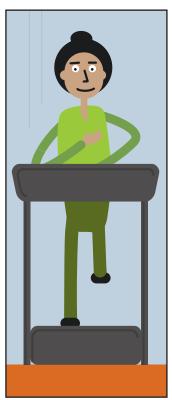
# Walk This Way

A Resource on State and Local Policies That Support Physical Activity and Wellness in and Around the Workplace











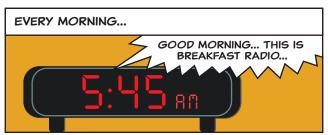
# Who should use this resource?

This resource is for wellness promoters — decisionmakers, business leaders, health department staff, and other stakeholders — who are interested in understanding state or local policies that support physical activity and wellness in and around the workplace.

# Contents

Setting the Scene: The Story of Alex & Riley	3
Introduction	5
How to Use This Resource	7
Warming Up: What Are Policies?	9
Policy Poster	10
Hitting Your Stride: What Policies Support Physical Activity and Wellness in and around the Workplace?	12
Policies That Support Physical Activity and Wellness IN the Workplace Raising Awareness Workplace Wellness Councils Workplace Wellness Programs for Government Employees Paid Time for Physical Activity Workplace Wellness Programs Through Tax Credits	12 14 17 21 25 29
Policies That Support Physical Activity and Wellness <b>AROUND</b> the Workplace Complete Streets Comprehensive Plans Zoning Transportation Demand Management	34 36 41 45 49
Moving Right Along: What Is the Process of Policymaking?	53
Phase 1: Identify Needs	53
Phase 2: Start the Conversation	54
Phase 3: Select, Develop, and Adopt a Policy	56
Phase 4: Implement the Policy	57
Phase 5: Evaluate the Policy	58
Crossing the Finish Line	59
Bibliography	60
Acknowledgements	65









ALTHOUGH THEY LIVE LESS THAN 10 MILES FROM THEIR OFFICES, THEY DRIVE NEARLY AN HOUR TO WORK BECAUSE THERE ARE NO BIKE LANES OR PUBLIC TRANSPORTATION.





FOLLOWING A STRESSFUL COMMUTE, THEY START THEIR DAY WITH A LARGE COFFEE WITH CREAM AND SUGAR OR A CAFFEINATED SODA.



FOR THE NEXT 4 HOURS, RILEY SITS ANSWERING PHONE CALLS FROM CUSTOMERS...



AND ALEX - A SOCIAL WORKER - MEETS WITH CLIENTS.



AT LUNCH TIME, ALEX GOES TO THE VENDING MACHINE BECAUSE THERE AREN'T ANY NEARBY RESTAURANTS...



AND, EVEN THOUGH RILEY'S WORKPLACE IS LESS THAN A MILE AWAY FROM THE CLOSEST RESTAURANT, SHE HAS TO DRIVE BECAUSE THERE ARE NO SIDEWALKS AND IT'S DANGEROUS TO WALK.

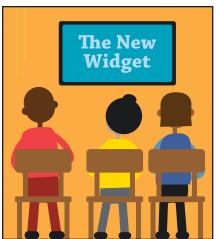
THEY RETURN & EAT THEIR LUNCHES AT THEIR DESKS.





ALEX SPENDS THE AFTERNOON ON THE PHONE WITH CLIENTS... AND RILEY SITS IN A COMPANY TRAINING. THEY BOTH LEAVE WORK AROUND 5 PM.





THEY ARRIVE HOME AT 6:30 PM AFTER PICKING UP THEIR KIDS. THERE'S SO MUCH TO DO BEFORE THEY CRAWL INTO BED... JUST BEFORE MIDNIGHT.



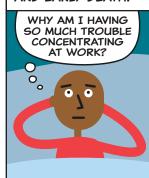


LIKE MANY OF US, THE ONLY PHYSICAL ACTIVITY THEY HAD ALL DAY ARE THE SHORT WALKS FROM THEIR HOMES TO THEIR CARS & FROM THEIR CARS TO THEIR OFFICES...



WHICH IS FAR SHORT OF WHAT IS RECOMMENDED.

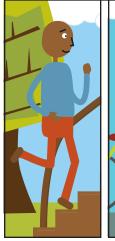
PHYSICAL ACTIVITY INCREASES OUR PRODUCTIVITY AND REDUCES OUR RISK OF DEPRESSION, DIABETES, HEART DISEASE, CANCER, AND EARLY DEATH.1



HHS RECOMMENDS THAT ADULTS PARTICIPATE IN AT LEAST 150 MINUTES OF MODERATE-INTENSITY AEROBIC ACTIVITY AND 2 DAYS OR MORE OF MUSCLE-STRENGTHENING ACTIVITIES EVERY WEEK?



HOW DO WE SUPPORT PHYSICAL ACTIVITY AND WELLNESS IN AND AROUND THE WORKPLACE? LET'S GET STARTED.







# Introduction



The story of Alex and Riley is a story that many people in the United States have experienced. Physical activity reduces our risk of depression, diabetes, heart disease, some cancers, and even early death! The U.S. Department of Health and Human Services recommend that adults participate in at least 150 minutes of moderate-intensity aerobic activity a week and 2 days or more of musclestrengthening activities.<sup>2</sup> Yet, 4 in 5 adults are not getting even that much physical activity.<sup>3</sup>

People want to do what is best for their health and the health of their families, but our environments and the policies that shape our environments continue to make meeting basic daily physical activity recommendations nearly impossible for the majority of workers in the United States. This doesn't just affect our health and mental health; it affects our bottom lines. Physical inactivity accounts for \$117 billion in health care costs each year.<sup>4</sup>

Given that many adults spend half their waking hours at work, the workplace can play a big role in supporting positive lifestyle changes.<sup>81</sup> At the organizational level, workplace wellness policies and programs vary greatly in form and scope, but they commonly focus on disease prevention and health promotion. They often help employees participate in more physical activity.

Most workplace wellness efforts have focused on the organizational level. However, jurisdiction-wide policies (such as executive orders, resolutions, ordinances, or laws) implemented by state and local governments have also encouraged organizational wellness policies. This resource discusses state and local policies for raising awareness,

THIS RESOURCE
PROVIDES
WELLNESS
PROMOTERS WITH
GUIDANCE AND AN
UNDERSTANDING
OF SOME COMMON
STATE AND LOCAL
POLICIES THAT
SUPPORT PHYSICAL
ACTIVITY AND
WELLNESS IN
AND AROUND THE
WORKPLACE.

creating wellness councils, establishing government wellness programs, offering paid leave for physical activity, and creating tax credits for small businesses with workplace wellness programs.

Communities have used these kinds of policies to support the following activities:

- raise awareness about workplace wellness and the need for physical activity
- create demand for organizational workplace wellness policies and programs
- create financial incentives for businesses to adopt workplace wellness programs

Workplace wellness, though, does not begin and end at the office. Community health and employee health are intrinsically linked. For example, adults typically spend almost an hour commuting to and from work. They run errands throughout the workday — like buying lunch or picking up the dry cleaning. Research indicates that 89% of people in the United States drive to destinations that are less than 2 miles away. For adults to incorporate physical activity into their daily routine, they need communities that are designed to make it easier to walk, bike, and use public transportation.

Recognizing this connection between employee health and community health, organizations like the National Academy of Sciences and the Vitality Institute have called for policies that promote community health and simultaneously support employee health. Additionally, the Community Guide recently released recommendations to improve physical activity through built environment strategies, many of which are included here. Therefore, this resource includes policies that implement complete streets, update comprehensive plans, revise zoning laws, and encourage transportation demand management. Communities are using these policies to support the following actions:

WORKPLACE
WELLNESS DOES
NOT BEGIN AND
END AT THE OFFICE.

- encourage employees to live healthier, more active lives
- reduce health care costs for the entire community as well as for individual employers
- improve the health of the local pool of potential job applicants

# How to Use This Resource

This resource provides wellness promoters with guidance and an understanding of some common state and local policies that support physical activity and wellness in and around the workplace. It is divided into 3 sections.

WARMING UP What Are Policies?

This section defines policy and describes the kinds of policies included in this resource.

2 HITTING YOUR STRIDE
What Policies Support Physical Activity and
Wellness in and Around the Workplace?

This section provides a high-level overview of common state and local government policies promoting physical activity, and wellness in the workplace and community, including:

# Policies That Support Physical Activity and Wellness IN the Workplace

- raising awareness
- · workplace wellness councils
- workplace wellness programs for government employees
- · paid time for physical activity
- workplace wellness tax credits

# Policies That Support Physical Activity and Wellness AROUND the Workplace

- complete streets
- comprehensive plans
- zoning
- transportation demand management

For each of the policies, the resource includes a description of the policy examples of the strategy in action, and links to in-depth resources for more information. Both sets of strategies (those that promote workplace wellness and those that support employee wellness around the workplace) are generally organized from easiest to hardest in terms of cost, political buy-in needed, and complexity of implementation. This resource includes icons that help identify these factors. We also included icons for highlighting policies that are tailored for state and/or local governments. (See the icon key on the next page.)

#### **Icons**

Policy Key*			Levels of Government	
EASY MEDIUM  S S S S S S S S S S S S S S S S S S		Implement Cost Political	STATE	State policies include laws, resolutions, statutes, and budget appropriations.  Local policies include ordinances, resolutions, budgets, or comprehensive plans (also known as general plans).



# MOVING RIGHT ALONG What Is the Policy Process?

This section describes how wellness promoters can partner with communities to identify community needs. It also describes how policies are adopted, implemented, and evaluated.

# PRACTICE TIP

# One Piece of a Larger Puzzle

No single policy by itself ensures everyone participates in more physical activity or that everyone's health improves. It is important to connect whatever policies communities have or are interested in to other relevant programs and policies. For example, a comprehensive plan update that aims to increase bike parking may be more effective when there is also a policy creating bike-to-work events. Why? Bike-to-work events help increase residents' awareness about newly available bike parking. Similarly, an employee wellness resolution will have a much stronger effect on health if it is paired with programs like walking clubs, physical activity classes, blood pressure screenings, or physical activity contests and challenges.<sup>7</sup>

<sup>\*</sup> These icons are meant to be only a guide. In each policy section, we explain our rationale for its designation of easy, medium, or hard. Generally speaking, though, our selections are based on a combination of the following: our assessment of the literature, how common the policy is, what our colleagues in the field have told us, and our own best judgment. Since every community is different, wellness promoters should make their own determination based on their own understanding and assessment of their community.

# Warming Up: What Are Policies?

Policies have 3 defining characteristics.

- They are written statements that reflect the values and decisions of a public body or private organization.
- · They are binding and enforceable.
- They apply broadly to a geographic area, type of institution, physical space, and/ or group of people.

Policies can be adopted within an organization or by local, state, or federal governments. The focus of this resource is on state and local policies because while there are many excellent resources on organizational wellness policies, there are few resources on state and local policies that support workplace wellness.

# State

State policies include laws, resolutions, statutes, and budget appropriations adopted by state legislatures. They also include executive orders adopted by the governor. For workplace wellness, these could include any of the following:

- a resolution supporting National Walk @ Lunch Day
- an executive order from the governor establishing an interagency workplace wellness council
- budget appropriations for workplace wellness tax credits for small businesses

#### Local

Local policies include city or county ordinances, resolutions, budgets, or comprehensive plans (also known as general plans) adopted by a county or city council. They also include executive orders adopted by the mayor. For workplace wellness, policies could include any of the following:

- a resolution creating a workplace wellness program for all city or county government employees
- · a comprehensive plan that encourages bicycle parking on all new developments
- an ordinance requiring large employers to implement strategies that reduce the number of workers who commute alone in their cars

# Organizational

Organizational policies include policies adopted by *individual* businesses, nonprofits, faith-based institutions, schools, or government agencies. For example, if a state's department of education adopts a policy allowing its employees to use paid time to participate in physical activity, this is an organizational policy because it does not apply to employees in all state agencies. For more information on organizational wellness policies, refer to the Centers for Disease Control and Prevention (CDC) Worksite Health ScoreCard.

THIS RESOURCE
SPECIFICALLY
FOCUSES
ON STATE
AND LOCAL
POLICIES.

# How to Support Physical Activity & Wellness in and Around the Workplace

Workplace wellness doesn't begin and end at the office. Here are some state and local strategies supporting wellness in and around the workplace.



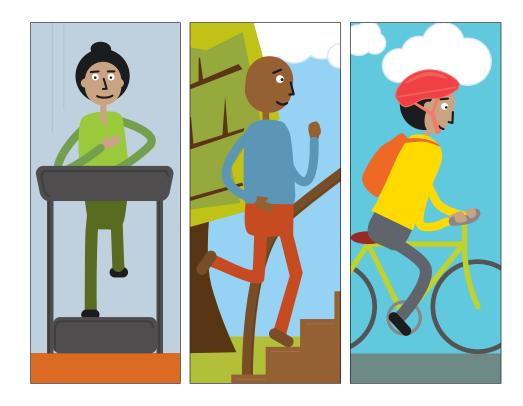


# Hitting Your Stride: What Policies Support Physical Activity and Wellness in and around the Workplace?

# POLICIES THAT SUPPORT PHYSICAL ACTIVITY AND WELLNESS IN THE WORKPLACE

CDC's review of nearly 50 peer-reviewed studies found that multicomponent work site obesity prevention programs are cost effective and improve health within 5 years.<sup>8,9</sup> Yet many people, like Alex and Riley, continue to work in government and private sector jobs without comprehensive workplace wellness programs.

Imagine that workplaces — like Alex's and Riley's — began implementing strategies to promote healthy behaviors and create work environments that make it easy for all employees to be physically active. Employers might host wellness events to



promote biking to work or walking during lunch. Employers could allow Alex, Riley, and their coworkers to use paid time to attend physical activity classes, or take walking breaks. These simple changes to the work environment can help people like Alex and Riley get more physical activity during the workday.<sup>10</sup>

How have state and local governments encouraged these kinds of changes within government and in the community? One common approach is to implement state or local laws that raise awareness, create wellness councils, establish wellness programs for government employees, and incentivize the private sector to implement wellness programs.<sup>11\*</sup> Communities with these kinds of policies have seen government and private employers alike benefit from the following:



# Improved Employee Health

Physical activity has many health benefits, including reducing the risk of heart disease, diabetes, and other chronic diseases; maintaining weight; and improving cognitive function. Moreover, these health benefits occur with as little as 150 minutes per week — about 20 minutes per day — of moderate-intensity physical activity, such as brisk walking.¹² Finally, employee participation in workplace wellness programs has been found to increase physical activity frequency, decrease smoking, and improve weight control.¹³



# Greater Productivity and Fewer Sick Days

Physically active employees have lower absentee rates, improved productivity, and fewer health-related work limitations. A 2008 study of nearly 200 companies of different sizes using the same workplace wellness program found that during the year following implementation, companies saw an average 41% increase in productivity.



# **Decreased Health Care Costs**

Between 2006 and 2011, health care costs for inactive adults were approximately \$1400 higher per year than the costs for active adults.<sup>4</sup> Adults who occasionally engage in physical activity, but not the recommended amount, have health care costs that are approximately \$700 higher than those for active adults.<sup>4</sup>



#### Return on Investment

The overall return on investment from disease management and lifestyle management wellness programs is \$1.50 for every dollar invested. The overall return on disease management alone is \$3.80.16 One study that assessed the return on investment for employers that developed workplace obesity interventions found that a 5% weight loss among employees who were overweight or obese would result in an annual reduction of medical and absenteeism costs by an average of \$90 per person.17

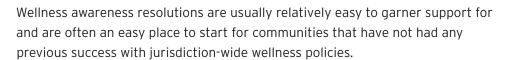
<sup>\*</sup> The workplace wellness policies listed here are not exhaustive; they represent some of the policies that are showing promise at the state and local level.

# RAISING AWARENESS



Raising awareness about a health issue is an important first step in any intervention. Communities have used awareness-raising resolutions to gather community support, identify key partners, generate political will, and build momentum for other interventions.

Resolutions that raise awareness about wellness include those recognizing bike-to-work days and walk-at-lunch days. These kinds of resolutions create opportunities for state and local governments to actively engage individuals, businesses, and decisionmakers on wellness issues and encourage them to think about solutions to improve health.







# What are the benefits?

On their own, wellness awareness resolutions will not lead to lasting behavior changes. However, research shows that supportive social and physical environments can lead to healthier employee behaviors. Raising awareness is an important component of creating cultural and environmental changes that can lead to communitywide policies and lasting behavior changes.

