Hawaii Complete Streets Policy
Healthy Hawaii Initiative, Hawaii Department of Health
University of Hawaii at Manoa

OVERVIEW

Intent of the intervention:  The intent of Hawaii Complete Streets Policy is to redesign Hawaii’s built environment to support active transportation. In 2009, the Hawaii legislature amended state statutes to require the Hawaii Department of Transportation (HDOT) and Hawaii’s four county transportation departments to adopt complete streets policies that accommodate all users of the roadways, including pedestrians, bicyclists, transit users, motorists and persons of all ages and abilities.

Hawaii Complete Streets is a state-level policy focusing on changes to the physical environment that can lead to increased physical activity (walking and biking) by individuals and families. Since the policy’s evaluation is preliminary, it is considered an emerging intervention.

Intended Population:  All users of the road, including pedestrians, cyclists, and operators of motorized vehicles

Setting(s): All communities

Background: Hawaii’s interest in passing complete streets legislation stemmed from both health and safety concerns, including physical inactivity contributing to increased obesity rates and the lack of sidewalks, inadequate crosswalks, and bicycle lanes contributing to high pedestrian and bicyclist fatality rates.

Using the socio-ecologic model as a framework, the Healthy Hawaii Initiative (HHI) worked with contractor Mark Fenton to develop a series of meetings, planning sessions, and workshops to build grassroots support for the passage of statewide complete streets legislation. Activities spanned 22 months between 2007 and 2009, and involved multiple stakeholders, including educational outreach for legislators and collaborative planning sessions with advocates. In January 2009, complete streets (and safe routes to school) legislation were introduced in the Hawaii State Legislature. Advocacy groups monitored the bill’s progress, testified at hearings, and assisted in rewording the bill. In June 2009, the Complete Streets legislation was signed into law.

Length of time in the field: Legislation signed into law June 2009; effective date January 1, 2010

1 The content of Hawaii Complete Streets policy review and translation is tailored for public health practitioners. While other professionals may find this document useful, it is not intended as a review and translation of Complete Streets policy implementation from the perspective of state and local departments of transportation.

2 Launched in 2000, Healthy Hawaii Initiative (HHI) is a statewide effort focused on reducing three core behaviors that contribute to chronic disease: smoking, inactivity and poor diet. HHI is funded by Tobacco Settlement funds.
HEALTH EQUITY CONSIDERATIONS

As a state-level policy, Hawaii Complete Streets seeks to affect as many people as possible creating a population-level impact. The policy seeks to change the environment to accommodate a wide array of populations and settings.

Hawaii Complete Streets policy is applicable to the following sub-populations:
- Low socio-economic status
- Urban and rural
- All races/ethnicities
- Female, male

IMPLEMENTATION

Hawaii Complete Streets Policy:
- Requires that Hawaii Department of Transportation and county transportation departments adopt a complete streets policy that seeks to reasonably accommodate convenient access and mobility for all users of the public highways.
- Applies to new construction, reconstruction, and maintenance of highways, roads, streets, ways and lanes located within urban, suburban, and rural areas.
- Includes 4 exemptions to implementation 1) safety (areas of unacceptable risk to pedestrians, bicycle or vehicular traffic), 2) sparseness of population, 3) costs excessively disproportionate to need or use, and 4) areas that prohibit bikes and pedestrians, such as interstate highways.
- Establishes a temporary statewide task force a) to review existing state and county highway design standards and guidelines and b) to propose changes to procedures and design manuals.
- Requires task force to report to the legislature. (See Intervention materials for Complete Streets Legislative Report)

Steps for implementing Hawaii’s Complete Streets policy are sequential:
1) State legislation  ➔  2) County resolutions  ➔  3) County design guidelines  ➔  4) Street construction and reconstruction

1) State legislation

Formative work/advocacy efforts to enact statewide Complete Streets policy
The advocacy campaign to develop and pass complete streets legislation in Hawaii targeted influential champions and key stakeholders and focused on capacity building through multidisciplinary partnerships. The campaign carried out activities targeting each level of the socio-ecologic model:
- Individuals: Community members and developers
- Interpersonal: Advocacy groups
- Institutional/Organizational: Transport, planning, education professionals
- Community: County council members, planning commissioners
- Public policy: State legislators and top departmental officials
Over the course of two years, networking and capacity building sessions were held with various complete streets stakeholders, including community members, planners, and policymakers. Sessions were facilitated by expert consultants as well as local advocates. Participants learned about connections between the built environment, active transportation and health. These educational sessions helped grow stakeholder support for complete streets (and Safe Routes to School), which led to the ultimate passage of Act 54, statewide enabling legislation for complete streets.

