# TABLE OF CONTENTS

## CHAPTER 1 - INTRODUCTION
- Transit That Aims Higher ........................................ 1
- Purpose and Goals .................................................. 2
- Report Organization .................................................. 3
- Development Oriented Transit ..................................... 4
- Urban Design Principles ............................................. 6
- Livability Benefits of Urban Design .......................... 7
- Zones of Responsibility ............................................. 8
- Suggested HCT Urban Design Process .................... 9

## URBAN DESIGN GUIDELINES

### CHAPTER 2 - MAKE TRANSIT WORK
- Introduction ......................................................... 11
- Fit Station into Surroundings .................................... 12
- Guideway is a Design Opportunity .......................... 14
- Service Buildings are a Design Opportunity .......... 16
- Pedestrians Have Highest Priority ....................... 18
- Bicycles are Highest Priority Vehicle .................... 22
- Blend Buses With Station Environment ................. 24
- Accommodate Motor Vehicles: Pick-up and Drop-off .. 26
- Accommodate Motor Vehicles: Park-and-ride ........ 28
- Structured Parking ............................................... 30
- Multi-Functional Transit Plazas .............................. 31

### CHAPTER 3 - CREATE A PLACE
- Introduction ......................................................... 33
- Station as Place .................................................. 34
- Transit Plaza Aesthetics .......................................... 35
- Places for People ............................................... 36
- Create a Safe Place .............................................. 38
- Make Sustainability Visible ................................... 40

## CHAPTER 4 - CONNECT TO COMMUNITY
- Introduction ......................................................... 43
- Begin With a Corridor-Wide Approach .................. 44
- Transit Oriented Development .............................. 45
- Create a Quality Pedestrian Environment ............ 46
- Create Complete Streets ...................................... 47
- Link To Adjacent Development ............................ 48
- Create a Context Sensitive Solution ................... 49

## CHAPTER 5 - STATION DESIGN EXAMPLES
- Introduction ......................................................... 51
- Downtown Station .................................................. 52
- Civic Center Station .............................................. 56
- Kalihi Station ...................................................... 60
- UH West O‘ahu Station ........................................... 64
TRANSIT THAT AIMS HIGHER

The coming of high-capacity transit (HCT) to Honolulu represents a once-in-a-lifetime opportunity to capture the community building and people moving benefits of this major investment in Honolulu’s future. HCT represents the largest new transportation infrastructure project on O‘ahu since the construction of the interstate highway system. HCT will provide an entirely new way to travel and experience the island. It will introduce numerous physical elements of engineered and architecturally designed transportation infrastructure. The application of sound urban design principles will help to:

- Maximize the performance of this transit investment.
- Enhance the livability of the communities it serves.
- Create long term value, and
- S sensitively integrate HCT into O‘ahu.

Everyone involved with the HCT project should understand how, and give priority, to the creation of a well designed, unique system that fits with the character of the surrounding island community. Applying good urban design practice to the HCT project is essential, as quality of place and quality of life are inseparable.

HIGH QUALITY TRANSIT  +  GOOD URBAN DESIGN  =  MAXIMUM TRANSIT SYSTEM PERFORMANCE
PURPOSE AND GOALS

Transit projects are complex, and so is urban design. The purpose of this report is to help guide the design of the HCT project and how it fits into, complements, and creates value in the communities surrounding the stations. The guidelines are based upon best practice for successfully integrating the dual objectives of designing transit systems for efficient people moving and community building. They represent urban design guidelines and standards that may be used as part of the station planning process.

The guidelines are meant to supplement, and not replace, existing policies and regulations or other project related reports. They are based upon research regarding precedents in which cities and transit agencies around the US have similarly incorporated sound urban design principles as an integral element of large-scale transportation systems. The guidelines are descriptive and suggestive - providing principles, examples, and guidance on ways to integrate the HCT transit project in a context-sensitive manner within the greater Honolulu community.

This report is intended to supplement and complement existing engineering and environmental standards and guidelines. In particular, it should be used in conjunction with several related HCT project reports:

- Design Language Pattern Book (October 2008)
- Design Criteria Chapter 10 Architecture (October 20, 2008)
- Design Criteria Chapter 11 Landscape Architecture (September 18, 2008)
- Design Criteria Chapter 26 Sustainability (March 2009)
- Station Interface Planning Report (2009)

The guidelines are meant to be dynamic and flexible. They can be updated as necessary, particularly as the project gets closer to implementation, and even after implementation.

INTRODUCTION

This report is intended to supplement and complement existing engineering and environmental standards and guidelines. In particular, it should be used in conjunction with several related HCT project reports:

- Design Language Pattern Book (October 2008)
- Design Criteria Chapter 10 Architecture (October 20, 2008)
- Design Criteria Chapter 11 Landscape Architecture (September 18, 2008)
- Design Criteria Chapter 26 Sustainability (March 2009)
- Station Interface Planning Report (2009)

The guidelines are meant to be dynamic and flexible. They can be updated as necessary, particularly as the project gets closer to implementation, and even after implementation.

URBAN DESIGN GUIDELINES

1. Provide a set of urban design principles and best practices for the HCT project.
2. Provide a toolkit to assist designers, engineers, and city staff with urban design as it relates to the HCT project and the surrounding station areas it will serve.
3. Be viewed as a starting point that should be refined and amended over time.
4. Establish an expectation for high quality, innovative public spaces adjacent to the HCT project.
5. Clarify timing, roles, and responsibilities in creating high quality public spaces that are part of the HCT project and beyond the HCT project scope.
6. Recognize that individual station areas need to be unique and meet the needs of the many communities the system serves.
Three main ideas form the basis for the urban design guidelines recommendations: 1) make sure the essential transit elements are both functional as well as aesthetically pleasing, 2) create a desirable place at transit stations – particularly for pedestrians, and 3) connect the transit system to the greater O‘ahu community, at a variety of scales. These three ideas are explained and illustrated throughout the five chapter document as described below.

Chapter 1 - Introduction. The responsibility for good design transcends the HTC project. This chapter generally describes the importance of urban design and how it applies to the HCT project, as well as introduces and describes three main organizing concepts. This chapter also briefly discusses potential urban design roles and responsibilities of the parties involved with the HCT project.

Chapter 2 - Urban Design Guidelines: Make Transit Work focuses specifically on improving the aesthetics, character, and function of the basic transit system elements (such as the guideway structure, parking areas, and bus facilities).

Chapter 3 - Urban Design Guidelines: Create a Place focuses on techniques for capturing benefits from transit system elements to improve their role in ‘place-making’ – whether it is fitting into the adjacent community context, or helping define and/or redefine new places.

Chapter 4 - Urban Design Guidelines: Connect to Community focuses specifically on the urban design considerations of connecting the transit system to the streets and existing or potential new development within easy walking distance of stations.

Chapter 5 - Station Design Examples illustrates how the proposed urban design guidelines (discussed in the previous chapters) might be applied to specific locations. The intent of the examples is to illustrate how to organize a myriad of interrelated urban design improvements in a manner that is consistent with the proposed design guidelines.
To maximize functionality and mutual benefit, transit facilities and surrounding development must be designed with an eye to each other. Unfortunately conventional transit design can separate transit from the community it is intended to serve. Simply having transit and development adjacent to each other is not enough. For transit facilities, they should be designed to be welcoming to the public and be well connected with the surrounding community. This transit facility design perspective is often referred to as Development-Oriented Transit (DOT).

On the land development side, the surrounding community should support transit by creating pedestrian-friendly places that feature good connectivity, an inviting public realm, and a greater mix of land uses along with higher densities. The term Transit-Oriented Development (TOD) is typically used to describe this technique.

Transit urban design considerations directly influence passenger experience. However, passenger experience transcends boundaries between community areas and transit agency responsibilities. Detailed design attention to the areas where station space and community urban space ‘touch’ will be of utmost importance to achieve overall successful transit urban design.
CHARACTERISTICS OF DEVELOPMENT-ORIENTED TRANSIT (DOT)

Visible to Transit Riders
Transit patrons need to be able to see where they are going. A clear line of sight to the station from adjacent streets and land uses allows transit patrons an easy way to orient themselves and recognize where they are. Landmarks, vistas, and focal points are key visual orientation devices; they can be used to show the way, emphasize the hierarchy of space, or welcome transit patrons to the station entrance. The station canopy provides an excellent opportunity to create a landmark.

Accessible Between Station and Destination
The relationship between existing community elements (buildings, streets, sidewalks) and the new transit infrastructure should be assessed as part of the design process to determine if a linked series of spaces, visual cues, and available routes make it easy to access the station. Direct, attractive connections – without barriers or dead ends – should be provided.

Connected to Allow System Transfers
Transit patrons will need to be able to conveniently transfer between TheBus and the HCT. Clear, direct routes for pedestrians between the two modes will be essential, but bus facilities should not overwhelm or dominate station areas since a high quality pedestrian experience is also an essential urban design objective.

Active with Uses that Promote Ridership
A range of uses, conveniently located close to the station entrance, will promote activity within the station area. Higher intensity development (such as office and/or residential towers), with active ground floor uses (such as shops and/or restaurants), sensitively clustered within a short walk of station entries will assist in promoting transit ridership and the creation of “18 to 24 hour places”.