For example, bike-to-work events are useful for encouraging everyone to bike.<sup>19</sup> They help address barriers like not knowing safe biking routes to work. By providing maps of bike routes and rest stations, bike-to-work events help employees identify safe routes, which may make it easier for them to bike in the future. These events also create an opportunity for workplaces to show support for active transportation and healthy lifestyles. Moreover, these events provide an opportunity for wellness promoters to educate business owners about what they can do to support wellness year-round. For example, the East Bay Bike Coalition uses bike-to-work days to market resources to employers on how to make every day bike-to-work day.<sup>20</sup>

# What are the basics?

A state legislature or local government adopts wellness awareness resolutions that often include the following components:

# STATE

#### What, When, and Why

Wellness awareness resolutions describe what the issue is, when the event will occur, and why it is important to raise awareness about the issue. For example, communities have adopted resolutions such as "A Resolution to Promote May as Bike-to-Work Month" or "A Resolution to Recognize April 20 as Walk @ Lunch Day." Like many policies in this resource, wellness awareness resolutions include findings (or whereas statements) that make a case for why the event is important. These statements may include health data, such as the effect of physical inactivity on obesity rate, the costs of illness, and information on best practices or recommendations.

#### What Actions Are Needed

A wellness awareness resolution also indicates how a government will implement the resolution. For example, in bike-to-work-day resolutions, the state or local government may promote bike-to-work day and/or encourage employees and community members to participate in related events.<sup>21</sup>

# What else do we need to know?

# Promotion and Education Are Keys to Successful Wellness Events

Whether the wellness awareness policy is a walk-at-lunch event, bike-to-work month, or something else, wellness promoters can help implement the policy by spreading the word and recruiting participants. Promotion of the event can be as simple as including information in a news blast or on a website, or encouraging colleagues and staff to participate in the event.

Another way to boost participation is to collaborate with other community groups. For example, state and local chambers of commerce, private businesses, community centers, and health care organizations can help promote the event and encourage communitywide participation. When reaching out to partners and recruiting potential participants, it is important to make sure everyone benefits from the strategy. One way to achieve this is to make sure outreach efforts include organizations and businesses with employees who are more likely to have risk factors for chronic disease.<sup>157</sup> Regardless of what is in the policy, wellness promoters may want to think about how to leverage these days to promote workplace wellness more broadly.

### Other Wellness Awareness Policies Are Good Resources

Existing resolutions and sample resolutions are good resources for finding example policy language. Additionally, nearly every health issue has a designated awareness month, and many have websites and events.<sup>22</sup> For example, National Walk @ Lunch Day and bike-to-work events often occur in April and May.<sup>23,24</sup> Effective wellness awareness policies build on these national events to help promote state or local events.

# POLICY IN ACTION

# Pennsylvania Bike-to-Work Resolutions

Bike-to-work resolutions adopted by state and local governments have helped increase the number of employees biking to work. For example, in 1999, Pennsylvania started getting involved in bike-to-work events by adopting a bike-to-work resolution.<sup>25</sup> After several years of success with these events, it used the momentum to adopt other bike-friendly policies including a complete streets policy and a statewide bicycle plan.<sup>26</sup> As a result, in 2015 Pennsylvania moved from the 38th most bike-friendly state to the 12th.<sup>26</sup> In addition, the number of bike commuters in Pennsylvania has increased by more than 100% since 2005.<sup>27</sup>

# **RESOURCES**

# National Bike Month Guide

The League of American Bicyclists developed this guide to help states, counties, and cities plan a bike month event. The guide includes a planning timeline for successful events; information about the health, productivity, economic, and environmental benefits of biking; and a sample resolution or proclamation for a bike-to-work month. It also includes talking points that can make a case for biking.

# Sample Resolution or Proclamation: Bike Month 2013

The Missouri Bicycle and Pedestrian Federation provides example policy language.

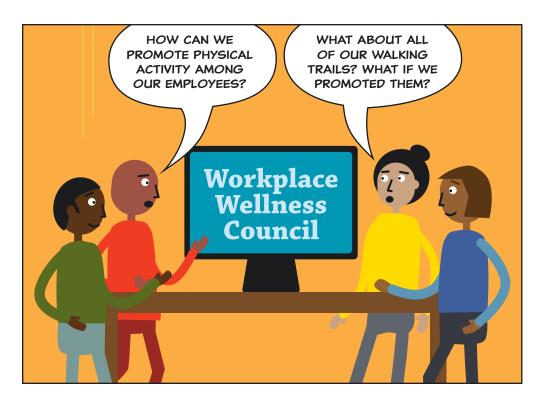
### Vermont's Walk-at-Lunch Day Resolution

This wellness awareness policy designates a walk-at-lunch day and encourages all Vermonters to participate in the event.

# Louisiana's Legislative Wellness Day Resolution

This resolution formally recognizes wellness and encourages everyone to support initiatives that address healthy eating and active living.

# WORKPLACE WELLNESS COUNCILS



A workplace wellness council is a group of people who are responsible for developing, promoting, implementing, and evaluating workplace wellness policies and programs. Workplace wellness councils contribute to the success of workplace wellness policies and programs by incorporating staff input, earning leadership support, and assuming responsibility for wellness policies and programs.

State or local governments adopt resolutions or issue executive orders to establish a workplace wellness council and specify council responsibilities, such as developing workplace wellness programs and policies for all government employees or encouraging the private sector to adopt comprehensive workplace wellness programs.

Resolutions or executive orders that create workplace wellness councils are usually relatively easy to develop and adopt. However, a successful workplace wellness council will depend on member commitment and leadership support, without which these policies may be moderately difficult to implement.



Workplace wellness councils, committees, or teams contribute to the success of workplace wellness policies and programs by designating a person or group of people to be responsible for developing and implementing the policy and program. Studies have also shown that health promotion teams or committees, such as workplace wellness councils, can help employers develop, implement, and sustain efforts.<sup>28–30</sup>







# What are the basics?

State or local governments adopt resolutions or executive orders to establish workplace wellness councils. These policies often include the following components:



# Membership Requirements

The policy outlines who, or which groups, will serve on the team. Wellness councils that direct internal government wellness operations often include the governor, mayor, or county executive; members of the legislature, city, or county council; and representatives from government agencies, such as state or local health departments, transportation departments, departments of education, and offices of personnel.<sup>31</sup> It can also be important to include representation and input from a range of employees including managers, front line staff, and hourly employees who may offer different perspectives on how workplace wellness may need to be implemented.

For wellness councils that also engage the business community, membership may include business leaders, nonprofit organizations, and community members in addition to representatives from government agencies.<sup>32–35</sup>

#### Council Responsibilities

After defining the members of the council, the policy may also define council responsibilities. Wellness councils may be tasked with developing a workplace wellness program for government employees; with promoting workplace wellness to the broader community including businesses, faith-based institutions, nonprofits, or schools; or with doing both. Wellness council responsibilities may include the following activities:

- identifying or creating resources to improve employee wellness
- communicating and promoting wellness initiatives
- providing information about effective workplace wellness program activities, such as offering health education, hosting health screenings, or implementing environmental changes

# Reporting Requirements

The policy may direct workplace wellness councils to submit meeting notes, research reports, or other documentation on a regular basis. The policy also defines what specific information to include in these reports, to whom the report will be sent, and what the reporting deadlines are. Often, the policy directs workplace wellness councils to submit reports to the governor, mayor, county executive, or other decisionmakers.

# What else do we need to know?

# Workplace Wellness Councils Do Not Always Start With Policy

Establishing a workplace wellness council through policy provides accountability, enforcement, and sustainability. For example, wellness councils established through policy must fulfill the responsibilities outlined in the policy. In addition, wellness councils established through policy are harder to dismantle than those established without policy.

However, some governments, like Illinois;<sup>36</sup> Indiana;<sup>37</sup> Rutherford County, Tennessee;<sup>34</sup> and Louisville, Kentucky,<sup>35</sup> have created workplace wellness councils without policy. These councils act as coalitions, nonprofit organizations, or advisory committees, and they operate like councils created through policy.

# Workplace Wellness Councils and Workplace Wellness Programs Can Be Adopted at the Same Time

Sometimes state and local decisionmakers are not ready to adopt a wellness program in conjunction with a policy that creates a wellness council. Instead, they want the council to explore and make recommendations about how to implement a workplace wellness program for government employees. In these instances, the resolution or executive order typically tasks the council with developing recommendations for a workplace wellness program.

However, in other instances, state and local decisionmakers may already know what they want their government workplace wellness program to look like. In these cases, decisionmakers may adopt a resolution establishing a workplace wellness program that includes the creation of a workplace wellness council.

# POLICY IN ACTION

# Governor's Council on Wellness and Physical Activity in Kentucky

With high rates of smoking, obesity, and physical inactivity, Kentucky consistently ranks near the bottom of the 50 states in health outcomes.<sup>38</sup> Recognizing the need for improved health, the state legislature in 2012 adopted a policy to create the Governor's Council on Wellness and Physical Activity.<sup>31</sup> The purpose of the council was to develop and implement a wellness program for Kentucky and to promote healthy lifestyles for all Kentuckians.

This legislation outlined membership, meeting, term length, and reporting requirements. Council members meet quarterly and include representatives from the governor's office, the Cabinet for Health and Family Services, the personnel cabinet, and the Kentucky State Senate and House Joint Committee on Health and Welfare of the General Assembly.<sup>31</sup>

Wellness council policies like this one can be useful for building momentum for other kinds of wellness policies. For example, since 2012, the state of Kentucky has continued to develop many other workplace wellness initiatives. In 2014, a new governor created the Kentucky Health Now initiative.

Ultimately, these policies work together to support changes to the environment. For example, today, Kentucky state agencies have signs to encourage stair use, there are more walking trails in the state, several state cafeterias offer healthy food options, and some state departments have adopted healthy meeting policies.<sup>41\*</sup>

<sup>\*</sup> Healthy meeting policies often require that only water, coffee, and tea be served during meetings and that stretch breaks or walk breaks incorporated into long meetings.

# RESOURCES

# North Carolina Wellness Committee Guide

Starting on page 6, this guide provides information on establishing and maintaining a work site wellness committee. While it is intended to help organizations, it can also help governments that are implementing a resolution establishing a workplace wellness council.

# Oregon Governor's Executive Order on Wellness

This policy directs the Public Employees Benefits Board in Oregon to appoint a wellness manager and work with the department of administrative services to create a coordinating council.

# Healthy Eating Active Living Cities Campaign: Employee Wellness

This website provides examples of different wellness policies that have been adopted by city and county governments. Wellness promoters can use these resources to find examples of sample policy language.

# WORKPLACE WELLNESS PROGRAMS FOR GOVERNMENT EMPLOYEES



Workplace wellness programs typically consist of employee health screenings, environmental changes, and incentives to participate in wellness interventions, such as physical activity classes, tobacco cessation, and diabetes prevention programs. They can help improve worker health,<sup>12,13</sup> increase productivity,<sup>14,15</sup> and reduce employer costs.<sup>4</sup> State and local decisionmakers adopt legislation or resolutions to support the development of workplace wellness programs for government employees.

The scale of workplace wellness programs influences how simple or difficult they are to develop and implement. Workplace wellness programs can include easy, low-cost activities (such as promoting stairwell use and walking breaks) that require little leadership support. However, wellness programs can also include activities such as offering paid time for physical activity and hosting on-site fitness classes. These activities may be more difficult to implement, more costly, and require more leadership support.







# What are the benefits?

As a group, government agencies are one of the largest employers nationally: About 1 in 7 workers is a government employee.<sup>42</sup> Government workplace wellness programs can affect a significant number of people and demonstrate by example why all employers may want to offer comprehensive workplace wellness programs.

Additionally, studies show that comprehensive workplace wellness programs lead to sustainable behavior change.<sup>29</sup> For example, research has shown that lifestyle management programs, such as tobacco cessation and weight management, can increase healthy behaviors.<sup>43</sup>

# What are the basics?

Workplace wellness program legislation and resolutions often include the following components:



# Program Development

The policy will outline what the workplace wellness program should include. Often, the policy directs a specific department or agency, such as the personnel department, to create a workplace wellness program that meets specific requirements. Workplace wellness program requirements may include health education and promotion, health screenings, environmental change strategies, and incentives for participation.

# Incentive Guidelines

Sometimes policies will include information about what kinds of incentives a wellness program should offer, like paid time or flextime for physical activity. The policy may also set limits on the monetary value of incentives, meaning only a certain amount of money can be spent on rewards, such as pedometers, gym memberships, and health benefit contributions.<sup>45,46</sup>

#### **Program Participation Eligibility**

To participate in the workplace wellness program and receive incentives, employees may have to meet certain eligibility criteria. For state and local government workplace wellness programs, these criteria usually include being an employee of the jurisdiction and being enrolled in the state or local government health insurance plan.

#### Program Implementation

Finally, the policy may designate a workplace wellness program coordinator or workplace wellness council to assist with the implementation of the program. Directing a person or group of people to develop and implement the wellness program contributes to its success. The person or team is able to identify employee needs, communicate with leaders and employees, and ensure consistent implementation of policies and programs. If the wellness program policy establishes a wellness team, it will often outline its duties and responsibilities, which may include coordinating with human resources, communicating the workplace wellness program to employees, and evaluating the workplace wellness program.

# What else do we need to know?

# Workplace Wellness Programs Can Be Low Cost and Can Be Adopted by Any Sized Government

There are many free, low-cost, and low-tech program strategies for implementing a workplace wellness policy. These strategies include encouraging the use of existing trails and walking paths, using existing office space for physical activity, and posting signs to encourage stairwell use.<sup>47</sup> A government of any size — including small and rural towns with limited resources — can promote workplace wellness.

# Wellness Programs Are Stronger if They Are Comprehensive

Comprehensive workplace wellness programs provide health education, create supportive social and physical environments, include medical screening programs, integrate into the workplace culture, and coordinate with related workplace programs.<sup>48</sup>

# Working With Outside Vendors May Support Implementation

When implementing a workplace wellness program policy, state and local governments usually work with their health insurance provider or some other wellness program vendor or organization to develop the wellness program that best fits their needs.

# POLICY IN ACTION

# Working Well and Living Healthy

In 2010, the Mississippi legislature passed the State Employee Wellness Program Act,<sup>49</sup> which created a state employee wellness program, designated a statewide wellness coordinator, and established state agency wellness councils. The legislation includes the following criteria for the wellness program:

- health education: informing government employees about physical activity, nutrition, healthy eating habits, stress management, and other health concerns
- health assessments: distributing surveys or health risk assessments that identify employee health issues and promote programs or interventions to improve employee health
- health programming: developing programs that promote health, such as physical activity classes, and offering evidence-based self-management programs addressing chronic disease
- environmental changes: developing and promoting strategies that integrate healthy behaviors and physical
  activity into the work environment such as offering healthier options in vending machines and promoting
  breastfeeding in the workplace
- participation incentives: providing incentives, such as flexible work schedules, to encourage employee participation in physical activity and wellness programs

Since the State Employee Wellness Program Act was passed, the state health department has developed a model state employee wellness program that can be used by all state government agencies. The state program uses the CDC Workplace Health Model<sup>50</sup> to create a program that best fits its needs.<sup>51</sup> The CDC Workplace Health Model includes assessment, planning and management, implementation, and evaluation. State agency wellness councils participate in trainings and webinars, develop wellness plans for their agencies, and collect evaluation data using the CDC Worksite Health ScoreCard.<sup>52</sup>

# **RESOURCES**

# Healthy Eating Active Living Cities Campaign: Model Worksite Wellness Resolution

This model resolution provides example language on establishing a workplace wellness program for government employees.

# Steps to Wellness: A Guide to Implementing the 2008 Physical Activity Guidelines for Americans in the Workplace

This resource from CDC offers a systematic process for developing, implementing, and evaluating physical activity and wellness programs, which can be useful for governments that are developing and implementing a workplace wellness program.

#### Worksite Health ScoreCard

This online assessment tool from CDC helps employers, including government agencies, evaluate current wellness practices and make plans for improvements.

### State Worksite Wellness Programs

This list of state work site wellness programs from the Directors of Health Promotion and Education includes a brief description of each program and links for more information.

