

**PRODUCT 4A(1)
TECHNICAL MEMORANDUM 2
DRAFT DOCUMENTATION OF PRELIMINARY STATEWIDE TRANSPORTATION
GOALS AND OBJECTIVES**

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Prepared for:

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Department of Transportation
Statewide Transportation Planning Office**

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APPENDIX J

Preliminary Goals and Objectives

This technical memorandum addresses part of Task 4a, which culminates in the identification of preliminary statewide goals and objectives for the Hawaii Statewide Transportation Plan (STP). As part of Task 4a, a series of meetings with relevant divisions within the State of Hawaii Department of Transportation (HDOT) were held in order to gather information and documentation on all current plans and programs. This technical memorandum contains a review of the goals and objectives used to guide these plans and programs. Subsequent tasks will involve synthesis of the goals and objectives in current plans and input received through the ongoing public participation process being undertaken as part of the STP development, so that a preliminary set of statewide goals and objectives could be developed.

The following previous and existing transportation plans were identified and reviewed:

1. Interim Statewide Transportation Plan for the State of Hawaii, prepared for State of Hawaii Department of Transportation, prepared by Kaku Associates, Inc., July 2000.
2. Oahu Commercial Harbors 2020 Master Plan, prepared for State of Hawaii DOT Harbors Division, prepared by Hawaii Stevedores, Inc., May 1997.
3. Hawaii Commercial Harbor 2020 Master Plan, State of Hawaii Department of Transportation Harbor Division, August 1998.
4. Kahului Commercial Harbor 2025 Master Plan, State of Hawaii Department of Transportation Harbor Division, July 2000.
5. Hawaii Long Range Land Transportation Plan – Final Report, prepared for State of Hawaii DOT, prepared by Frederic R. Harris, May 1998.
6. Kauai Long-Range Land Transportation Plan, prepared for State of Hawaii DOT, prepared by Austin, Tsutsumi & Associates, Inc., May 1997.
7. “Transportation for Oahu Plan 2025, Level 2 Evaluation Process (Draft for Review)”, Carter and Burgess Inc., 1/16/2001.
8. Final Statewide Airport System Plan - Volume 1, prepared for State of Hawaii Department of Transportation Airports Division, prepared by R.M. Towill Corporation, June 1998.

The set of plans listed above cover the three divisions of the Hawaii State Department of Transportation: Harbors, Airports, and Land. Many of the plans above are county (e.g., Kauai) or facility (e.g., Kahului Harbor) specific. While the set of available plans covers all three transportation divisions, it does not always include plans for every county or region in the State. It is also worth noting that all of the documents listed above contain long-range (20+ years) plans, which would make them comparable in terms of timeframe to the Statewide Transportation Plan, the subject of this memo.

Sections 1 through 4 summarize the goals and objectives used to guide the development of each plan or program. Sections 5 and 6 discuss the Hawaii State Plan Goals and the seven planning factors specified in the federal Transportation Equity Act for the 21st Century (TEA-21). The final section synthesizes the document reviews and formulates several conclusions about preliminary Statewide Goals and Objectives.

SECTION 1: STATEWIDE, MULTIMODAL PLANS

Interim Statewide Transportation Plan for the State of Hawaii

This interim, statewide, multimodal plan was completed in July of 2000. It specifies seven long-range transportation planning goals:

1. **Mobility and Accessibility:** To improve mobility and accessibility for both people and freight through the provision of quality transportation options.
2. **Safety and Security:** Ensure community safety and security through the physical design and operation of new and existing transportation facilities and through the selection of projects which promote safe and secure living environments.
3. **Statewide Planning, Programming, and Decision Making:** Integrate the various mode-specific planning processes and improve cooperation between all levels of government, the private sector, and the general public in order to best improve the transportation system as a whole, in an equitable manner.
4. **Environment and Quality of Life:** Provide a transportation system that preserves and reinforces environmental quality and livable communities.
5. **Funding and Financing:** Ensure adequate, continuous, and predictable public and private funding to meet the prioritized transportation needs.
6. **Economic Development:** Provide a transportation system that supports Hawaii's economic goals especially by enabling global competitiveness, productivity, and efficiency.
7. **Stakeholder and Public Involvement:** Establish processes that enable public and stakeholders to build consensus on transportation decisions and which are responsive to public and stakeholders' concerns.

These goals aim to be flexible, dynamic, and able to keep pace with the State as it develops over the 20-year lifetime of the plan. Several "Measures of Effectiveness" and "Currently Preferred Methods for Achieving the Goal" are specified per goal. These details are intended to guide the attainment of each goal by clarifying the meaning and intentions of the goal. They are also expected to change as Hawaii and its global context change over the coming years.

An example of a "Measures of Effectiveness" for the first goal is "availability of transportation options". An example of a "Currently Preferred Methods for Achieving the Goal" is to "provide a reasonable level and variety of public transit services that adequately meet statewide and community needs. The full set of "Measures of Effectiveness" and "Currently Preferred..." are contained in Appendix A.

SECTION 2: PLANS FOR THE HARBOR DIVISION

Three plans specific to the Harbor Division were reviewed: the Oahu Commercial Harbors 2020 Master Plan, the Hawaii Commercial Harbors 2020 Master Plan, and the Kahului Commercial Harbor 2025 Master Plan. The mission, objectives, and planning processes used in each plan are very similar as is illustrated by the following sections.

Oahu Commercial Harbors 2020 Master Plan

The following paragraphs excerpted from this document summarize the port system's primary mission, objectives used to guide the planning process, and organizations involved in the planning effort.

