TOD PLAN

Transit Oriented Development
And
Complete Streets

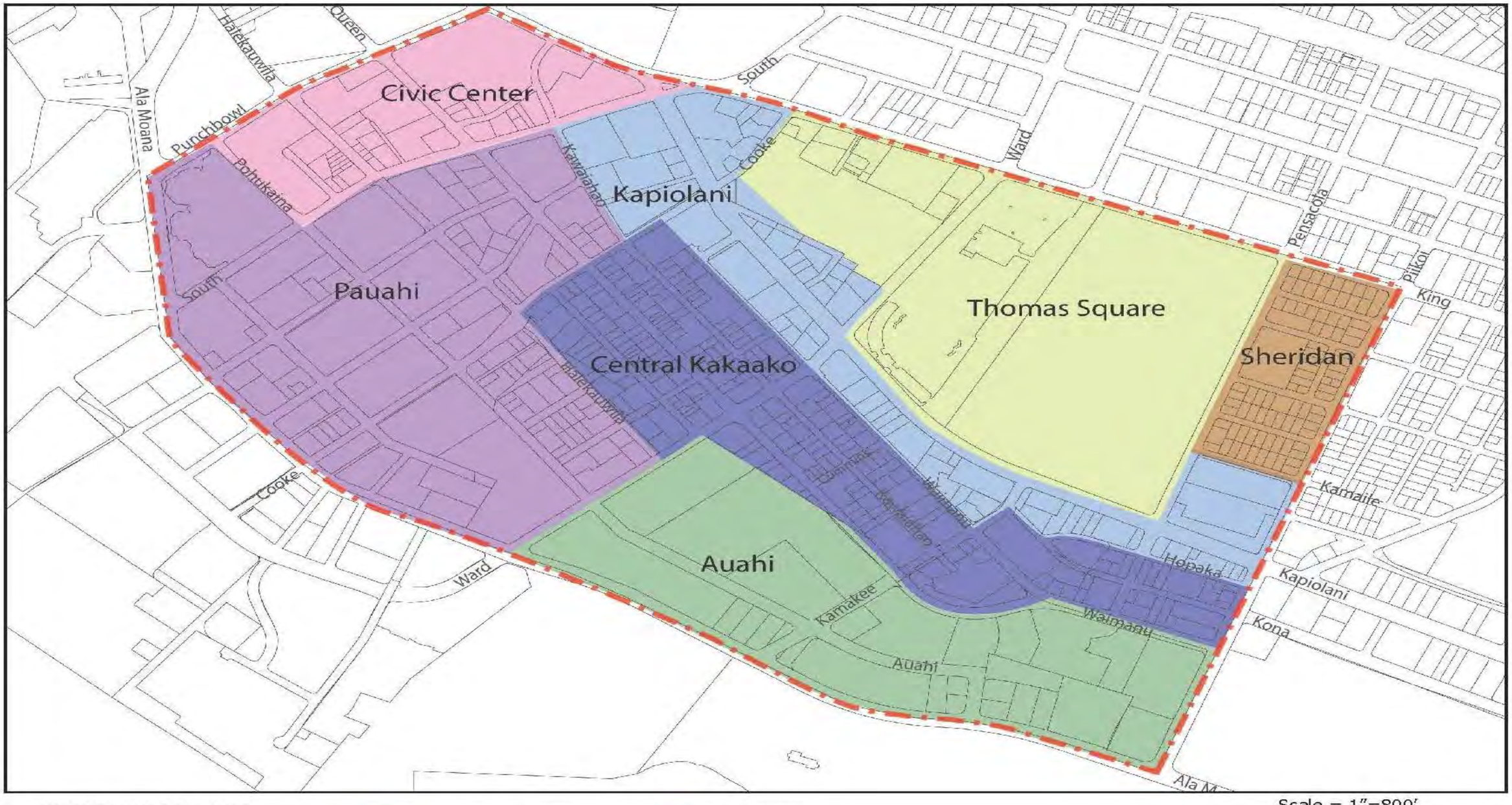
Mauka Area Plan Principles

- **Develop "urban village" neighborhoods**
  - Mixed uses, pedestrian-scale relationship of building to street and public places
- **Create great places**
  - Use of corridors, existing public lands and redevelopment opportunities
- **Make connections**
  - Maintain and complete the street grid, strategic crosswalks, multi-modal design

Urban Design Principles

- Create outstanding pedestrian environment
- Provide improved street connections
- Create network of green streets
- Connect pedestrian paths across major thoroughfares
- Strengthen the Mauka-Makai linkage
- Support small-lot, mixed use, industrial pattern in Central Kakaʻako
- Support transit-oriented development