Center TRT recommends that public health practitioners interested in tips for successful passage of a statewide complete streets policy read, *A Comprehensive Multi-Level Approach for Passing Safe Routes to School and Complete Streets Policies in Hawaii*, which is posted in the Intervention Materials section.

**Hawaii Complete Streets legislative language**
The National Complete Streets Coalition (NCSC) has developed a model policy outline or menu for state complete streets legislation. This policy outline presents recommendations in 14 separate areas for states to consider when writing legislation. Hawaii’s legislation fares favorably when compared with the national coalition’s recommendations. Both the NCSC outline and Hawaii’s legislation are provided in the Intervention Materials section. To track Hawaii’s conformity to model policy recommendations, look for the state abbreviation, HI, in the model policy outline.

**State statute as enabling legislation**
Hawaii Complete Streets legislation authorizes appropriate officials to implement or enforce the law; it does not provide funding for street improvements. The adoption of a complete streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind, including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. Complete streets programs are funded through existing, mainstream Federal Highway funding programs.

2) **County resolutions**

Hawaii state legislation requires county departments of transportation to adopt their own complete streets policy. Kauai County, one of four counties in Hawaii, was the first to pass a Complete Streets Resolution. In September 2010, the Kauai County Council unanimously passed Resolution No. 2010-48 to establish a county complete streets policy (see Intervention Materials for the Resolution). The passage of the resolution was an important and necessary first step to ensure that the intent of the state law becomes reality.

Kauai County has a Nutrition and Physical Activity Coalition — Get Fit Kauai, which created four task forces to address the coalition’s priorities. The Built Environment Task Force (BETF), one of the four, became the lead organization for passing the Kauai County Complete Streets Resolution. The BETF worked closely with the mayor, a complete streets champion. The success of the BETF can be attributed in part to its membership, which includes representation from constituencies essential to getting things done: two county council members, representatives from the county departments of Planning, Housing, Building, Parks and Recreation, Public Works, Heath, Disabilities (ADA Office), Elderly Affairs, Fire, Police, state Transportation Office, and community representatives.
The Task Force debated initially whether to ask the Kauai County Council to pass a complete streets resolution or an ordinance. The Planning Department recommended developing a resolution and crafted appropriate language. The Kauai County Complete Streets resolution passed unanimously, receiving all seven council members’ votes. While pleased with this success, the BETF does not think the resolution is strong enough and is now actively planning for a county ordinance that will carry the weight of law.

3) **Design standards and guidelines:**

State-level activity: Mandated Complete Streets Task Force
Hawaii state legislation called for a Complete Streets Task Force, which recommended the use of agency review to enforce the policy, including review of city, county and state planning documents and projects. To encourage the incorporation of complete streets design treatments in roadway projects, the task force recommended that agencies ensure that zoning codes, design guidelines and manuals, and other regulations and ordinances be consistent with Complete Streets Policy. The State Department of Transportation has a role in revising state and county roadway standards to ensure uniformity across counties. (For more information, see Complete Streets Task Force Legislative Report, November 2010 in the Intervention Materials section.)

County-level activity: Kauai County Complete Streets Implementation Committee
In Kauai County, the Built Environment Task Force formed a complete streets implementation committee [http://www.getfitkauai.com/built-environment.html](http://www.getfitkauai.com/built-environment.html). The implementation committee sought the assistance of the National Complete Streets Coalition, which came to Kauai and presented an implementation workshop for county and state officials. This workshop was the catalyst needed to get the different county departments to work together. The county’s first complete streets implementation project was low cost: the restriping of upcoming road resurfacing projects for bicycle lanes.

