculations. Reported fatalities may occur during other types of walking trips, which are not counted by the ACS.

Safety in Numbers: Fatality Rates Compared to Levels of Biking and Walking to Work



Sources: FARS, ACS 2013, 3-yr est

USDOT Safer Streets Initiative

With news that bicyclist and pedestrian deaths are increasing faster than overall traffic fatalities, the Safer People, Safer Streets Initiative (www.transportation.gov/safer-people-safer-streets) was launched by the U.S. Department of Transportation in the fall of 2014. The initiative aims to create a safer bicycling and walking environment for all Americans and is focused on strengthening partnerships between DOT and local officials, safety experts, planners, engineers, advocacy groups, the public, and other stakeholders.



Photo of U.S. Secretary of Transportation Anthony Foxx (center, smiling) by Tim Tai

Highlights of the initiative include:

- **Road Safety Assessments:** Assessments were conducted in every state by DOT and transportation agencies to better understand and prioritize the safety needs of non-motorized users.
- **Safety Guidelines:** DOT is releasing a variety of guides and manuals including a road diet guide and a protected bike lane manual.
- **Online Toolboxes:** PedSafe and BikeSafe were revised as online tools to output possible engineering, enforcement, and educational solutions to bicycle and pedestrian safety problems submitted by users.
- **New Research:** To help prioritize future investments, research areas include design flexibility and innovation, multimodal conflict points, and network development.
- **Data Collection:** DOT supports the University Transportation Centers as they seek to improve bicycle and pedestrian data collection.
- **Road Safety for Transit Patrons:** This initiative intends to look at the intersecting responsibilities of road and transit agencies to improve bicyclist and pedestrian safety and accessibility at transit stations.
- **The Mayor's Challenge:** Mayors and elected officials are challenged to become involved in improving bicycle and pedestrian safety by making a public statement of support, forming a local safety committee, and taking action through a series of approaches including making a commitment to complete streets, collecting local bicycle and pedestrian data, and improving walking and biking safety laws and regulations. For more information visit www.transportation.gov/mayors-challenge.

A New Vision for Safe Streets: Towards Vision Zero

By Leah Shahum, Director, Vision Zero Network

Introduced in Sweden in the 1990s, Vision Zero challenges much of our conventional thinking on traffic safety. First, it declares that no loss of life is acceptable on our streets, and sets the baseline expectation that we can and must work toward the goal of zero traffic fatalities and severe injuries.

Next, Vision Zero acknowledges that human beings are fallible; we make mistakes. Therefore, we must design road safety systems and policies that allow for mistakes without such severe consequences as death. Finally, Vision Zero recognizes that many diverse factors contribute to safe mobility, including street design, traffic enforcement, behavior, and policies. Therefore, we need a coordinated, multi-disciplinary approach to road safety.

From New York City to San Mateo, CA, local policymakers, advocates and practitioners are coming together to achieve Vision Zero, setting clear goals of eliminating traffic fatalities and severe injuries in a set timeframe and then developing measurable

action plans and pursuing strategies to achieve those goals. In our growing urban areas, adopting a true “safety first” approach will particularly benefit those most severely impacted – our seniors, youth, people of color and low-income communities.

While every city is different, we share many of the same challenges and, ultimately, solutions in our Vision Zero efforts. The Vision Zero Network is a collaborative campaign, launched in 2015, aimed at building the momentum and advancing the shift toward safe, healthy, equitable mobility for all. The Network brings together local leaders in health, traffic engineering, police enforcement, policy, and advocacy to develop and share winning strategies.

Strong, successful Vision Zero campaigns lead to policies and practices that set a new standard for safety on our streets and build toward a nationwide movement that prioritizes safe, healthy, equitable mobility for all. Learn more at www.visionzeronetwork.org.



San Francisco vigil on World Day of Remembrance for Road Traffic Victims. Photo by Arunsankar Muralitharan.

Reading List

- Alpert Reyes, E. (2015, April 1). "L.A. agrees to spend \$1.3 billion to fix sidewalks in ADA case." Los Angeles Times. <http://www.latimes.com/local/lanow/la-me-ln-lawsuit-broken-sidewalks-20150331-story.html>.
- Anderson, C. L., Vaca, F. E. & Chakravarthy, B. (2010). "Socioeconomic Disparities in Pedestrian Injuries." Injury Prevention, 16, A259.
- Blomberg, R. D., & Cleven, A. M. (1998). Development, Implementation, and Evaluation of a Pedestrian Safety Zone for Elderly Pedestrians. (Report No. DOT HS 808 692). Washington, DC: National Highway Traffic Safety Administration. www.nhtsa.dot.gov/people/injury/pedbimot/bike/resourceguide/
- Blomberg, R. D., & Cleven, A. M. (2000). Development, Implementation, and Evaluation of a Countermeasure Program for Alcohol-Involved Pedestrian Crashes. (Report No. DOT HS 809 067). Washington, DC: National Highway Traffic Safety Administration. <http://ntl.bts.gov/lib/25000/25900/25960/DOT-HS-809-067.pdf>
- Goddard, T., Kahn, K.B., & Adkins, A. "Racial Bias in Driver Yielding Behavior at Crosswalks." (2014, April). National Institute for Transportation and Communities. http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1009&context=psy_fac.
- Goodwin, A., Kirley, B., Sandt, L., Hall, W., Thomas, L., O'Brien, N., & Summerlin, D. (2013, April). "Countermeasures that work: A highway safety countermeasures guide for State Highway Safety Offices." 7th edition. (Report No. DOT HS 811 727). Washington, DC: National Highway Traffic Safety Administration. <http://www.ghsa.org/html/publications/countermeasures.html>
- Governing. (2014, August). "America's Poor Neighborhoods Plagued by Pedestrian Deaths." Governing. <http://www.governing.com/gov-data/pedestrian-deaths-poor-neighborhoods-report.html>.
- Litman, T. (2015, August). "Evaluating Active Transport Benefits and Costs." Victoria Transport Policy Institute. <http://www.vtpi.org/nmt-tdm.pdf>.
- Marshall, W.E. & Garrick, N.W. (2011, March). "Evidence on Why Bike-Friendly Cities Are Safer for All Road Users." Environmental Practice, 13:1. <http://www.cycle-helmets.com/bikes-safer-all-road-users.pdf>.
- Mendoza, J.A. & Yiu, Y. (2014, February). "Active Commuting to Elementary School and Adiposity: An Observational Study." <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3922227/pdf/chi.2013.0133.pdf>.
- Monsere, C., Dill, J., McNeil, N., Clifton, K., Foster, N., Goddard, T., Berkow, M., Gilpin, J., Voros, K., Van Hengel, D., & Parks, J. (2014, June). "Lessons From The Green Lanes: Evaluating Protected Bike Lanes In The U.S." National Institute for Transportation and Communities. : <http://trec.pdx.edu/research/project/583>.
- National Complete Streets Coalition. (2014, May). "Dangerous by Design 2014." <http://www.smartgrowthamerica.org/documents/dangerous-by-design-2014/dangerous-by-design-2014.pdf>.
- National Highway Traffic Safety Administration. (2013, October). "2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, Volume 2: Findings Report." <http://www.nhtsa.gov/staticfiles/nti/pdf/811841b.pdf>.
- Smart Growth America. (2015, March). "Safer Streets, Stronger Economies: Complete Streets project outcomes from around the country." <http://www.smartgrowthamerica.org/documents/safer-streets-stronger-economies.pdf>.
- Stop Street Harassment. (2014, June). "National Street Harassment Report." <http://www.stopstreetharassment.org/our-work/nationalstudy/>.
- World Health Organization. (2013). "Global status report on road safety 2013." http://www.who.int/violence_injury_prevention/road_safety_status/2013/en/.
- Zegeer, C., Henderson, D., Blomberg, R., Marchetti, L., Masten, S., Fan, Y., Sandt, L., Brown, A., Stutts, J., & Thomas, L. (2008a). "Evaluation of the Miami-Dade Pedestrian Safety Demonstration Project." (Report No. DOT HS 810 964). Washington, DC: National Highway Traffic Safety Administration. <http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/810964.pdf>.
- Zegeer, C. V., Blomberg, R. D., Henderson, D., Masten, S. V., Marchetti, L., Levy, M. M., Fan, Y., Sandt, L. S., Brown, A., Stutts, J., & Thomas, L. J. (2008b). "Evaluation of Miami-Dade pedestrian safety demonstration project." Transportation Research Record 2073, 1-10.

STRONG ECONOMIES

Employment opportunities

The Political Economy Research Institute (PERI) studied the employment impacts of building pedestrian- and bicyclist-oriented facilities in the U.S. In 2011, the institute released a report that showed how a \$1 million investment creates more jobs through building infrastructure specific to bicycling and walking than for road projects without these facilities. For each \$1 million invested, bicycling-specific projects created 11.4 full-time equivalent (FTE) positions, pedestrian-specific projects created 10 FTE jobs, and multi-use trails created 9.6 FTE positions. Road-only projects created the fewest jobs (7.8 FTE positions per \$1 million invested) (Garrett-Peltier, 2011). These numbers include direct, indirect, and induced jobs created through the initial design and construction of the facilities; they do not include ongoing maintenance or use impacts.

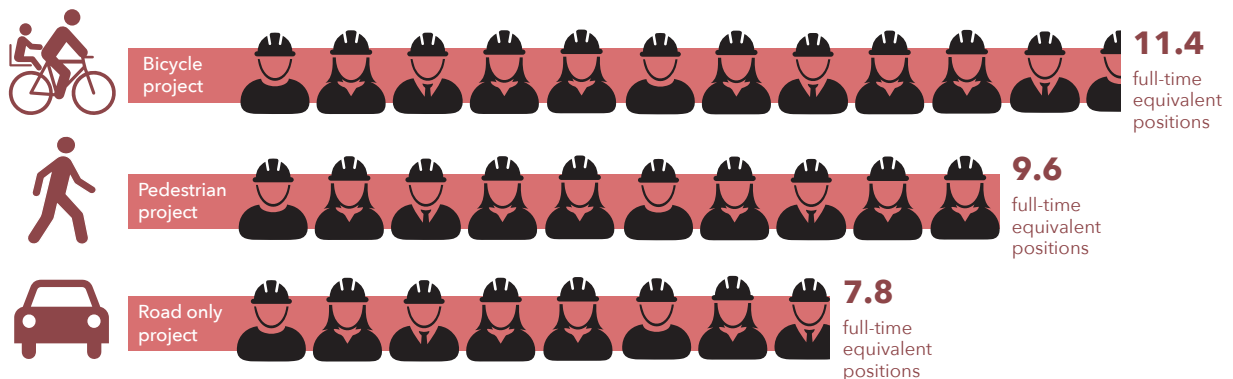
The study discusses possible reasons for the differences in job creation potential, including the general finding that bicycle/pedestrian facilities typically are more labor-intensive (i.e., require a larger portion of spending on salaries

for engineers and construction workers) versus road-only projects that are more capital-intensive (i.e., require a larger portion of spending for materials and equipment) (Garrett-Peltier, 2011).

A recent study of Complete Streets projects around the country found that employment levels were higher near completed projects, compared to pre-improvement levels and areas that were not improved (Smart Growth America, 2015).

While biking and walking can be a low-cost mobility option, proximity to employment can also be an important determinant of the feasibility of an active commute. A study from Brookings found that distance to jobs differs by race and ethnicity. From 2000 to 2012, proximate jobs for Hispanic metro-area residents declined by 17% and for black residents the decline was 14%, while for white metro-area residents the drop was 6% (Kneebone and Holmes, 2015). Longer journeys to work can be more difficult by bike or on foot—making connections for bicyclists and pedestrians to accessible, predictable transit options more important.

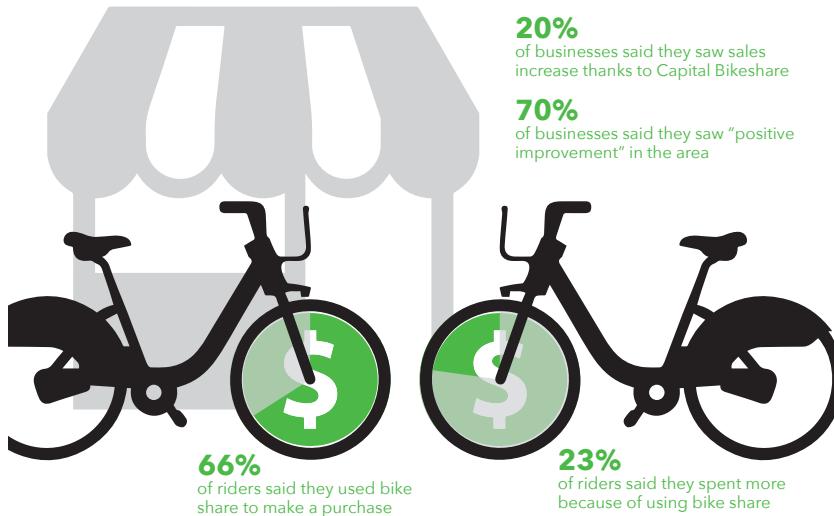
Jobs created per \$1 million spent on...



Source: Political Economy Research Institute

Bike share impacts on local business

Source: Buehler & Hamre



Hamre, pre-publication). The same study surveyed CaBi users, of whom 66% reported using the bike share program to make a purchase ("food-related, retail, or entertainment") and 23% reported that they spent more money because of their bike share trip.

Similarly, customers of the Nice Ride bike share system in Minneapolis spent an estimated additional \$150,000 in one season at restaurants and other businesses near Nice Ride stations (Wang et al, 2012).

Revenue for businesses

Pedestrians and bicyclists support businesses as frequent local consumers. In 2013, a Portland State University study on consumer behavior by mode of transportation found that bicyclists and pedestrians have a significant impact on local economies. A series of intercept surveys in Portland revealed that although they generally spent fewer dollars per visit, bicyclists and pedestrians made more frequent trips and actually spent more on average per month than consumers who drove (Clifton et al., 2013).

A 2012 economic impact assessment of Sunday Streets San Francisco found that 44% of businesses reported an increase in customer activity and sales. For every dollar that was spent during Sunday Streets, a total output of \$9.32 was generated (Zieff and Chaudhuri, 2013).

A recent survey of businesses located near Capital Bikeshare (CaBi) stations in Washington, DC, found that 20% of businesses saw an increase in their sales, and 70% said they saw a "positive impact" on the surrounding area (Buehler and

Improved real estate values

Eight of ten Complete Streets projects recently studied showed increased values for properties near the improved areas. The remaining two projects saw property values stay the same. Edgewater Drive, in Orlando, FL, saw adjacent property values rise 80%; Dubuque, IA, saw property values increase 111%. All of the projects studied for the report were part of broader economic development efforts, but the authors note, "it's clear that in all cases, the [Complete Streets] retrofits were considered a necessary component and catalyst for these economic strategies" (Smart Growth America, 2015).

Similarly, a recent study of the 30 largest metro areas in the U.S. found that office rental premiums in walkable urban places ("WalkUPs") were higher than drivable suburban places (\$35.33 per square foot compared to \$20.32 per square foot). Excluding New York City metro as an outlier, WalkUPs still achieved a 44% price premium over drivable suburban places in the other metro areas studied (Leinberger and Lynch, 2014).

Impact of Complete Streets Projects

Source: Smart Growth America



Building Two Kinds of Equity

From *"Safer Streets, Stronger Economies: Complete Streets Outcomes from Around the Country"* (Smart Growth America, 2015).

Complete Streets projects are related to higher property values, and that can be a great thing for citywide growth. However, it can also create rent pressures for existing businesses and residents.

Public policies that support small businesses and entrepreneurs, encourage first-source hiring practices and living wages, keep housing affordable, and reinvest projects' value in the area can help make sure everyone in a neighborhood reaps the benefits associated with Complete Streets improvements.

Active transportation and displacement

In recent years, there has been increased scrutiny of the economic development narrative, most notably regarding the role of infrastructure, such as bike lanes and bike share systems, in gentrification. A 2014 analysis compared trends in mobility and demographics along San Francisco's Valencia Streets. The study found that, while a road diet and other facilities (e.g., bike racks) helped to double the number of cyclists passing 17th and Valencia during peak hours, the demographics of the corridor's residents shifted significantly during the years from 2006 to 2011. The local population changed from a working-class district with a primarily Latino character to one of the most rapidly gentrifying areas in San Francisco." The previously low rents rose to a skyrocketing median, the number of residents earning more than \$200,000 doubled, and the resident population shifted to a white majority (Stehlin, 2015).

While better facilities for biking and walking may not be the causal factor in these larger trends, advocates and planners are increasingly faced with and addressing these concerns.

Savings through cost avoidance

In 2008, Rails-to-Trails Conservancy released a report that estimated potential savings Americans could see if bicycling and walking took a higher priority in transportation spending. The report quantified benefits from avoided driving, fuel savings, CO2 emissions reductions, and increased physical activity. Assuming national bicycle and pedestrian combined mode share increased from 10% to just 13%, the researchers estimated that financial savings would be more than \$10 billion annually. At 25% mode share, savings would reach more than \$65 billion per year (Gotschi and Mills, 2008).

Statewide Economic Benefits

Studies show that statewide economic benefits from people biking and walking are widespread beyond the point of sale or individual cost savings. Dollars spent on active transportation reach neighboring communities, contributing to the regional and statewide economies. Healthier people reduce health care costs across the state.

A recent impact study of active transportation in New Jersey concluded that for every \$1 million invested in infrastructure for biking and walking,



Photo courtesy of RAGBRAI (Register's Annual Great Bike Ride Across Iowa)

10 jobs are supported with over \$705,000 in compensation, \$136,000 is returned as local, state, and federal taxes, and \$1.2 million is added to the state GDP. The study also estimated that active transportation-related businesses contributed over \$41 million in local, state, and federal taxes. The total direct, indirect, and induced impacts of active transportation-related infrastructure, business, and events was estimated at \$497 million to the New Jersey economy in 2011. The authors noted that this amount is more than the estimated economic impact of the 2013 Super Bowl (\$480 million) (Brown and Hawkins, 2013).

A survey of bicycle commuters in Iowa reported that respondents spent, on average, \$1,160 annually

on bike-related activities. The study estimated bicycle commuters contributed \$52 million in direct and indirect impacts to the state of Iowa due to their spending habits and saved over \$13 million in health care expenses (Lankford, J. et al, 2011).

In 2008, the Register's Annual Great Bicycle Ride Across Iowa (RAGBRAI), a weeklong bicycle ride across the state, contributed an estimated \$24.5 million in direct sales to the counties along the event route. The estimate increases to \$27.5 million in direct sales when considering impacts to neighboring counties. The ride supported 460 jobs within the region, including over \$15.6 million in personal income (Lankford, S. et al, 2008).

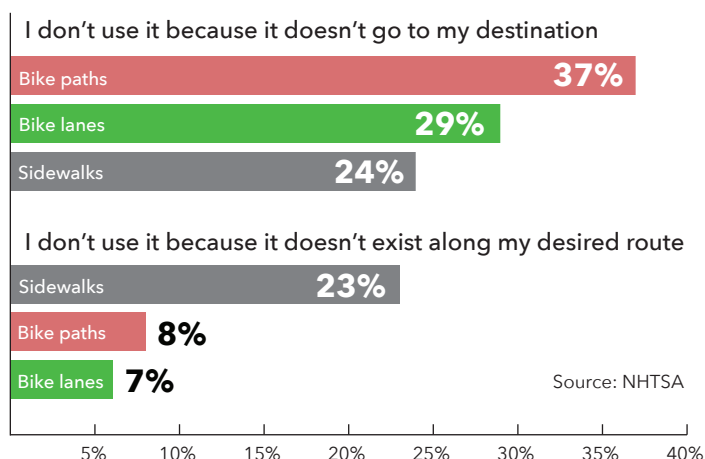
Reading List

- Buehler, R. & Hamre, A. (n.d.). "Business and Bikeshare User Perceptions of the Economic Benefits of Capital Bikeshare." Pre-publication.
- Clifton, K., Muhs, C., Morrissey, S., Morrissey, T., Currans, K., & Ritter, C. (2013, February). "Examining Consumer Behavior and Travel Choices." (Oregon Transportation Research and Education Consortium, OTREC-RR-12-15). http://ppms.otrec.us/media/project_files/OTREC-RR-12-15%20Final.pdf.
- Garrett-Peltier, H. (2011, June). "Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts." Political Economy Research Institute, University of Massachusetts, Amherst. http://www.peri.umass.edu/fileadmin/pdf/published_study/PERI_ABikes_October2011.pdf.
- Gotschi, T. & Mills, K. (2008). "Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking." Rails-to-Trails Conservancy. <http://www.railstotrails.org/resource-library/resources/active-transportation-for-america/>.
- Kneebone, E & Holmes, N. (2015, April). Brookings Institution. "The growing distance between people and jobs in metropolitan America." <http://www.brookings.edu/research/reports2/2015/03/24-people-jobs-distance-metropolitan-areas-kneebone-holmes>.
- Leinberger, C.B. & Lynch, P. (2014). "Foot Traffic Ahead: Ranking Walkable Urbanism in America's Largest Metros." <http://www.smartgrowthamerica.org/documents/foot-traffic-ahead.pdf>.
- Smart Growth America. (2015, March). "Safer Streets, Stronger Economies: Complete Streets project outcomes from around the country." <http://www.smartgrowthamerica.org/documents/safer-streets-stronger-economies.pdf>.
- Stehlin, J. (2014). "Cycles of investment: Bicycle infrastructure, gentrification, and the restructuring of the San Francisco Bay Area." Environment and Planning. <http://epn.sagepub.com/content/47/1/121.abstract?id=a130098p>.

CONNECTED ROUTES

Connecting to resources

Trips that are short distances are often the best opportunities to walk or bike (McKenzie, 2014). Accessibility to resources at a community level means a person can get from home to a job, school, and resources, such as a grocery store. The United States has spent billions of dollars on connecting roads for motorized traffic, but very little, in comparison, for pedestrian and biking traffic. Just as a street improves in usability through intersections with other streets, so too do bikeways and sidewalks improve in usability when connected to other bikeways and sidewalks. A recent study of bicyclist and pedestrian attitudes and behaviors, conducted by National Highway Traffic Safety Administration (NHTSA), found that the most common reason for not using a nearby bike path, bike lane, or sidewalk was that the facility did not go where the traveler needed to go. Similarly, the second highest reason reported for not using sidewalks was that there were not any (or few existed) along the desired route (NHTSA, 2013).



Inequities of disconnected routes

For older adults, mobility is especially important for staying connected to their communities and living independently. A 2014 report from Joint Center for Housing Studies at Harvard University reviews the current state of housing for older adults and highlights the lack of connectivity most seniors face due to their location in suburban communities and the lower likelihood that they own and can drive a car for transportation (Fernald, 2014). The study points out that one in four adults age 50 and over live with reduced hearing, vision, cognitive, or mobility capabilities (Fernald, 2014). For many older adults, walking is the only option for transportation, and this is only possible for those who are physically able, live near the resources they desire, and have safe pedestrian pathways connecting them to those resources.

Access to safe, affordable transportation options affects our daily decisions and opportunities. People with low annual income, and especially communities of color with low income, are impacted most by the presence or lack of these modes of transportation. Low-income households and communities of color are less likely to have access to a car and, therefore, spend a higher percentage of their time and money on public transportation options than do people who are middle-income and white (Zimmerman et al, 2015). The availability of safe, affordable transportation options impact their accessibility to health care, employment, school, and other basic necessities.

Shared mobility systems, such as bike share and car share systems, provide additional transportation options for people who do not own cars, either by choice or out of necessity. The American Automotive Association (AAA) estimated that, in 2014, the annual costs to Americans who own and operate a

newly purchased car were between \$6,000 and \$12,000, depending on gas mileage and miles driven (AAA, 2014). These estimates include costs for fuel, routine maintenance, tire replacement, insurance, license and registration fees, taxes, depreciation, and loan financing. Mobility options that reduce the need for car use can significantly reduce transportation costs a household pays.

Alternatives to car transportation are particularly beneficial for households with low- and moderate-income who generally spend a higher percentage of their income on transportation than households with higher incomes (FHWA, *Mobility Challenges for Households in Poverty*, 2014). Nationally, about 9% of American households do not own a car (ACS, 2011-2013 3-year estimates), and of households with an annual income less than \$35,000, that number rises to 18% (CTOD, 2014).

Often, households must choose between saving money with affordable housing, which may require higher transportation costs, or saving money with affordable transportation options, which may require higher housing costs (CTOD, 2014). Connectivity of affordable housing with affordable transportation options can make these basic living choices more manageable.

Reading List

- AAA. (2014). "Your Driving Costs: How Much are You Really Paying to Drive?" <http://publicaffairsresources.aaa.biz/wp-content/uploads/2014/05/Your-Driving-Costs-2014.pdf>.
- Bratman, E & Jadhav A. (2014, July). "How Low-Income Commuters View Cycling." City Lab. <http://www.citylab.com/commute/2014/07/how-low-income-commuters-view-cycling/374390/>.
- Center for Transit-Oriented Development. (2014, April). "Creating Connected Communities: A Guidebook for Improving Transportation Connections for Low- and Moderate-Income Households in Small and Mid-Sized Cities." http://www.huduser.org/portal/publications/pdf/Creating_Cnnted_Comm.pdf.
- Federal Highway Administration. (2014). "FHWA NHTS Brief: Mobility Challenges for Households in Poverty." <http://nhts.ornl.gov/briefs/PovertyBrief.pdf>
- Fernald, M. (Ed.). (2014). "Housing America's Older Adults: Meeting the Needs of an Aging Population." Joint Center for Housing Studies of Harvard University. http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-housing_america_older_adults_2014.pdf.
- McKenzie, B. (2014, May). "Modes Less Traveled: Commuting by Bicycle and Walking in the United States: 2008-2012." <http://www.census.gov/prod/2014pubs/acs-25.pdf>.
- National Highway Traffic Safety Administration. (2013, October). "2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, Volume 2: Findings Report." <http://www.nhtsa.gov/staticfiles/nti/pdf/811841b.pdf>.
- Zimmerman, S., Lieberman, M., Kramer, K., & Sadler, B. (2015). "At the Intersection of Active Transportation and Equity: Joining Forces to Make Communities Healthier and Fairer." Safe Routes to School National Partnership. <http://saferoutespartnership.org/sites/default/files/pdf/At-the-Intersection-of-Active-Transportation-and-Equity.pdf>.

Booming Greenways in North Carolina's Research Triangle

By John Pucher, Professor Emeritus, Rutgers University

The Research Triangle of North Carolina (Raleigh-Durham-Chapel Hill) has been one of the fastest-growing metropolitan areas in the country. Its population increased seven-fold between 1970 (317,563) and 2014 (2,132,523). The area has experienced a corresponding economic boom, thanks largely to the three renowned universities at each corner of the Triangle: NC State University in Raleigh, Duke University in Durham, and the University of North Carolina at Chapel Hill. The many research institutions and high-tech firms in the area have attracted highly-educated professionals from all over the country, so that the Triangle currently has the highest ratio of doctorates per capita in the United States.

Accompanying this stunning population and economic growth, there has been increasing public support for shared-use greenways. In numerous surveys conducted in the Triangle, investment in greenway expansion and improvement has consistently topped the ranking of citizen preferences for government expenditures. The widespread support for greenways has also been reflected in voter approval of virtually all bond referenda to fund more greenways. City



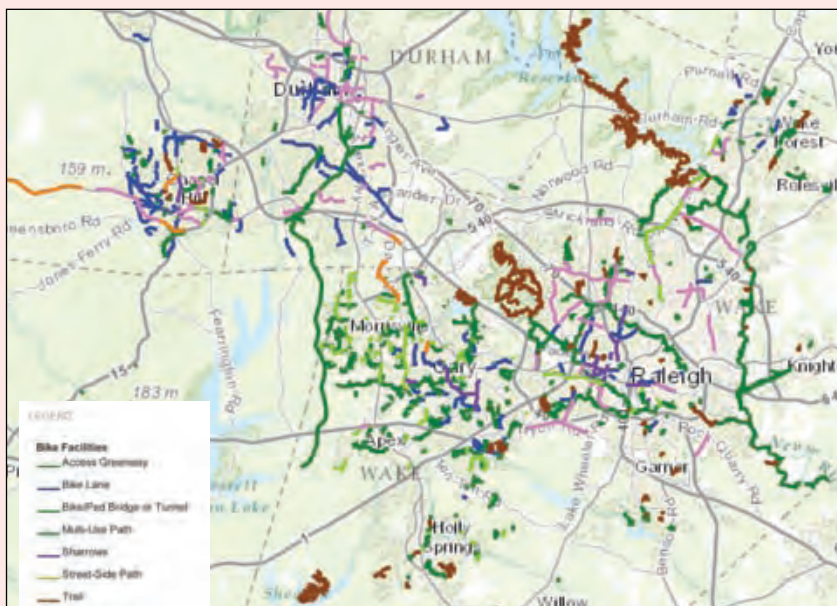
Suspension bridge on Neuse River Trail

Photo by Kristy Jackson

governments and the two metropolitan planning organizations in the area (CAMPO and DCHC MPO) have also dedicated increasing amounts of their capital budgets for greenways. The NC Department of Transportation has contributed to funding, often derived from federal funds for pedestrian/bicycling projects. In Cary, Knightdale, and Chapel Hill, developers have been required to build greenways as part of new developments, and virtually all communities require the dedication of easements on privately owned land along rivers, creeks, and lakes to allow greenway construction.

The result of increased funding and staffing for greenway planning and construction is one of the largest greenway networks in the country. In 2015, the Raleigh-Durham-Chapel Hill metropolitan area had almost 300 miles of paved off-road, shared-use trails. As reflected by the green lines in Map 1, the cities of Raleigh (115 miles), Cary (71 miles), and Durham (30 miles) have the most greenways, but virtually every community in the Triangle has one or more greenways, and all of them have ambitious plans for future growth. For example, Raleigh has plans to expand to 235 miles, and Cary, just west of Raleigh, has plans to expand its greenway system to 222 miles. There are also extensive unpaved walking and biking trails in the region (shown in brown on the map).

The increase in recreational cycling on greenways has helped generate more on-road cycling as well,



Map 1. Research Triangle Greenways. Source: Triangle J Council of Governments

and growing public support for more on-road cycling facilities. In 2000, there were less than 10 miles of on-road bike lanes in the Triangle, but by 2015, total center-line mileage of bike lanes (blue lines on map) had grown to 93 miles, mostly in Durham (36 miles), Chapel Hill-Carrboro (32 miles), Cary (20 miles), and Raleigh (18 miles). Significant expansion is planned. For example, Raleigh is planning to double its mileage of on-road bike facilities by the end of 2016. Cary will increase its mileage of bike lanes from 20 miles to 27 miles by 2017.

Given the polycentric, decentralized nature of the Research Triangle, it is crucial to provide regional connections between the greenway networks of individual cities (Map 2). The most important of these connecting routes is the East Coast Greenway (thick green line on the map), which connects Durham to Cary and Raleigh, and which connects the Triangle Region to the rest of the East Coast via the 2,900-mile East Coast Greenway route that runs from Maine to Florida. Of all metropolitan areas the East Coast Greenway (ECG) route that runs through the Triangle has the most complete stretch (95%) of off-road, shared-use trails on the entire ECG route.

Triangle greenways are typically 10-14 feet-wide paved trails in 50-150 feet-wide corridors of protected greenspace, running along rivers, creeks, and lakes. They were developed as part of flood management plans, but equally important, they preserve greenspace adjacent to all major waterways and tributaries, protect aquatic and edge habitats, and prevent development of ecologically sensitive lands. The greenways provide a series of linear parks throughout each city, providing recreational opportunities for residents and visitors. Many greenways include playing fields, picnic areas, boating facilities, fishing spots, bird watching, nature trails, outdoor sculpture, and community centers.

Only partial data are available on usage levels, but an in-person survey of the 71-mile Cary greenways estimated at least 1.1 million annual users just on weekends, not including weekday use. Since Cary has about a fourth of the total mileage of Triangle Area greenways, that suggests over 4 million annual users overall, which might be an underestimate since the Cary survey only counted weekend use. Indeed, on weekends with good weather, many parts of the Triangle greenways are overcrowded, not only with pedestrians, runners, and bicyclists but also with dog walkers, parents with strollers, skateboarders, in-line skaters, bird



Map 2. Regional Connections. Source: Triangle J Council of Governments

watchers, and people fishing in the adjacent lakes from the extensive wooden walkways and bridges.

A before-and-after study conducted by the Institute for Transportation Research (ITRE) at NC State University found more than a doubling (133% growth) in walking and bicycling trips on the American Tobacco Trail in Durham only three months after the bicycle and pedestrian bridge over Interstate 40 was completed, thus connecting the northern and southern portions of the trail. That dramatic jump in use between 2013 and 2014 demonstrates the importance of such connections over roadways and waterways for the success of greenways.

With widespread public support, it seems certain that the Research Triangle will continue to have one of the most extensive and best-integrated greenway systems in the country, supplemented by a growing network of on-road cycling facilities.

Sources: City departments of transportation and parks and recreation in Raleigh, Durham, Cary, Knightdale, Chapel Hill, and Carrboro; the Capital Area Metropolitan Planning Organization (CAMPO); the Triangle J Council of Governments (TJCOG); county parks, recreation, and transportation departments in Wake County, Orange County, and Durham County; East Coast Greenways; the Institute for Transportation Research and Education (ITRE) at NC State University; and the NC Department of Transportation.

MULTIMODAL INFRASTRUCTURE

Infrastructure for active transportation

Facilities for pedestrians and bicyclists include sidewalks, bike lanes, and off-road paths, as well as shelters, bike parking, public seating, signage, road markings, and intersection signals. Providing these types of multimodal infrastructure encourages more people to bike and walk regularly. Bike parking and bike corrals, in particular, have been found to be significant predictors of increased mode share at nearby businesses (Clifton et al, 2013). A recent analysis of Safe Routes to Schools programs in District of Columbia, Florida, Oregon, and Texas, showed that engineering improvements for walking and bicycling were associated with an 18% relative increase of children walking or biking to school (McDonald et al, 2014).

Recent studies of specific types of facilities have attempted to quantify their impact on biking and walking levels. Protected bike lanes have been shown to increase biking levels

between 21–171% and are very appealing to people who self-identify as “interested, but concerned” bicyclists (Monsere et al, 2014). A study (unpublished as of this writing) of Capital Bikeshare in Washington DC, found that 16% of those surveyed were making a trip that they would not have made without the bike share bike (Buehler and Hamre, pre-publication).

Not all pedestrians and bicyclists want the same options for active transportation. A study using Strava Metro data in Travis County, Texas, highlights the importance of bicycling infrastructure for fitness cyclists. The study found a strong positive correlation between Strava users activity and the presence of wide roadway shoulders and hilly terrain (Griffin and Jiao, 2015). Though routes next to fast moving traffic or on steep slopes are not generally appealing to people who bike for utility purposes, communities looking to encourage more recreational riding may want to improve bike access to routes with these characteristics.



San Francisco, CA. Photo courtesy of Green Lane Project

The impact of design

Beyond the specialized infrastructure for bicyclists and pedestrians, the broader design of the transportation network and the cities they are within impact the travel modes people take. National Institutes of Health (NIH) found that greater population density, in particular, is correlated with moderate to vigorous physical activity (Brown et al, 2013). Further, analyses show significant correlations between vehicle miles traveled and “street network density, street connectivity, and major road design factors such as the number of lanes, outside shoulders, raised medians and the presence of on-street parking, bike lanes, and curbs/sidewalks” (Marshall and Garrick, 2012).

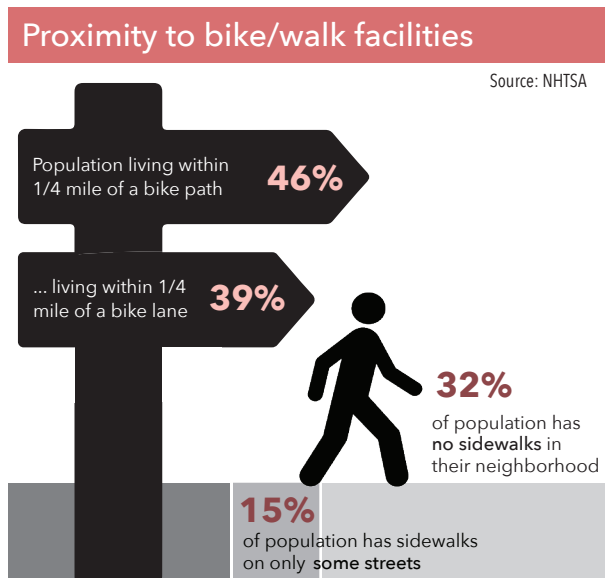
According to a 2012 survey by the National Highway Traffic Safety Administration (NHTSA), 46% of individual respondents across the U.S. stated that they live within a quarter mile of a bike path (“paths away from the road on which

bikes can travel”). Only 39% stated that they live within a quarter mile of a bike lane (“marked lanes on a public road reserved for bikes to travel”). Thirty-two percent of respondents stated that no streets in their neighborhood had sidewalks and an additional 15% said that only some streets had sidewalks (NHTSA, 2013).

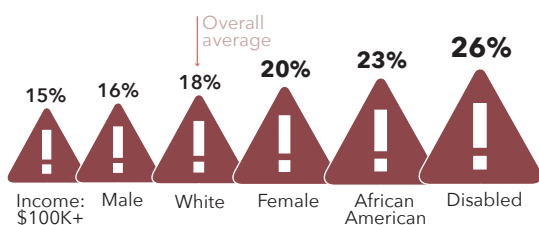
Not surprisingly, respondents who live near a bike path or bike lane were more likely to use these facilities to ride compared to respondents who do not live near a bike path or lane. Further, respondents who stated that they biked fewer than twenty of the previous thirty days were more likely, compared with “heavy riders” (those who rode 20-30 days), to have ridden on a separated facility (bike path) than an on-road facility (bike lane) (NHTSA, 2013).

Among all respondents in the NHTSA survey, regardless of walking frequency (except those who stated they have a disability that prevents them from walking), 18% stated that they are somewhat or very dissatisfied with how their community is designed for walking. However, some segments of the population showed higher dissatisfaction: 20% of females; 20–21% of those with an income less than \$30,000; 21%, 22%, and 24%, respectively, of those identifying as Native American/Alaska Natives, black, and Native Hawaiian/Pacific Islanders; and 26% of those reporting their employment status as “disabled” (NHTSA, 2013).

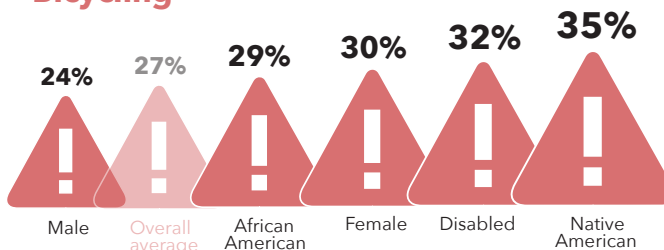
Among all respondents in the NHTSA survey, regardless of bicycling frequency (except those who stated they have a disability that prevents them from riding a bike), 27% stated that they are somewhat or very dissatisfied with how their community is designed for bicycling. Again, some demographic characteristics showed higher dissatisfaction: 30% of females; 30% of those with an income between \$15,000 and \$29,999; and 29%, 33%, and 35%, respectively, of those identifying as black, Native Hawaiian/Pacific Islanders, and Native American/Alaska Natives (NHTSA, 2013).



Walking



Bicycling



Source: NHTSA

Design for safety

The design of our transportation network facilities also presents safety implications for the people traveling on them. Pedestrian-scaled developments, in particular, have been shown to decrease the number and severity of crashes involving travelers of all modes (Dumbaugh and Rae, 2009; NYC DOT, 2013).

A study of 24 California cities suggests that the intersection density and specialized features of a street network may influence safety for pedestrians and bicyclists. The researchers studied crash data over an 11-year period and found that cities with higher intersection density consistently saw fewer severe crashes for all modes of transportation—pedestrians, bicyclists, and motorists (Marshall and Garrick, 2011). In fact, the study showed that intersection density of the street network is possibly a more predictable indicator of safety for travelers than the presence or lack of bike lanes (Marshall and Garrick, 2011).

A study of pedestrian injuries in New York City, 2001–2010, found that injuries among school-aged children decreased in census tracts with Safe Routes to School (SRTS) improvements to the built environment compared to virtually no change in census tracts without SRTS improvements (DiMaggio and Li, 2013). Improvements completed in the studied census tracts included both short-term projects, such as crosswalk markings and updated signage, as well as capital construction projects that would provide new or expanded facilities.

Specialized Infrastructure Design for Bicyclists and Pedestrians



Bike Share

A public sharing system where bicycles are made available to individuals for short-term use. Bicycles can generally be picked up and dropped off at various docking stations located throughout a system's service area.



Bicycle Corrals

A bicycle parking structure that converts one vehicle parking space into a parking space for ten or more bicycles. Corrals are usually located on the street along the curb.



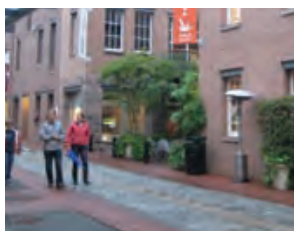
Bicycle Boulevards

Also called "neighborhood greenways." A shared roadway intended to give priority to bicyclists by optimizing it for bicycle traffic and discouraging motor vehicle traffic. These routes often use "turned stop signs" allowing bicyclists to progress without stopping along the boulevard, but force cross traffic to stop.



Protected Bike Lanes

Also called "cycle tracks," use physical barriers to separate bike lanes from both cars and sidewalks, creating safe, inviting spaces for people to bike.



Home Zones (Woonerfs)

These streets are designated as "shared streets," prioritizing pedestrians and bicyclists, and keeping motor vehicles at low speeds.



Contraflow Bicycle Lanes

A designated bicycle lane marked to allow bicyclists to travel against the flow of traffic on a one-way street.



Colored Bicycle Lanes

Bicycle lanes that have special coloring to provide a distinct visual sign that the space is designated for bicyclists.



Bike Boxes

A pavement marking that utilizes two stop lines: an advanced stop line for motor vehicles, and a stop line closer to the intersection for bicyclists. This allows bicyclists to get a head start when the light turns green to more safely proceed ahead or make a left turn.



Shared Lane Markings

Often called "sharrows," these markings resemble a bicycle and an arrow painted on a roadway to indicate the direction of travel for bicycles as well as motorized vehicles.



Bicycle Traffic Lights

Traffic signals at intersections that have specific symbols to direct bicycle traffic.

Photo credits, top to bottom: Greg Griffin, courtesy of www.pedbikeimages.org; Payton Chung; La-Citta-Vita@Flickr; effelar @Flickr; John Luton

Photo credits, top to bottom: Jeff Miller; PeopleForBikes; John Luton; Arthur Wendall; Roland Tanglao.



Washington, DC

Photo by Dan Reed @Flickr (CC BY-NC 2.0)



Station Density is Key to Creating an Equitable Bike Share System

By Ted Graves, Bike Share Program Manager, NACTO

Over the past five years, bike share programs have proliferated in cities around the United States, with over 36 million bike share trips taken to date. In 2014, to help cities implement and expand their bike share systems, the National Association of City Transportation Officials (NACTO) launched the Bike Share Program, which conducts research on bike share best practices. Research from the NACTO Bike Share Program builds off the wealth of experience from its member cities, as well as analysis of bike share ridership data from across the United States, Mexico, Canada, and Europe. A best practice report, with an additional focus on strategies for increasing ridership in low-income communities, is forthcoming and will complement NACTO's existing library of bicycling design guides.

NACTO's preliminary findings show that having a high station density is key to building a successful, equitable bike share program. People use bike share only when it is convenient in their daily lives and serves the trip they are trying to make. NACTO's analysis of 2014 ridership data from an array of North American bike share systems shows that ridership (the number of trips that begin or end at a given station) increased exponentially the more stations there are in close proximity. To address issues of equity and increase ridership among low-income populations, NACTO encourages

cities to launch (or expand) bike share programs so that they densely cover a large, contiguous area that includes low-income neighborhoods, as well as employment centers or other high-density areas.

Users should also be provided with safe, welcoming places to ride. As bike share systems are launched and expanded, protected bike infrastructure that takes people where they want to go must be introduced as well. Implementing a bike share system along with high-quality bike infrastructure makes bicycling safer overall by increasing the number of bike trips. This strengthens the "safety in numbers" effect where the rate of bicycle crashes and injuries goes down as more people bike.

NACTO represents large cities on transportation issues of local, regional, and national significance and facilitates the exchange of transportation ideas, insights and best practices while fostering a cooperative approach to key issues facing cities and metropolitan areas. For more information about bike share or bicycling infrastructure design, visit www.nacto.org.

Reading List

- Bigazzi, A.Y. (2014). "Bicyclists' Uptake of Traffic-Related Air Pollution: Effects of the Urban Transportation System." Portland State University. Dissertations and Theses. Paper 2064. http://pdxscholar.library.pdx.edu/open_access_etds/2064/.
- Brown, B.B., Smith, K.R., Hanson, H., Fan, J.X., Kowaleski-Jones, L., & Zick, C.D. (2013, March). "Neighborhood Design for Walking and Biking: Physical Activity and Body Mass Index." *American Journal of Preventive Medicine*, 44(3). <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3690570/pdf/nihms-437549.pdf>.
- Buehler, R. & Hamre, A. (n.d.). "Business and Bikeshare User Perceptions of the Economic Benefits of Capital Bikeshare." Pre-publication.
- Clifton, K., Muhs, C., Morrissey, S., Morrissey, T., Currans, K., & Ritter, C. (2013, February). "Examining Consumer Behavior and Travel Choices." (Oregon Transportation Research and Education Consortium, OTREC-RR-12-15). http://ppms.otrec.us/media/project_files/OTREC-RR-12-15%20Final.pdf.
- DiMaggio, C. & Li, G. (2013, February). "Effectiveness of a Safe Routes to School Program in Preventing School-Aged Pedestrian Injury." *American Academy of Pediatrics*. *Pediatrics* 131:2. <http://pediatrics.aappublications.org/content/131/2/290.full.pdf>.
- Dumbaugh, E. & Rae, R. (2009). "Safe Urban Form: Revisiting the Relationship Between Community Design and Traffic Safety." *Journal of the American Planning Association*, 75:3. <http://www.tandfonline.com/doi/abs/10.1080/01944360902950349#VPS08VPF9so>.
- Fitzpatrick, K. & Park, E.S. (2010). "Safety Effectiveness of the HAWK Pedestrian Crossing Treatment." <http://www.fhwa.dot.gov/publications/research/safety/10042/>.
- Griffin, G.P., Jiao, J. (2015). Where does bicycling for health happen? Analysing volunteered geographic information through place and plexus. *Journal of Transport & Health*. <http://dx.doi.org/10.1016/j.jth.2014.12.001i>.
- Marshall, W.E. & Garrick, N.W. (2011, March). "Evidence on Why Bike-Friendly Cities Are Safer for All Road Users." *Environmental Practice*, 13:1. <http://www.cycle-helmets.com/bikes-safer-all-road-users.pdf>.
- Marshall, W.E. & Garrick, N.W. (2012). "Community design and how much we drive." *The Journal of Transport and Land Use*, 5:2. <https://www.jtlu.org/index.php/jtlu/article/view/301>.
- McDonald, N.C., Steiner, R.L., Lee, C., Smith, T. R., Zhu, X., & Yang, Y. (2014, December). "Impact of the Safe Routes to School Program on Walking and Bicycling." *Journal of the American Planning Association*. Pre-publication version https://planning.unc.edu/people/faculty/noreenmcdonald/McDonald_et_al_JAPA_SRTSEvaluation.pdf.
- Mead, J., Zegeer, C., & Bushell, M. (2014, April). "Evaluation of Pedestrian-Related Roadway Measures: A Summary of Available Research." *Pedestrian and Bicycle Information Center*. http://katana.hsrrc.unc.edu/cms/downloads/PedestrianLitReview_April2014.pdf.
- Monsere, C., Dill, J., McNeil, N., Clifton, K., Foster, N., Goddard, T., Berkow, M., Gilpin, J., Voros, K., Van Hengel, D., & Parks, J. (2014, June). "Lessons From The Green Lanes: Evaluating Protected Bike Lanes In The U.S." *National Institute for Transportation and Communities*. : <http://trec.pdx.edu/research/project/583>.
- National Complete Streets Coalition. (2014, May). "Dangerous by Design 2014." <http://www.smartgrowthamerica.org/documents/dangerous-by-design-2014/dangerous-by-design-2014.pdf>.
- National Highway Traffic Safety Administration. (2013, October). "2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, Volume 2: Findings Report." <http://www.nhtsa.gov/staticfiles/nti/pdf/811841b.pdf>.
- New York City Department of Transportation. (2013, November). "Making Safer Streets." <http://www.nyc.gov/html/dot/downloads/pdf/dot-making-safer-streets.pdf>
- Slater, S.J., Nicholson, L., Chriqui, J., Barker, D., Chaloupka, F.J., & Johnston, L.D. (2013, February). "Walkable Communities and Adolescent Weight." *American Journal of Preventive Medicine*, 44(2). <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3553501/pdf/nihms-429605.pdf>.
- Van Houton, R. & Malenfant, J.E. L. (n.d.). "An Analysis of the Efficacy of Rectangular-shaped Rapid-Flash LED Beacons to Increase Yielding to Pedestrians Using Crosswalks on Multilane Roadways in the City of St. Petersburg, FL." http://www.mutcd.fhwa.dot.gov/resources/interim_approval/ia11/stpetersburgrpt/stpetersburgrpt.pdf.

EFFECTIVE GOVERNANCE

Legislation and Regulation

Protections for all people on the road are most clearly defined by the laws and regulations legislators put into place. Legislation, such as Vulnerable Road User laws and Safe Passing laws, recognize that people walking or biking, particularly youth, seniors, and people with disabilities, are more vulnerable to injury or fatality in the event of a crash, compared to drivers of motor vehicles. The League of American Bicyclists reviews these and many other traffic laws (www.bikeleague.org/content/bike-law-university).

“Complete Streets” policies can also go a long way toward integrating nonmotorized transportation features into routine road maintenance and new street development (Shinkle and Teigan, 2008). Recent analysis of U.S. Complete Streets projects showed that post-project streets were generally safer, encouraged more multimodal transportation, were “remarkably affordable,” increased employment levels and business starts, increased property values, and increased investment from the private sector (Smart Growth America, 2015). As of the end of 2014, over 700 jurisdictions had adopted a Complete Streets policy in some form, including 30 states, the District of Columbia, 58 regional planning organizations, 58 counties, and 564 municipalities across 48 states (Smart Growth America, 2015).

Administration

One of the most common ways administrators promote active transportation as a viable option in their communities is by adopting long-term transportation plans with goals that give equal priority to bicycling and pedestrian facilities. Implementation of policies and programs that support active transportation can make positive impacts on public health and safety. From transportation planners, engineers, and public health officials, to the U.S. Surgeon General and the Secretary of the U.S. Department of Transportation, administrators and agency staff are integrating active transportation into business-as-usual models.

The national Safe Routes to School (SRTS) program was established with federal legislation through SAFETEA-LU (“Safe, Accountable, Flexible and Efficient Transportation Equity Act—A Legacy for Users”) in 2005 and required all states to hire a Safe Routes to School Coordinator to oversee state SRTS activities (NCSRTS, 2011). In recent years, the program has been attributed with community benefits such as an increased percentage of children walking and biking to school, decreased number of injuries, improved mental and physical health of school-aged children, and cost savings due to reduced transportation and health care



Release of Surgeon General's Call to Action on Walking. Photo by Todd Eytan

needs (DiMaggio and Li, 2013; McDonald et al, 2014; McDonald, 2015a). However, with recent changes to federal funding for this program, states are faced with tough decisions about how to continue their SRTS activities.

In 2010, the U.S. Department of Health and Human Services (HHS) announced its updated 10-year plan for national health improvements (USHHS, 2010b), including renewing a goal to “improve health, fitness, and quality of life through daily physical activity” (USHHS, n.d.). In 2015, the U.S. Surgeon General released a *Call to Action to Promote Walking and Walkable Communities* that called for “improved access to safe and convenient places to walk and wheelchair roll, as well as for a culture that supports these activities for people of all ages and abilities.” (USHHS, 2015).

U.S. Transportation Secretary Foxx announced in 2014 that the department will support design improvements to ensure safe and efficient routes for pedestrians and bicyclists, promote behavioral safety, and provide education to help travelers make safer choices (USDOT, 2014a). Implementation of the plan includes USDOT staff working with local officials, advocacy groups, safety organizations, practitioners, and researchers across the country to identify needs and strategize improvements to the nonmotorized transportation network.

Increasing equity in public processes

Increasing public participation in bike-ped advocacy and the civic process aimed at improving conditions for biking and walking has become more prominent in recent years with a fresh focus on equity, diversity and inclusion.

Historically, the civic bodies that advise and inform decisions about biking and walking often have not been representative of the community. A 2012 study of bicycle and pedestrian advisory

committees in California found that women comprised 24% of members serving on the 42 bike or bike/ped advisory committees (Nixon and Deluca, 2012). A 2006 analysis by the Brookings Institute found that, in the 50 largest metropolitan areas, suburban communities and white residents experienced considerable over-representation in Metropolitan Planning Organization votes. On average, only 29% of board votes represented urban jurisdictions, despite the fact that 56% of residents within the MPO regions lived in the urban jurisdictions. In addition, more than 88% of MPO voting members were white (Sanchez, 2006).

There is evidence of growing emphasis on equitable planning within these bodies. A scan of bicycle and pedestrian master plans from 38 communities conducted by Advocacy Advance found that half of the plans made explicit mention of equity along with several associated terms describing race, family characteristics, and income (Advocacy Advance, 2015).

Enforcement

In creating safe spaces, different segments of the population may bear a disproportionate brunt of enforcement, affecting their propensity to walk or bike. An investigation in Tampa, Florida, found that 80% of bicycle tickets given by police are to African Americans, who make up 25% of the population (Zayas and Stanley, 2015). In New York City, a study showed that 12 of the 15 neighborhoods with the most citations for riding on sidewalks were predominantly Latino or African American, while 14 of the 15 with the fewest were primarily white (Levine and Siegel, 2014).

Validating the Lived Experiences of Immigrants

By James Rojas, urban planner, founder of Place It! and Latino Urban Forum

Validating people's lived experiences is critical to engaging and integrating underrepresented communities into the urban planning process. A process by which people reveal who they are, where they come from, and what they value is the first step in building key relationships.

Through Place It, I have facilitated over 400 workshops that allowed me to experiment with and develop new public engagement strategies targeting previously overlooked stakeholders, such as women, youth, immigrants, and people of color.

Because they primarily work in professional settings isolated from the communities they serve, urban planners tend to view the public as a means to an end for policy and plans—not as human beings with feelings and cultural influences. Planning meetings are usually large venues or contentious so participants have a hard time connecting with others.

Members of the public who participate in the planning process need to support in working together and in developing a shared sense of ownership over their places; this is especially important for new participants. My assumption is that anyone can be an urban planner, with something to offer to urban planning and design. If planning professionals want to access crucial

community knowledge, they must start with an effective engagement strategy rooted in respect for difference.

Creating a Safe Space

Setting: The setting in which the outreach activity takes place is critical. I prefer places where people routinely and organically gather, such as a mall, park, school, corner store, laundromat, etc. For my workshops, I use smaller venues that enable an intimate atmosphere where 10-30 participants can physically bond.

Nonverbal Communication: How we communicate is critical to building trust between city planners and participants. Cities have their own nonverbal spatial and visual languages. Residents often use that language much more intuitively than they would a planning vocabulary. Having participants build solutions with objects rather than asking them to describe their world in technical language makes it possible to communicate this experiential knowledge.

Validation: With a supportive setting and an accessible structure for delivering feedback, facilitators validate that no "wrong" experiences can be shared during the activity. I have found that starting from childhood memories can bring strangers from very different backgrounds together into a shared emotional

Health Impact Assessments (HIAs): Examples of outcomes related to bicycling and walking

By Stephen Skowronski, Public Health Advisor, Centers for Disease Control and Prevention

Davidson Walks and Rolls: Active Transportation Master Plan Rapid HIA

Summary: In 2013, the Town of Davidson, North Carolina included an HIA as part of their efforts to develop an Active Transportation Plan to broaden the health considerations typically considered within pedestrian or bicycle planning to include increased accessibility, mental health, and health equity. The HIA was included as an Appendix in the final Master Plan. http://www.healthimpactnc.com/wp-content/uploads/2012/11/AppxA_RapidHIA_LowRes.pdf

Key outcomes: The findings of the HIA were used to inform the identification and prioritization of infrastructure projects in Davidson to increase the connectivity of the active transportation network and promote health equity.

Pathways to a Healthier Decatur: A Rapid HIA of the City of Decatur Community Transportation Plan

Summary of project: The City of Decatur, Georgia, developed a Community Transportation Plan to set a course for a transportation/land use

space. Everybody likes talking about their own lives, especially about their favorite childhood memories. Building childhood memories with objects also allows participants to discover how they orient themselves toward places and people. The shared activity reveals how age, racial, economic, and professional differences shape individual perspectives on place.

Community Planning

Now that workshop participants have a sense of what they consider important about place, they collaborate in teams to build urban planning solutions. This collaboration is designed to promote the teams' sense of agency in the planning process. The communal nature of this process provides a platform that everyone can participate in regardless of typical barriers, such as language, age, ethnicity, and professional training.

By building with objects in space, participants can share ideas for which they might not have words. Team members quickly test their ideas and design interventions with others. Through negotiations, new ideas emerge and become collaborative projects. In no time, the models begin to take shape. Once the time is up, each team presents their solutions, usually with conviction and enthusiasm.

In developing a variety of solutions based on their detailed understanding of the built environment, the teams reveal social and cultural patterns central to their experiences of place. Planning professionals would not normally have access to



these shaping factors if they were not from the area or background. The participants tap into their individual imaginations and the community's assets to introduce inspirational ideas into the planning process.

When participants bring their life experiences into an open community-planning process, they enjoy a greater sense of empowerment about civic participation. It also gives planners important material that will enable them to serve more community needs.

Read more: <http://bit.ly/rojasplanningprimer>

connection to make their city a healthy place to live and work; to maintain a high quality of life in their city; and to increase opportunities to use alternative modes of transportation. To evaluate the Plan's goals from a health perspective, the City requested an HIA of the Plan. <http://www.pewtrusts.org/~media/Assets/2007/01/01/cityofdecaturcommunitytransportationplan.pdf>

Key outcomes: The City created an Active Living Division to provide support services that contribute to the quality of life of its citizens. The HIA was noted as an accomplishment when the City was designated as a Silver-level Walk Friendly City in 2011.

