

Hawai'i TOD Infrastructure Financing and Delivery Strategy for Pilot Areas

**State of Hawai'i | Office of Planning and Sustainable
Development**

Deliverable 1: Review and Summary of Existing Data | October 31, 2022

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List of Abbreviations and Acronyms

AMI	Area Median Income
BID	Business Improvement District
BWS	City and County of Honolulu, Board of Water Supply
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CCHDC	Catholic Charities Housing Development Corporation
CDBG	Community Development Block Grants

CDP	Community Development Plan
CFD	Community Facilities District
CIP	Capital Improvement Program
DAGS	State of Hawai'i, Department of Accounting and General Services
DHHL	State of Hawai'i, Department of Hawaiian Home Lands
DLNR	State of Hawai'i, Department of Land and Natural Resources
DOE	State of Hawai'i, Department of Education
DPS	State of Hawai'i, Department of Public Safety
DURF	Dwelling Unit Revolving Fund
EIS	Environmental Impact Statement
GET	General Excise Tax
GO	General Obligation (bonds)
HART	City and County of Honolulu, Honolulu Authority for Rapid Transportation
HCDA	State of Hawai'i, Hawai'i Community Development Authority
HECO	Hawaiian Electric Company, Inc.
HHFDC	State of Hawai'i, Hawai'i Housing Finance and Development Corporation
HOME	Department of Housing and Urban Development HOME Investment Partnerships Program
HPHA	State of Hawai'i, Hawai'i Public Housing Authority
HUD	United States Department of Housing and Urban Development
KS	Kamehameha Schools
kV	Kilovolt
LCP	Līhu'e Community Plan
LIHTC	Low-Income Housing Tax Credits
MG	Million Gallon
NASED	New Aloha Stadium Entertainment district
OPSD	State of Hawai'i, Office of Planning and Sustainable Development
P3	Public-Private Partnership
PAB	Private Activity Bonds
RHRF	Rental Housing Revolving Fund
ROW	Right-of-Way
RPT	Real Property Tax
SF	Square Feet
State	State of Hawai'i
TAT	Transient Accommodation Tax
TOD	Transit-Oriented Development
TOD Council	Hawai'i Interagency Council for Transit-Oriented Development
UH	University of Hawai'i
UHWO	University of Hawai'i West O'ahu
US FWS	United States Fish and Wildlife Service
WWPS	Wastewater Pump Station
WWTP	Wastewater Treatment Plant

Glossary of Terms

Construction costs	Costs involved in building and landscaping capital facilities, including any consultant or staff services required and built-in equipment (Hawai'i State Legislature, 2020).
Financing	Refers to the act or process of raising upfront capital in order to expedite development by providing funds earlier than would otherwise be available. This typically involves borrowing or otherwise leveraging future revenue streams.
Funded	As used herein, refers to projects for which funding sources have already been identified. These are conventionally 2- and 6-year CIP funds, utility revenue bonds, highway or school impact fees and other legislative funds provided to the DOE (See also "Unfunded").
Funding	In this public finance context, refers to the revenue stream or other source of monies that are set apart to support a specific development objective. It may be monies that are immediately available, such as appropriations, or monies that will derive from a future revenue stream and be used to repay financing.
Infrastructure	For the purposes of this project, infrastructure is broadly defined to include roadways and highways, pedestrian and bike facilities, wastewater, water, storm water and drainage systems, energy and telecommunications, including broadband, transit and bus systems and facilities, and public schools (Office of Planning, 2018).
Investment	Refers to the cost and source of financing for the planning, design, and construction—and possibly, operations and maintenance—of capital improvement projects (Office of Planning, 2018).
Underwriting	The analysis and assurance of source funding and/or revenues.
Unfunded	As used herein, refers to that portion of estimated required infrastructure costs that has not been provided for via traditional funding sources (see also "Funded").
Value Capture	Refers to a policy approach that enables State and county governments to recover and reinvest land and property value increases resulting from public investment and other government actions. Funds can only be made available when subject to recapture by State and county governments (HR&A and Lincoln Institute of Land Policy, 2018).

1. Executive Summary

The Consultant Team has completed a five-month Phase 1 of the Hawai'i TOD Infrastructure Financing Study. As part of Phase 1 and based on a review of information provided by County and State agencies, the Consultant Team articulated the planned developments in four TOD Pilot Areas and the underlying infrastructure needed to enable these developments, including their costs and funding gaps. This was the key objective of Phase 1 and the main output of this deliverable. Based on information provided by the County and State agencies, the Consultant Team identified and summarized the following TOD-enabling infrastructure in each of the TOD Pilot Areas:

- Iwilei-Kapālama (O'ahu): 87 projects including drainage, electrical, fire, roadway, sewer, and water infrastructure totaling \$666.9 million in capital costs,¹ which would enable the construction of additional 27,500 housing units, 1.9M square feet of commercial space, and 100,000 SF of industrial space.
- Ka'ahumanu Avenue Community Corridor (Maui): water infrastructure totaling \$14.6 million in capital costs, \$7.3 million of which are unfunded, to enable the development of at least 380 housing units, 40,000 SF of office space, 5,000 SF of retail space, and 23,000 SF of civic space, as well as \$117.8 million in capital costs for roadway, social housing, and social infrastructure projects serving new and existing development in the TOD Pilot Area.²
- Līhu'e Town Core (Kaua'i): water and wastewater last-mile connections totaling \$8 million, the entirety of which is to be funded and would enable the construction of at least 650 residential units and 200,000 SF of commercial space,³ as well as additional water capacity improvements and mobility infrastructure serving new and existing development, whose capital costs are yet to be determined.
- Ane Keohokalole Highway Corridor (Hawai'i): a combination of water, wastewater, transportation, and social infrastructure projects totaling \$505.3 million in capital costs, \$423.4 of which is to be funded. These projects would enable the development of at least 5,200 housing units, 835,000 SF of commercial space, 340 hotel rooms, 65,000 SF of office space, and 50,000 SF of civic uses.

As defined in the project scope, the Consultant Team limited its assessment to the information provided by government agencies. Since not all counties have defined their new development plans and infrastructure needs assessments, the information reviewed and summarized in this report is asymmetrical for each TOD Pilot Area.

Lastly, to contextualize each TOD Pilot Area and the findings above, the Consultant Team produced a high-level understanding of the evolution of TOD in Hawaii and the conditions of State-led TOD efforts, an overview of funding and financing sources used in TOD projects, and a summary of the existing physical, socioeconomic, and real estate conditions in each TOD Pilot Area. While not comprehensive, this information is meant to provide further context for each TOD Pilot Area and function as a basis for analysis in subsequent phases of this study.

¹ The Consultant Team has not received information as to whether any of this amount is already funded.

² There is likely additional water and wastewater infrastructure required to accommodate new growth, but individual projects have not yet been identified by the county.

³ There is likely additional water supply infrastructure required to accommodate new development, but individual projects and costs have not been identified by the county.

2. Background and Introduction

2.1 Project Scope

The purpose of this study is to develop options and strategies to overcome barriers to funding, financing, and delivery of public infrastructure in four pilot transit-oriented development areas (TOD Pilot Areas) in the four counties of the State: the City and County of Honolulu, and the Counties of Hawai'i, Kaua'i, and Maui. HR&A Advisors is leading this study, with the support of subconsultants PBR HAWAII, KPMG LLC, Ashurst, Starn O'Toole Marcus & Fisher, and R.M. Towill (the Consultant Team).

The goals of this study include:

- Identifying potential funding and financing tools for each of the TOD Pilot Areas, and estimating the sources of revenue to finance infrastructure projects identified by the State and counties;
- Identifying the most promising delivery methods for these projects, considering a wide range of solutions ranging from traditional procurement to innovative approaches including value capture, P3, and others;
- Identifying barriers to implementing the most promising funding, financing, and delivery approaches, and suggesting institutional and regulatory changes to accommodate them; and
- Developing a roadmap to institute these changes.

To deliver on these study goals, the Consultant Team has outlined a four-phase workplan summarized below:

- **Phase 1 | Project Reconnaissance and Initial Review**, culminating in a review and summary of existing project data provided by State and County agencies (through October 2022);
- **Phase 2 | Preliminary Assessment and Prioritization of Funding, Financing, and Delivery Instruments**, concluding with a shortlist of funding, financing, and delivery instruments for further analysis (through February 2023);
- **Phase 3 | Funding and Financing Analysis** of the shortlisted options in Phase 2, including an assessment of the funding and financing options and recommendations on which ones are most promising for implementation (through July 2023);
- **Phase 4 | Implementation Strategy**, including the assessment of barriers to implement the instruments recommended in Phase 3 and recommendations on delivery, regulation, and institutional arrangements needed to implement the instruments identified (through November 2023).

The purpose of the present Phase 1 deliverable is to:

- 1) Present, based on the information provided by State and County agencies and representatives, the planned developments in the four TOD Pilot Areas and the underlying infrastructure needed to enable these developments, including their costs and funding gaps;

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- 2) Validate the list of planned development and infrastructure projects (including their cost and funding gaps) with each County Permitted Interaction Group, over which the Consultant Team will focus on during subsequent phases of this study; and
 - 3) Note the limitations of the future scope of work by TOD Pilot Area, given the level and quality of available information.

With regards to subsequent deliverables of this study:

- Deliverable 2, at the end of Phase 2, will provide a comprehensive list of funding and financing sources and identify those that may be suitable to support the delivery of specific TOD-enabling infrastructure projects in each of the TOD Pilot Areas.
- Deliverable 3 will then provide an estimate of the funding and financing capacity of the instruments prioritized in Phase 2.
- Deliverable 4 will offer an implementation roadmap for establishing the framework for financing and delivery of TOD-enabling infrastructure in the TOD Pilot Areas.

2.2 Information Sources

The Consultant Team has prepared this document based on the following information sources:

- Information collected during a site visit to the four counties, which included tours of the TOD Pilot Areas, meetings with County Permitted Interaction Groups, individual meetings with County agencies (e.g., planning departments, housing agencies, mayors' offices), individual meetings with State agencies (Department of Accounting and General Services, Hawai'i Community Development Authority), and meetings with State Senators and members of the State Legislature. Appendix 1: **Meetings Held during June 2022 Site Visit** presents a complete list of meetings.
- County and State information sent as a response to the Consultant Team's information request, including details on planned infrastructure projects in the TOD Pilot Areas, physical conditions in TOD Pilot Areas, infrastructure needs assessment, legal and regulatory information, and prior planning studies. A full list of information received is available in Appendix 3: **List of Documents Received**.
- Additional desk research and analysis of socioeconomic conditions and real market dynamics in the TOD Pilot Areas.
- Contextual information provided by the local members of the Consultant Team, including PBR Hawai'i and RM Towill, given their extensive prior work in all counties in general, and in some TOD Pilot Areas in particular (e.g., PBR Hawai'i conducted the infrastructure needs assessment for Iwilei-Kapālama and for the Kona subregion, where the Ane Keohokalole Highway Corridor is located).
- Prior studies conducted for each TOD Pilot Area that are publicly available.

3. TOD Goals and Available Funding Sources and Financing Instruments in the State of Hawai'i

3.1 TOD in Hawai'i

Seven key goals shape TOD efforts led by the State to date, including:⁴

- 1) To locate or redevelop facilities in existing towns and growth centers at transportation nodes served by public transportation, in alignment with County plans;
- 2) To maximize the co-location of State facilities and services in higher density, compact, mixed-use developments and communities;
- 3) To invest in critical infrastructure necessary to successfully implement town and growth center development;
- 4) To promote creative, cost-effective partnerships with other public and private partners;
- 5) To develop more affordable housing wherever feasible to do so;
- 6) To use green building and sustainable development practices as much as possible; and
- 7) To engage in equitable development that promotes and supports community well-being and active and healthy lifestyles.

As one of its strategies to deliver on these goals, the State facilitates partnerships with the counties to promote TOD investments. The formal vehicle for partnership and coordination between the State and counties is the Hawai'i Interagency Council for Transit-Oriented Development (TOD Council), which represents agencies from all four counties and from State agencies.⁵ The State also promotes the strategic use of its properties as anchor civic institutions, which can in turn catalyze other public and private investments to create more compact and livable communities.⁶ As of today, recent State-led efforts in this direction include a master plan and infrastructure plan completed for the State Office of Planning in 2020, which convened the State, City

⁴ State of Strategic Plan for Transit-Oriented Development, "Hawaii Interagency Council for Transit-Oriented Development," December 2017, https://files.hawaii.gov/dbedt/op/lud/20220425%20TOD%20Strat%20Plan/TODStratPlan_Aug2018_Current.pdf.

⁵ "Hawaii Interagency Council for Transit-Oriented Development," accessed September 13, 2022, <https://planning.hawaii.gov/lud/state-tod/>.

⁶ State of Strategic Plan for Transit-Oriented Development, "Hawaii Interagency Council for Transit-Oriented Development."

and County of Honolulu, and significant private landowners in three TOD districts in O‘ahu: East Kapolei, Halawa Stadium and Iwilei-Kapālama.⁷ The planning process facilitated inter-agency and inter-jurisdictional communication and the identification of the potential civic and community value of State properties, including for affordable housing development. Moreover, the plan identified the scale and scope of infrastructure needed to enable further buildout and set rough order of magnitude costs involved in the implementation.

While the State seeks to encourage TOD in all counties, given the availability and quality of transit in each county, their planned transit investments, and their current and projected population density and land use plans, TOD aspirations and potential outcomes will vary greatly by county, and will be particularly different on O‘ahu. While all counties have a bus transit system and have identified potential TOD Pilot Areas and redevelopment opportunities, Honolulu is the only County with a light rail line under construction – led by the Honolulu Authority for Rapid Transportation (HART) – and has done extensive TOD and land use planning work since 2007 around future rail stations.⁸ In addition, the State has shown success in the redevelopment of entire neighborhoods and urban areas. In particular, the State-led Hawai‘i Community Development Authority was responsible for much of the regional infrastructure over several decades that is supporting the redevelopment of Kaka‘ako in Downtown Honolulu. This is a revitalized, mixed-use neighborhood, and an example of State investments supporting the emergence of a dynamic urban core.

Following OPSPD’s definition of TOD,⁹ the Consultant Team understands as TOD projects those projects that through its programming and other characteristics create or promote an environment with a mix of residential, commercial, and institutional uses designed to maximize walking, biking, and public transit. Based on its review of planned, under construction, and recently completed projects in the State, a sample of which is presented in Appendix 2: Sample of Planned, Under Construction, and Completed Major TOD Projects in the State of Hawai‘i,¹⁰ **the Consultant Team understands that TOD is being implemented at large in Oahu involving different typologies, including:**

- Fully affordable developments, such as Hale Kalele and Hale Kewalo, completed in the last five years;
- High-density, mixed-used developments with a mix of market-rate and affordable housing, commercial space, public plazas, community centers, and hotels, including Ala Moana Plaza, Park on Keeaumoku Sky, The Ala Moana, 1500 Kapiolani, Hawaii City Plaza, and Manaolana Place.¹¹ These projects have recently received approvals or are currently under construction;
- Affordable housing facility for seniors, such as the Halewai‘olu Senior Residences, which are currently underway;¹² and
- The Kakaako Master Plan, a major mixed-use, mixed-income neighborhood encompassing four blocks and set to produce 1,336 housing units. Over 550 of the housing units built will be workforce/affordable units.

With regards to the neighboring islands, the Consultant Team has identified several projects with conditions—whether of building typology, density, or mix of uses—found in TOD. Moreover, several of the projects recently completed or under construction in or near to the study areas are focused exclusively on providing affordable housing rentals, namely: Villages of La‘i ‘Ōpua – Hawai‘i; Pua Loke Affordable Housing – Kaua‘i; Koae Workforce Housing Development – Kaua‘i; and Kamakoa Nui – Hawai‘i. **Two recent non-housing**

⁷ “State Transit-Oriented Development (TOD) Planning and Implementation Project for the Island of Oahu (Office of Planning Department of Business, Economic Development and Tourism, July 2020).

⁸ “TOD Home,” accessed September 14, 2022, <https://www.honolulu.gov/tod>.

⁹ “Defining TOD”, accessed October 31, 2022, <https://planning.hawaii.gov/lud/state-tod/defining-tod/>

¹⁰ The information presented in this Appendix includes only a sample of TOD and TOD-related projects in the State of Hawaii. It does not intend to be comprehensive list.

¹¹ “Development Projects”, City and County of Honolulu, <https://www.honolulu.gov/tod/projects/dev-projects.html>

¹² “Halewai‘olu Senior Residences”, The City and County of Honolulu, https://www.honolulu.gov/rep/site/dlm/Halewaiolu_Senior_Residences_PP.pdf

but relevant projects include TOD-enabling infrastructure focused on transit and street improvements, relying on TIGER grants (Līhu'e Revitalization Project – Kaua'i) and State CIP funds (Central Maui Transit Hub – Maui).

Funding of TOD projects with housing affordability components relies heavily on a combination of Low Income Housing Tax Credits (LIHTC) and other programs from the US Department of Housing and Urban Development (HUD), the State's Capital Improvement Program (CIP), HHFDC's Rental Housing Revolving Fund, and, on some instances, counties providing free land for development. For instance, Villages of La'i 'Ōpua, a Department of Hawaiian Home Lands (DHHL) community serving native Hawaiian households with leasehold homesteads, predominantly relies on state funding and income derived from its own portfolio, and is also able to tap into funds supported by the Native American Housing Assistance and Self Determination Act of 1996 (NAHASDA) and other Federal programs administered by HUD. Counties also contribute yearly to their own Affordable Housing Funds that can then partly fund TOD-related projects.

From conversations with government stakeholders, **the Consultant Team understand that a key State and County goal in pursuing TOD is to promote delivery of more medium- and high-density affordable housing to increase accessibility to jobs, quality services and amenities, making life more convenient for residents and services less expensive for State and County governments to provide.** A corollary benefit would be that urban growth would be accommodated away from the State's agricultural and conservation lands.

Lastly, **the Consultant Team understands that a key State goal is to promote civic and community uses of State lands,** and to encourage government agencies to leverage and monetize their assets near transit, especially those near the planned rail line, to produce income. The Consultant Team acknowledges that these goals may change as new State and county officials, including a new governor, take office in December 2022.

3.2 Overview of Available Funding Sources for TOD in Hawai'i

This section presents an overview of the combination of recurring State, County, and Federal funding sources, as well as special fees and charges levied on real estate developments, that are available in Hawai'i to support TOD and affordable housing projects. While not comprehensive, the list of instruments mentioned in this section and its details are meant to provide further context for each TOD Pilot Area and will be developed in depth in Phase 2 of this study.

The Consultant Team understands that while the State and Counties have certain mechanisms to fund affordable housing projects, these are different from those used for TOD-enabling infrastructure (such as sewage and power lines, water and sanitation infrastructure, parks, etc.), which can enable not only affordable housing projects but also market-rate housing, resorts, development of civic facilities, and high-density and compact mixed-use development overall.

Regarding **affordable housing**, funding is mainly provided by the State and federal governments. The State Legislature conducts yearly appropriations for housing funds that promote development of rentals, including the Rental Housing Revolving Fund (RHRF) and the Dwelling Unit Revolving Fund (DURF), both administered by the Hawai'i Housing Finance & Development Corporation (HHFDC). HHFDC also runs other affordable housing programs, including the Hula Mae Mortgage Loan Program, which supports below-market mortgage loans to first time homebuyers, and the Hula Mae Multi-family program, which promotes the development of new or rehabilitation of existing affordable housing units through below-market interest rates. Lastly, Section 201H-38 of Hawaii Revised Statutes program provides a process whereby an affordable housing project may be granted

exemptions from any ordinances or rules relating to planning, zoning, and construction standards that do not negatively affect the health and safety of the general public,¹³ which amounts to a subsidy on project costs.

Federal sources include LIHTC (funded by private taxpayers), project-based vouchers provided by HUD, and HUD-sponsored programs for housing assistance to Native Americans, including the Indian Housing Block Grant and Title VI Loan Guarantee, which provides financing guarantees to Indian tribes for private market loans to develop affordable housing.

Some counties also have their own individual affordable housing funds, which they fund through local taxes:

- Honolulu's Affordable Housing Fund, which builds up from 0.5% of taxpayer's property taxes at a pace of about \$8 million a year, is the only one that will be allocated soon in significant amounts (in September, the City announced a nearly \$30 million plan to build six affordable housing projects with a total of 972 units within the next five years, partly funded through the City's affordable housing fund).¹⁴ Honolulu also supports some affordable housing projects with infrastructure investments, waived fees and property taxes (for rental projects);
- Maui recently implemented a similar system and will start allocating 3% of yearly property tax revenues to an Affordable Housing Fund;¹⁵
- Kaua'i has an Affordable Housing Fund fed yearly through budget appropriations;
- In the County of Hawai'i, no less than 75% of the property tax revenue collected from the difference in revenue from the residential tier one property tax rate to the residential tier two property tax rate, is appropriated each fiscal year to County-sponsored programs designed to address housing and homelessness.¹⁶

To support **TOD-enabling capital investments and repairs**, there are public funding sources at the federal, State, and county levels, including:

- 1) **Federal grants**, including Community Development Block Grants (CDBG), TIGER grants, Home Funds, Housing Trust Funds, incentives provided in designated Opportunity Zones, as well as discretionary funding provided by the CARES Act, the Infrastructure Investment and Jobs Act, and the Inflation Reduction Act. These funds are mostly dedicated to capital investments and pursued on a project-by-project basis competitively.
- 2) **State grants and taxes**, including the Capital Improvement Program (CIP) and special appropriations. Capital Improvement Projects include renovations, repairs, and major maintenance of existing facilities, landscape improvements, new construction, land acquisition, and utility modifications.¹⁷ The CIP and other appropriations are fed by proceeds from State-issued debt (see next section), federal transfers, and proceeds from State taxes, mainly from:

¹³ "Frequently Asked Questions About Affordable Housing Projects Processed Under Section 201H-38, Hawaii Revised Statutes", Department of Planning and Permitting, City and County of Honolulu, <http://www.hawaiihousingalliance.org/docs/pubs/Affordable%20Housing%20Process%20in%20Hawaii/City%20and%20County%20of%20Honolulu%20Affordable%20Housing%20Projects%20Fact%20Sheet.pdf>

¹⁴ Cassie Ordonio, "A 'Tremendous Need' For Affordable Housing In Hawaii Leads To Long Waitlists," *Honolulu Civil Beat*, September 7, 2022, <https://www.civilbeat.org/2022/09/a-tremendous-need-for-affordable-housing-in-hawaii-leads-to-long-waitlists/>; "City Affordable Housing Funds Pile up, but Plans to Spend Them Are Underway," *KHON2* (blog), May 21, 2022, <https://www.khon2.com/always-investigating/city-affordable-housing-funds-pile-up-but-plans-to-spend-them-are-underway/>.

¹⁵ Guthrie Scrimgeour The Garden Island | Thursday et al., "Affordable Housing Voted Down," *The Garden Island*, August 4, 2022, <https://www.thegardenisland.com/2022/08/04/hawaii-news/affordable-housing-voted-down/>.