Properly planned and designed transit facilities can be instrumental in positively shaping a community’s future. They can set the stage by being a catalyst for implementing the community’s vision and creating economic value. Fitting transit into the community sometimes may require breaking the mold of generally accepted transit design. A DOT design perspective seeks to enhance transit system operation, passenger requirements, community fit and future development opportunities. It assumes that it is possible to meet user requirements and maintain cost-effective service while capturing synergies with station areas that exhibit TOD potential, encouraging environmentally friendly practices, and creating lively community spaces to visit and not just travel through.
INTRODUCTION

URBAN DESIGN PRINCIPLES

Urban design is the nexus of urban planning, architecture, and landscape architecture. For a major project like HCT, urban design is an essential element of realizing the opportunity and fitting the project into the community. Urban design concerns the arrangement and detailing of structures, buildings, places, spaces and networks that define our towns and cities. Successful communities apply urban design principles to orchestrate numerous physical and non-physical elements to create dynamic, attractive places for its residents to work, live, visit, and relax.

Successful transit systems share one common trait – excellent pedestrian access. Transit works best when stations and stops are easily accessible and surrounded by places that people like to visit – not just travel through. Creating inviting pedestrian places adjacent to transit increases the number of transit patrons and the overall vitality of the surrounding community.

Relative to the HCT project, the following seven design principles should be reflected in the design of the HCT transit facilities, surrounding streets, and neighboring properties.

Seven Principles of Urban Design

1. Places for People
   For places to be well-used and well-loved, they must be safe, comfortable, varied, and attractive.

2. Reflect Context - Make it Better
   New development should reflect and enrich the best qualities of existing places.

3. Create Urban Structure
   Inter-relationships between blocks, streets, buildings, open space, and landscape matter.

4. Provide Connections
   Places need to be easy to get to and integrated physically and visually with their surroundings.

5. Mix Use and Form
   Interesting, convenient, and desirable places meet a variety of needs and weave together different building forms and uses.

6. Well Detailed
   Buildings, streets & spaces between contain many finish treatments. Best places coordinate design details so that this interface is attractive and welcoming.

7. Flexible & Maintained
   Responsibility for care & maintenance is an essential consideration, and flexibility in the use of property allows for response to future conditions.
LIVABILITY BENEFITS OF URBAN DESIGN

The benefits of good urban design accrue to the broad community; therefore, many stakeholders have an interest in what takes place at both the micro scale (street and building design) and the macro scale (e.g., circulation patterns and land use). Furthermore, many kinds of ‘value’ can be considered – economic, environmental, social or cultural; tangible or intangible. Communities value the improved quality of life and aesthetics that good urban design can deliver; conversely, poor urban design can have significant adverse effects on the urban environment, society, and economy. The following six points describe livability benefits that urban design attention will bring to the HCT project.

Facilitate Transit Ridership
High quality, well designed station areas encourage transit patronage by facilitating positive transit user experience. Ease of use encourages first time users to become regular users, and regular users to return again and again.

Increase Project Acceptance
High quality station areas are places that people care about. The surrounding community will appreciate attention to urban design details since they impact their livability and sense of civic pride.

Improve Quality of Life
Well designed, active places attract people and encourage walking. Urban design facilitates connection and synergy between a diversity of elements allowing residents to meet needs of daily life while they interact with transit.

Make Places Safer
Urban design can help make stations, neighborhoods, and cities safer and more secure by promoting visibility, activity, “eyes on the street” and “eyes on the station”.

Stimulate Economic Opportunity
High quality transit connections, combined with high quality places, equal more real estate value. Employers and developers recognize that sites with close proximity to transit have advantages over sites that are isolated and only accessible by automobiles.

Conserve Energy and Environment
High quality pedestrian places connected to transit result in a reduction of car use – saving energy and lowering greenhouse gas emissions. Well designed station areas encourage compact development, providing an alternative to inefficient sprawl.

Most people understand buildings, open spaces, and streets. But the transit project will consist of many new types of “buildings”, serving a variety of “transportation” functions, and will need to be integrated into a variety of new “places”. If done well, the community will benefit in multiples ways, capturing the maximum value of the transit investment.
INTRODUCTION

ZONES OF RESPONSIBILITY

Great transit can compliment and help make a great place - the urban design challenge in part is figuring out how as part of the continuum - make transit work, create a place, connect to the community. Many stakeholders are involved, and they need to work together in ways that they may or may not realize. Achieving a high-quality outcome will require the support and commitment of many. The HCT project cannot assume responsibility for every element required to make station areas successful – the project has a limited scope and budget. What the HCT project can do is facilitate interaction between stakeholders to identify a range of elements desired within station areas. The challenge is that the best solutions typically cross “boundaries” and require coordination and attention to timing.

The general concept of “zones of responsibility” is a good way to begin to define where different stakeholders will be focusing their attention, yet illustrate how these zones overlap and relate. The most successful projects are those where there is a clear understanding and approach for getting ownership of “the spaces in-between” the zones of responsibility.

---

HCT Project Envelope

The HCT project is primarily concerned with improvements within the project Right of Way (ROW), but cannot ignore that its success is also dependant of the character and function of the streets and development adjacent to this ROW. Sometimes the ROW is above streets, or may be integrated with private development. It will be necessary to consider how the project envelope overlaps with adjacent streets and development.

---

Adjacent Streets

Streets are essential in meeting functional requirements of vehicles in the transit corridor, but their role as places of shared use – especially for pedestrians - is also essential. The City and County of Honolulu, as well as the Hawaii Department of Transportation, should work with the HCT project to make sure that streets near station areas meet the urban design needs of all users, not just motor vehicles. And the HCT project should not ignore the fact that future transit patrons need to cross streets safely if they are to access the transit system.

---

Adjacent Development

Adjacent station area development offers the opportunity to connect and coordinate land use with the HCT investment. Typically, this development will be by private parties, but the City and County of Honolulu, or a state agency, may be the developer. Sometimes the City and County of Honolulu, or a state agency, may be the regulatory entity responsible for reviewing development proposals in the station areas.
The HCT project is an unprecedented opportunity to shape Honolulu’s future. The approach for planning and designing HCT to fit into the community needs to be equal to the opportunity. As the HCT project moves forward, it is recommended that increased attention to urban design begin immediately, and continue through the life of the system (since station area needs change over time). Immediate steps the HCT project could include are:

### SUGGESTED HCT URBAN DESIGN PROCESS

1. **Vision for Each Station**
   - Using the urban design guidelines as a reference, a guiding vision should be identified for each station. The Department of Planning and Permitting (DPP) has begun vision processes for several stations, but many stations still require urban design consideration – something that the HCT project could begin to facilitate and address at other stations as part of a collaborative process with DPP and the HCT project. Ideally a team of project designers and skilled urban design staff would work closely with affected agencies and stakeholders to begin to set a station area design vision and framework.

2. **Work Collaboratively**
   - Creating successful station areas requires an integrated approach for the HCT, adjacent streets and development. Bringing together the players for each zone of responsibility is critical. Stakeholders need to view themselves as a team, working together to achieve mutually beneficial results, and meeting multiple objectives. Combining transit with disparate elements such as community, built form, landscape, ecology, and materials selection requires urban design expertise to create value and places where people want to be.

3. **Commitment and Leadership**
   - Transit station areas are complex places, filled with design opportunities. It is vital that someone, and/or some group, keep an eye on assuring that the vision of creating high quality places remains part of the transit building process - now and in the future. This leadership must build confidence and consensus amongst parties that urban design matters are part of the work plan, and that roles and responsibilities to achieve positive outcomes are clear. As HCT designs are being developed, so too should understanding, definition, and commitment to the long term upkeep of station areas.

4. **Identify Responsibilities**
   - Based on the urban design studies, a clearer definition of desired station area improvements will then be available. This will allow roles, responsibilities and timing to be clarified to coordinate a comprehensive approach to achieve station area improvements that go beyond individual stakeholder needs.

Facilitating ownership of the ‘spaces in-between’ is the key to creating great places with transit.

Design charrettes and workshops are an effective means to bring together urban designers with project stakeholders to foster communications, define station area visions, and promote shared responsibility.
INTRODUCTION

The success of any transit system is largely based upon its accessibility and convenience for riders. If it is difficult or time-consuming for people to use transit, they will find another way to get around. This chapter describes techniques to make access to and from the HCT stations easy and convenient - especially for pedestrians, since they are the most important mode to prioritize when designing for transit success. Bicycles, bus transit, and automobiles are also important station area transportation elements and are discussed as well.

This chapter includes sections on:
- Fit Station into Surroundings
- Guideway is a Design Opportunity
- Service Buildings are a Design Opportunity
- Pedestrians Have Highest Priority
- Bicycles are Highest Priority Vehicle
- Blend Buses with Station Environment
- Accommodate Motor Vehicles: Pick-up and Drop-off
- Accommodate Motor Vehicles: Parking
- Accommodate Motor Vehicles: Structured Parking
- Multi-Functional Transit Plazas

Springfield Transit Center, Springfield, Oregon
MAKE TRANSIT WORK
FIT STATION INTO SURROUNDINGS

The first task of transit system urban design is to consider how the station will fit into its surroundings, with particular consideration of how the station pedestrian entry will be emphasized.