"The State DOT Harbors Division's jurisdiction over commercial harbor facilities is primarily directed at the movement of cargo, passenger and fishing vessels entering, leaving, or traveling within the State, and the facilities and supporting services for loading, off-loading, and handling of these vessels, their cargo and passengers. The Oahu Commercial Harbors 2020 Master Plan therefore supports the port system's primary mission with this long-range planning guide for the development of safe, efficient, economically viable harbor facilities. Developed by a consortium of the maritime industry, other ancillary harbor users and government agencies, this Master Plan addresses the desperate need for harbor space by these focal maritime operations which are paramount to the welfare of the State."

"This maritime planning effort was conducted in accordance with the following objectives:

1. Plan the proper development of Oahu's commercial harbors, thereby facilitating maritime shipments of the essential commodities required by the State of Hawaii and its citizenry;
2. Optimize the utilization of land and water resources committed to marine cargo, passenger, and fishing operations in an economically responsible manner;
3. Provide terminals, other harbor resources, and access to these facilities in locations along the Honolulu waterfront, at Barbers Point and other locations in a manner that best relates to and serves Hawaii's port system in an efficient, safe, and secure manner;
4. Minimize the impact on environmental quality and recreational opportunities contiguous with port facilities."

Hawaii Commercial Harbor 2020 Master Plan

The following paragraphs excerpted from this document summarize the port system's primary mission, objectives used to guide the planning process, and organizations involved in the planning effort.

"The State DOT Harbors Division's jurisdiction over commercial harbor facilities is primarily directed at the movement of cargo, passenger and fishing vessels entering, leaving, or traveling within the State, and the facilities and supporting services for loading, off-loading, and handling of these vessels, their cargo and passengers. The

Hawaii Commercial Harbors 2020 Master Plan therefore supports the port system's primary mission with this long-range planning guide for the development of safe, efficient, economically viable harbor facilities. Developed by a consortium of the maritime industry, other ancillary harbor users and government agencies, this Master Plan addresses the desperate need for harbor space by these focal maritime operations which are paramount to the welfare of the State."

"This maritime planning effort was conducted in accordance with the following objectives:

1. Plan the proper development of Hilo and Kawaihae Harbor, thereby facilitating maritime shipments of the essential commodities required by Hawaii's citizenry;
2. Optimize the utilization of land and water resources committed to marine cargo, passenger, and fishing operations in an economically responsible manner;
3. Provide terminals, other harbor resources, and access to these facilities in locations within Hilo Bay, Kawaihae Bay, and other locations in a manner that best relates to and serves Hawaii's port system in an efficient, safe, and secure manner;
4. Minimize the impact on environmental quality and recreational opportunities contiguous with Hawaii's port facilities."

Kahului Commercial Harbor 2025 Master Plan

The following paragraphs excerpted from this document summarize the port system's primary mission, objectives used to guide the planning process, and organizations involved in the planning effort.

"The State of Department Harbors Division's jurisdiction over commercial harbor facilities is primarily directed at the movement of cargo, passenger and fishing vessels entering, leaving, or traveling within Hawaii, and the facilities and supporting services for loading, off-loading, and handling of these vessels, their cargo and passengers. The Kahului Commercial Harbors 2025 Master Plan therefore supports the port system's primary mission with this long-range planning guide for the development of safe, efficient, economically viable harbor facilities. Developed by a consortium of the maritime industry, other ancillary harbor users and government agencies, the 2025 Master Plan addresses the desperate need for harbor space by these focal maritime operations which are paramount to the welfare of Hawaii."

"This maritime planning effort was conducted in accordance with the following objectives:

1. Plan the proper development of Kahului Harbor, thereby facilitating maritime shipments of the essential commodities required by Maui's citizenry;
2. Optimize the utilization of land and water resources committed to marine cargo and passenger operations in an economically responsible manner;
3. Provide terminals, other harbor resources, and access to these facilities in locations within Kahului Bay and other locations in a manner that best relates to and serves Maui in an efficient, safe, and secure manner;
4. Minimize the impact on environmental quality and recreational opportunities contiguous with Maui's port facilities."

SECTION 3: PLANS FOR THE LAND TRANSPORTATION DIVISION

Hawaii Long Range Land Transportation Plan – Final Report

The goals and objectives of the Hawaii Long Range Land Transportation Plan were produced based on input from the Technical Advisory Committee, the Citizens Advisory Committee (CAC), and community representatives. The adopted goals are listed below. The objectives per goal are contained in Appendix B.

1. Provide a transportation system whereby people and goods can move efficiently, safely, comfortably and economically.
2. Provide non-motorized transportation facilities which support community planning, improve quality of life and create a more person-friendly environment.
3. Provide a transportation system with a variety of modes that is accessible to residents and visitors.
4. Prevent congestion from developing through efficient use of existing systems and through implementation of transportation demand management.
5. Develop intermodal links to airports, harbors, and transit from major thoroughfares.
6. Identify a variety of transportation funding sources.

Kauai Long-Range Land Transportation Plan

This document does not identify any specific goals and objectives.