South 24th Street Road Diet HIA

Summary of project: The City of Omaha, Nebraska received \$1.2 million in Transportation Enhancement funding for completing a road diet on South

24th Street. The HIA for the project collected health and safety priorities from neighborhood residents and community groups, which were included in the preliminary proposals and heavily referenced by the engineering firms that applied. http://www.pewtrusts.org/en/~media/Assets/External-Sites/Health-Impact-Project/South24RoadDiet11_29_12_assessmentonly.pdf

Key outcome: Once completed, the road diet will improve safety for the 15,000 people who use South 24th Street each day through environmental design updates, like a center turn lane, curb extensions and ADA compliant ramps. These changes are predicted to reduce crashes by 50 per year. The HIA contributed to the project moving faster than other similar projects.

Reading List

- Advocacy Advance. (2015, May). "Active Transportation Equity: A Scan of Existing Master Plans." <http://www.advocacyadvance.org/docs/ActiveTransportationEquityScan.pdf>.
- Advocacy Advance. (2014, June). "How Communities are Paying for Innovative On-Street Bicycle Infrastructure." <http://www.advocacyadvance.org/docs/PayingForInnovativeInfrastructure.pdf>.
- Advocacy Advance. (2014, June). "State Revenue Sources that Fund Bicycling and Walking Projects." http://www.advocacyadvance.org/docs/StateRevenueSources_June2014.pdf.
- Advocacy Advance. (2014, November). "Leveraging Health Funding for Active Transportation Investments." <http://www.advocacyadvance.org/docs/LeveragingHealth.pdf>.
- Advocacy Advance. (2014, December). "How Communities are Paying to Maintain Trails, Bike Lanes, and Sidewalks." <http://www.advocacyadvance.org/docs/Maintenance.pdf>.
- Advocacy Advance. (2014, June). "How Communities are Paying for Innovative On-Street Bicycle Infrastructure." www.advocacyadvance.org/docs/PayingForInnovativeInfrastructure.pdf.
- Advocacy Advance. (2014, June). "State Revenue Sources that Fund Bicycling and Walking Projects." http://www.advocacyadvance.org/docs/StateRevenueSources_June2014.pdf.
- Advocacy Advance. (2014, November). "Leveraging Health Funding for Active Transportation Investments." <http://www.advocacyadvance.org/docs/LeveragingHealth.pdf>.
- Advocacy Advance. (2014, December). "How Communities are Paying to Maintain Trails, Bike Lanes, and Sidewalks." <http://www.advocacyadvance.org/docs/Maintenance.pdf>.
- DiMaggio, C. & Li, G. (2013, February). "Effectiveness of a Safe Routes to School Program in Preventing School-Aged Pedestrian Injury." American Academy of Pediatrics. Pediatrics 131:2. <http://pediatrics.aappublications.org/content/131/2/290.full.pdf>.
- Goodwin, A., Kirley, B., Sandt, L., Hall, W., Thomas, L., O'Brien, N., & Summerlin, D. (2013, April). "Countermeasures that work: A highway safety countermeasures guide for State Highway Safety Offices." 7th edition. (Report No. DOT HS 811 727). Washington, DC: National Highway Traffic Safety Administration. <http://www.ghsa.org/html/publications/countermeasures.html>
- Hunter College (2011, May). "Beyond the Backlash: Equity and Participation in Bicycle Planning." www.hunter.cuny.edu/ccpd/repository/files/es_beyond-the-backlash-2011.pdf
- League of American Bicyclists. "Bike Law University." League of American Bicyclists. www.BikeLeague.org/content/bike-law-university.
- Levine, H. & Siegel L. (2014, April). "Criminal Court Summonses in New York City." The Marijuana Arrest Research Project. <http://marijuana-arrests.com/docs/Criminal-Court-Summonses-in-NYC-CUNY-Law-School-April-24-2014.pdf>.
- McDonald, N.C., Steiner, R.L., Lee, C., Smith, T. R., Zhu, X., & Yang, Y. (2014, December). "Impact of the Safe Routes to School Program on Walking and Bicycling." Journal of the American Planning Association. Pre-publication version https://planning.unc.edu/people/faculty/noreenmcdonald/McDonald_et_al_JAPA_SRTSEvaluation.pdf
- McDonald, N. (2015, May). "Impact of Safe Routes to School Programs on Walking and Biking." Active Living Research. http://activelivingresearch.org/sites/default/files/ALR_Review_SRTS_May2015.pdf.
- Mead, J., Zegeer, C., & Bushell, M. (2014, April). "Evaluation of Pedestrian-Related Roadway Measures: A Summary of Available Research." Pedestrian and Bicycle Information Center. http://katana.hsrc.unc.edu/cms/downloads/PedestrianLitReview_April2014.pdf.
- National Center for Safe Routes to School. (2011, November). "How Children Get to School: School Travel Patterns From 1969 to 2009." http://www.saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf.
- Nixon, H. & DeLuca, C. (2012, April). "An Examination of Women's Representation and Participation in Bicycle Advisory Committees in California." Mineta Transportation Institute. <http://transweb.sjsu.edu/project/1034.html>.
- Sanchez, T. (2006, June). "An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards." The Brookings Institution. <http://www.brookings.edu/research/reports/2006/06/01transportation-sanchez>.
- Shinkle, D. (2015, April). "Pedestrian Crossing: 50 State Summary." National Conference of State Legislatures. <http://www.ncsl.org/research/transportation/pedestrian-crossing-50-state-summary.aspx>.
- Smart Growth America. (2015, March). Safer Streets, Stronger Economies: Complete Streets project outcomes from around the country. <http://www.smartgrowthamerica.org/documents/safer-streets-stronger-economies.pdf>.

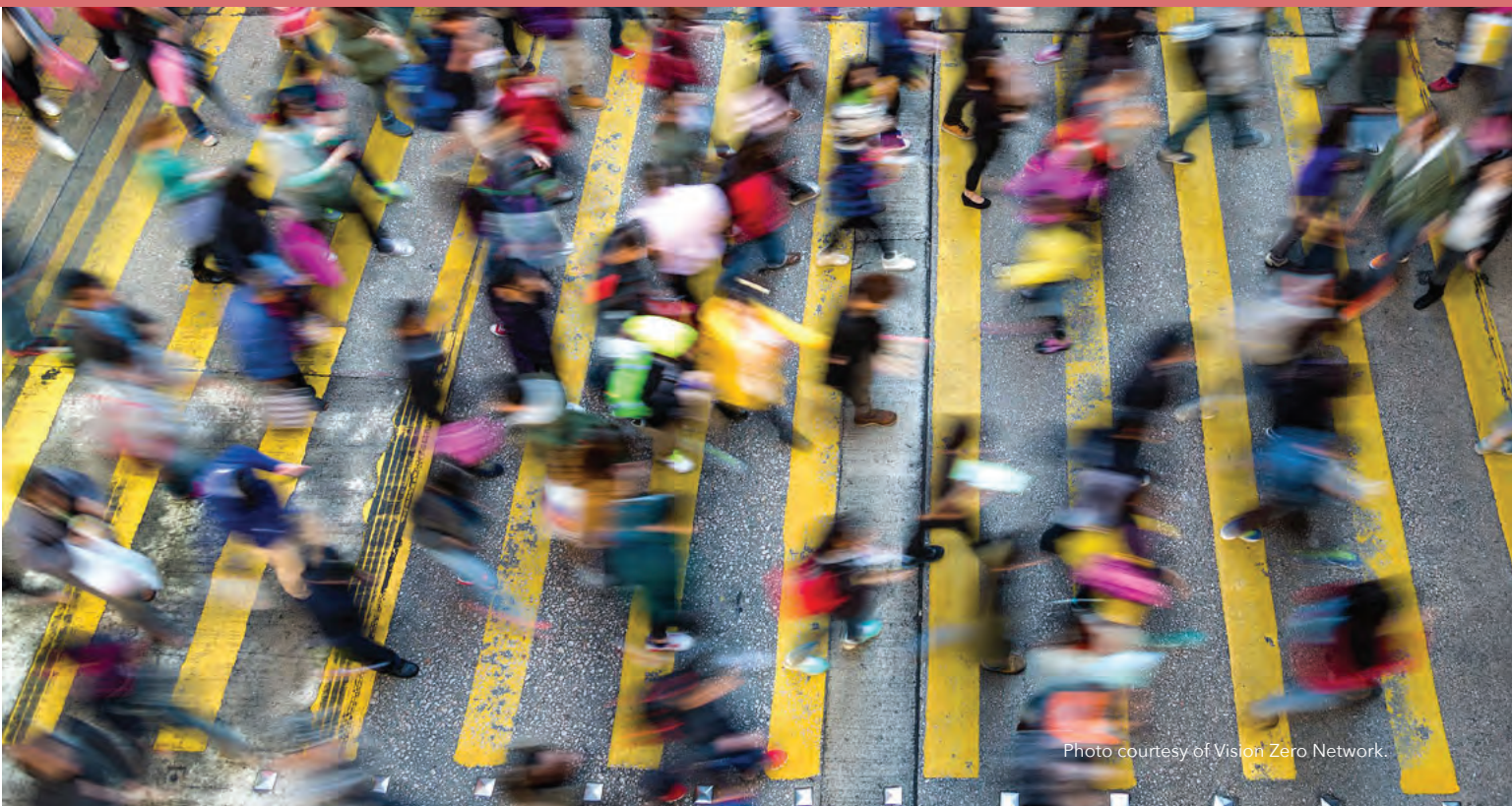


Photo courtesy of Vision Zero Network.

Smart Growth America. (2015, April). "The Fiscal Implications of Development Patterns: Madison, WI." www.smartgrowthamerica.org/documents/fiscal-implications-madison-wi.pdf.

U.S. Department of Health and Human Services. (n.d.). "Health People 2020: Physical Activity." <http://www.healthypeople.gov/2020/topics-objectives/topic/physical-activity>.

U.S. Department of Health and Human Services. (2010, December 2). "HHS announces the nation's new health promotion and disease prevention agenda." [Press release]. http://www.healthypeople.gov/sites/default/files/DefaultPressRelease_1.pdf.

U.S. Department of Health and Human Services. (2015, September). "Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities." Office of the Surgeon General. <http://www.surgeongeneral.gov/stepitup>

U.S. Department of Transportation (USDOT). (n.d.). "Transportation and Health Tool." http://www.fhwa.dot.gov/planning/health_in_transportation/resources/health_tool/.

U.S. Department of Transportation (USDOT). (2014, September). "Safer People, Safer Streets: Summary of U.S. Department of Transportation Action Plan to Increase Walking and Biking and Reduce Pedestrian and Bicyclist Fatalities." http://www.dot.gov/sites/dot.gov/files/docs/safer_people_safer_streets_summary_doc_acc_v1-11-9.pdf.

U.S. Department of Transportation (USDOT). (2015, February). "Beyond Traffic: Trends and Choices 2045." Draft report http://www.dot.gov/sites/dot.gov/files/docs/Draft_Beyond_Traffic_Framework.pdf.

Zayas, A. & Stanley, K. (2015, April). "How riding your bike can lead you in trouble with the cops - if you're black." Tampa Bay Times. <http://www.tampabay.com/news/publicsafety/how-riding-your-bike-can-land-you-in-trouble-with-the-cops--if-youre-black/2225966>

Zimmerman, S. & Kramer, K. (2013). "Getting the Wheels Rolling: A Guide to Using Policy to Create Bicycle Friendly Communities." ChangeLab Solutions. <http://changelabsolutions.org/bike-policies>.

DEDICATED RESOURCES

Dedicated funding makes a big impact

Several federal programs that fund bicycling and walking projects have been shown to have positive impacts on Americans' health, safety, accessibility, and economy. The Safe Routes to School Program provided \$1.2 billion during 2005-2012 and has been credited with increased rates of bicycling and walking to school, decreased rates of injury to those bicycling and walking to school, and lowered costs to tax payers for the health and transportation of children (DiMaggio and Li, 2013; McDonald et al, 2014; McDonald, 2015a).

The Nonmotorized Transportation Pilot Program, established in 2005, granted \$25 million each to four communities to invest in bicycling and pedestrian projects. An analysis of 2007-2013 data from the pilot communities highlights some of the outcomes of the injected funds, including an increase in active transportation, a decrease in the number of bicyclist and pedestrian fatalities, a decrease in injury rates for bicyclists and pedestrians, and a decrease in toxic pollutants being emitted (Lyons et al, 2014).

With impacts like these in just four communities over a seven-year period, dedicated funding for active transportation should be obvious. However, only about 2% of federal transportation dollars are being spent on bicycling and pedestrian projects.

Federal funds are not obligated relative to mode share or public desire

Transportation for America commissioned a national transportation poll in 2007. The results showed a vast discrepancy between how respondents would allocate federal funds (22% to bicycling and walking, 41% to public transportation, 37% to roads) and how the transportation budget was actually allocated at that time (1% to bicycling and walking, 20% to public transportation, 79% to roads) (Gotschi and Mills, 2008). A national survey commissioned by America Bikes in 2012 found that 83% of Americans support maintaining or increasing federal funding for sidewalks, bike lanes, and bike paths. Respondents in all gender, age, income, and racial groups reported support for federal funding for biking and walking. Support was also high regardless of political identification, educational background, region, and community type (America Bikes, 2012).



www.BikeTexas.org

Many statewide advocacy organizations have worked with their state to create a specialized license plate to support bicycle education efforts. For example, drivers in Texas can purchase a "Share the Road Y'all!" specialty license plate, where \$22 of the \$30 fee goes directly towards the Safe Routes to School Program run by BikeTexas. The plate raised an estimated \$40,000 in one year and has provided matching leverage for \$400,000 in federal grants.

Diverse transportation is supported by diverse funding sources

State and local legislation also determine funding availability for bicycling and walking projects. While the federal legislature is the primary funding source for transportation projects in the U.S., some state legislatures have implemented additional funding mechanisms to set aside money specifically for bicycling and walking. Many states leverage funds for biking and walking infrastructure improvements through matching grants; some states allow motor fuel taxes and registration fees to be used for nonmotorized transportation projects; some states designate spending minimums from the transportation budget for bicycling and walking projects (Shinkle and Teigan, 2008).

Advocacy Advance, a partnership of the Alliance for Biking & Walking and the League of American Bicyclists, has released several reports summarizing funding strategies for active transportation projects. Resources include:

- a summary of state revenue sources, including a table highlighting states with dedicated funding;
- case study examples of funding for biking and walking from health agencies;
- case study examples of ways to pay to maintain trails, bike lanes, and sidewalks; and
- case study examples of ways to pay for on-street bicycle infrastructure.

State and local governments make use of diverse revenue streams for biking and pedestrian projects, beyond what is available

Key outcomes of the Nonmotorized Transportation Pilot Program

From "Nonmotorized Transportation Pilot Program: Continued Progress in Developing Walking and Bicycling Networks" (Lyons et al, 2014).

- \$59 million of additional leveraged funds from federal, state, local, and private sources, as of 2013.
- 85.1 million vehicle miles traveled averted through increased nonmotorized trips between 2009 and 2013.
- 22.8% increase in the number of walking trips, between 2007 and 2013, across all four communities and as high as 56% increase at an individual project site.
- 48.3% increase in the number of bicycling trips, between 2007 and 2013, across all four communities and as high as 115% increase at an individual project site.
- ¼-mile bicycle network access expanded to approximately 240,000 people, 160,000 household units, and 102,000 jobs.
- An estimated total of 9,065 tons of CO₂ pollution prevented in 2013, or approximately 25 pounds per capita.
- An estimated 3.6 million gallons of gasoline saved between 2009 and 2013.
- A collective 20% decrease in the number of pedestrian fatalities and between 17.9% and 55.1% decrease in pedestrian injury rates in each community (2002-2012).
- A collective 28.6% decrease in the number of bicyclist fatalities and between 8.6% and 38.2% decrease in bicyclist injury rates in each community (2002-2012).
- Economic cost of mortality from bicycling reduced by \$46.3 million in 2013.

from federal funds. Advocacy Advance has compiled summary descriptions of these sources, as well as a table showing which states have used each strategy. The most impactful strategy is to establish a dedicated source of revenue that can fund biking and walking projects sustainably for many years. State legislators authorize such funds via statute. As of 2014, nineteen states have established dedicated revenue sources for biking and pedestrian projects (Advocacy Advance, “State Revenue Sources,” 2014).

The following examples highlight funding strategies implemented by states:

- A state or city general fund is a flexible, yet relatively stable revenue source, collected from resident taxes and fees. General fund money can be used for a variety of projects, including bicycle- and pedestrian-specific projects.
- Sales of special license plates (such as those with the “Share the Road” message) are set up to fund bicycling and walking advocacy organizations or state administered programs.
- Local planning assistance grants use funds from state departments of transportation or health. The grants typically fund

communities creating or updating transportation plans and programs.

- Development impact fees are charged to developers to cover service costs related to new infrastructure or operations. The fees are usually collected at the local level and can be applied to off-site services, including improving local transportation options through enhancements to pedestrian, bicycle, and transit infrastructure.
- A state gas tax is imposed on fuel sales and is being used to improve active transportation options.
- Fines collected from motorist speeding in school zones are being applied to safety enhancements for pedestrians and bicyclists, particularly near schools.
- The combined resources of public private partnerships allow governments to provide services (such as transportation infrastructure) without raising taxes on the populace.

Reading List

Advocacy Advance. (2014, June). “State Revenue Sources that Fund Bicycling and Walking Projects.” http://www.advocacyadvance.org/docs/StateRevenueSources_June2014.pdf.

America Bikes. (2012). “National Poll: Americans Support Funding for Sidewalks and Bikeways.” America Bikes. http://bikeleague.org/sites/default/files/America_Bikes_White_paper_final.pdf

DiMaggio, C. & Li, G. (2013, February). “Effectiveness of a Safe Routes to School Program in Preventing School-Aged Pedestrian Injury.” American Academy of Pediatrics. *Pediatrics* 131:2. <http://pediatrics.aappublications.org/content/131/2/290.full.pdf>.

Gotschi, T. & Mills, K. (2008). “Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking.” Rails-to-Trails Conservancy. <http://www.railstotrails.org/resource-library/resources/active-transportation-for-america/>.

Lyons, W., Rasmussen, B., Daddio, D., Fijalkowski, J., & Simmons, E. (2014, May). “Nonmotorized Transportation Pilot Program: Continued Progress in Developing Walking and Bicycling Networks.” http://www.fhwa.dot.gov/environment/bicycle_pedestrian/ntpp/2014_report/hep14035.pdf.

McDonald, N. (2015, May). “Impact of Safe Routes to School Programs on Walking and Biking.” Active Living Research. http://activelivingresearch.org/sites/default/files/ALR_Review_SRTS_May2015.pdf.

McDonald, N.C., Steiner, R.L., Lee, C., Smith, T. R., Zhu, X., & Yang, Y. (2014, December). “Impact of the Safe Routes to School Program on Walking and Bicycling.” *Journal of the American Planning Association*. Pre-publication version https://planning.unc.edu/people/faculty/noreenmcdonald/McDonald_etal_JAPA_SRTSEvaluation.pdf



Buffered bike lane in Chicago.
Photo courtesy of the Green Lane Project.

ENGAGED PUBLIC

Perceptions of biking and walking

Engaging more people in biking and walking requires more than facilities, funding, infrastructure, and legislation. As street anthropologist, Adonia Lugo, PhD, writes: “Both inanimate infrastructures and living practices should be taken into account when analyzing urban mobility... People can be infrastructure. They create networks in which they hold places of meaning and value. Instead of reducing movement in the street to an individual engagement with physical transport infrastructure, the concept of human infrastructure emphasizes the role of social interaction in how people move” (Lugo, 2013).

Indeed, a diversity of factors influence public perceptions and adoption of biking and walking. A national survey conducted by Princeton Survey Research Associates International in 2012 found that more than 60% of respondents in all demographic categories — gender, race, income, education and political affiliation — agreed that their community would be a better place if biking were safer and more comfortable. Similarly, more than 75% of respondents in all demographic categories had a “positive view” of bicyclists (America Bikes, 2012).

However, while the majority of all respondents agree that more bike lanes and trails would encourage them to ride more (55%), non-white respondents were significantly more likely than white respondents to indicate that social factors — including people to bike with (50% vs. 39%), learning more about safe cycling skills (39% vs. 20%) and an active advocacy organization or club (36% vs. 24%) — would increase their cycling (America Bikes, 2012).

Biking and walking may be intertwined with social status. For instance, a study from Rutgers found that newly arrived immigrants are 41 times more likely to ride a bicycle than native-born Americans

— but, over the course of a decade, immigrants’ automobile mode share rises from 30% to nearly 42%, while bicycle mode share dropped from 1.8% to 0.5%. Income could be a factor, the report suggests, as higher income is typically associated with higher automobile usage rates (Smart, 2010).

A study in Davis, CA, found that, while 70% of participants indicated that they “liked biking” in elementary school, in middle school it dropped to 39% and by high school only 20% of participants claimed that they liked biking. Nearly a third of participants highlighted the connection between their attitude toward bicycling and the acquisition of a driver’s license by themselves or their friends (Underwood et al, 2013).

Household responsibilities can also play a role in diminishing the feasibility of active transportation, as well. A 2014 study found that, even in households where women earn more, are better educated, and work more hours than their partners, these women still make 1.5 times as many child-serving trips and 1.4 times as many grocery trips as their male partners (Smart et al, 2014).

The growing advocacy movement

Because of these many competing and intersecting factors, increasing the number of people who bike and walk isn’t simply about making active transportation safe and practical but also appealing and inviting. And a rising number of groups with growing capacity are helping to do exactly that.

Since the founding of the Alliance in 1996, the number of member organizations — state and local biking and walking advocacy organizations — has grown from 12 to more than 210. To begin to benchmark the trends and impact of the People Powered Movement, the Alliance conducted a State of the Movement survey of its member organizations in 2015.

Empowering People with Disabilities through Bicycling

By Laura Padalino, Active Transportation Initiative Coordinator, PEAC

As an organization that has been actively advocating for equitable bicycling options for all people since their inception in 2004, Programs to Educate all Cyclists or PEAC is encouraged to see the ways the broader bicycling movement is quickly recognizing the capacity of the bicycle as a vehicle of social change. From young people of color in Seattle to women in Afghanistan, the bike continues to empower underrepresented voices to take a seat at transportation decision-making tables.

Hailing from southeast Michigan, PEAC's mission is to empower individuals with disabilities through bicycling. Each summer, their seven-week bike program teaches over 240 individual with disabilities how to ride a bike. Student goals range from pedaling and steering a tricycle to balancing a two-wheel bike to riding 100 miles on a tandem. Bicycling may look different for every person, but PEAC know that everyone can ride.

PEAC thinks of the bike as empowering in three main ways. First, the bike promotes physical, mental, & emotional strength. Children and adults with disabilities are more likely than their peers without disabilities to suffer from obesity and depression. Bicycling offers a way for people to stay active and have fun. Kaitlin was born with Spina-bifida, and uses a wheelchair and crutches for mobility. Following hip surgery when she was 8-years old, Kaitlin and her parents were looking for a way to strengthen and move her legs. In 2008, Kaitlin learned to ride the tricycle and tandem. Last summer, Kaitlin learned how to ride a hand-cycle, and completed her first 12-mile ride this fall. Since then, she has competed in 8 bicycling events and is seeking ways to build awareness of hand-cycling.

Second, the bike is integrative and inclusive and offers people with and without disabilities the opportunity to spend time together. Very often, kids with disabilities go to school on separate buses, and are educated in separate classrooms from kids without disabilities. Going on a bike ride is one way that people with and without disabilities can spend time together. This summer, PEAC worked with a 12-year old boy with autism who had never learned to balance a two-wheel bike. This is what his mom had to say when he learned how: "Riding a bike is such a 'rite of passage' for kids and Josey experienced a tremendous amount of sadness about not being able to ride a bike. It was

such a joyous day for us watching him ride all on his own. When I tucked him in last night he said, 'Mom, this was the best day ever!' This is one less thing that will stand in his way in social opportunities with other kids."

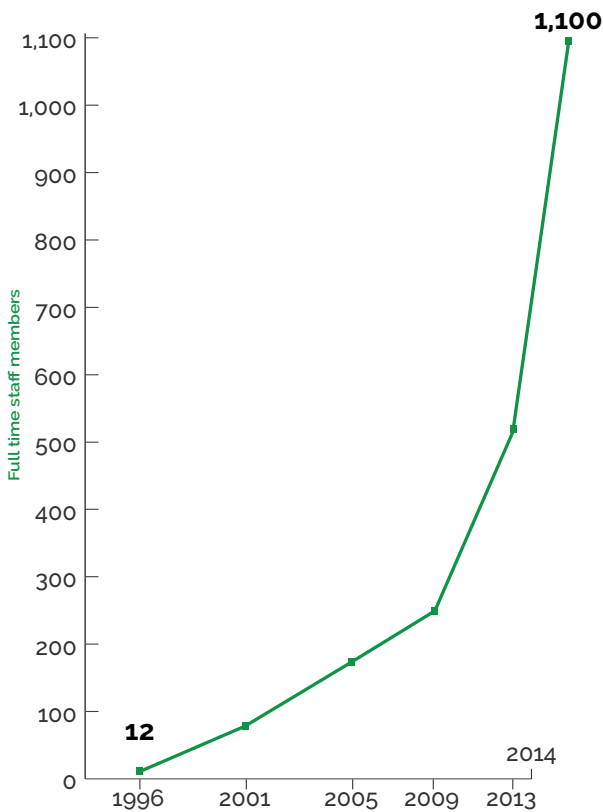
Finally, the bike offers individuals who cannot drive due to a disability an independent mode of transportation; it provides access to communities and a spontaneous, independent lifestyle. James has Cerebral Palsy and will not be able to get a driver's license. However, he does not let that stop him; James lives in his own apartment and his bike is his primary mode of transportation. He rides his bike to get to class, volunteer events, and his job on Eastern Michigan University's football team.

To learn more a bikeprogram.org or email info@bikeprogram.org.



Photo courtesy of PEAC

Full-time staff at Alliance organizations

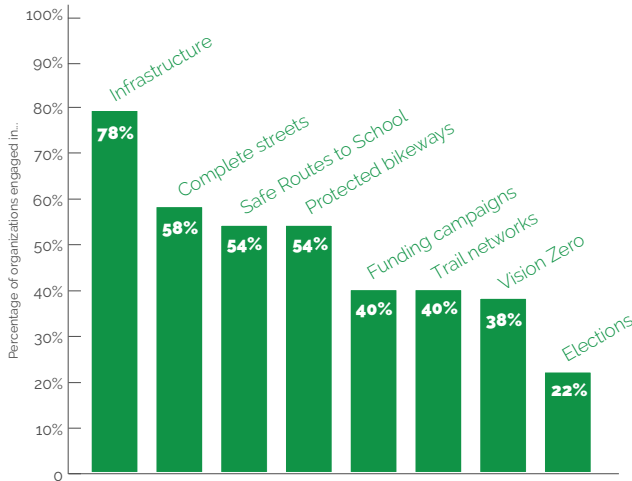


According to the survey, the vast majority of respondents work on bicycling (97%), or biking and walking (32%). Only 3% of respondents work solely on pedestrian issues. Nearly 80% focus on bicycling and walking at a single scale, with half of Alliance member organizations working at the city level, 38% working on a regional scale, and 29% including state/province-wide efforts.

In 1996, the 12 member organizations of the Alliance had just 10 full-time employees. That number skyrocketed to 1,100 full-time staff across 211 organizations by 2014. The pace of growth has accelerated in recent years, with staff doubling in size since 2013. The average size of staffed organizations is now six people. However, passion — rather than pay — is still a key catalyst for the People Powered Movement. Fully one-third of Alliance member organizations are volunteer run, and 10% have only one full-time employee.

Overall, Alliance members organizations reported a collective \$88 million in budgets in 2014 — a remarkable leap from the \$10,000 total budget reported by Alliance members in 1996. While many still dependent on membership as a major funding source, the majority of organizations (56%) have some alternative membership structure — for instance, offering different levels to accommodate students and seniors, or volunteering time rather than providing monetary contributions.

Most common campaigns at Alliance organizations



Of the more than 1,000 people working for Alliance member organizations, 47% are women. Looking more close at the distribution of female staffers, 32% of member organizations are staffed by mostly women (70-100% of staff), while 49% of organizations have no women on staff. People of color represent 15% of Alliance member organizations' staff, compared to 18% across the non-profit sector as a whole. Meanwhile 65% of responding member organizations have no people of color on staff. Very few organizations (1 in 5) have surveyed their members for demographic information,

Every Body Walk! Collaborative

The Every Body Walk! Collaborative is leading the national walking movement to increase walking and walkable communities throughout the U.S. The Collaborative is a cross-industry partnership of over 100 national, state, and local organizations that are inspiring a shift in our walking culture, behavior, and built environment. The collaborative network pushes for action, promotes successful local walking programs, and shares resources.

In 2011, Kaiser Permanente initiated Every Body Walk! as a public awareness campaign. In 2012, the campaign emerged into a collaborative at an EBW! conference of diverse stakeholders, including leaders from the public health, business, education, design, transportation, and the environment sectors. Kaiser granted the non-profit America Walks with two-years of funding to get the Collaborative started.

Visit their website (www.everybodywalk.org/collaborative) to become a partner, view the collective's 2020 vision, or download walking resource toolkits for workplaces, schools, and other groups.



Benchmarking the Bike/Walk Movement

Since 2007, the Alliance has compiled this Benchmarking Report to provide sophisticated analysis and credible data on biking and walking in all 50 states and a number of key cities. But mode share and crash rates aren't the only statistics that matter in our work. The Alliance is equally invested in the advocacy that drives those outcomes: The benchmarks of the People Powered Movement itself.

To take meaningful, accountable steps forward, we have to know where we stand today.

Thanks to the participation and sharing of information from our member organizations, *The State of the Movement* report helps us understand who we are, what our key priorities are, where our efforts are focused and how we are working to advance biking and walking in our communities. And by identifying these initial benchmarks we aim to set an informed stage for a much larger and nuanced discussion about shared challenges, emerging trends and our best collective course forward.

The State of the Movement data isn't perfect. And this report isn't a prescription – or indictment – of where we stand or where we're going. The State of the Movement is a starting point for a deeper conversation.



The State of the Movement

Benchmarking biking and walking advocacy

November 2015



Alliance for Biking & Walking

Read more and download the full report at <http://bit.ly/1kwqJ5A>

and only 25% feel that their membership is representative of the surrounding community.

In programming, more than two-thirds of respondents (68%) ranked annual events (like a major fundraiser or signature ride/walk) as significant or very significant, while 60% of respondents cited advocacy events (like walking audits, demonstrations, or state summits) as significant or very significant. Nearly half of respondents (47%) reported safety education / cycling classes as significant or very significant.

The leading initiatives undertaken by Alliance member organizations are general infrastructure campaigns with 79% respondents citing that as a current campaign. More than half of respondents were also engaged in complete streets (58%), protected bikeways (54%) and Safe Routes to School (54%). Funding campaigns and trail systems (both 40% respectively), and Vision Zero (38%) were also significantly represented, with 22% involved in local/state elections.

Broadening movements

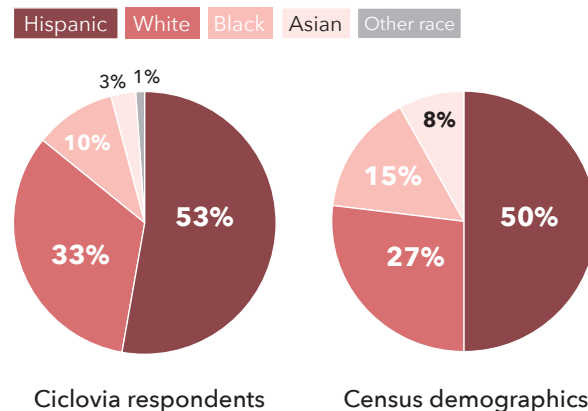
Leadership in biking and walking advocacy is broadening in its approach and scope (League, 2014). At the national level, this can be seen in rising attendance at events like the National Women's Bicycling Forum, which doubled in participation from 200 to 400 registrants between 2012 and 2014 alone; the Youth Bike Summit, which boasted more than 425 participants in 2015, the majority of whom were youth; and the annual gathering of the National Brotherhood of Cyclists, which celebrates and connects African-American riders and advocates.

At the local level, identity-oriented groups are engaging more diverse communities. Established in 2012, GirlTrek is mobilizing African-American women to walk for their health, with more than 35,000 women (as of May 2015) having taken the pledge to re-establish walking as a healing tradition in black neighborhoods. Black Girls Do Bike, a group for African-American cyclists, has also grown rapidly with 52 chapters across the country and more than 8,600 members.

Open Streets initiatives aren't just gaining in popularity, but expanding the spectrum of community residents who see biking and walking as an inviting activity. CicLAvia in Los Angeles, Calif., regularly engages more than 100,000 people to use miles of car-free streets to bike, walk and enjoy other physical activity. By prioritizing routes in all sectors of the city, many Open Streets events touch a more diverse cross-section of their communities. For instance, in a 2012 survey of 303 CicLAvia participants, 40% of respondents were Latino, 15% were Asian and 6% were black, and 60% of respondents said they wanted more frequent Open Streets events (Johnson, 2012). An evaluation of the New Brunswick Ciclovía in New Jersey also found that participants closely mirrored the demographics of the community — where nearly 50% of residents identify as Hispanic — and nearly 92% said that Ciclovía inspired them to “consider walking or bicycling more” (Brown and Martin, 2014).

Slow Roll in Detroit got thousands of its citizens to consider riding when it started a weekly event that's explicitly geared for everyone. The slow pace “keeps the group safe and gives riders a unique perspective of our great city and its neighborhoods” — and it's grown to more than 3,000 people per ride in the Motor City with additional chapters in Chicago, Cleveland, Buffalo, and Washington, DC.

New Brunswick Ciclovía Participation vs. City Census Demographics



Source: Brown & Martin



Participants at the 2015 Youth Bike Summit in Seattle, WA.
Photo courtesy of Bike Works.

Reading List

- America Bikes. (2012). "National Poll: Americans Support Funding for Sidewalks and Bikeways." America Bikes. http://bikeleague.org/sites/default/files/America_Bikes_White_paper_final.pdf
- Brown, C., & Martin, H. (2014). "Evaluation Report: The New Brunswick Ciclovía 2013." Alan M. Voorhees Transportation Center - Rutgers University. <http://togethernorthjersey.com/?grid-portfolio=ciclovía-planning-outreach-and-program-evaluation>.
- League of American Bicyclists. (2014). "The New Movement: Bike Equity Today." The League of American Bicyclists. <http://bikeleague.org/content/new-report-bike-equity-today>.
- Lugo, A. (2013, June). "CicLAvia and Human Infrastructure in Los Angeles: Ethnographic Experiments in Equitable Bike Planning." Journal of Transport Geography. <https://escholarship.org/uc/item/3fj825jv>.
- Smart, M. (2010). "U.S. Immigrants and Bicycling: Two-Wheeled in Autopia." Transport Policy. <http://www.sciencedirect.com/science/article/pii/S0967070X10000132>
- Smart, M., Ralph, K., Taylor, B., Turley, C., & Brown, A. (2014). "Honey, Can You Pick-Up Groceries on Your Way Home? Analyzing activities and travel among students and in non-traditional households." University of California Transportation Center. <http://www.lewis.ucla.edu/publication/honey-can-pick-groceries-way-home-analyzing-activities-travel-among-students-non-traditional-households/>
- Underwood, S., Handy, S., Paterniti, D., & Lee, A. (2014, January). "Why do teens abandon bicycling? A retrospective look at attitudes and behaviors." Journal of Transport & Health. <http://www.sciencedirect.com/science/article/pii/S2214140513000145>.

Finding Leaders from Within: The Case of Go Bronzeville and Go Pilsen

By Maggie Melin, Active Transportation Alliance

"I can't believe I did 3 miles with a cane!" -82-year old, Go Bronzeville participant

In 2013, Go Bronzeville, a four-month City of Chicago educational campaign designed to encourage residents to bike, walk, and use public transportation more often, rooted itself into the historically African American neighborhood of Bronzeville through the work of community partners and two local Ambassadors hired from within the community. Two years later, the program continues as a grassroots, volunteer-led effort focused on encouraging residents of all ages to enjoy the community and city through more active forms of transportation.

Go Bronzeville is one of five neighborhood campaigns launched by the City of Chicago thanks to a Congestion Mitigation and Air Quality Improvement Program (CMAQ) federal grant. The City hired Alta Planning + Design and the Active Transportation Alliance to manage the programs between 2013 and 2016 with the ultimate goal of reducing drive-alone trips and increasing trips made by foot, bicycle, transit, and carpool. Each campaign targets 7,500 households and focuses on collaborating with community leaders, businesses and residents; offering free resources and personalized travel information to residents; and organizing biking, walking and transit events for those in the community.

Before Go Bronzeville kicked-off in the community in 2013, the Active Transportation Alliance reached out to local Bronzeville organizations and leaders to gather advice on how to encourage residents' participation. As a traditionally underserved community, Bronzeville has often dealt with outside groups temporarily coming in to "fix" a problem and then leaving soon after. Rightfully, Go Bronzeville, a City of Chicago program, was initially received with reservation and concern that residents might not find the program to be a good fit with the local culture.

However, Go Bronzeville had yet to hire two local residents who would act as the program's Outreach Ambassadors and encourage those in their community to try alternative forms of transportation. Through the help of Bronzeville churches, schools, and community groups, word spread about the program and the job openings and soon two local Ambassadors were hired.

The Ambassadors of Go Bronzeville, Ronnie Matthew Harris and LaKeisha Hamilton, became the key to the success of the campaign. They came to the job with existing, authentic relationships and understood how to motivate and inspire their community members, more so than any outside individual or organization not deeply connected to the community.

According to Go Bronzeville Ambassadors LaKeisha Hamilton, "We made biking real and tangible to residents. They would say 'Wait a minute, she looks like me, and she looks cool riding her bike.'" She continued, saying, "When it comes to walking and biking, a lot of people need to be pushed, because sometimes they'll say, 'Oh I can't do it.' So



Go Bronzeville Ambassadors: LaKesha Hamilton (far left) and Ronnie Matthew Harris (far right) at the Bud Billiken Parade

Photo courtesy of Chicago Department of Transportation



LaKesha, Go Bronzeville Ambassador
Photo courtesy of Chicago Department
of Transportation

we became coaches and mentors, saying, ‘Yes you can, let’s try this out.’” (Streetsblog Chicago Interview).

By the end of the 4-month program, over 750 residents signed up as program participants. The Ambassadors additionally spoke to hundreds more at festivals, park gatherings, community meetings and helped organize 10 group walks and bike rides around the area. Event highlights included the Bronzeville Legends Identity Bike Tour where bicyclists were led to the homes of famous Bronzeville residents including Louis Armstrong and Muddy Waters, and the King Drive Women’s Wellness Walk where Go Bronzeville teamed up with local churches and the national nonprofit organization GirlTrek to lead a 3.2-mile walk up and down a prominent street in the community.

In subsequent years, the Go campaigns experienced similar success in other Chicago neighborhoods. Go Pilsen was launched in the summer of 2014 in the Mexican-American neighborhood of Pilsen. The local Ambassadors hired to represent the program were native Spanish-speakers and were able to connect with residents in ways that made many feel at ease and more encouraged to give biking, walking, and transit a try.

Collaboration with community partners on event ideas and planning brought additional attention to active transportation in creative and fun, new ways. One organized bike ride involved riding from the community farmers market to a community garden where a local bike shop brought a smoothie bike machine and a local juice vendor helped make pedal-powered smoothies for everyone. Another ride began with participants decorating their bikes in glow-in-the-dark accessories and ended with a star party in a park with a local astronomer.

In both cases, Go Bronzeville and Go Pilsen were embraced by their communities, in large part due to the dedication, energy, and enthusiasm of the Outreach Ambassadors and the support of community leaders. The Ambassadors became community role models that people trusted. Even after the City-led campaigns ended, former Ambassador Ronnie Matthew Harris voluntarily took ownership of the Go Bronzeville campaign and today continues to act as a leader of active transportation in his community. If we hope to include a broader range of individuals in the world of biking and walking, giving emerging leaders the tools and opportunities they need to do so from within their own communities may be one of the most important steps we need to take.

Streetsblog Chicago interview source:

<http://chi.streetsblog.org/2014/01/07/go-bronzeville-promotes-travel-options-in-the-black-metropolis/>

Part IV.

Show Your Data

Data on walking and bicycling from all 50 states, the 50 most populous U.S. cities and 18 select cities



Protected bike lane in Long Beach, California.
Photo by Allan Crawford.

TRENDS AT THE STATE LEVEL

Biking and Walking in Context: The Role of States

Before looking at biking and walking activities at the city level, it is important to consider the unique situation of the states. Each state government determines local funding priorities, policies, and legislation. For this reason, statewide bike and pedestrian advocacy organizations typically work on legislative campaigns and programs to ensure success at the local level. Many statewide advocacy organizations will host state summits to convene and organize local advocates to meet with state-level representatives and legislators.

Sometimes, state decision makers respond to local calls to action; sometimes they respond to broader initiatives from the federal level. In September 2015, the U.S. Surgeon General released Step It Up!—a call to action promoting walking and walkable communities (www.surgeongeneral.gov/stepitup).

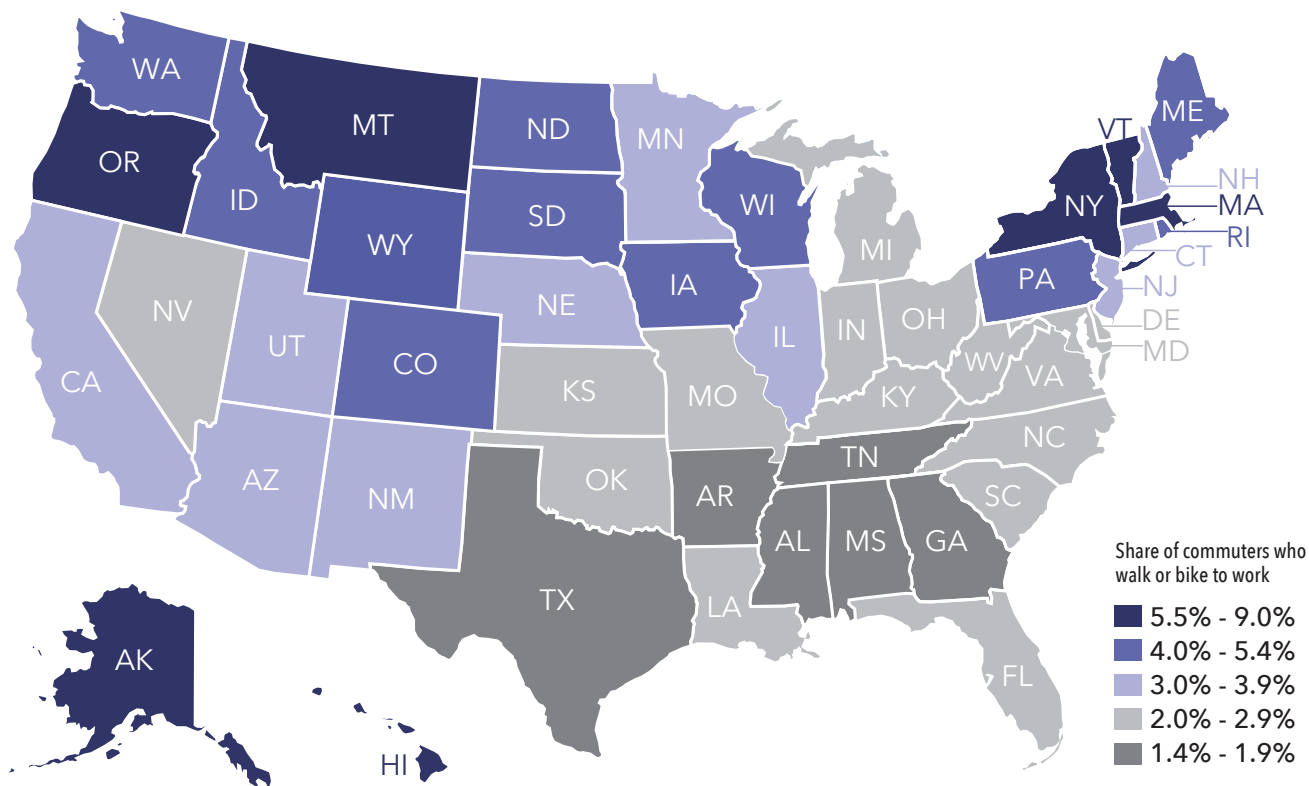
The Call to Action identifies goals that directly endorsing walking as a national priority, including design communities that make it safe and easy to walk for people of all ages and abilities; and promoting programs and policies to support walking where people live, learn, work, and play. The Surgeon General's appeal is yet more encouragement for advocates in their work towards better policies and investments for active transportation.

Working to improve conditions for bicycling and walking statewide has equity implications to consider. Where advocates prioritize resources for the most populated cities or regions of the state, they may overlook the needs of more rural areas. Directing attention to low-populated areas, though, may require more dollars per capita to adequately engage with residents not represented by a local biking and walking advocacy group. Effective advocates are continuously weighing the diverse needs of the populations in their state.



The Register's Annual Great Bike Ride Across Iowa (RAGBRAI) Photo courtesy of RAGBRAI

Levels of Bicycling and Walking to Work in the United States



Source: ACS 2011-2013

Commuter bicycling and walking rates at the state level have changed relatively little in recent years. Oregon remains the state with the highest bicycle to work share at 2.4%, nearly 1% higher than the next two highest states, Montana (1.5%) and Colorado (1.4%).

From 2007-2013, the majority of states showed a decrease in commuting by foot, though most decreases were minimal. Alaska (8.0%) remains the state with the highest share of commuters walking to work, more than 1.5% higher than the next two highest states of New York (6.4%), and Vermont (5.8%).

States in Context: Land Use, Population Density, Population Change, and State Revenue

Larger population change between 2000-2010

35.1%	Nevada
24.6%	Arizona
23.8%	Utah
21.1%	Idaho
20.6%	Texas
18.5%	North Carolina
18.3%	Georgia
17.6%	Florida
16.9%	Colorado
15.3%	South Carolina
14.6%	Delaware
14.1%	Wyoming
14.1%	Washington
13.3%	Alaska
13.2%	New Mexico
13.0%	Virginia
12.3%	Hawaii
12.0%	Oregon
11.5%	Tennessee
10.0%	California
9.7%	Average of all States
9.7%	Montana
9.1%	Arkansas
9.0%	Maryland
8.7%	Oklahoma
7.9%	South Dakota
7.8%	Minnesota
7.5%	Alabama
7.4%	Kentucky
7.0%	Missouri
6.7%	Nebraska
6.6%	Indiana
6.5%	New Hampshire
6.1%	Kansas
6.0%	Wisconsin
4.9%	Connecticut
4.7%	North Dakota
4.5%	New Jersey
4.3%	Mississippi
4.2%	Maine
4.1%	Iowa
3.4%	Pennsylvania
3.3%	Illinois
3.1%	Massachusetts
2.8%	Vermont
2.5%	West Virginia
2.1%	New York
1.6%	Ohio
1.4%	Louisiana
0.4%	Rhode Island
-0.6%	Michigan

Higher percentage of urban land

39.7%	New Jersey
38.8%	Rhode Island
38.3%	Massachusetts
37.7%	Connecticut
20.9%	Delaware
20.7%	Maryland
13.8%	Florida
10.8%	Ohio
10.5%	Pennsylvania
9.5%	North Carolina
8.7%	New York
8.3%	Georgia
7.9%	South Carolina
7.2%	New Hampshire
7.1%	Illinois
7.1%	Indiana
7.1%	Tennessee
6.8%	Virginia
6.4%	Michigan
6.1%	Hawaii
5.3%	California
4.6%	Louisiana
4.4%	Alabama
3.6%	Kentucky
3.6%	Washington
3.5%	Wisconsin
3.4%	Texas
3.0%	Average of all States
3.0%	Missouri
2.7%	West Virginia
2.4%	Mississippi
2.1%	Minnesota
2.1%	Arkansas
1.9%	Arizona
1.9%	Oklahoma
1.7%	Iowa
1.7%	Vermont
1.5%	Colorado
1.2%	Kansas
1.2%	Maine
1.2%	Oregon
1.1%	Utah
0.7%	Nevada
0.7%	Nebraska
0.7%	New Mexico
0.6%	Idaho
0.3%	South Dakota
0.3%	North Dakota
0.2%	Montana
0.2%	Wyoming
0.1%	Alaska

Higher density (Number of people per sq mile)

1,195.6	New Jersey
1,005.5	Rhode Island
848.0	Massachusetts
741.5	Connecticut
602.1	Maryland
469.4	Delaware
414.6	New York
358.2	Florida
284.7	Pennsylvania
282.3	Ohio
243.7	California
231.5	Illinois
216.5	Hawaii
206.7	Virginia
200.1	North Carolina
182.4	Indiana
174.0	Michigan
171.1	Georgia
156.9	South Carolina
156.5	Tennessee
147.3	New Hampshire
110.3	Kentucky
105.6	Louisiana
105.4	Wisconsin
103.6	Washington
99.5	Texas
94.9	Alabama
88.5	Average of all States
87.5	Missouri
77.1	West Virginia
67.7	Vermont
67.6	Minnesota
63.6	Mississippi
57.6	Arizona
56.6	Arkansas
55.6	Oklahoma
55.1	Iowa
50.1	Colorado
43.0	Maine
40.6	Oregon
35.2	Kansas
34.8	Utah
25.1	Nevada
24.1	Nebraska
19.3	Idaho
17.2	New Mexico
11.0	South Dakota
10.2	North Dakota
6.9	Montana
5.9	Wyoming
1.3	Alaska

More general revenue dollars per capita

\$16.83	Alaska
\$11.46	North Dakota
\$10.30	Wyoming
\$9.00	Vermont
\$8.50	Delaware
\$8.44	New York
\$7.79	Hawaii
\$7.08	Connecticut
\$6.95	Massachusetts
\$6.87	New Mexico
\$6.68	West Virginia
\$6.60	Rhode Island
\$6.44	Minnesota
\$6.07	New Jersey
\$6.02	Iowa
\$6.02	Maine
\$5.91	Maryland
\$5.87	Arkansas
\$5.87	Mississippi
\$5.86	Oregon
\$5.78	California
\$5.73	Montana
\$5.64	Wisconsin
\$5.50	Michigan
\$5.49	Louisiana
\$5.47	Pennsylvania
\$5.46	Average of all States
\$5.45	Oklahoma
\$5.29	Nevada
\$5.29	Kansas
\$5.27	Ohio
\$5.23	Kentucky
\$5.18	Utah
\$5.17	Washington
\$5.12	Indiana
\$5.09	Illinois
\$5.03	Virginia
\$4.88	North Carolina
\$4.84	South Dakota
\$4.72	Alabama
\$4.69	South Carolina
\$4.64	New Hampshire
\$4.60	Idaho
\$4.46	Arizona
\$4.45	Colorado
\$4.42	Missouri
\$4.34	Texas
\$4.25	Tennessee
\$4.14	Nevada
\$3.88	Georgia
\$3.87	Florida

Smaller population change between 2000-2010

Lower percentage of urban land

Lower density (Number of people per sq mile)

Fewer general revenue dollars per capita

Key



10 states with the highest percentage of commuters biking and/or walking to work



10 states with the lowest percentage of commuters biking and/or walking to work

States in Context: People of Color, Poverty, and Age

Higher percentage of people of color ⁽¹⁾

74.8%	Hawaii	
42.0%	Maryland	
40.6%	Mississippi	
39.4%	Georgia	
37.7%	California	
37.1%	Louisiana	
35.0%	New York	
33.5%	Alaska	
32.9%	South Carolina	
31.3%	New Jersey	
30.9%	Alabama	
30.7%	Virginia	
30.5%	Delaware	
30.2%	North Carolina	
30.1%	Nevada	
27.4%	Illinois	
27.1%	New Mexico	
26.6%	Oklahoma	
26.0% Average of all States		
25.2%	Texas	
23.8%	Florida	
22.3%	Connecticut	
22.0%	Tennessee	
21.9%	Arkansas	
21.8%	Washington	
21.0%	Arizona	
20.7%	Michigan	
20.0%	Massachusetts	
18.8%	Rhode Island	
18.1%	Pennsylvania	
17.3%	Ohio	
17.1%	Missouri	
15.8%	Colorado	
15.7%	Indiana	
14.8%	Oregon	
14.8%	Minnesota	
14.7%	South Dakota	
14.6%	Kansas	
13.2%	Wisconsin	
12.2%	Kentucky	
12.1%	Utah	
11.7%	Nebraska	
10.8%	Montana	
10.6%	North Dakota	
9.2%	Wyoming	
8.6%	Iowa	
8.1%	Idaho	
6.3%	West Virginia	
6.2%	New Hampshire	
4.9%	Maine	
4.9%	Vermont	

Higher percentage of poverty

23.4%	Mississippi	
21.6%	New Mexico	
20.3%	Louisiana	
19.8%	Arkansas	
19.4%	Georgia	
19.3%	Kentucky	
19.1%	Arizona	
19.0%	Alabama	
19.0%	South Carolina	
18.5%	Texas	
18.3%	North Carolina	
18.2%	Tennessee	
18.1%	West Virginia	
17.4%	Florida	
17.4%	Oklahoma	
17.3%	Michigan	
17.3%	Oregon	
17.1%	California	
16.3%	Nevada	
16.2%	Idaho	
16.2%	Ohio	
16.1%	New York	
16.1%	Missouri	
16.0%	Montana	
16.0%	Indiana	
15.9% Average of all States		
14.8%	Illinois	
14.4%	South Dakota	
14.4%	Rhode Island	
14.3%	Maine	
14.2%	Washington	
14.1%	Kansas	
13.8%	Colorado	
13.8%	Pennsylvania	
13.4%	Wisconsin	
13.4%	Utah	
13.3%	Nebraska	
13.0%	Iowa	
12.4%	North Dakota	
12.2%	Delaware	
12.1%	Wyoming	
12.0%	Massachusetts	
11.9%	Virginia	
11.7%	Hawaii	
11.7%	Minnesota	
11.7%	Vermont	
11.0%	New Jersey	
10.8%	Connecticut	
10.4%	Maryland	
10.2%	Alaska	
9.1%	New Hampshire	

Older population (median age)

43.6	Maine	
42.2	Vermont	
41.9	New Hampshire	
41.6	West Virginia	
41.2	Florida	
40.4	Pennsylvania	
40.3	Connecticut	
39.8	Montana	
39.7	Rhode Island	
39.4	Michigan	
39.3	Massachusetts	
39.3	New Jersey	
39.2	Ohio	
39.1	Delaware	
38.9	Oregon	
38.9	Wisconsin	
38.4	Kentucky	
38.4	South Carolina	
38.3	Alabama	
38.3	Tennessee	
38.2	Hawaii	
38.1	Iowa	
38.1	Maryland	
38.1	Missouri	
38.1	New York	
37.8 Average of all States		
37.8	North Carolina	
37.6	Arkansas	
37.6	Minnesota	
37.6	Virginia	
37.4	Washington	
37.2	Indiana	
37.0	Illinois	
36.9	Nevada	
36.8	New Mexico	
36.8	South Dakota	
36.8	Wyoming	
36.6	Arizona	
36.4	Mississippi	
36.2	Colorado	
36.2	Nebraska	
36.2	Oklahoma	
36.0	Kansas	
36.0	Louisiana	
35.9	North Dakota	
35.7	Georgia	
35.6	California	
35.2	Idaho	
33.9	Texas	
33.5	Alaska	
29.9	Utah	

Bicycling and walking rates are influenced by a wealth of interlocking factors, from household income to community density. Perhaps surprisingly, some of the states with the highest levels of biking and walking are not among those states that are most urban and most dense. Unsurprisingly, states that spend more general revenue per capita on biking and walking do tend to have higher rates of active transportation, as do states with a lower percentage of the populations in poverty.

Lower percentage of people of color ⁽¹⁾

Lower percentage of poverty

Younger population (median age)

Sources: ACS 2013, 3-yr est.; U.S. Census 2000, 2010. Notes: City averages are weighted by population and only include the 50 most populous U.S. cities. Asterisks (*) denote cities not among the 50 most populous cities. (1) "People of Color" (POC) is determined by the percentage of the population who identified as any of the following races in the American Community Survey: Black or African American only; American Indian or Alaska Native only; Asian only; Native Hawaiian or Other Asian Pacific Islander only; some other race only; or two or more races. Due to how ACS disaggregates race and ethnicity for commuter data, and in order provide comparable data for discussions of race and ethnicity among commuters and the population as a whole, POC here does not include people who identified as Hispanic or Latino if they also identified as white only.

States: Rankings

Over the course of the Benchmarking Project, state rankings have stayed markedly consistent, with little differentiation among the top states for walking and biking to work.

From 2007-2013, the highest gains in biking to work came in Oregon (0.7%), Hawaii (0.4%) and Vermont (0.4%), while the biggest increases in walking to work (0.5%) were seen in Oregon, Rhode Island, South Carolina and Massachusetts.

See the percentage growth for each state on page 85.