Neighborhoods

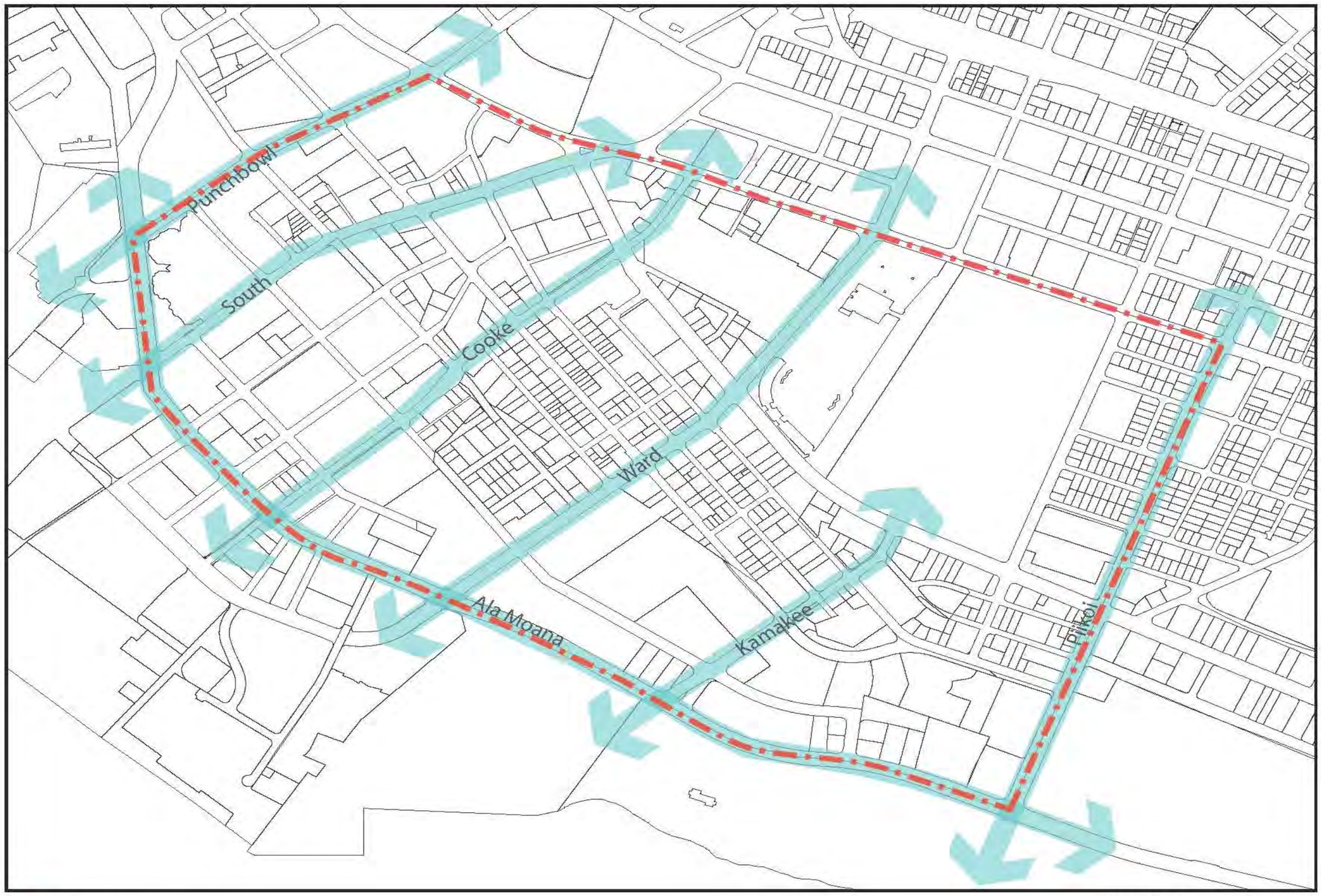


NEIGHBORHOOD ZONES

- Civic Center (CC)
- Kapiolani (KA)
- Thomas Square (TS)
- Sheridan (SH)
- Central Kakaako (CK)
- Pauahi (PA)
- Auahi (AU)

Scale = 1"=800'

View Corridors



Designated View Corridor

Not to Scale

TOD – Not Just About Rail Transit!

- **Mixed Use Residential & Commercial Area Designed to Maximize Access to Public Transport**
- **Creating a Predictable Public Realm**
  - **Relationship btwn Building Facades & Streetscapes**
- **Promoting Formation & Maintenance of Neighborhoods**
- **Establishing Compact Walkable Communities**
  - **Not Car Centric!**
  - **Safe For Pedestrians, Bicyclists, Motorcycles, all modes of Transportation**
  - **Not Defined by VMT (Vehicle Miles Traveled)**