Transportation for Oahu Plan 2025

The draft Transportation for Oahu Plan 2025 identifies four goals:

- **Transportation Service:** Develop and maintain Oahu's island-wide Transportation System to ensure efficient, safe, convenient, and economical movement of people and goods.
- **Quality of Life:** Develop and maintain Oahu's transportation system in a manner which maintains environmental quality and community cohesiveness
- **Community Responsibility:** Develop and maintain Oahu's transportation system in a manner that is sensitive to community needs and desires
- **Demand Management:** Develop a travel demand management system for Oahu which optimizes use of transportation resources

Each goal has several objectives associated with it, and each objective has one or more "plan performance measures" specified for it. Also, each objective has one or more of six "design intents of project" (congestion relief, secondary access, local circulation or facility access, support for development goals, safety, and overall plan element) associated with it. The full set of goals, objectives, "plan performance measures", and "design intents of project" are contained in Appendix C.

As an example, the first objective for the first goal, Transportation Service, is "Increase peak period person carrying capacity on Oahu's transportation network". One "design

intent" for projects satisfying this objective is identified: congestion relief. Several performance measures are specified: overall change in screenline V/C for selected screenlines; change in average travel time to selected destinations; change in number of congested lane miles in system; and average peak hour speed on network.

SECTION 4: PLANS FOR THE AIRPORT DIVISION

Final Statewide Airport System Plan - Volume 1

The conclusions and recommendations of the Statewide Airports System Plan were developed based on three major elements of a "strategic framework":

1. Airport System Vision, Mission, Goals, and Objectives
2. Airport System Planning Criteria
3. Airport System Investment Criteria

The *vision* of the statewide airports system is stated as: "working together to provide gateways of aloha." The *mission* of the Airports Division of the State of Hawaii, Department of Transportation is to "develop, manage and maintain a high quality statewide air transportation system with the spirit of aloha for Hawaii's residents and visitors." Consistent with this mission the Airports Division has established the following four *goals* for the statewide airport system:

1. Meet the current and forecast demand for air transportation service
2. Position Hawaii as a world-class tourist destination
3. Develop public-private cooperation between the airports system and its key stakeholders
4. Implement modern techniques in management of the airports system

Each goal is supported by several *objectives* that are not listed here for the sake of brevity, but are contained in Appendix D.

The second major element of the "strategic framework" used to develop the Statewide Airport Systems Plan is *planning criteria*. These criteria aim to facilitate informed and responsible choices among competing needs. They are used to evaluate projects against important considerations and requirements. The criteria are divided into three priority groupings, with the "Priority One" group receiving the highest weight. The Priority Criteria are listed below.

Priority One Planning Criteria

Projects that are required for:

- Safety and security of passengers, personnel and cargo;
- Compliance with federal, state, or local laws or regulations;
- Ongoing operation and maintenance of primary airports;
- Providing capacity to meet existing demand.

Priority Two Planning Criteria

Projects that are required for:

- Future long-term airport development;
- Providing capacity to meet forecast demand in the six-year time horizon;
- Meeting passenger level of service requirements;
- Ongoing operation and maintenance of the secondary airports;
- Providing essential air service to remote areas of the State; and/or
- Providing for new air service.

Priority Three Planning Criteria

Projects that are required for:

- Providing facility capacity to meet forecast demand in the horizon to 2020
- Increasing administrative productivity and reducing the cost of operation of the statewide airport system;
- Providing for the facility requirements for non-commercial aviation.

The final element of the "strategic plan" is airport system investment criteria. The purpose of establishing *investment criteria* for the Statewide Airport System Plan is to provide policy guidance for staff to select between facility development projects that are competing for scarce investment capital. The investment criteria provide assistance in rank ordering the potential capital improvements within the statewide airport system.

The investment criteria are based on both the financial results of a potential investment and the source of funds for the investment. For example, higher priority is assigned to projects targeted to result in near-term financial returns, and to projects funded by existing or externally granted sources of funds.

SECTION 5: HAWAII STATE PLAN GOALS

The Hawaii State Plan does not deal exclusively with transportation as do the previous plans and programs discussed, though transportation is one component of the overall State Plan. The Hawaii State Plan sets forth the following three goals and unifying themes:

- A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations.
- A desired physical environment, characterized by beauty, cleanliness, quiet, stable, natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
- Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.

SECTION 6: PLANNING FACTORS IDENTIFIED BY TEA-21

In June 1998, the President signed the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit, and other surface transportation programs for the next six years. TEA-21 is the successor to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which was the prior major authorizing legislation for surface transportation at the federal level.

Many key ISTEA statewide planning provisions are continued through TEA-21. Several key modifications have been made as well. Amongst them is the consolidation of the 16 metropolitan and 23 statewide planning factors into seven broad areas to be considered in the planning process. The seven areas are listed below:

1. Support the economic vitality of the United States, the States, and the metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety and security of the transportation system for motorized and non-motorized users;
3. Increase the accessibility and mobility options available to people and freight;
4. Protect and enhance the environment, promote energy conservation, and improve quality of life;
5. Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
6. Promote efficient system management and operations; and
7. Emphasize the preservation of the existing transportation system.

SECTION 7: OBSERVATIONS AND NEXT STEPS

After reviewing the goals, objectives, and methodologies for applying the goals and objectives to the planning process in the range of transportation plans, several observations may be made.

The goals of the Interim Statewide Transportation Plan for the State of Hawaii have a broader nature than the goals specified in the division-specific and/or region-specific plans, as might be expected. The goals of the statewide plan do not refer specifically to any of the elements of the transportation system (e.g. airports, harbors, rail), but rather refers to the "transportation system." Also, the statewide plan goals do not make reference to specific areas or facilities (such as Honolulu Airport or County of Maui), in contrast to the division-specific plans.

To illustrate the intent of the goal, the Interim Statewide Transportation Plan relates the goals to sample elements of the transportation system, areas within the state, or certain facilities in a list called "currently preferred methods for achieving the goal."

