

The Aiea-Pearl City Livable Communities Plan integrates the planning and development of traffic improvements, transit services and facilities and pedestrian/bicycle circulation with land use and community design. It provides the opportunity to enhance the character of the community, particularly through community design, and integrate the various parts of the community through improved transportation facilities and alternative modes of mobility. In turn, these improvements would serve to revitalize and enhance the socio-economic vitality of the community.

## Aiea-Pearl City Livable Communities Plan

### Executive Summary

### Mayor's Message and Message from the Aiea-Pearl City Community Vision Group

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# *Aiea Pearl City*

## **Livable Communities Plan**



## EXECUTIVE SUMMARY



May 2004  
Jeremy Harris, Mayor

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The Aiea-Pearl City Livable Communities Plan is intended to improve traffic-congested roadways, provide a more pedestrian-friendly environment, and revitalize the livability and character of the neighborhoods. The Livable Communities Plan is a project of the Aiea-Pearl City Community Vision Group, the City and County of Honolulu's Department of Planning and Permitting and Department of Transportation Services.

The Aiea-Pearl City Livable Communities Plan integrates the planning and development of traffic improvements, transit services and facilities and pedestrian/bicycle circulation with land use and community design. This integration serves as an important mechanism to infuse the livable communities plan concept into a more established community, such as Aiea-Pearl City, in need of physical, social and economic revitalization. It provides the opportunity to enhance the character of the community, particularly through community design, and integrate the various parts of the community through improved transportation facilities. In turn, these improvements would serve to revitalize and enhance the socio-economic vitality of the community.

The Aiea-Pearl City Livable Communities Plan is part of a national Livable Communities Initiative program funded by the Federal Transit Administration (FTA) to

help communities develop a comprehensive, integrated (multi-modal) transportation plan coordinated with logical patterns of land use. Major components of the Aiea-Pearl City Livable Communities Plan include:

## Transportation

An integrated transportation plan for Aiea-Pearl City includes: a traffic assessment of the major roadways in the region to identify key problem locations and assess potential actions to alleviate the problem conditions; identification of potential transit centers and major transfer points with convenient access to retail and service facilities within the town centers; and, pedestrian/bicycle circulation to improve access and safety.

## Community Design

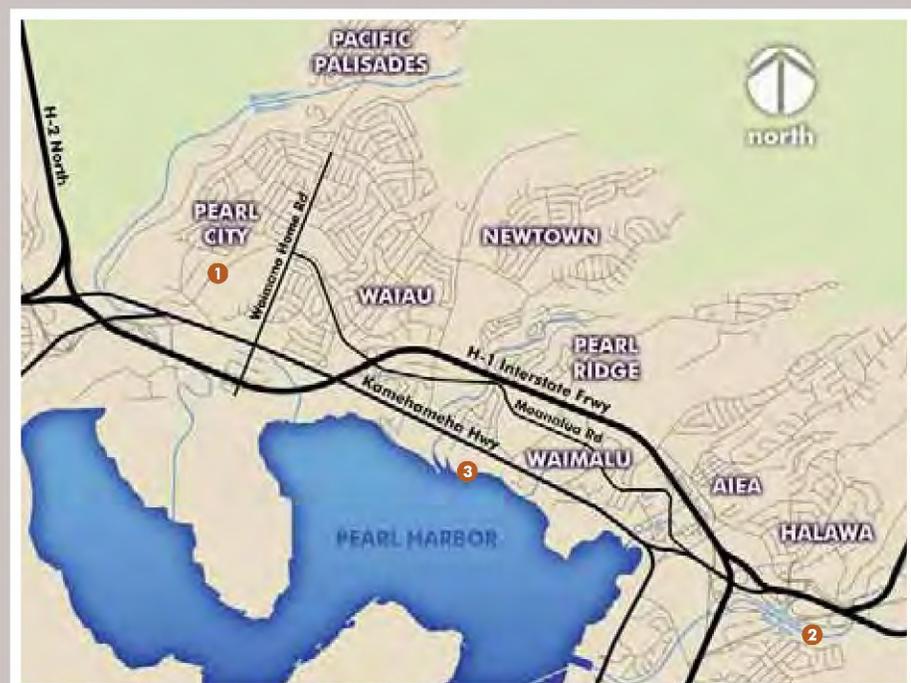
A community design plan incorporates the analysis of major land uses for their potential and capacity to define and serve the community; includes pedestrian streetscape guidelines for pathways and bikeways, landscape improvement recommendations for major roadways; and parks and open space needs.

## Implementation

An implementation plan includes the project scope, the implementing body, potential project timetable, cost estimates, and potential sources of funding.

## Plan Boundary

The Aiea-Pearl City Livable Communities Plan encompasses the area bounded by the (1) Pearl City Industrial Park to the West, (2) Halawa Stream to the East, (3) Pearl City Peninsula and Pearl Harbor shoreline to the South, and the residential ridge areas to the North.



As part of the City's 21<sup>st</sup> Century Community Visioning Process, the Aiea-Pearl City Community Vision Team prepared the *Aiea-Pearl City Community Vision Plan* (February 1999), which sets forth the community's vision toward achieving a more unified Aiea and Pearl City, as well as enhancing and revitalizing the physical, social and economic aspects of the community. The Vision Plan establishes a framework for enhancing and revitalizing the area by identifying projects that, when implemented, will contribute toward the realization of the community's vision. The long-term vision for Aiea-Pearl City is for a community better integrated and served by its roadway system, with expanded view, open space and connections to the Pearl Harbor Shoreline. The Kamehameha Highway corridor (page 5) and the establishment of Town Districts in Aiea and in Pearl City are focal points of the Community Vision Plan (pages 8-11).

Key components of the Vision Plan include (details on page 4):

- Expanded open space and views to the Pearl Harbor shoreline
- Establishment of Town Districts in Aiea and Pearl City
- Enhanced mauka-makai and east-west roadway connections
- Beautification of Kamehameha Highway and major intersections
- Aiea Shoreline Connection
- Mauka-Makai Urban Trails



## Vision Statement

*Aiea/Pearl City foresees itself as a community that supports a convenient and high quality lifestyle for residents, businesses and visitors. It will thus be a highly desirable place to live, work and play.*

*Aiea/Pearl City also strives to be a community with thriving business enterprises and viable economic opportunities.*

*It will be a beautiful place to live, one that is full of trees and tropical flora with generous amounts of open space. Buildings will be aesthetically pleasing and consistent with a design theme that promotes a historical, Hawaiian sense of place.*

*Aiea/Pearl City will also become a community in every sense of the word – physically, socially and emotionally. Its multi-cultural heritage, community-pride and its unique sense of place will be restored and preserved.*

*The community will be easily accessible from all areas on Oahu and travel within the community will be fast and efficient. Outdoor spaces will be pedestrian-friendly. And, all areas will be safe and secure.*

*And finally, all of this will be accomplished by choice – by those who live and work in Aiea/Pearl City. The future of the community will be shaped through a community planning process that ensures full participation of those who live and work in the community*

A livable community is easy to get around; is characterized by trees, views, and scenery; is convenient for shoppers and businesses; has ample parks and recreation facilities; has a sense of community spirit; is a good place to raise children; and is safe, with crime-free neighborhoods. Based on these characteristics, a set of goals was developed for the Aiea and Pearl City communities. Those goals aim to:

**1 Provide a safe environment** that is also healthy, pleasant, and convenient for residents and visitors of the Aiea-Pearl City communities.

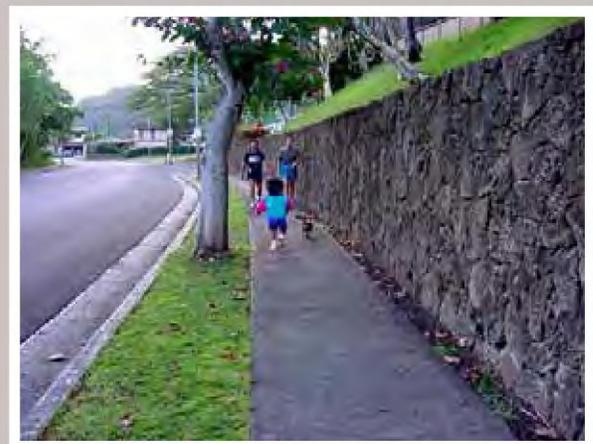
**2 Improve transit, pedestrian, and bicycle access** that is compatible with land use, zoning and urban design to reduce dependency on the automobile.

**3 Improve traffic** congested circulation systems within the Aiea-Pearl City communities.

**4 Improve circulation** throughout the community to improve access to businesses, public facilities and cultural/recreational areas.

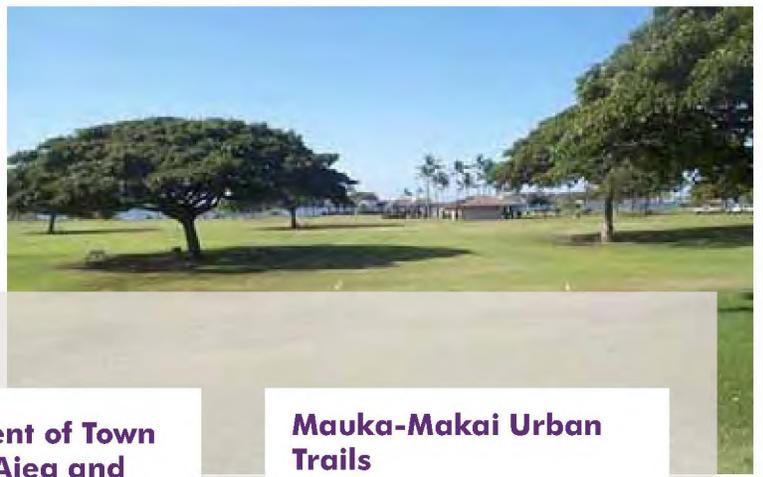
**5 Enhance the Pearl Harbor shoreline** to encourage recreational opportunities.

**6 Enhance the urban design** and streetscape character of the Aiea-Pearl City communities to complement the pedestrian experience.



# Community Vision Plan

The long term vision for Aiea-Pearl City is for a community better integrated and served by its roadway system, with expanded view, open space and connections to the Pearl Harbor shoreline. The Kamehameha Highway corridor and the establishment of Town Districts in Aiea and in Pearl City are focal points of the Community Vision Plan (see map on pages 6-7).



## Key Components

### **Aiea Shoreline Connection across Kamehameha Highway**

The Aiea area is without direct shoreline connection to and across Kamehameha Highway. A pedestrian-bicycle overpass or underpass could be developed using Nalopaka or Kauhale Streets.

### **Establishment of Town Districts in Aiea and Pearl City**

Town Districts are established in Aiea and Pearl City to provide community centers of activity.

### **Mauka-Makai Urban Trails**

Urban trails are proposed to make better use of the streams and drainageways, which extend from the mauka residential areas.

### **Beautification of Kamehameha Highway and major intersections**

Landscaping along the Kamehameha Corridor would greatly enhance the entire area. Major intersections at Waimano Home Road, Kaahumanu Street, and Kaonohi Street are proposed for intersection enhancements, including corner landscaping and better defined pedestrian crossings.

### **Expanded open space and views to the Pearl Harbor shoreline**

The Pearl Harbor Historic Trail Master Plan seeks to expand the use and enjoyment of the historic OR&L right-of-way. Open space and parks along the shoreline should be provided to the greatest extent possible from McGrew Point to Waipio Peninsula.

### **Enhanced mauka-makai and east-west roadway connections**

Major mauka-makai roadways provide linkages between residential and commercial-recreational areas and the shoreline. Improvements along the roadways to accentuate these conditions include restoring and adding landscaping, and installing theme trees. All paths need to be made accessible with connections to bicycle and pedestrian pathways.

# Kamehameha Highway Corridor

The Kamehameha Highway Corridor serves as the primary link between the Aiea Town District and the Pearl City Town District as well as the transition from the mauka communities and the Pearl Harbor shoreline. Together with Moanalua Road, Kamehameha Highway serves as the primary route for local residential traffic, movement of goods and services, and regional access.

A major component along the Kamehameha Highway Corridor is the Pearlridge area, which includes the Pearlridge Shopping Center and surrounding commercial and residential uses, designated as the Pearl Harbor Regional Town Center.

Physical and visual connections to the Pearl Harbor waterfront are to be strengthened. Higher density commercial and residential mixed-use developments are encouraged in the Regional Town Center area, with ample pedestrian and transit connections and facilities along Kamehameha Highway and in the mauka-makai direction. View channels and open space development in key locations will reinforce the connection to the Pearl Harbor shoreline.

A major goal of the Kamehameha Highway corridor improvements is to improve the visual quality and create an enjoyable pedestrian and bicycle-friendly experience connecting the Aiea and Pearl City Town Districts. Contributing to that end is the establishment of a bold, consistent landscape theme and character along the entire length of the corridor.

Along the Kamehameha Highway corridor, the following principles are recommended, subject to more site-specific urban design review and community consultation:

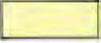
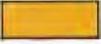
- Promote low density development makai of the Highway (buildings should be no higher than two stories, or 30 feet).
- Allow higher density development mauka of the highway (depending on lot size, viewshed impacts and compatibility with surrounding uses).
- Establish a consistent landscape zone along both sides of Kamehameha Highway. For properties fronting the Highway, establish a landscape easement or improvement zone (10-foot minimum).
- Reduce the visual impact of overhead lines by undergrounding or landscape treatment.
- Provide for a more pedestrian-friendly streetscape with links to the Pearl Harbor Historic Trail.
- Preserve and enhance views to the shoreline from Kamehameha Highway and mauka residential areas, especially at key intersections such as Kaonohi, Kaahumanu, and Honomanu Streets, and critical view channels.
- Identify potential or underutilized lands to increase or enhance public landscape areas and places. Create green open space for visual relief and passive recreation purposes.
- Encourage the consolidation of smaller parcels to enable more compact developments with greater open space and view channels.



**KAMEHAMEHA HIGHWAY**  
Typical schematic cross-section



## GENERAL LAND USES

-  **Low-Medium Density Residential**
-  **Medium-High Density Residential/  
Commercial Mixed Use**
-  **Commercial**
-  **Industrial**
-  **Open Space/Public Parks**
-  **Public Facilities**

## KEY PLAN FEATURES



### Mauka/Makai Streets

- Restore/Add Landscaping
- Install Theme Trees
- Provide Accessible Paths
- Integrate Bikeways



### Waiawa/Halawa Streets

- Restore/Add Landscaping
- Install Theme Trees
- Provide Accessible Paths
- Integrate Bikeways



### Pearl Harbor Shoreline Trail

- Implement Pearl Harbor Historic Trail
- Integrate Mixed Uses



### Mauka/Makai Urban Trail

- Extend Pearl Harbor Historic Trail
- Implement Stream Restoration
- Integrate Multi-Use Trails



### Neighborhood Trail

- Connect Existing Neighborhoods
- Utilize Existing Public Parks & Open Spaces
- Integrate Natural Areas



### Community Facility

- Community Cultural Center
- Senior/Youth Day Care Center
- Interpretive/Eco-Center



### Major Intersection Enhancements

- Pedestrian/Bike Crossing
- Traffic Improvements
- Landscape



# Community Design - Aiea

The Aiea-Pearl City Vision Statement foresees a community that supports a convenient and high quality lifestyle, thriving business enterprises, is aesthetically pleasing, easily accessible throughout, pedestrian friendly, and has a strong sense of community. Towards developing a plan to better define and serve these needs, alternative land use concepts were explored, and community design objectives created.

The community design plan analyzes major land uses for their development potential and capacity to define and serve the community. The plan also includes preparation of pedestrian streetscape guidelines for pathways and bikeways, landscape improvement recommendations for major roadways, and parks and open space needs. The community design objectives for both Aiea and Pearl City are a means of achieving the goals set forth in the Aiea-Pearl City Livable Communities Plan.

## Aiea Community Design Objectives:

- Establish a Town District, which will be the center of activity in Aiea.
- Recapture and enhance the small-town character of Aiea.
- Create a pedestrian-oriented atmosphere with clear pedestrian-oriented connections to activities.

## Aiea Community General Design Guidelines:

- Maintain significant view corridor.
- Retain natural topography and significant landscaping.
- Place utilities underground wherever feasible.



**Proposed Aiea Town Core**



## Aiea Town District Design Objectives:

- Redevelopment should reflect small town plantation architectural character.
- Sidewalks on major streets should be provided or widened and made pedestrian friendly (provide visual along the sidewalks dividers such as landscaping to buffer pedestrians from traffic).
- Bus stops should have street furniture in character with the town.
- Street lighting should reflect small town character and be consistent in style.
- Crosswalks should be better defined and enhanced with street patterned paving.
- At the top of Aiea Heights Drive on the proposed Town Center site, establish a gateway/terminus feature.
- Allow mixed use developments – commercial/office and residential.
- Limit building heights to 40 feet.
- Building and site design should be pedestrian-friendly.
- Building facade should be close to street (A maximum of 50% of front ground level façade should be within 10 feet of the front property line).
- Buildings should have large openings at ground level (50% of the first floor storefront should be transparent – windows and entryways).
- Contemporary designs should be compatible with small town character. Off-street parking should be located to minimize view from street (in side setback or rear areas).



## AIEA TOWN CENTER CONCEPT

- Landscaping should be used to screen parking areas from the streets.
- Aiea Shopping Center – planters and landscaping should be added (especially to lower parking lot and along Aiea Heights Drive).

## Implementation:

- Endorsement of design guidelines by the City (Plan endorsed by Council Resolution).
- Incorporate design guidelines into the City's design review process for proposed developments.
- Pursue rezoning of Town District area as needed.
- Aiea Heights Drive Pedestrian/Landscape Improvements.
- Moanalua Road Landscape Improvements.
- Moanalua Road/Aiea Heights Drive Intersection (landscape/streetscape).
- Street Tree Program implementation.

# Community Design - Pearl City

## Pearl City Community Design Objectives:

- Establish a Town District which will serve as the focal point of Pearl City.
- Create a high quality pedestrian environment to encourage walking and biking.
- Encourage developments with designs consistent with small town character.
- Beautify public spaces.
- Create more green open spaces, especially around shorelines of Pearl Harbor.
- Encourage economic revitalization through the designation of appropriate land uses and an enhanced physical environment, particularly along Lehua Avenue.

## Pearl City Community General Design Guidelines:

- Maintain significant view corridors.
- Retain natural topography and significant landscaping.
- Place utilities underground wherever feasible.

## Pearl City Town District Design Objectives:

- Establish a “Main Street” – a continuous and vital retail experience extending from Lehua Avenue towards the Library on Waimano Home Road – wider sidewalks, narrower roads, street furniture and landscaping.
- Street lighting should reflect small town character and be consistent in style.
- Bus stops should have street furniture in character with the town.
- Create consistent street spaces that unify separate developments into a tightly knit, walkable district with a traditional town atmosphere.
- Allow mixed use developments – commercial/office and residential (BMX-3, Business Mixed Use Community; and AMX, Apartment Mixed Use).
- Limit building heights to 40 feet in BMX-3 and 60 feet in AMX.
- Building and site design should be pedestrian-friendly.

### LEHUA AVENUE

A visual simulation of a revitalized Lehua Avenue.



- Building façade should be close to street (A maximum of 50% of front ground level façade should be within 10 feet of the front property line).
- Buildings should have large openings at ground level (50% of the first floor storefront should be transparent -windows and entryways).
- Buildings should not be massive in height and bulk.
- Sidewalks on major streets should be provided or widened and made pedestrian-friendly

(provide visual dividers along the sidewalk such as landscaping to buffer pedestrians from traffic).

- Crosswalks should be better defined and enhanced with street patterned paving.
- Landscaping should be used to screen parking areas from the streets.
- Contemporary designs should be compatible with small town character. Off-street parking should be located to minimize view from street (in side setback or rear areas).

### PROPOSED PEARL CITY TOWN CORE



### Implementation Plan:

- Develop a plan to revitalize and rehabilitate Lehua Avenue as an important part of providing a “Main Street” for Pearl City.
- Pursue rezoning of the Town District area to facilitate plan implementation.
- Endorsement of design guidelines by the City (Plan endorsed by Council Resolution).
- Incorporate design guidelines into the City’s design review process for proposed developments.
- Establish a Town District gateway on Kamehameha Highway to reinforce a sense of arrival in Pearl City.
- Implement a Street Tree Program.

# Transportation Plan

Within the Aiea-Pearl City communities, traffic conditions along the roadways are congested, particularly during peak commuter periods and on weekends. Residential neighborhoods in the area experience speeding and cut-through traffic by motorists. There is a need to implement traffic improvements at key locations throughout Aiea and Pearl City to alleviate traffic flow problems and improve vehicular/pedestrian safety conditions. The transportation plan (see map on pages 14-15) integrates traffic circulation and flow, the public transit system, and pedestrian/bikeway circulation in creating a more livable community for Aiea-Pearl City.

## Traffic Improvement Projects

A traffic assessment was conducted of major streets in Aiea and Pearl City. The purpose of the assessment was to focus on actions that would improve travel for local residents, including access within the commercial/business areas as well as to/from residential areas. The traffic assessment resulted in identifying 15 sites for traffic improvement projects (below).

- 1 Kamehameha Highway at Pali Momi Street (East)**  
Traffic signal coordination.
- 2 Kamehameha Highway at Pali Momi Street (West)**  
Traffic signal coordination.
- 3 Kamehameha Highway at Kaonohi Street**  
Install traffic signal at the Kaonohi Street/Moanalua Loop intersection.
- 4 Kamehameha Highway at Kaahumanu Street**  
Adjust the timing of the traffic signals along the highway.
- 5 Moanalua Road at Kaimakani Street**  
Narrow the roadway on the Ewabound approach of the intersection along Moanalua Road.
- 6 Moanalua Road at Aiea Heights Drive**  
Allow right-turn movement from the Aiea Shopping Center onto Moanalua Road
- 7 Moanalua Road at Pali Momi Street/ Koauka Street**  
Restripe Koauka Street with an exclusive left-turn lane to reduce vehicle confusion.
- 8 Moanalua Road at Kaonohi Street**  
Install right-turn pockets on approaches. Add a second left turn lane on Kaonohi Street mauka bound. Convert Pearlridge driveway to right-in/right-out only.
- 9 Moanalua Road at Pono Street/ Hekaha Street/Kaahahele Street**  
Coordinate traffic signal timing, add a right turn lane on Moanalua onto Hekaha, and realign Pono Street to eliminate one intersection.
- 10 Moanalua Road at Kaahumanu Street**  
Add a second left-turn pocket to the Diamond Head-bound approach on Moanalua. Add a third Ewa-bound lane Ewa of Kaahumanu Street.
- 11 Moanalua Road at H-1 Freeway Off-Ramp (Pearl City Interchange)**  
Stripe a portion of the right-turn lane on Moanalua Road as a solid/dashed line to indicate that vehicles could merge into the lane, but not until clear of the solid line.
- 12 Moanalua Road at Hoomalu Street**  
Modify the traffic signal to provide a right-turn arrow for mauka-bound vehicles on Hoomalu Street and restrict right turns on red.
- 13 Kaahumanu Street between Kamehameha Highway and Moanalua Road**  
Install a two-way left-turn lane on Kaahumanu Street to provide turning vehicles with a refuge area. Remove on-street parking from one side of street.
- 14 Moanalua Road extension over the Cane Haul Road**  
This extension would create an alternative route from Pearl City to the H-1 Freeway Ewabound and to the H-2 Freeway. (between Waimano Home Road and Waihona Street).
- 15 Options for H-1 freeway return loop past Pearl City**  
The recommended route is to exit the H-1 Freeway Ewabound via Waipahu Exit 8B and then return to Pearl City via Farrington Highway and Kamehameha Highway.

**\* Refer to the map on pages 14-15 to view the locations of the traffic improvement projects listed.**

## Traffic Calming

Traffic calming is a relatively new approach in Hawaii to address speeding and cut-through traffic that create a hazardous environment for motorists, pedestrians, bicyclists, and children within residential areas. Examples of traffic calming devices include full/partial street closures, median barriers, and forced turn islands. Visual devices to control speed include on-street parking, bicycle lanes, narrowed lanes, streetscaping, and colored/textured pavement. Physical speed control devices include speed humps/tables, raised crosswalks, roundabouts, raised island medians, curb extensions, and pedestrian refuge islands. The City has undertaken additional traffic calming planning and projects at Manana-Kuahaka Street, Pacific

Palisades, Auhuhu Street, Newtown, Aiea Heights, and Kaamilo Street. Eight locations were identified as areas that need traffic calming improvements. They are:

- Ulune Street
- Komo Mai Drive
- Kaahumanu Street
- Waimano Home Road
- Hoomalu Street
- Hoolaulea Street
- Kaonohi Street
- Lehua Avenue



MOANALUA ROAD AT AIEA



MOANALUA ROAD AT PEARL CITY

## Pedestrian/Bicycle

The proposed pedestrian/bikeway circulation system is intended to effectively serve and connect schools, parks and other activity areas and destinations, as well as provide convenient access to the public transit system. The pedestrian/bikeway system is also intended to encourage alternative modes of travel between the various land use facilities in Aiea-Pearl City. The integration of the proposed bikeway system with other existing and planned bikeway systems in the area is intended to accommodate a broad range of bicyclists, including recreational, commuter/utilitarian, and bicycling enthusiasts. The proper placement of improved sidewalks and paths is also intended to encourage increased pedestrian activity between activity areas within the community.

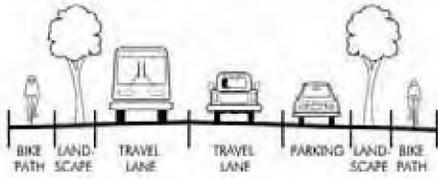


PEARL CITY BIKE PATH AT LEHUA AVENUE

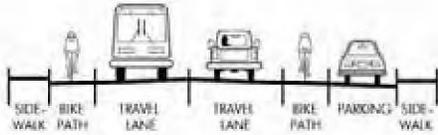
# Integrated Transportation Plan



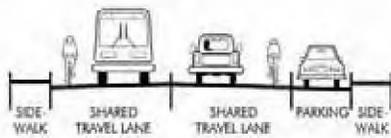
## TYPICAL SECTIONS



**Bike Path**



**Bike Lane**



**Bike Route  
(Shared Roadway)**



## EXISTING

-  Pearl Harbor Bike Path
-  Bike Lane
-  Express Bus Route
-  Bus Route

## PROPOSED

-  Traffic Improvement Locations
-  Bike Path
-  Bike Lane
-  Bike Route (Shared Roadway)
-  Shared-Use Path
-  Improved shoulders for shared pedestrian/bicycle use
-  Greenway (Shared Use Path)
-  Sidewalks
-  Pedestrian Path

## SOURCES

### Bike Plan Hawaii

State of Hawaii Department of Transportation  
(April 1994)

### Honolulu Bicycle Master Plan

City & County of Honolulu Department of Transportation Services (April 1999)

### Pearl Harbor Historic Trail Master Plan

City & County of Honolulu (May 2001)

### Final Environmental Assessment, Honolulu Bicycle Master Plan

Improvements College Access Project No.28,  
Pearl Harbor Historic Trail to Leeward Community College City and County of Honolulu Department of Transportation Services (July 2001)

### Recommendations based on various suggestions from: Aiea-Pearl City Livable Communities Plan

Community Workshops of December 1, 1999 and July 5, 2001 Aiea-Pearl City Livable Communities Plan Community Survey (April 2001)

# Implementation Plan

Following endorsement by the City and County of Honolulu Department of Planning and Permitting and the Aiea-Pearl City Community Vision Group and area Neighborhood Boards, the Aiea-Pearl City Livable Communities Plan will be submitted to the Honolulu City Council for consideration and acceptance by City Council resolution. Once accepted, the Plan will provide the overall guidance for the implementation of land use, community design and transportation improvements for Aiea-Pearl City.

The Implementation Plan provides the framework and strategy for pursuing action and funding of the various land use, community design and transportation elements of the Livable Communities Plan. Other vision projects and master plan recommendations proposed or considered for funding by the Community Vision Group are also included in the Implementation Plan. The Plan's provisions will be implemented through a combination of public and private initiatives. The focus of the Implementation Plan is on establishing an overall timeframe, sequence and responsibilities for potential government actions which are proposed. It will help to organize the Livable Communities Plan's recommendations such that community groups and interested parties can monitor the progress of and keep projects on track towards completion.

## Table Key

(D)	Design Costs
(C)	Construction Costs
(P)	Planning Costs
BWS	Board of Water Supply
DDC	Dept. of Design & Construction
DLNR	Dept. of Land & Natural Resources
DOT	Dept. of Transportation
DPP	Dept. of Planning & Permitting
DPR	Dept. of Parks & Recreation
DTS	Dept. of Transportation Services

## Implementation Phasing Plan

Project Name	Estimated Costs	Implementing Entity
<b>I. Short-Term Projects (within 5 years) Community Design/ Vision</b>		
1. Livable Communities Plan Endorsement by City Council Resolution	None	DPP, City Council, Vision Group
2. Aiea Town District Rezone	None	DPP, City Council, Vision Group
3. Pearl City Town District Rezone	None	DPP, City Council, Vision Group
4. Aiea Heights Dr. Pedestrian /Landscape Improvements	\$35,000 (D) \$225,000 (C)	DDC, DTS
5. Moanalua Rd. Landscape Improvements (Aiea)	\$15,000 (P) \$25,000 (D) \$250,000 (C)	DDC, DTS
6. Lehua Avenue Revitalization Plan	None	DPP, Vision Group
7. Interim Park Plan, Aiea Town Center	\$25,000 (D) \$490,000 (C)	DDC, DPR, Vision Group
8. In-Line Skating Rink	\$100,000 (D) \$600,000 (C)	DPR, DDC, Vision Group
9. Aiea Skateboard Park	\$10,000 (D) \$389,000 (C) \$1,000 (L)	DPR, DDC, Vision Group
<b>Pearl Harbor Historic Trail Master Plan</b>		
10. Trail Protection in Perpetuity	Land acquisition as needed	DPP, DDC, DOT, Navy, landowners
11. Trail Landscaping	To be determined w/DPR	DPR, BWS, Landowners, DOT, Navy, Vision Group
12. Pearl Harbor Fishpond Restoration	\$40,000 to \$100,000 (P)	DLNR, Navy, land-owners, Vision Group, others

# Implementation Plan Cont.

Project Name	Estimated Costs	Implementing Entity
<b>Transportation Traffic Improvements Projects</b>		
13. Kaonohi St./ Kamehameha Hwy./Moanalua Loop - Traffic Signal Improvements	\$45,000 (D) \$295,000 (C)	DOT, DTS, DDC
14. Pali Momi St. (East to West)/Kamehameha Hwy. - Traffic Signal Adjustment	\$2,000 (D) \$10,000 (C)	DOT, DTS
15. Kaahumanu St./Kamehameha Hwy. - Traffic Signal Adjustment	\$1,000 (D) \$6,000 (C)	DOT, DTS
16. Kaahumanu St./Moanalua Rd. - Additional lane and turn pockets	\$60,000 (D) \$445,000 (C)	DTS, DDC
17. Kaonohi St./Moanalua Rd. Restrict - Add turn pockets, turn lanes, and modify turn movements	\$75,000 (D) \$510,000 (C)	DTS, DDC
18. Pono St./Hekaha St./Kaahele St./Moanalua Rd. - Adjust traffic signal, relocate crosswalk, and add traffic lane through restriping	\$10,000 (D) \$60,000 (C)	DTS, DDC
19. Kaahumanu St. (Moanalua Rd. to Kamehameha Hwy.) - Install two-way left-turn lane and extend "No Parking zone on Ewa/mauka corner	\$15,000 (D) \$85,000 (C)	DTS, DDC
<b>Traffic Calming Projects</b>		
20. Komo Mai Dr. (Kaahele to Waimano Home Road) - Striped parking and bike lanes, raised medians, and curb extensions	\$35,000 (D) \$245,000 (C)	DTS, DDC
21. Komo Mai Dr. at Hoolaulea intersection - Replace traffic signal with single-lane roundabout	\$5,000 (D) \$20,000 (C)	DTS, DDC
22. Kaahumanu St. - Striped parking and bike lanes, raised medians, and curb extensions	\$30,000 (D) \$185,000 (C)	DTS, DDC
23. Ulune St. - Striped parking and bike lanes, raised medians, and curb extensions	\$20,000 (D) \$115,000 (C)	DTS, DDC
<b>Pedestrian/Bicycle Circulation Plan</b>		
24. Aiea Heights Dr. (Lower Ulune St. to Upper Ulune St.) – sidewalks both sides, parking lane one side, bike lanes both sides, and two travel lanes	\$39,000 (D) \$260,000 (C)	DTS, DDC
25. Kaahele St. (Moanalua Rd. to Komo Mai Dr.) - Parking lanes, bike lanes, two travel lanes, landscaped/striped median, bulbouts and roundabout	DTS to determine	DTS, DDC
26. Komo Mai Dr. (Kaahele St. to Hoohulu St.) – Option 1 - Parking lane one side, bike lanes two sides, and two travel lanes; Option 2 - Parking lanes both sides, bike lanes both sides and two travel lanes	Option 1 : \$13,000 (D) \$85,000 (C) Option 2 : \$16,000 (D) \$102,000 (C)	DTS, DDC,DTS, DDC
27. Komo Mai Dr. (Hoohulu St. to Hoolaulea St.) - Two travel lanes (bike route) within existing pavement width	\$2,000 (D) \$9,000 (C)	DTS, DDC
28. Komo Mai Dr. (Hoolaulea St. to Waimano Home Rd. - Parking lane one side, bike lanes both sides, and two travel lanes within existing pavement width	\$8,000 (D) \$55,000 (C)	DTS, DDC
29. Kaahumanu St. (Kamehameha Hwy. To Moanalua Rd.) – Option 1 - Parking lane both sides, two inside travel lanes, and two outside shared travel lanes	\$5,000 (D) \$30,000 (C)	DTS, DDC
30. Kaahumanu St. (Kamehameha Hwy. To Moanalua Rd.) – Option 1 - Parking lane both sides, two inside travel lanes, and two outside shared travel lanes	\$5,000 (D) \$30,000 (C)	DTS, DDC
31. Kaahumanu St. (Hookanike St. to Hoolauae St.) - Parking lanes both sides, bike lanes both sides, two travel lanes, and a median	\$9,000 (D) \$58,000 (C)	DTS, DDC
32. Ulune St. (Kulawea St. to Kahuapaani St.) - Parking lane both sides, bike lanes both sides, two travel lanes and median	\$14,000 (D) \$90,000 (C)	DTS, DDC
33. Waimano Home Rd. (Kamehameha Hwy. To Moanalua Rd.) - Bike lanes both sides, five travel lanes	\$13,000 (D) \$83,000 (C)	DTS, DDC
34. Kamehameha Hwy. (From Waihona St. to Aiea Access Road/Aloha Stadium) - Six travel lanes, including two outside shared travel lanes, and a median	\$72,000 (D) \$480,000 (C)	DOT

# Implementation Plan Cont.

Project Name	Estimated Costs	Implementing Entity
35. Kamehameha Hwy. Makai to Pearl Harbor Bike Path - Gateway at McGrew Point - Shared-use path/signage for pedestrians/bicyclists	\$600 (D) \$3,500 (C)	DTS, DDC
36. Noelani St. (Waimano Home to Hoomalu) – Two shared travel lanes	\$3,000 (D) \$18,000 (C)	DTS, DDC
37. Noelani St. (Hoomalu to Kaahumanu St.) – Parking lane one side, two shared travel lanes.	\$5,000 (D) \$31,000 (C)	DTS, DDC
38. Kaonohi St. (Kamehameha Hwy. to Moanalua Rd.) – Bike lanes both sides, five travel lanes, remove existing on-street parking.	\$8,000 (D) \$50,000 (C)	DTS, DDC
39. Hookanike St. (Kaahumanu to Hoomalu St.) – Parking lane both sides, and two shared travel lanes.	\$5,000 (D) \$32,000 (C)	DTS, DDC
40. Hoomalu St. (Hookanike to Komo Mai Dr.) – Two shared travel lanes.	\$2,000 (D) \$12,000 (C)	DTS, DDC
41. Halawa Heights Rd. (Ulune St. to Kaholi Pl.) - Parking lane both sides, and two shared travel lanes	\$4,000 (D) \$27,000 (C)	DTS, DDC
42. Hoomaemae St. (Waimano Home - Hoolaulea) – Two shared travel lanes, reconstruct curb fronting Highlands Middle School.	\$13,000 (D) \$87,000 (C)	DTS, DDC
43. Lehua Ave. (Kamehameha Hwy. to Lehua Elem School) – Concrete sidewalk on Ewa side between First St. and Lehua Elementary School.	\$36,000 (D) \$238,000 (C)	DTS, DDC
<b>Pedestrian Crossing Improvements</b>		
44. Aiea Shoreline Access - Identify and delineate a right-of-way from the Aiea area to and across Kamehameha Highway, including the feasibility of a pedestrian bicycle overpass or underpass across the highway.	\$50,000	DTS, DOT
45. Kamehameha Hwy. (at Intersection of Pali Momi St. (East) – Restripe existing crosswalks, install crosswalk w/in right-turn lane of Pali Momi St. w/ actuated pedestrian walk signal.	\$3,000 (D) \$15,000 (C)	DOT, DTS, DDC
46. Moanalua Rd. (Pearlridge Shopping Center across of Ualo St.) – Upgrade existing crosswalk and walk signal, install raised curb w/in median area.	\$7,000 (D) \$42,000 (C)	DTS, DDC
<b>II. Mid-Term Projects (5 to 10 years)Community Design/Vision</b>		
1. Moanalua Rd./Aiea Heights Dr. Intersection – Intersection landscape/streetscape improvements.	\$50,000 (D) \$350,000 (C)	DDC, DTS
2. Street Tree Program Implementation – Kahuapaani, Halawa, Aiea Hts. Drive, Kaonohi, Kaahale, Kaahumanu, Waimano Home Road, Komo Mai, Ulune.	\$3,000 per 100 LF	DOT, DDC, DTS
3. Urban Trail Planning and Preliminary Design – Feasibility planning and preliminary design.	\$100,000 (P)	DDC, City DPR, DPP, Landowners
4. Moanalua Rd., and Hoomalu St. to Waimano Home Road (Pearl City) - Landscape Improvements.	\$40,000 (D) \$280,000 (C)	DDC, DTS
5. Kamehameha Hwy. Beautification – Landscape/pedestrian improvements.	To be determined	DOT
6. Waimano Home Rd./ Kamehameha Hwy. – Intersection landscape/streetscape improvements.	\$50,000 (D) \$350,000 (C)	DOT, DDC, DTS
7. Kamehameha Hwy. Gateway	\$15,000 (D) \$100,000 (C)	DOT
8. 50 Meter Swimming Pool and support facilities.	\$75,000 (P) \$100,000 (D) \$7,000,000 (C)	DDC, DPR, Vision Group
<b>Pearl Harbor Historic Trail</b>		
9. Trail Realignments – Harbor Center and near HECO Plant	Undetermined	DPP, Vision Group
10. Trail Amenities	Undetermined	DPP, DDC, DPR
11. Trail Realignment – Admiral Boathouse	Undetermined	DPP, Vision Group
12. Stream Bridge Improvements along Trail	Undetermined	DDC, DPP, Vision Group
13. Recreational Boating in East Loch from Blaisdell Park or redeveloped Harbor Ctr	None	DPP, DPR, Vision Group

# Implementation Plan Cont.

Project Name	Estimated Costs	Implementing Entity
14. Traffic Calming for Trail Crossings at roadways	Undetermined	DTS, DDC
<b>Aiea Town Center Master Plan</b>		
15. Aiea Town Center, Ph. I	\$660,000 (D) \$4,400,000 (C)	DDC, DPP, Vision Group
16. Aiea Town Center, Ph. II	\$180,000 (D) \$1,200,000 (C)	DDC, DPP, Vision Group
<b>Waiau District Park Master Plan</b>		
17. Waiau District Park, Ph. 1D – new parking	\$10,000 (D) \$104,000 (C)	DPR, DDC
18. Waiau District Park, Ph. 2A – walk/jog path, and new comfort station	\$32,000 (D) \$332,000 (C)	DPR, DDC
19. Waiau District Park, Ph. 2B – walk/jog path	\$10,000 (D) \$101,000 (C)	DPR, DDC
20. Waiau District Park, Ph. 2C – stairway and handicap ramp connection	\$15,000 (D) \$158,000 (C)	DPR, DDC
21. Waiau District Park, Ph. 3A – new parking lot	\$8,000 (D) \$86,000 (C)	DPR, DDC
22. Waiau District Park, Ph. 3B – replace drainage swale, new parking lot, walk/jog path	\$40,000 (D) \$426,000 (C)	DPR, DDC
23. Waiau District Park, Ph. 3C – driveway, maintenance building and yard	\$15,000 (D) \$142,000 (C)	DPR, DDC
24. Waiau District Park, overall – landscaping and irrigation	\$15,000 (D) \$158,000 (C)	DPR, DDC
<b>Transportation Traffic Improvements Projects</b>		
25. Kaimakani St./Moanalua Rd. – roadway narrowing, restricted mauka bound approach to through traffic	\$5,000 (D) \$25,000 (C)	DTS, DDC
26. H-1 Freeway Off-Ramp/Moanalua Rd. – restrict lane changes into Hoomalu St. left-turn pocket	N/A (D) \$2,000 (C)	DTS, DDC
27. Hoomalu St./Moanalua Rd. – provide right-turn arrow for mauka bound vehicles, and restrict right-turns on red	\$5,000 (D) \$25,000 (C)	DTS
28. Pali Momi St./Koauka St./Moanalua Rd. – exclusive left-turn lane, and adjust traffic signal timing	\$3,000 (D) \$15,000 (C)	DTS, DDC
<b>Traffic Calming Projects</b>		
29. Hoolaulea St. – sidewalks, on-street parking, bike lanes, and two travel lanes	\$16,000 (D) \$104,000 (C)	DTS, DDC
30. Hoomalu St. – sidewalks, on-street parking, bike lanes, and two travel lanes	\$10,000 (D) \$65,000 (C)	DTS, DDC
31. Kaonohi St. – striped on-street parking and bike lanes, raised medians, and curb extensions	\$22,000 (D) \$145,000 (C)	DTS, DDC
<b>Pedestrian/Bicycle Circulation Plan</b>		
32. Kaahumanu St. (Kamehameha Hwy. to Moanalua Rd.) – Option 2 – one center turn lane, two inside travel lanes, two outside shared travel lanes	\$3,800 (D) \$25,000 (C)	DTS, DDC
33. Aiea Heights Dr. (Moanalua Rd. to Lower Ulune St.) – Bike lanes both sides, two travel lanes	\$3,000 (D) \$18,000 (C)	DTS, DDC
34. Aiea Heights Dr. (Upper Ulune St. to Hoio St.) – Sidewalks both sides, parking lane one side, and two shared travel lanes	\$46,000 (D) \$303,000 (C)	DTS, DDC

# Implementation Plan Cont.

Project Name	Estimated Costs	Implementing Entity
35. Hoolaulea St. (Waimano Home Rd. to Komo Mai Dr.) – sidewalks both sides, parking lane one side, bike lanes both sides, and two travel lanes	\$255,000 (D) \$1.7 mill. (C)	DTS, DDC
36. Hoomalu St. (Moanalua Rd. to Hookanike) – sidewalks both sides, and two shared travel lanes	\$62,000 (D) \$410,000 (C)	DTS, DDC
37. Gateway at Blaisdell Park – shared-use path from Kamehameha Hwy. Makai through Blaisdell Park to Pearl Harbor Bike Path	\$8,600 (D) \$57,000 (C)	DDC, DTS, DPR
38. Newtown Traffic Calming - Kaahele St. (Moanalua Rd. to Komo Mai Dr.) – Parking lane both sides, bike lanes both sides, two travel lanes, landscaped/stripped median, bulbouts, and roundabout at various intersections	DTS to determine	DTS, DDC
39. Kaonohi St. (Moanalua Rd. to Pearl Country Club) – Parking lane both sides, bike lanes both sides, two travel lanes, and median	\$11,000 (D) \$68,000 (C)	DTS, DDC
40. Kaonohi St. (Pearl Country Club to Kahapili St.) – Parking lane both sides, and two shared travel lanes	\$7,000 (D) \$41,000 (C)	DTS, DDC
41. Halawa Heights Rd. (Ulune St. to Kaholi Pl.) – Parking lane both sides, and two shared travel lanes	\$7,000 (D) \$41,500 (C)	DTS, DDC
42. Ulune St. (Kaamilo St. to Aiea Heights Dr.) – Parking lane one side, bike lanes both sides, and two travel lanes	\$4,000 (D) \$27,000 (C)	DTS, DDC
43. Halewiliko St. (Aiea Heights Dr. to Kulawea St.) – Bike lanes both sides, and two travel lanes	\$3,000 (D) \$18,000 (C)	DTS, DDC
44. Kaahele St.(Komo Mai Dr. to Hiliu Pl.) – Parking lanes both sides, bike lanes both sides, two travel lanes, and bulbouts at various intersections	DTS to determine	DTS, DDC
45. Kaamilo St. (Aiea Heights Dr. to curve makai of Kalawina Pl.) – Two shared travel lanes	\$2,000 (D) \$8,000 (C)	DTS, DDC
46. Kaamilo St. (From road curve makai of Kalawina Pl. to Moanalua Rd.) – Parking lane one side, bike lanes both sides, and two travel lanes	\$23,000 (D) \$150,000 (C)	DTS, DDC
47. Waimano Home Rd. (Komo Mai Dr. to Hookiekie St.) – Sidewalk on Ewa side	\$56,000 (D) \$370,000 (C)	DTS, DDC
48. Komo Mai Dr. (Waimano Home Rd. to Aaniu Loop/Lower Aamanu St.) – Two shared travel lanes	\$4,800 (D) \$26,000 (C)	DTS, DDC
49. Komo Mai Dr. (Aaniu Lp./Lower Aamanu St. to Lower Aumakua St.) – Two shared travel lanes	\$2,000 (D) \$13,000 (C)	DTS, DDC
50. Komo Mai Dr. (Lower Aumakua St. to Upper Auhuhu St.) – Parking lanes both sides, and two shared travel lanes	\$14,000 (D) \$90,000 (C)	DTS, DDC
51. Auhuhu St. (Komo Mai Dr.) – Parking lane one side, and two shared travel lanes	\$8,000 (D) \$53,000 (C)	DTS, DDC
52. Kaimakani St. (Moanalua Rd. to Ulune St.) – Parking lane one side, and two shared travel lanes	\$3,000 (D) \$17,000 (C)	DTS, DDC
53. Kuahaka St. (Waimano Home Rd. to Cane Haul Rd.) – Parking lane one side, and two shared travel lanes	\$6,000 (D) \$39,000 (C)	DTS, DDC
54. Salt Lake Blvd. (Kamehameha Hwy. to Kahuapaani St.) – Four inside and center travel lanes, and two outside shared travel lanes	\$7,000 (D) \$46,000 (C)	DTS, DDC
55. Waihona St. (Mauka of Kamehameha Hwy. by Pearl City Industrial Park) – Parking lane both sides, and two shared travel lanes	\$14,000 (D) \$92,000 (C)	DTS, DDC

### III. Long-Term Projects (beyond 10 years)Community Design/Vision

1. Urban Trail construction	To be determined	DDC, City DPR, DPP, Landowners
2. Aiea Shoreline Access and Pedestrian Bridge - Across Kamehameha Hwy. to improve shoreline access to Aiea	\$130,000 (D) \$850,000 (C)	DOT
<b>Pearl Harbor Historic Trail</b>		
3. Trail along Pearl Harbor Shoreline from Lehua Ave. to Pearl Harbor Bike Path	\$37,000 (D) \$241,000 (C)	DTS, DDC, DPP, U.S. Navy, HECO

# Implementation Plan Cont.

Project Name	Estimated Costs	Implementing Entity
4. Expand Historic Railway to Halawa Landing and to Nanakuli	Undetermined	DDC, DOT, Railway Society, Others
5. Implement Fishpond Restoration	To be determined	DLNR, Navy, land-owners, Vision Group, others
6. Pearl Kai Marsh Restoration adjacent to the Trail at Pearl Kai Shopping Center	Undetermined	DLNR, land-owners, others
7. Stream Restoration of streams that flow into Pearl Harbor	Undetermined	DPR, DPP, DDC, DLNR, Navy, Vision Group
8. Water Resources Conservation Plan for landscape and development improvements along the Trail	Undetermined	DLNR, BWS, DPR, DDC, DPP
9. Railway Station Development at Lehua Ave., Harbor Center, and Halawa Landing	Undetermined	DPP, DDC, Vision Group, Others
<b>Transportation/Traffic Improvement Projects</b>		
10. Aiea Heights Dr./Moanalua Rd. – Reconstruct Aiea Shopping Center driveway to allow right-turn movement onto Moanalua Road	\$5,000 (D) \$25,000 (C)	DTS, DDC, Aiea Shopping Center
11. Pono St./Hekaha St./Kaahele St./Moanalua Rd. – Realign Pono St. intersection with Hekaha Street	DOT to determine	DOT, DTS
<b>Traffic Calming Projects</b>		
12. Waimano Home Rd. – Provision of bike lanes	\$305,000 <sup>4</sup>	DTS, DDC
<b>Pedestrian/Bicycle Circulation Plan</b>		
13. Kanuku St. (Kamehameha Hwy. to Hekaha St.) – Sidewalk on Ewa side, parking lanes both sides, and two shared travel lanes	\$52,000 (D) \$346,000 (C)	DTS, DDC
14. Honomanu St. (Kamehameha Hwy. to Moanalua Rd.) – Sidewalk on Ewa side, parking lane one side, bike lanes both sides, and two travel lanes	\$20,000 (D) \$130,000 (C)	DTS, DDC
15. Noelani St. (Waimano Home Rd. to Hoomalu St.) – Sidewalks both sides, parking lane both sides, bike lanes both sides, and two travel lanes	\$81,000 (D) \$540,000 (C)	DTS, DDC
16. Aiea Heights Dr. (Hoio St. to Kaupili Pl.) – Improved shoulders both sides for shared pedestrian/bicycle use	\$140,000 (D) \$931,000 (C)	DTS, DDC
17. Halawa Heights Rd. (Kaholi Pl. to Hele Mauna Pl.) – Improved shoulders for shared pedestrian/bicycle use	\$49,000 (D) \$321,000 (C)	DTS, DDC
18. Hekaha St. (Kamehameha Hwy. to Moanalua Rd.) – Sidewalks both sides, parking lanes both sides, two travel lanes, w/portion as shared travel lanes	\$102,000 (D) \$675,000 (C)	DTS, DDC
19. Napuanani Rd. (Off Ewa side of Aiea Heights Dr. fronting Napuanani Park) – Improved shoulders on mauka side for shared pedestrian/bicycle use	\$15,000 (D) \$100,000 (C)	DTS, DDC
20. Moanalua Loop (Kaonohi St. to Moanalua Rd.) – Sidewalk on mauka side	\$49,000 (D) \$325,000 (C)	DTS, DDC
21. Cane Haul Rd. (Kuala St. extension to Waihona St.) – Sidewalks, bike lanes, travel lanes to be developed in conjunction with planning/design of the City Dept. of Transportation Services' Manana Sub-Area Traffic Study	Manana Sub-Area Traffic Study	DTS, DDC
22. Waimano Home Rd. (Kamehameha Hwy. to Moanalua Rd.) – Bike lanes	\$240,000 (D) \$1.6 mill. (C)	DTS, DDC, DPP
23. Waimano Home Rd. (Moanalua Rd. to Komo Mai Dr.) – Bike lanes	\$255,000 (D) \$1.7 mill. (C)	DTS, DDC, DPP
24. Salt Lake Blvd. (Kamehameha Hwy. to Kahuapaani St.) – Bike lanes	\$195,000 (D) \$1.3 mill. (C)	DTS, DDC
25. Lehua Ave. (Kamehameha Hwy. to Lehua Elem. School) – Bike lanes	To be determined	DTS, DDC, DPP
26. Kaahumanu St. (Moanalua Rd. to Hookanike St.) – Bike lanes	\$91,000 (D) \$605,000 (C)	DTS, DDC
27. Kaahumanu St. (Kamehameha Hwy. to Moanalua Rd.) – Bike lanes	\$180,000 (D) \$1.2 mill. (C)	DTS, DDC

## More Information

If you would like more information regarding the Aiea-Pearl City Livable Communities Plan, you may contact us at:

Department of Planning and Permitting  
 (808) 523-4039  
[www.honoluluodpp.org](http://www.honoluluodpp.org)

## Implementation Plan Cont.

Project Name	Estimated Costs	Implementing Entity
28. Kamehameha Hwy. (From Waihona St. to Aiea Access Rd./Aloha Stadium) – Bike lanes	\$1.6 mill. (D) \$10.2 mill. (C)	DOT
29. Noelani St. (Hoomalu St. to Kaahumanu St.) – Bike lanes	\$240,000 (D) \$1.6 mill. (C)	DTS, DDC
30. Kaonohi St. (Pearl Country Club to Kahapili St.) – Bike lanes	\$225,000 (D) \$1.5 mill. (C)	DTS, DDC
31. Gateway at Kanuku St. (Kamehameha Hwy. makai to the Pearl Harbor Bike Path) – Shared-use path for pedestrians/bicyclists	\$9,000 (D) \$59,000 (C)	DTS, DDC, DPP, Landowners
32. Gateway at Pearl Kai Center (Kamehameha Highway makai to Pearl Harbor Bike Path) – Shared-use path for pedestrians/bicyclists	\$6,200 (D) \$41,000 (C)	DTS, DDC, DPP, Landowners
33. Kaimakani Trail Park – Pedestrian Trail along Kaimakani St. Right-of-Way from Ulune St. intersection mauka to Halawa Heights	\$15,000 (P) \$42,000 (D) \$278,000 (C)	DTS, DPP, United States of America
34. Moanalua Rd. (Waimano Home Rd. to Kaimakani St.) – Bike lanes	\$1.2 mill. (D) \$7.9 mill. (C)	DTS, DDC
35. Kamehameha Hwy. (From Moanalua Rd. (including Aiea Access Rd.) to Salt Lake Blvd.) – Bike path	\$1.5 mill. (D) \$10.2 mill. (C)	DOT
36. Kaluaao Stream Greenway – along stream from H-1 makai to shoreline by Pearl Kai Shopping Center	\$45,000 (D) \$294,000 (C)	DTS, DDC, Landowners
37. Waimalu Stream Greenway – Along stream from Kilinoe St. makai to Pearl Harbor shoreline and makai along Harbor Center	\$88,000 (D) \$586,000 (C)	DTS, DDC, Landowners
38. Waiawa Stream Greenway – Along Stream from Pearl Harbor Bike Path makai along Pearl City Peninsula	\$57,000 (D) \$380,000 (C)	DTS, DDC, U.S. Navy
39. McGrew Point Trail – Makai of Pearl Harbor Bike Path, adjacent to Pa'aiau Fishpond	\$15,000 (D) \$97,000 (C)	DTS, DDC, U.S. Navy
40. Komo Mai Dr. (Hoohulu St. to Hoolaulea St.) – Bike lanes	To be determined	DTS, DDC
41. Kaamilo St. (Aiea Heights Dr. to end of road curve makai of Kalawina Pl.) – Bike lanes	To be determined	DTS, DDC

## Mayor's Message



The Aiea-Pearl City Livable Communities Plan is the culmination of a community-based planning effort that was a cornerstone of the City's 21<sup>st</sup> Century Community Visioning Process. The Plan sets forth the community vision towards achieving a more unified Aiea and Pearl City and sets the framework for enhancing and revitalizing the physical, social and economic aspects of the community.

The Aiea-Pearl City Livable Communities Plan has a strong focus on the transportation network, a vital need and concern for the Aiea-Pearl City communities. An integrated transportation plan was developed to improve the area's vehicular, transit and pedestrian-bicycle circulation system, including numerous projects that can be implemented in the coming years.

The Plan embraces the Pearl Harbor Historic Trail, a project I fully support and whose implementation will help open the Pearl Harbor shoreline and expand recreational opportunities for the surrounding region. Community design guidelines are proposed, including specific Aiea and Pearl City Town District guidelines, that will promote aesthetically pleasing developments and pedestrian-friendly and accessible streetscapes.

The Aiea-Pearl City Vision Group, Aiea and Pearl City Neighborhood Boards, community organizations and participating residents are to be commended for their visionary approach to community and land use planning which will have lasting benefits in ensuring a promising future for Aiea and Pearl City.

Mahalo,

A handwritten signature in black ink that reads "Jeremy Harris". The signature is fluid and cursive, with a large, sweeping initial "J".

JEREMY HARRIS, Mayor  
City and County of Honolulu

## Message from Aiea-Pearl City Community Vision Group



On behalf of the Aiea and Pearl City communities, we are very pleased to present our Aiea-Pearl City Livable Communities Plan. This Plan was one of our initial vision projects intended to set the path for the future of our Aiea and Pearl City communities. Councilmember Gary Okino, then a vision team member and resident, initiated this project, recognizing the need for a community-based plan which could establish the basis for long term community improvement projects.

The Plan contains detailed community design guidelines and wide range of implementation projects which will serve us well in evaluating future developments and determining needed improvements. In particular, there are many roadway and pedestrian/bicycle projects which can be pursued to make our streets function more efficiently and safely. Landscaping recommendations will help beautify the community along key thoroughfares and intersections along Kamehameha Highway and Moanalua Road.

We appreciate the help and support of our very active Vision Group, Neighborhood Board members, area businesses and residents, our Councilperson and area legislators, and the City Administration for their support in this effort. We believe we now have a very fine blueprint to guide our community's future.

Sincerely,

A handwritten signature in black ink that reads "Claire J. Jamamoto". The signature is written in a cursive, flowing style.

Aiea-Pearl City Community  
Vision Group

# Aiea Pearl City Livable Communities Plan

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## INTRODUCTION

## 1. INTRODUCTION

The Aiea-Pearl City Livable Communities Plan is intended to improve traffic-congested roadways, provide a more pedestrian-friendly environment, and revitalize the livability and character of the neighborhoods. The Livable Communities Plan is a project of the Aiea-Pearl City Community Vision Group, established through the City and County of Honolulu's 21<sup>st</sup> Century Community Visioning Process, and the City and County of Honolulu Department of Planning and Permitting. Established in 1998, the Community Visioning Process affords citizens on Oahu the unique opportunity to partner with the City in defining, prioritizing, and realizing the future of their respective communities through capital improvement projects such as parks, streets/roadways, and other community facilities improvements. The Aiea-Pearl City Community Vision Group is one of 19 geographically-based community groups involved in the visioning process.

The Aiea-Pearl City Livable Communities Plan integrates the planning and development of traffic improvements, transit services and facilities and pedestrian/bicycle circulation with land use and community design. This integration serves as an important mechanism to infuse the livable communities plan concept into a more established community, such as Aiea-Pearl City, in need of physical, social and economic revitalization. It provides the opportunity to enhance the character of the community, particularly through community design, and integrate the various parts of the community through improved transportation facilities and alternative modes of mobility. In turn, these improvements would serve to revitalize and enhance the socio-economic vitality of the community.

Major components of the Aiea-Pearl City Livable Communities Plan include:

**Transportation:** An integrated transportation plan for Aiea-Pearl City which includes: a traffic assessment of the major roadways in the region to identify key problem locations and assess potential actions to alleviate the problem conditions; identification of potential transit centers and major transfer points with convenient access to retail and service facilities within the town centers; and, pedestrian/bicycle circulation to improve access and safety.

**Community Design:** A community design plan which incorporates major land uses for their potential and capacity to define and serve the community; and includes pedestrian streetscape guidelines for pathways and bikeways, landscape improvement recommendations for major roadways, and parks and open space needs.

**Implementation:** An implementation plan to include project scope, implementing body, potential project timetable, cost estimates, and potential sources of funding.

The Aiea-Pearl City Livable Communities Plan boundaries encompass the area bounded by the Pearl City Industrial Park to the west, Halawa Stream to the east, Pearl City Peninsula and Pearl Harbor shoreline to the south, and the residential ridge areas to the north (see Figure 1-1).

## **1.1 Background**

The Aiea-Pearl City Livable Communities Plan is part of a national Livable Communities Initiative program funded by the Federal Transit Administration (FTA). The primary purpose of the Livable Communities Initiative is to help communities develop a comprehensive, integrated (multi-modal) transportation plan coordinated with logical patterns of land use. The objectives of the Livable Communities Initiative are to improve mobility and quality of services available to residents of neighborhoods by:

- strengthening the link between transit planning and community planning, including land use policies and urban design supporting the use of transit and ultimately providing physical assets that better meet community needs;
- stimulating increased participation by community organizations and residents, minority and low-income residents, small and minority businesses, persons with disabilities and the elderly in planning and design process; and,
- coordinating commercial and social service program development and activities to increase employment opportunities, improve neighborhoods, and promote the investment in and use of transit and other pedestrian-oriented transportation facilities and services.

Key characteristics of Livable Communities include: 1) full community participation in the decision-making process by residents, neighborhood organizations and the business community, including small and minority businesses; and 2) transit, pedestrian and bicycle access that is compatible with land use, zoning and urban design to reduce dependence on the automobile.

## **1.2 Aiea-Pearl City Community Vision Plan**

As part of the City's 21<sup>st</sup> Century Community Visioning Process, the Aiea-Pearl City Community Vision Team prepared the *Aiea-Pearl City Community Vision Plan* (February 1999) which sets forth the community's vision toward achieving a more unified Aiea and Pearl City, as well as enhancing and revitalizing the physical, social and economic aspects of the community. The Vision Plan establishes a framework for enhancing and revitalizing the area by identifying projects that, when implemented, will contribute toward the realization of the community's vision.

The Vision Plan recognizes the socio-economic opportunities that are available within the Aiea-Pearl City community. Included is the opportunity to capitalize on the area's central location relative to Oahu's population and employment centers, as well as being conveniently located at the crossroads of the major freeways. Increased socio-economic opportunities are also afforded with the military at Pearl Harbor and Camp Smith in Halawa, and the Arizona Memorial and homeporting of the USS Missouri which are among the top visitor attractions on Oahu. The area also has the second largest shopping center in Hawaii - Pearlridge Shopping Center - as well as major discount retailers and light industrial areas, and is the home of Aloha Stadium, a major sporting facility. From a land use standpoint, areas makai of Kamehameha Highway, including the Pearl Harbor shoreline, afford opportunities for revitalization. The Vision Plan also

**AIEA PEARL CITY**  
 COMMUNITY VISION GROUP

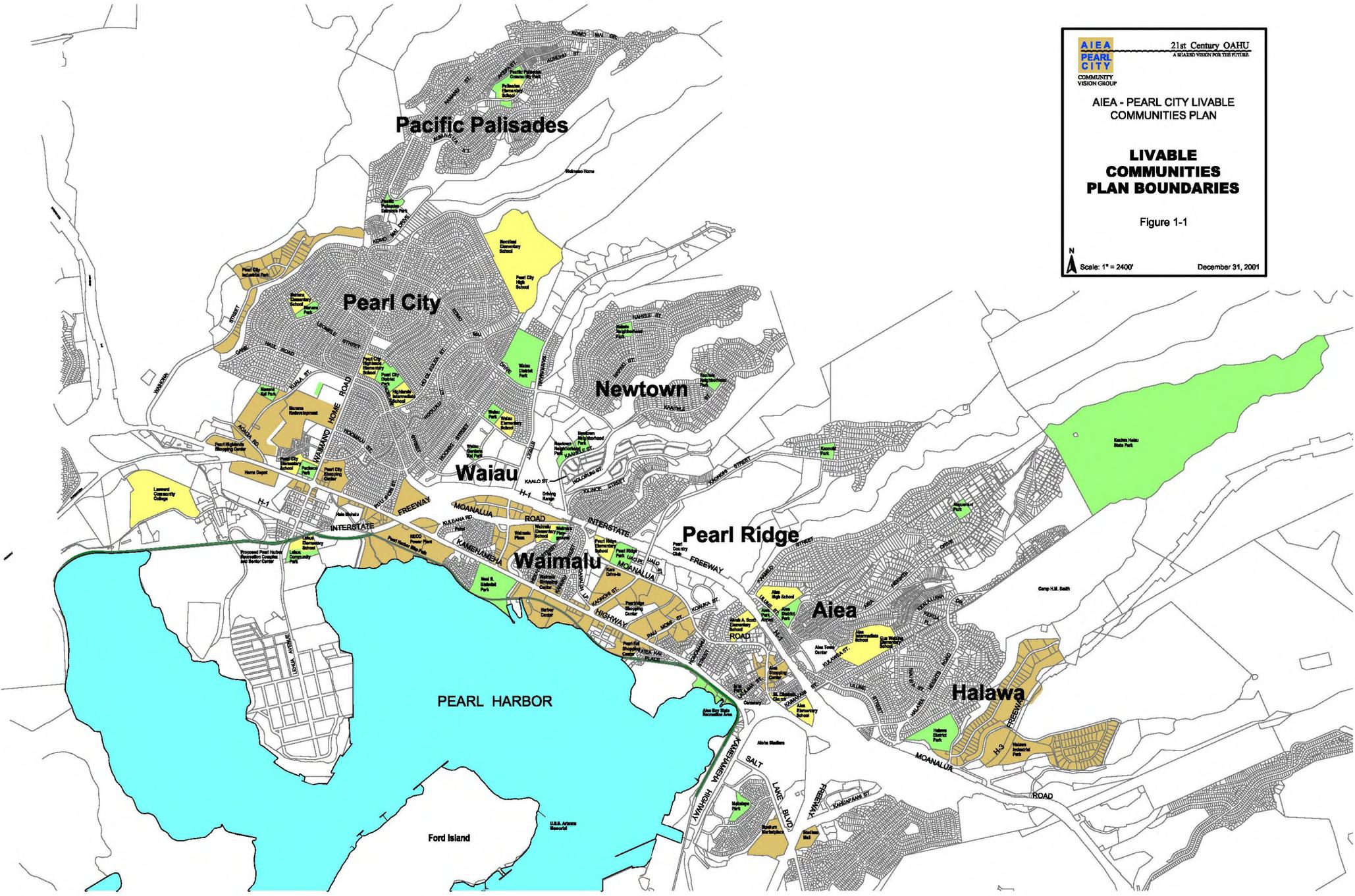
21st Century OAHU  
 A SCALED VISION FOR THE FUTURE

**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**

**LIVABLE COMMUNITIES PLAN BOUNDARIES**

Figure 1-1

N  
 Scale: 1" = 2400'  
 December 31, 2001



identifies adverse conditions which currently hamper physical, social and economic opportunities. These include a fading sense of community and loss of unique sense of place, poor traffic circulation due to congested conditions, inadequate pedestrian facilities, and inappropriate land use and development patterns.

Toward enhancing and revitalizing Aiea-Pearl City, the Vision Plan sets forth various short- and long-term projects including the Aiea-Pearl City Livable Communities Plan, roadway beautification, acquisition of the Aiea Sugar Mill property, planning and design for the Pearl Harbor Historic Trail, Aiea and Pearl City gateway projects, and various park improvements. The Vision Plan identifies several major elements in optimizing the enhancement and revitalization of the Aiea-Pearl City community:

- Integrated transportation improvements;
- Preservation and proper treatment of shoreline areas;
- Reorganization of ill-configured land uses;
- Long-term beautification that is guided by a consistent and appropriate design theme; and,
- Economic revitalization through the establishment of a major new attraction – the Pearl Harbor Historic Trail.

The Vision Plan maintains that to ensure these elements are accomplished in the most efficient and effective manner, two planning studies are essential prior to implementation – the Aiea-Pearl City Livable Communities Plan and the Pearl Harbor Historic Trail Master Plan. A discussion of the Pearl Harbor Historic Trail Master Plan, which was completed in May 2001, is included in Section 2.5.

The Vision Statement and Goals and Strategies of the *Aiea-Pearl City Community Vision Plan* are set forth below and in Table 1-1. Some of the strategies have been supplemented or added based on comments obtained at the July 5, 2001 Community Design Workshop for the Livable Communities Plan and are noted as such in Table 1-1.

### ***Vision Statement***

*Aiea/Pearl City foresees itself as a community that supports a convenient and high quality lifestyle for residents, businesses and visitors. It will thus be a highly desirable place to live, work and play.*

*Aiea/Pearl City also strives to be a community with thriving business enterprises and viable economic opportunities.*

*It will be a beautiful place to live, one that is full of trees and tropical flora with generous amounts of open space. Buildings will be aesthetically pleasing and consistent with a design theme that promotes a historical, Hawaiian sense of place.*

*Aiea/Pearl City will also become a community in every sense of the word – physically, socially and emotionally. Its multi-cultural heritage, community-pride and its unique sense of place will be restored and preserved.*

*The community will be easily accessible from all areas on Oahu and travel within the community will be fast and efficient. Outdoor spaces will be pedestrian-friendly. And, all areas will be safe and secure.*

*And finally, all of this will be accomplished by choice – by those who live and work in Aiea/Pearl City. The future of the community will be shaped through a community planning process that ensures full participation of those who live and work in the community.*

<b>Table 1-1 Aiea-Pearl City Community Vision Plan Goals and Strategies</b>	
<b>Goal 1: Build a “Livable Community”</b>	<p><u>Strategies</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide a safe, healthy, pleasant and convenient environment for everyone who visits or lives in Aiea/Pearl City.</li> <li><input type="checkbox"/> Move people efficiently through the community while reducing dependency on the automobile. Create a pedestrian-friendly outdoor environment.</li> <li><input type="checkbox"/> Discourage traffic that bypasses the freeway through Aiea/Pearl City.</li> <li><input type="checkbox"/> Improve access to businesses, public facilities and cultural/recreational areas by improving traffic, transit and pedestrian/bicycle circulation throughout the community.*</li> <li><input type="checkbox"/> Create a design character for the community that is representative of its history and its Hawaiian character and beautify the community according to an overall design strategy.</li> <li><input type="checkbox"/> Plan for appropriate future land uses while assuring that adequate infrastructure can be provided.</li> <li><input type="checkbox"/> Provide ample recreational and cultural resources and opportunities for both residents and visitors.</li> <li><input type="checkbox"/> Open the Pearl Harbor shoreline to the community, including potential commercial opportunities.*</li> <li><input type="checkbox"/> Reduce crime - provide a safe environment for both residents and visitors.</li> </ul>
<b>Goal 2: Develop a Vibrant Economy</b>	<p><u>Strategies</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Revitalize the stagnant local economy                             <ol style="list-style-type: none"> <li>1) Increase patronage of local businesses</li> <li>2) Provide tax breaks and other advantages to local businesses</li> <li>3) Facilitate the movement of people through the community.</li> </ol> </li> <li><input type="checkbox"/> Increase vocational and employment opportunities.</li> <li><input type="checkbox"/> Facilitate visitor movements between visitor attractions and local businesses.</li> <li><input type="checkbox"/> Revitalize the Aiea/Pearl City economy and increase economic opportunities by enhancing the visitor attractions in the area.</li> <li><input type="checkbox"/> Create jobs to help low and moderate income persons by developing a major visitor attraction that takes advantage of a location on the Pearl Harbor shoreline, on-site historic features, proximity to the attractions on Ford Island and the heritage and culture of Hawaii and Aiea.</li> </ul>
<b>Goal 3: Maintain a Sustainable Community</b>	<p><u>Strategies</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Preserve the Pearl Harbor shoreline.</li> <li><input type="checkbox"/> Preserve or restore, as needed, environmentally sensitive areas, including improving the water quality of Pearl Harbor.*</li> <li><input type="checkbox"/> Preserve and display the history of Aiea/Pearl City, including establishing depositories and learning centers.*</li> <li><input type="checkbox"/> Expand the network of parks and open space throughout the community.</li> <li><input type="checkbox"/> Encourage productive agriculture and aquaculture where appropriate.</li> </ul>

<b>Table 1-1 (continued)</b> <b>Aiea-Pearl City Community Vision Plan</b> <b>Goals and Strategies</b>	
<b>Goal 4:</b> <b>Create a Sense of Community</b>	<u>Strategies</u> <ul style="list-style-type: none"> <li>❑ Preserve the Aiea Sugar Mill site for historical and community purposes. The mill site will promote a sense of place by restoring the heritage of Aiea.</li> <li>❑ Restore community-pride by developing central gathering places for the community. Build major community centers in Aiea and in Pearl City.</li> <li>❑ Strengthen community partnerships with the Navy in developing potential opportunities for shoreline and waterway activities within Pearl Harbor to socially and economically enhance the Aiea-Pearl City community.**</li> <li>❑ Establish programs, events, and celebrations to bring together the different parts of the community. This includes not only Aiea and Pearl City, but also the residential areas on the other side of Aloha Stadium that is isolated both physically and socially from the community.</li> <li>❑ Rekindle the strong community helping spirit that is needed to create harmony among its residents and to assist our residents and businesses in need.</li> <li>❑ Build a strong community association that will rebuild and strengthen the spirit of the Aiea/Pearl City community.</li> <li>❑ Provide social, educational and employment programs that assist all residents of the community.</li> </ul>
<p>Source: <i>Aiea-Pearl City Community Vision Plan</i> prepared by the Aiea-Pearl City Community Vision Team, February 1999.</p> <p>Notes:</p> <p>* Strategies which have been supplemented based on comments from the July 5, 2001 Aiea-Pearl City Livable Communities Plan Community Design Workshop.</p> <p>** Strategies which have been added based on comments from the July 5, 2001 Aiea-Pearl City Livable Communities Plan Community Design Workshop.</p>	

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# Aiea Pearl City Livable Communities Plan

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## PLANNING APPROACH

## 2. PLANNING APPROACH

The planning approach included consideration of existing plans and ongoing planning efforts, in particular, the City and County of Honolulu’s General Plan, Primary Urban Center Development Plan, Oahu Trans 2K project, and Pearl Harbor Historic Trail Master Plan. A comprehensive community-based planning process was also undertaken to provide ample opportunities for public involvement and ensure that community needs and concerns are reflected in the Plan.