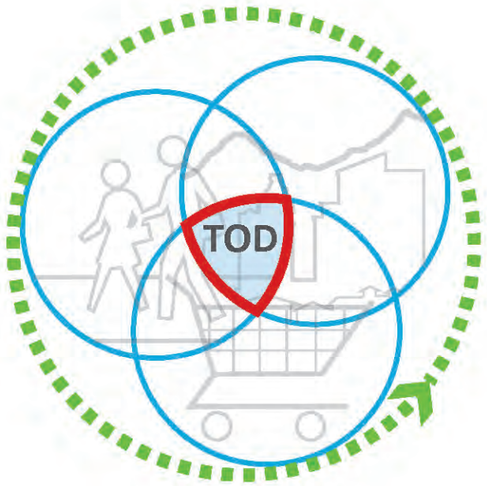
Existing Kakaako Transit

- Bike Share
- Bike Lane (Proposed)
- Bike Lane (DOT)
- Transit Station
- Transit Path
- TheBus Routes
- Alapai Bus Transit Center
- TheBus Stop
- TheBus Line
- ¼ Mile Radius
- Project Location

Elements of TOD

Successful Transit Oriented Development is a balance of all three of these primary elements listed below. Entitlements will be distributed between developments that provide the greatest balance.

Mobility and Accessibility



Development Potential

Availability of Services

mo·bil·i·ty
the quality or state of being capable of moving or of being moved readily from place to place.

ac·ces·si·ble
easy to approach, reach, enter, or use.

Mobility and accessibility are terms with distinct definitions and a balance of both are critical in order to achieve functional TOD. Overall mobility and accessibility must be viewed from a universal design perspective, meaning that the community of Kakaako as a whole needs to be addressed when establishing TOD.

Complete Streets are a driving mechanism in achieving district wide mobility and accessibility for virtually all community members. A "complete" street is designed for safe, comfortable, and convenient movement both along and across the right-of-way by people of all ages and abilities, using multiple modes to circulation.

Accessible to All
Sidewalks must be safe and accessible for all users, regardless of physical abilities or age. They must be welcoming to people in wheelchairs, those pushing strollers, and those with carts or suitcases. Sidewalks must have continuous and unobstructed pathways and sight lines.

All-Weather Access
Sidewalks must be designed to provide storage for snow in winter, and graded to eliminate stormwater "ponding," especially at transitions and ramps. Shade trees should be provided for comfort during warmer months, and bus shelters for inclement weather.

Vibrant Walking Environment
Sidewalks must be comfortable, human-scaled, and vibrant with public art, cafés, benches, trees, awnings, and signage. They must be designed with inviting building entrances and transparent shop windows.

Ease of Maintenance
Sidewalks should be durable and built with time-tested materials and features. They must be sustainable using locally-sourced materials. Maintenance responsibilities must be identified during the design process with a focus on reducing labor-intensive operations.

Stormwater Management
Sidewalks must be designed to divert stormwater to soil rather than to pipes wherever possible. They must include, where appropriate and maintainable, features such as rain gardens, permeable paving, and simple ways to treat runoff from roadway and sidewalk surfaces.

Intelligent Systems
Sidewalks should be fitted with smart-infrastructure networks such as fiber-optic cables and "smart" tags, like radio frequency identification (RFID) tags or quick response (QR) barcodes, to create opportunities for people to access local place-based information.

Efficient Technologies
Sidewalks designs should incorporate the latest state of the art technology to maximize efficiency. Energy-efficient features such as solar-powered trash compactors and LED street lights must be considered in all designs.

mobility + accessibility

Figure 1 | Pedestrian Elements of Complete Streets

Walkscore®, an international survey of walking access to services, ranked Kakaako a ***Walker's Paradise.*** Almost three hundred community services and amenities were listed within walking distance or a short bike ride from the geographic center of the district. This map, alongside the high level of transit service provided with the bus, demonstrates that transit oriented development can exist in Kakaako - with or without rail.

The diversity and **Availability of Services** within close proximity from one another throughout Kakaako offer a network of destinations that charge the district with activity. Although the landscape of services existing in Kakaako are already substantial enough to meet most of the daily needs of the community, TOD proposes to further enhance the accessibility to the existing services as well as promote the increase in service variety.