The various division-specific and region-specific plans identify some common and some unique goals. For instance, the three Harbor Division plans include a goal to "optimize the utilization of land and water resources committed to marine cargo...in an economically responsible manner". A comparable goal is not identified in the Airport Division plan. However, the Hawaii Long-Range Land Transportation Plan identifies a

Somewhat similar goal to “prevent congestion from developing through efficient use of existing systems and through implementation of transportation demand management.”

As in the case of Interim Statewide Transportation Plan, many of the division-specific plans specifically expand on their goals through devices such as “planning criteria,” “objectives,” or “design intents.” In the case of several plans, these devices form part of a methodology for incorporating the goals into the planning process. In many cases they clarify the meaning or intent of the goals.

Subsequent tasks will involve analysis of the goals and objectives in current plans. Combined with input received through the ongoing public participation process being undertaken as part of the STP development, they will serve as the basis for the formulation of a preliminary set of statewide goals and objectives.

Appendix A

Interim Hawaii Statewide Transportation Plan

**Goals, Measures of Effectiveness, and Currently Preferred
Method for Achieving the Goal**

The set of seven statewide planning goals are as follows:

- I. Mobility and Accessibility: To improve mobility and accessibility for both people and freight through the provision of quality transportation options.
- II. Safety and Security: Ensure community safety and security through the physical design and operation of new and existing transportation facilities and through the selection of projects which promote safe and secure living environments.
- III. Statewide Planning, Programming, and Decision Making: Integrate the various mode-specific planning processes and improve cooperation between all levels of government, the private sector, and the general public in order to best improve the transportation system as a whole, in an equitable manner.
- IV. Environment and Quality of Life: Provide a transportation system which preserves and reinforces environmental quality and livable communities.
- V. Funding and Financing: Ensure adequate, continuous and predictable public and private funding to meet the prioritized transportation needs.
- VI. Economic Development: Provide a transportation system which supports Hawaii's economic goals especially by enabling global competitiveness, productivity, and efficiency.
- VII. Stakeholder and Public Involvement: Establish processes which enable public and stakeholders to build consensus on transportation decisions and which are responsive to public and stakeholders' concerns.

The next few sections discuss each goal individually and in more detail.

GOAL I: MOBILITY AND ACCESSIBILITY

TO IMPROVE MOBILITY AND ACCESSIBILITY FOR BOTH PEOPLE AND FREIGHT THROUGH THE PROVISION OF QUALITY TRANSPORTATION OPTIONS.

Measures of Effectiveness:

- Availability of transportation options
- Quality of transportation options – time, comfort (is it a pleasant experience – congestion/stress, air quality, noise), safety, monetary cost to user.

Currently Preferred Methods for Achieving this Goal:

1. Upgrade intermodal connections between
 - airports and ground transport,
 - harbors and ground transport,
 - airports and harbors via ground transport, and
 - various ground transport modes such as auto, mass transit, bicycle, and pedestrian.
2. Accommodate freight transshipment and storage needs through the provision of adequate airport and harbor systems and support facilities.
3. Provide a reasonable level and variety of public transit services that adequately meet statewide and community needs.
4. Employ transportation demand management strategies to reduce travel demands or shift them to low-cost, low-energy, environmentally friendly modes such as biking and walking.
5. Use operational and transportation systems management strategies to enhance the performance of Hawaii's transportation system.
6. Invest in proactive infrastructure maintenance and rehabilitation.
7. Improve air travel options.

Sample projects:

- *Planned Kalaheo Airport, a general aviation airport, to relieve traffic at the Honolulu International Airport.*

GOAL II: SAFETY AND SECURITY

ENSURE COMMUNITY SAFETY AND SECURITY THROUGH THE PHYSICAL DESIGN AND OPERATION OF NEW AND EXISTING TRANSPORTATION FACILITIES AND THROUGH THE SELECTION OF PROJECTS WHICH PROMOTE SAFE AND SECURE LIVING ENVIRONMENTS.

Measures of Effectiveness

- projected change in frequency and/or severity of physical harm to users and/or non-users of the facility.
- Projected change in frequency and severity of physical violence, not directly caused by the operation of the transportation facility.

GOAL III: STATEWIDE PLANNING, PROGRAMMING, AND DECISION MAKING

INTEGRATE THE VARIOUS MODE-SPECIFIC PLANNING PROCESSES AND IMPROVE COOPERATION BETWEEN ALL LEVELS OF GOVERNMENT, THE PRIVATE SECTOR, AND THE GENERAL PUBLIC IN ORDER TO BEST IMPROVE THE TRANSPORTATION SYSTEM AS A WHOLE, IN AN EQUITABLE MANNER.

Measures of Effectiveness

- Satisfaction of all levels of government, the private sector, and the general public.
- Transportation system-wide (rather than mode specific) level of service and cost effectiveness.
- Both long-term and short-term level of service and cost effectiveness.

Currently Preferred Methods for Achieving this Goal:

1. Improve coordination amongst the existing airports, harbors, and land transportation planning processes.

Sample method:

- *Integrate the airport, harbor, and land transportation plans with consideration for the system-optimal distribution of financial resources amongst modes.*
2. Ensure that the statewide transportation planning process is conducted in a manner consistent with Federal requirements and regulations.