### 2.1 City and County of Honolulu General Plan

The General Plan for the City and County of Honolulu (adopted 1977, amended 1992) is a statement of the long-range social, economic, environmental, and design objectives for the general welfare and prosperity of the people of Oahu. The Plan is also a statement of broad policies which facilitate the attainment of the objectives of the Plan. Eleven subject areas provide the framework for the City’s expression of public policy concerning the needs of the people and functions of government: population; economic activity; the natural environment; housing; transportation and utilities; energy; physical development and urban design; public safety, health and education; culture and recreation; and government operations and fiscal management. The Aiea-Pearl City Livable Communities Plan embodies the following relevant objectives and policies of the General Plan:

#### V. *Transportation and Utilities*

*Objective A: To create a transportation system which will enable people and goods to move safely, efficiently, and at a reasonable cost; serve all people, including the poor, the elderly, and the physically handicapped; and offer a variety of attractive and convenient modes of travel.*

*Policy 1: Develop and maintain an integrated ground-transportation system consisting of the following elements and their primary purposes:*

- a. Public transportation – for travel to and from work, and travel within Central Honolulu;*
- c. Bikeways – for recreational activities and trips to work, schools, shopping centers, and community facilities; and*
- d. Pedestrian walkways – ...for trips to schools, parks, and shopping centers.*

*Policy 5: Improve roads in existing communities to reduce congestion and eliminate unsafe conditions.*

*Policy 10: Discourage the inefficient use of the private automobile, especially in congested corridors and during peak-hours.*

*Policy 11: Make public, and encourage private, improvements to major walkway systems.*

#### VI. *Physical Development and Urban Design*

*Objective B: To develop Honolulu (Waialae-Kahala to Halawa), Aiea, and Pearl City as the Island’s primary urban center.*

*Policy 3: Encourage the establishment of mixed-use districts with appropriate design and development controls to insure an attractive living environment and compatibility with surrounding land uses.*

*Objective E: To create and maintain attractive, meaningful, and stimulating environments throughout Oahu.*

*Policy 3: Encourage distinctive community identities for both new and existing districts and neighborhoods.*

*Policy 5: Require new developments in stable, established communities and rural areas to be compatible with the existing communities and areas.*

*Policy 8: Preserve and maintain beneficial open space in urbanized areas.*

## **2.2 City and County of Honolulu Development Plan Program**

The Aiea-Pearl City planning area is located in the Primary Urban Center Development Plan (PUC DP) which encompasses the region from Pearl City in the west to Waialae-Kahala in the east. It is the most populated part of the State and is Oahu's largest employment center. Development plans provide maps and policy statements to implement the objectives and policies of the City General Plan and serve as a guide for more detailed zoning and public and private sector investment decisions.

The existing Development Plan Land Use map of the Aiea-Pearl City area is shown in Figure 2-1. As stated in the Special Provisions for the PUC DP, the following relevant principles outline the desired three-dimensional implications of the land use patterns depicted on the land use map to be implemented through public and private actions:

- (1) The overall pattern of urban development within the Primary Urban Center shall continue to be linear, running parallel with the shoreline and bounded by mountainous conservation lands and the sea.*
- (2) Medium and higher density residential uses shall occur along the coastal plain, near the major travel corridors...Suburban low-density, low-rise residential development shall remain along the lower mountain ridges and inner valley floors...*
- (3) Commercial uses shall continue to be located along the major roadways, with the exception that small neighborhood oriented commercial uses may be located within low-density residential and apartment areas...Apartments in mixed use with commercial shall be permitted, subject to appropriate zoning regulations and where: (A) public facilities and services are adequate to serve mixed uses; (B) the area is accessible by major transportation corridors; and (C) such uses are compatible with adjacent uses...*
- (6) To promote a more pleasing and attractive urban setting and to maintain a strong sense of the nearness of open space and nature, a strong mauka-makai orientation shall be promoted through the establishment and preservation of mauka-makai view corridors and open space belts along streams.*

CENTRAL  
OAHU  
DP AREA

- Lower-Density Residential
- Higher-Density Residential/Mixed Use
- Community/Neighborhood Commercial
- District Commercial
- Industrial
- Resort
- Institutional
- Parks and Open Space
- Preservation
- Military
- Urban Community Boundary
- Pedestrian Network
- U** College/University
- +** Hospital/Medical Center
- INT** Intermediate School (State)
- HS** High School (State)
- ▲** Small Boat Marina
- ⚓** Harbor
- ✈** Airport

**AIEA  
PEARL CITY**  
COMMUNITY  
VISION GROUP

**21st Century OAHU**  
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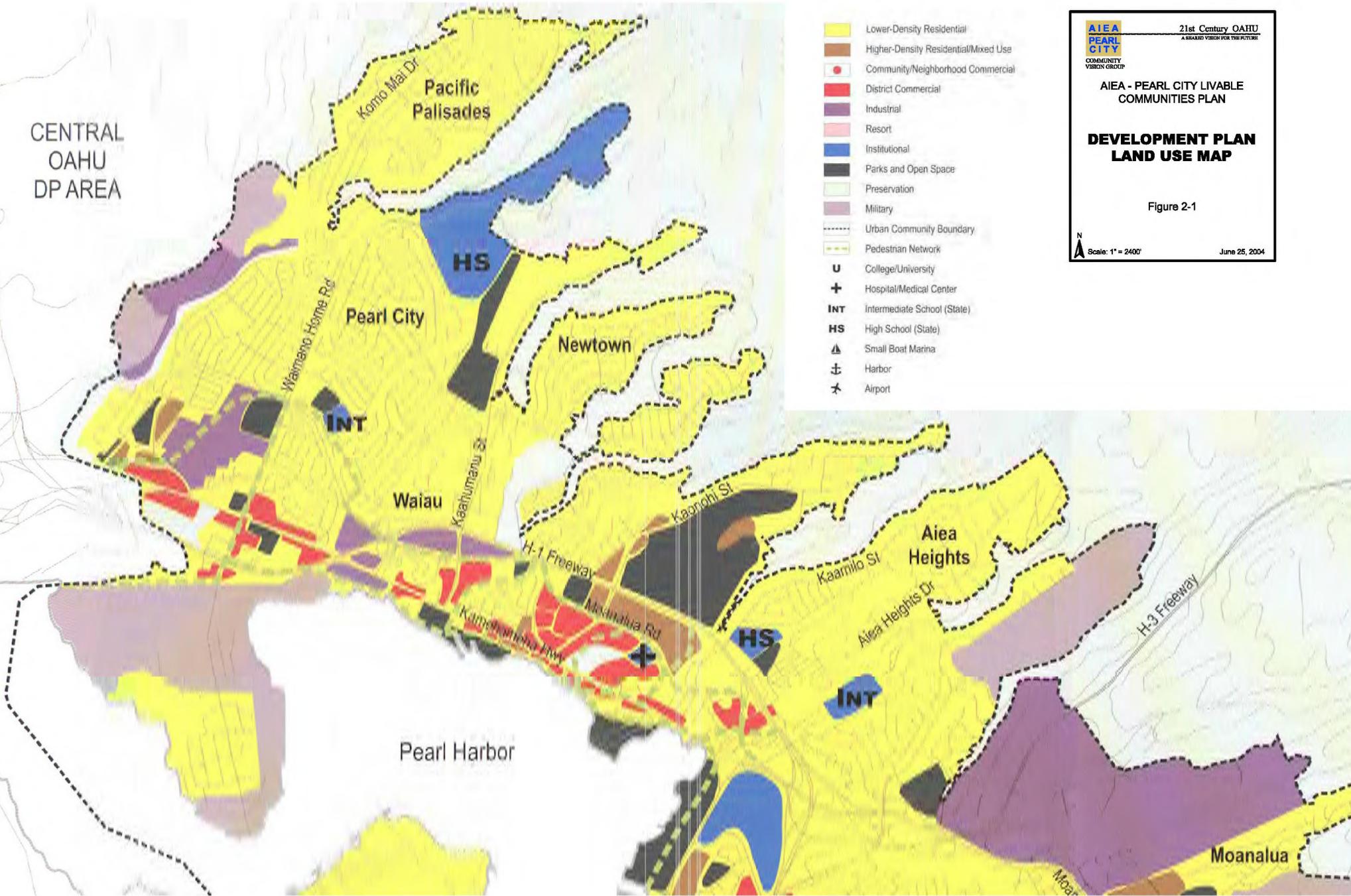
**AIEA - PEARL CITY LIVABLE  
COMMUNITIES PLAN**

**DEVELOPMENT PLAN  
LAND USE MAP**

Figure 2-1

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Scale: 1" = 2400'

June 25, 2004



- (7) *Adequate amounts of recreational facilities and public parks shall be provided for active and passive recreation, particularly in areas where redevelopment or other activities create opportunities for new urban open spaces.*
- (8) *The visual impact of taller structures along major roadways and pedestrian corridors shall be minimized through the use of appropriate building setbacks, plantings adjacent to walkways, and open space areas.*

The PUC DP provides the following specific urban design principles and controls for the Primary Urban Center:

*Section 24-2.2 Urban Design Principles and Controls for the Primary Urban Center*

*(a) Specific Urban Design Considerations*

*(1) Open Space*

*The visibility, preservation, enhancement and accessibility of open space areas,...shall be given high priority in the design of adjacent and nearby developments in the Primary Urban Center. These areas include, but are not limited to the steep slopes of valley and ridge areas, streams and the shoreline areas...*

*(2) Public Views*

*In order to promote pleasing and attractive urban living environments, and to protect and enhance the remaining natural environment of urban areas, views of landmarks and the natural environment from public places may be identified and protected by the Department of Land Utilization. Important views to be protected include, but are not limited to the following:*

- (A) Panoramic, mauka and makai, and continuous views of the Koolau and Waianae mountain ranges, ridges, valleys, and coastline and the sea.*
- (B) Views of natural landmarks, such as...Pearl Harbor, major streams and forest areas.*
- (C) Views of unique agriculturally developed areas.*

Primary Urban Center Development Plan Revision Program: The PUC DP is currently undergoing revision by the City and County of Honolulu's Department of Planning and Permitting (DPP) as part of the Development Plan Revision Program initiated in 1993. The DP Revision Program entails comprehensive revisions of the eight regional DPs in response to a 1992 City Charter amendment to change the definition of DPs from "relatively detailed" plans to "conceptual schemes" for implementing General Plan development objectives and policies.

Two workshops were held on May 1, 2001 and June 26, 2001 which included active involvement by the public in contributing ideas and views to be considered in the revised PUC

DP. A public review draft (May 2002) of the revised PUC DP was prepared by the City DPP. Public comments obtained for the Aiea-Pearl City area were also considered in the development of the Livable Communities Plan. The draft revised PUC DP was presented at two public information meetings held on August 27 and 29, 2002. Once adopted, the revised DP will guide growth, public policy, investment, and decision-making within the Primary Urban Center over the next 20 years. The DP revisions will supersede the existing DP land use maps and principles and controls.

The key elements of the vision for the PUC include:

- Honolulu's natural, cultural and scenic resources are protected and enhanced.
- Livable neighborhoods have business districts, parks and plazas, and walkable streets.
- The PUC offers in-town housing choices for people of all ages and incomes.
- Honolulu is the Pacific's leading city and travel destination.
- A balanced transportation system provides excellent mobility for residents and visitors.

To achieve the vision, the PUC DP sets forth policies and guidelines organized according to the key elements. The policies and guidelines specifically applicable to the Aiea-Pearl City area include the following:

### *3.1 Protection and Enhancing Natural, Cultural and Scenic Resources*

#### *3.1.3 Guidelines*

##### *3.1.3.3 Urban Skyline and Mauka-Makai Views*

- *Increase line-of-sight opportunities towards Pearl Harbor – particularly the USS Missouri and the USS Arizona memorials.*

##### *3.1.3.4 Makai Access*

- *Provide continuous lateral shoreline access for pedestrians extending from Diamond Head to Nuuanu Stream, around Keehi Lagoon, and from Neal S. Blaisdell Park through Aiea Bay State Recreation Areas.*
  - *Acquire privately-owned properties and the McGrew Point Navy land makai of the Pearl Harbor bikeway along Pearl Harbor's East Loch shoreline for recreational use.*

##### *3.1.3.5 Stream Greenways and Drainage*

- *Develop streamside pathways to improve access to recreation sites and natural areas and provide safe, convenient pedestrian routes between neighborhoods. Stream segments to be considered for priority action include but are not limited to the following:*
  - *Aiea Stream: segment through former Aiea Sugar Mill site*

- *Halawa Stream: segment near Aloha Stadium*
- *Kalauao Stream: from Kamehameha Highway to Pearl Harbor’s East Loch*

### 3.2 Cultivating Livable Neighborhoods

#### 3.2.2 Policies

##### 3.2.2.1 Neighborhood Planning and Improvement

- **Cultivate existing and new “neighborhood centers.”** *Neighborhoods need central places where people gather for shopping, entertainment, and/or recreation. The center of a neighborhood...could be a commercial town center, with a grocery store and other shops and services....*
- **Promote mixed land uses.** *Office, retail, and other community service uses can co-exist with residential uses. In the PUC’s in-town neighborhoods, retail and other services are supported by both residential and office development....*
- **Make streets “pedestrian-friendly.”** *There are many opportunities to create street environments that invite pedestrian use, such as widening sidewalks; planting trees to provide shade and to buffer pedestrians from vehicular traffic; and narrowing at intersections to provide shorter and safer pedestrian crossings....*

##### 3.2.2.4 Shopping and Retail Business Districts

- **Community/Neighborhood Commercial.** *These commercial areas are located within and primarily serve Lower Density Residential Neighborhoods. Generally 10 acres or less in land area, these district typically have service stations, grocery and sundry stores, and other small businesses servicing residential customers. Buildings are generally one or two stories in height. While they vary greatly in total size and number of business establishments, a Community/Neighborhood Commercial area typically has no more than 200,000 square feet of commercial floor area.*
- **Commercial streets.** *Enliven commercial streets by providing wide sidewalks and trees for shade and by encouraging property owners to build to the sidewalk edge. Vital urban neighborhoods rely on high pedestrian activity. Storefronts create interest and stimulate pedestrian activity along the street, especially when they are built to the property line, where it meets the public sidewalk.*
- **District-wide parking.** *Support older commercial districts and the continued use and rehabilitation of small commercial lots by providing conveniently located municipal parking.*
- **Integration of shopping centers into the neighborhood....***Encourage neighboring retail complexes and small centers to reduce or eliminate physical barriers and develop agreements for shared parking....*

### 3.4 *The Pacific's Leading City*

#### 3.4.2 *Policies*

##### 3.4.2.5 *Pearl City-Aiea Town Centers*

- **Define the role of town centers.** *Establish the “Pearlridge” area as the Pearl Harbor Regional Town Center, and strengthen the physical and visual connection between this urban activity center and the Pearl Harbor waterfront. Other town centers at Pearl City, Waimalu, Aiea and Halawa should serve as more localized or specialized activity and service areas.*
- **Promote mixed land use.** *Town centers should support some form of mixed land use to respond more flexibly to market needs and to reduce dependence on the private automobile for local travel. The Pearl Harbor Regional Town Center should be designated for a greater diversity of uses than the other town centers, emphasizing an integration of high density residential and commercial development. Land use designations and design standards should be oriented toward assuring compatibility of building forms and uses, creating street connections, and providing a smooth transition between town centers and adjacent residential neighborhoods.*
- **Facilitate pedestrian, transit and bicycle improvements.** *There should be major improvements to transportation facilities and services, with particular emphasis on pedestrian, bicycle and public transit modes along Kamehameha Highway; and commuter travel on the H-1 Freeway and in the Aloha Stadium vicinity. Design standards for new development in the town centers – especially the Pearl Harbor Regional Town Center – should encourage pedestrian and transit travel.*

### 3.5 *Develop a Balanced Transportation System*

#### 3.5.3 *Guidelines*

- *Implement the regional pedestrian network in the Honolulu and Pearl Harbor areas. Establish standards for the development of a regional greenbelt system linking major parks and important public spaces, including mauka-makai greenbelts along the City's urban streams and canals for pedestrian and bicycle travel.*
- *Work with residents and school organizations in planning and education efforts to improve pedestrian safety through traffic management plans and the construction of traffic calming devices and improved sidewalks and crosswalks on neighborhood streets.*

## 2.3 **Community-Based Planning Process**

In keeping with the intent of the objectives and characteristics of the Livable Communities Initiative program, numerous meetings and discussions with the Aiea-Pearl City community have been held throughout the planning process. A key entity was the Aiea-Pearl City Community Vision Group which served in an advisory capacity throughout the process.

### **2.3.1 Aiea-Pearl City Community Vision Group**

Established for the City's Community Visioning Process, the Aiea-Pearl City Community Vision Group served as an advisory body to the City Department of Planning and Permitting throughout the planning process for the Livable Communities Plan. The Vision Group is comprised of representatives from various facets of the Aiea-Pearl City community, including the Aiea Community Association, Pearl City Community Association, Aiea Neighborhood Board, Pearl City Neighborhood Board, State Senate, State House of Representatives, City Council, and area business associations, as well as residents and other members of the community. The Community Vision Group, through its monthly meetings, served as an advisory entity for the Plan's integrated transportation plan, community design and streetscape/landscape concepts and guidelines, and implementation plan elements.

### **2.3.2 Community Workshops and Meetings**

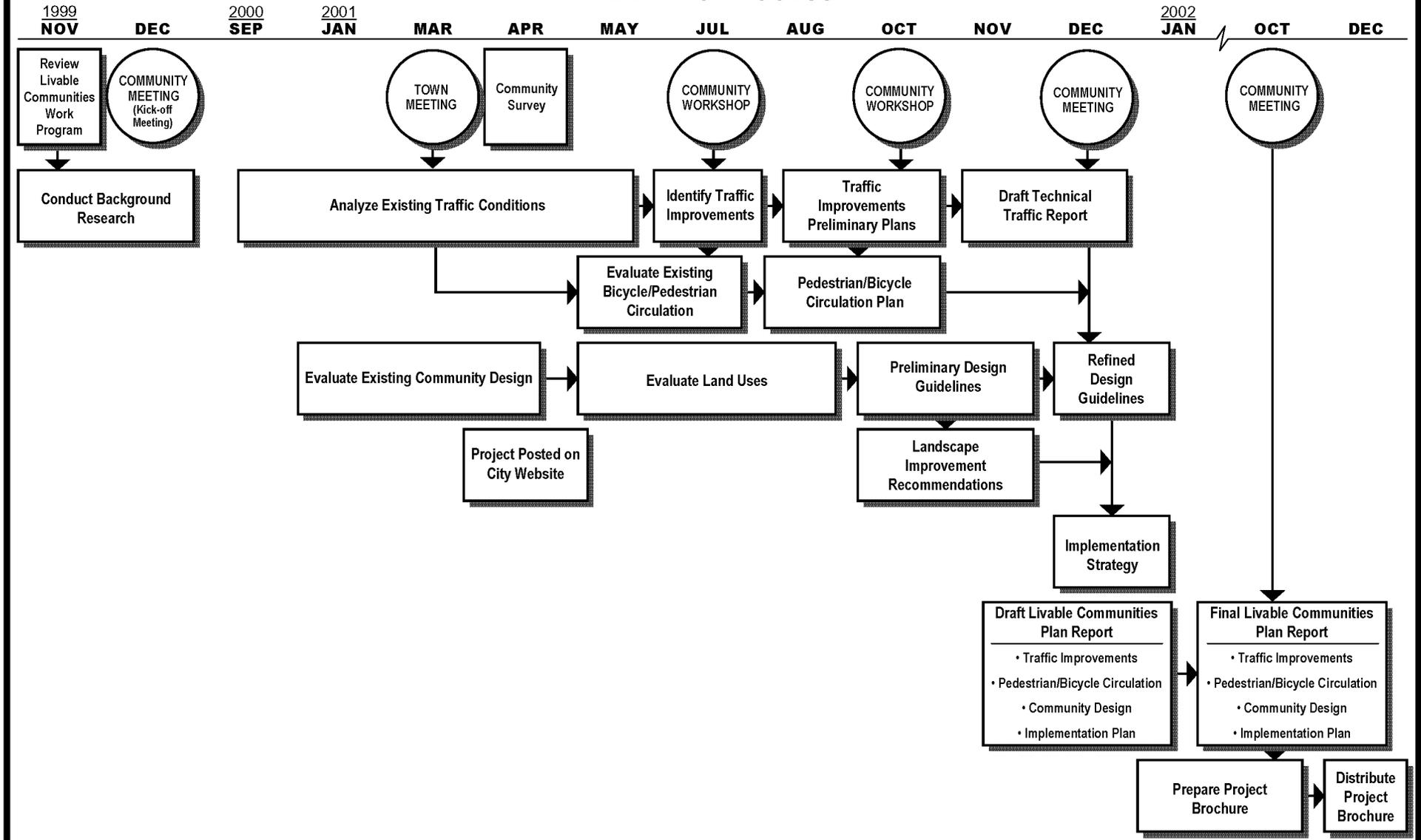
Throughout the planning process for the Livable Communities Plan, a number of meetings and discussions with the community were held, including monthly meetings with the Aiea-Pearl City Community Vision Group from mid-1999. The Aiea-Pearl City Livable Communities Plan's planning process is illustrated in the flow chart in Figure 2-2.

In December 1999, a community meeting was held to solicit input from the broader community on traffic problem locations, bus transit routes and stations, potential pedestrian/bikeway and parks/beautification improvements, and potential urban design concepts for the region. In March 2001, the Livable Communities Plan project was presented at the Aiea/Pearl City Town Meeting sponsored by area legislators in which traffic and transportation were the topics of discussion. A community survey was conducted in April 2001 with area residents and businesses to help assess their interest and needs in being better served by improved traffic conditions, transit, pedestrian/bicycle circulation, and urban design. This was followed by two major community workshops to solicit input from the community - a July 2001 community design workshop to identify opportunities to create new community assets, and an October 2001 workshop to review community land use and design ideas and recommended traffic improvements and pedestrian/bicycle circulation. In December 2001 and November 2002, community meetings were held to present the recommended community design plans, as well as traffic improvements and pedestrian/bicycle circulation recommendations.

Additional opportunities have been undertaken to present the Aiea-Pearl City Livable Communities Plan project to other businesses and organizations within the larger community to solicit interest and participation. These include presentations and status reports to the Pearl City Neighborhood Board, Pearl City Community Association, Aiea Neighborhood Board, Aiea Community Association, Aiea-Pearl City Business Association, Pacific Palisades Community Association, and the Pearl City Benchmarking Conference.

# AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN

## PLANNING PROCESS



Aiea - Pearl City Community Vision Group Monthly Meetings

Figure 2-2

### **2.3.3 Community Survey**

A community survey was conducted in April 2001 with residents and businesses of Aiea-Pearl City as part of the Livable Communities Plan project. The intent of the survey was to help assess the interest and needs of residents and businesses in the Aiea-Pearl City area in being better served by improved traffic conditions, transit, pedestrian/bicycle circulation, and urban design.

The survey was distributed as an insert through the April 2001 Leeward Current, which has a circulation of 21,000 in the Aiea-Pearl City area. The survey was also made available through the Aiea-Pearl City Livable Communities Plan website. A total of 476 mail-in surveys were received as of June 12, 2001, a response rate of 2 percent. Appendix A contains the survey questionnaire and summary of results.

In general, traffic flow/safety problems experienced by motorists and pedestrians along roadways and at intersections generated the most response in the survey. Traffic flow problems along Kamehameha Highway were most mentioned, particularly Ewabound between Kaahumanu Highway and the vicinity of Sam's Club. Congested traffic conditions along Moanalua Road were also highly mentioned, mainly Ewa bound in the afternoons as well as in the vicinity of Pearlridge Shopping Center. The segment of Kaahumanu Street between Kamehameha Highway and Moanalua Road was also frequently mentioned due to difficulty in entering/exiting the businesses along the street. Other problem areas frequently mentioned include congested traffic conditions along Waimano Home Road, and difficult and dangerous conditions in entering/exiting the Aiea Shopping Center along Aiea Heights Drive.

The problem intersection most mentioned was Kamehameha Highway and Waimano Home Road due to congested traffic conditions. As a follow-up, it should be noted that recent improvements to the intersection in conjunction with the nearby Home Depot development, coupled with the opening of the Kuala Street extension (formerly known as Spine Road), have resulted in improved traffic conditions at the intersection. Intersections along Moanalua Road were also frequently mentioned, including those at Kahele Street, Kaonohi Street, Kaahumanu Street, Aiea Heights Drive, Waimano Home Road, and Hoomalu Street.

Alternative transit center sites highly favored by respondents include the Aloha Stadium overflow parking area on Kamehameha Highway and the former Jim Slemons auto dealership site along Kamehameha Highway across of Pearlridge Shopping Center. This essentially validates the City Department of Transportation Services' (DTS) designation of proposed transit center sites for Aiea-Pearl City as part of its Bus Rapid Transit (BRT) project, as further discussed in Section 2.4.1.1.

For pedestrians/bicyclists, sidewalks were indicated to be needed in lower Pearl City, Pacific Palisades, Aiea Heights Drive, Halawa Heights Drive, and Kamehameha Highway. The need for safer crossing areas were indicated along Moanalua Road, Kamehameha Highway, Komo Mai Drive, Aiea Heights Drive, and Halawa Heights Drive. The need for bike lanes/paths were mentioned for mauka areas of Pearl City, along mauka-makai roads, including ridges, and along Kamehameha Highway, Moanalua Road and Waimano Home Road.

In general, there was support for additional traffic calming improvements, mainly along segments of Ulune Street (especially at the Aiea Heights Drive intersection), Komo Mai Drive, Aiea Heights Drive, Kaahumanu Street, and Hoomalu Street. Preference was expressed more for speed bumps rather than roundabouts which were indicated by some to be confusing, dangerous and an impediment to traffic flow. Others preferred increased enforcement of traffic laws (speeding) instead.

Regarding community design, the need for landscaping/beautification along Kamehameha Highway from Aloha Stadium to Pearl City was overwhelmingly mentioned. Various stretches along Moanalua Road were also frequently mentioned as needing landscaping/beautification. Other areas and roadways mentioned as needing beautification include Waimano Home Road, Kaahele Street, Komo Mai Drive, Aiea Heights Drive, Lehua Avenue, the cemetery in Aiea, Kamehameha Drive-In, and the Pearl Harbor shoreline.

Views, visual landmarks and open space areas which respondents indicated are important to preserve include the Sumida Watercress Farm, ponds Ewa of Waiau Zippy's, Kamehameha Drive-In, and shoreline park areas/views of Pearl Harbor from the Pearl Harbor Bike Path, Blaisdell Park, Kamehameha Highway, Aiea Bay State Recreation Area, and McGrew Point.

Areas makai of Kamehameha Highway indicated to need revitalization/physical improvements include the Pearl Harbor Bike Path, shoreline area (removal of trash and overgrown vegetation), removal of overhead power lines, and development of a park at McGrew Point.

The majority of respondents favored development of the proposed Pearl Harbor Recreation Complex and Senior Center in Pearl City along Lehua Avenue across of Lehua Elementary School.

## **2.4 Oahu Trans 2K**

Oahu Trans 2K was launched in the Fall of 1998 as the transportation component of the City's 21<sup>st</sup> Century Oahu Community Visioning Process. The Trans 2K process was an extensive community-based planning effort with the objective of gathering community input and fashioning a transportation program that meets the varied needs and desires of the people of Honolulu. During the process, residents in communities throughout Oahu worked with transportation planners and engineers to develop workable solutions to transportation problems.

The Trans 2K process led to the development of the *Islandwide Mobility Concept Plan* followed by six major transportation projects – Primary Corridor Transportation Project, Hub-and-Spoke Bus Routes, Transit Centers, Islandwide Traffic Calming, Honolulu Bicycle Master Plan, and Sand Island Scenic Parkway. These transportation projects are intended to create more livable communities while enhancing mobility for everyone.

### **2.4.1 Islandwide Mobility Concept Plan**

The *Islandwide Mobility Concept Plan* (March 1999) provides a strategy to increase islandwide accessibility while enhancing a sense of place in our communities. The elements of this plan define a balanced, integrated transportation vision for the Island which creates increased accessibility to healthy communities.

In its development, the *Islandwide Mobility Concept Plan* set the overall planning context and defined the relationship between the major projects being proposed. Three goals were articulated in the Mobility Concept Plan: 1) improve in-town mobility, 2) strengthen connections throughout the island, and 3) make transportation choices which help foster livable communities. These goals were used to organize transportation projects throughout Oahu, and have also since been incorporated into the State's Oahu Metropolitan Planning Organization's (OMPO) *Oahu Regional Transportation Plan 2001 update (TOP 2025)*. An overview of the major transportation projects stemming from the Mobility Concept Plan which are relevant to the Aiea-Pearl City area is provided below.

#### **2.4.1.1 Primary Corridor Transportation Project**

The Primary Corridor Transportation Project set out to create a high-capacity, frequent-service transit spine in the primary transportation corridor of Kapolei to Honolulu. The primary transportation corridor is a mix of existing residential and economic centers and areas designated by government plans to become residential and economic centers. With future growth being directed by government plans to occur in this corridor, the level of activity within the corridor is expected to increase.

The primary transportation corridor extends from Kapolei in the Ewa District to the University of Hawaii at Manoa and Waikiki in the east. The east/west (Koko Head/Ewa) length of the corridor is approximately 26 miles. The north/south (mauka/makai) width is a maximum of 4 miles, bounded by the Koolau Mountain Range and the coastline. The corridor is by far the most urban region on Oahu and in the State, encompassing more than 60 percent of the Island's population and more than 80 percent of its employment.

The Primary Corridor Transportation Project has used Trans 2K to take a comprehensive islandwide approach in assessing future transportation options. Throughout the Trans 2K public involvement process and extensive research and analysis, several options were considered for the primary corridor. Of these, three alternatives were analyzed in detail in the *Major Investment Study/Draft Environmental Impact Statement for the Primary Corridor Transportation Project (MIS/DEIS)* (August 2000): 1) No-Build Alternative consisting of over eight roadway projects to be implemented in the next three years and expansion of the bus service in developing areas like Kapolei; 2) Transportation System Management (TSM) Alternative featuring reconfiguration of the bus system into a hub-and-spoke network with circulator, local and express routes meeting at transit centers; and, 3) Bus Rapid Transit (BRT) Alternative which builds on the hub-and-spoke bus system in the TSM Alternative, and adds Regional and In-Town BRT elements.

Bus Rapid Transit (BRT): In November 2000, the Honolulu City Council selected the Bus Rapid Transit (BRT) as the locally preferred alternative to create a fully integrated mass transit system for Oahu. The BRT program includes a regional system from Kapolei to Kalihi with expanded zipper lanes and new access ramps to let buses bypass traffic congestion on the H-1 Freeway during both the morning and afternoon. An In-Town BRT system uses frequent bus service along dedicated lanes to create a high-capacity spine between Middle Street, Downtown Honolulu, University of Hawaii, Kakaako, and Waikiki.

BRT uses priority lanes, enhanced bus stops and new vehicle technology to give buses the same features of rail but at a substantially lower cost. Dedicated bus lanes along existing streets and traffic signal priority systems give BRT the speed and reliability typically associated with rail systems.

In an effort to address issues in specific areas and explore community enhancement opportunities in relation to the BRT project, working groups were established in Pearl City/Aiea, Kalihi, Downtown-Kakaako, Midtown/UH, Waikiki, and Aliamanu/Salt Lake/Foster Village. Each was comprised of about 15 to 20 representatives from community associations, civic groups and major landowners. Working group members and the BRT project consultants exchanged information on community needs and technical details of the BRT schemes. The working groups also identified ways in which the BRT project could enhance and strengthen the communities that it serves. The proposed BRT system for the Aiea-Pearl City area is discussed in Section 5.2.2.

As a result of the working groups and comments received on the MIS/DEIS, the locally preferred alternative was refined to include new and modified components which the City Council endorsed on August 1, 2001. A Supplemental Draft EIS was prepared by the City in March 2002 to assess the specific proposed changes to the BRT. Changes include a new access ramp location, a new In-Town BRT route, rerouting of a portion of the In-Town BRT alignment, and other refinements along the BRT routes serving Waikiki. These changes are designed to improve how BRT fits into each community along the primary transportation corridor. The Supplemental Draft EIS and its refinements to the locally preferred alternative will then be integrated into the Final EIS.

#### **2.4.1.2 Hub-and-Spoke Bus Routes**

During the Oahu Trans 2K process, communities throughout Oahu indicated the need for transit services that could take them around their neighborhoods as well as provide faster service into town. To serve these needs, a new hub-and-spoke bus route system is being phased in throughout Oahu.

A hub-and-spoke system provides better service within communities while connecting neighborhoods to other destinations. Community circulators pick up and drop off people throughout a neighborhood before heading to a transit center. At each transit center, circulator routes meet to exchange passengers onto limited-stop express or local buses for longer trips into town or other places.

In August 2000, Leeward Oahu was the first area on the Island to receive the new routes. The next area to convert to the hub-and-spoke system will be the North Shore and Central Oahu communities. Community meetings began in Spring 2001 and passenger and driver surveys have been completed. The conversion planning process is anticipated to last about one year.

#### **2.4.1.3 Transit Centers**

The hub-and-spoke system relies on coordinated schedules to make transfers easy and convenient. New transit centers are proposed in 14 communities throughout Oahu to provide comfortable and attractive places to make these transfers.

Each transit center could contain amenities such as restrooms, telephones, vending machines, bus information kiosks, or other conveniences. The amount of parking would depend on the size and function of each transit center. The City and its consultants are working with neighborhood boards, vision groups and other groups to develop appropriate solutions for each community.

A discussion of proposed transit center sites in Aiea-Pearl City is included in Section 5.2.2.

#### **2.4.1.4 Islandwide Traffic Calming**

A major objective of the Islandwide Mobility Concept Plan is to make residential and commercial streets more livable. Speeding and cut-through traffic on neighborhood streets have become a common occurrence, creating a hazardous environment for motorists, pedestrians and bicyclists within residential areas. Traffic calming is an effort to reduce the speeds of motorists, improve traffic flow, increase safety for pedestrians and motorists, and improve the quality of life in a neighborhood. This is achieved by incorporating physical and/or visual features to discourage inappropriate motor vehicle speeds and volumes.

The City Department of Transportation Services began the islandwide Traffic Calming Program in 1998. Using a community-based process, the Department's staff and consultants worked closely with Councilmembers and residents of neighborhoods around the Island to address specific concerns at locations determined by the residents. By mid-2001, over 30 neighborhoods held traffic calming workshops and charettes in which calming options were selected to curb speeding and cut-through traffic problems. The more popular traffic calming measures which came out of these workshops include bulbouts, speed tables and roundabouts. Currently, several dozen of these traffic calming projects are in various stages of design and construction.

Proposed and planned traffic calming projects for the Aiea-Pearl City area are discussed in Section 5.2.1.2.

#### **2.4.1.5 Honolulu Bicycle Master Plan**

The City and County of Honolulu Department of Transportation Services' *Honolulu Bicycle Master Plan*, completed in April 1999, provides recommendations for the development of a regional network of almost 100 miles of new bikeway routes, stretching from Pearl City to Kahala. Recognizing Honolulu's physical assets, coupled with the hallmark of a livable city, the *Honolulu Bicycle Master Plan* outlines a set of projects, policies, and programs to incorporate bicycles into the City's future transportation system. The recommended bikeways connect primary employment centers, and commercial and recreational destinations with urban Honolulu's major residential areas. In addition, the plan includes important recommendations to institutionalize bicycle transportation features in the routine working of all levels of government agencies and, in some instances, the private sector.

The *Honolulu Bicycle Master Plan* identifies Honolulu's 20-year vision as follows:

*Honolulu is a bicycle-friendly city where bicycling is a viable and popular travel choice for residents and visitors of all ages.*

The plan identifies three Priority One projects aimed at accomplishing this vision: the Lei of Parks, College Access, and Bike-Friendly Route No. 1, a continuous bicycle facility between Kahala and Pearl City. These recommendations focus on improving access to important elements of Honolulu: parks and waterfront areas; commercial and employment centers; and colleges and universities. Priority Two projects complete the Makai and Central Bike Corridors. Priority Three projects complete the Regional Bike Corridor concept's network of routes.

The *Honolulu Bicycle Master Plan's* recommended bikeway facilities for the Aiea-Pearl City area are discussed in Section 5.2.3.2.2.

## **2.5 Pearl Harbor Historic Trail Master Plan**

The *Pearl Harbor Historic Trail Master Plan* prepared by the City and County of Honolulu (May 2001) is an 18.6-mile long rail-and-trail system between Aiea and Nanakuli that will link neighborhoods to beach parks and other recreation areas, regional attractions, historic sites, and nature habitats. The long-range master plan stemmed from the Aiea-Pearl City Community Vision Group's Year 2000 project and was an offshoot of efforts by the Aiea-Pearl City community to obtain federal economic empowerment zone grants. The Pearl Harbor Historic Trail is a vital element in the Aiea-Pearl City Livable Communities Plan as its proposed projects for the area are integrated into the Plan.

The former Oahu Railway and Land Company (OR&L) right-of-way is the foundation upon which the proposed Pearl Harbor Historic Trail will be built. The Aiea-Pearl City Community Vision Group saw the 40-foot wide OR&L right-of-way as a valuable asset within their community that had the potential to meet a number of community needs such as safe bicycle and pedestrian paths, a natural and historic preservation project, a recreation resource, a means of opening up shoreline access, and an opportunity for economic revitalization.

The Master Plan incorporates a combination shared-use path and railway extending from Aiea to Nanakuli and includes major components, attractions and activity centers that will establish the Trail as a world-class heritage and recreation corridor. The Trail will feature a continuous path for bicyclists and pedestrians alongside an historic train, diverging from the OR&L right-of-way where advantageous to take in shoreline views. Miles of greenway and bikeway connections and gateways to the path are proposed, enhancing access to nearby communities and attractions. A transportation network consisting of the restored railway, shuttle buses, trolleys, and ferries linked to Trail attractions are intended to bring more visitors and residents into the communities.

A key project of the Master Plan is the re-establishment of the historic railway operation for the entire 18.6 miles of the Trail. The Hawaiian Railway Society (HRS) currently operates a six-mile long narrated railway train tour between its Ewa station museum and Kahe Tracks Beach Park in Nanakuli. Train expansion is proposed in four phases over a 25-year period, with the last and most technically challenging three-mile segment linking Lehua Avenue and Halawa Landing near the USS Arizona Memorial Visitors Center.

Major projects of the *Pearl Harbor Historic Trail Master Plan* which are relevant to the Aiea-Pearl City area are summarized in Table 2-1. Trail connections recommended in the Master Plan are further identified in Section 5.2.3.2.3.

<b>Table 2-1 Pearl Harbor Historic Trail Master Plan Major Projects Proposed (Relevant to the Aiea-Pearl City Area)</b>	
<b>Priority Projects and Programs – Years 2001–2005</b>	
<b>Project</b>	<b>Description</b>
<b>Recreation</b>	
<b>Trail Signs and Markers</b>	Design and install Pearl Harbor Historic Trail identification and directional signs and mileage markers.
<b>Trail Connections</b>	Plan, construct, and identify bikeways and paths joining the Trail to increase public access and links to attractions, neighborhoods, and schools. Priority locations: Pearl Kai Shopping Center, McGrew Point, Kanuku Street, Neal S. Blaisdell Park, Lehua Avenue.
<b>Community &amp; Economic Revitalization</b>	
<b>Trolley System</b>	Provide trolley or shuttle systems on public roadways between future railway stations/attractions in addition to or absence of an expanded historic railway. The trolleys could provide an alternate and efficient link between community and visitor attractions.
<b>Pearl Harbor Recreation Complex and Senior Center</b>	Support Aiea-Pearl City Community Vision Group’s project to develop a new recreation complex at Lehua Avenue. The complex will include a Senior Recreation Center, swimming pool, and ball fields and would complement the planned railway station at Lehua Avenue.
<b>Trail Protection in Perpetuity</b>	The City (and State) could consider rezoning the Trail right-of-way, designating the entire Trail as an historic corridor, creation of a special district, or acquiring the right-of-way. Work with developers of new neighborhoods to acquire easements alongside the Trail and to provide Trail access points.
<b>Landowner &amp; Community Support &amp; Involvement</b>	Arrange discussions with Trail and adjacent landowners and hire a specialty consultant to conduct a Trail user, door-to-door survey along adjacent properties. The survey would identify concerns, opportunities, and access issues.
<b>Historic Preservation</b>	
<b>Historic Railway Expansion</b>	Phase 1: New route from Ewa station/Train Museum to Waipahu Depot and Waipahu Cultural Garden Park; Phase 2: Kahe “Tracks” Beach to Nanakuli; Phase 3: Waipahu Depot to Lehua Avenue; Phase 4: Lehua Avenue to Halawa Landing.
<b>Train Stations</b>	Construct train stations as community “substations” to unify the Trail’s historic train theme. <u>Related Project:</u> Harbor Center Redevelopment. Provide alternate transportation (trolleys, buses) on public roadways to supplement access to stations and attractions.
<b>Heritage Corridor Designation</b>	Prepare National Park Service (NPS) application for consideration of the Pearl Harbor Historic Trail to be nominated as a National Heritage Corridor. Lobby Hawaii’s Congressional delegation for support of formal designation by the U.S. Congress.

<b>Table 2-1 (continued)</b> <b>Pearl Harbor Historic Trail Master Plan</b> <b>Major Projects Proposed</b> <b>(Relevant to the Aiea-Pearl City Area)</b>	
<b>Priority Projects and Programs – Years 2001–2005 (continued)</b>	
<b>Project</b>	<b>Description</b>
<b>Environmental Preservation</b>	
<b>Open Shoreline Views</b>	Selectively clear mangrove at Pearl Harbor. Key locations include: east of Harbor Center, east of Lehua Avenue, Waiawa Stream.
<b>Trail Landscaping</b>	Upgrade landscaping along the Trail and at gateways and spurs. Within City jurisdiction areas, develop a landscape concept plan in association with the Department of Parks and Recreation to prioritize areas for improvements.
<b>Fishpond Restoration</b>	Develop Pearl Harbor fishponds (Pa'aiaiu, Pa'akea, Pa'au'au) restoration plan and identify feasible improvements. Partial restoration may be possible in conjunction with interpretive exhibits.
<b>Future Projects – Years 2006–2025</b>	
<b>Category</b>	<b>Project</b>
<b>Community and Economic Revitalization</b>	<ul style="list-style-type: none"> <li>▪ Increase efforts for Trail protection through land use policy strategies, donations, purchase, easements, and greenway buffer setbacks.</li> <li>▪ Explore redevelopment of incompatible land uses along the Pearl Harbor shoreline with landowners: Harbor Center, junkyards, tire and car maintenance businesses, etc.</li> <li>▪ Incorporate recommendations of this Master Plan into City plans as they are updated (General Plan, Development Plan, Sustainable Community Plans, Special Area Plans), as well as the Oahu Regional Transportation Plan and the State's Bike Plan Hawaii.</li> </ul>
<b>Future Projects – Years 2006–2025 (continued)</b>	
<b>Category</b>	<b>Project</b>
<b>Recreation</b>	<ul style="list-style-type: none"> <li>▪ Construct remaining Trail public access links, gateways, and spurs.</li> <li>▪ Realign Trail bicycle/pedestrian path to Harbor Center shoreline and closer to shoreline east of Lehua Avenue (near HECO's Waiawa Power Plant).</li> <li>▪ Add more Trail amenities: benches, water fountains, landscaping, and signage.</li> <li>▪ Realign bike path behind CINCPACFLT Admiral's Boathouse. Investigate relocation of Boathouse to Ford Island.</li> <li>▪ Refurbish stream bridges that are aging or showing signs of wear. Widen and enhance bridges to accommodate multiple users.</li> <li>▪ Discuss with Navy the possibility of limited recreational boating in East Loch from Neal S. Blaisdell Park or a redeveloped Harbor Center commercial seaside village.</li> <li>▪ Traffic calming: Add raised crosswalks to act as wide speed bumps where Trail intersects roadways (Harbor Center, etc.).</li> <li>▪ Maintain, update, and replace Trail sections and amenities that age and show signs of wear.</li> </ul>

<b>Table 2-1 (continued)</b> <b>Pearl Harbor Historic Trail Master Plan</b> <b>Major Projects Proposed</b> <b>(Relevant to the Aiea-Pearl City Area)</b>	
<b>Historic Preservation</b>	<ul style="list-style-type: none"> <li>▪ Expand historic railway to Halawa Landing and to Nanakuli (Lualualei Access Road). Aggressively pursue funding and prepare detailed studies for expanding the railway. Poll public support for the expansion.</li> <li>▪ Construct additional train stations and stops and expand railway theme (signage, exhibits, programs) along entire length of Trail.</li> </ul>
<b>Environmental Preservation</b>	<ul style="list-style-type: none"> <li>▪ Implement fishpond restoration plans.</li> <li>▪ Restore marsh adjacent to the Trail at Pearl Kai Shopping Center (former Opu Fishpond site/Kalua’oa Springs).</li> <li>▪ Extend path spur to University of Hawaii Pearl City Extension Farm.</li> <li>▪ Stream restoration: clean up streams flowing into Pearl Harbor and create greenway paths and features (nature park, overlooks, children’s education centers).</li> <li>▪ Prepare water resources conservation plan for landscape and development improvements along the Trail. Address Pearl Harbor region (ahupuaa) water quality issues and long-term flooding and climatic change impacts on trailside developments.</li> </ul>
<p>Source: <i>Pearl Harbor Historic Trail Master Plan</i>, prepared by the City and County of Honolulu, May 2001.</p>	

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# Aiea Pearl City Livable Communities Plan

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## LAND USE, ENVIRONMENTAL AND SOCIO-ECONOMIC ANALYSIS

### **3. LAND USE, ENVIRONMENTAL AND SOCIO-ECONOMIC ANALYSIS**

This section describes the land use, environmental and socio-economic conditions of the Aiea-Pearl City area.

#### **3.1 Land Use**

This section discusses land ownership, existing and proposed land uses and developments, and Development Plan, Zoning and Special Management Area information.

##### **3.1.1 Land Ownership**

Land ownership within the Aiea-Pearl City Livable Communities Plan boundaries is comprised of Federal lands, State and City and County of Honolulu lands for public facilities, major private landowners, and thousands of individual private landowners (see Figure 3-1). Substantial Federal lands owned and administered by the U.S. Navy include those located in the Pearl City Peninsula, Ford Island, Manana area, McGrew Point, Pearl Harbor makai of Kamehameha Highway (across of Aloha Stadium), Camp H. M. Smith, and Halawa. The U. S. Navy also has jurisdiction over the waters in Pearl Harbor. State lands include public schools, parks, libraries, housing projects, Aloha Stadium, Waimano Training School and Hospital, Leeward Community College, University of Hawaii at West Oahu, University of Hawaii's Pearl City Urban Garden Center, the Animal Quarantine facility in Halawa, Halawa Correctional Facility, and forest reserve areas. City lands include parks, the Pearl City Police Station, fire stations, Board of Water Supply facility sites, and wastewater facility sites.

Major private landowners include Kamehameha Schools and The Queen Emma Foundation. There are also thousands of individual private landowners whose parcels are less than 10,000 square feet in size.

##### **3.1.2 Land Uses**

Aiea and Pearl City are generally older, established communities with vestiges of urban sprawl (see Figure 3-2). Residential is the predominant land use in the area and is mostly located mauka of the H-1 Freeway, with smaller pockets of residential in makai areas. Commercial uses are concentrated along Kamehameha Highway and, to a lesser extent, along Moanalua Road. Industrial uses are primarily located along the western and eastern boundaries of the planning area. Public and recreational facilities are for the most part located throughout the planning area. Military uses are largely concentrated in the vicinity of Pearl Harbor, with the exception of Camp H. M. Smith located in Halawa Heights.

Major proposed and planned developments in the Aiea-Pearl City area include the City's Manana Development project in Pearl City, the City's proposed Aiea Town Center at the site of the former Aiea Sugar Mill, and the U.S. Navy's planned redevelopment of Camp H. M. Smith and Ford Island.

A more detailed description of the existing and proposed land uses and developments in the Aiea-Pearl City area is discussed in the following sections.

### **3.1.2.1 Residential**

Residential development in Aiea-Pearl City consists primarily of single-family dwellings located mostly on the slope and ridge areas. The majority of these are established residential communities. Within Pearl City, major single-family residential developments include Pearl City Heights Subdivision, Momilani Subdivision, Twin View Terrace, Manana Subdivision, Manana Park Subdivision, Kauhale Manana Subdivision, Pacific Palisades, Holiday City Subdivision, Momilani Villa, Waiiau View Estates Subdivision, Waiiau Farm Lots, and Waiiau-Kai Tract. Within Aiea, major single-family residential developments include Waimalu Tract, Waimalu Garden Tract, Waimalu Subdivision, Waimalu Vista Subdivision, Harbor Terrace, Newtown Villa, Ke Kumulani, Kaonohi Ridge Subdivision, Pearl View Estates Cluster Subdivision, Aiealani Tract, Aiea Kai Tract, Laulima Tract, Enchanted Hill Estates, Enchanted Hills Manor, Aiea Town Tract, Aiea Homesteads, Aiea Park Place, Aiea Heights Subdivision, Lapa'olu, Halawa Heights Tract, Halawa Heights Subdivision, Halawa Hills Estates Subdivision, and Halawa Valley Estates.

Multi-family residential developments are largely concentrated in the Waiiau, Waimalu, Newtown, and Pearl Ridge areas and tend to be more recent developments. Low- to mid-density multi-family residential developments in Pearl City include College Gardens, Hale Ola, Acacia Park, the State's Manana Uka Housing and Hale Mohalu developments, Waiiau Gardens Kai, Waiiau Garden Villa, Waiiau Garden Court, Hillside Terrace, and Wailuna development. In Aiea, low- to mid-density multi-family residential developments include Hillside Terrace, Chateau Newtown, Newtown Meadows, Townhomes at Pearlridge, Pacific Village, Bougainville, Kaonohi Ridge Condominium, the Ridgeway, Nahalekeha, Aiea Lani Estates, Crosspointe, Alii Plantation, Puuwai Momi Housing, and Makalapa Manor.

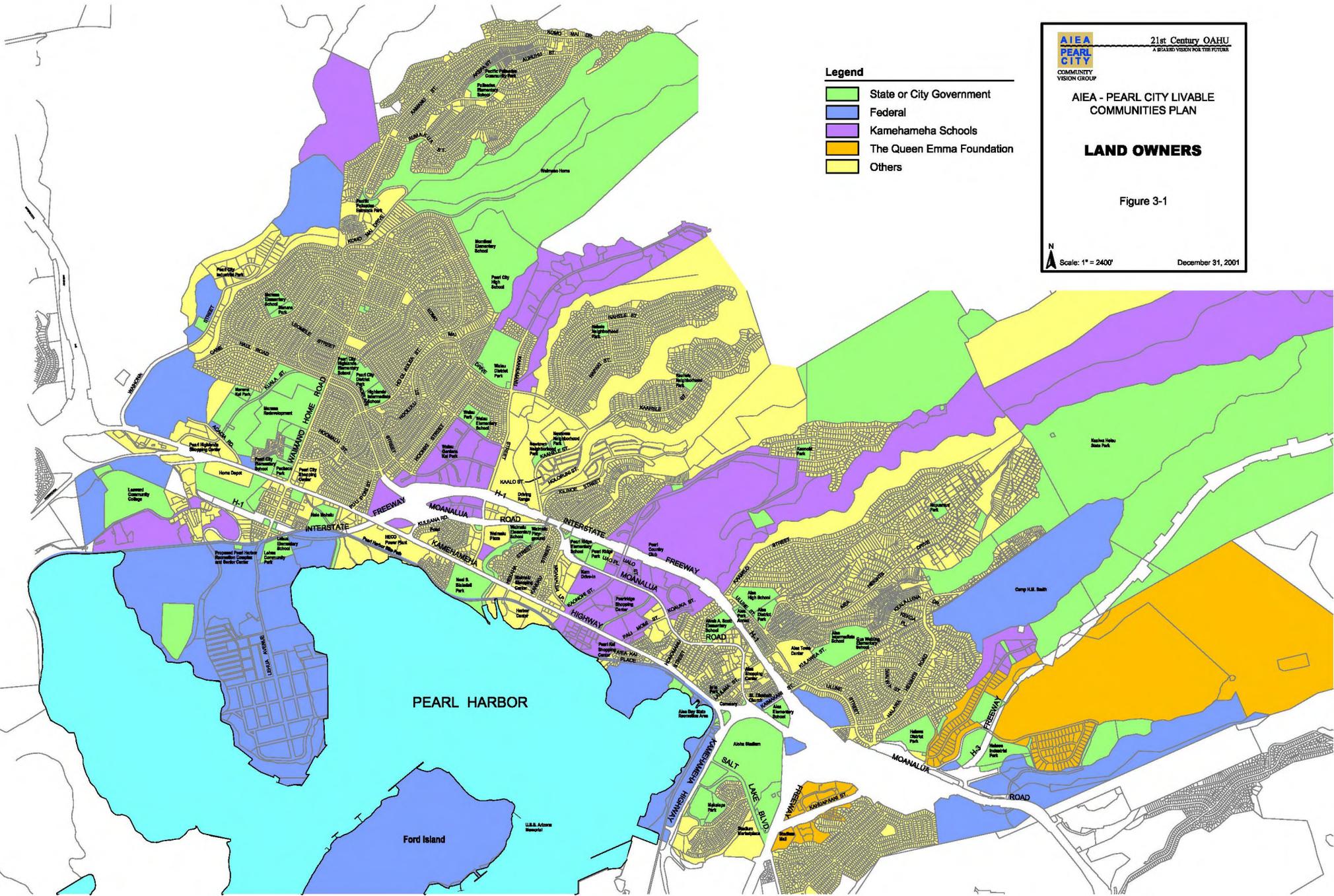
High-rise developments are primarily located in the Pearl Ridge area makai of the H-1 Freeway and include the Highlander, Lele Pono, Pearlridge Square, Pearl Horizons, Pearl Ridge Gardens and Towers, Pearl Regency, Pearl No. Two, Park at Pearlridge, and Kauhale Condominium. The Colonnade on the Greens is the only high-rise development in Aiea located mauka of the H-1 Freeway. In Pearl City, the only high-rise is the Century Park Plaza, a twin tower development located mauka of the H-1 Freeway adjacent to the Pearl Highlands Center.

A number of smaller low- to mid-rise apartment buildings are located in various areas of Aiea and Pearl City. Most notable are those along Lehua Avenue in Pearl City, and along lower Kanuku Street and Moanalua Loop in Aiea.

A senior facility is proposed in conjunction with the City Department of Design and Construction's planned Aiea Town Center Master Plan at the former Aiea Sugar Mill site. The type of senior facility, which could range from an assisted living facility to senior housing without nursing services, would be determined by the developer of the project. A more detailed discussion of the Aiea Town Center Master Plan is included in Section 3.1.2.4.

### **3.1.2.2 Commercial**

Existing commercial uses in the region are concentrated along Kamehameha Highway, as well as Moanalua Road in Aiea. The most prominent commercial use is Pearlridge Shopping Center, the State's second largest shopping center. Other prominent commercial uses in the region include nationwide big box/discount retailers such as Toys R Us and Circuit City in Pearl

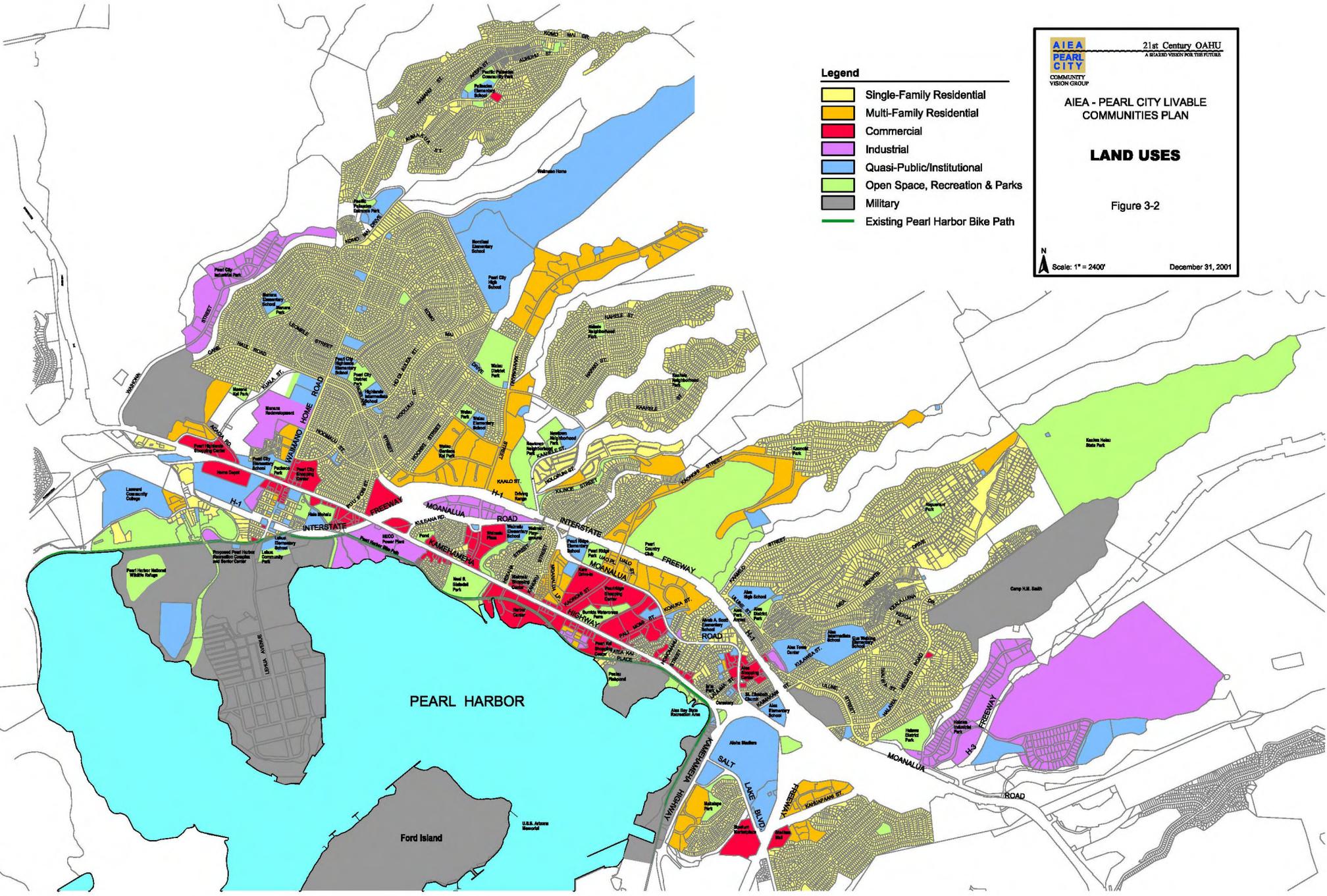



21st Century OAHU  
A BOLD VISION FOR THE FUTURE

**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**  
  
**LAND OWNERS**

Figure 3-1

N  
 Scale: 1" = 2400'  
 December 31, 2001



- Legend**
- Single-Family Residential
  - Multi-Family Residential
  - Commercial
  - Industrial
  - Quasi-Public/Institutional
  - Open Space, Recreation & Parks
  - Military
  - Existing Pearl Harbor Bike Path

AIEA PEARL CITY 21st Century OAHU  
A SCALED VISION FOR THE FUTURE  
 COMMUNITY VISION GROUP

**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**

**LAND USES**

Figure 3-2

N  
 Scale: 1" = 2400' December 31, 2001

Ridge, and Home Depot and Sam's Club in Pearl City. Major commercial centers include Pearl Highlands Center, Pearl City Shopping Center and the Sears Distribution Center in Pearl City; Waimalu Plaza, Waimalu Shopping Center, Harbor Center, West Ridge Shopping Center, Pearl Kai Shopping Center, Aiea Shopping Center, and Aiea Shopping Plaza in Aiea; and, Stadium Mall and Stadium Marketplace in Halawa.

Strip commercial areas are prominent along Kamehameha Highway which include car dealerships, service stations, restaurants, fast food establishments, and banking institutions. Swap meet activities are held at the former Kamehameha Drive-In site located at the corner of Kaonohe Street and Moanalua Road, and at the Aloha Stadium. In the residential ridge areas, neighborhood convenience stores are located in Pacific Palisades and Halawa Heights.

Commercial uses are currently proposed for three areas in Pearl City. A specialty retail center is proposed for an approximately 3-acre site on the mauka side of Kamehameha Highway adjacent to the Burger King establishment in Waiiau. The project site is undergoing a zone change from R-5 Residential District to B-2 Community Business District.

Recently, Wal-Mart purchased approximately 20 acres in the City's Manana Development located in Pearl City mauka of Kamehameha Highway above the Pearl Highlands Center. Another nationwide big box/retailer, Best Buy, recently announced plans for a store to be located adjacent to Home Depot in Pearl City.

In Aiea, a commercial establishment is proposed for a 32,181 square-foot parcel on the mauka side of Kamehameha Highway about a half-mile south of Aloha Stadium near the Puuwai Momi Housing area. Proposed establishments include a neighborhood convenience store, takeout restaurant, a police workstation, and additional retail space. The project will require a Development Plan Land Use Map Amendment and a zone change from R-5 Residential District to B-2 Community Business District.

### **3.1.2.3 Industrial**

Existing light Industrial uses in the region include the Pearl City Industrial Park at the western end of Pearl City, the City's new bus facility and Board of Water Supply's baseyard facility within the Manana Development project, the light industrial development along Kaahumanu Street between the H-1 Freeway and Moanalua Road in Waimalu, Kalauao Industrial Park near the Pearl Kai Shopping Center in Aiea, the administrative offices and laboratories of the Hawaii Agriculture Research Center (HARC) at the former Aiea Sugar Mill site, and Halawa Industrial Park in Halawa Valley.

Existing major industrial facilities in the region include Hawaiian Electric Company, Inc.'s (HECO) Waiiau Power Plant located makai of Kamehameha Highway, and the Halawa Quarry operated by Hawaiian Cement in Halawa Valley.

### **3.1.2.4 Quasi-Public/Institutional**

Existing quasi-public/institutional uses in the region include schools, police and fire stations, libraries, hospitals/clinics and nursing/care homes, post offices, churches/religious institutions, and other public facilities.

**Schools:** Existing public schools in the Aiea-Pearl City region include 12 elementary schools, two intermediate schools, and two high schools. Table 3-1 lists the public schools in the region and the State Department of Education's (DOE) six-year enrollment projections.

<b>Table 3-1 Public Schools in Aiea-Pearl City 2000-2006 Actual and Projected Enrollment</b>							
<b>School</b>	<b>Actual 2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>Aiea</b>							
<u>Elementary Schools</u>							
Aiea	376	350	361	362	373	376	374
Alvah A. Scott	661	632	630	625	623	621	619
Gus Webling	489	484	486	485	486	497	505
Pearl Ridge	631	632	624	623	622	621	623
Waimalu	685	666	654	643	634	633	623
Totals	2,842	2,764	2,755	2,738	2,738	2,748	2,744
<u>Intermediate School</u>							
Highlands	1,103	1,081	1,094	1,103	1,074	1,066	1,067
<u>High School</u>							
Pearl City	2,032	2,019	2,023	2,035	2,052	2,054	2,048
<b>Pearl City</b>							
<u>Elementary Schools</u>							
Lehua	362	364	356	352	350	355	357
Manana	510	501	507	504	503	499	497
Momilani	406	412	406	404	408	408	407
Pearl City Highlands	392	378	374	363	359	356	357
Palisades	378	346	338	325	314	313	316
Pearl City	552	551	542	537	525	538	538
Wai'au	669	670	666	667	666	665	667
Totals	3,269	3,221	3,189	3,152	3,125	3,134	3,139
<u>Intermediate School</u>							
Aiea	571	582	608	586	565	566	569
<u>High School</u>							
Aiea	1,367	1,341	1,230	1,228	1,234	1,246	1,272

Source: State Department of Education, Statistical Research and Analysis Section, September 5, 2001

The projected enrollment of the elementary schools in the region generally reflect a slight declining trend in the near future. The potential for future consolidation of elementary schools in the region should the declining enrollment trend continue, and the possible subsequent availability of school facilities for other community-related uses were pursued with the State DOE. According to the DOE, the probability of future consolidation of elementary schools in the region due to declining enrollment is highly unlikely. The DOE anticipates long-term demand for school facilities resulting from the need to accommodate employees in the various DOE

programs, the impact on school facilities from planned reduction of the student/teacher ratio, potential increased enrollment due to future housing projects, and facilities for alternative learning centers and other future DOE programs.

Existing private schools in the region mostly for pre-schoolers include The Children’s House, Alphabetland Pre-School, Kamaaina Kids, and Highlands Child Care Center in Pearl City; and St. Timothy’s Children’s Center, Alphabetland Pre-School, Waimalu Grace Brethren Church and Children’s Center, King’s Kids Christian Preschool, Keiki Aloha Preschool and Daycare, Our Savior Lutheran School, and St. Elizabeth School in Aiea.

Existing facilities of higher education in the region include the University of Hawaii’s Leeward Community College located makai of the H-1 Freeway in Pearl City, and the University of Hawaii at West Oahu located adjacent to and Diamond Head of Leeward Community College.

Police and Fire Stations: The Pearl City Police Station, the only police station in the region, is located along Waimano Home Road. Existing fire stations in the region include the Pearl City Fire Station located on First Street near Lehua Avenue, the Waiiau Fire Station located on Komo Mai Drive near Kaahumanu Street, and the Aiea Fire Station located on Ulune Street.

Libraries: Existing libraries in the region include the Pearl City Public Library located on Waimano Home Road and the Aiea Public Library located on Moanalua Road.

It has been proposed that the State acquire land within the former Aiea Sugar Mill site for the construction of a new Aiea Public Library. A site has been designated for a new library as part of the City’s planned Aiea Town Center Master Plan. Further discussion of the *Aiea Town Center Master Plan* is included below under “Other Public Facilities”.

Hospitals/Clinics and Nursing/Care Homes: The major acute-care hospital in the region is the Kapiolani Medical Center at Pali Momi located on Moanalua Road in Aiea. Existing clinics include the Straub Pearlridge Satellite Clinic on Pali Momi Street and the Rehabilitation Hospital of the Pacific (REHAB) at Aiea outpatient clinic in Pearl Ridge. The State Department of Health’s Waimano Training School and Hospital facility is located at the end of Waimano Home Road in Pearl City. Nursing/care homes in the region include the Pearl City Nursing Home located on Lehua Avenue and the Aiea Heights Rest Home.

Post Offices: Existing post offices in the region include the Pearl City Post Office located on Kamehameha Highway and the Aiea Post Office located on Kauhale Street.

Churches/Religious Institutions: A number of churches/religious institutions are located throughout the Aiea-Pearl City area. Institutions in Pearl City include the Pearl City Community Church, Grace Bible Church - Pearl Side, Kahikuonalani United Church of Christ, Oceanview Bible Chapel, New Hope Pearl Community, Palisades Baptist Church, Palisades Community Chapel, Island Christian Fellowship, Trinity United Methodist Church Pearl City, Leeward Community Church, Filipino American Christian Church, Joy of Christ Lutheran Church of Pearl City – ELCA, Peniel Pearl Gates Church, Pearl City Hongwanji Mission, Thai Buddhist Temple of Hawaii, Jehovah’s Witnesses Pearl City, and First Baptist Church of Pearl City.

In Aiea, churches/religious institutions include the Assembly of God Bethany at Aiea, St. Timothy's Episcopal Church, Antioch Baptist Church Hawaii, Waimalu Grace Brethren Church and Children's Center, The Church of Jesus Christ of Latter-Day Saints, Our Savior Lutheran Church of Aiea, Calvary Church of the Pacific, Aiea Seventh-Day Adventist Church, Aiea Hongwanji Mission, Aiea United Methodist Church, Jehovah's Witnesses Aiea Halawa Heights Baptist Church, Tentoku Yodo Mission of Hawaii, and The Church of Jesus Christ of Latter-Day Saints (Halawa).

**Other Public Facilities:** Other existing public facilities include the Ewa District Court and University of Hawaii's Pearl City Urban Garden in Pearl City; Aloha Stadium in Aiea; and the State's Animal Quarantine facility and Halawa Correctional Facility in Halawa Valley. Various City Board of Water Supply and wastewater system facilities are located throughout the region.

**Manana Development:** A major public facility project currently undergoing development is the City's Manana Development located in Pearl City mauka of Kamehameha Highway in the vicinity of the Waimano Home Road intersection (see Figure 3-3). The development encompasses approximately 108.7 acres mauka of Kamehameha Highway (also referred to as the Manana property) and the 13.8-acre Home Depot site makai of the Highway (also referred to as the Pearl City Junction property).

The subject properties, previously occupied by military warehouses, were acquired by the City from the U.S. Navy in the mid-1990s to ensure that future development of the properties appropriately addressed the urban expansion needs of the Pearl City area. Development objectives were established to serve as the basis for the project's conceptual land use plan. One of the objectives established that the project meet the needs of various departments of the City and County of Honolulu (i.e., bus facility, Public Works facilities, Board of Water Supply, etc.). With recommendations from the Pearl City Task Force, the resulting conceptual land use plan for the properties was based on a business park concept which provided for a mix of commercial and light industrial uses as the primary land use component. The land use concept included a mix of commercial retail and office uses, public service facilities, and open spaces with recreational improvements. This proposal was subsequently modified by the City Council's Committee on Economic Development, Planning and Tourism to only encompass the Pearl City Junction property.

The Manana property mauka of Kamehameha Highway was recently rezoned from F-1 Military and Federal Preservation District and R-5 Residential District to IMX-1 Industrial-Commercial Mixed Use District and P-2 General Preservation District in April 2002. Although the nature of the desired uses remain unchanged from those suggested in the conceptual land use plan of the mid-1990s, any use permitted in the IMX-1 Industrial-Commercial Mixed Use District would be permitted for any subsequent proposed development. Proposed areas by type of use are as follows:

Generic Use	Approximate Area
Park	14.0 Acres
Bus Facility	21.0 Acres
Board of Water Supply Corporation Yard	7.4 Acres
Department of Parks and Recreation Corporation Yard	4.6 Acres
Department of Transportation Services Corporation Yard	4.2 Acres
Commercial and Industrial Uses	52.4 Acres

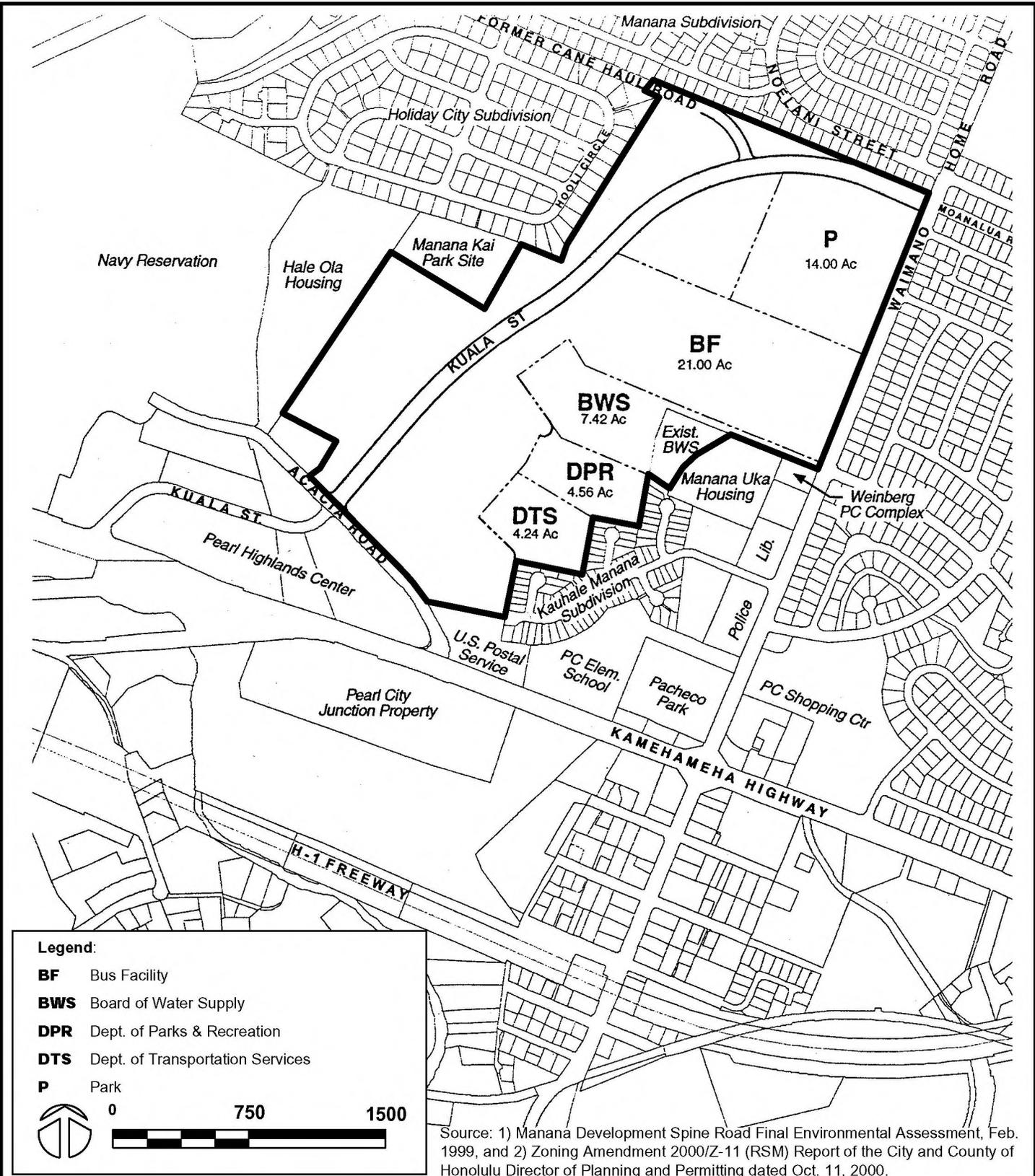
The public facilities identified above are intended to provide the City with needed corporation yard facilities and a park/youth center for use by the surrounding community. The primary support infrastructure for the Manana property consists of the recently completed Kuala Street extension, formerly known as Spine Road. The following is a description of the public facilities which have either been completed or are nearing completion.

Pearl City Bus Facility: The City Department of Transportation Services' Pearl City Bus Facility was completed in November 2001. The 21-acre facility is intended to accommodate additional buses as part of the City's planned expansion of its public transit system, as well as to base a portion of the City's bus fleet closer to Ewa and Central Oahu. The new facility provides space to accommodate approximately 250 buses, in addition to a fleet of Handi-Vans on site. Other facilities include space for administration, training and bus operator support, vehicle service and maintenance facilities, a wash area, paint and body repair activities, spare parts and supplies, and parking.

Board of Water Supply Facility: The Board of Water Supply's (BWS) existing 2-acre baseyard facility is being expanded to create a 9.5-acre facility adjacent to the Pearl City Bus Facility. The expanded yard is intended to provide a long-term regional base for BWS's repair, maintenance and field/plant operations for the next 10 to 30 years. Facilities include a new operations administration building, a new Finance Inventory storage/field and plant operations facility, automotive service/repair facility, vehicle wash area, body/fender shop, shower/lockers, and parking. The facility is anticipated to be completed by mid-2002.

Youth Facility/Park: The 14-acre Manana Community Park and recently completed youth facility provides a facility for youth in the area to gather and fraternize in a safe environment. The youth facility and active park also provide a multi-use community facility for the community. Existing park facilities include two softball fields, a soccer field and practice area. Other planned park facilities include volleyball and basketball courts, and a skate park.

Kuala Street Extension: The Kuala Street extension (formerly known as Spine Road) which opened in June 2001 provides the primary vehicular access into the Manana Development, as well as relieves some of the traffic congestion at the Kamehameha Highway/Waimano Home Road intersection.



Source: 1) Manana Development Spine Road Final Environmental Assessment, Feb. 1999, and 2) Zoning Amendment 2000/Z-11 (RSM) Report of the City and County of Honolulu Director of Planning and Permitting dated Oct. 11, 2000.



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**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**

## Manana and Pearl City Junction Development Master Plan

Figure 3-3

Of the approximately 52.4 acres not undergoing redevelopment as a public facility, approximately 20 acres were recently purchased by Wal-Mart for a retail store. The remainder of the Manana property will be sold by the City.