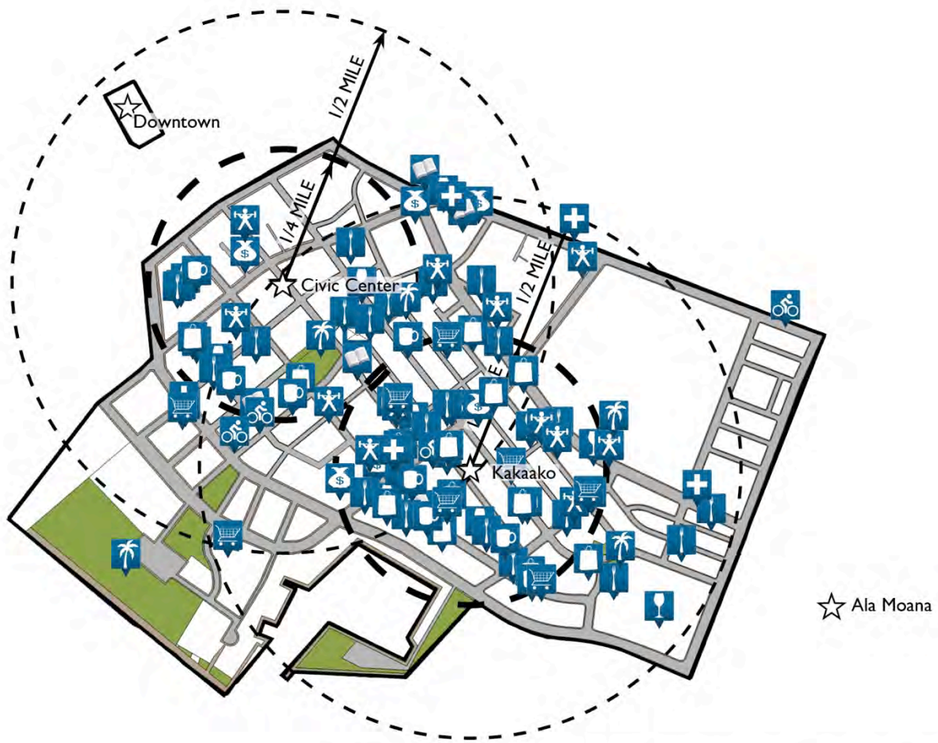


Figure 2 | Services/Amenities in the Kakaako Community Development District

Walk Score®

100-90 | Walker's Paradise

Daily errands do not require a car

89-70 | Very Walkable

Most errands can be accomplished on foot

69-50 | Somewhat Walkable

Some amenities within walking distance

49-25 | Car-Dependent

A few amenities within walking distance

24-0 | Car-Dependent

Almost all errands require a car

Kakaako Walk Score®

91

Walker's Paradise

availability of services

Transit Oriented Development

Walk Score ®

83 Very Walkable

Out of 100 — 593+ Amenities within a one mile

12 min to **WALK** to Downtown
20 min to **WALK** to Chinatown
18 min to **WALK** to the Capitol
44 min to **WALK** to Waikiki
27 min to **WALK** to Ala Moana Center

Transit Score ™

76 Excellent Transit

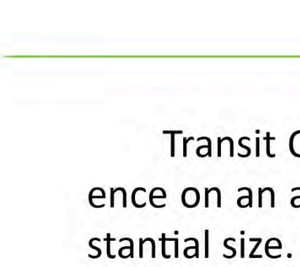
58 nearby bus routes

10 min **PUBLIC BUS** ride to Downtown
16 min **PUBLIC BUS** ride to Chinatown
15 min **PUBLIC BUS** ride to the Capitol
23 min **PUBLIC BUS** ride to Waikiki
17 min **PUBLIC BUS** ride to Ala Moana Center

Walk Score®

Two developers, **Kamehameha Schools and the Howard Hughes Corporation**, have major land holdings within the Kakaako Community Development District. Their properties, along with a few other large lot parcels, are highlighted as having the **greatest transit oriented development potential** in Kakaako.

Transit Oriented Developments that have significant influence on an area need to be dense, mixed-use projects of substantial size. Although the ideas laid forth in this TOD plan will result in district wide improvements, only certain sites with the greatest development potential will create a significant impact on the community. In light of the TOD size, density and use requirements, Development Potential of a parcel in Kakaako is effected by parcel size, land ownership and its current neighborhood zone. Development parcels that are over two acres, owned by a single entity and in a neighborhood zone or location where the current Mauka Area Rules already entitles the site to higher density and height.