Emphasize Station Entry
Station orientation, furnishing elements, and landscaping should be arranged and prioritized within the context of the surrounding area to visually emphasize the station pedestrian entrance.

Consider View from Below
The underside of stations and guideways represent design opportunities, and particular attention should be paid to the detailing and finishing of these surfaces, especially in high visibility areas.

Link Station With Ground Plane
Vertical design elements (such as elevators, escalators, and/or stairs) should be exploited to emphasize the physical and visual linkage between the station platform (above) to transit station plaza (below, at grade) to assist transit patron way finding.
Example of Potential Station Entry Treatments

LEGEND

1. Escalator up to station
2. Weather canopy provides protection
3. Visible bike parking
4. Space for retail provides activity
5. Generous pedestrian areas
6. Decorative paving
7. Landscaping

World Trade Center
Portland, Oregon
MAKE TRANSIT WORK
GUIDEWAY IS A DESIGN OPPORTUNITY

The system guideway will stretch the entire length of the transit corridor and be one of the most visible elements of the system. It represents one of the biggest opportunities to make a high quality urban design statement.

Guideway Structure
Sculptural treatments and/or architectural detailing of the guideway structure can improve upon its aesthetic appeal, reflect local context, emphasize the station entry, and/or help to achieve local urban design objectives.

Structural Support Columns
In general, an elegant and consistent approach to column design will help unify the HCT system. In certain areas, however, the addition of color, textures, and/or sculptural treatments may be appropriate to differentiate the HCT design to improve upon its aesthetic appeal, reflect local context, emphasize the station entry, and/or help to achieve local urban design objectives.

Program Space Below
Spaces below the guideway are opportunities to create places or locate facilities. In Portland, Oregon spaces under elevated streets provide an open air market, transit station, and trolley storage barn. In San Francisco, Mission Creek Park North is located under a highway.

June 2009
Parsons Brinckerhoff’s PlaceMaking Group
Example of Guideway Creating an “Outdoor Room”

1. Guideway structure defines space and provides shade
2. Eye drawn towards station entry
3. Direct pedestrian connection
4. Well lit
5. Pedestrian crossing of street given design emphasis
6. Decorative paving
7. Landscaping
8. Bollards
9. Planter wall doubles as seating
10. Wayfinding signs

Miami-Dade Transit
Miami, Florida
MAKE TRANSIT WORK

SERVICE BUILDINGS ARE A DESIGN OPPORTUNITY

Service buildings will be located throughout the length of the corridor and be highly visible elements of the system. They represent a significant opportunity to make a high quality urban design impact.

Treat Architecturally
Should facilities be located on a site with redevelopment potential, ideally they should be designed to be incorporated into future buildings.

Treat As Art
Where facilities are visible from streets or the pedestrian realm, carefully designed, high quality, contextually appropriate delineation and/or screening should be incorporated.

Defines Space
Service buildings, such as substation enclosures and maintenance facilities, need to be located not only for ease accessibility, but also so that they help to define high quality public places.
Attractive high quality materials with interesting design detailing
Well lit
Windows provide transparency, as well as increase visibility and surveillance
Bike parking
Transit staff parking
Building takes advantage of space under structure
MAKE TRANSIT WORK
PEDESTRIANS HAVE HIGHEST PRIORITY

The first 600 feet around transit stations provide the first impression of the place and are important for orientation and wayfinding. This is especially important for infrequent or first time users, and if done well, makes for a better transit experience and increases the likelihood of repeated use. The first 600 feet essentially connects the station with the surrounding community – ideally this makes the station a seamless, integrated part of the community and surroundings.

Pedestrian is King

Safe, convenient, and comfortable pedestrian travel between the station and surrounding areas should be a first priority. This includes direct routes that don’t require out-of-direction travel; wide sidewalks buffered from traffic, and; clearly marked pedestrian street crossings with adequate signal timing and generous refuge islands.

Street Level Facilities

The ground level treatment (sidewalks, streets, landscaped areas) and first floor of surrounding structures – essentially anything within the pedestrian’s reach - should be given a high degree of design attention and utilize the most durable of materials. The level of design detail and quality of materials outside of the reach of pedestrians is of less importance (unless it is a landmark structure).

Activity at Station

Buildings should front the transit plaza and primary connecting pedestrian streets with inviting entries, windows, canopies, or arcades. These buildings should contain a variety of retail businesses and destinations that attract and support pedestrian use.
Example of Street Crossing that Emphasizes Pedestrian Circulation

LEGEND

1. Clear visible sight lines to and from station
2. Landscaped areas for shade and visual relief
3. Pedestrian oriented lighting improves aesthetics, safety and security
4. Active uses along edges to increase visibility, security and convenience of public spaces
5. Raised crosswalk calms traffic

Jebel Ali Village Station (Visualization)
Dubai, UAE
MAKE TRANSIT WORK

PEDESTRIANS HAVE HIGHEST PRIORITY

All transit users are a pedestrian at some point in their trip. Strongly supporting pedestrian use of station areas should be a primary project objective and urban design goal.

Provide Generous Facilities

Sidewalks and plazas should be amply sized and free of obstacles that impede pedestrian flow to and from the station entrance. Spaces should provide adequate and comfortable capacity for waiting and gathering as well as walking.

Pedestrian Scale

All elements within the pedestrian realm, such as station entries, plazas, sidewalks, building facades, as well as design details such as lighting and paving, should be scaled to relate to human usage.

Views and Connections

The station, particularly its entrance, should be clearly visible to pedestrians from within 600 feet. Like the front door of a house, it should be clear where to enter. Connections should be of adequate width, have comfortable features and an absence of obstacles. All connections should conveniently serve all users including people with disabilities.

Station areas should be easy and attractive to walk in.
Example of Pedestrian Experience within 600 Feet of Transit

1. Adjacent development frames and activates transit plazas with ground floor retail
2. Clear prominent signage aids in wayfinding and station identification
3. Station entrance is visible from a distance, open and inviting with direct pedestrian access
4. The light and open entrance reinforces pedestrians’ sense of direction and location
5. Mezzanine is also light and open and well-detailed, incorporating locally themed artwork.
6. Platform is open to orienting views and continues palette of materials from ground level
MAKE TRANSIT WORK
BICYCLES ARE HIGHEST PRIORITY VEHICLE

Bicycles are the world’s most sustainable vehicle. Strongly supporting bicyclists’ use of station areas should be a primary project objective and urban design goal.

Provide Generous Facilities

Plentiful bicycle racks, located close to the station entry, in highly visible areas will encourage bicycle use and promote security. “Bicycle Stations” (that provide repair, storage, showers, etc.) should be considered at key, high bicycle use stations throughout the transit system.

Reflect Rider Needs

Clearly defined bicycle lanes, bicycle related signage and signals, curb cuts, and elements such as “bike stairs” all positively reflect and reinforce bicyclist’s experience of connecting to transit.

Provide Direct Connections

Bicyclists should have a direct path to the station entry, with a minimum of conflict with other traffic and/or disruption to riding. Lower priority travel modes should be arranged to allow bikes to take priority and connect to existing and planned lanes/trails.
Integrate bicycle parking into transit plaza design

Multiple rack locations accommodate high numbers of riders

Clear sight lines and presence of adjacent uses promotes security

Combination of landscaping, architecture, and open space define the ‘place’

Clearly defined pedestrian areas and absence of auto traffic

Decorative paving

Plaza lighting is important for safety and security

Planting design appropriate for high traffic pedestrian and bicycle areas

Example of Highly Visible and Ample Bike Parking at Transit Station

Streetcar Stop, South Waterfront
Portland, Oregon

City and County of Honolulu
Honolulu High Capacity Transit Corridor Project
MAKE TRANSIT WORK
BLEND BUSES WITH STATION ENVIRONMENT

Bus transit facilities at stations are extremely important, yet too often create places that are unpleasant for pedestrians. Several design techniques and attention to details can overcome this all too common urban design problem.

Convenient, but not Dominant
Bus staging areas should be located in close proximity to station entries, but in ways that: 1) allow pedestrian friendly site development to occur closest to the station entry; and 2) minimize the visual impact of the typically large amount of paving required.

Quality Detailed Facilities
Site furnishings for bus transit patron areas should be of the same high quality design and durable materials used for other station areas. This should be a clear, visual and functional ‘message’

Safe Clear Connections
Bus patrons should have a direct visual connection between staging areas and the rail transit station, and/or incorporation of a high quality directional sign system that facilitates the connections between the two areas.
Example of High Quality Bus Facility Design

1. High quality paving materials
2. Curb side access
3. Pedestrian furnishings
4. Landscaping
5. Clear visibility of rail transit station entry
6. Unique bus shelter design

MTA Headquarters
Los Angeles, California
MAKE TRANSIT WORK

ACCOMMODATE MOTOR VEHICLES: PICK-UP & DROP OFF

Automobiles should have access to the station for picking up and dropping off passengers, but the design of these facilities should help achieve other urban design objectives and reflect a lower level of priority compared to other modes.