**Proposed Aiea Town Center:** A master plan for the Aiea Town Center to be located on the former Aiea Sugar Mill site is being developed by the City and County of Honolulu Department of Design and Construction (see Figure 3-4). The master plan proposes to develop parts of the former sugar mill site into a community center with community and recreational facilities as well as services for youths and seniors. The Aiea Town Center Master Plan is part of the community's larger vision to also develop a senior facility and relocate the Aiea Public Library from its current location on Moanalua Road to the sugar mill site.

Within the sugar mill site, the Town Center is proposed for 3.4 acres, with the senior facility and library sites proposed for an additional 3.5 and 2.3 acres, respectively. The existing Hawaii Agriculture Research Center (HARC) which occupies a portion of the sugar mill site will remain. Immediately mauka of the HARC site is the recently constructed Halewiliko Street which runs in an east-west direction between Aiea Heights Drive and Kulawea Street.

The proposed Aiea Town Center is intended to emulate the design and community feeling of the old Aiea Town by creating an informal setting where all generations can gather. Three major design themes are reflected in the Aiea Town Center concept: 1) the Town Center as the center of community activities much like the center of the old sugar plantation towns; 2) the Town Center as the backyard or front porch of the Aiea community; and 3) the Town Center as a multi-generational gathering place for residents of all ages. Proposed uses are intended to draw people to the Town Center and foster a synergistic relationship with the proposed library and senior facility, as well as the neighboring residential area and Aiea Intermediate School. Proposed uses for the Town Center include a daycare center, rooms for community meetings and classes, thrift store, art center, coffee shop, open market (such as farmers market or craft fairs), outdoor performance area, and picnic areas. The type of senior facility, which could range from an assisted living facility to senior housing without nursing services, would be determined by the developer of the project.

The interim plan for the Aiea Town Center property includes passive park and general field uses and could be used for gatherings and activities such as farmers markets, community festivals and craft fairs.

The City intends to acquire a portion of the sugar mill site from current owner Bank of Hawaii for the Town Center development. Environmental studies are currently being conducted on the site to address soil contamination problems stemming from the previous land use. The project will require a Primary Urban Center Development Plan Land Use Map Amendment to residential and commercial/neighborhood commercial and a zone change to B-1 for the Town Center and library and A-1 for the Senior Facility.

### **3.1.2.5 Recreation/Open Space**

Recreation and open space resources in the region include public parks/outdoor recreational facilities, stream corridors, view corridors, fishponds, agricultural areas, and cemeteries.



Source: Aiea Town Center Draft Master Plan, prepared by: Group 70 International, Inc., Oct. 2001



Not to Scale



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**AIEA - PEARL CITY LIVABLE  
COMMUNITIES PLAN**

# Aiea Town Center Design Scheme

Figure 3-4

**Public Parks/Outdoor Recreational Facilities:** Public parks fall into two general categories: islandwide and regional parks, and community-based parks. Most of the islandwide and regional parks are under State jurisdiction and all of the community-based parks are under City jurisdiction. Table 3-2 describes the City Department of Parks and Recreation's parks classification system.

<b>Table 3-2 Parks Classification System City and County of Honolulu Department of Parks and Recreation</b>		
<b>Park Classification</b>	<b>Facilities Standard</b>	<b>Definition/Facilities</b>
<b>Island-Based Parks</b>	8 acres/1,000 persons	Parks that serve a wide range of recreational needs of the entire island population
Beach/Shoreline Parks	---	Areas along/near shoreline that may include facilities and support services for water activities, sunbathing, picnicking, and other passive recreational activities
<b>Community-Based Parks</b>	2 acres/1,000 persons <sup>1</sup>	Parks that generally serve the appropriate recreational needs of the residential areas of the island
District Parks	≈20 acres in size, serving ≈25,000 people	Playfields, playcourts, passive areas, gymnasium/recreation complex, swimming pool
Community Parks	≈10 acres in size, serving ≈10,000 people	Playfields, playcourts, passive areas, recreation building
Neighborhood Parks	≈6 acres in size, serving ≈5,000 people	Playfields, playcourts, passive areas, comfort station
Mini Parks	---	Small landscaped areas serving high density neighborhoods as well as high density business and industrial areas. Facilities may include benches, picnic tables, children's play area
Urban Parks	---	Passive landscaped areas including squares and triangles usually located in residential or business areas
Source: City and County of Honolulu, Department of Parks and Recreation, <i>Index of Oahu Parks and Facilities</i> , April 1997.		
<sup>1</sup> Standard is more applicable to developing areas or where land shortages are not as acute as some older communities and should be considered flexible to meet the particular and reasonable needs of each community.		

Within the Aiea-Pearl City region, there are a number of existing public parks, including a regional park, two beach/shoreline parks, four district parks, four community parks, 11 neighborhood parks, two mini parks, and one urban park. Table 3-3 identifies these parks along with the respective acreage and facilities.

<b>Table 3-3 Existing Public Parks Aiea-Pearl City Region</b>			
<b>Park Name</b>	<b>Acres</b>	<b>Facilities</b>	<b>Playfields/Courts</b>
<b>Aiea-Pearl City Region</b>			
<b>Regional Park</b>			
Keaiwa Heiau State Park (Aiea)	384.5	Comfort station, picnic areas, parking stalls, caretaker’s residence, Aiea Loop Trail. Also includes Keaiwa Heiau (archaeological/cultural site)	None
<b>Beach/Shoreline Parks</b>			
Neal S. Blaisdell Park (Pearl City) (City Jurisdiction)	25.9	Comfort station, maintenance building, tool & equipment building, sheltered viewing area, sheltered eating area, exercise cluster, children’s play apparatus, 256 parking stalls, staff parking area <sup>1</sup>	None
Aiea Bay State Recreation Area	4.0	Comfort station, picnic areas, parking stalls	None
Total Acreage Beach/Shoreline Parks	29.9		
<b>Aiea</b>			
<b>District Parks</b>			
Aiea District Park	8.8	Recreation building (multi-purpose rooms, arts & crafts rooms, kitchens, offices), comfort station, swimming pool (25 yds), training pool, children’s play apparatus, 44 parking stalls <sup>1</sup>	Gymnasium building (gym, basketball center court, 2 basketball cross courts, 2 volleyball cross courts, 3 badminton courts, 2 team rooms, office), basketball/volleyball court, 2 tennis courts, tennis practice court, baseball field, softball field <sup>1</sup>
Annex Site		Comfort station, children’s play apparatus <sup>1</sup>	Softball field <sup>1</sup>

<b>Table 3-3 (continued)</b>			
<b>Existing Public Parks</b>			
<b>Aiea-Pearl City Region</b>			
<b>Park Name</b>	<b>Acres</b>	<b>Facilities</b>	<b>Playfields/Courts</b>
<b>Aiea (continued)</b>			
<b>District Parks (continued)</b>			
Halawa District Park	20.2	Recreation building (arts & crafts room, office, comfort station), children's play apparatus, 149 parking stalls <sup>1</sup>	Recreation building/gymnasium (gym, 1 basketball center court, 2 basketball cross courts, volleyball center court, 2 volleyball cross courts, martial arts room, woodworking room, multi-purpose room, 3 offices, kitchen, 2 team rooms, weight lifting room, game room, 2 kiln/drying rooms, boxing/wrestling room, 2 arts & crafts rooms), 2 basketball courts, 2 volleyball courts, 2 tennis courts, baseball field, 4 softball/1 football fields <sup>1</sup>
Total Acreage District Parks - Aiea	29.0		
<b>Community Parks</b>			
Pearl Ridge Community Park	9.1	Comfort station, office, children's play apparatus, 17 parking stalls (shared with school) <sup>1</sup>	2 basketball courts, volleyball court, 6 tennis courts, tennis practice court, baseball field, softball/soccer field <sup>1</sup>
<b>Neighborhood Parks</b>			
Kaahahele Neighborhood Park	4.2	Comfort station <sup>1</sup>	Soccer field <sup>1</sup>
Kaonohi Neighborhood Park	4.3	Comfort station, children's play apparatus <sup>1</sup>	2 basketball courts, volleyball court, softball field <sup>1</sup>
Makalapa Neighborhood Park	5.9	Comfort station, picnic facilities, children's play apparatus <sup>1</sup>	2 basketball courts, 2 volleyball courts, 2 softball fields, tetherball court <sup>1</sup>
Nahele Neighborhood Park	4.0	Comfort station, children's play apparatus <sup>1</sup>	Softball field, 2 basketball courts <sup>1</sup>
Napuanani Neighborhood Park	4.4	Comfort station, maintenance building, picnic facilities, children's play apparatus, 10 parking stalls <sup>1</sup>	Basketball court, volleyball court (grass), softball field <sup>1</sup>
Newtown Neighborhood Park	8.1	Comfort station <sup>1</sup>	Softball field <sup>1</sup>
Waimalu Neighborhood Park	2.1	Comfort station, children's play apparatus <sup>1</sup>	Basketball court, volleyball court, softball field <sup>1</sup>
Total Acreage Neighborhood Parks - Aiea	33.0		
<b>Mini Park</b>			
'Ie'ie Mini Park	0.1	Children's play apparatus <sup>1</sup>	None

<b>Table 3-3 (continued) Existing Public Parks Aiea-Pearl City Region</b>			
<b>Park Name</b>	<b>Acres</b>	<b>Facilities</b>	<b>Playfields/Courts</b>
<b>Pearl City</b>			
<b>District Parks</b>			
Pearl City District Park	9.9	Recreation building (arts & crafts room & kiln, multi-purpose room w/kitchen, 2 offices), swimming pool (25 yds), training pool, 70 parking stalls <sup>1</sup>	Gymnasium building (gym, basketball center court, 2 basketball cross courts, volleyball center court, 2 volleyball cross courts, 3 badminton courts, weight lifting room, physical fitness room, 2 multi-purpose rooms, kitchen, office, music room, handball court), 2 basketball courts, 2 volleyball courts, 2 tennis courts, 2 softball fields <sup>1</sup>
Waiiau District Park	31.4	Recreation building (multi-purpose room, conference room, kiln room, office, kitchen, restrooms, storage rooms), comfort station, children's play apparatus, 123 parking stalls <sup>1</sup>	Baseball/soccer field, 4 softball fields, 2 football/3 soccer fields <sup>1</sup>
Total Acreage District Parks – Pearl City	41.3		
<b>Community Parks</b>			
Lehua Community Park	6.7	Recreation building (arts & crafts room, kiln/drying room, office), children's play apparatus, 3 parking stalls <sup>1</sup>	2 basketball courts, 2 volleyball courts, 8 tennis courts, softball field <sup>1</sup>
Manana Community Park	14.0	Youth facility, parking stalls	2 softball fields, soccer field, practice field
Pacific Palisades Community Park	8.4	Recreation building (arts & crafts room, kiln/drying room, 2 meeting/multi-purpose rooms, kitchen, office, open area (basement)), comfort station, children's play apparatus, 17 parking stalls <sup>1</sup>	2 basketball courts, 2 volleyball courts, 2 tennis courts, tennis practice courts, 2 softball fields <sup>1</sup>
Total Acreage Community Parks – Pearl City	29.1		

<b>Table 3-3 (continued) Existing Public Parks Aiea-Pearl City Region</b>			
<b>Park Name</b>	<b>Acres</b>	<b>Facilities</b>	<b>Playfields/Courts</b>
<b>Pearl City (continued)</b>			
<b>Neighborhood Parks</b>			
Manana Kai Neighborhood Park	4.4	Comfort station, children's play apparatus, 3 staff parking stalls <sup>1</sup>	2 basketball courts, 2 volleyball courts, softball/football field <sup>1</sup>
Manana Neighborhood Park	4.0	Bathhouse/office, swimming pool (25 yds), children's play apparatus <sup>1</sup>	Basketball court, basketball/volleyball court, softball field, play field <sup>1</sup>
Pacheco Neighborhood Park	4.5	Comfort station/pavilion, 73 parking stalls <sup>1</sup>	Basketball court, volleyball court, baseball field, softball field <sup>1</sup>
Waiiau Neighborhood Park	4.6	Comfort station, children's play apparatus <sup>1</sup>	Basketball court, volleyball court, softball field <sup>1</sup>
Total Acreage Neighborhood Parks – Pearl City	17.5		
<b>Mini Park</b>			
Waiiau Gardens Mini Park	2.4	Children's play apparatus, landscaped <sup>1</sup>	Basketball/volleyball court (half-sized court) <sup>1</sup>
<b>Urban Park</b>			
Pacific Palisades Entrance Park	3.9	Landscaped <sup>1</sup>	
Source: <sup>1</sup> City and County of Honolulu, Department of Parks and Recreation, <i>Index of Oahu Parks and Facilities</i> , April 1997			

Based on the City Department of Parks and Recreation's service area standard of 2 acres of community-based parks per 1,000 persons, the total acreage of existing community-based parks in the Aiea-Pearl City region generally meet the land-to-population standard. Currently in the region, there are approximately 165.4 acres of community-based parks for a population of 83,257 persons. This generally meets the requirement of 166 acres of community-based parks based on the land-to-population standard.

Other existing outdoor recreational facilities in the region include the Pearl Harbor Bike Path; Pearl Country Club, a private 18-hole golf course located mauka of the H-1 Freeway in Aiea; and, the Newtown Driving Range located along Kaahale Street in Aiea. Several hiking trails are located in the ridge and valley areas of Aiea and Pearl City. These include the Aiea Loop, Aiea Ridge and Kalauao trails with access points from Keaiwa Heiau State Recreation Area; Waimano Ridge and Waimano Valley trails with access points from Waimano Home Road in Pearl City; and, Waimano Pool and Manana trails with access points from Komo Mai Drive in Pacific Palisades.

Various waterbodies contribute to open space resources in the region, including five major perennial stream corridors. In Pearl City, the Waiawa Stream flows makai within the western portion of the Pearl City Peninsula through mostly undeveloped areas. In Aiea, Waimalu Stream traverses makai in the vicinity east of Kaahumanu Street and Blaisdell Park. The stream is channelized through the developed areas mauka of Kamehameha Highway. Kalauao Stream flows east of the Pearlridge Shopping Center and is mostly channelized through the

developed areas. Makai of Kamehameha Highway, the stream in its natural state flows into Pearl Harbor just east of the Pearl Kai Shopping Center. Aiea Stream traverses makai through Aiea town east of the former sugar mill site. The stream is mostly channelized through the developed areas and flows into Aiea Bay just east of the Aiea Bay State Recreation Area. Halawa Stream traverses through Halawa Valley in the vicinity of Halawa Industrial Park and outlets in Pearl Harbor near the USS Arizona Memorial Visitor Center. Portions of the stream within the developed areas are channelized.

Other waterbodies in the region include Pa'aiau Fishpond located in the western portion of McGrew Point and Pa'akea Fishpond located within the southeast portion of the Harbor Center development in Aiea.

A well-known landmark and open space resource in Aiea is the Sumida Watercress Farm located adjacent to Pearlridge Shopping Center. The 13.3-acre farm which is fed by Kalauao Spring provides a contrast in open space to the surrounding built environment. A similar open space resource is the vegetated pond area immediately west of the Waiiau Zippy's. Other open space areas include the agricultural lands makai of Leeward Community College and the Waiawa Unit of the U.S. Fish and Wildlife Service's Pearl Harbor National Wildlife Refuge located in the northwest portion of the Pearl City Peninsula.

Existing open space view corridors are prevalent mostly from the residential ridge areas overlooking Pearl Harbor, and makai views along the Pearl Harbor shoreline. The more prominent makai views include those from Halawa Heights near Camp H. M. Smith, along Kaonohi Street overlooking the Pearl Country Club, from Kaahele Street in the vicinity of the Newtown Neighborhood Park, from Waiiau District Park, from the vicinity near Momilani Elementary School and Pearl City High School, and from the entrance to Pacific Palisades near the Pacific Palisades Entrance Park.

Cemeteries in the region include Sunset Memorial Park located makai of Kamehameha Highway in Pearl City, and the old cemetery in Aiea near Aloha Stadium.

New recreational facilities as well as improvements to a number of existing public parks are proposed or planned for Aiea-Pearl City as part of the community visioning process. A major project is the City's *Pearl Harbor Historic Trail Master Plan* (May 2001) which will integrate connecting shared-use paths and bikeways along the trail in addition to other amenities (see more detailed discussion in Section 2.5).

Another major proposed recreational project is the Pearl Harbor Recreation Complex and Senior Center with possible facilities to include a recreation complex, senior center, playfields (soccer, baseball and football), and a 50-meter swimming pool. The facility would provide much needed community play fields for youth sports programs in the area, fulfill the need for a 50-meter pool in the community, and allow for organized senior programs to accommodate the growing senior population in the Aiea-Pearl City area. A feasibility study is currently being conducted for a location on U. S. Navy land along Lehua Avenue across of Lehua Elementary School in Pearl City.

A site is also currently being pursued in the region for a bark park which would provide dog owners with a facility designed specifically for recreational enjoyment by their dogs.

Major improvements are planned for the existing Waiiau District Park to more effectively service the broader Aiea-Pearl City community as well as nearby residential neighborhoods. In response to the growing popularity of organized sports, coupled with changes in recreational activities and demographics in the region, a master plan for Waiiau District Park was undertaken by the City in 2000 to address appropriate recreational needs for the community. The resulting proposed improvements include the addition of a playfield in the upper terrace area of the Park, an additional multi-purpose building and outdoor courtyard, playcourts for basketball and volleyball, skateboard or inline skating court, a walking/jogging path, maintenance yard and building, and additional parking. A gymnasium and swimming pool are also proposed for future consideration.

Other public parks proposed for facility improvements include Neal Blaisdell Park, Manana Neighborhood Park, Pearl City District Park, and Pacific Palisades Community Park in Pearl City; and Kaonohi Neighborhood Park, Napuanani Neighborhood Park, Halawa District Park, Aiea District Park, Waimalu Neighborhood Park, and Pearl Ridge Community Park in Aiea. Proposed improvements include installation of play equipment; renovation and repair of buildings; fencing; and other maintenance activities. Additional facilities proposed for the new Manana Community Park in Pearl City include basketball and volleyball courts, a skate park and a comfort station.

### **3.1.2.6 Military**

The military and its facilities are an integral part of the Aiea-Pearl City community given the proximity of Pearl Harbor. The USS Arizona Memorial, USS Bowfin and the Battleship Missouri Memorial are among the most visited attractions on the Island. Uses in the vicinity of the USS Arizona Memorial Visitor Center include the Pearl Harbor Yacht Club, Rainbow Bay Marina, CINCPACFLT Admiral's Boathouse, and Richardson Recreation Center. Military housing is provided on McGrew Point in Aiea, Ford Island, Pearl City Peninsula, and on Naval Reservation land in Manana near the Pearl Highlands Center. The U.S. Navy's Camp H.M. Smith facility is located in Halawa Heights.

The U.S. Navy is currently pursuing a public/private partnership to redevelop Ford Island. The long-term redevelopment proposes to provide for new construction for up to 420 housing units, Bachelor Enlisted Quarters for up to 1,000 personnel, and infrastructure improvements such as roads and utilities. The development may also include a combination of new construction and adaptive reuse of existing structures for administrative space to accommodate 1,500 additional employees, and a consolidated training complex. Private development of up to 75 acres would be allowed on Ford Island and could include a historic visitor attraction.

At Camp H. M. Smith, construction of the U.S. Navy's Pacific Command Headquarters facility is currently underway.

At the Pearl City Peninsula, the U.S. Navy is constructing about 192 new homes with completion estimated by Summer 2002. Upon construction of the new homes and demolition of some existing homes, the number of homes will total about 664. The Navy is also planning to demolish the existing fuel farm, tanks and well sites within the Pearl City Peninsula.

### **3.1.3 City and County of Honolulu Development Plan, Zoning and Special Management Area**

Existing Development Plan (DP) Land Use, and Zoning and Special Management Area maps of the Aiea-Pearl City area are shown in Figures 2-1 and 3-5, respectively. DP Land Use and zoning closely follow existing land uses. As noted in Section 2.2, revisions to the existing PUC DP are in progress which will supersede the existing DP Land Use map. The Livable Communities Plan will provide the more detailed guidance under the revised Development Plan program.

The Coastal Zone Management Act contains the general objectives and policies upon which all counties within the State have structured specific legislation which created Special Management Areas (SMA). Any “development” within the SMA requires a SMA Use Permit, which is administered by the City Department of Planning and Permitting. Approval of a SMA Use Permit is granted by the Honolulu City Council. The SMA boundary for the planning area is shown in Figure 3-5.

## **3.2 Environmental Considerations**

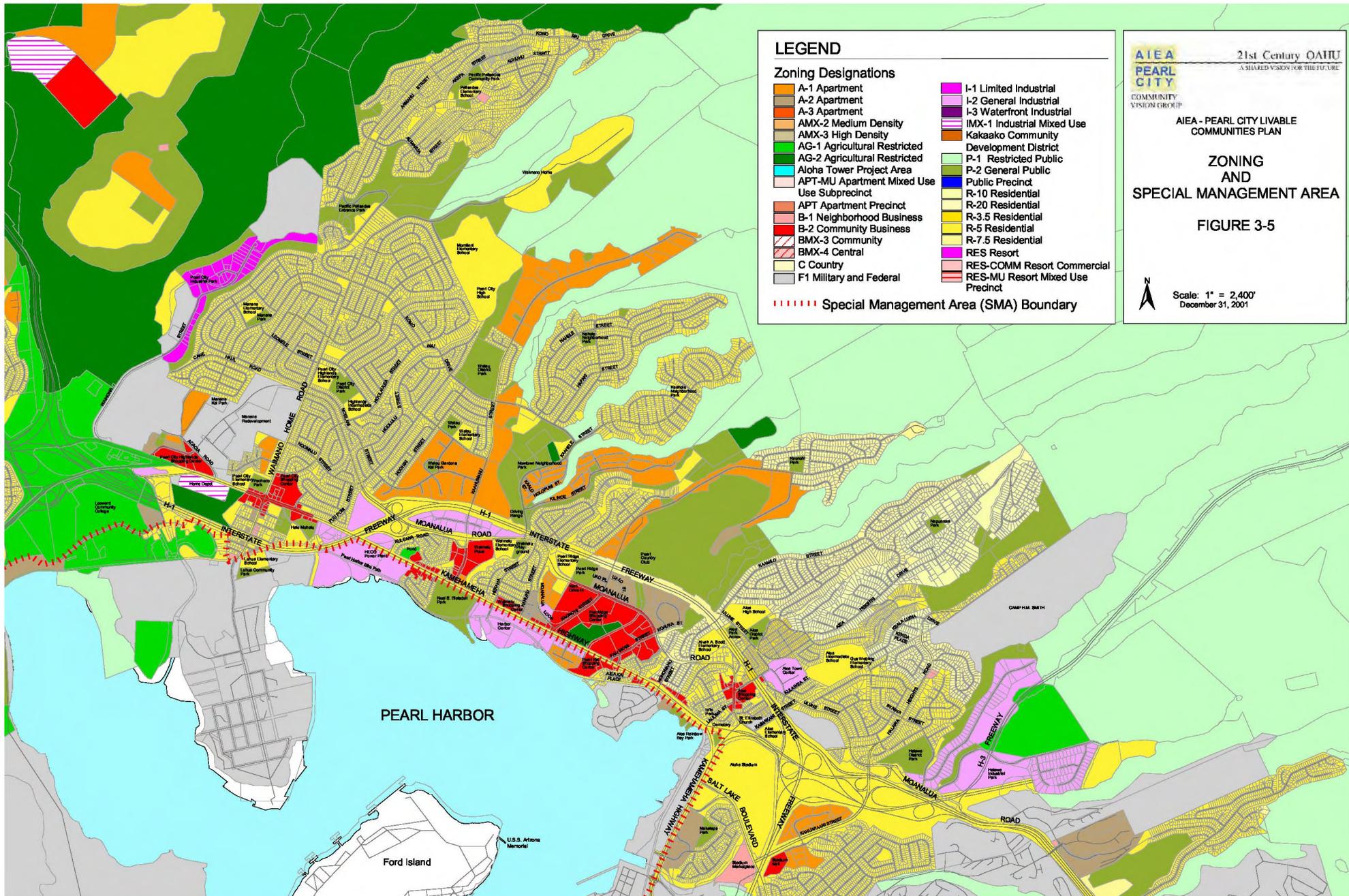
### **3.2.1 Pearl Harbor Shoreline**

The waters of Pearl Harbor’s East Loch between the Pearl City Peninsula and Halawa are within the jurisdiction of the U.S. Navy and subject to security restrictions. Any future planning for uses or activities associated with the Pearl Harbor shoreline area would require coordination with the U.S. Navy in addressing operational, security, environmental, and Anti-Terrorist Force Protection (ATPF) considerations and measures.

### **3.2.2 Flood Hazard**

According to the Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM), flood areas are designated mainly within the vicinity of major streams in the Aiea-Pearl City area (see Figure 3-6). In Aiea, areas along North Halawa Stream and Aiea Stream have been designated within the Floodway (Zone AE). A relatively broad area in the vicinity of the lower reaches of Aiea Stream is designated in flood area Zone X, areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. The area bordering the makai end of the stream is designated in Zone A, special flood hazard areas inundated by 100-year flood with no base flood elevations determined. In the vicinity of Kalauao Stream, areas are designated within the Floodway (Zone AE); Zone AE, special flood hazard areas inundated by 100-year flood, base flood elevations determined; and flood area Zone X.

In Pearl City, a sizable area in Waiawa in the vicinity of Waiawa Stream is designated within the flood zone. This area extends makai from the vicinity of Waihona Street and includes the area makai of Leeward Community College and the northwestern portion of Pearl City Peninsula.



### LEGEND

**Zoning Designations**

A-1 Apartment	I-1 Limited Industrial
A-2 Apartment	I-2 General Industrial
A-3 Apartment	I-3 Waterfront Industrial
AMX-2 Medium Density	IMX-1 Industrial Mixed Use
AMX-3 High Density	Kakaako Community
AG-1 Agricultural Restricted	Development District
AG-2 Agricultural Restricted	P-1 Restricted Public
Aloha Tower Project Area	P-2 General Public
APT-MU Apartment Mixed Use	Public Precinct
Use Subprecinct	R-10 Residential
APT Apartment Precinct	R-20 Residential
B-1 Neighborhood Business	R-3.5 Residential
B-2 Community Business	R-5 Residential
BMX-3 Community	R-7.5 Residential
BMX-4 Central	RES Resort
C Country	RES-COMM Resort Commercial
F1 Military and Federal	RES-MU Resort Mixed Use Precinct

Special Management Area (SMA) Boundary

**AIEA**  
**PEARL CITY**  
 COMMUNITY VISION GROUP

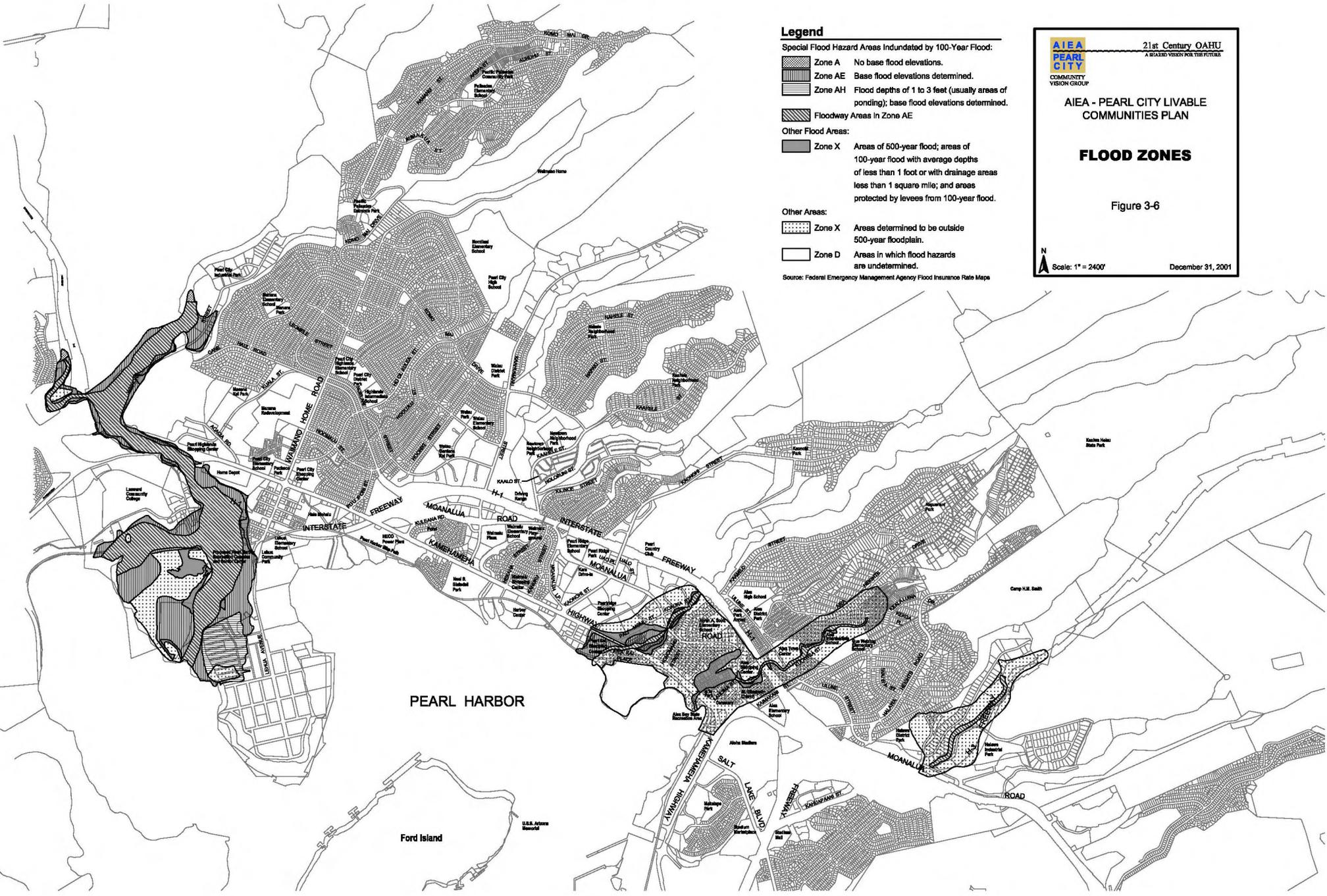
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**ZONING AND SPECIAL MANAGEMENT AREA**

**FIGURE 3-5**

Scale: 1" = 2,400'  
 December 31, 2001



**Legend**

- Special Flood Hazard Areas inundated by 100-Year Flood:**
- Zone A No base flood elevations.
  - Zone AE Base flood elevations determined.
  - Zone AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
  - Floodway Areas in Zone AE
- Other Flood Areas:**
- Zone X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.
- Other Areas:**
- Zone X Areas determined to be outside 500-year floodplain.
  - Zone D Areas in which flood hazards are undetermined.
- Source: Federal Emergency Management Agency Flood Insurance Rate Maps

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**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**

FLOOD ZONES

Figure 3-6

Scale: 1" = 2400'
 December 31, 2001

Most of this area is designated within the Floodway (Zone AE), with smaller areas within flood area Zone X. The remaining areas are designated as special flood hazard areas inundated by 100-year flood, specifically Zone A, Zone AE, and Zone AH, flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

While existing structures are grandfathered within the Floodway zone, new developments are typically prohibited within this zone unless it can be shown that flood elevations will not increase with the development.

The remainder of the Aiea-Pearl City region is designated Zone D, areas in which flood hazards are undetermined, with pockets in Zone X, areas determined to be outside 500-year floodplain.

### **3.3 Socio-Economic Assessment**

This section describes the socio-economic setting, profile and trends for the Aiea-Pearl City region.

#### **3.3.1 Socio-Economic Setting**

The socio-economic fabric of Aiea and Pearl City has evolved over the past century. Although the two communities are similar in character today, each originated from different industries.

In the late 1800's, economic activity in Aiea centered around the sugar plantation which consisted of about 8,000 acres in and around Pearl Harbor including the sugar mill in Aiea. By the early 1900's, plantation operations prospered, leading to the growth of Aiea Town. Over the years, urban development in the form of residential, commercial and public facilities uses gradually replaced former plantation lands. In 1996, the sugar mill refinery ceased operations and the landmark building was demolished in 1998.

Unlike neighboring Aiea which was built around a plantation, Pearl City was settled by independent farmers and small businesses. In the late 1890s to early 1900s, the OR&L train operations had an impact on life in Pearl City as it provided a connection to the rest of Oahu. From the early 1950's, urban development took over former cultivated lands and by the early 1970's the character of the land above Kamehameha Highway underwent major changes with new residential subdivisions. As the population grew, the development of commercial and public facilities uses also increased in Pearl City.

With the influx of urban sprawl over the years, Aiea and Pearl City may be viewed as one community with no distinct physical separation. Pearl City is visually linked to Aiea through continuous development mauka and makai of Kamehameha Highway extending east through Waiau, Waimalu and Pearl Ridge. The H-1 Freeway bisects the community with residential uses located predominantly mauka and commercial/retail uses located makai.

Aiea-Pearl City is located virtually at the center of Oahu's population between Downtown Honolulu and the Second City of Kapolei and is at the crossroads of the Island's three major freeways that intersect at the Halawa and Waiawa interchanges. Its proximity to Pearl Harbor and the strong presence of military personnel residing in the community and nearby vicinity contribute to the area being a major employment center on the Island. Major commercial/retail

establishments such as Pearlridge Shopping Center, Pearl Highlands Center, Harbor Center, Pearl Kai Shopping Center, Pearl City Shopping Center, Aiea Shopping Center, Pearl City Industrial Park, and Halawa Industrial Park are also major contributors to employment in the region.

Retail/commercial establishments are among the major economic attractions in the area. Pearlridge Shopping Center, the State's second largest shopping center, as well as large nationwide retail store chains including Toys R Us and Circuit City and low-cost warehouse stores such as Sam's Club, attract outside residents as well as visitors, in addition to area residents. Other major economic attractions in the area include Aloha Stadium, and the USS Arizona Memorial and Battleship Missouri Memorial which are among the most popular visitor destinations on the Island.

### **3.3.2 Existing Socio-Economic Profile**

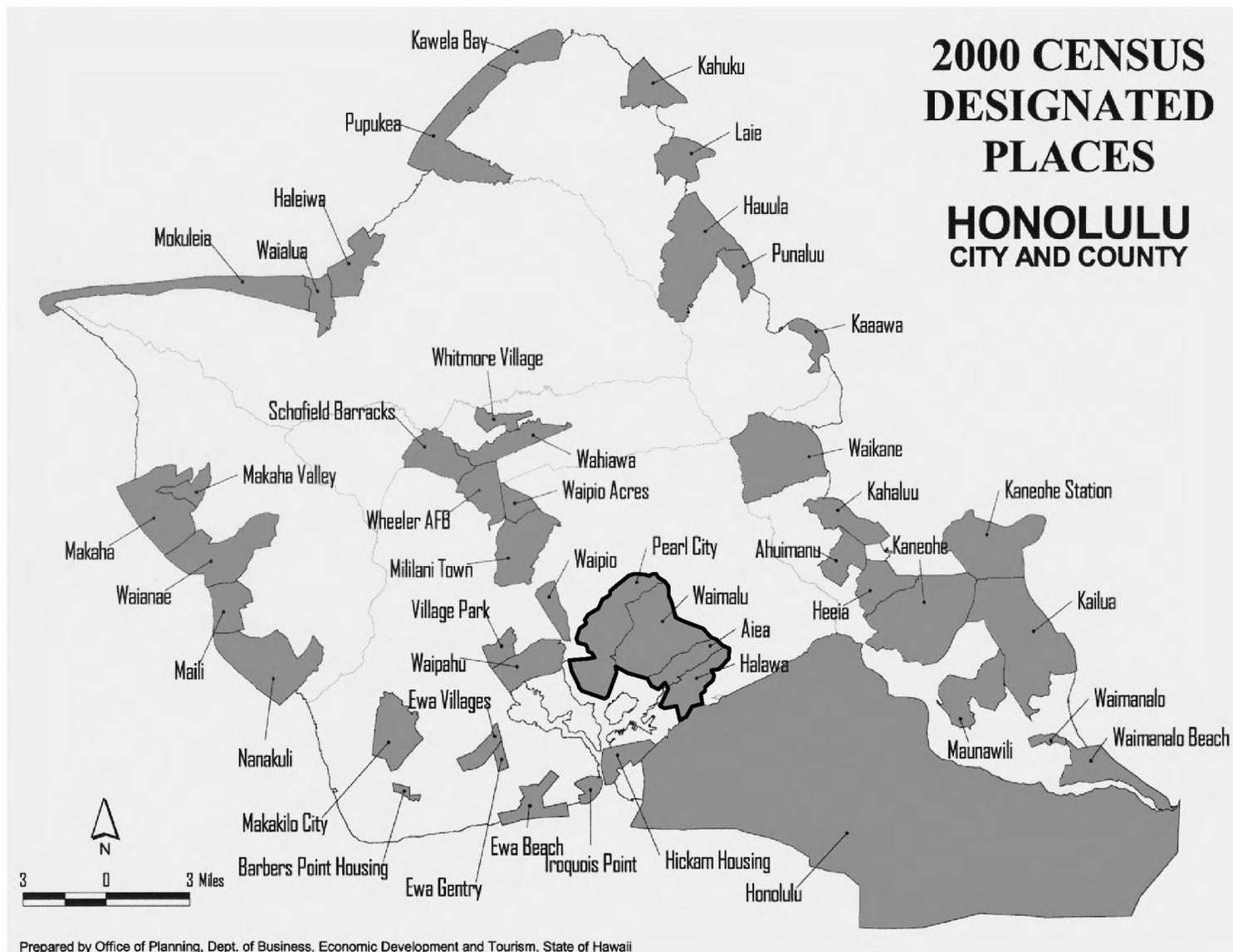
A demographic profile of the Aiea-Pearl City community based on U.S. Census data is presented in Table 3-4. A map depicting the 1990 and 2000 Census Designated Places (CDP) is shown in Figure 3-7.

Population: In 2000, Aiea-Pearl City had a population of 83,257 which represents about 9.5% of Oahu's population (876,156). Within the region, the Pearl City and Waimalu CDPs are the most populated (37.2% and 35.3%, respectively) followed by the Halawa and Aiea CPDs (16.7% and 10.8%, respectively). The population of the region has remained relatively stable since 1990 (83,274 population) including the distribution of population with the four CDPs.

The 2000 median age in Aiea-Pearl City is slightly higher than in Oahu as a whole, 37.8 versus 35.7 for the Island. Within the region, the highest median age is in the Aiea CDP (41.7), with the lowest in the Pearl City CDP (37.0). The 2000 median age of the area represents a 13.8% increase over the 1990 median age of 33.2%. This trend reflects an established community in which residents have generally remained in the area over the years.

In the region, 2000 race statistics indicate a large concentration of Asians (54.2%) followed by those of two or more races (18.8%) and Whites (16.8%). The percentage of Asians within the area is proportionately higher than that of Oahu (46.0%).

Housing: The total number of households in Aiea-Pearl City for 2000 (26,345) represent a slight increase from 1990 (25,896). The average household size in the area, although larger in comparison to Oahu as a whole since 1990, has decreased over the years from 3.20 in 1990 to 3.04 in 2000. The number of housing units in the area has increased slightly from 26,393 in 1990 to 27,300 in 2000. Although the percentage of occupied housing units in the area in 2000 (96.5%) has slightly decreased since 1990 (98.1%), the occupancy rate is higher than that of Oahu as a whole (90.7%). In Aiea-Pearl City, owner-occupied housing units in 2000 (65.8%) are substantially higher than that of Oahu (54.6%), with renter-occupied housing units (34.2%) being proportionately lower than that of the Island (45.4%). This trend has generally remained unchanged since 1990.



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COMMUNITIES PLAN**

## Census Designated Places Map

Figure 3-7

**Table 3-4  
Demographic Profile  
Aiea-Pearl City  
(1990 and 2000 Census Data)**

Subject	1990						2000					
	Aiea CDP <sup>1</sup>	Halawa CDP	Pearl City CDP	Waimalu CDP	Total Aiea-Pearl City	Oahu	Aiea CDP	Halawa CDP	Pearl City CDP	Waimalu CDP	Total Aiea-Pearl City	Oahu
Population	8,906	13,408	30,993	29,967	83,274	836,231	9,019	13,891	30,976	29,371	83,257	876,156
Percent	10.7%	16.1%	37.2%	36.0%	100%		10.8%	16.7%	37.2%	35.3%	100%	
Percent (of Oahu)					9.9%					9.5%		
<b>Age</b>												
Under 24 years	29.7%	34.5%	36.5%	34.3%	34.7%	36.4%	27.6%	33.3%	32.5%	30.9%	31.6%	34.0%
25 to 44 years	30.1%	34.5%	30.1%	40.5%	34.5%	34.3%	27.6%	28.3%	27.2%	31.5%	28.9%	30.6%
45 to 64 years	22.9%	20.6%	24.6%	19.2%	21.8%	18.3%	23.1%	22.6%	23.2%	27.5%	24.6%	22.0%
Over 65 years	17.3%	10.4%	8.8%	6.0%	9.0%	11.0%	21.7%	15.8%	17.1%	10.1%	14.9%	13.4%
Median Age	38.1	33.0	32.7	32.4	33.2	32.2	41.7	37.4	37.0	37.8	37.8	35.7
<b>Race</b>												
White	24.4%	24.3%	21.4%	28.1%	24.6%	31.6%	16.3%	15.5%	17.2%	17.1%	16.8%	21.3%
Black or African American	0.9%	2.1%	2.5%	2.3%	2.2%	3.1%	0.9%	1.8%	2.7%	2.3%	2.2%	2.4%
American Indian and Alaska Native	0.1%	0.2%	0.3%	0.4%	0.3%	0.4%	0.1%	0.2%	0.3%	0.3%	0.2%	0.2%
Asian <sup>2</sup>	---	---	---	---	---	---	58.3%	50.9%	53.4%	55.3%	54.2%	46.0%
Native Hawaiian/Other Pacific Islander <sup>3</sup>	---	---	---	---	---	---	5.1%	10.4%	6.1%	5.6%	6.6%	8.9%
Asian or Pacific Islander	73.4%	71.6%	74.1%	67.8%	71.4%	63.0%	---	---	---	---	---	---
Other Race	1.2%	1.8%	1.7%	1.4%	1.6%	1.9%	0.8%	0.8%	1.4%	1.1%	1.1%	1.3%
Two or More Races	---	---	---	---	---	---	18.6%	20.3%	18.8%	18.3%	18.8%	19.9%
<b>Households</b>												
Total Households	2,628	4,020	8,876	10,372	25,896	265,304	2,758	4,142	8,921	10,524	26,345	286,450
Average Household Size	3.38	3.29	3.49	2.87	3.20	3.02	3.24	3.28	3.17	2.78	3.04	2.95
Average Family Size	3.58	3.57	3.67	3.29	3.49	3.50	3.51	3.64	3.48	3.26	3.42	3.46
<b>Housing</b>												
Total Housing Units	2,687	4,094	8,999	10,613	26,393	281,683	2,831	4,289	9,181	10,999	27,300	315,988
Occupied Housing Units	98.1%	98.2%	98.6%	97.7%	98.1%	94.2%	97.4%	96.6%	97.2%	95.7%	96.5%	90.7%
Vacant Housing Units	1.9%	1.8%	1.4%	2.3%	1.9%	5.8%	2.6%	3.4%	2.8%	4.3%	3.5%	9.3%
Owner-Occupied Housing Units	73.5%	69.1%	67.8%	64.2%	67.1%	52.0%	73.3%	64.1%	68.7%	62.1%	65.8%	54.6%
Renter-Occupied Housing Units	26.5%	30.9%	32.2%	35.8%	32.9%	48.0%	26.7%	35.9%	31.3%	37.9%	34.2%	45.4%
Source: 1990 Census Data, and 2000 Census Data.												
Notes: <sup>1</sup> CDP = Census Designated Places												
<sup>2</sup> Includes Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian.												
<sup>3</sup> Includes Native Hawaiian, Guamanian or Chamorro, Samoan, Other Pacific Islander.												

### 3.3.3 Socio-Economic Trends

The following describes the socio-economic trends of the Aiea-Pearl City community based on data from the City and County of Honolulu Department of Planning and Permitting.

**Population:** The resident population of Aiea is projected to remain stable at 32,346 in 2025, a 0.1% increase over the 1990 population of 32,323 as presented in Table 3-5. In comparison, the population of Pearl City is expected to increase considerably in 2025 from 47,072 in 1990 to 67,657 in 2025, a 43.7% increase. This compares to a 23.1% population increase for Oahu over the same period.

Neighborhood Board	1990	2025	Change	% Total	Annual Change
(20) Aiea	32,323	32,346	23	0.1	0.0
(21) Pearl City	47,072	67,657	20,585	43.7	1.0
Oahu	836,231	1,029,814	193,583	23.1	0.6

Source: City and County of Honolulu Department of Planning and Permitting

**Housing:** The number of housing units in the region are projected to increase commensurately with the population. As shown in Table 3-6, housing units in Aiea are projected to increase by only 4.0% by year 2025 (11,589 units) from 1998 (11,140 units). Pearl City is projected to incur a greater increase in housing units from 16,361 in 1998 to 22,614 in 2025, a 38.2% increase. Comparatively, housing units on Oahu are projected to increase by 26.7% during the same period.

Neighborhood Board	1998	2025	Change	% Total	Annual Change
(20) Aiea	11,140	11,589	449	4.0	0.1
(21) Pearl City	16,361	22,614	6,253	38.2	1.2
Oahu	312,200	395,687	83,487	26.7	0.9

Source: City and County of Honolulu Department of Planning and Permitting

**Employment:** In general, the number of jobs in Aiea and Pearl City are projected to increase to year 2025, with the exception of military jobs which are expected to decline by 36.7% within the region as well as islandwide (see Table 3-7). Another more significant decline is with construction jobs in Aiea which are projected to decrease by 61.8 percent by year 2025. Major job sectors projected with the highest increases include transportation/communication/utilities, finance/insurance/real estate, and service.

<b>Employment Category/ Neighborhood Board</b>	<b>1990</b>	<b>2025</b>	<b>Change</b>	<b>% Total</b>	<b>Annual Change</b>
<b><u>Military Jobs</u></b>					
(20) Aiea	1,934	1,225	-709	-36.7	-1.3
(21) Pearl City	2,416	1,529	-887	-36.7	-1.3
Oahu	63,201	40,002	-23,199	-36.7	-1.3
<b><u>Government Jobs</u></b>					
(20) Aiea	838	956	118	14.1	0.4
(21) Pearl City	841	1,008	167	19.9	0.5
Oahu	35,485	44,630	9,145	25.8	0.7
<b><u>Hotel Jobs</u></b>					
(20) Aiea	15	31	16	106.7	2.1
(21) Pearl City	1	12	11	1100.0	7.4
Oahu	20,024	25,823	5,799	29.0	0.7
<b><u>Agriculture Jobs</u></b>					
(20) Aiea	162	182	20	12.3	0.3
(21) Pearl City	170	235	65	38.2	0.9
Oahu	4,676	5,581	905	19.8	0.5
<b><u>Transportation/ Communication/Utilities Jobs</u></b>					
(20) Aiea	763	1,053	290	38.0	0.9
(21) Pearl City	961	1,511	550	57.2	1.3
Oahu	41,384	50,649	9,265	22.4	0.6
<b><u>Industrial Jobs</u></b>					
(20) Aiea	1,820	1,978	158	8.7	0.2
(21) Pearl City	943	1,333	390	41.4	1.0
Oahu	40,858	50,816	9,958	24.4	0.6
<b><u>Finance/Insurance/Real Estate Jobs</u></b>					
(20) Aiea	1,062	1,301	239	22.5	0.6
(21) Pearl City	424	1,705	1,281	302.1	4.1
Oahu	34,228	45,883	11,655	34.1	0.8
<b><u>Service Jobs</u></b>					
(20) Aiea	4,131	5,903	1,772	42.9	1.0
(21) Pearl City	3,443	9,762	6,319	183.5	3.0
Oahu	140,897	223,415	82,518	58.6	1.3

<b>Table 3-7 (continued)</b>					
<b>Forecast of Employment: 1990 to 2025</b>					
<b>Employment Category/ Neighborhood Board</b>	<b>1990</b>	<b>2025</b>	<b>Change</b>	<b>% Total</b>	<b>Annual Change</b>
<b><u>Retail Jobs</u></b>					
(20) Aiea	5,603	5,959	356	6.4	0.2
(21) Pearl City	3,590	6,650	3,060	85.2	1.8
Oahu	93,560	121,951	28,391	30.3	0.8
<b><u>Construction Jobs</u></b>					
(20) Aiea	956	365	-591	-61.8	-2.7
(21) Pearl City	1,019	2,372	1,353	132.8	2.4
Oahu	29,618	28,754	-864	-2.9	-0.1
Source: City and County of Honolulu Department of Planning and Permitting					

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# Aiea Pearl City Livable Communities Plan

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## COMMUNITY DESIGN PLAN

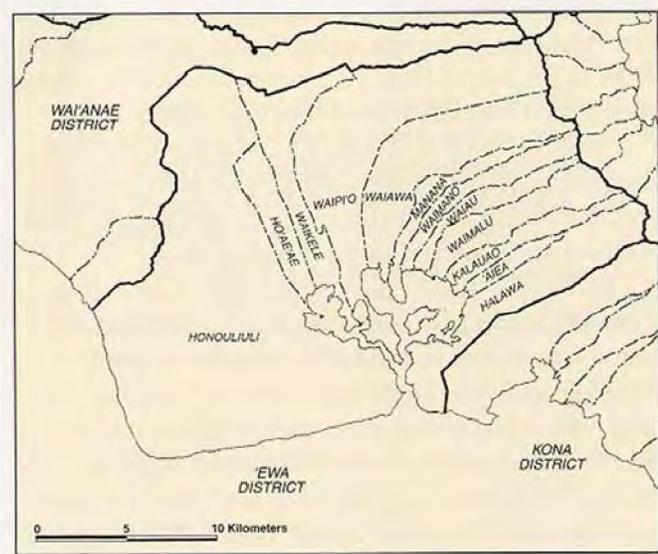
## 4. COMMUNITY DESIGN PLAN

This section describes the overall Aiea-Pearl City Community Plan and the basis and design objectives for the Aiea and Pearl City Town Districts.

### 4.1 Historical Overview of Aiea-Pearl City

The Aiea-Pearl City area extends from Waiawa Stream to Halawa Stream and stretches from the Koolau Mountains to the shores of Pearl Harbor. Contained within this area are nearly all of the elements that make up the Hawaiian landscape from the rainy upland mountains, valleys with streams carrying precious water through fertile lands, to a once rich coastal environment. Natural springs are also found in the area. All of these qualities and a favorable mild year-round climate made the Aiea-Pearl City area attractive for cultivation and residential use.

Puuloa, the Hawaiian name for Pearl Harbor, was the heartland of the traditional moku (district) of Ewa. Ewa extended from the border with Moanalua in the Kona moku, across the Harbor, out over the Ewa Plain to Ko Olina and up to Nanakuli in the Waianae moku, and up the Central Plateau to near Schofield Barracks and Wahiawa. Ewa was divided into 12 smaller land divisions or ahupuaa – self-sufficient corridors of land running from the mountains to the sea. The present day Aiea encompasses four ahupuaa: Waimalu, Kalauao, Aiea, and Halawa. Pearl City also encompasses four ahupuaa: Waiawa, Manana, Waimano, and Waiuu.



The years from the 1300's to 1700's saw continuing population growth around Puuloa. The land divisions in Ewa were heavily populated by natives due to the fishing rights at the many ponds along the shore which provided an abundance of shellfish and fish for the ancient Hawaiian chiefs. Small floodplains behind the fish ponds were covered with irrigated kalo (taro) fields. Today, the watercress farm at Pearlridge and the lowlands of Waiawa and Manana between Leeward Community College and Pearl City Peninsula are the main remnants of these lower floodplains. Lining the high ground on the edge of the kalo fields were the thatched houses and heiau of the Hawaiians who lived in the area. The soils of the adjacent upland areas were particularly well-suited to mechanized, irrigated agriculture. Kalo patches were scattered within the uplands.

Five heiau were located in the vicinity of Aiea, but only the Keaiwa Heiau remains in existence at the present day Keaiwa Heiau State Park in Aiea Heights. Aiea was also the site of a battle in December 1784 between the forces of Kalanikupule, ruler of Oahu, and those of his uncle, Kaeokulani, ruler of Kauai.

In the early 1800's, Honolulu became the port and governing center on Oahu, and attracted populations from other areas. Population declined with disease, and the small pox epidemic of 1853 decimated Ewa and its Puuloa lands. By 1860, the settlement of these lands had dramatically altered.

Oysters containing pearls were soon discovered in the Pearl River. In 1840, cattle ranching was introduced in the uplands, causing vast amounts of earth to be washed down by storms into the lagoons, quickly diminishing the oyster population.

The greatest change in the area was the dredging of the Pearl River to create Pearl Harbor. In 1876, King Kalakaua signed the treaty ceding Pearl Harbor to the United States. The second change was the discovery of artesian water which made it possible for sugar to become a commercial venture. In 1889, the Oahu Railway & Land Company (OR&L) was established by Benjamin F. Dillingham to serve the transportation needs of developing sugar plantations on Oahu. The first railroad run from Honolulu to Pearl River Lagoon was made in September 1889, followed by the opening of the first section to Aiea. In January 1890, traffic to Pearl City began and by 1898 the railroads had extended to Waianae and connected it with Waialua around Kaena Point.

Over the years, the lands became used for more active agricultural purposes including sugar cane, other farm crops and ranching. In the 1900s, the town of Aiea was developed around a sugar plantation and sugar mill, which prospered until the mid-century close of the plantation. The sugar mill continued operations until 1996. The Pearl City area was initially developed in the lower portion of Lehua Avenue centered around the OR&L's land development and independent farming operations. Additional discussion of Aiea and Pearl City's historical background is provided in Sections 4.6.1.1 and 4.6.2.1.

A combination of a diminishing agricultural industry and the increasing urbanization of Honolulu resulted in a growing population in the Aiea and Pearl City communities culminating in the post-war boom and subsequent suburban expansion into the area. Rapid growth of residential and commercial development, particularly within the last 35 years, have resulted in the metamorphosis of Aiea and Pearl City from satellites of Honolulu to the distinct communities of today.

## **4.2 Regional Context**

The present-day Aiea-Pearl City community occupies the west end of the City's Primary Urban Center. The area includes established neighborhoods of suburban residences in mauka areas, significant commercial centers along the major thoroughfares, and industrial parks at both ends. Major arterials – the H-1 Freeway, Kamehameha Highway, and Moanalua Road -- bisect the community in an east-west direction. The H-1 Freeway creates a physical divide to the community while facilitating access to areas beyond.

The Aiea-Pearl City area is a transportation hub of Oahu with major attractors. The H-1 provides access from the Ewa Plain, Kunia and Waianae. The H-2 Freeway which provides access to Central Oahu and North Shore starts at the west end of Pearl City, while the H-3 Freeway to Windward Oahu initiates in Halawa Valley on the east end of the region. Major

islandwide and regional attractors include the Aloha Stadium and Pearl Ridge Shopping Center on the east end, Pearl Harbor and the Arizona Memorial/Battleship Missouri to its south, and Leeward Community College on the west end. Pearl Harbor is a scenic, historic, and natural resource in the region. There are several “big box” retail stores which draw customers islandwide. Numerous commercial complexes line Kamehameha Highway, including Pearl Kai Shopping Center, WestRidge Shopping Center, Waimalu Shopping Complex, Harbor Center, and Pearl City Shopping Center. The retail, entertainment and restaurant attractions which serve the broader Leeward community also result in increased roadway congestion for residents in the Aiea-Pearl City communities.

The increased demands of urbanization and population growth have had major impacts on the natural environment and open space character of the region. Views of the mountains and sea have disappeared or become degraded, roads and paved surfaces are unattractive, increase runoff and raise temperatures, pedestrian and bicycle circulation is more difficult and dangerous, and streams and drainageways have become hardened with reduced permeability.

### **4.3 Alternative Community Design Concepts**

The Aiea-Pearl City Vision Statement (see Section 1.2) foresees a community that supports a convenient and high quality of life, thriving business enterprises, is aesthetically pleasing, easily accessible throughout, pedestrian friendly, and has a strong sense of community. Towards developing a plan to better define and serve these needs, alternative land use concept plans were explored. The alternatives are further described and shown in Appendix B.

The Town Core concept proposed the development of “town cores” that include a mix of commercial and community facilities in a central location. Between the cores, higher density residential mixed use to generate social and economic activities would be encouraged.

The Theme Centers concept promotes the idea of developing “theme centers” distributed throughout the Aiea-Pearl City area. Neighborhood Centers would focus on district parks with an emphasis on recreational activities and facilities for community interaction. Commercial centers would focus on shopping facilities with transit connectors. Community centers would include social services, public agencies and health facilities. Strong connectors via walkways, paths, bikeways and neighborhood-scale transit systems would link the centers and residential areas.

The alternative concepts were presented and commented upon at a community workshop in October 2001. The Community Plan that resulted was a blend of the desired features of the two alternatives.

### **4.4 Community Vision Plan**

The long term vision for Aiea-Pearl City is for a community better integrated and served by its roadway system, with expanded views, open space and connections to the Pearl Harbor shoreline. The Kamehameha Highway corridor and the establishment of Town Districts in Aiea and in Pearl City are focal points of the Community Vision Plan (see Figure 4-1). Key components of the Vision Plan include:

- **Expanded open space and views to the Pearl Harbor shoreline**

The Pearl Harbor Shoreline is an underutilized resource whose views and use are obscured by various commercial, residential and industrial developments. The Pearl Harbor Historic Trail Master Plan seeks to expand the use and enjoyment of the historic OR&L right-of-way which spans the entire shoreline in the area from the Arizona Memorial to and through the Pearl City-Waipahu area. Ultimately, the Pearl Harbor Historic Trail Plan envisions the restoration of the historic railroad along the OR&L right-of-way, with potential railway stations at the Arizona Memorial, Harbor Center/Blaisdell Park, and Lehua Avenue. Proposed uses include expanded points of interest, improved pedestrian and bicycle connectors, and enhanced educational and interpretative features.

Open space and parks along the shoreline should be provided to the greatest extent possible. From McGrew Point to Waipio Peninsula, efforts should be made to acquire or provide expanded open space and public recreational facilities. Lehua Avenue and adjacent areas, McGrew Point and Pearl City are designated as potential Community Facilities in the event that these Navy-owned areas can be acquired and developed for community purposes. Possible uses include a community cultural center, senior/youth day care center, active and passive recreational parks, and interpretive eco-center for public education and enjoyment of shoreline resources such as fishponds and wetlands.

In areas mauka of Kamehameha Highway and generally makai of the H-1, higher density residential-commercial mixed uses are proposed to offset lower densities along the shoreline and to take advantage of the transit corridor along Kamehameha Highway. Higher densities are intended to provide greater opportunities for creating view corridors and open space to the shoreline.

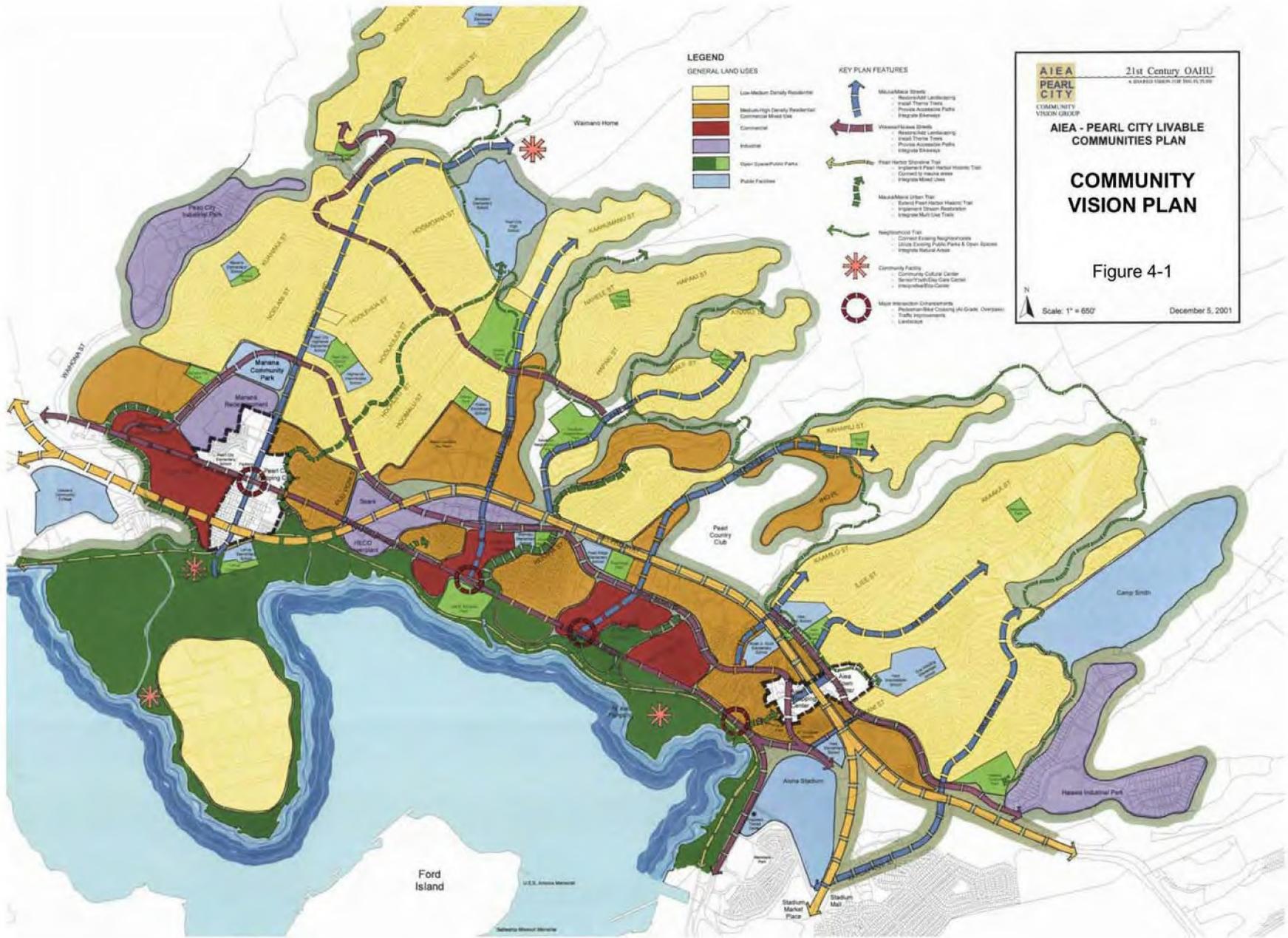
- **Establishment of Town Districts in Aiea and Pearl City**

Town Districts are established in Aiea and Pearl City to provide community centers of activity. The Aiea Town District extends from the former Aiea Sugar Mill site to the commercial areas below. The Pearl City Town District encompasses the civic and commercial uses on lower Waimano Home Road through Lehua Avenue. The Lehua Avenue area is targeted for economic revitalization. The Town Districts are further described in Section 4.6.

- **Enhanced mauka-makai and east-west roadway connections**

There are major mauka-makai roadways which provide linkages between residential and commercial-recreational areas and the shoreline. Improvements along the roadways to accentuate these connections include restoring and adding landscaping, and installing theme trees. All paths need to be made accessible with connections to bicycle and pedestrian pathways.

East-west roadways which link neighborhoods in the mauka areas, in particular, Komo Mai Drive which extends from Pacific Palisades to the Newtown area, and Ulune Street which links Halawa and Aiea also deserve enhancements with landscaping, theme trees and accessible bicycle-pedestrian paths.



**LEGEND**

- GENERAL LAND USES**
- Low-Medium Density Residential
  - Medium-High Density Residential
  - Commercial
  - Industrial
  - Open Space/Parks
  - Public Facilities

**KEY PLAN FEATURES**

- Municipal Street
- Resource Landscaping
- Road
- Transit
- Private Accession Paths
- Program
- (Hawaii) Street
- Resource Landscaping
- Road
- Transit
- Private Accession Paths
- Program
- Pearl Harbor Shoreline Trail
- Impasse of Pearl Harbor Historic Trail
- Connected to main area
- Integrated Mixed Uses
- Mound/Mound Urban Trail
- Extended Pearl Harbor Historic Trail
- Impasse of Pearl Harbor
- Connected to main area
- Integrated Mixed Uses
- Neighborhood Trail
- Connect Existing Neighboring
- Urban Existing Public Parks & Open Spaces
- Integrated Mixed Uses
- Community Facility
- Community Cultural Center
- Senior/Day Care Center
- Integrated Day Care
- Main Intersection Enhancements
- Pedestrian/Bike Crossing (at Green Overpass)
- Traffic Improvements
- Landmark

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**COMMUNITY VISION PLAN**

Figure 4-1

Scale: 1" = 650'  
 December 5, 2001

As major streets which connect communities, Kamehameha Highway and Moanalua Road should be made to convey neighborhood identity. The identifying characteristics which give neighborhoods their unique visual signatures or identities should be emphasized and conveyed by the streets which connect them to other places. To help accomplish this, landscape and other streetscape design should reflect the unique identities of each neighborhood and, where possible, should provide open spaces between them which create significant public views or access to mauka or shoreline resources.

Moanalua Road is heavily used for commuting between neighborhoods, and accessing the freeway and shopping areas. Expansion of Moanalua Road in the Aiea area has resulted in unattractive and high retaining walls. The area between Pali Momi Street and Aiea Heights Drive requires landscaping to mitigate the effects of the walls and road widening improvements.

- **Beautification of Kamehameha Highway and major intersections**

As the main thoroughfare from Halawa through Pearl City, Kamehameha Highway is lined with commercial uses and has an unattractive streetscape. Landscaping along the Kamehameha Corridor would address this need and greatly enhance the entire area.

Major intersections at Waimano Home Road, Kaahumanu Street, and Kaonohi Street are proposed for intersection enhancements, including corner landscaping and better defined pedestrian crossings.

- **Aiea Shoreline Connection across Kamehameha Highway**

The Aiea area is without a direct shoreline connection to and across Kamehameha Highway. The closest connector road is Honomanu Street which crosses to McGrew Point. A pedestrian-bicycle overpass or underpass could be developed using Nalopaka or Kauhale Streets.

- **Mauka-Makai Urban Trails**

The concept of urban trails are proposed to make better use of the streams and drainageways which extend from the mauka residential areas. These are multi-use trails and greenways which could provide aesthetic improvements and additional connections to the Pearl Harbor Historic Trail and the shoreline. Such trails and greenways need to consider stream restoration concepts for enhancements consistent with flooding, water quality and ecological concerns.

The above Plan components are elaborated upon in the sections which follow.

#### **4.5 Kamehameha Highway Corridor Objectives**

The Kamehameha Highway Corridor serves as the primary link between the Aiea Town District and the Pearl City Town District as well as the transition from the mauka communities and the Pearl Harbor shoreline. Together with Moanalua Road, Kamehameha Highway serves as the primary route for local residential traffic, movement of goods and services, and regional access.

With the growth and development of the Aiea and Pearl City communities, Kamehameha Highway has evolved into a multi-lane thoroughfare primarily functioning to accommodate the needs of vehicles. Coupled with inconsistent commercial development and the proliferation of overhead utility lines, the result is a transportation corridor that is less than pedestrian and bicycle-friendly, key elements of a livable community.

A major component along the Kamehameha Highway Corridor is the PearlrIDGE area, which includes the PearlrIDGE Shopping Center and surrounding commercial and residential uses, designated as the Pearl Harbor Regional Town Center. The designation of the Regional Town Center is consistent with existing uses and helps to bridge the Aiea Town District and the Pearl City Town District by providing additional commercial activities and opportunities. A mix of well-designed commercial, residential, and open space uses along Kamehameha Highway will further enhance the corridor by encouraging the community to engage in its activities.

Physical and visual connections to the Pearl Harbor waterfront are to be strengthened. Higher density commercial and residential mixed-use developments are encouraged in the Regional Town Center area, with ample pedestrian and transit connections and facilities along Kamehameha Highway and in the mauka-makai direction. View channels and open space development in key locations will reinforce the connection to the Pearl Harbor shoreline. In the Harbor Center area, higher density development may be considered in the future, subject to community consultation, in exchange for the provision of greater open space, greater access and view corridors to the Pearl Harbor shoreline.

Along the Kamehameha Highway corridor, the following principles are recommended, subject to more site-specific urban design review and community consultation.

- Promote low density development makai of the Highway. Buildings should be no higher than two (2) stories.
- Allow higher density development mauka of the highway, depending on lot size, viewshed impacts and compatibility with surrounding uses.
- Establish a consistent landscape zone along both sides of Kamehameha Highway. For properties fronting the Highway, establish a landscape easement or improvement zone (10-foot minimum).
- Reduce the visual impact of overhead lines by undergrounding or landscape treatment.
- Provide for a more accessible pedestrian and bike-friendly streetscape with links to the Pearl Harbor Historic Trail.
- Preserve and enhance views to the shoreline from Kamehameha Highway and mauka residential areas, especially at key intersections such as Kaonohi, Kaahumanu, and Honomanu Streets, and critical view channels. Remove undesirable elements that block or inhibit view planes and corridors.
- Identify potential or underutilized lands to increase or enhance public landscape areas and places. Create green open space for visual relief and passive recreation purposes.
- Encourage the consolidation of smaller parcels to enable more compact developments with greater open space and view channels.

A major goal of the Kamehameha Highway corridor improvements is to improve the visual quality and create an enjoyable pedestrian and bicycle-friendly experience connecting the Aiea

and Pearl City Town Districts. Contributing to that end is the establishment of a bold, consistent landscape theme and character along the entire length of the corridor.

Objective: Provide a landscape themed pedestrian and bicycle-friendly corridor linking the Aiea and Pearl City Town Districts and enhance opportunities for mauka-makai connections. (See Figures 4-2, 4-3 and 4-4)

- Provide accessible pedestrianways and bikeways on both sides of Kamehameha Highway. Where feasible, develop separate bikeways and pedestrian paths to be located within the existing right-of-way.
- Plantings and other improvements should reinforce the landscape theme and character of Kamehameha Highway.
  - No structures, walls, parking areas or pavement (except for pedestrianways or outdoor dining) shall be allowed within the landscape easement.
  - Large canopy trees, e.g. Monkeypod, should be installed at 50 feet on center or a minimum of two (2) trees per lot.
  - All planting areas should have permanent irrigation systems.
- Identify and prioritize additional key view planes and corridors to Pearl Harbor and mauka areas for preservation and enhancement. Remove undesirable elements that block or inhibit view planes and corridors. Reinforce views with appropriate landscaping. Visual access to commercial establishments should be retained.
- Enhance major intersections that connect mauka areas to the makai Pearl Harbor shoreline (e.g., Waimano Home Road, Kaahumanu Street, Kaonohi Street, and Pali Momi Street).
- Reduce the visual impact of overhead utility lines. Overhead lines should be placed underground wherever feasible or mitigated with landscape treatment (e.g., tree lines or screen planting).
- Reduce the amount of visual clutter. Signage and other street elements should be consolidated wherever possible.

#### **4.6 Regional Views, Open Space and Landscape Objectives**

Towards a more aesthetically pleasing community and natural environment, this section presents the design objectives for the views and vistas, landscape restoration, street tree program, urban trails, and restoration of natural systems within the Aiea-Pearl City region.

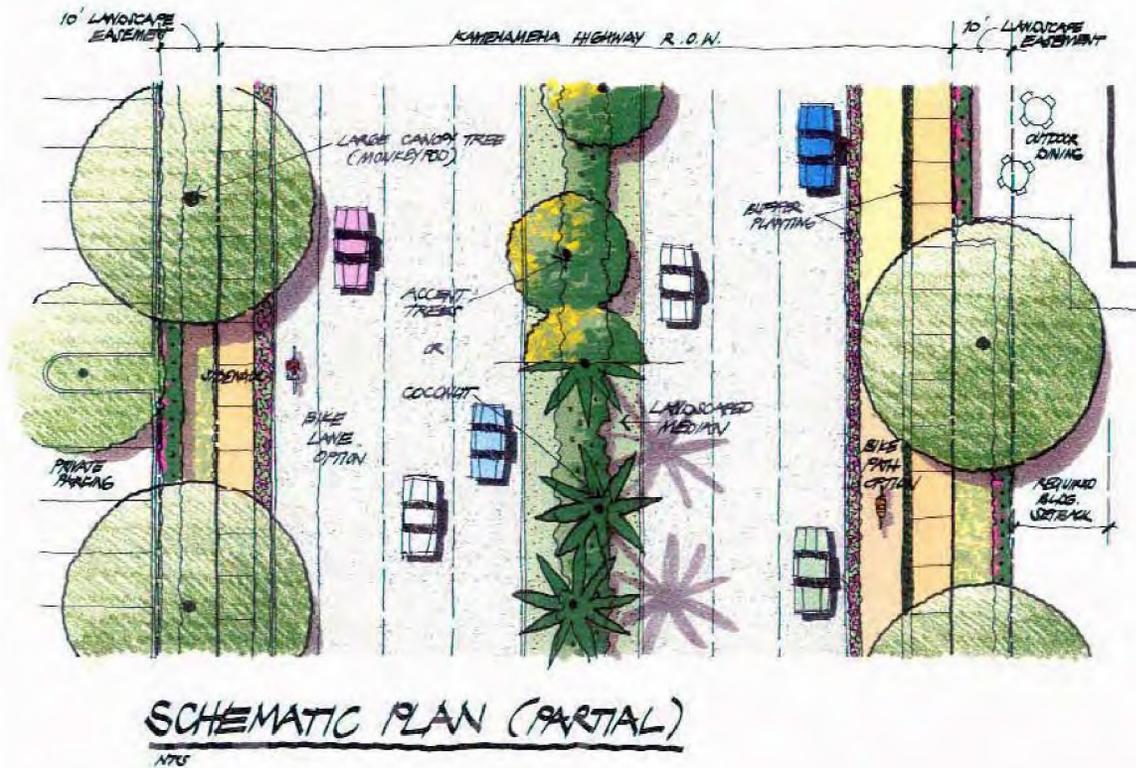
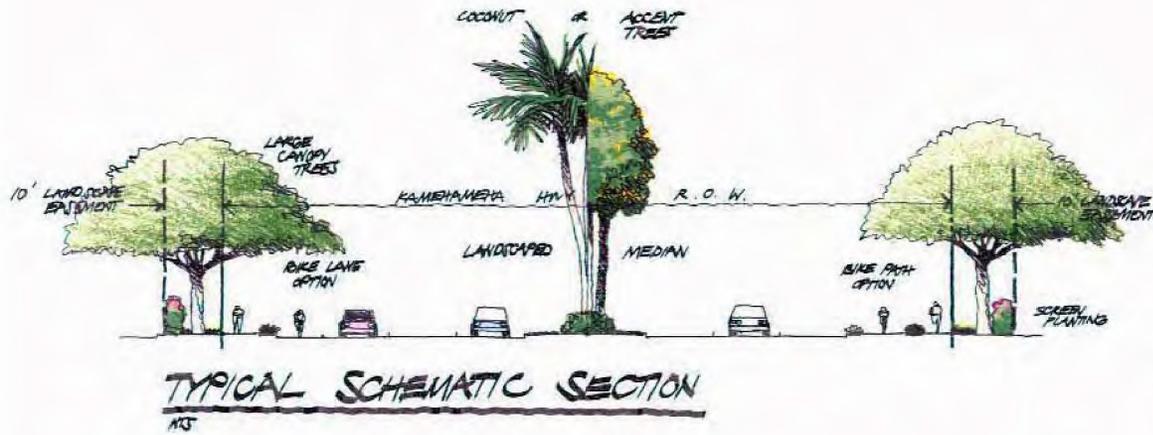
##### **4.6.1 Views and Vistas**

Views and vistas are the visual connections that identify and establish the character of place and its relationship to the rest of the larger community. Visual access to important landmarks provide orientation and direction of movement through a community. Currently, views of Pearl Harbor are nearly obscured from the nearshore areas, especially along Kamehameha Highway. Similarly, views of the Koolau Range are also diminished, although to a lesser extent.