% of commuters who **walk to work**

1	Alaska	8.0
2	New York	6.4
3	Vermont	5.8
4	Montana	4.9
5	Massachusetts	4.8
6	Hawaii	4.7
7	Oregon	4.2
8	South Dakota	4.1
9	North Dakota	4.1
10	Maine	4.1
11	Pennsylvania	3.9
12	Wyoming	3.7
13	Rhode Island	3.6
14	Iowa	3.6
15	Washington	3.5
16	Wisconsin	3.4
17	Idaho	3.2
18	Illinois	3.1
19	Colorado	3.1
20	Connecticut	3.1
21	New Jersey	3.0
22	New Hampshire	3.0
23	Nebraska	2.8
24	Minnesota	2.8
25	West Virginia	2.8
26	California	2.7
27	Utah	2.5
28	Maryland	2.4
29	Virginia	2.3
30	Kansas	2.3
31	Ohio	2.3
32	South Carolina	2.3
33	New Mexico	2.3
34	Kentucky	2.2
35	Delaware	2.2
36	Michigan	2.2
37	Nevada	2.2
38	Arizona	2.1
39	Indiana	2.1
40	Missouri	2.0
41	Louisiana	1.9
42	Oklahoma	1.8
43	North Carolina	1.8
44	Arkansas	1.7
45	Texas	1.6
46	Mississippi	1.6
47	Georgia	1.6
48	Florida	1.5
49	Tennessee	1.3
50	Alabama	1.1

% of commuters who **bike to work**

1	Oregon	2.4
2	Montana	1.5
3	Colorado	1.4
4	California	1.1
5	Hawaii	1.1
6	Alaska	1.0
7	Idaho	1.0
8	Arizona	1.0
9	Wyoming	1.0
10	Vermont	0.9
11	Washington	0.9
12	Utah	0.9
13	Wisconsin	0.8
14	Minnesota	0.8
15	Massachusetts	0.8
16	New Mexico	0.8
17	Florida	0.7
18	South Dakota	0.7
19	Illinois	0.6
20	New York	0.6
21	Nebraska	0.5
22	Louisiana	0.5
23	Indiana	0.5
24	Iowa	0.5
25	North Dakota	0.5
26	Pennsylvania	0.5
27	Michigan	0.5
28	Maine	0.4
29	Nevada	0.4
30	Virginia	0.4
31	Rhode Island	0.4
32	New Jersey	0.4
33	Kansas	0.3
34	South Carolina	0.3
35	Delaware	0.3
36	Ohio	0.3
37	Maryland	0.3
38	Connecticut	0.3
39	Texas	0.3
40	Oklahoma	0.3
41	Kentucky	0.3
42	Missouri	0.2
43	North Carolina	0.2
44	New Hampshire	0.2
45	Georgia	0.2
46	Tennessee	0.2
47	Arkansas	0.1
48	Alabama	0.1
49	Mississippi	0.1
50	West Virginia	0.1

Source: ACS 2011-2013

% of commuters who bike or walk to work

1	Alaska	9.0
2	New York	7.0
3	Vermont	6.7
4	Oregon	6.5
5	Montana	6.4
6	Hawaii	5.7
7	Massachusetts	5.5
8	South Dakota	4.8
9	Wyoming	4.7
10	North Dakota	4.6
11	Colorado	4.5
12	Maine	4.5
13	Pennsylvania	4.4
14	Washington	4.4
15	Wisconsin	4.2
16	Idaho	4.1
17	Iowa	4.1
18	Rhode Island	4.0
19	California	3.9
20	Illinois	3.7
21	Minnesota	3.6
22	Utah	3.4
23	New Jersey	3.4
24	Connecticut	3.4
25	Nebraska	3.4
26	New Hampshire	3.2
27	Arizona	3.1
28	New Mexico	3.1
29	West Virginia	2.9
30	Virginia	2.7
31	Kansas	2.7
32	Maryland	2.7
33	South Carolina	2.7
34	Michigan	2.7
35	Ohio	2.6
36	Nevada	2.6
37	Indiana	2.6
38	Delaware	2.5
39	Kentucky	2.5
40	Louisiana	2.4
41	Missouri	2.2
42	Florida	2.2
43	Oklahoma	2.1
44	North Carolina	2.0
45	Texas	1.9
46	Arkansas	1.9
47	Georgia	1.8
48	Mississippi	1.7
49	Tennessee	1.5
50	Alabama	1.2

Per capita spending on bike/walk projects

1	Alaska	\$11.58
2	Rhode Island	\$10.29
3	Vermont	\$8.50
4	Delaware	\$8.28
5	Montana	\$5.49
6	Kentucky	\$5.20
7	Wyoming	\$4.57
8	Missouri	\$4.54
9	Minnesota	\$4.51
10	Tennessee	\$3.98
11	North Dakota	\$3.65
12	Georgia	\$3.43
13	Connecticut	\$3.28
14	Indiana	\$3.25
15	Pennsylvania	\$3.07
16	Florida	\$2.98
17	Oregon	\$2.89
18	Arkansas	\$2.83
19	Nebraska	\$2.81
20	Michigan	\$2.80
21	South Dakota	\$2.77
22	Ohio	\$2.63
23	California	\$2.53
24	New Mexico	\$2.46
25	Washington	\$2.36
26	New York	\$2.36
27	Utah	\$2.32
28	Massachusetts	\$2.32
29	Illinois	\$2.20
30	Mississippi	\$2.09
31	Nevada	\$2.07
32	Maine	\$2.07
33	Arizona	\$2.01
34	Virginia	\$1.98
35	Kansas	\$1.94
36	Texas	\$1.85
37	Iowa	\$1.76
38	North Carolina	\$1.74
39	Wisconsin	\$1.59
40	New Hampshire	\$1.50
41	Colorado	\$1.33
42	Maryland	\$1.33
43	Alabama	\$1.31
44	Louisiana	\$1.03
45	South Carolina	\$0.83
46	Idaho	\$0.82
47	New Jersey	\$0.42
48	West Virginia	\$0.35
49	Oklahoma	\$0.29
50	Hawaii	-\$0.09

of bike/ped fatalities per 10K commuters

1	Alaska	2.8
2	Vermont	2.8
3	South Dakota	3.2
4	North Dakota	3.7
5	Nebraska	3.8
6	Iowa	4.0
7	Maine	4.1
8	Wyoming	4.2
9	Minnesota	4.3
10	Massachusetts	4.5
11	Idaho	4.8
12	Wisconsin	4.9
13	New Hampshire	5.0
14	Oregon	5.3
15	Washington	5.3
16	Montana	5.5
17	New York	5.7
18	Colorado	6.0
19	Rhode Island	6.3
20	Pennsylvania	6.5
21	Hawaii	6.8
22	Connecticut	6.9
23	Kansas	7.2
24	Illinois	7.3
25	Utah	7.7
26	Virginia	8.3
27	Ohio	8.7
28	Indiana	10.5
29	New Jersey	11.3
30	Kentucky	12.0
31	West Virginia	12.4
32	California	12.5
33	Missouri	13.4
34	Maryland	13.9
35	Michigan	14.6
36	Oklahoma	17.5
37	Nevada	19.1
38	Arizona	19.6
39	Tennessee	19.9
40	New Mexico	20.6
41	Arkansas	22.0
42	Texas	22.8
43	Georgia	23.0
44	North Carolina	23.3
45	Delaware	23.6
46	South Carolina	23.7
47	Louisiana	25.6
48	Mississippi	27.2
49	Alabama	32.0
50	Florida	34.3

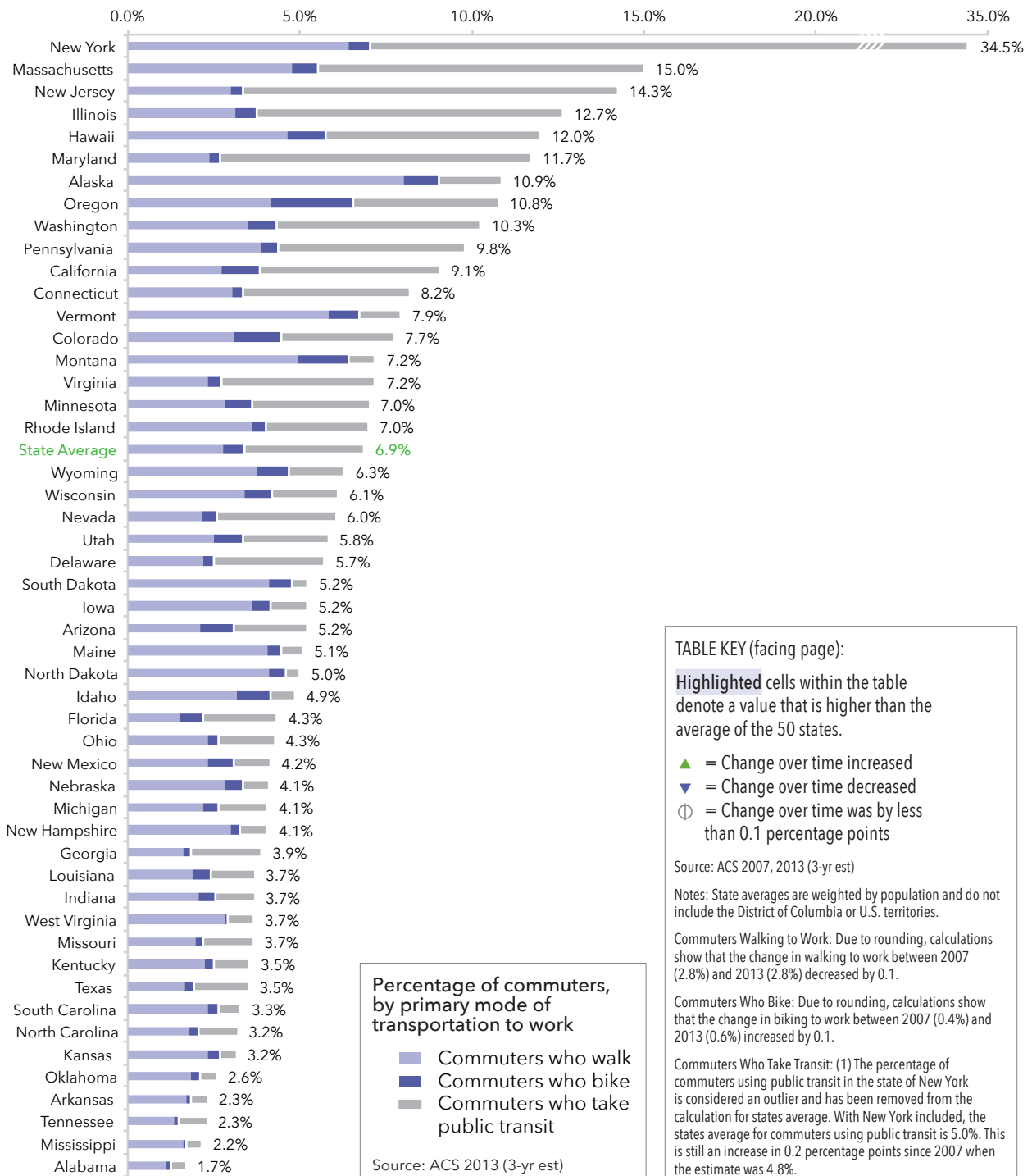
% getting recommended physical activity

1	Oregon	64.1
2	Colorado	60.4
3	Hawaii	60.2
4	Vermont	58.8
5	Montana	57.8
6	California	56.3
7	Washington	56.3
8	New Hampshire	55.4
9	Alaska	55.3
10	Utah	55.3
11	New Mexico	55
12	Massachusetts	54.5
13	Wyoming	54.2
14	Idaho	53.9
15	South Dakota	53.7
16	Maine	53.6
17	Nevada	53.6
18	Wisconsin	53.4
19	Michigan	53.1
20	Minnesota	52.7
21	Illinois	52.4
22	Arizona	51.9
23	Virginia	51.9
24	Connecticut	50.9
25	Georgia	50.8
26	New Jersey	50.5
27	Florida	50.2
28	Nebraska	50.1
29	Delaware	49.7
30	Ohio	49.5
31	Kansas	49.1
32	Rhode Island	49.1
33	South Carolina	49.1
34	Missouri	48.7
35	Maryland	48.6
36	North Carolina	48.6
37	Pennsylvania	47.8
38	West Virginia	47.6
39	New York	47.3
40	Iowa	47
41	Kentucky	46
42	Alabama	45.4
43	North Dakota	45.3
44	Louisiana	45.2
45	Indiana	44.1
46	Oklahoma	43.9
47	Texas	42.1
48	Arkansas	41.2
49	Tennessee	37.7
50	Mississippi	37.4

Sources: ACS 2011-2013; FHWA FMIS 2012-2014; FARS 2011-2013; BRFS5 2013

States: Mode Share

Commuters Walking, Biking, and Taking Transit to Work



Active Transportation: Commuter Mode Share

	Percentage of commuters who <i>walk to work</i>	Percentage change 2007-2013 (in percentage points)		Percentage of commuters who <i>bike to work</i>	Percentage change 2007-2013 (in percentage points)		Percentage of commuters who <i>take transit to work</i>	Percentage change 2007-2013 (in percentage points)
Alabama	1.1%	-0.2 pts ▼		0.1%	0.0 pts ○		0.5%	0.0 pts ○
Alaska	8.0%	-0.6 pts ▼		1.0%	0.1 pts ▲		1.8%	0.6 pts ▲
Arizona	2.1%	-0.2 pts ▼		1.0%	0.2 pts ▲		2.1%	0.1 pts ▲
Arkansas	1.7%	-0.1 pts ▼		0.1%	0.0 pts ○		0.5%	0.1 pts ▲
California	2.7%	0.0 pts ○		1.1%	0.3 pts ▲		5.2%	0.2 pts ▲
Colorado	3.1%	-0.1 pts ▼		1.4%	0.3 pts ▲		3.3%	0.1 pts ▲
Connecticut	3.1%	0.1 pts ▲		0.3%	0.0 pts ○		4.8%	0.6 pts ▲
Delaware	2.2%	-0.3 pts ▼		0.3%	0.0 pts ○		3.2%	0.6 pts ▲
Florida	1.5%	-0.2 pts ▼		0.7%	0.2 pts ▲		2.1%	0.2 pts ▲
Georgia	1.6%	-0.1 pts ▼		0.2%	0.0 pts ○		2.1%	-0.3 pts ▼
Hawaii	4.7%	0.1 pts ▲		1.1%	0.4 pts ▲		6.3%	0.7 pts ▲
Idaho	3.2%	-0.2 pts ▼		1.0%	0.1 pts ▲		0.7%	-0.1 pts ▼
Illinois	3.1%	0.1 pts ▲		0.6%	0.1 pts ▲		8.9%	0.4 pts ▲
Indiana	2.1%	-0.2 pts ▼		0.5%	0.1 pts ▲		1.1%	0.1 pts ▲
Iowa	3.6%	-0.2 pts ▼		0.5%	0.0 pts ○		1.1%	0.1 pts ▲
Kansas	2.3%	-0.4 pts ▼		0.3%	0.1 pts ▲		0.5%	-0.1 pts ▼
Kentucky	2.2%	0.1 pts ▲		0.3%	0.1 pts ▲		1.1%	0.1 pts ▲
Louisiana	1.9%	0.0 pts ○		0.5%	0.2 pts ▲		1.3%	-0.1 pts ▼
Maine	4.1%	-0.1 pts ▼		0.4%	0.1 pts ▲		0.6%	-0.1 pts ▼
Maryland	2.4%	-0.2 pts ▼		0.3%	0.1 pts ▲		9.1%	0.4 pts ▲
Massachusetts	4.8%	0.5 pts ▲		0.8%	0.3 pts ▲		9.5%	0.7 pts ▲
Michigan	2.2%	-0.1 pts ▼		0.5%	0.1 pts ▲		1.4%	0.2 pts ▲
Minnesota	2.8%	-0.2 pts ▼		0.8%	0.2 pts ▲		3.4%	0.4 pts ▲
Mississippi	1.6%	-0.2 pts ▼		0.1%	-0.1 pts ▼		0.4%	0.0 pts ○
Missouri	2.0%	-0.1 pts ▼		0.2%	0.0 pts ○		1.4%	0.0 pts ○
Montana	4.9%	-0.2 pts ▼		1.5%	0.1 pts ▲		0.8%	-0.2 pts ▼
Nebraska	2.8%	-0.4 pts ▼		0.5%	0.0 pts ○		0.7%	0.1 pts ▲
Nevada	2.2%	-0.1 pts ▼		0.4%	-0.1 pts ▼		3.5%	0.1 pts ▲
New Hampshire	3.0%	-0.4 pts ▼		0.2%	0.0 pts ○		0.8%	0.1 pts ▲
New Jersey	3.0%	-0.3 pts ▼		0.4%	0.1 pts ▲		10.9%	0.5 pts ▲
New Mexico	2.3%	-0.1 pts ▼		0.8%	0.2 pts ▲		1.1%	0.1 pts ▲
New York	6.4%	0.2 pts ▲		0.6%	0.2 pts ▲		27.4%	1.2 pts ▲
North Carolina	1.8%	0.0 pts ○		0.2%	0.0 pts ○		1.2%	0.2 pts ▲
North Dakota	4.1%	-0.1 pts ▼		0.5%	0.0 pts ○		0.4%	0.0 pts ○
Ohio	2.3%	0.0 pts ○		0.3%	0.1 pts ▲		1.6%	-0.3 pts ▼
Oklahoma	1.8%	-0.2 pts ▼		0.3%	0.0 pts ○		0.5%	0.0 pts ○
Oregon	4.2%	0.5 pts ▲		2.4%	0.7 pts ▲		4.2%	0.1 pts ▲
Pennsylvania	3.9%	-0.2 pts ▼		0.5%	0.2 pts ▲		5.5%	0.3 pts ▲
Rhode Island	3.6%	0.5 pts ▲		0.4%	0.1 pts ▲		3.0%	0.3 pts ▲
South Carolina	2.3%	0.5 pts ▲		0.3%	0.1 pts ▲		0.6%	0.0 pts ○
South Dakota	4.1%	-0.3 pts ▼		0.7%	0.2 pts ▲		0.5%	0.1 pts ▲
Tennessee	1.3%	-0.2 pts ▼		0.2%	0.1 pts ▲		0.8%	0.1 pts ▲
Texas	1.6%	-0.2 pts ▼		0.3%	0.1 pts ▲		1.6%	-0.1 pts ▼
Utah	2.5%	-0.1 pts ▼		0.9%	0.2 pts ▲		2.5%	0.0 pts ○
Vermont	5.8%	-0.2 pts ▼		0.9%	0.4 pts ▲		1.2%	0.4 pts ▲
Virginia	2.3%	0.1 pts ▲		0.4%	0.1 pts ▲		4.5%	0.6 pts ▲
Washington	3.5%	0.1 pts ▲		0.9%	0.2 pts ▲		5.9%	0.7 pts ▲
West Virginia	2.8%	0.0 pts ○		0.1%	-0.1 pts ▼		0.8%	-0.2 pts ▼
Wisconsin	3.4%	0.0 pts ○		0.8%	0.1 pts ▲		1.9%	0.2 pts ▲
Wyoming	3.7%	-0.2 pts ▼		1.0%	0.0 pts ○		1.6%	0.2 pts ▲

In almost all states, commuters with low income represent a higher percentage of those who walk and use public transit than their representation within the total commuter population. On average, people of low income represent 14% of the commuter population, but are 31% of commuters who walk to work and 22% of commuters who take transit to work.

The difference in distribution of people with low income walking to work varies across the states from 9 (in Hawaii) to 26 (in Kentucky, Utah, and West Virginia) percentage points above their distribution in the commuter population. The difference in distribution of people with low income taking transit to work varies from 3 percentage points below their distribution in the commuter population to 38 percentage points above their distribution.

Due to how ACS disaggregates modes of transportation by earnings, data are not available to show biking to work among people with low income.

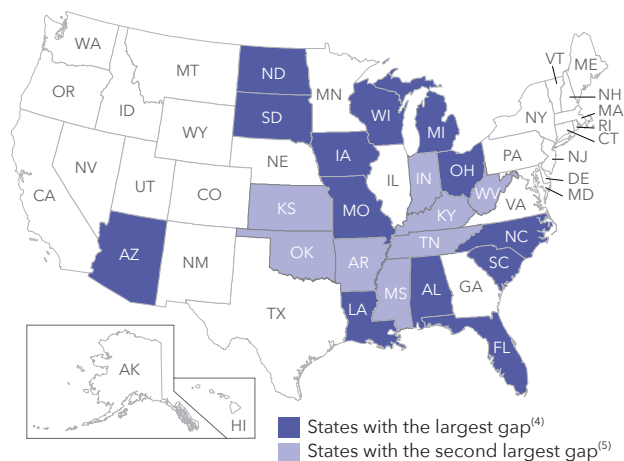
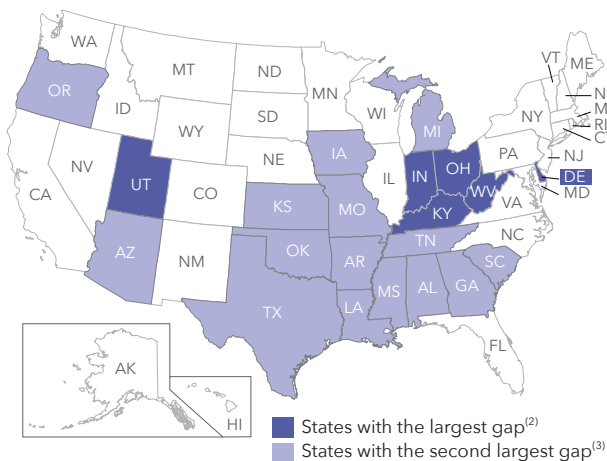
Disproportionate Distribution: Commuters with Low Income ⁽¹⁾ Walking and Taking Transit

The states highlighted below have the largest difference between the percentage of low-income commuters and the percentage of low-income commuters who walk to work.

For example, in West Virginia, people with low income represent 15% of the total commuter population. However, of all commuters who walk to work, 41% are people with low income. This is a difference of 26 percentage points.

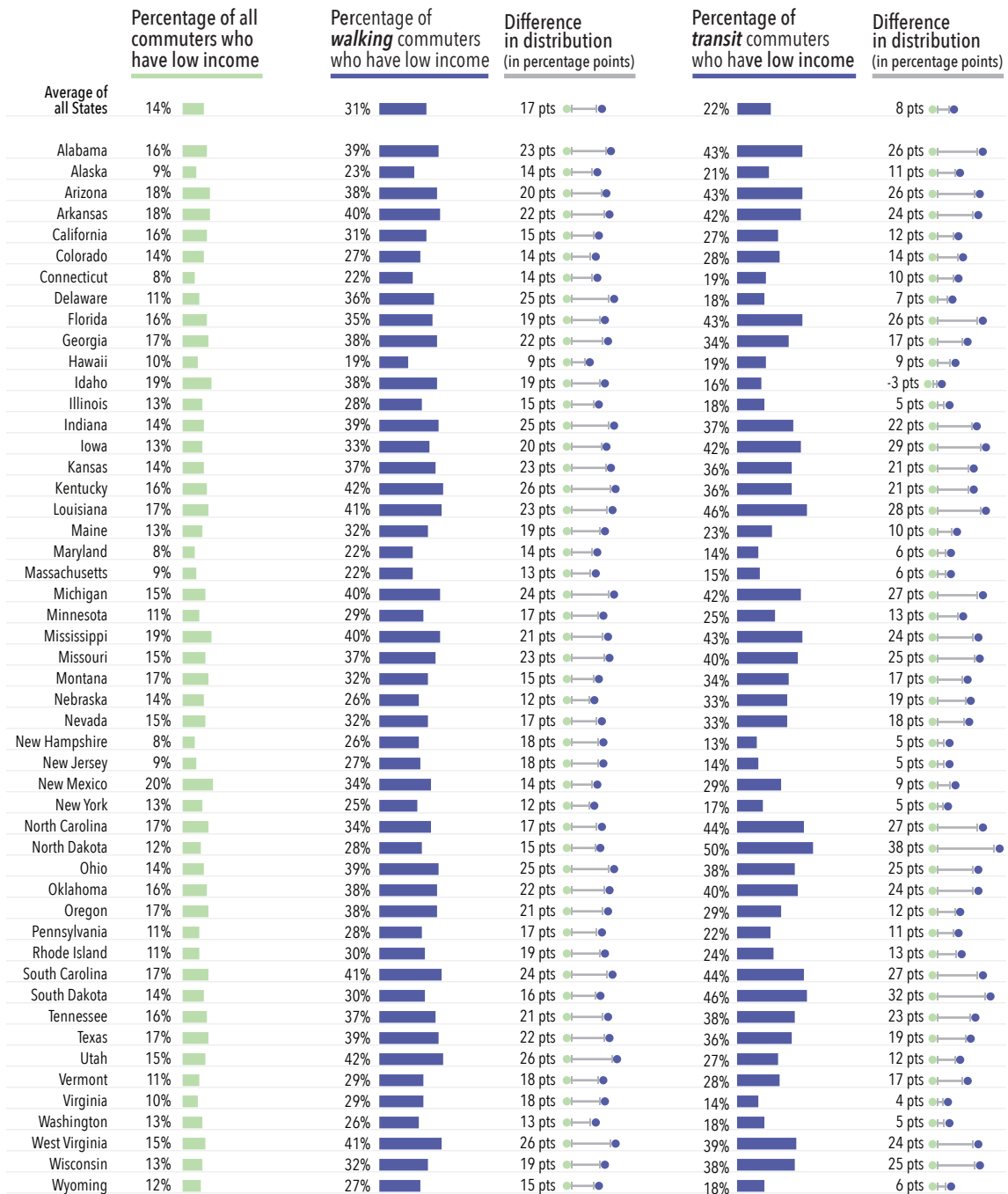
The states highlighted below have the largest difference between the percentage of low-income commuters and the percentage of low-income commuters who take transit to work.

For example, in North Dakota, people with low income represent 12% of the total commuter population. However, of all commuters who take transit to work, 50% are people with low income. This is a difference of 38 percentage points.



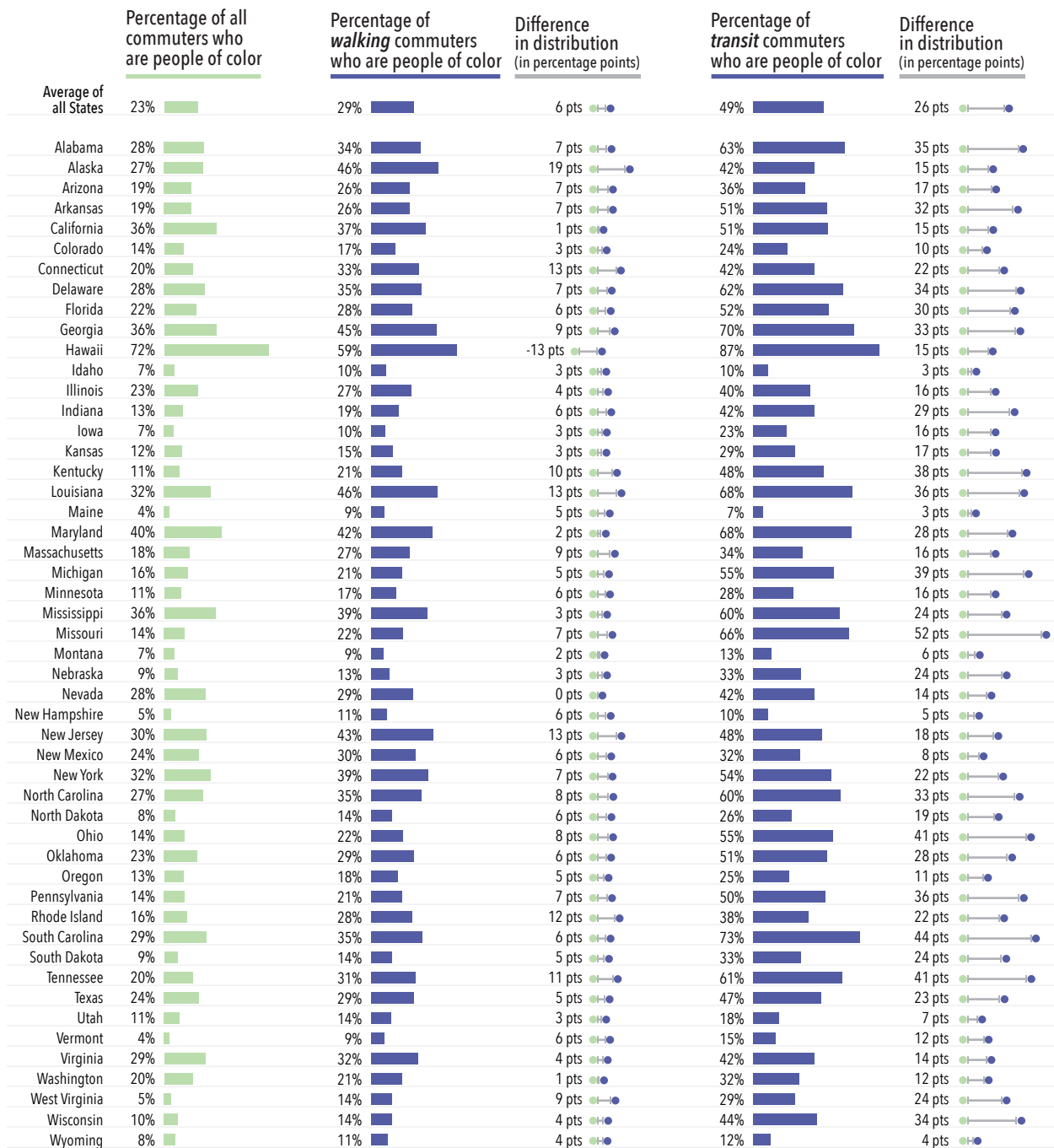
Source: ACS 2013, 3-yr est. Notes: (1) "Low income" is determined by the percentage of the population who reported an income of 150% or less of the U.S. federal poverty level in the American Community Survey. (2) States in which the percentage of low-income commuters who walk to work is 25-26 percentage points higher than the percentage of low-income commuters within the total commuter population. (3) States in which the percentage of low-income commuters who walk to work is 20-24 percentage points higher than the percentage of low-income commuters within the total commuter population. (4) States in which the percentage of low-income commuters who take transit to work is 25-38 percentage points higher than the percentage of low-income commuters within the total commuter population. (5) States in which the percentage of low-income commuters who take transit to work is 20-24 percentage points higher than the percentage of low-income commuters within the total commuter population.

Commuters with Low Income⁽¹⁾



Source: ACS 2013, 3-yr est. Notes: Difference in distribution calculations were made before rounding, therefore some calculations may not appear to add up. State averages are weighted by population and do not include the District of Columbia or U.S. territories. (1) "Low income" is determined by the percentage of the population who reported an income of 150% or less of the U.S. federal poverty level in the American Community Survey.

Commuters Who Are People of Color⁽¹⁾

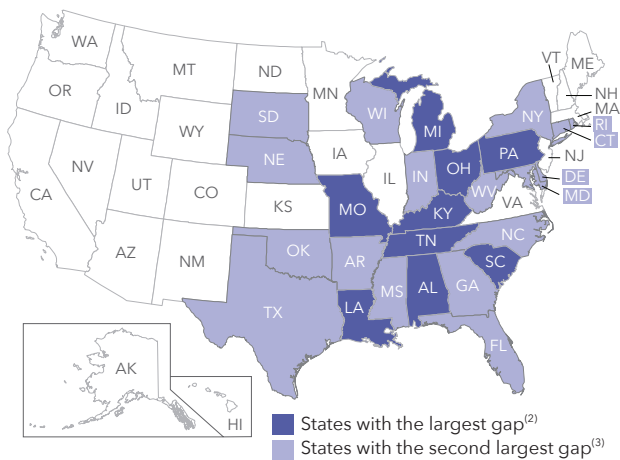


Source: ACS 2013, 3-yr est. Notes: Difference in distribution calculations were made before rounding, therefore some calculations may not appear to add up. State averages are weighted by population and do not include the District of Columbia or U.S. territories. (1) "People of Color" (POC) is determined by the percentage of the population who identified as any of the following races in the American Community Survey: Black or African American only; American Indian or Alaska Native only; Asian only; Native Hawaiian or Other Asian Pacific Islander only; some other race only; or two or more races. Due to how ACS disaggregates race and ethnicity for commuter data, POC here does not include people who identified as Hispanic or Latino if they also identified as white only.

Disproportionate Distribution: People of Color⁽¹⁾ Taking Transit to Work

The states highlighted in this map have the largest difference between the percentage of commuters of color and the percentage of commuters of color who take transit to work.

For example, in Missouri, people of color represent 14% of the total commuter population. However, of all commuters who take transit to work, 66% are people of color. This is a difference of 52 percentage points.



Source: ACS 2013, 3-yr est. Notes: (1) "People of Color" (POC) is determined by the percentage of the population who identified as any of the following races in the American Community Survey: Black or African American only; American Indian or Alaska Native only; Asian only; Native Hawaiian or Other Asian Pacific Islander only; some other race only; or two or more races. Due to how ACS disaggregates race and ethnicity for commuter data, POC here does not include people who identified as Hispanic or Latino if they also identified as white only. (2) States in which the percentage of commuters of color who take transit to work is 31-52 percentage points higher than the percentage of commuters of color within the total commuter population. (3) States in which the percentage of commuters of color who take transit to work is 20-30 percentage points higher than the percentage of commuters of color within the total commuter population.

In most states, commuters of color represent a higher percentage of those who walk and use public transit than their representation within the total commuter population. The percentage of people of color among the national commuter population varies greatly between states. A simple average of the states does not account for regional variation.

The difference in distribution of people of color walking to work ranges between 13 percentage points below their distribution in the commuter population (in Hawaii) to 19 percentage points above their distribution (in Alaska). The difference in distribution of people of color taking transit to work varies from 3 (in Idaho and Maine) to 52 (in Missouri) percentage points above their distribution.

Due to how ACS disaggregates modes of transportation by race, data are not available to show biking to work among people of color.

In most states, women represent a lower percentage of commuters who bike to work than their representation within the total commuter population. On average, women represent 47% of the commuter population, but are only 27% of commuters who bike to work.

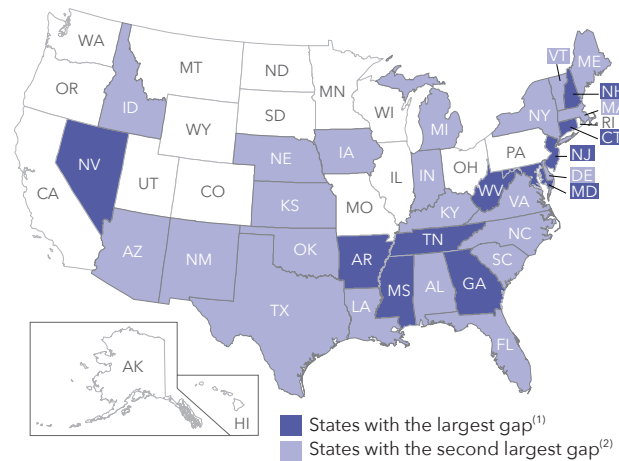
Not including Wyoming, which shows no difference in distribution, the difference of women biking to work varies from 14 (in Montana and Rhode Island) to 35 (in Mississippi) percentage points below their distribution.

Women walking to work closely matches their distribution among commuters, ranging between a difference of 11 percentage points below their distribution in the population (in Mississippi) to 3 percentage points above their distribution (in Rhode Island and Utah).

Disproportionate Distribution: Women Biking

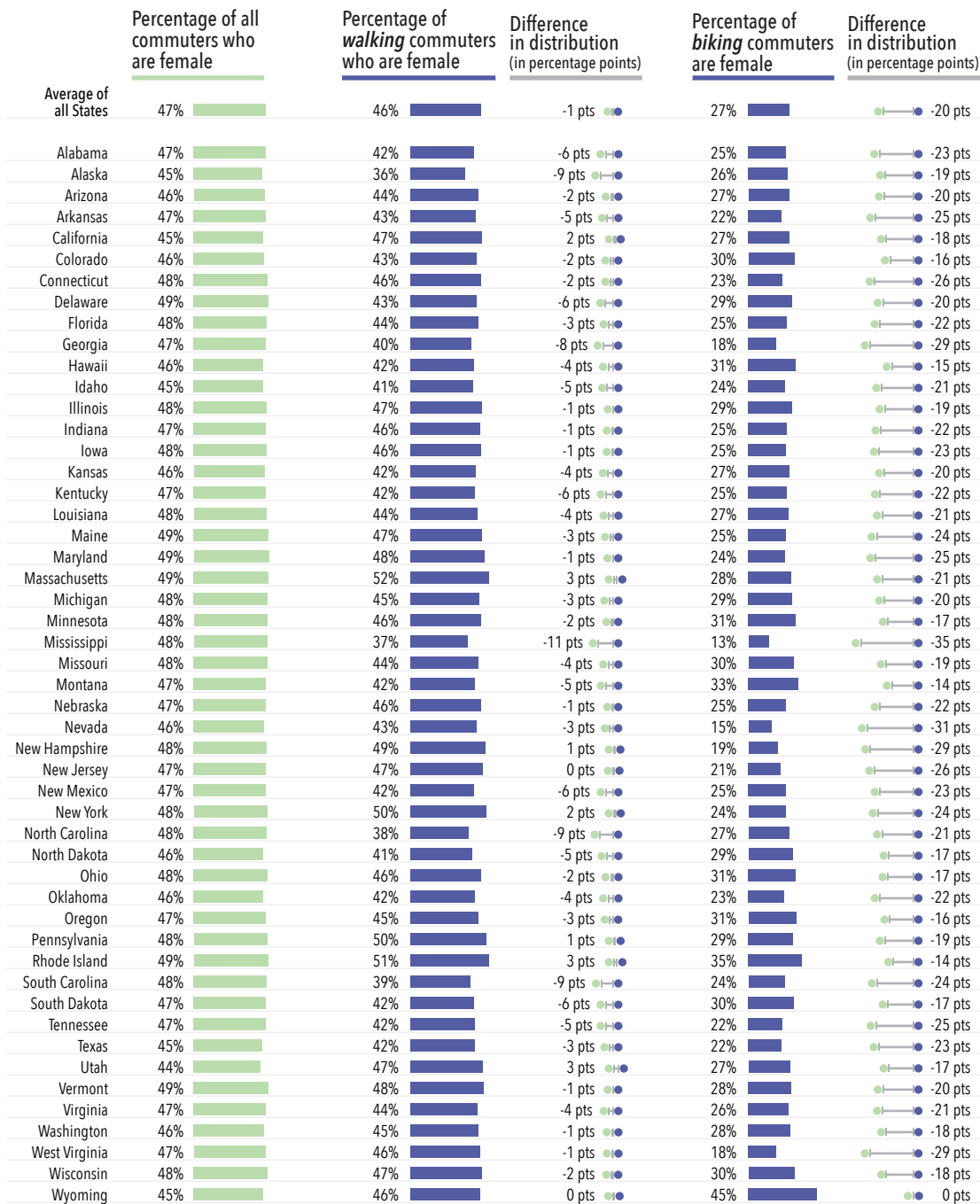
The states highlighted in this map have the largest difference between the percentage of female commuters and the percentage of female commuters who bike to work.

For example, in Mississippi, women represent 48% of the total commuter population. However, of all commuters who bike to work, 13% are women. This is a difference of 35 percentage points.



Source: ACS 2013, 3-yr est. Notes: (1) States in which the percentage of female commuters who bike to work is 25–35 percentage points higher than the percentage of female commuters within the total commuter population. (2) States in which the percentage of female commuters who bike to work is 20–24 percentage points higher than the percentage of female commuters within the total commuter population.

Commuters Who Are Women



Source: ACS 2013, 3-yr est. Note: Difference in distribution calculations were made before rounding, therefore some calculations may not appear to add up. State averages are weighted by population and do not include the District of Columbia or U.S. territories.

Physical Activity and Biking and Walking Levels

	Percentage of adults who get 150 min+ of aerobic physical activity per week	Change in percent from 2005-2013 (in percentage points)	Percentage of commuters who walk to work	Percentage of commuters who bike to work
Alabama	45%	3 pts ▲	1.1% ▼	0.1% ⊕
Alaska	55%	-4 pts ▼	8.0% ▼	1.0% ▲
Arizona	52%	-2 pts ▼	2.1% ▼	1.0% ▲
Arkansas	41%	-5 pts ▼	1.7% ▼	0.1% ⊕
California	56%	3 pts ▲	2.7% ⊕	1.1% ▲
Colorado	60%	6 pts ▲	3.1% ▼	1.4% ▲
Connecticut	51%	0 pts ⊕	3.1% ▲	0.3% ⊕
Delaware	50%	5 pts ▲	2.2% ▼	0.3% ⊕
Florida	50%	5 pts ▲	1.5% ▼	0.7% ▲
Georgia	51%	9 pts ▲	1.6% ▼	0.2% ⊕
Hawaii	60%	8 pts ▲	4.7% ▲	1.1% ▲
Idaho	54%	0 pts ⊕	3.2% ▼	1.0% ▲
Illinois	52%	5 pts ▲	3.1% ▲	0.6% ▲
Indiana	44%	-4 pts ▼	2.1% ▼	0.5% ▲
Iowa	47%	1 pts ▲	3.6% ▼	0.5% ⊕
Kansas	49%	0 pts ⊕	2.3% ▼	0.3% ▲
Kentucky	46%	11 pts ▲	2.2% ▲	0.3% ▲
Louisiana	45%	7 pts ▲	1.9% ⊕	0.5% ▲
Maine	54%	-1 pts ▼	4.1% ▼	0.4% ▲
Maryland	49%	-1 pts ▼	2.4% ▼	0.3% ▲
Massachusetts	55%	2 pts ▲	4.8% ▲	0.8% ▲
Michigan	53%	4 pts ▲	2.2% ▼	0.5% ▲
Minnesota	53%	2 pts ▲	2.8% ▼	0.8% ▲
Mississippi	37%	-3 pts ▼	1.6% ▼	0.1% ▼
Missouri	49%	2 pts ▲	2.0% ▼	0.2% ⊕
Montana	58%	1 pts ▲	4.9% ▼	1.5% ▲
Nebraska	50%	3 pts ▲	2.8% ▼	0.5% ⊕
Nevada	54%	3 pts ▲	2.2% ▼	0.4% ▼
New Hampshire	55%	-1 pts ▼	3.0% ▼	0.2% ⊕
New Jersey	51%	5 pts ▲	3.0% ▼	0.4% ▲
New Mexico	55%	4 pts ▲	2.3% ▼	0.8% ▲
New York	47%	-1 pts ▼	6.4% ▲	0.6% ▲
North Carolina	49%	7 pts ▲	1.8% ⊕	0.2% ⊕
North Dakota	45%	-3 pts ▼	4.1% ▼	0.5% ⊕
Ohio	50%	0 pts ⊕	2.3% ⊕	0.3% ▲
Oklahoma	44%	2 pts ▲	1.8% ▼	0.3% ⊕
Oregon	64%	8 pts ▲	4.2% ▲	2.4% ▲
Pennsylvania	48%	-1 pts ▼	3.9% ▼	0.5% ▲
Rhode Island	49%	-2 pts ▼	3.6% ▲	0.4% ▲
South Carolina	49%	4 pts ▲	2.3% ▲	0.3% ▲
South Dakota	54%	6 pts ▲	4.1% ▼	0.7% ▲
Tennessee	38%	2 pts ▲	1.3% ▼	0.2% ▲
Texas	42%	-5 pts ▼	1.6% ▼	0.3% ▲
Utah	55%	0 pts ⊕	2.5% ▼	0.9% ▲
Vermont	59%	1 pts ▲	5.8% ▼	0.9% ▲
Virginia	52%	1 pts ▲	2.3% ▲	0.4% ▲
Washington	56%	2 pts ▲	3.5% ▲	0.9% ▲
West Virginia	48%	8 pts ▲	2.8% ⊕	0.1% ▼
Wisconsin	53%	-3 pts ▼	3.4% ⊕	0.8% ▲
Wyoming	54%	-2 pts ▼	3.7% ▼	1.0% ⊕

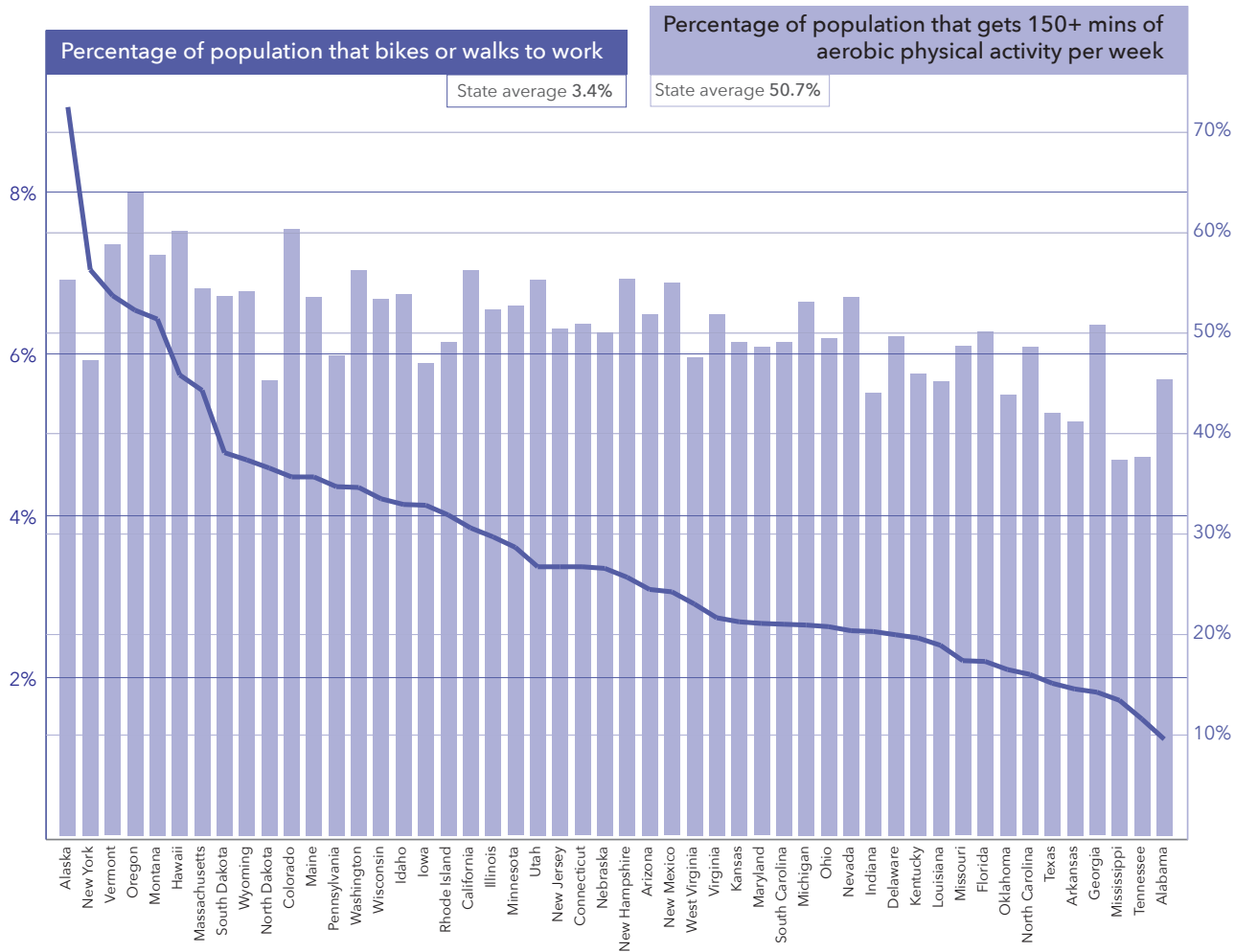
TABLE KEY:

Highlighted cells within the table denote a value that is higher than the average of the 50 states.

- ▲ Change over time increased
- ▼ Change over time decreased
- ⊕ Change over time less than 0.1 percentage points

Sources: BRFSS 2005, 2013, ACS 2013 (3-yr est)

Notes: In 2011, BRFSS changed their data collection and analysis methodology to include data collected by cell phone and adjustments were made to the weighting of the data. The averages of all state BRFSS data could only be calculated by averaging percentages for each state, therefore, these averages are not weighted.



Sources: ACS 2013 (3-yr est), BRFSS 2013

States with higher levels of bicycling and walking to work also see higher levels of the population getting 150 minutes or more of physical activity per week. In fact, many of the states that show higher than average rates of physical activity are also states with higher than average rates of active commuting. Of all states, Oregon (64%), Colorado (60%) and Hawaii (60%) have the highest percentage of people meeting recommended physical activity levels – and are also in the top ten states for both biking and walking to work. Tennessee (38%), Mississippi (37%), and Arkansas (41%) have the lowest shares of people meeting the physical activity minimum. These states also all have bicycling and walking levels below the national average.

Public Health in States: Obesity, Diabetes, Hypertension, Asthma and Active Commuting

TABLE KEY

Highlighted cells within the table denote a value that is higher than the average of the 50 states.

- ▲ Change over time increased
- ▼ Change over time decreased
- ⊕ Change over time less than 0.1 percentage points

Sources: BRFSS 2005, 2013.

Notes: In 2011, BRFSS changed its data collection and analysis methodology to include data collected by cell phone and adjustments were made to the weighting of the data. The averages of all state BRFSS data could only be calculated by averaging percentages for each state, therefore, these averages are not weighted. (1) "Obesity" is defined as a body mass index of 30.0 or higher.

	% of adults who are obese ⁽¹⁾	% change 2005-2013 (percentage points)	% of adults who have diabetes	% change 2005-2013 (percentage points)	% of adults with high blood pressure	% change 2005-2013 (percentage points)
Alabama	32%	4 pts ▲	14%	4 pts ▲	40%	9 pts ▲
Alaska	28%	1 pts ▲	7%	3 pts ▲	30%	8 pts ▲
Arizona	27%	6 pts ▲	11%	3 pts ▲	31%	8 pts ▲
Arkansas	35%	7 pts ▲	12%	3 pts ▲	39%	10 pts ▲
California	24%	1 pts ▲	10%	3 pts ▲	29%	3 pts ▲
Colorado	21%	4 pts ▲	7%	2 pts ▲	26%	6 pts ▲
Connecticut	25%	5 pts ▲	8%	2 pts ▲	31%	8 pts ▲
Delaware	31%	8 pts ▲	11%	3 pts ▲	36%	8 pts ▲
Florida	26%	4 pts ▲	11%	2 pts ▲	35%	7 pts ▲
Georgia	30%	4 pts ▲	11%	3 pts ▲	35%	9 pts ▲
Hawaii	22%	2 pts ▲	8%	1 pts ▲	29%	4 pts ▲
Idaho	30%	5 pts ▲	8%	2 pts ▲	29%	6 pts ▲
Illinois	29%	4 pts ▲	10%	2 pts ▲	30%	5 pts ▲
Indiana	32%	5 pts ▲	11%	3 pts ▲	34%	7 pts ▲
Iowa	31%	6 pts ▲	9%	3 pts ▲	31%	7 pts ▲
Kansas	30%	6 pts ▲	10%	3 pts ▲	31%	7 pts ▲
Kentucky	33%	5 pts ▲	11%	2 pts ▲	39%	11 pts ▲
Louisiana	33%	2 pts ▲	12%	2 pts ▲	40%	11 pts ▲
Maine	29%	6 pts ▲	10%	2 pts ▲	33%	8 pts ▲
Maryland	28%	4 pts ▲	10%	3 pts ▲	33%	7 pts ▲
Massachusetts	24%	3 pts ▲	9%	2 pts ▲	29%	5 pts ▲
Michigan	32%	5 pts ▲	10%	2 pts ▲	35%	7 pts ▲
Minnesota	26%	2 pts ▲	7%	2 pts ▲	27%	5 pts ▲
Mississippi	35%	4 pts ▲	13%	3 pts ▲	40%	7 pts ▲
Missouri	30%	4 pts ▲	10%	2 pts ▲	32%	5 pts ▲
Montana	25%	3 pts ▲	8%	2 pts ▲	29%	5 pts ▲
Nebraska	30%	4 pts ▲	9%	2 pts ▲	30%	6 pts ▲
Nevada	26%	5 pts ▲	10%	3 pts ▲	31%	7 pts ▲
New Hampshire	27%	4 pts ▲	9%	3 pts ▲	30%	7 pts ▲
New Jersey	26%	4 pts ▲	9%	2 pts ▲	31%	6 pts ▲
New Mexico	26%	5 pts ▲	11%	3 pts ▲	30%	7 pts ▲
New York	25%	3 pts ▲	11%	3 pts ▲	32%	6 pts ▲
North Carolina	29%	4 pts ▲	11%	3 pts ▲	36%	6 pts ▲
North Dakota	31%	6 pts ▲	9%	2 pts ▲	30%	6 pts ▲
Ohio	30%	6 pts ▲	10%	3 pts ▲	34%	7 pts ▲
Oklahoma	33%	6 pts ▲	11%	2 pts ▲	38%	8 pts ▲
Oregon	27%	3 pts ▲	9%	3 pts ▲	32%	8 pts ▲
Pennsylvania	30%	5 pts ▲	10%	2 pts ▲	34%	7 pts ▲
Rhode Island	27%	6 pts ▲	9%	3 pts ▲	34%	8 pts ▲
South Carolina	32%	3 pts ▲	13%	2 pts ▲	38%	7 pts ▲
South Dakota	30%	4 pts ▲	9%	3 pts ▲	31%	6 pts ▲
Tennessee	34%	6 pts ▲	12%	3 pts ▲	39%	9 pts ▲
Texas	31%	4 pts ▲	11%	3 pts ▲	31%	7 pts ▲
Utah	24%	3 pts ▲	7%	2 pts ▲	24%	6 pts ▲
Vermont	25%	5 pts ▲	8%	2 pts ▲	31%	7 pts ▲
Virginia	27%	2 pts ▲	10%	3 pts ▲	33%	6 pts ▲
Washington	27%	4 pts ▲	9%	2 pts ▲	30%	6 pts ▲
West Virginia	35%	5 pts ▲	13%	3 pts ▲	41%	10 pts ▲
Wisconsin	30%	5 pts ▲	8%	2 pts ▲	32%	7 pts ▲
Wyoming	28%	4 pts ▲	9%	2 pts ▲	29%	5 pts ▲

	% of adults who have asthma	% change 2005-2013 (percentage points)	% of commuters who walk to work	% of commuters who bike to work
Alabama	9%	1 pts ▲	1.1% ▼	0.1% ⊖
Alaska	9%	2 pts ▲	8.0% ▼	1.0% ▲
Arizona	9%	2 pts ▲	2.1% ▼	1.0% ▲
Arkansas	8%	1 pts ▲	1.7% ▼	0.1% ⊖
California	9%	2 pts ▲	2.7% ⊖	1.1% ▲
Colorado	9%	1 pts ▲	3.1% ▼	1.4% ▲
Connecticut	10%	2 pts ▲	3.1% ▲	0.3% ⊖
Delaware	11%	2 pts ▲	2.2% ▼	0.3% ⊖
Florida	8%	2 pts ▲	1.5% ▼	0.7% ▲
Georgia	8%	1 pts ▲	1.6% ▼	0.2% ⊖
Hawaii	9%	2 pts ▲	4.7% ▲	1.1% ▲
Idaho	9%	1 pts ▲	3.2% ▼	1.0% ▲
Illinois	8%	1 pts ▲	3.1% ▲	0.6% ▲
Indiana	10%	2 pts ▲	2.1% ▼	0.5% ▲
Iowa	8%	1 pts ▲	3.6% ▼	0.5% ⊖
Kansas	9%	2 pts ▲	2.3% ▼	0.3% ▲
Kentucky	10%	1 pts ▲	2.2% ▲	0.3% ▲
Louisiana	8%	2 pts ▲	1.9% ⊖	0.5% ▲
Maine	12%	2 pts ▲	4.1% ▼	0.4% ▲
Maryland	9%	1 pts ▲	2.4% ▼	0.3% ▲
Massachusetts	11%	2 pts ▲	4.8% ▲	0.8% ▲
Michigan	12%	2 pts ▲	2.2% ▼	0.5% ▲
Minnesota	8%	-1 pts ▼	2.8% ▼	0.8% ▲
Mississippi	8%	1 pts ▲	1.6% ▼	0.1% ▼
Missouri	11%	2 pts ▲	2.0% ▼	0.2% ⊖
Montana	9%	1 pts ▲	4.9% ▼	1.5% ▲
Nebraska	7%	1 pts ▲	2.8% ▼	0.5% ⊖
Nevada	8%	1 pts ▲	2.2% ▼	0.4% ▼
New Hampshire	11%	1 pts ▲	3.0% ▼	0.2% ⊖
New Jersey	9%	2 pts ▲	3.0% ▼	0.4% ▲
New Mexico	9%	0 pts ⊖	2.3% ▼	0.8% ▲
New York	10%	0 pts ⊖	6.4% ▲	0.6% ▲
North Carolina	8%	2 pts ▲	1.8% ⊖	0.2% ⊖
North Dakota	8%	1 pts ▲	4.1% ▼	0.5% ⊖
Ohio	10%	2 pts ▲	2.3% ⊖	0.3% ▲
Oklahoma	9%	1 pts ▲	1.8% ▼	0.3% ⊖
Oregon	11%	1 pts ▲	4.2% ▲	2.4% ▲
Pennsylvania	10%	2 pts ▲	3.9% ▼	0.5% ▲
Rhode Island	12%	1 pts ▲	3.6% ▲	0.4% ▲
South Carolina	9%	2 pts ▲	2.3% ▲	0.3% ▲
South Dakota	8%	1 pts ▲	4.1% ▼	0.7% ▲
Tennessee	7%	-1 pts ▼	1.3% ▼	0.2% ▲
Texas	7%	0 pts ⊖	1.6% ▼	0.3% ▲
Utah	9%	1 pts ▲	2.5% ▼	0.9% ▲
Vermont	11%	2 pts ▲	5.8% ▼	0.9% ▲
Virginia	9%	0 pts ⊖	2.3% ▲	0.4% ▲
Washington	10%	1 pts ▲	3.5% ▲	0.9% ▲
West Virginia	9%	0 pts ⊖	2.8% ⊖	0.1% ▼
Wisconsin	10%	1 pts ▲	3.4% ⊖	0.8% ▲
Wyoming	9%	1 pts ▲	3.7% ▼	1.0% ⊖

Data suggest a strong relationship between statewide percentages of bicycling and walking to work and key public health indicators.

States with higher levels of bicycling and walking to work see lower levels of diabetes, obesity, and high blood pressure. Unfortunately, every state saw a rise in each disease, but the smallest increases were seen in states with higher levels of walking and biking, including Colorado, Hawaii, and Montana.

Bicycling and Walking Priorities within State Health Improvement Plans

By Ariane Reeves (Public Health Advisor, CDC), Josh Martinez (Public Health Advisor, CDC), Julie Dudley (Chronic Disease Prevention Program Manager, Florida Department of Health), Akia Burnett (Senior Public Health Consultant, Michigan Department of Community Health), and Sylvia Pirani (Director, Office of Public Health Practice, New York State Department of Health)

Background & Purpose

What is a SHIP? A state health improvement plan (SHIP) is a long-term, systematic effort to address public health problems based on the results of State Health Assessment (SHA) activities and the state health improvement process. States work collaboratively with community stakeholders to create a SHA which describes the health of their citizens and the state of their public health infrastructure. These collaborative coalitions then use this information to develop a State Health Improvement Plan (SHIP) which helps set priorities and coordinate and target resources. The connection between assessment and improvement planning provides opportunities for intervention. The Public Health Accreditation Board (PHAB) Standards and Measures emphasize the importance of collaboration on these activities, as follows:

*While the state health department is responsible for protecting and promoting the health of the population, it cannot be effective acting unilaterally. The health department must partner with other agencies and organizations to plan and share responsibility for health improvement. Other sectors of the state and stakeholders have access to additional data and bring different perspectives that will enhance planning. A collaborative planning process fosters shared ownership and responsibility for the plan's implementation. The state health improvement process is a vehicle for developing partnerships and for understanding roles and responsibilities.*¹

Linkage to Accreditation

Along with a SHA and a Strategic Plan, a SHIP is one of three prerequisites required for PHAB health department accreditation. The resulting documents may be used to help SHA coalitions identify a public health issue and quickly develop a plan of action. For more information about developing a SHIP, CDC has worked with the Association of State and Territorial Health Officials (ASTHO) to create guidance and resources for states and territories seeking public health accreditation.²

Excerpts from Three SHIP Examples Which Support Bicycling and Walking

Michigan's State Health Improvement Plan

SHIP Excerpt from: *Michigan's State Health Improvement Plan 2012-2017* (Published August 2012)³

Strategies and Goals 2012-2017

d. The Department of Transportation:

1. Continue to promote the Michigan "Safe Routes to School" Program, an effort designed to increase safety and encourage more students to walk and bike to school daily.
2. Work with the Complete Streets Advisory Council and the State Transportation Commission to develop and communicate a "Complete Streets" policy for Michigan.