# PRACTICE TIP

# How Do We Answer Questions About Liability?

Employers are often concerned about liability when implementing wellness policies and programs that encourage physical activity. While liability is often a legitimate concern, the benefits resulting from employees being more physically active (such as improved health, increased productivity, and reduced health care costs) make these policies and programs appealing to many employers, including government agencies.

The types of liability issues that may arise depend on both the policies and programs in place as well as relevant state liability laws.

In some states, employers can protect themselves by requiring participating employees to sign a liability waiver; the waiver often clarifies that participation is voluntary and not a requirement of employment.<sup>53</sup> Employers should also review their insurance policies to minimize any liability exposure in case of an injury.

Wellness promoters should consult an employment attorney licensed in their state as well as their state workers' compensation regulators to identify what state protections exist and what additional policies or strategies may be helpful in their jurisdiction.

# PAID TIME FOR PHYSICAL ACTIVITY



A policy that creates paid time for physical activity encourages employees to be physically active during the workday and integrates physical activity into the work environment. Such a policy makes it easier for employees to meet daily physical activity recommendations because they do not have to carve out time before or after work for physical activity. State and local governments can adopt resolutions to allow employees to participate in physical activity during work hours, outside of their regularly scheduled breaks.

With leadership support, it can be simple to develop and implement a paid time policy. However, it may be difficult to get full leadership support and buy-in for this policy because it may be viewed as costly or unfair to all employees. For example, employees have various job responsibilities and work hours that in some instances may restrict their ability to take advantage of a paid time for physical activity policy. A well-crafted paid time for physical activity policy can address these concerns.







#### What are the benefits?

When paid time for physical activity policies are combined with education or free access to an on-site gym, employee participation in physical activity increases.<sup>54</sup> One study found that full-time employees with 2.5 hours of paid time for physical activity reported higher productivity than full-time employees without any paid time for physical activity.<sup>55</sup>

# What are the basics?

Paid time for physical activity has been adopted primarily by individual government agencies, such as the Kentucky Department of Education<sup>40</sup> or the Mississippi Departments of the Army and Air Force,<sup>167</sup> but a state legislature or city or county council can also adopt this kind of policy so that government employees in all agencies benefit from paid time for physical activity. Regardless of whether the policy is adopted by an individual agency or by a state, county, or city legislature, a paid time policy often includes the following components:



#### Paid Time Guidelines

This includes guidelines for when employees can use paid time and the amount of paid time employees are allowed. For example, some paid time for physical activity policies allow 30 minutes per day but only during the lunch hour. Others allow a total of 3 hours per week that can be used anytime during the work week.

# Approval Requirements

Most paid time for physical activity policies require employees to obtain approval from management before using paid time to participate in physical activity.

Obtaining approval may require completing and submitting a written request that details the amount of paid time the employees plan to use to participate in physical activity.

# **Activity Guidelines**

Paid time for physical activity policies can define the type of physical activity that is eligible for paid time usage. Some paid time for physical activity policies are linked to other workplace wellness program activities, such as health screenings or physical activity programs. In other words, employees may be restricted to using paid time for on-site physical activity classes only.

# What else do we need to know?

# Approval Requirements May Deter Participation

Policies that require management approval may help ensure that employees are using the additional paid breaks for physical activity, but they may also deter some employees from participating by creating an additional barrier. For example, if managers do not fully appreciate the benefits of the policy, they may be reluctant to approve an employee's request for paid time for physical activity. One way to minimize barriers for employees is to limit how often employees must seek approval. For example, the paid time for physical activity policy in South Carolina includes a one-time request form that employees must complete and submit.<sup>56</sup> There are other strategies to avoid this barrier:

- earn support and buy-in from managers during the development and adoption of the policy
- educate managers of the benefits of physical activity on employee productivity and health
- evaluate the outcomes of a paid time for physical activity policy and share results with managers and employees

# State Governments Can Also Encourage Private Employers to Adopt Paid Time Policies

State and local paid time for physical activity resolutions typically apply only to state, county, or city employees. However, state governments can include paid time policies as a requirement for private businesses to qualify for wellness tax credits and wellness grants.

# Paid Time for Physical Activity Policies May Raise Equity Concerns

When adopting a paid time for physical activity policy, decisionmakers may have concerns about how to implement the policy in a way that ensures all employees benefit equally from the policy. State and local government employees have various job responsibilities and work hours that may prohibit their ability to take advantage of a paid time for physical activity policy. Some employees may have to be available to answer phones, some work nights, and others participate in physical activity as part of their job responsibilities. Additionally, for government employees who are low income, it can be especially important to think about how the policy might be implemented. Baron, et al. reports that "Low-income workers have reported their... exercise behaviors to be adversely affected by time pressure, physical fatigue, and low control over workload and scheduling" as well as by a work environment that doesn't support physical activity. When these concerns arise, decisionmakers and employees can work together to develop strategies to overcome these barriers so that everyone benefits from the policy.

However, if after discussing strategies to overcome these concerns, decisionmakers are still reluctant to adopt a paid time for physical activity policy, a flextime policy may be an interim alternative. With a flextime policy, employees are still able to participate in physical activity during the workday, but not during paid time.<sup>57</sup>

# PRACTICE TIP

# Flextime for Physical Activity: Alternative to a Paid Time Policy

Adopting a flextime policy is another way to encourage employees to be physically active during the workday and may be easier to implement than a paid time for physical activity policy.

Flextime policies allow employees to adjust their work schedules so they can participate in physical activity during work hours. For example, to attend physical activity classes, employees may come in early and leave early, take a long lunch break and stay late, or come in late and stay late.

Flextime policies may be easier to adopt and implement than paid time policies because they do not increase the amount of break time employees are given. Employees work the same number of hours and take the same number of breaks, but do so on adjusted schedules.

For more information about flextime policies, view the following resources:

- CDC Workplace Health Promotion: Policies/Physical Activity Interventions
- Sample flextime and physical activity policies from the Oregon Health Authority

# **RESOURCE**

# Georgia Paid Time Policy

In this organizational policy, all state public health department employees are able to take 30 minutes per day, 5 days per week, of paid time for participation in physical activity. This policy can serve as an example for other communities that are implementing an organizational, local, or statewide paid time for physical activity policy.

# POLICY IN ACTION

# St. Louis Employees Get Paid to BeeFit

The City of St. Louis Department of Personnel adopted a policy to establish "an official, city-approved employee wellness program." The employee wellness program, BeeFit, is for city employees and includes provisions for appointing a city wellness coordinator, agency wellness coordinators, funding, administrative support, reporting, and evaluation. 59

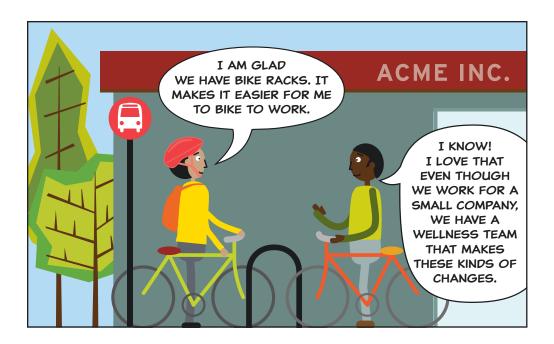
The policy also encourages city departments to allow up to 3 hours of paid administrative leave per employee per week. Employees can use the paid time to participate in eligible BeeFit programs and wellness-related activities. Before participating, employees must receive approval from managers or supervisors to use paid time for participation in physical activity.<sup>59</sup>

Types of BeeFit programs in which employees may participate:

- a 10-week weight loss challenge
- yoga classes
- low-impact aerobics
- smoking cessation classes
- Zumba classes

- diabetes prevention and control programs
- · blood pressure screenings
- wellness screenings
- flu shots

# WORKPLACE WELLNESS PROGRAMS THROUGH TAX CREDITS



Workplace wellness tax credits provide monetary incentives to private employers that develop, adopt, and implement workplace wellness policies and programs. Often, workplace wellness tax credits are created to incentivize small businesses to offer workplace wellness programs because small businesses are more likely to face budget, staff, and capacity challenges.<sup>60</sup> As a result, they are substantially less likely to offer wellness programs. For example, only 39% of employers with less than 100 employees offer a wellness program versus over 60% of employers with more than 100 employees.<sup>60</sup>

By providing businesses with a monetary incentive, workplace wellness tax credits can increase the number of businesses offering workplace wellness programs.<sup>7,61</sup> However, workplace wellness tax credits can be costly and complicated depending on how they are written. This can make them politically challenging policies to implement.



A workplace wellness tax credit promotes the implementation of workplace wellness programs. It can also ensure that wellness programs are designed to improve health. Studies have shown that participation in comprehensive workplace wellness programs increases physical activity, reduces smoking, and improves overall health.<sup>44,60</sup>







# What are the basics?

State legislatures adopt workplace wellness tax credits which often include the following components:



#### Tax Credit Amount

A law establishing a tax credit typically includes the amount of money an employer can receive through the tax credit and the annual tax credit limit. For example, employers could receive \$100 per employee up to \$2000 per tax year.<sup>62</sup> Alternatively, employers could receive a tax credit equal to 25% of the costs associated with implementing a qualified wellness program, up to \$10 000 per year.<sup>63</sup>

# **Business Eligibility Criteria**

To qualify for the tax credit, an employer must document that the business falls within the category of eligible businesses. For example, a business might be required to meet employer size limits (businesses must have fewer than 200 employees to qualify for the credit), offer employee health insurance, offer a wellness program, operate within the state, and/or comply with state business licensing requirements (labor laws and tax laws).<sup>62,63</sup>

### **Wellness Program Requirements**

Additionally, businesses must demonstrate that their workplace wellness program meets certain standards in order to qualify for the tax credit. For example, the policy could require that wellness programs be comprehensive and evidence based, collect employee data through health assessments, and address employee health needs and interests.<sup>64</sup>

#### Application and Certification Process

Wellness tax credit legislation also typically includes information about how businesses apply for and receive the tax credit. For example, tax credit policies may outline required documentation (the name of business, business ID number, etc) and identify application deadlines. These policies usually designate the state agency or agencies responsible for collecting applications, certifying wellness programs, and approving or denying the tax credit.<sup>65</sup>

# What else do we need to know?

# States Often Try to Balance Business Eligibility Criteria and Wellness Program Requirements so They Are Comprehensive but Realistic

The goal of the tax credit is to help more businesses offer wellness programs. If the eligibility criteria and program requirements are too strict, businesses may not be able to take advantage of the tax credit. For example, setting the employer size limit at 25 employees and requiring the wellness program to be comprehensive may not be realistic given that small businesses are less likely to offer any type of wellness program. On the other hand, expanding the definition of small business to include businesses with up to 750 employees and requiring only that a business distribute an employee wellness newsletter may help more businesses participate in the tax credit but won't improve health outcomes.

Employer criteria and program requirements vary by state. For example, Maine<sup>62</sup> and Massachusetts<sup>66</sup> both provide tax credits to employers that develop, implement, and maintain certified workplace wellness programs. However, businesses in Maine must have 20 or fewer employees to qualify for the tax credit<sup>62</sup> while Massachusetts sets the limit at 200 employees.<sup>62</sup> When deciding what requirements may be reasonable, states will often partner with a team of experts — such as chambers of commerce, business associations, and wellness promoters — to conduct an assessment of businesses and determine the best criteria.

# Tax Credits Require an Appropriate and Sustainable Funding Source

In many cases, tax credits require state funding to offset the reduction in state tax revenue. States will often try to identify an appropriate, reliable, and sustainable funding source. Additionally, some state legislatures have been reluctant to implement a workplace wellness tax credit indefinitely. In these cases, states have piloted a tax credit. When this occurs, states often include a requirement to evaluate the implementation of the tax credit. They may then choose to revise and extend the tax credit, as appropriate.

# States Designate an Agency to Administer the Tax Credit and Develop a Plan for Implementing the Tax Credit

A wellness tax credit needs a state agency to collect applications, certify wellness programs, approve or deny applications, recruit businesses to participate, and promote the tax credit. Also, workplace wellness tax credits are more likely to be successful when they are paired with statewide programs aimed at guiding businesses through the staffing and capacity hurdles associated with implementing workplace wellness programs and policies. If a statewide workplace wellness program or initiative exists, it is useful to collaborate with those agencies or organizations to develop a plan for implementing the tax credit.

# Define Evaluation and Reporting Guidelines

The policy may define evaluation and reporting guidelines to help determine what is and is not working with the tax credit. These requirements may include what the report measures, which agency needs to write the report, and when the report is due.

# RESOURCES

# Examples of state workplace wellness tax credits

In addition to Massachusetts (see above profile), Maine has adopted a workplace wellness tax credit.

#### Kentucky Worksite Wellness Tax Credit: A Health Impact Assessment

This resource includes findings from an assessment of the impact a wellness tax credit could have on the physical activity, nutrition, and obesity levels of children whose parents receive work site wellness services. Wellness promoters may be able to follow the steps of this assessment to conduct their own assessment of a wellness tax credit.

# POLICY IN ACTION

# Massachusetts Small Business Wellness Tax Credit

In 2012, Massachusetts adopted the Massachusetts Small Business Wellness Tax Credit. The purpose of the tax credit is to encourage businesses with 200 or fewer employees to adopt evidence-based workplace wellness programs. Small businesses can receive a tax credit equal to 25% of the costs associated with implementing a qualified wellness program, up to \$10 000 per year. The policy appropriated \$15 million per year to the tax credit (October 2013 to December 2017), which is enough to support 1500 small business wellness programs per year.

In consultation with the Division of Insurance, the Massachusetts Department of Public Health certifies the wellness programs and the Massachusetts Department of Revenue administers the tax credit. The public health department and Division of Insurance were also required to establish wellness program requirements and develop a model workplace wellness guide for employers. After a business applies for certification of its wellness program, the health department reviews the wellness program and the business's eligibility and approves or denies the application. To be eligible for the wellness tax credit, businesses and wellness programs must meet the following criteria:

# **Business Eligibility Criteria**

# offer health benefits to all employees

- employ 200 or fewer employees, the majority of whom work in Massachusetts
- comply with all legal obligations of employers and with all applicable labor, licensing, and tax laws
- meet wellness program certification criteria developed by the state health department (see right column)

# Wellness Program Criteria

Wellness programs must be evidence based and tailored to meet employee interests. Businesses must demonstrate that they have met the following requirements:

- · establish an annual budget for wellness expenditures
- · designate a wellness champion
- inform employees of the wellness program using formal communication strategies
- conduct assessments of employee health status
- collect data or information on employee health interests
- identify the most important health issues and interests of employees
- ensure at least 33% of employees participate in at least one element of the wellness program
- include each of the following components: awareness and education, supporting individual behavior change, and environmental supports and policies

To facilitate business participation, the public health department and Division of Insurance have developed several programs and resources that help businesses develop comprehensive wellness programs. One of these is the Prevention and Wellness Trust Fund's Working on Wellness Program.<sup>68</sup> Participating businesses learn how to develop a comprehensive wellness program and have the opportunity to learn more about the workplace wellness tax credit before applying. The public health department has also developed a Model Wellness Guide and a wellness tax credit program guide for businesses interested in applying for the tax credit.

# PRACTICE TIP

# Workplace Wellness Grants: Alternative to Wellness Tax Credits

A workplace wellness grant program is similar to a workplace wellness tax credit in that it encourages businesses to offer workplace wellness programs. Under a workplace wellness grant program, businesses may receive grants as reimbursements for wellness program costs up to a certain amount or as funding to assist with the development of a workplace wellness program.

Just as with a workplace wellness tax credit policy, workplace wellness grant policies include the maximum grant amount, business eligibility criteria, wellness program criteria, and application processes.

Massachusetts,<sup>63</sup> Ohio,<sup>69</sup> and Wisconsin<sup>70</sup> are implementing workplace wellness grant programs.

# POLICIES THAT SUPPORT PHYSICAL ACTIVITY AND WELLNESS **AROUND** THE WORKPLACE

Policies that support active work environments increase physical activity and productivity. But workplace wellness doesn't begin and end at the office.

Community health and employee health are fundamentally connected. The ability for people to walk to and from work, to walk to lunch, or to run errands during the work day without jumping in their cars are all contingent on policies that design, build, and retrofit our communities with sidewalks, bicycle lanes, and other amenities that promote active living.