¹⁶ "Hawai'i County Code," § Chapter 19 (n.d.),

<https://www.hawaiicounty.gov/home/showpublisheddocument/302323/637981499261730000>.

¹⁷ "CIP Dashboard," accessed September 13, 2022, <http://transparency.hawaii.gov/cip-dashboard/>

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- a. **General Excise Tax (GET)**, a tax imposed on nearly all consumer transactions and on businesses doing business in Hawai'i, is assessed at various percentage rates on the gross income businesses derive from activity in the State. The general excise tax rate varies depending on the business activity; it is 0.15% on insurance commissions, 0.5% on certain activities such as wholesaling, and 4% on most activities at the consumer level. For FY2021 the general excise tax comprised approximately 50% of all general fund revenues.¹⁸
 - b. **Transient Accommodation Tax (TAT)**, which charges proceeds from transient accommodation rentals at a 10.25 rate.¹⁹
 - c. **Income Taxes** for both individuals and corporations. The individual income tax rates for married individuals and unmarried individuals range from 1.4% to 11.0% of net taxable income. The income tax rates for estates and trusts range from 1.4% to 8.25%. Corporate income tax rates range from 4.4% to 6.4%.²⁰
 - d. **Other taxes**, including the Public Service Company tax (tax on gross income from public utility business of public utilities in lieu of the general excise tax), the estate tax (tax on the transfer of a taxable estate), a franchise tax on banks (in lieu of net income and general excise taxes) and financial services companies, insurance premiums tax, and a special excise tax on tobacco products and liquor.²¹
- 3) **State loan funds**, including:
- a. The **Dwelling Unit Revolving Fund**, which can be used to finance regional infrastructure projects in conjunction with the counties, private landowners and developers that supports the development of affordable housing.²²
 - b. The **Clean Water State Revolving Fund Program**, which assists in financing the construction of water pollution control projects necessary to prevent contamination of our groundwater and coastal water resources and to protect and promote the health, safety and welfare of the citizens of the State of Hawaii. The Program provides low interest loans to county and state agencies to construct point source and nonpoint source water pollution control projects.²³
 - c. **Drinking Water State Revolving Fund**, which provides low interest loans to Hawaii's regulated water systems for the construction of drinking water infrastructure projects.²⁴ The Fund is fed by an amount determined by the Federal Capitalization Grant, with a 20% state match.²⁵
- 4) **County appropriations for capital projects**, including through the Counties' Capital Improvement Programs, using proceeds from State funds, and county-level taxes, including:

¹⁸ "General Excise Tax (GET) Information | Department of Taxation," accessed September 14, 2022, <https://tax.hawaii.gov/geninfo/get/>

¹⁹ State of Hawaii Department of Taxation, "An Introduction to the Transient Accommodations Tax," March 2020, https://files.hawaii.gov/tax/legal/brochures/TAT_brochure.pdf

²⁰ "State Funding Sources," accessed September 14, 2022, <https://budget.hawaii.gov/budget/about-budget/state-funding-sources/>

²¹ "State Funding Sources."

²² "Swelling Unit Revolving Fund," Hawaii Housing Finance Corporation, <https://dbedt.hawaii.gov/hhfdc/dwelling-unit-revolving-fund-durf>

²³ "Clean Water State Revolving Fund Programs", State of Hawaii, Department of Health, [https://health.hawaii.gov/wastewater/home/cwsrf/#:~:text=The%20CWSRF%20Program%20provides%20low,\(808\)%20586%2D4294](https://health.hawaii.gov/wastewater/home/cwsrf/#:~:text=The%20CWSRF%20Program%20provides%20low,(808)%20586%2D4294).

²⁴ "Drinking Water State Revolving Fund", State of Hawaii, Department of Health, <https://health.hawaii.gov/sdwb/drinking-water-state-revolving-fund/>

²⁵ "Overview of the Drinking Water State Revolving Fund Program," Hawaii Department of Health, https://health.hawaii.gov/sdwb/files/2014/09/SessionB-01.20140805.DWSRF_.pdf

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- a. **Real property taxes**, which are the main source of county revenues. The effective average rate for the whole state is currently 0.31%,²⁶ although it varies by county. Homeowners and various property classes qualify for exemptions, making effective average residential property tax rates lower for some groups and higher for others. Notably, all counties grant substantial or entire real property tax exemptions to qualifying affordable housing projects and impose higher rates on residential owners that do not reside full-time in the subject property, including both out-of-state as well as local resident owners.
 - b. **Transient Accommodation Tax**, a surcharge over the State's TAT rate that counties are allowed to apply as of 2021, at a maximum rate of 3%.²⁷ All counties have implemented the surcharge at the maximum allowed rate.²⁸
 - c. **General Excise Tax**, a surcharge over the State's GET that counties are allowed to apply at a maximum rate of 0.5%. Honolulu, Hawai'i, and Kaua'i County have implemented the surcharge at 0.5%, while Maui has not implemented the GET surcharge. On Honolulu, the surcharge is intended to help fund HART's rail project and has been in place since 2007 through 2030.²⁹ A 2018 bill authorized the rest of the counties to apply the GET surcharge, and Hawai'i and Kaua'i County implemented their respective surcharges in 2019.³⁰

Moreover, **Value Capture Instruments are used for funding of TOD-enabling investments** and consist mainly of special fees and levies that are charged to some real estate developments to cover capital or operating costs of infrastructure projects that may enable that vertical development. Value Capture Instruments currently regulated in the State include:³¹

- 1) **Impact Assessment Fees**, charged to a type of development with the goal of mitigating part of its impacts. There are two types of impact assessment fees in the State:
 - a. The 1992 Hawai'i Impact Fee Act allows county councils to impose impact fees for any development not involving water supply, and to water boards on any development involving water supply. The only example of implementation is highway improvements in East Kapolei, where a highway impact fee (the Ewa highway impact fee program) is assessed on nearby housing and commercial development to fund the additional infrastructure needs associated with the growth induced by the highway construction.³²

²⁶ Janelle Fritts, "How High Are Property Taxes in Your State?" *Tax Foundation* (blog), July 7, 2021, <https://taxfoundation.org/high-state-property-taxes-2021/>.

²⁷ "County Announces New Transient Accommodations Tax," *Hawaii News and Island Information* (blog), December 15, 2021, <https://bigislandgazette.com/county-announces-new-transient-accommodations-tax/>

²⁸ "Additional 3% Tax to Be Applied to Vacation Rental & Hotel Bookings | Blog | Ahearn Karlovsky," accessed September 14, 2022, <https://ahearnkarlovsky.com/blog/kauai-county-passed-its-own-3-transient-accommodation-tax/>; "County Announces New Transient Accommodations Tax"; "OTAT," accessed September 14, 2022, <https://www.honolulu.gov/budget/oahu-transient-accommodations-tax.html>; "County Announces New Transient Accommodations Tax."

²⁹ "County Council Mulls Creating a General Excise Tax Surcharge" *Pacific Business News*, accessed September 14, 2022, <https://www.bizjournals.com/pacific/news/2015/12/17/kauai-county-council-mulls-creating-a-general.html>

³⁰ "County Council Mulls Creating a General Excise Tax Surcharge"

³¹ A potential land value capture instruments that has been implemented but not applied to infrastructure investments are user fees to access specific areas, generally limited to supporting a given asset. Notable ones are Hanauma Bay special fund & Diamond Head Monument fees (the latter implemented within the last 12-18 months). There is interest to implement more of these fees, especially for similar areas that are highly used by visitors.

³² Duncan Associates and Helber Hastert & Fee, "Presentation to County of Hawaii Planning Department: Infrastructure and Public Facilities Needs Assessment," <https://www.planning.hawaiicounty.gov/home/showpublisheddocument/301593/637203392537400000>; Duncan Associates, "State Impact Fee Enabling Acts," n.d., http://www.impactfees.com/publications%20pdf/summary_of_state_acts.pdf

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- b. Act 245, from 2007, allows the Hawai'i Department of Education (DOE) to collect impact fees from residential housing developments in certain areas. The fees are aimed at addressing the impact of new residential development on schools. Under Act 245, developers can either pay a fee or provide land to contribute to the cost of building new or expanding existing DOE facilities. The DOE has identified five impact districts for the fees, including the Kalihi to Ala Moana corridor on O'ahu (which tracks the path of the Honolulu rail project), West Hawai'i, Leeward O'ahu, West Maui, and Central Maui.³³
- 2) **Community Facilities District (CFD)**, a special taxing district to fund public facilities construction, private infrastructure, or other improvements by levying a special tax assessment on property owners within the defined boundaries of the CFD. Thus, those owners effectively pay for public facilities improvements as part of their property tax bill. CFDs can also issue bonds and use their tax proceeds to service them. While all four Hawai'i counties have adopted ordinances enabling the creation of CFDs, to date there have been only two CFDs formed and utilized in the state: i) the Kukui Ula Project CFD in Kaua'i, formed in 2008, which helped fund road and intersection construction and improvements, as well as the expansion of the county's potable water system; and ii) the Kaloko Heights Project CFD in Hawai'i, formed in 2021 to help fund sewer line improvements on the Kaloko Heights masterplan community, including its affordable housing component.³⁴ Depending on the county, the creation of CFDs is contingent on council approval, landowners' approval, or both. Maui allows CFDs to be initiated by either property owners or the County Council, and then requires the Council to approve its formation.³⁵ On O'ahu, Kaua'i, and Hawai'i, formation of a CFD requires approval by the County Council and at least 25% of the property owners within the proposed district petition for its creation³⁶
- 3) **Business Improvement Districts**, which, similarly to CFDs, consists of assessing commercial and non-residential properties within a defined area to fund supplemental maintenance and security services and such other improvements, services, and facilities within the special improvement district.³⁷ Each separate special improvement district must be established by a separate ordinance.³⁸ Unlike CFDs proceeds, BID proceeds are not bondable and are only used for improvements that promote businesses.³⁹ There are currently five BIDs in Hawai'i, including four in Honolulu (Waikiki Business Improvement District; Waikiki Beach Special Improvement District; Fort Street Mall Business Improvement District; and Chinatown Improvement District) and the Kailua Village Business Improvement District in Hawai'i.⁴⁰

³³ "Act 245," HB19 HD2 SD2 CDI § (2007), 245, https://www.capitol.hawaii.gov/session2007/bills/GM1016_.PDF; Suevon Lee, "State Initiates Audit Of School Impact Fees On Developers," Honolulu Civil Beat, April 9, 2019, <https://www.civilbeat.org/2019/04/state-initiates-audit-of-school-impact-fees-on-developers/>

³⁴ NANCY COOK LAUER West Hawaii Today | Sunday et al., "Kaloko Heights Sewer Project Back before County Council," Hawaii Tribune-Herald, July 4, 2021, <https://www.hawaiitribune-herald.com/2021/07/04/hawaii-news/kaloko-heights-sewer-project-back-before-county-council/>.

³⁵ "Community Facilities Districts," MauiCounty.us, November 23, 2019, <http://mauicounty.us/cfd/>

³⁶ Urban Land Institute, "Community Facilities District Financing City and County of Honolulu," 2015, <https://ulidigitalmarketing.blob.core.windows.net/ulidcnc/2015/12/David-Taussig-and-Assoc-CFD-Financing-Introduction.pdf>; "Kaua'i County Code," Chapter 26 Special Improvement Financing by Community Facilities Districts § Sec. 26-2.1 Institution of Proceedings (n.d.), https://library.qcode.us/lib/kauai_county_hi/pub/county_code/item/title_x-chapter_26?view=all#title_x-chapter_26; "Hawai'i County Code," Chapter 32 Special Improvement Financing by Community Facilities Districts § Section 32-19 (n.d.), <https://www.hawaiicounty.gov/home/showpublisheddocument/74/637649759168830000>.

³⁷ "House Bill §46-80.5 Special Improvement District," accessed September 13, 2022, https://www.capitol.hawaii.gov/hrscurrent/vol02_ch0046-0115/hrs0046/hrs_0046-0080_0005.htm

³⁸ House Bill §46-80.5 Special improvement district.

³⁹ Columbia Capital Management LLC, "County of Maui - Community Facilities District - Presentation to Water and Infrastructure Committee," <http://mauicounty.us/wp-content/uploads/2019/11/Presentation-from-Columbia-Capital-Mgmt-11-18-2019.pdf>

⁴⁰ "Improvement Districts and Associations in Hawaii," accessed September 13, 2022, <http://www.hawaiiiforvisitors.com/about/organizations/improvement.htm>

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- 4) **Special Improvement Districts**, which are similar to BIDs but can fund enhanced landscaping services, sanitation services, lighting, etc., while a BID can fund supplemental improvements that will restore or promote business activity in the district (i.e., aesthetic and decorative safety fixtures, lighting facilities, pedestrian overpass and underpass improvements, etc.). Assessments established under a SID may be initiated by the City Council on its own initiative (or at the request of the Mayor), or following a petition of owners of more than 25% of the real property tax assessed value within the proposed district.⁴¹
 - 5) **Hawaii Community Development Authority (“HCDA”) Assessment Districts**, established by the State legislature for providing various streetlight, curb, gutter, sidewalk, drainage, sewer and water systems improvements. HCDA can then issue bonds backed by these assessments to fund various improvements. The only precedent of application in the State is the Kakaako Community Development District, where HCDA imposes an additional assessment on property owners to support neighborhood infrastructure.⁴²

3.3 Overview of Available Financing Sources for TOD in Hawai‘i

This section presents the array of available financing sources to Counties and the State. Similarly to the prior section on funding instruments, it is worth noting that, while not comprehensive, the list of financing instruments below will be developed in depth in Phase 2 of this study, and includes:

- State- and County-issued **General Obligation Bonds (GO Bonds)**. GO bonds have no associated source of revenue and are backed fully by the State or counties. They are generally recognized as one of the least costly means of securing new funds that can be used for public projects.⁴³
 - State GO bonds: GO Bonds may be issued by the State, provided that such bonds at the time of issuance would not cause the total amount of principal and interest payable in the current or any future fiscal year, whichever is higher, on such bonds and on all outstanding general obligation bonds in the current or any future fiscal year, whichever is higher, to exceed a sum equal to 18.5% of the average of the General Fund revenues of the State in the three fiscal years immediately preceding such issuance. General obligation bonds of the State must be authorized pursuant to the Constitution by a majority vote of the members to which each house of the Legislature is entitled.⁴⁴
 - County GO Bonds: GO Bonds may be issued by a County, provided the County authorizes the sale of bonds through an ordinance or resolution. The Director of Finance of the County then outlines the bonds terms and the County may issue the bonds to pay all or part of the cost of appropriations for public improvements made in a capital budget ordinance.⁴⁵
- **Utility Revenue Bonds**, which are backed by revenue proceeds from fees paid by users of public utilities. Issuers include the County Department of Environmental Services and the County Board of Water Supply, as the fees charged to users for these services represent revenue streams that can underwrite revenue bonds. Notable examples of agencies that have issued revenue bonds to partly finance capital facilities include the C&C’s Department of Environmental Services, which manages the

⁴¹ DTA, “TOD Financial Analysis”, 2020.

⁴² DTA, “TOD Financial Analysis”, 2020.

⁴³ “State Transit-Oriented Development (TOD) Planning and Implementation Project for the Island of Oahu.”

⁴⁴ DTA, “TOD Financial Analysis”, 2020.

⁴⁵ DTA, “TOD Financial Analysis”, 2020.

county's wastewater collection and treatment services, and Honolulu's Board of Water Supply, which manages freshwater resources and distribution system.⁴⁶

- **CFD Bonds**, which can be issued by CFDs to finance projects within their boundaries and are then serviced by proceeds from the special taxes they levy upon residential units. The Kaua'i Kukui Ula Project CFD was formed in 2008 and has authorization to issue \$120 million in bonds. The CFD issued a bond for \$11.9 million in 2012, which was used for developer reimbursements of a bypass road, reservoirs, community entry points, a roundabout and shoreline improvements.⁴⁷
- Counties can also issue **tax-exempt special revenue bonds, or private activity bonds (PABs)**.⁴⁸ PABs involve the counties using private activity bond volume allocation to issue tax-exempt special revenue bonds, the proceeds of which a developer would use to construct or acquire and rehabilitate affordable rental units. The tax-exempt special revenue bonds are not secured by the Counties' credit. Instead, the bonds are secured by the developer's project. Utilizing Private Activity Bonds specifically for housing, offers the benefit of low interest rate debt and triggers an allocation of 4% Low Income Housing Tax Credits.⁴⁹ These 4% credits can then be syndicated to raise equity for a housing project.⁵⁰ Concerning the implementation of PABs, the City and County of Honolulu is now seeking to be an active issuer of these bonds and has a PAB program available to affordable housing developers.⁵¹
- **Lease Revenue Financing**, by which state agencies can use lease revenues to support and repay Lease Revenue Bonds. Lease revenues can be generated from several sources, including lease payments by a public entity for a capital asset utilized by the public agency, and land lease payments imposed by a public entity on private entities leasing property.⁵² Notable examples in the State include the 2017 State of Hawaii Airport Revenue Bonds, which was used to pay the costs of design, development, and construction of consolidated rental motor vehicle facility projects in certain airports.⁵³ Moreover, DAGS is currently planning to issue lease revenue bonds in order to partly finance the New Aloha Stadium Entertainment District, which would be partly serviced with ground lease proceeds from new real estate development.⁵⁴

⁴⁶ "State Transit-Oriented Development (TOD) Planning and Implementation Project for the Island of Oahu."

⁴⁷ Columbia Capital Management LLC, "County of Maui - Community Facilities District - Presentation to Water and Infrastructure Committee."

⁴⁸ "Private Activity Bonds", accessed September 9, 2022, <https://www.oneoahu.org/pab>

⁴⁹ "In consideration of H.B. 2019 Relating to Bonds", State of Hawaii, Department of Business, Economic Development, and Tourism, https://www.capitol.hawaii.gov/Session2022/Testimony/HB2019_TESTIMONY_HSG_02-08-22_.PDF

⁵⁰ "In consideration of H.B. 2019 Relating to Bonds", State of Hawaii, Department of Business, Economic Development, and Tourism

⁵¹ "Private Activity Bonds".

⁵² DTA, "TOD Financial Analysis", 2020.

⁵³ DTA, "TOD Financial Analysis", 2020.

⁵⁴ Andrew Gomes, "Aloha Stadium Replacement Project's More Costly Funding Plan Shifts to Private Developer – New Aloha Stadium Entertainment District (NASED)," *Honolulu Star-Advertiser*, May 30, 2021, <https://nased.hawaii.gov/aloha-stadium-replacement-projects-more-costly-funding-plan-shifts-to-private-developer/>.

4. Understanding of TOD Pilot Areas Context and Identified TOD-Enabling Infrastructure Projects

4.1 O‘ahu | Iwilei-Kapālama

TOD Pilot Area Overview

The Iwilei-Kapālama TOD Pilot Area is located in central Honolulu and bounded by Waiakamilo Road and the H-1 Freeway to the north, the H-1 Freeway and Nu‘uanu Canal to the east; Nu‘uanu Canal and Nimitz Highway to the south, and Nimitz Highway and Waiakamilo Road to the west.⁵⁵ The TOD Pilot Area is anchored by two planned rail stations with the Kapālama Station at the north and the Iwilei station south. The stations are part of the fourth and currently final planned rail system segment and are expected to open in 2031.

The area has over 700 properties and covers approximately 552 acres. Various State agencies own properties within the area, including office, open space, educational, and residential uses. The City owns a smaller number of properties, some of which are being considered for longer-term redevelopment. Private landowners with large properties in the Iwilei-Kapālama TOD Pilot Area include Kamehameha Schools, Castle and Cooke, City Mill Co. Ltd., Costco, Douglas Emmett. The Salvation Army, and H & J Weinberg Foundation, Inc.

For further context, an overview of Iwilei Kapālama’s demographic trends, socioeconomic conditions, area uses, and real estate market trends is included in Appendix 4: Oahu | Iwilei-Kapālama Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trends.

⁵⁵ “Infrastructure Improvement Master Plan for the Iwilei Area”

Figure 1 | Iwilei-Kapālama TOD Pilot Area



Source: HR&A Advisors

Development and Redevelopment Opportunities in Iwilei-Kapālama

Proposed residential developments in the area include high-rise senior living, medium-low rise affordable housing, and market rate housing. With the projected completion of rail service, the Infrastructure Improvement Master Plan for the Iwilei Area and its associated residential and mixed-use projects suggest that the area could accommodate 27,500 housing units, 1.9 million square feet of commercial space, and 100,000 square feet of commercial space over the next 30 to 50 years. Additionally, occupancy of major planned residential developments, including those developed with State agencies or subsidies such as HHFDC and HPHA, are expected to be restricted to households with established prior residency in the State.

Table 1 | Anticipated Development in the Iwilei Master Plan

REAL ESTATE TYPOLOGY	ANTICIPATED DEVELOPMENT				
	Phase 1 (Up to 2030)	Phase 2 (2030-2039)	Phase 3 (2040-2049)	Phase TBD	TOTAL
Housing	8,600 Units	7,500 Units	4,100 Units	7,300 Units	27,500 Units
Commercial	55,200 SF	135,700 SF	353,200 SF	1,349,800	1,892,900 SF
Industrial	N/A	N/A	N/A	100,000 SF	100,000 SF

Source: Infrastructure Improvement Master Plan for the Iwilei Area (PBR HAWAII, 2022)

As per the engagement with County agencies and the Infrastructure Improvement Master Plan for the Iwilei Area, the Consultant Team understands that there is significant potential for the redevelopment of specific state-owned and non-profit large landholdings around the stations of the planned rail line, including:

- **Liliha Civic Center (DAGS)**, which currently hosts State government offices and will be redeveloped into a mixed-use project with an affordable component.
- **Mayor Wright Homes and Kalanihuia Homes (Hawai'i Public Housing Authority, HPHA)**; a current State-owned public housing complex being considered for expansion to include mixed-income segments, and renovation.
- **DHHL's Kapālama Project**, which would convert a portion of City Square Shopping Center to residential uses, led by the Department of Hawaiian Homelands on behalf of its beneficiaries.⁵⁶
- A new **masterplan of Honolulu Community College (University of Hawai'i, UH)**; which will guide the growth in its enrollment and the fact that there will be a rail station on campus.
- **Nā Lama Kukui Business Center (Office of Hawaiian Affairs, OHA)**, a property owned by OHA and formerly known as the Gentry Pacific Design Center. OHA acquired the commercial property in August 2012 as part of an investment strategy aimed at helping it generate income from real estate that could help fund its programs that benefit Native Hawaiians. OHA moved its headquarters on O'ahu to the location, which is an estimated 44,000-square-foot space.⁵⁷
- **Kamehameha Schools Masterplan**, approved in 2009 by the Hawai'i Community Development Authority (HCDA), encompasses 29 acres on nine city blocks of owned by Kamehameha Schools (KS). The Master Plan calls for the development of a mixed-use, mixed-income neighborhood featuring a range of housing options for owners and renters – from low-rise residences to high-rise towers – inviting green spaces, walking paths, and retail.
- **O'ahu Community Correctional Center (OCCC)**, the largest jail in the state. The State is planning on renovating it given concerns of overcrowding and safety.
- **Kapālama Canal Catalytic Project**, intended as a catalyst to spur broader neighborhood improvements and urban, mixed-use development consistent with the vision laid out in the TOD Plan. The project will provide new open space in this underserved community and high-quality facilities for bicycle and pedestrian travel to and from the rail station.

⁵⁶ The other part of City Square Shopping Center is owned by Kamehameha Schools and is contemplated under the Kapālama Kai Plan

⁵⁷ "Nā Lama Kukui ", Office of Hawaiian Affairs, <https://www.oha.org/aina/commercial-property/nlk>

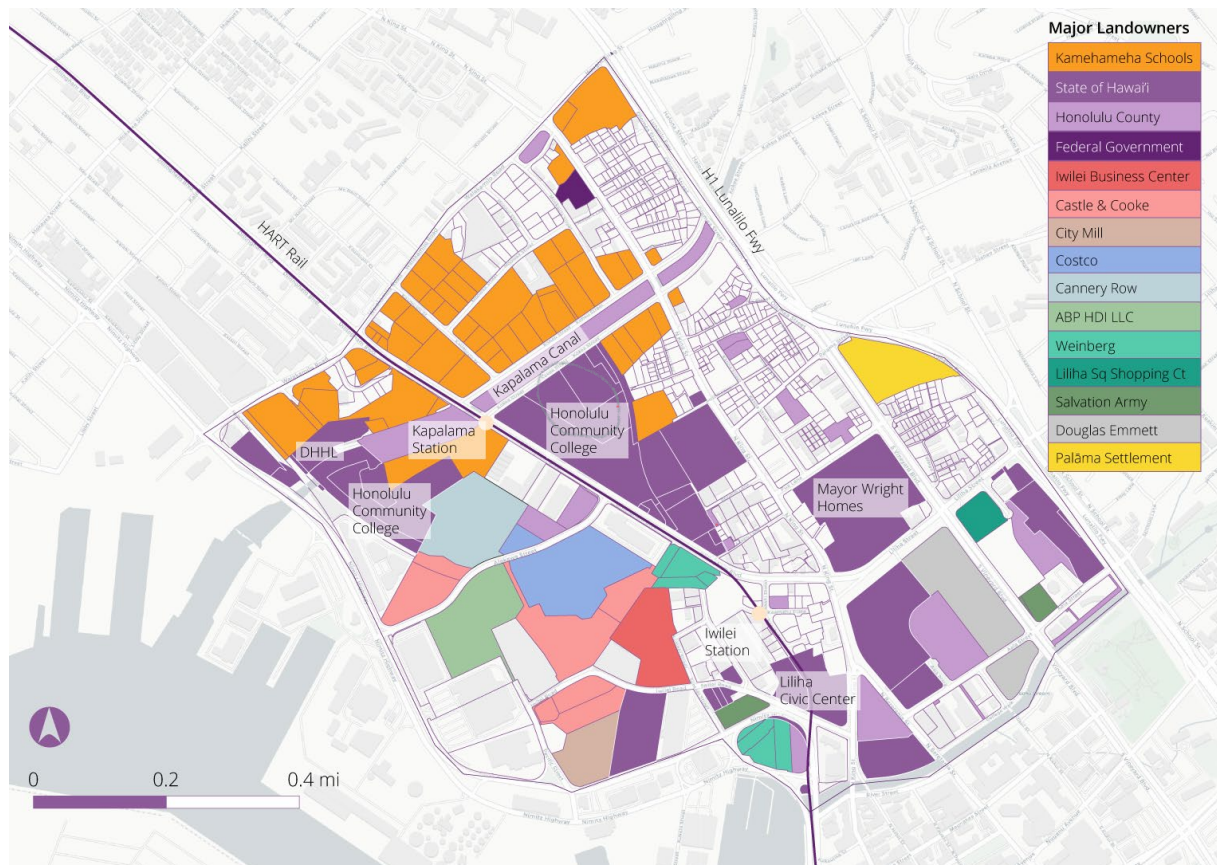
- **Kukui Gardens**, located near the Central Business District, immediately adjacent to Chinatown. The property covers approximately 9 acres, and could house 20 buildings with 1- to 4-bedroom family apartments.

In addition to the opportunities above, the Consultant Team understands there are several private landowners with properties in the Iwilei Master Plan Area that are subject to redevelopment, including but not limited to:

- Castle & Cooke Commercial, Inc. (Castle and Cooke);
- City Mill Co. Ltd. (City Mill);
- Costco Wholesale Corp. (Costco),
- Douglas Emmett (Waena Apartments);
- The Salvation Army;
- Liliha Square (Liliha Square Shopping Center); and
- H & J Weinberg Foundation, Inc.

Figure 2 below pinpoints the location of each site and parcel in the Iwilei Kapālāma TOD Pilot Area. Table 2 provides details of the major redevelopment opportunities for which the Consultant Team was able to pinpoint sufficient information. It is worth noting that, in the case of individual landowners listed above, information on the sites is confidential, and therefore the Consultant Team was not able to locate the status of projects or their capacity to hold specific additional residential units and commercial/industrial space.

Figure 2 | Opportunities for Redevelopment, Iwilei-Kapālāma TOD Pilot Area



Source: HR&A Advisors

Table 2 | Summary of Redevelopment Opportunities in Iwilei-Kapālana

PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
Liliha Civic Center	Department of Accounting and General Services (DAGS) Hawai'i Housing Finance & Development Corporation (HHFDC)	3.79-acre State-owned land, located at the corner of North King Street and Iwilei Road. The property is close to two planned rail stations, Kūwili (Iwilei) and Hōlau (Chinatown) The property currently has two existing structures and a parking lot on site. There are functioning State offices on site.	Plans for redevelopment as mixed-use project, that include <ul style="list-style-type: none"> • State Offices: ~ 215k SF • Residential: 400-600 units rental and/or for-sale • Ancillary Retail: ~11,500 SF • Structured Parking • Open Space Primary housing targeting households that are not well served by existing low-income housing tax credit (LIHTC) and other federal programs.	Currently conducting Environmental Impact Statement.	N/A	\$5M from HHFDC's Dwelling Unit Revolving Fund for infrastructure improvements; no additional funding obtained so far	Considering private developer
Mayor Wright Homes Redevelopment	Hawai'i Public Housing Authority (HPHA)	14.8-acre complex with State-owned 364 affordable housing units, near Downtown	Proposal to replace aging public housing units and create a mixed-use, mixed-income community, including: <ul style="list-style-type: none"> • 2,500 units – replacing the 	EIS completed, but project on hold. Former public-private partnership with Hunt Companies	\$1.3 billion	No public funding identified.	Seeking private partner / affordable housing developer

PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
		Honolulu and Kalihi-Palama	<p>existing housing on a one-for-one basis and adding additional affordable, workforce, and market-rate units</p> <ul style="list-style-type: none"> • 66% of the new units being made available to renters with incomes below 120% AMI; 34% market rate • Up to 80k SF of new retail and commercial space • Multi-Purpose Community Center 	Inc. terminated in 2020.			
Kamehameha Schools Masterplan	Kamehameha Schools	104 acres of discontinuous real estate owned by Kamehameha Schools, today dominated by industrial uses, along Kapālama Canal. Kamehameha Schools	<p>Redevelopment into a mixed-use and light industrial community, including:</p> <ul style="list-style-type: none"> • Maintaining about 50% of land for industrial use (~585,000 SF) • 4,000 - 5,000 new homes • 150k SF of new retail space 	<p>Planning work began in 2017, followed by community outreach in 2018 – 2019. Construction of a first phase between 2026 and 2028. Completion of all</p>	N/A	County and/or State contributions expected to be negotiated	N/A - considering improvement districts

PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
		currently rents most plots for industrial purposes and some leases are active for decades to come.	<ul style="list-style-type: none"> 6 acres of open space and other uses 	development by ~2041.			
University of Hawai'i - Honolulu Community College	University of Hawai'i	Current university campus	UH has a long-range masterplan that guides future growth and development. UH seeks to update it. No residential component is planned on the site.	N/A	N/A	N/A	N/A
DHHL Kapālama Project	Department of Hawaiian Home Lands (DHHL)	A 2.75-acre portion of DHHL's 4.46-acre holdings in Kapālama that has been proposed for redevelopment. The project would convert a portion of the City Square Shopping Center to one or two high-rise	Preliminary redevelopment plans include a combination of: <ul style="list-style-type: none"> 18.5K SF of ground floor retail space ~500 residential units 	Medium priority due to existing long lease terms	\$250	N/A	DHHL seeking developers to accelerate redevelopment plans.

PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
Nā Lama Kukui Business Center (Office of Hawaiian Affairs, OHA)	Office of Hawaiian Affairs	residential buildings. OHA acquired the commercial property in August 2012 as part of an investment strategy aimed at helping it generate income from real estate that could help fund its programs that benefit Native Hawaiians.	N/A	N/A	N/A	N/A	N/A
O'ahu Community Correctional Center	Hawaii Department of Public Safety	N/A	The State of Hawaii is continuing with preparation of a Request for Qualifications (RFQ) that will seek submission of Statements of Qualifications (SOQ) to design, construct, finance and maintain the new OCCC. In addition to completing the RFQ	Planning	N/A	N/A	N/A

PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
			for release, the OCCC team is continuing to: • Examine viable funding/financing options; • Define the project approvals process; • Complete a current architectural space program; • Prepare a new construction cost estimate; and • Update the project development schedule.				
Kapālama Canal Catalytic Project	City and County of Honolulu		The project is intended as a catalyst to spur broader neighborhood improvements and urban, mixed-use development consistent with the vision laid out in the TOD Plan. The project will provide new open space in this underserved community and high-quality facilities for bicycle and	Planning	N/A	N/A	N/A

PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
			pedestrian travel to and from the rail station. The City and County of Honolulu provided specific project information				
Kukui Gardens	EAH Housing	Property covers approximately 9 acres, 20 buildings house 1-4 bedroom family apartment homes.	389 apartment units	Built	\$30M renovation	N/A	N/A

Summary of Infrastructure Requirements and Costs in Iwilei-Kapālama

The redevelopment opportunities identified above as well as the overall buildout planned for Iwilei-Kapālama require significant enabling infrastructure. This includes the significant cost of improving, upgrading, or constructing shared public infrastructure systems such as roads, sewer, drainage, and water to accommodate the planned higher densities and to address existing system inadequacies or substandard conditions.⁵⁸

According to the State's TOD Planning and Implementation Project for the Island of O'ahu Study, the island has existing sewer, water, drainage, roadway, and electrical infrastructure constraints that limit future construction and economic growth. For instance:⁵⁹

- **Sewer:** The City Department of Environmental Services (ENV) has projects underway to address limited sewer capacity and serve new TOD development within the Iwilei-Kapālama Sewer System. The on-going Hart Street/Waiakamilo Road Replacement Sewer project will complete the connection of existing customers to the recently completed trunk sewer in Waiakamilo Road. The Awa Street Wastewater Pump Station (WWPS) Improvements and Rehabilitation project will rehabilitate the Awa Street WWPS, including upgrading the capacity. This project, which is currently beginning planning phase, will help provide capacity for new connections upstream of the WWPS. There may be localized capacity restrictions in the smaller 6-inch and 8-inch lines depending on the proposed development that connects to these lines, which will need to be addressed by the individual projects.
- **Water Systems:** The Board of Water Supply (BWS) owns and operates the water system in the area. The backbone water infrastructure is relatively strong in the Iwilei area; however, aging infrastructure is an ongoing challenge. Water system improvements are presently needed based on the existing water line sizes and the required fire flow for the proposed land uses for industrial and mixed-use development. The BWS has multiple projects in its capital improvements program (CIP) that will address current deficiencies and increase local and regional capacity. However, due to ongoing project planning and investments needed to address the Red Hill fuel tank contamination, BWS is currently going through major revisions to its proposed 6-year CIP that may change the priority and timeline of some projects.
- **Drainage:** The drainage system in the Iwilei-Kapālama TOD Pilot Area does not meet the City Storm Drainage Standards. In addition, much of the area is expected to be subjected to impacts of sea level rise in coming years. The existing backbone drainage systems consist of drain lines owned by the City, State, and private entities. The systems have various deficiencies and constraints due to the limited capacity of the major drainageways, a flat low-lying terrain, and a high-water table.
- **Roadways and Circulation:** Given the anticipated levels of redevelopment, including major expansion of residential uses throughout the area, circulation is a key infrastructure consideration. Roadways and circulation-related improvements may include major intersections and roadways in the vicinity of each TOD project site that serve both regional and project-related purposes. Multi-modal access and circulation improvements will be a critical component to providing access for all users, including pedestrians, bicyclists, and transit users, to promote safer and more active transportation choices and ridership of the HART line.
- **Electrical systems.** Due to the size of existing electrical lines, currently there is only capacity for roughly 200 to 600 new residential units; although based on the information from area landowners, 1,300 to 1,800 new units are expected to be built in the next 10 years in that corridor. HECO, the county's utility company has indicated during the prior TOD studies conducted by the City and the State, that it plans to

⁵⁸ PBR HAWAII et al., "Infrastructure Improvement Master Plan for the Iwilei Area (DRAFT)" (Hawai'i Housing Finance and Development Corporation and Department of Accounting and General Services, July 11, 2022).

⁵⁹ PBR HAWAII et al.

serve large redevelopment projects. This includes projects consolidating multiple small parcels into a larger parcel, and block type developments, such as existing large parcels where density and loads will be increased significantly from existing levels based on the HECO 25-kV distribution system. HECO is working with DPP on developing infrastructure plans to extend 25-kV circuits from their Iwilei transmission substation to support the larger redevelopment projects within the Iwilei Master Plan Area. The cost of 25-kV infrastructure improvements needed to enable TOD projects is estimated to range between \$64.3M-\$71.2M. In the mid- to long-term an additional 46-kV11 transmission alignment would likely be needed to serve the Iwilei Master Plan Area. The cost of such expansion ranges around \$93M.

Through the information provided by County and State agencies, the Consultant Team has identified 87 projects with a total capital cost of \$666.9 million in this TOD Pilot Area. As shown in Table 3, the bulk of funding is mainly for drainage, electrical, and sewer work. 80% of funds are required to enable affordable housing, 31% is needed soon to ensure the future viability of existing development, 62% to accommodate future growth and 8% for project-specific infrastructure. Appendix 8: List of Infrastructure Projects in Iwilei-Kapālana provides the full list of projects.

Table 3 | Summary of Infrastructure Requirements and Costs in Iwilei-Kapālana

TYPE OF INFRASTRUCTURE	NUMBER OF PROJECTS	FUNDING REQUIRED (\$M)
Drainage*	18	\$234.3
Electrical	15	\$163.3
Fire	2	\$1.3
Roadway**	18	\$51.3
Sewer	10	\$175.2
Water	24	\$41.5
TOTAL	87	\$666.9

(*) Includes sea-level rise mitigation works.

(**) Includes road improvements, construction, sidewalk, landscaping work.

It is worth noting that:

- The Consultant Team could not corroborate with the information provided whether any of these projects were already partially or fully funded, and will assume that their full capital costs remain to be covered.
- The Consultant Team was also not able to identify the capital costs of 10 out of the 87 projects.
- For most projects (81 out of 87) the Consultant Team could not determine their current stage of planning and design, and will thus assume that all of them are feasible and will move forward seeking funding and financing.
- The total capital costs of the projects shared by the County for the purposes of this assignment (\$666.9) differ from the total estimated in the draft 2022 Iwilei-Kapālana Infrastructure Needs Assessment (\$535-542 million).⁶⁰ It is worth noting that, despite these information gaps, the exact amount of funds needed is not critical to the Consultant Team's assessment of best tools to address infrastructure funding gaps. Instead, the approximate scale and type of needs covered, addressed in the information provided, suffice to proceed with future phases of this study.

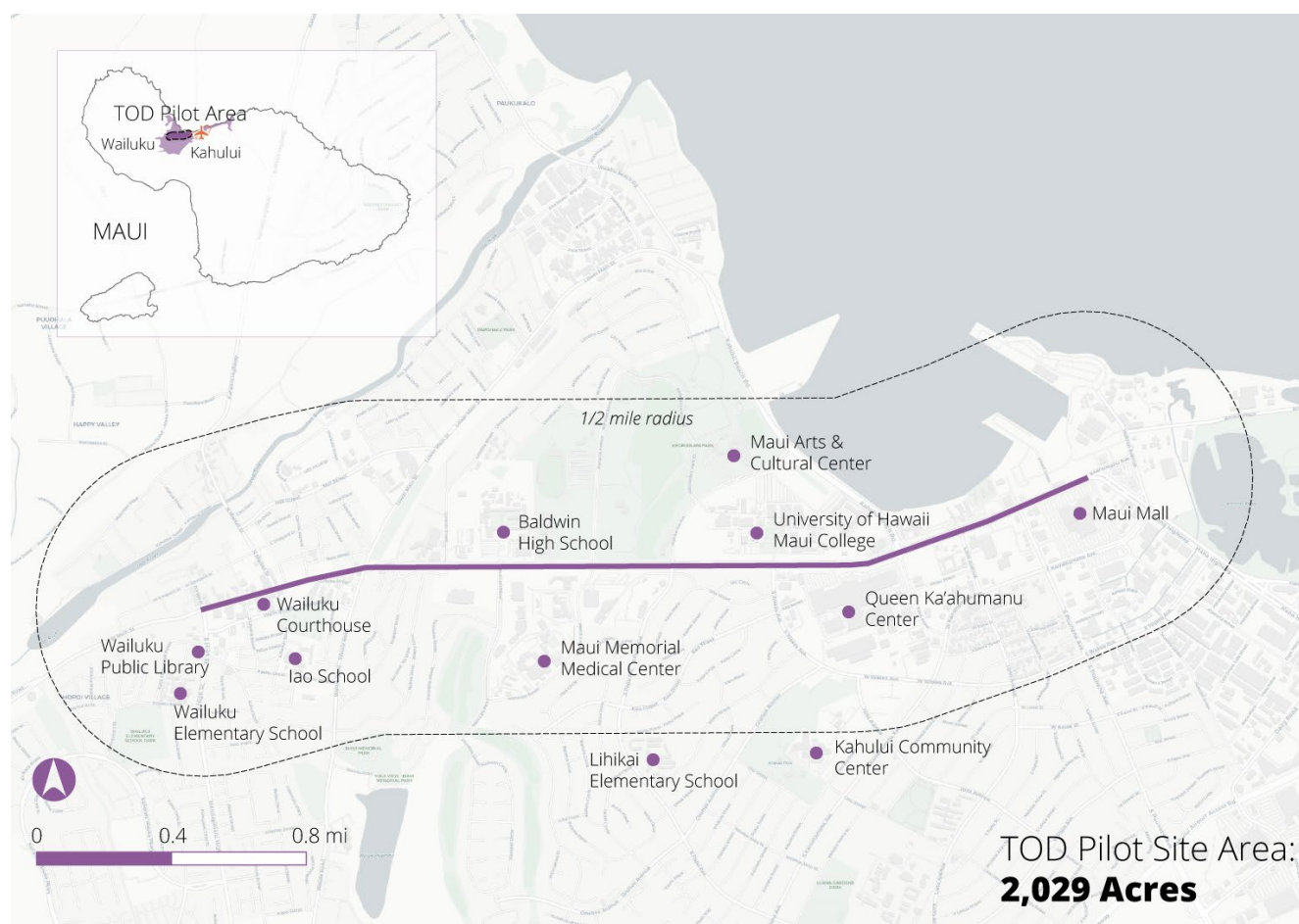
⁶⁰ Sum of estimated costs from Tables 3-4, 3-6, 3-7, 3-9, and 3-10. See PBR HAWAII et al., "Infrastructure Improvement Master Plan for the Iwilei Area (DRAFT)"

4.2 Maui | Ka'ahumanu Avenue Community Corridor

TOD Pilot Area Overview

The Ka'ahumanu Avenue Community Corridor stretches 2.5 miles along Main Street and Ka'ahumanu Avenue from South High Street on the west to Hana Highway on the east.⁶¹ This is the main thoroughfare connecting the urban centers of Kahului and Wailuku. Around one in five of Maui's 166,000 inhabitants live within half a mile of this transit corridor, making it one of the most populated sectors of the island. The corridor is also the location of the island's major economic hub, hosting a large density of jobs, schools, healthcare services, government services, retail, commercial, and civic and recreational activities. By 2040, Maui's population is expected to increase by 33,000 inhabitants, and the Ka'ahumanu Avenue Community Corridor is set to become a key enabler of economic growth by promoting transitable, sustainable, and inclusive development.⁶² Given the corridor's importance to the present and future growth of Maui's economy, the County chose this corridor as a TOD Pilot Area for this study.

Figure 3 | Ka'ahumanu Avenue TOD Pilot Area



Source: HR&A Advisors

⁶¹ Community Profile, 2021.

⁶² Community Profile, 2021.

For further context, Appendix 5: Maui | Ka‘ahumanu Avenue Community Corridor Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trends presents an overview of Ka‘ahumanu Avenue Community Corridor’s demographic trends, socioeconomic conditions, area uses, and real estate market trends.

Development and Redevelopment Opportunities in Ka‘ahumanu Avenue Community Corridor

From the information provided by County and State agencies, as well as its own research, the Consultant Team identified four (4) opportunities for redevelopment in State-owned and private large landholdings around the Ka‘ahumanu Avenue Community Corridor: 1) Hale Pilina Family Affordable Rental Housing Project; 2) Kahului Civic Center Mixed Use; 3) Wailuku Courthouse Expansion; and 4) Repairs to the Kahekili Terrace. Together, these developments would involve the addition of between 380 and 580 housing units, 114,000 square feet of new office space for State facilities, 5,000 square feet of new retail space, and community facilities, including parks, an adult school, and a library. In addition, the County has encouraged the owners of the Queen Ka‘ahumanu Center, a mall of 571,000-square feet that is struggle financially, to consider more mixed-use opportunities, but they have not announced any plans to transform the Mall. Figure 4 below displays the location of these projects.

Figure 4 | Opportunities for Redevelopment, Ka’ahumanu Avenue TOD Pilot Area



Source: HR&A Advisors

All projects are in planning or pre-planning stage, and therefore their development is rather speculative at this point. Table 4 below summarizes the details of these projects.

Table 4 | Summary of Redevelopment Opportunities in Ka'ahumanu Avenue Community Corridor

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST (\$M)	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
1	Hale Pilina Family Affordable Rental Housing Project	Catholic Charities Housing Development Corporation/ (CCHDC in process of acquiring site from A&B Properties, Inc.)	150 South Pu'unēnē Avenue, adjacent to Kahului Post Office, Coach Spencer Shiraishi Memorial Pool, and Salvation Army site.	178 rental apartments (<60% AMI) in four, 3-story buildings, plus park/open space on a 4.8-acre site formerly used for Maui Swap Meet.	Currently in planning Stage. 2024-26 (2 phases)	\$85.0	N/A	N/A
2	Kahului Civic Center Mixed Use	HHFDC	153 West Ka'ahumanu Avenue Walking distance to Ka'ahumanu Community Corridor. Mostly vacant site.	200–400-unit MF affordable units (up to 60% AMI); DAGS offices (40K SF); Adult school (7K SF); retail (5K SF); library (16K SF) development on 5.57-acre site	Planning anticipated to start late 2022	N/A	Request for funding in 2022 legislative session	N/A
3	Wailuku Courthouse Expansion	DAGS/HHFDC	Parcel currently utilized as a parking lot for the County of Maui with approximately	Expansion and redevelopment of the Wailuku Courthouse complex for additional courtrooms and administrative	Completion in 2028	\$0.3 for planning. Design and construction costs not available	N/A	N/A

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST (\$M)	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
			45 reserved stalls.	space, including a six-level State office building and 74,000 SF of office space				
4	Kahekili Terrace	HPHA	Existing affordable housing complex comprised of 14 two and three-story buildings providing a total of 82 housing units	Major repairs for \$4.4 identified in a 2013 HPHA assessment.	Some issues were addressed since the HPHA assessment, but Consultant Team is not aware of the extent of improvements.	N/A	N/A	N/A
5	Queen Ka'ahumanu Center	QKC Maui Owner, LLC	571K SF property. Mall is struggling financially as large retailers closed their doors in late 2021	The property has the potential to include a more modern mix of uses such as affordable housing, mixed-use development, smaller brick and mortar retail, plazas and pedestrian-friendly spaces	County encouraging owners to pursue redevelopment plans, but no definitions as of now.	N/A	N/A	N/A

N/A = Not Available

Summary of Infrastructure Requirements and Costs in Kaʻahumanu Avenue Community Corridor

The redevelopment opportunities identified above as well as the transit-oriented community land use envisioned in the Kaʻahumanu Avenue Community Corridor Action Plan will require significant investments in enabling infrastructure. Stakeholder engagement to date suggests that water and climate change are the most pressing environmental concerns for the area's future economic development. Drinking water remains a limited resource on Maui and increased temperatures coupled with decreased rainfall over time may reduce the amount of fresh water available for drinking and crop irrigation.

County and state agencies provided information to the Consultant Team on four infrastructure works needed to accommodate the redevelopment opportunities identified and to guarantee the viability of existing development. These works include the Wailuku Civic Hub Parking Facility and plaza, the Central Maui Reliable Water Capacity project, the Central Maui Transit Hub, and improvements to the Kahekili Terrace complex. Capital costs and aggregate funding needs for the first three projects amount to \$22.2 and \$7.3 million, respectively. Additional details on these projects are presented in Table 5 below. It is worth noting that:

- The Wailuku Civic Hub and the Central Maui Transit Hub already have funding committed that fully cover their costs;
- The Waihee Aquifer is the only project whose capital costs are known and that part of them remain unfunded;
- The Consultant Team has not received an updated status of Kahekili Terrace's needed improvements, their costs, and the extent to which they have funding committed; and
- The information provided by the County and by Stage Agencies did not identify any other projects needed to enable development in the Kaʻahumanu Avenue Community Corridor TOD Pilot Area.

Table 5 | Summary of Infrastructure Requirements and Costs in Kaʻahumanu Avenue Community Corridor

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
1	Wailuku Civic Hub - Parking Facility and plaza	Social Infrastructure	\$5.5	\$0.0	GO bond fund	No relation to affordable housing	Needed to accommodate future growth	Under construction. Off-site infrastructure needs to be determined as DAGS is looking to expand master

								planning efforts to include both the State and County's properties
2	Central Maui Transit Hub	Transit	\$7.6	\$0.0	GO Fund	Located adjacent to future workforce housing	Needed today for future viability of existing development	Under construction
3	Central Maui Reliable Capacity - Waihee Aquifer	Water	\$14.6	\$7.3	State fund, Restricted Water Fund	Potentially enables affordable housing projects	Needed to accommodate future growth	Pre-planning stage. Plans and feasibility studies in 2023
4	Improvements to Kahekili Terrace	Housing	Unknown	Unknown	State CIP (2022)	Existing Affordable Housing Complex	Needed to accommodate future growth	2011 estimate of \$4.3 in infrastructure needs. Some issues remediated but extent is unknown
Total			\$27.7	\$7.3		-		

In addition to the projects detailed in Table 5 above, it is the Consultant Team's understanding that for the purposes of this assignment, the County wants to also focus on four civic and sports facilities and in having the Consultant Team assess the funding, financing and delivery methods necessary to close the project's funding gaps. These infrastructure projects, detailed in Table 6 below, have a total capital cost of \$95.6 million that have been funded in its entirety.

Table 6 | Summary of Social Infrastructure Facilities in the Ka'ahumanu Avenue Community Corridor

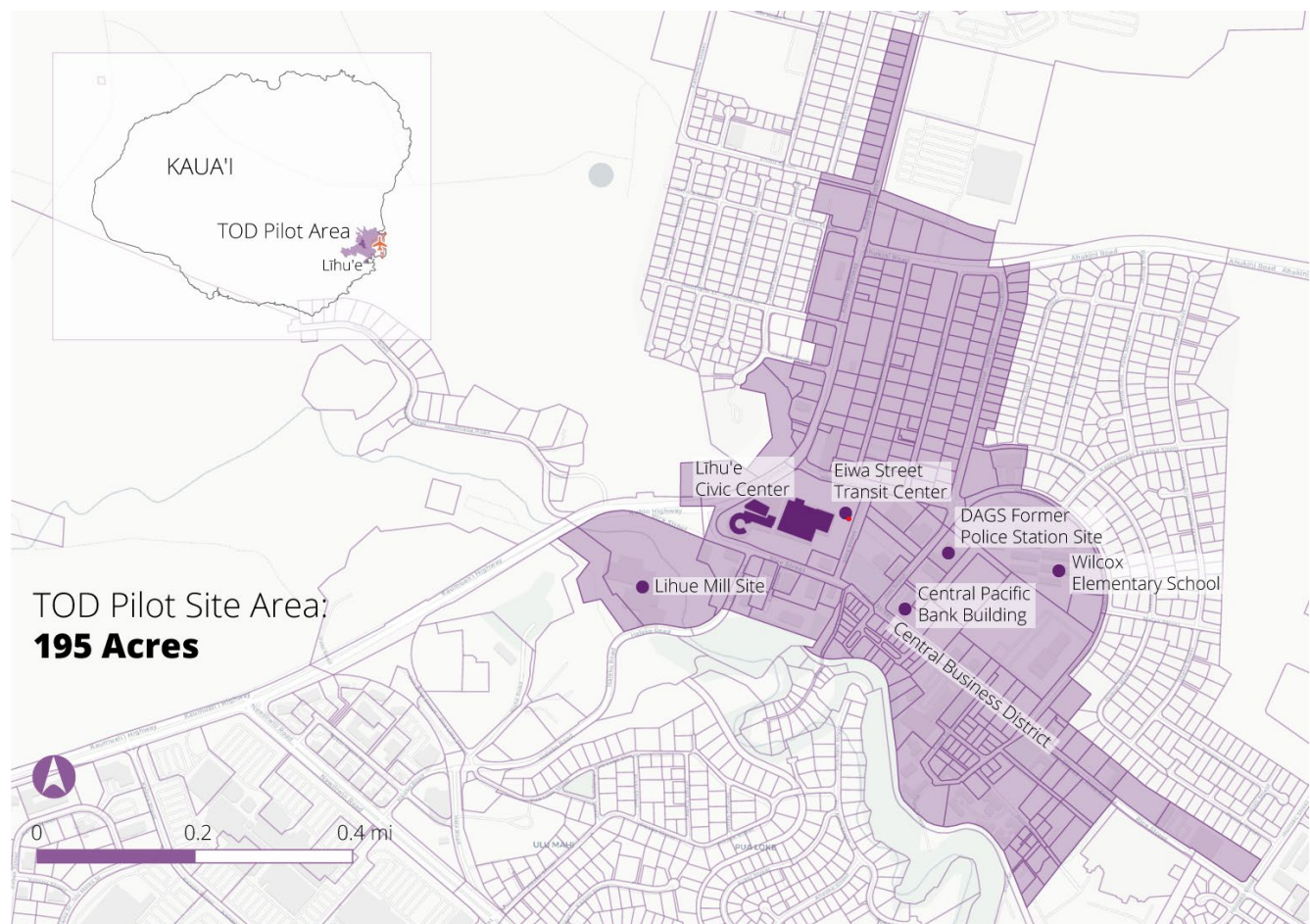
#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	STAGE
1	60 S. Church St Building Renovations - County recently purchased building for efficiency of government operations	Social Infrastructure	\$9.43	\$0.0	GO bond fund	County recently purchased this building. Renovations required prior to occupancy.
2	Halau of Oiwi Arts	Social Infrastructure	\$54.00	\$0.0	GO bond fund and other grant funds	Planning Stage. Public invited to comment on proposed plans (May 2022)
3	War Memorial Gym Building Improvements - repair and renovation of the facility	Social Infrastructure	\$25	\$0.0	GO bond fund and lapsed bond fund	Planning work done. Construction hasn't started.
4	War Memorial Football Stadium and Track Rehabilitation	Social Infrastructure	\$7.20	\$0.0	GO Fund	In design and planning stage. Construction scheduled for 2023.
Total			\$95.6	\$0.0		

4.3 Kaua'i | Līhu'e Town Core

TOD Pilot Area Overview

Since TOD planning began in the mid-2000s, the Līhu'e Civic Center has been the anchor of the town of Līhu'e in Kaua'i County, located west of the Līhu'e Airport and the cruise ship terminal at Nāwiliwili Harbor. **The Civic Center was selected as a TOD Pilot Area because of its potential to help mitigate the housing and infrastructure constraints of the island.** Engagement to date indicates that the island has a housing deficit of approximately 4,000 units (about 10% of existing housing stock) and a growing concern with regards to the availability of fresh water to enable new housing construction. The area has potential to support potential future TOD development, particularly through the promotion of walkability, transit accessibility, and affordable housing development on nearby State properties, such as the vacant former Police Station and underutilized Department of Health sites.

Figure 5 | Līhu'e Town Core TOD Pilot Area



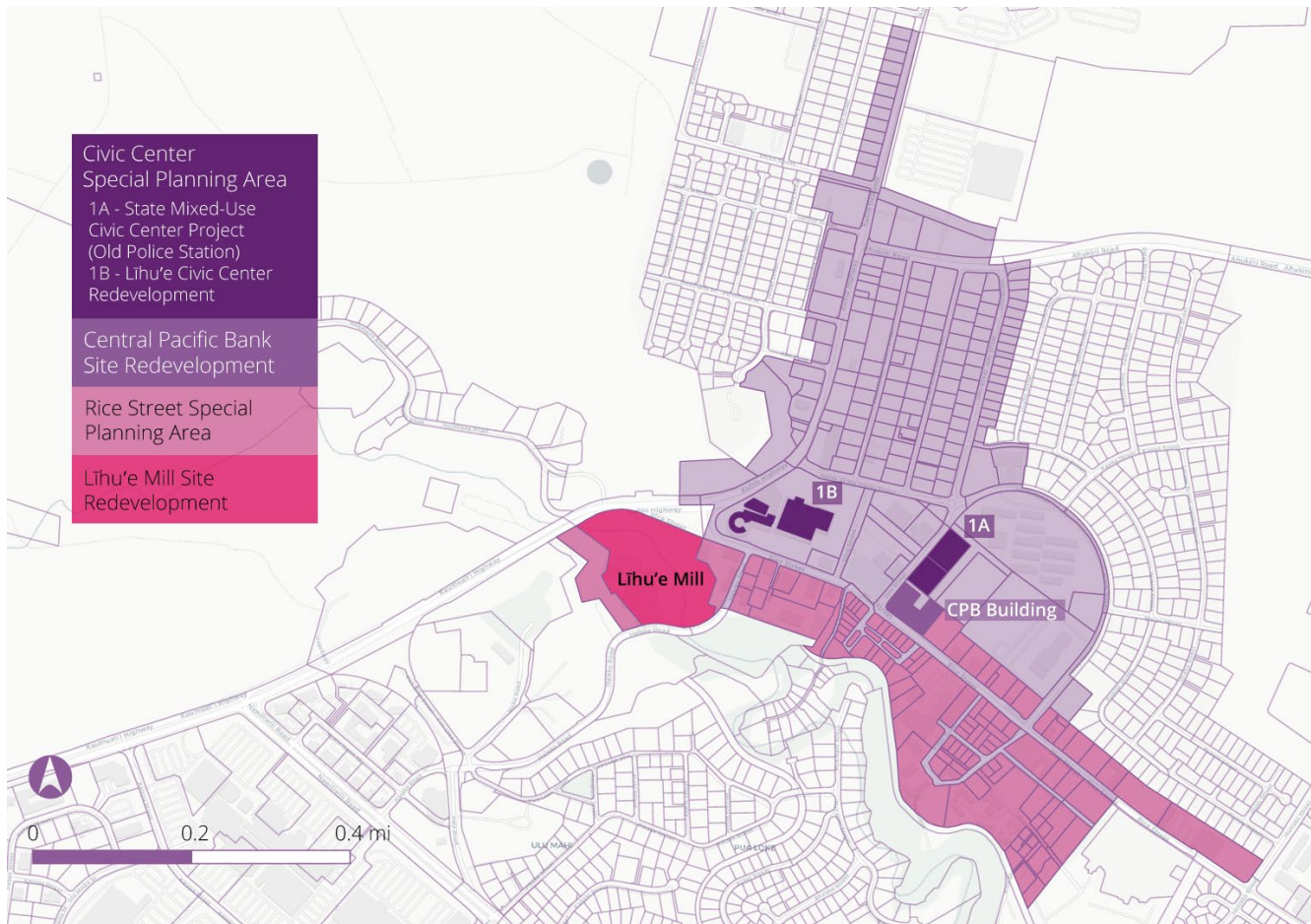
Source: HR&A Advisors

For further context, Appendix 6: Kaua'i | Līhu'e Town Core Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trend provides an overview of Līhu'e Town Core's demographic trends, socioeconomic conditions, area uses, and real estate market trends.

Development and Redevelopment Opportunities in Līhu'e Town Core

County and state agencies provided information to the Consultant Team on four (4) opportunities for redevelopment in large landholdings in the Līhu'e Town Core, including: 1) The Civic Center Special Planning Area, which currently hosts several government facilities (Department of Health offices, former police station site, County offices) and is ripe for residential development; 2) Redevelopment of the former Central Pacific Bank Building into an affordable housing project; 3) Redevelopment of the Rice Street Special Planning Area, which currently hosts about 4.65 acres of vacant space ripe for residential and commercial construction; and 4) The Līhu'e Mill Site Redevelopment, a former sugar mill site with potential for housing development. Figure 6 below displays the location of these projects.

Figure 6 | Opportunities for Redevelopment, Līhu'e Town Core TOD Pilot Area



Source: HR&A Advisors

It is worth noting that plans for the Civic Center Special Planning Area and the Rice Street Special Planning Area are very preliminary:

- In the case of the Civic Center Special Planning Area, DAGS is currently conducting a proof of concept, scoping and financial analysis that will render whether is worth pursuing redevelopment on the site.
- The Rice Street Special Planning Area comprises a large area primed for development but there is no masterplan to guide it.

-
- The masterplan to transform the Līhu'e Mill Site into workforce Housing with a learning center, educational trails, and community gardens is still ongoing.⁶³

Regarding the affordable housing development in the former Central Pacific Bank Building, the project has funding and LIHTC credits secured, and construction is ready to start.

Table 7 below summarizes further details of these projects.

⁶³ Loha Architects, "Lihue Sugar Mill Master Plan", accessed October 31, 2022, <https://loharchitects.com/work/lihue-sugar-mill-master-plan>

Table 7 | Summary of Redevelopment Opportunities in Līhu'e Town Core

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
1A	State Mixed-Use Civic Center Project (Old Police Station)	DAGS/DLNR	Part of Civic Center Special Planning Area. Project would include the Department of Health site, the former Police Station site, and their associated parking areas. This site is approximately 2.09 acres in size.	This site could conceivably be developed at an R-40 standard (40 dwelling units per acre). As such this site could yield 83 dwelling units.	Pre-planning stage. Proof of Concept and project scoping underway	N/A	N/A	N/A
1B	Līhu'e Civic Center Redevelopment	County of Kaua'i	Part of Civic Center Special Planning Area, including the existing County of Kaua'i Civic Center. Excluding the main existing structures, it is approximately 6.58 acres in size.	This site could conceivably be developed at an R-20 standard (20 dwelling units per acre). As such, this site could yield 131 dwelling units	Pre-planning stage. Proof of Concept and project scoping underway	N/A	N/A	N/A

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST	FUNDING AND FINANCING IDENTIFIED	DELIVERY METHODS IDENTIFIED
2	Central Pacific Bank Site Redevelopment	N/A	N/A	62-64 affordable rental units	Construction about to begin. Funding secured	N/A	LIHTC credits secured	Affordable housing developer
3	Rice Street Special Planning Area	Various owners	Vacant land that remains to be developed includes vacant parking areas and developed sites that remain abandoned. These sites account for 4.65 acres of land	Zoning entitlements would allow for 200K SF of commercial space and 372 residential units	N/A	N/A	N/A	N/A
4	Līhu'e Mill Site Redevelopment	Lihue Mill LLC	601,000 SF former sugar mill site. Unused/no activity at site	Potential for housing, including workforce housing, as well as community center, bus pullout, pedestrian/road improvements, open space & greenway	In master planning stage.	N/A	N/A	N/A

Summary of Infrastructure Requirements and Costs in Līhu'e Town Core

The redevelopment opportunities identified above and the buildout envisioned in the Līhu'e Town Core Urban Design Plan will require investments in enabling infrastructure. Engagement to date suggests that the main constraint to future TOD in the Līhu'e Town Core is freshwater availability. While the County has water treatment and distribution capacity, additional water development capacity is limited by a legal dispute before the State Supreme Court.⁶⁴

Based on the information provided by County and State agencies, the Consultant Team identified the costs of the water and wastewater infrastructure required to accommodate the maximum number of residential units allowed under current zoning rules in the Civic Center and the Rice Street Special areas. These water and wastewater connection projects amount to a total unfunded amount of \$8.0 million. Table 8 lays out additional details on these projects. The Consultant Team also anticipates future works in the medium- to long-term emerging from the Lihue Civic Center Mobility Plan as well as additional water capacity improvements that comply with the State Supreme Court Ruling. However, the Consultant Team does not have enough information to estimate the capital needs of these efforts.

It is worth noting that the Consultant Team did not receive any information on other projects needed to enable development. This is a particular area of concern for water and wastewater usage. The Consultant Team learnt that from a wastewater and water standpoint, both the Civic Center Special Planning Area and the Rice Street Special Planning Area have capacity to accommodate additional users. However, while existing wastewater is only at near 50 percent capacity and can accommodate much more development, accommodating more than 300 new residential or commercial meters would present an issue. No information was provided to the Consultant Team on any infrastructure projects that would address this problem as well as others that may arise when accommodating the density buildout envisioned in the Līhu'e Town Core Urban Design Plan.

⁶⁴ The Court issued its ruling on September 23, 2022, which invalidated the Environmental Impact Statement for a relief transmission line that was key for better service to Līhu'e and the Līhu'e Town Core. The Department of Water will now have to prepare another Environmental Impact Statement, which would add five to ten years to the water supply development timeline. The County is currently examining its options for increasing water capacity that accords with the State Supreme Court ruling.

Table 8 | Summary of Infrastructure Requirements and Costs in Līhu‘e Town Core

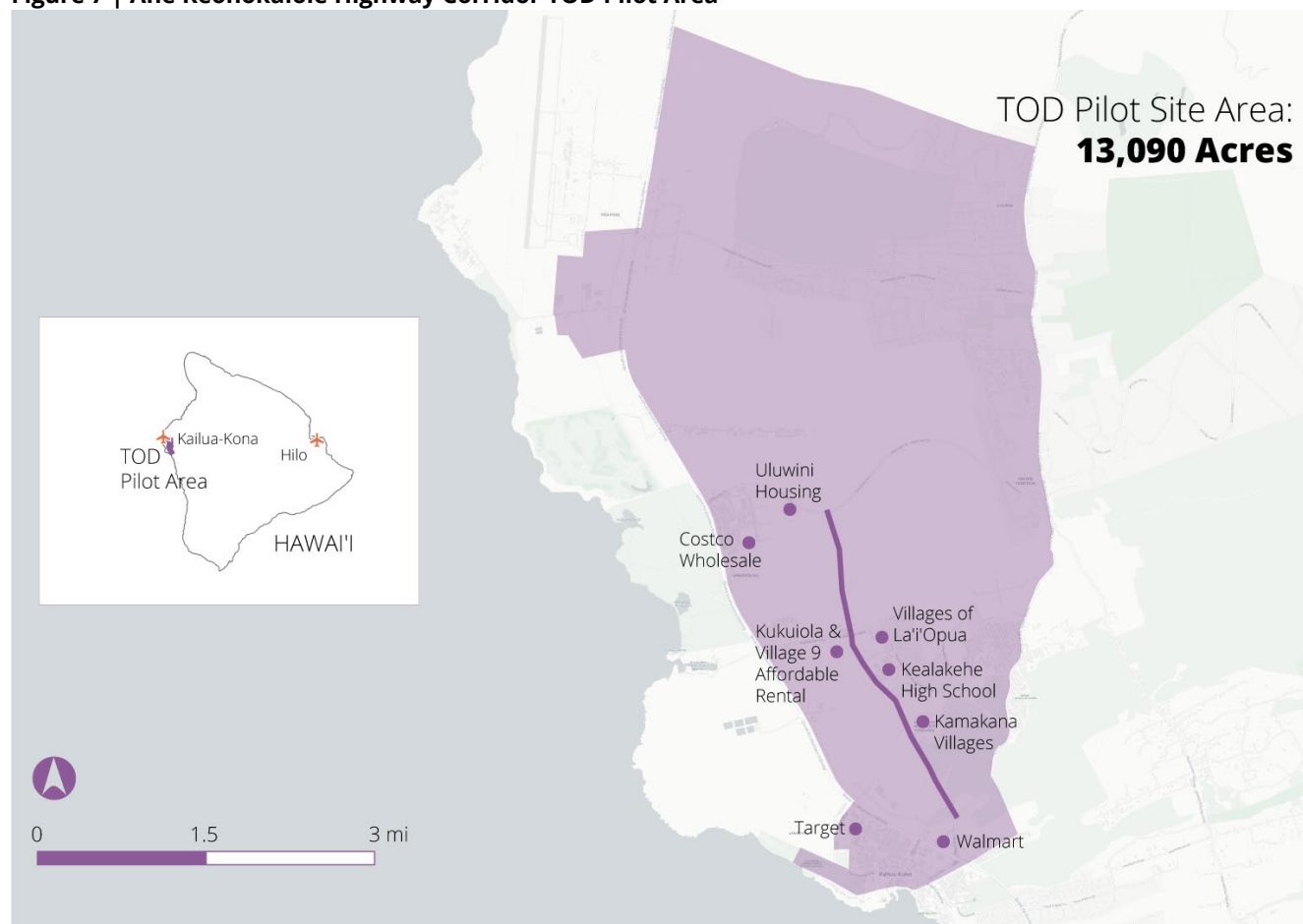
#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
1	Civic Center Special Planning Area water and wastewater hook-up fees	Water and Wastewater	\$2.9M	\$2.9M	N/A	Needed to accommodate a maximum of 215 units	Needed today for future viability of existing development	Not planned
2	Rice Street Special Planning Area water and wastewater hook-up fees	Water and Wastewater	\$5.1M	\$5.1M	N/A	Needed to accommodate a maximum of 372 units	Needed today for future viability of existing development	Not planned
3	Līhue Civic Center Mobility Plan	Transit and Parking	To be determined	N/A	N/A	It will support potential future TOD development on nearby State properties, such as the vacant former Police Station and the underutilized Department of Health sites	Needed to accommodate future growth	Planning. \$250K commissioned for study
4	Additional Water Capacity Improvements	Water and Wastewater	To be determined	N/A	N/A	It will support potential future TOD development in the area	Needed to accommodate future growth	Not planned
TOTAL			\$8.0M	\$8.0M				

4.4 Hawai'i | Ane Keohokalole Highway Corridor

TOD Pilot Area Overview

The 2.9-mile Ane Keohokalole Highway runs parallel to the Queen Ka'ahumanu Highway from Palani Road to Hina Lani Street, about a mile inland of the ocean. Construction of the first phase of highway started on March 30, 2010 and ended in 2012.⁶⁵ The corridor is flanked at both the north and south ends of the highway by retail centers anchored by a Costco Wholesale at the north and a Walmart, Target, Safeway, and other shops and restaurants at the south. In the middle of the corridor is located the Kealakehe High School alongside with some single-family housing developments. Although not in the corridor, UH- Hawai'i Community College, Palamanui Campus is close in proximity to the corridor. The County selected the corridor as a TOD Pilot Area given the opportunities for new development, particularly of affordable housing, along the highway.

Figure 7 | Ane Keohokalole Highway Corridor TOD Pilot Area



Source: HR&A Advisors

For further context, Appendix 7: Hawai'i | Kailua Kona Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trend includes an overview of Ane Keohokalole Highway Corridor's demographic trends, socioeconomic conditions, area uses, and real estate market trends.

⁶⁵ "Public invited to opening ceremony of the Ane Keohokālole Highway Saturday", Hawaii 24/7, <https://hawaii247.com/2012/06/20/public-invited-to-opening-ceremony-of-the-ane-keohokalole-highway-saturday-june-23/>

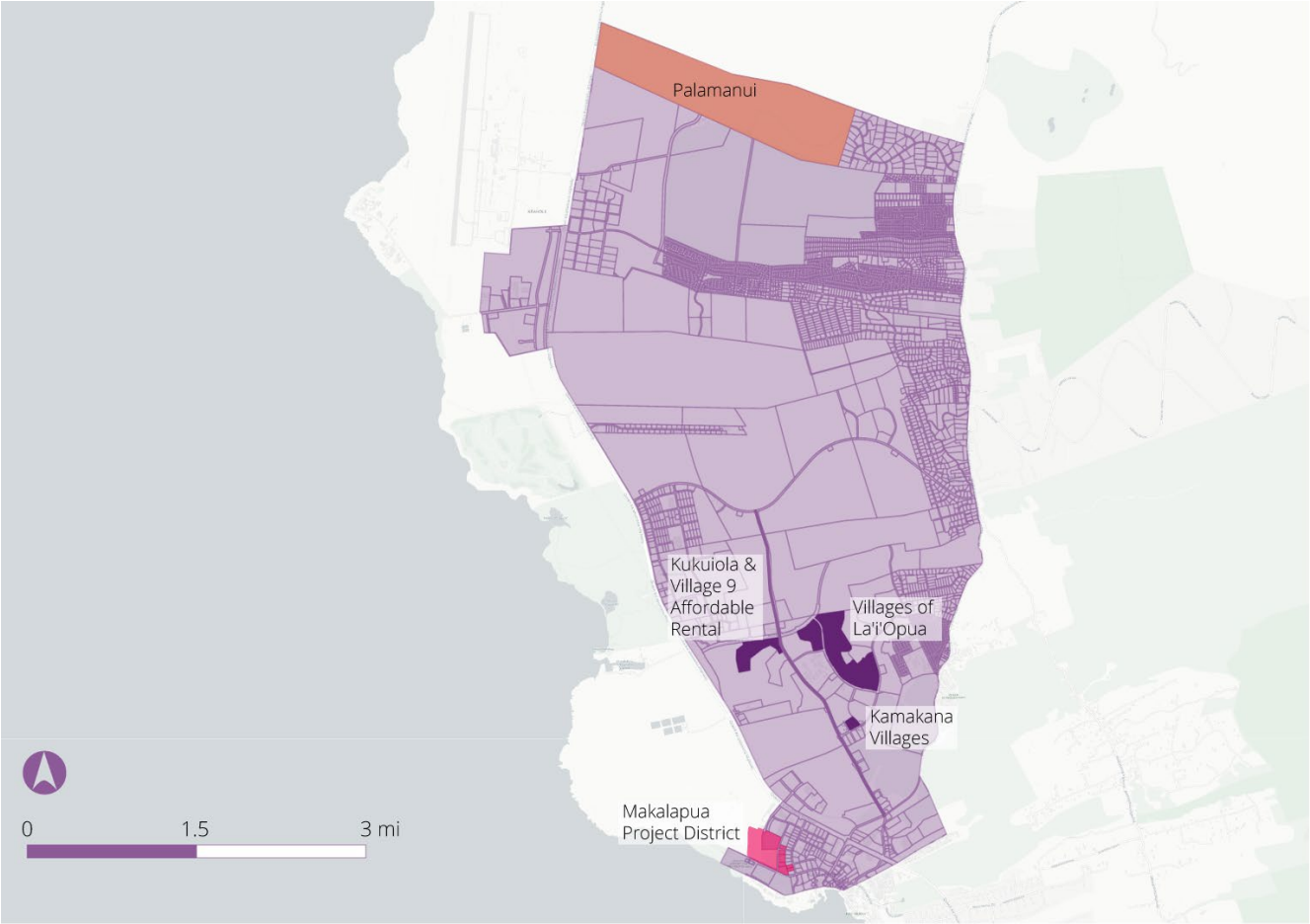
Development and Redevelopment Opportunities in selected portion of Ane Keohokalole Highway Corridor

Based on the information provided by County and State agencies, as well as its own research, the Consultant Team identified six (6) opportunities for redevelopment in large landholdings around the Ane Keohokalole Highway Corridor, namely:

- 1) **Kamakana Villages**, a P3 development between HHFDC and Stanford Carr Development, built on lands held in trust for HHFDC. Most of the master-planned community construction remains stalled, although 170 affordable rental housing units have been delivered on site.
- 2) **Villages of La'i 'Ōpua**, a DHHL master-planned community consisting of approximately 1,000 single-family lots. Village 3 (225 lots) has been completed and is fully occupied. Infrastructure for Village 5 (117 lots) and Village 4, Akau (118 lots) has been built and house construction is underway, including units for a “rent with option to purchase” program in which qualified renters — those earning less than 60% of the Area Median Income – would be provided the option to purchase the home after a 15-year rental compliance period. Construction of Village 4 (125 lots) infrastructure has commenced, while planning for development of Village 2 (200 lots), Village 1 (200 lots), and off-site water development has started.
- 3) **Kukuiola and Village 9 Affordable Rental Community**, which consists of two subprojects: the County of Hawai'i Kukuiola homeless emergency shelters and permanent supportive housing component; and a HHFDC affordable rental housing component. Funding for the Kukuiola homeless emergency shelters has been granted but the future for the rest of the project remains uncertain as of today.
- 4) **University Village**, a currently stalled development pursued by the University of Hawai'i System to create student housing adjacent to the Palamanui Community College.
- 5) **State Kailua-Kona Civic Center**, a plan by DAGS to develop a new State office building with an estimated 65,000 gross square feet and parking for State vehicles, employees, and clients. The Consultant Team is not aware of any parcel for the site having been identified.
- 6) **Makalapua Project District**, a mixed-use project mixed-use with 300 residential units, 220 hotel rooms split between two hotels, 470,000 square feet of commercial space and 50,000 square feet of civic uses. The site is owned by the Lili'uokalani Trust (LT), a nonprofit public benefit organization dedicated to improving the welfare of orphan and other destitute children in Hawai'i. LT manages its landholdings to provide a financial foundation for the perpetual benefit of its beneficiaries.

These developments would involve the addition of at least 3,846 housing units (at least 400 of them affordable), 335,400 square feet of new retail space, school, community facilities, and parks. Figure 8 below displays the location of these projects and Table 9 provides further details.

Figure 8 | Opportunities for Redevelopment, Ane Keohokalole Highway Corridor TOD Pilot Area



Source: HR&A Advisors

Table 9 | Summary of Redevelopment Opportunities in selected portion of Ane Keohokalole Highway Corridor

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST (\$M)	FUNDING AND FINANCING	DELIVERY
1	Kamakana Villages <i>Manawalea St and Kaeka St</i>	Stanford Carr Development/ undeveloped lands held by FHT Kamakana LLC (in trust for HHFDC); developed lands held by HHFDC	Includes 85 units for low-income senior persons and their families.	2,330-unit master planned community on 272-acre site to include DOE school, 335.4K SF of commercial space, preserves, and parks.	Stalled over challenge to sustainable yield of aquifer; completion by 2040.	\$80.6	State: \$25+ mil DURF loan, RHRF, land contribution. Private: LIHTC, Master developer equity Federal: CDBG, HOME	Public/private partnership - State DURF loan; developer to take down sites via purchase or lease premium payment as developed
2	Villages of La'i 'Ōpua <i>Kailua-Kona, HI 96740</i>	DHHL	Village 3 (225 lots) completed and fully occupied. Infrastructure for Village 5 (117 lots) and Village 4, Akau (118 lots) has been constructed and house construction is underway. Construction of Village 4, Hema (125 lots) infrastructure has commenced.	DHHL master-planned community consisting of approximately 1,000 single-family lots for native Hawaiian beneficiaries. Planning for development of Village 2 (200 lots), Village 1 (200 lots), and off-site water development has started	Funding provided to DHHL for construction of Villages 1 and 2. Construction had not started as of September 2022	N/A	Hawai'i Act 279, SLH 2022 provided \$67 million of funds for DHHL to proceed with planning and development of Village 1 and 2 and offsite water development.	Partnership with affordable housing developer
3	Kukuiola and Village 9 Affordable	HHFDC	Kukuiola Village: 30 emergency shelters under construction Rest of site is undeveloped	Kukuiola Village: total of 60 emergency shelters and 160 permanent supportive housing	Kukuiola Village partly under construction. Timeline now	N/A	\$10 million in federal funding earmarked for Kukuiola and \$4 million in funding	HHFDC evaluating whether to utilize 3rd party developer or to

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST (\$M)	FUNDING AND FINANCING	DELIVERY
	Rental Community <i>SW corner of Kealakehe Parkway and Ane Keohokalole Hwy</i>			units for homeless population. Village 9: up to 300 units of leasehold affordable rental housing project for households at 60% or below AMI	known for the rest of the project.		from HHFDC to build access to the entire complex	develop themselves.
4	Palamanui <i>73-4225 Ane Keohokalole, Kailua-Kona, HI 96740</i>	SMC Kona LLC / University of Hawai'i System	Land immediately adjacent to Hawaii Community College Palamanui, which will help facilitate and support building a community around the college.	Masterplan that includes 1,116 mixed-income single and multi-family residential units, 30k SF of commercial space, 120 hotel rooms, 20 to 30 acres of public park, roadway, improvements, and landscaping.	Development stalled over extension of Ane Keohokalole Hwy and water issues.	N/A	Private - \$9.68 mil donation State GO bonds - \$7.5 million	N/A
5	State Kailua-Kona Civic Center	DAGS	Parcel not yet identified, but development will occur on TOD Pilot Area as majority of the clients for which these offices provide services for reside in or around Kailua-Kona	Development of a new State office building with an estimated 65,000 gross square feet, as well as parking for State vehicles, employees, and clients, to consolidate State offices located in the Kailua-Kona to Kealahou region.	Site selection, potential co-location w/Kona Transit Hub	N/A	N/A	N/A

#	PROJECT NAME	DEVELOPER/ LANDOWNER	DESCRIPTION OF CURRENT SITE	DESCRIPTION PROGRAM	CURRENT STAGE AND TIMELINE	COST (\$M)	FUNDING AND FINANCING	DELIVERY
6	Makalapua Project District 74-5490 <i>Makala Blvd, Kailua-Kona, HI 96740</i>	QLT	Site is 28.3 hectares	Mixed-use community, including 300 residential units, 220 hotel rooms split between two hotels, 470,000 square feet of commercial space and 50,000 square feet of civic uses.	EIS completed. Entire project is anticipated to be completed in 15 years. Start date unknown	\$65 M	N/A	Lili'uokalani Trust has selected the partnership of DiGeronimo Companies, Fairmount Properties and Los Angeles-based JCI Development, Inc. (DFJ) to develop the Makalapua Project District.

N/A = Not Available

Summary of Infrastructure Requirements and Costs in selected portion of Ane Keohokalole Highway Corridor

The redevelopment opportunities identified in the Ane Keohokalole Highway Corridor and the buildout envisioned for this specific area within the broader geographic scope of the Kona Community Development Plan (2010) will require investments in enabling infrastructure, particular around water and wastewater. In particular:

- Regarding **wastewater infrastructure**, engagement to date suggests that it is at overcapacity, especially the Kealakekua Sewage Treatment Plant. Furthermore, there is no collection system to bring the wastewater from the highway to the treatment plant. Wastewater Infrastructure expansion is necessary to enable large scale market-rate development in the corridor.
- Regarding **water infrastructure** and its constrained development around the highway, the problem stems not only from issues concerning financing of water works, but from legal actions from the National Parks Services, which has prevented the use of water sources in the area given their proximity to the Kaloko-Honokōhau National Historical Park, concerned with its contamination and depletion.
- The lack of additional **solid waste facilities** were also cited as a key factor during engagement instances that were holding back development in the area.

In addition, the Consultant Team understands that the County administration is interested in financing a set of transit and community facility projects that are not critical to enable individual housing redevelopment opportunities, but that are important assets for the transformation of the corridor into a vibrant and viable urban area. The full list of projects can be found in Appendix 9: List of Infrastructure Projects in Ane Keohokālōle Highway corridor and is summarized in Table 10 below.

Table 10 | Summary of Infrastructure Requirements and Costs in portion of Ane Keohokalole Highway Corridor

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
New transportation, housing, and community facilities								
1	Old Airport Park Transit Station and Kailua-Kona Bus Maintenance Facility	Transit	\$10.7	\$5.40	GO Bond, federal funds, prior county appropriated funds	No relation	Needed to accommodate future growth	Pre-planning
2	Kealakehe Animal Shelter and Kealakehe Regional Park	Social infrastructure	\$40.6	\$38.0	GO Bond, prior county appropriated funds	No relation	Needed to accommodate future growth	N/A
Critical infrastructure for the overall viability of the area								
3	Ulu Wini Low Income Housing Wastewater Treatment Plant	Repair of existing Wastewater Transportation Project	\$4.0	\$0.0	GO Bond, federal funds, prior county appropriated funds	Repair on existing affordable housing complex	Needed today for future viability of existing development	N/A
4	Kealakehe Wastewater Transportation Projects	Wastewater Upgrade	\$144.5	\$144.5*	N/A	No relation	Needed to accommodate future growth	N/A
5	Kealakehe Refuse Transfer Station	Solid Waste	\$7.2	\$7.2*	N/A	No relation	Needed to accommodate future growth	N/A
6	North Kona Mid-Level Well (part of (North Kona) Keauhou Water Use	Wells, Reservoirs and Pipelines	\$20.00	\$20.00	DWSRF	No relation	Needed to accommodate future growth	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
	and Development Plan)							
7	Waiaha Well No. 2 (part of (North Kona) Keauhou Water Use and Development Plan)	Wells, Reservoirs and Pipelines	\$7.00	\$4.00	DWSRF	No relation	Needed to accommodate future growth	N/A
Infrastructure relevant for specific housing projects								
8	Enabling infrastructure for La'i 'Ōpua Villages	On-site and off-site water and wastewater distribution lines, roads, utilities, and extensions of the Ane Keohokālolo Highway	\$169.2	\$102.2	Act 279, SLH 2022 provided \$67 million of funds for DHHL; portion to be used for offsite water development.	Would enable project advancement	Project-specific infrastructure	N/A
9	Enabling infrastructure for Kamakana Villages	Wells, a reservoir, a sewer plant, onsite roads, access roads from Ane Keohokālolo Highway, and parks	\$102.1	\$102.1*	N/A	Would enable project advancement	Project-specific infrastructure	On hold
TOTAL			\$505.30	\$423.40				

N/A = Not Available

(*) Information on funding allocated not available. The Consultant Team assumes that the entirety of the project cost remains unfunded.

5. Recap and Limitations of the Analysts

Between June and October 2022, the Consultant Team developed an understanding of the existing physical, socioeconomic, and real estate conditions in each of the TOD Pilot Areas, the planned development within them, and some of the major hurdles to materialize it, including missing enabling infrastructure as well as legal and market impediments. The Consultant Team developed this understanding through a combination of direct observations during the site visits from June 2022, ongoing conversations with state and county stakeholders, review of prior studies, examination and analysis of the information provided by the state and counties in response to the Consultant Team's information request (produced at the end of June 2022), independent desk research, and feedback from members of the TOD Council. The content and conclusions presented in this deliverable are based on this understanding, which is the product of a combination of quantitative and qualitative research.

From the work conducted so far, the Consultant Team recognizes that except for Honolulu, there are no defined expected development and buildout plans in the TOD Pilot Areas, nor complete assessments of the necessary TOD-enabling infrastructure. Through its professional judgment and conversations held with key stakeholders in each county, the Consultant Team concludes that there are gaps in the lists of infrastructure projects presented in this report for Maui, Kaua'i, and Hawai'i, and that, therefore, the infrastructure investments required to enable TOD that are presented in this report may be understated.

Given the limitations in the information available as to each area's buildout plans and our current scope of work, the Consultant Team was not able to determine any other specific infrastructure projects required beyond the list of projects provided by counties. However, the Consultant Team notes that, despite these information gaps, the exact amount of funds needed is not critical to its assessment of the best tools to address infrastructure funding gaps. Instead, the approximate scale and type of needs covered, addressed overall in the information provided for each county, will suffice to proceed with future phases of this study.

6. Appendixes

Appendix 1: Meetings Held during June 2022 Site Visit

06/13/2022 O'ahu Site Visit and CFIG Meeting

1. Meeting with State Comptroller's Office

Participants:

- Comptroller's Office: Chris Kinimaka; Curt Otaguro
- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Ann Bouslog
- OPSD: Ruby Edwards

2. Iwilei-Kapālama Site Visit

Participants:

- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Nathalie Rezo
- OPSD: Ruby Edwards; Carl Miura; Aaron Setogawa
- City and County of Honolulu: Harrison Rue; (Department of Planning and Permitting); Randy Chu (Department of Land Management)
- State Agencies and Institutions: Michael Shibata (University of Hawai'i); Dean Minakami (Hawai'i Housing Finance and Development Corporation); Chris Kinimaka (Hawai'i Department of Accounting and General Services); David DePonte (Hawai'i Department of Accounting and General Services); Kevin Auger (Hawai'i Public Housing Authority)

3. CFIG Meeting

Participants:

- Chairs: Representative Nadine Nakamura; Denise Iseri-Matsubara (HHFDC)
- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Nathalie Rezo
- OPSD: Ruby Edwards; Carl Miura; Aaron Setogawa
- City and County of Honolulu:
 - Department of Transportation Services: Chris Clark
 - Department of Planning and Permitting: Harrison Rue; Dean Uchida
 - Department of Facility Maintenance: Dawn Szewczyk; Warren Mamizuka; Tyler Sugihara
 - Department of Environmental Services: Mike O'Keefe; Lisa Kimura; Roger Babcock; Jack Pobuk
 - Honolulu Board of Water Supply: Dominic Dias; Marc Chun
 - Department of Parks and Recreation: Dori Amano-Mitsui
 - Department of Land Management: Randy Chu
 - Mayor's Office: Krishna Jayaram
 - Department of Design and Construction: Haku Milles
- State of Hawai'i
 - Department of Accounting and General Services: Chris Kinimaka
 - Department of Business, Economic Development & Tourism: Lauren Primiano
 - Department of Education: Roy Ikeda
 - Department of Land and Natural Resources: Derek Wong; Ian Hirokawa; Katie Roth
 - Hawai'i Housing Finance and Development Corporation: Dean Minakami
 - Hawai'i Public Housing Authority: Kevin Auger
 - Hawai'i State Department of Transportation: David Rodriguez

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- University of Hawai'i: Michael Shibata

06/14/2022 Maui Site Visit and CPIG Meeting

4. Wailuku-Kahului Corridor Site Visit

5. Meeting with State Senator Keith-Agaran

6. Meeting with Mayor of Maui – Michael Victorino

Participants:

- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Nathalie Rezo
- OPSD: Ruby Edwards; Carl Miura
- County of Maui: Pam Eaton (Long Range Planning Division); Lauren Armstrong (Maui MPO)

7. CPIG Meeting

Participants:

- Chairs: Pam Eaton (Maui Planning Department)
- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Nathalie Rezo
- OPSD: Ruby Edwards; Carl Miura
- County of Maui:
 - Maui Planning Department: Pam Eaton, David Yamashita
 - Maui MPO: Lauren Armstrong
 - Department of Water Supply: Dave Taylor
- State of Hawai'i
 - Department of Land Management: Randy Chu
 - Hawai'i State Department of Transportation: David Rodriguez
 - Hawai'i Housing Finance and Development Corporation: Dean Minakami
 - Department of Accounting and General Services: Chris Kinimaka, DePonte, David
 - Department of Business, Economic Development & Tourism: Lauren Primiano; Lorene K Maki
 - Public Health Department: Heidi Hansen Smith
 - Department of Land and Natural Resources: Derek Wong
 - Hawai'i Community Development Authority: Craig K Nakamoto

06/15/2022 Kaua'i Site Visit and CPIG Meeting

8. Meeting with City Managing Director and Director of County Housing Agency

Participants:

- City Managing Director: Michael A. Dahilig
- Kaua'i County Housing Agency: Adam Roversi
- Kaua'i County Planning Department: Jodi Higuchi-Sayegusa, Deputy Director
- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Ann Bouslog
- OPSD: Ruby Edwards; Carl Miura

9. Līhu'e Town Core Site Visit

Participants:

- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Ann Bouslog
- County of Maui: Jodi Higuchi

10. CPIG Meeting

Participants:

- Chair: Jodi Higuchi-Sayegusa (County of Kaua'i)
- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton

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- PBR HAWAII: Ann Bouslog
 - KPMG: Justin Marino
 - OPSD: Ruby Edwards; Carl Miura
 - County of Kaua'i:
 - Department of Transportation: Celia Mahikoa
 - Kaua'i Department of Water: Judy Hayducsko (Deputy Manager-Engineer)
 - State of Hawai'i
 - Department of Land and Natural Resources (DLNR): Alison Neustein; Ian Hirokawa
 - Department of Accounting and General Services: Chris Kinimaka, DePonte, David
 - Department of Health: Heidi Hansen Smith
 - Department of Transportation: David Rodriguez

06/16/2022 Hawai'i County Site Visit and CPIG Meeting

11. Site Tour - Ane Keohokalole Highway Corridor

Participants:

- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Ann Bouslog
- County of Hawai'i:
 - Deputy Managing Director: Bobby Command
 - Department of Planning: Zendo Kern; Lorene Maki; Natasha Soriano
 - Hawai'i Mass Transit Agency: John Andoh
 - Department of Environmental Management: Kelly Hartman
 - Office of Housing & Community Development: Harry Yada

12. CPIG Meeting

Participants:

- Chair: Zendo Kern (Director, Department of Planning - County of Hawai'i)
- HR&A: Amitabh Barthakur; Ignacio Montojo; David Anton
- PBR HAWAII: Ann Bouslog
- KPMG: Andrea Meyerowitz; Justin Merino
- OPSD: Ruby Edwards; Carl Miura
- County of Hawai'i:
 - Deputy Managing Director: Bobby Command
 - Planning Department: April Suprenant (Manager, Long-range planning), Natasha Soriano
 - Department of Water Services: Keith Okamoto & Kurt Inaba
 - Department of Finance: Kay Oshiro
 - Department of Public Works: Steve Pause (acting Director)
 - Hawai'i Mass Transit Agency: John Andoh
 - Department of Environmental Management: Ramzi Mansour; Kelly Hartman
 - Department of Public Works: Steve Pause
- Hawai'i Island Community Development Corp (non-profit developer): Keith Kato
- State of Hawai'i
 - Department of Education: Roy Ikeda
 - Department of Accounting and General Services: Chris Kinimaka and David DePonte
 - Hawai'i State Department of Transportation: David Rodriguez
 - Department of Land Management: Randy Chu

Appendix 2: Sample of Planned, Under Construction, and Completed Major TOD Projects in the State of Hawai'i

This appendix presents a sample of major TOD projects in the State of Hawaii and intends to portray the type of projects most commonly developed recently and in the pipeline of development. The list was prepared by PBR HAWAII based on publicly available information.