Appendix A: Suggested Coalition Strategies to Increase the Availability of Healthy Foods and to Improve Access to Physical Activity Opportunities

2. Encourage coalitions to implement strategies to increase access to physical activity opportunity:

- a. Work with transportation projects to implement non-motorized infrastructure to support residents to walk, bike and use public transportation where appropriate.
- b. Facilitate safe neighborhoods that encourage physical activity where appropriate (e.g., sidewalks, bike lanes, adequate lighting, multi-use trails, walkways, parks, and playgrounds).

Outcome: The Michigan Department of Community Health (MDCH) developed a SHA that identified obesity as one of its leading health issues. The SHIP advisory group prioritized the state's health issues based on the SHA and other supporting documents, and identified obesity as its priority health issue in their 2012-2017 SHIP. To date, MDCH has worked with local health departments, community coalitions and partners in local government, schools, colleges and

universities, hospitals, parks and recreation, zoning and planning boards, local businesses, law enforcement, and local non-profit organizations to build healthy communities that increase access to physical activity opportunities through trail development and enhancements, park improvements, bike lanes, worksite wellness policies and environmental changes. In collaboration with partner organizations, Michigan passed Complete Streets state legislation in 2010⁴ and has adopted nearly 100 local Complete Streets local policies. MDCH has also assisted in contributing to 190 new Safe Routes to School (SRTS) programs through mini-grant funding and technical assistance and the registration of 556 schools as program participants in SRTS events. Through the efforts and funding support of the Michigan Department of Transportation, nearly 100 communities have conducted trainings on walkability and how enhancing walkability leads to more vibrant places. For more information, visit www.michigan.gov/preventobesity.

New York State's Health Improvement Plan

SHIP Excerpt from: *Prevention Agenda 2013-2017: New York State's Health Improvement Plan* (Published June 2013)⁵

Goal #1 – Improve the design and maintenance of the built environment to promote healthy lifestyles, sustainability, and adaption to climate change

Other Governmental Sectors

Promote healthy lifestyles, sustainability and adaptation to climate change

- Support climate change, complete streets, waterfront revitalization programs.
- Offer school, workplace and community-based physical education programs.
- Construct and maintain safe sidewalks, bike lanes, recreational facilities, parks and other amenities, especially in low-income communities.
- Increase public lands designated for public recreation, particularly in low-income communities.
- Provide on-going inspection, maintenance and upgrade of surface transit.
- Issue penalties for promoting carbon, unsustainable building.
- Offer subsidies and other incentives to increase availability of healthy food in low-income communities.

Outcome: The New York State Department of Health, through its Division of Chronic Disease Prevention (DCDP) and Center for Environmental Health (CEH), works closely with academic partners and local health departments to promote a safe and healthy built environment. The DCDP collaborates with the University at Albany School of Public Health to provide technical assistance to counties working on Complete Street policies and initiatives. For more information, visit http://www.albany.edu/sph/cphce/prevention_agenda_cs.shtml. Training offered by the Clinton County Health Department allowed a community group called P.A.S.S. (Plattsburgh Acquiring Safe Streets) to change a long-standing, but unsafe roadway to become a Complete Street; now bike lanes run along each side of the road giving cyclists a safe place to ride and freeing sidewalks up for pedestrians.

Florida's State Health Improvement Plan

SHIP Excerpt from: *Florida's State Health Improvement Plan, 2012-2015* (Published April 2012)⁶

Efforts to achieve objectives in Florida's State Health Improvement Plan, 2012-2015, were largely organized through the Florida Department of Health's mission to protect, promote and improve the health of all people in Florida through integrated state, county and community efforts. Coordinated efforts with partners such as the Florida Department of Transportation resulted in their adoption of the Complete Streets Policy. The State Surgeon General and Secretary of Health Dr. John Armstrong congratulated the Department of Transportation for putting in place a policy: "A physical environment that supports healthy activities is an essential requirement for healthy communities. Safer and more accessible walkways and bicycle lanes give Floridians and visitors the opportunity to incorporate healthy activities into their daily lives." Innovative collaborations like this policy will continue to move health forward in Florida.

Footnotes:

¹ <http://www.phaboard.org/wp-content/uploads/SM-Version-1.5-Board-adopted-FINAL-01-24-2014.docx.pdf>

² <http://www.astho.org/Programs/Accreditation-and-Performance/Accreditation/>

³ http://www.michigan.gov/documents/mdch/MDCH_SHIP_FINAL_8-16-12_400674_7.pdf

⁴ http://www.michigan.gov/mdot/0,1607,7-151-9623_31969_57564--,00.html

⁵ https://www.health.ny.gov/prevention/prevention_agenda/2013-2017/plan/healthy_environment/focus_area_3.htm

⁶ <http://www.floridahealth.gov/about-the-department-of-health/documents/state-health-improvement-plan.pdf>

States: Traffic Safety

Pedestrian Fatalities

	Total Pedestrian Fatalities (Total fatalities in 3-year period)			Pedestrian Fatality Rates (Fatalities per 10k walking commuters)			Pedestrian Fatalities as a Percentage of all Traffic Fatalities
	2005-2007 Total	2008-2010 Total	2011-2013 Total	2005-2007 Average	2008-2010 Average	2011-2013 Average	2005-2013 Percentage
Alabama	220	193 ▼	215 ▲	30	25 ▼	33 ▲	7%
Alaska	29	18 ▼	23 ▲	3	2 ▼	3 ▲	12%
Arizona	479	384 ▼	420 ▲	26	22 ▼	24 ▲	15%
Arkansas	113	120 ▲	134 ▲	18	17 ▼	21 ▲	7%
California	2,111	1,788 ▼	1,987 ▲	16	13 ▼	15 ▲	19%
Colorado	165	126 ▼	171 ▲	7	6 ▼	7 ▲	10%
Connecticut	104	119 ▲	105 ▼	7	8 ▲	7 ▼	13%
Delaware	54	58 ▲	70 ▲	18	20 ▲	25 ▲	17%
Florida	1,645	1,443 ▼	1,468 ▲	40	38 ▼	39 ▲	18%
Georgia	452	467 ▲	473 ▲	21	24 ▲	23 ▼	11%
Hawaii	93	62 ▼	72 ▲	11	7 ▼	8 ▲	21%
Idaho	34	31 ▼	36 ▲	5	5 ⊕	6 ▲	5%
Illinois	475	362 ▼	397 ▲	9	7 ▼	7 ⊕	13%
Indiana	195	166 ▼	198 ▲	10	8 ▼	11 ▲	8%
Iowa	72	56 ▼	65 ▲	4	3 ▼	4 ▲	5%
Kansas	67	56 ▼	65 ▲	6	5 ▼	7 ▲	5%
Kentucky	150	168 ▲	154 ▼	13	14 ▲	12 ▲	7%
Louisiana	321	292 ▼	306 ▲	30	25 ▼	27 ▲	12%
Maine	29	35 ▲	30 ▼	4	5 ▲	4 ▼	6%
Maryland	313	332 ▲	307 ▼	15	16 ▲	15 ▼	19%
Massachusetts	203	190 ▼	219 ▲	5	4 ▼	5 ▲	18%
Michigan	404	360 ▼	416 ▲	14	13 ▼	15 ▲	13%
Minnesota	115	102 ▼	109 ▲	5	4 ▼	5 ▲	8%
Mississippi	186	158 ▼	148 ▼	30	25 ▼	26 ▲	7%
Missouri	243	186 ▼	232 ▲	15	11 ▼	14 ▲	8%
Montana	40	34 ▼	47 ▲	6	5 ▼	7 ▲	6%
Nebraska	25	22 ▼	34 ▲	3	3 ⊕	4 ▲	4%
Nevada	166	127 ▼	166 ▲	21	16 ▼	21 ▲	16%
New Hampshire	24	24 ⊕	25 ▲	3	4 ▲	4 ⊕	6%
New Jersey	466	432 ▼	427 ▼	11	11 ⊕	11 ⊕	23%
New Mexico	182	111 ▼	149 ▲	30	17 ▼	25 ▲	13%
New York	910	908 ▼	925 ▲	6	5 ▼	5 ⊕	24%
North Carolina	508	475 ▼	534 ▲	23	21 ▼	23 ▲	12%
North Dakota	18	17 ▼	17 ⊕	4	4 ⊕	4 ⊕	4%
Ohio	299	277 ▼	302 ▲	8	8 ⊕	8 ⊕	9%
Oklahoma	163	144 ▼	166 ▲	17	15 ▼	18 ▲	7%
Oregon	143	142 ▼	149 ▲	8	7 ▼	7 ⊕	12%
Pennsylvania	476	416 ▼	457 ▲	7	6 ▼	7 ▲	11%
Rhode Island	42	37 ▼	33 ▼	9	7 ▼	6 ▼	17%
South Carolina	334	280 ▼	336 ▲	32	24 ▼	24 ⊕	11%
South Dakota	28	23 ▼	18 ▼	5	4 ▼	3 ▼	5%
Tennessee	228	218 ▼	227 ▲	19	19 ⊕	20 ▲	7%
Texas	1,222	1,134 ▼	1,387 ▲	22	20 ▼	24 ▲	12%
Utah	81	79 ▼	86 ▲	9	7 ▼	9 ▲	11%
Vermont	7	10 ▲	18 ▲	1	2 ▲	3 ▲	5%
Virginia	258	222 ▼	245 ▲	10	8 ▼	9 ▲	10%
Washington	199	183 ▼	184 ▲	6	6 ⊕	6 ⊕	12%
West Virginia	71	47 ▼	79 ▲	12	7 ▼	13 ▲	6%
Wisconsin	157	143 ▼	139 ▼	6	5 ▼	5 ⊕	8%
Wyoming	15	12 ▼	16 ▲	5	4 ▼	5 ▲	3%

TABLE KEY (this page and next):

Highlighted cells within the table denote a value that is higher than the average of the 50 states.

- ▲ Change over time increased
- ▼ Change over time decreased
- ⊕ Change over time less than 1 percentage point

Sources: FARS 2005-2013 (annual data); ACS 2007, 3-yr est; ACS 2010, 3-yr est; ACS 2013, 3-yr est.

Note: Fatality rates were calculated by averaging the number of pedestrian or bicyclist fatalities in the 3-year time span indicated and dividing by the estimated number of commuters walking to work (using corresponding ACS 3-year estimates). The accuracy of fatality rates is limited due to the potential for inaccurate and incomplete reporting of fatalities and due to the use of commuter data in the rate calculations. Reported fatalities may occur during other types of walking and biking trips, which are not counted by the ACS.

Bicyclist Fatalities

	Total Bicyclist Fatalities (Total fatalities in 3-year period)			Bicyclist Fatality Rates (Fatalities per 10k biking commuters)			Bicyclist Fatalities as a Percentage of all Traffic Fatalities
	2005-2007 Total	2008-2010 Total	2011-2013 Total	2005-2007 Average	2008-2010 Average	2011-2013 Average	2005-2013 Percentage
Alabama	32	16 ▼	20 ▲	61	20 ▼	27 ▲	1%
Alaska	4	3 ▼	4 ▲	5	3 ▼	4 ▲	2%
Arizona	85	63 ▼	72 ▲	14	9 ▼	9 ⊕	3%
Arkansas	9	12 ▲	16 ▲	16	31 ▲	30 ▼	1%
California	365	308 ▼	386 ▲	9	6 ▼	7 ▲	3%
Colorado	29	30 ▲	33 ▲	4	3 ▼	3 ⊕	2%
Connecticut	13	14 ▲	15 ▲	9	11 ▲	9 ▼	2%
Delaware	6	15 ▲	5 ▼	14	42 ▲	13 ▼	2%
Florida	374	316 ▼	383 ▲	31	21 ▼	23 ▲	4%
Georgia	57	59 ▲	59 ⊕	25	21 ▼	20 ▼	1%
Hawaii	12	8 ▼	6 ▼	9	4 ▼	3 ▼	2%
Idaho	7	13 ▲	5 ▼	4	5 ▲	2 ▼	1%
Illinois	63	70 ▲	86 ▲	8	7 ▼	8 ▲	2%
Indiana	49	38 ▼	40 ▲	15	11 ▼	9 ▼	2%
Iowa	23	15 ▼	11 ▼	11	7 ▼	5 ▼	1%
Kansas	12	12 ⊕	15 ▲	10	7 ▼	10 ▲	1%
Kentucky	20	18 ▼	11 ▼	23	16 ▼	8 ▼	1%
Louisiana	68	35 ▼	56 ▲	38	16 ▼	19 ▲	2%
Maine	8	5 ▼	5 ⊕	12	5 ▼	6 ▲	1%
Maryland	21	24 ▲	16 ▼	12	9 ▼	6 ▼	1%
Massachusetts	22	23 ▲	27 ▲	5	3 ▼	4 ▲	2%
Michigan	70	73 ▲	70 ▼	16	14 ▼	12 ▼	2%
Minnesota	19	32 ▲	18 ▼	4	5 ▲	3 ▼	2%
Mississippi	16	18 ▲	17 ▼	27	39 ▲	41 ▲	1%
Missouri	24	12 ▼	11 ▼	14	6 ▼	5 ▼	1%
Montana	10	4 ▼	3 ▼	5	2 ▼	1 ▼	1%
Nebraska	6	5 ▼	2 ▼	4	4 ⊕	1 ▼	1%
Nevada	30	19 ▼	14 ▼	16	11 ▼	9 ▼	2%
New Hampshire	8	3 ▼	8 ▲	16	5 ▼	17 ▲	2%
New Jersey	41	46 ▲	45 ▼	11	11 ⊕	10 ▼	2%
New Mexico	18	18 ⊕	15 ▼	13	9 ▼	8 ▼	1%
New York	145	107 ▼	142 ▲	13	9 ▼	9 ⊕	3%
North Carolina	75	71 ▼	74 ▲	28	23 ▼	24 ▲	2%
North Dakota	2	3 ▲	2 ▼	4	4 ⊕	4 ⊕	1%
Ohio	47	48 ▲	53 ▲	12	10 ▼	11 ▲	1%
Oklahoma	16	24 ▲	19 ▼	16	19 ▲	15 ▼	1%
Oregon	40	25 ▼	28 ▲	5	2 ▼	2 ⊕	3%
Pennsylvania	51	44 ▼	38 ▼	10	6 ▼	4 ▼	1%
Rhode Island	3	3 ⊕	5 ▲	8	4 ▼	9 ▲	2%
South Carolina	53	39 ▼	43 ▲	39	22 ▼	21 ▼	2%
South Dakota	1	2 ▲	1 ▼	2	3 ▲	1 ▼	0%
Tennessee	23	20 ▼	21 ▲	28	18 ▼	16 ▼	1%
Texas	147	143 ▼	149 ▲	20	18 ▼	15 ▼	1%
Utah	19	16 ▼	14 ▼	8	6 ▼	4 ▼	2%
Vermont	0	1 ▲	0 ▼	0	2 ▲	0 ▼	0%
Virginia	40	36 ▼	25 ▼	14	9 ▼	5 ▼	1%
Washington	34	24 ▼	34 ▲	5	3 ▼	4 ▲	2%
West Virginia	4	5 ▲	1 ▼	13	14 ▲	5 ▼	0%
Wisconsin	32	25 ▼	33 ▲	6	4 ▼	5 ▲	2%
Wyoming	2	3 ▲	1 ▼	3	4 ▲	1 ▼	0%

Pedestrian Fatalities, by Select Demographics

Percentage of all pedestrian fatalities (2005-2013)

	Youth (under age 16)	Percentage in total population	Seniors (age 65 and older)	Percentage in total population	People of color or Hispanic/Latino ⁽¹⁾	Percentage in total population
Alabama	8%	21%	13%	14%	47%	33%
Alaska	19%	23%	11%	9%	67%	37%
Arizona	5%	22%	16%	15%	62%	43%
Arkansas	7%	22%	12%	15%	33%	26%
California	6%	21%	24%	12%	61%	61%
Colorado	8%	21%	18%	12%	43%	31%
Connecticut	5%	19%	26%	15%	29%	30%
Delaware	5%	20%	13%	15%	25%	36%
Florida	5%	18%	20%	18%	43%	43%
Georgia	8%	22%	10%	11%	56%	45%
Hawaii	1%	20%	41%	15%	75%	77%
Idaho	13%	24%	26%	13%	15%	17%
Illinois	8%	21%	20%	13%	47%	37%
Indiana	11%	22%	18%	14%	25%	19%
Iowa	12%	21%	25%	15%	13%	12%
Kansas	10%	22%	21%	14%	23%	23%
Kentucky	9%	21%	17%	14%	19%	14%
Louisiana	8%	22%	8%	13%	94%	40%
Maine	6%	18%	33%	17%	4%	6%
Maryland	7%	20%	15%	13%	46%	46%
Massachusetts	4%	18%	33%	14%	23%	25%
Michigan	7%	20%	15%	15%	41%	24%
Minnesota	10%	21%	24%	14%	21%	18%
Mississippi	7%	22%	12%	13%	51%	42%
Missouri	8%	21%	14%	15%	28%	19%
Montana	6%	20%	21%	16%	27%	13%
Nebraska	10%	22%	20%	14%	25%	19%
Nevada	6%	21%	18%	13%	38%	47%
New Hampshire	10%	18%	38%	15%	7%	8%
New Jersey	6%	20%	24%	14%	44%	42%
New Mexico	5%	22%	12%	14%	71%	60%
New York	6%	19%	31%	14%	36%	43%
North Carolina	8%	21%	11%	14%	43%	35%
North Dakota	10%	20%	17%	14%	41%	12%
Ohio	11%	20%	17%	15%	24%	19%
Oklahoma	8%	22%	13%	14%	38%	32%
Oregon	6%	20%	20%	15%	16%	22%
Pennsylvania	8%	19%	29%	16%	24%	21%
Rhode Island	5%	18%	31%	15%	26%	25%
South Carolina	5%	20%	12%	15%	47%	36%
South Dakota	4%	22%	17%	15%	58%	16%
Tennessee	7%	21%	13%	14%	32%	25%
Texas	7%	24%	13%	11%	83%	56%
Utah	15%	28%	19%	9%	23%	20%
Vermont	0%	17%	46%	16%	0%	6%
Virginia	6%	20%	18%	13%	41%	36%
Washington	7%	20%	25%	13%	28%	29%
West Virginia	8%	18%	14%	17%	8%	7%
Wisconsin	10%	20%	27%	14%	28%	17%
Wyoming	5%	21%	16%	13%	31%	15%

TABLE KEY

Highlighted cells within the table denote a value that is higher than the percentage in the total population.

Sources: FARS 2005-2013 (annual data); ACS 2007, 3-yr est; ACS 2010, 3-yr est; ACS 2013, 3-yr est.

Note: (1) Data for fatalities by race and ethnicity in 2013 were not available; therefore, the percentages of pedestrian fatalities who were people of color or Hispanic/Latino cover the years 2005 through 2012. Due to sensitivities around reporting personal information in crash reports, race and ethnicity data may not be categorized properly on fatality report forms. As a result, some states have a high number of 'unknown' or 'other' race fatalities. For this table, the 'unknown' category has been removed, but the 'other' category has been included in the calculations.

Bicyclist Fatalities, by Select Demographics

Percentage of all bicyclist fatalities (2005–2013)

TABLE KEY
Highlighted cells within the table denote a value that is higher than the percentage in the total population.

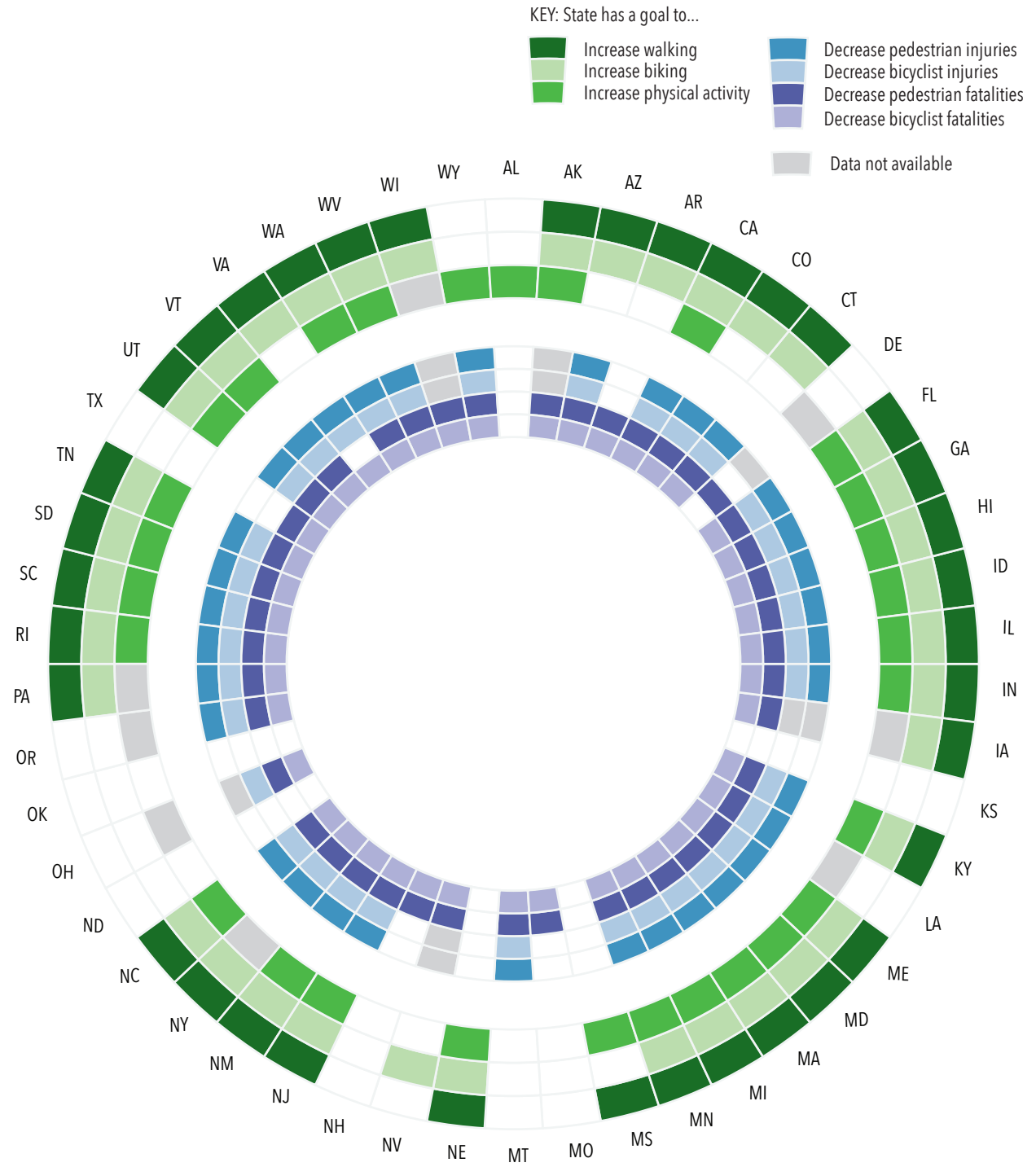
Sources: FARS 2005–2013 (annual data); ACS 2007, 3-yr est; ACS 2010, 3-yr est; ACS 2013, 3-yr est.

Note: The total number of bicyclist fatalities should be considered when viewing these data. Due to few overall bicyclist fatalities in some states, these percentages may be skewed. (1) Data for fatalities by race and ethnicity in 2013 were not available; therefore, the percentages of bicyclist fatalities who were people of color or Hispanic/Latino cover the years 2005 through 2012. Due to sensitivities around reporting personal information in crash reports, race and ethnicity data may not be categorized properly on fatality report forms. As a result, some states have a high number of 'unknown' or 'other' race fatalities. For this table, the 'unknown' category has been removed, but the 'other' category has been included in the calculations.

	Youth (under age 16)	Percentage in total population	Seniors (age 65 and older)	Percentage in total population	People of color or Hispanic/Latino	Percentage in total population
Alabama	21%	21%	3%	14%	37%	33%
Alaska	36%	23%	0%	9%	44%	37%
Arizona	10%	22%	17%	15%	45%	43%
Arkansas	19%	22%	3%	15%	33%	26%
California	9%	21%	14%	12%	52%	61%
Colorado	13%	21%	12%	12%	24%	31%
Connecticut	29%	19%	7%	15%	30%	30%
Delaware	19%	20%	15%	15%	16%	36%
Florida	5%	18%	13%	18%	38%	43%
Georgia	15%	22%	6%	11%	48%	45%
Hawaii	0%	20%	19%	15%	42%	77%
Idaho	16%	24%	12%	13%	15%	17%
Illinois	17%	21%	15%	13%	36%	37%
Indiana	16%	22%	9%	14%	11%	19%
Iowa	16%	21%	10%	15%	2%	12%
Kansas	23%	22%	8%	14%	21%	23%
Kentucky	22%	21%	6%	14%	17%	14%
Louisiana	13%	22%	7%	13%	93%	40%
Maine	28%	18%	0%	17%	0%	6%
Maryland	20%	20%	3%	13%	30%	46%
Massachusetts	15%	18%	10%	14%	23%	25%
Michigan	15%	20%	13%	15%	24%	24%
Minnesota	25%	21%	16%	14%	13%	18%
Mississippi	16%	22%	2%	13%	51%	42%
Missouri	21%	21%	15%	15%	24%	19%
Montana	35%	20%	6%	16%	13%	13%
Nebraska	15%	22%	8%	14%	31%	19%
Nevada	19%	21%	6%	13%	44%	47%
New Hampshire	32%	18%	0%	15%	7%	8%
New Jersey	14%	20%	10%	14%	44%	42%
New Mexico	6%	22%	14%	14%	49%	60%
New York	15%	19%	11%	14%	31%	43%
North Carolina	8%	21%	8%	14%	47%	35%
North Dakota	57%	20%	14%	14%	33%	12%
Ohio	15%	20%	11%	15%	20%	19%
Oklahoma	20%	22%	14%	14%	20%	32%
Oregon	4%	20%	17%	15%	11%	22%
Pennsylvania	23%	19%	5%	16%	19%	21%
Rhode Island	9%	18%	55%	15%	25%	25%
South Carolina	10%	20%	7%	15%	49%	36%
South Dakota	0%	22%	0%	15%	0%	16%
Tennessee	22%	21%	6%	14%	29%	25%
Texas	15%	24%	9%	11%	83%	56%
Utah	24%	28%	12%	9%	14%	20%
Vermont	100%	17%	0%	16%	0%	6%
Virginia	12%	20%	6%	13%	41%	36%
Washington	12%	20%	12%	13%	19%	29%
West Virginia	10%	18%	10%	17%	0%	7%
Wisconsin	12%	20%	13%	14%	6%	17%
Wyoming	17%	21%	0%	13%	0%	15%

States: Administrative Priorities

Goals for Health and Safety



Source: Benchmarking / Bicycle Friendly States Survey 2015

Plans, Guides and Requirements Supporting Improvements for Pedestrians and Bicyclists

Bike/Ped-Friendly Plans, Guides, and Requirements

	1	2	3	4	5	6	7	8	9
Alabama	■			■	☐				
Alaska	■		■	■	■				☐ B
Arizona	■	■	■	■	■				☐ B
Arkansas	■			■	☐				■
California			■	■	■		■		■
Colorado	■			■	■			■	■
Connecticut	■	■	■	■	■		■		■
Delaware	✕		■	☐ P				■	■
Florida			■	■	☐				■
Georgia	☐ B			■	☐			■	■
Hawaii	✕			■	■				■
Idaho				■					■
Illinois	☐ B		■	■	■	■	■		■
Indiana			■	■	☐				■
Iowa					☐ B		■	■	■
Kansas	■		■		☐				☐ B
Kentucky	■	■		■	■				■
Louisiana	■							■	■
Maine				■	■	■	■		■
Maryland	■		■	■	■		■		■
Massachusetts	✕		■	■	■	■	■	■	■
Michigan			■	■	■				■
Minnesota	☐ B		■	■	■		■	■	■
Mississippi					☐				■
Missouri				■	☐				■
Montana			■		☐				■
Nebraska			■		☐				■
Nevada	☐ B			■					■
New Hampshire	■		■	■	■				■
New Jersey	■		■	■	■		■		■
New Mexico				■	☐		■		■
New York	■		■	■	■				■
North Carolina	■			■	☐				☐ B
North Dakota	☐ B	■	■		☐		■		■
Ohio	■			■	■		■		■
Oklahoma									■
Oregon	■		■	■	■				■
Pennsylvania	■		■	■	☐				■
Rhode Island			■	■	■	■	■		■
South Carolina				■	■				■
South Dakota					☐				■
Tennessee ¹	■ ☐ B		■	■	■		■		■
Texas				■	☐				■
Utah	☐ B			■	■		■		■
Vermont	■			■	■				■
Virginia	✕	■	■	■	☐			■	■
Washington	■		■	■	■	■	■	■	■
West Virginia	☐ B		■	■	■		■		■
Wisconsin	✕		■	■			■		■
Wyoming	■				☐				■

Bike/Ped-Friendly Plans, Guides, and Requirements

1. Bike and/or Ped Master Plan
2. Mountain Bike Trail Plan
3. Trails Plan
4. Highway Safety Plan Includes Emphasis on Bike/Ped Safety
5. Carbon Emissions Plan Encourages Bike/Ped
6. Health Impact Assessment Required
7. Project Selection Criteria Includes Physical Activity
8. Adopted NACTO Design Guide (Streets and/or Bikeways)
9. Adopted Other Design Guide (for Bikes and/or Pedestrians)

KEY:

- Pedestrians and bicycles are addressed together in one plan, guide, or requirement
- ✕ Pedestrians and bicycles are addressed, but in separate plans, guides, or requirements
- ☐ P Plan, guide, or requirement only addresses pedestrians
- ☐ B Plan, guide, or requirement only addresses bicycles
- ☐ Not applicable (no such plan, guide, or requirement is in place)

Source: Benchmarking / Bicycle Friendly States Survey 2015.

Note: (1) Tennessee has both a combined bike/ped plan (implemented in 2005) and a stand-alone bike plan (implemented in 2011).

When states publish goals and plans to increase bicycling and walking and to decrease crashes, they are making public commitments to progress for which success can be easily measured. Forty-five states now have stated goals to increase biking and walking, and 42 states have goals to reduce bicyclist and pedestrian fatalities. In addition, the majority of states have a Highway Safety Plan that includes an emphasis on bike/ped safety.

Policies Supporting Improvements for Pedestrians and Bicyclists

Bike/Ped-Friendly Policies

	1	2	3	4	5	6
Alabama			☐			
Alaska		■	☐	■		
Arizona		■	■	■	■	
Arkansas		■	☐	■		
California	■		■	■	▣ B	
Colorado	■	■	☐			
Connecticut	■		■		■	
Delaware	■		■	■		
Florida	■	■	■	■		
Georgia	■		☐	■	■	
Hawaii	■					
Idaho		■	☐			
Illinois	■		▣ B			
Indiana	■				▣ B	
Iowa		■	☐	■		
Kansas			☐	■		
Kentucky		■	☐	■		■
Louisiana	■		☐	■		
Maine	■		■		■	
Maryland	■		■	■	■	■
Massachusetts	■	■	■		■	
Michigan	■	■	■	■		■
Minnesota	■	■	■	■		■
Mississippi	■	■	☐	■		
Missouri			☐			
Montana			☐	■		
Nebraska			☐	■		
Nevada				■		
New Hampshire		■		■		
New Jersey	■			■	■	
New Mexico			☐			
New York	■	■	■	■		
North Carolina	■		▣ B	■		■
North Dakota		■	☐	■		
Ohio		■	☐	■		
Oklahoma			☐	■		
Oregon	■	■	■		■	
Pennsylvania	■	■	☐			■
Rhode Island	■	■	■	■		
South Carolina	■	■	■	■		
South Dakota				■		
Tennessee	■	■	■	■		■
Texas	■	■	☐	■		
Utah		■				
Vermont	■		■	■	■	
Virginia	■	■		■	▣ B	■
Washington	■	■	■	■	■	■
West Virginia	■					■
Wisconsin	■		■	■		■
Wyoming			☐	■		■

KEY: ■ Policy or legislation is in place
 ▣ B Policy only applies to bicycles
 ☐ Not applicable (no such policy is in place)

Source: Benchmarking / Bicycle Friendly States Survey 2015, National Complete Streets Coalition (accessed Feb 2015)

Key to Policies, by number:

- 1. Complete Streets:** Complete Streets policies ensure that streets are planned, designed, and operated with the needs of all users in mind including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Read more: www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals
- 2. Accommodation Policy:** The U.S. Department of Transportation encourages agencies and governments to adopt their policy statement on bicycle and pedestrian accommodation "to incorporate safe and convenient walking and bicycling facilities into transportation projects." Read more: www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/policy_accom.cfm
- 3. Smart Growth Policy Encourages Bike/Ped:** By integrating land use and transportation planning into smart growth policies, communities can be designed so that homes are near office, schools, shops, parks, and other amenities and provide the public the option to bike or walk instead of drive. www.epa.gov/smartgrowth or www.smartgrowthamerica.org
- 4. Vision Zero Policy:** Vision Zero policies set a target of zero traffic fatalities or serious injuries on roadways. Policies vary by location and often include elements such as improving street design, reducing traffic speeds, and increasing education and enforcement. visionzeroinitiative.com
- 5. Incentives for Bike/Ped Commuting:** Governments or employers can use incentives to encourage bicycling or walking to work. Examples include offering a place to shower, lockers, or secured bike parking, allowing flexible schedules or casual dress, and providing gift certificates or bonuses. Read more in The Bike/Ped Commuter Handbook from the League of American Bicyclists: www.bikeleague.org/sites/default/files/bikeleague/bikeleague.org/programs/bicyclefriendlyamerica/bicyclefriendlybusiness/pdfs/handbook_for_employers.pdf
- 6. Bike Parking Required at State Facilities:** Governments can implement ordinances that require all new developments or buildings undergoing a change to provide bike parking. For more information, visit: www.fhwa.dot.gov/publications/research/safety/pedbike/05085/pdf/lesson17lo.pdf or www.la-bike.org/sites/default/files/Websitefiles/LACBC_Bicycle_Parking_Ordinance_Guide.pdf



Washington Bikes staff and coalition partners with Washington Governor at a bill signing for a vulnerable road user law. Photo courtesy of Washington Bikes.

The Power of State Policy

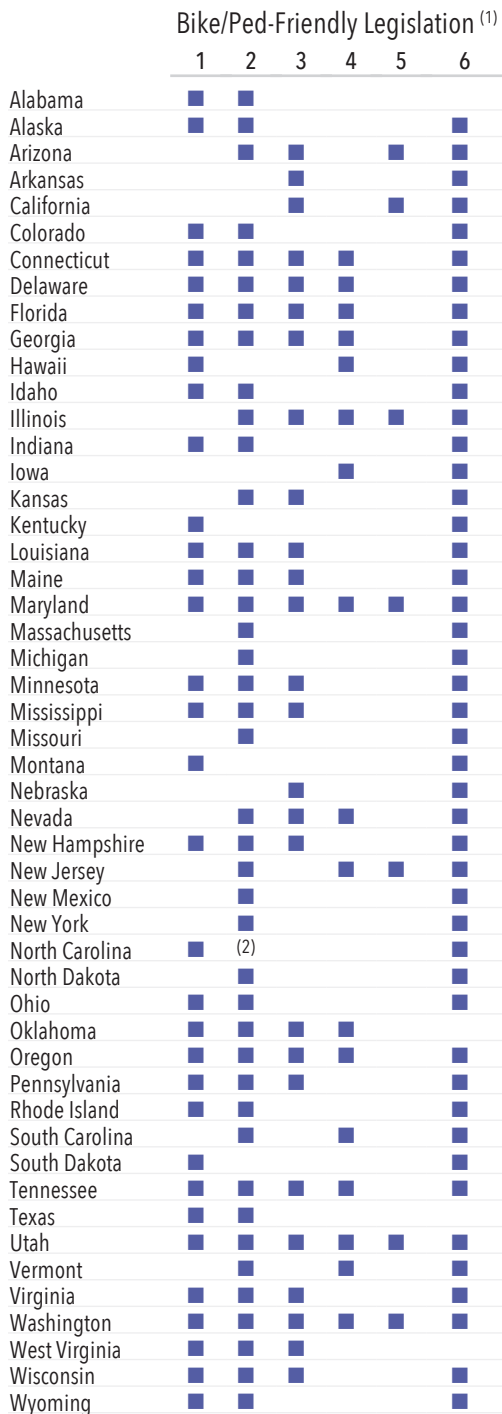
By Barb Chamberlain, Chief Strategic Officer, Washington Bikes

Every law passed is another opportunity to educate people about how we interact on the streets and to broaden the base of support for biking and walking. As policies accumulate they create the basis for more wins because you have precedents to build on.

With passage of the Neighborhood Safe Streets Bill in 2014, for example, we had support from AAA to AARP Washington to the Childhood Obesity Prevention Coalition. We talked about making streets safer for biking and walking to encourage healthy transportation and recreation, and the importance of thinking about the safety of children and senior citizens in particular. The benefits go far beyond transportation statistics to make streets more livable and improve the quality of neighborhoods.

We really do change the way streets are designed through policy wins such as our creation of a Complete Streets grant program in 2011. Simply by creating the possibility that grants would be available, we gave local advocates a message they could take to their city councils to get Complete Streets ordinances adopted so their towns would be eligible for funding if and when we got it. Funding for the program was then part of our big win in the 2015 transportation revenue package.

Legislation Supporting Pedestrians and Bicyclists



Source: Benchmarking / Bicycle Friendly States Survey 2015.
 Notes: (1) Wording of the actual legislation varies from state to state. For a more thorough review of bicycle laws, visit BikeLeague.org/BikeLaws. (2) It is legal to ride two abreast in North Carolina; the state does not have a law that specifically allows or prohibits it.

KEY (this page and next):

■ Policy or legislation is in place

Key to Legislation:

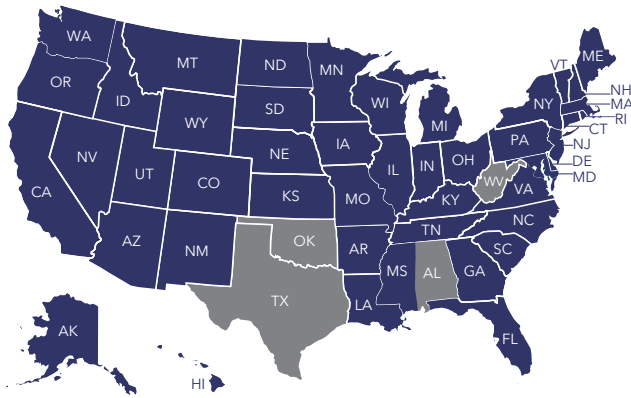
- Bicycles Considered Vehicles:** In states where bicyclists are considered vehicles, bicyclists are subject to the same traffic laws and rules as car drivers and are also granted the same rights on the road.
- Bicyclists Can Ride Two-Abreast:** This law allows bicyclists to ride two-abreast and commonly stipulates that the riders are not impeding the normal and reasonable movement of traffic.
- Three-Foot Safe Passing Required:** States with three-foot safe passing laws require vehicles overtaking a bicycle to pass at a safe distance of not less than three feet.
- Vulnerable Road User Law:** Vulnerable road user laws vary state-by-state and are intended to increase protection for pedestrians, bicyclists, and other non-car road users. They often increase penalties for violating existing laws that impact vulnerable road users and prohibit certain actions being taken towards them such as throwing an object or harassment.
- Trip Reduction Law:** As a way to manage traffic congestion and alleviate air pollution, trip reduction laws can require local, regional, or state governments or employers to encourage the use of alternative forms of transportation and develop programs that reduce drive-alone trips.
- Right of Way in Crosswalks:** This law requires that vehicles must stop or yield the right-of-way to pedestrians crossing an intersection at a marked or unmarked crosswalk.

For additional information on these laws and other common bicycle/pedestrian-friendly laws, visit the League or American Bicyclist's Bike Law University (www.bikeleague.org/content/bike-law-university) or the National Conference of State Legislatures (www.ncsl.org/research/transportation/bicycles-and-pedestrians.aspx).

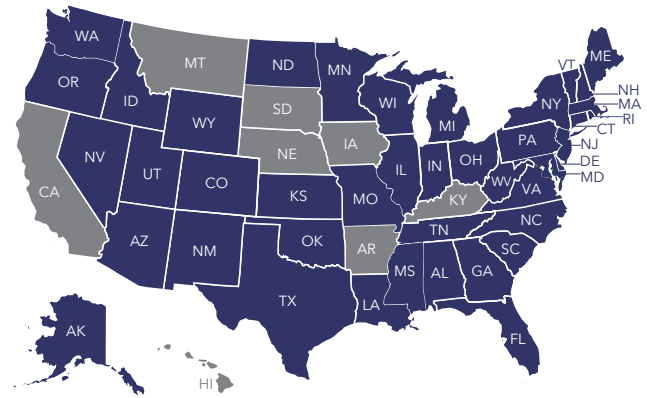
State Legislation that Supports Biking & Walking

■ Policy or legislation is in place

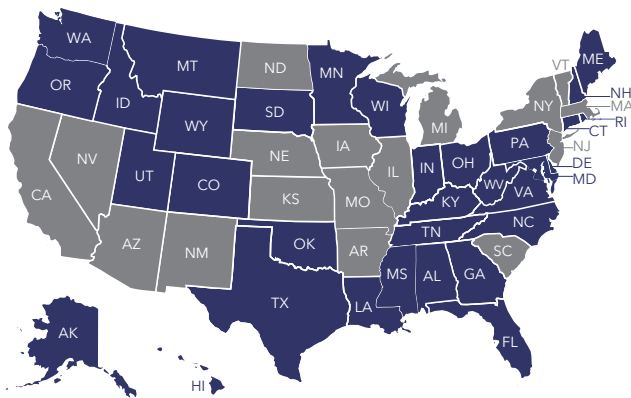
Right of Way in Crosswalks



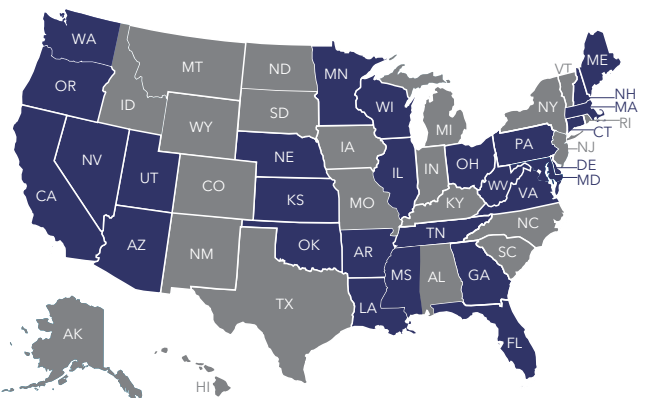
Bicyclists Can Ride Two Aboard



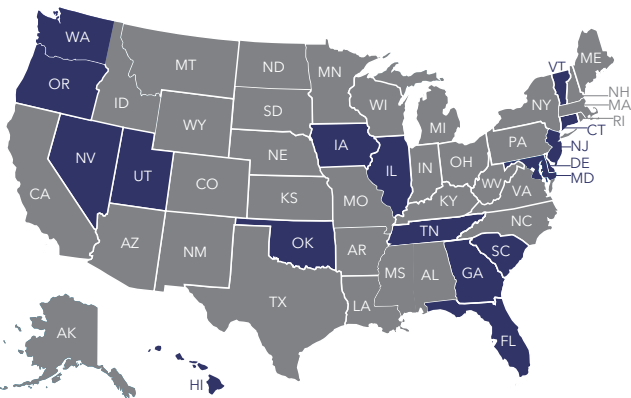
Bicycles Considered Vehicles



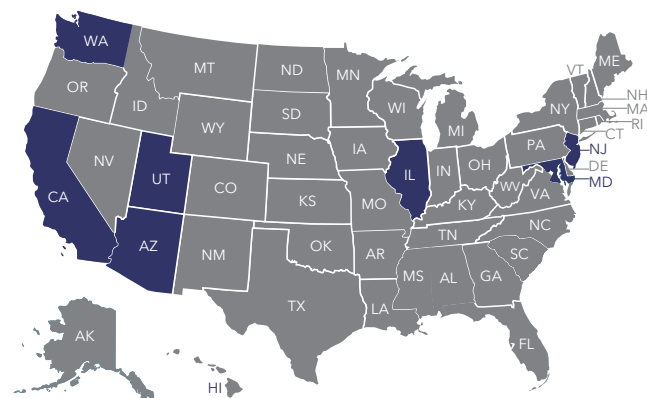
Three-Foot Safe Passing Required



Vulnerable Road User Law



Trip Reduction Law



Source: Benchmarking / Bicycle Friendly States Survey 2015

Statewide Education Efforts

	State	1	2	3	4	5	6	7	8	9	10
Key to statewide education efforts 1. Share the road campaign 2. Share the road driver training for state employees 3. Drivers license test that includes motorists rights and responsibilities toward cyclists 4. State commercial drivers license test with questions on motorists rights and responsibilities towards cyclists 5. Information on the rights and responsibilities of the motorist/bicyclist interaction in the state drivers manual 6. Safety guide on motorist/ bicyclist interaction 7. State bicycle riders manual or pocket guide 8. Statewide Safe Routes to School curriculum 9. Police training on state vehicle code as it applies to bicyclists 10. Diversion program for traffic offenders that includes information on sharing the road with bicyclists	Alabama					✓					
	Alaska			✓		✓				✓	
	Arizona	✓	✓	✓		✓	✓	✓	✓		
	Arkansas			✓		✓		✓		✓	
	California	✓	✓	✓		✓	✓		✓	✓	
	Colorado	✓		✓	✓	✓		✓	✓	✓	
	Connecticut			✓	✓	✓	✓		✓	✓	
	Delaware	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Florida	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Georgia	✓		✓		✓	✓	✓	✓	✓	
Hawaii	✓		✓	✓	✓	✓					
Idaho			✓		✓			✓		✓	
Illinois	✓	✓	✓	✓	✓	✓				✓	
Indiana	✓		✓		✓			✓	✓	✓	
Iowa	✓		✓	✓	✓				✓	✓	
Kansas	✓				✓						
Kentucky	✓		✓		✓			✓		✓	
Louisiana	✓		✓		✓					✓	
Maine	✓		✓		✓	✓	✓	✓	✓	✓	
Maryland	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Massachusetts	✓		✓		✓	✓	✓	✓	✓	✓	
Michigan	✓		✓	✓	✓	✓			✓	✓	✓
Minnesota	✓	✓	✓		✓	✓	✓	✓	✓	✓	
Mississippi	✓		✓		✓	✓	✓	✓	✓		
Missouri	✓	✓	✓	✓	✓	✓				✓	
Montana	✓		✓		✓	✓	✓			✓	
Nebraska			✓	✓	✓				✓	✓	
Nevada	✓		✓		✓	✓	✓				
New Hampshire	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
New Jersey	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
New Mexico	✓		✓		✓	✓			✓	✓	
New York	✓		✓		✓	✓	✓		✓	✓	✓
North Carolina	✓		✓		✓	✓	✓	✓	✓		
North Dakota	✓	✓	✓	✓	✓	✓					
Ohio	✓		✓		✓	✓	✓	✓	✓	✓	
Oklahoma	✓		✓	✓	✓	✓			✓	✓	
Oregon	✓		✓	✓	✓		✓	✓	✓	✓	
Pennsylvania	✓		✓	✓	✓	✓	✓	✓	✓	✓	
Rhode Island	✓		✓		✓	✓			✓	✓	
South Carolina	✓	✓	✓	✓	✓				✓	✓	
South Dakota			✓	✓	✓					✓	
Tennessee	✓				✓	✓	✓		✓	✓	
Texas	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Utah	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Vermont	✓		✓		✓	✓	✓	✓	✓	✓	
Virginia	✓		✓	✓	✓	✓	✓	✓	✓		
Washington	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
West Virginia			✓	✓					✓	✓	
Wisconsin	✓	✓	✓	✓	✓	✓			✓	✓	✓
Wyoming	✓		✓	✓	✓				✓		

Available Training for Those Who Impact Biking and Walking

	State DOT employees participated in training to use the National Highway Institute Traffic Monitoring Guide	Complete Streets / Accommodation Policy training for engineers and planners	State DOT employees attended training on innovative bike/ped infrastructure in 2014	State DOT sponsored training on innovative bike/ped infrastructure in 2014	Bicycling enforcement is part of a Police Officer Standards and Training (POST) course	Bicycling enforcement training is part of the police academy curriculum for new officers
Alabama	■				■	■
Alaska	■					
Arizona		■	■	■		
Arkansas		■	■	■	■	■
California	■	■	■	■	■	■
Colorado	■	■	■	■	■	■
Connecticut	■	■	■		■	■
Delaware			■	■		■
Florida	■	■	■	■		
Georgia	■	■	■	■	■	
Hawaii						■
Idaho	■		■	■		■
Illinois		■	■	■	■	■
Indiana		■	■		■	■
Iowa	■	■	■	■	■	■
Kansas	■					
Kentucky		■	■	■	■	■
Louisiana		■	■	■	■	■
Maine		■	■	■		■
Maryland			■		■	
Massachusetts		■	■	■	■	■
Michigan	■	■	■	■	■	■
Minnesota	■	■	■	■	■	■
Mississippi	■	■	■	■	■	■
Missouri			■	■	■	■
Montana	■		■	■	■	■
Nebraska	■		■		■	■
Nevada		■	■	■		
New Hampshire		■			■	■
New Jersey		■	■	■	■	
New Mexico	■					■
New York		■	■	■		
North Carolina		■	■	■		
North Dakota		■				
Ohio	■	■	■	■	■	■
Oklahoma			■			
Oregon	■		■	■	■	■
Pennsylvania	■	■	■	■	■	■
Rhode Island		■	■	■	■	■
South Carolina	■	■	■	■	■	
South Dakota			■	■		■
Tennessee			■		■	
Texas		■	■	■		
Utah		■	■	■	■	■
Vermont		■	■	■		
Virginia		■	■	■		
Washington	■	■	■	■		■
West Virginia			■	■		
Wisconsin	■	■	■	■		
Wyoming	■		■	■		

Source: Benchmarking / Bicycle Friendly States Survey 2015

Spending Targets, Dedicated Funding, and State DOT Staffing Rates (per million population)

Sources: Benchmarking / Bicycle Friendly States Survey 2015, Advocacy Advance, 2014 ("State Revenue Sources"), ACS 2013 3-yr est.

Notes: Staffing rates represent full-time equivalent (FTE) staff hired by the state Department of Transportation to work on bicycle and pedestrian projects. States were asked to report how many state DOT employees, expressed in FTE, work on bicycle and/or pedestrian issues as detailed in their work description in the last two years (including Safe Routes to School and regular contract hours). An FTE of 1.0 means that the person is equivalent to a full-time worker, while an FTE of 0.5 indicates that the worker is only half-time. These FTE are illustrated as a rate per million population.

 State has a bicycle and pedestrian spending target
 State has dedicated funding source

WASHINGTON

Spending target: No less than 0.03% of the total state and federal transportation budget. In 2013-2015 biennium budget, this amount was \$26.85 million.

Dedicated funding sources:
Legislatively approved funding

OREGON

Spending target: No less than 1% of the State Highway Fund. This amount ranges from \$6 to \$8 million.

Dedicated funding source:
Lottery revenue

NEVADA

Dedicated funding source:
Vehicle registration fees (voluntary donation)

CALIFORNIA

Spending target: \$130 million per year (1% of transportation budget) through the Active Transportation Program. First cycle awarded \$360 million for fiscal years 2013/14, 2014/15, and 2015/16.

Dedicated funding sources:
State fuel (gas) tax
Vehicle registration fees
General fund
Bond proceeds
Public private partnership

MONTANA

Spending target:
No less than \$200,000 per year by law.

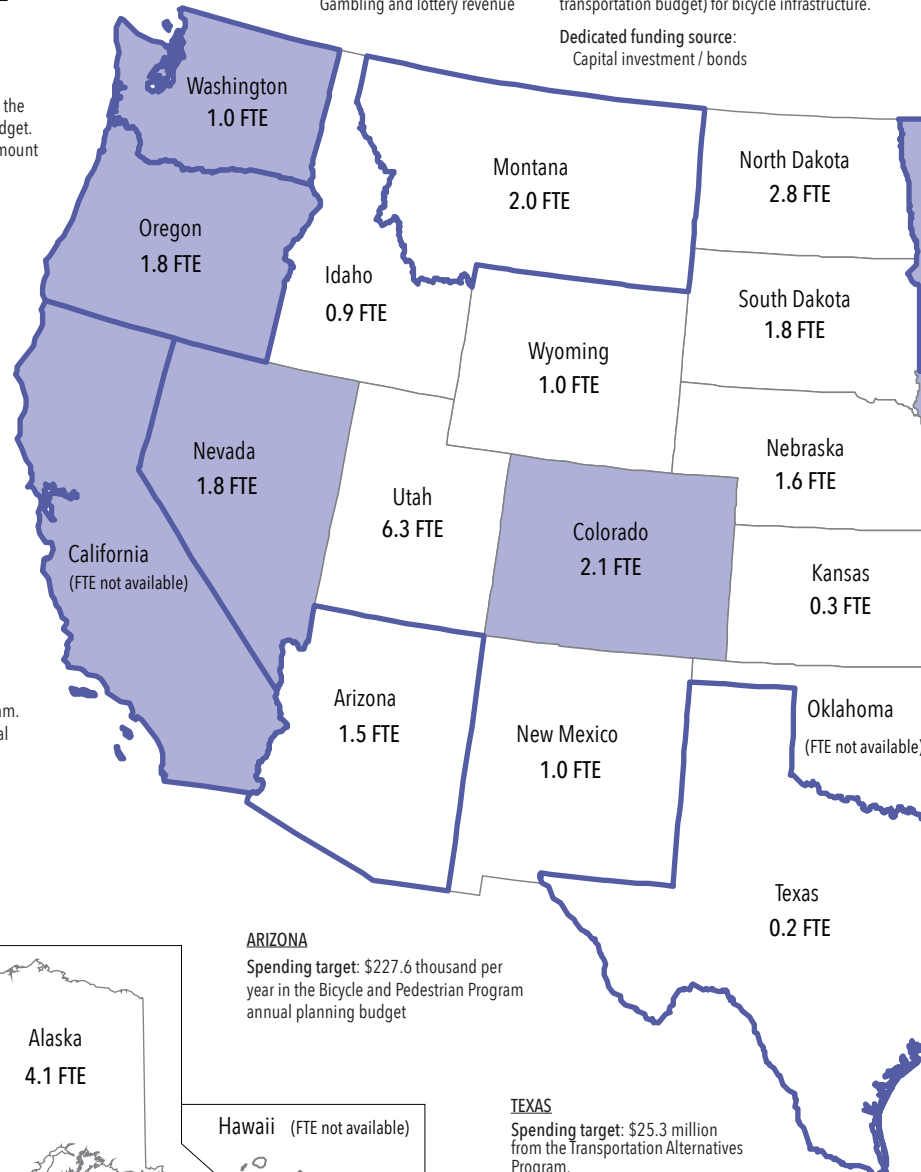
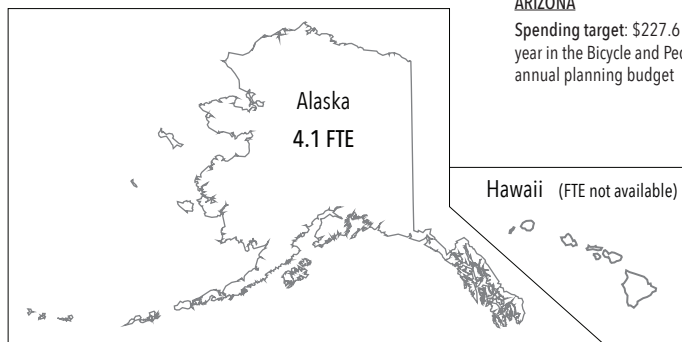
COLORADO

Dedicated funding sources:
State fuel (gas) tax
Vehicle and truck taxes
Vehicle registration fees
Gambling and lottery revenue

MINNESOTA

Spending target: \$12 million per year (1.6% of the annual transportation budget) for accessible pedestrian infrastructure. \$10 million per year (1.4% of the annual transportation budget) for bicycle infrastructure.

