



# Capabilities for Public Health Agency Involvement in Land Use and Transportation Decision Making to Increase Active Transportation Opportunity

**OCTOBER 2017**





## BACKGROUND AND PURPOSE

The burden of physical inactivity in the United States is high. An estimated 49% of adults met federal guidelines of at least 150 minutes of physical activity per week in 2015,<sup>1</sup> with only about 25% of children meeting the guideline of 60 minutes of physical activity daily.<sup>2</sup> National health objectives include active transportation as an important way to meet physical activity guidelines.<sup>3</sup> Built environments that provide opportunities for routine walking and bicycling have been shown to support these activity behaviors. Policies that support such built environments include land use and transportation policies that create safe and convenient destinations, pedestrian and bicycle facilities, and networks connecting them.

In most communities, decision making about land use and transportation policies is limited to municipal departments with primary responsibility for the built environment, such as planning and public works. Yet local health departments have a potentially valuable role to play given their mandate to protect and improve the health of the public. Public health officials are uniquely positioned to engage colleagues, elected officials and the public about the health benefits of walkable and bikeable communities, specific built environment characteristics that encourage these behaviors, and policy changes needed to achieve those environments. The National Prevention Strategy (NPS)<sup>4</sup> and the National Physical Activity Plan (NPAP)<sup>5</sup> encourage involvement by the public health sector in decision making about land use and transportation. However, there are gaps in practice, with few public health officials having such involvement to date.<sup>6, 7</sup> Reasons cited for this lack of involvement include lack of resources, limited staffing, and lack of collaboration across municipal departments.<sup>8</sup>

Policy development is a complex process and the range of possible public health sector actions<sup>5</sup> is large, requiring strategic allocation of scarce resources. Many communities conduct assessments of their health needs and outline priorities through mechanisms such as Community Health Assessments (CHA) and Community Health Improvement Plans (CHIP). Those who choose to address physical activity through active transportation must translate their priorities into action.

This document presents a research-based tool that local health departments (LHDs) and other public health sector entities can use to strategically plan their engagement in local processes to improve walking and biking opportunities in their communities. We set out to define specific department-level capabilities and tasks associated with these capabilities. Capabilities are statements of functions that organizations such as LHDs should perform in a defined area of expertise and thus support strategic planning. The menu of options will enable organizations with varying resource levels to (1) assess where their current activities fit into an approach that supports physical activity through the built environment (2) strengthen their capacity over time by outlining options for next steps.

## ACKNOWLEDGEMENTS

This document is a product of a Prevention Research Center in collaboration with the Division of Nutrition, Physical Activity and Obesity. It was supported by Cooperative Agreement Number U48 DP005031-02S1 (Physical Activity Policy Research Network+) from the Centers for Disease Control and Prevention awarded to the UMass Worcester Prevention Research Center. The information in this document represents the views of the authors and does not necessarily represent the official position of the Centers for Disease Control and Prevention.

We gratefully acknowledge the Expert Panel members whose input informed development and validation of the information provided in this document.

## DEVELOPMENT TEAM

Our team included Stephenie Lemon, PhD<sup>1</sup>; Karin Valentine Goins, MPH<sup>1</sup>; Mariana Arcaya, PhD<sup>2</sup>; Semra Aytur, PhD<sup>3</sup>; Katie Heinrich, PhD<sup>4</sup>; Jay Maddock, PhD<sup>5</sup>; Michael Knodler, Jr, PhD<sup>6</sup>; Rodney Lyn, PhD<sup>7</sup>; Robin Riessman, MPH<sup>6</sup>; Thomas Schmid, PhD<sup>8</sup>; Meera Sreedhara, MPH<sup>3</sup>; and Heather Wooten, MCP<sup>9</sup>.