3. Identify and plan for both short-term and long-term transportation needs.

Sample Methods:

- *Ensure preservation of right-of-ways for construction of future transportation projects*
 - *Develop a financially constrained long range plan*
4. Better coordinate land use planning with transportation planning.
 5. Improve coordination amongst Federal, State, County, Metropolitan, Non-Metropolitan, and private transportation activities and programs.

GOAL IV: ENVIRONMENT AND QUALITY OF LIFE

PROVIDE A TRANSPORTATION SYSTEM WHICH PRESERVES AND REINFORCES ENVIRONMENTAL QUALITY AND LIVABLE COMMUNITIES.

Measures of Effectiveness

- Degree of attainment of Federal and State noise, air, and water quality standards.
- Degree of attainment of Federal and State energy conservation goals.
- Satisfaction of affected communities and environmental groups.

Currently Preferred Methods for Achieving this Goal:

1. Encourage safe and convenient use of low-cost, energy efficient, non-polluting means of transportation.

Sample Projects:

- *Provision of bikeways*
- *Provision of pedestrian walkways*

2. Encourage the design and development of transportation systems sensitive to Hawaii's scenic beauty and natural environment.

Sample Methods:

- *Give funding priority to projects which are sensitive to Hawaii's scenic beauty and natural environment.*
3. Develop and maintain the transportation system to meet noise, air, and water quality standards set by Federal and State agencies.

Sample Methods:

- *Give funding priority to projects which best attain noise, air, and/or water quality standards.*
4. Ensure that energy conservation goals set by Federal, State, or Local agencies are considered in the development and maintenance of the transportation system.
 5. Encourage the design and development of transportation systems sensitive to the needs of affected communities.
 6. Minimize disruption of existing neighborhoods due to transportation system construction.
 7. Ensure that physically-challenged, elderly, and economically-disadvantaged persons have reasonable access to transportation services.

GOAL V: FUNDING AND FINANCING

ENSURE ADEQUATE, CONTINUOUS AND PREDICTABLE PUBLIC AND PRIVATE FUNDING TO MEET THE PRIORITIZED TRANSPORTATION NEEDS.

Measures of Effectiveness

- Monetary and non-monetary cost of project delays resulting from inadequate, or unpredictable funding.

Currently Preferred Methods for Achieving this Goal:

1. Ensure that financial feasibility is considered in the development of the STP.

Sample Methods:

- *Develop annual budgets for each year within the twenty-year planning horizon of the STP.*
2. Ensure that financial resources are balanced amongst projects specific to State, Federal, or local needs.
 3. Ensure that financial resources are balanced amongst air, harbor, ground transport, and intermodal projects.
 4. Monitor maintenance needs of the existing system and factor the cost of deferring maintenance into prioritization decisions and financial feasibility analysis.

GOAL VI: ECONOMIC DEVELOPMENT

PROVIDE A TRANSPORTATION SYSTEM WHICH SUPPORTS HAWAII'S ECONOMIC GOALS ESPECIALLY BY ENABLING GLOBAL COMPETITIVENESS, PRODUCTIVITY, AND EFFICIENCY.

Measures of Effectiveness:

- Availability of long-term, meaningful employment opportunities.
- Unemployment rate.
- Degree of economic stability, diversity, and growth.

Currently Preferred Methods for Achieving this Goal:

1. Enable orderly economic growth and development by coordinating public and private sector efforts.
2. Maintain and improve the transportation system in a manner which accommodates planned population distributions and land use development policy.

3. Help meet the State's economic and agricultural diversification & self-sufficiency goals by providing a transportation system which enables Hawaii to benefit from emerging global opportunities related to Hawaii's export, tourism, or other industries.

Sample Projects:

- *Planned Kalaheo Airport*
- *Increase the availability and quality of public and private services between resort areas, airports, and other tourist destinations.*

GOAL VII: STAKEHOLDER AND PUBLIC INVOLVEMENT

ESTABLISH PROCESSES WHICH ENABLE PUBLIC AND STAKEHOLDERS TO BUILD CONSENSUS ON TRANSPORTATION DECISIONS AND WHICH ARE RESPONSIVE TO PUBLIC AND STAKEHOLDERS' CONCERNS.

Measures of Effectiveness:

- Number and variety of public meeting attendees. Ensure that a sufficient number of meetings is held for each specific purpose recognizing that the desired attendance levels may vary depending on the purpose of the meeting.

Currently Preferred Methods for Achieving this Goal:

1. Ensure that development of the STP includes a proactive public participation process providing opportunities for early and continuing public involvement.
2. In accordance with TEA-21, the federal Transportation Equity Act, provide citizens, affected public agencies, freight shippers, private providers of transportation, representatives of users of public transit, providers of freight transportation services, and other interested parties with a reasonable opportunity to comment on the proposed STP.
3. In response to TEA-21, ensure that the needs of non-metropolitan regions and Tribal governments are represented throughout the public participation process.
4. Educate the public and stakeholders about environmental concerns and trade-offs.

Appendix B

Hawaii Long Range Land Transportation Plan – Final Report

Goals and Objectives

- (3) The need to preserve corridors for future transportation use(s) was clearly recognized.
- (4) Safety was a top priority. Safety has been compromised by mixing traffic on a roadway system which predominantly comprises two-lane roads. Separations are needed as volumes increase: separation of through traffic from local traffic in town centers; separation of trucks and slow moving vehicles (e.g. construction, farm) from other vehicles.

From these several themes (many of which were CAC generated), a revised set of goal statements and objectives was formulated. The adopted goals and objectives are listed below.

Goal 1: Provide a transportation system whereby people and goods can move efficiently, safely, comfortably and economically.