Dedicated funding source:
Capital investment / bonds

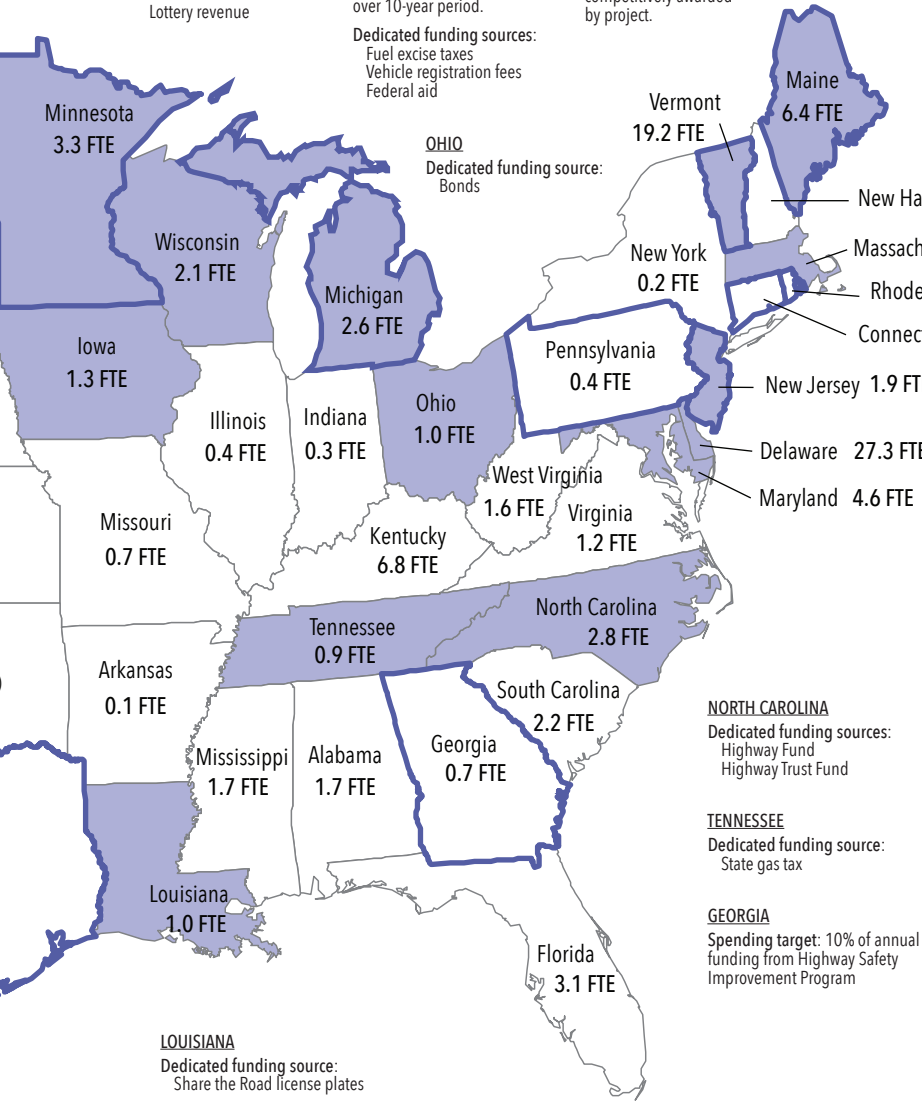


ARIZONA

Spending target: \$227.6 thousand per year in the Bicycle and Pedestrian Program annual planning budget

TEXAS

Spending target: \$25.3 million from the Transportation Alternatives Program.



WISCONSIN

Dedicated funding sources:
Allocated state funds
Department of Natural Resources Stewardship funds

IOWA

Dedicated funding sources:
General fund
Infrastructure fund
Lottery revenue

MICHIGAN

Spending target: 1% of state transportation fund, averaged over 10-year period.

Dedicated funding sources:
Fuel excise taxes
Vehicle registration fees
Federal aid

OHIO

Dedicated funding source:
Bonds

PENNSYLVANIA

Spending target: 1.4% (\$2 million) of the state's \$140 million multi-modal fund is dedicated to bike/ped projects every year. Remaining funds are discretionary and are competitively awarded by project.

VERMONT

Spending target: \$9 million in anticipated annual expenditures on projects identified in the bike/ped program.

Dedicated funding source:
Appropriated funds

MAINE

Spending target: \$3.3 million per year through Complete Streets Program

Dedicated funding source:
State Highway Funds, for 50% match program

MASSACHUSETTS

Dedicated funding source:
State bonding bill (earmarks)

RHODE ISLAND

Spending target: \$14.08 million in four-year period of the Transportation Improvement Plan

CONNECTICUT

Spending target: 1% of the construction, maintenance and repair budget per fiscal year

NEW JERSEY

Spending target: \$25.8 million (1.25% of the transportation budget) per fiscal year

Dedicated funding source:
State gas tax

DELAWARE

Dedicated funding sources:
Federal Aid Highway (CMAQ)
State funding

MARYLAND

Dedicated funding sources:
Motor fuel taxes
Vehicle excise (titling) taxes
Federal aid
Bond proceeds
Corporate income taxes
Sales and use taxes
Operating revenues (e.g., transit fares, port fees, airport fees)
Motor vehicle fees (e.g., registrations, licenses and other fees)

NORTH CAROLINA

Dedicated funding sources:
Highway Fund
Highway Trust Fund

TENNESSEE

Dedicated funding source:
State gas tax

GEORGIA

Spending target: 10% of annual funding from Highway Safety Improvement Program

LOUISIANA

Dedicated funding source:
Share the Road license plates

States: Available Resources

Federal Funds Obligated to Bicycle and Pedestrian Projects

	FMIS Reporting Method		Total Obligated Funds to Bike/Ped Projects: ⁽¹⁾			Average Annual Spending per Capita on Bike/Ped Projects:		
	Reports spending only for stand-alone bike/ped projects	OR Reports spending for bike/ped facilities part of larger projects	FY 2006-2008	FY 2009-2011 ⁽²⁾	FY 2012-2014	FY 2006-2008	FY 2009-2011	FY 2012-2014
Alabama	✓		\$24,291,724	\$40,046,340	\$19,000,560	\$1.75	\$2.79	\$1.31
Alaska		✓	\$22,280,152	\$29,878,930	\$25,337,170	\$10.90	\$13.99	\$11.58
Arizona		✓	\$44,074,907	\$50,497,972	\$39,544,668	\$2.32	\$2.62	\$2.01
Arkansas	✓		\$16,179,128	\$13,533,580	\$25,081,020	\$1.91	\$1.55	\$2.83
California		✓	\$149,497,453	\$254,409,619	\$288,878,497	\$1.37	\$2.27	\$2.53
Colorado	✓		\$18,100,711	\$49,715,890	\$20,765,353	\$1.25	\$3.28	\$1.33
Connecticut	✓		\$19,990,522	\$24,452,781	\$35,315,503	\$1.91	\$2.28	\$3.28
Delaware	✓		\$15,102,121	\$22,832,436	\$22,775,526	\$5.84	\$8.46	\$8.28
Florida		✓	\$79,242,855	\$270,358,707	\$172,485,203	\$1.45	\$4.78	\$2.98
Georgia	✓		\$49,478,630	\$135,468,614	\$101,785,992	\$1.73	\$4.65	\$3.43
Hawaii		✓	\$4,412,634	\$11,143,604	-\$391,225 ⁽⁴⁾	\$1.15	\$2.73	-\$0.09 ⁽⁴⁾
Idaho	✓		\$11,821,236	\$11,948,185	\$3,938,026	\$2.64	\$2.54	\$0.82
Illinois		✓	\$22,020,429	\$67,802,006	\$85,031,839	\$0.57	\$1.76	\$2.20
Indiana	✓		\$41,705,748	\$113,322,028	\$63,716,331	\$2.19	\$5.82	\$3.25
Iowa		✓	\$34,245,294	\$53,649,969	\$16,249,692	\$3.82	\$5.87	\$1.76
Kansas	✓		\$18,587,423	\$15,064,168	\$16,761,351	\$2.23	\$1.76	\$1.94
Kentucky		✓ ⁽³⁾	\$27,127,654	\$81,318,568	\$68,280,609	\$2.14	\$6.24	\$5.20
Louisiana		✓	\$17,330,635	\$48,274,384	\$14,169,735	\$1.33	\$3.55	\$1.03
Maine	✓		\$7,876,908	\$17,977,473	\$8,255,718	\$2.00	\$4.51	\$2.07
Maryland	✓		\$11,006,691	\$19,891,967	\$23,511,748	\$0.65	\$1.15	\$1.33
Massachusetts		✓	\$30,158,634	\$66,464,846	\$46,249,492	\$1.55	\$3.38	\$2.32
Michigan	✓		\$45,884,193	\$78,150,002	\$83,100,359	\$1.52	\$2.64	\$2.80
Minnesota	✓		\$45,149,086	\$79,627,243	\$72,796,076	\$2.90	\$5.00	\$4.51
Mississippi		✓	\$19,114,423	\$29,669,420	\$18,730,178	\$2.18	\$3.33	\$2.09
Missouri	✓		\$48,892,833	\$91,660,411	\$82,036,954	\$2.77	\$5.10	\$4.54
Montana		✓	\$20,472,607	\$23,259,593	\$16,571,265	\$7.13	\$7.82	\$5.49
Nebraska		✓	\$13,321,756	\$15,797,081	\$15,653,892	\$2.51	\$2.88	\$2.81
Nevada	✓		\$7,930,891	\$14,635,541	\$17,139,902	\$1.04	\$1.80	\$2.07
New Hampshire	✓		\$16,216,963	\$8,329,469	\$5,928,313	\$4.12	\$2.11	\$1.50
New Jersey		✓	\$13,663,704	\$42,164,010	\$11,135,032	\$0.53	\$1.60	\$0.42
New Mexico		✓	\$19,782,346	\$40,376,457	\$15,388,394	\$3.36	\$6.53	\$2.46
New York		✓	\$53,644,664	\$190,108,625	\$138,718,611	\$0.92	\$3.27	\$2.36
North Carolina	✓		\$45,240,827	\$95,424,565	\$51,018,233	\$1.67	\$3.33	\$1.74
North Dakota	✓		\$6,921,172	\$10,589,389	\$7,693,325	\$3.61	\$5.23	\$3.65
Ohio	✓		\$46,638,665	\$64,727,725	\$91,151,185	\$1.35	\$1.87	\$2.63
Oklahoma	✓		-\$3,715,723 ⁽⁴⁾	\$26,616,600	\$3,294,090	-\$0.34 ⁽⁴⁾	\$2.36	\$0.29
Oregon		✓	\$11,152,963	\$56,892,707	\$33,748,658	\$1.00	\$4.94	\$2.89
Pennsylvania		✓	\$88,458,898	\$175,643,974	\$117,440,845	\$2.37	\$4.61	\$3.07
Rhode Island		✓	\$20,065,229	\$22,039,421	\$32,444,423	\$6.34	\$6.98	\$10.29
South Carolina		✓ ⁽³⁾	\$9,026,302	\$25,623,946	\$11,716,755	\$0.68	\$1.84	\$0.83
South Dakota	✓		\$6,358,215	\$16,713,152	\$6,927,399	\$2.66	\$6.83	\$2.77
Tennessee	✓		\$45,297,476	\$68,205,142	\$76,964,854	\$2.46	\$3.58	\$3.98
Texas		✓	\$82,591,575	\$163,730,382	\$144,337,876	\$1.15	\$2.16	\$1.85
Utah		✓	\$15,925,704	\$32,231,413	\$19,915,021	\$1.99	\$3.88	\$2.32
Vermont	✓		\$18,056,321	\$18,398,119	\$15,975,733	\$9.70	\$9.80	\$8.50
Virginia	✓		\$11,518,192	\$40,358,556	\$48,495,517	\$0.50	\$1.68	\$1.98
Washington	✓		\$61,906,884	\$90,142,890	\$48,873,426	\$3.20	\$4.45	\$2.36
West Virginia		✓	\$11,000,925	\$14,683,025	\$1,946,375	\$2.03	\$2.64	\$0.35
Wisconsin		✓	\$25,728,625	\$40,552,380	\$27,310,339	\$1.53	\$2.38	\$1.59
Wyoming		✓	\$9,083,437	\$12,221,917	\$7,884,775	\$5.79	\$7.22	\$4.57

Federal Funds for Bicycle and Pedestrian Projects

Overall, states spend just 2.0% of their federal transportation dollars on bicycle and pedestrian projects (based fiscal years 2012-2014). This amounts to just \$2.47 per capita for bicycling and walking each year.

TABLE KEY (this page and previous):

Highlighted cells within the table denote a value that is higher than the average of the 50 states.

✓ = Yes

Sources: Benchmarking / Bicycle Friendly States Survey 2015, FHWA FMIS 2006-2014 (annual data); ACS 2008, 3-yr est; ACS 2011, 3-yr est; ACS 2013, 3-yr est.

Notes: Due to variation in how states record and report federal project spending, caution is necessary when making comparisons of financial data between states. State averages are weighted by population and do not include the District of Columbia or U.S. territories. (1) All obligations from SRTS and NTPP programs were included as bicycle and pedestrian funding. (2) Total federal highway program obligations for bicycle and pedestrian projects peaked in 2009 and 2010 due to additional funding provided under the American Recovery and Reinvestment Act (ARRA). (3) Data were not available for Kentucky and South Carolina in their 2015 surveys. Data presented here are from their 2014 surveys. (4) Negative obligation amounts are a result of more deobligated funds than new obligated funds.

	Percentage of Obligated Funds for Bicycle and Pedestrian Projects ⁽¹⁾			Funding from ARRA (2009-2014)	
	FY 2006-2008	FY 2009-2011 ⁽²⁾	FY 2012-2014	% bike/ped funds from ARRA	% ARRA funds for bike/ped
Alabama	1.1%	1.4%	0.8%	17.0%	2.0%
Alaska	1.9%	1.9%	1.6%	7.4%	2.4%
Arizona	2.5%	1.8%	1.8%	10.5%	1.9%
Arkansas	1.3%	0.7%	1.5%	1.7%	0.2%
California	1.6%	2.0%	2.6%	11.8%	2.5%
Colorado	1.3%	2.4%	1.2%	14.4%	2.6%
Connecticut	1.5%	1.3%	2.5%	22.6%	4.7%
Delaware	3.8%	3.4%	4.1%	18.5%	7.1%
Florida	1.4%	3.6%	3.1%	11.2%	3.7%
Georgia	1.4%	2.8%	2.7%	18.1%	4.9%
Hawaii	0.9%	1.7%	-0.1% ⁽⁴⁾	44.8%	3.9%
Idaho	1.5%	1.1%	0.5%	37.5%	3.3%
Illinois	0.7%	1.2%	2.0%	11.6%	1.8%
Indiana	1.7%	3.1%	2.3%	26.7%	7.2%
Iowa	2.9%	2.8%	1.1%	15.6%	3.0%
Kansas	1.6%	1.0%	1.5%	15.2%	1.4%
Kentucky	1.6%	3.1%	3.2%	14.2%	5.0%
Louisiana	0.6%	1.6%	0.6%	21.0%	3.0%
Maine	1.5%	2.5%	1.5%	7.7%	1.5%
Maryland	0.7%	0.9%	1.4%	1.5%	0.2%
Massachusetts	1.7%	2.9%	2.5%	33.8%	10.9%
Michigan	1.5%	1.9%	2.7%	11.4%	2.1%
Minnesota	2.3%	3.1%	3.8%	9.0%	2.5%
Mississippi	0.8%	1.6%	1.2%	2.6%	0.4%
Missouri	2.0%	2.6%	3.0%	13.4%	3.6%
Montana	2.0%	1.6%	1.3%	21.1%	3.9%
Nebraska	1.7%	1.4%	1.8%	5.3%	0.7%
Nevada	0.9%	1.1%	1.6%	10.6%	1.8%
New Hampshire	3.4%	1.2%	1.2%	25.8%	2.8%
New Jersey	0.6%	1.3%	0.4%	32.8%	2.8%
New Mexico	2.1%	2.9%	1.5%	26.1%	6.1%
New York	1.2%	3.3%	2.7%	8.8%	3.1%
North Carolina	1.6%	2.4%	1.6%	18.2%	3.7%
North Dakota	0.9%	0.9%	0.7%	16.8%	1.9%
Ohio	1.3%	1.3%	2.3%	7.5%	1.3%
Oklahoma	-0.2% ⁽⁴⁾	1.0%	0.2%	51.3%	3.0%
Oregon	0.9%	3.1%	2.5%	10.5%	3.6%
Pennsylvania	2.0%	3.2%	2.4%	17.5%	4.9%
Rhode Island	3.5%	2.5%	4.8%	10.5%	4.2%
South Carolina	0.5%	1.0%	0.6%	32.9%	2.6%
South Dakota	0.9%	1.5%	0.8%	40.4%	5.1%
Tennessee	2.1%	2.1%	3.1%	12.3%	3.1%
Texas	1.0%	1.5%	1.5%	14.1%	1.9%
Utah	1.9%	2.5%	2.0%	3.2%	0.8%
Vermont	3.7%	2.5%	2.1%	6.4%	1.8%
Virginia	0.5%	1.1%	1.7%	2.4%	0.3%
Washington	2.8%	3.1%	2.3%	12.9%	3.7%
West Virginia	0.8%	0.9%	0.1%	36.9%	2.9%
Wisconsin	1.3%	1.4%	1.2%	15.6%	2.0%
Wyoming	1.3%	1.3%	1.0%	14.6%	1.9%

Federal Funding Programs for Biking and Walking Projects

	Total Obligated Funds	Percentage of Funds for Biking and Walking Projects from Each Federal Program (2009-2014)									
		FY 2009-2014	CMAQ	STP/TE	Other STP	SRTS	RTP	HSIP	NHPP	TAP	ARRA
Alabama	\$59,046,900	7%	32%	3%	27%	0%	0%	1%	0%	17%	13%
Alaska	\$55,216,100	14%	24%	4%	5%	12%	0%	15%	0%	7%	18%
Arizona	\$90,042,639	33%	25%	16%	8%	0%	0%	2%	4%	11%	1%
Arkansas	\$38,614,600	0%	17%	14%	16%	12%	0%	1%	6%	2%	32%
California	\$543,288,117	30%	17%	7%	19%	0%	1%	3%	4%	12%	8%
Colorado	\$70,481,243	12%	50%	10%	11%	0%	1%	0%	2%	14%	1%
Connecticut	\$59,768,284	0%	13%	23%	12%	2%	0%	22%	1%	23%	3%
Delaware	\$45,607,961	24%	23%	0%	4%	0%	0%	1%	3%	19%	27%
Florida	\$442,843,910	0%	35%	15%	11%	2%	6%	3%	13%	11%	5%
Georgia	\$237,254,606	5%	31%	16%	12%	0%	0%	9%	0%	18%	8%
Hawaii	\$10,752,379	-12% ⁽¹⁾	49%	-2% ⁽¹⁾	8%	0%	0%	0%	0%	45%	12%
Idaho	\$15,886,211	0%	16%	-3% ⁽¹⁾	29%	0%	0%	0%	6%	38%	13%
Illinois	\$152,833,845	26%	27%	4%	17%	1%	0%	6%	2%	12%	6%
Indiana	\$177,038,359	6%	32%	4%	7%	2%	0%	8%	10%	27%	4%
Iowa	\$69,899,661	1%	40%	1%	11%	6%	0%	6%	2%	16%	18%
Kansas	\$31,825,519	7%	43%	2%	27%	0%	0%	1%	2%	15%	2%
Kentucky	\$149,599,177	6%	16%	9%	4%	3%	0%	23%	0%	14%	24%
Louisiana	\$62,444,119	0%	49%	3%	7%	5%	0%	8%	2%	21%	4%
Maine	\$26,233,192	1%	45%	7%	19%	0%	4%	10%	0%	8%	6%
Maryland	\$43,403,715	1%	39%	1%	32%	2%	9%	11%	0%	1%	4%
Massachusetts	\$112,714,339	10%	22%	8%	16%	0%	0%	9%	0%	34%	1%
Michigan	\$161,250,361	5%	34%	4%	19%	0%	0%	9%	10%	11%	8%
Minnesota	\$152,423,320	5%	36%	7%	9%	0%	0%	7%	10%	9%	17%
Mississippi	\$48,399,598	0%	62%	2%	16%	15%	0%	1%	0%	3%	1%
Missouri	\$173,697,365	1%	51%	10%	9%	6%	0%	3%	0%	13%	6%
Montana	\$39,830,859	6%	44%	5%	12%	0%	0%	2%	0%	21%	10%
Nebraska	\$31,450,973	0%	32%	0%	16%	11%	0%	10%	23%	5%	3%
Nevada	\$31,775,443	29%	14%	2%	20%	12%	0%	0%	0%	11%	11%
New Hampshire	\$14,257,782	0%	36%	2%	26%	0%	0%	8%	0%	26%	3%
New Jersey	\$53,299,042	1%	11%	20%	22%	0%	1%	9%	0%	33%	3%
New Mexico	\$55,764,851	4%	30%	20%	9%	5%	0%	0%	2%	26%	2%
New York	\$328,827,236	33%	11%	3%	9%	0%	1%	25%	0%	9%	8%
North Carolina	\$146,442,798	7%	17%	25%	10%	6%	1%	10%	0%	18%	5%
North Dakota	\$18,282,714	0%	41%	0%	32%	1%	0%	5%	0%	17%	4%
Ohio	\$155,878,910	18%	32%	6%	19%	5%	0%	5%	6%	7%	2%
Oklahoma	\$29,910,690	0%	26%	3%	12%	0%	0%	0%	0%	51%	7%
Oregon	\$90,641,365	4%	16%	23%	12%	10%	0%	17%	2%	11%	5%
Pennsylvania	\$293,084,818	8%	32%	17%	5%	4%	0%	8%	3%	17%	6%
Rhode Island	\$54,483,844	0%	7%	5%	7%	9%	0%	34%	1%	11%	26%
South Carolina	\$37,340,701	0%	38%	7%	20%	0%	0%	-3% ⁽¹⁾	1%	33%	5%
South Dakota	\$23,640,551	0%	14%	0%	16%	20%	0%	5%	0%	40%	4%
Tennessee	\$145,169,995	2%	29%	18%	7%	3%	0%	14%	0%	12%	15%
Texas	\$308,068,258	7%	30%	15%	24%	0%	0%	6%	0%	14%	4%
Utah	\$52,146,434	14%	22%	20%	16%	0%	1%	21%	1%	3%	2%
Vermont	\$34,373,852	0%	29%	26%	13%	0%	0%	20%	0%	6%	6%
Virginia	\$88,854,073	5%	58%	4%	17%	0%	1%	2%	0%	2%	9%
Washington	\$139,016,317	20%	22%	16%	11%	0%	1%	8%	1%	13%	8%
West Virginia	\$16,629,399	1%	18%	0%	29%	6%	0%	0%	2%	37%	7%
Wisconsin	\$67,862,719	7%	26%	2%	15%	0%	0%	7%	4%	16%	22%
Wyoming	\$20,106,692	0%	54%	0%	23%	0%	0%	0%	0%	15%	8%

State Funding Sources for Biking and Walking Projects

	General Fund	License Plates	Local Planning Assistance Grants	Development Impact Fees	State Fuel (gas) Tax	School Zone Speeding Fines	Public Private Partnerships	State has a dedicated source of funding
Alabama			✓					
Alaska	✓		✓					
Arizona	✓		✓	✓		✓		
Arkansas	✓			✓	✓			
California	✓		✓	✓	✓		✓	✓
Colorado		✓	✓	✓	✓			✓
Connecticut	✓	✓	✓		✓			
Delaware	✓		✓		✓			✓
Florida		✓	✓	✓	✓			
Georgia		✓	✓	✓	✓			
Hawaii				✓		✓		
Idaho	✓			✓	✓		✓	
Illinois	✓	✓	✓	✓	✓			
Indiana		✓	✓	✓				
Iowa	✓	✓	✓					✓
Kansas			✓					
Kentucky	✓	✓	✓		✓		✓	
Louisiana		✓						✓
Maine	✓		✓	✓	✓		✓	✓
Maryland	✓	✓	✓	✓	✓			✓
Massachusetts	✓							✓
Michigan	✓				✓		✓	✓
Minnesota	✓		✓		✓		✓	✓
Mississippi		✓	✓		✓			
Missouri	✓	✓			✓		✓	
Montana			✓	✓				
Nebraska			✓					
Nevada		✓		✓	✓			✓
New Hampshire			✓	✓			✓	
New Jersey			✓	✓	✓		✓	✓
New Mexico				✓				
New York			✓					
North Carolina		✓	✓		✓			✓
North Dakota	✓		✓		✓			
Ohio	✓	✓	✓		✓			✓
Oklahoma	✓	✓						
Oregon	✓	✓		✓	✓			✓
Pennsylvania			✓	✓	✓		✓	
Rhode Island			✓	✓				
South Carolina		✓		✓				
South Dakota			✓		✓			
Tennessee		✓			✓			✓
Texas	✓	✓		✓	✓		✓	
Utah		✓		✓	✓			
Vermont			✓	✓	✓			✓
Virginia	✓	✓		✓	✓		✓	
Washington	✓	✓	✓	✓	✓	✓	✓	✓
West Virginia	✓	✓	✓	✓	✓			
Wisconsin	✓		✓	✓	✓			✓
Wyoming	✓		✓		✓			

TABLE KEY (previous page):
Highlighted cells within the table denote the largest funding source for each state.

Source: FHWA FMIS

Notes: Funding from TAP was available beginning in FY 2013

CMAQ: Congestion Mitigation and Air Quality Improvement Program

STP: Surface Transportation Program

TE: Transportation Enhancement

SRTS: Safe Routes to School

RTP: Recreational Trails Program

HSIP: Highway Safety Improvement Program

NHPP: National Highway Performance Program

TAP: Transportation Alternatives Program

ARRA: American Recovery and Reinvestment Act

TABLE KEY (this page):

✓ = Yes

Source: Advocacy Advance. (2014, June). "State Revenue Sources that Fund Bicycling and Walking Projects."

Available online at http://www.advocacyadvance.org/docs/StateRevenueSources_June2014.pdf.

States: Implementation

Biking and Walking Infrastructure

	Protected bike lanes on any state highway	Standard bike lanes installed on any state highway	% of the state highway network with wide paved shoulders or bike lanes	Bike boxes installed on any state highway	Bike specific traffic signals installed on any state highway
Alabama		✓	26 to 50%		
Alaska		✓	51 to 75%		
Arizona		✓	51 to 75%		
Arkansas		✓	26 to 50%		
California	✓	✓	51 to 75%	✓	
Colorado		✓	76 to 100%	✓	✓
Connecticut		✓	26 to 50%		
Delaware	✓	✓	51 to 75%		✓
Florida	✓	✓	76 to 100%		
Georgia	✓	✓	0 to 25%		
Hawaii		✓	(1)		
Idaho		✓	51 to 75%		
Illinois	✓	✓	26 to 50%		
Indiana			0 to 25%		
Iowa			0 to 25%		
Kansas			51 to 75%		
Kentucky	✓	✓	26 to 50%		
Louisiana		✓	26 to 50%		
Maine		✓	51 to 75%		
Maryland		✓	51 to 75%		
Massachusetts	✓	✓	26 to 50%	✓	✓
Michigan	✓	✓	26 to 50%		
Minnesota		✓	51 to 75%		✓
Mississippi		✓	0 to 25%		
Missouri		✓	0 to 25%		
Montana	✓	✓	0 to 25%		
Nebraska			26 to 50%		
Nevada		✓	0 to 25%		✓
New Hampshire		✓	0 to 25%		
New Jersey	✓	✓	76 to 100%	✓	
New Mexico	✓	✓	26 to 50%		
New York		✓	26 to 50%	✓	✓
North Carolina	✓	✓	0 to 25%		
North Dakota		✓	26 to 50%		
Ohio	✓	✓	26 to 50%	✓	✓
Oklahoma			51 to 75%		
Oregon	✓	✓	51 to 75%		✓
Pennsylvania		✓	51 to 75%		
Rhode Island		✓	26 to 50%		
South Carolina		✓	0 to 25%		
South Dakota		✓	51 to 75%		
Tennessee	✓	✓	51 to 75%		
Texas	✓	✓	26 to 50%		
Utah	✓	✓	51 to 75%		✓
Vermont		✓	26 to 50%		
Virginia	✓	✓	26 to 50%		✓
Washington		✓	51 to 75%	✓	
West Virginia	✓	✓	26 to 50%		
Wisconsin		✓	26 to 50%		✓
Wyoming	✓	✓	51 to 75%	✓	

KEY (this page and next):
✓ = Yes

Source: Benchmarking / Bicycle Friendly States Survey 2015. Note: (1) Data unavailable.

Routes and Trails for Biking and Walking

How Are State Bicycle Routes Publicized?

	Miles of nonmotorized natural surface trails in state parks/lands	Trail miles open to off-road cyclists	Trail miles open to pedestrians	Miles of converted "rails to trails"	Printed map	Online map	Signed or marked routes	Signed US Bike Route System routes
Alabama	238	126	235	75				
Alaska	576	576	576	41				✓
Arizona	2,883	2,500	All	62	✓	✓		
Arkansas	1,677	1,431	1,677	66	✓	✓		
California	4,456	2,865	4,456	726		✓		✓
Colorado	615	459	615	300	✓	✓		
Connecticut	1,995	766	1,995	180	✓	✓	✓	
Delaware	281	230	281	26	✓	✓	✓	✓
Florida	4,461	2,512	4,461	701		✓		✓
Georgia	3,000	300	3,000	185			✓	
Hawaii	NA	NA	NA	22			✓	
Idaho	400	300	400	408			✓	
Illinois	1,875	250	1,875	860			✓	✓
Indiana	751	119	751	407				
Iowa	483	267	483	799			✓	
Kansas	307	232	307	273	✓	✓		
Kentucky	500	300	300	64		✓	✓	✓
Louisiana	245	178	156	89	✓	✓	✓	
Maine	475	45	475	378	✓	✓	✓	✓
Maryland	1,000	800	1,000	172	✓	✓	✓	✓
Massachusetts	3,316	2,375	3,316	410		✓	✓	✓
Michigan	7,685	7,685	7,685	2,318	✓	✓		✓
Minnesota	2,451	1,490	2,451	2,337	✓	✓	✓	✓
Mississippi	NA	NA	NA	120	✓	✓		
Missouri	2,758	1,298	2,758	374		✓	✓	✓
Montana	NA	NA	All	179				
Nebraska	712	712	712	380				
Nevada	232	208	232	51				
New Hampshire	1,000	1,000	1,000	536	✓	✓		
New Jersey	950	700	950	314		✓	✓	✓
New Mexico	109	90	109	31			✓	
New York	16,000 ⁽¹⁾	NA	16,000 ⁽¹⁾	767			✓	
North Carolina	520	120	520	95	✓	✓	✓	✓
North Dakota	525	280	525	28				
Ohio	1,594	383	1,220	916	✓	✓	✓	✓
Oklahoma	170	121	170	51				
Oregon	633	180	633	295	✓	✓	✓	
Pennsylvania	7,437	3,044	7,437	1,750		✓	✓	
Rhode Island	200	150	200	71	✓	✓	✓	
South Carolina	370	101	370	120		✓		
South Dakota	313	248	313	116				
Tennessee	1,591	682	1,117	103			✓	
Texas	1,200	925	1,200	280				
Utah	NA	NA	NA	139		✓	✓	
Vermont	1,000	100	1,000	132	✓	✓	✓	
Virginia	650	350	650	371	✓	✓	✓	✓
Washington	11,350	2,900	11,350	1,057	✓	✓	✓	✓
West Virginia	3,000	2,000	3,000	551			✓	
Wisconsin	3,294	1,684	3,294	1,785	✓	✓		
Wyoming	10,472	7,330	10,472	46	✓	✓	✓	

Sources: Benchmarking / Bicycle Friendly States Survey 2015; Rail To Trails Conservancy. Note: (1) The New York Office of Parks, Recreation and Historic Preservation reports over 16,000 miles of trails throughout the state of which 10,000 miles are estimated to be part of the state's snowmobile trail system.

TRENDS AT THE CITY LEVEL

Biking and Walking in Context: The Role of Cities

Unlike advocacy campaigns at the state level, which generally push for broad policy and funding improvements, biking and walking activities at the city level engage the public in more personal ways. Roadway fatalities are more visible at the local level. Economic impacts are felt more intensely. Benefits from improved infrastructure are more relevant to daily travel choices.

In general, active transportation advocates and professionals working within a particular city or neighborhood are confronted more directly with concerns of transportation equity than their counterparts working statewide. Planners and engineers regularly make decisions that affect the safety and priority of neighborhoods. They, along with advocates and city officials, have a responsibility to ensure that improvements to biking and walking facilities

serve the needs of all residents, including those in historically underserved communities.

Local biking and walking advocacy organizations communicate through their unique local culture and priorities. In some communities, arguments for the health benefits of biking and walking as physical activity may resonate more than other arguments, such as economic or environmental benefits. Open streets initiatives, sometimes called *ciclovías*, and locally-focused bike rides and walks have had great success in cities of all sizes, in all regions. Biking and pedestrian advocates, as well as sympathetic elected officials and government staff, find these events and initiatives to be invaluable strategies to connect with residents and further public education of active transportation options.

Calls for improved safety on U.S. roads have recently gained national attention and have a particular significance at the local level. Vision Zero (discussed further on page 42) is a strategy that assumes all traffic fatalities and severe injuries



Southwest Moody Street in Portland, Ore.
Photo courtesy of Green Lane Project.



New York City, New York
 Photo courtesy of NYC DOT @ Flickr (CC BY-NC-ND 2.0)

are preventable. The collaborative, local-minded work of this strategy engages advocates from diverse social movements, such as environmental and social justice advocates, as well as key city departments, including police, transportation, and public health. As of September 2015, this strategy has been adopted by at least ten major U.S. cities. (www.visionzeronet.org)

In early 2015, the U.S. Department of Transportation made its own appeal to traffic safety in cities through the announcement of the Mayors’ Challenge for Safer People and Safer Streets (www.transportation.gov/mayors-challenge). The challenge encourages local officials to take a “complete streets” approach; fix existing barriers to safe transportation;

gather and track biking and walking data; design facilities for safety, ease, and convenience; create and maintain connected bicycling and walking networks; update safety laws and regulations; and educate and enforce proper behavior by all road users. As of December 2015, more than 240 cities, counties, and other local governments had signed on to the challenge.

Notes for page 120: City averages are weighted by population and only include the 50 most populous U.S. cities. Asterisks (*) denote cities not among the 50 most populous cities. (1) The City of Louisville merged with Jefferson County in 2003. Therefore, population data between 2000 and 2010 are not comparable. ACS 2005 data was used to show population change for Louisville/Jefferson County. (2) Walkability scores determined by distance to amenities, as well as population density and road metrics. Points are awarded for closeness to amenities; locations within 0.25 mile (about a 5-minute walk) receive the maximum number of points allowed. A Walk Score® is in a range from 0 (“car dependent”) to 100 (“walker’s paradise”)

Notes for page 121: City averages are weighted by population and only include the 50 most populous U.S. cities. Asterisks (*) denote cities not among the 50 most populous cities. (1) “People of Color” (POC) is determined by the percentage of the population who identified as any of the following races in the American Community Survey: Black or African American only; American Indian or Alaska Native only; Asian only; Native Hawaiian or Other Asian Pacific Islander only; some other race only; or two or more races. Due to how ACS disaggregates race and ethnicity for commuter data, and in order provide comparable data for discussions of race and ethnicity among commuters and the population as a whole, POC here does not include people who identified as Hispanic or Latino if they also identified as white only.

Key

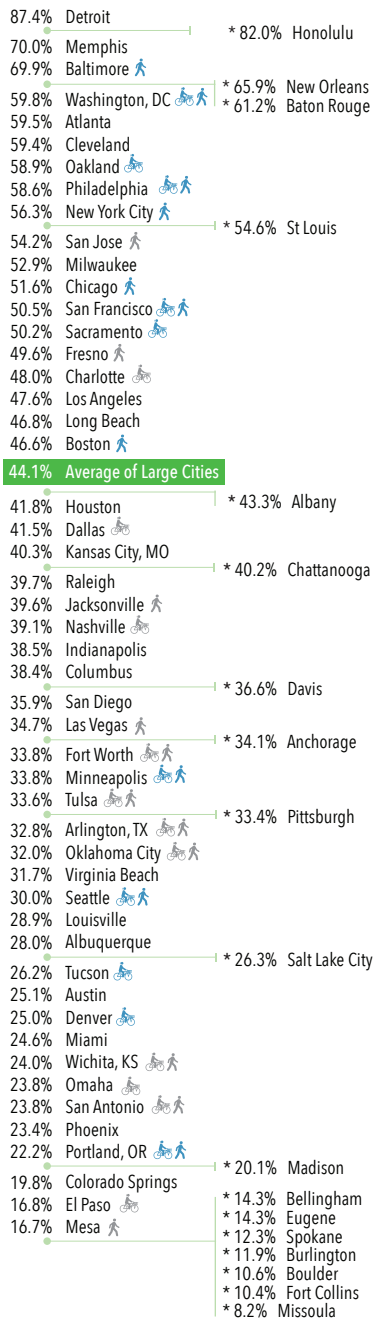


10 large cities with the highest percentage of commuters biking and/or walking to work



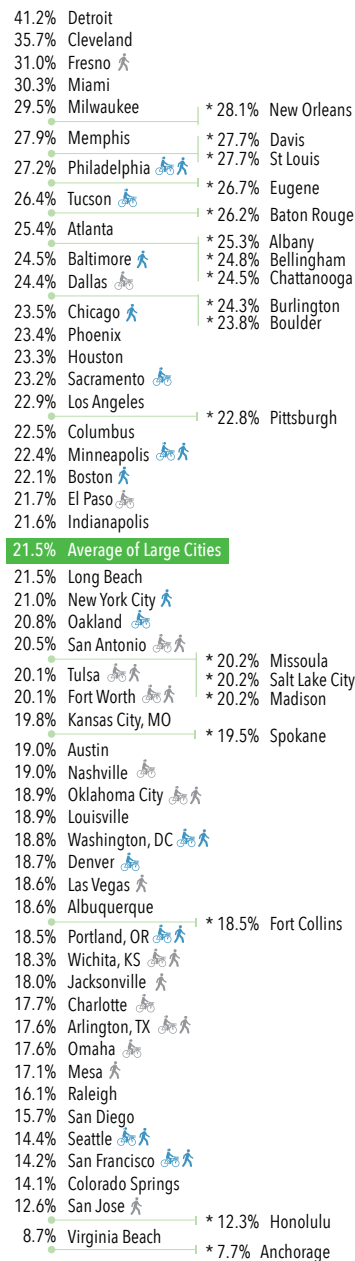
10 large cities with the lowest percentage of commuters biking and/or walking to work

Higher percentage of people of color ⁽¹⁾



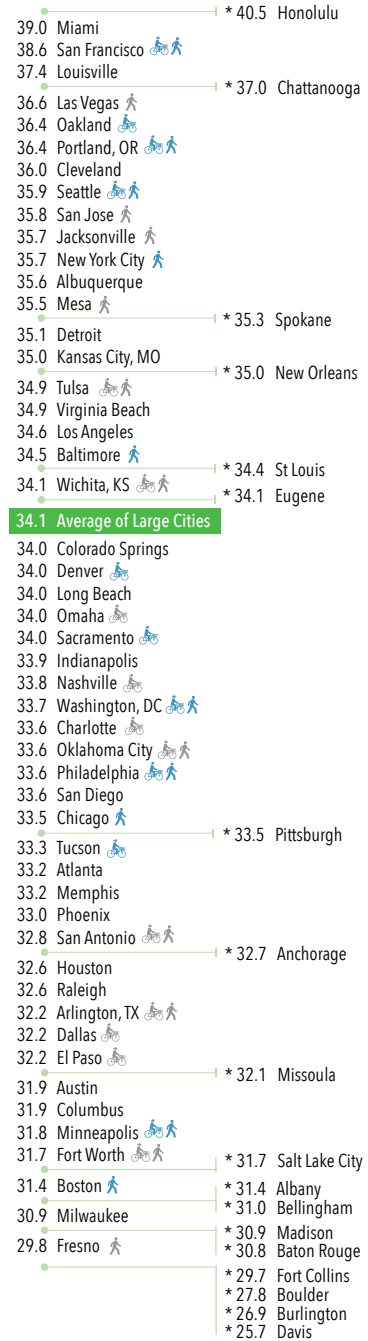
Lower percentage of people of color ⁽¹⁾

Higher percentage of poverty



Lower percentage of poverty

Older population (median age)



Younger population (median age)

Sources: ACS 2013, 3-yr est.; U.S. Census 2000, 2010. **Additional notes on page 119.**

Cities: Rankings

% of commuters who **walk to work**

Most Populous U.S. Cities

1	Boston	14.8
2	Washington, DC	12.6
3	San Francisco	10.2
4	New York	10.2
5	Seattle	9.3
6	Philadelphia	8.5
7	Baltimore	6.8
8	Chicago	6.7
9	Minneapolis	6.5
10	Portland, OR	5.9
11	Milwaukee	5.6
12	Atlanta	4.9
13	Denver	4.8
14	Miami	4.7
15	Cleveland	4.6
16	Oakland	4.6
17	Los Angeles	3.7
18	Tucson	3.6
19	Detroit	3.4
20	Sacramento	3.3
21	San Diego	3.1
22	Columbus	2.9
23	Omaha	2.7
24	Austin	2.6
25	Long Beach	2.5
26	Virginia Beach	2.5
27	Louisville	2.3
28	Charlotte	2.2
29	Kansas City, MO	2.2
30	Indianapolis	2.1
31	Houston	2.1
32	Colorado Springs	2.1
33	Albuquerque	2.1
34	Nashville (Metro Gov)	2.1
35	El Paso	2.0
36	Raleigh	1.9
37	Phoenix	1.9
38	Memphis	1.9
39	Dallas	1.9
40	San Antonio	1.9
41	Tulsa	1.8
42	Arlington, TX	1.7
43	Las Vegas	1.7
44	Mesa	1.7
45	San Jose	1.6
46	Oklahoma City	1.6
47	Fresno	1.6
48	Wichita, KS	1.4
49	Jacksonville	1.2
50	Fort Worth	1.2

Additional U.S. Cities

1	Burlington	20.1
2	Pittsburgh	11.1
3	Boulder	10.5
4	Albany	9.8
5	Madison	9.5
6	Bellingham	9.4
7	Honolulu (Urban)	8.9
8	Missoula	8.3
9	Eugene	7.0
10	Charleston	5.8
11	New Orleans	5.0
12	Salt Lake City	4.9
13	St Louis	4.3
14	Fort Collins	4.0
15	Spokane	3.7
16	Baton Rouge	3.7
17	Davis	3.5
18	Anchorage	3.4
19	Chattanooga	3.0

From 2007-2013, walking commute rates have seen uneven progress, with gains in some cities and decreases in others. Among the leaders, there has been noted increases, including 1.4% in Seattle, 1.3% in Boston, 1.2% in Portland and 1.1% in Chicago and Washington, D.C.

% of commuters who **bicycle to work**

Most Populous U.S. Cities

1	Portland, OR	6.1
2	Washington, DC	4.0
3	Minneapolis	3.9
4	San Francisco	3.7
5	Seattle	3.7
6	Oakland	3.0
7	Tucson	2.9
8	Denver	2.4
9	Sacramento	2.3
10	Philadelphia	2.1
11	Boston	1.9
12	Austin	1.6
13	Chicago	1.4
14	Albuquerque	1.3
15	Los Angeles	1.1
16	Fresno	1.1
17	New York	1.0
18	Long Beach	1.0
19	Mesa	1.0
20	Miami	0.9
21	Milwaukee	0.9
22	Atlanta	0.9
23	San Diego	0.9
24	San Jose	0.9
25	Baltimore	0.9
26	Columbus	0.8
27	Phoenix	0.7
28	Colorado Springs	0.6
29	Houston	0.6
30	Virginia Beach	0.6
31	Cleveland	0.5
32	Raleigh	0.5
33	Kansas City, MO	0.4
34	Jacksonville	0.4
35	Indianapolis	0.4
36	Detroit	0.4
37	Las Vegas	0.4
38	Louisville	0.3
39	Memphis	0.3
40	Nashville (Metro Gov)	0.3
41	Wichita, KS	0.3
42	San Antonio	0.3
43	Tulsa	0.2
44	Dallas	0.2
45	Oklahoma City	0.2
46	Omaha	0.2
47	Charlotte	0.2
48	Arlington, TX	0.2
49	Fort Worth	0.2
50	El Paso	0.1

Additional U.S. Cities

1	Davis	20.3
2	Boulder	10.8
3	Eugene	8.0
4	Fort Collins	7.4
5	Burlington	6.8
6	Missoula	6.4
7	Madison	5.2
8	Bellingham	2.9
9	Salt Lake City	2.9
10	New Orleans	2.8
11	Charleston	2.5
12	Honolulu (Urban)	1.9
13	Pittsburgh	1.8
14	Anchorage	1.2
15	Baton Rouge	0.8
16	Albany	0.7
17	St Louis	0.7
18	Spokane	0.6
19	Chattanooga	0.5

In contrast to walking rates, bicycle commuting has seen steady gains in the majority of large cities from 2007-2013. Topping the list, bike commute rates have grown 2.3% in Washington, D.C. and Portland, 1.5% in San Francisco, 1.4% Seattle, 1.3% in Oakland, and 1.1% in Philadelphia.

Sources: ACS 2011-2013

% of commuters who walk or bike to work

Most Populous U.S. Cities

1	Boston	16.7
2	Washington, DC	16.7
3	San Francisco	13.9
4	Seattle	12.9
5	Portland, OR	12.1
6	New York	11.2
7	Philadelphia	10.6
8	Minneapolis	10.4
9	Chicago	8.1
10	Baltimore	7.7
11	Oakland	7.6
12	Denver	7.2
13	Tucson	6.5
14	Milwaukee	6.5
15	Atlanta	5.8
16	Sacramento	5.7
17	Miami	5.6
18	Cleveland	5.2
19	Los Angeles	4.8
20	Austin	4.2
21	San Diego	4.0
22	Detroit	3.8
23	Columbus	3.7
24	Long Beach	3.5
25	Albuquerque	3.4
26	Virginia Beach	3.1
27	Omaha	3.0
28	Colorado Springs	2.7
29	Mesa	2.7
30	Houston	2.7
31	Fresno	2.7
32	Louisville	2.6
33	Phoenix	2.6
34	Kansas City, MO	2.6
35	Indianapolis	2.6
36	San Jose	2.6
37	Raleigh	2.5
38	Charlotte	2.4
39	Nashville (Metro Gov)	2.4
40	Memphis	2.2
41	San Antonio	2.1
42	El Paso	2.1
43	Las Vegas	2.1
44	Dallas	2.1
45	Tulsa	2.0
46	Arlington, TX	1.9
47	Oklahoma City	1.9
48	Jacksonville	1.7
49	Wichita, KS	1.7
50	Fort Worth	1.3

Additional U.S. Cities

1	Burlington	26.9
2	Davis	23.8
3	Boulder	21.3
4	Eugene	15.0
5	Missoula	14.7
6	Madison	14.7
7	Pittsburgh	12.8
8	Bellingham	12.3
9	Fort Collins	11.3
10	Honolulu (Urban)	10.8
11	Albany	10.5
12	Charleston	8.4
13	New Orleans	7.8
14	Salt Lake City	7.8
15	St Louis	5.0
16	Anchorage	4.5
17	Baton Rouge	4.5
18	Spokane	4.3
19	Chattanooga	3.5

The top cities for active commuting rates have stayed stable since the 2014 Benchmarking Report, with Baltimore and Chicago moving into the top 10, with the shift of New Orleans and Honolulu to the smaller, additional cities category.

Bike/ped fatalities per 10K commuters

Most Populous U.S. Cities

1	Washington, DC	1.6
2	Boston	1.6
3	Seattle	1.9
4	Minneapolis	2.8
5	San Francisco	2.8
6	Portland, OR	3.4
7	Virginia Beach	3.8
8	New York	3.9
9	Chicago	4.3
10	Baltimore	5.3
11	Philadelphia	5.4
12	Denver	6.4
13	Cleveland	6.7
14	Milwaukee	6.8
15	Oakland	7.4
16	Omaha	7.8
17	Columbus	8.8
18	Colorado Springs	10.3
19	San Diego	10.7
20	Atlanta	11.2
21	Los Angeles	11.6
22	Sacramento	12.0
23	Austin	12.6
24	Tucson	13.4
25	Long Beach	13.7
26	Wichita, KS	15.8
27	Mesa	16.5
28	Nashville (Metro Gov)	16.7
29	San Jose	17.3
30	Raleigh	17.7
31	Arlington, TX	18.0
32	Albuquerque	18.7
33	Houston	18.7
34	Louisville	19.0
35	Miami	20.2
36	Las Vegas	20.3
37	Charlotte	21.1
38	Indianapolis	21.7
39	Kansas City, MO	22.9
40	Tulsa	24.8
41	El Paso	27.2
42	Phoenix	29.1
43	Memphis	29.7
44	Dallas	29.8
45	Oklahoma City	30.5
46	San Antonio	30.9
47	Fresno	35.8
48	Fort Worth	40.7
49	Detroit	45.3
50	Jacksonville	50.8

Additional U.S. Cities

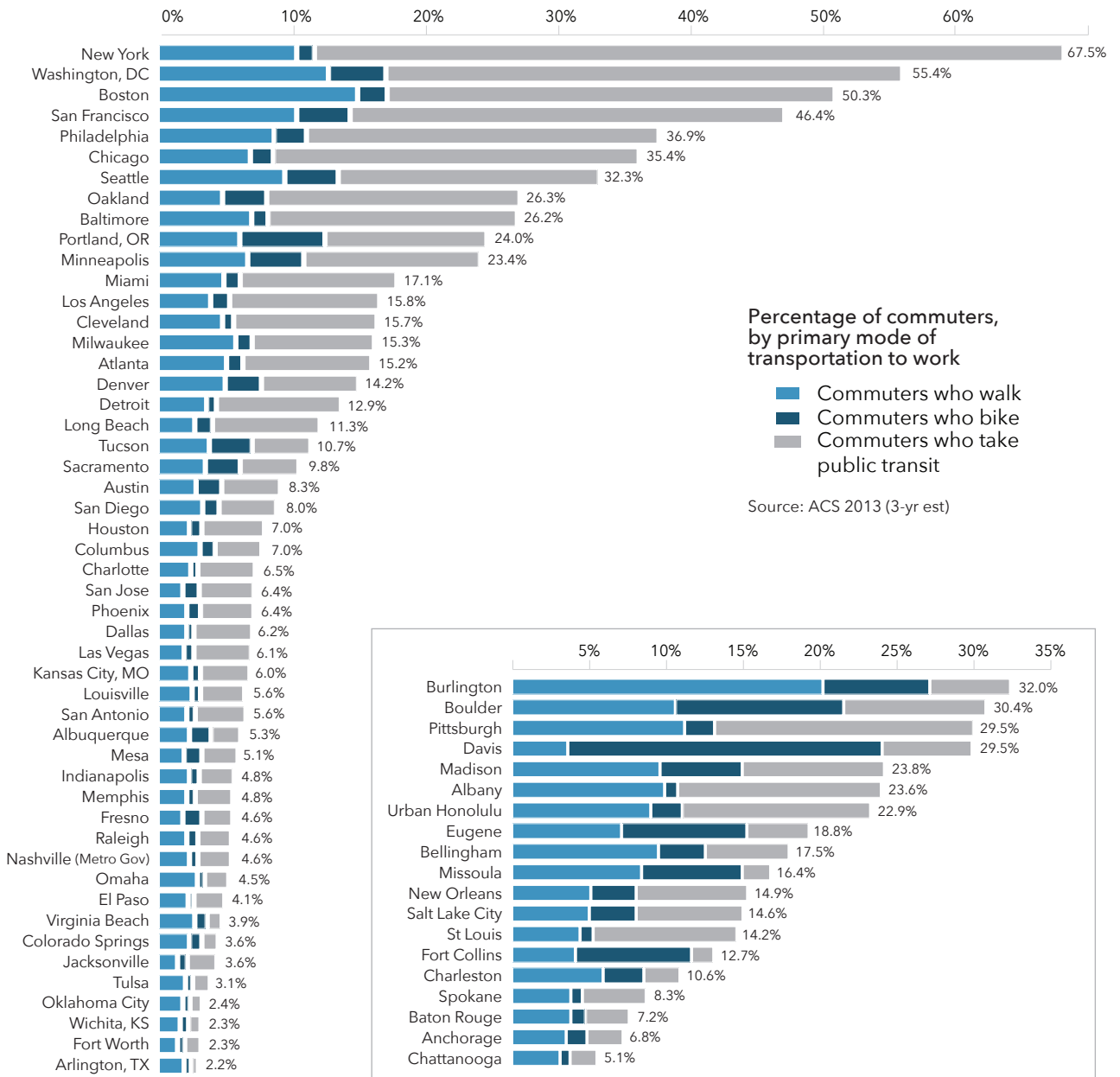
1	Burlington	0.6
2	Fort Collins	0.8
3	Davis	0.9
4	Boulder	1.1
5	Bellingham	1.3
6	Pittsburgh	1.8
7	Madison	1.9
8	Eugene	1.9
9	Missoula	3.2
10	Honolulu (Urban)	3.4
11	Albany	5.7
12	Salt Lake City	8.0
13	Anchorage	8.9
14	Spokane	9.4
15	Charleston	9.4
16	New Orleans	9.5
17	Chattanooga	13.0
18	St Louis	16.9
19	Baton Rouge	22.9

Among the most populous cities, several cities saw gains in safety, with Washington, D.C. and Portland rising the most in the ranking.

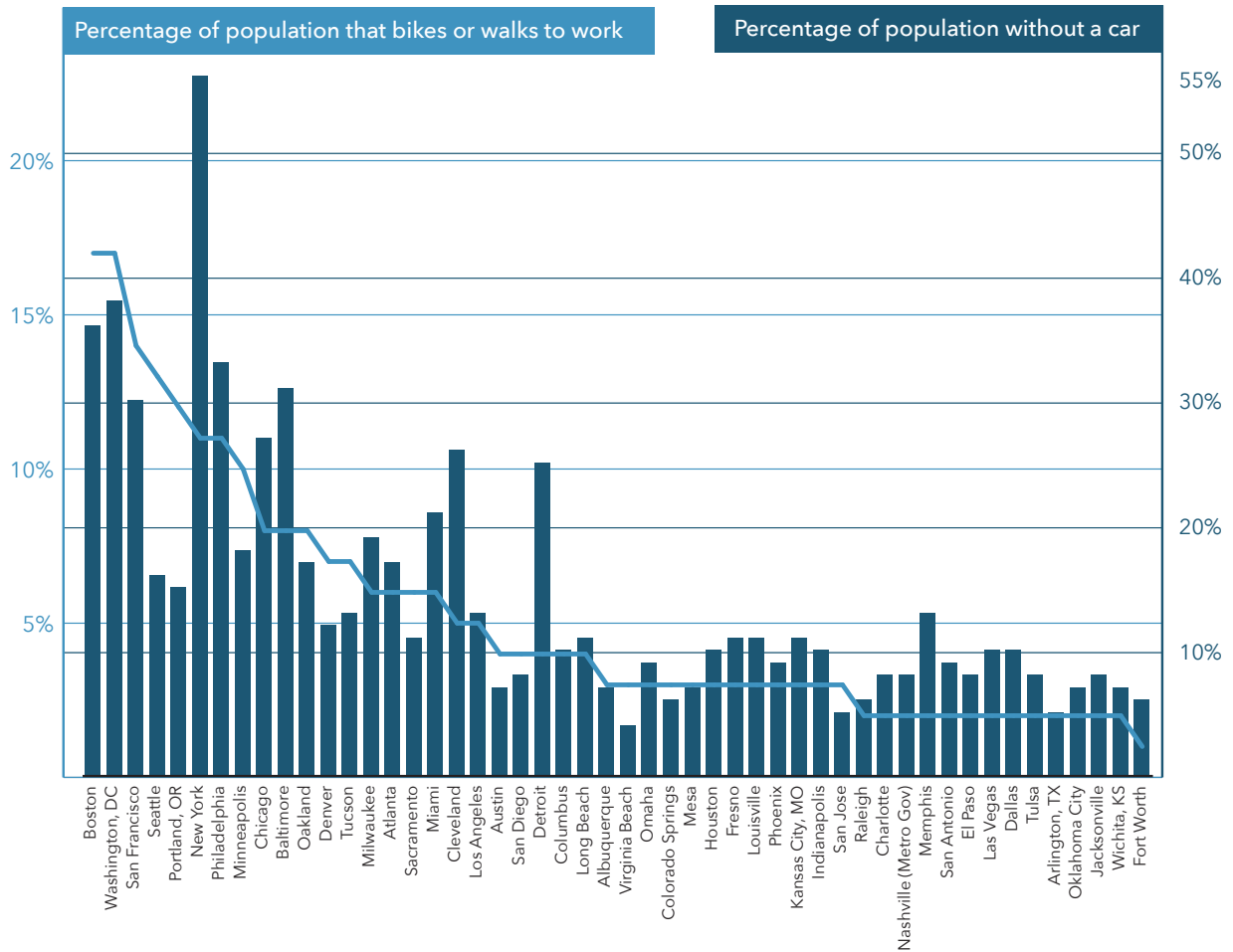
Sources: ACS 2011-2013; FHWA FMIS 2012-2014; FARS 2011-2013; BRFSS 2013

Cities: Mode Share

Commuters Walking, Biking, and Taking Transit to Work in Large Cities



Car Ownership and Bicycling and Walking Levels in Large Cities



Sources: ACS 2011-2013

Cities with the highest levels of bicycling and walking have lower car ownership rates. Although the statistical relationship is strong, the causation likely runs in both directions. Those who walk or bicycle a lot are less likely to need or want a car, and those who do not own a car are more likely to need to walk or bicycle for some trips.

Commuters Walking to Work in Cities

Most Populous U.S. Cities	Percentage of commuters who walk to work	Change in percentage between 2007-2013 ¹ (in percentage points)
Albuquerque	2.1%	-0.2 pts ▼
Arlington, TX	1.7%	0.6 pts ▲
Atlanta	4.9%	0.7 pts ▲
Austin	2.6%	0.5 pts ▲
Baltimore	6.8%	-0.3 pts ▼
Boston	14.8%	1.3 pts ▲
Charlotte	2.2%	0.5 pts ▲
Chicago	6.7%	1.1 pts ▲
Cleveland	4.6%	0.4 pts ▲
Colorado Springs	2.1%	-0.1 pts ▼
Columbus	2.9%	0.4 pts ▲
Dallas	1.9%	0.1 pts ▲
Denver	4.8%	0.3 pts ▲
Detroit	3.4%	0.4 pts ▲
El Paso	2.0%	-0.2 pts ▼
Fort Worth	1.2%	-0.4 pts ▼
Fresno	1.6%	-0.4 pts ▼
Houston	2.1%	-0.1 pts ▼
Indianapolis	2.1%	0.3 pts ▲
Jacksonville	1.2%	-0.4 pts ▼
Kansas City, MO	2.2%	-0.1 pts ▼
Las Vegas	1.7%	-0.2 pts ▼
Long Beach	2.5%	-0.1 pts ▼
Los Angeles	3.7%	0.2 pts ▲
Louisville	2.3%	0.4 pts ▲
Memphis	1.9%	-0.2 pts ▼
Mesa	1.7%	-0.4 pts ▼
Miami	4.7%	0.9 pts ▲
Milwaukee	5.6%	0.6 pts ▲
Minneapolis	6.5%	-0.1 pts ▼
Nashville	2.1%	0.2 pts ▲
New York City	10.2%	0.3 pts ▲
Oakland	4.6%	0.3 pts ▲
Oklahoma City	1.6%	0.2 pts ▲
Omaha	2.7%	0.2 pts ▲
Philadelphia	8.5%	0.2 pts ▲
Phoenix	1.9%	0.1 pts ▲
Portland, OR	5.9%	1.2 pts ▲
Raleigh	1.9%	-0.5 pts ▼
Sacramento	3.3%	-0.1 pts ▼
San Antonio	1.9%	-0.4 pts ▼
San Diego	3.1%	0.1 pts ▲
San Francisco	10.2%	0.7 pts ▲
San Jose	1.6%	-0.2 pts ▼
Seattle	9.3%	1.4 pts ▲
Tucson	3.6%	-0.2 pts ▼
Tulsa	1.8%	-0.5 pts ▼
Virginia Beach	2.5%	-0.5 pts ▼
Washington, DC	12.6%	1.1 pts ▲
Wichita, KS	1.4%	-0.2 pts ▼

Additional U.S. Cities	Percentage of commuters who walk to work	Change in percentage between 2007-2013 ¹ (in percentage points)
Albany	9.8%	-1.4 pts ▼
Anchorage	3.4%	0.6 pts ▲
Baton Rouge	3.7%	0.3 pts ▲
Bellingham	9.4%	2.6 pts ▲
Boulder	10.5%	0.8 pts ▲
Burlington	20.1%	-0.6 pts ▼
Chattanooga	3.0%	0.7 pts ▲
Davis	3.5%	-1.7 pts ▼
Eugene	7.0%	1.5 pts ▲
Fort Collins	4.0%	0.6 pts ▲
Honolulu	8.9%	-0.8 pts (1) ▼
Madison	9.5%	-0.1 pts ▼
Missoula	8.3%	1.4 pts ▲
New Orleans	5.0%	-0.3 pts ▼
Pittsburgh	11.1%	-1.0 pts ▼
Salt Lake City	4.9%	0.4 pts ▲
Spokane	3.7%	0.1 pts ▲
St Louis	4.3%	1.1 pts ▲

TABLE KEY (This page and next):

Highlighted cells within the table denote a value that is higher than the average of the 50 most populous cities.