Research shows that every hour spent in a car is associated with a 6% increase in obesity.<sup>71</sup> Yet 86% of people continue to drive to work and use their car to run errands throughout the day.<sup>72</sup> This is the case even though most people in the United States live within 10 miles of their work, including nearly 1 in 3 who live within 5 miles of their work.<sup>73</sup>

Why, then, do most people drive? Research points to a major culprit: Most of our communities prioritize cars. Many people live and work in places that do not have the basic infrastructure to make walking and biking possible or safe. International research indicates that where alternatives to driving are available, many people will choose these alternatives. For example, more people commute by transit when they live and work within half a mile of transit stops or stations. But 1 in 3 people who live in large cities, 2 in 3 people who live small towns, and 9 in 10 people who live in rural areas do not have access to any public transportation. Additionally, 40% of roads don't have sidewalks, and 43% of people live in communities without any bike lanes. As a result, many of us — including people like Alex and Riley — don't feel safe walking or biking to work. Driving is the easier choice.

The good news is that we can change this. This section highlights four policies\* — complete streets, comprehensive plans, zoning, and transportation demand management — that support physical activity throughout the workday, from the moment we leave our homes to the moment we return at the end of a productive day.

These policies benefit everyone, including government and private sector employees. They make it possible for more people to be physically active — and healthier — in their daily lives, which is why CDC, the surgeon general, and the Community Guide recommend combining land use and transportation policies to promote active living. 81,82,163

MY COMMUTE IS MY GYM.

- BIKE EAST BAY
COALITION<sup>20</sup>

<sup>\*</sup> As with workplace wellness policies, the policies listed here are not exhaustive but represent some of the types of policies that are showing promise at the state and local level.

When communities have these policies, all community members — including workplaces and their employees — benefit from:



# Higher rates of physical activity

Almost 1 in 3 people who use public transit to get to work meet their daily requirements for physical activity.<sup>83</sup> Transit use often includes some form of active transportation.



# Improved health

A man who lives in a walkable, mixed-use area (where homes, commercial buildings, schools, and other daily needs are near each other) is 10 pounds lighter than a similar man who lives in a car-oriented area.<sup>84</sup> Adults who bicycle enjoy lower weight and blood pressure and are less likely to become diabetic.<sup>85</sup> Bicycling also reduces mortality rates by decreasing the incidence of traffic-related deaths and respiratory illnesses.<sup>86</sup>



# Improved air quality

Every 10 minutes, someone dies because of air pollution.<sup>87</sup> Vehicles are the single largest source of air pollution in the United States.<sup>88</sup> Fewer car trips means lower greenhouse gas emissions and decreased levels of air pollution.<sup>89</sup> This, in turn, minimizes people's exposure to pollutants,<sup>90</sup> which is of particular benefit to people with asthma.<sup>91</sup>



# Greater feeling of connectedness

Studies show that people who live and work in walkable environments are more likely to know their neighbors and participate in social activities.<sup>30</sup>



# Stronger economies and more jobs

Walking and biking are good for the local economy. Multiple studies show that people who visit shopping districts by bicycle spend more on a weekly basis than those who visit by car.<sup>92–96</sup> Building infrastructure that supports biking and walking also creates more jobs than traditional road projects.<sup>97</sup>

# PER \$1 MILLION SPENT

Active transportation infrastructure

AMMANIA 1 jobs created

Repaving and widening roads

ANAMANA 8 ighs created

# **COMPLETE STREETS**



Many of our streets are designed primarily for cars, with few features that enable people to walk and bike safely. "Complete streets" policies ensure that streets are accessible to everyone — people of all ages and abilities, whether they are on foot, on a bicycle, using public transit, or in a car. State and local governments can adopt complete streets policies.

If the proposed policy is tailored to meet local needs and people recognize the value of providing multiple methods for moving around communities, complete streets policies are not politically challenging to adopt. Complete streets policies can also be fairly easy and low cost to implement. For example, each street does not require the same features to be "complete," or safe for active travel. A road designed for slow speeds or a wide paved shoulder may be enough to make it safe for walking or bicycling. Other streets may require elements such as painted crosswalks, accessible transit stops, pedestrian signals, street lights, median islands, street trees, sidewalks, parking lanes, benches, bike racks, and bicycle lanes.







# What are the benefits?

Complete streets policies provide a variety of health, environmental, and economic benefits. Effective complete streets policies can accomplish the following:

- support walking, biking, and transit<sup>99</sup>
- improve access for seniors and people with disabilities<sup>100,101</sup>
- increase physical activity for everyone, including workers<sup>100,164</sup>
- promote lower obesity rates<sup>100</sup>

- improve community character 100,165
- increase safety and the perception of safety<sup>100</sup>
- stimulate the local economy<sup>102,166</sup>
- reduce traffic and pollution<sup>102</sup>

#### What are the basics?

Complete streets policies are adopted through various mechanisms including state and local laws, resolutions, executive orders, and planning regulations.<sup>103</sup> Incorporating complete streets features when streets are being built or resurfaced decreases the cost of the policies, as those costs are folded into budgeted transportation project expenses.



As a stand-alone policy, complete streets policies articulate a community's vision that transportation systems and infrastructure improvements provide safe, accessible transportation options for everyone. These policies provide an opportunity to improve compliance with the American Disabilities Act and make physical activity accessible to all people.\* Complete streets policies can be implemented through active transportation plans and incorporated into comprehensive planning and zoning. Because the focus is on travel, implementation generally affects transportation planning. Summarized below are key elements for ideal complete streets policies. Many of these elements were developed by the National Complete Streets Coalition.<sup>104</sup>

#### Include the Community's Vision for Complete Streets<sup>104</sup>

Often the first and most cost-effective component of achieving complete streets is for a community to adopt a complete streets resolution that signifies a local commitment to making streets accessible to all. More than 840 jurisdictions have adopted complete streets policies.<sup>103</sup>

#### Apply to New and Renovation Projects<sup>104</sup>

Once a jurisdiction has adopted a complete streets policy, it can determine which specific strategies it needs to incorporate walkability and bikeability into its street design. These strategies can become part of all new design and all renovation projects. For example, Oregon requires walkways and bikeways be added to roads whenever a street or highway is built.<sup>105</sup>

#### Encourage Street Connectivity for All Modes of Travel<sup>104</sup>

Street connectivity creates more routes to destinations for diverse users, allowing more people to walk or cycle. Some research indicates that street connectivity increases active transportation:<sup>106</sup>

#### Target Communities With the Greatest Need

When implementing complete streets, wellness promoters may want to identify and prioritize high-need areas (including low-income areas, areas around schools where more than half of the students receive free and reduced-price school meals, and areas with high numbers of pedestrian and bicycle collisions). While a complete streets policy applies to all neighborhoods, a policy is stronger if its authors recognize that generally the communities with the worst health outcomes have far fewer parks and open, safe spaces for physical activity and recreation.<sup>107</sup>

<sup>\*</sup> Under Title II of the ADA or Americans With Disabilities Act of 1990 (ADA), Pub. L. No. 101-336, 104 Stat. 328 (1990), the United States Access Board provides guidelines for how streets and sidewalks should be accessible to people with different disabilities. These guidelines are often used in complete street design. For more information visit: www.ada.gov/ada\_title\_II.htm

Streets in lower-income communities, for instance, tend to be more dangerous for people who walk or ride bicycles,<sup>108</sup> due to an absence of safe infrastructure and adequate street design.<sup>109–111</sup> Injuries to people walking and bicycling are much more frequent in lower-income neighborhoods than in higher-income areas.<sup>108</sup> When Louisville, Kentucky, engaged in an initiative to improve health in 12 lower-income neighborhoods, its complete streets policies were identified as key to improving walkability.<sup>99</sup>

#### Ensure That Complete Streets Solutions Meet Community Needs 104

Complete streets policies are designed to reflect and meet community needs. In some cases, this may mean emphasizing one mode of transportation over another or adapting to the needs of particular populations with specific mobility concerns. For example, the policy adopted in Baton Rouge, Louisiana, states, "Special attention in the design and planning of a project shall be given to addressing the needs of people with disabilities and the elderly."

#### Establish Performance Standards<sup>104</sup>

Performance standards and evaluation mechanisms will ensure that any complete streets policy is implemented in a way that meets community needs.

#### Identify Implementation and Evaluation Requirements<sup>104</sup>

Finally, strong complete streets policies include guidance on how to implement and evaluate the policy. For example, Dawson County, Montana, requires the county to track the total number of miles of bike lanes and trails built, the number of compliments and complaints the county receives, and the rate of children walking or biking to school.<sup>113</sup>

#### What else do we need to know?

#### Complete Streets Implementation Can Include a Variety of Policies

Safe, convenient, sufficient, and secure bike parking is essential for encouraging employees to bike to work. Research shows that commuters with access to showers, lockers, and bike parking are much more likely to commute by bicycle.<sup>114</sup> Although complete streets policies are associated with improvements to walking and biking paths, they can lead to the implementation of other policies, such as enhanced green space or increased bike parking and shower amenities. For example, Boulder, Colorado, includes bike parking, bike maintenance, and bike skills training within its complete streets policy.<sup>115</sup>

#### Complete Streets Are Not Just for Urban Areas; Rural Communities Have Also Adopted Complete Streets

Forty-six percent of complete streets policies have been passed in rural communities, small towns, and small suburbs. Complete streets may look different in rural communities than they do in urban centers. For example, roads surrounded by agricultural lands may be "complete" simply by providing wide shoulders with colored or textured surface treatments for safe bicycling and walking. In rural environments, it is especially important to allow design flexibility so that solutions can be context sensitive. Widening main streets, which are also often state highways, compromises pedestrian safety, and can have a negative effect

on small-town economies.<sup>117</sup> But there are many examples where changing main street designs to include wider sidewalks and streetscape improvements has revitalized more suburban and rural downtowns. Complete streets policies at the local level help communicate the town's goals and priorities to their state department of transportation, which may be responsible for maintaining roads.

#### POLICY IN ACTION

#### Complete Streets in Phases

Houghton is a small city in the Upper Peninsula of Michigan with a population of almost 8000. As the population of Houghton began to decline in the 1970s and 1980s, the town established a vision of a healthy community that focused on quality economic growth. The town wanted to create a healthy, sustainable community and attract and retain young professionals who want to live in walkable communities. The leaders of Houghton believed a complete streets design would help the city gain national attention and attract new residents and industry.

In 2010, Houghton became the first town in the Upper Peninsula and the 6th city in Michigan to adopt a complete streets ordinance. The Houghton ordinance calls for transportation improvement projects that "... provide appropriate accommodation for bicyclists, pedestrians, transit users and motorists of all ages and abilities." It further states that all street plans, including new roads and renovations, shall include such accommodations as sidewalks, curb ramps, bike lanes, and signage to "...maximize walkable and bikeable streets wherever feasible." The ordinance also specifies that street projects need to emphasize improving access and safety for all user groups.

In adopting and implementing this policy, the city worked with the local health department to leverage state and federal community building grant opportunities. For example, Houghton received a \$10 000 grant to connect a residential area to the waterfront trail, which then connected residents to the downtown area. Houghton then obtained a \$30 000 grant to build 200 yards of sidewalk, which allowed it to complete a route around the entire town.

As a result of these initiatives, the downtown area that had struggled to fill rental units now has nearly 100% occupancy. The town has also been able to keep businesses in the area. One of the startup businesses in Houghton grew from 12 to 50 employees and needed a new location. The startup was going to move to a tax-free zone outside of the community but at the urging of its employees decided to stay in Houghton to be connected to the trails and recreational opportunities.<sup>120</sup>

#### **RESOURCES**

#### A Guide to Building Healthy Streets

ChangeLab Solutions developed this guide to help communities ensure their complete streets policy creates real, on-the-ground change. It focuses on how public health practitioners, in particular, can collaborate with other agencies to implement complete streets.

#### A Model Complete Streets Resolution for Local Governments

ChangeLab Solutions developed this Model Complete Streets Resolution for Local Governments to help communities everywhere support the development of complete streets. This resource includes model policy language as well as relevant findings, and it can help jurisdictions focus their efforts on the neighborhoods that suffer the most from a lack of pedestrian- and bicycle-friendly infrastructure.

#### Model Comprehensive Plan Language on Complete Streets

ChangeLab Solutions has model language that shows how a comprehensive plan can encourage complete streets policies and promote street design and land use policies that improve safe access to physical activity and active transportation.

#### Urban Bikeway Design Guide

The National Association of City Transportation Officials' guide provides cities with designs that help create complete streets that are safe and enjoyable for people on bikes.

# Complete Streets Local Policy Workbook and The Best Complete Streets Policies of 2014

Smart Growth America provides several resources for city officials interested in complete streets policies.

#### **Evaluating Complete Streets Projects: A Guide for Practitioners**

The AARP and National Complete Streets Coalition has put together a performance measuring tool that outlines ways to develop and deploy performance measures to understand individual projects and connect investments with community goals.

# Making Strides: State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities

The safe routes partnership has compiled this report card that looks at policies in four areas: complete streets and active transportation, safe routes to school and active transportation funding, active neighborhoods and schools, and state physical activity planning and support. The report includes research on how walking, bicycling, and physical activity can improve health.

## **COMPREHENSIVE PLANS**



Comprehensive plans — also called community plans, general plans, and master plans — include a high-level, long-term vision for community development in a city or county and strategies to reach that vision. They often include a variety of components or elements ranging from housing and land use to public safety, open spaces, and culture. They provide guidance when local governments prepare or revise other plans, documents, or policies, such as zoning codes, transportation demand management policies, active transportation plans, or bicycle master plans.

Comprehensive plans can include goals, objectives, and policies to support active transportation both to and from the workplace and during the workday. A comprehensive plan that incorporates health and active transportation will encourage future development to create more walkable and accessible communities that promote physical activity. Yet according to a survey by the American Planning Association, only 31% of planning staff across the country said their comprehensive plan addressed health.<sup>121</sup>

Writing and updating comprehensive plans is generally expensive and politically challenging. Counties and cities often spend several years updating their comprehensive plans. However, within comprehensive plans, there are opportunities to incorporate goals and strategies that will improve health and physical activity. Comprehensive plans are usually updated every 5 to 10 years. During these windows of opportunity, communities may add strategies that support physical activity and health to their local comprehensive plans without significant cost or political resistance.







#### What are the benefits?

Because comprehensive plans provide a framework for how development will occur, they can support workplace wellness by giving direction about the following:

- where businesses, transportation, recreational areas, daily necessities, and housing are located
- how they are designed
- · how they connect to each other
- how much development or level of density there can be in the community

When comprehensive plans effectively incorporate health, they can be a powerful tool for supporting healthy community development. Research has found such plans promote access to physical activity and green spaces, improve physical and mental health, and can reduce stress.<sup>122</sup> For example, a study in Los Angeles found that residents within a mile of a park are 4 times more likely to visit the park once a week.<sup>123</sup> A study in Nebraska found that for every \$1 spent on trails, almost \$3 in medical expenses is saved.<sup>124</sup>

Additionally, many of the policies in comprehensive plans that support physical activity also reduce traffic congestion, air pollution, and injuries from car wrecks. One study found that a 3% increase in active transportation, such as more bike lanes and wider sidewalks, could lead to a 30% decrease in congestion.<sup>125,126</sup>

#### What are the basics?

Cities and counties\* develop comprehensive plans and review and revise those plans periodically.<sup>154,155</sup> The incorporation of a general health framework in the vision and/or specific policies to promote workplace wellness can include provisions that focus on the following key issues.

#### General Health

During the development and revision periods of a comprehensive plan, cities or counties can add a health element and/or integrate health considerations, goals, and policies. Additionally, a vision statement that includes an explicit interest in promoting community health can be provided as a way to incorporate health into the entire comprehensive plan.

#### Physical Activity

Cities or counties often update their plans to include policies that target physical activity. Strategies such as widening sidewalks, providing bike parking, adding bike lanes, and slowing traffic are often incorporated into a comprehensive plan. Making sure that trails within an area are connected and that there are paths for pedestrians and bicyclists can also increase physical activity.



While states may also develop comprehensive plans, this section focuses on local planning documents, which are more common. Local plans are often reviewed by the state and may need to conform to state goals in order to be approved. Some states, such as Washington and Minnesota, have passed legislation that requires cities and counties to update their plans on a regular basis.

#### Connection Between Residential and Workplace Areas

How people commute to and from work is largely influenced by where they live. Proximity and connectivity between houses and workplaces can promote active transportation. Therefore it is important to ensure that the housing element accounts for people's commutes. The housing element identifies locations for affordable housing in the community and can promote neighborhoods with a mix of housing types and a range of affordability levels. The housing element works in concert with the land use element to determine how many housing units are built, where they are located, and how new development will meet needs of current and future residents.