Objective: Identify, enhance and establish key view corridors and planes throughout the Aiea-Pearl City area.

- Re-establish views of the Pearl Harbor shoreline along Kamehameha Highway by:

- Creating permanent open space at key locations (e.g. intersections, drainage-ways, pedestrian crossings).
- Re-establishing views via selective pruning and trimming of existing plantings.
- Encouraging adjoining private landowners to create and maintain views to Pearl Harbor.
- Protect important views, landmarks, and open space elements (e.g. Sumida Watercress Farm and Pa‘aiou Fishpond).
- Enhance mauka/makai views, particularly along key streets (e.g. Kaonohi Street, Kaahumanu Street, Waimano Home Road), natural drainageways (e.g. Aiea Stream, Kalauao Stream, Waimalu Stream, and Waiawa Stream), and ridgelines.



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**KAMEHAMEHA HIGHWAY LANDSCAPE CONCEPT**

Figure 4-2

APRIL 2002



Figure 4-3 Kamehameha Highway Landscape Concept



Figure 4-4 Proposed Improvements at Entrance to Aiea Kamehameha Highway by Aiea State Recreation Area

#### **4.6.2 Landscape Restoration**

There are many opportunities to transform existing paved or undeveloped areas into new landscape features and open space elements. The collective effect of these restored landscapes would significantly enhance the visual and environmental quality of the community. Proposed improvements would include plantings as well as other landscape features such as walls, signs and lighting. Improvements should include the installation of permanent underground irrigation systems to insure the long term success of the newly created spaces.

Objective: Identify locations throughout the Aiea-Pearl City community that can be converted from paved, underutilized or undeveloped sites to landscaped public open space. (See Figures 4-5, 4-6, 4-7, and 4-8)

- Convert paved areas within existing roadways to landscaping, e.g. unused striped medians or shoulders (e.g. Kamehameha Highway, Aiea and Halawa Heights Roads, Ulune Street, and Moanalua Road).
- Restore and beautify existing abandoned or underutilized sites and remnant parcels (e.g. Lehua Avenue and street right-of-ways).
- Acquire and develop areas to enhance adjacent existing parks, trails, or open space.



Figure 4-5 Existing Moanalua Road (Westbound) past Aiea Heights Drive Intersection



Figure 4-6 Proposed Improvements to Moanalua Road (Westbound) past Aiea Heights Drive Intersection



Figure 4-7 Existing Moanalua Road in Pearl City

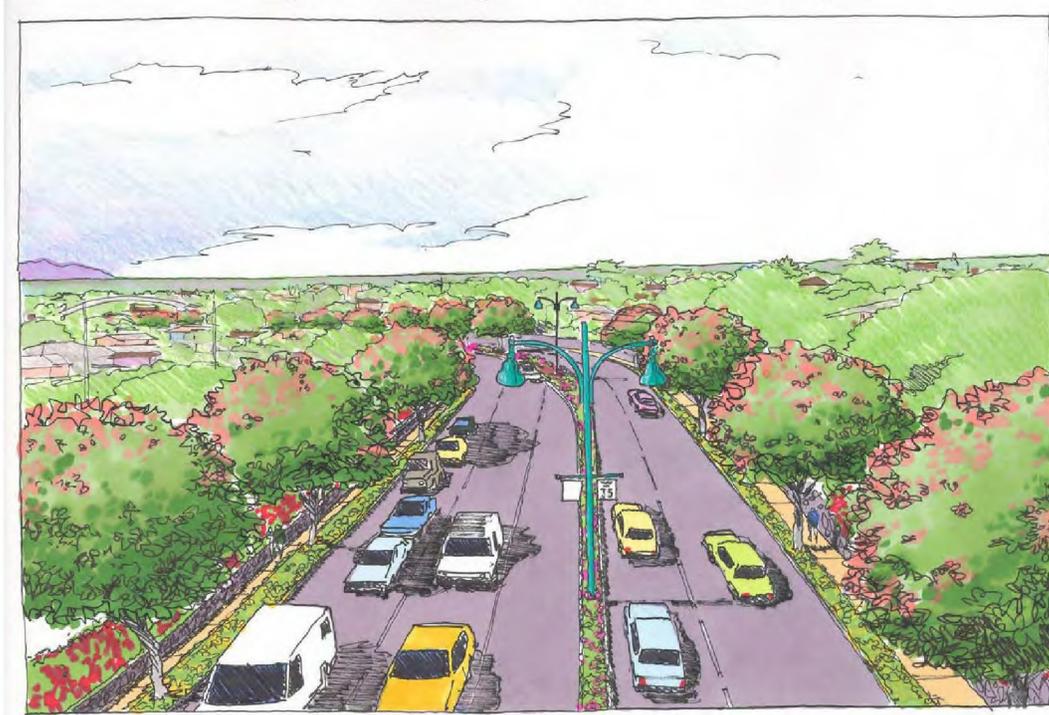


Figure 4-8 Proposed Improvements to Moanalua Road in Pearl City

### **4.6.3 Street Tree Program**

In general, most streets throughout Aiea-Pearl City are visually unattractive and not pedestrian or bicycle-friendly. There is a pronounced absence of street trees for shade and aesthetic relief as well as a lack of accessible pathways. A related issue is the preponderance of overhead utility lines along most of the streets, which preclude significant plantings of street trees. Overhead utilities should be undergrounded wherever feasible.

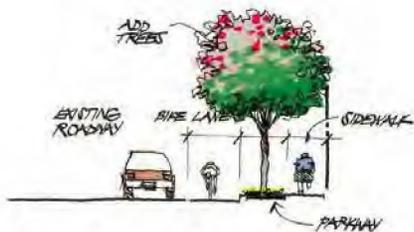
Objective: Develop and adopt a Street Tree Master Plan Concept and implement the installation of street trees throughout the community. (See Figure 4-9)

A suggested concept is to have two different tree types for major streets and roads, except for Kamehameha Highway (refer to Section 4.4 Kamehameha Highway Corridor Objectives). For major streets and roads in the east/west direction, Rainbow Showers are proposed as many of the existing streets are already planted with this species. For major streets and roads in the mauka/makai direction, a tree such as the Gold Tree is suggested for its spectacular bloom and vertical growth habit, which would enhance mauka/makai views.

- Major east/west streets are:
  - Moanalua Road
  - Komo Mai Drive
  - Ulune Street
  
- Major mauka/makai streets are:
  - Waimano Home Road/Lehua Avenue
  - Kaahumanu Street
  - Kaonohi Street
  - Kaamilo Street
  - Aiea Heights Drive
  - Halawa Heights Drive/Kahuapaani Street

When more detailed plans are developed to implement these recommendations, the type of trees, the cost of maintenance, and community desires will be among the considerations.

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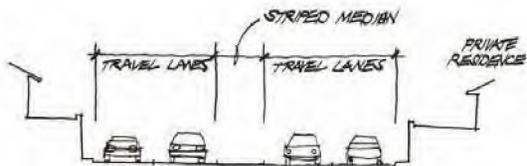
TYPICAL STREET IMPROVEMENTS

KEY CONCEPTS

- ADD STREET TREES THROUGHOUT EX. COMMUNITY
- DEVELOP & IMPLEMENT MASTER STREET TREE PLAN
- UNDERGROUND OVERHEAD UTILITIES (AVOID CONFLICTS)

**ROADWAY LANDSCAPE CONCEPTS**

Figure 4-9

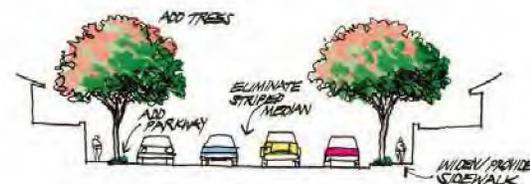


EXISTING CONDITIONS

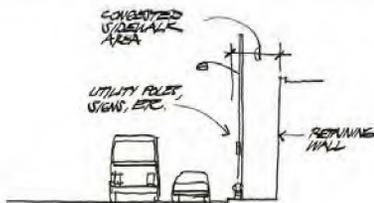
RESTORE LANDSCAPE OPPORTUNITIES



LANDSCAPED MEDIAN

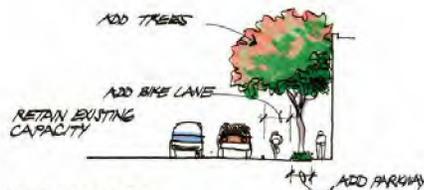


WIDENED SIDEWALK/PARKWAY



EXISTING CONDITIONS

ENHANCE PEDESTRIANWAY/BIKEWAY



PARKWAY



WIDENED SIDEWALK

#### **4.6.4 Urban Trails**

In addition to conventional sidewalks and bikeways within streets and roads, urban trails are alternate means of non-vehicular circulation that allow residents choices in which to move through the community. Urban trails can be developed in various non-traditional locations and conditions that may be undeveloped or underutilized.

Objective: Develop a community-wide network of accessible urban trails that connect the town districts and residential areas utilizing: (See Figures 4-10, 4-11 and 4-12)

- Existing and abandoned neighborhood trails, easements and right-of-ways.
- Public lands and facilities such as schools and parks.
- Streams and drainageways, existing and restored.
- Existing corridors, e.g. Pearl Harbor Historic Trail.
- New or future corridors.

Criteria for the development of urban trails include:

- Ability to link nodes and destinations.
- Meeting design and planning requirements for pedestrian passage.
- Addressing safety and security/management concerns.
- Meeting accessibility requirements.

#### **4.6.5 Restoration of Natural Systems**

Existing natural systems have been dramatically altered due to the urbanization of the region. Watersheds and ridgelines have been developed with many adverse effects such as concentrated stormwater flows, non-point pollution of off-shore waters, and diminished recharge capacity of subsurface resources due to hardening.

Objective: Develop a regional stream restoration program for all major drainageways, including Aiea Stream, Kalauao Stream, Waimalu Stream, and Waiawa Stream.

- Restore wetland areas and estuaries for environmental remediation and natural habitat enhancement.
- Integrate concepts of urban trails as a major component of the restoration and improvement plans.

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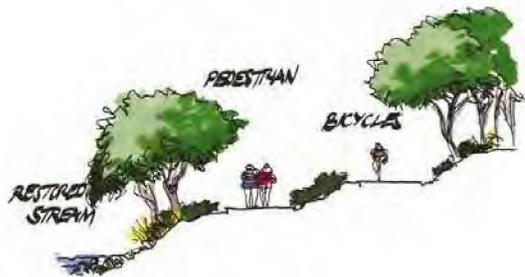
STREETS



DIVIDED PATHS



COMBINED PATH



TRAILS

URBAN TRAIL CONCEPT:

- DEVELOPMENT OF ALTERNATE ROUTES THAT PROVIDE LINKAGES THROUGHOUT THE COMMUNITY AND NEIGHBORHOODS.

MULTI-USE:

- PEDESTRIAN (WALKING / JOGGING)
- BICYCLES
- OTHER NON-MOTORIZED ACCESS

CRITERIA:

- LINKS NODES AND DESTINATIONS
- MEETS DESIGN & PLANNING REQUIREMENTS
- SAFETY & SECURITY (MANAGEMENT)
- ACCESSIBILITY REQUIREMENTS

OPPORTUNITIES:

- ABANDONED R.O.W. / EASEMENTS
- EXISTING R.O.W. / EASEMENTS
- PUBLIC LANDS
  - SCHOOLS, PARKS
  - STREETS AND ROADS
- DRAINAGEWAYS / STREAM RESTORATION
- CREATE NEW CORRIDORS

URBAN TRAIL CONCEPT

Figure 4-10



Figure 4-11 Existing Drainage Channel in Pearl City



Figure 4-12 Proposed Improvements to Drainage Channel in Pearl City

## 4.7 Aiea and Pearl City Town District Design Objectives

This section presents the community design objectives for Aiea Town and Pearl City Town which are based on the vision set forth in the *Aiea-Pearl City Community Vision Plan* (February 1999).

### 4.7.1 Aiea Town District Design Objectives

This section describes the proposed community design of Aiea Town and the design objectives intended to improve the physical character of the area. Through future implementation, the objectives seek to recapture Aiea’s small-town plantation history and sense of community.

#### 4.7.1.1 History of Aiea

The name “Aiea” was derived from a rare, native soft-wooded tree with small yellow flowers called “A’iea” which proliferated in the area following a drought during the era of old Hawaii (see Figure 4-13).

Aiea’s history was influenced by the establishment of the Honolulu Plantation Company in 1898, which was incorporated by Suessmann and Wurmser, owners of the mainland S. & W. food store chain. The company leased 8,000 acres in and around Pearl Harbor and erected the sugar mill in Aiea seven miles from downtown Honolulu. The plantation occupied lands which encompassed the area of the present day Honolulu International Airport to as far west as Pearl City. Most of the lands occupied by present day Hickam Air Force Base, Honolulu International Airport, Pearl Harbor Naval Station, and the communities of Halawa Heights, Aiea and Pearl City were cultivated sugar cane fields as recently as 1947.



Figure 4-13 Aiea Tree

The plantation operations prospered, leading to the growth of Aiea Town, including the old town center which served as the commercial, social, cultural, and communication hub for the community. Over 500 company-owned cottages for 4,000 workers and dependents were distributed in camps throughout the plantation. A fully-staffed hospital was maintained by the plantation for its residents. Other on-site amenities included a church, temple, Japanese language school, baseball fields, and a plantation library.

From 1928 to 1939, the plantation was managed by Alvah A. Scott who oversaw the plantation through its most profitable years. An elementary school in Aiea is named in his memory.

Over time, Aiea gradually became urbanized with the development of military operations, roads, and commercial and housing developments. This resulted in the decline of a significant portion of prime sugar cane fields and the shut-down of the plantation in 1947. Urbanization eventually replaced the old plantation town character of Aiea, although the sugar refinery operations continued until 1996. The Aiea Sugar Mill for many years was the last significant landmark reflecting the plantation history of Aiea until its demolition in 1998.

Vestiges of Aiea's sugar cane heritage remain despite the surrounding urbanization. This is most evident in the modern multi-story headquarters for the Hawaiian Sugar Planter's Association (now named Hawaii Agriculture Research Center) built in 1972 next to the former sugar refinery.

#### **4.7.1.2 Present Day Aiea**

Present day Aiea, which generally encompasses the area from Kaahumanu Street eastward to and including Halawa, can be characterized as an established community with vestiges of urban sprawl. Aiea is bisected by the H-1 Freeway which traverses in an east-west direction. Residential is the predominant use and is mostly located mauka of the H-1 Freeway, with smaller pockets of residential in makai areas. Commercial and quasi-public institutional uses are concentrated makai of the Freeway in the vicinity of the two principal east-west arterials - Kamehameha Highway and Moanalua Road. Light industrial uses occur in Halawa Valley and, to a lesser extent, in the area makai of Kamehameha Highway in Waimalu.

The topography of the Aiea area varies from moderately steep ridges mauka of the Freeway, transitioning to moderately sloping areas further makai, and leveling off in areas makai of Moanalua Road to the shoreline. Panoramic views of Pearl Harbor and the Waianae Range to the west are afforded from the residential ridge areas and are virtually non-existent from the lower elevation areas due to the more level topography and developed nature of the area.

The residences mauka of the Freeway are mostly recent single-family and low- to mid-density multi-family developments. Smaller areas of more established single-family residences are located in areas makai of the Freeway, with high-rise developments also concentrated makai of the Freeway in the Pearl Ridge area.

The commercial core established in the vicinity of Kamehameha Highway and Moanalua Road consists of a mixture of strip commercial, shopping centers, and regional retail establishments. Pearlridge Shopping Center, the State's second largest shopping center, is the most prominent commercial use in the area.

In general, land use and development patterns which occurred prior to the 1960s and 1970s, coupled with the demise of the sugar plantation operations, have resulted in the loss of Aiea's small-town identity. This is reflected in the numerous commercial/retail establishments and widespread residential development. In addition, major arterials that traverse through the town contribute to a disconnected ambience which discourage pedestrian activity.

#### 4.7.1.3 Community Design Objectives

The primary community design objective is to revitalize and enhance the small-town character of Aiea by incorporating vestiges of its historic past with elements of a livable community. The community design objectives are intended to foster achievement of the vision established in the *Aiea-Pearl City Community Vision Plan* which identifies elements needed to optimize the enhancement and revitalization of the Aiea community. This would be achieved through the following recommended design objectives:

- ***Establish a Town District which will be the center of activity in Aiea.*** The establishment of a Town District is intended to recapture the spirit of Aiea’s small-town plantation history and sense of community. A mixture of land uses within the Town District consisting of commercial, retail, residential, and public facilities is essential toward promoting a sense of community as well as serving as the nucleus of activity for the area.
- ***Recapture and enhance the small-town character of Aiea.*** The enhancement of Aiea’s small-town character is essential in recapturing the town’s distinct identity. This would be achieved through enhanced building relationships and forms, architectural influences, and streetscapes reflective of the small-town character.
- ***Create a pedestrian-oriented environment with clear pedestrian-oriented connections to activities.*** The development of a pedestrian-friendly environment is essential in effectively linking existing and proposed activity areas, thereby improving mobility for pedestrians. Strong pedestrian orientation is achieved through the provision of “storefront” business establishments, enhancement of the streetscape and walking environment, and consolidation of parking behind buildings.

#### 4.7.1.4 Proposed Aiea Town District

The present Aiea Town, which encompasses the area in the vicinity of Moanalua Road and Aiea Heights Drive, is established as the Town District based on its historical significance and nucleus of existing and planned land uses which fosters a revitalized town core. The Aiea Town District encompasses the area from the former sugar mill site makai to the Aiea Shopping Plaza and Aiea Public Library (see Figure 4-14). The Town District presently includes the former sugar mill site, Aiea Shopping Center, Aiea Medical Building, Aiea Public Library, Aiea Shopping Plaza, Aiea Post Office, commercial/retail establishments, service stations, and pockets of residences. Major roadways within the Town District include Moanalua Road, Aiea Heights Drive, Ulune Street, and the new Halewiliko Street near the former sugar mill site.

Aiea Town provides a logical opportunity for revitalization as a Town District given the essential land uses that comprise the town core and its location at the eastern end of Aiea which allows it to serve as the gateway to the community. Historically, the Town District area makai of the H-1 Freeway was formerly the Old Town area of Aiea which functioned as the center of daily community activities and celebrations in the first half of the twentieth century. The significance of the former Aiea Sugar Mill site to the community both historically and until recently as a landmark further contributes toward recapturing the small-town identity of Aiea (see Figure 4-15).



Figure 4-14 Proposed Aiea Town District



Figure 4-15 Former Aiea Sugar Mill

In an effort to recapture the historic identity of Aiea, a portion of the former Aiea Sugar Mill site is planned for development of the Aiea Town Center which will include a community center with community and recreational facilities, as well as services for youths and seniors (see Figures 4-16 and 4-17). Planning for this proposed Town Center, with the completion of a master plan and land acquisition by the City, presents an opportunity to serve as a catalyst for the revitalization of the Town District.



New Conceptual Plan  
Aiea Town Center

Figure 4-16 Proposed Aiea Town Center

#### **4.7.1.5 Aiea Town District Design Objectives**

The Town District design objectives presented below are formulated to achieve the community design objectives described above and the desired small-town character of the Aiea Town District. Specific recommended improvements under the design objectives do not necessarily conform to the City's current development standards under the Land Use Ordinance (LUO) and other applicable City policies. Rather, the intent is to initiate the process of tailoring the development standards based on the recommended improvements in consideration of future amendments to the LUO and other relevant City policies. Implementation of these objectives is recommended for renovations, new development or redevelopment which may occur in the Town District.

##### **Streetscape Character**

The existing streetscape of Aiea Town currently lacks characteristics and amenities reflective of a pedestrian-friendly environment. Along Moanalua Road, the lack of unified landscaping and streetscape enhancements directs the visual focus to relatively stark building forms and paved parking areas not conducive to pedestrian activity. The high volume of traffic on the multi-lane Moanalua Road further contributes to an environment that is unattractive to pedestrians.

The intent is to enhance the streetscape to create a more pedestrian-friendly and visually attractive street environment through the Town District. This would be achieved through the introduction of aesthetic elements into the streetscape on both public and private properties to establish a more unified theme unique to Aiea Town.

Objective: Provide enhanced streetscape amenities for a pedestrian-friendly experience, including improving existing sidewalks and designing new sidewalks to encourage and enhance pedestrian activity.

- Provide visual dividers along sidewalk edges such as landscaping to buffer pedestrians from vehicular traffic along the major streets.
- Provide additional sidewalk width at public bus stops, if feasible, to allow for uninterrupted pedestrian movement. (See Figures 4-18 and 4-19)



Conceptual Image

Aiea Town Center

**GROUP 70**  
INTERNATIONAL

Figure 4-17 Rendering of Proposed Aiea Town Center



Figure 4-18 Existing Bus Stop along Aiea Heights



Figure 4-19 Existing Bus Stop along Moanalua Road near the Aiea Heights Drive Intersection

- Provide street furnishings such as benches, trash receptacles, bicycle racks, and landscape planters in appropriate locations along public sidewalks for the convenience of pedestrians. The style of street furnishings should be complementary with the small-town character.
- Enhance public bus stops with covered shelters to provide a comfortable place for people to wait and socialize. The shelter design should be in character with the small-town atmosphere. Where sidewalk space is limited, the integrating of public bus stops under a building canopy should be encouraged.
- Introduce urban street elements such as street banners which could announce festivals or other events. This element could be integrated with the street lighting system. The banners would enhance the streetscape with color, as well as inform motorists and pedestrians of community events.
- Replace existing street light fixtures with a style complementary to the small-town ambience of the Town District.
- Consider placing overhead power lines underground along the major streets to improve the visual quality of the Town District.

**Moanalua Road and Aiea Heights Drive Intersection**

As the entryway into Aiea, the intersection of Moanalua Road and Aiea Heights Drive lacks a strong visual identity for Aiea Town (see Figure 4-20). Land uses on the mauka side include the Aiea Shopping Center and its expansive surface parking lot, and the Shell Service Station. On the makai side, uses include low-rise commercial/retail establishments. Although landscaping is provided at the intersection corners, the character of the intersection fails to project an aesthetic focal point which would give motorists a sense of arrival.

The strategic location of this intersection provides an opportunity to enhance and create a sense of arrival at this important crossroad and to provide a strong visual connection mauka to the Aiea Town Center.



Figure 4-20 Existing Moanalua Road and Aiea Heights Drive Intersection



Figure 4-21 Proposed Improvements along Moanalua Road (looking westbound) near the Aiea Heights Drive Intersection (in the right background)

**Objective:** Enhance the intersection of Moanalua Road and Aiea Heights Drive to serve as the gateway to the Aiea Town District. (See Figures 4-21 and 4-22)

- Create a visual sense of unity from the intersection mauka to the future Aiea Town Center through complementary landscaping. This could be achieved by introducing major vertical landscape elements to create a strong visual image.
- Landscape the street corners to further unify the intersection and the enhanced Lower Aiea Heights Drive.
- Enhance and better define the intersection crosswalks with patterned paving.

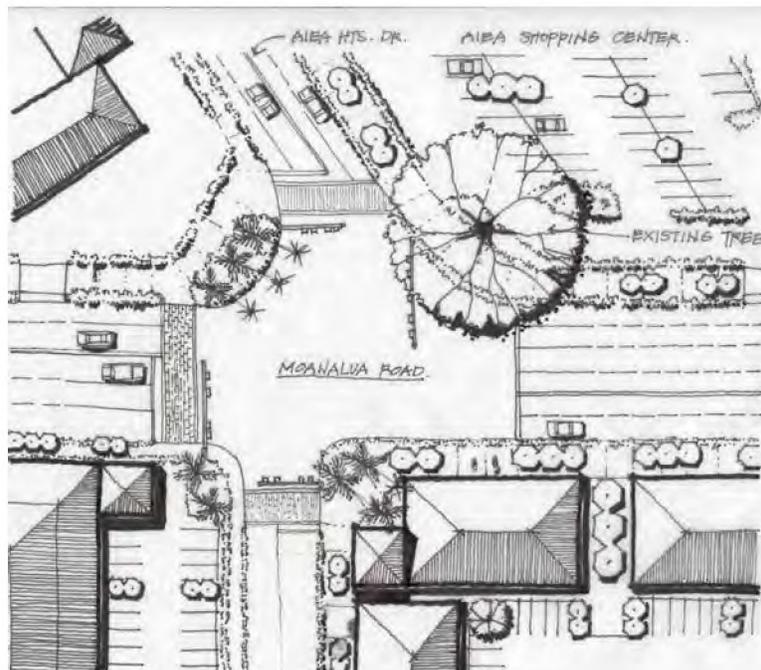


Figure 4-22 Proposed Improvements at Moanalua Road and Aiea Heights Drive Intersection

### **Lower Aiea Heights Drive**

Lower Aiea Heights Drive is a visually stark roadway with landscaping virtually non-existent along its corridor (see Figure 4-23). The pedestrian experience further deteriorates at the Aiea Heights Drive overpass as the relatively narrow sidewalk is flanked on one side by the street and the other by the H-1 Freeway below.

Lower Aiea Heights Drive provides an essential physical and visual link within the Town District. Its strategic location provides the opportunity to develop a strong connection between the existing primary town core area along Moanalua Road and the future Aiea Town Center development at the former sugar mill site. Its terminus at the base of the Aiea Town Center site also allows for development of an important gateway feature to the Town Center.



Figure 4-23 Existing Aiea Heights Drive Overpass

Objective: Enhance Lower Aiea Heights Drive between Moanalua Road and the future Aiea Town Center to provide a strong physical and visual connection within the Town District. (See Figures 4-24 and 4-25)



Figure 4-24 Proposed Improvements at Aiea Heights Drive Overpass

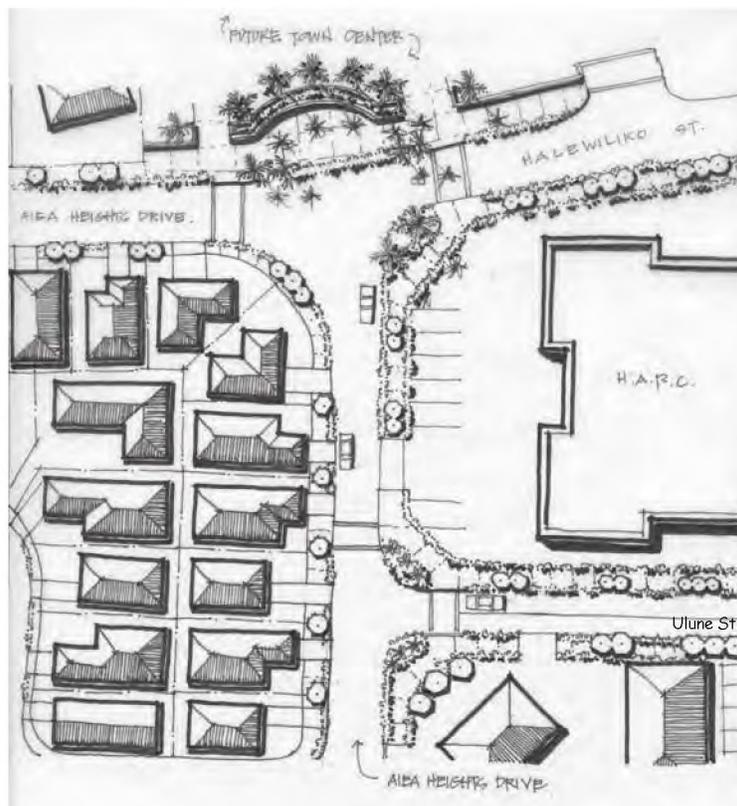


Figure 4-25 Proposed Improvements at Aiea Heights Drive and Aiea Town Center Site

- Establish a distinctive gateway/terminus feature at the top of Lower Aiea Heights Drive on the proposed Aiea Town Center site to serve as a visual focal point for the Town Center as well as provide a visual connection to the lower Town District area.
- Landscape the intersection of Lower Aiea Heights Drive and Halewiliko Street to complement the visual connection with the makai intersection of Moanalua Road and to provide a sense of arrival at the Aiea Town Center. The improvements could include major vertical landscape elements complementary to the gateway/terminus feature at the Aiea Town Center site.
- Enhance the appearance of the Aiea Heights Drive overpass to be more in character with the small-town ambience. This could be achieved through implementation of landscape visual dividers along the sidewalk and replacement of the existing metal railings with a more appropriate and attractive railing design conducive to the character of the area.
- Enhance the sidewalks with patterned concrete paving to continue the small-town ambience connection from the lower Town District area.

### **Building Relationships and Forms**

Aiea Town reflects a history of development that extends back to the post-plantation era. Along the makai side of Moanalua Road, low-rise commercial/retail buildings are built up to the sidewalk but offer no architectural characteristics appealing to pedestrians. Visually, there is a

lack of building form relationships along the street and these are further interrupted by surface parking areas which are visible from the street.

To ensure that the Aiea Town District becomes a vibrant, pedestrian-oriented community area, new buildings or additions should be located close to the street, creating a traditional “street line” of facades with buildings forming an attractive edge to the roadway. Building relationships and form should consider creative approaches to stimulate the pedestrian experience. The scale of the town design should relate to the pedestrian experience which typically is conducive with low-rise (two- to three-stories) rather than high-rise buildings. To maintain the small-town community-oriented atmosphere, low-rise buildings would allow for commercial/retail establishments to be located on the street level, with offices and residential units located on the upper stories to encourage pedestrian activity and revitalize street life.

Objective: Establish the scale and design of building forms within the Town District to encourage pedestrian activity.

- Limit building heights to 40 feet to reinforce the small-town character and scale.
- Encourage development of low-rise buildings which provide commercial/retail activities on the street level, with residential and other special services on the upper stories to promote pedestrian-oriented activities in the Town District.
- Locate building façades close to the street. A maximum of 50 percent of the front ground level façade should be located within 10 feet of the front property line. (See Figures 4-26 and 4-27)

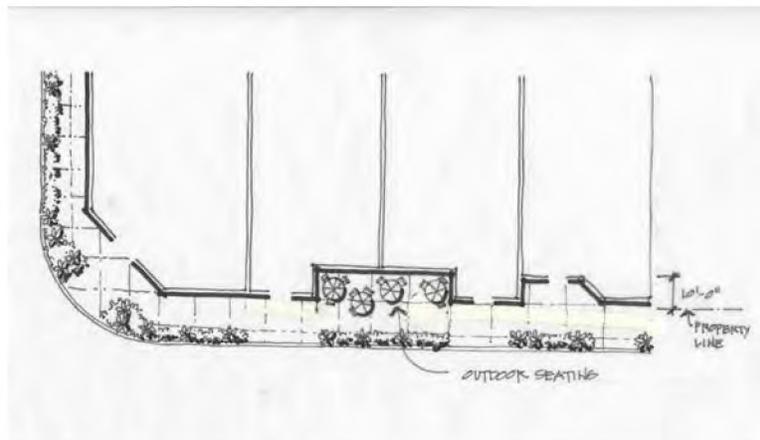


Figure 4-26 Example of Desirable Building Frontage

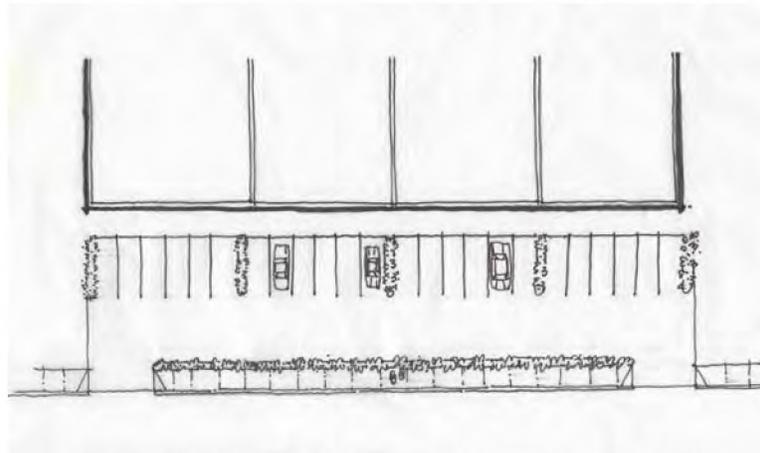


Figure 4-27 Example of Undesirable Building Frontage

- Provide building forms which are offset into smaller, more pedestrian-scaled masses. Long continuous expanses of building forms and overscaled forms should be discouraged. By grouping buildings along the street and consolidating the resulting open space, opportunities for meaningful pedestrian-oriented spaces such as courtyards can be created.
- Provide awnings or sidewalk overhangs at the storefront of existing and new buildings to add visual interest to the building façade and to provide shelter from the elements.
- Provide large openings at the ground level of buildings to allow visual penetration of activity within the building. At least 50 percent of the ground level storefront should be transparent (windows and doors).
- Provide storefront entry designs that are attractive to pedestrians such as recessed entry and variation of roof forms over the entry.
- Provide storefront openings without doors to create an open market atmosphere, where appropriate.
- Provide outdoor dining areas (within private property boundaries) to enhance the indoor/outdoor relationship and promote pedestrian activity at the sidewalk.

### **Architectural Character**

The architectural styles of buildings within Aiea Town are characteristic of the various changing times subsequent to the post-plantation era. This is reflected in the 1950's architecture of the single- and two-story commercial/retail buildings, the 1960's/1970's Aiea Shopping Center, and the more modern Aiea Medical Center building and Aiea Shopping Plaza. Vestiges of the plantation heritage architecture are virtually non-existent.

Although the plantation heritage holds much historical significance for Aiea, literally replicating the plantation-style buildings for renovation, new development or redevelopment may not necessarily be appropriate. Rather than producing architecture of historic replication, the development of renovated or new buildings should borrow from vernacular and historic resources in forming the basis for recapturing the small-town character. The later architectural styles evident in Aiea Town, although not reflective of the plantation heritage, also contribute to Aiea's historic identity and should be recognized. Renovating buildings to reflect contemporary times should include design features reminiscent of the small-town character.

**Objective:** Establish the architectural character of buildings to be reflective of the small-town ambience.

- Encourage the use of exterior building materials such as wood siding and stucco which convey a small-town ambience. Extensive use of materials such as plastic, steel, and glass products (except for windows or doors) should be discouraged.
- Encourage the use of muted exterior building colors that are compatible with the small-town character. Appropriate color finishes include subdued, earthen tones, matte finish paints, stains which accent the natural wood grains, and accent trim colors.
- Encourage incorporating architectural detailing and ornamentation on building exteriors reflective of the town's plantation history. The incorporation of such architectural detailing, especially at the ground level, would contribute to a sense of pedestrian scale as well as be visually appealing.
- Incorporate signage compatible with the architectural character of the building. Sign forms and graphics reflective of the small-town character should be encouraged, with consideration given to use of complementary materials and color to enhance the building's architectural character.

### **Parking**

Parking in Aiea Town consists of paved surface parking lots adjacent to commercial/retail establishments. In some areas, parking lots are visible from Moanalua Road.

Parking in the Town District should be adequately provided and conveniently located to foster a walkable pedestrian environment. In keeping with the small-town character, the siting of buildings should consider the location of parking areas. This would entail parking areas to be located in the rear of business establishments or screened to preserve the traditional "street line" of facades, rather than allowing large areas of parking to visually dominate the view from the street.

**Objective:** Locate off-street parking to minimize views from streets.

- Encourage development of parking areas in the rear or side yard setbacks of business establishments. Parking in the front yard setback of business establishments should be discouraged.
- Screen parking areas visible from the street with landscaping or landscaped low walls.
- Locate parking structures at the rear of business establishments. Landscaping should be provided at each parking level to visually soften the structure. A minimum 10-foot wide landscaping buffer should be provided between the parking structure and adjacent residential parcels.
- Encourage joint use of parking areas and driveways between properties. (See Figure 4-28)
- Locate on-street parking in designated areas to foster pedestrian activity. Such on-street parking should only be provided in areas where adequate sidewalks are available for pedestrians.
- Locate loading areas in the rear of business establishments.

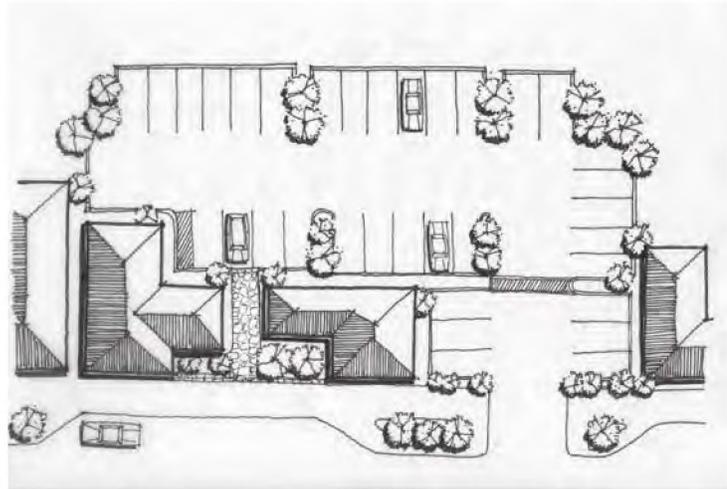


Figure 4-28 Shared Parking Diagram

### **Aiea Shopping Center**

Aiea Shopping Center is a defining landmark within Aiea Town, encompassing a large area within the Town District. Its architecture is characteristic of the area's post-plantation style and its expansive and highly visible surface and structure parking compounds the relatively stark environment of the town core.

The shopping center's highly visible and strategic location at the gateway to the Town District establishes a need to enhance and revitalize the site through landscaping to contribute to the small-town ambience.

**Objective:** Visually enhance the Aiea Shopping Center site along Aiea Heights Drive and Moanalua Road to complement the small-town character of the Town District.

- Establish landscaping within Aiea Shopping Center's parking lot in accordance with standards established in the City and County of Honolulu's Land Use Ordinance (LUO) at a minimum, especially within the lower level parking lot along Moanalua Road.
- Add landscape planters to the shopping center's parking lot walls located along Aiea Heights Drive to visually soften its appearance.
- Implement the applicable building form, architectural character and parking design guidelines established for the Town District in any future renovation or redevelopment of the shopping center site.

#### 4.7.1.6 Town District Zoning

Currently, the lands comprising the Aiea Town District planning area are zoned B-2 Community Business District, I-2 Intensive Industrial District, and R-3.5 Residential District as shown on Figure 4-29. The intent of the B-2 Community Business District zoning designation is to provide areas for community-wide business establishments serving several neighborhoods. The I-2 Intensive Industrial District designation which encompasses the former sugar mill site, is intended to set aside areas for the full range of industrial uses necessary to support the City. The R-3.5 Residential District designation is intended to provide areas for urban residential development.

The current zoning designations do not allow for mixed-use development within individual properties. To spur revitalization of the Town District, it is essential that the underlying zoning designations be amended to allow for a mixture of commercial and residential uses. This would allow for residences to be in close proximity to retail and employment opportunities which would encourage more pedestrian activity and less dependency on vehicular travel. It is recommended that the zoning designation for the portion of the Town District planning area shown in red on Figure 4-14 be amended to a business-apartment mixed use district that promotes small-town mixed-use development.

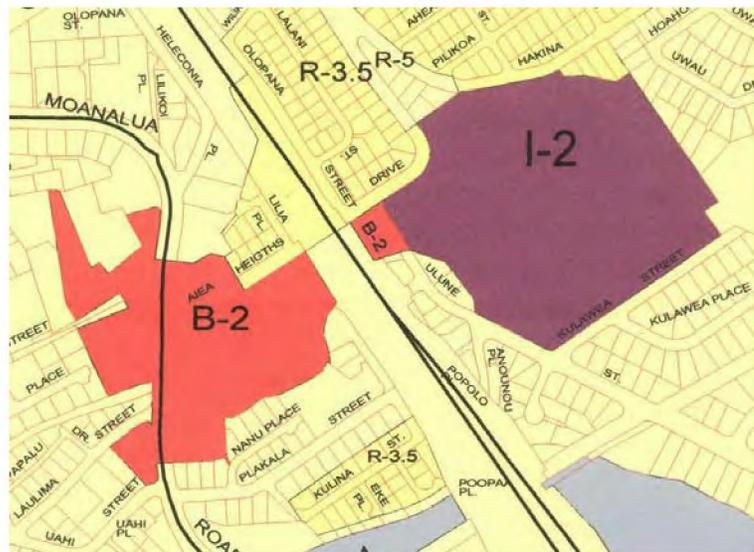


Figure 4-29 Existing Zoning Designations

The remainder of the Town District planning area as shown in blue on Figure 4-14 is designated as Public and includes the proposed Aiea Town Center site and existing Aiea Public Library site. The I-2 Intensive Industrial District zoning designation of the former sugar mill site is currently being recommended for B-1 Neighborhood Business District and A-1 Low Density Apartment District designations by the City to more appropriately accommodate the Aiea Town Center development. For the existing Aiea Public Library site, its current R-3.5 Residential District zoning designation is recommended to be amended to a business-apartment mixed use district to provide continuity of the small-town mixed-use development.

#### 4.7.2 Pearl City Town District Design Objectives

This section addresses the community design of Pearl City Town and introduces a number of design objectives aimed at improving the physical character and, ultimately economic revitalization, of the area. Through future implementation, the objectives are intended to recapture the small-town character of Pearl City Town.

#### 4.7.2.1 History of Pearl City

In 1890, Hawaii's first planned city and suburban development was achieved in Manana by Benjamin F. Dillingham and his Oahu Railway and Land Company (OR&L). Manana became "Pearl City", a name which was likely selected because of the pearls in Pearl Harbor. Lehua Avenue was chosen as the name of the main street running from the Government Road (now Kamehameha Highway) to the tip of the peninsula. Dillingham's engineers laid out a townsite with streets, avenues, parks, school grounds, and a modern water system. To encourage home seekers and small farmers, its land was offered at exceptionally easy terms. The choice residential sites were auctioned off.

Unlike neighboring Aiea which was built around a plantation, Pearl City was settled by independent farmers who raised watercress, rice, taro, lotus, pineapple, and sugar cane. Others purchased land and developed rentals. There were many small businesses such as a dairy, poi factory, bakery, and the soda works. (See Figure 4-30)

The OR&L train served as a connection from Pearl City to the rest of Oahu with the train station becoming the center of daily life on the peninsula. A small bus that ran on tracks shuttled passengers from the peninsula to upper Pearl City. Excursion trains filled with passengers traveled to Pearl City on weekends and the area became a favorite place for pleasure seekers and picnic parties. Wealthy families visited the peninsula on weekends or during the summers, maintaining mansions on the peninsula and enjoying parties and yacht races in Pearl Harbor. Dillingham promoted



Figure 4-30 Photo of Mow Leong Store along Lehua Avenue (1925 or 1926) (current site of Lehua Elementary School)

sail boat races, a large dancing pavilion, and many forms of entertainment and recreation. The Pearl Harbor Yacht Club was founded in 1924, and the members later purchased the home of Albert Fayerweather Afong to serve as their clubhouse. The activities of the Pearl Harbor Yacht Club came to a halt on December 7, 1941 with the attack on Pearl Harbor. (*Stringing the Pearl – Growing Up in the '20s and '30s*, <http://kalama.doe.hawaii.edu/hern95/pt004/toc/stringing.html>)

The war changed the face of Pearl City with the influx of military and civilian defense workers and erection of large barracks-like buildings. After the war, the civilian population gradually lost their property and the peninsula lands were condemned by the military.

From the early 1950's through the early 1970's, major changes to the lands above Kamehameha Highway occurred wherein formerly cultivated hillside lands were rapidly replaced by housing developments. In the 1950's and 1960's, organized sports increased as the

population increased. In 1956, the first phase of the Pearl City Shopping Center was announced. With the ensuing population growth, new public facilities were built over a 14-year period.

#### **4.7.2.2 Present Day Pearl City**

Pearl City presently encompasses the area from the Pearl City Industrial Park eastward to Kaahumanu Street. The character of the area is that of an established suburban community with vestiges of urban sprawl. The H-1 Freeway bisects lower Pearl City and Kamehameha Highway, the principal east-west arterial, traverses through the central core of the area. Waimano Home Road is the principal arterial providing mauka-makai access through the town. Mauka of Kamehameha Highway, residential is the predominant use with other uses consisting of commercial and quasi-public institutional facilities. Along Kamehameha Highway, the urban fabric is predominantly commercial use consisting of a mixture of strip commercial, car dealerships, shopping centers, banking institutions, and nationwide big box retailers. Makai of Kamehameha Highway, uses include residential, commercial, civic, and military housing on the peninsula. Light industrial uses are located at the western end of Pearl City and within the City's Manana Development near Waimano Home Road.

The topography of the Pearl City area varies from moderately steep ridges in the mauka areas, gradually transitioning to relatively level areas makai of Kamehameha Highway. Limited views of Pearl Harbor are available from some locations within the residential ridge areas.

Residences include recent single-family and low- to medium-density multi-family developments in the Waiiau area mauka of the H-1 Freeway. The remainder of the residential areas consists of more established single-family developments and medium-density apartment buildings. The only high-rise in Pearl City is the twin tower Century Park Plaza located mauka of Kamehameha Highway near Pearl City Highlands in lower Manana.

Over the years, Pearl City's small town identity has diminished due to urban sprawl and inconsistent development patterns. Although elements of a small town are in existence, particularly along Lehua Avenue, the organization of such elements do not contribute to a small-town atmosphere. Also, the recent proliferation of mainland "big box" retail establishments in the area detracts from the small-town character and sense of community. Furthermore, despite the presence of numerous residences, commercial/retail establishments and essential recreational and civic facilities in the town core, pedestrian activity is relatively non-existent due to the visually stark major arterials that traverse through the area, contributing to an unappealing pedestrian environment.

#### **4.7.2.3 Community Design Objectives**

The primary community design objective is to enhance and revitalize the small-town character of Pearl City which would foster a vibrant economic environment. The community design objectives are intended to build upon the vision established in the *Aiea-Pearl City Community Vision Plan* which identifies elements in optimizing the enhancement and revitalization of Pearl City. This would be achieved through the following recommended design objectives:

- **Establish a Town District which will serve as the focal point of Pearl City.** The establishment of a Town District is intended to recapture Pearl City's sense of community and small-town environment. The Town District would encompass a setting where social, residential, civic and commercial/retail establishments serve as the activity center in a pedestrian-oriented environment.
- **Establish a "Main Street" – a continuous and vital commercial/retail experience extending from Lehua Avenue mauka along Waimano Home Road to the Pearl City Public Library.** Establishment of a "Main Street" would revive vestiges of the old Pearl City where the Lehua Street area was once the center of activity in the town core. The revitalized Lehua Avenue is envisioned as a lively gathering place comprised of a mixture of residential and commercial/retail uses which would serve as a catalyst for an activity area, attracting both residents and visitors. The concept would extend mauka along Waimano Home Road to include the existing commercial, civic and recreational uses. Improvements to the physical environment along "Main Street" such as wider sidewalks, narrower streets and improved streetscapes would serve to enhance the pedestrian experience.
- **Recapture and enhance the small-town character of Pearl City.** The enhancement of Pearl City's small-town character is essential in recapturing the town's sense of community and identity. This would be achieved through enhanced building relationships and forms, architectural influences, and streetscapes reflective of the small-town character.
- **Encourage economic revitalization through the designation of appropriate land uses and an enhanced physical environment, particularly along Lehua Avenue.** The prominence of the Lehua Avenue area, which once served as the town core and central activity area of Pearl City, has diminished over the years. However, its strategic location in relation to the existing town core area, nearby essential uses and services, and planned Pearl Harbor Historic Trail improvements provides the opportunity for economic revitalization of the area through the designation of appropriate land uses and an enhanced physical environment conducive to residents, visitors and businesses.
- **Create a pedestrian-oriented environment to encourage and enhance pedestrian activity.** The development of a pedestrian-friendly environment is essential in effectively linking existing and proposed activity areas, thereby improving mobility for pedestrians. Strong pedestrian orientation is achieved through the provision of "storefront" business establishments, enhancement of the streetscape and walking environment, and consolidation of parking behind buildings.

#### 4.7.2.4 Proposed Pearl City Town District

The proposed Town District for Pearl City encompasses the area in the vicinity of Waimano Home Road/Lehua Avenue and Kamehameha Highway based on the concentration of existing and planned land uses and services essential to a town core and the historic significance of the Lehua Avenue area. The Pearl City Town District encompasses the area from the Pearl City Public Library on Waimano Home Road makai to the Lehua Avenue area near Lehua Elementary School (see Figure 4-31). Major land uses within the Town District include the Pearl City Shopping Center, Pearl City Public Library, Pearl City Police Station, Pacheco Park, Pearl City Elementary School, Pearl City Post Office, single-family and low-density multi-family

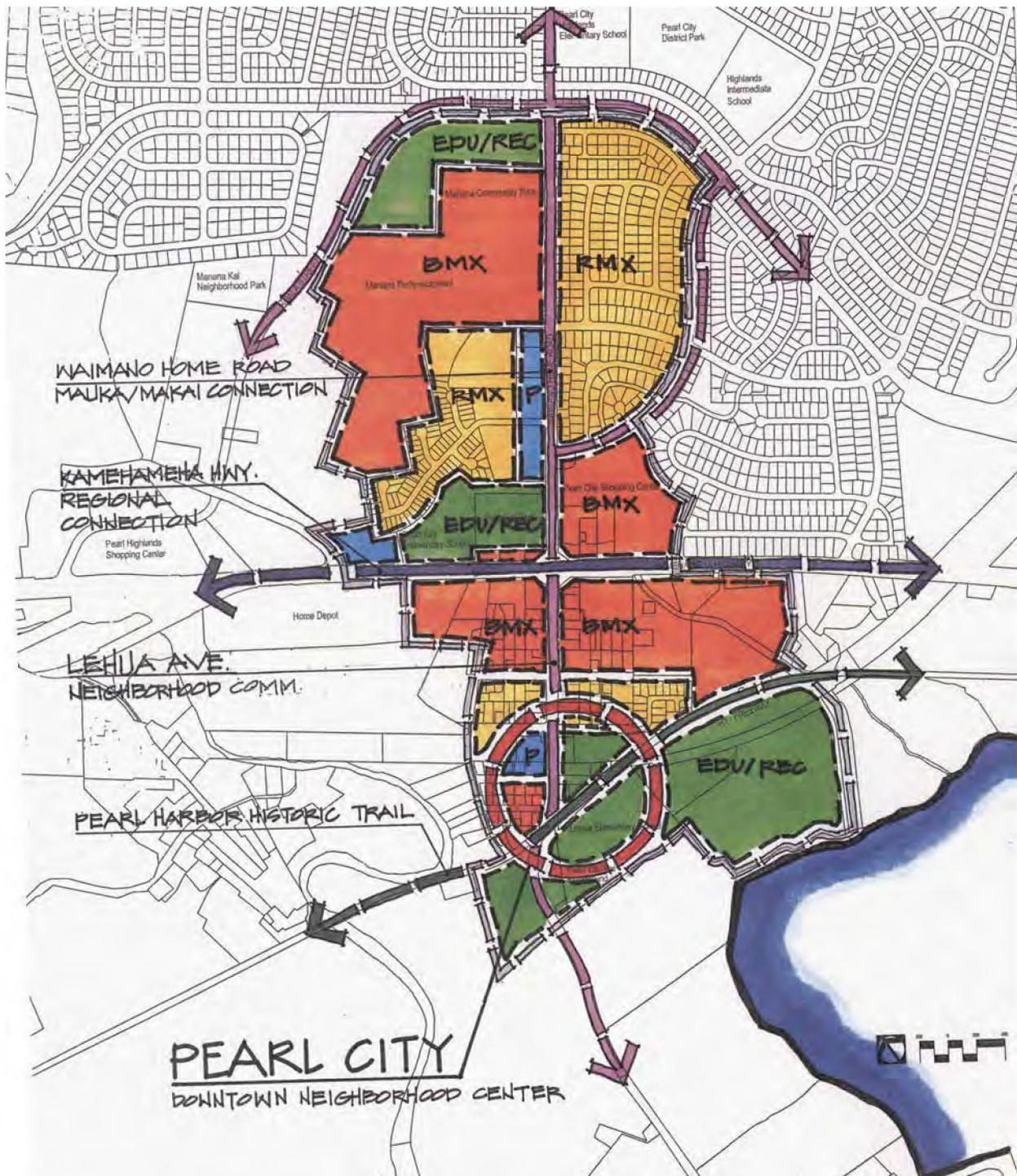


Figure 4-31 Proposed Pearl City Town District

residences, commercial/retail establishments, civic facilities, a car dealership, and churches. Major roadways within the Town District include Kamehameha Highway, Waimano Home Road and Lehua Avenue.

Currently, the designated Town District area functions both symbolically and physically as the primary town core within Pearl City. Its multitude of existing varied and complementary uses and services in close proximity provides the opportunity to better define the town's identity. Historically, Lehua Avenue, given its central location in proximity to the mauka areas of Pearl City and the Pearl Harbor shoreline makai, served as the town's "Main Street" and was the hub of activities for the area. The revival of this concept through enhancement and future redevelopment of the area can be extended mauka along Waimano Home Road to capture the essential civic and commercial uses, thereby fostering economic revitalization of the area.

The close proximity of the City's Manana Development adjacent to the northeast portion of the Town District further validates the significance of the town core. Public amenities within the development include the new Manana Community Park and youth facility adjacent to Waimano Home Road. Other uses include the Pearl City Bus Facility, Board of Water Supply and Department of Parks and Recreation Corporation Yards, and a planned Wal-Mart store. These uses complement the Town District by providing diverse services that would contribute toward supporting the adjacent areas both socially and economically.

The Manana Development, although important to the town core area, is not included within the Town District boundaries since the nature of its uses and IMX-1 Industrial-Commercial Mixed Use District zoning designation are not conducive with the traditional small-town character envisioned for the District. The development objectives which served as the basis for the conceptual land use plan for Manana established that the property be developed in a manner which addresses the needs of the City and the community while maintaining fiscal responsibility. A separate set of development standards has been imposed on Manana developments as part of the zoning ordinance for the area. The development guidelines established for Manana are more appropriate for industrial uses, such as wide front yard setbacks and landscape buffer areas.

Two other significant existing and proposed adjacent uses also contribute to the significance of the designated Town District. The existing Pearl Harbor Bike Path, which extends along the old Oahu Railway and Land Company (OR&L) right-of-way from Waipahu to the area of the USS Arizona Memorial Visitors Center along the Pearl Harbor shoreline, traverses through Lehua Avenue just mauka of Lehua Elementary School. The Pearl Harbor Bike Path is part of an 18.6-mile long rail-and-trail system proposed between Nanakuli and Aiea that will link neighborhoods to beach parks and other recreational and regional attractions. The Pearl Harbor Historic Trail will feature a continuous path for bicyclists and pedestrians alongside the re-established historic train operation. Attractions and activity centers along the Trail will establish it as a world-class heritage and recreation corridor. A railway station is proposed in the vicinity of Lehua Avenue as part of the Historic Trail master plan.

The other major use proposed is the Pearl Harbor Recreation Complex and Senior Center which is undergoing a feasibility study for a location southwest of the Town District immediately makai of the Pearl Harbor Bike Path. Possible facilities include a recreation complex, senior

center, playfields (soccer, baseball and football), and a 50-meter swimming pool. The complex would be a regional draw for the surrounding area.

#### **4.7.2.5 Pearl City Town District Design Objectives**

In developing the design objectives for the Town District, it is recognized that the respective character of the Lehua Avenue and lower Waimano Home Road areas differ. This is reflective of the historic origins of the two areas wherein Lehua Avenue functioned as the original town core of Pearl City from the late nineteenth century into the mid-twentieth century, and Waimano Home Road came into prominence thereafter. Likewise, the uses and nature of the two areas differ. Along Lehua Avenue, the mixture of small commercial establishments mixed in with residences, and smaller parcels are reflective of the historic small-town character of the area. Along lower Waimano Home Road, the character is more commercial- and civic-oriented with larger parcel sizes which is reflective of more contemporary times.

As such, the design objectives for the Lehua Avenue area are intended to achieve a small-town character with historic influences. For the lower Waimano Home Road area, the design objectives are intended to establish an area that retains its contemporary nature, yet possesses a traditional, small-town character.

The Town District design objectives presented below are established to achieve the community design objectives described above and the desired small-town character of the Town District. Specific recommended improvements under the design objectives do not necessarily conform to the City's current development standards under the Land Use Ordinance (LUO) and other applicable City policies. Rather, the intent is to initiate the process of tailoring the development standards based on the recommended improvements in consideration of future amendments to the LUO and other relevant City policies. Implementation of these objectives are recommended for renovations, new development or redevelopment which may occur in the Town District.

#### **Streetscape Character**

The existing streetscape of the Pearl City town core lacks a visually stimulating character that would attract pedestrian activity. Although commercial/retail establishments along Lehua Avenue provide the desired street frontage orientation, the lack of streetscape and landscape amenities precludes a pedestrian-friendly environment. The area along Waimano Home Road, although providing landscaped areas, also lacks the amenities and ambiance conducive to a pedestrian-oriented environment.

The intent is to enhance the streetscape to create a more pedestrian-friendly and visually attractive street environment through the Town District consistent with the small-town character. This would be achieved through the introduction of aesthetic elements into the streetscape on both public and private properties toward establishing a more unified theme unique to Pearl City.

Objective: Provide enhanced streetscape amenities for a pedestrian-friendly experience, including improving existing sidewalks and designing new sidewalks to encourage and enhance pedestrian activity.

- Provide visual dividers along sidewalk edges such as landscaping to buffer pedestrians from vehicular traffic along the major streets.
- Provide additional sidewalk width at public bus stops, if feasible, to allow for uninterrupted pedestrian movement.
- Provide street furnishings such as benches, trash receptacles, bicycle racks, and landscape planters in appropriate locations along public sidewalks for the convenience of pedestrians. The style of street furnishings should be complementary with the small-town character.
- Enhance public bus stops with covered shelters to provide a comfortable place for people to wait and socialize. The shelter design should be in character with the small-town atmosphere. Where sidewalk space is limited, the integrating of public bus stops under a building canopy should be encouraged.
- Introduce urban street elements such as street banners which could announce festivals or other events. This element could be integrated with the street lighting system. The banners would enhance the streetscape with color, as well as inform motorists and pedestrians of community events.
- Replace existing street light fixtures with a style complementary to the small-town ambience of the Town District.
- Consider placing overhead power lines underground along the major streets to improve the visual quality of the Town District.

### **Waimano Home Road/Lehua Avenue and Kamehameha Highway Intersection**

The intersection of Waimano Home Road/Lehua Avenue and Kamehameha Highway can be considered the landmark intersection of the Pearl City area due to its strategic location. Visually, however, this heavily traveled intersection is wide and nondescript, lacking cohesive landscaping and streetscape elements (see Figure 4-32).

An opportunity exists to reinforce a sense of arrival at this important crossroads to the town core and visually provide thematic continuity linking the Lehua Avenue area and Waimano Home Road.

**Objective:** Enhance the intersection of Waimano Home Road/Lehua Avenue and Kamehameha Highway to reinforce a sense of arrival to Pearl City. (See Figures 4-33 and 4-34)

- Incorporate landscaping to unify the four corners of the intersection and visually convey the thematic continuity of Lehua Avenue and Waimano Home Road. This could be achieved by introducing major vertical elements to create a strong visual image.
- Landscape the median areas of the intersection roadways to further unify the intersection and provide visual relief from the wide streets.
- Enhance the intersection crosswalks with patterned paving to impart the small-town ambience.



Figure 4-32 Existing Waimano Home Road/Lehua Avenue and Kamehameha Highway Intersection



Figure 4-33 Proposed Improvements at Waimano Home Road/Lehua Avenue and Kamehameha Highway Intersection

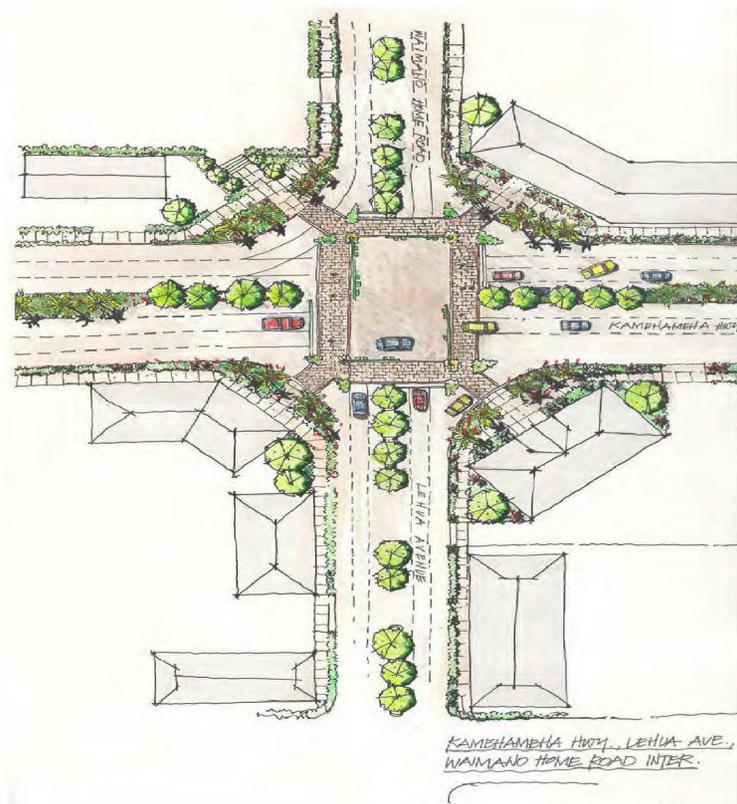


Figure 4-34 Proposed Improvements at Waimano Home Road/Lehua Avenue and Kamehameha Highway Intersection

### **Lehua Avenue**

Lehua Avenue, although retaining some sense of a small-town character with its street front-oriented stores, is void of streetscape amenities and landscaping that would attract pedestrians (see Figure 4-35). The area of Lehua Avenue in the vicinity of the Pearl Harbor Bike Path is deteriorated in appearance with older residential and commercial buildings, pockets of unpaved areas, and virtually no landscaping (see Figure 4-37). This deteriorated appearance conveys an uninviting environment for users of the Bike Path.

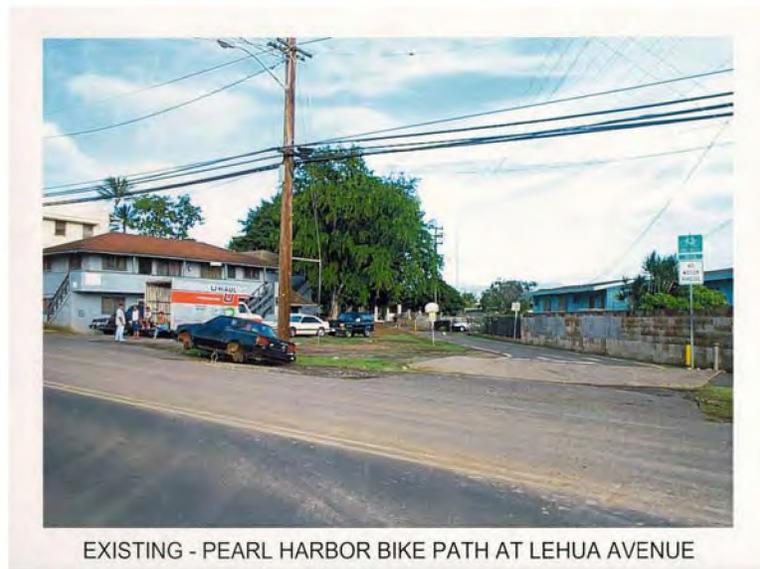


Figure 4-35 Existing Lehua Avenue

Lehua Avenue has vestiges of existing streetscape features that, when enhanced, could foster a revitalized area (See Figure 4-36). The proposed improvements associated with the Pearl Harbor Historic Trail and future train operations provide an opportunity to re-establish the historic role of Lehua Avenue as the center of activity for the town core. With the proposed trail improvements, there is a need to enhance and redevelop the Lehua Avenue area to positively contribute to the improved trail system experience and, more importantly, to benefit economically from the activity that would be generated in the area.



4-36 Proposed Improvements along Lehua Avenue



EXISTING - PEARL HARBOR BIKE PATH AT LEHUA AVENUE

Figure 4-37 Existing Lehua Avenue at Pearl Harbor Bike

**Objective:** Enhance Lehua Avenue by fostering a small-town, pedestrian-friendly environment and encouraging the use of and activity from the Pearl Harbor Bike Path and future Pearl Harbor Historic Trail (See Figure 4-38).

- Establish consistent “street spaces” that unify individual buildings and developments into a tightly knit, walkable environment, conveying a traditional small-town atmosphere. (See Figure 4-39) The creation of lineal street spaces establishes the basic scale and character of the area. This would be achieved through continuous patterned sidewalks and unified landscaping enhanced by uninterrupted building frontage.



RECOMMENDED - PEARL HARBOR HISTORIC TRAIL AT LEHUA AVENUE

Figure 4-38 Proposed Improvements at Lehua Avenue at Pearl Harbor Historic Trail



Figure 4-39 Street Space

- Widen sidewalks, if feasible, to allow for sidewalk activities, such as outdoor dining areas, while allowing for uninterrupted pedestrian movement. Widened sidewalks will also result in the narrowing of Lehua Avenue which will reinforce the small-town ambience of the area.
- Enhance Lehua Avenue in the vicinity of the Pearl Harbor Bike Path with streetscape amenities and landscaping to create an attractive, user-friendly environment. (See Figure 4-38) Improvements such as shade trees, seating areas, and patterned walkways and crosswalks would encourage pedestrian activity as well as serve as an attractive rest area for users of the Bike Path. In the future when the Pearl Harbor Historic Trail improvements are implemented in the area, more appropriate streetscape and landscape amenities should be provided to accommodate the activity level to be generated.

- Continue the appropriate streetscape enhancements beneath the H-1 Freeway overpass area of Lehua Avenue to provide visual continuity along the street. Provisions for pedestrian-scaled lighting, especially at night, should be incorporated to provide a safer pedestrian environment.
- Provide patterned street crossing areas to encourage pedestrian activity along both sides of the street. Patterned street crossings also serve to slow motorists at the pedestrian crossings. (See Figure 4-36)

### **Waimano Home Road**

Waimano Home Road is a relatively wide roadway with no distinctive visual character. Buildings are set back from the property line and surface parking areas are highly visible from the street. Although landscaping is provided along the street, the general lack of streetscape amenities contribute to an unappealing pedestrian experience.

As a major street providing access to essential civic, recreational and commercial uses as well as residential developments in the mauka areas, Waimano Home Road has a significant influence on the character of the area. Given the close proximity of varied uses in the area, it is logical that an enhanced pedestrian experience be provided in character with the livable community concept. An enhanced lower Waimano Home Road could also serve as a gateway to the upper Pearl City area while continuing the small-town character of Lehua Avenue.

**Objective:** Enhance lower Waimano Home Road to provide a more pedestrian-friendly environment and to continue the small-town character of Lehua Avenue.

- Widen the sidewalks along lower Waimano Home Road to allow for more pedestrian activity and uninterrupted pedestrian movement. Widened sidewalks will also result in the narrowing of the roadway which will further reinforce the small-town ambiance of the area. Narrowing of the roadway is possible due to the opening of Kuala Street which has relieved traffic and would enable a more pedestrian-oriented nature along Waimano Home Road.
- Provide patterned street crossing areas to encourage pedestrian activity along both sides of the street. Patterned street crossings also serve to slow motorists at such pedestrian crossings.
- Establish landscaping within the existing surface parking lots along lower Waimano Home Road (Pearl City Police Station, Pearl City Public Library and Pacheco Park) in accordance with standards established in the City's Land Use Ordinance (LUO) at a minimum. A continuous landscaped edge should be established along lower Waimano Home Road to screen existing surface parking lots.

### **Building Relationships and Forms**

The existing character of buildings along Lehua Avenue reflects vestiges of the historic small-town nature of the area. The more established commercial buildings are low-rise with street-front orientation. Interspersed between these establishments are mid-rise apartment buildings and a nursing home which provide for interrupted building form relationships along the street. Along Waimano Home Road, the low-rise buildings are set back from the street and, due to the large parcel sizes, form no building relationships.

To ensure that the Pearl City Town District becomes a vibrant, pedestrian-oriented community, new buildings or additions should be located close to the street. This would create a traditional "street line" of facades with buildings forming an attractive edge to the roadway, particularly appropriate to the Lehua Avenue area. Building relationships and form should consider creative approaches to stimulate the pedestrian experience. The scale of the town design should relate to the pedestrian experience which typically is conducive with low-rise (two- to three-stories) rather than high-rise buildings. To maintain the small-town community-oriented character, low-rise buildings would allow for commercial/retail establishments to be located on the street level, with offices and residential units located on the upper stories to encourage pedestrian activity and revitalize street life. This mixture of uses within a single building is specifically intended for Lehua Avenue which is reminiscent of the historic character of the area.

**Objective:** Establish the scale and design of building forms within the Town District to reflect the small-town character and encourage pedestrian activity.

- Limit building heights to 40 feet in the business-apartment mixed use district and 60 feet in the apartment-business mixed use district to reinforce the small-town character and scale.
- Encourage development of low-rise buildings which provide commercial/retail activities on the street level, with residential and other special services on the upper stories to promote pedestrian-oriented activities in the Town District, particularly along Lehua Avenue.
- Locate building facades close to the street. A maximum of 50 percent of the front ground level façade should be located within 10 feet of the front property line. (See Figures 4-40 and 4-41)

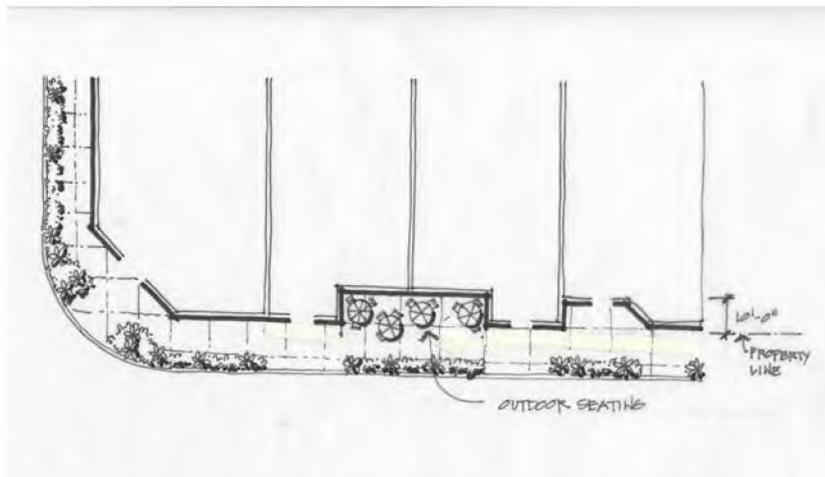


Figure 4-40 Example of Desirable Building Frontage

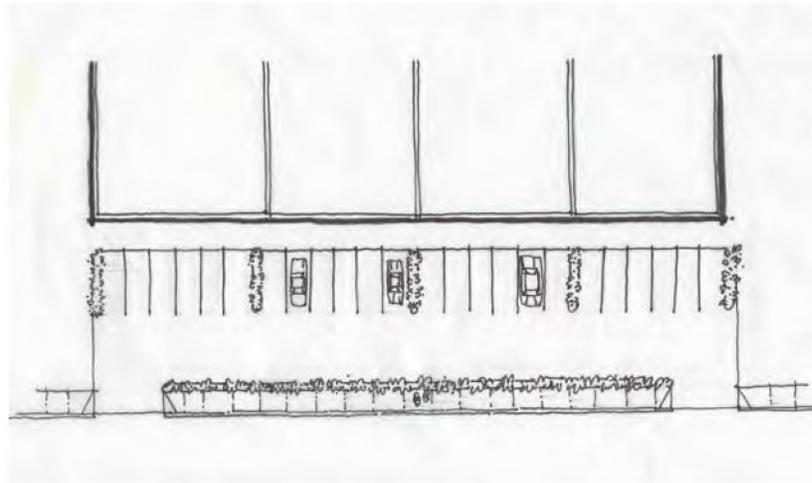


Figure 4-41 Example of Undesirable Building Frontage

- Provide building forms which are offset into smaller, more pedestrian-scaled masses. Long continuous expanses of building forms and overscaled forms should be discouraged. By grouping buildings along the street and consolidating the resulting open space, opportunities for meaningful pedestrian-oriented spaces such as courtyards can be created.
- Provide awnings or sidewalk overhangs at the storefront of existing and new buildings to add visual interest to the building façade and to provide shelter from the elements.
- Encourage coordination of actual or visual heights of adjacent buildings. Designs could be coordinated with the height of walls, parapet, window lines, awning lines, and other horizontal elements. (See Figure 4-42)



Figure 4-42 Coordination of Architectural Design Heights

- Provide large openings at the ground level of buildings to allow for viewing of activity within the building. At least 50 percent of the ground level storefront should be transparent (windows and doors).
- Provide storefront entry designs that are attractive to pedestrians such as recessed entry and variation of roof forms over the entry.
- Provide storefront openings without doors to create an open market atmosphere, where appropriate.
- Provide outdoor dining areas (within private property boundaries) to enhance the indoor/outdoor relationship and promote pedestrian activity at the sidewalk.

### **Architectural Character**

The architectural style of buildings within the Pearl City Town District is reflective of the historic origins of the area. Along Lehua Avenue, the commercial buildings reflect mid-twentieth century architecture although the character is relatively nondescript. Mauka along Waimano Home Road, the architectural style is of the late 1950's to 1970's, reflective of a more contemporary era.

In designing for renovation, new development or redevelopment, literally replicating the past historic style may not necessarily be appropriate. Rather than producing architecture of historic replication, the development of renovated or new buildings should borrow from vernacular and historic resources in forming the basis for recapturing the small-town character. The later architectural styles along Waimano Home Road also contribute to Pearl City's historic identity and should be recognized. Renovating buildings to reflect contemporary times should include design features reminiscent of the small-town character.

**Objective:** Establish the architectural character of buildings to be reflective of the small-town ambience.

- Encourage the use of exterior building materials such as wood siding and stucco which convey a small-town ambience. Extensive use of materials such as plastic, steel, and glass products (except for windows and doors) should be discouraged.