development potential

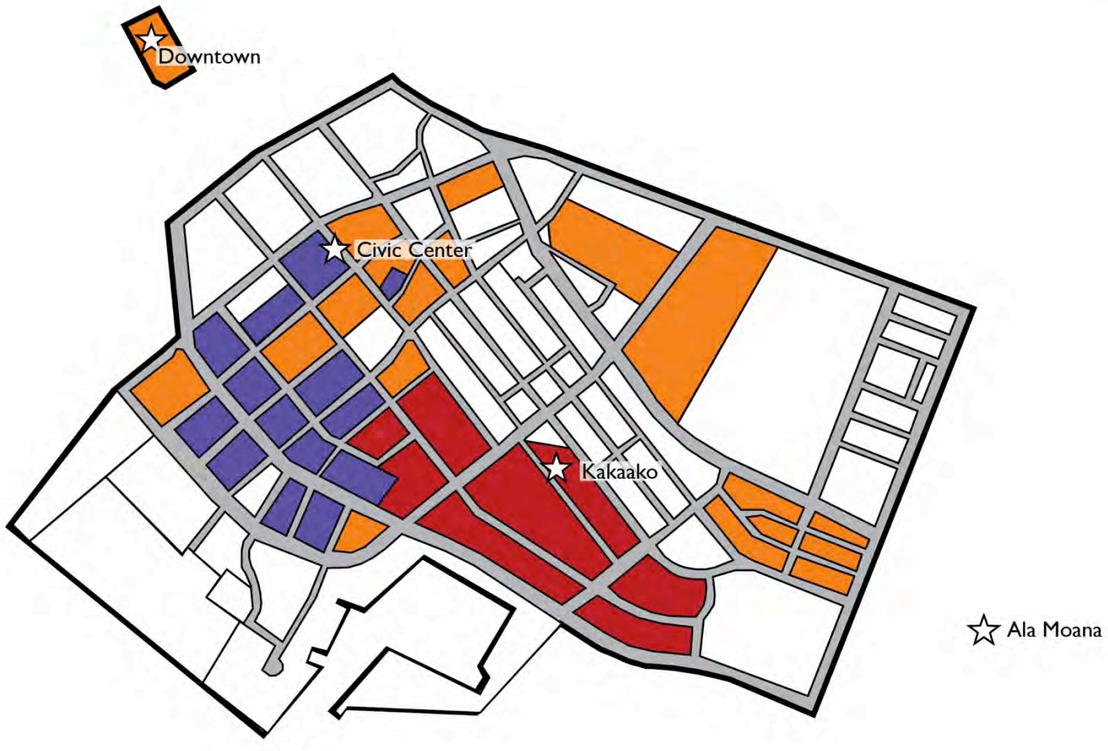
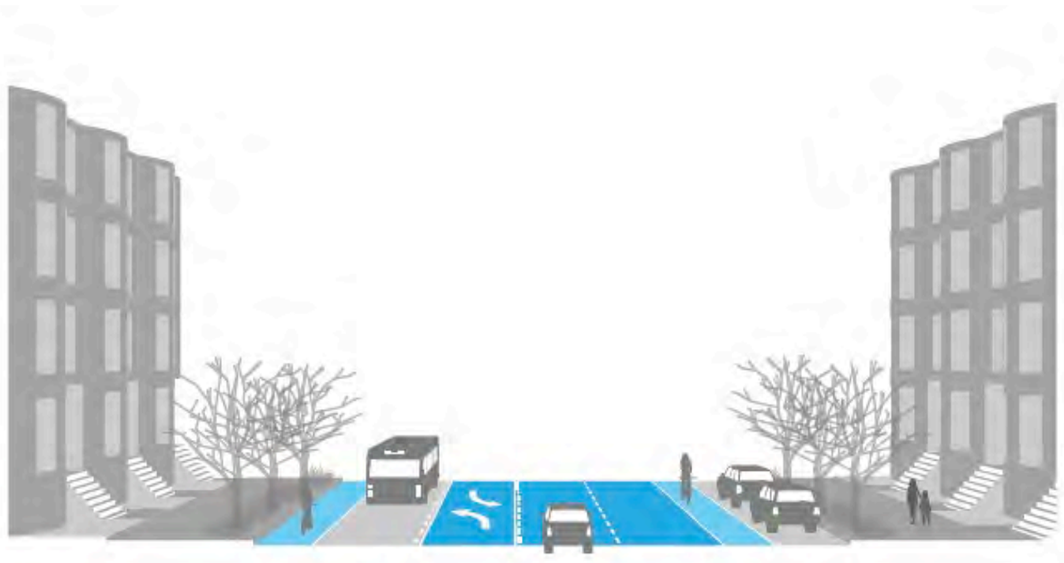


Figure 3| Sites Identified with the Highest Development Potential

What is a Complete Street?

Traditional road classifications emphasize vehicle movement.



Complete Street Types emphasize the character of the entire street.

Kakaako Candidate Complete Streets

Complete Streets

Complete Streets Program Elements

- Pedestrian Countdown Signals
- Crosswalk Markings
- Landscape Buffer
- Street Tree
- Bicycle Sharrows
- Bicycle Lane Safely Located
- Bicycle Intersection Design
- Bus and Service Vehicle Pull-Out Lanes
- Omni-directional Crosswalk (Barnes Dance)
- Speed Tables

Complete Streets for Pedestrians

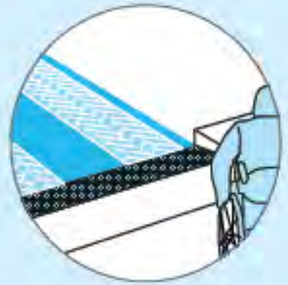
Safety

Lower motor vehicle speeds:

- Narrower lane widths
- Reduced turning radii
- Traffic calming measures

Less exposure to conflicts:

- Dedicated space
- Shorter crossing distances
- Improved sight lines and visibility
- Crossing islands
- Appropriate signal timing and crossing treatments



Accessible crossings:

- ADA compliant curb ramps
- ADA compliant crosswalks
- Accessible pedestrian signals

Convenience

Comfortable and inviting spaces:

- Appropriate sidewalk widths for pedestrian volumes
- Crossings that reflect pedestrian desire lines
- Buildings that front the street
- Transparent store fronts
- Street trees
- Amenities such as benches, recycling and trash receptacles, public art, street cafés, etc.