Accessible, Not Disruptive
Care must be taken regarding how and where automobiles are accommodated to avoid disruptive traffic impacts on pedestrians, especially during evening peak travel periods.

Ease of Drop-off
Transit plazas should have easy access to areas where they can be dropped off and/or picked up. Ideally, these facilities should be configured as streets, not separate “parking lots”.

Taxis and Car-Sharing
Taxis and car sharing complement transit. Parking for car share vehicles should be given priority with on-street spaces, or in parking lots or structures, closest to the station pedestrian entrance. Provision for taxis should be located in an easily visible location without impeding pedestrian access or other modes of transportation.
Example of Motor Vehicle Accessibility without Disruption

LEGEND

1. Station entry and drop-off defined and protected by canopy
2. Convenient passenger pick-up and drop-off designed as an urban street.
3. Taxis accommodated along the street curb.
4. Combination of landscaping, architecture, and open space define the ‘place’
5. Retail provides additional station area activity
6. Clearly defined pedestrian routes
7. Decorative paving
8. Parking located nearby, but not immediately in front of entry
9. Bus transit located nearby, but not immediately in front of entry

Union Station
Portland, Oregon
While the importance of parking is recognized, it should not be a dominant development feature near the station. Large parking lots located between the station and destinations create an unappealing environment that pedestrians will avoid.

Close, But Not Dominant
Locating park-and-ride lots away from, but with direct connections to the station, opens that real estate for higher and better development that can benefit from transit adjacency.

Break up Large Lots
Consider multiple, smaller parking lots integrated into surrounding development, and surface lots as a street grid to allow for future incremental infill redevelopment. Explore shared parking opportunities with surrounding property owners to reduce the amount of parking, share the cost burden and take advantage of off-peak parking availability.

Attractive Edges
Where parking lots must face the street, a combination of landscaping and attractive fencing can serve as a buffer between the lot and the pedestrian realm. However, care should be taken to allow good visibility to promote safety and security.
Example of a Well Designed Surface Parking Lot

LEGEND

1. Parking lot located behind street facing development
2. Well defined and attractive pedestrian route through parking lot
3. Direct pedestrian connection to station, aligned with street grid or primary pedestrian destinations
4. Lighting scaled for pedestrians
5. Landscaping for stormwater infiltration, shade, and to reduce visual impact

Orenco Station
Hillsboro, Oregon
MAKE TRANSIT WORK

ACCOMMODATE MOTOR VEHICLES: STRUCTURED PARKING

Structured parking should fit with the scale and architectural character of the surrounding community. Pedestrian entries should be visible and prominently located while vehicular entries off of primary pedestrian routes should be avoided. Where parking structures face the street of primary pedestrian routes ground floor commercial space should be provided. Additionally, wrapping the parking structure with a commercial or residential liner building puts an active face on the street above ground level and provides additional development opportunities. Parking structures shared with adjacent development can reduce the cost associated with construction and provide a more efficient and better integrated use of land near the station.

Examples of Well-Designed Parking Structures

LEGEND

1. Structured parking designed to match the surrounding architectural character
2. Ground floor retail
3. Housing or office over parking structure
4. Liner building containing housing or office
5. Pedestrian entry is highly visible and emphasized
6. Vehicular entrance is scaled to respect pedestrians
MULTI-FUNCTIONAL TRANSIT PLAZAS

Transit plazas are one of the most important character defining elements of a transit system. They are a gateway to and/or from a place and play a critical role in defining the experience of how pedestrians and bicycle riders connect to transit. How transit plazas are organized, and the hierarchy given to various elements, will directly influence their success and the success of the transit system.

Station transit plazas should be versatile, relate to adjacent land uses, and provide transit functionality. They are not “the space left over” when designing the system. They should be viewed as individual design projects, combining a number of mutually supportive objectives.

Bicycle Circulation

Should be direct, making the transition from bike to transit easy. Bike parking must be located in high visibility areas to assist with security.

Pedestrian Circulation

Should be comfortable, free flowing, interesting, and inviting. Clearly defined routes should be unimpeded by other transit plaza program elements.

Bus

Connections should be confidently placed close to station entries, but organized so that they do not dominate the character of the space. Bus shelters should provide shade and seating for
CHAPTER 3
URBAN DESIGN GUIDELINES: CREATE A PLACE
INTRODUCTION

It is important to create great station places that people will enjoy visiting for their own positive qualities - rather than just wanting to pass through on their way to other more desirable locations. A successful, pedestrian-friendly station area should be comfortable and inviting to the surrounding community. It should be attractive to pedestrians for a variety of reasons in addition to transit. Station areas have the potential to be great public places, which should contribute to Honolulu’s unique character. Application of ‘placemaking’ guidelines should vary in response to community context of any given station. For example, the Chinatown station should concentrate on blending with and supporting the established community character, compared to East Kapolei where the station may be instrumental in helping define a new identity for an emerging community.

The following section includes:
- Station as Place
- Transit Plaza Aesthetics
- Places for People
- Create a Safe Place
- Make Sustainability Visible
CREATE A PLACE

STATION AS PLACE

The best transit stations are places to come back to, not just leave from. As a place, they can be thought of in one of three ways: 1) as a focal point; 2) incorporated as a supporting element into an area; or 3) secondary to the character and function of a place.

Focal Point

In this situation, the station is the place. It has created something new and desirable in an area that was devoid of attraction or quality (or has been planned as something entirely new and different from its previous use). Typically, the station architecture is dramatic, emphasizing its central importance.

Incorporated Into Place

In this situation, there is a balance between the station and adjacent uses, so that together they define a place. Typically, the station architecture is more subtle, allowing it to blend with other station area elements so that together they define the character and function of the station area.

Secondary To Place

In this situation, the station is not prominent, but is apparent to transit riders through visual cues such as signage. Not as common or possible in elevated transit systems, sometimes the presence of transit vehicles can visually outweigh station elements.
Aesthetics Considerations include landscaping and art integration. These elements should be customized to fit with the adjacent community and geographic ahupua’a.

Activity Zones Reinforce transit user experience. Businesses next to stations provide ‘eyes on the plaza’. These zones can also include seating, cafes, outdoor patios, and/or small retail stands.
CREATE A PLACE
PLACES FOR PEOPLE

Station plazas can serve as social gathering places, focal points, and places to see or be seen. Plazas should be scaled relevant to their intensity and use. A sense of enclosure can be created by fronting buildings on the edges of plazas and sidewalks. Building entrances and windows should be oriented to plazas on the street.

Gathering Spaces
Just as public spaces range from grand plazas and squares, to small, local neighborhood parks, so too does the scale of transit plazas, from central grand civic spaces to community gathering places. Station plazas should be designed to be active multi-use spaces that can help serve community needs.

Wayfinding
Integrated signage can assist in wayfinding, while avoiding visual clutter. Text should be sized to be legible and contrast appropriately with the sign background color.

Quality Materials and Versatility
Sun and weather protection should be provided through the use of trees, awnings, arcades, and similar techniques. Durable, attractive and well-placed street furniture provides necessary pedestrian amenities without creating obstacles to pedestrian movement.

“Great public spaces are the living room of the city - the place where people come together to enjoy the city and each other. Public spaces make high quality life in the city possible - they form the stage and backdrop to the drama of life.”
The Center For Design Excellence
Example of a People Place at a Transit Station

LEGEND

1. Clear sight lines and direct connections to transit.
2. Provide pedestrian amenities such as seating, trash receptacles, shelter, and landscaping to define places for people.
3. Retail, kiosks, visitor information booths are active uses that contribute to the vitality and 18 hour activity of public spaces.
4. Programed activities, music shows or other public events help bring together a sense of community and ownership.
5. Design spaces that are versatile with active and passive spaces. Use landscaping to provide shade and visual relief.

Pioneer Courthouse Square
Portland, Oregon
CREATE A PLACE
CREATE A SAFE PLACE

Personal safety and security is essential for all transit patrons. It will play a large part in both the success of the transit system and in helping create attractive places for people. User experiences while using transit will shape their perspective on how user friendly and safe the system is. Safe transit places will help increase ridership.

Safe transit places are typically defined by:

- Well lit environments to help orientate riders and offer safe passage;
- Connected access routes, clear signage, and paths without barriers to and from the transit facility;
- Active and visible places where patrons can see and be seen; and
- Regular maintenance of facilities to promote a high quality aesthetic and welcoming station area environment.

Defensible Space

Common concerns regarding transit and public spaces are the fear of excessive loitering and/or vandalism. However, studies have shown that the measures described on these pages are effective in reducing and often eliminating illegal and undesirable behavior. These guidelines promote the creation of spaces for safe and successful transit use during all working hours.

CPTED

Crime Prevention through Environmental Design (CPTED) is a design methodology that focuses on reducing opportunities for crime and mitigating fear of crime to improve quality of life factors. Through the design and management of the physical environment and an increase in public safety and education, CPTED programs have increased community security. Four basic principles of CPTED that should be considered during site planning and design of public spaces include:

1. Territoriality: Design physical attributes that express ownership, such as fencing, signage, landscaping, and pavement treatments.

2. Natural Surveillance: Arrange physical features, activities and people in such a way as to maximize visibility. A potential criminal is less likely to attempt a crime if he or she is at risk of being observed. At the same time, we are likely to feel safer when we can see others and be seen.

3. Improve sightlines: There should be clear views of surrounding areas. Design permeable barriers that do not restrict vision. Avoid features (low vegetation, fences, etc.) that block sightlines and major access points.

4. Access Control: Reduce the opportunity and accessibility for crime. The physical guidance of people coming and going from a space by the appropriate placement of entrances, exits, fencing, landscaping and lighting denies a criminal’s access to potential victims.

Zone 1 - Building Interior: layout of floor plan should encourage active uses towards windows to encourage more eyes on the street.

Zone 2 - Building Perimeter: access points and windows should be oriented toward the street and major pedestrian circulation.

Zone 3 - Building Yard: raised planters, plinth wall or fences provide security barrier in the building yard.

Zone 4 - Sidewalk: trees, planters, and other streetscape elements are used to promoted active pedestrian zones.

Zone 5 - Curb Lane: this zone can be designed for on-street parking or drop-offs/pick-up area to encourage active street zones.

Zone 6 - Street: design appropriate lane widths to accommodate appropriate vehicle speed. This can be determined by the uses that are planned to be located at the edges of the street.
Example of a Transit Facility Designed with Safety in Mind

LEGEND

1. Lighting is critical to ensure safety for users and transit operators.

2. Provide clearly defined routes with no obstructions or barriers to and from station.

3. Ground floor transparency and building frontages offer active uses near and around transit.

4. Transit facilities should be well maintained and monitored to deter loitering and undesirable activities. Street furniture, lighting, clear sight lines can help create a sense of ownership.

5. Landscaping must be maintained to provide clear sight lines for pedestrians, bicyclist and vehicles.

16th Street Bus Mall
Denver, Colorado

City and County of Honolulu
Honolulu High Capacity Transit Corridor Project
CREATE A PLACE
MAKE SUSTAINABILITY VISIBLE

Best practice in transit projects now incorporate principles of sustainable design. To achieve “green transit” it will be important to not only incorporate energy and resource efficiency, waste reduction and pollution prevention, good indoor air quality and natural light to promote user health, and efficiency in design and construction - it will also be important to make project sustainability measures visible and part of the system’s overall aesthetic and user experience. Sustainable design as part of the transit system should be made part of the project’s “look and feel”.

Green Infrastructure

A significant, visible and artistic combination and incorporation of project sustainability measures assists in conveying transit project commitment to high quality urban design and community aesthetics.

Green Roofs

Station structures and service buildings offer opportunities for green or eco-roof applications - especially important where views from above are likely.

Community Education

Signs that explain station and transit system sustainability measures should be incorporated to inform and educate users about how station elements are improving the environment, livability, and aesthetics.
Solar Energy

In addition to providing energy for features such as station area lighting, solar power generation components can also be used as an architectural design element that combines sustainability and aesthetics.

Local and/or Recycled Materials

The reuse and/or locally derived sourcing of construction materials is another way to demonstrate project commitment to sustainability and aesthetics.

Stormwater

Bioswales, rain gardens, permeable paving, and/or infiltration planters are but a few techniques that manage stormwater at the surface as well as provide opportunities for aesthetic enhancements.

Sustainable design should be part of the project’s look and feel.
CHAPTER 4
URBAN DESIGN GUIDELINES:

CONNECT TO COMMUNITY
INTRODUCTION

Relationships between the transit system and adjacent development will greatly influence the character and function of station areas, the communities the HCT travels through, and the quality of transit user experience. Orientation to the station and integration of transit-supportive development should be managed so that it complements the station area and nearby communities. Although being addressed by the City and County of Honolulu’s Department of Planning and Permitting, Transit Oriented Development efforts, the HCT project should also make efforts to consider the community context and relationships to adjacent development as part of the transit system design process.

The proposed transit system will engage O‘ahu at both a regional and local level. The urban design of the system must address this, especially in how it connects to the communities surrounding each station. While the transit system ties all station places together, the stations need to be equally tied functionally and visually to the surrounding communities. This section includes:

- Begin With a Corridor-Wide Approach
- Transit-Oriented Development
- Create a Quality Pedestrian Environment
- Create Complete Streets
- Link To Adjacent Development
- Create a Context Sensitive Solution.
BEGIN WITH A CORRIDOR-WIDE APPROACH

Consider the Variety of Scales

Good transit system urban design begins with the consideration of the entire transit corridor, since the project will engage Honolulu at a variety of scales - the region of the island, downtown Honolulu and Kapolei, several unique districts (such as Chinatown), many neighborhoods, and numerous buildings.

Reflect Corridor Geography

As stated in the landscape architecture design criteria for the project, it is of vital importance that this project have a “strong character, identity, and relevance to all of the communities that it connects, as well as to the State of Hawai‘i at large” and refers to the many ahupua‘a that cross the transit alignment as “timeless geographic areas having the same relevance and identity today as they did in historic times.” Four geographic areas have been defined.

**Plains**: defined by the broad sloping terrain built on coral beds with few trees, much sun, and little rain. In this area with few natural resources, the ahupua‘a is quite large, incorporating several transit centers within one ahupua‘a.

**Pearl Harbor Basin**: several ahupua‘a, with the rich nature of water, soil, and coastal resources. In this geographic area it is common to only find one transit station per ahupua‘a. Most of these ahupua‘a have the word “wai” for water included in the name, which speaks to this abundant resource. Soil in this area is equally rich, with a characteristic reddish brown color.

**Salt Lake**: more arid than the Pearl Harbor Basin, named after a naturally occurring saltwater body separated from the ocean. Salt Lake is home to a layered shale rock in tones of gray to almost white. This area contains the Airport Spur that will be the welcoming statement to many island visitors. Two high-capacity stations are located within this area: Airport and Aloha Stadium.

**Coastal Area**: encompasses Downtown Honolulu and Waikiki, which is rich in resources and is typified by the deep charcoal or black color associated in Hawaiian culture with fertile soil. The richness of the coastal area also refers to the richness of cultural activity, including the historical use of this area for relaxation, surfing, and hula.

“A vital part of the mass transit project is the opportunity to develop and redevelop key areas of Honolulu to provide additional housing and work opportunities in our growing island. These efforts will allow the city to continue its goal of directing new growth to designated areas while ‘keeping the country, country.’ Appropriate transit-oriented development (TOD) land use regulations along the alignment and around the rapid transit stations will be crucial for these efforts and goals.”

City and County of Honolulu
TOD ORDINANCE 09-4 BILL 10 (2008), CD2, March 2009
TRANSIT-ORIENTED DEVELOPMENT

TOD focuses primarily on two of the three design principles: create a place and connect to the community. To effectively integrate transit with the communities it will serve, it is necessary to consider how to create land use patterns and urban design characteristics, which will support the communities’ vision for how it wants to grow. TOD is a strategy available to help manage growth and improve quality of life as it provides communities with an alternative to low-density suburban sprawl and automobile-dependent land use patterns.

TOD seeks to align transit investments with a community’s vision for how it wants to grow, creating “livable” higher density, mixed-use and walkable transit villages. A successful TOD will reinforce both the community and the transit system. For O‘ahu TOD will take many forms – from new communities in Kapolei, redevelopment in Waipahu, to reshaping parts of downtown Honolulu.

TODs behave differently than traditional development. People living and working in TODs are more likely to walk, use transit, and own fewer cars. TOD households are twice as likely to not own a car and own roughly half as many cars as the “average” household. At an individual station, TOD can increase ridership by 20 to 40 percent and even cause significant change at a regional level. People who live in a TOD are five times more likely to commute by transit than other residents. Locations next to transit can enjoy increases in land values over 50 percent in comparison to locations away from transit stops.

With proper planning and implementation it is reasonable to expect these types of relations will occur around HCT stations. TOD and HCT are the bookends of creating places with lasting value. To capture the benefits of TOD the design of HCT should take into account the essential elements for successful TOD.

**Essential Elements For Successful TOD**

**A Defined Center**

Transit is particularly successful in communities and neighborhoods that have defined centers, offering multiple attractions and reasons for pedestrians to frequent the area. Having different zones with distinct characteristics also helps to create a sense of place. This sense of place may be created by including at least several of the following attributes:

- The density and buildings are highest in the core near the transit station, moderating somewhat in the center that is within ¼ mile of the transit station, and ultimately transitioning in the edge to match the character of surrounding development approximately ½ mile from the station.
- Buildings are located closer to the street and are typically taller than the surrounding area.
- Buildings are primarily oriented to the street with windows and main entrances.
- Parking is less predominant, being located to the rear and in parking structures. Parking requirements are reduced in close proximity to transit, compared to the norm.
- Sidewalks are wider than in lower density areas, and offer pedestrian amenities, such as street trees, benches, kiosks, and plazas.

**A Mix of Uses**

One of the most visually distinguishable features of a TOD is the active streetscape, which is oriented towards pedestrians. The HCT urban design guidelines place particular emphasis on enhancing and celebrating the pedestrian experience. A mix of uses is required to create multiple destinations around the transit station, which helps to generate pedestrian traffic. An active, lively environment can change the perception of distances, making destinations seem shorter and more walkable. A transit-supportive environment includes a mixture of residential, commercial, service, employment, and public uses making many trips between destinations shorter and more walkable. In addition:

- First floor uses are “active” and oriented to serve pedestrians.
- Multiple compatible uses are permitted within buildings near transit.
- A mix of uses generating pedestrian traffic is concentrated within walking distance (¼ to ½ mile) of transit.
- Auto-oriented uses, such as service stations and drive-through facilities, are limited or prohibited near transit.

**More Density than Average**

A key ingredient for walkable communities and support for transit is having sufficient residential densities to reduce walking distances between residences and other destinations, including commercial services, schools, parks, and transit. The following elements contribute to appropriate density for transit supportive land uses:

- Densities that are higher than the community norm are located within ¼ to ½ mile of transit.
- Structured parking is used rather than surface lots in higher density areas.
- Site design for major projects allows for the intensification of densities over time.

Although one may read about desired density numbers based on ridership levels needed to support certain types of transit service, there is not one standard density level appropriate and suitable for TOD. What is critical is that the development and transit are linked and that it is convenient and safe for pedestrians to move throughout the TOD. This can be accomplished through a well-designed environment that addresses density, convenience, and safety (i.e. a very dense yet poorly designed development is not a successful TOD).
CONNECT TO COMMUNITY

CREATE A QUALITY PEDESTRIAN ENVIRONMENT

Vibrant, livable communities are always convenient and comfortable places for pedestrians. The addition of an elevated rail transit station to any neighborhood increases the need for detailed attention to be paid to creating the best possible environment for pedestrians – especially since all transit users are pedestrians at some point in their trip. A station’s walk-shed is increased when pedestrians have interesting, pleasant and safe routes to and from the station.

Active Edges

Pedestrians like to see and be seen. They appreciate, and are supported by, routes that are interesting, active, and engaging. Techniques that encourage pedestrian-supportive environments linking to stations include: buildings with primary entrances, storefront windows, and lanais oriented towards adjacent streets; human-scaled building facades and site furnishings; landscaping; and parks. Undesirable elements (such as service areas) should be located to the back of buildings.

Pedestrian Amenities

Pedestrians appreciate furnishings that are beautiful and increase their comfort and convenience. Elements that make walking routes more desirable include: building canopies, awnings, and arcades that provide weather protection; benches, trash receptacles, wayfinding signage and lighting that contribute to comfort and safety; street trees, landscaping, and on-street parking that serve as a buffer between pedestrians and vehicular traffic.

Connectivity

Pedestrians appreciate continuous pedestrian networks, direct routes, and will avoid “out of direction” travel. Street patterns and pedestrian paths should provide multiple and direct connections between the station and the surrounding community. Small block sizes in station areas (around 300’ in length) are best, and block perimeters should be no more than 1,600 feet. Large blocks should include intermediate pedestrian connections.

Vibrant, livable communities are always convenient and comfortable places for pedestrians.
CREATE COMPLETE STREETS

Great places are defined in large part by great streets. Jane Jacobs said it well: “Streets and their sidewalks, the main public places of a city, are its most vital organs.” When designing for transit and ‘pedestrian friendliness’, streets need to be great places for walking, commerce, casual interaction and for moving traffic. The relationship between human activities and the physical form of the spaces framed by streets and buildings has an enormous amount to do with making a complete street.

Coordinating transit stations design with the design of streets adjacent to them should be part of the transit planning and design process. Allan Jacobs, in Great Streets, defined a number of criteria for great streets including:

- A complete street should help make a community and is a symbol of its history.
- A complete street is physically comfortable and safe.
- The best streets encourage participation, entertain, and are open to all.
- The best streets are those that are attractive and can be remembered.
- The truly complete street is one that is representative: it is the epitome of a type; it can stand for others; it is the best. To have achieved this status, it will have been put together well, artfully.

COMPLETE STREETS DESIGN PRINCIPLES

1. Work with Basic Street Structure. Simply stated, streets are defined by three main component zones: 1) the roadway itself, 2) the sidewalk area, and 3) the adjacent buildings and/or development. It helps to understand these areas and how they work together when considering street improvements.

2. Consider Context. Streets are part of the overall community fabric and, at their best, are places of shared use. They physically create and define a network of public open spaces – sometimes referred to as the ‘public realm’. How does the idea of a lively, aesthetically pleasing ‘public realm’ apply to streets? It helps to begin with an understanding of a given street’s context and the adjacent land use character.

3. Streets are for People. The best streets are pleasant for pedestrians. They contain destinations for those walking and prioritize their needs such that vehicles are slowed to allow safer and more comfortable pedestrian crossings. They provide:
   - Architectural continuity
   - Ground floor transparency
   - Complementary elements
   - Diversity
   - Detailed design and quality construction
   - Good maintenance

4. Manage Access and Parking. The best streets make sure that good access is provided to adjoining land uses, and that parking does not overwhelm the character of the street.

5. Aesthetics and Definition. Lighting, signage, and planting design can beautify and stage a dynamic street. As a design element, lighting fixtures and signage can provide safety, express themes, and provide direction for travelers. Plants provide outstanding opportunities for spatial definition and the positive expression of landscape character.
CONNECT TO COMMUNITY
LINK TO ADJACENT DEVELOPMENT

Rather than draw a line around transit and keep development outside, the best transit systems blur this perceived barrier by working with citizens, agencies, and the development community to link the system to adjacent development further integrating the station into the community.

Higher Densities
Stations and surrounding buildings should relate to one another. Higher densities and a mix of uses within a ¼ to ½ mile of the station will facilitate higher numbers of transit users living in close proximity to the station, create opportunities for linked walking trips, and reduce the necessity of automobile use.

Integrated Development
Stations can be located within development. The construction and maintenance of transit and associated facilities can be shared, creating a whole greater than the sum of the parts and a station area that is seamless with its surroundings.

Future Mezzanines
Some important pedestrian connections may not occur until later in the life of the system. Stations located in areas with high development potential should be designed so that future mezzanine connections will link the station to anticipated development.
CREATE A CONTEXT-SENSITIVE SOLUTION

The HCT passes through and connects a wide variety of distinct communities, landscapes and cultural resources. Its visibility as an elevated system makes it an inextricable part of all of these. The Design Language Pattern Book and the Landscape Guidelines provide recommendations to incorporate design and aesthetic elements that reflect Hawaiian culture along with the natural and built landscape. It is important that the elements also reflect community values, history or aspirations. Following a contextual approach as part of final project design, so project elements are both functional and aesthetically appropriate to their setting, is therefore important to make the system a desired amenity integral to the Hawaiian landscape rather than an alien project dropped into it.

Consider Surrounding Character

Stations should fit into, or appropriately contrast with, their surroundings. Look to existing historic, cultural, and landscape resources for design themes that may be incorporated into station elements. This might include native and/or culturally significant plants into landscaping schemes and/or restoration and reuse of significant, existing structures.

Consider Views

The project will impact existing views as well as create new opportunities for viewing O‘ahu. Significant mauka and makai view corridors should be preserved to the extent possible and the system should accommodate, frame, and/or create a new high quality views. High quality architectural design of support structures and/or the incorporation of public art may be appropriate responses to impacted views.

Incorporate Public Art

Public art benefits everyone. High quality public art can express community character and values in unique and special ways. System-wide public art should evoke the historic, cultural, or scenic qualities of each station area and incorporate local materials with durable, high quality finishes.

“Drawing inspiration from a neighborhood’s indigenous character strengthens local identity.”

Urban Design Compendium
CHAPTER 5

STATION DESIGN EXAMPLES
INTRODUCTION

The following station design examples illustrate how the proposed urban design guidelines (discussed in previous chapters) might be applied to specific station locations. They have been applied to five locations which are representative of the variety of station types, locations and differing contexts through which the HCT project passes.

They are not intended to represent the current state of project design and engineering, rather the intent of the examples is to illustrate how a myriad of interrelated urban design improvements might be organized in a manner that is consistent with the proposed design guidelines. They are creative ideas that may or may not be determined by project stakeholders to be worthy of pursuit, in part or wholly.

It is hoped that they serve as references for project designers and stakeholders when conducting discussions about the full range of issues associated with station designs, and a step towards identifying appropriate visions for station area development.
**DOWN TOWN STATION**

**VISION**
This is a high profile station that will be heavily used by residents and tourists alike. Its location in the heart of the downtown central business district and its adjacency to Irwin Park, the historic Dillingham Transportation Building, and Aloha Tower, indicate a higher level of quality and design detail is appropriate. Key urban design issues to be addressed at this location include:

- Improving the pedestrian friendliness of the area;
- Calming Nimitz Highway in recognition of anticipated increase in pedestrian usage of the area;
- Fitting the station and guideway into the corridor in ways that complement the best features of the area (Irwin Park, Dillingham Building, views of Aloha Tower, etc.);
- Using the transit project as an opportunity to mitigate existing negative visual and experiential elements (character and function of Nimitz Highway, existing power plant).

Given the many urban design opportunities that exist at this location, the guideway and station should help to define Irwin Park as a grand open space. The station entries should be designed to create a strong arrival and departure experience that connects and orients pedestrians and transit users to Irwin Park and the Dillingham Building Courtyard Plaza. The Nimitz corridor, including adjacent sidewalks and median, should be enhanced – especially for pedestrians who desire to cross Nimitz and Bishop Street at ground level. The presence of the power plant should be minimized.

To achieve these goals and objectives, it is anticipated that the transit project, the many departments within the City and County of Honolulu, and other agency and private stakeholders will have to work together on defining this comprehensive vision in more detail and coming to agreement on a coordinated approach to providing the many complementary pieces.

**Urban Design Elements**

- Make Transit Work
- Create a Place
- Connect to Community
Coordinate all elements of transit infrastructure to minimize the appearance of massive and/or bulky elements.

- Use neutral colors on all heavy transit infrastructure elements (beams, columns, guideway, etc.), unless color emphasis is applied effectively to highlight station entries.

Provide a high quality pedestrian connection from the station to Dillingham Building Courtyard.

- Replace impacted water feature with a new water feature that will mitigate traffic noise from Nimitz Highway.
- Integrate stairs and elevator in ways that appear seamless with the design and character of Dillingham Building Courtyard.
- Repair paving and planters.

Provide a high quality pedestrian connection to the Diamond Head side of Bishop Street.

- Capture more pedestrian space by relocating Bishop Street curb Ewa, since Bishop Street is overly wide at this location.
- Buffer the power plant (landscaping, public art).
- Provide decorative fences and gates to screen service areas.

Provide an aesthetic treatment of the Nimitz median.

- Landscaping, basalt rocks, pavers, public art.

Preserve, to the extent possible, the mauka/makai view corridor on Bishop Street.

- Minimize overhead infrastructure elements across Bishop Street.
- Exploit any new view opportunities created from the station platform and mezzanine.

Plan for aesthetic and pedestrian improvements to the intersection of Bishop Street and Nimitz Highway.

- Bold crosswalk striping and/or special paving treatments, curb extensions, bollards, “countdown” lights, etc.

Plan for aesthetic and pedestrian improvements to Nimitz Highway.

- Landscaping, paving, lighting, furnishings

Provide signage within 1 block of station to guide pedestrians and bicyclists to area transit facilities as well as landmarks and other places of importance.

Continue to improve Irwin Park for pedestrian usage.

- Provide streetscape improvements on all four sides of the park to support its character & function as a “grand outdoor space”.
- In the future, relocate surface parking into structured parking as part of any power plant redevelopment.

Redevelop power plant site as TOD.

- Attract high quality mixed-use development.
- Include structured parking that incorporates Irwin Park parking.

KEY ELEMENTS

T: Make Transit Work
P: Create a Place
C: Connect to Community

See Urban Design Concept Plan

1. Coordinate all elements of transit infrastructure to minimize the appearance of massive and/or bulky elements.

2. Provide a high quality pedestrian connection from the station to Dillingham Building Courtyard.

3. Provide a high quality pedestrian connection to the Diamond Head side of Bishop Street.

4. Provide an aesthetic treatment of the Nimitz median.

5. Preserve, to the extent possible, the mauka/makai view corridor on Bishop Street.

6. Plan for aesthetic and pedestrian improvements to the intersection of Bishop Street and Nimitz Highway.

7. Plan for aesthetic and pedestrian improvements to Nimitz Highway.

8. Provide signage within 1 block of station to guide pedestrians and bicyclists to area transit facilities as well as landmarks and other places of importance.

9. Continue to improve Irwin Park for pedestrian usage.

10. Redevelop power plant site as TOD.
URBAN DESIGN CONCEPT PLAN

Places For People
Reflect Context - Make It Better
Create Urban Structure
Provide Connection
Mix Use and Form
Well Detailed
Flexible & Maintained
CIVIC CENTER STATION

VISION

This is a high profile station that will be heavily used by residents and tourists alike. Its location near the Hawaii Capital and City and County of Honolulu civic center district, and its adjacency to parcels with high development potential, indicates a high level of quality and design detail is appropriate. Halekauwila Street, below the station, offers a unique opportunity to create a “non-standard” street that truly elevates the priority of pedestrians. Key urban design issues to be addressed at this location include:

- Generally improving the pedestrian friendliness of the area;
- Calming South Street, close to Halekauwila Street, in recognition of anticipated increase in pedestrian usage of the area;
- Seizing opportunities to integrate the station design with Halekauwila Street;

and

- Seizing opportunities to integrate the station with the likely intense redevelopment of parcels immediately adjacent to the station.

The station entries should be designed to create a strong arrival and departure experience that connects and orients pedestrians and transit users to South Street. Both the Halekauwila Street and South Street corridors should be enhanced – especially for pedestrians who desire to cross at street level. Given the low intensity of existing development immediately adjacent to the proposed station, creative integration of station and development could be possible – such as a direct mezzanine connection. Station entry plazas and adjacent development should be generous and welcoming, providing a number of pedestrian amenities (such as site furnishings) and active ground floor uses.

To achieve these goals and objectives, it is anticipated that the transit project, the many departments within the City and County of Honolulu, and other agency and private stakeholders will have to work together on defining this comprehensive vision in more detail and coming to agreement on a coordinated approach to providing the many complementary pieces.

Urban Design Elements

- Make Transit Work
- Create a Place
- Connect to Community
CIVIC CENTER STATION

TRANSIT PROJECT ROLE

1. Consider a unique aerial center platform station at this location.
   - A center platform is preferred when right-of-way flexibility exists – possible given the current low intensity of development on adjacent parcels.
   - Station composition is less complicated (compared to aerial side platform stations).
   - A single station canopy is easier to create - providing opportunity for strong design image / station character.
   - Number of vertical devices is optimized, providing straightforward orientation, and minimal duplication of circulation and furnishing elements.
   - Integrated station design with streetscape unifies both elements, improving visual character.
   - Will still require coordinating all elements of transit infrastructure to minimize the appearance of massive and/or bulky elements.

2. Integrate station design with Halekauwila Street.
   - Flexibility of right-of-way and street cross section design exists given the current low intensity of development on adjacent parcels.
   - A unique streetscape is possible, such as a “woonerf”. (Dutch word for an area where motorists and other users share the street without boundaries such as lanes and curbs; people on bikes and on foot have access to the whole street, not just sidewalks).
   - A generous median will provide pedestrian refuge when crossing the street.

3. Provide a high quality, direct pedestrian connection to South Street – make this the station “front door”.
   - Take advantage of potential center median in Halekauwila Street to create a generous pedestrian refuge and entry plaza to the station.
   - Orientation to South Street provides the most direct pedestrian connection mauka and Ewa to the civic center destinations.
   - Use neutral colors on all heavy transit infrastructure elements (beams, columns, guideway, etc.), unless color emphasis is applied effectively to highlight station entries.

4. Plan and design station to integrate with adjacent TOD.
   - Allow for a high quality, direct station connection to adjacent TOD from a future mezzanine above the platform that directly connects down to the station platform.

5. Make pedestrian oriented intersection improvements.
   - At a minimum, the creation of wide sidewalks and generous street crossings that include bold crosswalk striping, “count down” timers, and clear pedestrian oriented signage.
   - Median refuges, decorative paving, decorative lighting, high quality landscaping, and bollards are also desirable.

6. Integrate bus shelter and bicycle parking facilities to create a seamless overall design.
   - Locate bus shelter in coordination with adjacent development.
   - Coordinate design of shelter and furnishings with adjacent development to create an integrated design that is mutually supportive and pedestrian friendly.

7. Provide signage within 1 block of station to guide pedestrians and bicyclists to area transit facilities as well as landmarks and other places of importance.

CITY ROLE

8. Coordinate design of entry plazas for TOD to emphasize station entrance(s).
   - Alignment and orientation of adjacent TOD building entries should promote visual and functional connections to transit station.
   - Larger, more generous plaza spaces should be required on the Diamond Head side of South Street – especially within 200’ of the station entry.
   - Seating, tables and chairs, shelter, and landscaping should be included to provide additional pedestrian amenity and interest.
   - Active ground floor uses, like shops and restaurants, should be land use components of the built edges of the entry plazas.

9. Promote high quality station area streetscapes along both sides of South and Halekauwila Streets.
   - To the extent possible, continue pedestrian related improvements at least one to two blocks in all directions from station entry.

10. Reduce pedestrian/vehicular conflicts by actively managing vehicular access.
    - Require service and parking access to be from side streets (created by new TOD) and off of Keawe Street.
    - Avoid (or prohibit) service and parking access off of South and Halekauwila Streets.

11. Extend Reed Lane Diamond Head from South Street through future TOD to (but not through) Mother Waldron Park.
    - Smaller blocks promote pedestrian connectivity and create additional vehicular access.

12. Require adjacent TOD to address station and provide active ground floor uses along South and Halekauwila Streets since there will be a significant increase in pedestrian usage of this area.
    - Adjacent uses should spill out onto the adjacent sidewalks and/or have a direct visual connection between the interior spaces and the adjacent street. This will improve around the clock safety and security, as well as improve the pedestrian experience.

13. Continue to improve Mother Waldron Park.
    - Provide adjacent streetscape improvements and internal park improvements to support character and function as a significant open space amenity for this area.

KEY ELEMENTS

T: Make Transit Work
P: Create a Place
C: Connect to Community
See Urban Design Concept Plan
CIVIC CENTER STATION URBAN DESIGN CONCEPT PLAN

Places For People

Reflect Context - Make It Better

Create Urban Structure

Provide Connection

Mix Use and Form

Well Detailed

Flexible &Maintained
KAHI STATION

VISION

This is a low profile station that will primarily be used by local residents. Its location suggests that it should be designed to “fit in” to the character of the neighborhood.

Key urban design issues to be addressed at this location include:
• Generally improving the pedestrian friendliness of the area;
• Calming Kamehameha Highway/Dillingham Boulevard, close to Mokaua Street, in recognition of anticipated increase in pedestrian usage of the area;
• Seizing opportunities to integrate the station design with Kamehameha Highway / Dillingham Boulevard; and
• Seizing opportunities to integrate the station with the potential redevelopment of small parcels adjacent to the station.

The station entries should be designed to create a friendly arrival and departure experience that connects and orients pedestrians and transit users to Mokaua Street. Both the Kamehameha Highway/Dillingham Boulevard and Mokaua Street corridors should be enhanced – especially for pedestrians who desire to cross at street level. Given the lower scale/heights of existing development immediately adjacent to the proposed station, creative integration should be explored to reduce. Station entry plazas should be generous and welcoming, providing needed and useable open space in this neighborhood of high lot coverage.

To achieve these goals and objectives, it is anticipated that the transit project, the many departments within the City and County of Honolulu, and other agency and private stakeholders will have to work together on defining this comprehensive vision in more detail and coming to agreement on a coordinated approach to providing the many complementary pieces.
URBAN DESIGN IMPROVEMENTS SKETCH
1. Integrate station design with Kamehameha Highway/Dillingham Boulevard.
   - A well designed median (thoughtful detailing of paving and/or landscaping) beneath the transit guideway will provide pedestrian refuge when crossing the street as well as improve streetscape aesthetics.

2. Provide high quality, direct pedestrian connections to Mokauea Street – make these the station “front doors”.
   - Take full advantage of available station parcels to create generous entry plazas to the station.
   - Orientation to Mokauea Street provides the most direct pedestrian connection mauka and makai to local destinations.
   - Set station entries back to open up pedestrian areas closest to the intersection of Mokauea Street and Kamehameha/Dillingham.
   - Design Handi-Van and service access to appear as pedestrian plaza – separate by creative use of bollards or other design techniques.
   - Use neutral colors on all heavy transit infrastructure elements (beams, columns, guideway, etc.), unless color emphasis is applied effectively to highlight station entries.

3. Plan and design station to integrate with adjacent development.
   - Match scale and feeling of multiple small-lot, lower rise parcel development.
   - Butt station facilities directly against adjacent development (zero side and rear lot setbacks), and match front setbacks.
   - Minimize station bulk – take cues from adjacent development.

4. Make pedestrian oriented intersection improvements.
   - At a minimum, the creation of wide sidewalks and generous street crossings that include bold crosswalk striping, “count down” timers, and clear pedestrian oriented signage.
   - Median refuges, decorative paving, decorative lighting, high quality landscaping, and bollards are also desirable.

5. Integrate bus shelter and bicycle parking facilities to create a seamless overall design.
   - Locate bus shelter in coordination with plaza design.

6. Provide signage within 1 block of station to guide pedestrians and bicyclists to area transit facilities as well as landmarks and other places of importance.

CITY ROLE

7. Require adjacent TOD to address station and provide active ground floor uses along Kamehameha Highway.
   - Adjacent uses should spill out onto the adjacent sidewalks and/or have a direct visual connection between the interior spaces and the adjacent street. This will improve around the clock safety and security, as well as improve the pedestrian experience.

8. Reduce pedestrian/vehicular conflicts by actively managing vehicular access.
   - Require service and parking access to be from side streets and off of Colburn Street.
   - Avoid (or prohibit) service and parking access off of Mokauea Street and Kamehameha/Dillingham—especially close to the station entries.

9. Promote high quality station area streetscapes along both sides of Mokauea Street and Kamehameha/Dillingham.
   - To the extent possible, continue pedestrian related improvements at least one to two blocks in all directions from station entry.

KEY ELEMENTS

T: Make Transit Work
P: Create a Place
C: Connect to Community

See Urban Design Concept
URBAN DESIGN CONCEPT PLAN

Places For People
Reflect Context - Make It Better
Create Urban Structure
Provide Connection
Mix Use and Form
Well Detailed
Flexible & Maintained
UH WEST O’AHU STATION

VISION

This is a highly visible station, located prominently along a busy arterial, in a rapidly developing part of the island. The station will primarily be used by local residents, park-and-ride users, and University of Hawaii – West O’ahu Campus students. Its location suggests that it should be designed as a landmark to stand out and express the character of this emerging new center.

Key urban design issues to be addressed at this location include:
• Generally improving the pedestrian friendliness of the area;
• Calming the North/South arterial in recognition of an anticipated increase in pedestrian usage of the area and the need to cross from one side to the other;
• Seizing opportunities to integrate the station, guideway, and park-and-ride design with the North/South arterial and Ho’opili Main Street;
• Seizing opportunities to create a new landmark that is legible within the large scale context.

The station entries should be designed to create a friendly arrival and departure experience that connects and orients pedestrians and transit users towards the east/west Ho’opili Main Street. Both the North/South arterial and Ho’opili Main Street corridors should be enhanced – especially for pedestrians who desire to cross at street level or travel along their lengths. Given the envisioned lower to moderate scale/heights of proposed development immediately adjacent to the station, the stations role as a new landmark should be explored. Station entry plazas should be generous and welcoming, providing a refuge and important link in this fragmented area.

To achieve these goals and objectives, it is anticipated that the transit project, the many departments within the City and County of Honolulu, and other agency and private stakeholders will have to work together on defining this comprehensive vision in more detail and coming to agreement on a coordinated approach to providing the many complementary pieces.
## UH WEST O‘AHU STATION

### TRANSIT PROJECT ROLE

1. Coordinate all elements of transit infrastructure to minimize the appearance of massive and/or bulky elements.
   - Use neutral colors on all heavy transit infrastructure elements (beams, columns, guideway, etc.), unless color emphasis is applied effectively to highlight the station entry.
   - Explore a unique station design that could serve as an appropriate landmark.

2. Integrate station design with North/South arterial and Ho‘opili Main Street.
   - Consider how project landscaping and public streetscaping will integrate and complement each other.

3. Provide a high quality pedestrian connection from the station across the North/South arterial.
   - Consider locating the station entry on the makai side of the Ho‘opili Main Street in order to avoid conflicts between pedestrians and vehicles turning left from the North/South arterial street.
   - Participate in providing bold crosswalk striping and/or special paving treatments, curb extensions, bollards, “count-down” lights, etc.

4. Provide a high quality pedestrian connection across the drainage channel to the park-and-ride and bus transfer facilities.
   - Bridge the drainage channel with generous pedestrian facilities to minimize its function as a barrier.

5. Participate in providing an aesthetic treatment of the Ho‘opili Main Street median.
   - Landscaping, basalt rocks, pavers, public art.

6. Frame the view of the Ho‘opili Main Street.
   - Consider enhancements to the guideway and support columns that frame these views and serve as a gateway.

### CITY ROLE

7. Plan for aesthetic and pedestrian improvements to the intersection of North/South arterial and Ho‘opili Main Street.
   - Bold crosswalk striping and/or special paving treatments, curb extensions, bollards, “count-down” lights, etc.

8. Plan for aesthetic and pedestrian improvements to North/South arterial and Ho‘opili Main Street.
   - Landscaping, paving, lighting, furnishings.

9. Provide signage within ¼ mile of the station area to guide pedestrians and bicyclists to area transit facilities as well as landmarks and other places of importance.

10. Facilitate TOD on parcels adjacent to the station.
    - Attract high quality mixed-use development.
    - Provide incentives to build structured parking rather than surface lots to the rear of development along streets.

11. Create a well-designed and aesthetically pleasing park-and-ride and bus transfer facility.
    - Locate behind “Main Street” development.
    - Incorporate high quality lighting, landscaping, and pedestrian connections.
    - Integrate low impact stormwater management techniques such as bioswales, rain gardens and pervious pavement.

### KEY ELEMENTS

- **T**: Make Transit Work
- **P**: Create a Place
- **C**: Connect to Community
- See Urban Design Concept

---

**June 2009**

Parsons Brinckerhoff's PlaceMaking Group
URBAN DESIGN CONCEPT PLAN

Places For People
Reflect Context - Make It Better
Create Urban Structure
Provide Connection
Mix Use and Form
Well Detailed
Flexible & Maintained