- Objectives:
- 1-1. Provide a transportation system which enhances desired growth, physical development and land use patterns for Hawaii County.
 - 1-2. Pursue land use initiatives which help reduce the demand for travel.
 - 1-3. Provide a transportation system that meets historic, recreational, natural resource and environmental goals.
 - 1-4. Establish and maintain scenic routes between communities.
 - 1-5. Improve the design of high accident intersections.
 - 1-6. Establish and maintain routes to military installations.
 - 1-7. Establish a roadway plan for future corridors. Preserve and secure necessary rights-of-way for future projects and corridors.
 - 1-8. Coordinate new road plans with Hawaiian Homelands development plans.
 - 1-9. Widen or replace narrow and substandard bridges.

Goal 2: Provide non-motorized transportation facilities which support community planning, improve quality of life and create a more person-friendly environment.

- Objectives:
- 2-1. Provide programs which emphasize person trip planning other than by car.
 - 2-2. Provide bikeways and safe crossings from residential areas to schools.
 - 2-3. Support a safe pedestrian orientation in town centers by building by-passes for through vehicular traffic.

- 2-4. Create a series of trails and greenways that can be used for transportation; include both trails on roads and trails on their own right-of-way.
- 2-5. Improve the design of high-accident intersections.
- 2-6. Pave shoulders to create more bike lanes.

Goal 3: Provide a transportation system with a variety of modes which is accessible to residents and visitors.

- Objectives:
- 3-1. Provide a public transportation system in developed high growth areas and areas with high densities.
 - 3-2. Improve the mobility of Hawaii County's rural population.
 - 3-3. Provide an efficient public transit route between East and West Hawaii.
 - 3-4. Provide public transit accessibility to elderly, disabled, and economically disadvantaged individuals.
 - 3-5. Ensure user and community safety and security in the design and operation of transportation facilities.
 - 3-6. Encourage energy conservation in transportation.
 - 3-7. Encourage private systems for employees and for tourists.
 - 3-8. Provide accommodation on public transit for those who are unable to drive, including the elderly and handicapped.
 - 3-9. Provide shuttle systems in town using vehicles smaller than a bus.

Goal 4: Prevent congestion from developing through efficient use of existing systems and through implementation of transportation demand management.

- Objectives:
- 4-1. Provide programs for vanpools and carpools (ridesharing) to increase vehicle occupancy during peak commute periods.
 - 4-2. Encourage the use of public transportation.
 - 4-3. Establish a bikeway system for commute trips, recreation, and other trip purposes.
 - 4-4. Encourage walkways, telecommuting and other non-polluting modes.

4-5. Encourage safe and convenient transportation that is low-cost, energy-efficient, and non-polluting.

4-6. Encourage quality-of-life improvements through improved mobility opportunities and travel reduction.

Goal 5: Develop intermodal links to airports, harbors and transit from major thoroughfares.

- Objectives:
- 5-1. Establish and maintain a network of transportation terminals including airports and harbors which promotes and influences economic development and desired land use patterns.
 - 5-2. Provide accessibility to seaports in Hilo, Kona and Kawaihae for shipping, docking and storage facilities.
 - 5-3. Provide access to airports in Hilo, Kona and Waimea.
 - 5-4. Provide sidewalks, bikeways and bicycle storage facilities at transportation terminals and work centers.
 - 5-5. Provide systems for the efficient movement of goods. Provide transportation systems and programs which assist economic growth and diversification.
 - 5-6. Provide truck climbing lanes, pull outs and slow traffic lanes where there are heavy concentrations of truck travel.

Goal 6: Identify a variety of transportation funding sources.

- Objectives:
- 6-1. Ensure that transportation projects meet Federal and State standards, so they are eligible for Federal and State funding.
 - 6-2. Make use of Federal funds for projects between communities.
 - 6-3. Make use of Federal funds for safety and bridge repair projects.
 - 6-4. Make use of Federal funds and State programs for transit and vanpool/carpool projects.
 - 6-5. Apportion transportation funds for enhancements including pedestrian provisions and bikeways, scenic easements, historic highways, landscaping, and mitigation of pollution due to runoff.

- 6-6. Provide information to County Council, State Legislature and federal government in support of recommended projects.
- 6-7. Provide non-federal funding share for transportation improvements.
- 6-8. Encourage private participation in the funding of improvement projects.
- 6-9. Implement a traffic impact fee ordinance.

3.2 TRAVEL DEMAND MODEL CALIBRATION AND VALIDATION

Travel demand models are utilized to estimate demand for travel within a given transportation system. These models consist of a chain of computer applications traditionally including four sequential processes: trip generation; trip distribution; modal split; and traffic assignment. The County of Hawaii model -- which is consistent with this form of travel demand estimation except there is no modal split module -- was developed under a previous contract using the TRANPLAN software package. The original County model was validated against a 1987 base.

The consultant's services were engaged partly to update the original travel estimation model from 1987 to a new base year, namely 1992. In addition to simulating new base year (1992) ground traffic conditions, the updated model was used to develop a travel demand forecast for the year 2020, ten years beyond the original year 2010 long range planning horizon. There was no "interim" analysis year for the Hawaii County LRLTP update, however; only the base year 1992 and the one long range future scenario (year 2020) were analyzed.

The calibration/validation process is the final phase of base year model development. *Calibration* is the process by which model parameters are adjusted to better "fit" traffic assignment (simulated) volumes to observed traffic counts. *Validation* is the process whereby model assignments are compared to observed data and it is agreed that the model is performing sufficiently well at replicating observed traffic count data. Validation of the base year traffic model establishes the *validity* of the model for use in projecting future travel conditions in the transportation study area.