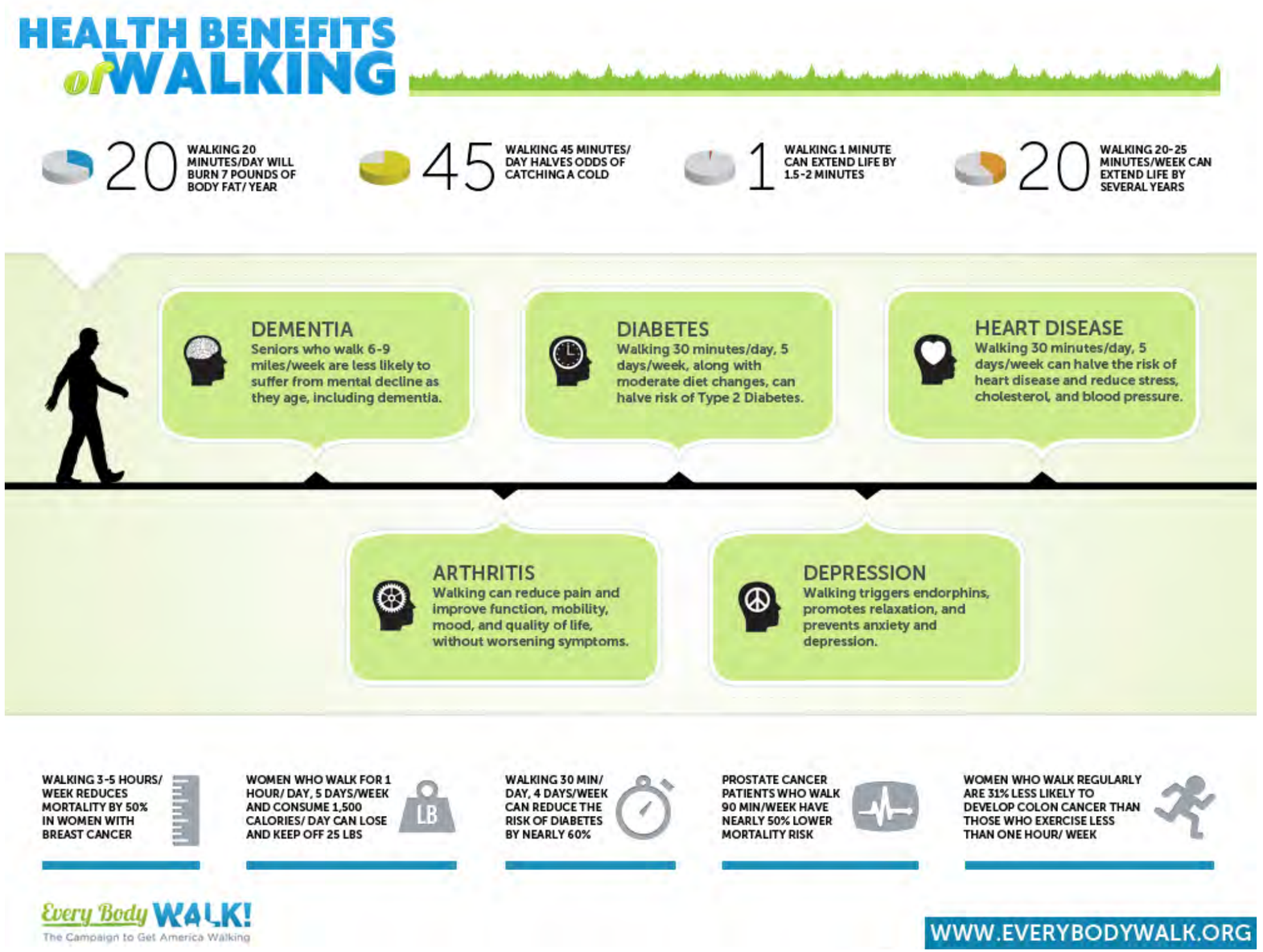
Minimal Delay

Frequent opportunities to cross:

- Pre-timed pedestrian signals
- Responsive pushbuttons
- Direct routes across complex intersections

Complete Street Intersection Design

It Makes Sense to be a Pedestrian!