- Encourage the use of muted exterior building colors that are compatible with the small-town character. Appropriate color finishes include subdued, earthen tones, matte finish paints, stains which accent the natural wood grains, and accent trim colors.
- Encourage incorporating architectural detailing and ornamentation on building exteriors reflective of the town's history. The incorporation of such architectural detailing, especially at the ground level, would contribute to a sense of pedestrian scale as well as be visually appealing.
- Incorporate signage compatible with the architectural character of the building. Sign forms and graphics reflective of the small-town character should be encouraged, with consideration given to use of complementary materials and color to enhance the building's architectural character.

### **Parking**

Parking in the Lehua Avenue area consists of small parking areas located within the respective properties of business establishments and apartment buildings. These are supplemented by on-street parking along both sides of Lehua Avenue and along the cross streets. In the area of Waimano Home Road, surface parking lots are provided within the quasi-public uses and commercial establishment properties. Much of these parking lots are visible from Waimano Home Road and Kamehameha Highway. There is no on-street parking along Waimano Home Road in the town core.

Within the Town District, adequate and conveniently located parking should be provided to achieve a walkable pedestrian environment. Rather than providing large areas of parking highly visible from the street, parking areas should be located in the rear of business establishments or screened from view to maintain the traditional "street line" of facades which is reflective of the small-town character.

**Objective:** Locate off-street parking to minimize views from streets.

- Encourage development of parking areas in the rear or side yard setbacks of business establishments. Parking in the front yard setback of business establishments should be discouraged.
- Screen parking areas visible from the street with landscaping or landscaped low walls.
- Locate parking structures at the rear of business establishments. Landscaping should be provided at each parking level to visually soften the structure. A minimum 10-foot wide landscaping buffer should be provided between the parking structure and adjacent residential parcels.
- Encourage joint use of parking areas and driveways between properties. (See Figure 4-43)
- Consolidate on-street parking in areas to foster pedestrian activity. Such on-street parking should only be provided in areas where adequate sidewalks are available for pedestrians.
- Locate loading areas in the rear of business establishments.

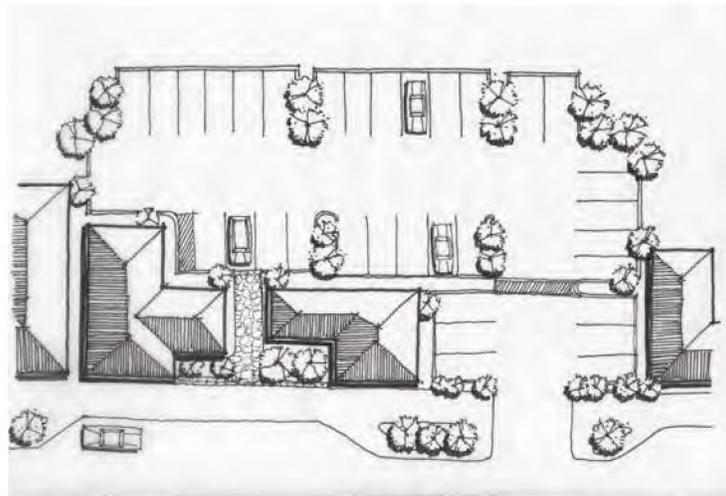


Figure 4-43 Shared Parking Diagram

### **Pearl City Shopping Center**

Pearl City Shopping Center, which encompasses a large area within the northeast portion of the Town District, reflects a 1950's/early 1960's architectural style characteristic of Pearl City. Its expansive surface parking lot which surrounds the shopping center presents a stark, visually unappealing character to the area.

Due to the shopping center's highly visible and strategic location at the crossroad of the Town District, there is a need to enhance and revitalize the site through landscaping to reinforce the small-town ambience.

**Objective:** Visually enhance the Pearl City Shopping Center site to complement the small-town character of the Town District.

- Establish landscaping within the Pearl City Shopping Center's parking lot in accordance with standards established in the City's Land Use Ordinance (LUO) at a minimum, especially within the perimeter areas along Kamehameha Highway, Waimano Home Road and Hoolaulea Street.
- Implement the applicable building form, architectural character and parking design guidelines established for the Town District in any future renovation or redevelopment of the shopping center site.

### **4.7.2.6 Town District Zoning**

The lands comprising the Town District planning area are currently zoned B-1 Neighborhood Business District, B-2 Community Business District, A-1 Low Density Apartment District, A-2 Medium Density Apartment District, R-5 Residential District, P-2 General Preservation District, and F-1 Military and Federal Preservation District as shown on Figure 4-44.

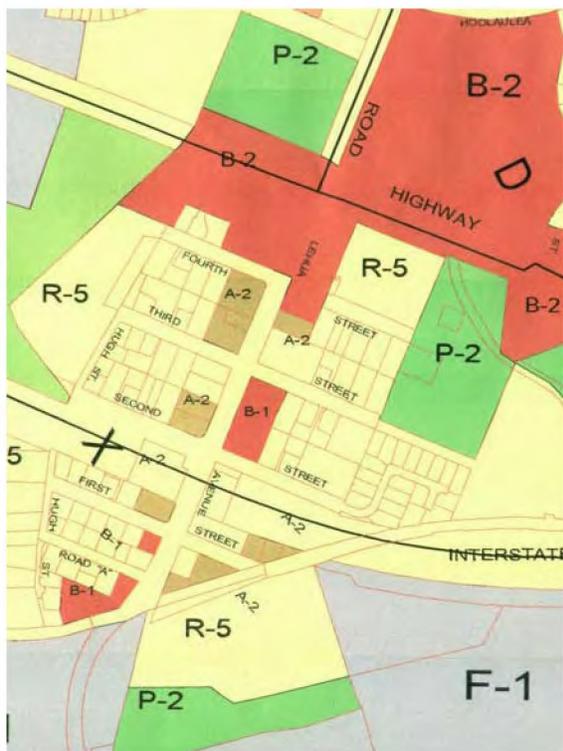


Figure 4-44 Existing Zoning Designations

The intent of the B-1 Neighborhood Business District zoning designation is to provide relatively small areas which serve the daily retail and other business needs of the surrounding population. The B-2 Community Business District designation is intended to provide areas for community-wide business establishments serving several neighborhoods. The intent of the A-1 Low Density Apartment District and A-2 Medium Density Apartment District designations are to provide areas for low density, multi-family dwellings and medium density, multi-family dwelling units, respectively. The R-5 Residential District designation is intended to provide areas for urban residential development. The P-2 General Preservation District which encompasses Pacheco Park is intended for lands well-suited to the functions of providing visual relief and contrast to the City's built environment or serving as outdoor space for the public's use and enjoyment. The F-1 Military and Federal Preservation District designation which includes the Pearl City Post Office site, is intended to identify areas in military or federal government use.

Within the Lehua Avenue area, the current zoning designations are predominantly residential and apartment, with business use allowed primarily in the vicinity of Kamehameha Highway and within a few small areas along lower Lehua Avenue.

To encourage revitalization of the Town District, especially along Lehua Avenue, it is essential that the underlying zoning designations be amended to allow for a mixture of commercial and residential uses. This would allow for residences to be in close proximity to retail and employment opportunities which would encourage more pedestrian activity and less dependency on vehicular travel. The current zoning designations do not allow for mixed use development within individual properties.

To encourage mixed use development in the Town District, it is recommended that the zoning designation for a portion of the planning area be amended to a business-apartment mixed use district as shown in red on Figure 4-31. This zoning designation, particularly along Lehua Avenue, would allow for the mixed use of commercial and residential development essential to establishing an active, pedestrian-oriented environment, and a unified appearance of building relationships and forms along the street. The business-apartment mixed use district zoning designation for the Pearl City Shopping Center site is intended to allow for the flexibility of possibly providing for mixed use development in future redevelopment of the property.

The recommended designation of apartment-business mixed use district zoning within the adjacent areas of Lehua Avenue and the area west of Waimano Home Road as shown in yellow on Figure 4-31 is intended to allow for mostly residential or apartment neighborhoods with supportive commercial use. The commercial uses are intended to be permitted under varying intensities, creating more diverse neighborhoods while optimizing the use of both land and available urban services and facilities. Mixing could occur horizontally and vertically, although controls would be established to maintain the character as primarily apartment neighborhoods.

The Public designated areas shown in blue on Figure 4-31 are intended to allow for public/civic uses to provide services complementary to a town core. The Public designated areas mauka of Kamehameha Highway include the existing Pearl City Police Station, Pearl City Public Library, Pearl City Elementary School, Pearl City Post Office, Pacheco Park, and commercial area along Kamehameha Highway. By designating this area as Public, it further reinforces this quad of the Town District as a civic/institutional precinct. Along Lehua Avenue, the Public designated area beneath the H-1 Freeway overpass is currently undeveloped and could be used as a site for a potential relocation of the Pearl City Post Office or some other essential public service use, or developed into a municipal parking lot to support the commercial uses in the area.

The Educational/Recreational (EDU/REC) designated area shown in green on Figure 4-31 reflect existing educational and recreational uses in the area. Along Lehua Avenue, the designated area is intended to serve as a rest stop or park and recreation area given its proximity to the Pearl Harbor Bike Path. In the future, this area has the potential to become a significant amenity to the area with the implementation of the Pearl Harbor Historic Trail improvements.

Aiea  
Pearl City  
Livable  
Communities  
Plan

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**TRANSPORTATION PLAN**

## **5. TRANSPORTATION PLAN**

### **5.1 Transportation System Needs**

This section describes Aiea-Pearl City's transportation system and associated characteristics and needs.

#### **5.1.1 Traffic Needs**

Traffic conditions along the roadways in the region are characterized as congested, particularly during peak commuter periods and on weekends. This is largely attributed to the concentration of commercial/retail uses makai of the H-1 Freeway, including a regional shopping center and big box/discount retailers, which draw residents from elsewhere on the Island in addition to those from the area. Much of the congestion occurs along Kamehameha Highway and Moanalua Road, the major east-west arterials.

There is a need to implement traffic improvements at key locations throughout Aiea and Pearl City to alleviate traffic flow problems and improve vehicular/pedestrian safety conditions. Problem locations identified through the Aiea-Pearl City Community Vision Group and Livable Communities Plan community survey focus primarily on Kamehameha Highway and Moanalua Road, including the major intersections. In order to alleviate traffic congestion along these major east-west streets, improvements are needed along these streets and at the major intersections which would also facilitate traffic flow along the mauka-makai streets.

As with other communities islandwide, speeding and cut-through traffic by motorists are a common occurrence in the Aiea-Pearl City area, especially in the residential neighborhoods. The steady growth of motorized traffic over the years, along with wide or inadequately designed older neighborhood streets and congested arterial streets contribute to the tendency of motorists to speed or cut through the neighborhood. This results in safety hazards for residents, pedestrians and bicyclists. Through community feedback, the need for traffic calming improvements in the Aiea-Pearl City area has been identified, particularly within residential neighborhoods. Through the City's Traffic Calming Program, improvements and plans have been initiated in the Manana and Pacific Palisades areas of Pearl City and the Newtown and Aiea Heights areas of Aiea.

Within the Aiea-Pearl City transportation network, the roadways can functionally be classified into five general categories: interstate/freeway/expressway, principal arterial, minor arterial, and major collector. The categories are based on geometric and traffic characteristics of each street type. Figure 5-1 depicts the existing roadway network in Aiea-Pearl City.

Interstate roads include the H-1 Freeway which traverses in an east-west direction, Moanalua Freeway which connects to the H-1 Freeway in Aiea, and the H-3 Freeway which provides north-south access to Kaneohe and the Windward side of the Island through Halawa Valley. The freeway classification includes the segment of roadway which transitions from the Moanalua Freeway to Moanalua Road and Kamehameha Highway in Aiea.

Two principal arterials providing east-west access through the region include Kamehameha Highway and Moanalua Road between Waimano Home Road and Moanalua Freeway. Another

principal arterial is the segment of Waimano Home Road between Kamehameha Highway and Moanalua Road.

Minor arterial streets include the segment of Waimano Home Road between Moanalua Road and Komo Mai Drive; the segments of Kaahumanu Street and Kaonohi Street between Kamehameha Highway and Moanalua Road; Salt Lake Boulevard; and Kahuapaani Street in Halawa.

Major collector streets providing north-south or mauka-makai access include Kuala Street, the segment of Waimano Home Road mauka of Komo Mai Drive, Hoolaulea Street, Hoomalu Street, Puu Poni Street, the segment of Lehua Avenue from Kamehameha Highway Lehua Elementary School, Kaahumanu Street between Moanalua Road and Komo Mai Drive, Kaahele Street, Hekaha Street, Kanuku Street, Moanalua Loop, Kaonohi Street mauka of Moanalua Road, Honomanu Street, Kaamilo Street, Aiea Heights Drive, and Halawa Heights Road. East-west major collector streets include Acacia Road, Komo Mai Drive between Aumakua Street and Kaahele Street, and Ulune Street between Aiea Heights Drive and Halawa Heights Road.

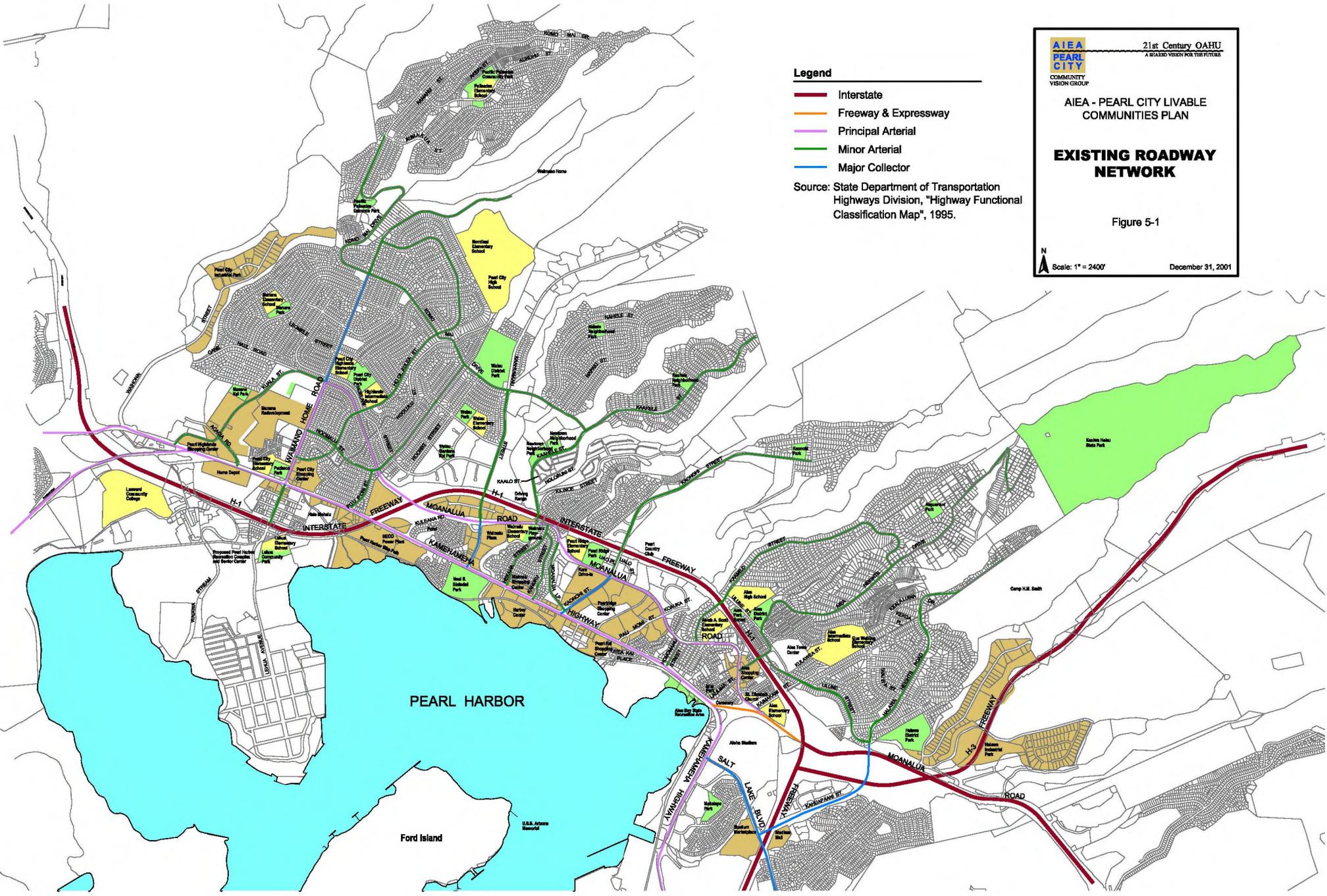
Traffic circulation within Aiea-Pearl City is provided by roads that generally represent a grid-like system. The major east-west arterials and collector streets are complemented by the various north-south arterials and collector streets which allow for a relatively uniform circulation system. However, this type of system also encourages through or bypass trips on neighborhood streets as traffic congestion on arterials and collector streets increase.

### **5.1.2 Public Transit System Needs**

Public transit is an essential public transportation service. It increases capacity in heavily traveled corridors, reduces reliance on car trips, and supports densely developed areas and activity centers. It also provides mobility for the elderly, physically impaired, others who are not able to or can not afford to drive.

Bus transit is the primary form of public transport in Aiea-Pearl City. TheBus, operated by Oahu Transit Services, Inc., operates in mixed traffic over City and State streets and the freeway. Eleven bus routes service the Aiea-Pearl City area, including eight local routes, two express routes and the CityExpress! Route A as identified in Table 5-1 and depicted in Figure 5-2. All of the buses use some portion of either Kamehameha Highway or Moanalua Road in traversing through Aiea and Pearl City.

The need for improved public transit services and facilities is being addressed by the City Department of Transportation Services separate from the Aiea-Pearl City Livable Communities Plan. For the purposes of presenting a fully integrated transportation plan, the efforts currently being undertaken by the City with regard to the planned Bus Rapid Transit (BRT) and transit center projects are incorporated into this report.



- Legend**
- Interstate
  - Freeway & Expressway
  - Principal Arterial
  - Minor Arterial
  - Major Collector

Source: State Department of Transportation Highways Division, "Highway Functional Classification Map", 1995.

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 COMMUNITY VISION GROUP

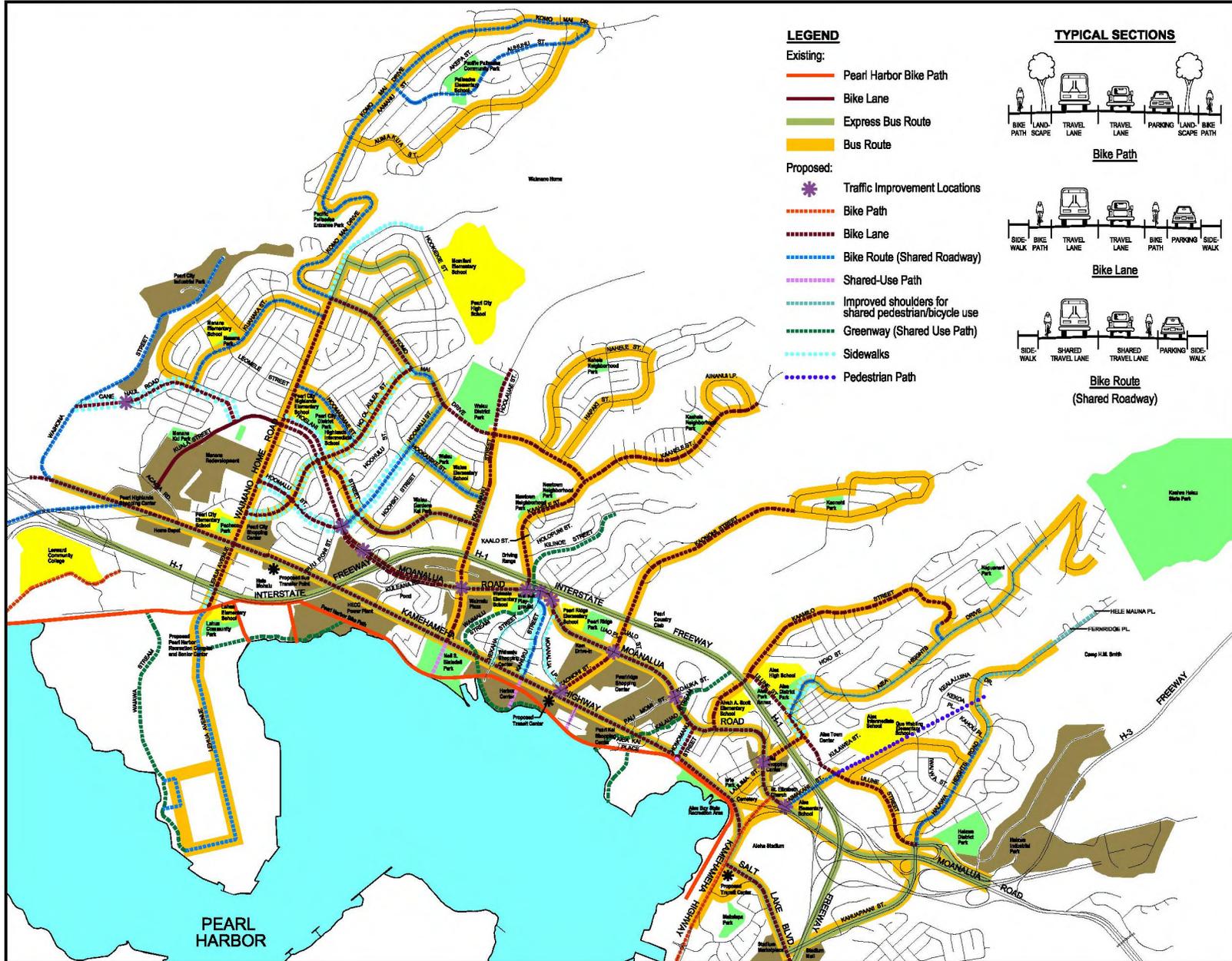
21st Century OAHU  
 A SCALED VISION FOR THE FUTURE

**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**

**EXISTING ROADWAY NETWORK**

Figure 5-1

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 Scale: 1" = 2400' December 31, 2001



**LEGEND**

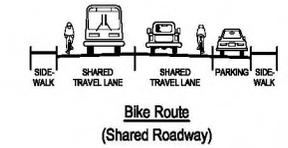
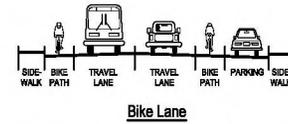
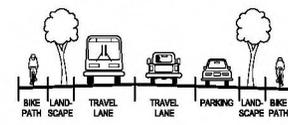
Existing:

- Pearl Harbor Bike Path
- Bike Lane
- Express Bus Route
- Bus Route

Proposed:

- \* Traffic Improvement Locations
- - - Bike Path
- - - Bike Lane
- - - Bike Route (Shared Roadway)
- - - Shared-Use Path
- - - Improved shoulders for shared pedestrian/bicycle use
- - - Greenway (Shared Use Path)
- - - Sidewalks
- - - Pedestrian Path

**TYPICAL SECTIONS**



COMMUNITY VISION GROUP

**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**

**INTEGRATED TRANSPORTATION PLAN**  
Figure 5-2

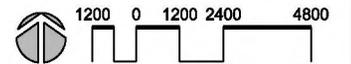
Sources:

1. Bike Plan Hawaii  
State of Hawaii Department of Transportation (April 1994)
2. Honolulu Bicycle Master Plan  
City & County of Honolulu Department of Transportation Services (April 1999)
3. Pearl Harbor Historic Trail Master Plan  
City & County of Honolulu (May 2001)
4. Final Environmental Assessment, Honolulu Bicycle Master Plan  
Improvements College Access, Project No.28, Pearl Harbor Historic Trail to Leeward Community College  
City and County of Honolulu Department of Transportation Services (July 2001)
5. Recommendations based on various suggestions from:
  - Aiea-Pearl City Livable Communities Plan Community Workshops of December 1, 1999 and July 5, 2001
  - Aiea-Pearl City Livable Communities Plan Community Survey (April 2001)

Prepared By

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Graphic Scale In Feet



<b>Table 5-1 TheBus Transit Service Routes Aiea-Pearl City Vicinity</b>	
<b>Route No.</b>	<b>Destination</b>
<b>Local Routes</b>	
11	Honolulu/Aiea Heights
20	Waikiki/Pearlridge
32	Kalihi/Pearlridge
53	Honolulu/Pacific Palisades
54	Honolulu/Pearl City
71	Pearlridge/Newtown
73	Leeward Community College
74	Aiea/Halawa Heights
<b>Express Routes</b>	
90	Pearl City Express
87	Aloha Stadium Express
<b>CityExpress! Route</b>	
Route A	To Kalihi/University of Hawaii
Source: Oahu Transit Services, Inc. – TheBus	

### 5.1.3 Pedestrian/Bikeway Needs

Sidewalks are provided throughout areas of Aiea-Pearl City, although the predominantly older neighborhoods do not have adequate pedestrian facilities. These include the Momilani subdivision in Pearl City, Pearl City Heights subdivision, Aiea Heights, Halawa Heights, Pacific Palisades, Waimalu, and Waiiau. The Livable Communities Plan community survey also reiterated the need for sidewalks in these areas. Designated mauka-makai pedestrianways to the Pearl Harbor Bike Path and shoreline areas are for the most part non-existent.

Pedestrian crossing poses a safety concern in some areas of Aiea-Pearl City. Prominent among these are Moanalua Road in the vicinity of Pearlridge Shopping Center and the former Kamehameha Drive-In, and Kamehameha Highway across of Pearlridge Shopping Center. Other unsafe pedestrian crossing areas revealed in the community survey include Kaonohi Street, Kaahele Street/Newtown Recreation Center, Aiea Heights Road, Halawa Heights Drive, vicinity of shopping centers, and major streets fronting schools.

Currently, the only existing bikeway facilities in the Aiea-Pearl City area include the Pearl Harbor Bike Path traversing makai of Kamehameha Highway along the OR&L right-of-way from the Pearl City Peninsula to the vicinity of the Rainbow Bay Marina in Aiea, and bike lanes along the new Kuala Street extension in Pearl City.

There is the need for identifying and developing pedestrianways and bikeways to connect existing residential areas with activity centers, schools, recreational areas, and major transit stops. Some of the sidewalk facilities are in need of improvement and new facilities are needed to further link existing and proposed activity areas, thereby improving mobility for pedestrians. In conjunction with this and in consideration of existing and future traffic improvements, the

provision of safer pedestrian crossing areas is needed. Key areas include Moanalua Road and Kamehameha Highway in the vicinity of Pearlridge Shopping Center.

There is a need to identify and designate bikeways within Aiea-Pearl City to encourage usage and increase safety along specific streets and corridors. An integrated bikeway system is needed to link activity areas, schools, recreational areas, and proposed transit centers within the region. The existing Pearl Harbor Bike Path should also be integrated with mauka areas to achieve a comprehensive mauka-makai connection. The need for bikeway connections mauka into the various residential ridge areas was also revealed in the community survey. The provision of such mauka bikeway connections would complement the opportunity available to bus riders in being able to have their bicycles transported on City buses.

#### **5.1.4 Interrelationship of Transportation System Needs**

The interrelationship of the various transportation system needs enhances the livability of the area by increasing the availability of travel mode choices for people. Alternative travel mode choices are facilitated by effectively integrating locational and design considerations of the roadway network, public transit and pedestrian/bikeway elements. The interconnection of streets improves circulation patterns by increasing the number of direct routes for motorists and pedestrians, shortening walking and biking distances, and improving transit accessibility and circulation. Traffic calming improvements encourage slower speeds by motorists, thereby resulting in an increasingly safer environment for motorists, pedestrians and bicyclists. Safe, pedestrian-friendly streets are essential in promoting walking, transit use, and bicycling. The provision of enhanced bikeway facilities offers bicyclists better protection from motorized traffic and improved access to activity areas, thereby encouraging bicycling as a safe travel mode choice. Enhanced pedestrian mobility increases the potential for transit use and reduces automobile trips. Likewise, public transit routes and amenities strategically integrated with pedestrian and bikeway facilities would further encourage use of these travel modes.

### **5.2 Transportation Plan**

The transportation plan integrates traffic circulation and flow, the public transit system, and pedestrian/bikeway circulation in creating a more livable community for Aiea-Pearl City. The integrated transportation plan is depicted in Figure 5-2. This section focuses on and documents the planning analysis, plan elements, rationale involved, and recommendations for the major transportation components of the integrated plan.

#### **5.2.1 Traffic Assessment**

A traffic assessment was conducted of major streets in Aiea-Pearl City. The assessment focused on identifying existing problem locations and proposed improvement actions, rather than forecasts of future conditions. In consideration of existing traffic congestion conditions, the focus was on actions to improve travel for local residents, including access within the commercial/business areas as well as to/from residential areas. Although the focus was on intersections along the heavily traveled Kamehameha Highway and Moanalua Road, other locations with traffic flow and safety issues were also considered.

An inventory of existing traffic volumes of selected intersections in the region was conducted in September 2000 and May 2001. The intersections were selected from input obtained through the Livable Communities Plan community survey and community workshops, and the Aiea-Pearl City Community Vision Group. Level of Service (LOS) analyses were performed for each study intersection to determine the quantitative and qualitative assessment of traffic conditions. Based on further input, the traffic study locations were narrowed down to the following 20 areas:

1. Kamehameha Highway at Salt Lake Boulevard (Ewabound)
2. Kamehameha Highway at Pali Momi Street (East)
3. Kamehameha Highway at Pali Momi Street (West)
4. Kamehameha Highway at Kaonohi Street
5. Kamehameha Highway at Kaahumanu Street
6. Moanalua Road at Kaimakani Street
7. Moanalua Road at Aiea Heights Drive
8. Moanalua Road at Pali Momi Street
9. Moanalua Road at Kaonohi Street
10. Moanalua Road at Pono Street
11. Moanalua Road at Hekaha Street
12. Moanalua Road at Kahele Street
13. Moanalua Road at Kaahumanu Street
14. Moanalua Road at H-1 Freeway Off-Ramp (Pearl City Interchange)
15. Moanalua Road at Hoomalu Street
16. Moanalua Road Pedestrian Crossing at Pearlridge Shopping Center
17. Halawa Heights Road at Ulune Street
18. Waimano Home Road at Hoolaulea Street
19. Moanalua Road Extension Over the Cane Haul Road
20. Options for H-1 Freeway Return Loop Past Pearl City

Of these, the following four traffic study locations are either being addressed under another transportation component or improvements are no longer being proposed due to subsequent considerations.

Kamehameha Highway at Salt Lake Boulevard (Ewabound): This intersection was initially selected as a traffic study location due to the possibility of major circulation changes resulting from the U.S. Navy's proposed Ford Island redevelopment and the City's Bus Rapid Transit (BRT) project. This traffic study location has since been deemed to be more appropriately addressed through the City's ongoing Primary Corridor Transportation Project.

Moanalua Road Pedestrian Crossing at Pearlridge Shopping Center: The proposed pedestrian crossing improvements at this location are discussed in Section 5.2.3.3.1.

Halawa Heights Road at Ulune Street: Proposed improvements to this intersection are intended to serve as traffic calming measures and, as such, are discussed in Section 5.2.1.2.1.

Hoolaulea Street at Waimano Home Road: This location was initially selected due to Ewabound vehicles previously experiencing difficulty turning left from Hoolaulea Street onto Waimano Home Road due to the build-up of vehicle queuing from Kamehameha Highway. Recent intersection improvements at the Kamehameha Highway/Waimano Home Road intersection

have resulted in improved traffic operations, including a decrease in the makaibound queuing of vehicles along Waimano Home Road. As such, no traffic improvements are recommended for this location.

### **5.2.1.1 Recommended Traffic Improvement Projects**

The following sections describe the existing operating conditions, recommended improvements, and options considered, if applicable, for the resulting 17 traffic study locations:

1. Kamehameha Highway at Pali Momi Street (East)
2. Kamehameha Highway at Pali Momi Street (West)
3. Kamehameha Highway at Kaonohi Street
4. Kamehameha Highway at Kaahumanu Street
5. Moanalua Road at Kaimakani Street
6. Moanalua Road at Aiea Heights Drive
7. Moanalua Road at Pali Momi Street
8. Moanalua Road at Kaonohi Street
9. Moanalua Road at Pono Street
10. Moanalua Road at Hekaha Street
11. Moanalua Road at Kaahale Street
12. Moanalua Road at Kaahumanu Street
13. Moanalua Road at H-1 Freeway Off-Ramp (Pearl City Interchange)
14. Moanalua Road at Hoomalu Street
15. Kaahumanu Street Between Kamehameha Highway and Moanalua Road
16. Moanalua Road Extension Over the Cane Haul Road
17. Options for H-1 Freeway Return Loop Past Pearl City

#### **5.2.1.1.1 Kamehameha Highway**

Within the limits of the planning area, Kamehameha Highway is a six- to seven-lane roadway traversing in the east-west or Diamond Head-Ewa direction. The Highway functions as both a local and regional arterial facility and provides access to adjacent commercial uses as well as servicing through traffic. Kamehameha Highway connects to regional roadway facilities such as Farrington Highway and the H-1 and Moanalua Freeways. The posted speed limit along the Highway is 35 miles per hour (mph).

Kamehameha Highway currently carries approximately 63,000 vehicles per day at the Kaluaao Bridge in Aiea (East end of Pearl Kai Center). During peak traffic hours, the Highway carries approximately 3,500 to 5,000 vehicles per hour. Peak hours generally occur during the morning commute, and traffic volumes remain high from the midday (lunch hour) through the afternoon commute. Generally, high traffic volumes characterize the Highway, although heavy congestion occurs only at specific locations along the corridor. The major congestion points along Kamehameha Highway have been identified as study locations and are described below.

The recommended improvements consider the State Department of Transportation (DOT) Highways Division's planned Kamehameha Highway Improvement project to encompass the segment between Waihona Street in Pearl City and Center Drive in Makalapa. Traffic signal timing coordination is one of the recommended alternatives to be considered.

#### **5.2.1.1.1.1 Kamehameha Highway at Pali Momi Street (East and West)**

Pali Momi Street is a four- to five-lane mauka-makai roadway providing a heavily used connection between Kamehameha Highway and Moanalua Road. Pali Momi Street also provides direct access to the Pearlridge Shopping Center and Kapiolani Medical Center at Pali Momi.

At Kamehameha Highway, Pali Momi Street splits and forms two closely spaced signalized intersections. The east intersection serves makai-bound traffic and the west intersection serves mauka-bound traffic. Due to the close proximity of these two intersections, queuing of vehicles occurs between them, resulting in congestion and unprogressed traffic flow.

Recommended Improvements: It is recommended that improvements to traffic flow be achieved by adjusting the traffic signal timing at the intersections of Kamehameha Highway and Pali Momi Street (East and West). Traffic signal coordination is especially important for these two intersections due to the close spacing of the signals. It is recommended that the traffic signal adjustments be undertaken by the State DOT as part of its Kamehameha Highway Improvement project. This will allow compatible improvements to be made on the corridor level.

Options Considered: An option considered was to reverse the direction of flow on the Pali Momi Street East and West intersections. Reversing the flow would move the Ewabound to mauka-bound vehicles off of Kamehameha Highway at the East intersection. Operations and queuing in the Ewabound direction on Kamehameha Highway would improve; however, Diamond Head-bound traffic would operate at a worse level. Installing double left-turn storage lanes for the Diamond Head-bound traffic on Kamehameha Highway would be required at the East intersection. However, even with the double left-turn lanes, the storage length between the East and West intersections may be insufficient, potentially resulting in the left-turn vehicles queuing through the West intersection.

#### **5.2.1.1.1.2 Kamehameha Highway at Kaonohi Street**

Kaonohi Street is a four- to five-lane major mauka-makai roadway servicing the Pearl Ridge area. It provides access to regional shopping facilities, residential and recreational areas.

The intersection of Kaonohi Street and Kamehameha Highway is characterized by heavy traffic volumes on all approaches. Vehicle conflicts due to close spacing of the adjacent intersections add to the congestion at this location. On Diamond Head-bound Kamehameha Highway, the Lipoa Street intersection causes queuing through Kaonohi Street. On Kaonohi Street, the unsignalized intersection with Moanalua Loop creates conflicts. In addition to contributing to congestion at the Kamehameha Highway intersection, the Moanalua Loop intersection is characterized by recurrent angle and broadside accidents.

Recommended Improvements: It is recommended that improvements to traffic flow along Kamehameha Highway be achieved by adjusting the timing of the traffic signals. Coordination of signal timing along the Kamehameha Highway corridor is recommended for improved traffic progression as it would minimize the queuing created by downstream traffic signals. It is recommended that the traffic signal adjustments be undertaken by the State DOT as part of its Kamehameha Highway Improvement project.

It is also recommended that a traffic signal be installed at the Kaonohi Street/Moanalua Loop intersection to operate jointly with the Kamehameha Highway/Kaonohi Street traffic signal (see Figure 5-3). The new signal would provide control for vehicles accessing Moanalua Loop and should reduce vehicle conflicts and enhance safety at this location. In conjunction with the new traffic signal, a crosswalk is recommended to be installed on Kaonohi Street to facilitate pedestrian crossing.

Options Considered: To reduce vehicle conflicts at the Moanalua Loop intersection, restricted turn movements were considered. However, this option was eliminated from consideration as it was determined that the restricted movements would create circuitous routing and increased traffic congestion at other locations.

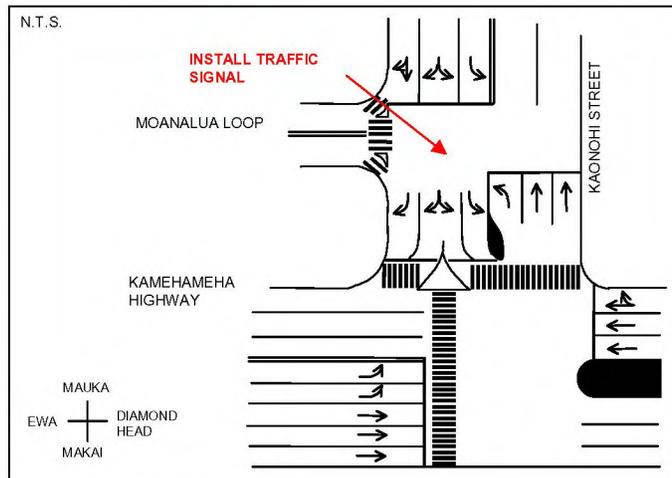


Figure 5-3 Kamehameha Highway at Kaonohi Street

#### 5.2.1.1.1.3 Kamehameha Highway at Kaahumanu Street

Kaahumanu Street is a four- to five-lane major mauka-makai roadway that services the Waiiu area and provides access to Waimalu Plaza, Times Square and nearby residential areas. Makai of the Kaahumanu Street/Kamehameha Highway intersection is the vehicular access to Neal Blaisdell Park.

The intersection is characterized by heavy traffic volumes on Kamehameha Highway and the makaibound or mauka leg of Kaahumanu Street (segment between Kamehameha Highway and Moanalua Road). Currently, Kaahumanu Street operates in a single traffic signal phase. The mauka-bound approach from the Neal Blaisdell Park vehicular access has relatively low volumes in comparison to the makai-bound approach from Kaahumanu Street. Due to the heavy makai-bound to Diamond Head-bound demand, the left-turn movement from Kaahumanu Street onto Kamehameha Highway is accommodated by two lanes. This configuration causes confusion and right-of-way conflicts between vehicles turning left from the makaibound leg onto Kamehameha Highway and those exiting Neal Blaisdell Park at its access point.

Recommended Improvements: It is recommended that improvements to traffic flow progression along Kamehameha Highway be achieved by adjusting the timing of the traffic signals along the Highway. Monitoring of traffic volumes and accidents resulting from the mauka-makai right-of-way conflict at the intersection should be performed, and traffic signal timing adjustments made if deemed necessary. It is recommended that the traffic signal timing coordination be undertaken by the State DOT as part of its Kamehameha Highway Improvement project.

Options Considered: To minimize vehicle conflicts, the mauka and makai approaches at the intersection with Kamehameha Highway could operate in a split phase. However, this option would result in longer delays on all approaches. Also, the vehicle demand from the Neal Blaisdell Park was not deemed high enough to warrant an additional traffic signal phase.

### 5.2.1.1.2 Moanalua Road

Within the limits of the planning area, Moanalua Road is a four- to five-lane Diamond Head–Ewa arterial roadway providing access to major shopping facilities, schools and other community facilities. Moanalua Road also connects to the major mauka-makai routes servicing the residential areas in the community, as well as the H-1 Freeway and Moanalua Freeway. The posted speed limit varies from 25 to 35 miles per hour (mph).

Moanalua Road currently carries approximately 31,000 vehicles per day at the Kalauao Bridge in Aiea (East of Pali Momi/Koauka). During peak traffic hours, the roadway carries approximately 1,500 to 2,500 vehicles per hour. Much like Kamehameha Highway, peak hours generally occur during the morning commute, and traffic volumes remain high from the midday (lunch hour) through the afternoon commute. The major congestion points along Moanalua Road have been identified as study locations and are described below.

#### 5.2.1.1.2.1 Moanalua Road at Kaimakani Street

Kaimakani Street is a two-lane mauka-makai roadway providing a connection over the H-1 Freeway as well as access between Ulune Street and Moanalua Road. Aiea Elementary School is located at the Diamond Head/mauka corner of this intersection.

Kaimakani Street is stop-controlled at Moanalua Road. Traffic volumes and speeds on Moanalua Road are high at this intersection due to vehicles transitioning off of Moanalua Freeway onto Moanalua Road. Due to the high traffic speeds and volumes, vehicles on Kaimakani Street often experience delays as they attempt to maneuver onto/through Moanalua Road.

Recommended Improvements: Roadway “narrowing” is recommended on the Ewabound approach of the intersection along Moanalua Road to reduce motorists’ speed (see Figure 5-4). Road narrowing could entail striping of shoulders and/or installation of landscaping to make the roadway appear to be narrower to motorists. Any improvements should retain the existing roadway width, as future development in the surrounding areas may create the need for a second lane on the approach.

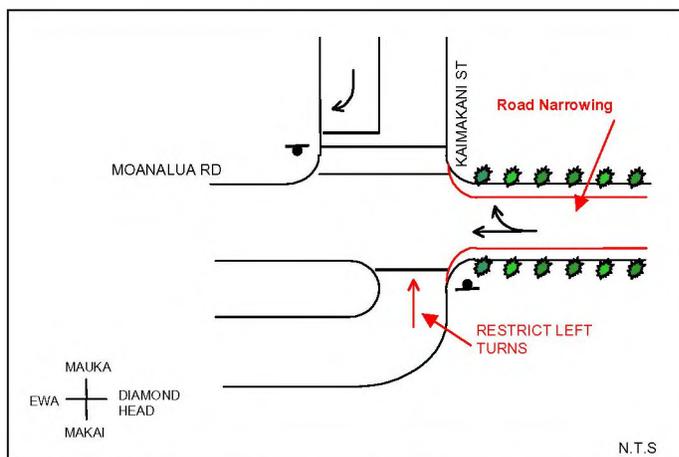


Figure 5-4 Monalua Road at Kaimakani Street

Restricting the mauka-bound approach to through traffic would also decrease conflicts with vehicles turning right onto Moanalua Road. This restriction would require revising the access to Saint Elizabeth School to allow entrance at the Moanalua Road/Aiea Access Road intersection.

Options Considered: Speed tables, speed humps and rumble strips were considered to aid in slowing vehicles exiting Moanalua Freeway. However, these were eliminated from

consideration due to the potential effects on emergency vehicle access, as well as the additional noise that may be generated in relation to the close proximity of Aiea Elementary School.

#### 5.2.1.1.2.2 Moanalua Road at Aiea Heights Drive

At Moanalua Road, Aiea Heights Drive is a four-lane roadway providing access to commercial uses. Mauka of the commercial area, Aiea Heights Drive is a two-lane roadway servicing primarily the mauka residential areas, a school and park facilities.

At the intersection of Moanalua Road and Aiea Heights Drive, heavy congestion occurs due to the traffic signal and vehicles accessing driveways near the intersection. With the makai-bound traffic queues on Aiea Heights Drive, vehicles have difficulty turning left from the Aiea Shopping Center (lower level). This, in addition to the shopping center's driveway on Moanalua Road being restricted to a right-in only movement, hampers circulation back to Moanalua Road.

Recommended Improvements: It is recommended that the right-turn movement from the Aiea Shopping Center onto Moanalua Road at its existing driveway be allowed. This movement would allow for better access and improve circulation for the shopping center as well as reduce traffic conflicts on Aiea Heights Drive. The shopping center's existing driveway on Moanalua Road would need to be reconstructed to accommodate the proper design for vehicles entering and exiting the shopping center.

#### 5.2.1.1.2.3 Moanalua Road at Pali Momi Street/Koauka Street

Pali Momi Street forms the makai leg of the intersection at Moanalua Road. This street is a four- to five-lane mauka-makai roadway providing a heavily used connection between Kamehameha Highway and Moanalua Road. Pali Momi Street also provides direct access to the Pearlridge Shopping Center and Kapiolani Medical Center at Pali Momi Hospital. Koauka Street, which forms the mauka leg of the intersection, is a two-lane roadway that provides access to a residential area mauka of Moanalua Road.

General traffic flow, congestion and safety problems exist at the intersection of Moanalua Road and Pali Momi Street. Specifically, it was noted that pedestrians illegally cross the Ewa leg (Moanalua Road) of the intersection. Conflicts due to unexpected vehicle movements also occur in the mauka-makai direction.

Recommended Improvements: It is recommended that Koauka Street be restriped with an exclusive left-turn lane to reduce vehicle confusion (see Figure 5-5). Additionally, the traffic signal timing at the intersection should be optimized to minimize delays.

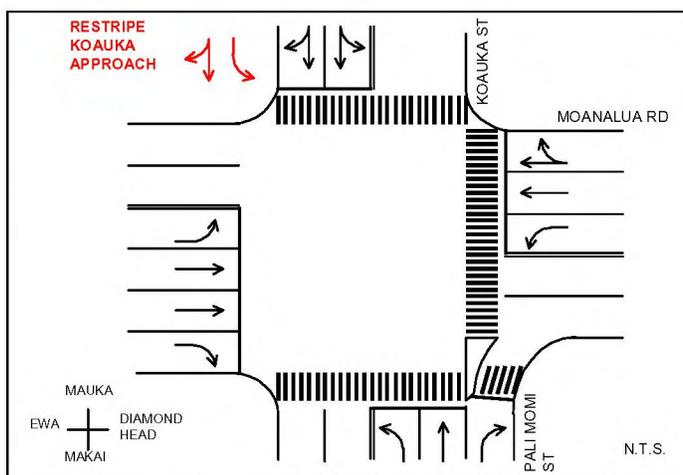


Figure 5-5 Moanalua Road at Pali Momi Street

**Options Considered:** Adding a pedestrian crossing on the Ewa side of the intersection on Moanalua Road was considered. With pedestrians in the crosswalk, however, there would be vehicle delays and conflicts resulting from the left-turn movement from Pali Momi Street onto Ewabound Moanalua Road. For safety purposes and to maintain traffic flow operations, the addition of a new pedestrian crossing was eliminated from consideration.

**5.2.1.1.2.4 Moanalua Road at Kaonohi Street**

Kaonohi Street is a four- to five-lane major mauka-makai roadway servicing the Pearl Ridge area. It provides access to regional shopping facilities and residential and recreational areas. Heavy congestion and long delays for turning movements occur at this intersection which is characterized by high traffic volumes on all approaches.

**Recommended Improvements:** The installation of right-turn pockets on the Diamond Head, mauka and Ewa approaches of the intersection are recommended to relieve some of the congestion (see Figure 5-6). As the Moanalua Road (Diamond Head and Ewa) approaches are currently striped with wide curb lanes, minimal striping changes would create right-turn pockets. A right-turn pocket for the mauka approach could also be installed without pavement widening by shifting the lanes toward the Diamond Head side.

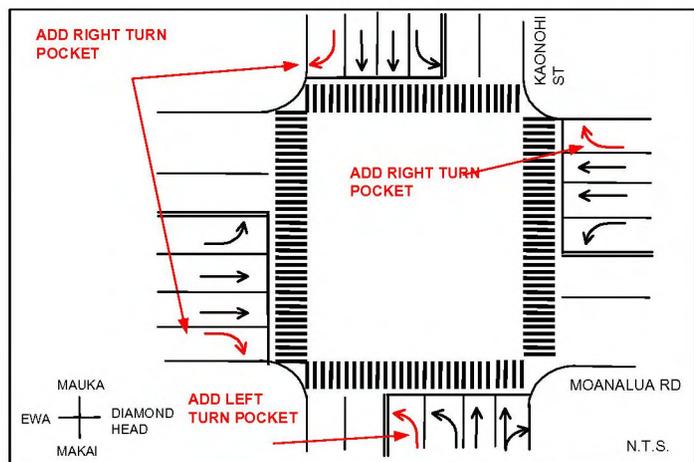


Figure 5-6 Moanalua Road at Kaonohi Street

Another recommendation is to add a second left-turn lane on the mauka-bound approach, which may be constructed within the existing right-of-way through restriping. However, slight widening may be required. Also, left-turn movements into and out of the Pearlridge Shopping Center driveway on Kaonohi Street near the intersection should be physically restricted (see Figure 5-7).

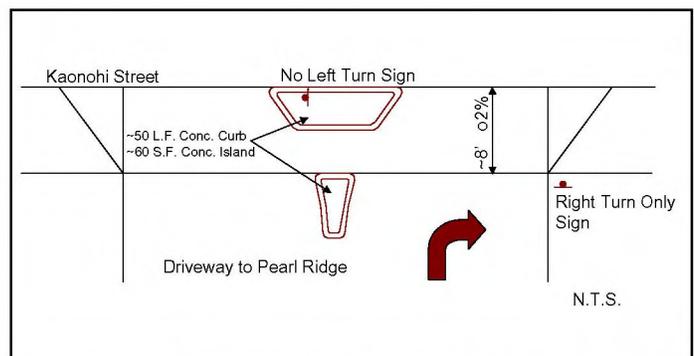


Figure 5-7 Conversion of Pearlridge Driveway to Right-in/Right-out Only

### 5.2.1.1.2.5 Moanalua Road at Pono Street/Hekaha Street/Kaahele Street

Pono Street is a two-lane mauka-makai roadway that provides access to a residential area located mauka of Moanalua Road. Hekaha Street is a two-lane mauka-makai roadway providing a heavily used connection between Kamehameha Highway and Moanalua Road. It provides access to nearby residential areas and is adjacent to the Waimalu Shopping Center. Kaahele Street is a major mauka-makai roadway servicing the Newtown community. It provides access between mauka residential areas and the regional roadway network.

Kaahele Street, Hekaha Street and Pono Street form three closely spaced signalized intersections along Moanalua Road. Heavy through and turning traffic as well as uncoordinated signal operations result in frequent queuing of vehicles through the intersections. Traffic queues back-up through this segment of the roadway, making turns to and from Moanalua Road difficult.

**Recommended Improvements:** It is recommended that the traffic signal timing of the three intersections be coordinated to improve traffic flow (see Figure 5-8). In addition, the existing crosswalk on Moanalua Road Ewa of Hekaha Street should be relocated to the Diamond Head side of the intersection to reduce pedestrian and vehicle conflicts. Furthermore, a third Diamond Head-bound lane could be added on Moanalua Road between Kaahele Street and Hekaha Street by restriping the existing pavement.

Long-term improvements could include realigning the Pono Street intersection to align with Hekaha Street (see Figure 5-9). This would reduce a portion of the conflicts created by the closely spaced intersections. The left-turn pocket to Pono Street would require Moanalua Road to be widened. This improvement could be coordinated with the State DOT's Waimalu Viaduct widening

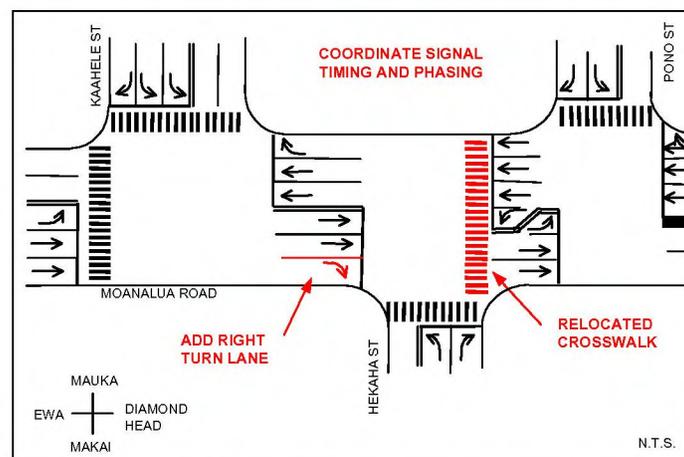


Figure 5-8 Moanalua Road at Kaahele Street, Hekaha Street and Pono Street

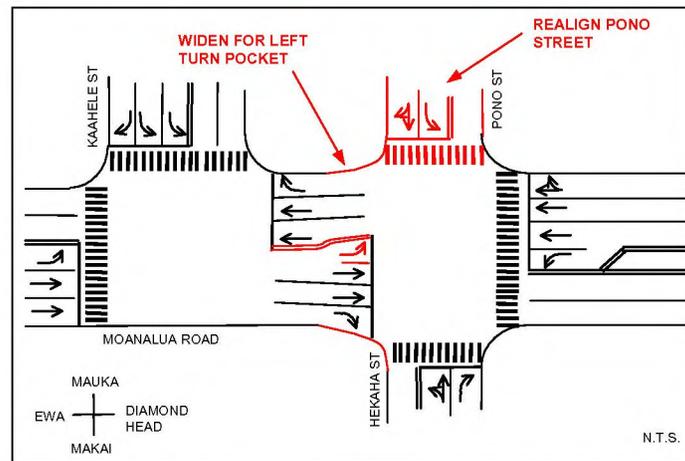


Figure 5-9 Moanalua Road at Kaahale Street, Hekaha Street and Pono Street

**5.2.1.1.2.6 Moanalua Road at Kaahumanu Street**

Kaahumanu Street is a four- to five-lane major mauka-makai roadway that services the Waiau area and provides access to Waimalu Plaza, Times Square, Neal Blaisdell Park, and nearby residential areas.

Recent intersection improvements have relieved some of the congestion at this intersection. However, vehicle volumes remain high at all approaches of the intersection and congestion still occurs.

Recommended Improvements: The Diamond Head-bound approach on Moanalua Road has a consistently higher volume of left turning vehicles than the Ewabound approach. Adding a second left-turn pocket to the Diamond Head-bound approach is recommended (see Figure 5-10). This left-turn pocket could be accommodated within the existing median.

The right-turn movement from makai-bound Kaahumanu Street to Ewabound Moanalua Road can be improved by adding a third Ewabound lane Ewa of Kaahumanu Street, thereby allowing a free-right turn movement. This additional Ewabound lane would extend to the existing shoulder lane/H-1 Freeway westbound on-ramp on Moanalua Road. The new lane may be accommodated within the road shoulder; however, slight widening may be required. In addition, extending the Ewabound right-turn pocket is recommended to increase storage and reduce delays for the movement.

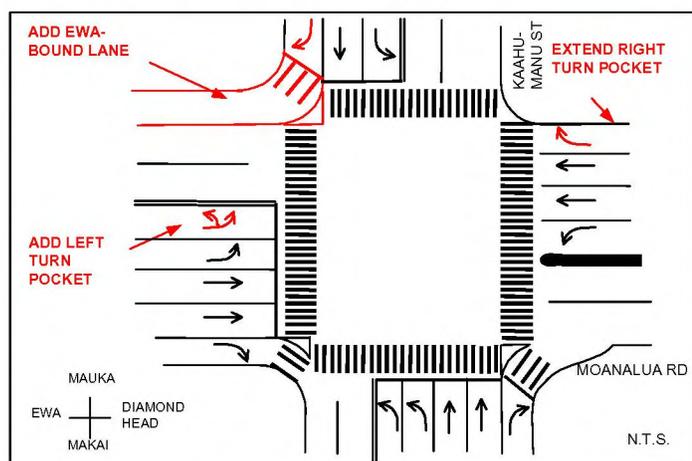


Figure 5-10 Moanalua Road at Kaahumanu Street

**5.2.1.1.2.7 Moanalua Road at H-1 Freeway Off-ramp (Pearl City Interchange)**

From the Ewabound H-1 Freeway Pearl City off-ramp, vehicles access Moanalua Road Ewabound from two lanes. The inside (left) lane of the H-1 off-ramp must yield to traffic on Moanalua Road. The outside (right) lane is a free-flow lane that feeds into a right-turn only onto Hoomalu Street. To avoid having to yield to traffic on Moanalua Road, vehicles exiting the Ewabound H-1 Freeway at the Pearl City interchange make unsafe and multiple lane changes to turn left at the Hoomalu Street intersection.

Recommended Improvements: The recommended changes to the intersection include striping a portion of the right-turn lane on Moanalua Road as a solid/dashed line which would indicate that vehicles could merge into the lane, but not out until clear of the solid line (see Figure 5-11).

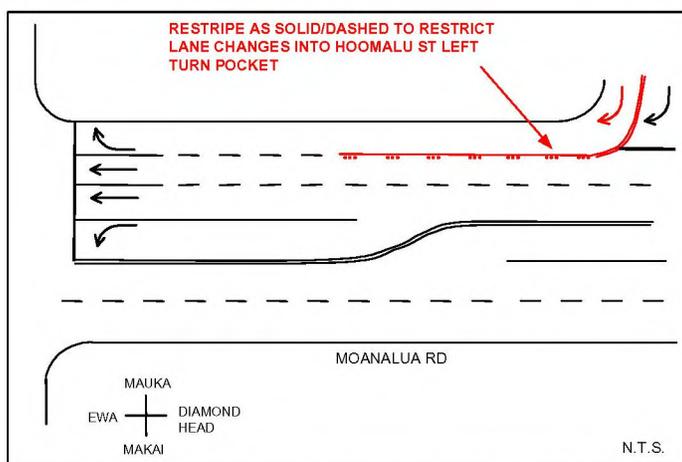


Figure 5-11 Moanalua Road at H-1 Freeway Off-ramp (Pearl City Interchange)

**5.2.1.1.2.8 Moanalua Road at Hoomalu Street**

Hoomalu Street is a two-lane roadway primarily servicing the Pearl City residential areas. It is also used as an access to Moanalua Road and the H-1 Freeway.

At this intersection, mauka-bound vehicles on Hoomalu Street turning right onto Moanalua Road have limited sight distance due to the fence line along the makai side of Moanalua Road. Additionally, makai-bound vehicles on Hoomalu Street turning left onto Moanalua Road fail to yield to mauka-bound or right turning vehicles when trying to access the right lane of Moanalua Road.

Recommended Improvements: It is recommended that the traffic signal at this intersection be modified to provide a right-turn arrow for mauka-bound vehicles on Hoomalu Street and restrict right turns on red (see Figure 5-12). Hoomalu Street should be restriped to demarcate an extended right-turn only lane.

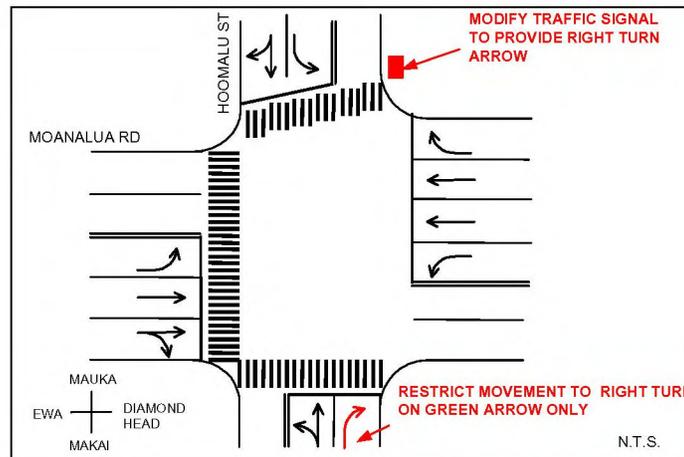


Figure 5-12 Moanalua Road at Hoomalu Street

**Options Considered:** Creating an additional lane to allow mauka-bound vehicles on Hoomalu Street to turn onto Diamond Head-bound Moanalua Road was considered. This alternative would reduce the conflicts associated with the right-turning vehicles. However, due to the close proximity of the residences on the makai side of Moanalua Road, this option was eliminated from consideration.

#### 5.2.1.1.3 Kaahumanu Street between Kamehameha Highway and Moanalua Road

Kaahumanu Street is a major four-lane roadway with frequent access to and from adjacent driveways. Within the segment between Kamehameha Highway and Moanalua Road, a number of driveways provide access to Waimalu Plaza, Times Square and residential areas. High traffic volumes on Kaahumanu Street make it difficult for vehicles to turn left into and out of the driveways. In addition, sight distance is limited due to roadway geometrics and on-street parking.

**Recommended Improvements:** Installing a two-way left-turn lane on Kaahumanu Street to provide turning vehicles with a refuge area is recommended. Removing on-street parking on one side of the street could provide the required width for the two-way left-turn lane. Another recommendation is to extend the “No Parking” zone on the Ewa/mauka corner beyond the Burger King driveway on Kaahumanu Street to facilitate makai-bound right turns onto Kamehameha Highway.

#### 5.2.1.1.4 Potential Circulation Options for the Pearl City Area

The following two traffic study locations are general discussions of potential circulation options for the Pearl City area.

#### 5.2.1.1.4.1 Moanalua Road Extension over the Cane Haul Road

Additional access to the Pearl City neighborhood and Pearl City Industrial Park areas are under consideration to relieve some of the congestion on the existing roadway network, as well as allow motorists to bypass major intersections along Kamehameha Highway.

An extension of Moanalua Road could be created over the existing Cane Haul Road, connecting Kuala Street to Waihona Street (see Figure 5-13). This would create an alternate route from Pearl City to the H-1 Freeway Ewabound and to the H-2 Freeway. Also, an additional access point to the Pearl City and Manana residential neighborhoods would be created. As a result, some congestion may be relieved along Waimano Home Road and Kamehameha Highway. Additional traffic along Kuahaka Street or other streets connecting to the Moanalua Road extension would be incurred due to the new access to the residential neighborhoods.

An alternative to the Waihona Street connection could be to provide a connection only between Kuala Street to Kuahaka Street. This could accomplish similar improvements to circulation and congestion, including relief to Noelani Street traffic movements. The regional access link for this alternative, however, would not be as direct.

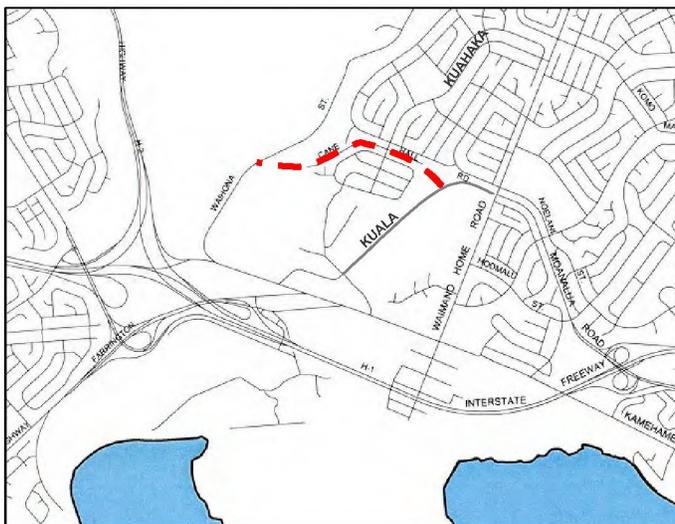


Figure 5-13 Moanalua Road Extension over the Cane Haul Road

Any potential extension of Moanalua Road over the existing Cane Haul Road will be further assessed as part of the City Department of Transportation Services' Manana Sub-Area Traffic Study.

#### 5.2.1.1.4.2 Options for H-1 Freeway Return Loop Past Pearl City

Additional access options to the Pearl City area from the H-1 Freeway Ewabound were identified to allow motorists to bypass intersections along congested sections of Moanalua Road and Kamehameha Highway.

A recommended route which is currently allowed is to exit the H-1 Freeway Ewabound via Waipahu Exit 8B to Farrington Highway, and make a U-turn at the Farrington Highway/Waipio Point Access Road (Kahualii Street) intersection (see Figure 5-14). Motorists would return to Pearl City via Farrington Highway and Kamehameha Highway.

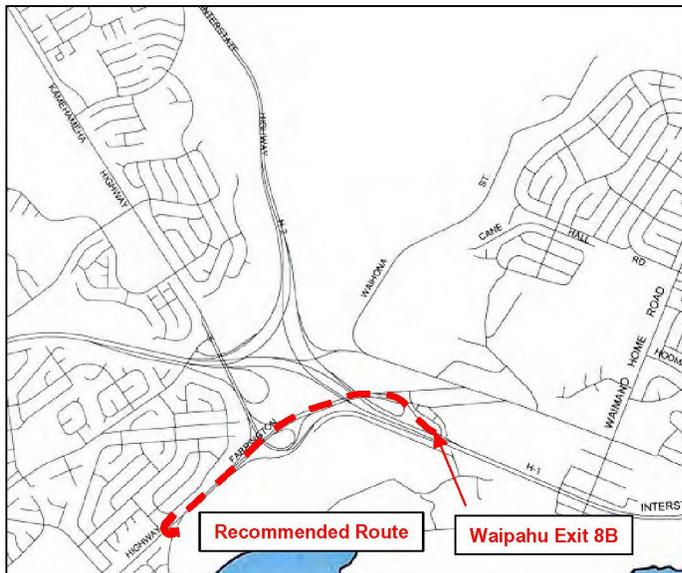


Figure 5-14 Options for H-1 Return Loop Past Pearl City

Another alternative utilizing the H-1 Freeway Ewabound route to return to Pearl City was also considered. Using the Waipahu Exit 8B to Kamehameha Highway, a U-turn movement could be created at the Kamehameha Highway/Waipahu Street intersection by reconstructing some of the traffic islands, or by creating a “jug-handle”. Motorists would return to Pearl City via Kamehameha Highway.

The State DOT is currently conducting a study of the Waiawa Interchange which may result in other options through altering or adding movements to the interchange.

### 5.2.1.2 Recommended Traffic Calming Projects

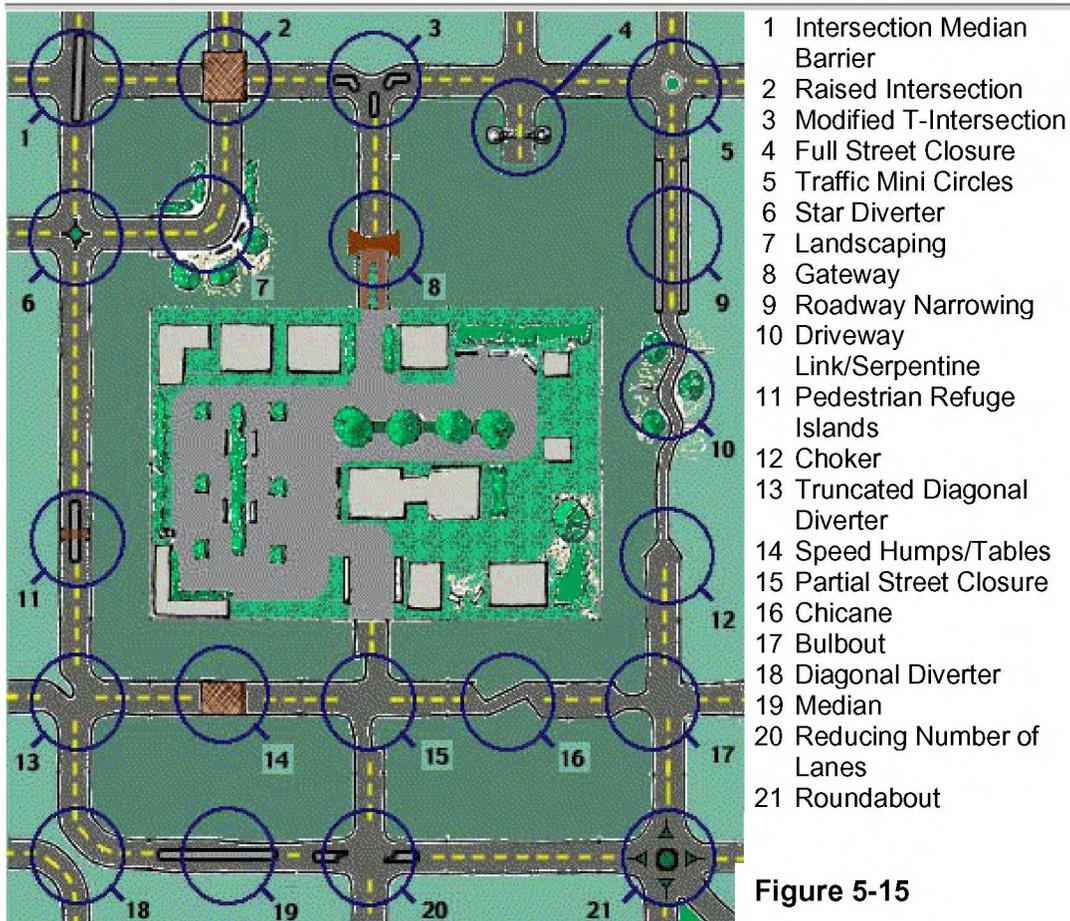
Speeding and cut-through traffic on neighborhood streets have become a common occurrence, which creates a hazardous environment for motorists, pedestrians, bicyclists, and children within residential areas. Traffic calming is a relatively new approach in Hawaii to address these problems and to better manage the roadway environment. It is achieved by incorporating physical and/or visual features to discourage inappropriate motor vehicle speeds and volumes.

Traffic calming devices to control inappropriate volumes are generally physical obstructions to specific traffic movements. Examples of traffic calming devices include full/partial street closures, traffic diverters, median barriers, and forced turn islands. Methods to control inappropriate speeds include both visual and physical devices. Examples of visual speed control devices include on-street parking, bicycle lanes, narrowed lanes, streetscaping, and colored/textured pavement. Physical speed control devices include speed humps/tables, raised crosswalks, roundabouts, chicanes, raised island medians, curb extensions, neckdowns, chokers, and pedestrian refuge islands. Figure 5-15 depicts examples of these and other traffic calming devices.

Through the planning process for the Livable Communities Plan, the following eight roadways were identified as locations needing traffic calming improvements:

- Ulune Street
- Komo Mai Drive
- Kaahumanu Street
- Waimano Home Road
- Hoomalu Street
- Hoolaulea Street
- Kaonohi Street
- Lehua Avenue

## GENERAL EXAMPLES OF TRAFFIC CALMING DEVICES



**Figure 5-15**

The following sections describe each of the study roadways, including specification of locations along the respective roadways identified as problem areas, and the recommended improvements where applicable. It is noted that the recommendations consider the recommended community design, traffic, and pedestrian/bicycle circulation plan improvements for the Livable Communities Plan.

### 5.2.1.2.1 Ulune Street

Specific locations along Ulune Street were identified as needing traffic calming improvements. Excessive speeding occurs in the vicinity of Aiea Heights Drive, Kaimakani Street, Kulawea Street, and Halawa Heights Road.

Between Halawa Heights Road and Kulawea Street, Ulune Street is striped as a four-lane roadway measuring 64 feet from curb to curb. The outside (curb) lanes are fairly wide to allow for parking and bus stops while maintaining the travel lane.

**Recommended Improvements:** Both visual and physical traffic calming devices are recommended along Ulune Street between Halawa Heights Road and Kulawea Street. Visual improvements would include striped parking and bike lanes (see Figure 5-16). Raised medians and curb extensions could also be provided at desired locations. These locations could include Halawa Heights Road which is characterized by poor sight distance, and Kulawea Street which leads to Aiea Intermediate School. Both vehicles and pedestrians would benefit from the extended curbs through improved visibility and reduced crossing distances.



Existing: 64' Roadway width, 4 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: bulbouts and raised medians at specific locations. On street parking, bike lanes, 2 traffic lanes

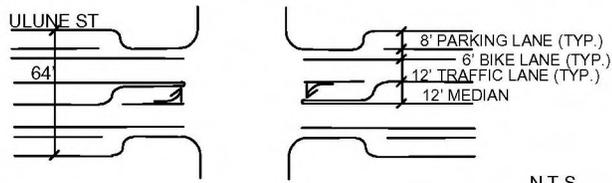


Figure 5-16 Ulune Street

**Current Planned Traffic Calming Improvements:** As part of the City Department of Transportation Services' Traffic Calming Program, traffic calming improvements are currently being planned for two locations along Ulune Street. One location is at the five-way intersection of Ulune Street, Aiea Heights Drive, Honohono Street, and Hakina Street. The proposed solution is to convert the Honohono Street entry one-way mauka at the intersection to simplify vehicle movements at the five-way corner. The other location is at the intersection of Ulune Street and Kaamilo Street near Aiea High School where construction of a roundabout is an alternative. Specific improvements for the area should be provided in a final report anticipated for completion in early 2002. Further discussion of other City-proposed traffic calming improvements in the Aiea Heights area is included in Section 5.2.1.2.9.

**5.2.1.2.2 Komo Mai Drive**

Specific locations along Komo Mai Drive were identified as needing traffic calming improvements. Excessive speeding occurs in the Pacific Palisades area, and in the vicinity of Kaahele Street, Hoomalu Street, Hoolaulea Street, and Kaahumanu Street.

**Recommended Improvements:** Between Kaahele Street and Waimano Home Road, Komo Mai Drive varies in width from 40 to 44 feet. Visual traffic calming devices are recommended which would include striped on-street parking on one side of the roadway, bike lanes and two travel lanes (see Figures 5-17 and 5-18). The resulting narrowed lanes would cause vehicles to slow, and bicyclists would have a dedicated area to bike. Between Hoomalu Street and Hoolaulea Street, speeding is particularly problematic for residents trying to access Komo Mai Drive.



Existing: 44' Roadway width, 2 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: On street parking on one side of the roadway, 2 traffic lanes and bike lanes.

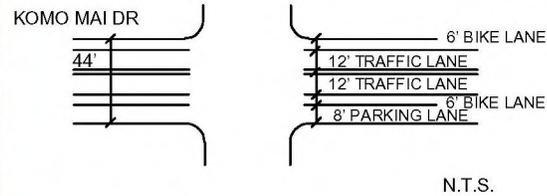


Figure 5-17 Komo Mai Drive (Diamond Head of Hoohulu Street)



Existing: 40' Roadway width, 2 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: On street parking on one side of the roadway, 2 traffic lanes and bike lanes.

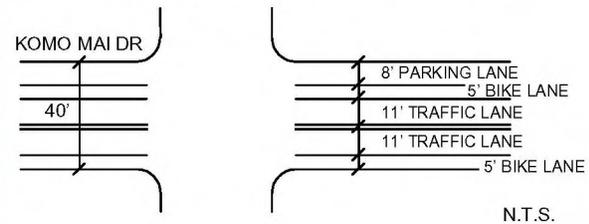


Figure 5-18 Komo Mai Drive (Ewa of Hoolaulea Street)

The intersection of Komo Mai Drive and Hoolaulea Street is currently traffic signal controlled. Speeding on both roadways was observed as vehicles attempt to clear the intersection before the traffic signal turns red. A single lane roundabout would reduce motorist speed at the intersection while maintaining traffic flow in all directions. An approximate 19-foot radius traffic circle including a raised circle and truck apron is recommended (see Figure 5-19). Actual dimensions would be determined during the project’s design phase.