The County Planning Department is updating the General Plan to include a Complete Streets component in their scope of work, allowing the county to direct funds to implement Complete Streets as part of capital improvements. The Department of Public Works will update roadway standards.

4) **Street construction and reconstruction**

Kauai County is considering using some streets as pilot projects. The County knows it must lead the way in improving the pedestrian environment in urban centers. A few streets in the county seat are due for redesign.

**Policy enforcement and monitoring for compliance**
State legislation delegates to the state and county departments of transportation the responsibility for complete streets policy enforcement and monitoring for compliance.

**Keys to Success:**

To pass legislation
- Partners from various backgrounds/fields/expertise are essential to building the capability to pass the policy. Ensure strategies are in place for building and maintaining relationships among partners and stakeholders.
• Identify champions, such as community people or legislators who are passionate about the issue and who will work consistently to make it happen.
• Develop a high level of buy-in and support for the policy.

To implement the policy:
• Build a coalition of stakeholders – city planners, retail owners, major employers – to coordinate and maximize the use of resources
• Lay the groundwork for coordination between Planning Department and Public Works Department
• Transportation planner is needed
• Monitor local/county efforts (Kauai County relies on its Built Environment Task Force)
• Provide expert technical assistance to county staff
• Educate public officials and create awareness of the conditions of streets and sidewalks. A creative example is the “Mayor’s Walking Workbus” sponsored by Get Fit Kauai’s Worksite Wellness Task Force and the Mayor’s office. This one-day-a-week, two-mile walk encourages and promotes physical activity among the working and school communities. Approximately 30-50 people participate in the weekly walk.

Barriers to Implementation:
• A state-level policy requires the State Department of Transportation to adopt Complete Streets standards, which can be slow to happen.
• Administrations at both the state and county levels have to commit staff time to Complete Streets implementation, which means funding new positions and hiring more staff.
• Lifespan of roads - Complete Streets only occurs on new roads or ones that are redeveloped.
• Exemptions to the state policy are vague and may be granted without continued vigilance of supporters.

RESOURCES REQUIRED

The Resources Required section of the template is intended for public health practitioners advocating for passage of state and local Complete Streets Policy. It does not address the capacity, infrastructure and funding needed for policy implementation. Policy implementation is under the purview of state and county departments of transportation and local public works departments. Their mandate and funding for Complete Streets policy implementation is beyond the scope of Center TRT’s review and translation.

Resources required for advocacy efforts to enact the policy
Staff: At minimum, one full-time dedicated staff.

Training: Technical assistance from the National Complete Streets Coalition and/or a skilled consultant that can incorporate both public health and built environment principles.

Materials: Model legislation, computer, projector, handouts, and chart paper
Funding: Potential sources are State Department of Health, Centers for Disease Control and Prevention, National Park Service, Safe Routes to School program funds

UNDERLYING THEORY/ EVIDENCE

Strategies Used\(^3\): Complete Streets policy is based on the following evidence-based strategies related to physical activity

Transportation Policy: The promotion of active transport as policy is a promising strategy for increasing physical activity. The modification of road and highway standards and changes to the physical environment, such as requiring bike lanes and sidewalks, supports individuals and families to increase their physical activity. Transportation policies are more effective when used in combination with other strategies for increasing physical activity, including urban planning and policy (e.g., ensuring walking and biking trails are safe and viable alternatives to driving), mass media campaigns (e.g., promotion of alternative forms of transport), and economic incentives (e.g., financial incentives for car or van pools). Transportation policy's evidence of effectiveness to increase physical activity is limited, but one reason for this is the lack of evaluated transportation policy interventions.

Urban Planning and Policy: Urban planning and policy strategies for increasing physical activity include both community-scale urban planning and policy approaches and street-scale urban design. Kauai County’s efforts to implement Complete Streets policy provide excellent examples of both community-scale and street-scale urban planning and design. Community-scale urban planning and policy strategies include: zoning regulations, building codes, permitting policies, land use regulations, and growth and development standards. Street-scale urban planning and policy development strategies generally focus on particular neighborhoods. Common components of street-scale urban design include traffic control measures, sidewalk continuity, and safety enforcement, e.g., improved street crossing signals.