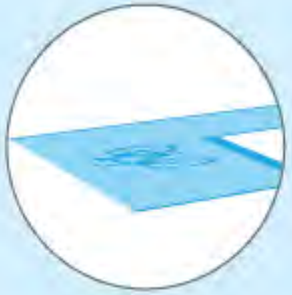


Complete Streets for Bicycles

Safety

Lower motor vehicle speeds:

- Narrower lane widths
- Reduced turning radii
- Traffic calming measures



Less exposure to conflicts:

- Dedicated space
- Shorter crossing distances
- Signal design that accommodates bicycle speeds
- Signal design that reduces conflicts with other modes

Degree of separation:

- Intersection treatments for separate bicycle crossings
- Bicycle lanes
- Buffered bicycle lanes
- Cycle tracks

Convenience

Well-maintained and bicycle friendly intersections:

- Good pavement quality
- Materials that reduce vibrations
- Connections to other bikeways
- Wayfinding signs
- Bicycle parking

Minimal Delay

- Responsive traffic signals
- Bicycle signals
- Bicycle detection
- Direct routes across complex intersections

Bicycle Sharing Facilities

Necessary Elements of Successful TOD

- **Efficient Public Transit**
  - **Multiple Modes of Transportation**
- **Form Based Codes**
  - **To Create Active Streetscapes & Predictable Public Realm**
- **TOD Overlay and Rules**
  - **ID Parcels Suitable for Increased Density, Height or Other**
- **Complete Streets Program**
  - **Intersection Design, Parking Regulations, & Pedestrian Facilities Too**
- **Diversity of Housing Opportunities**
  - **Sale & Rental Housing**
  - **Flexible Affordable/Work Force Housing Regulations**

Balance is Needed!

Affordable vs Market Financing

Affordable Housing Financing

- Find Free/Low Cost Sites
- Secure Low Income Housing Tax Credit Sales & Equity
- HUD Backed Loans
- Small Grants
- Government Subsidy
- Conventional Financing to Cover the Remainder

Market Housing Business Profile

- ID Market Need
- Secure Site Control & Equity Investment
- Conduct Pre-Development & Design Activities
- Realize 65+% Pre-Pre-Sales & Deposits
  - Non-refundable Deposits
  - Equity Investment
  - Construction & Permanent Financing

TOD = A New Look at Affordable Housing

Not Just Subsidized Construction of Residential Units for Qualifying Households!

- **Promote Use of Public Transportation**
- **Unbundle Parking From Cost of Housing**
- **Integration btwn Building Frontage & Streetscape Promotes Compact Walkable Neighborhoods**
- **Public Private Partnership**
- **Deliver Real Units in the Urban Core!**

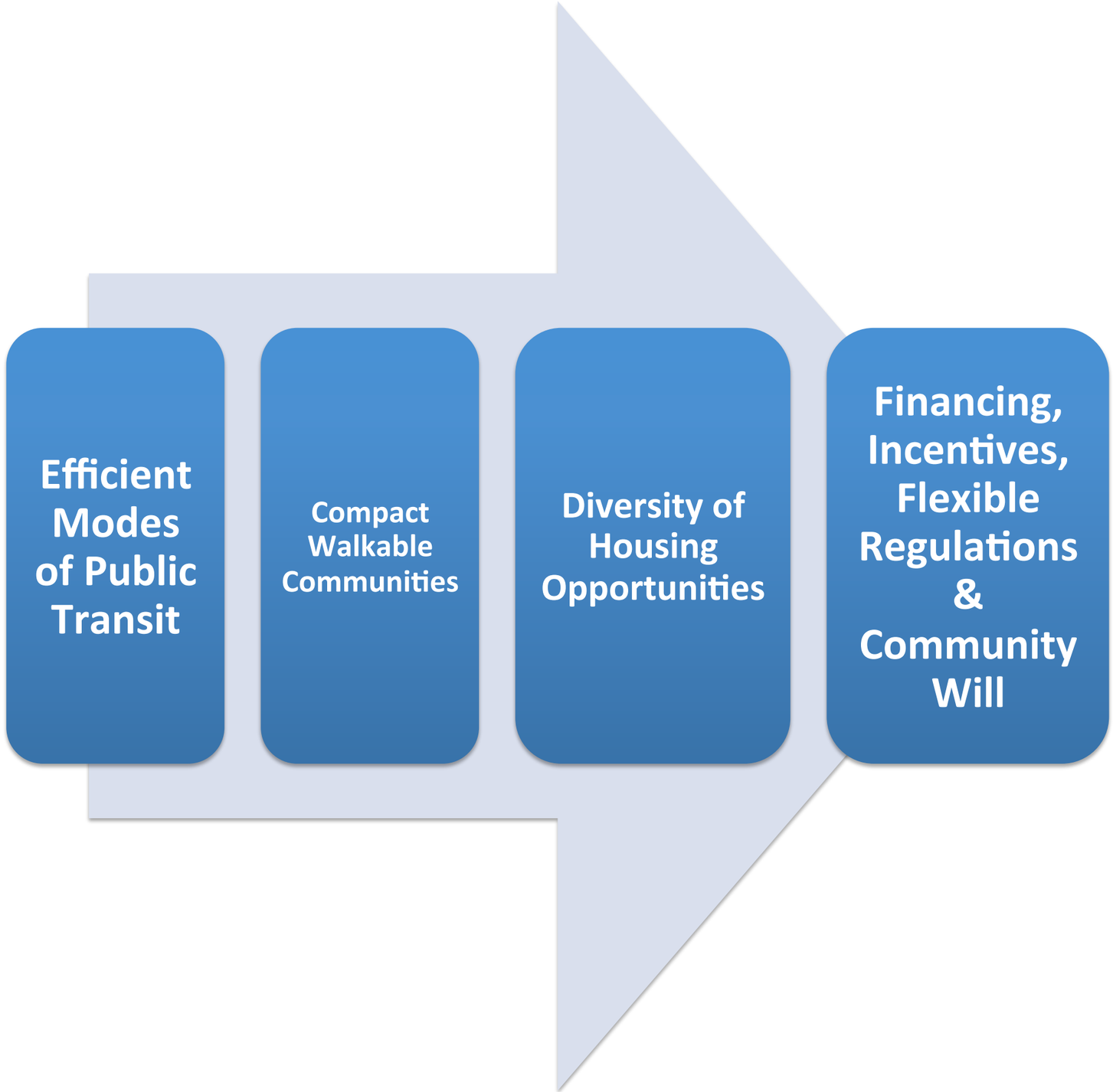
Pathway to Achieving More Affordable Housing in Conjunction w/TOD