- ▲ = Change over time increased
- ▼ = Change over time decreased
- Ⓛ = Change over time was by less than 0.1 percentage points

THIS PAGE:

Sources: ACS 2007, 2013 (3-yr est).

Notes: City averages are weighted by population and only include the 50 most populous U.S. cities. (1) The change in percentage for Honolulu is based on ACS 2010 and 2013 data. Data for the city of Honolulu (Urban Honolulu CDP) is not available in ACS 2007. (2) The 2014 *Benchmarking Report* calculated the large city average including New Orleans and Honolulu, in addition to the 50 most populous cities. This report calculates the average for only the 50 most populous cities.

FACING PAGE:

Source: ACS 2013, 3-yr est.

Notes: City averages are weighted by population and only include the 50 most populous U.S. cities. Difference in distribution calculations were made before rounding, therefore some calculations may not appear to add up. (1) "Low income" is determined by the percentage of the population who reported an income of 150% or less of the U.S. federal poverty level in the American Community Survey. (2) "People of Color" (POC) is determined by the percentage of the population who identified as any of the following races in the American Community Survey: Black or African American only; American Indian or Alaska Native only; Asian only; Native Hawaiian or Other Asian Pacific Islander only; some other race only; or two or more races. Due to how ACS disaggregates race and ethnicity for commuter data, POC here does not include people who identified as Hispanic or Latino if they also identified as white only.

Where People with Low Income⁽¹⁾ and People of Color⁽²⁾ Walk to Work

Most Populous U.S. Cities	Low Income			People of Color			Additional U.S. Cities	Low Income			People of Color		
	Percentage of all commuters who have low income	Percentage of walking commuters who have low income	Difference gap (in percentage points)	Percentage of all commuters who are people of color	Percentage of walking commuters who are people of color	Difference gap (in percentage points)		Percentage of all commuters who have low income	Percentage of walking commuters who have low income	Difference gap (in percentage points)	Percentage of all commuters who are people of color	Percentage of walking commuters who are people of color	Difference gap (in percentage points)
Albuquerque	18%	36%	17 pts	25%	37%	12 pts	Albany	20%	23%	3 pts	32%	36%	4 pts
Arlington, TX	17%	36%	19 pts	30%	40%	11 pts	Anchorage	7%	13%	6 pts	28%	20%	-8 pts
Atlanta	17%	20%	3 pts	48%	55%	7 pts	Baton Rouge	25%	47%	22 pts	55%	62%	7 pts
Austin	18%	35%	17 pts	22%	22%	0 pts	Bellingham	25%	33%	9 pts	8%	5%	-3 pts
Baltimore	16%	28%	13 pts	62%	50%	-13 pts	Boulder	24%	33%	9 pts	7%	12%	5 pts
Boston	15%	18%	3 pts	40%	31%	-9 pts	Burlington	21%	30%	9 pts	10%	9%	0 pts
Charlotte	17%	30%	13 pts	43%	43%	1 pts	Chattanooga	19%	28%	9 pts	30%	33%	3 pts
Chicago	18%	23%	5 pts	42%	34%	-8 pts	Davis	26%	19%	-6 pts	30%	31%	1 pts
Cleveland	26%	36%	9 pts	50%	47%	-3 pts	Eugene	26%	53%	27 pts	8%	12%	3 pts
Colorado Springs	15%	28%	14 pts	16%	22%	6 pts	Fort Collins	22%	30%	8 pts	5%	11%	6 pts
Columbus	18%	37%	19 pts	31%	25%	-6 pts	Honolulu	11%	16%	5 pts	79%	72%	-7 pts
Dallas	22%	36%	13 pts	37%	43%	5 pts	Madison	20%	46%	26 pts	16%	15%	-1 pts
Denver	16%	19%	3 pts	20%	22%	2 pts	Missoula	25%	43%	18 pts	3%	6%	3 pts
Detroit	31%	45%	14 pts	85%	76%	-9 pts	New Orleans	21%	27%	6 pts	55%	41%	-14 pts
El Paso	22%	43%	20 pts	17%	23%	6 pts	Pittsburgh	17%	29%	12 pts	25%	28%	2 pts
Fort Worth	17%	32%	15 pts	30%	29%	-1 pts	Salt Lake City	21%	33%	12 pts	21%	21%	1 pts
Fresno	26%	51%	25 pts	44%	44%	0 pts	Spokane	19%	34%	15 pts	8%	6%	-2 pts
Houston	22%	42%	20 pts	39%	44%	4 pts	St Louis	20%	34%	14 pts	41%	49%	8 pts
Indianapolis	19%	38%	19 pts	33%	37%	5 pts							
Jacksonville	14%	33%	19 pts	33%	37%	4 pts							
Kansas City, MO	16%	32%	16 pts	32%	29%	-3 pts							
Las Vegas	16%	28%	12 pts	31%	40%	8 pts							
Long Beach	19%	40%	21 pts	42%	44%	1 pts							
Los Angeles	23%	34%	12 pts	46%	51%	5 pts							
Louisville	16%	40%	24 pts	23%	25%	2 pts							
Memphis	23%	41%	19 pts	63%	68%	5 pts							
Mesa	17%	28%	11 pts	16%	20%	4 pts							
Miami	28%	40%	12 pts	19%	24%	5 pts							
Milwaukee	25%	37%	12 pts	42%	36%	-7 pts							
Minneapolis	19%	33%	14 pts	24%	32%	8 pts							
Nashville	17%	36%	19 pts	35%	33%	-2 pts							
New York City	16%	22%	6 pts	53%	44%	-9 pts							
Oakland	18%	28%	10 pts	51%	52%	1 pts							
Oklahoma City	18%	38%	20 pts	28%	35%	6 pts							
Omaha	16%	22%	5 pts	18%	21%	3 pts							
Philadelphia	18%	22%	4 pts	51%	35%	-16 pts							
Phoenix	20%	37%	17 pts	21%	31%	10 pts							
Portland, OR	17%	30%	13 pts	19%	22%	4 pts							
Raleigh	16%	24%	8 pts	36%	46%	10 pts							
Sacramento	19%	26%	7 pts	45%	40%	-5 pts							
San Antonio	20%	32%	13 pts	23%	29%	6 pts							
San Diego	14%	23%	8 pts	33%	29%	-4 pts							
San Francisco	11%	17%	6 pts	45%	42%	-3 pts							
San Jose	12%	25%	13 pts	53%	51%	-2 pts							
Seattle	12%	20%	8 pts	25%	24%	-1 pts							
Tucson	26%	38%	12 pts	24%	26%	2 pts							
Tulsa	19%	29%	10 pts	29%	31%	2 pts							
Virginia Beach	8%	12%	4 pts	29%	29%	-1 pts							
Washington, DC	10%	9%	-1 pts	47%	27%	-20 pts							
Wichita, KS	18%	46%	28 pts	18%	24%	7 pts							

Commuters Biking to Work in Cities

Most Populous U.S. Cities	Percentage of commuters who bike to work	Change in percentage between 2007-2013 (in percentage points)
Albuquerque	1.3%	0.4 pts ▲
Arlington, TX	0.2%	0.0 pts ⊖
Atlanta	0.9%	0.3 pts ▲
Austin	1.6%	0.5 pts ▲
Baltimore	0.9%	0.6 pts ▲
Boston	1.9%	0.9 pts ▲
Charlotte	0.2%	0.1 pts ▲
Chicago	1.4%	0.5 pts ▲
Cleveland	0.5%	0.0 pts ⊖
Colorado Springs	0.6%	0.1 pts ▲
Columbus	0.8%	0.2 pts ▲
Dallas	0.2%	0.0 pts ⊖
Denver	2.4%	0.8 pts ▲
Detroit	0.4%	0.1 pts ▲
El Paso	0.1%	-0.1 pts ▼
Fort Worth	0.2%	0.0 pts ⊖
Fresno	1.1%	0.3 pts ▲
Houston	0.6%	0.2 pts ▲
Indianapolis	0.4%	0.3 pts ▲
Jacksonville	0.4%	0.1 pts ▲
Kansas City, MO	0.4%	0.3 pts ▲
Las Vegas	0.4%	0.0 pts ⊖
Long Beach	1.0%	0.3 pts ▲
Los Angeles	1.1%	0.5 pts ▲
Louisville	0.3%	0.1 pts ▲
Memphis	0.3%	0.1 pts ▲
Mesa	1.0%	0.0 pts ⊖
Miami	0.9%	0.6 pts ▲
Milwaukee	0.9%	0.4 pts ▲
Minneapolis	3.9%	1.1 pts ▲
Nashville	0.3%	0.1 pts ▲
New York City	1.0%	0.4 pts ▲
Oakland	3.0%	1.3 pts ▲
Oklahoma City	0.2%	0.0 pts ⊖
Omaha	0.2%	0.0 pts ⊖
Philadelphia	2.1%	1.1 pts ▲
Phoenix	0.7%	0.1 pts ▲
Portland, OR	6.1%	2.3 pts ▲
Raleigh	0.5%	0.2 pts ▲
Sacramento	2.3%	0.7 pts ▲
San Antonio	0.3%	0.1 pts ▲
San Diego	0.9%	0.2 pts ▲
San Francisco	3.7%	1.5 pts ▲
San Jose	0.9%	0.4 pts ▲
Seattle	3.7%	1.4 pts ▲
Tucson	2.9%	1.0 pts ▲
Tulsa	0.2%	0.1 pts ▲
Virginia Beach	0.6%	0.1 pts ▲
Washington, DC	4.0%	2.3 pts ▲
Wichita, KS	0.3%	0.1 pts ▲

Additional U.S. Cities	Percentage of commuters who bike to work	Change in percentage between 2007-2013 (in percentage points)
Albany	0.7%	0.2 pts ▲
Anchorage	1.2%	0.0 pts ⊖
Baton Rouge	0.8%	0.2 pts ▲
Bellingham	2.9%	-0.6 pts ▼
Boulder	10.8%	2.6 pts ▲
Burlington	6.8%	3.9 pts ▲
Chattanooga	0.5%	0.2 pts ▲
Davis	20.3%	6.0 pts ▲
Eugene	8.0%	0.7 pts ▲
Fort Collins	7.4%	2.4 pts ▲
Honolulu	1.9%	0.1 pts ⁽¹⁾ ▲
Madison	5.2%	1.2 pts ▲
Missoula	6.4%	-0.1 pts ▼
New Orleans	2.8%	1.4 pts ▲
Pittsburgh	1.8%	0.8 pts ▲
Salt Lake City	2.9%	1.0 pts ▲
Spokane	0.6%	-0.1 pts ▼
St Louis	0.7%	0.2 pts ▲

TABLE KEY (This page and next):

Highlighted cells within the table denote a value that is higher than the average of the 50 most populous cities.

- ▲ = Change over time increased
- ▼ = Change over time decreased
- ⊖ = Change over time was by less than 0.1 percentage points

Sources: ACS 2007, 2013 (3-yr est).

Notes: City averages are weighted by population and only include the 50 most populous U.S. cities. (1) The change in percentage for Honolulu is based on ACS 2010 and 2013 data. Data for the city of Honolulu (Urban Honolulu CDP) is not available in ACS 2007. (2) The 2014 Benchmarking Report calculated the large city average including New Orleans and Honolulu, in addition to the 50 most populous cities. This report calculates the average for only the 50 most populous cities.

Where Women Bike to Work

SOURCE: ACS 2013, 3-yr est

Most Populous U.S. Cities	Percentage of females among all commuters	Percentage of females among all biking commuters	Difference gap (in percentage points)
Albuquerque	48%	31%	-17 pts
Arlington, TX	46%	23%	-23 pts
Atlanta	47%	22%	-25 pts
Austin	45%	28%	-18 pts
Baltimore	53%	30%	-23 pts
Boston	50%	26%	-24 pts
Charlotte	49%	26%	-23 pts
Chicago	48%	29%	-20 pts
Cleveland	52%	14%	-38 pts
Colorado Springs	45%	23%	-22 pts
Columbus	49%	33%	-16 pts
Dallas	44%	9%	-35 pts
Denver	47%	28%	-18 pts
Detroit	55%	29%	-26 pts
El Paso	45%	14%	-31 pts
Fort Worth	47%	2%	-44 pts
Fresno	47%	27%	-20 pts
Houston	44%	21%	-23 pts
Indianapolis	49%	20%	-29 pts
Jacksonville	48%	22%	-26 pts
Kansas City, MO	50%	37%	-13 pts
Las Vegas	46%	8%	-39 pts
Long Beach	46%	30%	-16 pts
Los Angeles	45%	21%	-24 pts
Louisville	49%	30%	-19 pts
Memphis	51%	22%	-29 pts
Mesa	47%	24%	-23 pts
Miami	45%	31%	-15 pts
Milwaukee	51%	32%	-19 pts
Minneapolis	47%	33%	-14 pts
Nashville	48%	17%	-31 pts
New York City	48%	26%	-23 pts
Oakland	48%	38%	-9 pts
Oklahoma City	46%	16%	-30 pts
Omaha	48%	20%	-29 pts
Philadelphia	52%	37%	-16 pts
Phoenix	46%	22%	-23 pts
Portland, OR	48%	34%	-14 pts
Raleigh	48%	25%	-24 pts
Sacramento	50%	32%	-18 pts
San Antonio	47%	15%	-32 pts
San Diego	45%	24%	-21 pts
San Francisco	46%	32%	-14 pts
San Jose	44%	26%	-18 pts
Seattle	48%	31%	-17 pts
Tucson	48%	29%	-18 pts
Tulsa	47%	20%	-27 pts
Virginia Beach	46%	38%	-8 pts
Washington, DC	51%	37%	-14 pts
Wichita, KS	47%	21%	-26 pts

Additional U.S. Cities	Percentage of females among all commuters	Percentage of females among all biking commuters	Difference gap (in percentage points)
Albany	50%	44%	-6 pts
Anchorage	47%	21%	-26 pts
Baton Rouge	49%	21%	-28 pts
Bellingham	48%	43%	-5 pts
Boulder	49%	37%	-12 pts
Burlington	49%	23%	-26 pts
Chattanooga	48%	39%	-8 pts
Davis	49%	40%	-9 pts
Eugene	49%	33%	-16 pts
Fort Collins	47%	31%	-16 pts
Honolulu	47%	29%	-17 pts
Madison	49%	28%	-21 pts
Missoula	50%	35%	-15 pts
New Orleans	50%	37%	-13 pts
Pittsburgh	50%	33%	-17 pts
Salt Lake City	44%	35%	-10 pts
Spokane	49%	18%	-31 pts
St Louis	50%	38%	-12 pts

Sources: ACS 2007, 2013 (3-yr est).

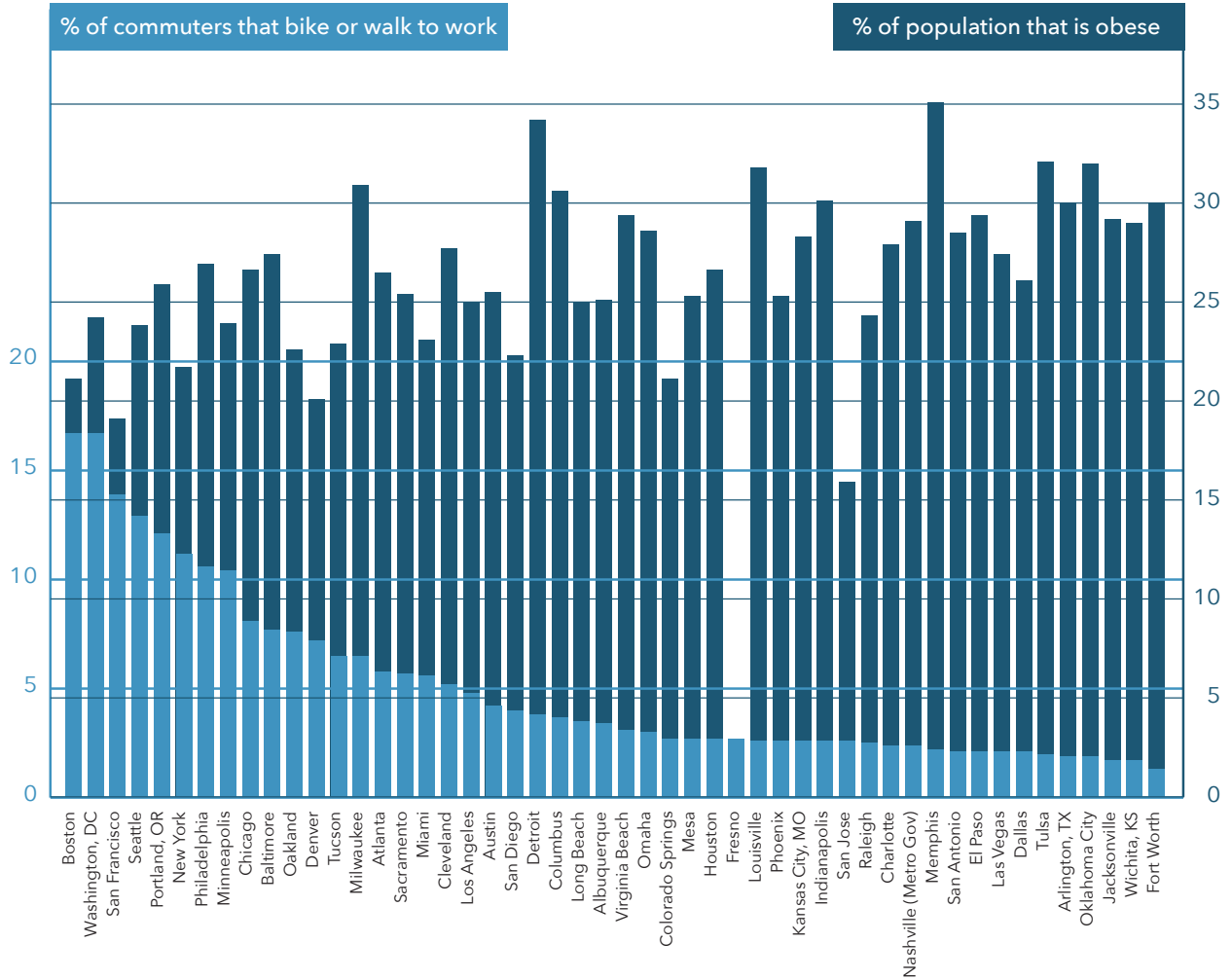
Notes: City averages are weighted by population and only include the 50 most populous U.S. cities. (1) The change in percentage for Honolulu is based on ACS 2010 and 2013 data. Data for the city of Honolulu (Urban Honolulu CDP) is not available in ACS 2007. (2) The 2014 *Benchmarking Report* calculated the large city average including New Orleans and Honolulu, in addition to the 50 most populous cities. This report calculates the average for only the 50 most populous cities.

In all of the cities studied, women bike to work at percentages lower than their distribution in the commuter population. Among the most populous cities, women make up just 29% of all commuters who bike to work. This is an average of 19 percentage points lower than the percentage of women in the overall commuter population (47%).

Cities: Public Health

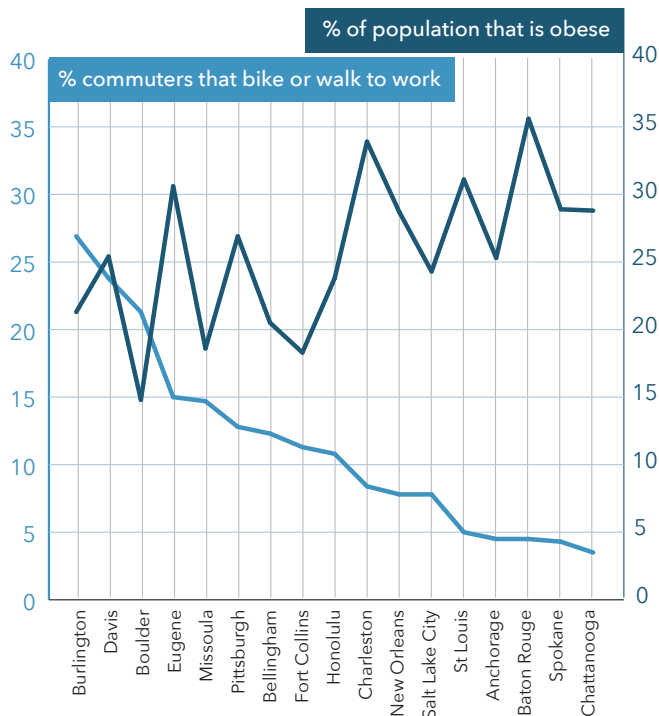
Obesity and Biking & Walking Levels

50 Most Populous Cities



Sources: BRFSS 2012; ACS 2013 (3-yr est)

Additional Surveyed Cities



Sources: BRFSS 2012; ACS 2013 (3-yr est)

Obesity rates continue to rise in the United States, posing a significant public health challenge at all levels. As many studies have indicated, active transportation plays a role in improving community health.

That trend is evident among the cities studied in the Benchmarking Report, with cities that have higher rates of biking and walking to work also tending to have lower rates of obesity.

This trend does not hold for all cities, however, with exceptions in places like San Jose and Colorado, which have lower levels of obesity despite low levels of active commuting, as well.

Public Health in Cities: Obesity, Diabetes, Hypertension, Asthma & Active Commuting

Most Populous U.S. Cities	% of adults who are overweight or obese ⁽¹⁾	Change in % from 2005-2012 (in percentage points)	% of adults who have diabetes	Change in % from 2005-2012 (in percentage points)	% of adults who have high blood pressure	Change in % from 2005-2011 (in percentage points)
Albuquerque	60%	1 pts ▲	9%	3 pts ▲	26%	4 pts ▲
Arlington, TX	67%	8 pts ▲	10%	5 pts ▲	30%	7 pts ▲
Atlanta	61%	-1 pts ▼	9%	1 pts ▲	29%	6 pts ▲
Austin	61%	7 pts ▲	7%	1 pts ▲	24%	9 pts ▲
Baltimore	64%	3 pts ▲	10%	3 pts ▲	33%	5 pts ▲
Boston	56%	1 pts ▲	7%	1 pts ▲	27%	3 pts ▲
Charlotte	64%	5 pts ▲	10%	3 pts ▲	28%	2 pts ▲
Chicago	62%	3 pts ▲	8%	1 pts ▲	29%	5 pts ▲
Cleveland	65%	4 pts ▲	12%	3 pts ▲	30%	2 pts ▲
Colorado Springs	56%	0 pts ○	9%	3 pts ▲	24%	6 pts ▲
Columbus	64%	0 pts ○	9%	3 pts ▲	32%	5 pts ▲
Dallas	63%	0 pts ○	10%	3 pts ▲	30%	7 pts ▲
Denver	56%	1 pts ▲	7%	3 pts ▲	25%	-4 pts ▼
Detroit	67%	4 pts ▲	13%	3 pts ▲	35%	6 pts ▲
El Paso	66%	3 pts ▲	14%	7 pts ▲	X	X
Fort Worth	67%	7 pts ▲	10%	2 pts ▲	30%	7 pts ▲
Fresno	X	X	X	X	X	X
Houston	63%	-3 pts ▼	11%	3 pts ▲	30%	7 pts ▲
Indianapolis	65%	5 pts ▲	10%	2 pts ▲	33%	10 pts ▲
Jacksonville	66%	X	12%	X	35%	X
Kansas City, MO	64%	2 pts ▲	10%	3 pts ▲	32%	8 pts ▲
Las Vegas	64%	6 pts ▲	10%	2 pts ▲	30%	7 pts ▲
Long Beach	59%	-3 pts ▼	11%	4 pts ▲	27%	1 pts ▲
Los Angeles	59%	-3 pts ▼	11%	4 pts ▲	27%	1 pts ▲
Louisville	68%	4 pts ▲	10%	2 pts ▲	34%	9 pts ▲
Memphis	69%	6 pts ▲	14%	6 pts ▲	37%	5 pts ▲
Mesa	61%	6 pts ▲	10%	3 pts ▲	27%	6 pts ▲
Miami	62%	-1 pts ▼	11%	2 pts ▲	31%	5 pts ▲
Milwaukee	66%	7 pts ▲	9%	4 pts ▲	28%	4 pts ▲
Minneapolis	61%	2 pts ▲	7%	2 pts ▲	24%	4 pts ▲
Nashville	63%	1 pts ▲	9%	1 pts ▲	35%	8 pts ▲
New York City	59%	2 pts ▲	10%	2 pts ▲	29%	5 pts ▲
Oakland	58%	6 pts ▲	9%	2 pts ▲	27%	0 pts ○
Oklahoma City	67%	5 pts ▲	11%	3 pts ▲	34%	7 pts ▲
Omaha	63%	2 pts ▲	8%	1 pts ▲	28%	5 pts ▲
Philadelphia	63%	3 pts ▲	11%	5 pts ▲	30%	2 pts ▲
Phoenix	61%	6 pts ▲	10%	3 pts ▲	27%	6 pts ▲
Portland, OR	60%	4 pts ▲	9%	3 pts ▲	28%	5 pts ▲
Raleigh	61%	-4 pts ▼	8%	2 pts ▲	26%	3 pts ▲
Sacramento	61%	X	10%	X	27%	X
San Antonio	67%	-1 pts ▼	10%	-1 pts ▼	34%	11 pts ▲
San Diego	59%	-3 pts ▼	9%	2 pts ▲	29%	6 pts ▲
San Francisco	50%	-2 pts ▼	8%	1 pts ▲	27%	0 pts ○
San Jose	49%	X	7%	X	27%	X
Seattle	59%	4 pts ▲	8%	2 pts ▲	28%	5 pts ▲
Tucson	60%	7 pts ▲	12%	4 pts ▲	26%	-4 pts ▼
Tulsa	67%	5 pts ▲	11%	3 pts ▲	35%	6 pts ▲
Virginia Beach	66%	5 pts ▲	10%	3 pts ▲	33%	7 pts ▲
Washington, DC	61%	6 pts ▲	9%	4 pts ▲	28%	1 pts ▲
Wichita, KS	65%	5 pts ▲	10%	3 pts ▲	31%	8 pts ▲

	% of adults who have asthma	Change in % from 2005-2012 (in percentage points)	% of commuters who walk to work	% of commuters who bike to work
Albuquerque	10%	1 pts ▲	2.1% ▼	1.3% ▲
Arlington, TX	7%	-2 pts ▼	1.7% ▲	0.2% ⊕
Atlanta	8%	1 pts ▲	4.9% ▲	0.9% ▲
Austin	8%	4 pts ▲	2.6% ▲	1.6% ▲
Baltimore	10%	1 pts ▲	6.8% ▼	0.9% ▲
Boston	9%	1 pts ▲	14.8% ▲	1.9% ▲
Charlotte	7%	0 pts ⊕	2.2% ▲	0.2% ▲
Chicago	8%	1 pts ▲	6.7% ▲	1.4% ▲
Cleveland	11%	5 pts ▲	4.6% ▲	0.5% ⊕
Colorado Springs	8%	-1 pts ▼	2.1% ▼	0.6% ▲
Columbus	9%	1 pts ▲	2.9% ▲	0.8% ▲
Dallas	8%	1 pts ▲	1.9% ▲	0.2% ⊕
Denver	10%	1 pts ▲	4.8% ▲	2.4% ▲
Detroit	12%	1 pts ▲	3.4% ▲	0.4% ▲
El Paso	8%	2 pts ▲	2.0% ▼	0.1% ▼
Fort Worth	7%	-2 pts ▼	1.2% ▼	0.2% ⊕
Fresno	X	X	1.6% ▼	1.1% ▲
Houston	5%	-3 pts ▼	2.1% ▼	0.6% ▲
Indianapolis	10%	3 pts ▲	2.1% ▲	0.4% ▲
Jacksonville	10%	X	1.2% ▼	0.4% ▲
Kansas City, MO	10%	1 pts ▲	2.2% ▼	0.4% ▲
Las Vegas	7%	0 pts ⊕	1.7% ▼	0.4% ⊕
Long Beach	7%	1 pts ▲	2.5% ▼	1.0% ▲
Los Angeles	7%	1 pts ▲	3.7% ▲	1.1% ▲
Louisville	12%	5 pts ▲	2.3% ▲	0.3% ▲
Memphis	7%	1 pts ▲	1.9% ▼	0.3% ▲
Mesa	9%	2 pts ▲	1.7% ▼	1.0% ⊕
Miami	5%	0 pts ⊕	4.7% ▲	0.9% ▲
Milwaukee	8%	0 pts ⊕	5.6% ▲	0.9% ▲
Minneapolis	9%	-1 pts ▼	6.5% ▼	3.9% ▲
Nashville	7%	-2 pts ▼	2.1% ▲	0.3% ▲
New York City	8%	0 pts ⊕	10.2% ▲	1.0% ▲
Oakland	11%	1 pts ▲	4.6% ▲	3.0% ▲
Oklahoma City	11%	3 pts ▲	1.6% ▲	0.2% ⊕
Omaha	8%	2 pts ▲	2.7% ▲	0.2% ⊕
Philadelphia	11%	2 pts ▲	8.5% ▲	2.1% ▲
Phoenix	9%	2 pts ▲	1.9% ▲	0.7% ▲
Portland, OR	10%	0 pts ⊕	5.9% ▲	6.1% ▲
Raleigh	7%	-1 pts ▼	1.9% ▼	0.5% ▲
Sacramento	10%	X	3.3% ▼	2.3% ▲
San Antonio	6%	-2 pts ▼	1.9% ▼	0.3% ▲
San Diego	7%	1 pts ▲	3.1% ▲	0.9% ▲
San Francisco	11%	1 pts ▲	10.2% ▲	3.7% ▲
San Jose	8%	X	1.6% ▼	0.9% ▲
Seattle	8%	0 pts ⊕	9.3% ▲	3.7% ▲
Tucson	9%	1 pts ▲	3.6% ▼	2.9% ▲
Tulsa	9%	1 pts ▲	1.8% ▼	0.2% ▲
Virginia Beach	8%	0 pts ⊕	2.5% ▼	0.6% ▲
Washington, DC	8%	-1 pts ▼	12.6% ▲	4.0% ▲
Wichita, KS	9%	-1 pts ▼	1.4% ▼	0.3% ▲

TABLE KEY (This page and previous):

Highlighted cells within the table denote a value that is higher than the average of the 50 most populous cities.

X Data not available

▲ Change over time increased

▼ Change over time decreased

⊕ Change over time was by less than 0.1 percentage points

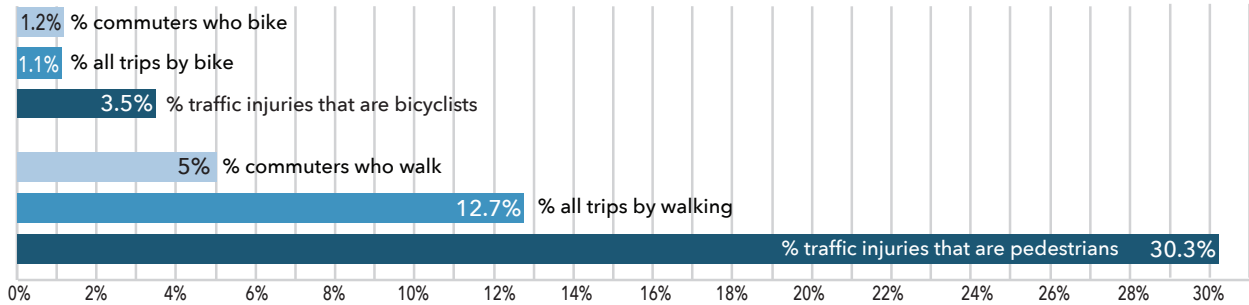
Sources: BRFSS 2005, 2011 and 2012; ACS 2013 (3-yr est)

Notes: In 2011, BRFSS changed their data collection and analysis methodology to include data collected by cell phone and adjustments were made to the weighting of the data. (1) "Overweight or obese" is defined as a body mass index of 25.0 or higher.

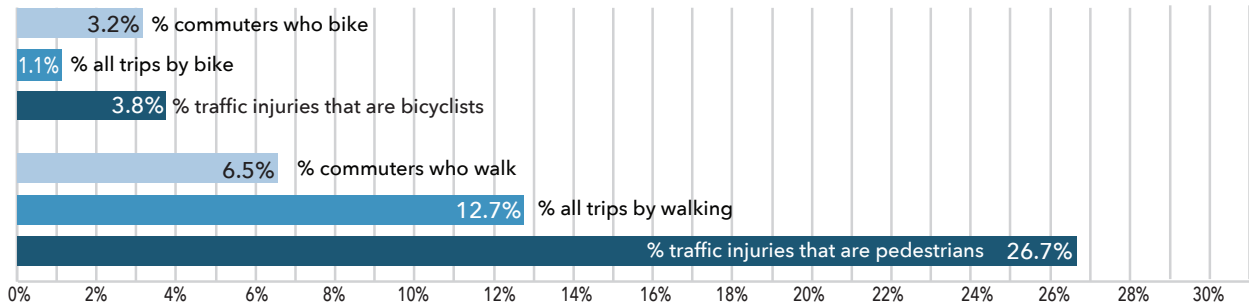
Cities: Traffic Safety

Safety of People who Bike and Walk in Cities

Safety of People who Bike and Walk in the 50 Most Populous U.S. Cities



Safety of People who Bike and Walk in Additional Benchmarking Cities

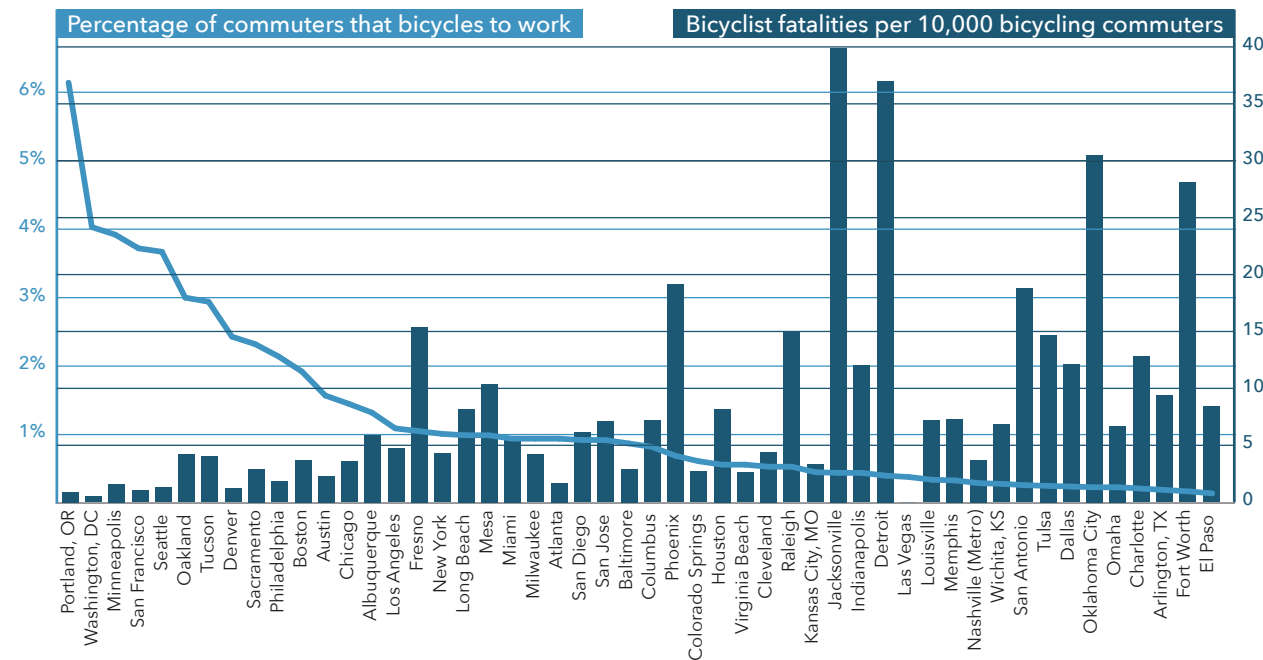
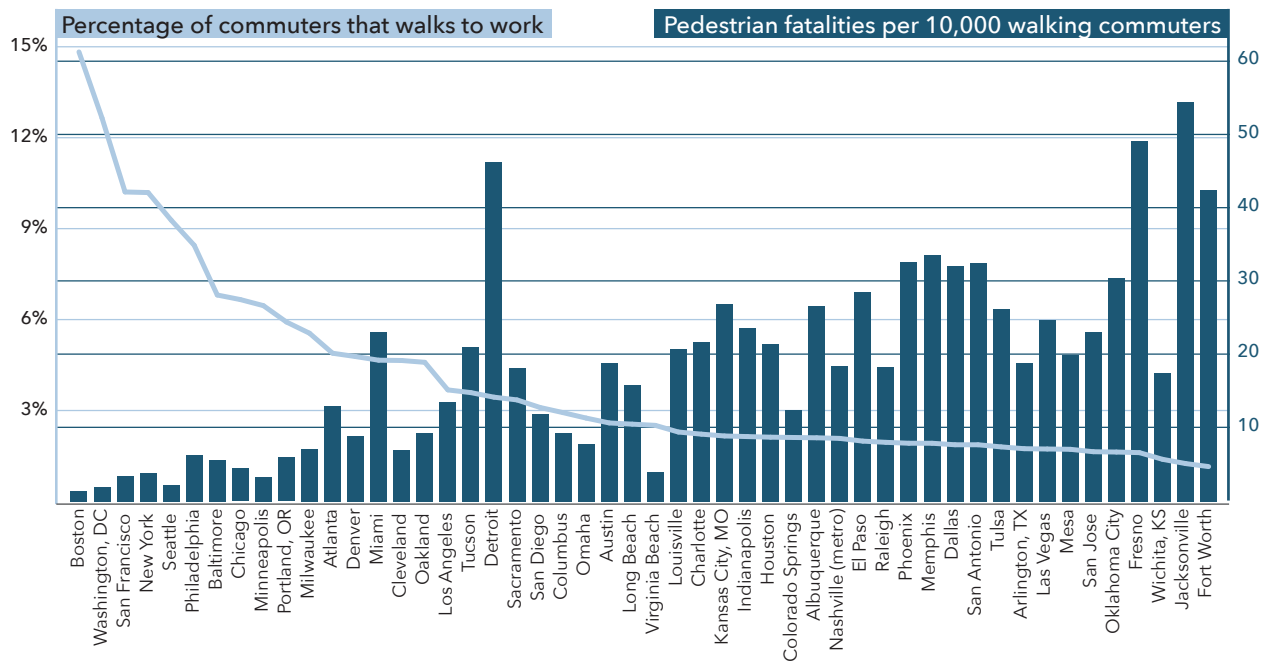


Sources: ACS 2011-2013; FHWA FMIS 2012-2014; FARS 2011-2013; BRFS 2013

Data for the 52 cities studied in this report indicate an inverse relationship between bicycling and walking levels and fatality rates. Cities with the highest rates of pedestrian fatalities are among those with the lowest levels of walking. Similarly, cities with the highest levels of bicycling generally have lower bicycle fatality rates.

A possible explanation is that in places where more bicyclists and pedestrians are present, motorists are more used to sharing the roadways with bicyclists and are more aware of pedestrians at crossings. Environmental factors (such as signed routes, bike lanes, and sidewalks) that contribute to increased bicycling and walking also likely contribute to increased safety.

Fatality Rates and Walking & Biking Levels in the Most Populous Cities



Sources: ACS 2011-2013; FHWA FMIS 2012-2014; FARS 2011-2013; BRFSS 2013

Pedestrian Fatalities in the Most Populous Cities

Most Populous U.S. Cities	Total Pedestrian Fatalities (Total fatalities in 3-year period)			Average Fatality Rates for Pedestrians (Fatalities per 10k walking commuters)	Pedestrian Fatalities as a Percentage of all Traffic Fatalities
	2005-2007	2008-2010	2011-2013	2005-2013 Fatality Rate	2005-2013 Percentage
Albuquerque	53	32 ▼	43 ▲	27	29%
Arlington, TX	15	13 ▼	18 ▲	18	18%
Atlanta	26	45 ▲	39 ▼	14	23%
Austin	55	40 ▼	68 ▲	18	29%
Baltimore	46	36 ▼	30 ▼	7	33%
Boston	24	23 ▼	20 ▼	2	34%
Charlotte	39	39 ○	55 ▲	20	23%
Chicago	164	122 ▼	110 ▼	6	28%
Cleveland	22	16 ▼	14 ▼	9	18%
Colorado Springs	7	6 ▼	16 ▲	7	14%
Columbus	32	37 ▲	32 ▼	11	21%
Dallas	111	88 ▼	104 ▲	33	25%
Denver	43	33 ▼	43 ▲	10	33%
Detroit	95	79 ▼	96 ▲	43	29%
El Paso	28	36 ▲	47 ▲	23	25%
Fort Worth	59	38 ▼	51 ▲	39	24%
Fresno	34	25 ▼	44 ▲	33	33%
Houston	165	135 ▼	139 ▲	23	23%
Indianapolis	26	36 ▲	58 ▲	17	18%
Jacksonville	87	60 ▼	77 ▲	42	21%
Kansas City, MO	32	23 ▼	39 ▲	22	17%
Las Vegas	36	29 ▼	33 ▲	22	25%
Long Beach	29	24 ▼	25 ▲	16	27%
Los Angeles	281	274 ▼	265 ▼	15	35%
Louisville	41	44 ▲	39 ▼	25	19%
Memphis	43	39 ▼	53 ▲	27	16%
Mesa	27	14 ▼	20 ▲	19	17%
Miami	66	48 ▼	59 ▲	28	39%
Milwaukee	45	28 ▼	30 ▲	9	29%
Minneapolis	11	12 ▲	14 ▲	3	22%
Nashville	39	31 ▼	36 ▲	20	17%
New York City	446	461 ▲	448 ▼	4	52%
Oakland	28	25 ▼	24 ▼	11	28%
Oklahoma City	34	30 ▼	42 ▲	29	17%
Omaha	8	7 ▼	14 ▲	6	13%
Philadelphia	100	92 ▼	97 ▲	6	33%
Phoenix	157	121 ▼	124 ▲	37	26%
Portland, OR	27	24 ▼	33 ▲	6	30%
Raleigh	22	23 ▲	23 ○	17	24%
Sacramento	34	31 ▼	36 ▲	17	30%
San Antonio	85	82 ▼	113 ▲	26	24%
San Diego	63	66 ▲	73 ▲	12	27%
San Francisco	62	50 ▼	48 ▼	4	49%
San Jose	50	33 ▼	52 ▲	20	33%
Seattle	22	32 ▲	22 ▼	3	29%
Tucson	49	29 ▼	51 ▲	17	25%
Tulsa	39	22 ▼	26 ▲	26	21%
Virginia Beach	16	12 ▼	7 ▼	7	16%
Washington, DC	52	36 ▼	24 ▼	3	40%
Wichita, KS	15	10 ▼	13 ▲	17	14%

TABLE KEY:

Highlighted cells within the table denote a value that is higher than the average of the 50 most populous cities.

- ▲ Change over time increased
- ▼ Change over time decreased
- Change over time was by less than 0.1 percentage points

Sources: FARS 2005-2013 (annual data); ACS 2007, 3-yr est; ACS 2010, 3-yr est; ACS 2013, 3-yr est.

Notes: Fatality rates were calculated by averaging the number of pedestrian fatalities in the 3-year time span indicated and dividing by the estimated number of commuters walking to work (using corresponding ACS 3-year estimates). The accuracy of fatality rates is limited due to the potential for inaccurate and incomplete reporting of fatalities and due to the use of commuter data in the rate calculations. Reported fatalities may occur during other types of walking trips, which are not counted by the ACS.

Bicyclist Fatalities in the Most Populous Cities

Most Populous U.S. Cities	Total Bicyclist Fatalities (Total fatalities in 3-year period)			Average Fatality Rates for Bicyclists (Fatalities per 10k biking commuters)	Bicyclist Fatalities as a Percentage of all Traffic Fatalities
	2005-2007	2008-2010	2011-2013	2005-2013 Fatality Rate	2005-2013 Percentage
Albuquerque	10	6 ▼	6 ○	8	5%
Arlington, TX	3	1 ▼	1 ○	16	2%
Atlanta	5	2 ▼	1 ▼	6	2%
Austin	3	4 ▲	5 ▲	2	2%
Baltimore	2	4 ▲	2 ▼	5	2%
Boston	3	3 ○	7 ▲	3	7%
Charlotte	5	7 ▲	3 ▼	28	3%
Chicago	17	16 ▼	19 ▲	4	4%
Cleveland	1	4 ▲	1 ▼	8	2%
Colorado Springs	1	3 ▲	1 ▼	5	2%
Columbus	3	6 ▲	7 ▲	6	3%
Dallas	4	5 ▲	5 ○	15	1%
Denver	4	4 ○	3 ▼	2	3%
Detroit	8	7 ▼	9 ▲	35	3%
El Paso	2	1 ▼	1 ○	10	1%
Fort Worth	1	4 ▲	5 ▲	21	2%
Fresno	6	11 ▲	9 ▼	18	8%
Houston	10	12 ▲	14 ▲	9	2%
Indianapolis	9	3 ▼	6 ▲	16	3%
Jacksonville	11	14 ▲	20 ▲	34	4%
Kansas City, MO	2	2 ○	1 ▼	9	1%
Las Vegas	7	6 ▼	0 ▼	15	3%
Long Beach	3	5 ▲	5 ○	7	4%
Los Angeles	22	22 ○	27 ▲	5	3%
Louisville	6	7 ▲	2 ▼	18	2%
Memphis	3	5 ▲	2 ▼	21	1%
Mesa	13	5 ▼	6 ▲	14	7%
Miami	4	3 ▼	3 ○	10	2%
Milwaukee	1	1 ○	3 ▲	3	1%
Minneapolis	3	5 ▲	4 ▼	2	7%
Nashville	7	2 ▼	1 ▼	14	2%
New York City	65	51 ▼	48 ▼	7	6%
Oakland	3	3 ○	7 ▲	4	5%
Oklahoma City	0	3 ▲	6 ▲	18	1%
Omaha	0	1 ▲	1 ○	6	1%
Philadelphia	11	9 ▼	7 ▼	3	3%
Phoenix	23	22 ▼	26 ▲	18	5%
Portland, OR	8	4 ▼	5 ▲	1	6%
Raleigh	3	2 ▼	5 ▲	12	3%
Sacramento	6	8 ▲	4 ▼	5	5%
San Antonio	6	6 ○	9 ▲	22	2%
San Diego	13	8 ▼	11 ▲	6	4%
San Francisco	4	6 ▲	5 ▼	1	5%
San Jose	5	2 ▼	9 ▲	5	4%
Seattle	3	6 ▲	5 ▼	1	5%
Tucson	8	8 ○	8 ○	5	5%
Tulsa	1	2 ▲	2 ○	11	1%
Virginia Beach	1	3 ▲	1 ▼	4	2%
Washington, DC	4	3 ▼	2 ▼	1	3%
Wichita, KS	4	1 ▼	1 ○	14	2%

TABLE KEY:

Highlighted cells within the table denote a value that is higher than the average of the 50 most populous cities.

- ▲ Change over time increased
- ▼ Change over time decreased
- Change over time less than 0.1 percentage points

Sources: FARS 2005-2013 (annual data); ACS 2007, 3-yr est; ACS 2010, 3-yr est; ACS 2013, 3-yr est.

Notes: Fatality rates were calculated by averaging the number of bicyclist fatalities in the 3-year time span indicated and dividing by the estimated number of commuters biking to work (using corresponding ACS 3-year estimates). The accuracy of fatality rates is limited due to the potential for inaccurate and incomplete reporting of fatalities and due to the use of commuter data in the rate calculations. Reported fatalities may occur during other types of bicycle trips, which are not counted by the ACS.

Pedestrian Fatalities in Additional Benchmarking Cities

Additional U.S. Cities	Total Pedestrian Fatalities (Total fatalities in 3-year period)			Average Fatality Rates for Pedestrians (Fatalities per 10k walking commuters)	Pedestrian Fatalities as a Percentage of all Traffic Fatalities
	2005-2007	2008-2010	2011-2013	2005-2013 Fatality Rate	2005-2013 Percentage
Albany	5	2 ▼	7 ▲	3	30%
Anchorage	16	9 ▼	16 ▲	11	29%
Baton Rouge	15	18 ▲	27 ▲	18	22%
Bellingham	0	0 ⊕	2 ▲	1	11%
Boulder	1	1 ⊕	4 ▲	1	24%
Burlington	0	0 ⊕	1 ▲	0	20%
Chattanooga	11	13 ▲	8 ▼	19	13%
Davis	1	0 ▼	2 ▲	3	21%
Eugene	7	7 ⊕	4 ▼	4	35%
Fort Collins	0	3 ▲	1 ▼	2	9%
Honolulu	41	24 ▼	18 ▼	9	42%
Madison	4	9 ▲	8 ▼	2	21%
Missoula	4	0 ▼	5 ▲	4	28%
New Orleans	21	29 ▲	32 ▲	12	26%
Pittsburgh	16	18 ▲	9 ▼	3	24%
Salt Lake City	19	14 ▼	16 ▲	11	26%
Spokane	7	8 ▲	10 ▲	8	29%
St Louis	34	32 ▼	35 ▲	20	24%

TABLE KEY:

Highlighted cells within the table denote a value that is higher than the average of the 50 most populous cities.

- ▲ Change over time increased
- ▼ Change over time decreased
- ⊕ Change over time less than 0.1 percentage points

Sources: FARS 2005-2013 (annual data); ACS 2007, 3-yr est; ACS 2010, 3-yr est; ACS 2013, 3-yr est.

Notes: Fatality rates were calculated by averaging the number of pedestrian fatalities in the 3-year time span indicated and dividing by the estimated number of commuters walking to work (using corresponding ACS 3-year estimates). The accuracy of fatality rates is limited due to the potential for inaccurate and incomplete reporting of fatalities and due to the use of commuter data in the rate calculations. Reported fatalities may occur during other types of walking trips, which are not counted by the ACS.

Bicyclist Fatalities in Additional Benchmarking Cities

Additional U.S. Cities	Total Bicyclist Fatalities (Total fatalities in 3-year period)			Average Fatality Rates for Bicyclists (Fatalities per 10k biking commuters)	Bicyclist Fatalities as a Percentage of all Traffic Fatalities
	2005-2007	2008-2010	2011-2013	2005-2013 Fatality Rate	2005-2013 Percentage
Albany	2	1 ▼	1 ⊕	13	9%
Anchorage	0	2 ▲	3 ▲	3	3%
Baton Rouge	6	2 ▼	5 ▲	20	5%
Bellingham	0	0 ⊕	0 ⊕	0	0%
Boulder	1	2 ▲	0 ▼	1	12%
Burlington	0	0 ⊕	0 ⊕	0	0%
Chattanooga	2	2 ⊕	2 ⊕	23	2%
Davis	0	0 ⊕	0 ⊕	0	0%
Eugene	3	1 ▼	2 ▲	1	12%
Fort Collins	0	3 ▲	1 ▼	1	9%
Honolulu	2	2 ⊕	1 ▼	3	3%
Madison	1	1 ⊕	3 ▲	1	5%
Missoula	1	0 ▼	0 ⊕	1	3%
New Orleans	6	5 ▼	4 ▼	6	5%
Pittsburgh	0	1 ▲	1 ⊕	1	1%
Salt Lake City	3	3 ⊕	2 ▼	4	4%
Spokane	2	2 ⊕	1 ▼	6	6%
St Louis	0	2 ▲	1 ▼	3	1%

Families for Safe Streets: A Growing Movement

By Carolyn Szczepanski for the Vision Zero Network

Amy Cohen stood at a podium in front of a thousand New York City residents brought together by unspeakable tragedy – but mobilized by great opportunity.

“This is our city,” Cohen told the massive crowd at a 2015 rally in Union Square. “This is happening on our streets. And it is our collective responsibility to come together and eliminate so much unnecessary and preventable suffering.”

Just two years ago, Cohen never would have envisioned herself as a safe streets advocate, let alone the leader of a group that has played a pivotal role in the progress of Vision Zero in the nation’s most iconic city.

But on October 8, 2013, the unthinkable happened. Her 12-year-old son, Sammy, was waiting for a friend to head to soccer practice when his ball bounced into the street – and he was killed by a Chevrolet van. For Cohen, Sammy’s death wasn’t just a crushing loss. It was a call to action. She knew Sammy wasn’t a victim of carelessness but a casualty of an inherently flawed transportation system.

When she borrowed a radar gun, she found that drivers on her street in Park Slope Brooklyn were consistently exceeding the speed limit of 30 miles an hour. The social worker started attending City Council committee meetings and vigils for others killed on NYC streets – and working with local advocacy group, Transportation Alternatives, to advance Vision Zero.

For Transportation Alternatives, working with Cohen and other families shifted their paradigm, too. In 2014, Families for Safe Streets (FSS) was established as a group embedded in and aligned with TA’s campaign for Vision Zero, but led by those who had lost a loved one.

“From the traditional transportation or bike advocate’s perspective, it’s a real change in how we incorporate voices of victims,” says Caroline Samponaro, TA’s Deputy Director. “Rather than speaking on their behalf, we created a framework in which they can do that for themselves.”

For those who have lost children or parents, spouses or friends, stepping into that advocacy space can be heartwrenching. In a sense, being an advocate asks that they relive the most traumatic moments in their lives over and over.

“None of us came to this work voluntarily,” Cohen says. “It’s not easy to speak out so soon after a loss. It’s hard just to get out of bed each day. Our group was successful because we started with individuals who had lost loved ones at different times – some recent and some less so. It created a very supportive environment, where those whose loved ones were lost more recently received support from those who were further along this painful journey. We’ve since decided to formalize the support and guidance aspect of our work, since it’s often the first thing someone needs after losing a loved one or suffering from a life-debilitating injury.”

“Our first effort focused on lowering the speed limit and getting speed cameras,” Cohen recalls. “Both require approval from the New York State Legislature... The Mayor’s Vision Zero agenda didn’t originally include lowering the speed limit, likely because he didn’t think it was politically possible. But, after we made it our key priority, the City joined with us and together we were able to get it passed.”

But, as Families for Safe Streets have been so effective in emphasizing, Vision Zero isn’t about numbers. It’s about lives.

“We’re a year out from the speed limit change and a little boy was hit on the same street as Sammy Cohen,” TA’s Samponaro says. “But the driver was going slow enough that the little boy could walk away. That’s an incredible testament to the work of Amy and Gary [Sammy’s dad] and Tamar [Sammy’s sister]. And they’re just one of the families. There are dozens and dozens who have been so courageous in becoming part of the advocacy community.”

Read more at <http://visionzeronetwork.org/from-grief-to-action-families-for-safe-streets-takes-the-lead-in-nyc/>



Amy Cohen speaking at a press conference in 2015. Photo by Andrew Hinderaker

Cities: Administrative Priorities

City Goals for Health and Safety

Most Populous U.S. Cities	Decrease pedestrian fatalities	Decrease bicyclist fatalities	Decrease pedestrian injuries	Decrease bicyclist injuries	Increase walking	Increase biking	Increase physical activity	Adopted goals as part of...			
								Carbon emissions reduction plan	Public health improvement plan	Transportation congestion mitigation plan	Public safety improvement plan
Albuquerque		✓		✓	✓	✓	✓			✓	✓
Arlington, TX	✓	✓	✓	✓	✓	✓	✓				
Atlanta						✓				✓	✓
Austin	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baltimore	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boston				✓		✓		✓		✓	✓
Charlotte	✓	✓	✓	✓	✓	✓	✓		✓		✓
Chicago	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Cleveland	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Colorado Springs	✓	✓			✓	✓	✓	✓			
Columbus	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Dallas						✓	✓				
Denver					✓	✓	✓	✓	✓		
El Paso					✓	✓	✓	✓			
Fort Worth	✓	✓	✓	✓	✓	✓	✓				
Fresno	✓	✓			✓	✓	✓	✓	✓		✓
Houston		✓		✓							✓
Indianapolis						✓					
Jacksonville	✓	✓	✓	✓	✓	✓	✓		✓		✓
Kansas City, MO	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Las Vegas								✓	(1)		
Long Beach						✓					
Los Angeles	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Louisville	✓	✓	✓	✓	✓	✓	✓				✓
Memphis	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mesa	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Miami	✓	✓	✓	✓	✓	✓	✓	✓			
Milwaukee	✓	✓	✓	✓	✓	✓	✓	✓			
Minneapolis	✓	✓			✓	✓	✓	✓		✓	
Nashville	✓	✓	✓	✓	✓	✓	✓				
New York City	✓(1)	✓(1)			✓	✓	✓	✓	(1)		
Oakland	✓	✓	✓	✓	✓	✓	✓	✓			
Oklahoma City						✓					
Omaha					✓	✓	✓		✓		
Philadelphia	✓	✓			✓	✓	✓		✓		✓
Phoenix					✓(1)	✓(1)					
Portland, OR	✓	✓	✓	✓	✓	✓	✓	✓			
Raleigh	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Sacramento	✓	✓	✓	✓	✓	✓	✓	✓			
San Antonio		✓			✓	✓	✓		✓		
San Diego	✓	✓	✓	✓	✓	✓	✓	✓			
San Francisco	✓	✓	✓	✓	✓	✓		✓	✓	✓	
San Jose	✓	✓	✓	✓	✓	✓		✓		✓	
Seattle	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Tucson	✓		✓		✓	✓					
Tulsa	✓	✓	✓	✓	✓	✓	✓				
Virginia Beach	✓	✓	✓	✓	✓	✓					
Washington, DC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wichita, KS	✓	✓	✓	✓	✓	✓					

KEY: ✓ = Yes

Source: Benchmarking Survey 2014. Notes: A survey was not submitted for Detroit; the city has been removed from this table. (1) City did not answer this question in the 2014 survey. Their response from the 2012 survey is included here.