Policy Evaluation
Dr. Jay Maddock of the University of Hawaii at Manoa is charged with evaluating the implementation of state-level complete streets policy.

Environmental change
From April to July 2010, Dr. Maddock and his team completed a baseline surveillance survey to assess the walkability and bikeability of roads in Hawaii using the Pedestrian Environmental Data Scan (PEDS) tool. This study offers baseline results against which future studies will systematically measure the impact of compete streets policy on actual changes at the street-segment level.

Behavioral change
Dr. Maddock and his team conduct a survey annually to document walking and biking behaviors in approximately 3,600 people surveyed by random digit dial. Data from 2009 and 2010 represent baseline and preliminary data points and are presented in the table below. Dr.

\(^3\) A full description of the intervention strategies used can be found on www.center-trt.org with references to the sources of evidence to support the strategies.
Maddock estimates that at least five years of data will be needed to demonstrate behavior change attributable to the passage of complete streets policy.

### Baseline data

**Question: How do you usually get to work?**

<table>
<thead>
<tr>
<th>Mode</th>
<th>2009 Frequency</th>
<th>2009 Percentage</th>
<th>2010 Frequency</th>
<th>2010 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive/carpool</td>
<td>2818</td>
<td>88.7</td>
<td>2446</td>
<td>80.6</td>
</tr>
<tr>
<td>Bus</td>
<td>161</td>
<td>5.1</td>
<td>291</td>
<td>9.6</td>
</tr>
<tr>
<td>Walk</td>
<td>141</td>
<td>4.4</td>
<td>235</td>
<td>7.8</td>
</tr>
<tr>
<td>Bicycle</td>
<td>58</td>
<td>1.8</td>
<td>63</td>
<td>2.1</td>
</tr>
</tbody>
</table>

**Question: On a typical school day, how do your children get to school?**

<table>
<thead>
<tr>
<th>Mode</th>
<th>2009 Frequency</th>
<th>2009 Percentage</th>
<th>2010 Frequency</th>
<th>2010 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take the bus</td>
<td>331</td>
<td>16.0</td>
<td>293</td>
<td>18.2</td>
</tr>
<tr>
<td>Driven in a car/truck/van</td>
<td>1370</td>
<td>66.1</td>
<td>1032</td>
<td>64.1</td>
</tr>
<tr>
<td>Walk</td>
<td>298</td>
<td>14.4</td>
<td>204</td>
<td>12.6</td>
</tr>
<tr>
<td>Bike</td>
<td>19</td>
<td>0.9</td>
<td>22</td>
<td>1.4</td>
</tr>
<tr>
<td>Other non-motorized</td>
<td>4</td>
<td>0.2</td>
<td>16</td>
<td>1.0</td>
</tr>
<tr>
<td>transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home schooled</td>
<td>49</td>
<td>2.4</td>
<td>39</td>
<td>2.4</td>
</tr>
<tr>
<td>No children in school/Does not apply</td>
<td>2</td>
<td>0.1</td>
<td>6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Question: How safe from traffic do you feel while you are walking or riding your bike in your neighborhood?**

<table>
<thead>
<tr>
<th>Safety Level</th>
<th>2009 Frequency</th>
<th>2009 Percentage</th>
<th>2010 Frequency</th>
<th>2010 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely safe</td>
<td>488</td>
<td>26.1</td>
<td>502</td>
<td>27.3</td>
</tr>
<tr>
<td>Quite safe</td>
<td>682</td>
<td>36.4</td>
<td>695</td>
<td>37.8</td>
</tr>
<tr>
<td>Slightly safe</td>
<td>462</td>
<td>24.6</td>
<td>426</td>
<td>23.2</td>
</tr>
<tr>
<td>Not safe at all</td>
<td>241</td>
<td>12.9</td>
<td>216</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Data collection instruments and the results paper of the environmental study, *A State-Wide Observational Assessment of the Pedestrian and Cycling Environment* can be found in the **Intervention Materials** section.