<sup>1</sup>University of Massachusetts Medical School, <sup>2</sup>Massachusetts Institute of Technology, <sup>3</sup>University of New Hampshire, <sup>4</sup>Kansas State University, <sup>5</sup>Texas A&M University, <sup>6</sup>University of Massachusetts Amherst, <sup>7</sup>Georgia State University, <sup>8</sup>US Centers for Disease Control and Prevention, <sup>9</sup>ChangeLab Solutions

## CONTACT US

We welcome questions and suggestions from users. For more information, contact:  
UMass Worcester Prevention Research Center [umwprc@umassmed.edu](mailto:umwprc@umassmed.edu)

## DEVELOPMENT PROCESS

This project utilized a multi-step Delphi process that involved an Expert Panel from across the U.S. representing a range of related disciplines. This is a proven method for establishing consensus on a topic by synthesizing available information and producing recommendations. Expert Panel involvement included three steps:

**1) Key informant interviews:** These interviews solicited input from Expert Panel members into potential roles and responsibilities and capabilities for LHDs to participate in built environment policy at the local level. Thematic analysis of the interviews produced an initial set of 10 capabilities and associated tasks.

**2) Online ranking and rating survey:** This survey asked Expert Panel members to rank the 10 identified capabilities according to **impact** (magnitude of potential effect of local health department participation on physical activity opportunity of built environment) and **feasibility** (ease of implementation based on investment of time and other resources by a local health department). Tasks associated with each capability were rated on **importance** (value of that task to achieving the respective capability). Results indicated that each capability was perceived to be important for LHD involvement but capabilities differed with respect to feasibility of involvement. All capabilities and tasks were therefore retained and organized into three tiers based on relative level of resources required to perform them: fewest resources; moderate resources; and most resources.

**3) Final endorsement survey:** The results of the ranking and rating survey were presented to the Expert Panel members in another survey. The Expert Panel indicated their level of agreement with the approach of categorizing capabilities into tiers and their level of agreement with the classification of each capability. Capabilities that achieved less than 85% agreement with their classification were reassigned based on comments provided by respondents. Three capabilities were moved from fewest resources to moderate resources, while one capability was moved from moderate to most resources.

Our Expert Panel initially included 49 members identified by the development team and colleagues from the Physical Activity Policy Research Network+. These individuals completed key informant interviews. After the interviews, an additional 9 expert panel members participated in the surveys. Expert Panel members represented five disciplines: planning (n=13); transportation/public works (n=11); health (n=19); active transportation (n=10); and administration (n=5). The panel members hailed from 16 states from across the US plus the District of Columbia, worked for municipal, county, regional and state entities, and included frontline, management and executive personnel.

## WHO SHOULD USE THIS DOCUMENT

This tool is intended primarily for use by local health departments, defined broadly as municipal, county, regional or other network-based public health entities. It will be most useful for midsize and smaller local health departments, which typically have the greatest resource constraints. It will particularly benefit departments that have little to no experience working on built environment issues and have prioritized physical activity and active transportation through processes such as CHA and CHIP. Directors, mid-level managers and frontline staff can use the tool for activities such as workplan development, monitoring and reporting. Specific tasks that presume a municipal relationship may not be applicable for all users.

Other potential users include: state health department staff such as physical activity practitioners, who may use it to organize and provide technical assistance to local health departments; other stakeholders in the public health network, such as hospitals, community health centers, and nonprofit and advocacy organizations; and public health training programs preparing the next generation of leaders.

## HOW TO USE THIS DOCUMENT




This document contains two sections:

- Overview of capabilities
- Listing of tasks by capability

The three tiers of capabilities and their respective tasks are represented by colors and symbols for easy reference, as described below.

**Note:** "Resources" is a broad term that includes time, funding, personnel, training, staff commitment, and other variables. Capabilities have been assigned to tiers to aid in strategic planning, and capabilities within a category may require varying amounts of resources.

### Key to Colors and Symbols

Resources and Time Required	Color	Symbol
Fewest	Green	
Moderate	Yellow	
Most	Blue	

The tool does not represent a prescriptive, step-by-step listing of actions. Users can employ the document in several ways. They can assess how their current activities map onto the capabilities and tasks to support their physical activity / active transportation goals and select additional capabilities that fit their goals and resource level. Alternatively, they can select capabilities they want to pursue based on their CHIP or other goals and assess their resource levels against this information.

# CAPABILITIES



## Collaboration with other public officials

Establish and maintain relationships with local, regional and state government partners and across LHD programs.