Within the Pacific Palisades area, Komo Mai Drive which varies in width consists of two travel lanes with on-street parking along most of its length. At the entrance to Pacific Palisades, there is a landscaped median along Komo Mai Drive between Aaniu Loop/Aamanu Street and Lower Aumakua Street. The recommended traffic calming improvement is to provide for two 14-foot shared travel lanes between Lower Aumakua Street and Upper Auhuhu Street which would be designed for and signed as a bike route (see Figure 5-20).

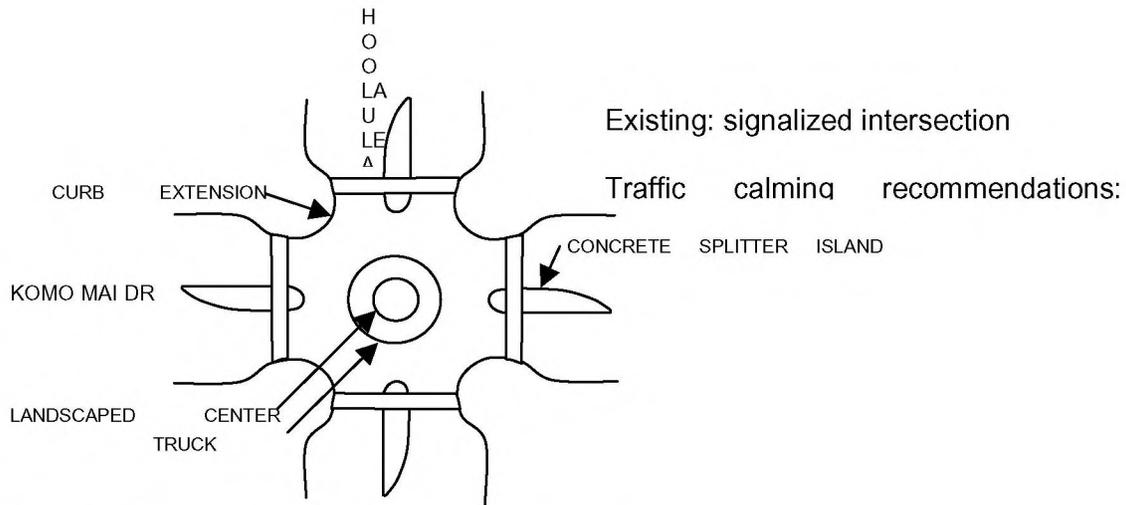
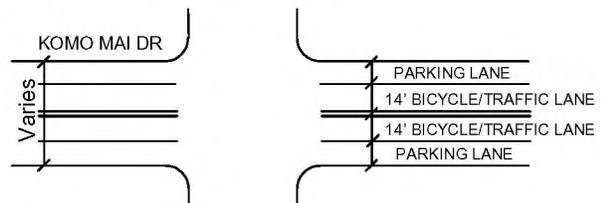


Figure 5-19 Komo Mai Drive/Hoolaulea Street Intersection



Existing: Roadway width varies, 2 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: On street parking, shared bicycle/traffic lanes.



N.T.S.

Figure 5-20 Komo Mai Drive (Pacific Palisades Area)

**Current Planned Traffic Calming Improvements:** As part of the City Department of Transportation Services' Traffic Calming Program, traffic calming improvements are planned for various locations in the Newtown area, including three locations along Komo Mai Drive. One location is at the intersection of Komo Mai Drive and Kaahale Street which handles some of the highest daily volumes of traffic in the Newtown neighborhood. A single-lane roundabout is planned at this intersection. A roundabout is also planned at the intersection of Komo Mai Drive and Hapaki Street to address speeding concerns and the high incidence of accidents. The third location is the segment of Komo Mai Drive between its intersections with Nahele Street and Hapaki Street. This area is problematic due to speeding and vertical sight distance restrictions. The recommended improvements include a raised median and curb extension to lower motorist speeds and facilitate pedestrian crossings. Further discussion of other City-proposed traffic calming improvements in the Newtown area is included in Section 5.2.1.2.9.

### 5.2.1.2.3 Kaahumanu Street

Kaahumanu Street was identified as needing traffic calming improvements to address speeding concerns, specifically the section between Moanalua Road and Waiiau District Park. This section of Kaahumanu Street is currently striped as a four-lane roadway measuring 64 feet from curb to curb. The outside (curb) lanes are fairly wide to allow for parking and bus stops while maintaining the travel lane.

**Recommended Improvements:** Recommended improvements include both visual and physical traffic calming devices along Kaahumanu Street between Moanalua Road and Waiiau District Park. Visual improvements would include striped parking and bike lanes (see Figure 5-20).



Existing: 64' Roadway width, 4 traffic lanes  
Parking allowed on both sides of the roadway

Traffic calming recommendations: bulbouts at intersections with on street parking lanes, a shared bike/vehicle lane and a vehicle lane in each direction.

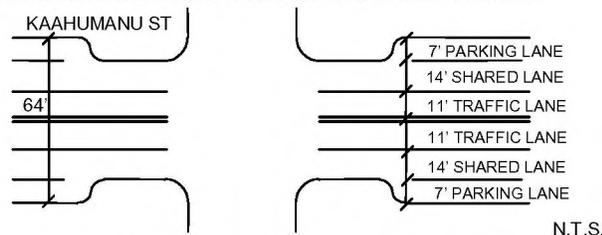
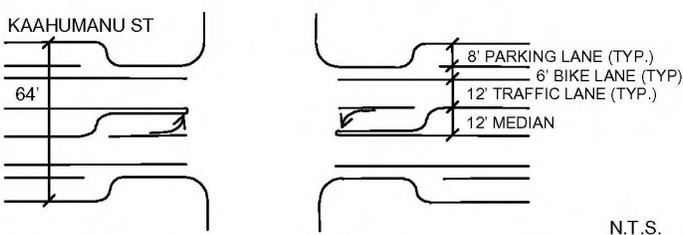


Figure 5-21 Kaahumanu Street

Raised medians and curb extensions could also be provided at desired locations. Mauka of Moanalua Road, Kaahumanu Street would consist of striped on-street parking with four travel lanes. The outside lanes would be striped slightly wider to allow for shared bicycle/traffic use. Further mauka, as vehicular volumes decrease, the recommendation is to provide for on-street parking, bike lanes, two travel lanes, and a median. A separate traffic study should be conducted to determine the location at which transition from a four-lane to two-lane roadway would provide sufficient capacity.

Mauka section transition to bulbouts at intersections with on street parking, bike lanes, 2 traffic lanes and a median.



### 5.2.1.2.4 Waimano Home Road

Excessive speeds were identified along Waimano Home Road in the vicinity of Hoomoana Street. Waimano Home Road is a four-lane roadway with left-turn pockets at intersections. The pavement width is generally 45 feet measured from curb to curb, and 57 feet at intersections.

**Recommended Improvements:** Lane widths along Waimano Home Road are currently narrow, and physical traffic calming devices may not be desirable due to heavy use of the roadway.

Long-term improvements to the corridor between Kamehameha Highway and Komo Mai Drive include widening of the roadway to provide bike lanes in accordance with the City’s *Honolulu Bicycle Master Plan* (April 1999) and the State’s *Bike Plan Hawaii* (April 1994) (see Figure 5-22). The addition of bike lanes would provide a visual traffic calming effect while providing a dedicated area for bicyclists.



Existing: 45-57' Roadway width, 4-5 traffic lanes

Traffic calming recommendations: Long term improvements include widening to provide bike lanes

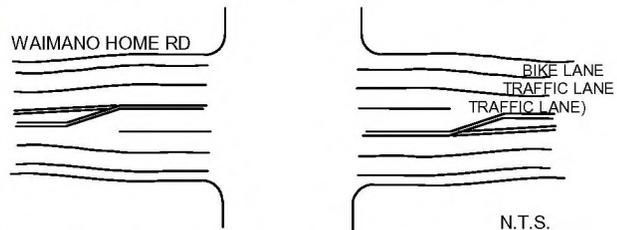


Figure 5-22 Waimano Home Road

**5.2.1.2.5 Hoomalu Street**

Excessive speeds were identified along Hoomalu Street between Moanalua Road and Waimano Home Road. Hoomalu Street is a two-lane 35-foot wide roadway with rolled curbs. Currently, motorists drive their vehicles over the rolled curb to park on the grass/dirt area.

Recommended Improvements: The recommended improvements to Hoomalu Street between Moanalua Road and Waimano Home Road include widening the section to accommodate sidewalks, on-street parking, bike lanes, and two travel lanes (see Figure 5-23). Improvements are to be constructed within the existing right-of-way. These improvements, although requiring physical widening of the roadway, would visually reduce the vehicular travel way.



Existing: 35' Roadway width, 2 traffic lanes, rolled curb

Parking allowed on both sides of the roadway

Traffic calming recommendations: widen roadway to accommodate on street parking, bike lanes, and 2 traffic lanes

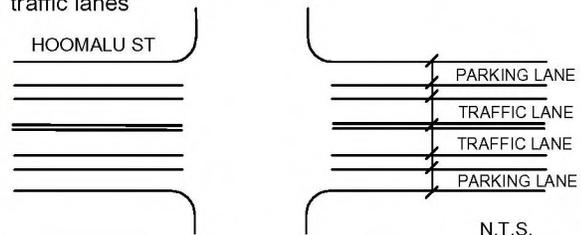


Figure 5-23 Hoomalu Street

**5.2.1.2.6 Hoolaulea Street**

Excessive speeds were identified along Hoolaulea Street in the vicinity of Highlands Intermediate School. Hoolaulea Street is a two-lane 45-foot roadway.

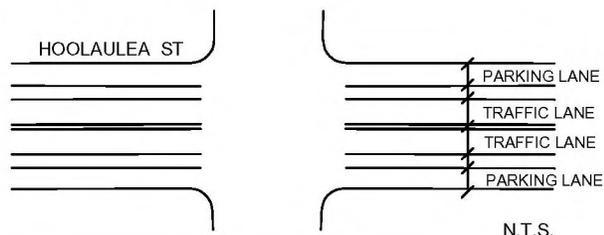
Recommended Improvements: The recommended improvements to Hoolaulea Street between Waimano Home Road and Komo Mai Drive include widening to accommodate sidewalks, on-street parking, bike lanes, and two travel lanes (see Figure 5-23). Improvements would need to be constructed within the existing right-of-way. These improvements, although requiring physical widening of the roadway, would visually reduce the vehicular travel way.



Figure 5-24 Hoolaulea Street

Existing: 45' Roadway width, 2 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: widen roadway to accommodate on street parking, bike lanes, and 2 traffic lanes



**5.2.1.2.7 Kaonohi Street**

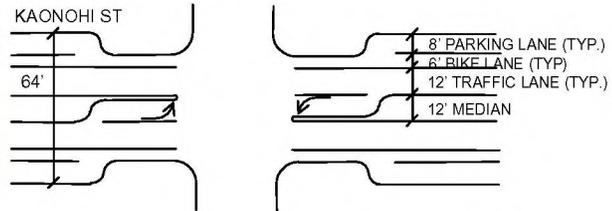
Excessive speeds were identified along Kaonohi Street mauka of Moanalua Road. Between Moanalua Road and the Pearl Country Club, Kaonohi Street consists of four travel lanes within a 64-foot wide pavement. Mauka of the Country Club, Kaonohi Street transitions to a 40-foot wide two-lane roadway. Kaonohi Street mauka of Moanalua Road includes on-street parking and sidewalks.

Recommended Improvements: Recommended improvements include the provision of both visual and physical traffic calming devices along Kaonohi Street mauka of Moanalua Road. Visual improvements would include striped on-street parking and bike lanes. Raised medians and curb extensions could also be provided at desired locations. Between Moanalua Road and Pearl Country Club, Kaonohi Street would consist of striped on-street parking, bike lanes, two travel lanes, and a center median (see Figure 5-25). The outside lanes would be striped slightly wider to allow for shared bicycle/traffic use. Mauka of the Country Club, striped on-street parking and shared bicycle/vehicle travel lanes are recommended (see Figure 5-26). Long-term improvements to the roadway would consist of widening to provide for continuous bike lanes in accordance with the City’s *Honolulu Bicycle Master Plan* (April 1999).



Existing: 64' Roadway width, 4 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: bulbouts at intersections with on street parking lanes, bike lanes, 2 traffic lanes and a median.



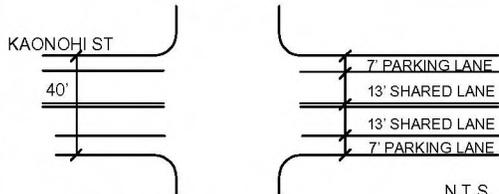
N.T.S.

Figure 5-25 Kaonohi Street (makai of Pearl Country Club)



Existing: 40' Roadway width, 2 traffic lanes  
 Parking allowed on both sides of the roadway

Traffic calming recommendations: on street parking lanes and shared bicycle/vehicle lanes



N.T.S.

Figure 5-26 Kaonohi Street (mauka of Pearl Country Club)

**5.2.1.2.8 Lehua Avenue**

As discussed in Chapter 4, the area along Lehua Avenue is proposed for future redevelopment as part of a town district for the Pearl City area.

Recommended Improvements: The planning and design of the redevelopment of Lehua Avenue as part of the Pearl City Town District should incorporate appropriate traffic calming devices to maintain a multi-modal friendly environment. These include the provision of bike lanes in accordance with the City's *Honolulu Bicycle Master Plan* (April 1999) and the State's *Bike Plan Hawaii* (April 1994). Connection should also be enhanced to the nearby Pearl Harbor Historic Trail.

**5.2.1.2.9 Other Planned Traffic Calming Projects**

As part of the City Department of Transportation Services' Traffic Calming Program, a number of traffic calming projects have been proposed or planned in the Aiea-Pearl City area.

In Pearl City, planned traffic calming improvements include gateway treatment (installation of a median strip) at Kuahaka Street and Waimano Home Road; roundabouts at the intersections of

Kuahaka Street and Kalauipo Street, and Kuahaka Street and Kaweloka Street; and additional traffic calming measures on Auhuhu Street in Pacific Palisades.

In Aiea, traffic calming improvements are proposed for the Aiea Heights and Newtown areas as follows:

Aiea Heights Traffic Calming: Aiea Heights area residents have expressed concern about traffic safety in their community, predominantly excessive cut-through traffic and high motor vehicle speeds which create difficult situations for pedestrians. As such, the Aiea Heights area was selected by the City for the Traffic Calming Program. Based on community input and results from a charette and workshop, the following 9 areas were identified and potential traffic solutions proposed:

1. Five-way intersection of Ulune Street, Aiea Heights Drive, Honohono Street, and Hakina Street – make Honohono Street entry one-way mauka at the five-way corner
2. Kaamilo Street/Ulune Street intersection – roundabout
3. Kaamilo Street/Iliee Street intersection – curb extensions
4. Kaamilo Street/Lauhulu Street intersection – curb extensions
5. Hoio Street/Lauhulu Street intersection – curb extensions
6. Kaamilo Street between Olena Street and Kuawa Street – speed tables
7. Iliee Street between Kaamilo Street and Kuawa Street – speed tables
8. Aiea Heights Drive between Ulune Street and Hoio Street – speed tables
9. Kaamilo Street makai of Kuawa Street – speed table or median and tree wells

These potential solutions are included in the Traffic Calming Aiea Heights Conceptual Design Report prepared by the City Department of Transportation Services (October 30, 2001). Specific improvements for the area should be provided in a final report anticipated for completion in 2002.

Newtown Traffic Calming: Newtown was selected by the City as an area that would benefit from traffic calming as residents have expressed concerns about speeding and safety for many years, especially in the area of Kaahele Street and Komo Mai Drive. A charette and workshop were held in which area residents worked on suggesting potential solutions to problem areas and providing comments on the recommended traffic calming treatments. The resulting *Newtown Traffic Calming Charette Final Report*, prepared by the City in July 2001, identifies the following 19 traffic calming recommendations:

1. Kaahele Street/Kilinoe Street intersection – medians, bulbouts and lane reductions\*
2. Kaahele Street/Kaalo Street intersection – bulbouts and lane reductions\*
3. Kaahele/Lulu Street – medians, bulbouts and lane reductions\*
4. Length of Kaahele Street below Komo Mai Drive – medians, tree wells and bike lanes\*
5. Kaahele Street/Komo Mai Drive intersection – roundabout\*
6. Kaahele Street/Nohoalii Street intersection – bulbouts
7. Kaahele Street/Aloalii Street intersection – bulbouts and lane width reductions
8. Kaahele Street/Naalii Street (mauka) intersection – bulbouts and lane width reductions

9. Kaahele Street/Naalii Street (makai) intersection – bulbouts, curb extensions and lane reductions
10. Kaahele Street/Kuini Street intersection – bulbouts
11. Kaahele Street/Keikialii Street intersection – bulbouts
12. Kaahele Street/Kaahele Place intersection – bulbouts, curb extensions and lane reductions
13. Komo Mai Drive/Hapaki Street intersection – roundabout
14. Komo Mai Drive near Nahele Street – median with curb extensions
15. Nahele Street/Apala Loop intersection – roundabout
16. Oliwa Street/Nahele Street intersection – bulbouts and curb extension
17. Nahele Street/Piki Street intersection – bulbouts and medians
18. Hapaki Street/Nahele Street intersection – bulbouts and medians
19. Piki Street/Hapaki Street intersection – curb extensions
20. Typical Slow Point – medians with bulbouts

\* Priorities

## 5.2.2 Proposed Public Transit System Improvements

As discussed in Section 2.4.1.1, the City Department of Transportation Services is undertaking its Bus Rapid Transit (BRT) project which will create a fully integrated mass transit system for Oahu. The BRT will provide convenient, efficient transportation by establishing a state-of-the-art transit network stretching from Kapolei to Waikiki and to the University of Hawai'i, Manoa.

The Regional BRT system will create a fast, convenient, and continuous transit corridor between Kapolei and Middle Street. This system will include extending the existing inbound morning peak period, the H-1 zipper lane, creating an outbound zipper lane during afternoon peak hours, and building dedicated ramps in several key locations. These elements will allow BRT vehicles to bypass traffic congestion to provide fast and reliable travel times.

The In-Town BRT will provide high-capacity and frequent service spanning Honolulu's urban core – from Middle Street to Richards Street, and along branches to UH-Manoa, Kakaako and Waikiki. Environmentally-friendly vehicles will run on exclusive or shared-use BRT lanes on existing streets, servicing stops every one-fourth to one-half mile. BRT station platforms will allow passengers easy and speedy access to board the BRT vehicles.

For the Aiea-Pearl City area, the Regional BRT initially proposed special access ramps to the H-1 Freeway at Kaonohi Street and Radford Drive and a transit center at the former Kamehameha Drive-In site. Subsequently, the Pearl City/Aiea Working Group, convened for the BRT project, evaluated alternative ramp locations to address community concerns regarding the Kaonohi Street access ramp, and set out to find alternatives to the proposed transit center at the former Kamehameha Drive-In site.

Aloha Stadium Gateway: The new strategy focuses on developing a transit corridor along Kamehameha Highway through Aiea-Pearl City and using the Aloha Stadium as the primary connection to the BRT system. The Pearl City/Aiea Working Group felt that a transit center would be more appropriate at Aloha Stadium. The transit center would be located in the

stadium overflow parking lot along Kamehameha Highway and would be integrated with a planned park-and-ride facility (see Figure 5-2).

The working group recommended an exclusive BRT ramp at Luapele Drive to replace the Kaonohi Street ramp that would connect the Aloha Stadium Transit Center with the H-1 zipper lanes. This proposed ramp would begin on Luapele Drive near Salt Lake Boulevard and would rise into the center median of the H-1 Freeway towards the Honolulu International Airport. The new ramp would be reversible and used only while the zipper lanes are in operation. The ramp would provide a Koko Head-bound on-ramp to the H-1 Freeway during the morning peak hour and an exit from the Ewa-bound H-1 Freeway in the afternoon peak hour.

Kamehameha Highway Bus Lanes: A system of exclusive contra-flow bus lanes along Kamehameha Highway would connect the Aloha Stadium Transit Center and access ramp to Aiea and Pearl City. Similar to the operation on Kalanianaʻole Highway in East Honolulu, these lanes would be coned off during the morning and afternoon peak periods to allow buses to bypass traffic congestion. This strategy was preferred because it maintains the landscaped median while minimizing the impact on existing traffic.

Transit Center Locations: The third component of the Pearl City/Aiea Working Group recommendations includes the development of transit centers or bus transfer points along Kamehameha Highway (see Figure 5-2). These centers would create a transit spine linking neighborhoods in Aiea and Pearl City with regional transit service.

A transit center is proposed at the former Jim Slemons auto dealership site located on the makai side of Kamehameha Highway just Ewa of Kaonohi Street. This transit center would be centrally located in the heart of the commercial district near Pearlridge Shopping Center.

In Pearl City, a bus transfer point is proposed makai of Kamehameha Highway at the site of the former Hale Mohalu Hospital. The facility would be co-located with the future Pearl City Youth Facility (PCYF) and baseball field. A potential alternative location for the bus transfer point is the University of Hawaii's Pearl City Urban Garden site makai of Kamehameha Highway, adjacent to Home Depot. This site offers a more central location relative to the Pearl City town core and proposed revitalization of the Lehua Avenue area.

### **5.2.3 Pedestrian/Bicycle Circulation**

The proposed pedestrian/bikeway circulation system is intended to effectively serve and connect schools, parks and other activity areas and destinations, as well as provide convenient access to the public transit system. The pedestrian/bikeway system is also intended to encourage alternative modes of travel between the various land use facilities in Aiea-Pearl City. The integration of the proposed bikeway system with other existing and planned bikeway systems in the area is intended to accommodate a broad range of bicyclists, including recreational, commuter/utilitarian, and bicycling enthusiasts. The proper placement of improved sidewalks and paths is also intended to encourage increased pedestrian activity between activity areas within the community.

### 5.2.3.1 Bikeway Designations

In discussing facilities for bicycles, it is important to distinguish the specific types of bikeway facilities being proposed for designated areas. The term bikeway”is used to define any trail, path, part of a highway or shoulder, sidewalk, or other travelway specifically signed and/or marked for bicycle travel. The term is applicable whether or not the facility is reserved for the exclusive use of bicycles or is shared with some other type of vehicle or with pedestrians. The various designations of bikeways are defined as follows and depicted in Figure 5-27:

Bike Path: (also referred to as *Shared-Use Path*) A completely separate right-of-way for the exclusive or semi-exclusive use of bicyclists/walkers/joggers/skaters. Where such a facility forms part of the roadway, it is separated from the roadway by a significant amount of open space and/or a major physical barrier (such as trees or a considerable change in ground elevation). Bike paths are primarily proposed in areas of special scenic value, or where integration with existing travel corridors would otherwise prove hazardous. A minimum 10-foot width is recommended for a bike path.

Bike Lane: A portion of a roadway that has been designated for the preferential or exclusive use of bicycles. While there are many variations on the general concept, there are only two different types of bike lanes – protected and unprotected. A protected bike lane is separated from adjacent vehicular traffic by a physical barrier such as concrete bumper stops, placement of the lane between parked cars and the curb, a median buffer landscape strip, or other similar means. An unprotected bike lane is delineated by a painted white line or a row of pavement markers. The recommended minimum width of a bike lane is 4 feet.

Bike Route: (also referred to as *Signed Shared Roadway*) A street or system of streets that meets certain minimum standards and is officially designated and marked as a bike route.” Bicycles share the roadways with moving vehicles. Bike routes are generally used to provide continuity between urban centers, especially in the more rural and less heavily used travelways outside the central business and commercial districts. In some cases, where sufficient space for a bike lane is not available, especially in congested urban areas, bike routes provide continuity on a bikeway. A minimum travelway width of 12 feet is recommended for the designation of bike routes.

Greenway: A path, paved or unpaved, as wide as a watershed or as narrow as a trail. Greenways typically follow rivers, wetlands, the coast, through landscape and open spaces and help maintain delineations between urban and conservation lands.

### 5.2.3.2 Existing Pedestrian/Bicycle Plans

This section describes the existing pedestrian/bicycle plans for the Aiea-Pearl City area.

#### 5.2.3.2.1 Bike Plan Hawaii

The State Department of Transportation Highway Division’s *Bike Plan Hawaii* (April 1994) is intended to serve as a guide for the implementation of bikeways in the State. The *Bike Plan Hawaii* recommends the distribution of new bikeway facilities along the general perimeter of the

islands of Oahu, Hawaii, Maui, and Kauai, as well as throughout the various community locations. The plan identifies the Pearl Harbor Bike Path as the only existing bikeway facility within the Aiea-Pearl City area (see Figure 5-27).

Bikeway facilities recommended by *Bike Plan Hawaii* for the Aiea-Pearl City area are identified in Table 5-2 and depicted in Figure 5-27.

The *Bike Plan Hawaii* is currently being updated by the State Department of Transportation Highway's Division and the U.S. Department of Transportation Federal Highway Administration (FHWA).

#### **5.2.3.2.2 Honolulu Bicycle Master Plan**

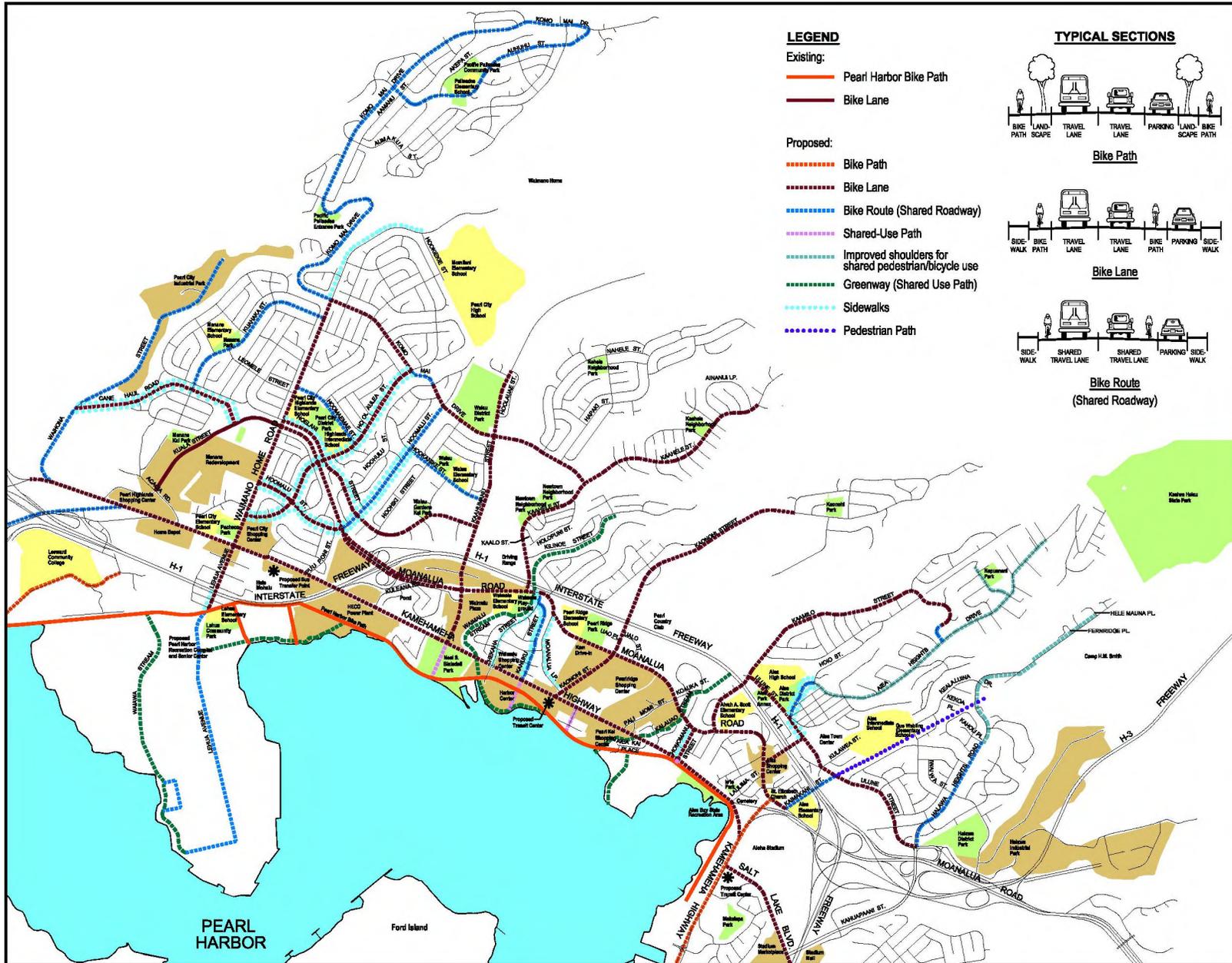
The City and County of Honolulu Department of Transportation Services' *Honolulu Bicycle Master Plan* (April 1999) provides a strategy for the bicycle component of our future transportation system. It identifies an integrated network of on-road bike lanes and off-road shared-use paths that will link people with their favorite destinations.

A major component of the plan is the Bike-Friendly Route No. 1 project which will complete major elements of the Central Bike Corridor from Kahala to Downtown and major elements of the Makai Bike Corridor from the Pearl Harbor Bike Path to Downtown. Bike-Friendly Route No. 1 includes 19 different road segments within the City and serves the commuter cyclists and accommodates recreational and utilitarian trips. The intent of Bike-Friendly Route No. 1 is to give commuters and other bicyclists a direct and safer bikeway through which to traverse urban Honolulu. A major segment of Route No. 1 involves the creation of gateways to the Pearl Harbor Bike Path through adding signage and landscaping at access points. Entrances and exits are recommended to be signed along Kamehameha Highway at Lehua Avenue, Neal Blaisdell Park, Kanuku Street, Pearl Kai Center, McGrew Point, and the USS Arizona Memorial Visitor Center.

Bikeway facilities recommended in the *Honolulu Bicycle Master Plan* for the Aiea-Pearl City area are identified in Table 5-2 and shown in Figure 5-27.

#### **5.2.3.2.3 Pearl Harbor Historic Trail Master Plan**

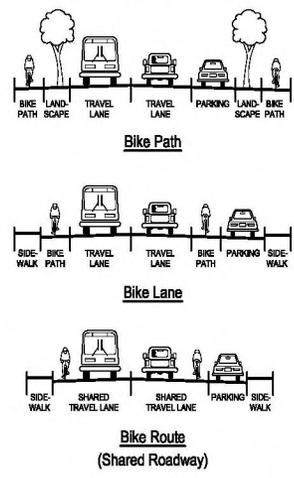
The City and County of Honolulu's *Pearl Harbor Historic Trail Master Plan* identifies various trail connections which would allow for possible bikeway, shared-use path (bike and pedestrian), and greenway connections from the Pearl Harbor Historic Trail. These linear paths generally use existing City street corridors. More than 30 miles of trail connections are proposed, including within the Aiea-Pearl City area, which would involve City designation of the bikeway segments, installation of signs, pavement markings, and, in some cases, widening of bike shoulders or sidewalks. The connections are based on priority bikeway projects listed in the *Honolulu Bicycle Master Plan* (1999).



**LEGEND**

- Existing:**
- Pearl Harbor Bike Path
  - Bike Lane
- Proposed:**
- - - Bike Path
  - - - Bike Lane
  - - - Bike Route (Shared Roadway)
  - - - Shared-Use Path
  - - - Improved shoulders for shared pedestrian/bicycle use
  - - - Greenway (Shared Use Path)
  - - - Sidewalks
  - - - Pedestrian Path

**TYPICAL SECTIONS**



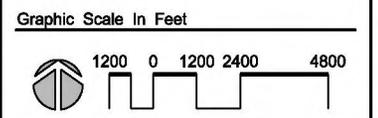
**AIEA - PEARL CITY  
LIVABLE COMMUNITIES  
PLAN**

**PROPOSED  
PEDESTRIAN/  
BICYCLE  
CIRCULATION  
PLAN  
Figure 5-27**

- Sources:
1. Bike Plan Hawaii  
State of Hawaii Department of Transportation (April 1994)
  2. Honolulu Bicycle Master Plan  
City & County of Honolulu Department of Transportation Services (April 1999)
  3. Pearl Harbor Historic Trail Master Plan  
City & County of Honolulu (May 2001)
  4. Final Environmental Assessment, Honolulu Bicycle Master Plan  
Improvements College Access, Project No.28, Pearl Harbor Historic Trail to Leeward Community College  
City and County of Honolulu Department of Transportation Services (July 2001)
  5. Recommendations based on various suggestions from:
    - Aiea-Pearl City Livable Communities Plan Community Workshops of December 1, 1999 and July 5, 2001
    - Aiea-Pearl City Livable Communities Plan Community Survey (April 2001)

Prepared By

**WILSON OKAMOTO  
& ASSOCIATES, INC.**  
December 5, 2001



Trail connections recommended in the *Pearl Harbor Historic Trail Master Plan* for the Aiea-Pearl City area are identified in Table 5-3. The connections deemed feasible for incorporation in the Livable Communities Plan proposed pedestrian/bicycle circulation plan are shown in Figure 5-27.

<b>Table 5-2 Recommended Bikeway Facilities State of Hawaii and City and County of Honolulu Bicycle Master Plans</b>		
<b>Route</b>	<b>Type</b>	<b>Agency</b>
Aiea Heights Drive (Ulune Street to Moanalua Road)	Bike Lane	City & State
Farrington Highway	Bike Route	State
Gateway at Blaisdell Park (Bike-Friendly Route 2)	SUP*	City
Gateway at Kanuku Street (Bike-Friendly Route 3)	SUP*	City
Gateway at Pearl Kai Center (Bike-Friendly Route 4)	SUP*	City
Gateway at McGrew Point (Bike-Friendly Route 4a)	SUP*	City
Honomanu Street (Moanalua Road to Kamehameha Highway)	Bike Lane	City
Hoomalu Street (Waimano Home Road to Moanalua Road)	Bike Lane	State
Kaahahele Street (Moanalua Road to Komo Mai Drive)	Bike Lane	State
Kaahumanu Street (Kamehameha Highway to Komo Mai Drive)	Bike Lane	City & State
Kaamilo Street		
-Kulawai Street to Honomanu Street	Bike Lane	City
-Moanalua Road to Ulune Street	Bike Lane	State
Kamehameha Highway		
-H-2 Freeway to Aiea Access Road	Bike Route	State
-Aiea Access Road past Salt Lake Boulevard	Bike Path	State
-H-2 Freeway to Stadium	Bike Lane	City
Kaonohi Street (Kamehameha Highway to Laelua Street)	Bike Lane	City
Komo Mai Drive (Waimano Home Road to Kaahahele Street)	Bike Lane	State
Kuala Street Extension	Bike Lane	City
Lehua Avenue (also City's Bike-Friendly Route 1)	Bike Lane	City & State
Moanalua Road		
-Aiea Heights Drive to Kaahumanu Street	Bike Lane	City
-Hoomalu Street to Aiea Access Road	Bike Lane	State
Noelani Street (Kaahumanu Street to Waimano Home Road)	Bike Lane	City
Salt Lake Boulevard	Bike Lane	City & State
Ulune Street		
-Halawa Valley Road to Aiea Heights Drive	Bike Lane	City
Waihona Street	Bike Route	State
Waimano Home Road (Kamehameha Highway to Komo Mai Drive)	Bike Lane	City & State
*SUP =Shared-Use Path		
Source: State of Hawaii Department of Transportation Highways Division, <i>Bike Plan Hawaii</i> , April 1994		
City and County of Honolulu Department of Transportation Services, <i>Honolulu Bicycle Master Plan</i> , April 1999		

Street	Facility	Type
Laulima	Aiea Elementary School	Route
Honomanu to Kaamilo	Alvah A. Scott Elementary School and Aiea High School	Route
McGrew Loop	McGrew Point, Pa'aiau Fishpond, future Cultural Center	Shared-use path
Stream Easement	Kalauao Stream	Greenway
Pali Momi	Pearl Kai and Pearlridge Shopping Center	Shared-use path
Kanuku	Redeveloped Harbor Center	Shared-use path
Stream Easement	Waimalu Stream	Greenway
Kaahumanu	To Neal S. Blaisdell Park	Route
Park Path	Neal S. Blaisdell Park	Shared-use path
Lehua Avenue	North to Waimano Home Road, south to Pearl City Peninsula	Route
Waiawa Stream Loop	Historic Trail-Pearl City Peninsula	Greenway
Waiawa Road Loop	Leeward Community College	Shared-use path
Ala Ike to Kuala	Leeward Community College link over H-1 to Pearl Highlands	Land and sidewalk (advanced riders)

Source: *Pearl Harbor Historic Trail Master Plan*, City and County of Honolulu, May 2001

### 5.2.3.3 Recommended Pedestrian/Bicycle Circulation Plan

The proposed pedestrian/bicycle circulation plan considers the existing and future bikeways and pedestrian facilities in the Aiea-Pearl City area, including those from the State's *Bike Plan Hawaii*, City's *Honolulu Bicycle Master Plan*, and City's *Pearl Harbor Historic Trail Master Plan*. The plan also considers problem locations identified through the Community Survey for the Aiea-Pearl City Livable Communities Plan, input from community meetings and workshops, discussions with school principals in the area and the City and County of Honolulu Department of Transportation Services, and existing State bicycle/pedestrian accident data. The intent is to provide for a pedestrian/bikeway system which is largely separated from vehicular traffic, thereby ensuring a pleasant and safe environment for facility users.

The proposed pedestrian/bicycle circulation plan for Aiea-Pearl City is depicted in Figure 5-27 and described in detail in Table 5-4. In general, the proposed improvements will provide an integrated pedestrian/bikeway system within the two communities. In addition to the existing Pearl Harbor Bike Path, connections between the two communities will be further facilitated with bikeway facilities along Kamehameha Highway and Moanalua Road, the two major east-west roads in the region. A designated bikeway along Komo Mai Drive will provide an important east-west connection further mauka. Major mauka-makai bikeway access will be provided along Waimano Home Road/Lehua Avenue and Kaahumanu Street in Pearl City, and Kaonohi Street and Honomanu Street/Kaamilo Street in Aiea.

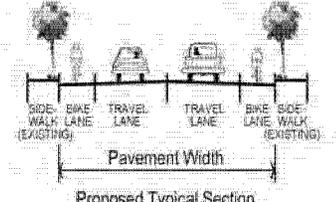
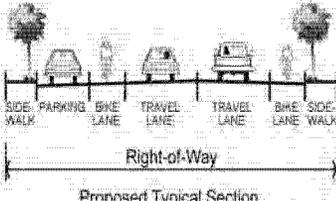
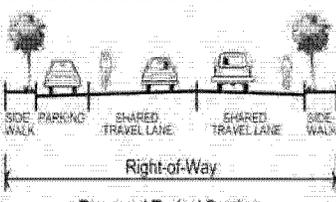
The availability of three major streams in the area – Waiawa Stream, Waimalu Stream and Kalauao Stream – each terminating at the shoreline, provides a unique opportunity for

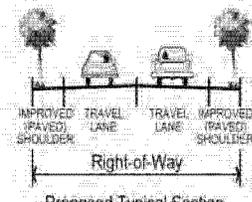
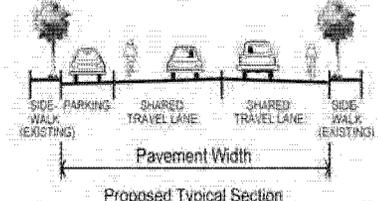
development of tranquil and scenic adjacent pathways for pedestrians and bicyclists, thereby further integrating access to recreational areas.

In Aiea, a designated bikeway along Ulune Street will provide an important east-west connection and facilitate mauka-makai bikeway access along Aiea Heights Drive and Halawa Heights Road. Mauka-makai bikeway access will also be provided along Kaahele Street, Kanuku Street and Kaimakani Street. To enhance pedestrian circulation, sidewalk facilities will be provided along Hekaha Street, Kanuku Street, Moanalua Loop, Honomanu Street, and lower Aiea Heights Drive to integrate with existing pedestrian facilities. Along upper Aiea Heights Drive and Halawa Heights Road, the existing road shoulders will be improved to more effectively allow for shared pedestrian/bicycle use. Mauka of the Kaimakani Street/Ulune Street intersection, an existing unimproved right-of-way will be developed into a pedestrian path to provide continuous mauka-makai access to Halawa Heights.

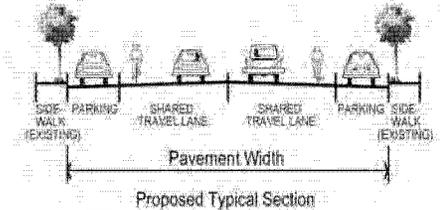
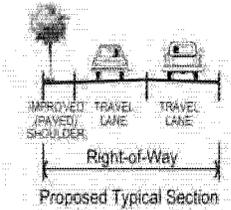
In Pearl City, the provision of bikeway access along Hoomalu Street, Hoolaulea Street, Noelani Street, Hookanike Street, and Kuahaka Street will allow for bicycle circulation within the predominantly residential area and nearby activity areas. Bikeway access is also designated along Komo Mai Drive mauka into Pacific Palisades and along Auhuhu Street which would provide for an essential connection with lower Pearl City. Waihona Street is also provided bikeway access through the Pearl City Industrial Park. In consideration of future extension of the Cane Haul Road between Kuala Street and Waihona Street, bike lanes and sidewalks are designated along the road. Much needed sidewalk facilities are designated along major roadways in the Pearl City Heights Subdivision, including Hoomalu Street, Hoolaulea Street and Noelani Street, which will connect to existing sidewalks. Sidewalks are also proposed along Waimano Home Road mauka of Komo Mai Drive to Hookiekie Street, which would facilitate pedestrian access to Waimano Training School and Hospital, and Momilani Elementary and Pearl City High Schools.

**Table 5-4  
Proposed Pedestrian/Bicycle Circulation Plan**

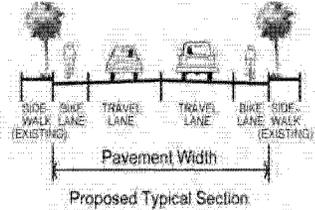
Roadway/Trail (Jurisdiction)	Location	Existing Road/Trail Width	Existing Improvements	Lineal Feet (LF)	Proposed Improvements
<b>Roadways</b>					
<b>Aiea Heights Drive</b> (Aiea)  (City and County of Honolulu)	Between Moanalua Road and Lower Ulune Street (by 7-11 Store)	50' ROW*; 38' Pavement; 39' Pavement along Overpass	2 lanes; sidewalks both sides.	800'	5-foot bike lanes both sides; two 12-foot travel lanes. Improvements to be constructed within existing pavement width. 
	Between Lower Ulune Street and Upper Ulune Street (by Aiea District Park)	50' ROW; 26' Pavement	2 lanes; unpaved shoulders on both sides used for parking.	800'	5-foot concrete sidewalks both sides; 7-foot parking lane one side; 4.5-foot bike lanes both sides; two 12-foot travel lanes. Improvements to be constructed within existing ROW width. 
	Between Upper Ulune Street and Hoio Street	55' to 65' ROW; 19' to 24' Pavement	2 lanes; unpaved shoulders on both sides used for parking.	1,100'	5-foot concrete sidewalks both sides; 7-foot parking lane one side; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing ROW width. 

<p align="center"><b>Table 5-4 (continued)</b> <b>Proposed Pedestrian/Bicycle Circulation Plan</b></p>					
<p><b>Aiea Heights Drive</b> (Aiea)</p> <p>(City and County of Honolulu)</p> <p>(continued)</p>	<p>Between Hoiio Street and Kaupili Place</p>	<p>55' to 65' ROW; 19' to 24' Pavement</p>	<p>2 lanes; unpaved shoulders both sides used for parking.</p>	<p>7,500'</p>	<p>Improved shoulders (paved) on both sides for shared pedestrian/bicycle use. Improvements to be constructed within existing ROW width.</p>  <p align="center">Proposed Typical Section</p>
<p><b>Auhuhu Street</b> (Pearl City)</p> <p>(City and County of Honolulu)</p>	<p>Between Komo Mai Drive</p>	<p>54' ROW; 39' Pavement (typical)</p>	<p>2 lanes; sidewalks and on-street parking both sides.</p>	<p>5,700'</p>	<p>8-foot parking one side; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p align="center">Proposed Typical Section</p>
<p><b>Cane Haul Road</b> (Pearl City)</p> <p>(City and County of Honolulu and Private Landowners)</p>	<p>Between new Kuala Street extension and Waihona Street</p>	<p>60' ROW</p>	<p>Unimproved 60' ROW.</p>	<p>4,600'</p>	<p>Concrete sidewalks, bike lanes and travel lanes to be developed in conjunction with the planning/design of the Manana Sub-Area Traffic Study to be undertaken by the City and County of Honolulu Department of Transportation Services.</p>

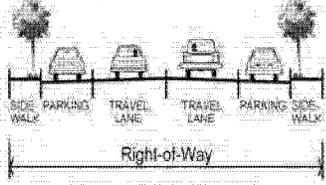
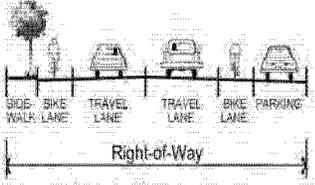
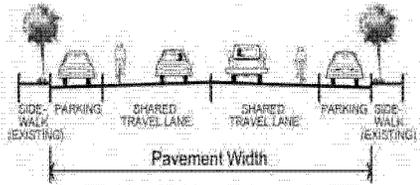
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Halawa Heights Road</b>                  (Aiea)                  (City and County of Honolulu)</p>	<p>Between Ulune Street and Kaholi Place</p>	<p>60' ROW;                  40' Pavement</p>	<p>2 lanes;                  sidewalks and on-street parking both sides.</p>	<p>3,000'</p>	<p>7-foot parking lane both sides; two 13-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p> 
	<p>Between Kaholi Place and Puumakani Street</p>	<p>70' to 100' ROW;                  24' Pavement</p>	<p>2 lanes;                  unpaved shoulders both sides (Diamond Head side varies in width up to 10'; Ewa side width is approx. 2'); parking on Diamond Head side on unpaved shoulder.</p>	<p>2,600'</p>	<p>Improved shoulders (paved) for shared pedestrian/bicycle use. Shoulders to be improved on Diamond Head side from Kaholi Street to Elrod Road, and on Ewa side from Elrod Road to Hele Mauna Place. Improvements to be constructed within existing ROW width.</p> 

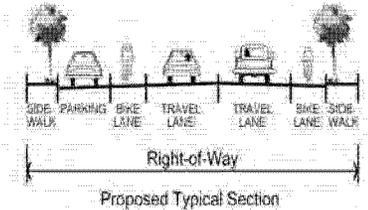
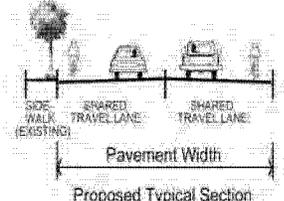
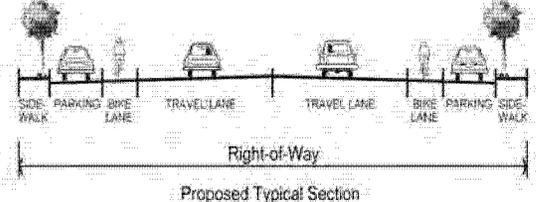
**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

<p align="center"><b>Halawa Heights Road</b> (Aiea)</p> <p>(City and County of Honolulu)</p> <p>(continued)</p>	<p>Between Puumakani Street and Hele Mauna Place</p>	<p>30' ROW; 20' Pavement</p>	<p>2 lanes (striped up to vicinity of Camp Smith); unpaved shoulders both sides (Diamond Head side varies in width up to 10'; Ewa side width is approx. 2'); parking on Diamond Head side on unpaved shoulder; sidewalk mauka of Hele Mauna Place.</p>	<p>2,300'</p>	
<p align="center"><b>Halewiliko Street</b> (Aiea)</p> <p>(City and County of Honolulu)</p>	<p>Between Aiea Heights Drive and Kulawea Street</p>	<p>56' ROW; 38' Pavement</p>	<p>2 lanes; sidewalks both sides.</p>	<p>800'</p>	<p>5-foot bike lanes both sides; two 12-foot travel lanes. Improvements to be constructed within existing pavement width.</p> 

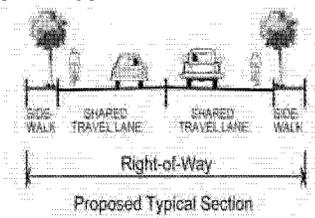
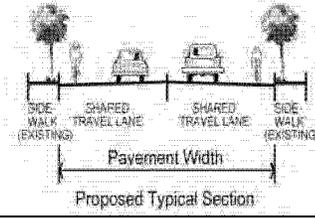
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Hekaha Street</b> (Aiea)  (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Moanalua Road</p>	<p>50' ROW; 32' Pavement</p>	<p>2 lanes; unpaved shoulders both sides used for parking.</p>	<p>2,100'</p>	<p>5-foot concrete sidewalks both sides; 8-foot parking lanes both sides; two 12-foot travel lanes. A 200-linear foot segment of the travel lanes between Moanalua Road and Kanuku Street would need to be designated as shared travel lanes (bike route) to provide a bikeway connection from Kanuku Street to Moanalua Road. Improvements to be constructed within existing ROW width.</p>  <p style="text-align: center;">Proposed Typical Section</p>
<p><b>Honomanu Street</b> (Aiea)  (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Moanalua Road</p>	<p>40' ROW; 21' Pavement</p>	<p>2 lanes; 8-foot unpaved shoulder on Diamond Head side used for parking; 3.5-foot sidewalk on Ewa side.</p>	<p>700'</p>	<p>5-foot concrete sidewalk on Ewa side; 7-foot parking lane one side; 5-foot bike lanes both sides; two 9-foot travel lanes. Improvements to be constructed within existing ROW width.</p>  <p style="text-align: center;">Proposed Typical Section</p>
<p><b>Hookanike Street</b> (Pearl City)  (City and County of Honolulu)</p>	<p>Between Kaahumanu Street and Hoomalu Street</p>	<p>60' ROW; 44' Pavement</p>	<p>2 lanes; sidewalk and on-street parking both sides.</p>	<p>2,180'</p>	<p>8-foot parking lane both sides; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p style="text-align: center;">Proposed Typical Section</p>

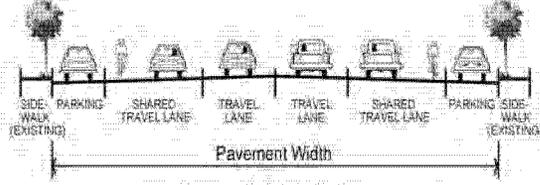
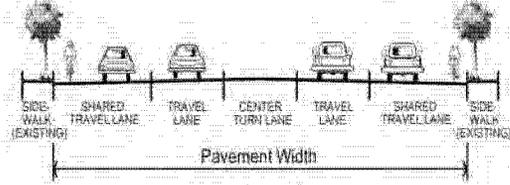
**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

<p align="center"><b>Hoolaulea Street</b> (Pearl City)</p> <p>(City and County of Honolulu)</p>	<p>Between Waimano Home Road and Komo Mai Drive</p>	<p>60' ROW; 45' Pavement</p>	<p>2 lanes; parking over the curb both sides.</p>	<p>5,500'</p>	<p>5-foot concrete sidewalks both sides; 8-foot parking lane one side; 7-foot bike lane one side; 6-foot bike lane one side; two 12-foot traffic lanes. Improvements to be constructed within existing ROW width.</p>  <p align="center">Proposed Typical Section</p>
<p align="center"><b>Hoomaemae Street</b> (Pearl City)</p> <p>(City and County of Honolulu)</p>	<p>Between Waimano Home Road and Hoolaulea Street</p>	<p>44' ROW; 28' Pavement</p>	<p>2 lanes; sidewalk on makai side.</p>	<p>2,000'</p>	<p>Two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width. Reconstruct curb fronting Highlands Middle School to prevent vehicles from parking on the curb before/after school hours when dropping off/picking up students.</p>  <p align="center">Proposed Typical Section</p>
<p align="center"><b>Hoomalu Street</b> (Pearl City)</p> <p>(City and County of Honolulu)</p>	<p>Between Waimano Home Rd. and Moanalua Rd.</p>	<p>60' ROW; 35' Pavement</p>	<p>2 lanes; parking over the curb both sides.</p>	<p>2,400'</p>	<p>5-foot concrete sidewalks both sides; 8' parking lane both sides; 5' bike lanes both sides; two 12' travel lanes. Improvements to be constructed within existing ROW width.</p>  <p align="center">Proposed Typical Section</p>

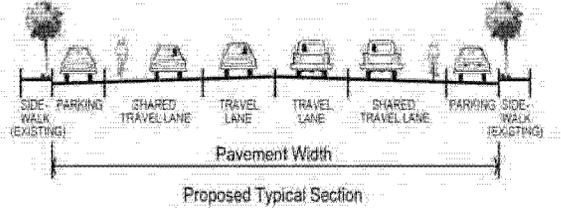
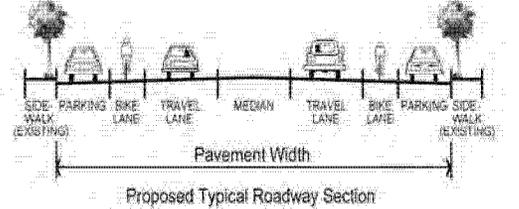
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Hoomalu Street</b> (Pearl City)</p> <p>(City and County of Honolulu)  (continued)</p>	<p>Between Moanalua Road and Hookanike Street</p>	<p>44' ROW; 23.5' Pavement</p>	<p>2 lanes; unpaved shoulders both sides used for parking.</p>	<p>2,500'</p>	<p>5-foot concrete sidewalks both sides; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing ROW width.</p>  <p>Proposed Typical Section</p>
	<p>Between Hookanike Street and Komo Mai Drive</p>	<p>44' ROW; 28' Pavement</p>	<p>2 unstriped lanes; sidewalk and on-street parking both sides.</p>	<p>1,400'</p>	<p>Two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p>Proposed Typical Section</p>
<p><b>Kaahahele Street</b> (Aiea)</p> <p>(City and County of Honolulu)</p>	<p>Between Moanalua Road and Komo Mai Drive</p>	<p>80' ROW; 64' Pavement</p>	<p>4 lanes; sidewalks and on-street parking both sides.</p>	<p>3,500'</p>	<p>Proposed improvements are based on the City and County of Honolulu Department of Transportation Services' Newtown Traffic Calming Charrette Final Report (July 2001). Improvements to include 10-foot parking lanes both sides; 5-foot bike lanes both sides; two 10- to 11-foot travel lanes; 12-foot landscaped/striped median; bulbouts at intersections of Kilinoe Street, Kaalo Street, and Lulu Street; roundabout at intersection of Komo Mai Drive.</p>
	<p>Between Komo Mai Drive and Hiliu Place</p>	<p>64' ROW; 44' Pavement</p>	<p>2 lanes; sidewalks and on-street parking both sides.</p>	<p>5,000'</p>	<p>Proposed improvements are based on the City and County of Honolulu Department of Transportation Services' Newtown Traffic Calming Charrette Final Report (July 2001). Improvements to include 7-foot parking lanes both sides; 5-foot bike lanes both sides; two 10-foot travel lanes; bulbouts at intersections of Nohoalii Street, Aloalii Street, Naalii Street, Kuini Street, Keikialii Street, and Kaahahele Place.</p>

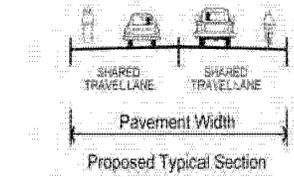
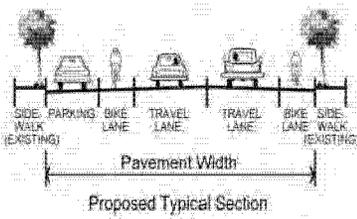
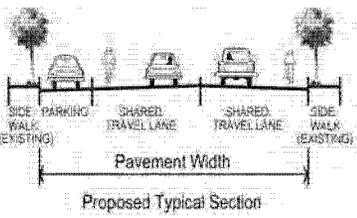
**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

<p align="center"><b>Kaahumanu Street</b> (Pearl City)  (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Moanalua Road</p>	<p>70' ROW; 64' Pavement</p>	<p>4 lanes; sidewalk and on-street parking both sides.</p>	<p>1,200'</p>	<p><b>Short-Term Improvements:</b> Shared travel lanes (bike route).  <b>Option 1 (with on-street parking):</b> 7-foot parking lanes both sides; two 11-foot inside (left) travel lanes; two 14-foot outside (right) shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p align="center">Proposed Typical Section</p> <p><b>Option 2 (without on-street parking):</b> One 12-foot center turn lane; two 12-foot inside (left) travel lanes; two 14-foot outside (right) shared travel lanes. Improvements to be constructed within existing pavement width.</p>  <p align="center">Proposed Typical Section</p> <p><b>Long-Term Improvements:</b> Bike lanes on both sides in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) and State's <i>Bike Plan Hawaii</i> (April 1994). Widening of the street within the existing ROW would be required to accommodate the bike lanes.</p>
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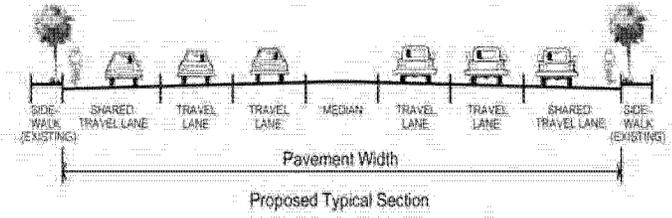
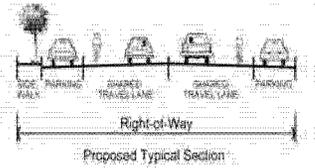
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Kaahumanu Street</b>                  (Pearl City)</p> <p>(City and County of Honolulu)</p> <p>(continued)</p>	<p>Between Moanalua Road and Hookanike Street</p>	<p>80' ROW;                  64' Pavement</p>	<p>4 lanes;                  sidewalk and parking on both sides.</p>	<p>2,300'</p>	<p><u>Short-Term Improvements:</u> Shared travel lanes (bike route). Improvements to include 7-foot parking lanes both sides; two 11-foot inside (left) travel lanes; two 14-foot outside (right) shared travel lanes. Improvements to be constructed within existing pavement width.</p>  <p><u>Long-Term Improvements:</u> Bike lanes on both sides in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) and State's <i>Bike Plan Hawaii</i> (April 1994). Widening of the street within the existing ROW would be required to accommodate the bike lanes.</p>
	<p>Between Hookanike Street and Hoolauae Street</p>	<p>76' ROW;                  64' Pavement</p>	<p>4 lanes;                  sidewalk and parking both sides.</p>	<p>2,060'</p>	<p>8-foot parking lanes both sides; 6-foot bike lanes both sides; two 12-foot travel lanes; 12-foot median. Improvements to be constructed within existing pavement width.</p> 

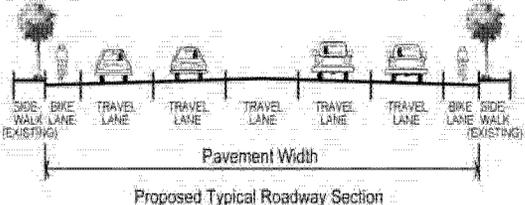
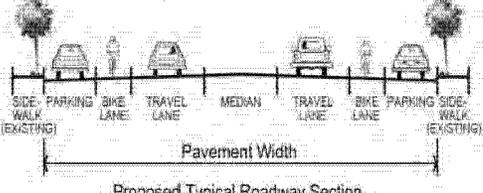
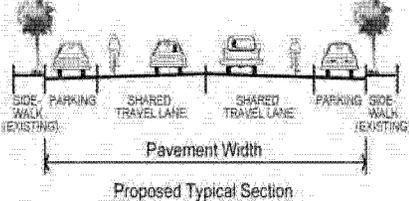
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Kaamilo Street</b> (Aiea)</p>	<p>From Aiea Heights Drive to end of curve in road makai of Kalawina Place</p>	<p>48' ROW; 24' Pavement</p>	<p>2 lanes.</p>	<p>410'</p>	<p><u>Short-Term Improvements:</u> Two 12-foot shared travel lanes (bike route) to be developed within existing pavement width.</p>  <p><u>Long-Term Improvements:</u> If demand arises, widen road to accommodate bike lanes within the existing ROW width.</p>
<p>(City and County of Honolulu)</p>	<p>From end of curve in road makai of Kalawina Place to Moanalua Road</p>	<p>50' to 54' ROW; 40' Pavement</p>	<p>2 lanes; sidewalk and parking both sides.</p>	<p>7,880'</p>	<p>8-foot parking lane one side; 5-foot bike lanes both sides; two 11-foot travel lanes. Improvements to be constructed within existing pavement width.</p> 
<p><b>Kaimakani Street</b> (Aiea)</p>	<p>Between Moanalua Rd. and Ulune St.</p>	<p>60' to 80' ROW; 38' Pavement</p>	<p>2 lanes; sidewalks both sides; on-street parking both sides, except along H-1 Freeway overpass.</p>	<p>1,400'</p>	<p>7-foot parking lane one side; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p> 

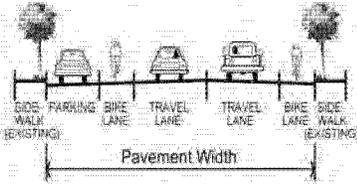
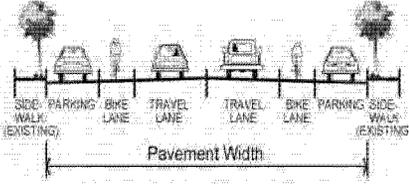
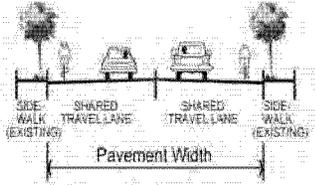
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Kamehameha Highway</b>                  (Aiea-Pearl City)                  (State of Hawaii)</p>	<p>From Waihona Street (Pearl City) to Aiea Access Road/Aloha Stadium</p>	<p>110' to 160' ROW</p>	<p>6 lanes; sidewalks both sides.</p>	<p>19,800'</p>	<p><u>Short-Term Improvements:</u> Shared travel lanes (bike route) in accordance with the State's <i>Bike Plan Hawaii</i> (April 1994). Improvements to be constructed within the existing pavement width.</p>  <p><u>Long-Term Improvements:</u> Bike lanes in accordance with the City's Honolulu <i>Bicycle Master Plan</i> (April 1999). Bike lanes to be developed in conjunction with the planning/design of the State Department of Transportation's Kamehameha Highway Improvement Project.</p>
<p>(State of Hawaii)</p>	<p>Segment from Moanalua Road (includes Aiea Access Road) south to Salt Lake Boulevard</p>	<p>100' to 200' ROW</p>	<p>6 lanes; sidewalks both sides.</p>	<p>2,400'</p>	<p>Bike path in accordance with the State's <i>Bike Plan Hawaii</i> (April 1994). Bike path to be developed in conjunction with the planning/design of the State Department of Transportation's Kamehameha Highway Improvement Project.                  (Note: The State's <i>Bike Plan Hawaii</i> reflects this segment of Kamehameha Highway to continue as a bike path further south. For the purposes of the Aiea-Pearl City Livable Communities Plan, only the segment up to Salt Lake Boulevard is included.)</p>
<p><b>Kanuku Street</b>                  (Aiea)                  (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Hekaha Street</p>	<p>50' ROW; 32' Pavement</p>	<p>2 lanes; unpaved shoulders both sides used for parking.</p>	<p>2,000'</p>	<p>(Note: 5-foot concrete sidewalk on Ewa side; 8-foot parking lanes both sides; two 14-foot shared travel lanes (bike route). Improvements to be constructed within the existing ROW width.</p> 

**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

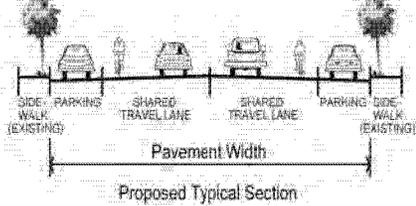
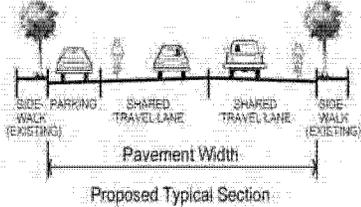
<p><b>Kaonohi Street</b> (Aiea)  (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Moanalua Road</p>	<p>80' ROW; 64' Pavement</p>	<p>5 lanes; sidewalks both sides; on-street parking on Ewa side.</p>	<p>1,700'</p>	<p>4.5-foot bike lanes both sides; five 11-foot travel lanes. Improvements will require removal of existing on-street parking. Improvements to be constructed within existing pavement width.</p> 
	<p>Between Moanalua Road and Pearl Country Club</p>	<p>80' ROW; 64' Pavement</p>	<p>4 lanes; sidewalks and on-street parking both sides.</p>	<p>2,500'</p>	<p>8-foot parking lanes both sides; 6-foot bike lanes both sides; two 12-foot travel lanes; 12-foot median. Improvements to be constructed within existing pavement width.</p> 
	<p>Between Pearl Country Club and Kahapili Street</p>	<p>60' ROW; 40' Pavement</p>	<p>2 lanes; sidewalks and on-street parking both sides.</p>	<p>3,000'</p>	<p><u>Short-Term Improvements:</u> 7-foot parking lanes both sides; two 13-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p><u>Long-Term Improvements:</u> Bike lanes in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999). Widening of the street within the existing ROW will be required to accommodate the bike lanes.</p>

**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

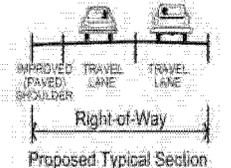
<p><b>Komo Mai Drive</b> (Aiea-Pearl City)  (City and County of Honolulu)</p>	<p>Between Kaahale Street and Hoohulu Street</p>	<p>60' ROW; 44' Pavement</p>	<p>2 lanes; sidewalks and on-street parking both sides.</p>	<p>4,500'</p>	<p><b>Option 1 (with on-street parking on one side):</b> 8-foot parking lane one side; 6-foot bike lanes both sides; two 12-foot travel lanes. Improvements to be constructed within existing pavement width.</p>  <p><b>Option 2 (with on-street parking on both sides):</b> 7-foot parking lanes on both sides; 5-foot bike lanes on both sides; two 10-foot travel lanes. Improvements to be constructed within existing pavement width.</p> 
	<p>Between Hoohulu Street and Hoolaulea Street</p>	<p>44' ROW; 28' Pavement</p>	<p>2 lanes; sidewalks both sides.</p>	<p>600'</p>	<p><b>Short-Term Improvements:</b> Two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p><b>Long-Term Improvements:</b> Bike lanes in accordance with the State's <i>Bike Plan Hawaii</i> (April 1994). Widening of the street within the existing ROW will be required to accommodate the bike lanes.</p>

<p align="center"><b>Table 5-4 (continued)</b>  <b>Proposed Pedestrian/Bicycle Circulation Plan</b></p>					
<p><b>Komo Mai Drive</b>                      (Aiea-Pearl City)                       (City and County of Honolulu)                       (continued)</p>	<p>Between Hoolaulea Street and Waimano Home Road</p>	<p>56' ROW;                      40' Pavement</p>	<p>2 lanes;                      sidewalks and on-street parking both sides.</p>	<p>2,600'</p>	<p>8-foot parking lane one side; 5-foot bike lanes both sides; two 11-foot travel lanes. Improvements to be constructed within existing pavement width.</p> <p align="center">Proposed Typical Section</p>
	<p>Between Waimano Home Road and Upper Auhuhu Street</p>	<p>54' to 72' ROW</p>	<p>2 lanes;                      sidewalks predominantly on both sides;                      on-street parking on both sides in certain areas;                      landscaped median between Aaniu Loop/Aamanu Street and Lower Aumakua Street.</p>	<p>13,700'</p>	<p><u>Between Waimano Home Road and Lower Aamanu Street:</u>                      Two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p> <p align="center">Proposed Typical Section</p> <p><u>Between Aaniu Loop/Aamanu Street and Lower Aumakua Street:</u>                      Two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p> <p align="center">Proposed Typical Roadway Section</p>

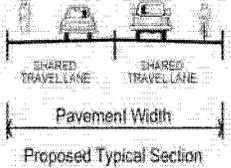
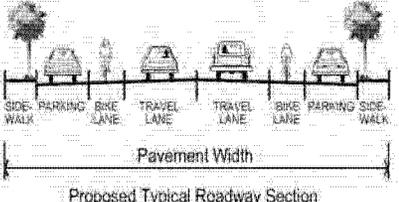
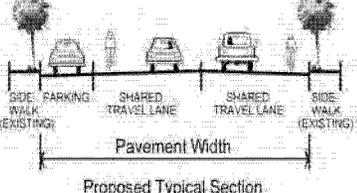
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Komo Mai Drive</b>                  (Aiea-Pearl City)                   (City and County of Honolulu)                   (continued)</p>	<p>Between Waimano Home Road and Upper Auhuhu Street (continued)</p>	<p>54' to 72' ROW</p>	<p>2 lanes; sidewalks predominantly on both sides; on-street parking on both sides in certain areas; landscaped median between Aaniu Loop/Aamanu Street and Lower Aumakua Street.</p>	<p>13,700'</p>	<p><u>Between Lower Aumakua Street and Upper Auhuhu Street:</u> 7- to 8-foot parking lanes on both sides; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p> 
<p><b>Kuahaka Street</b>                  (Pearl City)                   (City and County of Honolulu)</p>	<p>Between Waimano Home Road and Cane Haul Road</p>	<p>60' ROW;                  40' Pavement</p>	<p>2 lanes; sidewalks and on-street parking both sides.</p>	<p>4,300'</p>	<p>8-foot parking lane one side; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p> 
<p><b>Lehua Avenue</b>                  (Pearl City)                   (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Lehua Elementary School</p>	<p>80' ROW;                  31' Pavement</p>	<p>2 lanes; shoulders both sides; sidewalk on Diamond Head side; on-street parking on both sides.</p>	<p>1,600'</p>	<p><u>Short-Term Improvements:</u> Concrete sidewalk on Ewa side between First Street and Lehua Elementary School.  <u>Long-Term Improvements:</u> Bike lanes in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) and State's <i>Bike Plan Hawaii</i> (April 1994). Bike lanes to be developed in conjunction with the planning/design of the proposed Pearl City Town District development.</p>

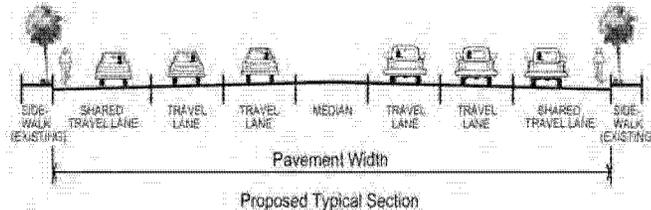
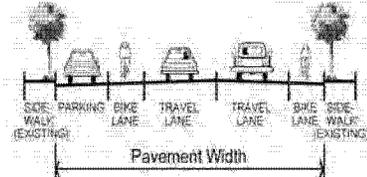
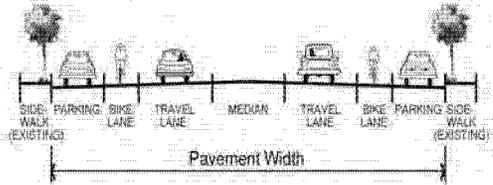
**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Moanalua Loop</b> (Aiea)</p> <p>(City and County of Honolulu)</p>	<p>Between Kaonohi Street and Moanalua Road</p>	<p>40' to 60' ROW; 21' Pavement</p>	<p>2 lanes; shoulders vary; on-street parking on both sides in certain areas.</p>	<p>2,100'</p>	<p>Concrete sidewalk on mauka side which would require <i>widening</i> within the existing ROW.</p>
<p><b>Moanalua Road</b> (Aiea-Pearl City)</p> <p>(Segment near Moanalua Freeway under jurisdiction of the State of Hawaii; remainder under jurisdiction of the City and County of Honolulu)</p>	<p>Between Waimano Home Road (Pearl City) and Halawa Heights Road (Aiea)</p>	<p>60' to 250' ROW</p>	<p>4 lanes; sidewalks both sides.</p>	<p>21,000'</p>	<p><u>Long-Term Improvements:</u> Bike lanes in accordance with the <i>City's Honolulu Bicycle Master Plan</i> (April 1999) and <i>State's Bike Plan Hawaii</i> (April 1994). Widening of the street within the existing ROW will be required to accommodate the bike lanes.</p>
<p><b>Napuanani Road</b> (Aiea)</p> <p>(City and County of Honolulu)</p>	<p>Off the Ewa side of Aiea Heights Drive fronting Napuanani Park</p>	<p>12' to 30' ROW; 10' to 25' Pavement</p>	<p>2 lanes; unpaved shoulders, mostly grassed.</p>	<p>1,150'</p>	<p>Improved shoulders (paved) on mauka side of road for shared <i>pedestrian</i>/bicycle use. Improvements to be constructed within existing ROW width.</p>  <p>The diagram, titled 'Proposed Typical Section', shows a cross-section of a road. On the left side, there is an 'IMPROVED (PAVED) SHOULDER'. To the right of the shoulder are two 'TRAVEL LANE's, each with a car icon. A horizontal line with arrows at both ends spans the width of the shoulder and the two travel lanes, labeled 'Right-of-Way'. Below the diagram is the text 'Proposed Typical Section'.</p>

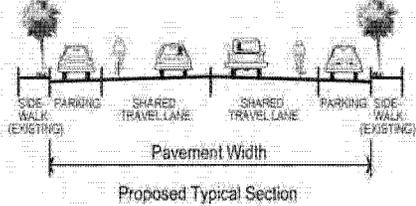
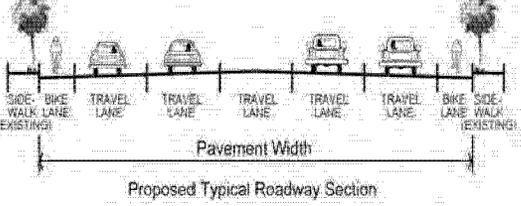
**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Noelani Street</b>                  (Pearl City)                   (City and County of Honolulu)</p>	<p>Between Waimano Home Road and Hoomalu Street</p>	<p>60' ROW;                  36' Pavement</p>	<p>2 lanes; unpaved shoulders both sides used for parking.</p>	<p>3,000'</p>	<p><b>Short-Term Improvements:</b> Two 14-foot shared travel lanes (bike route). Improvements to be developed within existing pavement width.</p>  <p><b>Long-Term Improvements:</b> Bike lanes in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999). Improvements to include 5-foot sidewalks on both sides; 8-foot parking lanes on both sides; 5-foot bike lanes on both sides; and two 12-foot travel lanes. Widening of the street within the existing ROW would be required to accommodate the proposed improvements.</p> 
<p><b>Noelani Street</b>                  (Pearl City)                   (City and County of Honolulu)                   (continued)</p>	<p>Between Hoomalu Street and Kaahumanu Street</p>	<p>60' ROW;                  36' Pavement</p>	<p>2 lanes; sidewalks and on-street parking on both sides.</p>	<p>3,200'</p>	<p><b>Short-Term Improvements:</b> 8-foot parking one side; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p><b>Long-Term Improvements:</b> Bike lanes in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999). Widening of the street within the existing ROW will be required to accommodate the bike lanes.</p>

**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p align="center"><b>Salt Lake Boulevard</b> (Aiea)</p> <p align="center">(City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Kahuapaani Street</p>	<p>60' to 100' ROW</p>	<p>6 lanes; 4 lanes along westbound segment between Stadium overflow parking lot and Kamehameha Highway; grassed median; sidewalks on both sides.</p>	<p>2,600'</p>	<p><b>Short-Term Improvements:</b> Shared travel lanes (bike route). Four 12-foot travel lanes (inside (left) and center lanes); two 14-foot outside (right) shared travel lanes. Improvements to be constructed within existing pavement width.</p>  <p align="center">Proposed Typical Section</p> <p><b>Long-Term Improvements:</b> Bike lanes on both sides in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) and State's <i>Bike Plan Hawaii</i> (April 1994). Widening of the street within the existing ROW would possibly be required to accommodate the bike lanes.</p>
<p align="center"><b>Ulune Street</b> (Aiea)</p> <p align="center">(City and County of Honolulu)</p>	<p>Between Kaamilo Street and Aiea Heights Drive</p>	<p>55' ROW; 39' to 40' Pavement (typical); 49' Pavement by Pull-Out Area</p>	<p>2 lanes; sidewalks and on-street parking both sides.</p>	<p>1,200'</p>	<p>7-foot parking lane one side; 5-foot bike lanes both sides; two 12-foot travel lanes. Improvements to be constructed within existing pavement width.</p>  <p align="center">Proposed Typical Section</p>
<p align="center">(City and County of Honolulu)</p>	<p>Between Kulawea Street and Kahuapaani Street</p>	<p>80' ROW; 64' Pavement</p>	<p>4 lanes; sidewalks and on-street parking both sides.</p>	<p>3,200'</p>	<p>8-foot parking lanes both sides; 6-foot bike lanes both sides; two 12-foot travel lanes; 12-foot median. Improvements to be constructed within existing pavement width.</p>  <p align="center">Proposed Typical Roadway Section</p>

**Table 5-4 (continued)**  
**Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Waihona Street</b> (Pearl City)  (City and County of Honolulu)</p>	<p>Mauka of Kamehameha Highway by Pearl City Industrial Park</p>	<p>60' ROW (w/in Industrial Park); 100' ROW (segment makai of Industrial Park); 43' to 44' Pavement</p>	<p>2 lanes; sidewalks on both sides; on-street parking on both sides in Industrial Park.</p>	<p>7,200'</p>	<p>7-foot parking lane one side; 8-foot parking lane one side; two 14-foot shared travel lanes (bike route). Improvements to be constructed within existing pavement width.</p>  <p>Proposed Typical Section</p>
<p><b>Waimano Home Road</b> (Pearl City)  (City and County of Honolulu)</p>	<p>Between Kamehameha Highway and Moanalua Road</p>	<p>75' ROW; 65' Pavement</p>	<p>4 to 5 lanes; sidewalks on both sides.</p>	<p>3,000'</p>	<p><u>Short-Term Improvements:</u> 5-foot bike lanes both sides; five 11-foot travel lanes. Improvements would be constructed within existing pavement width.</p>  <p>Proposed Typical Roadway Section</p> <p><u>Long-Term Improvements:</u> Bike lanes in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) and State's <i>Bike Plan Hawaii</i> (April 1994). Improvements to be developed in conjunction with the planning/design of the proposed Pearl City Town District development.</p>
	<p>Between Moanalua Road and Komo Mai Drive</p>	<p>60' to 70' ROW; 45' to 57' Pavement</p>	<p>Predominantly 4 lanes, with 5 lanes at intersections; sidewalks on both sides.</p>	<p>3,300'</p>	<p><u>Long-Term Improvements:</u> Bike lanes in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) and State's <i>Bike Plan Hawaii</i> (April 1994). Widening of the street within the existing ROW will be required to accommodate the bike lanes.</p>
	<p>Between Komo Mai Drive and Hookiekie Street</p>	<p>56' to 68' ROW; 25' Pavement</p>	<p>2 lanes; sidewalk on Diamond Head side.</p>	<p>3,000'</p>	<p>Sidewalk on Ewa side to be constructed within existing pavement width.</p>

<b>Table 5-4 (continued)</b> <b>Proposed Pedestrian/Bicycle Circulation Plan</b>					
<b>Trails</b>					
<b>Gateway at Blaisdell Park</b> (Pearl City)  (City and County of Honolulu)	From Kamehameha Highway (across Kaahumanu Street), makai through Blaisdell Park to the Pearl Harbor Bike Path.	-----	Neal Blaisdell Park.	900'	Shared-use path for pedestrians/bicyclists from Kamehameha Highway (across Kaahumanu Street), makai through Blaisdell Park to the Pearl Harbor Bike Path in accordance with the City's Honolulu Bicycle Master Plan (April 1999) (also referred to as Bike-Friendly Route 2 in the plan) and Pearl Harbor Historic Trail Master Plan (May 2001).
<b>Gateway at Kanuku Street</b> (Aiea)  (Private Landowners)	From Kamehameha Highway (across Kanuku Street), makai to the shoreline.	-----	Portion Harbor Center development.	850'	Shared-use path for pedestrians/bicyclists from Kamehameha Highway (across Kanuku Street) makai to the Pearl Harbor Bike Path and shoreline area in accordance with the City's Honolulu Bicycle Master Plan (April 1999) (also referred to as Bike-Friendly Route 3 in the plan) and Pearl Harbor Historic Trail Master Plan (May 2001). This long-term improvement would be developed in conjunction with future redevelopment of the area.
<b>Gateway at Pearl Kai Center</b> (Aiea)  (Private Landowners)	From Kamehameha Highway (across Pearlridge Shopping Center), makai to the Pearl Harbor Bike Path.	-----	Portion Kalauao Industrial Park and Pearl Kai Shopping Center.	600'	Shared-use path for pedestrians/bicyclists from Kamehameha Highway (across Pearlridge Shopping Center), makai to the Pearl Harbor Bike Path in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) (also referred to as Bike-Friendly Route 4 in the plan) and <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001). This long-term improvement would be developed in conjunction with future redevelopment of the area.
<b>Gateway at McGrew Point</b> (Aiea)	From Kamehameha Highway (at Honomanu Street)	-----	Portion Pearl Harbor Bike Path.	-----	Shared-use path/signage for pedestrians/bicyclists from Kamehameha Highway (across Honomanu Street), makai to the Pearl Harbor Bike Path in accordance with the City's <i>Honolulu Bicycle Master Plan</i> (April 1999) (also referred to as Bike-Friendly Route 4a in the plan) and <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001).

<b>Mauka trail along Kaimakani Street Right-of-Way</b> (Aiea)  (City and County of Honolulu)	From the Ulune Street intersection mauka to Halawa Heights	30' ROW	Unimproved right-of-way.	4,000'	Pedestrian path to be developed within the existing unimproved Kaimakani Street right-of-way mauka of Ulune Street to provide continuous mauka-makai access to Halawa Heights. The 30-foot right-of-way is reserved in favor of the United States of America. Development of the right-of-way into a pedestrian path would require coordination with the United States of America.
<b>Kalauao Stream</b> (Aiea)  (City and County of Honolulu and Various Private Landowners)	Along Kalauao Stream from the H-1 Freeway makai to the shoreline by Pearl Kai Shopping Center	-----	Kalauao Stream and various privately-owned properties.	4,200'	Greenway (shared-use path for pedestrians/bicyclists) to be developed along Kalauao Stream from the H-1 Freeway makai to the shoreline by Pearl Kai Shopping Center in accordance with the City's <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001). Development of this long-term improvement would also require coordination with the various private landowners whose properties Kalauao Stream traverses through.
<b>Trail along Pearl Harbor Shoreline from Lehua Avenue to Pearl Harbor Bike Path</b> (Pearl City)  (United States of America and Hawaiian Electric Company, Inc.)	From Lehua Avenue (makai of Lehua Community Park), Diamond Head along the Pearl Harbor shoreline	-----	U.S. Naval Reservation and Hawaiian Electric Company, Inc.'s Waiiau Power Plant facility.	3,500'	Greenway (shared-use path for pedestrians/bicyclists) to be developed from Lehua Avenue (makai of Lehua Community Park) and traversing Diamond Head along the Pearl Harbor shoreline, eventually connecting up to the Pearl Harbor Bike Path in the vicinity of HECO's Waiiau Power Plant in accordance with the City's <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001). Development of this long-term improvement would require coordination with and permission from the U.S. Navy and Hawaiian Electric Company, Inc.
<b>McGrew Point Trail</b> (Aiea)  (United States of America)	Makai of Pearl Harbor Bike Path, adjacent to Pa'aiau Fishpond within McGrew Point	-----	U.S. Naval Reservation (Navy housing development).	1,400'	Greenway (shared-use path for pedestrians/bicyclists) to be developed within McGrew Point, adjacent to the Pa'aiau Fishpond and future Cultural/Interpretive Center and continuing along the shoreline, in accordance with the City's <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001). Development of this long-term improvement would require coordination with and permission from the U.S. Navy.

**Table 5-4 (continued)  
Proposed Pedestrian/Bicycle Circulation Plan**

<p><b>Waiawa Stream</b> (Pearl City)  (United States of America)</p>	<p>Along Waiawa Stream from the Pearl Harbor Bike Path makai along Pearl City Peninsula</p>	<p>-----</p>	<p>U.S. Naval Reservation.</p>	<p>5,500'</p>	<p>Greenway (shared-use path for pedestrians/bicyclists) to be developed along Waiawa Stream from the Pearl Harbor Bike Path makai along the Pearl City Peninsula in accordance with the City's <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001). Development of this long-term improvement would require coordination with and permission from the U.S. Navy.</p>
<p><b>Waimalu Stream</b> (Aiea)  (City and County of Honolulu, State of Hawaii and Various Private Landowners)</p>	<p>Along Waimalu Stream from Kilinoe Street makai to the Pearl Harbor shoreline and makai along the Harbor Center development</p>	<p>-----</p>	<p>Waimalu Stream Flood Control project.</p>	<p>8,500'</p>	<p>Greenway (shared-use path for pedestrians/bicyclists) to be developed along Waimalu Stream from Kilinoe Street makai to the Pearl Harbor shoreline and makai along the Harbor Center development in accordance with the City's <i>Pearl Harbor Historic Trail Master Plan</i> (May 2001). Development of this long-term improvement would also require coordination with the various private landowners whose properties Waimalu Stream traverses through.</p>

Notes: \* ROW =Right-of-Way

### 5.2.3.3.1 Proposed Pedestrian Crossing Improvements

Within Aiea-Pearl City, two major locations currently pose pedestrian safety crossing concerns – along Moanalua Road and Kamehameha Highway in the vicinity of Pearlridge Shopping Center. In both locations, pedestrians encounter heavily traveled multiple-lane arterials. Given the pedestrian-oriented nature of the shopping center, improvements to provide for safe pedestrian crossing conditions are necessitated.

**Moanalua Road Pedestrian Crossing:** Moanalua Road in the vicinity of Pearlridge Shopping Center is currently a four-lane arterial with a center median/turn lane. An existing crosswalk on Moanalua Road immediately Diamond Head of the driveway access to the shopping center (across of Ualo Street) provides a mid-block crossing for pedestrians. In the nearby vicinity, the two nearest pedestrian crossings on Moanalua Road are located at the signalized intersections of Kaonohi Street and Pali Momi Street/Koauka Loop.

To provide for a safer mid-block pedestrian crossing, the proposed improvement involves upgrading the existing crosswalk on Moanalua Road near Ualo Street to an in-pavement flashing crosswalk with an actuated pedestrian walk signal to alert motorists of crossing pedestrians (see Figure 5-28). In addition, a raised curb within the median area is recommended to provide pedestrians with a safety refuge area while waiting to cross the street.

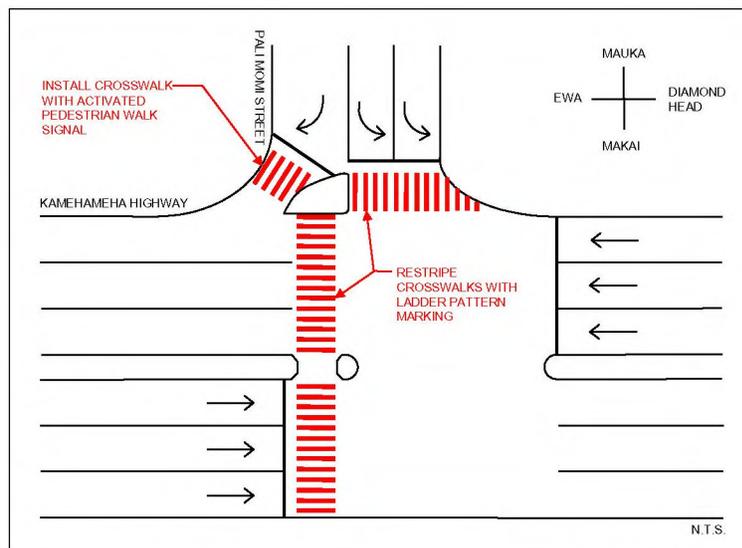


Figure 5-28 Kamehameha Highway at Pali Momi Street (East) Proposed Pedestrian Crossing

**Kamehameha Highway Pedestrian Crossing:** Kamehameha Highway in the vicinity of Pearlridge Shopping Center is a six-lane arterial with a median and turning lanes at the signalized intersections. Pedestrian crosswalks are currently provided at three signalized intersections along a 0.4 mile stretch of Kamehameha Highway in the vicinity of the shopping center – at Kaonohi Street, Lipoa Place and Pali Momi Street (East).

According to the State DOT's 1994-1998 pedestrian accident data, a relatively high number of accidents have occurred at the intersection of Kamehameha Highway/Pali Momi Street (East).

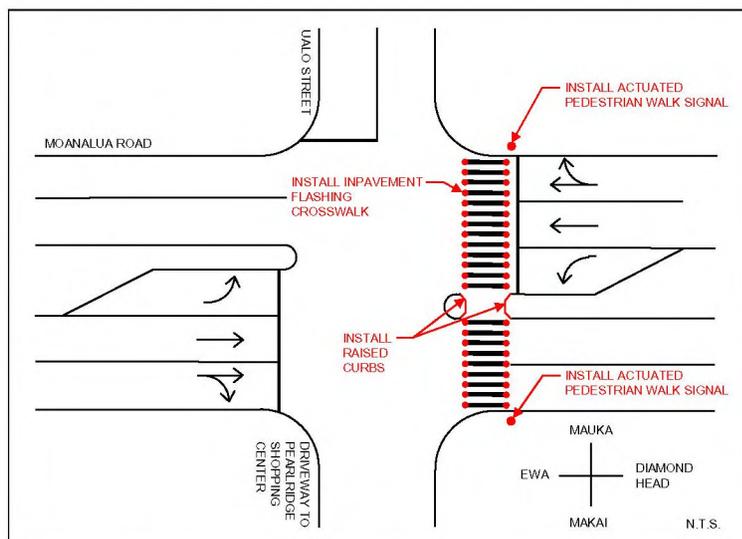


Figure 5-29 Moanalua Road at Ualo Street – Proposed Pedestrian Crossing Improvements

To improve pedestrian safety, the existing crosswalks along Kamehameha Highway and Pali Momi Street (East) are proposed to be restriped to the ladder pattern for increased visibility to motorists (see Figure 5-29). Additionally, a crosswalk marked in the ladder pattern is proposed to be installed within the right-turn lane of Pali Momi Street (East) at the Kamehameha Highway intersection along with an actuated pedestrian walk signal.

**Other Areas of Pedestrian Safety Crossing Concerns:** Various other locations in Aiea-Pearl City where safe pedestrian crossing is of concern have been raised. A notable location is in the vicinity of the Kamehameha Drive-In where pedestrians frequently jaywalk across Kaonohi Street and Moanalua Road during swap meet events, despite the presence of marked crosswalks at the intersection. Another relatively common occurrence involves motorists not yielding to pedestrians in marked crosswalks, especially near schools. In such instances, where appropriate pedestrian crossings are provided, it is recommended that police enforcement be implemented during the periods that such infractions frequently occur.

#### 5.2.3.3.2 Pedestrian/Bikeway Amenities

The provision of pedestrian/bicycle facilities should incorporate safety, attractiveness and convenience measures to encourage and promote usage. Amenities for pedestrians and bicyclists should be adequately illuminated and strategically located and incorporated in consideration of nearby facilities and land uses.

In an effort to encourage bicycling, the provision of bicycle parking facilities is an essential element. In general, provisions for bicycle parking should be considered at all major traffic generators, especially where vehicle parking is provided. Long-term bicycle parking facilities, preferably secured, should be provided at any potential public transit center facility to encourage intermodal travel. Short-term bicycle parking facilities would be needed at locations such as shopping centers and commercial areas, community facilities, and recreational areas. Such bicycle facilities should be convenient and located near building entrances or other highly visible areas which are self-policing.

Adequate signing and marking are essential, especially to alert bicyclists and pedestrians to potential conflicts. The use of guide signing to indicate destinations, directions and distances as

appropriate, should also be used. The use of pavement markings may be beneficial to indicate directions of travel.

All proposed pedestrian/bikeway improvements would be designed to meet the requirements of the Americans with Disabilities Act (ADA) Accessibility Guidelines.

# Aiea Pearl City Livable Communities Plan

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## IMPLEMENTATION PLAN

## **6. IMPLEMENTATION PLAN**

### **6.1 Introduction**

Following endorsement by the City and County of Honolulu Department of Planning and Permitting and the Aiea-Pearl City Community Vision Group and area Neighborhood Boards, the Aiea-Pearl City Livable Communities Plan will be submitted to the Honolulu City Council for consideration and adoption by City Council resolution. Once adopted, the Plan will provide the overall guidance for the implementation of land use, community design and transportation improvements for Aiea-Pearl City.

This Implementation Plan provides the framework and strategy for pursuing action and funding of the various land use, community design and transportation elements of the Livable Communities Plan. Other vision projects and master plan recommendations proposed or considered for funding by the Community Vision Group are also included in the Implementation Plan. The Plan's provisions will be implemented through a combination of public and private initiatives. The focus of the Implementation Plan is on establishing an overall timeframe, sequence and responsibilities for potential government actions which are proposed. The Implementation Plan also addresses the private sector actions which along with government actions help to achieve the goals of the Aiea-Pearl City Community Vision Group. The Implementation Plan helps to organize the Livable Communities Plan's recommendations such that community groups and interested parties can monitor the progress of and keep projects on track towards completion.

### **6.2 Relationship to Development Plan and Zoning**

The Aiea-Pearl City Livable Communities Plan is intended to provide guidance to City decisions on proposed developments seeking zoning and other regulatory approvals. Proposed developments should be consistent with the Livable Communities Plan if the site is within the Plan boundaries and specific land uses or design guidelines are applicable to the site. If there are no applicable references from the Livable Communities Plan, the Primary Urban Center Development Plan (PUC DP) would be the guiding document in development reviews.

As indicated in Sections 4.4.2.5 and 4.4.3.5, specific improvements recommended under the community design objectives for the Aiea and Pearl City Town Districts do not necessarily conform to the City's current development standards under the Land Use Ordinance (LUO) and other applicable City policies. These recommended improvements are intended to foster initiation of the process of tailoring the development standards accordingly in consideration of future amendments to the LUO and other relevant City policies.

#### **6.2.1 Amendments to the Livable Communities Plan**

Revisions or amendments to the Aiea-Pearl City Livable Communities Plan may need to be considered periodically, but the overall Plan should be reviewed at least every five years. Such review could be timed to coincide with the PUC Development Plan review.

There is also a need for continued monitoring to ensure the implementation of the Livable Communities Plan's recommendations. In addition to the Aiea-Pearl City Community Vision

Group, possibilities for the ongoing role could be in the form of new committees under the Aiea and Pearl City Neighborhood Boards or the Aiea and Pearl City Community Associations.

**6.3 Community Vision, City and County of Honolulu, and State of Hawaii-Initiated Projects**

A number of projects are planned for implementation in the Aiea-Pearl City area through the City’s Community Vision process for the Aiea-Pearl City Vision Group (Fiscal Years (FY) 2001, 2002 and 2003), the City’s Capital Improvement Projects (CIP) (FY July 1, 2000 to June 30, 2003), the State DOT Highways Statewide Transportation Improvement Program (STIP) (FY 2002, 2003 and 2004), the Oahu Transportation Improvement Program (TIP) (FY 2002 through 2004), and the State Legislature. The Oahu TIP describes and prioritizes the surface transportation programs and projects that the Oahu Metropolitan Planning Organization (OMPO) Policy Committee has selected for implementation during the program period. The Oahu TIP, as adopted by the Policy Committee and approved by the Governor (or his designee), is the Oahu element of the Statewide TIP (STIP). The STIP is the document upon which the Federal Department of Transportation bases its obligation of federal transportation funds for projects in Hawaii.

The projects programmed for the Aiea-Pearl City area include the following:

<b>Table 6-1 Programmed Projects Aiea-Pearl City Region</b>		
	<b>Project</b>	<b>Project Description</b>
<b>Aiea-Pearl City Vision Projects (FY 2001)</b>		
1	Aiea Town Center	Master plan (FY '01); passive park (FY '02)
2	Pearl City Gateway	Design and construction
3	Aiea Gateway	Design; construction (FY '02)
4	Palisades Community Park	Widen access road and parking lot
<b>Aiea-Pearl City Vision Projects (FY 2002)</b>		
5	50-Meter Swimming Pool and Support Facilities	Site selection and planning for a 50-meter swimming pool and support facilities in the Aiea/Pearl City District.
6	Bark Park	Bark Park and miscellaneous park improvements.
7	Waiau District Park Master Plan – Phases 1A and 3A	Phase 1A playing field expansion and Phase 3A parking lot expansion.
8	Aiea Gateway	Construction of Aiea entry/gateway on Moanalua Road, including landscaping, water feature and irrigation system.
9	Youth Skateboard Park	Site selection, master plan, and construction of a skateboard park in Pearl City.
10	Pearl Harbor Recreation Complex and Senior Center	Site selection, planning and design for a recreation complex and senior center, toddler program, multipurpose rooms, swimming pool, and playfields (soccer, baseball and football).

<b>Table 6-1 (continued) Programmed Projects Aiea-Pearl City Region</b>		
	<b>Project</b>	<b>Project Description</b>
<b>Aiea-Pearl City Vision Projects (FY 2003)</b>		
11	In-Line Hockey Rink	Design of a regulation in-line hockey court, including batter boards, fencing, score booth, bleachers, waste receptacles, and drinking fountains.
12	Pearl Harbor Historic Trail	Signage (directional, safety and informational) along the Trail; selective mangrove removal; and trail improvements to widen existing pathway
13	Waiiau District Park Master Plan – Phases 1A, 1B, and 1C	Design and construction for Phases 1A, 1B and 1C including grading, retaining wall, security fence, and walking/jogging path.
<b>City's Capital Improvement Projects (CIP) (FY July 1, 2000 to June 30, 2001)</b>		
14	Aiea Town Center	Land acquisition and master plan preparation.
15	Kuahaka Street, Auhuhu Street, Ulune Street, and Newtown Traffic Calming Improvements	Plan, design and construct traffic calming measures.
16	Resurfacing of streets at Aiea Heights Drive, Akaaka Street, Aumakua Street, Iliiee Street, Kaamilo Street, Komo Mai Drive, Kulawai Street, and Hoolaulea Street	Design, construct and inspect resurfacing and reconstruction of roadways.
17	Sidewalk Improvements at Aiea, specifically Kauhale Street	Acquire land, design and construct sidewalks.
18	Pacific Palisades Community Park (Pearl City)	Design and construct access road widening, parking lot expansion, park entrance security post, and recreation building repair.
19	Napuanani Neighborhood Park, Kaahele Community Park, Nahele Neighborhood Park, Pacific Palisades Community Park	Design, reconstruct, and refurbish play courts, play apparatus/areas, and paved surfaces.
20	Aiea District Park, Manana Neighborhood Park, Newtown Neighborhood Park, Pearl City Neighborhood Park, Lehua Community Park, replacement of Pacheco Neighborhood Park bleachers, and repair of Pearl City District Park swimming pool	Design and construct miscellaneous improvements.
21	Aloha Stadium Transit Center	Design transit center and park-and-ride lot.
22	Pearl Ridge Transit Center Development	Plan and design bus transit center and park-and-ride facilities at various locations.
23	Manana Sub-Area Traffic Study	Develop transportation planning study.
<b>City's Capital Improvement Projects (CIP) (FY July 1, 2001 to June 30, 2002)</b>		
24	Manana High Tech Park	Plan, design and construct improvements for development of a high tech park at Manana.
25	Acacia Road Widening	Widen mauka-bound Acacia Road from Kamehameha Highway to Kuala Street.
26	Aiea Heights Drive, 5-Way Intersection at Ulune Street	Design and construct intersection improvements.

<b>Table 6-1 (continued) Programmed Projects Aiea-Pearl City Region</b>		
	<b>Project</b>	<b>Project Description</b>
27	Aiea Heights Drive Sidewalk Improvements	Design and construct sidewalk improvements between upper and lower Ulune Street.
28	Moanalua Road Widening	Widen Moanalua Road between Kaahumanu Street and the H-1 Freeway on-ramp.
29	Kaonohi Street Rehabilitation	Design, rehabilitate and reconstruct roadway improvements.
30	Aiea Beautification	Design and construct landscape improvements on City properties, sidewalks, roadways, other public facilities and at Aiea Town Center.
31	Aiea/Pearl City Bark Park	Design and construct bark park in an existing City park.
32	Aiea/Pearl City Swimming Pool	Site selection and master plan for a 50-meter swimming pool.
33	Aiea/Pearl City Skateboard Park	Site selection, plan, design, and construct a skateboard park in a City park.
34	Manana Community Park and Youth Facility	Complete design and construct master planned park improvements, and provide related park equipment.
35	Manana Kai Neighborhood Park	Construct 10-stall parking lot and provide additional access to Park via Kuala Street Extension or Road D w/in City's Manana project.
36	Moanalua Road Beautification	Landscaping and irrigation between Aiea Heights Drive and Pali Momi Street.
37	Pacific Palisades Community Park	Construct additional parking stalls and concrete walkways. Widen access road and install parking and roadway lighting.
38	Pearl Harbor Recreation Complex	Plan and design a recreation complex.
39	Pearl Harbor Historic Trail	Acquire land, plan, design, and construct a recreational bike path along the Pearl Harbor Historic Trail, to include landscaping and rest/comfort station.
40	Halawa District Park and Pearl City District Park	Design and renovate recreational facilities to include multi-purpose buildings and gymnasiums.
41	Waiau District Park	Design park improvements and construct master plan improvements.
42	Pearl City/Aiea Transit Center	Acquire land, plan, design, and construct transit center.
<b>City's Capital Improvement Projects (CIP) (FY July 1, 2002 to June 30, 2003)</b>		
43	Kaonohi Street/Moanalua Road Intersection Improvements	Plan, design and construct traffic intersection improvements and modifications, and design, rehabilitate and reconstruct roadway improvements.
44	Pacific Palisades Community Park	Widen access road, construct additional parking and lighting.
45	Halawa District Park and Aiea District Park	Design and construct various improvements, such as lighting, paved surfaces, roof reconstruction, etc.

<b>Table 6-1 (continued) Programmed Projects Aiea-Pearl City Region</b>		
	<b>Project</b>	<b>Project Description</b>
46	Manana Neighborhood Park	Design and construct pool facility improvements.
47	Pacific Palisades Community Park	Design and reconstruct volleyball courts.
48	Pearl Harbor Historic Trail	Design and construct signage (directional, safety and informational) along the trail and mangrove removal from Halawa Landing area to Leeward Community College.
49	Kamehameha Highway Transit Corridor and Transit Centers	Plan transit corridor and transit centers improvements.
<b>State DOT Statewide Transportation Improvement Program (STIP) (FY 2002, 2003 and 2004) Oahu Transportation Improvement Program (TIP) (FY 2002 through 2004)</b>		
50	Interstate Route H-1 Rehabilitation and Resurfacing – Kaahumanu Street to Kaimakani Street	Repair concrete pavements and restore to original condition.
51	Interstate Route H-1 Seismic Retrofit – Kaonohi Street and Kaamilo Separation	Retrofit existing bridge superstructures to meet current design criteria.
52	Interstate Route H-1 Widening (Westbound) – Waimalu Viaduct to Pearl City Off-Ramp	Widen H-1 Freeway to 6 lanes in westbound direction from the Waimalu Viaduct to the Pearl City off-ramp, meeting current freeway standards.
53	Leeward Community College Access Improvements	Construct second access to Leeward Community College from Waipio Point Access Road along the existing roadway easement, continuing along an existing abandoned cane haul road, connecting to the southwest corner of the campus.
54	Aloha Stadium Transit Center	Develop major bus transfer center and park-and-ride lot at Aloha Stadium overflow lot at Salt Lake Boulevard and Kamehameha Highway.
55	Enhancement Elements at Islandwide Transit Centers – Pearl City/Aiea	Install transit enhancement elements at various transit centers in Pearl City/Aiea and other locations.
56	Islandwide Transit Centers – Pearl City/Aiea	Develop transit centers in Pearl City/Aiea and other locations.
<b>State Legislature Capital Improvement Projects (CIP) – Transportation Facilities</b>		
57	Kamehameha Highway Improvements – Waihona Street to Center Drive	Plans for traffic operational and other improvements, including traffic signal upgrade, sidewalk, bikeway, bridges, drainage, guardrail, and overhead signs.

#### 6.4 Plan Elements

This plan is intended to improve traffic-congested roadways, provide a more pedestrian-friendly environment, and revitalize the livability and character of the neighborhoods. Major components of the plan include community design and transportation projects, they will be implemented in various phases. The plan components are described below.

## **Community Design**

The community design plan analyzes major land uses for their development potential and capacity to define and serve the community. The plan also includes preparation of pedestrian streetscape guidelines for pathways and bikeways, landscape improvement recommendations for major roadways, and parks and open space needs. The community design objectives for both Aiea and Pearl City are a means of achieving the goals set forth in the Aiea-Pearl City Livable Communities Plan. Some of the general community design objectives, design guidelines and town district guidelines are listed below.

### **Community Design Objectives for Aiea-Pearl City:**

- Establish Town Districts, which will be the center of activity
- Create a pedestrian-oriented atmosphere with clear pedestrian-oriented connections to activities
- Beautify public spaces
- Create more green open spaces, especially around shorelines of Pearl Harbor
- Enhance open spaces and view of the Pearl Harbor shoreline and mountains
- Encourage economic revitalization through the designation of appropriate land uses and an enhanced physical environment, particularly along Lehua Avenue

### **General Design Guidelines for Aiea-Pearl City:**

- Maintain significant view corridors
- Retain natural topography and significant landscaping
- Place utilities underground wherever feasible

### **Town District Guidelines:**

- Allow mixed use developments
- Limit building heights to 40 feet
- Building and site design should be pedestrian friendly
- Redevelopment should reflect small town plantation architectural character
- Building façade should be close to the street
- Street furniture and lighting should reflect the character of the town
- Landscaping should be used to minimize views from the streets

In order for these guidelines to be implemented, the plan must first be endorsed by the City (plan endorsed by Council Resolution), design guidelines incorporated into the City's design review process, and the rezoning of the Town District areas pursued in order to facilitate plan implementation.

Projects considered important to implement in the near term also include major Vision Project initiatives such as the Aiea Town Center , Pearl Harbor Senior and Recreation Center, and projects implementing the Pearl Harbor Historic trail Master Plan. Landscape improvements along Moanalua Road and Aiea Heights Drive in Aiea are also proposed, along with the preparation of a revitalization plan for Lehua Avenue.

### **Traffic Improvement**

A traffic assessment was conducted of major streets in Aiea and Pearl City to focus on actions that would improve travel for area residents, including access within the commercial/business areas as well as to/from residential areas. The traffic assessment resulted in the following 15 sites for traffic improvement projects.

1. Kamehameha Highway at Pali Momi Street (East)
  - Traffic signal coordination
2. Kamehameha Highway at Pali Momi Street (West)
  - Traffic signal coordination
3. Kamehameha Highway at Kaonohi Street
  - Install traffic signal at the Kaonohi Street/Moanalua Loop intersection.
4. Kamehameha Highway at Kaahumanu Street
  - Adjust the timing of the traffic signals along the highway
5. Moanalua Road at Kaimakani Street
  - Narrow the roadway on the Ewabound approach of the intersection along Moanalua Road
6. Moanalua Road at Aiea Heights Drive
  - Allow right-turn movement from the Aiea Shopping Center onto Moanalua Road
7. Moanalua Road at Pali Momi Street/Koauka Street
  - Restripe Koauka Street with an exclusive left-turn lane to reduce vehicle confusion.
8. Moanalua Road at Kaonohi Street
  - Install right-turn pockets on approaches. Add a second left turn lane on Kaonohi Street mauka bound. Convert Pearlridge driveway to right-in/right-out only
9. Moanalua Road at Pono Street/Hekaha Street/Kaahele Street
  - Coordinate traffic signal timing, add a right turn lane on Moanalua onto Hekaha, and realign Pono Street to eliminate one intersection
10. Moanalua Road at Kaahumanu Street
  - Add a second left-turn pocket to the Diamond Head-bound approach on Moanalua. Add a third Ewa-bound lane Ewa of Kaahumanu Street
11. Moanalua Road at H-1 Freeway Off-Ramp (Pearl City Interchange)
  - Stripe a portion of the right-turn lane on Moanalua Road as a solid/dashed line to indicate that vehicles could merge into the lane, but not until clear of the solid line
12. Moanalua Road at Hoomalu Street
  - Modify the traffic signal to provide a right-turn arrow for mauka-bound vehicles on Hoomalu Street and restrict right turns on red
13. Kaahumanu Street between Kamehameha Highway and Moanalua Road
  - Install a two-way left-turn lane on Kaahumanu Street to provide turning vehicles with a refuge area. Remove on-street parking from one side of street
14. Moanalua Road extension over the Cane Haul Road

- This extension would create an alternative route from Pearl City to the H-1 Freeway Ewabound and to the H-2 Freeway
15. Options for H-1 freeway return loop past Pearl City
- The recommended route is to exit the H-1 Freeway Ewabound via Waipahu Exit 8B and then return to Pearl City via Farrington Highway and Kamehameha Highway

The projects that can be completed in the near term are targeted for areas along Kamehameha Highway and Moanalua Road. Some of these projects include adjusting the timing of various traffic signals; adding turn pocket lanes, striped parking and bus lanes; and installing raised medians and curb extensions.

### **Traffic Calming**

Traffic calming is a relatively new approach in Hawaii to address speeding and cut-through traffic that create a hazardous environment for motorists, pedestrians, bicyclists, and children within residential areas. Examples of traffic calming devices include full/partial street closures, median barriers, and forced turn islands. Visual devices to control speed include on-street parking, bicycle lanes, narrowed lanes, streetscaping, and colored/textured pavement. Physical speed control devices include speed humps/tables, raised crosswalks, roundabouts, raised island medians, curb extensions, and pedestrian refuge islands. The City has undertaken traffic calming projects at Manana on Kuahaka Street, Pacific Palisades at Auhuhu Street, Newtown Estates, Aiea Heights, and Kaamilo Street. Eight additional locations were identified as areas that need traffic calming improvements. They are:

- Ulune Street
- Komo Mai Drive
- Kaahumanu Street
- Waimano Home Road
- Hoomalu Street
- Hoolaulea Street
- Kaonohi Street
- Lehua Avenue

Short-term projects planned for Komo Mai Drive, Kaahumanu Street, and Ulune Street include striped parking, bike lanes on both sides of the street, raised medians and curb extensions. Mid-term traffic calming projects focus on sidewalks, on-street parking, bike lanes, and widening the two travel lanes.

### **Pedestrian/Bicycle**

The proposed pedestrian/bikeway circulation system is intended to effectively serve and connect schools, parks and other activity areas and destinations, as well as provide convenient access to the public transit system. The pedestrian/bikeway system is also intended to encourage alternative modes of travel between the various land use facilities in Aiea-Pearl City. The integration of the proposed bikeway system with other existing and planned bikeway systems in the area is intended to accommodate a broad range of bicyclists, including recreational, commuter/utilitarian, and bicycling enthusiasts. The proper placement of improved sidewalks and paths is also intended to encourage increased pedestrian activity between activity areas within the community.

The pedestrian/bicycle projects that take priority focus on parking lanes and bike lanes on both sides of the street; shared-use paths and signage for pedestrians/bicyclists; and pedestrian crossing improvements.

### **6.5 Implementation Phasing Plan**

An implementation phasing plan has been developed to indicate the general sequencing and responsible entities for implementing the various projects of the Aiea-Pearl City Livable Communities Plan. Other vision projects and master plan recommendations proposed or considered for funding by the Community Vision Group are also included in the Implementation Plan (see Table 6-2). The phasing plan is organized by the major plan components of Community Design and Transportation and is based on short-term (within 5 years), medium-term (5 to 10 years) and long-term (beyond 10 years) actions.

Estimated design and construction costs for the various projects are also included in Table 6-2. The costs are preliminary for budget purposes only and generally do not include planning and right-of-way acquisition costs which may be required in some areas.

### **6.6 Sources of Funding**

Funding for the various projects of the Aiea-Pearl City Livable Communities Plan will require pursuing a number of available funding sources to realize full implementation. The following is an overview of the potential sources for the development of the various projects.

A number of funding sources are available for transportation-related projects, including roadway improvement and bicycle/pedestrian facilities. On the federal level, federal funds are authorized through the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) for the maintenance and construction of highways, interstates and public roads. Distributed by the Federal Highway Administration (FHWA), these funds are provided through the following programs that may be applicable to projects in the Livable Communities Plan:

- National Highway System (NHS): Provides funding for improvements to rural and urban roads that are part of the NHS, including the interstate system and designated connections to major intermodal terminals.
- Bridge Replacement and Rehabilitation (BRR): Provides funds to assist the states in their programs to replace or rehabilitate deficient highway bridges and to seismic retrofit bridges located on any public road.
- Surface Transportation Program (STP): Provides flexible funding that may be used by states and localities for projects on any federal-aid highway, including NHS, bridge projects on any public road, transit capital projects and intracity and intercity bus terminals and facilities.
- Recreational Trails Program: Provides funds to develop and maintain recreational trails for motorized and non-motorized recreational trail users.

The principal source of State funds is through appropriations made by the State Legislature. Funds can be sought through general repair and maintenance projects in the State's operating budget or can be specifically sought through capital improvement programs. A key source of funding is from existing highway State revenues in which the State imposes taxes, fees and charges relating to the operation and use of motor vehicles on the public highways. These funds are deposited into the State Highway Special Fund and are used for acquisition, planning, design, construction, repair, and maintenance of the State Highway System. Specifically, the State Highway Special Fund provides funding for the following:

- Roadway construction for projects that are 100 percent funded with State funds
- Local match for federally funded projects

Table 6-2 Implementation Phasing Plan Aiea-Pearl City Livable Communities Plan					
	Project Name	Project Scope	Estimated Timeframe <sup>1</sup>	Estimated Costs <sup>2</sup>	Implementing Entity <sup>3</sup>
<b>I. Short-Term Projects (within 5 years) Community Design/ Vision</b>					
1	Livable Communities Plan	Endorsement of Livable Communities Plan by City Council Resolution.	1 yr	None	DPP, City Council, Vision Group
2	Aiea Town District Rezone	Rezoning of Town District area as recommended by Livable Communities Plan.	1 - 2 yrs	None	DPP, City Council, Vision Group
3	Pearl City Town District Rezone	Rezoning of Town District as recommended by Livable Communities Plan.	1 - 2 yrs	None	DPP, City Council, Vision Group
4	Aiea Heights Drive Pedestrian /Landscape Improvements	Sidewalk and landscaping on Aiea Hts Drive between Town Center site and Moanalua Road	2 yrs	\$35,000 (D) \$225,000 (C)	DDC, DTS
5	Moanalua Rd. Landscape Improvements (Aiea)	Landscaping along Moanalua Road between Aiea Heights Drive and Pali Momi Streets ( <i>also CVG FY'00 proposed</i> )	2 yrs	\$15,000 (P) \$25,000 (D) \$250,000 (C)	DDC, DTS
6	Lehua Avenue Revitalization Plan	Rezoning of Lehua Avenue area per Pearl City Town District guidelines	2 yrs	None	DPP, Vision Group
7	Interim Park Plan	Passive park and general field uses for gatherings and activities such as farmers markets, community festivals, and craft fairs. Landscaping w/gravel parking area. ( <i>CVG FY'02</i> )	1 - 2 yrs	\$25,000 (D) \$490,000 (C)	DDC, DPR, Vision Group
8	In-Line Skating Rink	Design and construct a regulation in-line hockey court (200 ft by 120 ft) incl. batter boards, fencing, score booth, bleachers. ( <i>CVG FY'03</i> )	1 - 3 yrs	\$100,000 (D) \$600,000 (C)	DPR, DDC, Vision Group
9	Aiea Skateboard Park	Construct a skateboard park for the Aiea area youth. ( <i>CVG FY'03 proposed</i> )	1 yr	\$10,000 (D) \$389,000 (C) \$1,000 (L)	DPR, DDC, Vision Group
<b>Pearl Harbor Historic Trail Master Plan</b>					
10	Trail Protection in Perpetuity	Rezone the trail right-of-way, designating the entire Trail as an historic corridor, creation of a special district, or acquiring the right-of-way. ( <i>PHHT</i> )	1 - 5 yrs	Land acquisition as needed	DPP, DDC, DOT, Navy, landowners
11	Trail Landscaping	Upgrade landscaping along Trail and at gateways and spurs. Develop landscape concept plan w/ DPR, prioritize improvements. Demonstration: Lehua Ave to Waipio Pt. Road ( <i>PHHT</i> )	1 - 2 yrs	To be determined w/DPR	DPR, BWS, landowners, DOT, Navy, Vision Group
12	Fishpond Restoration	Prepare restoration plan for Pearl Harbor fishponds (Pa'aiiau, Pa'akea, Pa'au'au) for feasible improvements and permit requirements ( <i>PHHT</i> )	1 yr	\$40,000 to \$100,000 (P)	DLNR, Navy, landowners, Vision Group, others

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

<b>Transportation Traffic Improvement Projects</b>					
13	Kaonohi St./ Kamehameha Hwy./Moanalua Loop	Adjust traffic signal timing; install traffic signal at Kaonohi St./Moanalua Loop intersection.	1 - 2 yrs	\$45,000 (D) \$295,000 (C)	DOT, DTS, DDC
14	Pali Momi St. (East to West)/Kamehameha Hwy.	Adjust traffic signal timing.	1 - 2 yrs	\$2,000 (D) \$10,000 (C)	DOT, DTS
15	Kaahumanu St./ Kamehameha Hwy.	Adjust traffic signal timing.	1 2 yrs	\$1,000 (D) \$6,000 (C)	DOT, DTS
16	Kaahumanu St./Moanalua Rd.	Add third Ewabound lane on Moanalua Rd. Ewa of Kaahumanu St. (possible right-of-way acquisition); add second left-turn pocket on Diamond Head-bound approach; extend Ewabound right-turn pocket.	6 mon - 2 yrs	\$60,000 (D) \$445,000 (C)	DTS, DDC
17	Kaonohi St./Moanalua Rd.	Add right-turn pockets on the Diamond Head, mauka and Ewa approaches; add second left-turn lane on maukabound approach (possible right-of-way acquisition from Kamehameha Drive-In site); physically restrict left-turn movements into/out of Pearlridge Shopping Center driveway on Kaonohi St. near intersection.	6 mon - 2 yrs	\$75,000 (D) \$510,000 (C)	DTS, DDC
18	Pono St./Hekaha St./ Kaahale St./Moanalua Rd.	Adjust traffic signal timing; relocate existing crosswalk on Moanalua Rd. Ewa of Hekaha St.; add third Diamond Head-bound lane on Moanalua Rd. between Kaahale St. and Hekaha St. through restriping.	6 mon - 1 yr	\$10,000 (D) \$60,000 (C)	DTS, DDC
19	Kaahumanu St. (Moanalua Rd. to Kamehameha Hwy.)	Install two-way left-turn lane on Kaahumanu St. to provide refuge area; extend "No Parking" zone on Ewa/mauka corner to facilitate right-turns onto Kamehameha Hwy.	1 - 2 yrs	\$15,000 (D) \$85,000 (C)	DTS, DDC
<b>Traffic Calming Projects</b>					
20	Komo Mai Dr. (Kaahale to Waimano Home Road)	Striped parking and bike lanes both sides; raised medians and curb extensions at desired locations.	1 yr	\$35,000 (D) \$245,000 (C)	DTS, DDC
21	Komo Mai Dr. at Hoolaulea intersection	Single-lane roundabout to replace traffic signal controlled intersection to reduce speeds while maintaining traffic flow	2 - 3 yrs	\$5,000 (D) \$20,000 (C)	DTS, DDC
22	Kaahumanu St.	Striped parking and bike lanes; raised medians and curb extensions at desired locations.	6 mon	\$30,000 (D) \$185,000 (C)	DTS, DDC
23	Ulune St.	Striped parking and bike lanes both sides; raised medians and curb extensions at desired locations.	1 - 2 yrs	\$20,000 (D) \$115,000 (C)	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

<b>Pedestrian/Bicycle Circulation Plan</b>					
24	Aiea Heights Dr. (Lower Ulune St. to Upper Ulune St.)	Sidewalks both sides; parking lane one side; bike lanes both sides; two travel lanes (widening w/in existing ROW).	2 - 3 yrs	\$39,000 (D) \$260,000 (C)	DTS, DDC
25	Kaahahele St. (Moanalua Rd. to Komo Mai Dr.)	Parking lanes both sides; bike lanes both sides; two travel lanes; landscaped/striped median; bulbouts and roundabout at various intersections (based on City Dept. of Transportation Services' <i>Newtown Traffic Calming Charette Final Report</i> dated July 2001).	DTS to prioritize, determine	DTS to determine	DTS, DDC
26	Komo Mai Dr. (Kaahahele St. to Hoohulu St.)	<u>Option 1</u> : Parking lane one side; bike lanes both sides; two travel lanes (w/in existing pavement width).	<u>Option 1</u> : 1 year	<u>Option 1</u> : \$13,000 (D) \$85,000 ©	DTS, DDC
		<u>Option 2</u> : Parking lane both sides; bike lanes both sides; two travel lanes (w/in existing pavement width).	<u>Option 2</u> : 1 year	<u>Option 2</u> : \$16,000 (D) \$102,000 ©	DTS, DDC
27	Komo Mai Dr. (Hoohulu St. to Hoolaulea St.)	Two travel lanes (bike route) (w/in existing pavement width).	6 months	\$2,000 (D) \$9,000 ©	DTS, DDC
28	Komo Mai Dr. (Hoolaulea St. to Waimano Home Rd.)	Parking lane one side; bike lanes both sides; two travel lanes (w/in existing pavement width).	1 yr	\$8,000 (D) \$55,000 ©	DTS, DDC
29	Kaahumanu St. (Kamehameha Hwy. To Moanalua Rd.)	<u>Option 1 (w/on-street parking)</u> : Parking lane both sides; two inside travel lanes; two outside shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$5,000 (D) \$30,000 ©	DTS, DDC
30	Kaahumanu St. (Moanalua Rd. to Hookanike St.)	Parking lane both sides; two inside travel lanes; two outside shared travel lanes (bike route) (w/in exist. Pavement width).	6 mon	\$8,000 (D) \$50,000 ©	DTS, DDC
31	Kaahumanu St. (Hookanike St. to Hoolauae St.)	Parking lane both sides; bike lanes both sides; two travel lanes; median (w/in existing pavement width).	6 mon	\$9,000 (D) \$58,000 ©	DTS, DDC
32	Ulune St. (Kulawea St. to Kahuapaani St.)	Parking lane both sides; bike lanes both sides; two travel lanes; median (w/in existing pavement width).	1 - 2 yrs	\$14,000 (D) \$90,000 ©	DTS, DDC
33	Waimano Home Rd. (Kamehameha Hwy. To Moanalua Rd.)	Bike lanes both sides; five travel lanes (w/in existing pavement width).	1 yr	\$13,000 (D) \$83,000 ©	DTS, DDC
34	Kamehameha Hwy. (From Waihona St. to Aiea Access Road/Aloha Stadium)	Six travel lanes, including two outside shared travel lanes (bike route); median (w/in existing pavement width).	1 - 2 yrs	\$72,000 (D) \$480,000 ©	DOT
35	Gateway at McGrew Point	Shared-use path/signage for pedestrians/bicyclists from Kamehameha Hwy. Makai to Pearl Harbor Bike Path.	6 mon	\$600 (D) \$3,500 ©	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

36	Noelani St. (Waimano Home to Hoomalu)	Two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$3,000 (D) \$18,000 ©	DTS, DDC
37	Noelani St. (Hoomalu to Kaahumanu St.)	Parking lane one side; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$5,000 (D) \$31,000 ©	DTS, DDC
38	Kaonohi St. (Kamehameha Hwy. to Moanalua Rd.)	Bike lanes both sides; five travel lanes; removal of existing on-street parking (w/in existing pavement width).	1 - 2 yrs	\$8,000 (D) \$50,000 (C)	DTS, DDC
39	Hookanike St. (Kaahumanu to Hoomalu St.)	Parking lane both sides; two shared travel lanes (bike route) (w/in existing pavement width).	6 mon	\$5,000 (D) \$32,000 (C)	DTS, DDC
40	Hoomalu St. (Hookanike to Komo Mai Dr.)	Two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$2,000 (D) \$12,000 (C)	DTS, DDC
41	Hoomalu St. (Waimano Home Rd. to Moanalua Rd.)	Sidewalks both sides; parking lane both sides; bike lanes both sides; two travel lanes (widening w/in existing ROW).	2 yrs	\$114,000 (D) \$760,000 (C)	DTS, DDC
42	Hoomaemae St. (Waimano Home - Hoolaulaea)	Two shared travel lanes (bike route) (w/in existing pavement width). Reconstruct curb fronting Highlands Middle School.	1 yr	\$13,000 (D) \$87,000 (C)	DTS, DDC
43	Lehua Ave. (Kamehameha Hwy. to Lehua Elem School)	Concrete sidewalk on Ewa side between First Street and Lehua Elementary School.	6 mon	\$36,000 (D) \$238,000 (C)	DTS, DDC
<b>Pedestrian Crossing Improvements</b>					
44	Aiea Shoreline Access	Conduct a planning study to identify and delineate a right-of-way from the Aiea area to and across Kamehameha Highway, including the feasibility of a pedestrian bicycle overpass or underpass across the highway.	9 mon	\$50,000	DTS, DOT
45	Kamehameha Hwy. (at Intersection of Pali Momi St. (East))	Restripe existing crosswalks along Kamehameha Hwy. and Pali Momi St. (East) to ladder pattern; install ladder pattern crosswalk w/in right-turn lane of Pali Momi St. (East) w/actuated pedestrian walk signal.	6 mon	\$3,000 (D) \$15,000 (C)	DOT, DTS, DDC
46	Moanalua Rd. (Pearlridge Shopping Center across of Ualo St.)	Upgrade existing crosswalk on Moanalua Rd. to in-pavement flashing crosswalk w/actuated pedestrian walk signal; install raised curb w/in median area.	6 mon	\$7,000 (D) \$42,000 (C)	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

**II. Mid-Term Projects (5 to 10 years)**  
**Community Design/Vision**

1	Moanalua Rd./Aiea Heights Dr. Intersection	Intersection landscape/streetscape improvements.	1 - 2 yrs	\$50,000 (D) \$350,000 (C)	DDC, DTS
2	Street Tree Program Implementation	Plan, Design, and Planting of Street Trees along major roadways – Kahuapaani, Halawa, Aiea Hts Drive, Kaonohi, Kaahele, Kaahumanu, Waimano Home Road, Komo Mai, Ulune	1 - 5 yrs	\$3,000 per 100 LF	DOT, DDC, DTS
3	Urban Trail Planning and Preliminary Design	Feasibility planning and preliminary design for an urban trail system through the community	1 yr	\$100,000 (P)	DDC, City DPR, DPP, Landowners
4	Moanalua Rd. Landscape Improvements (Pearl City)	Planting of street trees and 6-foot grass parkway on Moanalua Road: Hoomalu St. to Waimano Home Road	1 yr	\$40,000 (D) \$280,000 (C)	DDC, DTS
5	Kamehameha Hwy. Beautification	Landscape/pedestrian improvements per DOT Kamehameha Highway Improvements Project plan.	3 yrs	To be determined	DOT
6	Waimano Home Rd./Kamehameha Hwy.	Intersection landscape/streetscape improvements.	18 mon	\$50,000 (D) \$350,000 (C)	DOT, DDC, DTS
7	Kamehameha Hwy. Gateway	Gateway on Kamehameha Hwy. near Waimano Home Rd. intersection	1 yr	\$15,000 (D) \$100,000 (C)	DOT
8	50 Meter Swimming Pool	Develop a 50-meter swimming pool to serve the region, including a competition general pool, wading pool, support facilities including restroom/shower, storage and parking. (CVG FY'02 Planning)	3 - 5 yrs	\$75,000 (P) \$100,000 (D) \$7,000,000 (C)	DDC, DPR, Vision Group
<b>Pearl Harbor Historic Trail</b>					
9	Trail Realignment – Harbor Center and near HECO Plant	Realign Trail bicycle/pedestrian path to Harbor Center shoreline and closer to shoreline east of Lehua Avenue near HECO's Waiawa power plant. (PHHT)	2 - 3 yrs	Undetermined	DDC, Vision Group
10	Trail Amenities	Add more Trail amenities: benches, water fountains, landscaping and signage. (PHHT)	1 - 2 yrs	Undetermined	DDC, DPR
11	Trail Realignment – Admiral Boathouse	Realign bike path behind CINCPACFLT Admiral's Boathouse. Investigate relocation of Boathouse to Ford Island. (PHHT)	1 - 2 yrs	Undetermined	DDC, Vision Group
12	Stream Bridge Improvements	Refurbish stream bridges along Trail that are aging or need repair. Widen and enhance bridges for multiple users. (PHHT)	3 - 5 yrs	Undetermined	DDC, DPP, Vision Group
13	Recreational Boating	Explore with Navy limited recreational boating in East Loch from Blaisdell Park or a redeveloped Harbor Center. (PHHT)	1 - 2 yrs	None	DPP, DPR, Vision Group
14	Traffic Calming for Trail Crossings	Add raised crosswalks to slow traffic when Trail intersects roadways (Harbor Center, other areas) (PHHT)	1 - 2 yrs	Undetermined	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

<b>Aiea Town Center Master Plan</b>					
15	Aiea Town Center, Ph. I	Community center, meeting rooms, covered walkways, portion of malls, plaza, parking and drop-off areas, landscaping, site work <i>(Aiea Town Center MP)</i>	3 - 4 yrs	\$660,000 (D) \$4,400,000 (C)	DDC, DPP, Vision Group
16	Aiea Town Center, Ph. II	Daycare center, covered walk, portions of mall, landscaping <i>(Aiea Town Center MP)</i>	2 yrs	\$180,000 (D) \$1,200,000 (C)	DDC, DPP, Vision Group
<b>Waiau District Park Master Plan</b>					
17	Waiau District Park, Ph. 1D	Construct new parking lot fronting Kaahumanu St. (18 stalls) <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$10,000 (D) \$104,000 (C)	DPR, DDC
18	Waiau District Park, Ph. 2A	Construct walking/jogging path 1,100 lf Construct new comfort station at middle terrace <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$32,000 (D) \$332,000 (C)	DPR, DDC
19	Waiau District Park, Ph. 2B	Construct walking/jogging path, 1,600 lf <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$10,000 (D) \$101,000 (C)	DPR, DDC
20	Waiau District Park, Ph. 2C	Construct stairway from upper terrace courtyard to middle terrace; handicap ramp connection <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$15,000 (D) \$158,000 (C)	DPR, DDC
21	Waiau District Park, Ph. 3A	Construct new parking lot at lower terrace area (15 stalls) <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$8,000 (D) \$86,000 (C)	DPR, DDC
22	Waiau District Park, Ph. 3B	Replace drainage swale with underground drainage system Construct new parking lot at lower terrace (62 stalls) Construct walking/jogging path (250 lf) <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$40,000 (D) \$426,000 (C)	DPR, DDC
23	Waiau District Park, Ph. 3C	Construct 18-foot wide driveway, 1,800 SF maintenance building and yard <i>(Waiau Park Plan)</i>	1 - 2 yrs	\$15,000 (D) \$142,000 (C)	DPR, DDC
24	Waiau District Park, overall	Landscaping and irrigation <i>(Waiau Park Plan)</i>	5 yrs	\$15,000 (D) \$158,000 (C)	DPR, DDC
<b>Transportation Traffic Improvement Projects</b>					
25	Kaimakani St./Moanalua Rd.	Roadway narrowing on Ewabound approach through striping and landscaping to reduce speed; restrict maukabound approach to through traffic.	1 yr	\$5,000 (D) \$25,000 (C)	DTS, DDC
26	H-1 Freeway Off-Ramp/ Moanalua Rd.	Restripe portion of right-turn lane on Moanalua Rd. as solid/dashed line to restrict lane changes into Hoomalu St. left-turn pocket.	3 mon	N/A (D) \$2,000 (C)	DTS, DDC
27	Hoomalu St./Moanalua Rd.	Modify traffic signal to provide right-turn arrow for mauka-bound vehicles on Hoomalu St. and restrict right turns on red.	3 mon	\$5,000 (D) \$25,000 (C)	DTS
28	Pali Momi St./Koauka St./ Moanalua Rd.	Restripe Koauka St. approach with exclusive left-turn lane; optimize traffic signal timing at intersection.	3 mon	\$3,000 (D) \$15,000 (C)	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

<b>Traffic Calming Projects</b>					
29	Hoolaulea St.	Sidewalks, on-street parking, bikes lanes, and two travel lanes (widening w/in existing ROW).	2 yrs	\$16,000 (D) \$104,000 (C)	DTS, DDC
30	Hoomalu St.	Sidewalks, on-street parking, bike lanes, and two travel lanes (widening w/in existing ROW).	2 yrs	\$10,000 (D) \$65,000 (C)	DTS, DDC
31	Kaonohi St.	Striped on-street parking and bike lanes; raised medians and curb extensions at desired locations.	1 yr	\$22,000 (D) \$145,000 (C)	DTS, DDC
<b>Pedestrian/Bicycle Circulation Plan</b>					
32	Kaahumanu St. (Kamehameha Hwy. to Moanalua Rd.)	<u>Option 2 (w/o on-street parking)</u> : One center turn lane; two inside travel lanes; two outside shared travel lanes (bike route) (w/in existing pavement width).	1 - 2 yrs	\$3,800 (D) \$25,000 (C)	DTS, DDC
33	Aiea Heights Dr. (Moanalua Rd. to Lower Ulune St.)	Bike lanes both sides; two travel lanes (w/in existing pavement width).	2 - 3 yrs	\$3,000 (D) \$18,000 (C)	DTS, DDC
34	Aiea Heights Dr. (Upper Ulune St. to Hoio St.)	Sidewalks both sides; parking lane one side; two shared travel lanes (bike route) (widening w/in existing ROW).	2 yrs	\$46,000 (D) \$303,000 (C)	DTS, DDC
35	Hoolaulea St. (Waimano Home Rd. to Komo Mai Dr.)	Sidewalks both sides; parking lane one side; bike lanes both sides; two travel lanes (widening w/in existing ROW).	2 yrs	\$255,000 (D) \$1.7 mill. (C)	DTS, DDC
36	Hoomalu St. (Moanalua Rd. to Hookanike)	Sidewalks both sides; two shared travel lanes (bike route) (widening w/in existing ROW).	2 yrs	\$62,000 (D) \$410,000 (C)	DTS, DDC
37	Gateway at Blaisdell Park	Shared-use path from Kamehameha Hwy. makai through Blaisdell Park to Pearl Harbor Bike Path	1 yr	\$8,600 (D) \$57,000 (C)	DDC, DTS, DPR
38	Newtown Traffic Calming - Kaahele St. (Moanalua Rd. to Komo Mai Dr.)	Parking lanes both sides; bike lanes both sides; two travel lanes; landscaped/striped median; bulbouts and roundabout at various intersections (based on City Dept. of Transportation Services' <i>Newtown Traffic Calming Charette Final Report</i> dated July 2001).	DTS to determine	DTS to determine	DTS, DDC
39	Kaonohi St. (Moanalua Rd. to Pearl Country Club)	Parking lane both sides; bike lanes both sides; two travel lanes; median (w/in existing pavement width).	1 yr	\$11,000 (D) \$68,000 (C)	DTS, DDC
40	Kaonohi St. (Pearl Country Club to Kahapili St.)	Parking lane both sides; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$7,000 (D) \$41,000 (C)	DTS, DDC
41	Halawa Heights Rd. (Ulune St. to Kaholi Pl.)	Parking lane both sides; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$7,000 (D) \$41,500 (C)	DTS, DDC
42	Ulune St. (Kaamilo St. to Aiea Heights Dr.)	Parking lane one side; bike lanes both sides; two travel lanes (w/in existing pavement width).	1 yr	\$4,000 (D) \$27,000 (C)	DTS, DDC
43	Halewiliko St. (Aiea Heights Dr. to Kulaweia St.)	Bike lanes both sides; two travel lanes (w/in existing pavement width).	6 mon	\$3,000 (D) \$18,000 (C)	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)**  
**Aiea-Pearl City Livable Communities Plan**

44	Kaahahele St. (Komo Mai Dr. to Hiliu Pl.)	Parking lanes both sides; bike lanes both sides; two travel lanes; bulbouts at various intersections (based on City Dept. of Transportation Services' <i>Newtown Traffic Calming Charette Final Report</i> dated July 2001).	DTS to determine based on prioritization	DTS to determine	DTS, DDC
45	Kaamilo St. (Aiea Heights Dr. to curve makai of Kalawina Pl.)	Two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$2,000 (D) \$8,000 (C)	DTS, DDC
46	Kaamilo St. (From road curve makai of Kalawina Pl. to Moanalua Rd.)	Parking lane one side; bike lanes both sides; two travel lanes (w/in existing pavement width).	1 yr	\$23,000 (D) \$150,000 (C)	DTS, DDC
47	Waimano Home Rd. (Komo Mai Dr. to Hookiekie St.)	Sidewalk on Ewa side (w/in existing pavement width).	6 mon	\$56,000 (D) \$370,000 (C)	DTS, DDC
48	Komo Mai Dr. (Waimano Home Rd. to Aaniu Loop/Lower Aamanu St.)	Two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$4,800 (D) \$26,000 (C)	DTS, DDC
49	Komo Mai Dr. (Aaniu Lp./Lower Aamanu St. to Lower Aumakua St.)	Two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$2,000 (D) \$13,000 (C)	DTS, DDC
50	Komo Mai Dr. (Lower Aumakua St. to Upper Auhuhu St.)	Parking lanes both sides; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$14,000 (D) \$90,000 (C)	DTS, DDC
51	Auhuhu St. (Komo Mai Dr.)	Parking lane one side; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$8,000 (D) \$53,000 (C)	DTS, DDC
52	Kaimakani St. (Moanalua Rd. to Ulune St.)	Parking lane one side; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$3,000 (D) \$17,000 (C)	DTS, DDC
53	Kuahaka St. (Waimano Home Rd. to Cane Haul Rd.)	Parking lane one side; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$6,000 (D) \$39,000 (C)	DTS, DDC
54	Salt Lake Blvd. (Kamehameha Hwy. to Kahuapaani St.)	Four inside and center travel lanes; two outside shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$7,000 (D) \$46,000 (C)	DTS, DDC
55	Waihona St. (Mauka of Kamehameha Hwy. by Pearl City Industrial Park)	Parking lane both sides; two shared travel lanes (bike route) (w/in existing pavement width).	1 yr	\$14,000 (D) \$92,000 (C)	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)  
Aiea-Pearl City Livable Communities Plan**

<b>III. Long-Term Projects (beyond 10 years) Community Design/Vision</b>					
1	Urban Trail	Urban trail construction.	2 yrs	To be determined	DDC, City DPR, DPP, Landowners
2	Aiea Shoreline Access and Pedestrian Bridge	Right-of-Way acquisition and pedestrian bridge across Kamehameha Highway to improve shoreline access to Aiea	3 yrs	\$130,000 D \$850,000 C	DOT
<b>Pearl Harbor Historic Trail</b>					
3	Trail along Pearl Harbor Shoreline from Lehua Ave. to Pearl Harbor Bike Path	Greenway (shared-use path for pedestrians/bicyclists) from Lehua Avenue east along Pearl Harbor shoreline (coordination w/ U.S. Navy and HECO)	3 - 5 yrs	\$37,000 (D) \$241,000 (C)	DTS, DDC, DPP, U.S. Navy, HECO
4	Expand Historic Railway	Expand historic railway to Halawa Landing and to Nanakuli. Pursue funding and prepare detailed studies. (PHHT)	10 yrs +	Undetermined	DDC, DOT, Railway Society, Others
5	Implement Fishpond Restoration	Restore Pearl Harbor fishponds (Pa'aiau, Pa'akea, Pa'au'au) per Restoration Plan (PHHT)	5 - 10 yrs	To be determined	DLNR, Navy, land-owners, Vision Group, others
6	Pearl Kai Marsh Restoration	Restore marsh adjacent to the Trail at Pearl Kai Shopping Center (former Opu Fishpond site/Kalua'oa Springs). (PHHT)	3 - 5 yrs	Undetermined	DLNR, land-owners, others
7	Stream Restoration	Clean up streams flowing into Pearl Harbor and create greenway paths and features (nature park, overlooks, children's education centers). (PHHT)	3 - 5 yrs	Undetermined	DPR, DPP, DDC, DLNR, Navy, Vision Group
8	Water Resources Conservation Plan	Prepare water resources conservation plan for landscape and development improvements along the Trail. Address ahupua'a water quality issues and long term flooding. (PHHT)	1 - 2 yrs	Undetermined	DLNR, BWS, DPR, DDC, DPP
9	Railway Station Development	Plan, design and construct railway train stations at Lehua Avenue, Harbor Center, and Halawa Landing. (PHHT)	5 - 10 yrs	Undetermined	DPP, DDC, Vision Group, Others
<b>Transportation Traffic Improvement Projects</b>					
10	Aiea Heights Dr./Moanalua Rd.	Reconstruct Aiea Shopping Center driveway at Moanalua Rd. to allow right-turn movement.	6 mon	\$5,000 (D) \$25,000 (C)	DTS, DDC, Aiea Shopping Center
11	Pono St./Hekaha St./Kaahele St./Moanalua Rd.	Realign Pono St. intersection to align with Hekaha St. (to be undertaken in conjunction with DOT's Waimalu Viaduct widening project).	2 yrs	DOT to determine	DOT, DTS
<b>Traffic Calming Projects</b>					
12	Waimano Home Rd.	Provision of bike lanes.	5 - 10 yrs	\$305,000 <sup>4</sup>	DTS, DDC

**Table 6-2 Implementation Phasing Plan (continued)  
Aiea-Pearl City Livable Communities Plan**

<b>Pedestrian/Bicycle Circulation Plan</b>					
13	Kanuku St. (Kamehameha Hwy. to Hekaha St.)	Sidewalk on Ewa side; parking lanes both sides; two shared travel lanes (bike route) (widening w/in existing ROW).	2 - 3 yrs	\$52,000 (D) \$346,000 (C)	DTS, DDC
14	Honomanu St. (Kamehameha Hwy. to Moanalua Rd.)	Sidewalk on Ewa side; parking lane one side; bike lanes both sides; two travel lanes (widening w/in existing ROW).	2 - 3 yrs	\$20,000 (D) \$130,000 (C)	DTS, DDC
15	Noelani St. (Waimano Home Rd. to Hoomalu St.)	Sidewalks both sides; parking lane both sides; bike lanes both sides; two travel lanes (widening w/in existing ROW).	2 yrs	\$81,000 (D) \$540,000 (C)	DTS, DDC
16	Aiea Heights Dr. (Hoi St. to Kaupili Pl.)	Improved shoulders (paved) both sides for shared pedestrian/bicycle use (widening w/in existing ROW).	2 - 3 yrs	\$140,000 (D) \$931,000 (C)	DTS, DDC
17	Halawa Heights Rd. (Kaholi Pl. to Hele Mauna Pl.)	Improved shoulders (paved) for shared pedestrian/bicycle use (widening w/in existing ROW).	2 - 3 yrs	\$49,000 (D) \$321,000 (C)	DTS, DDC
18	Hekaha St. (Kamehameha Hwy. to Moanalua Rd.)	Sidewalks both sides; parking lanes both sides; two travel lanes, w/portion as shared travel lanes (bike route) (widening w/in existing ROW).	2 yrs	\$102,000 (D) \$675,000 (C)	DTS, DDC
19	Napuanani Rd. (Off Ewa side of Aiea Heights Dr. fronting Napuanani Park)	Improved shoulders (paved) on mauka side for shared pedestrian/bicycle use (widening w/in existing ROW).	2 yrs	\$15,000 (D) \$100,000 (C)	DTS, DDC
20	Moanalua Loop (Kaonohi St. to Moanalua Rd.)	Sidewalk on mauka side (widening w/in existing ROW).	2 yrs	\$49,000 (D) \$325,000 (C)	DTS, DDC
21	Cane Haul Rd. (Kuala St. extension to Waihona St.)	Sidewalks, bike lanes and travel lanes to be developed in conjunction w/planning/design of the City Dept. of Transportation Services' Manana Sub-Area Traffic Study.	DTS to determine	Manana Sub-Area Traffic Study	DTS, DDC
22	Waimano Home Rd. (Kamehameha Hwy. to Moanalua Rd.)	Bike lanes (to be developed in conjunction w/planning/design of proposed Pearl City Town District development).	5 - 10 yrs	\$240,000 (D) \$1.6 mill. (C)	DTS, DDC, DPP
23	Waimano Home Rd. (Moanalua Rd.-Komo Mai Dr.)	Bike lanes (to be developed in conjunction w/planning/design of proposed Pearl City Town District development).	5 to 10 years	\$255,000 (D) \$1.7 mill. (C)	DTS, DDC, DPP
24	Salt Lake Blvd. (Kamehameha Hwy. to Kahuapaani St.)	Bike lanes (widening w/in existing ROW).	5 yrs	\$195,000 (D) \$1.3 mill. (C)	DTS, DDC
25	Lehua Ave. (Kamehameha Hwy. to Lehua Elem. School)	Bike lanes (to be developed in conjunction w/planning/design of proposed Pearl City Town District development).	5 yrs	To be determined	DTS, DDC, DPP
26	Kaahumanu St. (Moanalua Rd. to Hookanike St.)	Bike lanes (widening w/in existing ROW).	5 yrs	\$91,000 (D) \$605,000 (C)	DTS, DDC
27	Kaahumanu St. (Kamehameha Hwy. to Moanalua Rd.)	Bike lanes (widening w/in existing ROW).	5 yrs	\$180,000 (D) \$1.2 mill. (C)	DTS, DDC
28	Kamehameha Hwy. (From Waihona St. to Aiea Access Rd./Aloha Stadium)	Bike lanes (to be developed in conjunction w/State Dept. of Transportation's Kamehameha Highway Improvements Project).	10 yrs	\$1.6 mill. (D) \$10.2 mill. (C)	DOT

29	Noelani St. (Hoomalu St. to Kaahumanu St.)	Bike lanes (widening w/in existing ROW).	5 yrs	\$240,000 (D) \$1.6 mill. (C)	DTS, DDC
30	Kaonohi St. (Pearl Country Club to Kahapili St.)	Bike lanes (widening w/in existing ROW).	5 yrs	\$225,000 (D) \$1.5 mill. (C)	DTS, DDC
31	Gateway at Kanuku St. (Kamehameha Hwy. makai to the Pearl Harbor Bike Path)	Shared-use path for pedestrians/ bicyclists (in conjunction w/future redevelopment of area).	5 - 10 yrs	\$9,000 (D) \$59,000 (C)	DTS, DDC, DPP, Landowners
32	Gateway at Pearl Kai Center (Kamehameha Highway makai to Pearl Harbor Bike Path)	Shared-use path for pedestrians/bicyclists (in conjunction w/future redevelopment of area).	5 - 10 yrs	\$6,200 (D) \$41,000 (C)	DTS, DDC, DPP, Landowners
33	Kaimakani Trail Park	Pedestrian Trail along Kaimakani St. Right-of-Way from Ulune St. intersection mauka to Halawa Heights. (coordination w/United States of America)	3 - 5 yrs	\$15,000 (P) \$42,000 (D) \$278,000 (C)	DTS, DPP, United States of America
34	Moanalua Rd. (Waimano Home Rd. to Kaimakani St.)	Bike lanes (widening w/in existing ROW).	10 yrs	\$1.2 mill. (D) \$7.9 mill. (C)	DTS, DDC
35	Kamehameha Hwy. (From Moanalua Rd. (including Aiea Access Rd.) to Salt Lake Blvd.)	Bike path (in conjunction w/planning/design of State Dept. of Transportation's Kamehameha Highway Improvements project).	10 yrs	\$1.5 mill. (D) \$10.2 mill. (C)	DOT
36	Kalauao Stream Greenway	Greenway (shared-used path for pedestrians/bicyclists) along stream from H-1 makai to shoreline by Pearl Kai Shopping Center. (also PHHT)	5 - 10 yrs	\$45,000 (D) \$294,000 (C)	DTS, DDC, Landowners
37	Waimalu Stream Greenway	Greenway (shared-use path for pedestrians/bicyclists) along stream from Kilinoe St. makai to Pearl Harbor shoreline and makai along Harbor Center. (also PHHT)	5 - 10 yrs	\$88,000 (D) \$586,000 (C)	DTS, DDC, Landowners
38	Waiawa Stream Greenway	Greenway (shared-use path for pedestrians/bicyclists) along stream from Pearl Harbor Bike Path makai along Pearl City Peninsula (coordination w/U.S. Navy). (also PHHT)	5 - 10 yrs	\$57,000 (D) \$380,000 (C)	DTS, DDC, U.S. Navy
39	McGrew Point Trail	Greenway (shared-use path for pedestrians/bicyclists) makai of Pearl Harbor Bike Path, adjacent to Pa'aiau Fishpond (coordination w/U.S. Navy). (also PHHT)	5 - 10 yrs	\$15,000 (D) \$97,000 (C)	DTS, DDC, U.S. Navy
40	Komo Mai Dr. (Hooehulu St. to Hoolaulea St.)	Bike lanes (widening w/in existing ROW). Feasibility study needed.	To be determined	To be determined	DTS, DDC
41	Kaamilo St. (Aiea Heights Dr. to end of road curve makai of Kalawina Pl.)	Bike lanes (if demand arises) (widening w/in existing ROW).	To be determined	To be determined	DTS, DDC
<sup>1</sup> Includes planning, design and construction. <sup>2</sup> Includes design (D) and construction (C) costs; excludes planning and right-of-way acquisition costs unless specified. 15% design costs assumed unless otherwise provided. <sup>3</sup> DPP = Department of Planning and Permitting; DDC = Department of Design and Construction; DTS = Department of Transportation Services; DOT = Department of Transportation; DPR = Department of Parks and Recreation. <sup>4</sup> From City and County of Honolulu, <i>Honolulu Bicycle Master Plan</i> (April 1999).					

- Debt service on bonds sold to finance construction projects
- Rehabilitation of facilities (special maintenance)
- Maintenance
- Personnel
- Other small categories.

On the County level, sources of funding may be obtained through appropriations from the City and County of Honolulu's operating funds and capital improvements programs. Projects such as lane striping and intersection improvements can be programmed as part of regular roadway repair, maintenance and improvement projects. For bicycle facility projects, an alternative funding source is the City's Bike Fund which brings in about \$400,000 per year from bicycle registrations. About \$200,000 of this is used to fund the BikeEd Program and the City's Bicycle Coordinator position, with the remaining \$200,000 available for bicycle-related projects.

Funding sources for the community design-related projects would also include State and City capital improvement programs.

Other potential sources of funding for transportation and community design projects include the City's Community Vision program; existing City budgets involved with community redevelopment actions and funds, park improvement/redevelopment projects, and public works projects; and the traditional improvement district mechanism. For projects involving the use of private lands or participation of private landowners, developer funding may be appropriate. Smaller projects could be adopted by a community group or non-profit organization and funded through private charitable grants.

# Aiea Pearl City Livable Communities Plan

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## 7. REFERENCES

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# Aiea Pearl City Livable Communities Plan

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## APPENDIX A

### Aiea-Pearl City Livable Communities Plan Community Survey

6335-01  
July 5, 2001

### Aiea-Pearl City Livable Communities Initiative Summary of Community Survey Results

A community survey was conducted as part of the Aiea-Pearl City Livable Communities Initiative Project. The survey was distributed as an insert through the April 2001 Leeward Current, which has a circulation of 21,000 in the Aiea-Pearl City area. A total of 476 mail-in surveys were received as of June 12, 2001, a response rate of 2 percent. The following is a summary of key findings of the survey results:

#### 1. In what area of Aiea or Pearl City do you live?

	<u>No.</u>	<u>%</u>
Pearl City	136	29
Aiea	104	22
Pearl Ridge	67	14
Newtown	62	13
Other	52	11
Waiau	27	6
Waimalu	15	3
Halawa	<u>11</u>	2
Total:	474*	

\* No residential location indicated on two surveys.

#### If you are responding for a business in the Aiea-Pearl City area, where is it located?

	<u>No.</u>	<u>%</u>
Pearl City	21	45
Pearl Ridge	13	27
Aiea	7	14
Other	3	6
Newtown	3	6
Waiau	<u>1</u>	2
Total:	48	

#### 2. On which roadways or intersections in the Aiea-Pearl City area do you currently experience the most traffic flow or safety problems? Please specify the problems.

- ◆ This question generated the most response in the survey.
- ◆ In general, traffic along the major roads in the area were indicated to be a problem, especially Kamehameha Highway and Moanalua Road.
- ◆ Roadways and intersections with traffic flow/safety problems are depicted on Figure 1 attached hereto. Problem roadways and intersections most mentioned include those in Tables 1 and 2, respectively.

Roadway	No. of Respondents	Comments
Kamehameha Hwy. - between Pearl Highlands and Waimano Home Rd.	55	Traffic flow problems, especially Ewabound near Sam's Club and Pearl City Post Office. Construction and roadwork add to congestion. Should have another access in addition to Acacia Rd.
Moanalua Rd. - general	44	Congested traffic conditions, especially Ewabound in afternoons. Traffic signals not synchronized. Road construction further results in traffic congestion.
Kamehameha Hwy. - general	38	Congested traffic conditions, especially Ewabound.
Kamehameha Hwy. - between Waimano Home Rd. and Kaahumanu St.	37	Traffic flow problems, especially Ewabound near Longs/Daiei area; heavy on Saturdays. Synchronize traffic signals.
Moanalua Rd. - between Kaahumanu St. and Kaonohi St.	29	Construction activities slow traffic. Speeding in front of Waimalu Elementary School - blinking light should be activated during school hours.
Moanalua Rd. - between Kaahumanu St. and Aiea Heights Dr.	27	Congested traffic conditions, especially in vicinity of Pearlridge Shopping Center. In vicinity of Pearlridge Shopping Center and Pali Momi Hospital, views from 8 entrances/exits along Moanalua Rd. are blocked by parked cars. Entering/exiting businesses/schools/facilities along Moanalua Rd. is dangerous; speeding vehicles. Between Aiea Heights Dr. and Pali Momi St., several stop lights around curves are not visible to motorists until the last moment; recommend installing "stop ahead" signals to warn motorists. Constant construction along Moanalua Rd. slows traffic.
Kaahumanu St. - between Kamehameha Hwy and Moanalua Rd.	21	Difficult/dangerous to enter/exit businesses along Kaahumanu St. due to low visibility caused by parked cars, trees along sidewalks, and speeding vehicles. Inadequate turning lanes along Kaahumanu St.; need better turn lanes. Exiting from businesses onto makaibound Kaahumanu St. and then turning left onto Kamehameha Hwy. is difficult, especially on Saturdays.
Kamehameha Hwy. - between Kaahumanu St. and Laulima St.	20	Ewabound traffic is heavy. Buses also cause traffic congestion; recommend creating a separate lane for buses to pull into bus stops.
Waimano Home Rd. - general	19	Congested traffic conditions. Unacceptable back-up 1/3 mile + on two makaibound lanes. Speeding traffic.
Aiea Heights Dr. - between Moanalua Rd. and Ulune St.	18	Aiea Shopping Center entrance/exit is dangerous, especially left-turn into shopping center from Aiea Heights Dr. Difficulty exiting shopping center onto Aiea Heights Dr.

<b>Intersection</b>	<b>No. of Respondents</b>	<b>Comments</b>
Kamehameha Hwy./Waimano Home Rd.	84	Congested traffic conditions. Green time for left-turn from eastbound Kamehameha Hwy. onto northbound Waimano Home Rd. is too long, backing up Ewabound traffic on Kamehameha Hwy. Need better synchronization of traffic signals. Right-turn lane from Waimano Home Road onto Ewabound Kamehameha Hwy. is backed up.
Moanalua Rd./Kaahele St.	36	Insufficient green time for left-turn from Kaahele St. onto eastbound Moanalua Rd. due to nonsynchronization of traffic signal at Hekaha St. Cars on Moanalua Rd. frequently block intersection.
Moanalua Rd./Kaonohi St.	33	Traffic is backed up during Kam Drive-In swap meet. Need exclusive right-turn lanes on both directions of Kaonohi St. at intersection. Need exclusive right-turn lane from eastbound Moanalua Rd. onto makaibound Kaonohi St. Need second left-turn lane from maukabound Kaonohi Street onto westbound Moanalua Rd.
Moanalua Rd./Kaahumanu St.	28	Need exclusive right-turn lane from makaibound Kaahumanu St. onto westbound Moanalua Rd. Left-turn from maukabound Kaahumanu St. onto westbound Moanalua Rd. is dangerous. Left-turn lane from maukabound Kaahumanu St. onto westbound Moanalua Rd. backs up to Kamehameha Hwy. Many cars run through red light at intersection.
Aiea Heights Dr./Ulune St. (by ballpark)	22	Safety and speeding problems. Speeding motorists on Aiea Heights Dr. make it difficult to exit Ulune St. Inadequate storage lane for vehicles turning left from Aiea Heights Dr. onto Ulune St. during morning rush hour.
Moanalua Rd./Aiea Heights Dr.	22	Traffic congestion. Need exclusive right-turn lane from makaibound Aiea Heights Dr. onto Ewabound Moanalua Rd.
Moanalua Rd./Waimano Home Rd.	13	Used as a bypass during afternoon commute. Short left-turn green time from Moanalua Rd. onto makaibound Waimano Home Rd; tricky w/out left-turn arrow and difficult even w/arrow
Kamehameha Hwy./Acacia Rd.	12	Traffic congestion. Constant construction makes entry/exit difficult. Increase access to the Pearl City Post Office.
Moanalua Rd./Hoomalu St.	10	Cars exiting freeway do not stop for red light at intersection before turning right onto Hoomalu St. Should have "No Right Turn On Red" or right-turn arrow traffic signal from Hoomalu St. onto Moanalua Rd. (Diamond Head bound) due to blind corner. Also, speeding traffic.

**3. Regarding bus facilities, at what location(s) would you like to see bus shelters installed?**

- ◆ Various specific locations for bus shelters were mentioned.
- ◆ Locations most mentioned include areas along Moanalua Road, especially near shopping centers (33 respondents), Kamehameha Highway (23 respondents), Waimano Home Road (16 respondents), Komo Mai Drive (12 respondents), and Pacific Palisades (11 respondents).
- ◆ Other roadway locations frequently mentioned include Kaonohi Street, Aiea Heights Drive, Kaahumanu Street, Halawa Heights Drive, Hoomalu Street, Noelani Street, Kuahaka Street, and Kaahele Street.
- ◆ Other locations mentioned include Pearl Ridge Shopping Center, Aiea Shopping Center, in front of each public school, and at all bus stops.

**4. Transit centers are important parts of the future transit improvements. Alternative transit center sites are being evaluated at the following locations in the Aiea-Pearl City area (see front page for map locations). Do you have comments on these alternative transit center sites, including features or amenities you would like to see included in a transit center?**

- ◆ The following is a tabulation of the alternative transit center sites favored by the respondents:

Alternative Transit Center Site	No. Favored	Favorable Comments
<b>Pearl City:</b>		
1 - Median area makai of Pearl Highlands	8	Less traffic congestion than Aiea and away from heavy residential area; against the flow of traffic for Pearl City and Aiea residents in reaching the site. Access to freeway.
2 - UH property across Post Office	7	Less traffic congestion than Aiea.
3 - Manana Warehouse area	10	Logical since off Kamehameha Hwy. and in industrial area near H-1 Freeway. Less traffic congestion than Aiea. Adequate space. Bus facility is already located there.
4 - Hale Mohalu Park	10	Less traffic congestion than Aiea. Safer area.
5 - Next to HECO's Waiiau Power Plant	18	Appear to cause least traffic congestion. Away from close residential areas and on major highway. Not a heavily used site.
6 - Former Jim Slemons auto dealer	22	Most logical location; central location. Close to Pearlridge Shopping Center and right on Kamehameha Hwy.
<b>Aiea:</b>		
7 - Aloha Stadium overflow parking on Kamehameha Hwy.	39	Efficient use of area which might not be utilized to full potential. Better alternative to other sites (Sites 1 to 5) which might add to traffic congestion. Out of high traffic area. Most logical location; large area; will not create too many problems. Practical; close to freeway. Best use of public-owned land.
8 - Aloha Stadium at Kahuapaani St.	24	Out of high traffic area. Large area. Best use of public-owned land.
Note: Some respondents indicated multiple favorable sites.		

- ◆ For the alternative transit center sites that were not heavily favored, the primary reason mentioned was traffic congestion conditions (Sites 1 to 5).
- ◆ Additional alternative transit center sites mentioned include Kam Drive-In, Pearl City industrial area, Kaahumanu Street and Moanalua Road/Kamehameha Highway, Pearl Kai/Pearlridge Shopping Center, McGrew Point, and the retail/commercial area across of Aiea Shopping Center (former Grocery Outlet site).
- ◆ Facilities and amenities mentioned include: restrooms, secured bicycle parking area/lockers, eating establishments, snack/newspaper vending machines, ATM machines, pay phones, benches, drinking fountains, change machines, adequate and secured parking (free) areas (park-and-ride), covered waiting areas, information kiosk for TheBus (bus schedules/route maps/bus fees/purchase bus passes), and safe/secure facility for people and vehicles (security presence).
- ◆ A number of respondents did not understand the concept or function of a transit center.

**5. For pedestrians and bicyclists, what improvements would you like to see? Specifically where are such improvements needed?**

Improvements	Very Important	Somewhat Important	Not Important	Total
More sidewalks	226 63%	107 30%	29 7%	362
Safer crossing areas	297 82%	56 15%	15 3%	368
Slower traffic	201 58%	102 29%	50 13%	353
More bike lanes/paths	147 43%	132 39%	64 18%	343

- ◆ **Sidewalks** were indicated to be needed on various streets within the Momilani Subdivision, lower Pearl City from Daiei to Highlands Middle School, older Momilani tract, Aiea Heights Drive, Halawa Heights Drive, along areas of Kamehameha Highway, Waimano Home Road, Pacific Palisades, lower Komo Mai Drive, lower Palisades, Waiiau area, and around schools.
- ◆ **Safer crossing areas** were indicated to be needed at Moanalua Road, especially near Kam Drive-In and between Pali Momi and Hekaha Streets; Kamehameha Highway; Komo Mai Drive; Waimano Home Road/Komo Mai Drive; Aiea Heights Drive; Halawa Heights Drive (better lighting of pedestrian crosswalks); Pearlridge Shopping Center and other shopping centers; Kaonohi Street; Kaahahele Street; Newtown Recreation Center; and major streets fronting schools.
- ◆ Need for **slower traffic** was mentioned along Kamehameha Highway, Moanalua Road, Kaonohi Street, Komo Mai Drive, Aiea Heights Drive, Halawa Heights Drive, Kaahumanu Street, Ulune Street, Waimano Home Road, Pacific Palisades, Hoomalu Street, Noelani Street, Kuahaka Street, and Kaahahele Street. Roadways/intersections mentioned are included in Figure 1 (attached).
- ◆ Need for **bike lanes/paths** were mentioned for mauka areas of Pearl City from Kaahumanu Street to Waimano Home Road; along Kamehameha Highway, Moanalua Road and Waimano Home Road; from Kamehameha Highway to Pearl Harbor Bike Path; Kaahahele Street; Palisades; streets fronting schools; and mauka-makai roads, including up ridges.

6. **Communities throughout the Island are looking into the use of "traffic calming" designs such as *roundabouts* (circular raised island in middle of intersection), *bulbouts* (extending sidewalk or curb line into street), and lane reductions as a way to slow traffic and increase safety. Currently, the Aiea-Pearl City communities have selected the Manana and Pacific Palisades areas in Pearl City and the Newtown area in Aiea for traffic calming improvements. Do you have any suggestions for additional traffic calming improvements in the Aiea-Pearl City area?**

- ◆ In general, there was support for additional traffic calming improvements. Roadways most mentioned for traffic calming improvements are indicated below. The various roadways and intersections mentioned for traffic calming improvements are depicted in Figure 1 (attached):

Roadways	No. of Respondents	Comments
Ulune St.	18	Especially at Aiea Heights Dr. intersection (both by ballpark and sugar mill site). Speeding in vicinity of Kaimakani St., Kulawea St. and Halawa Heights Dr.
Komo Mai Dr.	13	In Palisades is a speedway. Also at intersections with Kaahale St., Hoomalu St., Hoolaulea St., and Kaahumanu St.
Aiea Heights Dr.	8	Improve the flow at intersection with Moanalua Rd. Speeding downhill on narrow 2-lane street. Dangerous intersections at Ulune St.
Kaahumanu St.	7	Turning left into Waimalu Plaza - should have left-turn lane. Speeding by Waiiau Fire Station and mauka of Moanalua Rd.
Kamehameha Hwy.	6	Along the Highway in general. By Acacia Rd., Waiiau Power Plant, and from H-1 merge onto Kamehameha Hwy. between Stadium and McGrew Point.
Waimano Home Rd.	6	Speeding makai (downhill) along road. Drivers disobey signals at Hoolaulea St. intersection. Speeding at Hoomoana St. intersection.
Hoomalu St.	6	Especially between Moanalua Rd. and Waimano Home Rd. Install speed bumps/humps.
Moanalua Rd.	5	Install bulbout by Liberty House. Safer crossing area needed from townhomes across of Pearlridge Shopping Center. Near Hoomalu St. Between Kaonohi and Pali Momi Streets.

- ◆ Preference was expressed more for speed bumps rather than roundabouts which were indicated by some to be confusing, dangerous and an impediment to traffic flow. The use of rumble strips to alert motorists of a traffic calming improvement up ahead was suggested.
- ◆ Landscaping in the center of the roundabout was mentioned as a possible hazard. One respondent who did not favor traffic calming indicated that a sister died in an accident (on the mainland) upon unsuspectingly hitting a roundabout at night due to poor visibility.

After several such accidents, the city where she lived is now incurring huge expense to remove all of the roundabouts.

- ◆ Those that opposed traffic calming improvements indicated that they create more problems and are an impediment to smooth traffic flow. Some preferred increased enforcement of traffic laws (speeding) instead.

**7. What areas or roadways in the community do you feel need more landscaping or beautification?**

- ◆ Landscaping/beautification along Kamehameha Highway was overwhelmingly mentioned (131 respondents), from Aloha Stadium to Pearl City.
- ◆ Various stretches along Moanalua Road were also frequently mentioned (71 respondents).
- ◆ Other areas frequently mentioned include: Waimano Home Road (23 respondents), Kaahele Street (12 respondents), Komo Mai Drive (10 respondents), Aiea Heights Drive (9 respondents), Lehua Avenue (7 respondents), Waiiau Interchange (7 respondents), H-1 Freeway (6 respondents), Ulune Street (5 respondents), and Pearl Harbor Bike Path (5 respondents). Other areas mentioned include: Aloha Stadium, the cemetery in Aiea, Kam Drive-In, entrance to Palisades, and the Pearl Harbor shoreline.
- ◆ The roadways and areas mentioned for beautification/landscaping are depicted in Figure 2 attached hereto.

**8. What views, visual landmarks or open space areas in the community do you feel are important to preserve?**

- ◆ **Shoreline park areas** (254 respondents) from:
  - ◆ Pearl Harbor Bike Path/Shoreline (37 respondents);
  - ◆ Blaisdell Park (28 respondents);
  - ◆ Kamehameha Highway (27 respondents);
  - ◆ Aiea Rainbow Bay State Park (8 respondents);
  - ◆ McGrew housing area;
  - ◆ Palisades;
  - ◆ Mauka lands.
- ◆ **Views of Pearl Harbor** (275 respondents) from:
  - ◆ Pearl Harbor Bike Path/Shoreline (23 respondents);
  - ◆ Ridge areas (Halawa Heights, Aiea Heights, Royal Summit, Newtown, Pearl Ridge, etc.) (23 respondents);
  - ◆ Kamehameha Highway (22 respondents);
  - ◆ Blaisdell Park (14 respondents);
  - ◆ McGrew Point;
  - ◆ Aiea Rainbow Bay State Park;
  - ◆ Palisades.
- ◆ **Sumida Watercress Farm** (293 respondents)
- ◆ **Other(s):**
  - ◆ Blaisdell Park (13 respondents);
  - ◆ Pearl Harbor Bike Path/Shoreline (9 respondents);
  - ◆ Any historic sites (Keaiwa Heiau in Aiea);
  - ◆ Aiea Rainbow Bay State Park;
  - ◆ Entrance to Aiea (near St. Elizabeth School);

- ◆ Aiea Heights;
- ◆ Kam Drive-In;
- ◆ Ponds Ewa of Waiau Zippy's;
- ◆ Sumida Watercress Farm;
- ◆ Aiea Sugar Mill site;
- ◆ Camp Smith;
- ◆ Arizona Memorial;
- ◆ Pacheco Park
- ◆ Aloha Stadium;
- ◆ Waimano Home (hospital site and open field).
- ◆ The views, visual landmarks, open space areas which were mentioned as important to preserve are depicted in Figure 2 attached hereto.

**9. The areas *makai* of Kamehameha Highway may need revitalization and physical improvements. Are there any specific areas you wish to see improved? Please explain.**

- ◆ Kamehameha Highway in general was most mentioned (36 respondents);
  - ◆ In addition, various segments of Kamehameha Hwy. were also mentioned:
    - ◆ Between Waimano Home Road and Kaahumanu Street (54 respondents). Areas mentioned include the Lehua Avenue area, Waiau Power Plant, cemetery next to Chevron, Blaisdell Park, and area under freeway.
    - ◆ Between Kaahumanu Street and Aloha Stadium (47 respondents). Areas mentioned include area behind Pearl Kai Center, McGrew Point, area behind Tony Honda, used car lot between Pearl Kai Center and McGrew Point, and between Aiea Rainbow Bay State Park and Admiral's boat house.
- ◆ Pearl Harbor Bike Path was also frequently mentioned (34 respondents). Comments included the need for maintenance/removal of overgrown vegetation for safety and beautification purposes, need for resurfacing, installation of lighting for safety, suggestion for extension of the bike path, and need for general sprucing up of area.
- ◆ The shoreline area was also mentioned (22 respondents). Comments included the need to clean the shoreline (especially of trash), removal of overgrown vegetation, improve shoreline access (boating, fishing, water sports, etc.), and improve utilization of shoreline (waterfront entertainment centers, etc.).
- ◆ Other comments included the following:
  - ◆ Need more consistency in structures -- odd mix of businesses, apartments, cemeteries, and industries.
  - ◆ Clutter from Pearl Kai to Pearl City -- worst clutter of contemporary urban development;
  - ◆ Remove overhead power lines;
  - ◆ Park at McGrew Point would provide continuance of Aiea Rainbow Bay State Park;
  - ◆ Get rid of Suzie's Adult shop out of highly visible area.
- ◆ The major areas *makai* of Kamehameha Highway in need of revitalization which were specified are depicted in Figure 2 attached hereto.

**10. Do you favor development of the proposed "Pearl Harbor Recreation Complex and Senior Center" in Pearl City at a location along Lehua Avenue (across of Lehua Elementary School)? (Uses contemplated include a recreation complex, senior center, playfields, and a 50-meter swimming pool). Please explain.**

- ◆ Majority of respondents indicated "yes" (249 respondents).
  - ◆ Supporting comments included the need for senior centers, especially with the growing aging population in the area; the need for additional recreational facilities, especially the 50-meter pool; good proximity to Pearl Harbor Bike Path and nearby nursing home; location near main highway; convenient location in unused area; and would give vitality to depressed area in Pearl City.
- ◆ Those that indicated "no" (39 respondents) commented as follows:
  - ◆ Pearl City already has a recreation center; location is too far for Seniors to walk to (especially from bus stop); number of residents living in close proximity is few; keep area as is - do not build there; funding for project is needed elsewhere; and recreational development should be secondary after traffic/roadway improvements.
  - ◆ Traffic was mentioned as a concern. Comments included the potential for additional traffic congestion, especially at the intersection of Kamehameha Hwy./Waimano Home Road/Lehua Avenue; need for improvement to traffic in this area (road to military area is too narrow/unsafe); and the need for adequate parking for the facility.
  - ◆ Other sites suggested include Manana warehouse area, Waiau District Park, area above Momilani Elementary School/Pearl City High School, Kamehameha Drive-In, Upper Pearl City/Pacific Palisades (more populated area); and Aiea. Other suggestions included redesigning Blaisdell Park and the existing Pearl City Recreation Center.

**11. Do you have any other observations concerning transportation, transit services, pedestrian/bikeway circulation, or urban design in the Aiea-Pearl City area that you would like to share with us?**

- ◆ A variety of "observations" were mentioned, including:

**Transportation:**

- ◆ Speeding concerns;
- ◆ Synchronization of traffic signals along Kamehameha Highway;
- ◆ Extend Moanalua Road to connect with Pearl Highlands;
- ◆ Additional right-turn lane on Moanalua Road at Aiea Heights Drive is needed to relieve congestion;
- ◆ Fix intersections of Kamehameha Highway and Waimano Home Road, and Kaahele Street and Moanalua Road;
- ◆ Consider another on/off freeway ramp to area, possibly near Pearl Ridge;
- ◆ Safety concern at H-1/H-3 merge westbound on freeway; suggest bolder solid lines;
- ◆ Need secondary access to Palisades;
- ◆ Lower Manana has a road that connects Acacia Road that is blocked off and gated. Road should be reopened to relieve traffic on Waimano Home Road and be incorporated to connect Manana to the Spine Road.
- ◆ Tow truck should be stationed in vicinity of Kaonohi Street overpass and Pearl City off-ramp during afternoon rush hour to move vehicles involved in accidents off the road as soon as possible;
- ◆ Synchronize traffic lights along Kamehameha Highway and Moanalua Road;
- ◆ Would like ferry service to town;

- ◆ Improving traffic flow and congestion is a priority.
- ◆ Specific roadways and intersections mentioned as problem areas are included in Figure 1 attached hereto.

**Transit Services:**

- ◆ Need for increased bus service in specific areas;
- ◆ Suggest more convenient bus system including smaller trolleys within communities feeding to regular routes outside of area;
- ◆ No bus station at Kam Drive-In site;
- ◆ Extend transit service to Newtown and upper Aiea, Pearl Ridge and Pearl City;
- ◆ Nearest bus stop to Crown at Wailuna is one mile;
- ◆ Pearl City needs bus service to the airport;
- ◆ Would like express bus from Pearl Ridge;
- ◆ Offer incentives for bus usage;
- ◆ Create trolley system for the region (like Waikiki, Kaimuki and Waiialae trolley);
- ◆ Combine transit centers with activity centers so people can shop, eat and recreate before and after;
- ◆ Add more articulated buses to alleviate crowding;
- ◆ Build more bus pull-out areas along roads;
- ◆ Mass/rail transit is needed.

**Pedestrian/Bikeway Circulation:**

- ◆ Clean up Pearl Harbor Bike Path area;
- ◆ Need improved sidewalks along Kamehameha Highway and Moanalua Road;
- ◆ Want sidewalks along Komo Mai Drive;
- ◆ Pedestrian overpass on Kamehameha Highway by Pearl Ridge Shopping Center;
- ◆ Fenced median on Kamehameha Highway by Pearl Kai causes much jaywalking;
- ◆ Sidewalks along mauka side of Kamehameha Highway between Cutter Dodge and Pearl City Post Office too narrow and not handicap accessible;
- ◆ Need sidewalks along Aiea Heights Drive;
- ◆ Extend the bike path (Pearl Harbor) further;
- ◆ No bikes on Moanalua Road -- they are a hazard;
- ◆ Bike lanes on all highways would improve safety.

**Urban Design:**

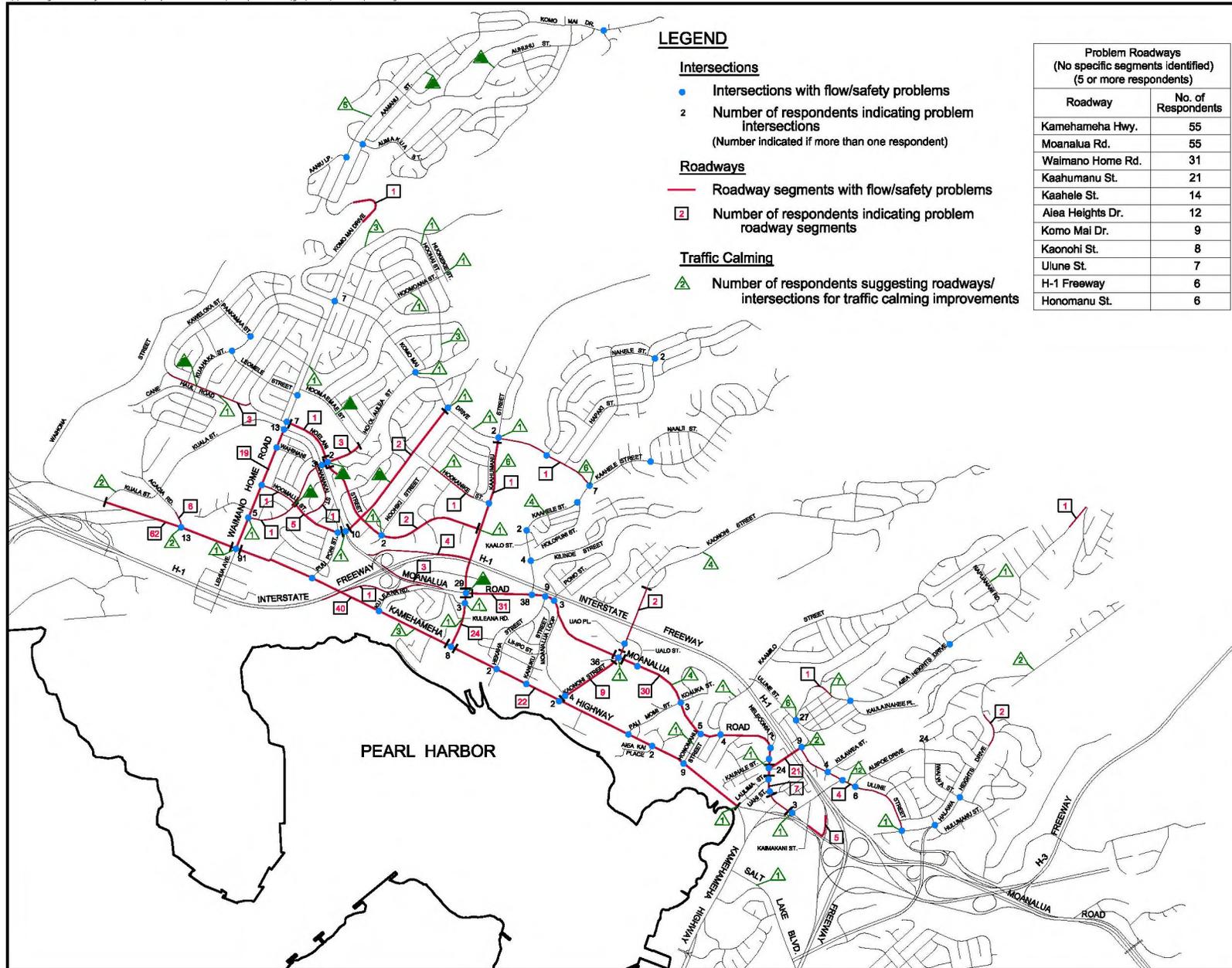
- ◆ Moanalua Road through Aiea town needs landscaping and beautification;
- ◆ Pearl Highlands Center's appearance from Kamehameha Highway is horrible. Where was urban design when it was processed for approval?
- ◆ Keep buildings to 40-foot height limit;
- ◆ Underground major power lines;
- ◆ Warehouses behind Pearl Highlands look like a dump -- need resurfacing;
- ◆ Do away with Kam Drive-In swap meet; do not turn site into business/shopping complex (traffic concerns);
- ◆ Need more parking areas, especially by shopping areas;
- ◆ More pedestrian-friendly sidewalks and commercial storefronts may attract more people to walk (safer and more pleasant experience);
- ◆ The pond next to Zippy's across of the HECO Power Plant should be cleaned;
- ◆ Need more tree lined streets -- especially Kamehameha Highway.

# Aiea Pearl City Livable Communities Plan

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## APPENDIX B

### Alternative Community Design Concepts



COMMUNITY VISION GROUP

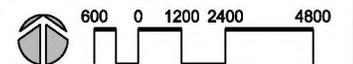
## AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN

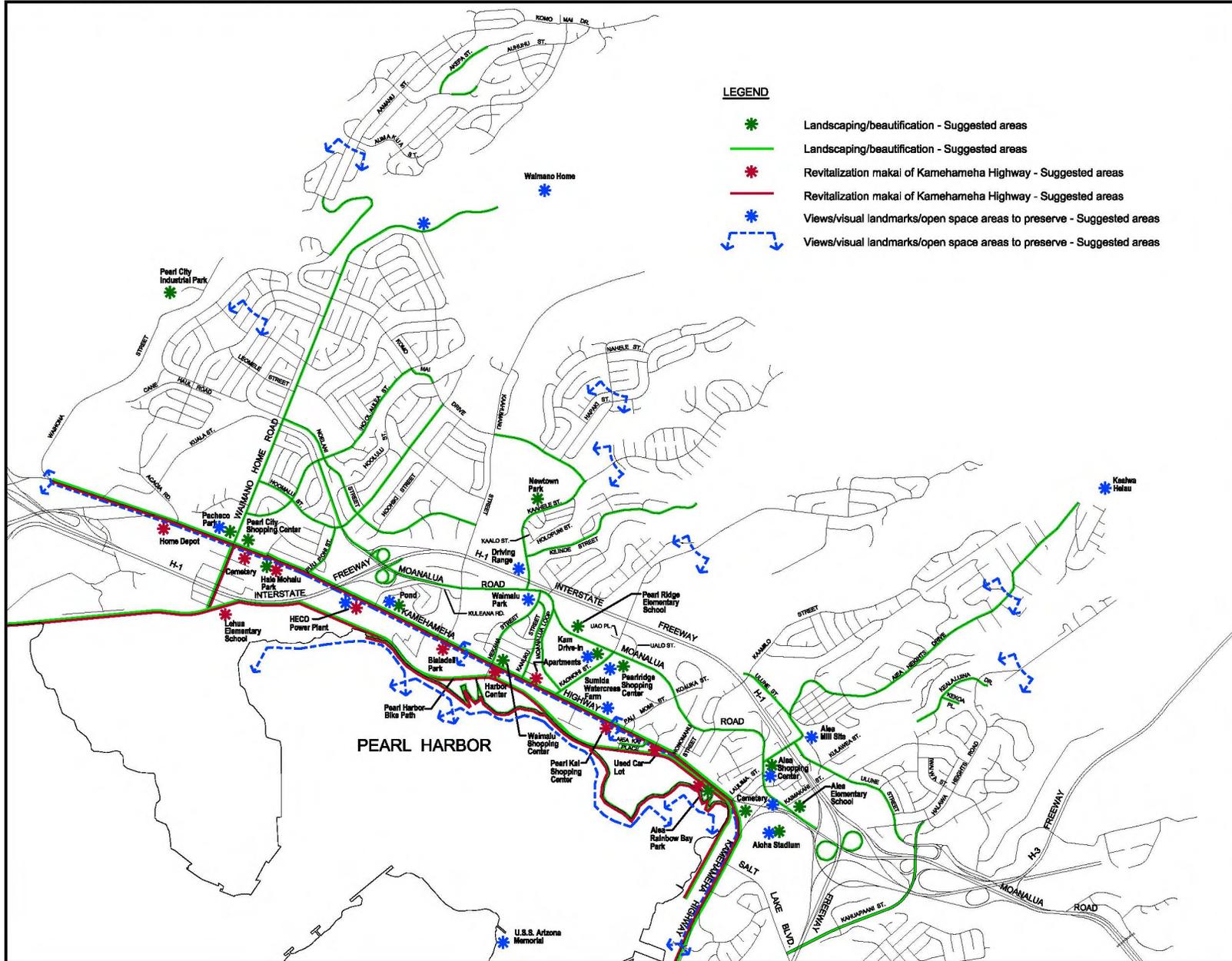
**FIGURE 1  
COMMUNITY SURVEY  
TRAFFIC RESULTS**

Prepared By

**WILSON OKAMOTO  
& ASSOCIATES, INC.**  
November 27, 2001

Graphic Scale In Feet





- LEGEND**
- \* Landscaping/beautification - Suggested areas
  - Landscaping/beautification - Suggested areas
  - \* Revitalization makai of Kamehameha Highway - Suggested areas
  - Revitalization makai of Kamehameha Highway - Suggested areas
  - \* Views/visual landmarks/open space areas to preserve - Suggested areas
  - - - Views/visual landmarks/open space areas to preserve - Suggested areas

**AIEA** 21st Century OAHU  
**PEARL CITY** A SHARED VISION FOR THE FUTURE  
 COMMUNITY VISION GROUP

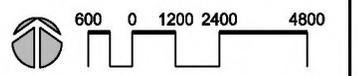
**AIEA - PEARL CITY  
 LIVABLE COMMUNITIES  
 PLAN**

**FIGURE 2  
 COMMUNITY SURVEY  
 URBAN DESIGN RESULTS**

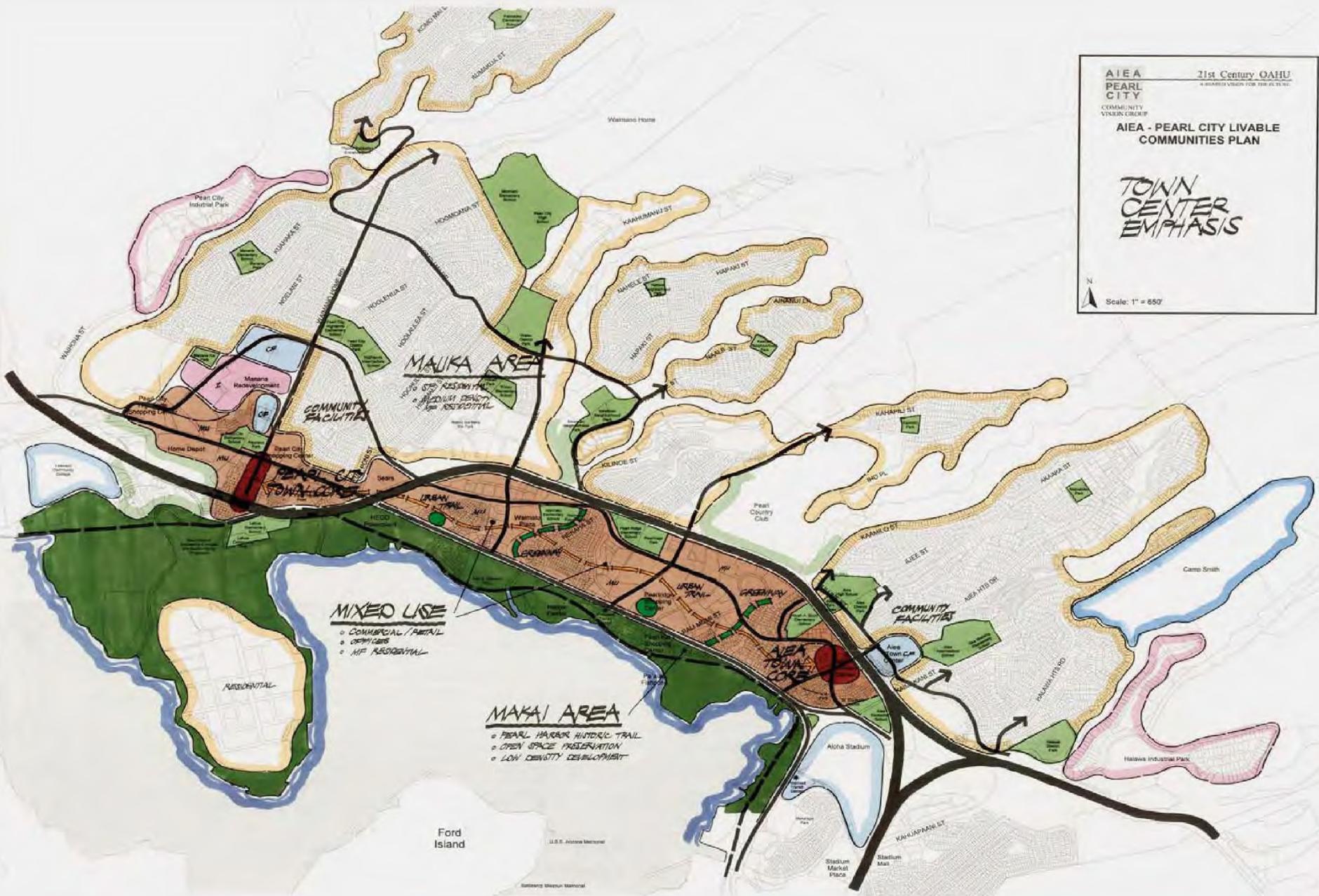
Prepared By

**WILSON OKAMOTO  
 & ASSOCIATES, INC.**  
 November 27, 2001

Graphic Scale In Feet



**AIEA** 21st Century OAHU  
**PEARL CITY** A BRIGHT VISION FOR THE FUTURE  
 COMMUNITY VISION GROUP  
**AIEA - PEARL CITY LIVABLE COMMUNITIES PLAN**  
  
*TOWN CENTER EMPHASIS*  
  
 N  
 Scale: 1" = 650'





# Aiea Pearl City Livable Communities Plan

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## APPENDIX C

### Community Workshops/ Meeting Results

6335-01  
July 12, 2001

**Aiea-Pearl City Livable Communities Plan  
Community Design Workshop Results**

**July 5, 2001, 6:30-9:30 p.m.  
Pearl Ridge Elementary School Cafeteria**

The Community Design Workshop on July 5, 2001 for the Aiea-Pearl City Livable Communities Plan was attended by approximately 60 persons (sign-in sheet attached). The purpose of the Workshop was to validate the Aiea-Pearl City Community Vision Plan Goals and Strategies (February 1999) and provide input on community design issues, ideas and projects for the region.

The Workshop included Small Group Sessions in which the attendees were allowed to participate in one of five groups: Regional Group, Aiea Group 1, Aiea Group 2, Pearl City Group 1, and Pearl City Group 2. The following input and suggestions were recorded for each group:

**Regional Group:**

Validation of Community Vision Goals and Strategies:

- Need to establish more partnerships between educational institutions and community businesses.
- Need for learning centers (i.e., fishponds).
- Depository for historical and cultural artifacts (old photos, etc.).
- Need sidewalks from Halawa housing area linking with Aiea Elementary School and recreational areas. Link transportation.
- Kekoa Place and Kealaluina Drive - need to reduce crime (noise concerns - roosters, dogs).
- Need better streetscape/landscaping.
- Need better access road to Leeward Community College.
- Lehua Avenue/Waimano Home Road - need transit connection.
- Need to maintain existing landscaping (i.e., Aiea State Park).
- Need to partner with Navy in addressing operational, security, environmental, and Anti-Terrorist Force Protection (ATFP) in regard to Pearl Harbor shoreline and use of bike path.
- Have avenue for making Navy, etc. aware of surrounding environment.

Community Design Ideas: (Map Mark-Ups)

- Possible eco-center at top of Waimano Home Road; partnership with schools.
- Trolley operation along Lehua Avenue/Waimano Home Road to vicinity of Pearl City High School.
- Trolley operation (other than TheBus) along Kamehameha Highway with mauka-makai links.
- The proposed Pearl Harbor Recreation Center along Lehua Avenue is a good idea. However, concerned about the close proximity of the Center to the existing fuel tanks makai (safety concern). Mention was made that the fuel tanks would possibly be removed.
- Need to take care of traffic concerns if the Lehua Avenue area is redeveloped.

- If the Lehua Avenue area is redeveloped, consider developing the nearby UH agricultural facility into an agriculture attraction.
- Develop a historic/cultural eco-site to encompass an existing house listed on the National Register of Historic Places within the western portion of the Pearl City Peninsula.
- Provide alternate access to Leeward Community College:
  - One alternative route is along the existing road alignment (Waiawa Road) makai of the College between Waipio Point Access Road and Ala Ike Street.
  - Another alternative route is a more direct access from Farrington Highway to Ala Ike Street Ewa of the College.
- No further commercial strip development along Kamehameha Highway.
- Possible commercial designation for area makai of Kamehameha Highway between the Waiiau Power Plant and Blaisdell Park.
- There is a current proposal to redevelop the area near Burger King (mauka of Kamehameha Highway near Kaahumanu Street) into restaurant, office and commercial uses.
- Shoreline in vicinity of Blaisdell Park to Admiral's Boathouse is active Naval area; concern with regard to potential water activities/orientation.
- Trolley link between Aiea Town Center and Kamehameha Highway.
- In Aiea, need playground equipment for kids and Seniors; better pool.
- Trees and walkways in the vicinity of Ulune Street and Kaimakani Street.
- Remove junk cars from Kekoa Place and Kealaluina Drive.
- Kekoa Place - need more police patrols; need trees; remove abandoned cars; need dogs on leashes and quieted; need to get rid of roosters - not a farm.

### **Aiea Group 1:**

#### Validation of Community Vision Goals and Strategies:

- Navy identified need for heightened security around Harbor area.
- Active Navy housing in Aiea.
- Navy operational concerns:
  - Bike path through multi-million dollar Navy operations.
  - ATFP: Anti-Terrorist Force Protection.
- Fences detract from view; how else can the area be policed?
- Water quality in Kaneohe Bay has improved; would like to see that in Pearl Harbor.
- Partnership with the Navy - water clean-up - control discharge, security. Pearl Harbor Advisory Board (existing).
- Community benefit for cleaning up Pearl Harbor.
  - Commercial opportunities.

#### Community Design Ideas:

- Canoe Club launches from Blaisdell Park.
- Kaahumanu Street and Moanalua Road is dangerous intersection.
- Aiea Town Center should be a facility where people can meet; classrooms.
- Jim Slemmons site as a Transit Center would be a traffic hazard.
- Kam Drive-In site should be set aside as a park (Pearl Ridge District Park).

- Identify churches in the area.
  - Churches offer community activities.
  - Affect/impact surrounding uses.
- Because of industrial uses makai of Kamehameha Highway, no views of the water. Move industrial uses mauka of the road.
- Right by Forty-Niners - that little street is getting a lot of traffic back-up.
- Widening of the streets has allowed people to drive faster.
- Return of residential character to streets will help slow traffic.
- Residential character of Aiea needs to be reinforced (coming from Plantation days).
- Improve landscaping of Halawa Interchange; plant trees - wasted land.
- Upper Halawa Heights by Camp Smith - need sidewalks.
- All along Kamehameha Highway - so pedestrian unfriendly - need trees and landscaping.
- Kahuapaani Street - plant trees in median.
- Kaahele Street and Moanalua Road (synchronize lights) in terms of traffic - ridiculous.
- Kamehameha Drive-In Park.
  - Nice spot for gym and pool - community center.
  - That community has grown.
- Kam Drive-In Park can incorporate swap meet - it brings people together.
- Second access to Halawa Valley.
  - Expanding City Public Works facilities.
  - More heavy equipment/vehicles - concrete, B&C Trucking Company, Ltd.
  - So trucks don't have to go through Aiea Town.

Community Design Ideas: (Map Mark-Ups)

- The Aiea Town Center site is located between two schools, Aiea High School and Aiea Intermediate School, making it an ideal location for locating/re-locating a new Aiea Library.
- Since the former Jim Slemons site is centrally located, it would better serve more of the population as a Transit Center.
- The Pearl Harbor Historic Trail or another bike path should be developed along the water fronting the Harbor Center.
- Reemphasized PUC DP suggestions to eliminate industrial uses and warehouses at Harbor Center.
- Reemphasized PUC DP suggestions to revitalize and redevelop Lehua Ave. makai of Kamehameha Hwy to include an attractive commercial street.
- Reemphasized PUC DP suggestion to develop a mini park under the banyan tree along Lehua Ave.
- Landscape and plant trees along Halawa Heights Road and Kahuapaani Street.
- Halawa Interchange is the entrance to the region and currently isn't very welcoming. Add vegetation and "green up" the area.
- Aloha Stadium shouldn't be a transit center, suggested "big bus stop."
- Clean up mangrove along the Pearl Harbor Historic Trail and near Rainbow Bay Park to open up views of the water.
- Establish/continue canoe launching from Rainbow Bay Park.
- Establish a trail extending mauka from Kaimakani Street.
- The Aiea Town Center should include a community center with meeting rooms, classrooms and multi-purpose rooms.
- At the Moanalua Road entrance into Aiea (near Kaimakani St. and the proposed Aiea Gateway) there should be two lanes into Aiea.
- Sidewalks are needed in upper Halawa, along Halawa Heights Road near Camp Smith.

- Keep/preserve Sumida Watercress Farm.
- Preserve/restore Pa'aiau Fishpond.
- Regarding the Pearl Ridge Transit Center site (former Jim Slemons), "if it's designed right it won't be a traffic problem. Most logical local since so close to shopping center, right on Kamehameha Hwy, and so many people transfer there anyway."
- Kam Drive-In site should be made into a regional park with a 50m pool and gym and should not be developed for commercial uses. The regional park can be integrated with existing swap meet function, mixing hardscape and softscape.
- Identified (name?) church along Moanalua Road across Pearl Ridge Elem. School. Churches also serve as community centers offering facilities and activities to community members.
- Make Moanalua Road more pedestrian-friendly. A number of schools are located along Moanalua Road.
- Traffic study location at Kaahale Street and Moanalua Road intersection is needed. Dangerous intersection.
- Kaahumanu Street and Moanalua Road intersection is dangerous. Kaahumanu Street is hard to enter and exit from.
- Preserve/restore fishpond near Harbor Center.
- Improve water quality of Waimalu Stream in the vicinity of Hekaha Street, Kaahumanu Street and Blaisdell Park along Kamehameha Hwy. It is a very visible portion of the stream.
- Establish/continue canoe launching from Blaisdell Park.

### **Aiea Group 2:**

#### Validation of Community Vision Goals and Strategies:

- Concurred with and validated Community Vision Goals and Strategies.

#### Community Design Ideas:

- Develop/Reinforce Themes
  1. "Aiea"
    - Meaning (Native Shrub)
    - Introduce into early education/cultural reference
    - Link to past/sense of place
  2. Plantation Era
  3. Water (Wai)
    - Origins
    - Re-connection
- Beautification Issues
  - Need to up-grade/improve existing
  - Improve entries to Aiea
  - Landscape improvements:
    - Kamehameha Highway
    - Moanalua Road
- Traffic and Circulation
  - Too many traffic lights
  - Increase bikeways, walkways along shoreline/Kamehameha Highway
  - Promote connections to makai/shoreline
  - Explore traffic calming measures
- Provide diversity of uses, activities along shoreline
- Land Use

- Eliminate industrial use along shoreline.
- Better utilization of Kam Drive-In site
  - Relocate waterfront commercial?
- Reinforce "Town Center"
  - Provide diversity/attractions
- Partnering with Navy to address:
  - Operational
  - Land Use
  - Environmental
  - Safety/Security
  - ATFP: Anti-Terrorist Force Protection

#### Community Design Ideas: (Map Mark-Ups)

- Replace industrial uses (in existing Harbor Center development) with retail congruent with water theme, sense of place.
- Aquaculture pond at the Aiea Seaport Village (makai of Harbor Center - Primo Gardens site).
- At the Harbor Center development - open amphitheater; open cafe; health/wellness/fitness center.
- Landscape area fronting Waimalu Shopping Center.
- Improve pedestrian/bikeway circulation (along Kamehameha Highway).
- Move waterfront industrial to the Kam Drive-In site.
- Create regional Express bus/rapid transit center within a portion of the Kam Drive-In site.
- Kidsworld (skating rink/hockey arena) at the Kam Drive-In site.
- Gym and swimming pool at the Kam Drive-In site.
- Need for traffic calming study at the intersection of Aiea Heights Drive/Ulune Street (near the ballpark).
- Add historical archive as a use at the planned Aiea Town Center.
- Beautify/improve streetscape along/within Aiea Town Commercial Core (along Moanalua Road and lower Aiea Heights Drive). Revitalize commercial core - activity at sidewalks, street trees, flags/banners.
- Create pedestrian/bike link to Aiea Town from Pearl Harbor Bike Path (in vicinity of Kauhale Street?).
- Beautify area around Aiea cemetery.
- Beautify entrance to Aiea (near Aiea Elementary School).
- Minimize/synchronize traffic lights at:
  - Aiea Heights Drive/Ulune Street intersection (by ballpark and sugar mill site).
  - Ulune Street/Kulaweia Street intersection.
  - Ulune Street/Kaimakani Street intersection.
- Partner with military - Aiea Town Historical ferry/bike/walking map.
- Maintain Halawa Interchange area - remove trees, landscape (xeriscape garden).

#### **Pearl City Group 1:**

#### Validation of Community Vision Goals and Strategies:

##### Goal 1: Build a "Livable Community"

##### Strategies

- "Provide a safe, healthy, pleasant and convenient environment for everyone who visits or lives in Aiea/Pearl City."

**Comment:** (re: underlined) - Not sure we want to encourage this.

- "Create a design character for the community that is representative of its history and its Hawaiian character and beautify the community according to an overall design strategy."

**Comment:** (re: underlined) - What does this mean?

- "Provide ample recreational and cultural resources and opportunities for both residents and visitors."

**Comment:** Residents first!

- Need to include Goal #2 - Economics.

#### Goal 3: Maintain a Sustainable Community

##### Strategies

- "Preserve or restore, if needed, environmentally sensitive areas."

**Comment:** Add underlined language.

- "Expand the network of parks and open space throughout the community."

**Comment:** High-rises allow for open space.

#### Goal 4: Create a Sense of Community

##### Strategies

- "Restore community pride by developing central gathering places for the community. Build major community centers in Aiea and Pearl City."

**Comment:** Yes, there should be a community center established for Pearl City.

#### Community Design Ideas:

- Need sidewalks to schools.
- Need sufficient bus stops.
- Need more traffic calming:
  - e.g., Noelani Street
  - Hoomalu Street
- Luehu Street off Waimano Home Road congested in afternoons.
- Bus stops - create character; more unique.
- Create Senior Center at Waimano Home area.
- Revitalize/clean-up Lehua Avenue.
- Near Burger King - 3 acres (development proposal explained):
  - Specialty retail
  - Wants to adopt park so can be kept clean.
- Pearl Harbor shoreline - need to clarify ownership, especially Navy.
- Need to partner with Navy in addressing:
  - Operational
  - Environmental
  - Land Use
  - Security/safety
  - ATRF: Anti-Terrorist Force Protection.
- Navy conflict: Pan-Am Pier with Navy Seal; bike path - Admiral's boathouse.
- Possible location for establishing community centers in Pearl City:
  - Waimano Home.
  - Kamehameha Highway/Waimano Home Road vicinity.
  - \*Lehua Avenue.

#### Community Design Ideas: (Map Mark-Up)

- Area in vicinity of Kamehameha Highway/Waimano Home Road/Lehua Avenue - community center is focal.
- Traffic calming needed at Noelani Street (in vicinity of Pearl Highlands Elementary School) - speed hump.

- In-line or skateboard park beneath the H-1 Freeway at Lehua Avenue.
- Move the Pearl Harbor Recreation Center currently proposed along Lehua Avenue to Waimano Home.
- Revitalization needed along mauka/makai Kamehameha Highway between pond area next to Zippy's/Waiiau Power Plant to Burger King/Blaisdell Park.

### **Pearl City Group 2:**

#### Community Design Ideas:

- Lehua Avenue - landscape.
- Waimano Home Road - overhead electrical.
- Waiiau Park pool (?), tennis courts.
- Trees - low maintenance.
- Pearl City Recreation Center - pool (50 meters).
- Landscape Kamehameha Highway.
- Traffic calming.
- Beautify Waimano Home Road above Komo Mai Drive.
- Median lower section of Lehua Avenue.
- Traffic signalization visibility - Waimano Home Road.
- Crime - Promote Neighborhood Watch (community involvement).
- School - security.
- Community programs promoting safety.
- Partnering with Navy to address these concerns:
  - Operational
  - Environmental
  - Land Use
  - Security/safety
  - ATFP: Anti-Terrorist Force Protection.
- Transportation:
  - Improve bus stops.
  - Bus shelter:
    - Minimum: benches
    - Maintenance.
  - Pearl City Elementary School ingress/egress.
  - Police ingress/egress.
  - Relocate Post Office to Manana Redevelopment area.
  - Pacheco Park:
    - Improve parking, restrooms.

#### Community Design Ideas: (Map Mark-Ups)

- What is the potential to revitalize the waterfront at the drainage ditch (Waimalu Stream - area denoted from vicinity of Moanalua Road to shoreline)? Shops? Cafes? Morning/evening market? Connection to Blaisdell Park?
- Possible Pearl City/Aiea Trolley route (route designated along Kamehameha Highway from Pearl City to Aiea near Stadium, mauka to Moanalua Road, west along Moanalua Road, and along Kuala Street to Kamehameha Highway).
  - \$0.25 fare
  - Trolleys to operate every 5 to 10 minutes.
- Incredible urban design potential in vicinity of Halawa Interchange area.

6335-01  
October 9, 2001

**Aiea-Pearl City Livable Communities Plan  
Community Workshop Results**

**October 3, 2001, 6:30 – 9:30 p.m.  
Pearl Ridge Elementary School Cafeteria**

The Community Workshop on October 3, 2001 for the Aiea-Pearl City Livable Communities Plan was attended by approximately 36 people. The purpose of the Workshop was to review and provide input on conceptual community land use and design plans and proposed traffic and pedestrian/bicycle circulation recommendations.

The Workshop included an Open House Session in which the attendees were provided the opportunity to visit three stations - Roadways and Traffic Station, Pedestrian/Bicycle Circulation Station, and Community Design Station - to review the conceptual plans and recommendations and dialogue with project personnel. This was followed by a Breakout Session in which attendees participated in one of three groups: Regional Group, Aiea Group, and Pearl City Group. The following input and comments were recorded for the Open House Session and Breakout Session:

**Open House Session**

Roadways and Traffic Station:

- Makai of Moanalua Road between Kaimakani Street and Aiea Access Road, add landscaping or rebuild curb to preventing parking on curb.
- Do not install traffic circles, and remove traffic lanes from Kaahale Street.

Pedestrian/Bicycle Circulation:

- Bike paths are preferable – out of traffic lanes.
- Continue bike path from Lehua Avenue to Waipahu.
- Need sidewalks in lower “Hoo” street areas of Pearl City, especially for senior citizens.
- Provide bikeway connection from Pearl Harbor Historic Trail to Leeward Community College.

Community Design Station:

- Relocate industrial areas – Moanalua Industrial to Pearl City Industrial.
- Relocate makai high-density dwellings to mauka of Kamehameha Highway.
- Relocate residential makai of Kamehameha Highway to mauka of Kamehameha Highway.

**Breakout Session**

Regional Group:

- Need to coordinate with the Navy in potential restoration of Pa’aiiau Fishpond at McGrew Point, as well as other proposed improvements at McGrew Point.
- Navy expressed concern with recreational uses of Pearl Harbor.

- Existing secured areas along the Pearl Harbor shoreline will only become more stringent in light of the recent terrorist attacks. Need to consider this in future planning of the area.
- Conduct quick traffic study of Manana area given recent traffic improvements – traffic seems to have improved.
- Concerned with traffic at Lehua Avenue/Kamehameha Highway, especially with the potential development of the nearby Pearl Harbor Recreation Complex and Senior Center.
- Potential for a historic village along Lehua Avenue.
- Coordinate with HECO regarding its planned installation of a new pipeline in the energy corridor. Potential opportunity for improvement of area with installation of the pipeline, including possible landscaping.
- Pearl Harbor shoreline area is underutilized – revitalization would enhance area.
- Should better manage Pearl Harbor shoreline area – not many other existing activities.
- Revitalize selective areas along the Pearl Harbor Historic Trail with commercial use, etc. Provide additional opportunities other than for recreational use. Opportunity to make it an attractive area with additional uses.
- Designate residential/commercial uses by Pearl Kai area along shoreline – possible commercial on ground level with residence above.
- Provide an alternative location for visitors to obtain tickets to the USS Arizona Memorial or the Battleship Missouri Memorial near the Pearl Kai area along the Pearl Harbor shoreline. The visitors could also help to economically support the surrounding commercial areas.
- Concern with raising fish for consumption in the fishponds along the Pearl Harbor shoreline – Pa’aiiau Fishpond at McGrew Point and the fishpond by Harbor Center. Restoration of fishponds would be for cultural purposes.
- Is the Town Center Emphasis modeled after the San Diego waterfront area?
- Waimalu Shopping Center is a great example of 1950’s architecture – area just needs sprucing up.
- Providing commercial use in mauka areas would help to alleviate traffic.
  - Provide convenience stores in mauka areas where bus routes terminate.
  - The existing convenience store on Auhuhu Street in Palisades (across of Palisades Elementary School) would be a good “test” for other potential convenience stores in mauka areas.
- Provide mauka/makai connection in Aiea – from Kamehameha Highway to mauka areas.
- Provide canopy or gold trees along Kahuapaani Street median. The street is the entrance to Aloha Stadium which hosts major sporting events.
- Gold trees are appropriate for area – there are some gold trees along Aiea Heights Drive.
- Trees as landscaping would help buffer traffic noise. Trees would also help in traffic calming (in conjunction with physical roadway improvements).
- Provide sidewalks in the older communities. Also underground utility lines which are prevalent in the older communities.
- Check the types of underground utilities running along Kamehameha Highway (check with HECO).
- There are no consistent sidewalks along Kamehameha Highway (not continuous). The highway in its present condition is not inviting to pedestrians – need landscaping.
- Former plantation manager homes above Moanalua Road in Aiea (across Aiea Library area) – check if these are historic.
- There used to be a trail from Schofield to Camp Smith (along the mountains).

- The existing drainage channel in Pearl City near Hoolaulea Street area would be a good opportunity for an urban trail.
- Provide urban trail along existing Kaimakani Street extension mauka to Camp Smith.
- Use existing drainage channels and streams as urban trails. Landscaped areas could be provided along edges of channels/streams where overflow of water levels would occur.

Aiea Group:

- Community Center Concept - comments regarding the pockets of commercial within the Aiea-Pearl City neighborhoods include:
  - Neighbors of the commercial parcels would not appreciate the additional traffic noise, etc.
  - Would prefer not to have 24-hour convenience-type stores, or other “undesirable” types of commercial development.
  - Unsure of profitability or sustainability of small businesses within the neighborhoods, due to the “mature” nature of these communities.
  - The convenience of the neighborhood stores would be attractive, but not for everyday use.
  - Suggest looking for existing pockets of commercial in the neighborhoods (e.g., Palisades, Halawa Heights) and study how they operate.
  - Economies driving development (would a corner grocery store be able to survive? Need to draw pedestrian traffic up into the neighborhood.).
  - Convenience
- Greenbelt Concept:
  - The “all green” makai of Kamehameha Highway was generally supported as a long-term goal for the community.
  - In the meantime, near-term development should focus on improving the existing land uses – while not creating any barriers to the long-term goals.
  - Relocate makai residential mauka of Kamehameha Highway.
  - Re-do Aiea District Park.
  - Improve pedestrian right-of-way to create a safe and pleasant walking environment.
- Town Core Concept:
  - The concept was supported by the group.
  - The history of Aiea was identified as an important concept of the Town Core.
  - Suggestions to promote the history of the town include walking tour “placards”, purchasing/preservation of historical plantation homes, and a museum.
  - Other uses suggested for the Aiea Town Center include facilities for the arts and a new library.
  - To promote “connectivity” over the freeway, improved pedestrian facilities are desired.
  - Revitalize town core.
  - Study neighborhood centers.
- Aiea Town Center
  - Ongoing evolution.
  - Perfectly located to draw elementary, intermediate and high school students.
  - Dance, music, theater productions could possibly use a performance space
  - Incorporate the plantation-house style into architecture.
  - Identify historical locations in the community, such as the sugar mill, the plantation manager’s house, and other historic structures (i.e., walking tours).
  - Identify historical areas for redevelopment incentives as is commonly done on the mainland.

Pearl City Group:

- Are we trying to move people makai of Kamehameha Highway? (Response: No. These are suggestions; next would be land use plan.)
  - Area is complex (multi-family housing).
  - The farming families have 4 – 5 houses.
  - Should not dislocate.
- As a concept and goals it is a good idea.
- Could be long-term 50 years.
- Something to move towards.
- Consider another mauka route parallel to Moanalua Road.
  - A concept like one that connects Komo Mai Drive across to Kaonohi Street.
- Concern of commercial and industrial traffic mixing with residential.
  - Establish “Truck Routes”.
  - Limit trucks on residential roadways.
- Palisades left out of picture.
  - Like a second access road.
  - Palisades has a commercial area.
- If create commercial areas in mauka/neighborhood areas, would need to relocate people.
  - May not be feasible.
- Can change zoning and land use, but it would be up to the owners.
- Board of Water Supply development at Komo Mai Drive hairpin turn – community opposed development.
- Manana Navy Warehouse site (comments based on City’s Manana Redevelopment Plan):
  - The height limit is the key issue.
  - 60-foot height limit would change nature of community – not necessarily industrial.
    - Will block beautiful views of Waianae Range.
    - Will affect quality of life (openness).
- Town Centers – to bring up to standards.
  - Need to revitalize Lehua Avenue. Owners been there 50 – 60 years. City maybe could have a redevelopment plan – provide tax incentives – allow owners to consolidate lots.
  - Maybe in conjunction with transit centers.
  - Establish Revitalization Task Force.
- Makai of Kamehameha Highway is original Pearl City.
- Concept of opening makai area.
  - Consolidation of lots would reduce density.
- If have denser development makai of Kamehameha Highway, need to consider view planes.
- Harbor Center conditions – need to comply with Pearl Harbor Historic Trail.
  - Setbacks for buildings.
- Landscape Concepts
  - These concepts can apply if there is enough room.
    - What about Moanalua Road? Would need more right-of-way; may not want to eliminate lanes.
  - Going to be limited on existing roads; implementation may be difficult.
  - People ask for trees to be removed – trees uproot sidewalks – safety hazard for pedestrians.
- Urban Trail Concept
  - Difficult to get an understanding of scale, how wide.

- With divided pedestrian/bicycle paths, is there enforcement? Sometimes a wider combined path is simpler.
- The more trees, the more shade, cooler when walking – preferable (divided path) – does require more land.
- Downtown District
  - Create special design district for historical/cultural resources to establish guidelines – not enforceable otherwise.
  - The community needs to get together and decide. It will make for better cooperation. Community input needed for guidelines.
  - Need to provide alternative routes around district.
  - Manana Board of Water Supply building very close to road – hasn't left much room for landscaping.
  - Example of Town Center: Mililani.
    - Commercial, civic and public uses concentrated, surrounded by residential – pedestrian-friendly.
  - This will help give the community identity.
  - Pearl City not pedestrian-friendly – how do you divert traffic?
  - Possibility of mauka-makai trolley – or City circulator buses – that go around the community.
  - Hub & Spoke from Hale Mohalu proposed transit center.
  - Like Waikele or Ward Center example of trolley routes – connecting commercial areas encourage/support shops.
  - Timeframe – 20 to 50 years. Long-term goal is to work towards plan.
  - Based on economics – if there is no one to go to store, it won't get built.
  - Even if long-term, it is good to put down guidelines or else development will continue to be haphazard.
  - Need to bring people back.
  - Near Lehua Senior Center – Pearl Harbor Historic Trail hub will become a major attraction

6335-01  
December 6, 2001

**Aiea-Pearl City Livable Communities Plan  
Community Meeting Results**

**December 5, 2001, 7:00 – 9:00 p.m.  
Pearl Ridge Elementary School Cafeteria**

The Community Meeting on December 5, 2001 for the Aiea-Pearl City Livable Communities Plan was attended by approximately 30 people (sign-in sheet attached). The purpose of the Meeting was to review and provide input on preliminary community design plans and proposed traffic and pedestrian/bicycle circulation recommendations.

The Meeting included an Open House Session in which the attendees were provided the opportunity to visit three stations - Traffic Station, Pedestrian/Bicycle Circulation Station, and Community Design Station - to review the preliminary community design plans and recommendations and dialogue with project personnel. The following input and comments were recorded for the Open House Session:

Traffic Station:

- Aiea Heights Drive/Moanalua Road:
  - Community design presentation showed median landscaping along Moanalua Road. Concern with shortening of left-turn pockets to accommodate landscaping.
  - Support for allowing right-turn out of Aiea Shopping Center from driveway along Moanalua Road.
  - Suggest restricting left-turn out of lower Aiea Shopping Center from driveway along Aiea Heights Drive.

Community Design Station:

- How will buses/commuters access the proposed Aloha Stadium transit center?
- Proposed Pearl Harbor Recreation Complex and Senior Center – good idea.

6335-01  
November 22, 2002

**Aiea-Pearl City Livable Communities Plan  
Community Meeting Results**

**November 20, 2002, 7:00 – 9:00 p.m.  
Pearl Ridge Elementary School Cafeteria**

The Community Meeting on November 20, 2002 for the Aiea-Pearl City Livable Communities Plan was attended by approximately 53 people (sign-in sheet attached). The purpose of the meeting was to present the Pre-Final Community Vision Plan and obtain input on proposed community land use and design plans; traffic, traffic calming and pedestrian/bicycle circulation recommendations; and implementation plan.

The Meeting included a presentation of the pre-final project plans/recommendations in a Plenary Session, and an Open House Session in which the attendees were provided the opportunity to visit three stations - Community Design Station, Traffic Station, and Pedestrian/Bicycle Circulation Station - to review the pre-final plans and recommendations and dialogue with project personnel. Input and comments/questions, with responses summarized in brackets, were recorded for the Plenary Session and Open House Session and are included below. Written comments received on the proposed recommendations are also included below.

**Plenary Session**

- Why is the Makalapa housing area located near Aloha Stadium not included in the Livable Communities Plan? *[out of study area]*
- (Representative Mark Takai) Should extend traffic calming improvements along Kaahumanu Street mauka of Komo Mai Drive to the end to reduce speeding. *[Will extend]*
- (Representative Takai) Should include traffic calming improvements along Hoomalu Street between Waimano Home Road and Komo Mai Drive. *[Will extend]*
- Is the Livable Communities Plan fairly well set? Once adopted, will the Plan be final? *[Plan will be completed, but it should be continually reviewed and revised over time]*
- Need to make the Kamehameha Highway and Waimano Home Road area more pedestrian-friendly (crosswalks, etc.). *[crosswalk enhancements planned]*
- Cautioned to not go overboard with urban design improvements when there is no money for maintenance (i.e., trimming of trees). Shower trees are rubbish trees. Traffic calming improvements are also going overboard; should speed up traffic, not slow it down.
- The Aiea Neighborhood Board was asked to comment on the draft Primary Urban Center (PUC) Development Plan. What is the relationship between the PUC Development Plan and the Aiea-Pearl City Livable Communities Plan? *[Plan to be subject to Neighborhood Board review and approval, thence submitted for City Council acceptance]*
- If the PUC Development Plan and Livable Communities Plan reflect the community's desires, what about projects that arise before these Plans are finalized? *[DPP tries to consider the plans in their review even though the plans are not official]*

- What are the final steps in the completion of the Livable Communities Plan? *[Plan will be submitted for Neighborhood Board and City Council endorsement]*
- The Aiea Neighborhood Board was presented a plan in which a building was proposed to be developed at a height of 60 feet. This is going against the recommendations of the Livable Communities Plan. Is the Livable Communities Plan for naught?
- Are the PUC Development Plan and Livable Communities Plan made available to applicants of proposed developments? Applicants are generally unaware of these plans.
- (Claire Tamamoto) Community members should be more vigilant in informing others in the community of these plans; the community can then rally around these plans. The City responds to the concerns of the community.
- (Jerry Souza) Will the abutting property owners be required to cost-share in the development of proposed improvements, such as sidewalks?
- (Representative Takai) Encountered cost-sharing issues with the community when sidewalks were requested for Hoomalu and Hoolaulea Streets. The Integrated Transportation Plan of the Livable Communities Plan depicts proposed sidewalks along those streets. *[Cheryl Soon, City Department of Transportation Director, responded that the recommended improvements in the Livable Communities Plan will be City-funded.]*
- (Representative Takai) Provided status of the Kamehameha Highway Improvements Project. Still determining when the next community meeting will be held; format would be similar to this meeting in terms of scoping process. Noted the depiction of a pedestrian overpass on Kamehameha Highway near McGrew Point in one of the renderings. Expressed concern with such overpasses, but will look into them if the community wants them. In the past, overpasses were generally not proposed due to low usage and, more recently, due to ADA concerns. *[Concern is acknowledged – bridge proposed to serve as both gateway and shoreline accessway from Aiea, which presently does not have good access.]*
- (Robyn Blanpied) The Livable Communities Plan makes reference to the Pearl Harbor Historic Trail, but there is no reference of the train or the historic train route. *[Will check and correct as needed]*
- Likes the Livable Communities Plan, but the Plan does not look toward the future. Most of the recommended improvements are based on the car as the primary mode of transportation. The Plan also looks at the present-day sidewalks and bikeways. The Plan should look “outside of the box”. A quarter of the Pearl City residents are senior citizens; in a few years the senior population will increase to one-third. Need to ensure the mobility of senior citizens.

### **Open House Session**

#### **Community Design Station:**

- Existing golden shower trees in Aiea are high maintenance trees. The City does not maintain the trees unless notified by residents. Instead of planting shower trees along a particular street, suggest planting a few of those trees at a gateway feature so maintenance is reduced.
- Need to address existing problems and concerns in the community before implementing the proposed improvements.
- Need to address and document areas of concern in the community in a systematic fashion.

- Should look at including the Makalapa housing area in the Livable Communities Plan given its close proximity.
- Need to address upkeep of landscaping; unable to handle maintenance of existing landscaping.
- The proposed Pearl Harbor Recreation Complex and Senior Center at the Lehua Avenue location is in a flood area; should not develop there.

#### Traffic Station:

- Concerned with the new traffic signal at the Aiea Sugar Mill site and its potential conflict with existing traffic flows/signal at Aiea High School.
- Need traffic calming improvements on Moanalua Road between Honomanu and Kaamilo Streets.
- Make Kamehameha Highway a local road – cut-off the Freeway exits to the Highway on both ends at the Pearl City Industrial Park and the Moanalua Road/Kamehameha Highway merge below Aiea. Then add roundabouts to major intersections on Kamehameha Highway.

#### **Written Comments**

#### Community Design:

- Question need for section of urban trail which runs mauka from Komo Mai Drive between Kaahumanu Street and Nahele Street (Punawai Gulch). The gulch handles a lot of water during heavy rains – an erosion concern for homes on both sides of the gulch. The homeowners would have security concerns with pedestrian access in this previously jungle area. Rest of urban trails in this neighborhood looks okay.
- It's "Pearl Harbor Historic Trail", not Pearl Harbor Bikeway. Where's the train?
- Do these improvements coordinate with any other road work or public utility work? (i.e. water main replacements or Hawaiian Electric undergrounding any of its lines in the area; sidewalk accessibility improvements/requirements; etc.),
- Concerned with drainage and root growth (for the trees) in the landscaped additions to the roadways.
- Concerned with maintenance of the pathways and landscaping.

#### Traffic and Pedestrian/Bicycle Circulation:

- Kamehameha Highway at Waimano Home Road needs to be more pedestrian-friendly.
- Mass transit plan (like BRT) needs to run through Pearl-City/Aiea.
- Likes overpasses and underpasses. Different pathways for different modes at Central Park is a good example.
- Traffic calming narrows the road which makes it harder to navigate the road (less safe), and/or speed bumps which would damage my car. Am against any traffic calming measures since it would slow me down when trying to get from point A to point B.
- Location: Ulune Street at the first traffic signal after the H-1 Freeway off-ramp (westbound), just after the bus stop, where most motorists turn right into the Halawa Industrial Park area. Thought: Could there be an exclusive right-turn lane after the bus stop? Currently, there are white reflectors that restrict through traffic if the traffic signal is red. Problem: If there are more than 3 vehicles waiting at the red traffic

signal, motorists who want to turn right cannot or they run over the reflector poles. Gets really congested during afternoon commute time or if there is a game/function at Halawa Park.

Other Comments:

- Aloha Stadium/Puu Wai Momi community needs to be incorporated into the Livable Communities Plan. A simple landscape pathway around Aloha Stadium to the overpass near Aiea Elementary School will help kids get to school safely. This neighborhood is part of our community and needs to be included.

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Aiea  
Pearl City  
Livable  
Communities  
Plan

May 2004

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Miyabara Associates

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