NETWORK UPDATE

The former base year model (1987) was updated to 1992 conditions. The 1987 roadway network was obtained from the County of Hawaii and the network was reviewed for accuracy and consistency with 1992 ground conditions. This was accomplished through coordination with the County of Hawaii Department of Public Works Engineering Division and the Hawaii Department of Transportation (HDOT) Highways Division. Roadway improvements completed between 1987 and 1992 were identified and added in order to update the base year network. In addition, the project team utilized local knowledge and made field visits to verify network characteristics.

Appendix C

Transportation for Oahu Plan 2025

**Goals, Objectives, “Plan Performance Measures,”
and “Design Intents of Project”**

Transportation for Oahu Plan.2025
Level 2 Evaluation Process
(Draft for Review)

		Design Intent of Projects on Level 2 List					Plan Performance Measures (Draft for Review)						
		Congestion Relief	Second Access	Local Circulation or Facility Access	Support Development Goals	Safety	Overall Plan Element						
Goal: Develop and maintain Oahu's island-wide Transportation System to ensure efficient, safe, convenient, and economical movement of people and goods. Transportation Service Objectives:													
1	Increase peak period person carrying capacity on Oahu's transportation network	X								Overall change in screenline V/C for selected screenlines	Change in average travel time to selected destinations	Change in number of congested lane miles in system	Average peak hour speed on network
2	Provide convenient and cost-effective transit service to transit riders	X								Percent of population within 1/2 mile of transit stops	Annualized cost of transit system per total rider	Cost per new rider	Operating cost per rider
3	Plan, design, construct and operate highway and transit facilities and service in a cost-effective manner						X			Change in person/vehicle hours of travel	Cost per hour of delay saved		
4	Encourage the availability of adequate public and private services between Waikiki, the airport and other tourist destinations (assume transit)			X						General change in Waikiki transit			
5	Promote intermodal efficiency of harbor terminal facilities, airport terminal facilities, and land transportation systems				X					Average travel time to airport	Average travel time to port		
6	Ensure that no person....shall be excluded from reasonable access to transportation services, as provided for by.....						X			Fairness of plan, balance of benefits and impacts	Equitable distribution of projects?		
7	Ensure user and community safety in the design and operation of transportation facilities		X					X		Does Plan provide for user and community safety?			
8	Ensure that Oahu's transportation system is planned, designed, constructed and operated in an integrated, cost-effective manner							X		See objective 3	Is the plan affordable?		
9	Enhance performance of Oahu's transportation system through the use of operational management strategies, such as ITS, TSM, TDM							X		Does Plan include these elements?			
10	Enhance the integration and connectivity of the regional transportation system across and between alternative modes.							X		Does Plan provide better intermodal connections?			
11	Promote planning, design, and construction of transportation facilities and systems to support economic development for Oahu's business community				X					Increase in service & capacity to developing areas and businesses			
12	Provide major rehabilitation/renewal/modernization of facilities in sufficient magnitude to ensure continued effective operation.							X		Share of money allocated to maintenance and rehabilitation			

Transportation for Oahu Plan 2025
Level 2 Evaluation Process
(Draft for Review)

		Design Intent of Projects on Level 2 List						Plan Performance Measures (Draft for Review)
		Congestion Relief	Second Access	Local Circulation or Facility Access	Support Development Goals	Safety	Overall Plan Element	
Goal: Quality of Life	Develop and maintain Oahu's Transportation System in a manner which maintains environmental quality and community cohesiveness							
Objectives:	13 Develop and maintain Oahu's transportation system to meet noise, air, and water quality standards set by Federal, State and local agencies						✗	Regional change in VMT (emissions)
	14 Preserve Oahu's cultural integrity, sensitive natural resources, including beaches; and scenic beauty, including sea and mountain views						Potential negative impacts?	Does Plan provide for these preservation policies?
	15 Develop and maintain low energy transportation facilities, including bikeways, walkways, and other energy efficient elements that can be safely integrated with other transportation modes						✗	Share of investment allocated to non-motorized travel
	16 Encourage energy conservation in transportation						✗	Regional change in VMT & energy consumption
	17 Minimize disruption of existing neighborhoods due to transportation system construction						Potential negative impacts?	Does Plan provide for these policies?
	18 Ensure that transportation facility design and maintenance are compatible with the existing and planned physical and social character of new and existing developments				✗			Does Plan provide for these policies?
	19 Maintain and upgrade the existing and future transportation system in a manner that is aesthetically pleasing, including incorporation of landscaping and tree planting						✗	Project budgets adequate to incorporate aesthetic elements?
	20 Develop transportation contingency plans for energy shortages, natural and manmade disasters, and other emergencies that would impact the transportation system		✗				✗	Overall change in ability to respond to interruptions in system
	21 Planning for transportation facilities in Waikiki should reflect the Pedestrian First policy as adopted by the Joint Waikiki Task Force in 1999				✗			Effect of plan on Waikiki pedestrian conditions

Transportation for Oahu Plan 2025
Level 2 Evaluation Process
(Draft for Review)