## Represent health and physical activity interests on land use or transportation policy boards

Voting or non-voting member of boards or committees with responsibilities related to transportation or land use.



## Review and comment on plans, policies, projects

Review of proposed plans, policies, public or private development or transportation-related projects to enhance or mitigate health impact in terms of walking, bicycling and transit access.



## Plan and policy development

Active participation in development of plan or policy.

## Public outreach to community

Community education, engagement, mobilization, promotion; includes participation on community coalitions.



## Project development and design review

Input on transportation project design from early stages and on development projects at pre-application.

## Policy maker education

Increase awareness among officials and develop champions regarding impact on health of land use and transportation decisions.



## Data and assessment

Data collection, analysis, evaluation, reporting, Geographic Information Systems (GIS).



## Dedicated staffing

Fund LHD personnel to work on built environment.



## Funding support

Secure or assist municipal agencies in securing new or dedicated funding for pedestrian and bicycle facilities and initiatives or to support LHD environment work.



## Collaboration with other public officials

Establish and maintain relationships with local, regional and state government partners and across LHD programs.

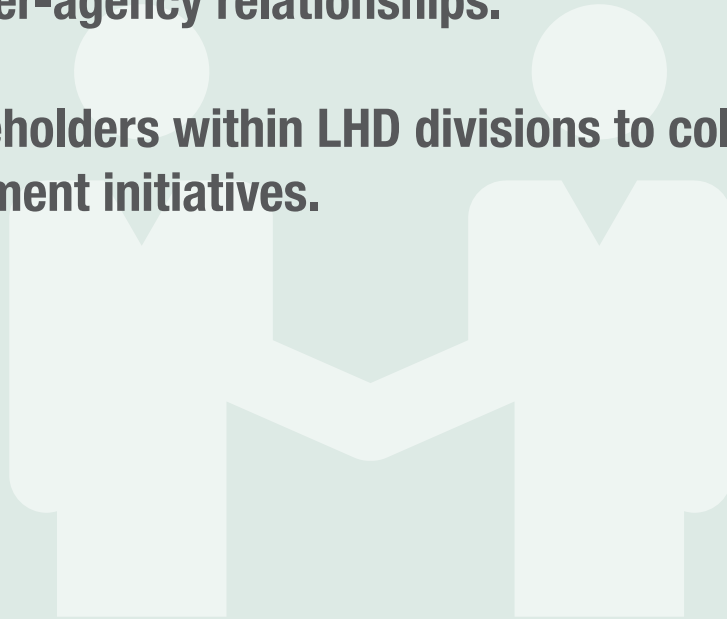
### TASKS

**Identify city planning and transportation staff and their missions.**

**Establish personal relationships with staff in transportation and land use agencies.**

**Formalize inter-agency relationships.**

**Engage stakeholders within LHD divisions to collaborate on built environment initiatives.**







## Represent health and physical activity interests on land use or transportation policy boards

Voting or non-voting member of boards or committees with responsibilities related to transportation or land

### TASKS

**Serve as member of permanent or temporary/informal transportation board or committee such as Metropolitan Planning Organization Advisory, Pedestrian/Bicycle, Complete Streets or Transportation Alternatives Program.**

**Serve as member of permanent or temporary/informal land use committee such as Planning Board/Commission, Zoning Board, comprehensive plan update, interdepartmental review team, or design review team.**



## **Review and comment on plans, policies, projects**

Review of proposed plans, policies, public or private development or transportation-related projects to enhance or mitigate health impact in terms of walking, bicycling and transit access.

### **TASKS**

**Review and comment on transportation project design.**

**Review and comment on transportation project selection.**

**Review and comment on land use plan or update.**

**Review and comment on capital budget regarding opportunities for pedestrian and bicycle facilities.**

**Review proposed local land use or transportation regulation.**

**Review all proposed, new or updated policies for health and physical activity implications.**



## Plan and policy development

Active participation in development of plan or policy.