City Goals for Health and Safety

Additional U.S. Cities	Adopted goals as part of...							Adopted goals as part of...			
	Decrease pedestrian fatalities	Decrease bicyclist fatalities	Decrease pedestrian injuries	Decrease bicyclist injuries	Increase walking	Increase biking	Increase physical activity	Carbon emissions reduction plan	Public health improvement plan	Transportation congestion mitigation plan	Public safety improvement plan
Albany	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Anchorage				✓	✓	✓	✓				
Baton Rouge		✓			✓	✓	✓	✓	✓		
Bellingham	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Boulder	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Burlington								✓			
Chattanooga	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Davis	✓	✓	✓	✓	✓	✓	✓	✓			
Eugene	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fort Collins	✓	✓	✓	✓	✓	✓	✓	✓			
Honolulu		✓		✓		✓					
Madison	✓	✓	✓	✓	✓	✓	✓	✓			
Missoula	✓	✓	✓	✓	✓	✓	✓	✓			✓
New Orleans	✓	✓	✓	✓					✓		
Pittsburgh	✓	✓	✓	✓	✓	✓		✓			
Salt Lake City	✓	✓	✓	✓	✓	✓	✓	✓			
Spokane	✓	✓			✓	✓					
St Louis					✓	✓	✓	✓	✓		

KEY: ✓ = Yes

Source: Benchmarking Survey 2014.

The overwhelming number of cities, of all sizes, are adopting goals to increase the safety and mode share of active transportation. Of the most populous cities, 23 have goals to increase biking and walking, decrease bicyclist and pedestrian injuries and fatalities, and increase physical activity. Among additional U.S. cities, 10 have all seven goals. Interestingly, many cities have adopted such goals as part of their carbon emissions reduction plan.

Cities: Available Resources

Spending Targets for Biking and Walking

Most Populous U.S. Cities	City has a spending target	Target percentage of transportation budget	Dedicated city budget funds to bike/ped in 2014	Dedicated city budget funds to all transportation programs in 2014
Albuquerque	✓	5%	\$3,880,000	\$32,000,000
Arlington, TX			\$0	
Atlanta			\$5,000,000	\$6,000,000
Austin	✓		\$2,440,000	\$24,500,000
Baltimore	✓	10%	\$374,000	\$400K (local) + \$39.8M (federal)
Boston			\$1,200,000	\$30,000,000
Charlotte			\$7,750,000	\$407,823,065
Chicago			\$8,200,000	
Cleveland			\$10,332,342	\$70,471,406
Colorado Springs	✓		\$2,162,032	\$46,255,784
Columbus	✓	5%	\$14,944,000	\$103,794,000
Dallas	✓			
Denver			\$2,600,000	
El Paso			\$15,150,000	\$50,500,000
Fort Worth				\$44,493,472
Fresno	✓			
Houston			\$15,112,760	\$181,815,000
Indianapolis			\$3,000,000	\$104,000,000
Jacksonville			\$6,430,000	\$20,036,500
Kansas City, MO			\$10,089,622	\$68,687,673
Las Vegas			\$42,021,884	\$84,374,465
Long Beach	✓			
Los Angeles			\$6,075,848	\$400,000,000
Louisville	✓	\$300,000	\$2,144,400	\$12,301,200
Memphis			\$7,892,530	\$109,788,569
Mesa			\$6,500,000	\$17,500,000
Miami			\$9,844,458	\$11,607,258
Milwaukee			\$1,100,000	\$4,449,500 ⁽¹⁾
Minneapolis			\$25,634,100	\$174,368,000
Nashville	✓	\$20 million + 1.5%	\$20,000,000	\$55,861,800 ⁽²⁾
New York City				
Oakland			\$3,549,000	\$17,100,000
Oklahoma City			\$24,877,014	\$96,472,450
Omaha	✓	10%	\$2,586,000	\$23,000,000
Philadelphia				
Phoenix				
Portland, OR				\$273,179,274
Raleigh			\$8,500,000	\$28,277,000
Sacramento				\$48,147,952
San Antonio	✓	1%	\$9,500,000	\$68,747,201
San Diego				
San Francisco				
San Jose			\$11,525,000	\$223,058,863
Seattle			\$30,000,000	\$409,000,000
Tucson			\$900,000	
Tulsa	✓	5%		
Virginia Beach	✓	1%	\$550,000	\$70,000,000
Washington, DC	✓	5%		
Wichita, KS			\$450,000	\$48,020,000

KEY (this page and next):

✓ = Yes

Source: Benchmarking Survey 2014.

Notes: A survey was not submitted for Detroit; the city has been removed from this table. (1) Amount reported only includes Infrastructure Services, not Operations. (2) Amount reported is for all Public Works activity, excluding Waste Management.

Spending Targets for Biking and Walking

Additional U.S. Cities	City has a spending target	Target percentage of transportation budget	Dedicated city budget funds to bike/ped in 2014	Dedicated city budget funds to all transportation programs in 2014
Albany			\$15,000	\$700,000
Anchorage	✓	10%	\$2,900,000 ⁽¹⁾	\$20,000,000 ⁽¹⁾
Baton Rouge				
Bellingham	✓			
Boulder	✓	30%	\$6,556,238	\$20,665,196
Burlington			Unknown	Unknown
Chattanooga			\$1,227,420	\$9,922,135
Davis	✓	20%	Unknown	Unknown
Eugene	✓			
Fort Collins			\$1,339,856	\$49,600,000
Honolulu			\$1,500,000	
Madison				
Missoula			\$2,750,000	\$11,000,000
New Orleans			\$2,000,000	
Pittsburgh			\$1,413,575	\$20,407,600
Salt Lake City			\$5,830,000	\$27,450,000
Spokane				
St Louis			\$140,000	\$40,000,000

KEY: ✓ = Yes

Source: Benchmarking Survey 2014. Notes: (1) Amount reported includes federal dollars from MPO.

Spending targets are goals set by states and cities for how much money, or what percentage of transportation spending, will be allocated to bicycling and walking. Some spending targets are based on percentage of transportation spending over varying time frames, while other states and cities set dollar amounts as annual spending targets.

Only a minority of cities currently have such targets. Among the largest cities the most notable are Baltimore and Omaha with a target of 10% of the transportation budget. Among additional cities, Davis, Calif. and Boulder had impressive targets of 20% and 30% respectively.

City Staff and Biking and Walking

Do city staff walk or bike as part of their job responsibilities?

Most Populous U.S. Cities	Employees hired to work on bike/ped projects (FTE) ⁽¹⁾	Police		EMTs or Paramedics		Other Staff	
		Walk	Bike	Walk	Bike	Walk	Bike
Albuquerque	14.0		✓				
Arlington, TX	1.0	✓	✓				
Atlanta	2.0	✓	✓	✓			
Austin	25.0	✓	✓			✓	
Baltimore	0.5	✓	✓		✓		
Boston	8.2	✓	✓	✓	✓	✓	✓
Charlotte	10.3	✓	✓		✓		✓
Chicago	21.0		✓				✓
Cleveland	5.0		✓			✓	
Colorado Springs	3.6	✓	✓		✓		
Columbus	20.0		✓		✓	✓	✓
Dallas	2.0		✓				
Denver	26.3		✓		✓	✓	
El Paso	4.0		✓				
Fort Worth	1.0		✓				✓
Fresno	2.0		✓				
Houston	10.0	✓	✓			✓	
Indianapolis	2.0		✓				
Jacksonville	12.0	✓	✓	✓	✓	✓	✓
Kansas City, MO	1.0	✓	✓				✓
Las Vegas	1.7	✓	✓				
Long Beach							
Los Angeles	12.0		✓		✓		✓
Louisville	3.0	✓	✓	✓	✓	✓	✓
Memphis	2.5		✓				
Mesa	3.0		✓		✓	✓	✓
Miami	6.0	✓	✓			✓	✓
Milwaukee	1.0	✓	✓				
Minneapolis	21.4	✓	✓			✓	✓
Nashville	14.3	✓	✓				✓
New York City							
Oakland	19.1	✓	✓			✓	✓
Oklahoma City	1.0		✓				
Omaha	1.0		✓				
Philadelphia	5.5	✓	✓		✓		✓
Phoenix							
Portland, OR	26.0	✓	✓			✓	✓
Raleigh	6.0	✓	✓			✓	
Sacramento	1.0	✓	✓				
San Antonio	3.0		✓				
San Diego	10.0					✓	✓
San Francisco		✓	✓				
San Jose	9.0	✓	✓			✓	✓
Seattle	13.0	✓	✓				
Tucson	2.3	✓	✓		✓		✓
Tulsa	3.0	✓		✓			
Virginia Beach	2.0		✓				
Washington, DC	8.0		✓				✓
Wichita, KS	0.0						

SOURCES: Benchmarking Survey 2014

NOTES: A survey was not submitted for Detroit; the city has been removed from this table. (1) Staffing rates represent full-time equivalent (FTE) staff hired by the city to work on bicycle and pedestrian projects. Survey respondents were asked to report how many employees, expressed in FTE, work on bicycle and/or pedestrian issues as detailed in their work description in the last two years (including Safe Routes to School and regular contract hours). An FTE of 1.0 means that the person is equivalent to a full-time worker, while an FTE of 0.5 indicates that the worker is only half-time.

City Staff and Biking and Walking

KEY: ✓ = Yes

Additional U.S. Cities	Employees hired to work on bike/ped projects (FTE) ⁽¹⁾	Do city staff walk or bike as part of their job responsibilities?					
		Police		EMTs or Paramedics		Other Staff	
		Walk	Bike	Walk	Bike	Walk	Bike
Albany	1.3	✓	✓				
Anchorage	10.0	✓	✓				
Baton Rouge			✓		✓		
Bellingham	2.6	✓	✓			✓	
Boulder	8.3	✓	✓			✓	✓
Burlington	13.5	✓				✓	✓
Chattanooga	6.0		✓		✓		
Davis	3.0		✓				✓
Eugene	2.8		✓				
Fort Collins	12.8	✓	✓	✓	✓	✓	✓
Honolulu	5.0	✓	✓				
Madison		✓	✓		✓	✓	
Missoula	6.0	✓	✓				✓
New Orleans	5.0		✓			✓	
Pittsburgh	3.0	✓	✓			✓	
Salt Lake City	6.5	✓	✓	✓	✓	✓	✓
Spokane	1.0		✓			✓	
St Louis	0.5		✓			✓	✓

Sources: Benchmarking Survey 2014. Notes: (1) Staffing rates represent full-time equivalent (FTE) staff hired by the city to work on bicycle and pedestrian projects. Survey respondents were asked to report how many employees, expressed in FTE, work on bicycle and/or pedestrian issues as detailed in their work description in the last two years (including Safe Routes to School and regular contract hours). An FTE of 1.0 means that the person is equivalent to a full-time worker, while an FTE of 0.5 indicates that the worker is only half-time.



Nearly all cities surveyed reported police utilizing bikes as part of their job responsibilities. Photo by Allan Crawford.

Planning for Biking and Walking

Most Populous U.S. Cities	Combined bike/ped master plan	Stand-alone bicycle master plan	Stand-alone pedestrian master plan	Trails master plan	Mountain bike master plan	Additional U.S. Cities	Combined bike/ped master plan	Stand-alone bicycle master plan	Stand-alone pedestrian master plan	Trails master plan	Mountain bike master plan
Albuquerque		✓		✓		Albany		✓			
Arlington, TX	✓					Anchorage		✓	✓	✓	
Atlanta		✓		✓		Baton Rouge	✓			✓	✓
Austin		✓	(1)	✓		Bellingham		✓	✓	✓	
Baltimore		✓		✓	✓	Boulder	✓			✓	
Boston		✓				Burlington					
Charlotte		✓		✓		Chattanooga	✓	✓			
Chicago		✓	✓	✓		Davis		✓			
Cleveland		✓		✓		Eugene	✓			✓	
Colorado Springs	✓	✓		✓		Fort Collins		✓	✓	✓	
Columbus		✓	✓	✓		Honolulu		✓			
Dallas		✓		✓		Madison		✓	✓	✓	
Denver		✓		✓		Missoula	✓		✓		
El Paso						New Orleans	✓				
Fort Worth		✓	✓			Pittsburgh		✓		✓	
Fresno	✓			✓		Salt Lake City	✓			✓	
Houston		✓		✓		Spokane	✓	✓	✓		
Indianapolis		✓		✓		St Louis		✓		✓	
Jacksonville	✓			✓							
Kansas City, MO		✓	✓	✓							
Las Vegas	✓			✓							
Long Beach		✓									
Los Angeles		✓									
Louisville		✓	✓	✓							
Memphis	✓	✓	✓	✓							
Mesa		✓									
Miami	✓	✓									
Milwaukee		✓		✓							
Minneapolis		✓	✓	✓							
Nashville	✓			✓							
New York City		✓									
Oakland		✓	✓								
Oklahoma City		✓		✓							
Omaha	✓			✓							
Philadelphia	✓			✓							
Phoenix		✓ (2)									
Portland, OR		✓	✓								
Raleigh		✓	✓	✓							
Sacramento		✓	✓								
San Antonio		✓									
San Diego		✓	✓								
San Francisco		✓	✓								
San Jose		✓	✓	✓							
Seattle		✓	✓								
Tucson				✓							
Tulsa				✓							
Virginia Beach	✓			✓							
Washington, DC	✓	✓	✓	✓							
Wichita, KS		✓	✓								

KEY: ✓ = Yes

Source: Benchmarking Survey 2014.

Source: Benchmarking Survey 2014.

Notes: A survey was not submitted for Detroit; the city has been removed from this table. (1) City has a sidewalk master plan. (2) Phoenix did not answer this question in the 2014 survey. Their response from the 2012 survey is included here.

KEY: ✓ = Yes

Planning for Success While Engaging Community

By Carolyn Szczepanski for the League of American Bicyclists

In Cudahy, California, more than 90% of the population is Latino and 30% live under the poverty line. One way Councilmember Baru Sanchez wants to uplift his community is through better biking – and he’s working with the Los Angeles County Bicycle Coalition (LACBC) to authentically engage his fellow residents in that effort.

Like Sanchez, the LACBC seeks to serve the residents of Cudahy. With a mission that extends beyond the City of Los Angeles, LACBC’s constituents are the more than 10 million people who live in the 88 incorporated municipalities that make up the entire county. Many of those cities are dense, diverse and full of folks who bike and walk. But especially in the Southeast areas of the county,

developed partnerships that are really geared toward capacity building to provide resources to local cities to make them more competitive for state programs.”

In 2014, the LACBC got a “Big Ideas” grant from Advocacy Advance – a partnership of the League and the Alliance for Biking & Walking – to support this critical work. Their goal: To create active transportation master plans for six cities in the Southeast Los Angeles County area so they’d be eligible and competitive for infrastructure and programmatic grants.

Bryan Moller knows those communities well; the LACBC’s Policy and Outreach Coordinator grew up in Bell, one of the target communities. In early 2015, Moller helped to organize a series of community bike rides that partnered with local organizations, that invited residents to not only get in the saddle, but share what would improve their experiences biking, walking and taking transit.

Sanchez was eager to play a leadership role. He saw cycling as not only a means for his residents to get out of Cudahy to access services across the region, but also to celebrate and elevate the strengths within his community. And he recognized the importance of involving residents before the paint hit the pavement.

“We started doing a monthly ride to get awareness out there that the city was applying for grants for bike lanes and Safe Routes to School so we were building that bicycle community now rather than later – so we have that community ready to use those bike lanes,” he says.

One thing that has become clear from the community rides is that residents of Cudahy don’t just want a means to get from point A to point B. Parents want to enjoy open spaces with their children, Sanchez says. Families want to spend time together doing healthy activities, like biking.

That broad-spectrum of potential riders has made it easier to find allies among his colleague within the City of Cudahy, but has inspired him to think about even bigger collaborations. He’s been reaching out to elected officials in neighboring municipalities, developing a coalition of southeast leaders.

“It’s small cities thinking big,” he says.

Read more at <http://bit.ly/20SOGCv>



Cudahy Councilmember Baru Sanchez at the start of a community ride.

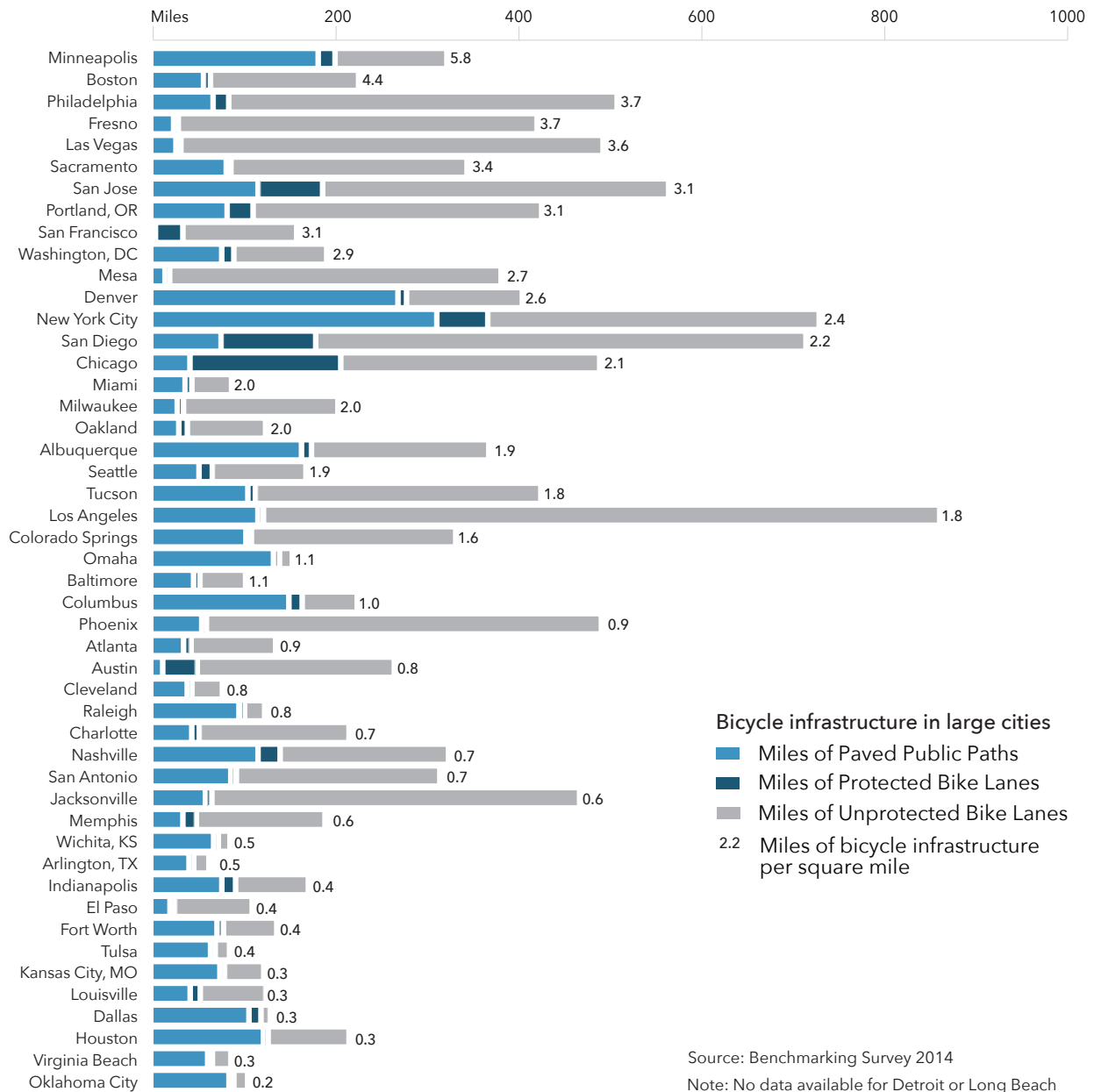
Photo courtesy of Los Angeles County Bicycle Coalition

many of those communities – like Cudahy – don’t have safe infrastructure for active transportation.

Why? According to Eric Bruins, LACBC’s Planning and Policy Director, it comes down to planning – and the resources to do it. “One of the main things we’ve discovered is that there’s so little planning done at the regional level and there are real gaps in L.A. County,” he says. “Only one-third of the cities have bike plans – the well-resourced cities. The lower-resourced cities are not doing the planning to plug into the region as to what their needs are... So we’ve

Cities: Implementation

Bicycle and Pedestrian Infrastructure in Large Cities



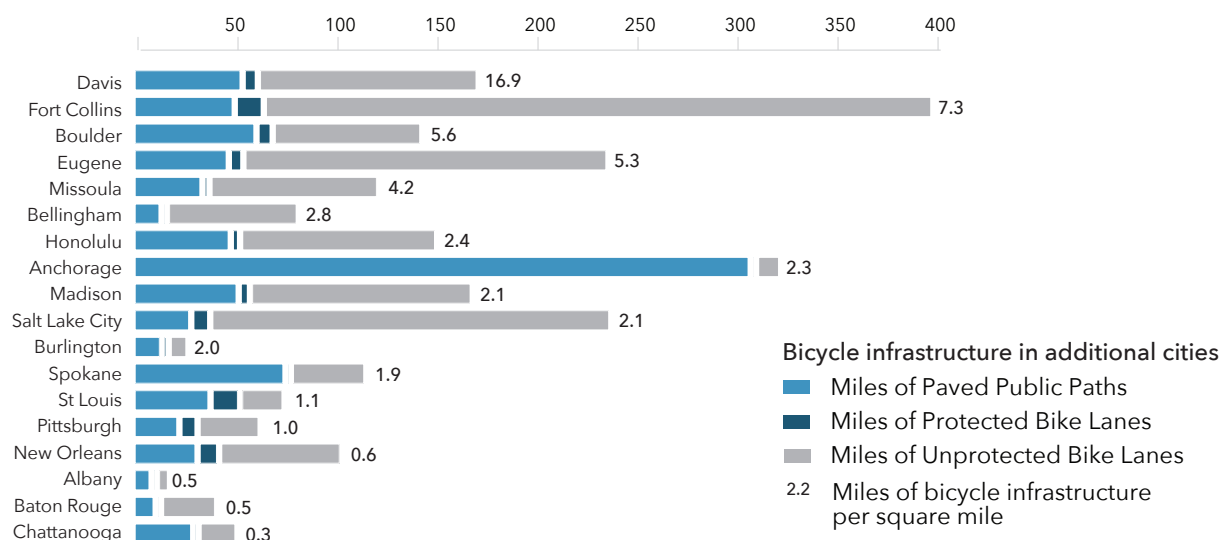
Most Populous U.S. Cities	Miles of bicycle infrastructure				Sidewalks		Facilities planned by 2020 for:		Goal to increase facilities for:	
	Protected bike lanes	Unprotected bike lanes	Paved paths	Total per sq mile	Total miles	Total per sq mile	biking	walking	biking	walking
Albuquerque	5.8	190.2	160.9	1.9	X		33.5	20.0	✓	✓
Arlington, TX	-	11.6	37.0	0.5	1,188	12.4	-	-	✓	✓
Atlanta	3.1	88.0	31.0	0.9	X				✓	
Austin	32.9	212.0	8.0	0.8	2,660	8.9			✓	✓
Baltimore	1.9	45.1	42.0	1.1	X		30	X	✓	✓
Boston	2.5	158.0	53.0	4.4	X				✓	X
Charlotte	3.0	160.0	40.0	0.7	2,094	7.0			✓	✓
Chicago	161.0	280.1	38.0	2.1	8,000	35.1	725		✓	✓
Cleveland	-	28.4	35.0	0.8	2,100	26.9	180		✓	✓
Colorado Springs	0.9	220.0	99.7	1.6	2,340	12.0	40	3.0	✓	✓
Columbus	9.5	55.5	147.0	1.0	1,472	6.8	238	31.1	✓	✓
Dallas	8.1	5.0	103.0	0.3	4,972	14.6	160		✓	
Denver	4.3	122.4	267.2	2.6	2,800	18.3			✓	✓
Detroit	X	X	X	X	X	X	X	X	X	X
El Paso	-	80.3	16.0	0.4	2,510	9.8	207	300.0	✓	✓
Fort Worth	1.9	53.6	67.8	0.4	X				✓	✓
Fresno	-	390.0	20.0	3.7	1,950	17.4			✓	✓
Houston	-	84.0	119.0	0.3			150		✓	✓
Indianapolis	10.0	75.0	73.1	0.4	1,466	4.1	100	-	✓	
Jacksonville	2.0	400.0	55.0	0.6	4,800	6.4	50	40.0	✓	✓
Kansas City, MO	-	38.0	71.0	0.3	2,201	7.0			✓	✓
Las Vegas	0.3	460.0	22.6	3.6	X		-	-		
Long Beach	X	X	X	X	X	X	X	X	X	X
Los Angeles	1.0	739.8	112.9	1.8	10,750	22.9	1,080		✓	✓
Louisville	6.0	66.9	38.3	0.3	2,167	6.7			✓	✓
Memphis	9.8	136.5	30.2	0.6	3,390	10.8			✓	✓
Mesa	-	360.0	10.5	2.7	4,400	32.1	216		✓	✓
Miami	2.3	38.6	32.7	2.0	1,050	29.2			✓	✓
Milwaukee	1.8	165.0	24.0	2.0	3,000	31.3	40		✓	✓
Minneapolis	13.4	118.1	179.3	5.8	2,000	37.0			✓	✓
Nashville	19.2	180.4	113.0	0.7	1,076	2.3			✓	✓
New York City	51.0	360.0	310.0	2.4	12,750	42.1	X	X	X	X
Oakland	4.3	81.0	25.7	2.0	1,120	20.0			✓	✓
Oklahoma City	0.3	10.0	81.0	0.2	2,486	4.1	135	120.0	✓	✓
Omaha	1.5	9.0	130.0	1.1	X				✓	✓
Philadelphia	12.0	422.8	63.5	3.7	4,500	33.6			✓	✓
Phoenix	-	430.0	51.0	0.9	X					
Portland, OR	23.4	312.8	79.0	3.1	2,510	18.9			✓	✓
Raleigh	1.0	17.0	92.0	0.8	1,165	8.1	85.0		✓	✓
Sacramento	-	255.0	78.0	3.4	2,140	21.8	X	X	✓	✓
San Antonio	1.0	219.0	83.0	0.7	4,511	9.8	X	X	✓	✓
San Diego	99.1	535.0	72.3	2.2	1,200	3.7	X	X	✓	✓
San Francisco	25.1	120.3	X	3.1	X	X	X	X	✓	✓
San Jose	66.0	376.0	113.0	3.1	6,400	36.2	1,000	X	✓	✓
Seattle	9.5	98.0	48.0	1.9	2,268	27.0	232	2,274	✓	✓
Tucson	3.1	309.4	101.8	1.8	X	X	25			
Tulsa	-	10.6	60.7	0.4	953	4.8	126	40.0	✓	✓
Virginia Beach	0.1	15.1	57.5	0.3	49	0.2	X	X	✓	✓
Washington, DC	8.2	97.2	73.0	2.9	1,910	31.3	107	30.0	✓	✓
Wichita, KS	-	7.7	64.1	0.5	X				✓	✓
Total	606.0	8,648.4	3,630.7		112,349		4,531.5	2,858.1	46	40
Average	12.6	180.2	77.2	1.6	3,121	17.2	226.6	238.2		
Median	2.4	121.3	64.1	1.1	2,235	13.5	116.5	30.6		
High	161.0	739.8	310.0	5.8	12,750	42.1	1,080	2,274		
Low	-	5.0	8.0	0.2	49	0.2	-	-		

Source: Benchmarking Survey 2014.

Bicycle and Pedestrian Infrastructure in Additional Cities

Most Populous U.S. Cities	Bicycle infrastructure				Sidewalks		Facilities planned by 2020 for:		Goal to increase facilities for:	
	Protected bike lanes	Unprotected bike lanes	Paved paths	Total per sq mile	Total miles	Total per square mile	biking	walking	biking	walking
Albany	-	3.9	7.0	0.5	289	13.5			✓	✓
Anchorage	-	10.0	310.0	2.3	19	0.1	437	230	✓	✓
Baton Rouge	-	25.7	9.0	0.5	938	12.2			✓	✓
Bellingham	-	64.0	12.0	2.8	297	11.0		307	✓	✓
Boulder	5.5	73.0	60.0	5.6	456	18.5			✓	✓
Burlington	0.7	7.3	12.2	2.0	127	12.3			✓	✓
Charleston	X	X	X	X	X	X	X	X	X	X
Chattanooga	-	17.0	28.0	0.3	488	3.6	350		✓	✓
Davis	5.0	109.0	53.0	16.9	282	28.5			✓	
Eugene	4.7	182.0	46.0	5.3	772	17.7			✓	✓
Fort Collins	12.0	336.0	49.0	7.3	843	15.5	62		✓	✓
Honolulu	2.0	97.0	47.0	2.4			150		✓	✓
Madison	3.0	110.0	51.0	2.1					✓	
Missoula	0.8	83.1	32.7	4.2	396	14.4			✓	✓
New Orleans	8.2	59.4	30.2	0.6	2,650	15.7			✓	✓
Pittsburgh	6.5	29.2	21.0	1.0	2,040	36.8			✓	
Salt Lake City	6.9	200.2	27.0	2.1	1,400	12.6			✓	✓
Spokane	-	35.5	74.7	1.9	1,265	21.3				
St Louis	12.3	19.8	36.8	1.1					✓	✓
Total	67.5	1,462.1	906.5		12,262		999	537	16	13
Average	3.8	81.2	50.4	3.3	818	15.6	249.8	268.5		
Median	2.5	61.7	34.7	2.1	488	14.4	250	268.5		
High	12.3	336.0	310.0	16.9	2,650	36.8	437	307		
Low	-	3.9	7.0	0.3	19	0.1	62	230		

Source: Benchmarking Survey 2014.



Source: Benchmarking Survey 2014

Bike Sharing in Cities*

Cities WITH Bike Share Systems*	System Name	# stations	# bikes	# bikes per 100K pop	System implemented by		
					Government	Non-profit	\$ from city gov.
Austin	Austin B-Cycle	45	339	39	✓	✓	
Boston	Hubway	140	1309	205	✓		
Charlotte	Charlotte BCycle	24	200	26	✓	✓	✓
Chicago	Divvy	300	2,700	100	✓	✓	✓
Cleveland	Zagster	8	40	10	✓	✓	
Columbus	CoGo Bike Share	30	300	37	✓	✓	✓
Denver	Denver B-Cycle	84	709	112	✓	✓	
Fort Worth	Fort Worth Bike Sharing	34	300	39		✓	
Houston	Houston B-cycle	29	225	10	✓	✓	
Indianapolis	Pacer's Bike Share	25	250	30		✓	
Kansas City, MO	Kansas City B-cycle	21	122	26		✓	✓
Miami	Citi Bike Miami	50	500	121			
Milwaukee	BublR Bikes	10	500	84	✓	✓	✓
Minneapolis	Nice Ride	170	1,500	381		✓	
Nashville	Nashville B-Cycle	25	190	30	✓	✓	✓
New York City	Citi Bike	330	6,000	72			
Oklahoma City	Spokies	7	95	16	✓		✓
Omaha	Heartland B-cycle	26	57	13		✓	
San Antonio	San Antonio B-Cycle	55	450	33	✓	✓	✓
San Diego	Deco BikeShare	65	399	30			
San Francisco	Bay Area Bike Share	35	350	42	✓		✓
San Jose	Bay Area Bike Share	16	150	15	✓		✓
Seattle	Pronto	50	500	79	✓	✓	✓
Tulsa	Tulsa Townies	3	60	15	✓	✓	✓
Washington, DC	Capital Bikeshare	347	2,930	463	✓		✓
Anchorage	Univ of AK, Anchorage Green & Gold Bikeshare	1	25	8			
Boulder	Boulder B-cycle	38	250	245	✓	✓	✓
Chattanooga	Bike Chattanooga	33	300	174	✓	✓	
Fort Collins	Fort Collins Bike Library	4	175	117	✓	✓	✓
Madison	Madison B-Cycle	39	315	131	✓		
Salt Lake City	GREENbike	20	200	105	✓	✓	✓

Bike Share Systems PLANNED*

Large cities

Albuquerque
Atlanta
Baltimore
Colorado Springs
Dallas
El Paso
Jacksonville
Las Vegas
Long Beach
Los Angeles
Louisville
Memphis
Mesa
Oakland
Philadelphia
Portland, OR
Raleigh
Sacramento
Tucson

Additional cities

Albany
Baton Rouge
Eugene
Honolulu
New Orleans
Pittsburgh
St Louis

NO Bike Share System*

Large cities

Arlington, TX
Fresno
Virginia Beach
Wichita, KS

Additional cities

Bellingham
Burlington
Davis
Missoula
Spokane

*Bike share systems have quickly expanded throughout the U.S. since city and state surveys were conducted in September 2014 (see page 6 in the Introduction for more detail on the survey). For example, Indego in Philadelphia launched in April 2015 with around 600 bikes, 60 stations, and experienced more than 180,000 rides in its first 100 days. The system plans to expand to 1,800 bikes and 180 stations.

Source: PlanPhilly. (2015, June). "Indego hits 100,000 ride mark faster than peer cities, will expand next spring." <http://planphilly.com/articles/2015/06/24/indego-hits-100-000-ride-mark-faster-than-peer-cities-will-expand-next-spring>

Source: Benchmarking Survey 2014.

Education and Encouragement in Large Cities

Most Populous U.S. Cities	Bicycle education Youth	Bicycle education Adults	Pedestrian educ. Youth	Bike to Work Day events	Open Streets initiative
Albuquerque	✓	✓	✓	✓	✓
Arlington, TX	✓	✓			
Atlanta	✓	✓		✓	✓
Austin	✓	✓	✓	✓	✓
Baltimore	✓	✓	✓	✓	
Boston	✓	✓	✓	✓	✓
Charlotte	✓	✓	✓	✓	
Chicago	✓	✓	✓	✓	
Cleveland	✓	✓		✓	✓
Colorado Springs	✓	✓	✓	✓	
Columbus	✓	✓	✓	✓	✓
Dallas		✓		✓	✓
Denver	✓	✓	✓	✓	✓
Detroit	X		X	✓	X
El Paso		✓		✓	✓
Fort Worth	✓	✓	✓	✓	✓
Fresno	✓	✓	✓	✓	
Houston	✓	✓		✓	✓
Indianapolis	✓	✓	✓	✓	✓
Jacksonville	✓	✓	✓	✓	
Kansas City, MO	✓	✓	✓	✓	
Las Vegas	✓	✓		✓	✓
Long Beach	✓	✓	✓	✓	X
Los Angeles	✓	✓	✓	✓	✓
Louisville	✓	✓	✓	✓	✓
Memphis	✓	✓	✓	✓	✓
Mesa	✓	✓		✓	✓
Miami	✓		✓	✓	✓
Milwaukee	✓	✓	✓	✓	
Minneapolis	✓	✓		✓	✓
Nashville	✓	✓		✓	
New York City	✓	✓	✓	✓	X
Oakland	✓	✓	✓	✓	✓
Oklahoma City	✓	✓		✓	✓
Omaha	✓	✓		✓	✓
Philadelphia	✓	✓	✓	✓	
Phoenix	✓	✓	✓	✓	
Portland, OR	✓	✓	✓	✓	✓
Raleigh	✓	✓		✓	
Sacramento	✓	✓	✓	✓	
San Antonio	✓	✓		✓	✓
San Diego	✓	✓	✓	✓	✓
San Francisco	✓	✓	✓	✓	✓
San Jose	✓	✓	✓	✓	
Seattle	✓	✓	✓	✓	✓
Tucson	✓	✓		✓	✓
Tulsa	✓	✓		✓	✓
Virginia Beach		✓			
Washington, DC	✓	✓	✓	✓	✓
Wichita, KS	✓		✓	✓	

Source: Benchmarking Survey 2014.

Among all cities, bicycle education for both youth and adults has become largely ubiquitous – as have Bike to Day events.

The car-free streets movement continues to grow, as well, with the majority of the most populous cities (30) and additional cities (14) now home to an Open Streets initiative.

Education and Encouragement in Additional Cities

Additional U.S. Cities	Bicycle education		Pedestrian education		Bike to Work Day events	Open Streets initiative
	Youth	Adults	Youth	Adults		
Albany	✓	✓	✓		✓	✓
Anchorage	✓	✓			✓	
Baton Rouge		✓	✓		✓	✓
Bellingham	✓	✓	✓		✓	
Boulder	✓	✓	✓		✓	✓
Burlington	✓	✓			✓	✓
Charleston	✓	X	X		X	X
Chattanooga	✓	✓	✓		✓	
Davis	✓	✓			✓	✓
Eugene	✓	✓	✓		✓	✓
Fort Collins	✓	✓	✓		✓	✓
Honolulu	✓	✓			✓	✓
Madison	✓	✓	✓		✓	✓
Missoula	✓	✓	✓		✓	✓
New Orleans	✓	✓			✓	✓
Pittsburgh	✓	✓			✓	✓
Salt Lake City	✓	✓	✓		✓	✓
Spokane	✓	✓	✓		✓	✓
St Louis	✓	✓	✓		✓	

Source: Benchmarking Survey 2014.

New Brunswick Ciclovía: Encouraging Community

By Carolyn Szczepanski

With 56,000 residents and the campus of Rutgers University, the New Brunswick is home to a diverse mix of homeowners, renters, and students. Almost 50% of the population self identifies as Hispanic, Spanish is spoken at home by 46% of the population – and, like many urban areas, says Jaymie Santiago, Vice President of New Brunswick Tomorrow, the city is challenged by health disparities.

"In New Brunswick, childhood obesity is prevalent," Santiago says. "Diabetes and hypertension are prevalent. Issues related to vulnerable population groups and health disparities are very real in our community."

With that in mind, the New Brunswick Ciclovía was launched in 2013 with a clear mission: "To promote active living for the entire community through open and car-free streets."

To make sure the initiative lives up to that vision, the organizers held themselves accountable by making it a clear goal: "To promote social interaction and social engagement."



For Santiago, that diverse participation has a ripple effect, impacting health in ways that go far beyond the five-hour event.

"Ciclovía helps to break down some of the barriers to the income segregation and, if you know anything about poverty and its systemic nature, one of the symptoms is isolation," Santiago says. "Ciclovía really helps to break down those barriers, connecting folks and creating that social cohesion for success."

Read much more on the Alliance blog at <http://bit.ly/1VZgoU>

Part V.

Tool Box



WalkBoston 2014 advocacy walk. Photo courtesy of WalkBoston.

SUMMARY WORKSHEET

Mode Share

Percentage of commuters who WALK to work

American Community Survey (ACS) 2013 (3-yr est)

Average of U.S. states: 2.8%

High: 8.0% (Alaska)

Low: 1.1% (Alabama)

Your state: _____ % (page 85)

Average among large U.S. cities: 5.0%

High: 14.8% (Boston)

Low: 1.2% (Fort Worth, Jacksonville)

Your city: _____ % (page 126)

Percentage of commuters who BIKE to work

ACS 2013 (3-yr est)

Average of U.S. states: 0.6%

High: 2.4% (Oregon)

Low: 0.1% (Alabama, Arkansas,
Mississippi, West Virginia)

Your state: _____ % (page 85)

Average among large U.S. cities: 1.2%

High: 6.1% (Portland, OR)

Low: 0.1% (El Paso)

Your city: _____ % (page 128)

Percentage of all commuters who WALK to work and are female

ACS 2013 (3-yr est)

Average of U.S. states: 46%

High: 52% (Massachusetts)

Low: 36% (Alaska)

Your state: _____ % (page 91)

Percentage of all commuters who BIKE to work and are female

ACS 2013 (3-yr est)

Average of U.S. states: 27%

High: 45% (Wyoming)

Low: 13% (Mississippi)

Your state: _____ % (page 91)

Average among large U.S. cities: 29%

High: 38% (Oakland, Virginia Beach)

Low: 2% (Fort Worth)

Your state: _____ % (page 129)

Health

Percentage of adults who met recommended minimum weekly aerobic physical activity

Behavioral Risk Factor Surveillance System (BRFSS) 2013

Average of U.S. states: 51%

High: 64% (Oregon)

Low: 37% (Mississippi)

Your state: _____ % (page 92)

Percentage of adults who are obese and/or overweight

BRFSS 2013 (states), 2012 (cities)

Average of U.S. states: 29%

High: 35% (Arkansas, Mississippi, West Virginia)

Low: 21% (Colorado)

Your state: _____ % (page 94)

Average among large U.S. cities: 27%

High: 69% (Memphis)

Low: 49% (San Jose)

Your city: _____ % (page 132)

Percentage of adults who have diabetes

BRFSS 2013 (states), 2012 (cities)

Average of U.S. states: 10%

High: 14% (Alabama)

Low: 7% (Alaska, Colorado, Utah)

Your state: _____ % (page 94)

Average among large U.S. cities: 10%

High: 14% (El Paso, Memphis)

Low: 7% (Austin, Boston, Denver,
Minneapolis, San Jose)

Your city: _____ % (page 132)

Percentage of adults who have hypertension (high blood pressure)

BRFSS 2013 (states), 2011 (cities)

Average of U.S. states: 33%

High: 41% (West Virginia)

Low: 24% (Utah)

Your state: _____ % (page 94)

Average among large U.S. cities: 30%

High: 37% (Memphis)

Low: 24% (Austin, Colorado Springs,
Minneapolis)

Your city: _____ % (page 132)

Percentage of adults who have asthma

BRFSS 2013 (states), 2012 (cities)

Average of U.S. states: 9%

High: 12% (Maine, Michigan, Rhode Island)

Low: 7% (Nebraska, Tennessee, Texas)

Your state: _____ % (page 95)

Average among large U.S. cities: 9%

High: 12% (Detroit, Louisville)

Low: 5% (Houston, Miami)

Your city: _____ % (page 133)

Safety

Pedestrian fatality rate (fatalities per 10K pedestrians)

FARS 2011-2013, ACS 2013 (3-yr est) (states) / FARS 2005-2013, ACS 2007, 2010, 2013 (3-yr est) (cities)

Average of U.S. states: 12

High: 39 (Florida)

Low: 3 (Alaska, South Dakota, Vermont)

Your state: _____ (page 98)

Average among large U.S. cities: 9

High: 43 (Detroit)

Low: 2 (Boston)

Your city: _____ (page 136)

Bicyclist fatality rate (fatalities per 10K bicyclists)

FARS 2011-2013, ACS 2013 (3-yr est) (states) / FARS 2005-2013, ACS 2007, 2010, 2013 (3-yr est) (cities)

Average of U.S. states: 9

High: 41 (Mississippi)

Low: 0 (Vermont)

Your state: _____ (page 99)

Average among large U.S. cities: 6

High: 35 (Detroit)

Low: 1 (Portland, San Francisco,
Seattle, Washington DC)

Your city: _____ (page 137)

Percentage of traffic fatalities that are pedestrians

Fatality Analysis Reporting System (FARS) 2005-2013

Average of U.S. states: 12%

High: 24% (New York)

Low: 3% (Wyoming)

Your state: _____ % (page 98)

Average among large U.S. cities: 28%

High: 52% (New York City)

Low: 13% (Omaha)

Your city: _____ % (page 136)

Percentage of traffic fatalities that are bicyclists

FARS 2005-2013

Average of U.S. states: 2%

High: 4% (Florida)

Low: 0% (South Dakota, Vermont,
West Virginia, Wyoming)

Your state: _____ % (page 99)

Average among large U.S. cities: 3%

High: 8% (Fresno)

Low: 1% (Dallas, El Paso, Kansas City,
Memphis, Milwaukee,
Oklahoma City, Omaha, Tulsa)

Your city: _____ % (page 137)

Funding

Per capita funding to biking and walking projects

FHWA FMIS 2012-2014, ACS 2013 (3-yr est)

Average of U.S. states: \$2.47

High: \$11.58 (Alaska)

Low: -\$0.09 (Hawaii)

Your state: \$ _____ (page 112)

Percentage of federal transportation dollars to biking and walking projects

Federal Highway Administration (FHWA) Fiscal Management Information System (FMIS) 2012-2014.

Average of U.S. states: 2.0%

High: 4.8% (Rhode Island)

Low: -0.1% (Hawaii)

Your state: _____ % (page 113)

STATE SURVEY TOOL

This questionnaire is a joint effort of the League of American Bicyclists and Alliance for Biking & Walking, combining the 2015 Bicycle Friendly State survey and 2016 Benchmarking Report questions.

Please read the following guidance on how to update the survey:

Make sure no questions are left unanswered, except questions that do not apply, and that all previously given answers are still up to date. Please enter 2014 data only, unless otherwise specified. For example, new policies that are going into effect on January 1, 2015 will need to be included in the 2016 survey.

Take advantage of open-ended questions to clarify multiple choice answers, add additional relevant information or highlight innovative practices not covered by other questions. Please note that there is a character limit – make sure your entered text is not cut off.

If you would like to include a link, we recommend using a service such as TinyURL (tinyurl.com) to shorten long links.

The deadline to submit this survey is January 15, 2015 midnight Hawaiian time.

LEGISLATION AND ENFORCEMENT

1. What state laws specific to bicyclists do you have? Check all that apply. For more information, click [here](#).

- A bicycle is considered a vehicle.
- A bicyclist has the same rights and responsibilities as motor vehicle operator.
- There is a law requiring a safe passing distance of at least three feet.
- There is a law requiring a safe passing distance of less than three feet
- There is a law that defines what is acceptable as a safe passing distance without specifying that distance in feet
- A bicyclist can legally signal a right turn with his/her right hand.
- Bicyclists are allowed to ride two abreast on roadways
- Photo enforcement is permitted by state law or enabling legislation.
- There is a trip reduction law.
- There is a state legislature bicycle caucus.
- There is a Vulnerable Road User law and/or there are increased penalties for motorists who injure or kill vulnerable road users, including cyclists.
- There is a law allowing transportation agencies to post 20mph or lower speed limits under certain circumstances
- There is a law that explicitly enables a bicyclist to legally pass on the right. (Explanation: A law that gives bicyclists rules for passing on the right that are more permissive than those established by [your state's equivalent](#) to UVC 11-304 or otherwise ensures that cyclists can recover damages if injured while passing to the right of a motor vehicle)

A. NEW: How does your state regulate electric bicycles?

NEW: Are electric bicycles defined as a specific type of bicycle or vehicle? [bicycle/vehicle]

NEW: Does the definition of an electric bicycle contain a speed restriction when that bicycle is powered by its motor alone? [yes/no]. If yes, what is the maximum speed allowed?

NEW: Does the definition of an electric bicycle require the bicycle to have pedals that can operate the bicycle? [yes/no]

NEW: Does the definition of an electric bicycle contain a power restriction defined in watts? [yes/no]. If yes, what is the maximum power allowed?

NEW: Does a statute allow electric bicycles on multiuse trails? [yes/no]

2. NEW: Does your state have a law that protects pedestrians in a non-signalized crosswalk? (See UVC 11-502.

Pedestrians' Right of Way in Crosswalks)? [yes/no]

3. Can a bicyclist legally choose to ride on the road when there is shared use path or trail adjacent to the road, or is there a mandatory sidepath law? See "Mandatory Use Laws" [here](#).

- Can ride on road

- Mandatory sidepath law
- Mandatory sidepath law with exceptions
- Please specify.

4. When a bike lane is present, can a bicyclist legally choose to ride in the adjacent travel lane, or is there a mandatory bike lane use law that does not allow exceptions for cyclists to leave the lane? See "Mandatory Use Laws" [here](#).

- Can ride in lane
- Mandatory bike lane use law
- Mandatory bike lane use law with exceptions
- Please specify.

5. Are bicyclists required to ride as far to the right as is practicable? See "Where to Ride Laws" [here](#).

- Yes, bicyclists are required to ride as far to the right as "practicable"
- No, bicyclists are required to ride as far to the right as "safe"
- No, there is no specific requirement for where bicycles, or vehicles moving slower than the normal speed of traffic, must operate.

A. If yes, does the law allow the following exceptions listed in the Uniform Vehicle Code?

- When overtaking and passing another bicycle or vehicle proceeding in the same direction.
- When preparing for a left turn at an intersection or into a private road or driveway.
- When reasonably necessary to avoid conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes that make it unsafe to continue along the right-hand curb or edge. For purposes of this section, a 'substandard width lane' is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane.
- When approaching an intersection with a right-turn lane if not turning right at the intersection
- Any other exception related to unsafe conditions not covered here
- No exceptions

6. Does your state have language in its vehicle code prohibiting a motorist from opening an automobile's door unless the motorist is able to do so safely? [yes/no]

7. Is there a mandatory bicycle helmet law (by state law or enabling legislation)? See "Helmet Laws" at <http://www.bikeleague.org/content/bike-law-university>. [yes/no]. If yes, to what ages does it apply? Enter a range, 0 or larger

8. Are there limitations on whether the failure to wear a helmet can be used in a lawsuit? See “Helmet Laws” at <http://www.bikeleague.org/content/bike-law-university>. [yes/no]

9. Are there statewide restrictions for cell phones and/or texting while operating a motor vehicle? Please check all that apply. For more information, visit http://www.ghsa.org/html/stateinfo/laws/cellphone_laws.html.

- Cell phone ban (novice drivers)
- Cell phone ban (all drivers)
- Hands-free device required
- Texting ban (novice drivers)
- Texting ban (all drivers)
- No restrictions

A. Are there restrictions for cell phones and/or texting while operating a bicycle? [yes/no]

* 10. What is the legal status of cyclists using paved shoulders on state highways?

- Permitted to use the shoulder
- Required to use the shoulder
- Shoulder is not considered a travel lane

11. Does the state have bicycling enforcement as a part of a Police Officer Standards and Training (POST) course? [yes/no]

12. Is bicycling enforcement training part of the police academy curriculum for new officers? [yes/no]

13. Is bicycling enforcement training provided by state and/or local bicycle advocacy groups? For an example, visit http://www.floridabicycle.org/resources/pdfs/PEGLEG_2010.pdf [yes/no]

14. Does your state collect data (e.g. traffic tickets issued, prosecutions, or convictions) regarding enforcement of laws related to bicycles, or enforcement actions against motorists based on incidents with bicycles?

- Yes, regarding bicyclist violations of traffic laws
- Yes, regarding motorist violations of traffic laws involving bicyclists
- Yes, regarding both
- No

A. If yes, do you make this data publicly available? [yes/no]

B. If yes, where is it published? Please provide a link, if available.

C. NEW: If yes, does this data include demographic information? [Please specify – text]

15. Has your state passed any legislation that pertains to bicycling or pedestrian activity in 2013? [yes/no]. If Yes, please specify.

16. Is there other unique legislation for bicycling or pedestrian activity in your state? [yes/no]. If yes, please specify.

POLICIES AND PROGRAMS

NOTE: In this section, an FTE of 1.0 means that the person is equivalent to a full-time worker, while an FTE of 0.5 indicates that the worker is only half-time. A person that spends 1/10 of their time on bike/ped would be counted as 0.1 FTE. Only include staff and contractors at the state level (ie. not MPO staff) in your calculations.

17. Expressed in FTE, how many state employees and regularly hired contractors worked on bicycle and/or pedestrian

issues as detailed in their work description in 2014 (include hours worked in the Safe Routes to School program)?

A. Expressed in FTE, how many state department of transportation employees and regularly hired contractors worked on bicycle and/or pedestrian issues as detailed in their work description in 2014 (include hours worked in the Safe Routes to School program)?

B. How much time, expressed in FTEs, did the state department of transportation bicycle and pedestrian coordinator spend on biking and walking issues in 2014 (not including work in other positions e.g. TE coordinator)?

NEW: Was this position vacant for any part of 2014? [yes/no]

C. In 2014, how many FTE staff did your state employ to work on Safe Routes to School (SRTS) specifically?

Please provide the SRTS coordinator’s name and email address.

18. Does your state have a designated Transportation Alternatives Program (TAP) manager? [yes/no]. If yes, is the TAP manager separate from your SRTS coordinator? [yes/no]

19. What percentage of your state’s eligible schools participates in a SRTS program? Enter a whole number, 0 or larger

20. Does your state provide additional funding above and beyond the federal SRTS funding to directly support safe walking and bicycling to school? [yes/no]. If yes, please answer the following questions:

A. What is the source of those funds? (e.g. State highway trust fund, state safety fund, lottery, etc.) Enter text, 100-word limit

B. How much extra funding did your state provide and fund in 2014? Enter a whole number, 0 or larger.

21. Does your state track school participation in SRTS programs funded solely on local funds? [yes/no]

22. Does your state have a policy requiring minimum acreage for school siting? [yes/no]. Note: Check with your state’s Department of Education. If yes, what is the requirement in acres? Enter a whole number, 0 or larger

23. Does the state have a Complete Streets or Bicycle and Pedestrian Accommodation policy? For more information, click [here](#).

- Complete Streets
- Accommodation Policy
- None

A. Has the state designated a committee to lead implementation efforts? [yes/no/not applicable]. If yes, provide a link, if possible.

B. Does your state use a Complete Streets/Accommodation Policy checklist, or other project development method, for state projects to ensure compliance/implementation?

- Checklist
- Other Project Development Method
- None
- Not applicable

C. Is there specific training available to engineers and planners on how to implement the Complete Streets/Accommodation Policy in everyday decisions? [yes/no/not applicable]. If yes, provide a link, if possible.

D. Does the state DOT track performance measures, such as mode shift or a low percentage of exempted projects, to better track and support compliance/implementation? [yes/no/not applicable]. If yes, provide a link, if possible.

24. Is there a policy that requires state office buildings, state park and recreation facilities, and other state facilities to provide bicycle parking? [yes/no]

25. Has your state provided any funding for the purchase and/or installation of bike parking racks at state buildings and facilities in the past three years? [yes/no]

26. Bike/Pedestrian infrastructure design guidance
- A. NEW: How many state DOT employees attended a training on innovative bike and pedestrian infrastructure in 2014? [Enter number]
 - B. NEW: Did the state DOT sponsor one or more trainings on innovative bike and pedestrian infrastructure in 2014? [Enter text]
 - C. NEW: Has your state adopted the National Association of City Transportation Officials (NACTO) Urban Streets Design Guide? See: <http://nacto.org/urban-street-design-guide-endorsement-campaign/>. [yes/no]
 - D. NEW: Has your state endorsed the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide? See <http://nacto.org/nacto-endorsement-campaign/>. [yes/no]
 - E. Does your state have a Traffic Control Devices manual? [yes/no]
 - F. Has your state adopted any other facility design guidelines that include bikes and/or pedestrians?
 - Yes, for bikes only
 - Yes, for pedestrians only
 - Yes, for both bikes and pedestrians
 - No

27. NEW: Has your state adopted any policies in support of Vision Zero goals? See <http://everybodywalk.org/4500-americans-killed-crossing-street-year/>. [yes/no]. If yes, please provide links to the policies and describe

28. Does your state allow bicycle access to shoulders on interstate highways or other freeways? [yes/no]

29. If your state has a land-use policy promoting smart growth, does it explicitly encourage bicycling and/or walking?

- Yes, for bicycling only
- Yes, for pedestrians only
- Yes, for both bicycling and pedestrians
- No
- Not applicable

30. Does your state coordinate with neighboring states, provinces or countries regarding bicycling and walking issues?

- Yes, on bicycling issues only
- Yes, on walking issues only
- Yes, on both bicycling and walking issues
- No
- If yes, please specify.

31. Does your state have a rumble strip policy and/or standard design drawings that include a minimum clear space of 4 feet for bicycles with spacing gaps? For more information, visit http://www.advocacyadvance.org/docs/rumble_strips.pdf [yes/no]

32. Project completeness

- A. Does the state have a policy to provide bicycle and pedestrian access across major bridges (e.g. crossing rivers, tolled facilities) and tunnels?
 - Yes, for bicyclists only
 - Yes, for pedestrians only
 - Yes, for both bicyclists and pedestrians
 - No
- B. Is there accountability so that projects programmed with bicycle and pedestrian components are built with those components? (E.g. a STIP amendment is required

to change the scope of work concerning sidewalks and bike facilities.) [yes/no]. If yes, please explain.

33. Are there any other unique bicycling or pedestrian programs or policies in your state? [yes/no]. If yes, please specify:

INFRASTRUCTURE AND FUNDING

34. Provisions for cyclists on the state highway network

- A. NEW: Are protected bike lanes installed on any state highway in your state? [yes/no]
- B. NEW: Are painted bike lanes installed on any state highway in your state? [yes/no]
- C. REWORDED: What percentage of the state highway network has wide paved shoulders, protected bike lanes and painted bike lanes (≥ 4 feet)?
 - 76 to 100%
 - 51 to 75%
 - 26 to 50%
 - 0 to 25%
- D. NEW: Are bike boxes installed on any state highway in your state? [yes/no]
- E. NEW: Are bike specific traffic signals installed on any state highway in your state? [yes/no]

35. How does the state assess and inform people about the provisions for cyclists on the state highway network?

- Bicycle level of service
- Suitability index
- NEW: Bicycle-specific Model Inventory of Roadway Elements (MIRE)
- Other
- Not applicable
- If other, please specify.

36. How many miles of non-motorized natural surface trails in state parks/lands are there within the state? Enter a whole number, greater than 0

- 36a. How many miles of these trails are open to off-road cyclists? Enter a whole number, greater than 0
- 36b. How many miles of these trails are open to pedestrians? Enter a whole number, greater than 0

37. Did your state transfer any funds from the Transportation Alternatives Program (TAP) to other federal-aid categories in FY 2014? [yes/no]

- If yes, what percent of the statewide TAP fund was transferred?
- If yes, to which categories were the funds transferred?

A. Does your state have any plans to transfer funds from TAP to other federal-aid categories? [yes/no]

- If yes, what percent of the statewide TAP fund will be transferred?
- If yes, to which categories will the funds be transferred?

B. Did your state transfer funds into TAP in FY 2014? [yes/no]

- If yes, please specify the amount.
- If yes, please specify the source of the transferred funds.

38. Has your state committed to fully funding its Recreational Trails Program (RTP)? [yes/no]

39. Has your state adopted a policy setting minimum spending levels for bike/ped for any of the programs listed below? Check all that apply.