Not Just a Box for Shoe Horning Households Into

Needs to Promote a New Way of Life that is not Car Centric

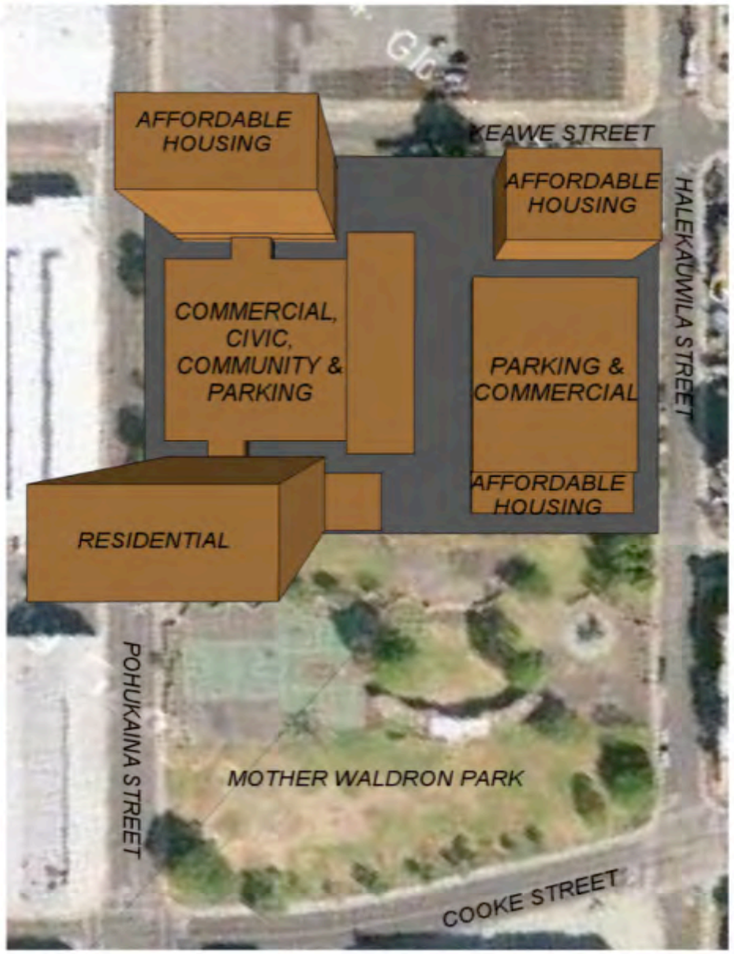
The Active Streetscapes, Open Space Treatment & Proximity to Services Makes Up for a Lack of Project Amenities.

Community Amenities Does Not Discriminate Against Market or Affordable Unit Residents



Transit Oriented Development

690 Pohukaina



Halekauwila Place

690 Pohukaina Site

Mother Waldron Park

PROJECT SITE PLAN

690 Pohukaina Development

- **Phase I**
  - Affordable Rentals (204)
  - Parking (282 stalls)
- **Phase II**
  - Market (500) & Affordable (300) Units
  - Civic (25K sf)
  - Community (10K sf)
- **Phase III**
  - Bus Incubator/ Innovation (30K sf)
  - Commercial (30K sf)
  - Parking (810 stalls)

- **Other Elements**
  - Increased Density (FAR) – *8.52 vs 3.5*
  - Increased Building Height to Use the Additional Density – *Up to 650 feet*
  - Broadband Infrastructure
  - Complete Streets Programming

A New Skyline for Honolulu