### TASKS

**Participate in policy development or update such as comprehensive/master plan, area or corridor plan, zoning ordinance, active design standards, or goal-setting to improve walking or livability index score.**

**Orient health boards to the potential for health regulations addressing pedestrian and bicycle accommodation.**

**Provide local health-related data such as epidemiological or health services statistics to support plan or policy development.**



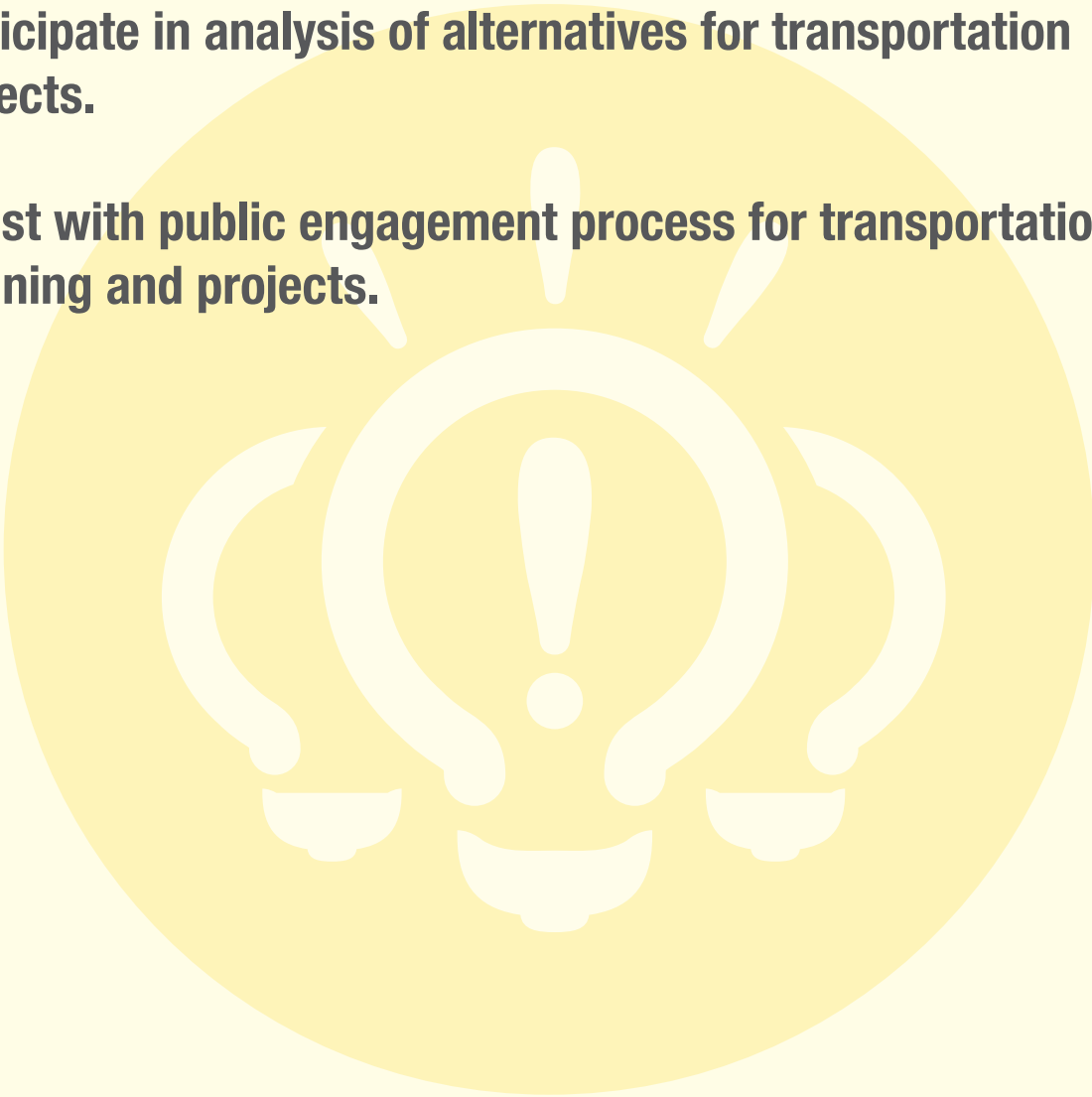
## Project development and design review

Input on transportation project design from early stages and on development projects at pre-application.

### TASKS

**Participate in analysis of alternatives for transportation projects.**

**Assist with public engagement process for transportation planning and projects.**





## Public outreach to community

Community education, engagement, mobilization, promotion; includes participation on community coalitions.

### TASKS

**Educate residents about community design and health, implications of municipal decisions, best practices, and advocacy strategies to build and demonstrate public support.**

**Participate in or lead community design initiatives of community health coalitions.**

**Assist community in engaging with municipal departments responsible for land use and transportation.**

**Lead or participate in Safe Routes to School initiative or Walk or Bike to School Days.**

**Assist neighborhood groups working on place-based initiatives to improve walking or bicycling environment.**

**Promote and track utilization of pedestrian and bicycle facilities.**



## Policy maker education

Increase awareness among officials and develop champions regarding impact on health of land use and transportation decisions.

### TASKS

**Inform elected and appointed officials of news and information on built environment and health through communications and presentations.**

**Conduct training for elected officials about built environment impact on physical activity and health.**

**Organize trainings for land use and transportation staff and board volunteers on physical activity and health impact of their decisions.**

**Institute built environment as regular topic on health board agenda.**



## Data and assessment

Data collection, analysis, evaluation, reporting, Geographic Information Systems (GIS).

### TASKS

**Maintain and manage community-level health statistics data.**

**Maintain updated knowledge of the evidence base regarding the link between health outcomes, health behaviors and built environment indicators at the local level.**

**Compile best practices on community design and health from other communities.**

**Assist with qualitative data collection efforts at the neighborhood level to inform built environment improvements.**

**Identify opportunities to include active transportation in local ordinance and regulation.**

**Identify strategic opportunities for and conduct collaborative health impact assessment of plans, policies or projects.**



## Dedicated staffing

Fund LHD personnel to work on built environment.

### TASKS

**Support dedicated LHD staff who work on built environment and physical activity.**







## Funding support

Secure or assist municipal agencies in securing new or dedicated funding for pedestrian and bicycle facilities and initiatives or to support LHD built environment work.

### TASKS

**Assist other agencies with their grant applications to improve pedestrian or bicycle infrastructure or support initiatives (e.g. Safe Routes to School).**

**Secure dedicated public health funding to improve pedestrian or bicycle infrastructure or support initiatives (e.g. Safe Routes to School).**

## References

1. Ward BW, Clarke TC, Nugent CN, Schiller JS. Early release of selected estimates based on data from the 2015 National Health Interview Survey. National Center for Health Statistics. May 2016; Available from: <http://www.cdc.gov/nchs/nhis.htm>
2. Ward BW, Clarke TC, Nugent CN, Schiller JH, Early Fakhouri THI, Hughes JP, et al. Physical activity in U.S. youth aged 12-15 years, 2012. NCHS data brief, no 141. Hyattsville, MD: National Center for Health Statistics; 2014.
3. Healthy People 2020. Physical Activity. last updated 12/18/14; Available from: <https://www.healthypeople.gov/2020/topics-objectives/topic/physical-activity/objectives>
4. Surgeon General.gov, U.S. Department of Health & Human Services. National Prevention Strategy. 2011; Available from: <http://www.surgeongeneral.gov/priorities/prevention/strategy/>
5. National Physical Activity Plan. Commentaries on Physical Activity and Health. October 2016; Available from: <http://www.physicalactivityplan.org/index.html>
6. Lemon SC, Goins KV, Schneider KL, Brownson RC, Valko CA, Evenson KR, et al. Municipal officials' participation in built environment policy development in the United States. *Am J Health Promot* 2015;30(1):42-9.
7. Goins KV, Ye J, Leep CJ, Robin N, Lemon SC. Local health department engagement in community physical activity policy. *Am J Prev Med* 2016;50(1):57-68.
8. Goins KV, Schneider KL, Brownson R, Carnoske C, Evenson KR, Eyler A, et al. Municipal officials' perceived barriers to consideration of physical activity in community design decision making. *J Public Health Manag Pract* 2013;19(3 Suppl 1):S65-73.





This document is available at [www.umassmed.edu/prc](http://www.umassmed.edu/prc)