#	COUNTY	PROJECT NAME	DEVELOPER/ LANDOWNER	DEV. STATUS	DESCRIPTION PROGRAM	COST (M)	FUNDING AND FINANCING	DELIVERY
1	Honolulu	Liliha Civic Center	Dept of Land and Natural Resources (DLNR)	Planning	Redevelopment as mixed-use project with ~600 affordable homes, State offices and parking, and incidental uses.	In progress, will provide when completed	DURF for infrastructure; no CIP funding as of 2020	Considering P3 developer/RFP
2	Honolulu	Mayor Wright Homes Redevelopment	Hawai'i Public Housing Authority (HPHA)	Planning	Redevelopment of 364-unit public housing project with 2,448 new units and 80,000 SF commercial in mixed-income community	\$1,300.0	No CIP funding as of 2020	Seeking private partner
3	Honolulu	Kamehameha Schools Kapālama Plan	Kamehameha Schools	Planning	Redevelopment of commercial/industrial areas expected to add ~ 6,900 new residential units, while reducing commercial/ industrial areas by ~585,000 SF	INA	County and/or State contributions expected to be negotiated	TBD - considering improvement districts, other solutions
4	Honolulu	Halewai'olu	Halewai'olu Senior Development, LLC (The Michaels Organization)/ City and County of Honolulu	Under Construction	156-unit affordable senior rental project now under construction in the downtown (Chinatown) TOD area	\$85.5	Private - LIHTC; County - City land State - Hula Mae MF Tax-Exempt Bond, State Rental Housing Trust Fund Loan	INA
5	Honolulu	Ho'opili	D.R. Horton/ D.R. Horton	Under Construction	11,750-unit master-planned community with schools, commercial, light industrial, agricultural uses on approximately 1,500 acres	\$5,000.0	Private	Private
6	Honolulu	East Kapolei High School	State of Hawai'i (donated by DRH)	Planning	High school for 3,200 students to serve East Kapolei and Ho'opili communities.	\$790.0	CIP, DRH	Private; State of Hawai'i CIP (H.B. No 509)

#	COUNTY	PROJECT NAME	DEVELOPER/ LANDOWNER	DEV. STATUS	DESCRIPTION PROGRAM	COST (M)	FUNDING AND FINANCING	DELIVERY
7	Honolulu	New Aloha Stadium Entertainment District (NASED) - "Real Estate" and "Stadium" projects	TBD	Planning (subject to change as of 9/21/2022)	Redevelopment of 98-acre Aloha Stadium site into (1) smaller stadium (from 50K seats to 25K-30K seats) and entertainment facility; (2) mixed use development on 70 acres, with hotel, entertainment, commercial, housing	\$420.0	Public/private	Planning - State CIP/leg appropriations Stadium - State to select P3 in 2023 to DBFM (not operate) for 30 years Real Estate - State seeking Part 1 Master Developer Partner in 2023 via ground lease.
8	Honolulu	Ward Village	Howard Hughes/ Howard Hughes	Under Construction	Redevelopment of 60-acre urban core community in Kakaako with housing, entertainment, commercial and park uses	\$300.0	Major infrastructure throughout Kaka'ako implemented by State in 1990s/early 2000s	Regional infrastructure - administered by HCDA using State bonds ² Master plan & vertical - private
9	Honolulu	Sky Ala Moana	JL Avalon Capbridge/same	Under Construction	Two towers with 390 market residential condominiums, 84 affordable rental units, and 390 condotel units.	\$360.0	Private	Private
10	Honolulu	UH West O'ahu (UHWO) - campus and University District Lands (UDL) buildout	UH/TBD	Planning/Under Construction	Student housing & program facilities on-campus; ~180-acre UDL adjoining the campus and UHWO & EK rail stations planned as residential/commercial community.	INA	State - CIP, other; P3 developer for UDL lands as income-production for the campus	Ground lease and/or property sales of UDL (sales require board approvals)
11	Hawai'i	Kamakana Villages	Stanford Carr Development/ private trust co (for HHFDC)	Stalled	2,330-unit Master planned community on 272-acre site to include DOE school, commercial, preserves, parks. Stalled over challenge to sustainable yield of aquifer.	\$80.6	State: DURF, RHRF, land contribution. Private: LIHTC, Master developer equity	Public/private partnership - State DURF loan; developer to take down sites via purchase or lease

#	COUNTY	PROJECT NAME	DEVELOPER/ LANDOWNER	DEV. STATUS	DESCRIPTION PROGRAM	COST (M)	FUNDING AND FINANCING	DELIVERY
12	Hawai'i	University Village (Palamanui)	SMC Kona LLC (affiliated with Nan Inc.)	Stalled	Masterplan for 1,116 residential units on 720-acre site tied to UH West Hawai'i Center.	INA	Fed: CDBG, HOME Private	premium payment as developed Hawai'i Community College at Palamanui opened 2015, for which Hunt built access road (Ane Keohokalole Hwy extension) and supported design, construction, and utilities of first building
13	Hawai'i	Village 9	TBD/HHFDC	Planning	Affordable leasehold rental housing to be developed by HHFDC and/or private entity; leasehold permanent housing for houseless by the County of Hawai'i.	\$5.0	HHFDC, County, CIP	INA
14	Hawai'i	Villages of La'i 'Opua	DHHL	Under Construction	Ongoing development of additional villages within broad community restricted to native Hawaiian beneficiaries. 200 units + water source development planned in V2; 200 units in V1	\$67.0	Hawai'i Act 279 fund allocation (as proposed, 8/15/2022) Fed & State LIHTC (by Hunt capital Partners, Ikaika 'ohana)	Grant
15	Hawai'i	Kamakoa Nui	County of Hawai'i/ OHCD	Ongoing	Infill workforce residential community; OHCD is reviewing master plan to accommodate 875-900 more units	INA	County - land sales or ground leases	Private land contribution; OHCD developing infrastructure; Site sales and/or ground leases to private developers
16	Kaua'i	State Mixed-Use Civic Center	DAGS/DLNR	Pre-planning	Housing or mixed use to support the Lihu'e Town Core	\$0.3	FY18 appropriation	

#	COUNTY	PROJECT NAME	DEVELOPER/ LANDOWNER	DEV. STATUS	DESCRIPTION PROGRAM	COST (M)	FUNDING AND FINANCING	DELIVERY
	Kaua'i	Līhu'e Civic Center Redevelopment	TBD/County of Kaua'i	Pre-planning				
17	Kaua'i	Central Pacific Bank Building		INA	62-64 affordable rental units	INA		
	Kaua'i	Līhu'e Mill Redevelopment	TBD/Lihue Mill LLC	Pre-planning				
18	Kaua'i	Pua Loke Affordable Housing	Ahe Group/County of Kaua'i	Completed	Provide dense affordable multi-family housing	\$16.0	LIHTC, other	
19	Kaua'i	Koae Workforce Housing Development	Mark Development Inc./County of Kaua'i	Completed	134 affordable units for rent (<60% AMI)	\$44.0	Housing Trust Funds, Home Funds, LIHTC	County of Kaua'i dedicated land to A&B
20	Maui	Hale Pilina Family Affordable Rental Housing Project	Catholic Charities Housing Development Corporation/ (CCHDC in process of acquiring site from A&B Properties, Inc.)	Planning	178 rental apartments (<60% AMI) in four, 3-story buildings, plus park/open space on a 4.8-acre site formerly used for Maui Swap Meet.	\$85.0	INA	INA
21	Maui	Kahului Civic Center Mixed Use	TBD/HHFDC/DAGS	Planning	200–400-unit MF affordable units (up to 60% AMI); DAGS offices (40K SF); Adult school (7K SF); retail (5K SF); library (16K SF) development on 5.57-acre site	INA	INA	INA
22	Maui	Wailuku Courthouse Expansion	TBD/DAGS/DLNR	Pre-planning	Expansion and redevelopment of the Wailuku Courthouse complex for additional courtrooms and administrative space.	\$0.3	INA	INA
	Maui	Kahekili Terrace Redevelopment	TBD/HPHA	Pre-planning				

Appendix 3: List of Documents Received

O‘ahu

- Infrastructure Improvement Master Plan of the Iwilei Area, Hawai‘i Housing Finance and Development Corporation and Department of Accounting and General Services, 07/2022
- Environmental Impact Statement Preparation Notice Iwilei Infrastructure Improvement Master Plan Liliha Civic Center Master Plan, State of Hawai‘i Housing Finance and Development Corporation, 03/2022
- State Transit-Oriented Development (TOD) Planning and Implementation Project for the Island of O‘ahu, State of Hawai‘i, 06/2020
- Agency TOD Project Fact Sheets, Hawai‘i Public Housing Authority,
- Real Property Assessment Data for Ad Valorem Tax Purposes, FY2023
- TOD Pilot Study Area (O‘ahu) – Zoning Map
- TOD Project Inventory Master List
- BWS Six Year CIP Projects in Kapālama TOD Area, 28/07/2022
- Infrastructure Projects Cost Estimates
- Red Hill Facility Impacts Briefing 3.7.22
- Liliha Civic Center & Iwilei Infrastructure Master Plan | General Project Information & Existing Site Conditions, 23.10.2020

Maui

- Ka‘ahuma Avenue Community Corridor | Draft Action Plan
- Ka‘ahumanu Avenue Community Corridor | Market Analysis, 1/2021
- Ka‘ahumanu Avenue Community Corridor | Housing Inventory Analysis, 2/2021
- Ka‘ahumanu Avenue Community Corridor | Community Profile
- Kahului Civic Center Mixed-Use Complex Final Environmental Assessment
- Maui Road Diet Layouts
- Planned Infrastructure Projects in TOD Pilot Area
- County of Maui Wastewater Infrastructure GIS map
- County Property Value Assessments and RTP Revenues FY 2022-2023
- Real Property Tax Rates FY 2022-2023
- List of Government Owned Properties Within TOD Area
- K TOD Tax and TOD Exemptions
- FY 2022 Water Rate Study, 07/2021
- Kahekili Terrace A&B, Hawai‘i Public Housing Authority
- Wailuku State Civic Center Complex Phasing Plan, 1/11/2021
- Maui Island General Plan 2030

Kaua‘i

- Planned Infrastructure Projects in TOD Pilot Area
- TOD Area GIS Layers
- County Tax Revenues FY2017-2022
- County Affordable Housing Regulations Sec. 7A-1.4.2 Exemptions
- Real Property Tax Rate FY2022-2023
- Real Property Tax Rates FY2022 for TOD Area
- Real Property Tax Exemptions FY 2022
- Housing Development Fund
- Kaua‘i Comprehensive Economic Development Strategic Plan 2022-2026, 30/11/2021
- Kaua‘i Economic Recovery Strategy Team Initial Recommendation, 5/7/2020

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- Kaua'i Destination Management Action Plan (Tourism)
 - Kaua'i Kakou General Plan 2018 Online
 - Lihue Community Plan (2015)
 - Lihue Town Core Urban Design Plan
 - Lihue Town Core Tiger Grant

Hawai'i

- Agency TOD Factsheet County of Hawai'i, Department of Planning
- Kealahou Planned Community, Final Environmental Impact Statement
- List of Confirmed Projects Within TOD Area for County of Hawai'i
- Funding Allocation for Capital Improvement Plan in the last 5 Years
- Hawaiian Home Lands Community Meeting West Hawaii, 5/16/2022
- County Code Chapter 11, Housing
- County GIS Layers
- List of Landowners in TOD Area
- Property Tax Exception List
- Property Tax Rate Ordinances
- Conclusion of Law and Decision and Order Regarding Proposed Use Amendments in North Kona, 12/1990
- Department Announces 21-22 Enrollment Figures for Public Charter Schools, 9/2021
- 2016-2020 Strategic Plan, 10/2016
- Kailua Village BID 5 Year Strategic Plan 2018-2022
- 2018 Kilauea Disaster Economic Recovery Plan, 12/2020
- University of Hawaii, Hawaii Community College, Palamamui Campus Long Range Development Plan
- Kona Community Development Plan, 2008
- Kona CDP Public Facilities Financing Plan
- PFFP Data Master List
- Petition for Ground Water Management Area Designation Keauhou Aquifer System Area, North Kona, Hawaii, 2014

The State of Hawaii, Office of Planning and Sustainable Development

- Agency TOD Project Fact Sheets
- Strategic Plan for Transit-Oriented Development, State of Hawaii, 2018
- TOD Financing Bill, State Legislator, 2022
- State Water Projects Plan Update, 2020
- State General Fund Tax Revenue Forecasts, 2022
- State GET, TAT, TOT Liabilities by County
- DAGS Facilities Properties in TOD Infrastructure Financing Pilot Areas
- Maui. Kaahumanu Avenue Community Corridor TOD Infrastructure Project List

Appendix 4: Oahu | Iwilei-Kapālama Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trends

Overview of Demographic and Socioeconomic Conditions

The City and County of Honolulu has a population of 954,000 residents (2021) and a median household income of \$88,000. Over a third of the island's population lives within the Urban Honolulu Census Designated Place of the County, which spans from Kahala in the east to Salt Lake in the west and includes the **Iwilei-Kapālama TOD Pilot Area**, Honolulu's central business district, Waikīkī, the Daniel K. Inouye International Airport, and Honolulu Harbor. Resident population in Urban Honolulu peaked in 2016 at 352,000, followed by decreases every subsequent year. The area is estimated to have lost 7,000 residents, or 2% of its 2010 population base, over the decade. This population decline is also reflected across the County – since 2016, O'ahu's resident population has contracted by some 39,000 and is expected to lose another 37,000 by 2026.⁶⁶

The area around the Iwilei-Kapālama TOD Pilot Area, estimated using the zip code area within the TOD Pilot Area and econometric models by EMSI, has a population of approximately 1,004. The area's population declined by 21% between 2016 and 2021, but could increase by 9% between 2021 and 2026. There are approximately 2,195 jobs in the area with the top three industries in 2021 being air transportation, outpatient healthcare, and retail and services. Median household incomes are \$15,000 lower than that of the City and County as a whole.⁶⁷

Table 11 | Demographic and Socioeconomic Indicators, O'ahu

REGION	POPULATION	POPULATION CHANGE (2016-2021)	JOBS	JOBS CHANGE (2016-2021)	MEDIAN INCOME (2020)*	POVERTY RATE*	TOP INDUSTRIES
O'ahu TOD Pilot Area	1,004	-21.3%	2,195	-7.5%	\$72,454**	10.7%*	<ul style="list-style-type: none">Scheduled Air TransportationOutpatient Care ServicesRetail and Services
City & County of Honolulu	953,860	+3.9%	515,683	-10.4%	\$87,722	8%	<ul style="list-style-type: none">Federal Government and MilitaryRestaurantsEducation and Hospitals (State Government)
Hawai'i State	1,396,188	-2.3%	715,364	-8.5%	\$83,173	8.9%	<ul style="list-style-type: none">RestaurantsFederal GovernmentEducation and Hospitals (State Government)

Source: EMSI

*Calculated Using ACS 2020 Data

**Calculated using Urban Honolulu CDP data

Overview of Area Uses and Real Estate Market Trends

Uses

The Iwilei-Kapālama TOD Pilot Area consists of an urbanized mix of industrial, commercial, educational, and residential uses. Industrial and commercial uses range from small businesses to warehouse facilities.

⁶⁶ "Infrastructure Improvement Master Plan for the Iwilei Area"

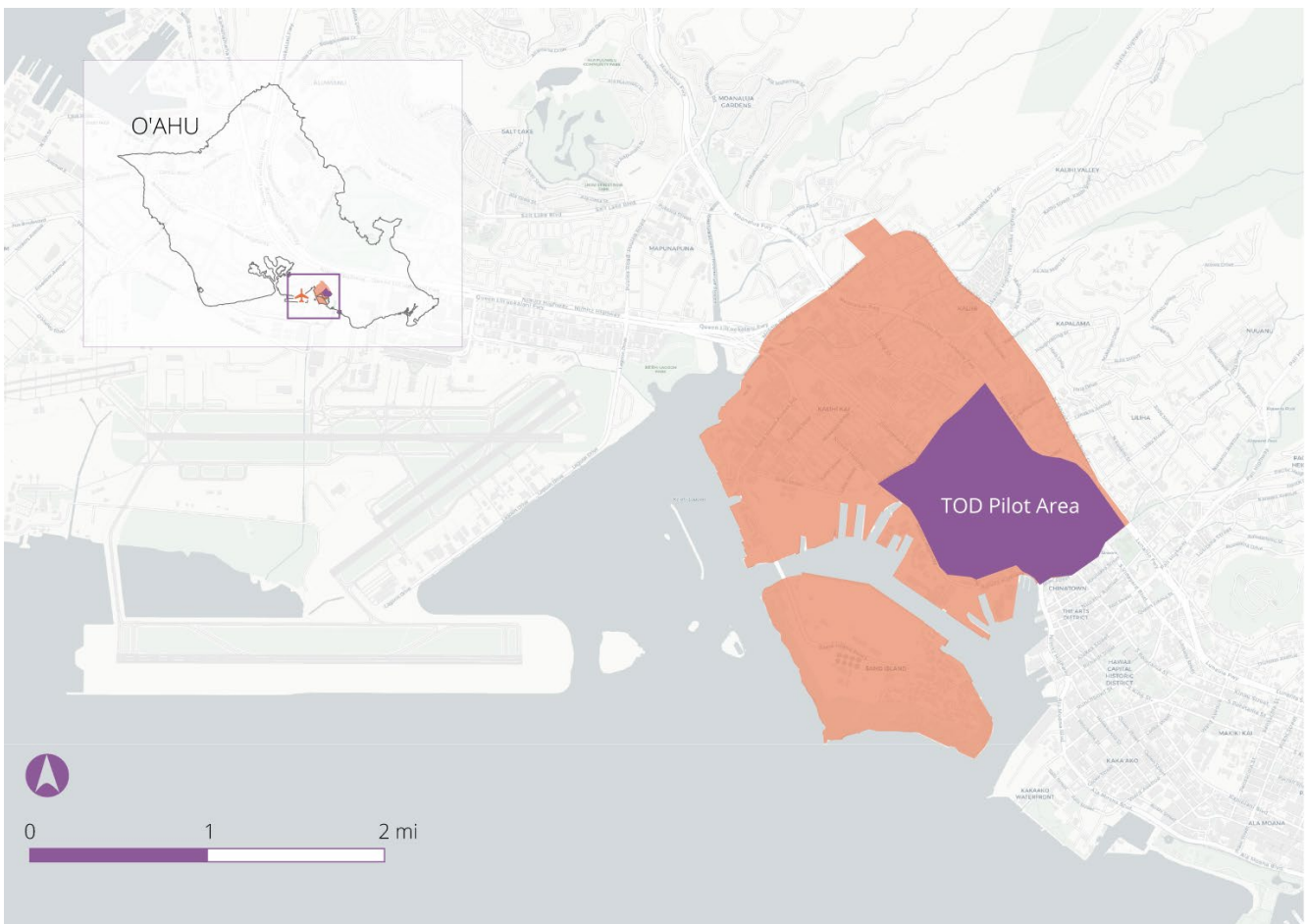
⁶⁷ EMSI

Educational uses include the Honolulu Community College, Kauluwela Elementary School, and Princess Victoria Ka'iulani Elementary School.

Residential Market Trends

The county's multifamily rental market is active with an island-wide vacancy rate of 3% and an absorption of over 600 units in the last 12 months. Between 2011 and 2021, the island's stock of multifamily rental housing grew by 4,149 units or around 8%, and there are 1,128 units currently in construction. The Kalihi-Palama real estate submarket, which includes the TOD Pilot Area, includes around 12% of the island's multifamily rental stock. While it has grown slightly less than the county average over the past 10 years, its low vacancy rate of 1.8% signals robust present demand for housing. Further growth in housing demand could be enabled by the construction of the planned rail hubs in the TOD Pilot Area.

Figure 9 | Kalihi-Palama Real Estate Submarket



Source: HR&A Advisors

Table 12 | Multifamily Rental Housing, O'ahu

MULTIFAMILY (RENTAL)	INVENTORY	UNDER CONSTRUCTION ⁶⁸	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE RENT /SF /MONTH	MARKET CAP RATE	NET DELIVERIES 2011-2021 ⁶⁹
Kalihi-Palama Submarket	4,454 units	0 units	16 units	1.8%	\$2.29	4.2%	159 units
City & County of Honolulu	53,987 units	642 units	613 units	3.4%	\$2.60	3.9%	4,149 units

Source: CoStar as of September 14, 2022

O'ahu's housing crisis has exacerbated in recent years. Market pressures have driven the median cost of single-family housing from \$789,000 in 2019 to \$1.15M in 2022. According to State estimates, O'ahu needs to build more than 27,500 new housing units to meet the growing housing gap.⁷⁰ By supporting the development of dense mixed-use typologies, the TOD Pilot Area could be a critical component for mitigating O'ahu's housing needs.

Commercial Market Trends

The Kalihi-Palama real estate submarket is also home to around 8.7% of the island's office stock. The TOD Pilot Area is a comparatively more active office market than the county at large with a lower current vacancy rate and a higher net increase in office space over the last decade. Vacancy rates for office space in the TOD Pilot Area reached a 10-year high in 2020 at 4.2%. Despite falling by 1% in the last 2 years, present vacancies remain higher than pre-pandemic levels.

Table 13 | Office Real Estate, O'ahu

OFFICE	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Kalihi-Palama Submarket	2.7M SF	0 SF	27,000 SF	3.1%	\$32.75	6.7%	384,724 SF
City & County of Honolulu	31.2M SF	165,000 SF	66,100 SF	7.3%	\$34.69	6.6%	227,909 SF

Source: CoStar as of October 26, 2022

The retail market within the Kalihi-Palama submarket has not seen the same growth as the office sector. Vacancy rates for retail space are slightly higher than the county average. Furthermore, the overall stock of retail space in the submarket has decreased over the last decade. Increased transit connectivity could support further growth in the TOD Pilot Area's commercial real estate markets by enabling mixed-use typologies and walkable neighborhoods with robust offerings of goods, services, and amenities thus driving up demand for office and retail space.

⁶⁸ CoStar data excludes projects that are planned but not yet in construction.

⁶⁹ Net Deliveries is calculated by subtracting the total stock of units of SF reported by CoStar in 2021 minus the stock of 2011. This accounts for demolitions, change in uses, and deliveries of newly built space.

⁷⁰ "Infrastructure Improvement Master Plan for the Iwilei Area"

Table 14 | Retail Real Estate, O‘ahu

RETAIL	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Kalihi-Palama Submarket	3.4M SF	0 SF	30,900 SF	5.5%	\$31.86	5%	-15,788 SF
City & County of Honolulu	40.8M SF	122,000 SF	50,900 SF	4.2%	\$48.49	4.9%	1,8M SF

Source: CoStar as of October 26, 2022

Appendix 5: Maui | Ka’ahumanu Avenue Community Corridor

Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trends

Overview of Demographic and Socioeconomic Conditions

The Ka’ahumanu Avenue Community Corridor is home to approximately 20% of the island’s population and 21% of its jobs.⁷¹ Compared to the Island, the TOD Pilot Area population tends to be younger, more racially diverse, and have lower household incomes. At \$74,720, the average annual income in the corridor is 11% lower than for Maui County as a whole.⁷² Furthermore, 1 in 4 households in the corridor live below the poverty line.⁷³ 36% of the households living within the TOD Pilot Area lack access to a vehicle, in comparison to 4.6% for the overall county⁷⁴. As the main non-tourism job center on Maui, the corridor hosts a diverse mix of businesses. Education and healthcare, office-based jobs, public administration, retail, and food services account for most jobs given the variety of shopping destinations and services in the area.

The Ka’ahumanu Avenue Pilot TOD Area faces the challenges of limited affordable housing, high development costs, and vehicle-focused transportation networks. 39% of households within the TOD Pilot Area are renters, 7% higher than overall Maui.⁷⁵ Nearly 45% of Maui renters are cost burdened, meaning they spend more than 30% of their income on housing. Furthermore, 73% of housing assistance vouchers are used within the corridor.⁷⁶ While the neighborhoods in the TOD Pilot Area are home to nearly half of Maui’s regulated affordable housing, there is a pressing need for hundreds more units. Only about 45 units of government-assisted affordable housing were built each year between 2014 and 2018 in Maui.⁷⁷

Table 15 | Demographic and Socioeconomic Indicators, Maui

REGION	POPULATION	POPULATION CHANGE (2016-2021)	JOB	JOB CHANGE (2016-2021)	MEDIAN INCOME (2021)	POVERTY RATE*	TOP INDUSTRIES
Maui TOD Pilot Area (Zip 96793, 96732)	33,642*	+2.8%	34,072	-3%	\$74,720**	8%***	<ul style="list-style-type: none"> • Restaurants • State and Local Government
Maui County	167,906	+1.4%	81,712	-6%	\$84,363**	9.5%	<ul style="list-style-type: none"> • Traveler Accommodation • Restaurants • Education and Hospitals (State Government)
Hawai’i State	1,396,188	-2.3%	715,364	-8.5%	\$83,173**	8.9%	<ul style="list-style-type: none"> • Restaurants • Federal Government • Education and Hospitals (State Government)

Source: EMSI

*2018 ACS 5-year data

** Ka’ahumanu Avenue Community Corridor Market Analysis, 2021

***Calculated Using ACS 2020 Data

⁷¹ “Ka’ahumanu Avenue Community Corridor Market Analysis”

⁷² “Ka’ahumanu Avenue Community Corridor Market Analysis”

⁷³ “Ka’ahumanu Avenue Community Corridor Market Analysis”

⁷⁴ ACS 2020

⁷⁵ “Ka’ahumanu Avenue Community Corridor Market Analysis”

⁷⁶ “Ka’ahumanu Avenue Community Corridor Market Analysis”

⁷⁷ “Ka’ahumanu Avenue Community Corridor Market Analysis”

Overview of Area Uses and Real Estate Market Trends

Residential Market Trends

Maui faces the challenges of a growing community, constrained geography, rising housing costs, and a limited supply of affordably priced housing. Today, 62% of housing in the corridor consists of single-family units. Only 25% of units are within multifamily rental buildings with at least 5 units. 13% of housing units are part of middle density developments with between 2-4 units.⁷⁸

According to CoStar, a proprietary real estate data aggregator, apartment rents in Central Maui have risen 60% since 2008 to a historic high in 2020 (\$3.20/square foot/month) and vacancies have fallen to historic lows (under 3%) as demand for market rate apartments has increased with little new supply. The average sale price of single-family homes in Wailuku and Kahului between 2019 and 2021 was roughly \$700,000 (\$455/square foot).⁷⁹ This has accelerated in recent years with the average multifamily rental unit within the TOD Pilot Area currently trading for over \$551,000.⁸⁰

Maui County overall has seen an average of roughly 600 housing units permitted per year between 2014 and 2019.⁸¹ Within Wailuku and Kahului, most new housing development has been in master-planned communities outside the Kaʻahumanu Avenue TOD Pilot Area. Most of the recent apartment development in Central Maui has been affordable housing; there have been no new market rate apartments built in Wailuku or Kahului since 2008. While demand is strong, the rents that would be affordable to the local population may not be enough to cover the cost of new construction. Under current market conditions and prevailing construction costs, most of the housing in this area will need to be subsidized and at below market rents to meet affordability needs of the existing population.⁸²

Table 16 | Multifamily Rental Housing, Maui

MULTIFAMILY (RENTAL)	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF /MONTH	MARKET CAPRATE	NET DELIVERIES 2011-2021
Maui TOD Pilot Area	833 units	0 units	14 units	0.9%	\$2.51	4.5%	82 units
Maui County	3,350 units	7 units	63 units	1.9%	\$2.89	4.4%	268 units

Source: CoStar as of September 14, 2022

Like other parts of the state, Maui is experiencing a rapidly accelerating housing affordability crisis. The problem stems from a policy implemented in the mid-2000s which imposed affordability limits to 40-50% newly constructed units thereby disincentivizing housing construction for over a decade. While the policy has since been reversed, the effects of a lost decade of development have contributed to today's housing affordability gap. Without a substantial increase in market-rate and deed-restricted affordable housing construction, increased demand can continue to exacerbate the affordability crisis of the county.⁸³

⁷⁸ "Kaʻahumanu Avenue Community Corridor Market Analysis"

⁷⁹ "Kaʻahumanu Avenue Community Corridor Market Analysis"

⁸⁰ CoStar

⁸¹ "Kaʻahumanu Avenue Community Corridor Market Analysis"

⁸² "Kaʻahumanu Avenue Community Corridor Market Analysis"

⁸³ "More Maui homes bought by offshore buyers last year than in recent times", Maui Now, <https://mauinow.com/2022/03/06/more-maui-homes-bought-by-offshore-buyers-last-year-than-in-recent-times/>

Commercial Trends

Central Maui's submarket is characterized by mostly retail space followed by industrial space. About half of all office, retail, and flex space in Maui is in Central Maui. The majority (82%) of Maui's industrial space is also located in Central Maui. A closer look at TOD Pilot Area's office market shows that it is comprised mostly of professional office space occupying about 1.1 million square feet.⁸⁴

Table 17 | Office Real Estate, Maui

OFFICE	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Maui TOD Pilot Area	1.3M SF	0 SF	-3,900 SF	3.6%	\$33.58	7.3%	6,509 SF
Maui County	2.2M SF	0 SF	25,700 SF	3.9%	\$33.25	7.3%	89,626 SF

Source: CoStar as of September 14, 2022

Office rents in the Central Maui submarket have remained stagnant since the Great Recession—hovering around \$30.00 per square foot per month (plus property's operating expenses) between 2008 and 2019—while vacancy rates have been declining progressively. Central Maui office rents have typically been lower than the island as a whole; however, in recent years they have surpassed the average Maui rents. At the same time, Central Maui vacancy rates have always been lower than across Maui, suggesting greater demand for office space in the Central Maui area and/or limitations on the supply side. Growth in the stock of commercial space in the TOD Pilot Area has been slow over the past decade with retail space increasing by 5% within the TOD Pilot Area and by 10% county-wide. Office space development has remained stagnant, increasing by less than 1% within the TOD Pilot Area and around 4% county-wide.⁸⁵

Table 18 | Retail Real Estate, Maui

RETAIL	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Maui TOD Pilot Area	2.4M SF	0 SF	1500 SF	5.1%	\$43.75	5.7%	114,693 SF
Maui County	8.8M SF	4,300 SF	-6,400 SF	8.2%	\$41.59	5.7%	795,958 SF

Source: CoStar as of September 14, 2022

Public Land

There are several institutional uses that comprise a large amount of land of the TOD Pilot Area including University of Hawai'i Maui College, Maui Memorial Medical Center, and Baldwin High School. The Maui Memorial Medical Center has seen several recent expansions. From information obtained during its on-the-ground engagement, the Consultant Team understands that UH Maui College has seen declining enrollment and does not provide (or currently have a plan for) student housing. These large ownerships and institutional owners

⁸⁴ "Ka'ahumanu Avenue Community Corridor Market Analysis"

⁸⁵ CoStar

present opportunities for bigger changes in the TOD Pilot Area if consistent with their own plans and facility needs.

Appendix 6: Kaua'i | Līhu'e Town Core Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trend

Overview of Demographic and Socioeconomic Conditions

The town of Līhu'e, defined by the zip code 96766, has a population of approximately 17,400, or around a quarter of the island's population. Between 2016 and 2021 Līhu'e's population increased by 3.2%, and the population is expected to increase by 0.6% between 2021 and 2026, according to EMSI. There are approximately 14,800 jobs in the area, with the top three industries in 2021 being education and hospitals (State Government), restaurants, and building maintenance. Median household income in Līhu'e \$82,057, 9% below the county's median household income.⁸⁶

Table 19 | Demographic and Socioeconomic Indicators, Kaua'i

REGION	POPULATION	POPULATION CHANGE (2016-2021)	JOBS	JOBS CHANGE (2016-2021)	MEDIAN INCOME (2020)*	POVERTY RATE*	TOP INDUSTRIES
Līhu'e (Zip 96766)	17,403	+3.2%	14,757	-1.6%	\$82,057	4.1%	<ul style="list-style-type: none"> • Education and Hospitals (State Government) • Restaurants • Building maintenance
Kaua'i County	71,664	+0.1%	34,007	-5.6%	\$82,818	9.9%	<ul style="list-style-type: none"> • Restaurants • Traveler Accommodation • Education and Hospitals (State Government)
Hawai'i State	1,396,188	-2.3%	715,364	-8.5%	\$83,173	8.9%	<ul style="list-style-type: none"> • Restaurants • Federal Government • Education and Hospitals (State Government)

Source: EMSI

*Calculated Using ACS 2020 Data

Overview of Area Uses and Real Estate Market Trends (Based on the Līhu'e Community Plan of 2015)

Residential Market Trends

Like other counties, Kaua'i is experiencing a housing shortage. Between 2020 and 2021, the median price of a single-family home on the island jumped by 57% to \$1.2 million.⁸⁷

While Kaua'i has over 40,000 homes, less than 600 are multifamily rental units.⁸⁸ Despite its size, demand for multifamily rental product is very high across the county as reflected by county-wide vacancy rates below 1%. The Līhu'e submarket is home to half of all of Kaua'i's multifamily rental units. Over the past 10 years, the county's stock of multifamily rental housing has increased by 11.5% (60 units) with all the growth concentrated within Līhu'e. While there are currently no new multifamily rental developments currently under construction,

⁸⁶ EMSI

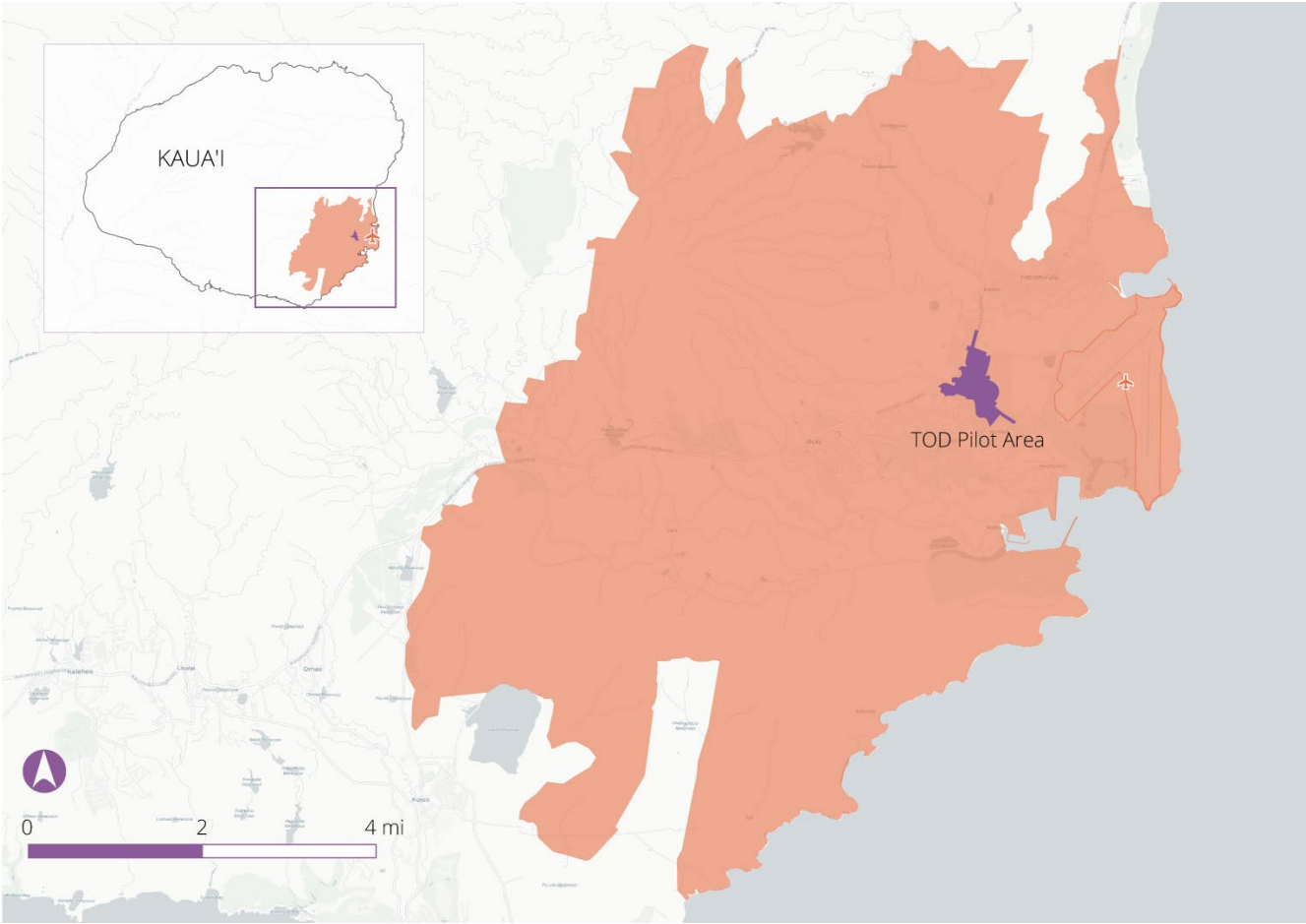
⁸⁷ Out-of-state buyers drove up housing prices on Kaua'i in 2021, <https://www.hawaiinewsnow.com/2022/01/04/out-of-state-buyers-drove-up-housing-prices-kaui-2021/>

⁸⁸ Out-of-state buyers drove up housing prices on Kaua'i in 2021, <https://www.hawaiinewsnow.com/2022/01/04/out-of-state-buyers-drove-up-housing-prices-kaui-2021/>

CoStar

the TOD pilot Area is host to multiple planned projects including Līhu'e Plaza (62 units), CPB Building (52-64 Units), Līhu'e Mill (96 Units).

Figure 10 | Līhu'e Real Estate Submarket



Source: HR&A Advisors

Table 20 | Multifamily Rental Housing, Kaua'i

MULTIFAMILY (RENTAL)	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF /MONTH	MARKET CAPRATE	NET DELIVERIES 2011-2021
Līhu'e Submarket	301 units	0 units	1 unit	0.6%	\$1.50	4.1%	60 units
Kaua'i County	583 units	0 units	3 units	0.9%	\$2.26	4.3%	60 units

Source: CoStar, accessed September 14, 2022

The Līhu'e Community Plan (2015) forecasted that between 2010 and 2035, the county needs an additional 10,000 new housing units to accommodate its resident population. Līhu'e was expected to absorb nearly half of this increase, which would mean adding approximately 4,600 units to its 2015 baseline housing stock. Although the Plan is now over 7 years old and demographics are in transition, it is still evident that there is an affordable housing deficit and a dramatic ramp up in housing development would be needed to approximate such forecasts.⁸⁹

Commercial Trends

Līhu'e has the most commercial floor area of Kaua'i's six planning districts. The district is home to 514,000 square feet of office space (82% of the county's total) and 1.8 M square feet of retail space (56% of the county's total). Vacancies across retail and office are low, signaling robust demand for both uses. Līhu'e has captured over half of the island's new retail development over the last decade, with 123,000 square feet added between 2011 and 2021.⁹⁰

Table 21 | Office Real Estate, Kaua'i

OFFICE	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Līhu'e Submarket	514,000 SF	0 SF	3,800 SF	2.5%	\$34.69	6.9%	0 SF
Kaua'i County	622,000 SF	0 SF	5,000 SF	2.0%	\$34.33	6.9%	3,879 SF

Source: CoStar as of September 14, 2022

In keeping with the Līhu'e Community Plan's focus on mixed use communities, future commercial uses are sought to be mixed "horizontally" (single purpose commercial building adjacent to noncommercial uses) or "vertically" (a single building with commercial and non-commercial uses). Currently planned developments are expected to provide all the projected demand for commercial floor space in Līhu'e District through 2035. Līhu'e also has the majority of the island's industrial floor area, with 81% of the island's total. Planned developments will provide adequate industrial floor area to accommodate the projected need through 2035.⁹¹

⁸⁹ Līhu'e Community Plan, 2015

⁹⁰ CoStar

⁹¹ Līhu'e Community Plan, 2015

Table 22 | Retail Real Estate, Kaua'i

RETAIL	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Līhu'e Submarket	1.8M SF	0 SF	26,300 SF	1.7%	\$32.17	5.9%	123,136 SF
Kaua'i County	3.2M SF	0 SF	48,000 SF	5.2%	\$31.94	5.9%	236,607 SF

Source: CoStar as of September 14, 2022

Appendix 7: Hawai'i | Kailua Kona Overview of Demographic, Socioeconomic Conditions, Area Uses and Real Estate Market Trend

Overview of Demographic and Socioeconomic Conditions

According to data from EMSI, the region of Kailua Kona within zip code 96745, which includes the Ane Keohokalole Highway has a population of approximately 4,156, or around 2% of the island's population. Between 2016 and 2021, the region's population increased by 6.1%. There are approximately 354 jobs in the area with the top industries in 2021 building maintenance, and construction. While median income for the Kailua Kona region is \$76,771, \$11,370 above the county median income of \$65,401, incomes within the TOD area are likely lower than the county average due to the presence of DHHL housing.

Table 23 | Demographic and Socioeconomic Indicators, Hawai'i County

REGION	POPULATION	POPULATION CHANGE (2016-2021)	JOBS	JOBS CHANGE (2016-2021)	MEDIAN INCOME (2020)*	POVERTY RATE*	TOP INDUSTRIES
Kailua Kona (Zip 96745)	4,156	+6.1%	354	-16.9%	\$76,771	8%	<ul style="list-style-type: none"> • Building maintenance • Construction
Hawai'i County	202,661	+2.1%	80,306	-2.4%	\$65,401	12.2%	<ul style="list-style-type: none"> • Education and hospitals (State government) • Restaurants • Tourism/Resorts
Hawai'i State	1,396,188	-2.3%	715,364	-8.5%	\$83,173	8.9%	<ul style="list-style-type: none"> • Restaurants • Federal Government • Education and Hospitals (State Government)

Source: EMSI

*Calculated Using ACS 2020 Data

**Calculated using Kailua CDP data

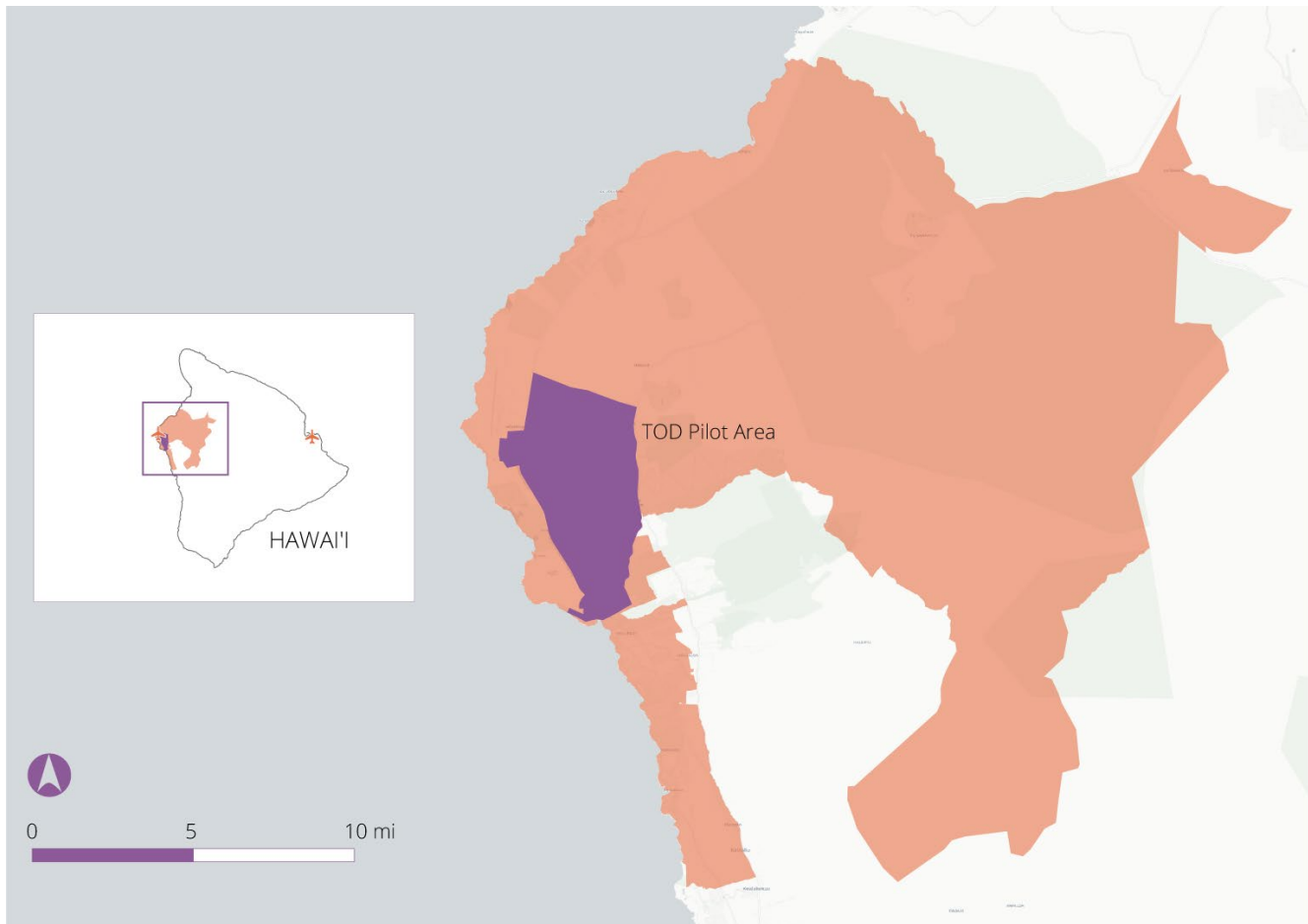
Overview of Area Uses and Real Estate Market Trends

Residential Market Trends

As in other counties, housing affordability is also a significant concern in Hawai'i County. The need for affordable housing solutions is reflected in the county's multifamily rental housing market which currently has a vacancy rate of 1.6%. Within the Kailua-Kona submarket, which includes the County's TOD Pilot Area and is home to 43% of the island's multifamily rental stock, the vacancy rate is only 2%. Despite large demand for multifamily rental product, the county has only added 200 multifamily rental units to its stock of housing over the past 10 years, a mere 7% increase. No new multifamily rental developments are under construction in the county. Given its relative proximity to goods and services, the Ane Keohokalole Highway Corridor has the potential to enable the development of dense housing to mitigate the growing housing gap.⁹² Nationwide increases in construction costs and rising interest rates might further exacerbate this situation by increasing the economic barriers to new development.

⁹² CoStar

Figure 11 | Kailua-Kona Real Estate Submarket



Source: HR&A Advisors

Table 24 | Multifamily Rental Housing, Hawai'i

MULTIFAMILY (RENTAL)	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF /MONTH	MARKET CAPRATE	NET DELIVERIES 2011-2021
Kailua-Kona Submarket	1,217 units	0 units	-4 units	2.0%	\$1.86	4.6%	195 units
Hawai'i County	2,810 units	0 units	26 units	1.6 %	\$1.84	4.7%	200 units

Source: CoStar as of September 14, 2022

Planned Developments

Kamakana Villages is the main TOD project within the TOD Pilot Area, with entitlements for up to 2,300 homes, half of which would be affordable, as well as 190,000 SF of commercial community facilities, an elementary school site, a community/civic center, and various parks, preserves, and open spaces. This project is a P3

development between the State HHFDC and Stanford Carr Development but is currently on hold due to water availability issues.

Also within the TOD Pilot Area, the Village 9 Affordable Housing site is in 35.77 acres of State land at the southwestern corner of the intersection of Kealakehe Parkway and Ane Keohokalole Highway. HHFDC proposes to develop the property to provide emergency shelter to people experiencing homelessness. The project is expected to begin construction in the fourth quarter of 2023.

Commercial Trends

The Kailua-Kona submarket is home to a third of the county's office and retail space.⁹³ Over the past 10 years, the stock of office and retail has increased by close to 10%, absorbing half of the growth of the entire island's commercial real estate market growth. The office market in the submarket has a slightly higher vacancy rate than the county at 4%. Retail within the submarket has almost double the vacancy rate than the county at 11%.⁹⁴

Table 25 | Office Real Estate, Hawai'i

OFFICE	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Kailua-Kona Submarket	764,000 SF	0 SF	19,000 SF	4.1%	\$28.39	7.2%	67,692 SF
Hawai'i County	2.5M SF	0 SF	30,4000 SF	3.7%	\$27.71	7.4%	120,575 SF

Source: CoStar as of September 14

Table 26 | Retail Real Estate, Hawai'i

RETAIL	INVENTORY	UNDER CONSTRUCTION	12 MONTH ABSORPTION OF UNITS	VACANCY RATE	MARKET RATE /SF/YEAR	MARKET CAPRATE	NET DELIVERIES 2011-2021
Kailua-Kona Submarket	3M SF	0 SF	32,900 SF	10.8%	\$28.86	7.8%	291,005 SF
Hawai'i County	9M SF	0 SF	211,000 SF	5.8%	\$31.33	6.9%	590,161 SF

Source: CoStar as of September 14, 2022

⁹³ While most of the commercial real estate of the Kailua-Kona Submarket falls outside the TOD Pilot Area, their proximity means makes both geographies into one single real estate market, commercial center, and employment hub.

⁹⁴ CoStar

Appendix 8: List of Infrastructure Projects in Iwilei-Kapālama

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
1	18" Relief Kokea St	Area Wide Sewer Capacity Relief	\$1.50	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
2	12" Relied Kokea St	Limited Sewer Capacity Relief	\$0.60	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
3	15" Liliha St	Limited Wastewater Collection Capacity	\$1.00	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
4	18" King St	Limited Sewer Capacity Relief	\$1.40	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
5	18" Nu'uuanu Stream Relief	Limited Sewer Capacity Relief	\$0.80	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
6	12" A'ala St Relief	Limited Sewer Capacity Relief	\$1.50	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
7	10" Vineyard Blvd Relied	Limited Sewer Capacity Relief	\$0.80	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
8	Awa St. Pump Station Improvements	Limited Sewer Capacity Relief	\$15.00	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
9	Cured in Place Pipe for Sea Level Rise	Area Wide Sewer Capacity Relief	\$150.00	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
10	12" King St	Project Wide Sea Level Rise Mitigation	\$2.60	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
11	16" Nimitz Highway	Project Water System Improvement	\$6.00	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
12	16" Iwilei Road	Water System Capacity Improvement	\$3.90	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
13	8" Off-Iwilei Rd	Water System Capacity Improvement	\$0.80	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
14	12" Kohou St	Water System Capacity Improvement	\$2.70	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
15	8" Kama Ln	Water System Capacity Improvement	\$0.06	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
16	8" Palama Ln	Water System Capacity Improvement	\$0.02	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
17	8" Long Ln	Water System Capacity Improvement	\$0.03	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
18	8""Ma'o Ln	Water System Capacity Improvement	\$0.03	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
19	Vineyard Blvd	Water System Capacity Improvement	\$0.03	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
20	Morris Ln	Water System Capacity Improvement	\$0.04	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
21	Hoapili Ln	Water System Capacity Improvement	\$0.04	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
22	Auld No	Water System Capacity Improvement	\$0.40	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
23	Peterson Ln	Water System Capacity Improvement	\$0.50	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
24	Kanoa St	Water System Capacity Improvement	\$0.30	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
25	Banyan St	Water System Capacity Improvement	\$0.09	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
26	Robello Ln	Water System Capacity Improvement	\$0.20	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
27	Akepo Ln	Water System Capacity Improvement	\$0.10	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
28	Iwilei Rd	Water System Capacity Improvement	\$0.50	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
29	Kapālama Canal Revitalization Project- Dredging	Project Wide Drainage System Improvement	\$20.00	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
30	Nu'uuanu Stream Improvements	Project Wide Drainage System Improvement	\$40.00	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
31	Houghtailing St/Moonui St Drainage	Drainage System Improvement	\$9.30	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
32	King St Drainage 1	Drainage System Improvement	\$1.80	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
33	King St Drainage 2	Drainage System Improvement	\$2.40	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
34	King St Drainage 3	Drainage System Improvement	\$7.80	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
35	Kaumuali'I St Drainage	Drainage System Improvement	\$2.40	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
36	Dillingham Blvd Drainage 1	Area Wide Drainage System Improvement	\$23.40	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
37	Dillingham Blvd Drainage 2	Area Wide Drainage System Improvement	\$5.40	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
38	Kohou St Drainage	Drainage System Improvement	\$1.90	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
39	Kalani St Drainage	Drainage System Improvement	\$3.10	N/A	N/A	Enables an affordable housing project	Needed today for future viability of existing development	N/A
40	Vineyard Blvd Drainage	Area Wide Drainage System Improvement	\$3.40	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
41	Pua Ln Drainage (including Kukui Garden)	Area Wide Drainage System Improvement	\$26.50	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
42	Costco Drainage	Area Wide Drainage System Improvement	\$18.00	N/A	N/A	Enables an affordable housing project	Needed to accommodate future growth	N/A
43	Nimitz Hwy Drainage	Area Wide Drainage System Improvement	\$3.00	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
44	Iwilei Rd Drainage	Area Wide Drainage System Improvement	\$25.00	N/A	HECO	Enables an affordable housing project	Needed to accommodate future growth	N/A
45	Nimitz Hwy - 25 kV Underground	Area Wide Electrical System Improvement	\$31.00	N/A	HECO	Enables an affordable housing project	Needed to accommodate future growth	N/A
46	Kalihi St- 25 kV Underground	Area Wide Electrical System Improvement	\$5.80	N/A	HECO	Enables an affordable housing project	Needed to accommodate future growth	N/A
47	Waiakamilo Rd- 25 kV Underground	Area Wide Electrical System Improvement	\$5.80	N/A	HECO	Enables an affordable housing project	Needed to accommodate future growth	N/A
48	North King St- 25 kV Underground	Area Wide Electrical System Improvement	\$11.50	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
49	Liliha St- 25 kV Underground	Area Wide Electrical System Improvement	\$2.30	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
50	Vineyard Blvd- 25 kV Underground	Area Wide Electrical System Improvement	\$2.10	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
51	Iwilei Rd South- 25 kV Underground	Area Wide Electrical System Improvement	\$1.80	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
52	Iwilei Rd North- 25 kV Underground	Area Wide Electrical System Improvement	\$1.90	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
53	Pine St- 25 kV Underground	Area Wide Electrical System Improvement	\$1.60	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
54	Dillingham Blvd- 25 kV Underground	Area Wide Electrical System Improvement	\$1.00	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
55	Kuwili St- 25 kV Underground	Area Wide Electrical System Improvement	\$4.20	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
56	Sumner St- 25 kV Underground	Area Wide Electrical System Improvement	\$2.30	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
57	46 kV Alternative - Nimitz Hwy	Project Wide Electrical System Improvement	\$52.00	N/A	HECO	Enables an affordable housing project	Needed today for future viability of existing development	N/A
58	46 kV Alternative - North King St	Project Wide Electrical System Improvement	\$22.00	N/A		Enables an affordable housing project	Needed today for future viability of existing development	N/A
59	46 kV Alternative - Dillingham Blvd	Project Wide Electrical System Improvement	\$18.00	N/A		Enables an affordable housing project	Needed today for future viability of existing development	N/A
60	Pua Lane along N King Street	Roadway Improvement	\$12.88	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
61	Storm Chambers	Site Specific Improvement	\$5.85	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
62	King St and Pua Lane Intersection	Roadway Improvement	\$3.51	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
63	Vineyard and Pua Lane Intersection	Roadway Improvement	\$3.51	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
64	King St and Dillingham Blvd/Liliha St	Area Wide Roadway Improvement	\$5.85	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
	Intersection Improvement							
65	Hotel Street, Beretania Street, King Street Improvements	Area Wide Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
66	Ka'a'ahi Street Extension	Roadway Improvement	\$7.02	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
67	A'ala Street Extension (Iwilei Road)	Area Wide Roadway Improvement	\$10.54	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
68	Liliha Street and Vineyard Blvd Streetscape Impr Project	Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
69	Dillingham Bvd/Ka'a'ahi Str Roadway and Traffic Signal Impr	Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
70	Protected Intersections	Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
71	Future Recommended Street Connections	Area Wide Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
72	New local streets to create an interconnected network	Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
73	Promenades to provide for active transportation	Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A
74	Promenades along the harbor	Roadway Improvement	Not Available	N/A	N/A	No relation to affordable housing	Needed to accommodate future growth	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED		RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
75	Two new ped bridges across the Kapālama Canal mauka	Roadway Improvement	Not Available	N/A	N/A		No relation to affordable housing	Needed to accommodate future growth	N/A
76	New bicycle routes throughout the Iwilei Master Plan Area	Roadway Improvement	Not Available	N/A	N/A		No relation to affordable housing	Needed to accommodate future growth	N/A
77	Kalihi Hi-Service Booster Electrical Upgrades	Area Wide Water Improvements	\$1.28	N/A	BWS Fund	Operating	No relation to affordable housing	Needed today for future viability of existing development	Pre-planning. 2024 P&E, 2027 Const
78	Aala Street and North Vineyard Blvd Water Sys Improv	Area Wide Water Improvements	\$6.32	N/A	BWS Fund	Operating	No relation to affordable housing	Needed today for future viability of existing development	Pre-planning. 2024 P&E, 2027 Const
79	Kokea Street and Auld Lane Water System Improvements	Area Wide Water Improvements	\$2.85	N/A	BWS Fund	Operating	No relation to affordable housing	Needed today for future viability of existing development	Pre-planning. 2024 P&E, 2027 Const
80	Dillingham Boulevard and Kohou Street Water System Improv	Area Wide Water Improvements	\$6.05	N/A	BWS Fund	Operating	No relation to affordable housing	Needed today for future viability of existing development	Pre-planning. 2024 P&E, 2027 Const
81	Honolulu District 42-inch Mains - Liliha Street to Moiliili	Regional Water Improvements	\$0.40	N/A	BWS Fund	Operating	No relation to affordable housing	Needed to accommodate future growth	Pre-planning. 2024 P&E, 2027 Const
82	Nimitz Hwy 16-inch Main, Waiakamilo Road to Sumner St	Area Wide Water Improvements	\$8.90	N/A	BWS Fund	Operating	No relation to affordable housing	Needed to accommodate future growth	Pre-planning. 2024 P&E, 2027 Const
83	Rehab of Streets, Unit 75 (Houghtailing St/Waiakamilo Rd)	Roadway Improvement (Houghtailing St)	\$4.00	N/A	0321 Highways and Streets - Highways, Streets, and Roadways		No relation to affordable housing	Project-specific infrastructure	N/A
84	Rehab of Streets, Unit 75	Roadway Improvement (Waiakamilo Rd)	\$4.00	N/A	0321 Highways and Streets - Highways,		No relation to affordable housing	Project-specific infrastructure	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
	(Houghtailing St; Waiakamilo Rd)				Streets, and Roadways			
85	Kapālama Canal Erosion Control, Stabilization and Dredging - TOD	Drainage Improvement	\$35.00	N/A	0292 Public Safety - Other - Miscellaneous	No relation to affordable housing	Project-specific infrastructure	N/A
86	Kalihi Kai Fire Station Plumbing and Miscellaneous Impr	Site-specific Facility Improvement	\$1.00	N/A	0221 Public Safety - Fire and Buildings	No relation to affordable housing	Project-specific infrastructure	N/A
87	Fire Station Emergency Vehicle Caution Sys (EVCS) Upgrade - Kalihi Kai (31)	Site-specific Facility Improvement	\$0.25	N/A	0221 Public Safety - Fire and Buildings	No relation to affordable housing	Project-specific infrastructure	N/A
TOTAL			\$666.9	N/A				

N/A = Not Available

Appendix 9: List of Infrastructure Projects in Ane Keohokālole Highway corridor

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
New transportation, housing, and community facilities								
1	Old Airport Park Transit Station, Makaeo Transit Hub	Transit	\$0.40	\$0.40*	N/A	No relation	Needed to accommodate future growth	Pre-planning
2	Kailua-Kona Bus Maintenance Facility	Transit	\$10.3	\$4.0	GO Bond, federal funds, prior county appropriated funds	No relation	Needed to accommodate future growth	Pre-planning
3	Ulu Wini Housing Improvements	Housing	\$1.0	\$0.0	GO Bond	No relation	Needed to accommodate future growth	Planning
4	Kealakehe Animal Shelter	Social Infrastructure	\$6.6	\$6.0	GO Bond	No relation	Needed to accommodate future growth	N/A
5	Kealakehe Regional Park (including onsite roads and utilities)	Social Infrastructure	\$34.0	\$32.0	GO Bond, prior county appropriated funds	No relation	Needed to accommodate future growth	Masterplan completed (2019). No more information after that
Critical infrastructure for the overall viability of the area								
6	Ulu Wini Low Income Housing Wastewater Treatment Plant	Repair of existing Wastewater Transportation Project	\$4.0	\$0.0	GO Bond, federal funds, prior county appropriated funds	Repair on existing affordable housing complex	Needed today for future viability of existing development	N/A

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
7	Kealakehe WWTP Aeration/sludge removal	Wastewater Transportation Project Upgrade	\$11.4	\$11.4	N/A	No relation	Needed to accommodate future growth	N/A
8	Kealakehe WWTP Expansion/reclamation	Wastewater Transportation Project Upgrade	\$65.5	\$65.5	N/A	No relation	Needed to accommodate future growth	N/A
9	Kealakehe WWTP Reclamation Distrib. Ph 1	Wastewater Transportation Project Upgrade	\$20.6	\$20.6	N/A	No relation	Needed to accommodate future growth	N/A
10	Kealakehe WWTP Reclamation Distrib. Ph 2	Wastewater Transportation Project Upgrade	\$47.0	\$47.0	N/A	No relation	Needed to accommodate future growth	N/A
11	Kealakehe Refuse Transfer Station	Solid Waste	\$7.2	\$7.2	N/A	No relation	Needed to accommodate future growth	N/A
12	Ota Well (part of North Kona Water Masterplan)	Wells, Reservoirs and Pipelines	\$15.8	\$15.8	N/A	No relation	Needed to accommodate future growth	N/A
13	North Kona Mid-Level Well (part of (North Kona) Keauhou Water Use and Development Plan)	Wells, Reservoirs and Pipelines	\$20.00	\$20.00	DWSRF	No relation	Needed to accommodate future growth	N/A
14	Waiaha Well No. 2 (part of (North Kona) Keauhou Water Use and Development Plan)	Wells, Reservoirs and Pipelines	\$7.00	\$4.00	DWSRF	No relation	Needed to accommodate future growth	N/A
Infrastructure relevant for La'i 'Ōpua Villages								

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
15	On-Site and Off-site Water for La'i 'Ōpua, Village 9	Water	\$34.2	\$34.2	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
16	On-Site and Off-site Water for La'i 'Ōpua, Village 2	Road & Water	\$22.2	\$22.2	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
17	On-Site and Off-site Water for La'i 'Ōpua, Village 1	Road & Water	\$22.2	\$22.2	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
18	Ane Keohokālole Highway Phase III - Hinalani Drive to Ka'iminani Drive (including onsite road and utilities)	Road	\$51.0	\$51.0	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
19	DPW - Kealakehe Parkway & Kealakaa St. Extensions (ROW Acquisition)	Road	\$10.7	\$0.0	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
20	Kealakehe Parkway Extension	Road	\$10.6	\$0.0	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
21	Ane Keohokalole Highway Extension Phase iv	Road	\$18.3	\$18.3	N/A	Would enable project advancement	Project-specific infrastructure	Project-specific infrastructure
Infrastructure relevant for Kamakana Villages								
22	Keopu Well 4 Development & Connection to Existing 1.0 MG Tank	Water	\$11.4	\$11.4	N/A	Would enable project advancement	Project-specific infrastructure	Stalled

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
23	Second Well Development & New 1.0 MG Tank	Water	\$10.0	\$10.0	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
24	NEW 1.0-MG Reservoir on DHHL	Water	\$4.4	\$4.4	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
25	Off-Site B	Sewer	\$10.0	\$10.0	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
26	Phase 2 Roadway	Road	\$6.7	\$6.7	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
27	Phase 3 Roadway	Road	\$9.6	\$9.6	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
28	Phase 4 Roadway	Road	\$5.2	\$5.2	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
29	Phase 5 Roadway	Road	\$10.6	\$10.6	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
30	Phase 6 Roadway	Road	\$10.7	\$10.7	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
31	Phase 7 Roadway	Road	\$0.3	\$0.3	N/A	Would enable project advancement	Project-specific infrastructure	Stalled

#	PROJECT NAME	TYPE OF INFRASTRUCTURE	CAPITAL COST (\$M)	TOTAL UNFUNDED (\$M)	SOURCES OF FUNDING IDENTIFIED	RELATION TO AFFORDABLE HOUSING NEEDS	PURPOSE	STAGE
32	Park	Park	\$0.5	\$0.5	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
33	North Preserve & No Development Area	Park	\$0.3	\$0.3	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
34	Widening of Palani Road/Queen Kaahumanu Hwy	Park	\$0.4	\$0.4	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
35	Construction of Road D / Ane K Hwy	Road	\$0.1	\$0.1	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
36	Manawalea St/Ane Keohokalole Hwy Signalized Intersection	Road	\$0.5	\$0.5	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
37	Makala Blvd (Road A) /Ane K Hwy -	Road	\$11.4	\$11.4	N/A	Would enable project advancement	Project-specific infrastructure	Stalled
38	Palani Rd / Ane K Hwy	Road	\$10.0	\$10.0	N/A	Would enable project advancement	Project-specific infrastructure	Stalled

N/A = Not Available