### POTENTIAL PUBLIC HEALTH IMPACT

**REACH** Complete streets policies have potential for broad reach to Hawaii’s population, through change to existing infrastructure and also to areas where new development is underway. Those living in sparsely populated areas may not be reached. Education about the importance of supportive infrastructure that encourages active transportation may increase levels of physical activity.

**EFFECTIVENESS** This policy lays the foundation for change in the way road systems are improved or developed. It has the potential to be an effective catalyst for change and to encourage development of environments that will be more supportive of physical activity. Baseline data on the pedestrian environment, mode of transit to work, and perceived safety
have been collected and plans are underway to recollect data as part of an ongoing evaluation plan.

**ADOPTION** The policy has been enacted at the state level. At this point, one of four counties in Hawaii has enacted a county-level Complete Streets resolution. Complete streets policies are being enacted nationwide, suggesting that they have strong potential for adoption.

**IMPLEMENTATION** A task force established by the Hawaii Department of Transportation met and developed recommendations for implementation. Actually implementing changes to infrastructure may be challenging. The policy allocated no additional funding. Although funding is available from other sources, it is not clear if it will be sufficient. However, a recent report from CompleteStreets.org suggests that these policies can be implemented at little cost to transportation budgets.

**MAINTENANCE** There is high potential for maintenance of this policy. There are already mechanisms in place to monitor roadway development and improvement projects, so this can be an added component. Plans are in place to collect evaluation measures. The statutory changes that come with a state resolution are a high measure of sustainability. Getting county and local communities to also enact these policies and incorporate them into their planning documents will increase sustainability. Influencing the culture and thought process when making improvements to roads or new developments is the first step in actual change. The complete streets policy can be this influence over time.

**INTERVENTION MATERIALS**

**Materials for Download**

Complete streets policies

State-level policy: Act 54 Hawaii Complete Streets Policy

County-level policy: Kauai County Council unanimously passed Resolution No. 2010-48 to establish a Complete Streets policy for the county

Publications and reports

A Comprehensive Multi-Level Approach for Passing Safe Routes to School and Complete Streets Policies in Hawaii — provides a description of the process advocates used to develop and pass complete streets legislation.

Complete Streets Task Force Legislative Report, November 2010

A State-Wide Observational Assessment of the Pedestrian and Cycling Environment in Hawaii, 2010 — describes Hawaii’s completed systematic statewide assessment of its streets to determine how accessible they are to walking and bicycling.
http://www.cdc.gov/pcd/issues/2012/11_0096.htm?s_cid=pcd9e14_e
Data collection instruments

Survey of Adult Residents in Hawaii
This brief survey (10 questions) can be used to assess the pedestrian environmental, active transportation, and safety concerns.

Pedestrian Environment Data Scan (PEDS) Tool
PEDS Protocol
Developed by the University of Maryland
The PEDS instrument was developed to measure environmental features that relate to walking in varied environments in the US. The audit instrument was designed to specifically address pedestrian concerns as well as minimize cost and implementation time. An electronic (palmOS) version of the audit is available, as are extensive training materials. The Pedestrian Environment Data Scan (PEDS) Tool was created by Dr. Kelly Clifton, University of Maryland; Andria Livi, University of Maryland; and Daniel Rodriguez, University of North Carolina, and supported by a grant from The Robert Wood Johnson Foundation Active Living Research program.  http://www.activelivingresearch.org/node/10641

Please click here to see evaluation plan and logic model for complete streets policy.

ADDITIONAL INFORMATION

Web links:
National Complete Streets Coalition
http://www.completestreets.org/

Get Fit Kauai Built Environment Task Force
http://www.getfitkauai.com/built-environment.html

Training/Technical Assistance available:
Contact the National Complete Streets Coalition
http://www.completestreets.org/

Program Contacts:
Marie Williams, Planner
Long-range Planning Division
Kauai County Planning Department
Email: mwilliams@kauai.gov

Bev Brody
Get Fit Kauai Island Coordinator
NPAC: Nutrition & Physical Activity Coalition of Kauai County
John A. Burns School of Medicine
University of Hawaii at Manoa
Email: bbrody1@hawaii.rr.com

Jay Maddock PhD
Professor Director
Office of Public Health Studies
Publications:

