# CHAPTER 1 INTRODUCTION

## 1.1 WHAT IS BIKE PLAN HAWAII?

ike Plan Hawaii is a tool to integrate bicycling into the state's transportation system. The plan outlines how the state intends to accommodate and promote bicycling. It draws on a combination of existing and future bicycle facilities, policies, and programs to ensure a successful bicycle network.

This document updates the previous plan, completed in 1994. Significant progress has been achieved, but more remains to be done.

Since 1994, Federal transportation legislation—beginning with the landmark ISTEA and followed by TEA-21 (see sidebar)—have led to the institutionalization of bicycle planning processes at the state and local levels. The State of Hawaii, Department of Transportation (HDOT) recognizes the importance of bicycling in moving people.

This plan serves as a blueprint to improve 5

This plan serves as a blueprint to improve conditions for the thousands of people statewide who are already bicycling and to encourage new users. It further clarifies HDOT's role in this effort and identifies opportunities to work with other

key agencies

and stakeholders.

A State of Hawaii Master Plan

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BICYCLING TODAY
IS NO LONGER
A "FORGOTTEN"
MODE OF
TRANSPORTATION.

Hawaii's mild climate and outdoor-oriented lifestyle are conducive to bicycling. Waikiki, Oahu.

The original Bike Plan Hawaii, prepared in 1977, and the 1994 update provide the foundations for statewide planning of bicycle facilities.

Bike Plan Hawaii contains the following types of information:

- Objectives and implementing actions
- Inventory of existing bicycle facilities
- Maps of proposed bicycle facility improvements
- Indications of preferred facility type for the various routes, such as signed shared roadways, bike lanes, and shared use paths
- Prioritization of projects
- Strategies for implementation, including potential funding sources
- Documentation of public involvement activities
- References to additional resources

The scope of *Bike Plan Hawaii* excluded the following:

- Bikeways that serve a strictly recreational purpose, such as mountain bike trails
- Bicycle facilities on City and County roads in the Honolulu Primary Urban Center (Kahala to Pearl City). These facilities have been addressed through a separate planning process, culminating in the 1999 Honolulu Bicycle Master Plan.

# FEDERAL TRANSPORTATION POLICIES ON BICYCLING

n 1991, Congress passed historic legislation that set a new direction for transportation policy. The Intermodal Surface Transportation Efficiency Act (ISTEA, called "ice tea") recognized that bicycling and walking are part of a balanced transportation system. ISTEA contained several key provisions to support bicycling:

- A 10% set-aside of Surface Transportation Program funding for transportation enhancements, including-but not limited to-facilities for bicycling.
- Opening of numerous other funding programs to pay for bicycling facilities.
   Projects to protect the safety of bicyclists, including construction of publicly owned bicycle paths and traffic calming measures became eligible for federal safety funds through the Hazard Elimination program. The National Highway System program was expanded to allow for construction of bicycle facilities on land adjacent to any
   NHS route.
- Requirement that all states and Metropolitan Planning Organizations (including the Oahu Metropolitan Planning Organization or OMPO) prepare long-range transportation plans that address bicycling.
- Requirement that each state appoint a bicycle coordinator.

ISTEA was in effect for a six-year period from 1992 to 1997. The follow-up legislation, the Transportation Equity Act for the 21st Century (TEA-21), was signed into law in June 1998 and will expire in 2003. It carried forward the same programs for bicycling

established in ISTEA and included several new and stronger directives:

- State and MPO long-range plans are to "provide consideration of strategies that will increase the safety and security of the transportation system for motorized and non-motorized users (emphasis added)."
- Bicyclists shall be given "due consideration" in state and MPO plans.
- Bicycle facilities are to "be considered, where appropriate, with all new construction and reconstruction of transportation facilities."

23 USC Section 217 also requires that the Secretary of the U.S. Department of Transportation assure that bicycle and pedestrian linkages are maintained and improved, stating that:

- "The Secretary of Transportation shall not approve any project or take any regulatory action that will result in the severance of an existing major route, or have an adverse impact on the safety of non-motorized transportation traffic and light motorcycles, unless such project or regulatory action provides for a reasonable alternate route or such a route already exists."
- "In any case where a highway bridge deck being replaced or rehabilitated with federal financial participation is located on a highway on which bicycles are permitted to operate at each end of such bridge, and the Secretary determines that the safe accommodation of bicycles can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations."

In effect, these policies have created a new standard for consideration of bicycling when road projects are undertaken and are helping to protect existing bicycle routes from being abandoned, eliminated, or disturbed.

#### **Other Relevant Federal Policies**

Americans with Disabilities Act (ADA).

Administered by the Department of Justice, ADA prohibits state and local governments from discriminating against people with disabilities in all programs, services, and activities. The United States Access Board is working to develop guidelines for trails—with implications for shoulder walkways and bikeways and shared use paths. In the meantime, the Federal Highway Administration (FHWA) published Designing Sidewalks and Trails for Access, Part 1 of II: Review of Existing Guidelines and Practices in 1999 and Part II of II in 2001, and recommends that these documents be used when considering how to accommodate persons with disabilities in public rights of way.

Title VI and Environmental Justice. Title VI of the Civil Rights Act of 1964 states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The Environmental Justice Order (Executive Order 12898) was signed in February 1994 and extends Title VI by providing that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations." Together, these federal policies mandate that participation in the transportation decision-making process be open and inclusionary, and that the outcome is an equitable distribution of beneficial and adverse effects.

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#### 1.2 STATE PLANS AND POLICIES ON BICYCLING

#### Hawaii State Plan

he 1996 Hawaii State Plan is the umbrella document in the statewide planning system. It serves as a written guide for the long-range development of the state by describing a desired future for the residents of Hawaii and providing a set of goals, objectives, and policies that are intended to shape the general direction of public and private development.

Transportation objectives established in the Hawaii State Plan include the following:

Sec. 226-17(a)(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economic, safe, and convenient movement of people and goods

Sec. 226-17(b)(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development

Sec. 226-17(b)(11) Encourage safe and convenient use of low-cost, energy-efficient, nonpolluting means of transportation

# **Hawaii Statewide Transportation Plan**

The Hawaii Statewide Transportation Plan was updated and published in September 2002 (www.hawaii.gov/dot/stp/completehstp.pdf). Bicycling has been incorporated into all major policy elements of the plan, but the most specific reference is found under the goal of Mobility and Accessibility.

Goal I:Achieve an integrated multi-modal transportation system that provides mobility and accessibility for people and goods.

Objective 3. To promote alternative air, land, and water transportation mode choices.

C. Facilitate and provide walking and bicycling options that meet statewide and community needs

Examples of actions that would help achieve this objective:

- Provide safe and continuous routes
- Provide educational programs
- Increase the mileage of bicycle lanes and bicycle routes
- Provide wide shoulders along road where bicycle lanes are not feasible or merited
- Sweep and maintain road shoulders and bike/multi-use paths on a regular basis.

## 1.3 WHY DO WE NEED A BICYCLE MASTER PLAN?

Creating a bicycle plan is important for the following reasons:

# It establishes a long-term strategy for bicycle facility improvements

A coherent and interconnected bicycle network requires a long-term commitment and comprehensive vision that extends beyond the piecemeal approach of day-to-day operations. Just as HDOT plans for highways, airports, and harbors, so it should plan for the bicycle network.

# It enables better coordination between transportation and land-use planning

A long-term plan provides an opportunity to consider demographic, land-use, and infrastructure changes in relation to each other. With the direction provided by the bicycle plan, HDOT and other public agencies can organize their efforts and expenditures over the course of many years in order to reach the desired goals and objectives for bicycle accommodation. Private developers are also





Bicycles are a versatile mode of transportation. For example, serving the occupational needs of police bike patrols (above) and the everyday mobility needs of people and their goods (left). Waikiki, Oahu.

alerted to community preferences for future development.

# It increases the ability to leverage funds for bicycle facilities

There are a number of funding sources to implement bicycle projects (see Chapter 8). Being part of an official bicycle plan is a criteria used to select recipients of some federal funds. Conversely, omission from the plan may diminish the ability of bicycle projects to qualify for some types of funding.

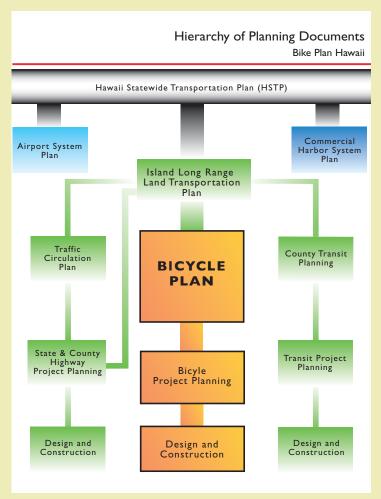
# • It provides a mechanism to achieve community consensus

A formal planning process provides an opportunity to involve the public in the future of the state's bicycle network. Public involvement is essential for a plan's success. First, public input is critical in identifying community needs. A local perspective is needed to know where the important destinations are and to point out the most feasible routes for connecting those destinations. Second, public participation can generate interest for the bicycle program. Without the sustained support and advocacy from citizens, efforts to create a comprehensive bicycle network are likely to lose momentum with decision makers.

# Hierarchy of Transportation Planning Documents in Hawaii

Bike Plan Hawaii is one component of a larger statewide transportation planning process. Figure 1-1 shows the relationship among various planning documents. The Hawaii Statewide Transportation Plan (HSTP) is the most comprehensive document and guides future planning for air, harbor, and land transportation facilities and programs. Of the three, development of the land transportation plan is the only one in which OMPO and the counties lead the planning process. While bicycling issues are addressed in each of the county land transportation plans, the State of Hawaii also sponsors a more comprehensive planning effort focused specifically on bicycling. In the terminology used by HDOT, Bike Plan Hawaii is a modal master plan.

Figure I-I



Master plans are conceptual in nature. After funds are allocated for a specific project, it then proceeds to the next step, which involves preliminary engineering plans to assess the physical feasibility of the project and satisfy applicable environmental regulations and permits. The most detailed set of plans are the actual design or construction drawings with detailed cost estimates.

Implementation of the *Bike Plan Hawaii* is dependent on available funds.

Approval of the plan by HDOT does not guarantee adequate financial resources to carry out the projects, nor can HDOT commit the financial resources of other public agencies or organizations.

## 1.4 HISTORY OF STATEWIDE BICYCLE PLANNING

statewide bicycle master plan was first authorized by the State Legislature in 1974 through Act 218, Session Laws of Hawaii, 1974. The first edition of *Bike Plan Hawaii* was published in 1977. The purpose of the plan, as initially conceived, was to provide a framework for the planning, programming, and construction of bikeways. Though it was formulated before the ISTEA era, *Bike Plan Hawaii* was nonetheless linked to FHWA policies, which already stressed the need for a master plan in order to receive federal-aid participation on eligible bikeway projects. The 1977 plan proposed a statewide network with some 1,041 miles of bikeways. The experimental nature of the first plan is seen in the phasing scheme which designated a "demonstration phase during which the necessary knowledge and experience can be gained for application to future bikeway planning...[S]ubsequent development of bikeways would depend largely on the success or failure of these demonstration bikeways."

Update of the 1977 plan began 15 years later (House Resolution 346 and Senate Concurrent Resolution No. 145 in 1987, and Senate Resolution 31 in 1989) and resulted in the 1994 edition of *Bike Plan Hawaii*. Its stated purpose was "to serve as a reaffirmation of legislative mandates, statutory pronouncements, and public requests that the bicycle be more seriously considered as a viable mode of transportation as well as a positive form of recreation." Although ISTEA had passed several years before the plan was completed, the magnitude of its impact in reorienting transportation priorities and funding potential was not yet fully realized. The 1994 plan recommended 1,309 miles of new bikeways.

What has happened since 1994? To what extent have the recommendations been implemented?

• There are 208 miles of bicycle facilities throughout the state; doubling from 103 miles in 1994.

• HDOT established the position of Bicycle and Pedestrian Coordinator in 1994.

 The City and County of Honolulu, Department of Transportation Services appointed a Bicycle Coordinator, also in 1994.

 All buses on Oahu have been equipped with bike racks. Rack usage exceeds 30,000 loadings per month. Hawaii County buses can accommodate bicycles, but advance arrangements are recommended.

 Bicycle parking in urban Honolulu has become more convenient with the installation of more than 400 bike parking racks.

 Effective January 2001, all children under 16 years of age are required by State law to wear a helmet when bicycling on a street, bikeway, or any other public property.

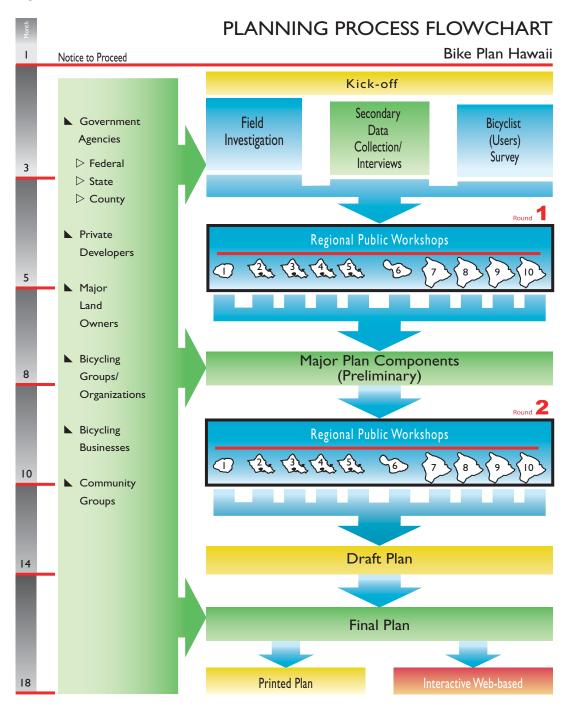
 Bicycling maps have been published for the islands of Oahu, Maui, and Hawaii.



# 1.5 How was BIKE PLAN HAWAII DEVELOPED?

Figure 1-2 shows the main tasks of the planning process along a time line.

Figure 1-2



**Data collection.** The planning effort began in June 2001 with an extensive data gathering effort. Data were collected from various sources (see Chapter 3) and all existing and proposed bikeways shown in the 1994 Plan were field-checked and videotaped.

**Initial consultation.** Representatives of all four County governments were briefed during the early consultation phase, including members of the Technical Advisory Committees (part of the organizational structure of the State Transportation Planning process) and the OMPO staff and Citizen Advisory Committee. These meetings were followed by more detailed, one-on-one meetings with officials in the County public works, planning, and police departments. Briefings were held for elected officials and informal meetings convened with bicycling advocate groups.

Working maps. Large-scale maps were prepared showing all existing and proposed routes.

**Public Meeting and Workshop 1.** During November 2001, public meetings were held at ten venues on the four major islands (see Table 1-1). An eleventh meeting on Molokai was held in February 2002. These events drew 159 participants, representing a diverse group of residents, bicycling advocates, owners of bicycling-related businesses, students, land developers, State and

County legislators, and government officials.

The purpose of the meeting was twofold.

Information about the planning process was presented during the first half. The second half was structured as a charrette or workshop with small groups adding, deleting, and revising bikeway proposals on the working maps.

Participants were also asked to complete a bicycle user's survey.

PROCEEDINGS OF THE TWO
ROUNDS OF PUBLIC MEETINGS
CAN BE FOUND IN THE
SUPPLEMENTAL VOLUME ON
COMMUNITY PARTICIPATION IN
BIKE PLAN HAWAII.



Workshop I participants listen to an introductory briefing and learn about the planning process.
Hilo, Hawaii.



Participants draw bikeway alignments and annotate maps with comments about existing bike routes and ideas for new ones. Kona, Hawaii.

**Surveys.** Additional information about user characteristics, needs, and preferences were obtained through three surveys: one of workshop participants, a random telephone survey, and a survey of school administrators. The findings of these surveys are presented in Chapters 3 and 4; questionnaires are found in Appendix A.



Workshop 2 participants had a chance to review and discuss the preliminary bikeway proposals.

Wailuku, Maui.

All participants were given a set of self-sticking dots to indicate their preferred bikeway proposals.



Public Meeting and Workshop 2. A second round of public meetings took place in May 2002 (see Table 1-1). A total of 148 persons attended the 10 workshops. Major agenda items included a review of proposed objectives, refinement of the future bikeway network, and feedback on criteria to evaluate the proposals. The interactive or workshop component of the meetings focused on maps that now contained bikeway proposals generated at the first meeting. Given the large number of possible projects and funding limitations, participants were asked to help prioritize them.

Public Review of the Draft Plan. Following the release of the Draft Plan, there will be a 30-day review period during which comments will be received from government agencies and the public. HDOT will consider all comments and provide written responses indicating what actions were taken in preparing the Final Plan.

Final Plan. After final modification of the plan, it was published in hardcopy, CD-ROM, and online formats. The plan is available at public libraries and community college and university libraries. It can also be viewed and/or downloaded from the Internet at http://www.hawaii.gov/dot/highways/bikeped/index.htm

# Compliance with Title VI and Environmental Justice

Several measures were taken to broaden and encourage participation from minority and low-income communities.

- Public meetings convened in dispersed geographic locations throughout the state
- Notice of meetings publicized through mass media, neighborhood boards and community associations, legislators and councilmembers, bicycling advocacy groups, and flyers posted at bike shops and community bulletin boards
- Random telephone survey with respondents constituting a diverse ethnic and economic profile.

Table I-I:
Schedule of Public Meetings-Workshops

Round I	Round 2
Lihue, November 7, 2001	Lihue, May 2, 2002
Ko Olina, November 1, 2001	Kapolei, May 13, 2002
Kaneohe, November 13, 2001	Kaneohe, April 30, 2002
Aina Haina, November 14, 2001	Hawaii Kai, April 29, 2002
Mililani Mauka, November 15, 2001	Mililani, May 14, 2002
Wailuku, November 8, 2001	Wailuku, May 1, 2002
Kaunakakai, February 28, 2002	
Hilo, November 3, 2001	Hilo, May 9, 2002
Puna District, November 3, 2001	Pahoa, May 8, 2002
Waimea, November 5, 2001	Waimea, May 7, 2002
Kailua-Kona, November 6, 2001	Kailua-Kona, May 6, 2002
	Lihue, November 7, 2001  Ko Olina, November 1, 2001  Kaneohe, November 13, 2001  Aina Haina, November 14, 2001  Mililani Mauka, November 15, 2001  Wailuku, November 8, 2001  Kaunakakai, February 28, 2002  Hilo, November 3, 2001  Puna District, November 3, 2001  Waimea, November 5, 2001

# 1.6 WHAT'S NEW ABOUT BIKE PLAN HAWAII?

- Like its predecessors, Bike Plan Hawaii is a facilities-oriented plan, but it gives greater prominence to non-construction objectives: education, enforcement, economics, and encouragement.
- It recommends the addition of approximately 1,722 miles of new bikeways to the statewide network (compared to 1,309 new miles in the 1994 plan). The current master plan improves connectivity between existing and proposed facilities, particularly within communities, and there is a significant increase in proposed off-road paths.
- Excluded are bikeway proposals for county roads in urban Honolulu. Because the City and County of Honolulu prepared a separate Honolulu Bicycle Master Plan in 1999, the recommendations of this plan are folded into Bike Plan Hawaii.

Bicyclist finds a shady spot to rest and take in the view. Kona, Hawaii.



- The section on implementation has been expanded. A wider array of potential funding sources is identified. The implementation process is discussed more thoroughly with special attention to points at which individuals and organizations can initiate, support, review, and critique bicycling programs and projects.
- The plan will be issued in print and on CD-ROMs, and it will also be available online, thereby reaching a broader audience.
   The website version will offer interactive features for users.