Defining and Locating Mixed-Use or Transit-Oriented Neighborhoods and Districts Having housing, retail, and employment opportunities situated near transit increases the likelihood that people will commute to and from work without driving and have more opportunities for activity. The recently released Community Prevention Services task force on physical activity found that when the built environment supports physical activity, people are more likely to be active as part of their commute and as a recreational activity. Many comprehensive plans support mixed-use development and transit-oriented developments or districts.

#### Improve Safety

Safety is a primary concern for people contemplating active transportation. Policies that include bike and pedestrian safety in the design — such as adequate lighting, maintaining bike and pedestrian crossings, and complete streets principles — will support an active community.

#### What else do we need to know?

#### Engage the Community in the Comprehensive Planning Process

Resident involvement in comprehensive planning has many benefits and is particularly important for improving active transportation. While a city and residents may share goals about promoting active transportation, residents (including local business owners and people who work in or commute from the community) can provide insight into which strategies they are most likely to benefit from. This can help planners determine which strategies are key to improving active transportation.

#### RESOURCES

#### A Foundation for a Healthier Future

ChangeLab Solutions has developed a library of model comprehensive plan policies.

#### The Changemaker's Guide: A Community Planning Curriculum

ChangeLab Solutions developed this curriculum to offer residents resources to meaningfully engage with the policy and planning processes that shape their neighborhoods, cities, and regions. The materials are offered in Spanish and English.

#### How to Create and Implement Healthy General Plans

This toolkit details a wide range of strategies, from building relationships and assessing existing conditions to creating and ultimately implementing policy language. The model health language also provides specific ideas for how to address health concerns through general plans.

#### POLICY IN ACTION

### Examples of Active Transportation in Comprehensive Planning

In 1999, Wisconsin passed its Smart Growth Law, which requires all communities to have a comprehensive plan by 2010.<sup>127</sup> The law states that comprehensive plans shall be the basis for land use decisions and that land use elements must contain a 20-year projection for future planning and community decisions.<sup>128</sup>

As a result, when Milwaukee adopted its comprehensive plan in 2010, it included provisions that were explicitly focused on public health and active transportation.<sup>129</sup> One of the guiding principles of the plan is to "promote public health and healthy communities."<sup>129</sup> In the plan, the city notes that in order to promote a functional public transit system, it needs higher density development around transit, which is not reflected by current zoning codes. The plan, therefore, suggests updating the zoning ordinance to match these recommendations.<sup>126</sup>

The plan also calls for land use that encourages people to live near where they work and to promote wellness and sustainable practices through the following strategies:<sup>129</sup>

- support and expand healthy transportation choices within neighborhoods, such as walking, biking, car sharing, expansion of public transit, and use of alternative fuel vehicles
- promote healthy food choices and provide options such as green markets, community gardens, and urban agriculture
- continue to use the city website and other available resources to promote wellness, energy efficiency, and sustainability
- support access to green space and recreational opportunities
- · expand efforts to reduce neighborhood environmental hazards, such as brownfields\*

<sup>\*</sup> Brownfields refer to former industrial or commercial areas where hazardous substances may linger as a result of prior pollution or contamination.

### ZONING



Zoning is the mechanism by which cities and counties regulate how parcels of land can be developed — both the types of uses allowed and the features of the physical structures that can be built. Zoning works by legally dividing a city or a county into separate geographic districts or "zones" and then applying different rules or regulations that govern the built environment within each zone. Many states require zoning codes to be consistent with a jurisdiction's comprehensive plan. Therefore, zoning codes can also be thought of as policies that bring comprehensive plans to life.

Many early zoning codes were designed to move environmental and industrial hazards away from residential areas and therefore kept different types of activities, such as housing and business, separate. Automobiles allowed people to drive between these separate areas. However, many commercial and retail spaces today do not pose health risks, and communities often benefit from living near where they work, shop, and play.

Zoning codes are important because they regulate land use, building location, building height, parking, and landscaping. Zoning can also regulate or give guidance on providing open space; on-site bike, pedestrian, and transit facilities; and other required building amenities.

Local governments generally adopt zoning codes through legislation such as ordinances. Although zoning codes are often cumbersome and complex, amending zoning codes to reflect community needs is not necessarily complex or expensive. Revising the entire code, however, can be fairly costly and may be politically challenging.







#### What are the benefits?

Zoning is a powerful tool for improving active transportation and physical activity. Zoning codes may allow for the following:

- higher levels of development near transportation<sup>130</sup>
- site plans and building design to be more pedestrian, bike, and transit friendly<sup>131</sup>
- restaurants and retail services in or within walking distance of workplace districts<sup>131</sup>
- on-site open spaces that support physical activity<sup>131</sup>
- a maximum number of parking spaces for new development<sup>132</sup>

Research has shown that zoning codes emphasizing these types of transit-oriented developments increase use of public transportation and active transportation.<sup>133</sup>

#### What are the basics?

Updates and revisions to existing zoning codes must be approved by the city or county council. Zoning policies can encourage workplace wellness by:

# LOCAL

#### **Encouraging Mixed-Use Neighborhoods**

When child care, parks, pharmacies, banks, and health and physical activity facilities — institutions that people use in their daily lives — lie close to homes and workplaces, they are more accessible, which increases walkability and quality of life.<sup>134</sup>

#### **Increasing Transit Access**

Some strategies for improving transit access include allowing or requiring higherdensity and mixed-use development near public transportation. As these strategies have gained popularity, some jurisdictions have allowed developers to build above the allowed height or density restrictions if the property they are building is within a guarter mile of a train or bus station.

#### **Encouraging Infrastructure That Supports Physical Activity**

Communities have encouraged people to walk, bike, or use public transportation by revising their zoning codes to create pedestrian-friendly commercial, civic, and residential neighborhoods.<sup>132</sup> One way to achieve this is to change parking requirements. Parking has pros and cons for pedestrian-friendly streets. Parking provides specific benefits for pedestrians: Street parking generally slows traffic speeds on a street and provides a buffer that increases safety for pedestrians. In addition, many of the pedestrians who access the services and businesses in downtown retail areas and pedestrian-oriented areas arrive by car. On the other hand, the process of parking poses hazards, and parking lots can be dangerous, crowd out pedestrian-oriented uses of space like plazas, and encourage caroriented building styles.

Zoning codes can be revised to balance the need for parking and the benefits of parking with pedestrians' needs. For example, zoning codes can be updated to support shared parking arrangements in transit or pedestrian-heavy districts and neighborhoods as well as reduce traffic through transportation demand

management strategies. Zoning codes can also reduce minimum parking requirements or limit the maximum number of parking spaces allowed in commercial corridors. For example, many communities have revised zoning laws to either reduce or eliminate a requirement for a minimum number of parking spaces in new developments.<sup>135</sup>

#### What else do we need to know?

Updating Zoning Codes Provides an Opportunity to Address Health Inequities Research on health equity indicates that one of the negative effects of zoning codes is that they can create communities where low-income residents and communities of color are more likely to be exposed to environmental hazards.<sup>136</sup> As cities and counties revise their zoning codes to reflect changing concerns of residents, there is an opportunity to revisit some of the environmental burdens on high-risk neighborhoods and address concerns about health inequities while making communities walkable and bikeable. For example, a city could decide to prioritize new park or bike lane development in areas where people have fewer opportunities for physical activity.

#### POLICY IN ACTION

#### Rezoning for the 21st Century

In 2008, Denver became the second largest city to implement form-based zoning.<sup>137</sup> Form-based zoning is a response to some of the problems associated with conventional zoning. While conventional zoning focuses on segregating different types of use (residential, commercial, and industrial), form-based zoning supports development that conforms to the local context. Instead of focusing on the type of use, more consideration is given to how the design of new construction matches existing buildings. For example, form-based zoning might ensure that the height or size of new construction conforms with the neighborhood.

Although form-based zoning is still a rarity, it is gaining popularity as cities confront complex codes that were generally drafted in the mid-20th century, when policies tended to favor suburban sprawl and driving cars. In Denver, the goal was to simplify what had become a very complex zoning code and to facilitate mixed-use development where people can live within walking distance of work, school, and recreational facilities.

Denver's form-based zoning has many goals that support active transportation, including:

- promote development along transit corridors that enhance their function as mixed-use, walkable centers that serve surrounding residential neighborhoods
- provide circulation and access standards that appropriately balance pedestrian and vehicular needs and result in safe pedestrian environments
- provide standards for interconnected streets and development patterns that support all modes of travel, such as walking, bicycling, public transit, and driving

In the 6 years since adoption, the city has seen more development that encourages people to walk, bike, or use public transportation.<sup>138</sup> While the first uses of form-based codes tended to be in planned communities and small towns, form-based codes have been partially implemented in Cincinnati,<sup>139</sup> Los Angeles,<sup>140</sup> Albuquerque,<sup>141</sup> and Atlanta.<sup>142</sup>

#### RESOURCES

#### Move This Way: Making Neighborhoods More Walkable and Bikeable

ChangeLab Solutions developed this guide to explain how to use one set of tools — zoning and subdivision codes — to make communities more walkable and bikeable. It was designed to assist public health practitioners, but it may also be useful to other stakeholders routinely involved with updating and revising zoning and subdivision codes.

#### Pedestrian Friendly Code Directory

ChangeLab Solutions developed this directory to help professionals learn how zoning and subdivision codes can create streets and neighborhoods that are safe, comfortable, and convenient for pedestrians, transit users, and bicyclists.

#### Form-Based Codes: A Step-by-Step Guide for Communities

The Chicago Metropolitan Agency for Planning developed this handbook to provide step-bystep guidance on form-based codes. It explains what form-based codes are and how they are created. Wellness promoters can use this resource to help municipal staff who will be responsible for administering form-based code.

#### Zoning to Encourage Physical Activity

CDC has pulled together a list of resources on how to use zoning to promote physical activity.

#### Planning and Community Health Center

This website provides resources to members of the American Planning Association so they can integrate health into planning practice at all levels, including zoning and comprehensive planning.

# TRANSPORTATION DEMAND MANAGEMENT



Transportation demand management (TDM) refers to a broad range of policies and programs designed to reduce rush hour congestion and encourage people to find alternative ways to commute besides driving alone in cars. TDM policies help communities:

- promote alternatives to driving alone, such as carpools, vanpools, shuttles, or other forms of ride sharing
- encourage people to use public transit, walk, or bike
- impose costs for commuters who choose to drive alone

Many TDM policies target commutes and may impact workplace policies and practices. For example, Boulder, Colorado, requires that any development that will exceed 100 vehicle trips at peak hours create a TDM plan to reduce vehicle trips. It also subsidizes public transit through parking revenue and provides free bus passes to all downtown employees.<sup>143</sup>

Because TDM generally involves tracking travel patterns and developing a variety of strategies to influence these patterns, it can be complicated to adopt and implement. It also requires financial resources to be effective, which can make it politically challenging. However, once implemented, it can provide cost savings and spur economic development.







#### What are the benefits?

The first obvious benefit of TDM policies is that they can reduce traffic congestion. However, TDM also improves air quality by reducing the number of drivers on the road while encouraging transit use and promoting active transportation. Research suggests that people who take public transportation are more likely to meet daily physical activity recommendations.<sup>83,144</sup> Additionally, a study in Wisconsin found that as a result of a TDM program, people traveled 18 million fewer miles in cars, and workers saved \$4.5 million in commuting costs.<sup>145</sup>

#### What are the basics?

TDM policies are adopted by state or local governments. Some states have passed TDM legislation that requires local governments to develop and implement plans to reduce single-occupant commute trips among large employers, including state agencies. For example, Washington State requires all cities to develop an employer-based commute trip reduction program. An agency such as a transportation authority may be responsible for overseeing TDM policies.



Local governments have also implemented their own policies (with or without a state requirement) by adopting a TDM ordinance (often referred to as a commute trip reduction ordinance) or by incorporating TDM policies into local planning documents. TDM strategies may include the following:

#### **Encouraging Ride Share or Car Share Programs**

Ride share and car share programs refer to multiple passengers sharing one vehicle to make a trip. There are a variety of ways to encourage ride share or car share programs, including prioritizing or discounting parking for people who travel together, reducing the costs of tolls for cars with a certain number of occupants, and adding carpool lanes. Similarly, TDM policies that discourage single-occupancy vehicles during peak hours can encourage ride sharing. One way to do this is through congestion pricing. In congestion pricing, a jurisdiction increases the costs of driving in heavily trafficked areas at peak hours by increasing fees for parking or tolls.

#### Offering Transit Incentives

Transit subsidies and pre-tax commuter benefits provide financial incentives to commuters who use alternative modes to commute to work. For example, the IRS allows employers to provide incentives to employees to ride transit or bike to work.\*156 These programs are voluntary, and some companies provide transit benefits without a discount on parking as a way to create greater incentives for people to choose alternatives to driving. State and local jurisdictions can supplement these federal and voluntary subsidies through their own commuter benefit programs.

#### **Making Transit Improvements**

If driving to work alone is the easiest and cheapest option, most people won't look for options to walk, bike, or carpool to work. Therefore, providing reasonable alternatives, such as buses that are affordable, easy to use, and efficient, can play an important role in increasing active transportation to and from work.

<sup>\*</sup> The federal government allows employers to provide a tax free reimbursement of up to \$20 per month for bike commute expenses.

Local governments can do this by making sure that buses or trains run on a regular schedule and travel where people need to go. Subsidizing the costs of transit and providing good information about these services will encourage public transportation. The transportation department in King County, Washington, began offering reduced transit fare for low-income residents to make it easier for them to access employment opportunities and daily needs.<sup>146</sup>

For areas that do not have strong bus or train systems, state and local governments can encourage alternative modes of travel such as vanpools, shuttles, and ferries.

#### **Encouraging Shuttle Bus Programs**

Shuttle bus programs provide connections between workplace districts, regional transit lines, restaurant and retail centers, and other destinations. These programs make it easier for employees to take transit to and from work and run errands without a car during the day. In some communities, employers have voluntarily established their own shuttle programs without support from a local or state policy. However, TDM policies have encouraged more of these programs by requiring large employers to establish shuttle bus programs.

#### What else do we need to know?

#### TDM Can Be Tailored to Local Needs and Capacity

One of the advantages of TDM is that it includes a variety of policies that can be tailored to the specific local and regional context. Many of these strategies are complementary. For example, a city that does not have a strong transit infrastructure might focus on shuttle bus programs and transit incentives, while a city with good transit infrastructure might focus on commute time, transit passes, and congestion parking.

#### RESOURCES

#### Cambridge Parking and Transportation Demand Management Ordinance

This ordinance is recognized for reducing congestion and increasing active transportation. Other communities that are interested in TDM policies can visit this page to find sample policy language and information about implementation. For other state and local examples, check out the following resources from Massachusetts, New Jersey, and Georgia.

#### Reference Sourcebook for Reducing Greenhouse Gas Emissions From Transportation Services: Chapter 5 Transportation Demand Management Strategies

This resource was developed by the Federal Highway Administration. It provides information about 8 TDM strategies including road pricing, parking management, insurance, ride sharing, high-occupancy vehicle lanes, transit incentives, transit improvements, and teleworking.

#### Online TDM Encyclopedia

The Victoria Transportation Policy Institute developed this resource to help communities learn more about strategies that result in more efficient use of transportation resources. While some of the information may be specific to Canada, the resources are still useful for communities in the United States seeking information about various strategies that can be included in TDM policies.

#### POLICY IN ACTION

#### Cambridge, Massachusetts

Cambridge, Massachusetts, adopted a parking and transportation demand management ordinance because residents were concerned about new developments increasing traffic and having a negative effect on air quality.<sup>147</sup>

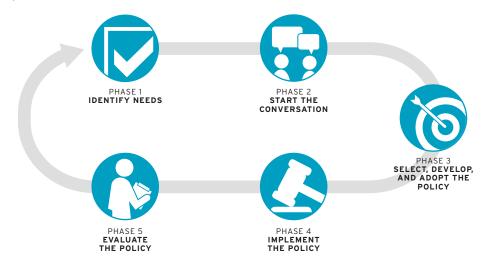
The ordinance required developers to use strategies to reduce the number of people who drive alone in their cars. It applies to all non-residential projects that propose to add 5 or more parking spaces to their developments and encourages developers to adopt the following kinds of strategies:<sup>148</sup>

- operating free shuttle buses
- constructing bus shelters
- · charging market-rate parking fees directly to employees or patrons
- · charging daily parking fees for occasional drivers instead of monthly parking passes
- offering bicycle parking above minimum zoning requirements
- · having showers and lockers
- · offering financial incentives for walking or biking
- · providing emergency rides home
- · offering car and vanpool matching
- · providing priority or discounted high-occupancy vehicle parking
- · disseminating transportation information
- · hiring Cambridge residents
- · having an on-site TDM coordinator

The ordinance is now nationally recognized for having increased commercial growth without increasing traffic. Within 2 years of adoption, the citywide rates of people driving alone in their cars declined even as statewide rates increased.<sup>149</sup> Today, only 35% of Cambridge residents drive to work alone,<sup>150</sup> compared with the regional rate of 76% of commuters who drive to work.<sup>151</sup>

# Moving Right Along: What Is the Process of Policymaking?

The policy process follows the same fundamental steps that wellness promoters use to encourage businesses to implement workplace wellness programs. In both cases, decisionmakers need to know what the issues and possible solutions are. Once they are familiar with them, they can work with partners to adopt, implement, and evaluate the appropriate intervention(s). The policy process is summarized below to help wellness promoters understand how the policies included in this resource are implemented.





## PHASE 1: IDENTIFY NEEDS

Well-crafted policies reflect local data and community input. The process of collecting this information can help communities prioritize needs. Decisionmakers will often use the information collected during this phase to refine and target policies.

Communitywide assessments focused on improving employee health in and around the workplace may answer the following kinds of questions:

- How much physical activity do workers participate in?
- What barriers do workers and employers experience when it comes to encouraging physical activity?
- How does the health of workers affect the community and the economy?
- What can our community legally do? What policies does it already have?
- How interested are community members, policymakers, and stakeholders in policies that support physical activity?

While some of this data may be available from public data sets, such as the American Commuter Survey, Behavioral Risk Factor Surveillance System, and the U.S. Census, community assessments often also include information collected via key informant interviews; surveys (in-person, telephone, or mailed); informal meetings; and seminars or workshops with relevant stakeholders like community residents, employers, and employees. While some of these techniques may be time intensive, they can raise awareness about strategies to support employee wellness in and around the workplace. They also provide an opportunity to identify and recruit potential champions.

Whatever strategy is used to collect data, communitywide workplace wellness assessments will often include the people and organizations such as:

- community members
- decisionmakers
- chambers of commerce
- small business associations
- Latino business associations
- Black business associations
- Asian business associations
- industry-specific business associations

- American Cancer Society
- American Heart Association
- National Coalition for Promoting Physical Activity
- Smart Growth America
- American Planning Association
- National Center for Safe Routes to Schools



## PHASE 2: START THE CONVERSATION

The wellness policies included in this resource must be adopted by a state legislature, a county board, or a city council. As with many laws, enacting wellness policies usually requires a strategic community organizing effort to educate decisionmakers and the public about the health and economic benefits associated with these policies. Some partners are continually engaged throughout the process while others may be needed only at specific points in the process.

Many states already have statewide coalitions on which wellness promoters regularly participate. Illinois,<sup>151</sup> Indiana,<sup>152</sup> and Utah<sup>153</sup> each has active statewide wellness coalitions. These coalitions can educate key stakeholders about the health problems identified in the assessment as well as evidence-based strategies for addressing those problems. Many local communities also form coalitions to prevent obesity, promote workplace wellness, encourage active transportation, or support other kinds of community health. Those coalitions can be important vehicles for engaging stakeholders on wellness strategies in and around the workplace.

Regardless of whether there is an existing coalition to build upon, community organizing requires a variety of dedicated participants. Depending on the issue, representatives of government agencies, businesses, health organizations, and the local community may all have a role to play in supporting these efforts. The table below provides ideas about the types of partners typically engaged for each policy included in this resource.

	,	Workplace	Wellness -	Paid time of employ	Tor physics	Con tax cr	Con Street	hensin	Town Ye plans
	9/5	6/0//0/	Vellnes	aid tin		Selmo	19/01.	P. Co.	6UIII MQ1
Potential Partners			7.0	/ 4 %		/ 0			
Community members	Х	Х			Х	Х	Х	Х	Х
Chambers of commerce	Х	Х			Х				
Various business associations	Х	Х			Х	Х			Х
American Cancer Society	Х	Χ	Χ	Х	Х	Х	Χ	Х	Х
American Heart Association	Х	Х	Х	Х	Х	Х	Х	Х	Х
Local chapters of the National Coalition for Promoting Physical Activity	Х	Х	Х	Х	Х	Х	Х	Х	Х
Smart Growth America	Х					Х	Х	Х	Х
Safe Routes to School	Х					Χ	Х	Χ	Х
Planning department	Х					Χ	Х	Χ	Х
Public works department						Х	Х	Х	Х
Transportation department						Х	Х	Х	Х
Public health department	Х	Х	Х	Х	Χ	Χ	Х	Χ	Х
Office of personnel or human resources	Х	Х	Х	Х					
Elected officials	Х	Х	Х	Х	Χ	Χ	Х	Χ	Х
Relevant local coalitions (eg, obesity prevention, cancer prevention, workplace wellness)	Х	Х	Х	Χ	Х	Х	Х	Х	Х
State department of revenue, board of equalization, or other state tax entity					Х				

# PHASE 3: SELECT, DEVELOP, AND ADOPT A POLICY

Successful implementation and enforcement of any policy starts with strong, clear language that outlines responsibilities and establishes accountability. Effective policies typically begin by answering the following questions:

- What is the evidence base for the policy? Many state or local government policies include findings (sometimes found in "whereas" clauses). These sections explain why the policy is important and why the government is adopting it.
- To whom does the policy apply? Does it apply to people, businesses, or government agencies?
- How do government agencies and/or the private sector comply with the policy? What are the policy's requirements? When is the policy activated? What is the process for meeting the policy's requirements?
- How will government agencies implement or enforce the policy? For example:
  - Which government agency is responsible for the implementation of the policy?
  - What budget does the agency need to implement or enforce the policy?
  - What steps must the agency take to implement the policy fully?
  - How will the agency notify staff and/or businesses about the new policy?
  - What kinds of assistance, resources, and training do businesses or government agencies need to comply with the policy?
  - Are there penalties for noncompliance?
  - What accountability measures are there to ensure government implements or enforces the policy?
- What is the timeline for implementation and/or enforcement? When does the policy go into effect? Are evaluation reports due to stakeholders or decisionmakers?

When developing the policy, decisionmakers may collaborate with a team of experts to finalize language, create buy-in for the policy, and identify potential implementation needs. These experts may include representatives from government agencies that will implement the policy as well as local attorneys or legal counsel with expertise in laws that are relevant to the policy. It may also include wellness promoters, researchers, representatives from businesses or organizations, and community members affected by the policy.

#### PRACTICE TIP

#### Ambitious, yet Feasible

Ideally, all policies that promote workplace wellness will have the biggest public health impact possible. However, there are important political constraints and processes that may make some policies more difficult to adopt. Crafting policy language is always a balancing act between what is going to have the biggest effect and what is likely to be adopted.

To achieve this balance, it is often best to start with a robust vision. For example, imagine after reviewing research and recommendations from the CDC, a workplace wellness team finds that each week employees need 150 minutes of aerobic activity. Using this information, they decide that they want all government employees to receive 3 hours a week of paid time for physical activity. However, they think that leaders may be willing to offer only 1 hour a week. The team may still submit the 3-hour proposal, even if they don't think it will be approved. It is often better to ask for policies that meet community needs and negotiate lower rather than miss the opportunity to have a stronger, more powerful policy.



## PHASE 4: IMPLEMENT THE POLICY

After adopting the policy, it is time to put the policy into practice. To start, it is important to identify who will be implementing the policy and work with them to clarify and streamline implementation. Depending on the policy, wellness promoters may play different roles:

- Promoting the policy by putting up signs or incorporating the policy into existing messages: Wellness promoters can support Walk@Lunch events by sharing local walking trails, event details, and the health benefits of physical activity.
- Educating people who are implementing the policy about strategies to increase its effectiveness: A local health department might share maps of neighborhoods with the highest obesity rates to help planning and transportation departments prioritize the implementation of complete streets.
- Connecting existing programs and policies to the new policy: Wellness
  promoters may want to include information about resources that a new
  transportation demand management policy has created in bike-to-work-day
  promotional materials.
- Implementing the policy: State health departments may support the implementation of a workplace wellness tax credit by reviewing business applications, approving applications, and administering the tax credit.
- Holding agencies accountable to the policy: If a city has adopted a resolution
  creating a wellness council and some of the agencies that are supposed to
  participate in council meetings are not attending, wellness promoters can help
  remind agencies of the policy and why it is important that they attend the meetings.

#### PRACTICE TIP

#### Financially Feasible

Regardless of economic conditions, effective policies can be financially feasible. For example, a citywide workplace wellness policy for government employees can affordably support physical activity by encouraging employees to take advantage of existing government-owned resources like parks, recreational facilities, and trails.

Sometimes, though, policies cannot be implemented with existing resources; they may require annual funding. If the policy requires annual funding — such as a workplace wellness tax credit — decisionmakers will need to allocate funding for the implementation of the policy.

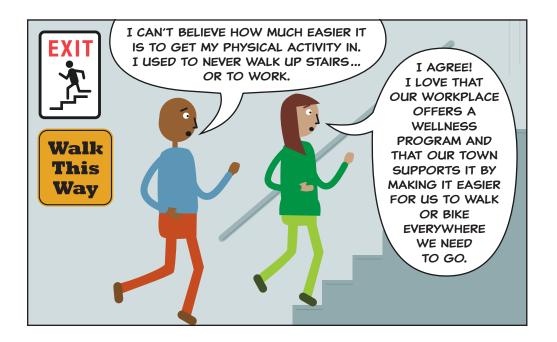


## PHASE 5: EVALUATE THE POLICY

Evaluation can help decisionmakers determine if the policy is addressing the problem originally identified and whether the policy needs to be revised to make it more effective. For example, if the number of people commuting alone in cars was the main concern, evaluators may want to know if single-occupancy vehicle trips have reduced since a transportation demand management policy was implemented. If the number of small businesses with workplace wellness programs was a concern, evaluators may research whether the number of small businesses with these kinds of programs has increased since a tax credit was implemented.

To measure success, evaluators will often use the data collected during the baseline assessment that was described under Phase 1: Identify Needs. They may conduct both process evaluations (for example, the number of new bike lanes added) and impact and outcome evaluations (for example, the number of people who are regularly biking to work as a result of the policy). Evaluators will also assess any unintended consequences (positive and negative) that may arise as a result of the policy. Based on these evaluations, if a state or local government is not meeting its goals, it may revise the policy, alter how it is implementing the policy, or implement other programs and policies that will work in conjunction with the original policy to improve health outcomes.

# Crossing the Finish Line



Employee wellness and community health are fundamentally linked. Healthier workers are more productive, have fewer sick days, and have decreased health care costs. Policies that make communities healthier have seen significant return on investment by reducing health care costs, creating jobs, and increasing tax revenue. Researchers have suggested that more than 50% of economic growth in the United States during the 20th century was the result of improvements in population health.

Changing our environments and the policies that shape our environments takes time. It requires patience, tenacity, and strategy. However, when communities have a vision for what they want to achieve and commit to that vision, they can improve the health of everyone, including people like Alex and Riley.

# Bibliography

- Physical Activity and Health: The Benefits of Physical Activity. Centers for Disease Control and Prevention website. www.cdc.gov/physicalactivity/basics/pa-health. Accessed November 1, 2015.
- How much physical activity do adults need? Centers for Disease Control and Prevention website. www.cdc.gov/physicalactivity/basics/adults/index.htm. Accessed October 11, 2016.
- 3. Facts about Physical Activity. Centers for Disease Control and Prevention website. www.cdc.gov/physicalactivity/data/facts.htm. Accessed March 23, 2017
- Keeping Americans Healthy at Every Stage of Life. Centers for Disease Control and Prevention website. www.cdc.gov/chronicdisease/resources/publications/aag/dnpao.htm. Accessed September 15, 2017.
- 5. Average Commute Times. wNYC website. http://project.wnyc.org/commute-times-us/embed.html#5.00/42.098/-103.562. Accessed March 24, 2017.
- 6. Wizemann T, Thompson D, Rountable on Population Health Improvement, Board on Population Health and Public Health Practice, Institute of Medicine, National Academies of Sciences E and M. Applying a Health Lens to Business Practices, Policies, and Investments. Washington D.C.: The National Academies Press; 2015. www.nap.edu/catalog/21842/applying-a-health-lens-to-business-practices-policies-and-investments. Accessed June 5, 2017.
- Goetzel RZ, Roemer EC, Liss-Levinson RC, Samoly DK. Workplace Health Promotion: Policy Recommendations That Encourage Employers to Support Health Improvement Programs for Their Workers. Atlanta, GA; 2008. http://dhss.alaska.gov/ahcc/Documents/meetings/200905/worksite\_health.pdf. Accessed June 5, 2017.
- Multi-Component Worksite Obesity Prevention. Centers for Disease Control and Prevention website. www.cdc.gov/policy/hst/hi5/worksite/index.html. Accessed March 24, 2017.
- Obesity: Worksite Programs. The Community Guide website. www.thecommunityguide.org/findings/obesity-worksite-programs. Accessed March 24, 2017.
- 10. Kruger J, Yore N, Bauer D, Kohl H. Selected barriers and incentives for worksite health promotion services and policies. *Am J Heal Promot*. 2007;21(5):439-47. www.ncbi.nlm.nih.gov/pubmed/17515009.
- 11. Step It up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities. Washington, D.C.: U.S. Department of Health and Human Services; 2015. www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/#Call to Action. Accessed June 5, 2017.
- U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Washington, D.C.; 2008. https://health.gov/paguidelines/pdf/paguide.pdf. Accessed June 5, 2017.
- 13. Mattke S, Liu H, Caloyeras J, et al. Workplace Wellness Programs Study, Final Report. Santa Monica, CA: RAND Health; 2013. www.dol.gov/agencies/ebsa/researchers/analysis/health-and-welfare/workplace-wellness-programs-study-full-text.pdf. Accessed June 5, 2017.
- 14. Burton W, McCalister K, Chen C, Edington D. The association of health status, worksite fitness center participation, and two measures of productivity. *J Occup Env Med*. 2005;47(4):343-51. www.ncbi.nlm.nih.gov/pubmed/15824625.
- 15. Baker KM, Goetzel RZ, Pei X, et al. Using a return-on-investment estimation model to evaluate outcomes from an obesity management worksite health promotion program. *J Occup Environ Med*. 2008;50(9):981-990. doi:10.1097/JOM.0b013e318184a489.
- Do Workplace Wellness Programs Save Employers Money? Santa Monica, CA: RAND Corporation; 2014. www.rand.org/content/dam/rand/pubs/research\_briefs/RB9700/RB9744/RAND\_RB9744.pdf. Accessed June 5, 2017.
- Trogdon J, Finkelstein E, Reyes M, Dietz W. A return-on-investment simulation model of workplace obesity intervention. J Occup Environ Med. 2009;51(7):751-758. doi:10.1097/JOM.0b013e3181a86656.
- 18. Matson-Koffman DM, Brownstein JN, Neiner JA, Greaney ML. A site-specific literature review of policy and environmental interventions that promote physical activity and nutrition for cardiovascular health: what works? *Am J Heal Promot*. 2005;19(3):167-193. doi:10.4278/0890-1171-19.3.167.
- 19. Piatkowski D, Bronson R, Marshall W, Krizek K. Measuring the impacts of bike-to-work day events and identifying barriers to increased commuter cycling. *J Urban Plan Dev.* 2014;141(4). doi:10.1061/(ASCE)UP.1943-5444.0000239.
- Metropolitan Transportation Commission, Kaiser Permanente, 511 SF Bay. Employer Toolkit. San Francisco, CA; 2016. https://bikeeastbay.org/sites/default/files/documents/2016-EmployerToolkit-web.pdf. Accessed June 5, 2017.
- 21. H.R. 244, 2015 Gen. Assemb., Reg. Sess. (Pa. 2015).
- 22. National Health Observances. healthfinder.gov website. https://healthfinder.gov/NHO/nhoyear.aspx?year=2016. Accessed March 24, 2017.
- 23. National Walk@Lunch Day. Blue Cross and Blue Shield of Alabama website. www.bcbsal.org/web/national-walk-at-lunch-day-2017.html. Accessed March 24, 2017.
- 24. May is Bike Month. The League of American Bicyclists website. http://bikeleague.org/bikemonth. Accessed March 24, 2017.
- 25. H.R. 447, 2000 Gen. Assemb., Reg. Sess. (Pa. 2000).
- Bicycle Friendly State Report Card: Pennyslvania. Washington, D.C.: The League of American Bicyclists; 2015. http://bikeleague.org/sites/default/files/BFS2015\_Pennsylvania.pdf.
- 27. Bicycle Commuting Data. The League of American Bicyclists website. http://bikeleague.org/commutingdata. Accessed March 24, 2017.
- 28. Brisette I, Fisher B, Spicer D, King L. Worksite characteristics and environmental and policy supports for cardiovascular disease prevention in New York state. *Prev Chronic Dis.* 2008;5(2). www.ncbi.nlm.nih.gov/pmc/articles/PMC2396985.
- 29. Kruse MM. From the Basics to Comprehensive Programming. In: Pronk NP, ed. ACSM's Worksite Health Handbook. Champaign, IL: Human Kinetics; 2009:296-307.
- 30. Centers for Disease Control and Prevention. Steps to Wellness: A Guide to Implementing the 2008 Physical Activity Guidelines for Americans in the Workplace. Atlanta, GA; 2012. www.cdc.gov/physicalactivity/worksite-pa/pdf/steps2wellness\_broch14\_508\_tag508\_tag508\_bdf. Accessed June 5, 2017.
- 31. Ky. Rev. Stat. Ann. § 12.550 (West 2012).
- 32. Leadership Council. Illinois Alliance to Prevent Obesity website. http://preventobesityil.org/about-iapo/leadership-council-2. Accessed March 24, 2017.
- 33. Nutrition and Physical Activity at Work. Wellness Council of Indiana website. www.wellnessindiana.org. Accessed March 24, 2017.
- 34. Mid-Cumberland Region County Health Council Historical Information. Rutherford County Wellness Council website. www.rutherfordcountytn.gov/rcwc/history.htm. Accessed March 24, 2017.
- 35. About Us, Worksite Wellness Council of Louisville website, www.louisvilleworksitewellness.org/about-us, Accessed March 24, 2017.
- 36. About IAPO. Illinois Alliance to Prevent Obesity website. http://preventobesityil.org. Accessed March 24, 2017.

- 37. Our Story. The Wellness Council of Indiana website. www.wellnessindiana.org/about-us. Accessed March 24, 2017.
- 38. Kentucky. America's Health Rankings website. www.americashealthrankings.org/KY. Accessed March 24, 2017.
- 39. Ky. Exec. Order No. 2014-114 (Feb. 24, 2014), http://apps.sos.ky.gov/Executive/Journal/execjournalimages/2014-MISC-2014-0114-231509.pdf.
- 40. Kentucky Department of Education. Physical Fitness Program Policy. 2015.
- 41. Final Progress Report of the Beshear Administration. Frankfort, KY: kyhealthnow; 2015. http://chfs.ky.gov/NR/rdonlyres/D32B641A-E004-43C4-8D0D-DE456789539C/0/kyhealthnowFinalProgressReportoftheBeshearAdministrationNov2015.pdf. Accessed June 5, 2017.
- 42. Selected Economic Characteristics, 2011-2015 American Community Survey 5-Year Estimates. U.S. Census Bureau website. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\_15\_5YR\_DP03&src=pt. Accessed March 24, 2017.
- 43. Wellness at Work. Centers for Disease Control and Prevention website. www.cdc.gov/features/workingwellness. Accessed March 24, 2017.
- 44. Goetzel RZ, Mosher Henke R, Tabrizi M, et al. Do workplace health promotion (wellness) programs work? *J Occup Environ Med*. 2014;56(9):927-934. doi:10.1097/JOM.0000000000000276.
- 45. Incentives for Nondiscriminatory Wellness Programs in Group Health Plans, 78 Fed. Reg. 33157 (Jun. 3, 2013).
- 46. The Affordable Care Act and Wellness Programs. Washington, D.C.: U.S. Department of Labor; 2014. www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/fact-sheets/fswellnessprogram.pdf. Accessed June 5, 2017.
- 47. Worksite Wellness Implementation Guide. Mapleton, UT: WellSteps www.wellsteps.com/custom/pdfs/WellSteps\_Implementation\_Guide.pdf. Accessed June 5, 2017.
- 48. Wellness Committee Guide. North Carolina: WorkWell NC; 2012. www.eatsmartmovemorenc.com/Worksites/Toolkit/Committee/Wellness%20Committee%20Guide%201-17-12.pdf. Accessed June 5, 2017.
- 49. Miss. Code. Ann. § 41-97-9 (2010).
- 50. Workplace Health Model. Centers for Disease Control and Prevention website. www.cdc.gov/workplacehealthpromotion/model/index.html. Accessed March 24, 2017.
- Starting a Wellness Program at Your Worksite. Mississippi State Department of Health website. http://msdh.ms.gov/msdhsite/index.cfm/43,0,277,734,html. Accessed March 24, 2017.
- 52. Worksite Health ScoreCard. Centers for Disease Control and Prevention website. www.cdc.gov/workplacehealthpromotion/initiatives/healthscorecard/index.html. Accessed March 24, 2017.
- Moving in the Right Direction. Sacramento, CA: Champions for Change, ChangeLab Solutions www.cdph.ca.gov/programs/NEOPB/Documents/Second FinalWorkplace Wellness (ChangeLabs).pdf. Accessed June 5, 2017.
- 54. Gazmararian J, Elon L, Newsome K, Schild L, Jacobson K. A randomized prospective trial of a worksite intervention program to increase physical activity. *Am J Heal Promot*. 2013;28(1):32-40. doi:10.4278/ajhp.110525-QUAN-220.
- 55. Thiele Schwarz U v., Hasson H. Employee self-rated productivity and objective organizational production levels: effects of worksite health interventions involving reduced work hours and physical exercise. *J Occup Env Med*. 2011;53(8):838-844. doi:10.1097/JOM.0b013e31822589c2.
- 56. South Carolina Department of Health and Environmental Control. *Physical Activity Policy and Employee Request Form.* www.scdhec.gov/Health/Wellness. Accessed June 5, 2017.
- 57. Elaine Russell. Kentucky Cabinet for Health and Family Services. Personal Interview. November 2015.
- 58. Admin. Reg. No. 148 pertaining to City Policy on Employee Wellness Program. www.stlouis-mo.gov/government/departments/personnel/documents/employee-wellness-program.cfm. Accessed September 15, 2008.
- 59. City of St. Louis Department of Personnel Admin. Reg. No. 148. www.stlouis-mo.gov/government/departments/personnel/documents/upload/reg148.pdf. Accessed September 6, 2015.
- 60. Mattke S, Liu H, Caloyeras J, et al. *Workplace Wellness Programs Study*. Boston, MA: Rand Corp; 2013. www.dol.gov/ebsa/pdf/workplacewellnessstudyfinal.pdf. Accessed June 5, 2017.
- 61. Kentucky Department for Public Health. Kentucky Worksite Wellness Tax Credit: A Health Impact Assessment. Frankfort, KY; 2012. www.astho.org/Programs/Environmental-Health/Built-and-Synthetic-Environment/Health-Impact-Assessments/Kentucky-HIA. Accessed June 5, 2017.
- 62. Me. Rev. Stat. Ann. tit. 36, § 5219-FF (2009).
- 63. Massachusetts Wellness Tax Credit. Mass.gov website. www.mass.gov/eohhs/consumer/wellness/health-promotion/massachusetts-wellness-tax-credit.html. Accessed March 27, 2017.
- 64. 105 Mass. Code Regs. 216.005 (2013).
- 65. 105 Mass. Code Regs. 216.006-.010 (2013).
- 66. 105 Mass. Code Regs. 216.000 (2013).
- 67. 105 Mass. Code Regs. 216.000 (2013).
- 68. Working on Wellness Program. Massachusetts Department of Public Health website. www.mass.gov/dph/worksitewellness. Accessed March 27, 2017.
- 69. Workplace Wellness Grant Program. Ohio Bureau of Workers' Compensation website. www.bwc.ohio.gov/employer/programs/safety/wellnessgrants.asp. Accessed March 28, 2017.
- 70. Workplace Wellness Program Grants. Wisconsin Department of Health Services website. www.dhs.wisconsin.gov/physical-activity/worksite/grant.htm. Accessed March 27, 2017.
- 71. Frank L, Andresen M, Schmid T. Obesity relationships with community design, physical activity, and time spent in cars. *Am J Prev Med*. 2004;27(2):87-96. doi:10.1016/j.amepre.2004.04.011.
- McKenzie B. Who Drives to Work? Commuting by Automobile in the United States: 2013. Washington, DC: U.S. Census Bureau; 2015. www.census.gov/hhes/commuting/files/2014/acs-32.pdf. Accessed June 5, 2017.
- 73. U.S. Department of Transportation. From home to work, the average commute is 26.4 minutes. Omnistats. 2003;3(4). www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/omnistats/volume\_03\_issue\_04/pdf/entire.pdf. Accessed June 5, 2017.
- 74. Pucher J, Dijkstra L. Promoting Safe Walking and Cycling to Improve Public Health: Lessons From The Netherlands and Germany. *Am J Public Health*. 2003;93(9):1509-1516. doi:10.2105/AJPH.93.91509.
- 75. Benefits of Complete Streets, Complete Streets Help Create Livable Communities. Washington, D.C.: National Complete Streets Coalition, Smart Growth America www.smartgrowthamerica.org/app/legacy/documents/cs/factsheets/cs-livable.pdf. Accessed June 5, 2017.
- 76. Kolko J. Making the Most of Transit: Density, Employment Growth, and Ridership around New Stations. Public Policy Instituite of California. www.ppic.org/content/pubs/report/R\_211JKR.pdf. Published 2011. Accessed June 5, 2017.
- 77. American Public Transportation Association. Rural Communities Expanding Horizons. Washingto, D.C. www.apta.com/resources/reportsandpublications/Documents/Rural-Communities-APTA-White-Paper.pdf. Accessed June 5, 2017.
- 78. AARP Poll: Fighting Gas Prices, Nearly A Third of Americans Age 50+ Hang Up Their Keys To Walk But Find Streets Inhospitable, Public Transportation Inaccessible. AARP website. www.aarp.org/about-aarp/press-center/info-08-2008/aarp\_poll\_fighting\_gas\_prices\_nearly\_a\_third\_of\_am.html. Accessed October 11, 2016.

- 79. Sidewalks Promote Walking. Washingto, D.C.: Bureau of Transportation Statistics; 2004. www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/special\_reports\_and\_issue\_briefs/issue\_briefs/number\_12/pdf/entire.pdf. Accessed June 5. 2017.
- 80. How Bike Paths and Lanes Make a Difference. U.S. Department of Transportation website. www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/special\_reports\_and\_issue\_briefs/issue\_briefs/number\_11/html/entire.html. Accessed March 27, 2017.
- 81. Bureau of Labor and Statistics. American Time Use Survey. 2015. www.bls.gov/tus/charts. Accessed June 5, 2017.
- 82. Physical Activity: Community-Scale Urban Design and Land Use Policies. The Community Guide website. www.thecommunityguide.org/findings/physical-activity-community-scale-urban-design-and-land-use-policies. Accessed March 29, 2017.
- 83. Besser LM, Dannenberg AL. Walking to public transit: steps to help meet physical activity recommendations. *Am J Prev Med*. 2005;29(4):273-280. doi:10.1016/j.amepre.2005.06.010.
- 84. Frumkin H, Frank L, Jackson R. Urban sprawl and public health: designing, planning, and building for healthy communities. *Environ Health Perspect*. 2005;113(3). www.ncbi.nlm.nih.gov/pmc/articles/PMC1253792.
- 85. Gordon-Larsen P, Boone-Heinonen J, Sidney S, Sternfeld B, Jacobs DR, Lewis CE. Active commuting and cardiovascular disease risk: the CARDIA study. *Arch Intern Med.* 2009;169(13):1216-1223. doi:10.1001/archinternmed.2009.163.
- 86. Rojas-Rueda D, de Nazelle A, Tainio M, Nieuwenhuijsen MJ. The health risks and benefits of cycling in urban environments compared with car use: health impact assessment study. *BMJ*. 2011;343. doi:10.1136/bmj.d4521.
- 87. Caiazzo F, Ashok A, Waitz I a., Yim SHL, Barrett SRH. Air pollution and early deaths in the United States. Part I: Quantifying the impact of major sectors in 2005. Atmos Environ. 2013;79:198-208. doi:10.1016/j.atmosenv.2013.05.081.
- 88. Cars, Trucks, and Air Pollution. Union of Concerned Scientists website. www.ucsusa.org/clean-vehicles/vehicles-air-pollution-and-human-health/cars-trucks-air-pollution#.V\_6IXkOVBJ1. Accessed March 27, 2017.
- 89. Carter DL, Council FM. Factors Contributing to Pedestrian and Bicycle Crashes on Rural Highways. Chapel Hill, NC; 2007. http://pubsindex.trb.org/view/2007/C/802225.
- 90. Dimaggio C, Li G. Effectiveness of a safe routes to school program in preventing school-aged pedestrian injury. *Pediatrics*. 2013;131(2):290-296. doi:10.1542/peds.2012-2182.
- 91. McMurray RG, Harrell JS, Bangdiwala SI, Deng S. Cardiovascular disease risk factors and obesity of rural and urban elementary school children. *J Rural Heal*. 1999;15(4):365-374. doi:10.1111/j.1748-0361.1999.tb00760.x.
- 92. Dekoster J, Schollaert U. Cycling: The Way Ahead for Towns and Cities. Luxembourg: Office for Official Publications of the European Communities; 1999. doi:10.1038/5000250.
- 93. Clifton KJ, Muhs C, Morrissey S, Morrissey T, Currans K, Ritter C. Examining Consumer Behavior and Travel Choices. Portland, OR: Oregon Transportation Research and Education Consortium; 2013. http://ntl.bts.gov/lib/47000/47000/47039/OTREC-RR-12-15\_Final.pdf. Accessed June 5, 2017.
- 94. Buis J, Roelof W. *The Economic Significance of Cycling*. The Hague: Association of Dutch Municipalities; 2000. www.ocs.polito.it/biblioteca/mobilita/EconomicSignificance.pdf. Accessed June 5, 2017.
- 95. Clean Air Partnership. Bike Lanes, On-Street Parking and Business. Toronto, Canada; 2009. www.bikeleague.org/sites/default/files/bikeleague/bikeleague.org/programs/bicyclefriendlyamerica/bicyclefriendlybusiness/pdfs/toronto\_study\_bike\_lanes\_parking.pdf. Accessed June 6, 2017.
- 96. Flusche D. Bicycling Means Business: The Economic Benefits of Bicycling Infrastructure. Washington, D.C.: League of American Bicyclists; 2012. www.advocacyadvance.org/site\_images/content/Final\_Econ\_Update(small).pdf. Accessed June 5, 2017.
- 97. Garrett-Peltier H. Pedestrian and Bicycle Infrastructure: A National Study Of Employment Impacts. Amherst, MA: University of Massachusetts, Political Economy Research Institute; 2011. http://bikeleague.org/sites/default/files/PERI\_Natl\_Study\_June2011.pdf. Accessed June 5, 2017.
- 98. Slotterback CS, Zerger C. Complete Streets from Policy to Project: The Planning and Implementation of Complete Streets at Multiple Scales. Minneapolis, MN: Humphrey School of Public Affairs, University of Minnesota; 2013. www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=2336. Accessed June 5, 2017.
- ChangeLab Solutions. A Guide to Building Healthy Streets. Oakland, CA; 2016. www.changelabsolutions.org/publications/guide-building-healthy-streets. Accessed June 5, 2017.
- A Health in All Policies Approach to Complete Streets Ordinances. Washington D.C.: NRPC; 2014. www.nashuarpc.org/files/3014/2184/6127/Final\_HiAP\_Dec2014\_wApp.pdf. Accessed June 5, 2017.
- 101. Benefits of Complete Streets, Complete Streets Help People with Disabilities. Washington, D.C.: National Complete Streets Coalition, Smart Growth America www.smartgrowthamerica.org/app/legacy/documents/cs/factsheets/cs-disabilities.pdf. Accessed June 5, 2017.
- 102. Complete Streets Stimulate the Local Economy. Washington, D.C.: National Complete Streets Coalition, Smart Growth America www.smartgrowthamerica.org/documents/cs/factsheets/cs-economic.pdf. Accessed June 5, 2017.
- 103. The "Best Complete Streets Policies of 2015" Comes Out April 12. Smart Growth America website. https://smartgrowthamerica.org/the-best-complete-streets-policies-of-2015-comes-out-april-12. Accessed March 27, 2017.
- 104. Changing Complete Streets Policy: A Brief Guidebook. Washington D.C.: National Complete Streets Coalition; Smart Growth America https://smartgrowthamerica.org/app/uploads/2016/09/Changing-Complete-Streets-Policy\_Brief-Guidebook.pdf. Accessed June 5, 2017.
- 105. Federal Highway Administration. State Best Practice Policy for Shoulders and Walkways. Washington, D.C. http://safety.fhwa.dot.gov/ped\_bike/tools\_solve/fhwasa11018/fhwasa11018.pdf. Accessed June 5, 2017.
- 106. Berrigan D, Pickle LW, Dill J. Associations between street connectivity and active transportation. Int J Health Geogr. 2010;9(20). doi:10.1186/1476-072X-9-20.
- 107. Powell LM, Slater S, Chaloupka FJ, Harper D. Availability of physical activity-related facilities and neighborhood demographic and socioeconomic characteristics: A national study. Am J Public Health. 2006;96(9):1676-1680. doi:10.2105/AJPH.2005.065573.
- 108. Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods. GOVERNING Institute website. www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html. Accessed March 27, 2017.
- 109. Gibbs K, Slater S, Nicholson N, Barker D, Chaloupka F. *Income Disparities in Street Features That Encourage Walking*. Chicago, IL; 2012. www.bridgingthegapresearch.org/\_asset/02fpi3/btg\_street\_walkability\_FINAL\_03-09-12.pdf. Accessed June 5, 2017.
- 110. Greenfield J. Why Don't the South and West Sides Have a Fair Share of Bike Facilities? Streetsblog website. http://chi.streetsblog.org/tag/shawn-conley. Published 2014. Accessed June 5, 2015.
- 111. Bicyclists TL of A. The New Majority: Pedaling Towards Equity. 2013:16.
- Smart Growth America. A Complete Streets Vision & Policy Statement. Washington, D.C.; 2014.
   www.smartgrowthamerica.org/app/legacy/documents/cs/policy/cs-la-batonrouge-policy.pdf. Accessed June 5, 2017.
- 113. The Best Complete Street Policies of 2014. Washington, D.C.: National Complete Streets Coalition; Smart Growth America; 2015. www.smartgrowthamerica.org/app/legacy/documents/best-complete-streets-policies-of-2014.pdf. Accessed June 5, 2017.
- 114. Blackford K, Jancey J, Howat P, Ledger M, Lee AH. Office-based physical activity and nutrition intervention: barriers, enablers, and preferred strategies for workplace obesity prevention, perth, Western Australia, 2012. *Prev Chronic Dis*. 2013;10. doi:10.5888/pcd10.130029.

- 115. Since the Workshop: Boulder, CO Continues to Develop New Transportation Strategies for Sustainable Development. Smart Growth America website. https://smartgrowthamerica.org/since-the-workshop-boulder-co-continues-to-develop-new-transportation-strategies-for-sustainable-development. Accessed March 29, 2017.
- 116. Complete Streets in Rural Communities & Small Towns. Washington, D.C.: National Complete Streets Coalition, Smart Growth America; 2010. www.smartgrowthamerica.org/documents/cs/factsheets/cs-rural-2.pdf. Accessed June 5, 2017.
- 117. Twaddell H, Emerine D. NCHRP Report 582: Best Practices to Enhance the Transportation-Land Use Connection in the Rural United States. Washington, D.C.: National Cooperative Highway Research Program (NCHRP); 2007. www.trb.org/main/blurbs/159290.aspx. Accessed June 5, 2017.
- 118. Gibson L. Complete Streets A Guide for Vermont Communities. Burlington, VT: Vermont Department of Health; 2012. http://healthvermont.gov/sites/default/files/documents/2016/11/HPDP\_PA&N Complete\_streets\_guide\_for\_VT\_communities.pdf. Accessed June 5, 2017.
- 119. Houghton, Mich., Ordinance 2010-223 (Dec. 22, 2010).
- 120. Ray Sharp. Western Upper Penninsula. Personal Interview. April 2014.
- Healthy Plan Making. Washington, D.C.: American Planning Association https://planning-org-uploaded-media.s3.amazonaws.com/legacy\_resources/research/publichealth/pdf/healthyplanningreport.pdf. Accessed June 5, 2017.
- 122. Groenewegen P, van den Berg A, de Vries S, Verheij R. Vitamin G: effects of green space on health, well-being, and social safety. *BMC Public Health*. 2006;6(149). doi:10.1186/1471-2458-6-149.
- 123. Cohen D, Sehgal A, Williamson, Stephanie Sturm R, McKenzie TL, Lara R, Lurie N. Park Use and Physical Activity in a Sample of Public Parks in the City of Los Angeles. Santa Monica, CA: RAND Corporation; 2006. www.rand.org/content/dam/rand/pubs/technical\_reports/2006/RAND\_TR357.pdf. Accessed June 5, 2017.
- Active Living Research. The Power of Trails for Promoting Physical Activity in Communities. San Diego, CA; 2011. http://activelivingresearch.org/files/ALR\_Brief\_PowerofTrails\_0.pdf. Accessed June 5, 2017.
- National Traffic Scorecard. 2008 Annual Report. Kirkland, WA: INRIX; 2009. www.wstc.wa.gov/meetings/agendasminutes/agendas/2009/Mar18/Mar18\_BP3\_Scorecard2008WSTC.pdf. Accessed June 5, 2017.
- 126. Gotschi T, Mills K. Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking. Washington, D.C.: Rails-to-Trails Conservancy; 2008. www.railstotrails.org/resourcehandler.ashx?id=2948. Accessed June 5, 2017.
- 127. Wis. Stat. § 66.1001 (1999).
- 128. Wis. Stat. § 66.1001(h).
- 129. Milwaukee Comprehensive Plan. Milwaukee, WI: Department of City Development; 2010. http://city.milwaukee.gov/lmageLibrary/Groups/cityDCD/planning/plans/Citywide/plan/Citywide.pdf. Accessed June 5, 2017.
- 130. Grow Chicago, Growing Near Transit Benefits Us All. Chicago, IL: Metropolitan Planning Council; 2015. http://growchicago.metroplanning.org/vision. Accessed June 5, 2017.
- Move This Way, Making Neighborhoods More Walkable and Bikable. Oakland, CA: ChangeLab Solutions; 2013. www.changelabsolutions.org/publications/move-this-way. Accessed June 5, 2017.
- 132. Addressing Health in the Citywide Plan and Proposed Zoning Code Neighborhood Centers. Philadelphia, PA: Philadelphia City Planning Commission; 2011. http://phila2035.org/wp-content/uploads/2011/02/Phila2035\_Citywide\_Plan\_Health\_Considerations.pdf. Accessed June 5, 2017.
- 133. Thrun E, Leider J, Chriqui J. Exploring the cross-sectional association between transit-oriented development zoning and active travel and transit usage in the United States, 2010-2014. Front Public Heal. 2016;4(113). doi:10.3389/fpubh.2016.00113.
- 134. Kettel-Kahn L, Sobush K, Keener D, Goodman K. Recommended Community Strategies and Measurements to Prevent Obesity in the United States. Atlanta, GA; 2009. www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm. Accessed June 5, 2017.
- 135. Shoup DC. The trouble with minimum parking requirements. Transp Res Part A Policy Pract. 1999;33(7-8):549-574. doi:10.1016/S0965-8564(99)00007-5.
- 136. Rossen LM, Pollack KM. Making the connection between zoning and health disparities. Environ Justice. 2012;5(3):119-127. doi:10.1089/env.2011.0037.
- 137. Denver's New Code Targets Sustainable Growth. HUD USER website. http://archives.huduser.gov/rbc/archives/newsletter/vol10iss4\_2.html. Accessed March 30, 2017.
- 138. Zoning Change Encourages More-Varied Mixed Use in Denver. Multifamily Executive website. www.multifamilyexecutive.com/design-development/zoning-change-encourages-development-in-denver\_o. Accessed March 30, 2017.
- 139. Final Draft of Cincinnati Form-Based Code. City of Cincinnati website.
  www.cincinnati-oh.gov/planning/news/final-draft-of-cincinnati-form-based-code. Accessed March 28, 2017.
- 140. East LA 3rd Street Specific Plan. Los Angeles County Department of Regional Planning website. http://planning.lacounty.gov/ela. Accessed March 27, 2017.
- 141. Form Based Zones. City of Alburquerque website. www.cabq.gov/council/projects/completed-projects/2009/form-based-code. Accessed March 27, 2017.
- 142. Codes Study. PlaceMakers website. www.placemakers.com/wp-content/uploads/2016/03/CodesStudy\_Mar2016.htm. Accessed March 27, 2017.
- 143. A Better City. Establishing an Effective Commute Trip Reduction Policy in Massachusetts. Boston, MA; 2014. www.abettercity.org/docs/Effective TRO Final.pdf. Accessed June 5, 2017.
- 144. Bopp M, Gayah V V., Campbell ME. Examining the link between public transit use and active commuting. *Int J Environ Res Public Health*. 2015;12(4):4256–4274. doi:10.3390/ijerph120404256.
- 145. Madison Area Transportation Planning Board. *Transportation Demand Management (TDM)/Ridesharing*. Madison, WI; 2006. www.madisonareampo.org/planning/documents/TDM Rideshare.pdf. Accessed June 5, 2017.
- 146. Johnson K. Targeting Inequality, This Time on Public Transit. *The New York Times*. www.nytimes.com/2015/03/01/us/targeting-inequality-this-time-on-public-transit.html?\_r=0. Published March 1, 2015.
- 147. Cambridge, Mass. Code Mun. Regs. § 10.18.010.
- 148. Cambridge, Mass. Code Mun. Regs. § 10.18.010-.090.
- 149. Seattle Department of Transportation. Best Practices. In: Seattle Transit Master Plan Briefing Book. Seattle, WA; 2011:17-19. www.seattle.gov/transportation/docs/tmp/briefingbook/SEATTLE%20TMP%207%20BP%20-%20e%20-%20TDM\_new.pdf. Accessed June 5, 2017.
- 150. 2006–2010 Cambridge Journey to Work. Community Development Department, City of Cambridge, Massachusetts website. www.cambridgema.gov/CDD/factsandmaps/transportationdata/2006/10itwtable, Accessed March 30, 2017.
- 151. McKenzie B. Who Drives to Work? Commuting by Automobile in the United States: 2013. American Community Survey Reports. 2015 (ACS-32). Available at: www.census.gov/library/publications/2015/acs/acs-32.html. Accessed June 5, 2017.
- 152. Wellness Council of Indiana website. www.wellnessindiana.org/about-us. Accessed March 27, 2017.
- 153. Utah Worksite Wellness Council wesbite. www.utahworksitewellness.org. Accessed March 27, 2017.
- 154. Wash. Rev. Code § 36.70A.130 (2005).
- 155. Minn. Stat. Ann. § 394.232 (Subd. 6)

- 156. 26 U.S.C. § 132(f)(5)(F)(ii)
- 157. Baron SL, Beard S, Davis LK, et al. Promoting Integrated Approaches to Reducing Health Inequities among Low-Income Workers: Applying a Social Ecological Framework. American journal of industrial medicine. 2014;57(5):539-556. doi:10.1002/ajim.22174. Available at: www.ncbi.nlm.nih.gov/pmc/articles/PMC3843946. Accessed June 6, 2017.
- 158. The Centers for Disease Control and Prevention. Workplace Health Promotion. Available at: www.cdc.gov/workplacehealthpromotion/businesscase/benefits/productivity.html.
- State of Obesity. Cost Containment and Obesity Prevention. 2015. Available at: http://stateofobesity.org/cost-containment. Accessed May 29, 2015.
- 160. Garrett-Peltier H. Pedestian and Bicycle Infrastructure: A National Study Of Employment Impacts. Amherst; 2011. Available at: www.peri.umass.edu/fileadmin/pdf/published\_study/PERI\_ABikes\_June2011.pdf.
- 161. Institute of Medicine. Business Engagement in Building Healthy Communities: Workshop Summary; 2014. Available at: www.iom.edu/Reports/2014/Business-Engagement-Building-Healthy-Communities.aspx.
- 162. Nordhaus WD. The Health of Nations: The Contribution of Improved Health to Living Standards; 2002. Available at: www.nber.org/papers/w8818.pdf.
- 163. The Community Preventive Task Force. Physical Activity: Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design. 2016. Available at: www.thecommunityguide.org/findings/physical-activity-built-environment-approaches. Accessed June 9, 2017.
- 164. Carlton SA, Watson KB, Paul P, Schmid TL, Fulton JE. Understanding the Demographic Differences in Neighborhood Walking Supports. *J. Phys Act Health*, 2017 Apr;14(4):253-264. doi: 10.1123/jpah.2016-0273. Epub 2016 Dec 29. www.ncbi.nlm.nih.gov/pubmed/28032804.
- 165. Carlton SA, Watson KB, Paul P, Schmid TL, Fulton JE. Understanding the Demographic Differences in Neighborhood Walking Supports. J. Phys Act Health, 2017 Apr;14(4):253-264. doi: 10.1123/jpah.2016-0273. Epub 2016 Dec 29. www.ncbi.nlm.nih.gov/pubmed/28032804.
- 166. Measuring what we value: Prioritizing public health to build prosperous regions, Washington D.C.: T4America, American Public Health Association http://t4america.org/2016/09/22/measuring-what-we-value-prioritizing-public-health-to-build-prosperous-regions.
- 167. Mississippi Departments of the Army and Air Force. Policy 10-19 Mississippi National Guard Physical Fitness Program. 2010.

# Acknowledgements

Written by Greta Aschbacher (policy analyst), Saneta deVuono-powell (senior planner), and Rebecca Johnson (senior policy analyst). Additional research and support from Heather Wooten (vice president of programs), Erik Calloway (senior planner), Kim Arroyo Williamson (senior communications production manager), Kiran Sidu (legal fellow), and Brittany Croom (legal fellow). All are affiliated with ChangeLab Solutions.

Additional support from Qaiser Mukhtar, PhD (work site physical activity), Thomas Schmid, PhD (senior health scientist), Ken Rose (senior policy advisor), and Terry O'Toole (senior advisor) of the Centers for Disease Control and Prevention; Ron Goetzel, PhD (senior scientist), Jeff Berko (manager of research projects), and Enid Roemer, PhD (associate scientist and deputy director) of Johns Hopkins Bloomberg School of Public Health; and Diane Dohm, formerly of ChangeLab Solutions.

This toolkit would not have been possible without the inspirational work of state and local health departments. Many thanks to the following for participating in interviews and reviewing drafts:

Elaine Russell and Teresa Lovely (Kentucky Department for Public Health), Shioban Torres (Massachusetts Department of Public Health), Cameron Troxell (Indiana State Personnel Department), Lindsey Bouza (Indiana State Department of Health), Rebecca Guidroz (Louisiana Department of Health and Hospitals), Cheri Hoots (Illinois Department of Public Health), Rebecca Fronberg and Dustin Jones (Utah Department of Health), James Kissee (Washington State Department of Health), Susan Alverson (South Dakota Department of Health), James Martin (Mississippi State Department of Health), Ray Sharp (Western Upper Peninsula Health Department), Tony Kuo (Los Angeles County Department of Public Health), Kristina Giard-Bradford (Tennessee Department of Health), and Heather Gramp (Oregon Health Authority).

Design & illustration: Karen Parry/Black Graphics

This publication was supported by Cooperative Agreement Number 3U38OT000141-03S1 awarded to ChangeLab Solutions and funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

ChangeLab Solutions is a nonprofit organization that provides legal information on matters relating to public health. The legal information in this document does not constitute legal advice or legal representation. For legal advice, readers are advised to consult a lawyer in their state. © 2017 ChangeLab Solutions