		Design Intent of Projects on Level 2 List						Plan Performance Measures (Draft for Review)	
		Congestion Relief	Second Access	Local Circulation or Facility Access	Support Development Goals	Safety	Overall Plan Element		
Goal: Community Responsibility	Develop and maintain Oahu's Transportation System in a manner that is sensitive to community needs and desires								
Objectives:	22. Maintain and develop the transportation system to reinforce Oahu's planned population distribution and land use development policies through the coordinated efforts of the public and private sectors, including the Sustainable Community Plan efforts.				X			Share of land miles in developing areas	Share of investment in developing areas
	23. Encourage innovation in planning, design, and maintenance of transportation services and facilities that support community goals.				X			Does plan include innovative elements?	
	24. Base transportation improvements for Oahu on a cooperative, comprehensive, and continuing planning process with emphasis on community involvement				X			Has plan been developed in a manner consistent with this objective?	
Goal: Demand Management	Develop a travel demand management system for Oahu which optimizes use of transportation resources								
Objectives:	25. Encourage increases in system-wide ride sharing on Oahu						X	Change in share of trips by carpool	
	26. Maximize the efficient use of the transportation system						X	Change in AVO	
	27. Encourage programs that reduce use in single occupancy vehicle travel and vehicle miles traveled						X	Change in VMT	

Appendix D

Final Statewide Airport System Plan – Volume 1

Goals and Objectives

2.2 AIRPORT SYSTEM VISION, MISSION, GOALS AND OBJECTIVES

The **vision** of the statewide airports system is stated as: *working together to provide gateways of aloha*. The **mission** of the Airports Division of the State of Hawaii, Department of Transportation is to *develop, manage and maintain a high quality statewide air transportation system with the spirit of aloha for Hawaii's residents and visitors*. Consistent with this mission, the Airports Division has established the following four **goals** for the statewide airport system:

Goal 1: Meet the current and forecast demand for air transportation service.

Goal 2: Position Hawaii as a world-class tourist destination.

Goal 3: Develop public-private cooperation between the airports system and its key stakeholders.

Goal 4: Implement modern techniques in management of the airports system.

The goals are supported by objectives developed for the Statewide Airport System Plan and presented below in Table 2-1, *Airport System Goals and Objectives*.

Table 2-1
Airport System Goals and Objectives

AIRPORT SYSTEM GOAL	SUPPORTING OBJECTIVES
<p><i>Airport System Goal 1</i> <i>Meet the Current and Forecast Demand for Air Transportation Service.</i></p>	
	<p><i>Objective 1A: Develop short-, medium- and long-range plans for the development of the statewide airport system air transportation facilities that: (i) provide for the efficient, safe, and secure movement of passengers, baggage, and cargo; (ii) comply with relevant local, state, and federal laws and regulations; and (iii) are compatible with the communities the airports serve.</i></p>

	<p>Objective 1B: Develop and utilize planning and investment criteria that drive decision-making for the statewide airport system.</p>
	<p>Objective 1C: Provide facilities that enhance essential air service to small or remote communities.</p>
	<p>Objective 1D: Provide air transportation facilities that encourage new air service to the State.</p>
	<p>Objective 1E: Ensure that airport infrastructure supports forecast demand for passenger and aircraft facilities.</p>
	<p>Objective 1F: Position the Airports Division to accommodate the latest air technology as it becomes available.</p>
<p><u>Airport System Goal 2</u> <u>Position Hawaii as a World-Class Tourist Destination.</u></p>	
	<p>Objective 2A: Provide a "gateway" to the State of Hawaii that is distinctly Hawaiian, communicates and enhances the unique character of the islands, reflects the Aloha spirit, and adds to the overall traveling experience of the State's visitors.</p>
	<p>Objective 2B: Establish and maintain air transportation facilities that provide a level of service that equals or exceeds what is provided by competitive destinations.</p>
	<p>Objective 2C: Provide and/or facilitate a "turnkey" traveling experience where intermodal transportation connections are efficient, user-friendly, and consistent with the high standards outlined in Objective 2B.</p>
	<p>Objective 2D: Provide a choice for passengers from the Mainland U.S. and international points of origin in traveling either directly to Neighbor Island destinations or through Honolulu.</p>
	<p>Objective 2E: Provide efficient, pleasant and user-friendly air service for Hawaii residents who use the statewide airports system.</p>

<p><u>Airport System Goal 3</u> <i>Develop Public-Private Cooperation between the Airports System and its Key Stakeholders.</i></p>	
	<p><i>Objective 3A:</i> Provide cost-effective and efficient facilities for use by the statewide airport system tenants that support their business needs and encourage their full participation in meeting the goals of the State.</p> <p><i>Objective 3B:</i> Provide a process of full cooperation between the State and its airport tenants in the decision-making process for the planning, design and operation of future air and ground transportation facilities at the airport(s).</p> <p><i>Objective 3C:</i> Provide for the essential air service needs of the statewide airport system consistent with the overall fiscal responsibilities of the Airports Division.</p> <p><i>Objective 3D:</i> Support effective working relationships with representatives of community and interest groups in the ongoing statewide airport system planning process.</p>
<p><u>Airport System Goal 4</u> <i>Implement Modern Techniques in Management of the Airports System.</i></p>	
	<p><i>Objective 4A:</i> Meet all goals, objectives, and performance standards that are financially feasible and that balance the needs of the State and the users of the statewide airport system.</p> <p><i>Objective 4B:</i> Develop the Airports Division and the statewide airports system as a model of modern government that is "run like a business": (i) develop Airports Division staff as a proactive, self-sufficient management team; (ii) implement management systems (such as the financial model and budgeting systems) that utilize the latest technology, boost productivity, and provide effective support for decision making; and (iii) foster individual and group accountability for achievement of statewide airport system goals and objectives.</p>