- Surface Transportation Program
- Congestion Mitigation and Air Quality Improvement Program
- Transportation Alternatives Program
- Highway Safety Improvement Program
- National Highway Performance Program
- No

40. Does your state government/agency have an overall bicycle and pedestrian spending target? [yes/no]

- If yes, what is the target amount for 2014?
Enter a whole number, 0 or larger
- If yes, what is the target as a percentage of the state's transportation budget? Enter a whole number, 0 or larger
- If yes, what is the timeline to reach the target? (100-word limit)

41. When your state reports bike/ped obligations in FMIS (the Federal Highway Administration's Fiscal Management Information System), do you:

- ...only record stand-alone bicycle/pedestrian projects? [yes/no]
- ...include facilities that are part of larger projects? [yes/no]

42. SAFETEA-LU funds apportioned in 2012 can still be obligated through 2015. In 2014, did the state obligate funds apportioned under SAFETEA-LU for bicycling and walking projects from the following programs? Check all that apply.

- Transportation Enhancements Program
- Safe Routes to School
- Recreational Trails Program
- Other programs (E.G. STP, CMAQ, HSIP, 402, etc.)

43. What is the total percentage of available program funds spent on bicycling and pedestrian projects for: Please note: The League will share the relevant FMIS data with you as soon as it becomes available in December 2014. Feel free to fill in your own data (if available) or to leave the answer fields below blank to be filled in by the League.

- A. Congestion Mitigation and Air Quality Improvement Program (CMAQ) in the past five years (FY2010-2014) Enter a percentage
- B. Surface Transportation Program (STP) in the past five years (FY2010-2014) Enter a percentage
- C. Transportation Alternatives Program (TAP) in the past year (FY2014) Enter a percentage
 - What percentage of the state Transportation Alternatives program funds was spent as part of a Safe Routes to School program?
- D. Highway Safety Improvement Program (HSIP) in the past five years (FY2010-2014) Enter a percentage
 - What percentage of the Highway Safety Improvement Program funds was spent as part of a Safe Routes to School program?
- E. State Planning and Research (SP&R) in the past five years (FY2010-2014) Enter a percentage
- F. Section 402 State and Community Highway Safety Grants in the past five years (FY2010-2014) Enter a percentage

44. Does the state have any dedicated funding sources, in addition to federal programs for bicycle and/or pedestrian projects and programs? [yes/no]

- A. What is the amount of state funding (e.g. derived from state revenue sources) spent on bicycle and/or pedestrian projects and programs in FY2014? Please also note the source for this information.
- B. What state revenue sources fund bicycling and walking projects?
 - State Fuel Tax
 - Vehicle and Truck Taxes
 - Registration Fees
 - Tolls
 - General Fund
 - Bond proceeds
 - Dedicated B/P Stream
 - Public/Private Partnership
 - Gambling (not including Lottery)
 - Lottery Revenue
 - State Bicycle User Fee
 - Highway Safety Fees
 - State Road control
 - Other (Enter text)

45. Does your state sub-allocate funding for bicycle and pedestrian projects to any of the following? Please check all that apply.

- Counties
- Cities
- Metropolitan Planning Organizations
- Other (Enter text)

46. Does your state provide local planning assistance grants? [yes/no]. If yes, please describe.

47. Does your state use criteria for transportation project selection that include physical activity? For examples, please visit [http://www.advocacyadvance.org/site_images/content/MPO_TAP_\(Final\).pdf](http://www.advocacyadvance.org/site_images/content/MPO_TAP_(Final).pdf) [yes/no]

48. Does your state require Health Impact Assessments? [yes/no]

49. How has the state identified a network or system of state bicycle routes? Check all that apply.

- A publicly available printed map
- An online map [please provide the link]
- Signed or marked routes
- Signed US Bike Route System routes
- None of the above

50. Can bicycles be brought on the following types of rail cars and buses? Check all that apply.

- Amtrak trains
- Regional passenger rail (with rush hour/other restrictions)
- Regional passenger rail (no rush hour/other restrictions)
- State owned and operated buses (on racks and/or inside vehicle)
- None of the above
- Not applicable

51. Are there any other unique bicycling or pedestrian infrastructure or funding activities in your state? [yes/no]. If yes, please specify.

EDUCATION AND ENCOURAGEMENT

52. Which of the following education programs or training does the state offer or sponsor?

- Share the road campaign
- Share the road driver training for state employees
- Drivers license test with questions on motorists' rights and responsibilities towards cyclists
- State commercial drivers license test with questions on motorists' rights and responsibilities towards cyclists
- Information on the rights and responsibilities of the motorist/bicyclist interaction in the state drivers manual
- Safety guide on motorist/bicyclist interaction
- REWORDED: State bicycle rider's manual or pocket guide
- Statewide Safe Routes to School curriculum
- Police training on state vehicle code as it applies to bicyclists
- Diversion program for traffic offenders that includes information on sharing the road with bicyclists
- None of the above

53. Is there an active statewide bicycle or pedestrian advocacy group? Check all that apply. For more information click <http://www.bikewalkalliance.org/about/partners/member-organizations>.

- Statewide Bicycle Advocacy Group
- Statewide Pedestrian Advocacy Group
- Statewide Bicycle and Pedestrian Advocacy Group

54. Does your state tourism board actively fund or otherwise promote bicycle tourism? [yes/no]

55. Does any state agency fund, promote or provide staff hours for bicycling and walking in any of the following ways? Check all that apply.

- Cross-state ride or equivalent
- Professional multi-day stage race

- Bike Month support or proclamation
- Bike to Work Day or commuter challenge
- Bike or walk to school event
- Governor's ride
- State Legislators ride
- Calendar of events
- Statewide annual bike/ped conference
- Statewide annual bicyclist-specific conference
- Statewide annual pedestrian-specific conference
- State-sponsored (contribute funding etc.) bicycling specific website
- State-sponsored (contribute funding etc.) bicycling route planning website
- State-sponsored major bicycling event to promote cycling and physical activity
- How many people participated in the state-sponsored major bicycling event in 2013?
- How many people participated in the state-sponsored major bicycling event in 2014?
- State-sponsored major walking event to promote walking and physical activity
- How many people participated in the state-sponsored major walking event in 2013?
- How many people participated in the state-sponsored major walking event in 2014?
- None of the above

56. Has your state adopted a policy creating incentives for bike or pedestrian commuting?

- Yes, for bicycle commuting only
- Yes, for pedestrian commuting only
- Yes, for both bicycle and pedestrian commuting
- No

57. Are there any other unique bicycling or pedestrian education or encouragement efforts in your state? [yes/no]. If yes, please specify.

EVALUATION AND PLANNING

58. Bicyclists and pedestrians in your state

- A. REWORDED: According to the most recent American Community Survey (ACS) data, what percentage of people bike to work in your state?
- B. NEW: According to the most recent ACS data, what percentage of people walk to work in your state?
- C. NEW: Does your state gather information on any of the following demographics of bicyclists? Check all that apply.
 - Income level
 - Age
 - Race/ethnicity
 - Gender
 - Other, please specify
- D. NEW: Does your state gather information on any of the following demographics of pedestrians? Check all that apply.
 - Income level
 - Age
 - Race/ethnicity
 - Gender
 - Other, please specify

59. Does your state conduct household travel surveys for all trips taken? [yes/no]. If yes, please answer the following questions:

- Does the survey specifically include pedestrian trips? [yes/no]
- Does the survey specifically include bicyclist trips? [yes/no]
- Does the survey track multi-modal trips (eg. part of trip by foot, part of trip by bike) [yes/no]
- What year was the most recent survey conducted? Enter a year
- How often is this survey conducted?

If there is a link to a report on this survey, please provide it here.

60. Does your state conduct counts of bike/ped commuting? [yes/no]. If yes, please answer the following questions:

- Does the count specifically include pedestrian trips? [yes/no]
- Does the count specifically include bicyclist trips? [yes/no]
- Does the count track multi-modal trips (eg. part of trip by foot, part of trip by bike) [yes/no]
- What year was the most recent survey conducted? Enter a year
- How often is this count conducted?
- If there is a link to a report on this count, please provide it here.

61. Does your state conduct Cordon counts? (Definition: Cordon counts are conducted by counting vehicles and/or people who cross a selected location within a specified timeframe). [yes/no]. If yes, please answer the following questions:

- Does the count specifically include pedestrian trips? [yes/no]
- Does the count specifically include bicyclist trips? [yes/no]
- What year was the most recent survey conducted? Enter a year
- How often is this count conducted?
- If there is a link to a report on this count, please provide it here.

62. Does your state conduct any other method of count?

If yes, please answer the following questions:

- Briefly, what was the methodology of these counts? 100-word limit
- Does the count specifically include pedestrian trips? [yes/no]
- Does the count specifically include bicyclist trips? [yes/no]
- Does the count track multi-modal trips (eg. part of trip by foot, part of trip by bike) [yes/no]
- What year was the most recent survey conducted? Enter a year
- How often is this count conducted?
- If there is a link to a report on this count, please provide it here.

63. Does the state have a current statewide bike and/or pedestrian plan as of FY2014? Check all that apply.

- Combined bicycle and pedestrian master plan
- Standalone bicycle master plan
- Standalone pedestrian master plan
- No

A. How much of each plan has been implemented? [none/less than 50%/more than 50%, but less than 100%/100%/not applicable]

- Combined bike/ped master plan
- Standalone bicycle master plan
- Standalone pedestrian master plan

B. Do these plans include performance measures and/or a project list to help measure progress toward implementation of the plan? [yes/no/not applicable]

- Combined bicycle and pedestrian master plan
- Standalone bicycle master plan
- Standalone pedestrian master plan

C. When was each plan first passed? [Enter a 4-digit year]

- Combined bicycle and pedestrian master plan
- Standalone bicycle master plan
- Standalone pedestrian master plan

D. When was each plan last updated/approved? [Enter a 4-digit year]

- Combined bicycle and pedestrian master plan
- Standalone bicycle master plan
- Standalone pedestrian master plan

64. Does your state have any of the following? Please check all that apply. Tip: You may want to consult with your state's resource agency responsible for the Recreational Trails Program.

- Statewide mountain bike trail plan
- Statewide trails master plan
- MOU/MOA regarding mountain bike trails (
- Partnership with a mountain bike trail advocacy organization?
- None of the above

65. Is bicycle and pedestrian safety an emphasis area in the state [Strategic Highway Safety Plan?](#)

- Yes, bicycle safety only
- Yes, pedestrian safety only
- Yes, both bicycle and pedestrian safety
- No

66. As of FY2014, is there a state bicycle, pedestrian, and/or Safe Routes to School advisory council that meets at least once per year? Check all that apply.

- Combined bicycle and pedestrian advisory council
- Standalone bicycle advisory council
- Standalone pedestrian advisory council
- Safe Routes to School advisory council
- No

A. How often does each council meet? [annually/quarterly/monthly/not applicable]

- Combined bicycle and pedestrian advisory council
- Standalone bicycle advisory council
- Standalone pedestrian advisory council
- Safe Routes to School advisory council

B. Is there interagency participation in these councils? [yes/no/not applicable]

- Combined bicycle and pedestrian advisory council
- Standalone bicycle advisory council
- Standalone pedestrian advisory council
- Safe Routes to School advisory council

C. Is there user group representation in these councils? [yes/no/not applicable]

- Combined bicycle and pedestrian advisory council
- Standalone bicycle advisory council
- Standalone pedestrian advisory council
- Safe Routes to School advisory council

D. How is council membership determined? [appointment/nomination or election/open invitation]

- Combined bicycle and pedestrian advisory council:
- Standalone bicycle advisory council
- Standalone pedestrian advisory council
- Safe Routes to School advisory council
- If other, please specify.

E. Who is the chair of the bicycle advisory council (if applicable), and what is their email address? Enter text

67. Does your state have a published goal to...

- ...increase walking? [yes/no]
- ...increase biking? [yes/no]
- ...increase physical activity? [yes/no]
- ...decrease pedestrian fatalities? [yes/no]
- ...decrease pedestrian injuries? [yes/no]
- ...decrease bicyclist fatalities? [yes/no]
- ...decrease bicyclist injuries? [yes/no]

If yes to any of the above, please list the specific targets and performance measures your state has set to meet the goal(s). If no targets or performance measures have been set, write 'NONE'.

68. Has your state adopted performance measures related to bicycle and pedestrian mode share?

- Yes, for bicycle only
- Yes, for pedestrian only
- Yes, for both bicycle and pedestrian
- No

69. Has your state adopted performance measures to decrease bicycle and pedestrian fatalities?

- Yes, for bicycle fatalities only
- Yes, for pedestrian fatalities only
- Yes, for both bicycle and pedestrian fatalities

No

70. Does your state have modeshare goals for biking and/or walking? [yes/no]. If yes, what is the goal?

- Bicycling and walking, Enter text (100-word limit)
- Bicycling only, Enter text (100-word limit)
- Walking only, Enter text (100-word limit)

71. Does the state have a target for reducing single-occupancy vehicle trips? [yes/no]. If yes, please describe.

72. Does the state have a target for reducing vehicle miles traveled? [yes/no]. If yes, please describe.

73. Has the economic impact of any of the following been studied in your state: Check all that apply.

- Bicycling
- Walking
- Trails
- Car-free zones in city centers
- None

73a. If yes, please describe the results of each study. Include links, if available. (500-word limit)

74. What is the total number of bicyclist and pedestrian fatalities that have been recorded in the last five years (2010-2014)?

- Total number of bicyclist fatalities
- Total number of pedestrian fatalities

75. What is the Statewide Comprehensive Outdoor Recreation Plan (SCORP) data about bicycle ownership or use rates? Please describe.

76. If your state has a plan for reducing carbon emissions, does it explicitly encourage bicycle and pedestrian use?

- Yes, bicycle use only
- Yes, pedestrian use only
- Yes, both bicycle and pedestrian use
- No
- Not applicable

77. Are there any other unique bicycling or pedestrian evaluation or planning activities in your state? [yes/no]. If yes, please specify:

GENERAL

78. Please list and describe the three most impressive aspects of bicycling and walking in your state. (500-word limit)

79. Please discuss the aspect that has been the most improved in 2014. (500-word limit)

80. Please list and describe three aspects that must be improved in order to make the state more bicycle and walking friendly. (500-word limit)

81. Which of the following departments and groups assisted in completing this application? Check all that apply.

- Federal Highway Administration Division Office
- State Department of Transportation
- State Resource Agency
- State Department of Education
- State Department of Public Health
- State Department of Public Safety
- Other State Agencies
- Local Municipalities
- Statewide Bicycle Advocacy Organization
- Regional Bicycle Advocacy Organization
- Local Bicycle Advocacy Organization
- Statewide Walking Advocacy Organization
- Regional Walking Advocacy Organization
- Local Walking Advocacy Organization

CITY SURVEY TOOL

Thank you for helping to compile bicycling and walking data for your city. We recommend using the survey worksheets found at www.bikewalkalliance.org/benchmarking-survey-support before attempting to submit your online survey. However, you will be able to revisit and edit your survey even after you have started to input data.

*** NOTE: Please answer all questions to the best of your ability. Any unanswered survey questions, or responses of “unknown” will be reported as “no” in the final report. Throughout this survey, the term “city” refers to the area within the official city limits. Please do not include data from the surrounding suburbs or metropolitan area. ***

COUNTING BICYCLISTS AND PEDESTRIANS

When answering questions in this section, please only include counts and surveys that your city has supported either in part or in whole, through funds or implementation. Counts and surveys conducted without city support at some level should not be included in this survey.

Household Travel Survey

1. Does your city conduct household travel surveys? A household travel survey records bicycling and walking habits of an entire household. Surveyors contact the households by phone, by mail, or online. [yes/no/unknown]. If yes, answer the following questions:
 - A. Does the survey specifically include pedestrian trips? [yes/no/unknown]
 - B. Does the survey specifically include bicyclist trips? [yes/no/unknown]
 - C. What year was the most recent survey conducted?
 - D. How often is this survey conducted?
 - E. If there is a link to a report on this survey, please provide it here.

Commuter Counts

2. Does your city conduct counts of bike/ped commuting? Commuter counts generally require an intercept survey to identify the purpose of the trip. The survey is often completed verbally by stopping travelers to ask their destination, or completed as a questionnaire on paper or online. [yes/no/unknown]. If yes, answer the following questions:
 - A. Does the count specifically include pedestrian trips? [yes/no/unknown]
 - B. Does the count specifically include bicyclist trips? [yes/no/unknown]
 - C. What year was the most recent count conducted?
 - D. How often is this count conducted?
 - E. If there is a link to a report on this count, please provide it here.

Cordon Counts

3. Does your city conduct cordon counts? Cordon counts are conducted to track the number of travelers who cross a specified line into or out of a designated area, such as a neighborhood or district, which is “cordoned off” [yes/no/unknown]. If yes, answer the following questions:
 - A. Does the count specifically include pedestrian trips? [yes/no/unknown]
 - B. Does the count specifically include bicyclist trips? [yes/no/unknown]
 - C. What year was the most recent count conducted?
 - D. How often is this count conducted?
 - E. If there is a link to a report for this count, please provide it here.

School Children Counts

4. Does your city conduct counts or surveys of children walking or biking to school? [yes/no/unknown]. If yes, answer the following questions:
 - A. Briefly, describe the methodology of the counts or surveys conducted.

- B. Does the count or survey specifically include pedestrian trips? [yes/no/unknown]
- C. Does the count or survey specifically include bicyclist trips? [yes/no/unknown]
- D. What year was the most recent count or survey conducted?
- E. How often is this count or survey conducted?
- F. If there is a link to a report for this count or survey, please provide it here.

Resident Satisfaction

5. Does your city conduct a survey to determine resident satisfaction with access to bicycle or pedestrian facilities? [yes/no/unknown]. If yes, answer the following questions:
 - A. Briefly, describe the methodology of the survey.
 - B. Does the survey specifically ask about satisfaction with pedestrian facilities? [yes/no/unknown]
 - C. Does the survey specifically ask about satisfaction with bicyclist facilities? [yes/no/unknown]
 - D. What year was the most recent survey conducted?
 - E. How often is this survey conducted?
 - F. If there is a link to a report on this survey, please provide it here.

Other Count or Survey

6. Does your city conduct any other method of count or survey? [yes/no/unknown]. If yes, answer the following questions:
 - A. Briefly, describe the methodology of additional counts or surveys conducted.
 - B. Does the count or survey specifically include pedestrian trips? [yes/no/unknown]
 - C. Does the count or survey specifically include bicyclist trips? [yes/no/unknown]
 - D. What year was the most recent count or survey conducted?
 - E. How often is this count or survey conducted?
 - F. If there is a link to a report for this count or survey, please provide it here.

Online

7. Are the raw data from any of the counts or surveys you reported in questions 16 publicly available online? [yes/no/unknown/not applicable]. If yes, please provide a link here.

FUNDING BIKING & WALKING

8. Does your city have an overall bicycle and pedestrian spending target? [yes/no/unknown]. If yes, answer the following questions:
 - A. What is the current target as a percentage (%) of the city’s transportation budget?
 - B. What is the date or year your city plans to reach this target?
 - C. To which of the following activities will these targeted funds be directed? (Check all that apply)
 - Infrastructure improvements (design and installation)

- Education of motorists
- Education of pedestrians
- Education of bicyclists
- Public health education
- Enforcement
- Events
- Plan development (e.g. pedestrian plan, bicycle plan, trails plan)
- Wayfinding design or signage
- Other (please specify):

9. How much did your city budget for bicycle and pedestrian programs (include staff salaries, infrastructure and education, including things such as sidewalk improvements, bike lanes, curb cuts, trails, classroom education, safety, literature, etc.) in the last two years?

- A. Dedicated city budget funds to bike/ped in 2013:
- B. Dedicated city budget funds to bike/ped in 2014:

10. How much did your city budget for transportation programs overall?
A. Dedicated city budget funds to all transportation programs in 2013:
B. Dedicated city budget funds to all transportation programs in 2014:

11. Please tell us about any unique bicycling or pedestrian funding activities in your city.

STAFFING BIKING & WALKING

* FTE means “fulltime equivalent.” Usually, 1 FTE means the employee works 40 hours or more per week. If the fulltime employee spends 100% of his or her time on bike/ped projects or programs, record 1 FTE for that employee. If the full time employee only spends 25% of their time on bike/ped projects or programs, record 0.25 FTE (or round to 0.3 FTE) for that employee. Only count FTE hours for staff and regularly hired contractors at the city level (i.e. not MPO staff) in your calculations.

For additional help in calculating your city’s FTE, including how to calculate parttime staff hours, visit the survey support page at <http://www.bikewalkalliance.org/benchmarking-survey-support>.

12. Expressed in FTE*, how many city employees and regularly hired contractors worked on bicycle and/or pedestrian issues as detailed in their job description in the last two years? (Include hours worked in a Safe Routes to School program)

City Jobs on Bike

13. Are any city staff expected to conduct their job duties by bike? (Check all that apply).

- Yes, police officers
- Yes, emergency medical technicians (EMTs) or paramedics
- Yes, other city staff
- No
- Unknown

If yes, answer the following questions:

- A. How many FTE were police officers patrolling on bikes in 2013?
- B. How many FTE were police officers patrolling on bikes in 2014?
- C. How many FTE were EMTs or paramedics available on bikes in 2013?
- D. How many FTE were EMTs or paramedics available on bikes in 2014?
- E. Please specify the position title and/or job duties of “other city staff” expected to conduct their job duties by bike.

- F. How many FTE were these additional staff conducting their job duties on bikes in 2013?
- G. How many FTE were these additional staff conducting their job duties on bikes in 2014?

City Jobs on Foot

14. Are any city staff expected to conduct their job duties by foot? (Check all that apply).

- Yes, police officers
- Yes, emergency medical technicians (EMTs) or paramedics
- Yes, other city staff
- No
- Unknown

If yes, answer the following questions:

- A. How many FTE were police officers patrolling on foot in 2013?
- B. How many FTE were police officers patrolling on foot in 2014?
- C. How many FTE were EMTs or paramedics available on foot in 2013?
- D. How many FTE were EMTs or paramedics available on foot in 2014?
- E. Please specify the position title and/or job duties
- F. How many FTE were these additional staff conducting their job duties on foot in 2013?
- G. How many FTE were these additional staff conducting their job duties on foot in 2014?

Other

15. How many city staff attended a fullday (or longer) training on innovative bike or pedestrian infrastructure in 2014?

16. Please tell us about any unique staffing circumstances that have aided in bike/ped initiatives in your city.

INFRASTRUCTURE – EXISTING BICYCLE AND PEDESTRIAN FACILITIES

17. How has your city identified a network or system of local walking routes? Check all that apply.

- A publicly available printed map
- An online map
- Signed or marked routes
- Other (please specify):
- If your city has an online map of local walking routes, please provide the link here:

18. Has your city adopted a system of wayfinding signage specific to pedestrians?

- Yes, signage for pedestrians is installed citywide.
- Yes, signage for pedestrians is installed in select areas of the city.
- No, the city has not adopted a wayfinding system for pedestrians.

19. How has your city identified a network or system of local bicycling routes? Check all that apply.

- A publicly available printed map
- An online map
- Signed or marked routes
- Other (please specify):
- If your city has an online map of local bicycling routes, please provide the link here:

20. Has your city adopted a system of wayfinding signage specific to bicyclists?
- Yes, signage for pedestrians is installed citywide.
 - Yes, signage for pedestrians is installed in select areas of the city.
 - No, the city has not adopted a wayfinding system for bicyclists.

Bicycle-Only Lanes

21. How many LANE MILES of each of the following does your city currently have in place? For questions a and b, do not double count miles of the same facilities. Miles reported in these questions should equal 100% of the existing bicycle lanes in your city.

For additional help in calculating miles of infrastructure, visit the survey support page at

<http://www.bikewalkalliance.org/benchmarking-survey-support>.

- A. Protected bike lanes (also called cycle tracks, separated bike lanes, or buffered bike lanes). Bicycleonly lanes that are on or adjacent to the roadway, but separated from motorized vehicles with a physical barrier, such as bollards, curb, raised pavement or painted buffer zone. Lane miles of protected bike lanes:
- B. Unprotected bike lanes. Bicycleonly lanes that are usually designated with a painted stripe, next to motorized traffic lanes. They are not protected with a physical barrier or painted buffer zone. Lane miles of unprotected bike lanes:
- C. TOTAL LANE MILES OF ALL BIKE LANES. (Total should equal “lane miles of protected bike lanes” + “lane miles of unprotected bike lanes.”)
- D. Do any of these miles include contraflow bike lanes (allowing bicyclists to ride in the opposite direction of oneway motorized traffic)? [yes/no/unknown]. If yes, how many lane miles of contraflow bike lanes?
- E. Does your city use a surface that is painted (e.g. “green lanes”) or constructed with different material than the roadway to differentiate bicycle facilities from motorized traffic lanes? [yes/no/unknown]. If yes, where is this paint/material currently applied? Check all that apply.
 - Bike lanes (along a corridor)
 - Bike boxes
 - Intersection or driveway crossings
 - Conflict areas
 - Other (please specify):

Shared Lanes

22. How many LANE MILES of each of the following does your city currently have in place? For questions a and b, do not double count miles of the same facilities. Miles reported in these questions should equal 100% of the existing shared lanes and paths in your city.

For additional help in calculating miles of infrastructure, visit the survey support page at

<http://www.bikewalkalliance.org/benchmarking-survey-support>.

- A. Bicycle boulevards. Shared, lowvolume streets designed to give priority to bicyclists and discourage motorized traffic. Lane miles of bicycle boulevards:
- B. Sharrows. Onstreet, indicated with a painted symbol that designates traffic lanes shared by bicyclists and motorized traffic. Lane miles of sharrows:
- C. TOTAL LANE MILES OF ALL DESIGNATED SHARED TRAFFIC LANES. (Total should equal “lane miles of bicycle boulevards” + “lane miles of sharrows.”)

Public Paths and Sidewalks

23A. Public sidewalks. Publicly owned paved paths within the roadway rightofway (ROW) that are designed for pedestrian use. Usually, bicycling is not allowed*.

- Lane miles of public sidewalks:
- Does your city prohibit bicycling on sidewalks? [yes/no]

23B. Paved public paths (eg. asphalt or cement). Publicly owned paths outside the roadway rightofway (ROW), open to both bicycling and walking, but closed to motorized vehicles.

- Lane miles of paved public paths:

23C. Unpaved public paths (eg. dirt or gravel). Publicly owned paths outside the roadway rightofway (ROW), open to both bicycling and walking, but closed to motorized vehicles.

- Lane miles of unpaved public paths:

23D. TOTAL LANE MILES OF ALL PUBLIC PATHS AND SIDEWALKS. (Total should equal “lane miles of public sidewalks” + “lane miles of paved public paths” + “lane miles of unpaved public paths.”)

Specialized Design

24. Which of the following specialized facilities has your city installed for pedestrians and bicyclists?

- A. Raised crossings
 - How many raised crossings for pedestrians only?
 - How many raised crossings for bicyclists only?
 - How many raised crossings designed for use by both pedestrians and bicyclists?
- B. Bicycle traffic lights
 - How many intersections?
- C. Bike boxes (also called advanced stop lines)
 - How many intersections?
- D. Bike corrals. Onstreet structure that converts one vehicle parking space into parking space for multiple bicycles.
 - How many corrals?
 - How many bike spaces?
- E. Home zone/woonerfs. A lowspeed area, usually residential, where priority is given to pedestrians and bicyclists. Motorists and other users share the street without boundaries, such as lanes and curbs.
 - How many designated locations?
 - What is the total square mileage of the designated area(s)?

25. Has your city removed parking in order to build or improve pedestrian infrastructure in the past five years (20102014)? [yes/no/unknown]

- If yes, how many parking spaces were removed to accommodate the pedestrian infrastructure?

26. Has your city removed parking in order to build or improve bike infrastructure in the past five years (20102014)? [yes/no/unknown]

- If yes, how many parking spaces were removed to accommodate the bike infrastructure?

Bike share

27. Does your city currently have a public bike share program?

- Yes
- No, but one is currently being planned
- No, and there are no plans to develop a program
- Unknown

If yes, answer the following questions:

- A. What is the name of your city’s bike share program?
- B. Who is involved in implementation of this program? Check all that apply
 - Government
 - Nonprofit organization
 - Unknown
 - Other (please specify):
- C. Are city funds used to help finance this program? [yes/no/unknown]
- D. How many bicycles are made available to the public at any given time?
- E. How many stations are in operation?

- F. How many total docking spaces are there?
- G. Does the bike share program have memberships available? (Check all that apply)
- Yes, paid individual memberships
 - Yes, paid household or family memberships
 - Yes, unpaid individual memberships (member by sign up only)
 - Yes, unpaid household memberships (member by sign up only)
 - No
- H. If yes, how many memberships did the program have in 2014?
- # of paid individual memberships
 - # of paid household or family memberships
 - # of unpaid individual memberships (member by sign up only)
 - # of unpaid household memberships (member by sign up only)
- I. Are the number of bike share checkouts tracked?
- J. If yes, how many total checkouts were there
- in 2013?
 - in 2014?

Other

28. Please tell us about any unique bicycling or pedestrian infrastructure in your city.

PLANNED BICYCLE AND PEDESTRIAN FACILITIES

29. Do any of your city's adopted plans include a goal to increase bicycle facilities? [yes/no/unknown]
30. Do any of your city's adopted plans have a goal to increase pedestrian facilities? [yes/no/unknown]
31. How many LANE MILES of planned bicycle facilities does your city expect to have installed by the following years? Include those published in local transportation plans. If your city does not have a target for the following years, leave the answer blank.
- Lane miles by 2016
 - Lane miles by 2020
 - Lane miles by 2030
 - Lane miles by (include another year, if applicable)
- A. What source(s) of funding will be used to implement these plans? Check all that apply.
- City funds
 - State funds
 - Federal funds
 - Private funds
 - Other (please specify):
32. How many LANE MILES of planned pedestrian facilities does your city expect to have installed by the following years? Include those published in local transportation plans. If your city does not have a target for the following years, leave the answer blank.
- Lane miles by 2016
 - Lane miles by 2020
 - Lane miles by 2030
 - Lane miles by (include another year, if applicable)
- A. What source(s) of funding will be used to implement these plans? Check all that apply.
- City funds
 - State funds
 - Federal funds
 - Private funds
 - Other (please specify):

PED-BIKE-TRANSIT INTEGRATION

33. Does your city have local bus service? Do not include intercity services (i.e. Greyhound or Megabus). [yes/no/unknown]. If yes, answer the following questions:
- A. What percent of buses servicing your city have bike racks?
 - B. How many bus stops are within your city?
 - C. What percentage of stops are sheltered?
34. Does your city have local rail service? Do not include intercity service (ie. Amtrak). Do include street cars and trolleys on rails. [yes/no/unknown]
- A. How many hours per week do the trains run? (0168 hours)
 - B. How many hours per week are bikes allowed rollon access? (0168 hours)
 - C. What are the legal limits for how many bikes can board a train car?
 - D. How many rail stops are within your city?
35. How many bike parking spaces are located within 100 ft of transit entrances or bus stops within your city?
- Near local bus stops?
 - Near intercity or commuter line bus stops?
 - Near local rail stop entrances?
 - Near intercity or commuter line rail stop entrances?
36. If your city has bike share, how many docks are located within 100 ft of transit entrances or bus stops?
- Near local bus stops?
 - Near intercity or commuter line bus stops?
 - Near local rail stop entrances?
 - Near intercity or commuter line rail stop entrances?

Other

37. Please tell us about any unique efforts to improve biking and transit integration in your city.

POLICIES AND PLANNING

38. Has your city adopted any policies in support of Vision Zero goals? See <http://everybodywalk.org/4500americanskilledcrossing-streetyear/>. If yes, please provide links to the policies and describe.
39. Which of the following goals has your city published as part of an adopted plan? Check all that apply.
- Increase walking?
 - Increase biking?
 - Increase physical activity?
 - Decrease pedestrian fatalities?
 - Decrease bicyclist fatalities?
 - Decrease pedestrian injuries?
 - Decrease bicyclist injuries?
- A. If your city has identified targets and performance measures for any of the above goals, please describe them here. If no targets or performance measures have been set, write 'NONE'.
- B. Has your city adopted any of these goals as part of a carbon emissions reduction plan? [yes/no/unknown]
- C. Has your city adopted any of these goals as part of a public health improvement plan? [yes/no/unknown]
- D. Has your city adopted any of these goals as part of a transportation congestion mitigation plan? [yes/no/unknown]
- E. Has your city adopted any of these goals as part of a public safety improvement plan? [yes/no/unknown]
- F. What other plans adopted by your city include the above goals?

Enforcement

40. How does your city address motorists not yielding to pedestrians and bicyclists? (Describe all that apply)

- Fine, please specify:
- Points on license, please specify:
- Prosecution, please explain:
- Warning, please explain:
- Other, please specify:
- A. How many motorist citations for not yielding to bikes or pedestrians resulted in a fine in 2014?
- B. How many motorist citations for not yielding to bikes or pedestrians resulted in a license penalty in 2014?
- C. How many motorist citations for not yielding to bikes or pedestrians resulted in prosecution in 2014?

41. How does your city address bicyclist violations of traffic laws? (Describe all that apply)

- Fine, please specify:
- Prosecution, please explain:
- Warning, please explain:
- Other, please specify:
- A. How many bicyclist citations resulted in a fine in 2014?
- B. How many bicyclist citations resulted in prosecution in 2014?
- C. How many bicyclist warnings were issued in 2014?

42. How does your city address pedestrian violations of traffic laws? (Describe all that apply)

- Fine, please specify:
- Prosecution, please explain:
- Warning, please explain:
- Other, please specify:
- A. How many pedestrian citations resulted in a fine in 2014?
- B. How many pedestrian citations resulted in prosecution in 2014?
- C. How many pedestrian warnings were issued in 2014?

43. Does your city publish data (e.g. traffic tickets issued, prosecutions, or convictions) regarding enforcement of laws related to bicycles and pedestrians? (Check all that apply)

- Yes, regarding bicyclist violations of traffic laws
- Yes, regarding pedestrian violations of traffic laws
- Yes, regarding motorist violations of traffic laws involving bicyclists
- Yes, regarding motorist violations of traffic laws involving pedestrians
- No
- Unknown

If yes, answer the following questions:

- A. Is this data published online? [yes/no/unknown]. If yes, please provide a link:
- B. Does this data include demographic information? [yes/no/unknown]. If yes, please describe what demographics are included:

Other

44. Which of the following has your city adopted? Check all that apply.

- The National Association of City Transportation Officials (NACTO) Urban Streets Design Guide? See <http://nacto.org/urbanstreetdesignguideendorsementcampaign/>.
- The NACTO Urban Bikeway Design Guide for facility design standards? See <http://nacto.org/nactoendorsementcampaign/>.
- A combined bicycle and pedestrian master plan?
- A standalone bicycle master plan?
- A standalone pedestrian master plan?
- A trails master plan?
- A mountain bike master plan?
- Infrastructure project selection criteria that include physical activity?
- A MINIMUM number requirement of car parking spaces in new developments?
- A MAXIMUM number requirement of car parking spaces in new developments?
- Bike parking requirement in buildings or parking garages?
- Bike parking requirement in new developments?

- Secure or valet parking for bicycles at public events (such as festivals, ball games, concerts, etc)?

45. Does a city ordinance or other legal document clearly ALLOW electric bicycles on multiuse paths or bike lanes in your city? [yes/no/unknown]

46. Does a city ordinance or other legal document clearly PROHIBIT electric bicycles on multiuse paths or bike lanes in your city? [yes/no/unknown]

Advisory Councils

47. Does your city have a bicycle, pedestrian, and/or Safe Routes to School advisory council that meets at least once per year? Check all that apply.

- Combined bicycle/pedestrian advisory council
- Standalone bicyclefocused advisory council
- Standalone pedestrianfocused advisory council
- Safe Routes to School advisory council
- None of the above

If you answered yes to any of the above advisory councils, answer the following questions:

- A. How often does each council meet? [annually/quarterly/monthly/not applicable]
 - Combined bicycle/pedestrian advisory council
 - Safe Routes to School advisory council
 - Standalone bicycle-focused advisory council
 - Standalone pedestrianfocused advisory council
 - Other (please specify):
- B. Is there interagency participation in these councils? [yes/no/not applicable]
 - Combined bicycle/pedestrian advisory council
 - Standalone bicyclefocused advisory council
 - Standalone pedestrianfocused advisory council
 - Safe Routes to School advisory council
- C. Is there user group representation on these councils? [yes/no/not applicable]
 - Combined bicycle/pedestrian advisory council
 - Standalone bicyclefocused advisory council
 - Standalone pedestrianfocused advisory council
 - Safe Routes to School advisory council
- D. How is council membership determined? [appointment/nomination or election/open invitation/not applicable]
 - Combined bicycle/pedestrian advisory council
 - Safe Routes to School advisory council
 - Standalone bicyclefocused advisory council
 - Standalone pedestrianfocused advisory council
 - Other (please specify):

Other

48. Please tell us about any unique bicycling or pedestrian policies and planning initiatives in your city.

SAFE ROUTES TO SCHOOL (SRTS)

49. How many public schools (grades K12) participate in a SRTS program?

- A. Number of public schools (grades K12) in your city:
- B. Number of public schools (grades K12) in your city participating in a SRTS program:

50. How many students (grades K12) are served by a SRTS program?

- A. Number of students in public schools (grades K12) in your city
- B. Number of students in public schools (grades K12) in your city served by a SRTS program

51. What is the total number of bike parking spaces installed at public schools in your city?

52. Does your city have a policy that requires minimum acreage for school siting? (Check with Department of Education staff). [yes/no/unknown]

53. Does your city have a policy that places children in schools for any reason other than proximity to residence? (Check with Department of Education staff). [yes/no/unknown]
54. Does your city have a policy that requires biking and walking access to public schools for students and staff? [yes/no/unknown]
55. Does your city have a policy that requires bike parking at public schools? [yes/no/unknown]
56. Please tell us about any unique efforts to provide safe routes to school in your city.

EDUCATION AND ENCOURAGEMENT

Bike/Walk to School

57. Have schools in your city participated in a Bike and/ or Walk to School event in the past two school years? [yes/ no/unknown]. If yes, answer the following questions:
- What percentage of schools in your city participated in this event in the 2012/2013 school year?
 - How many students participated in the 2012/2013 school year?
 - What percentage of schools in your city participated in this event in the 2013/2014 school year?
 - How many students participated in the 2013/2014 school year?

Youth Bicycle Courses

58. Were youth bicycle education courses available in your city in the past two years? ("Youth" refers to ages <18). [yes/ no/unknown]. If yes, answer the following questions:
- Who leads implementation of these courses? Check all that apply
 - City department
 - Nonprofit organization
 - Public school
 - Private school
 - Unknown
 - Other (please specify):
 - Does your city government provide financial sponsorship for these courses? [yes/no/unknown]
 - How many youth participated in these courses in 2013?
 - How many youth participated in these courses in 2014?

Youth Pedestrian Courses

59. Were youth pedestrian education courses available in your city in the past two years? ("Youth" refers to ages <18). [yes/ no/unknown]. If yes, answer the following questions:
- Who leads implementation of these courses? Check all that apply
 - City department
 - Nonprofit organization
 - Public school
 - Private school
 - Unknown
 - Other (please specify):
 - Does your city government provide financial sponsorship for these courses? [yes/no/unknown]
 - How many youth participated in these courses in 2013?
 - How many youth participated in these courses in 2014?

Adult Bicycle Courses

60. Were adult bicycle education courses available in your city in the past two years? [yes/no/unknown]. If yes, answer the following questions:
- Who leads implementation of these courses? Check all that apply
 - City department
 - Nonprofit organization
 - Public school
 - Private school
 - Unknown

- Other (please specify)
- Does your city government provide financial sponsorship for these courses? [yes/no/unknown]
 - How many adults participated in these courses in 2013?
 - How many adults participated in these courses in 2014?

Bike To Work

61. Were Bike to Work Day events hosted in your city in the past two years? [yes/no/unknown]. If yes, answer the following questions.
- Who leads implementation of these events? Check all that apply
 - City department
 - Nonprofit organization
 - Public school
 - Private school
 - Unknown
 - Other (please specify)
 - Does your city government provide financial sponsorship for these events? [yes/no/unknown]
 - How many adults participated in these events in 2013?
 - How many adults participated in these events in 2014?

Open Streets

62. Did your city host an open streets initiative (also known as "ciclovía" "Sunday Streets," or "Saturday Parkways") in the past two years? An open streets initiative regularly closes one or more streets to motorized traffic and encourages pedestrian and bicyclist use. Do not include onetime events such as marathons, bike races, or festivals. [yes/no/unknown]
- If yes, what was the schedule for the open streets initiative (e.g. first Friday of the month, every Sunday, etc.)
 - in 2013?
 - in 2014?

63. Which of the following bike rides were hosted in your city in the past two years (2013/2014)? Check all that apply.
- Mayor's ride
 - Critical Mass
 - Kidical Mass or other family ride
 - Communities of colorspecific ride
 - Women's ride
 - Individuals with disabilities riding together
 - Other urban recreational rides
 - Describe other:

64. In the last five years, has any city department produced, funded, or distributed educational materials related to biking or walking in your city? [yes/no/unknown]
- If yes, please describe:
 - If yes, please list in which language(s) these materials are available:

65. Please tell us about any unique bicycling or pedestrian education and encouragement efforts in your city.

ECONOMIC IMPACT

66. Has the economic impact of any of the following been studied in your city? Check all that apply
- Bicycling
 - Walking
 - Trails
 - Carfree zones in city centers
 - None
- If yes, please briefly describe the results. Include a link, if available, and/or the date when the study was published.
67. Does your city currently have a system in place or in development to measure economic indicators of transportation projects? [yes/no/unknown]
- If yes, please describe:

OVERVIEW OF DATA SOURCES

Source	Description	Method of Data Collection	Frequency of Data Collection	Last Date Available
ACS	The American Community Survey (ACS) is a national survey conducted by the U.S. Census Bureau that collects year-round demographic, social, economic and housing data which is released annually.	Data collection is similar to the Census long form and includes the use of internet and mail and may include the telephone and a personal visit for non-responders. The sample size is 1 in 50 households.	Monthly, published annually	2013
BLS	The Bureau of Labor Statistics (BLS) collects data on labor economics and statistics. This includes the Consumer Expenditure Survey which collects data on the buying habits and incomes of American households.	The Consumer Expenditure Survey uses a quarterly Interview Survey and a weekly Diary Survey to collect average annual expenditures and characteristics for MSAs.	Every 3 months, published annually	2013
BRFSS	The Behavioral Risk Factor Surveillance System (BRFSS) collects statewide-health information from U.S. residents including their health-related risk behaviors, chronic health conditions, and use of preventive services.	Telephone health survey of over 400,000 adults.	Ongoing, published annually	2013
BTS RITA	The Bureau of Transportation Statistics (BTS) Research and Innovative Technology Administration (RITA) reports on each state's major transportation and travel statistics including the number of licensed drivers in the U.S.	The BTS gathers data from major federal databases and national sources such as the Department of Transportation's Federal Highway Administration.	Annually	2012
FARS	The Fatality Analysis Reporting Systems (FARS) is a federal database of vehicle-related injuries and fatalities created by the National Highway Traffic Safety Administration (NHTSA).	An agency from each state government provides information on fatal crashes to FARS.	Annually	2013
FHWA FMIS	"The Federal Highway Administration (FHWA) Fiscal Management Information System (FMIS) tracks all highway projects financed through Federal-Aid Highway Funds."	State DOTs report funding data to FMIS.	Ongoing, published annually	2014
GHSA	"Governors Highway Safety Association tracks distracted driving laws on cell phone use and texting while driving."	"Data collected from the Insurance Institute for Highway Safety and State Highway Safety Offices."	Ongoing	2014
LAB	"League of American Bicyclists: Bicycle Friendly State program surveys collect information on statewide policies, education, enforcement, and other efforts aimed at bicycle promotion"	"LAB sends online surveys to state bicycle and pedestrian coordinators."	Annually	2014
NCSRTS	The National Center for Safe Routes to School (NCSRTS) tracks data on walk and bike to school events and SRTS funding.	The NCSRTS gathers data from FHWA FMIS and an online form/questionnaire completed by event organizers and/or SRTS coordinators.	Quarterly (funding tracking), Ongoing (event tracking)	2014
NCSC	The National Complete Streets Coalition (NCSC) tracks and assists with complete streets policies.	"The NCSC monitors adoption of policies through their network, media, etc."	Ongoing	2014
NHTS	The National Household Travel Survey (NHTS) is a national survey and inventory of daily and long-distance travel.	Daily trip data is collected over the telephone from households and individuals in those households, over a 24-hour period. States and MPOs can additionally purchase an add-on sample of additional household travel samples.	"Every 5 to 7 years since 1969"	2009
NOAA	"The National Oceanic and Atmospheric Administration (NOAA) is a federal agency which collects data on historical climate normals and variables."	Precipitation and temperature data are archived at the National Climatic Data Center from various sources including weather satellites, radars, airport weather stations, National Weather Service cooperative observers, etc.	Ongoing	1971-2000

Source	Description	Method of Data Collection	Frequency of Data Collection	Last Date Available
PeopleForBikes	PeopleForBikes is a bicycle movement and organization that keeps an inventory of protected bike lanes in North American cities.	Data is updated regularly by PeopleForBikes with the help of their network.	Ongoing	2014
RTC	The Rails-to-Trails Conservancy (RTC) tracks current projects and development of the rails to trails movement.	RTC monitors rail-trails through their network, media, interviews with trail managers, etc.	Periodically	2013
SRTSNP	"The Safe Routes to School National Partnership (SRTSNP) monitors and collects benchmarking data on the national Safe Routes to School program and produces quarterly "State of the States" reports."	The SRTSNP gathers data from major federal databases and national sources such as the Department of Transportation's Federal Highway Administration.	Quarterly	2014
STN	"School Transportation News (STN) keeps an inventory of U.S. transportation data elements on a state-by-state basis, specifically on student enrollment and school bus information."	"STN surveys the Pupil Transportation Sections of every State Department of Education."	Annually	2014
TraDE (RTC)	The Transportation Alternatives Data Exchange (TraDE) reports on projects funded by Transportation Alternatives and is operated by Rails-to-Trails Conservancy. TraDE was previously operated as the National Transportation Enhancements Clearinghouse (NTEC) in cooperation with the Federal Highway Administration (FHWA), which ended in September 2013.	Data comes from FHWA's reporting of Transportation Alternative funded projects.	Annually	2013
US Census	A population census administered by the U.S. Census Bureau.	The Census is administered through mailed forms and a house visit for nonresponders.	Every 10 years	2010
USDOE	The U.S. Department of Education's (USDOE) National Center for Education Statistics collects data through their Common Core of Data (CCD) about all public schools, public school districts and state education agencies in the U.S. including public elementary and secondary school enrollment data.	The data are supplied by state education agency officials.	Annually	2012/13
Walk Score	Walk Score is a public walkability index which rates a community's walkability on a scale of 0 to 100. Walk Score also produces a Bike Score and Transit Score for neighborhoods.	The company evaluates walkability, bikability, and transit-friendliness based on patent pending scoring technology.	Ongoing	2014
WFC	Walk Friendly Communities (WFC) is a national recognition project to promote communities that are committed to creating safer walking environments. WFC maintains a list of Walk Friendly Communities and States with project highlights from each designated location.	Communities apply to be designated as a Walk Friendly Community.	Biannually	2014
WISQARS	"The Web-based Injury Statistics Query and Reporting System (WISQARS) is the Center of Disease Control's online database that provides fatal and nonfatal injury, violent death, and cost of injury data."	Non-fatal injury data are from the National Electronic Injury Surveillance System - All Injury Program (NEISS-AIP) operated by the U.S. Consumer Product Safety Commission with CDC's NCIPC.	Annually	2013

BIKING & WALKING COUNTS

Local departments of transportation or planning have been conducting local biking and walking counts to provide supplementation information to data already gathered by federal sources of data, such as the National Household Travel Survey or the American Community Survey. Local counts can also provide hyper local information, particularly if measuring an impact after a bike lane or new sidewalks are installed. Many local and state departments of transportation have been implementing their own programs. For example, New York City Department of Transportation had historically been taking bicycle counts since 1984, but implemented an automated counting system in April 2014 (<http://www.nyc.gov/html/dot/html/bicyclists/bike-counts.shtml>). Pedestrian counts are taken twice a year at 114 locations throughout the city (<http://www.nyc.gov/html/dot/html/about/datafeeds.shtml#Pedestrians>).

To encourage local and state departments of transportation across the country to implement biking and walking counting programs, the Federal Highways Administration at the U.S. Department of Transportation included for the first time a chapter on bicycling and walking in the 2013 Traffic Monitoring Guide (see Chapter 4, “Traffic Monitoring for Non-Motorized Traffic,” https://www.fhwa.dot.gov/policyinformation/tmguidetmg_2013/traffic-monitoring-for-non-motorized.cfm). The chapter provides basic technical guidance and considerations when counting people who bike and walk. Portland State University’s Innovation for Bicycle & Pedestrian Information has created a guide (<https://www.pdx.edu/ibpi/count>) to help bicycle and pedestrian planners and engineers with how to create or improve bicycle and pedestrian count programs.

In addition, the 2013 Traffic Monitoring Guide also provides a standardized data format for biking and walking counts (see Chapter 7, “Traffic Monitoring Formats”), which is one of the many first steps needed to ensure proper collecting and sharing of biking and walking data at the national level.

The standardized format would allow inclusion of biking and walking data into the federally managed Travel Monitoring Analysis System (TMAS). TMAS is an internal data archive of traffic data submitted by state departments of transportation; the data is accessed by Federal Highways Administration District Offices. Including biking and walking counts into TMAS was also featured in U.S. Department of Transportation’s Safer People, Safer Streets initiative, which aims to improve the safety of all Americans who travel by foot or bike.

If you are agency staff seeking more guidance on the technical aspects of conducting biking and walking counts, the following additional resources may be helpful:

- National Cooperative Highway Research Program (NCHRP), Report 797: “Guidebook on Pedestrian and Bicycle Volume Data Collection” (2014).
- Transportation Research Circular, Number E-C183: “Monitoring Bicyclist and Pedestrian Travel Behavior” (March 2014).

ONLINE RESOURCES

Transportation and Health Tool

By LCDR Joseph R. Ralph, MPH, CHES (CDC Healthy Community Design Initiative)

Everyone benefits from using roadways, streets, sidewalks, trails, and public transportation for everyday needs, whether for traveling to and from work, school, and play or accessing basic necessities, such as health services and grocery stores. At the same time, too many people suffer negative impacts from our transportation systems, from increased air pollution to a lack of safe places to walk, bike, and engage in physical activity without unnecessary risk.

For a long time, public health impacts and benefits were not an explicit consideration in transportation policy, program, and funding decisions. That has begun to change. Many state officials, metropolitan planning organizations (MPOs), and partners have begun including public health goals and health criteria in transportation planning and policies and within the transportation project selection process. The public health community has also begun to partner with transportation planning agencies to integrate health considerations in transportation work.

To highlight the connection between transportation and public health and improve transportation decision making, the Centers for Disease Control and Prevention (CDC) and U.S. Department of Transportation (US DOT) have partnered to develop a simple-to-use Transportation and Health Tool (THT). The THT allows transportation decision makers and the public to see how their region or state compares with those of their peers in terms of key health and transportation indicators.

The Transportation and Health Tool provides easy access to a set of transportation and public health indicators, reported at the state and metropolitan level. It also provides information

and resources for agencies seeking to better understand the transportation-health linkages and to identify strategies for improvement.

Through a rigorous process, including input from an expert panel, CDC and US DOT cooperatively selected transportation and health indicators for use in the THT. This tool is designed to be a useful resource for transportation decision makers around the country, providing an overview and key perspectives on how their decisions affect the health of the communities they serve.

The following indicators, measured at the state level, the metropolitan area level, or both, will be included in the THT:

1. Transportation
 - Commute mode share
 - Housing and transportation affordability
 - Land use mix
 - Person miles traveled by mode
 - Proximity to major roadways
 - Public transportation trips per capita
 - VMT per capita
2. Health
 - Alcohol-impaired fatalities
 - Physical activity from transportation
 - Road traffic fatalities by mode
 - Road traffic fatalities exposure rate
3. Policy
 - Complete Streets policies
 - Seat belt use
 - Use of Federal funds for bicycle and pedestrian efforts

For more information on the Transportation and Health Tool, please visit www.transportation.gov/transportation-health-tool

Housing + Transportation Affordability Index

The Housing and Transportation (H+T) Affordability Index from the Center for Neighborhood Technology is a new tool that allows people to think of “housing affordability” in a new way. Traditionally, housing affordability has been defined as costing no more than 30% of one’s household income; however, this fails to account for the next largest expense: transportation. The Index combines housing and transportation costs and sets the benchmark of housing and transportation affordability at no more than 45% of household income. The data for the H+T Affordability Index is presented through an easy-to-use website that features fact sheets, maps, and downloadable data.

People make decisions on where to live based on a variety of factors, but the H+T Affordability Index highlights how affordability can vary between and within regions due to neighborhood characteristics. That is, residents in neighborhoods that are more compact, mixed-use, and have public transportation access (what the H+T Affordability Index calls “location-efficient neighborhoods”) tend to have lower transportation costs than their counterparts who live in “location-inefficient neighborhoods” that are more dependent on cars and their associated costs. The Index’s “Two Views of Affordability” feature notes that housing affordability can vastly differ when not compared to housing and transportation affordability.

The H+T Affordability Index also provides a helpful tool for advocates to demonstrate the cost driving when advocating for neighborhood that are easier for people to walk and bike. By simply entering in a zip code or location, one can estimate the total driving costs of living in that neighborhood/ region as a percentage of that community’s typical household income. The Index is yet another tool that advocates can use to persuade people who drive of economical benefits of compact communities and biking and walking as efficient, cost saving modes of transportation.

For more information on the Housing + Transportation Affordability Index, please visit <http://htaindex.cnt.org>.

AARP Livability Index

The Livability Index developed by AARP is the first tool to broadly measure livability across all neighborhoods in the United States. The word “livability” can mean different things to different people. AARP’s Livability Index accounts for this diversity and provides higher scores to communities that are diverse and provide a high quality of life to people regardless of age, income, and abilities.

The Index, which provides a total livability score from 0 to 100, was created as a tool to help policymakers and the public to get a better sense of livability in their community and to encourage action to increase a community’s score.

The Index looks at livability broadly across seven categories:

- Housing: Affordability and access
- Neighborhood: Access to life, work, and play
- Transportation: Safe and convenient options
- Environment: Clean air and water
- Health: Prevention, access, and quality
- Engagement: Civic and social involvement
- Opportunity: Inclusion and possibilities

Each category has 5-9 individual metrics and policies within, which are also scored. The category scores are combined and averaged to create a final score for the community. Biking and walking advocates and policymakers may be particularly interested in the transportation metrics, where the metrics includes estimated walk trips per household per day; average speed limit on streets and highways; average number of fatal crashes per 100,000 people; and the percentage of transit stations and vehicles that are ADA-accessible. The health category also measures the percentage of people who live within a half-mile of parks and within 1-mile of recreational facilities.

The Livability Index also measures policies, which can be extremely helpful for advocates who are trying to encourage their local decision makers to adopt new policies, such as Complete Streets policies, which have an impact on a community’s livability.

Learn more and use the Livability Index at <https://livabilityindex.aarp.org/>.

Walk Score, Bike Score, and Transit Score

Walk Score was created to promote walkable neighborhoods and has since expanded to creating scores for biking and taking transit. Recently acquired by real estate website, Redfin, Walk Score aims to have a score included with every real estate listing to help potential buyers evaluate walkability and transportation options in locations where they might want to live. Though scoring varies by the mode, scores can be described everything from as a walker/ rider/ biker's paradise to somewhat walkable/ some transit/ bikeable, or as car-dependent for Walk Score. For example, a Walk Score of 92 would be described as a Walker's Paradise.

Walk Score analyzes walking routes based on nearby amenities. Amenities within a 5-minute walk (typically 0.25 miles) are scored with maximum points. More distant amenities score lower points, with no points after a 30-minute walk. Walk Score does account for some walkability measures, such as analyzing population density, block length, and intersection density, but has been noted for not being able to account for all elements of the pedestrian environment, such as noting safe walking routes with sidewalks or the size of the roads being crossed (e.g., two lane road versus a four lane arterial).

Transit Score is based on data released by local public transportation agencies. Scoring is assigned based on the frequency, type of transit, and distance to the stops from the mapped location.

Bike Score is dependent on four equally weighted factors: bike lanes; hills; destinations and road connectivity; and bike commuting mode share.

Though users at the Walk Score website can find detailed information about their specific Walk Score, the two other scores – Transit Score and Bike Score – are presented as their top transit and bike friendly cities.

To access these three scoring tools, please visit www.walkscore.com.

Strava Metro

With new technologies and smartphones becoming more easily accessible to people who walk and bike, exercise and fitness apps have gained in popularity. Strava is an app that allows users to track their progress and utilize their smartphones' GPS technology. Information from the person's smartphone during the walk, run, or bike ride can be easily transmitted online to allow people to analyze, share, and compare with other users.

This treasure trove of data, particularly the geographic data of where people are biking and walking, could be a huge opportunity for planners, engineers, and advocates to understand which routes may be more popular or more well-traveled than others. As such, Strava has made this data (with identifying personal information removed) available for a fee. The data can be analyzed not only by route information, but also the time of day, the day of the week, and by which season people have traveled and used the Strava app.

The available data has some advantages. Pedestrian and bicycle counters provides counts at a specific location, while Strava Metro data includes more or less the entire route that has been traveled. Some have used Strava data to indicate level of stress and have worked with their local department of transportation to encourage specific routes to have bicycle infrastructure installed.

Many people report using the app for all types of bicycling, including commuting for errands and for recreational purposes. Though it is important to note that the data only represents users of the app, which may present new information and data to planners, engineers, and advocates, but may still miss a segment of the population who do not use the app. Strava data could be a great way to begin looking into travel patterns, but may miss equity concerns, particularly in communities where residents may not own a smartphone or GPS.

To learn more about Strava Metro, please visit <http://metro.strava.com/>.

The Alliance for Biking & Walking creates, strengthens, and unites state and local bicycling and walking advocacy organizations. We give advocates tools to win campaigns that transform communities into great places to bike and walk.

The Benchmarking Project tracks bicycling and walking trends across the United States and publishes an updated report every two years. It is produced as a resource for bicycle and pedestrian advocates, elected officials, agency staff, researchers, media, and anyone searching for a means to measure bicycling and walking progress.

Made possible in part by:

