STATE TOD PLANNING & IMPLEMENTATION FOR THE ISLAND OF O‘AHU

TOD COUNCIL REPORT BACK
Tuesday, February 11, 2020
HCDA Community Room

OFFICE OF PLANNING
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, & TOURISM

PBR HAWAII & ASSOCIATES, INC.
dta WWW.FINANCEDTA.COM
R. M. TOWILL CORPORATION SINCE 1930
CALLISONRTKL FEHR PEERS ARUP

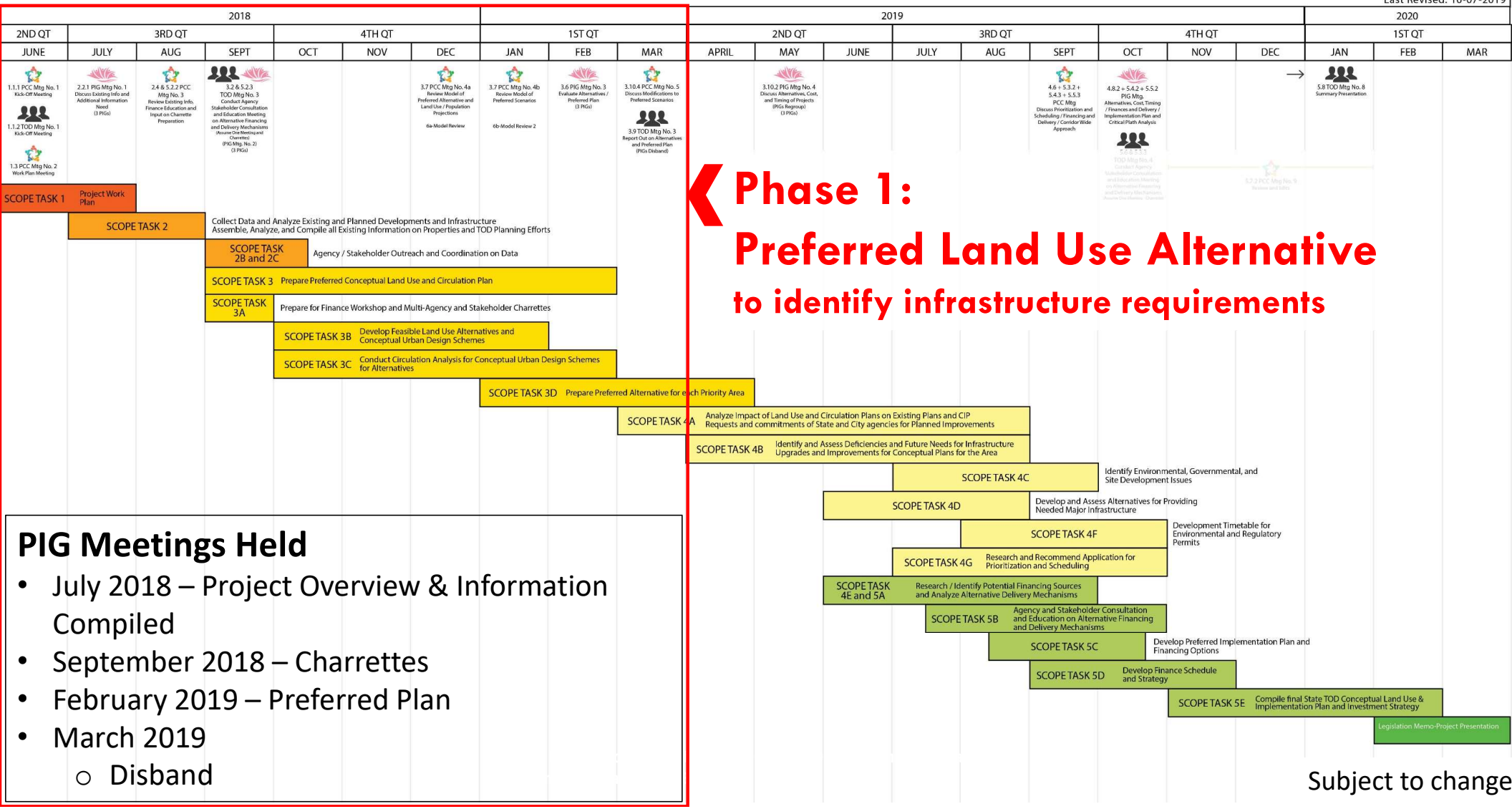
Project Purposes

- Coordinate approach between all stakeholders
- Coordinate regional infrastructure investments
- Identify source(s) of financing and best practices for TOD Implementation
- Consider incentives for landowner participation
- Identify sustainable development practices

OP TOD INFRASTRUCTURE MASTER PLAN PROJECT SCHEDULE*

= Project Coordinating Committee = TOD Council = Permitted Interaction Group

Last Revised: 10-07-2019



Phase 1:
Preferred Land Use Alternative
to identify infrastructure requirements

PIG Meetings Held

- July 2018 – Project Overview & Information Compiled
- September 2018 – Charrettes
- February 2019 – Preferred Plan
- March 2019
  - Disband

Subject to change

Phase 1: Meetings Held

Group	Date(s)	Topics Covered
Project Coordinating Committee (PCC)	• June 1, 2018 • June 22, 2018 • August 16, 2018 • September 21, 2018 • November 2, 2018 • December 4, 2018 and January 23, 2019	• Kick-off meeting • Work Plan • Charrette Preparation • Charrette Summary • Project Boundary • Land Use Scenario Review – PIG 3
Permitted Interaction Groups (PIGs)	• July 12 – 20, 2018 • July 30, 2018 • September 20 & 21, 2018 • **February 26, 2019**	• Info Compiled to Date • Farrington Widening • Charrettes • **Preferred Conceptual Land Use Scenario**

OP TOD INFRASTRUCTURE MASTER PLAN PROJECT SCHEDULE*

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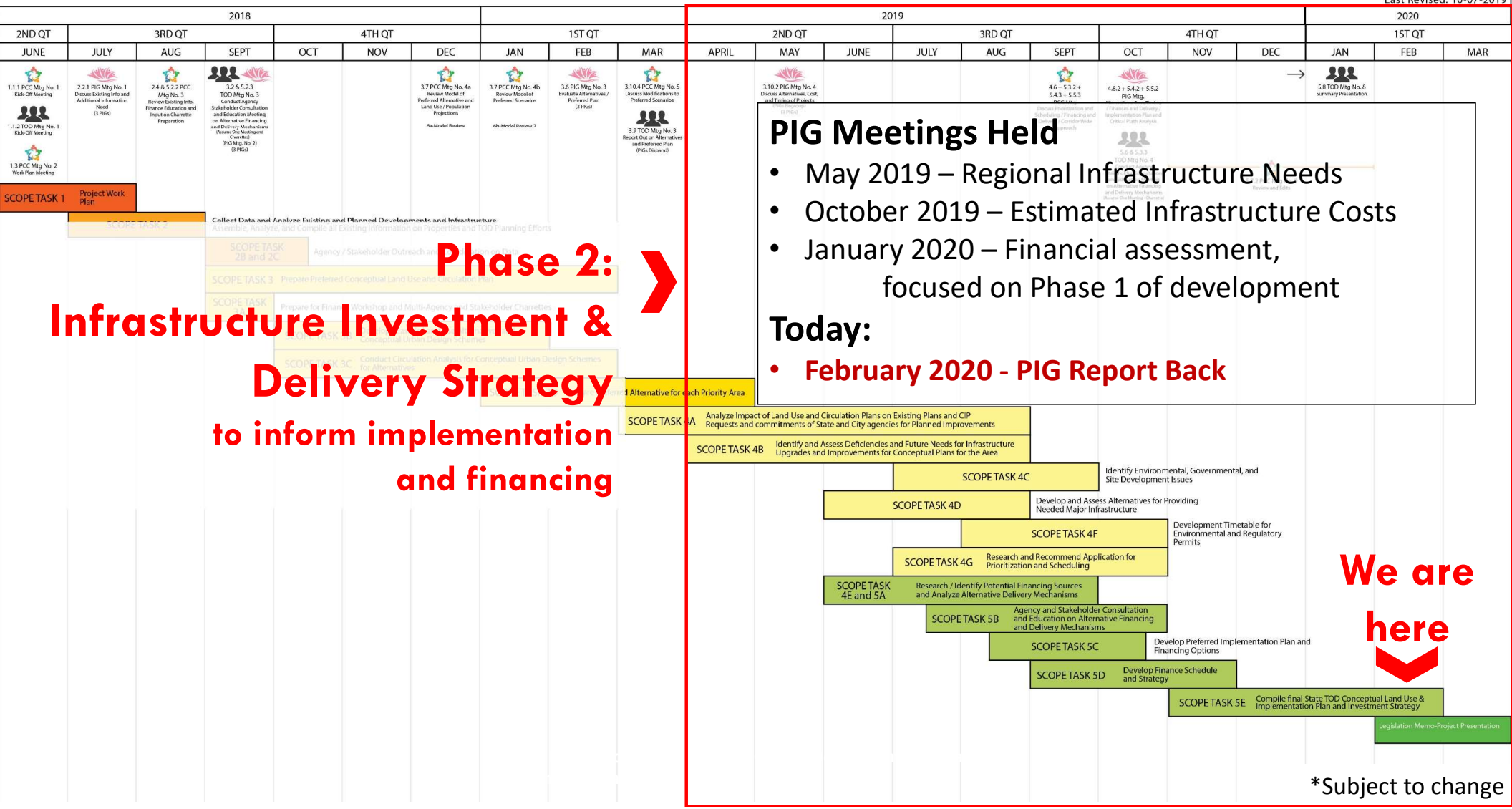


Phase 2:
Infrastructure Investment & Delivery Strategy
to inform implementation and financing

PIG Meetings Held

- May 2019 – Regional Infrastructure Needs
- October 2019 – Estimated Infrastructure Costs
- January 2020 – Financial assessment, focused on Phase 1 of development

Today:

- **February 2020 - PIG Report Back**

We are here

*Subject to change

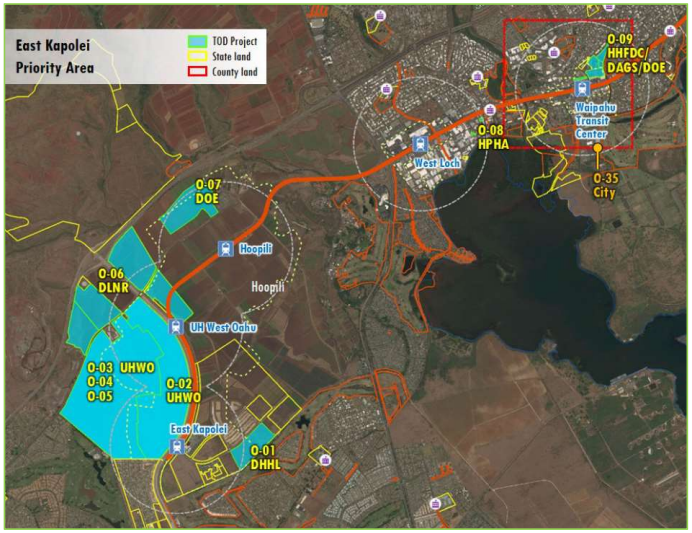
Phase 2: Meetings Held to Date

Group	Date(s)	Topics Covered
Project Coordinating Committee (PCC)	• May 13, 2019 • August 30, 2019 • September 5, 2019 • January 7, 2020	• Alternatives / Costs / Timing of Infrastructure Projects • Infrastructure Financing • Sequencing • Financing / Funding Tools and Options
Permitted Interaction Groups (PIGs)	• May 23, 2019 • October 8-11, 2019 • **January 14-15, 2020**	• Alternatives / Costs / Timing of Infrastructure Projects • Sequencing and Financing / Funding Tools and Options • **Financing / Funding Tools, Potential Yields, and Recommendations**

TOD Opportunities and Study Efforts

TOD Opportunities:
State Lands Along the Rail

Priority Areas:



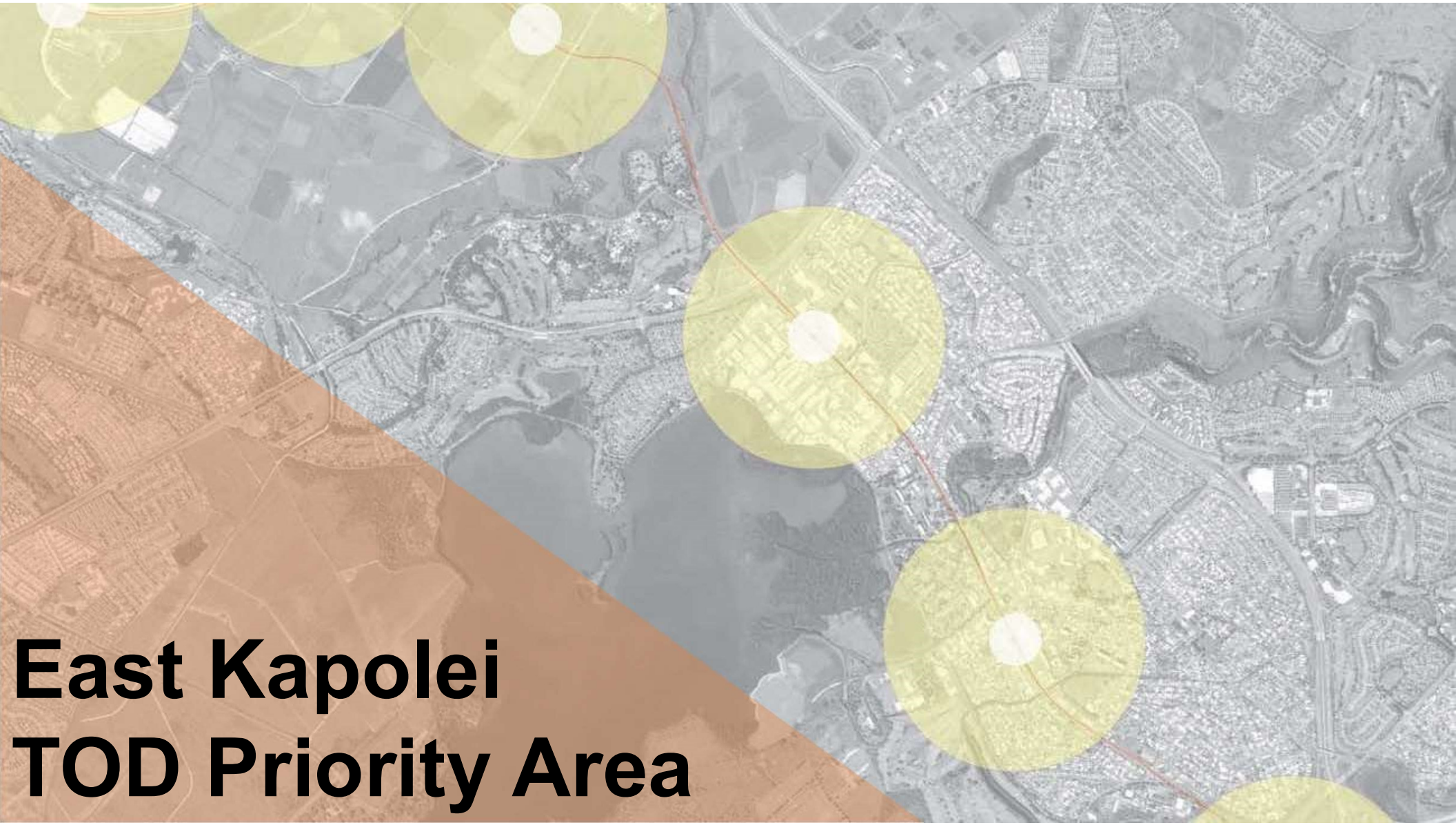
East Kapolei

Hālawa-Stadium

Iwilei-Kapālama

Priority Areas and State Goals

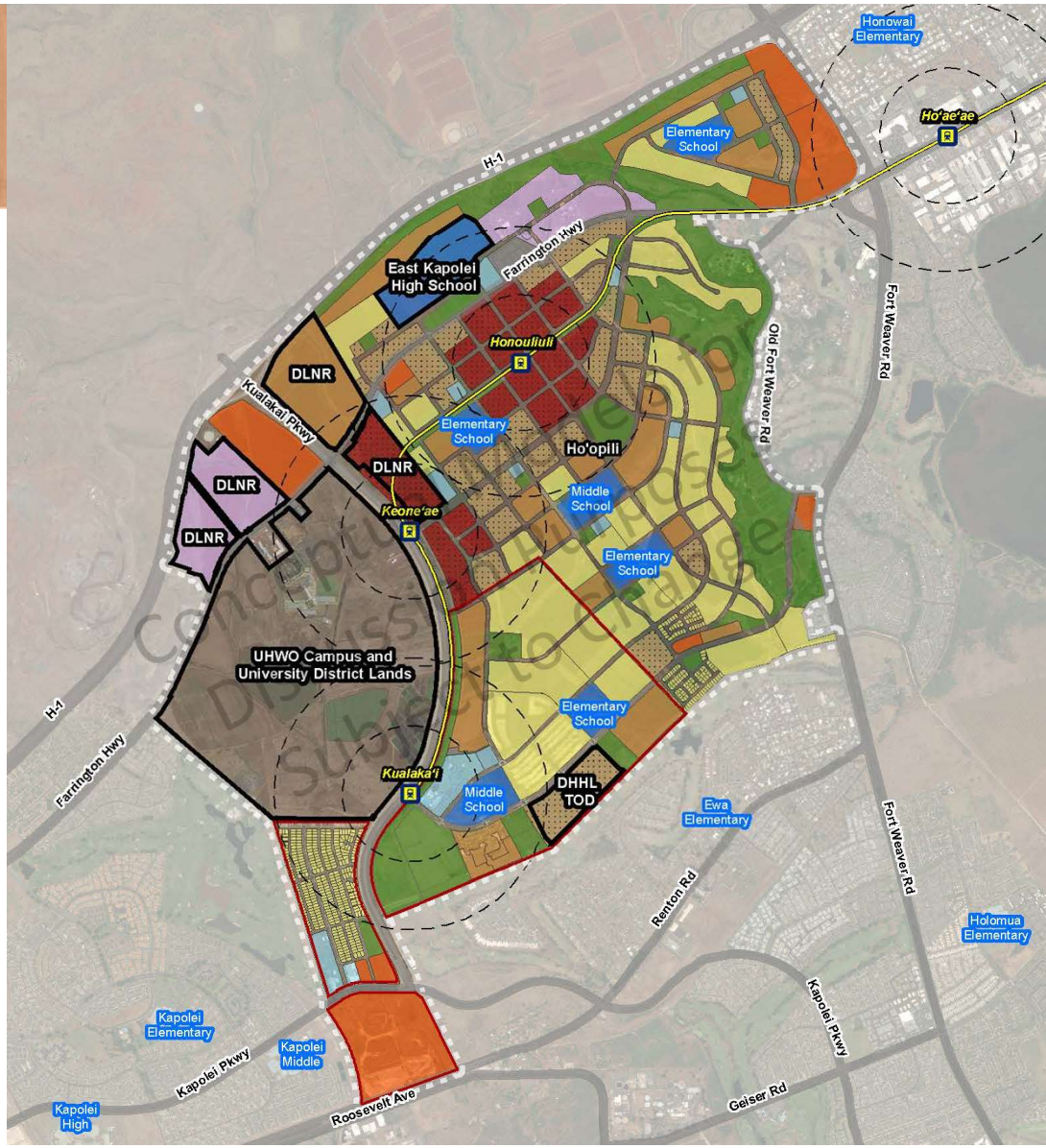
- 47,000+ new/rebuilt homes, disproportionally affordable
- New and improved community facilities
- New Aloha Stadium Entertainment District (NASED)
- Revenues for mission driven agencies
- Connection to employment centers
- Reduced transportation costs, congestion, and energy consumption
- Preservation of ag lands and Keep The Country Country!!
- Value created in Phase 1 alone exceeds $10.3B in 2019 dollars



East Kapolei
TOD Priority Area

Preferred Alternative: East Kapolei

- ✓ Proceed with current conceptual land use scenarios for each of the various landowners
- ✓ Improve currently planned connections/intersections



Preferred Alternative: East Kapolei Anticipated Development Model

	Residential (Units)	Commercial (SF)	Industrial (SF)	Hotel (rooms)
Existing	840	1,990,000	0	0
Phase 1: Additional (0-10 Years)	9,740	3,460,000	1,190,000	180
Phase 2: Additional (11-20 Years)	6,740	1,770,000	1,150,000	~190
Phase 3: Additional (20-40+ Years)	1,640	1,100,000	490,000	Possibly another
Total Anticipated Buildout*	**18,960**	**8,320,000**	**2,830,000**	~370

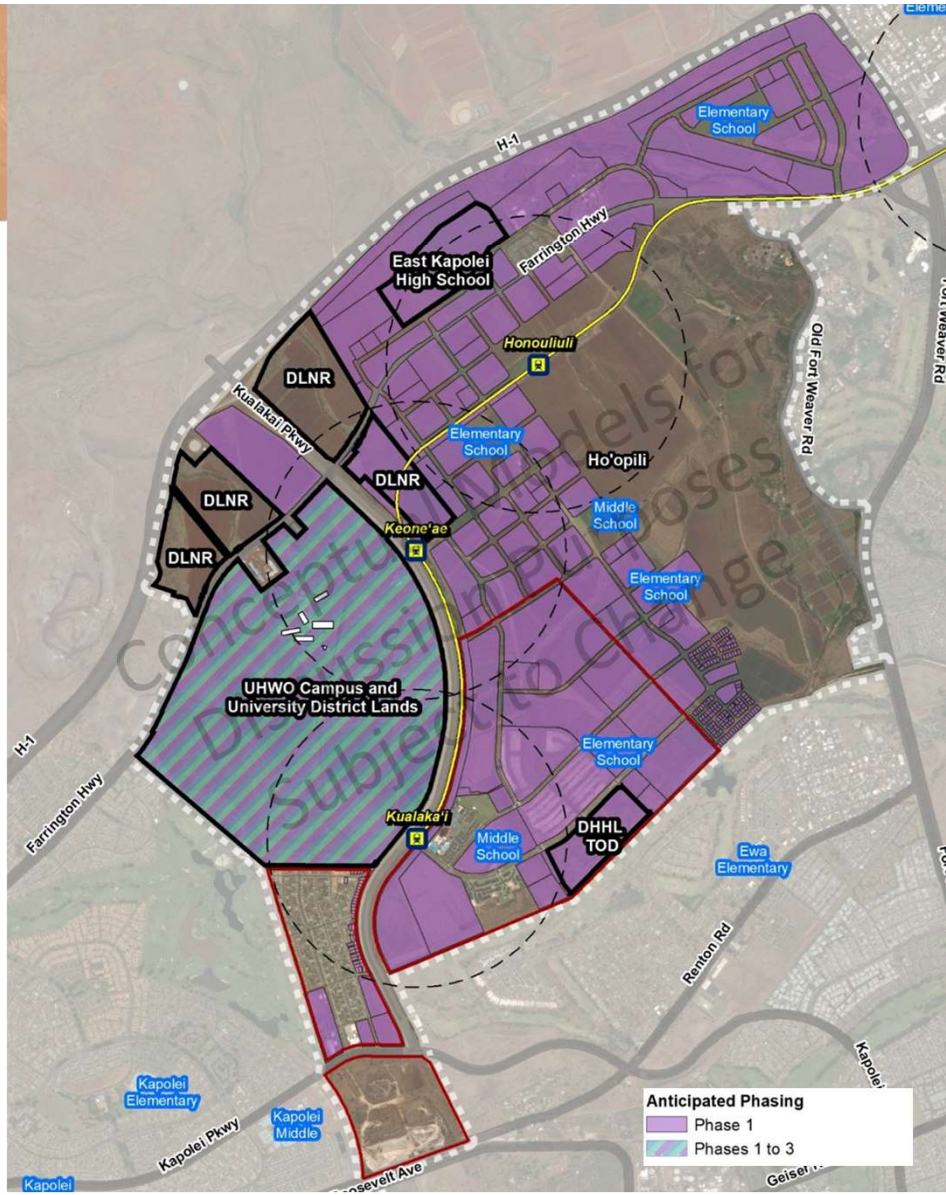
*Development estimates subject to change. Includes existing inventories.

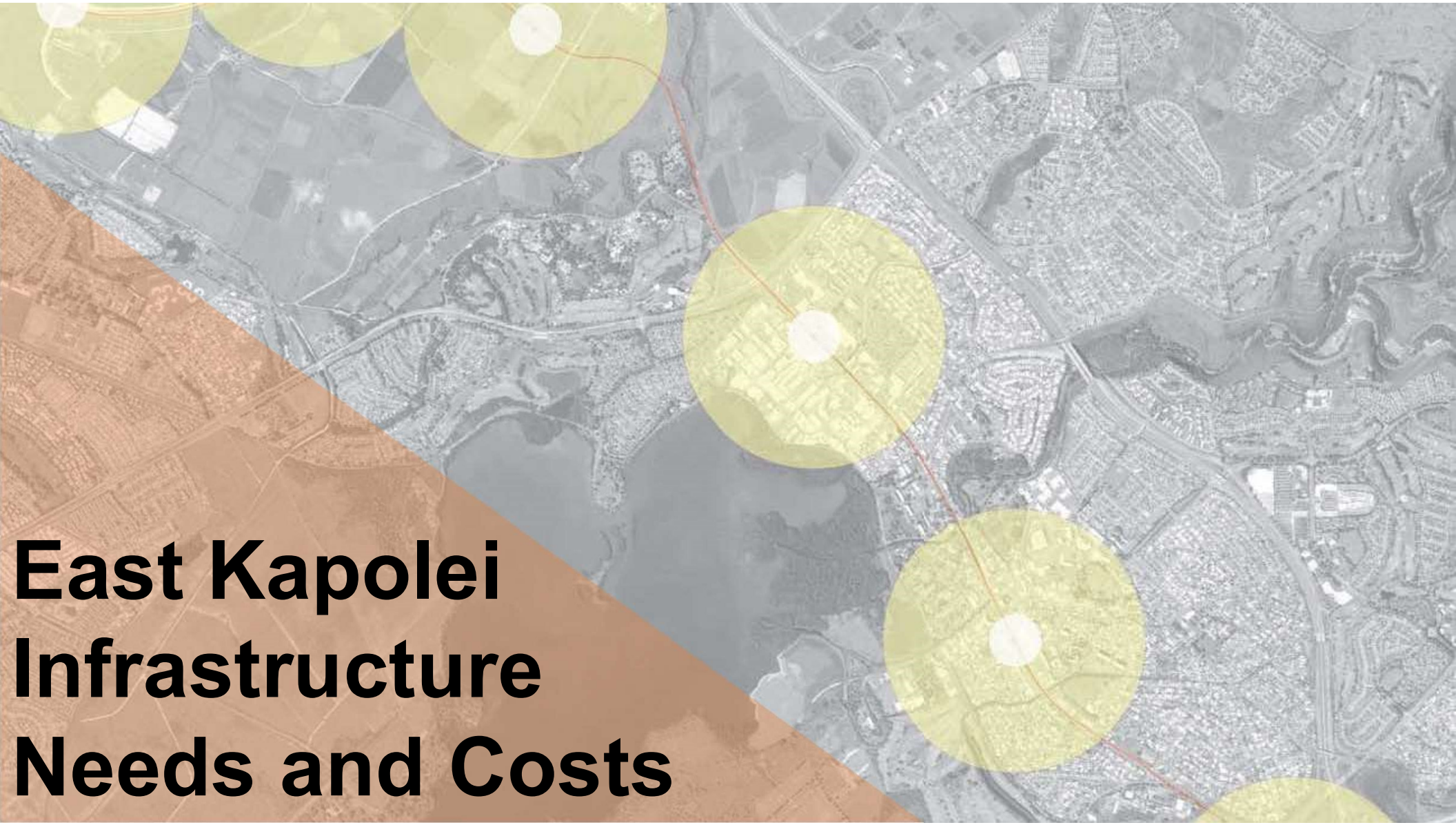
East Kapolei: Phase 1 Plan
(2020-2029)

Net new development*

- Residential – 9,740 homes
- Commercial/Mixed-Use – 3.46 million SF
- Hotel – 180 rooms
- Industrial – 1.19 million SF
- Schools

* Figures based on preferred plans by agency and other stakeholders and represent new facilities NET OF existing facilities expected to be demolished.



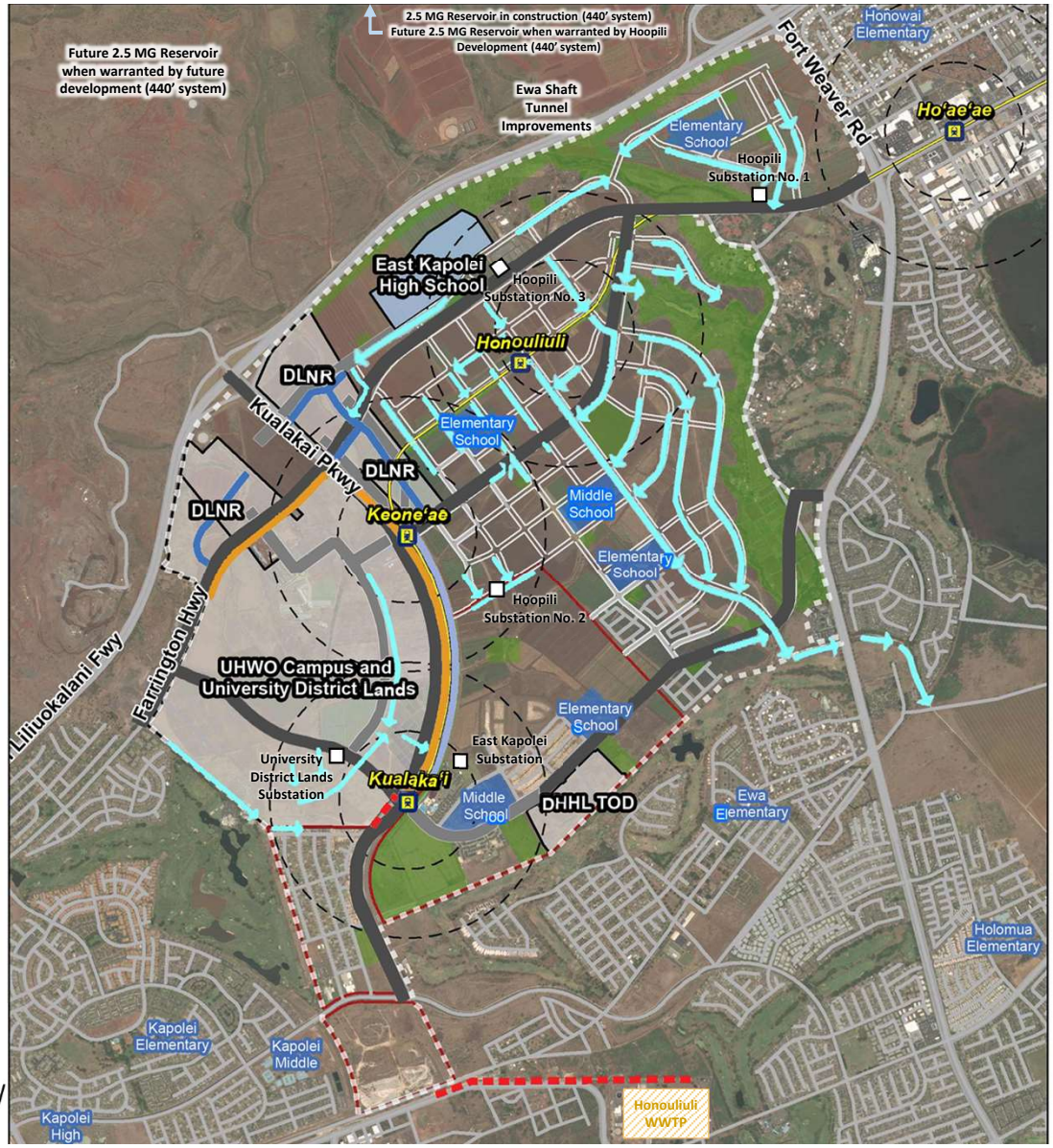


East Kapolei Infrastructure Needs and Costs

EAST KAPOLEI STATE LANDS: NEW-UPGRADED FACILITIES

Legend

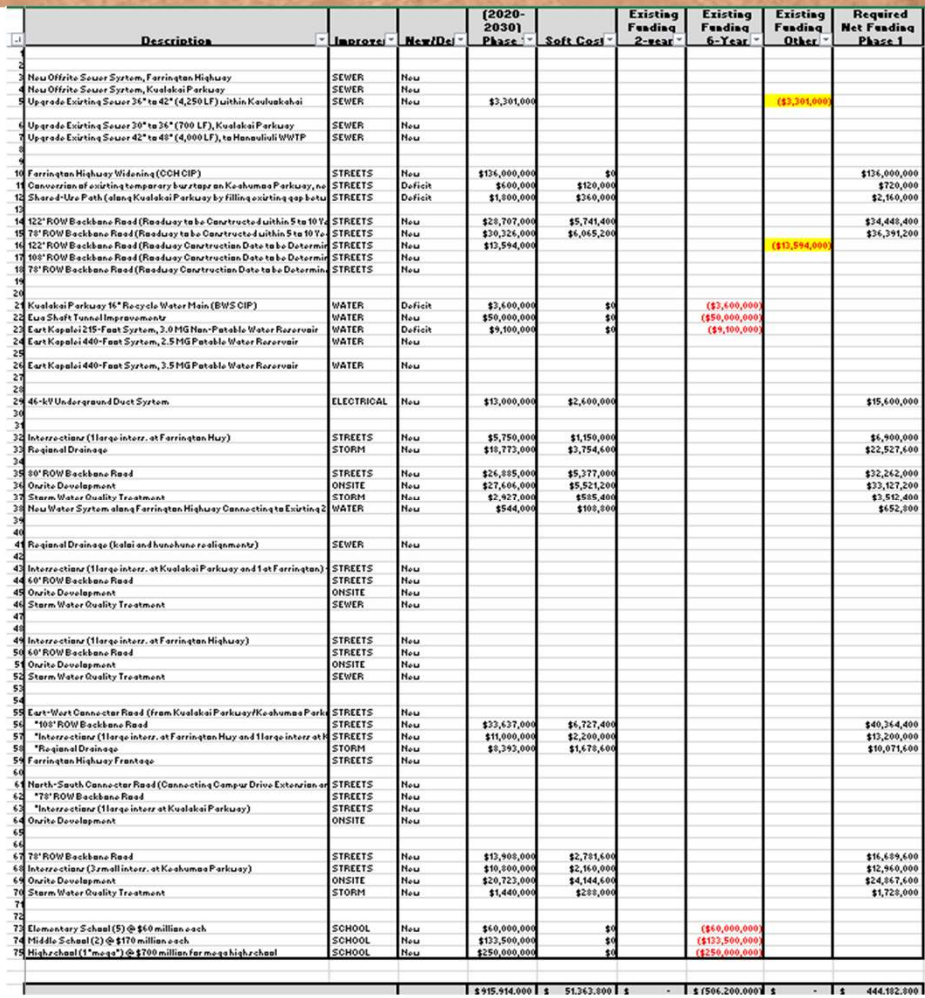
- Future Rail Stations
- Rail Line
- State Parcels
- State TOD Projects
- Proposed Electrical Substation
- New Sewer Line
- Upgraded Sewer Line
- New Water Lines
- Non-Potable Water Improvements
- Drain Lines (Future)
- Regional Corridors for Development Support
- Multi-Modal Connection (including sidewalks/ separated pathways and/or bicycle lanes/cycle tracks/ multi-use pathways)



East Kapolei – Total Regional and Regional-Project Costs by Phase (2019 dollars, in millions)

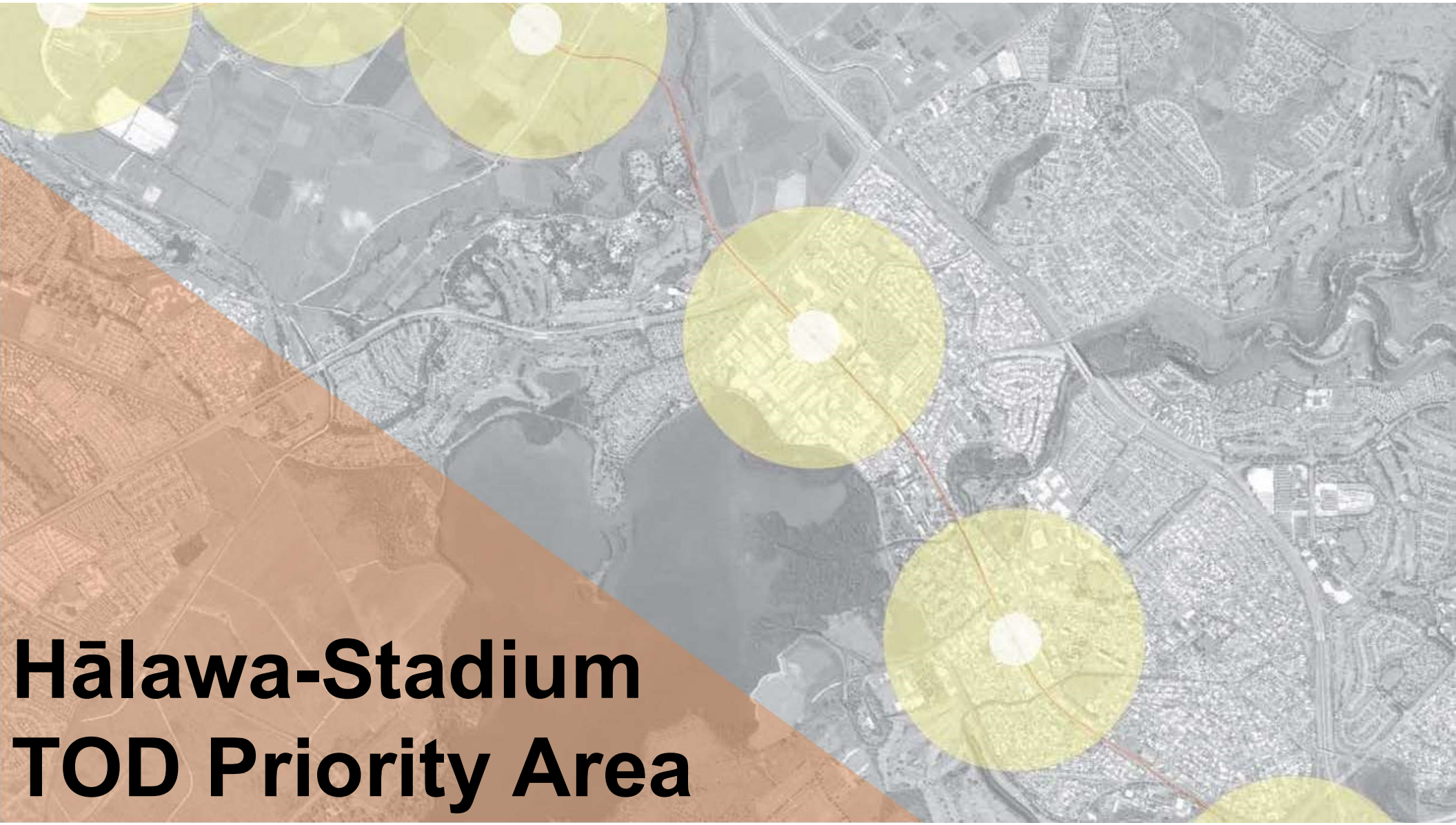
Phase 1	Phases 2-3	Total
$969.4	$1,683.1	**$2,652.6**

- Developed from detailed analysis from engineering consultant based on preferred plans, existing, needed, and deficit infrastructure
- $729.5 million funding already committed to Phase 1 projects



Description	Improvement	New/Def	(2020-2030) Phase	Soft Cost	Existing Funding 2-year	Existing Funding 6-Year	Existing Funding Other	Required Net Funding Phase 1
New Offsite Sewer System, Farrington Highway	SEWER	New						
New Offsite Sewer System, Kualakai Parkway	SEWER	New						
Upgrade Existing Sewer 36" to 42" (4,250 LF) within Kaulualehai	SEWER	New	$3,301,000				($3,301,000)	
Upgrade Existing Sewer 30" to 36" (700 LF), Kualakai Parkway	SEWER	New						
Upgrade Existing Sewer 42" to 48" (4,000 LF), to Honouliuli WWTP	SEWER	New						
Farrington Highway Widening (CCH CIP)	STREETS	New	$136,000,000	$0				$136,000,000
Conversion of existing temporary bus stops on Keahumoa Parkway, no	STREETS	Deficit	$600,000	$120,000				$720,000
Shared-Use Path (along Kualakai Parkway by filling existing gap betw	STREETS	Deficit	$1,800,000	$360,000				$2,160,000
122' ROW Backbone Road (Roadway to be Constructed within 5 to 10 Y	STREETS	New	$28,707,000	$5,741,400				$34,448,400
78' ROW Backbone Road (Roadway to be Constructed within 5 to 10 Ye	STREETS	New	$30,326,000	$6,065,200				$36,391,200
122' ROW Backbone Road (Roadway Construction Date to be Determir	STREETS	New	$13,594,000				($13,594,000)	
108' ROW Backbone Road (Roadway Construction Date to be Determir	STREETS	New						
78' ROW Backbone Road (Roadway Construction Date to be Determine	STREETS	New						
Kualakai Parkway 16" Recycle Water Main (BWS CIP)	WATER	Deficit	$3,600,000	$0		($3,600,000)		
Exis Shaft Tunnel Improvements	WATER	New	$50,000,000	$0		($50,000,000)		
East Kapolei 215-Feet System, 3.0 MG Non-Potable Water Reservoir	WATER	Deficit	$9,100,000	$0		($9,100,000)		
East Kapolei 440-Feet System, 2.5 MG Potable Water Reservoir	WATER	New						
East Kapolei 440-Feet System, 3.5 MG Potable Water Reservoir	WATER	New						
46-kV Underground Duct System	ELECTRICAL	New	$13,000,000	$2,600,000				$15,600,000
Intersections (1 large interx. at Farrington Hwy)	STREETS	New	$5,750,000	$1,150,000				$6,900,000
Regional Drainage	STORM	New	$18,773,000	$3,754,600				$22,527,600
80' ROW Backbone Road	STREETS	New	$26,885,000	$5,377,000				$32,262,000
Onsite Development	ONSITE	New	$27,606,000	$5,521,200				$33,127,200
Storm Water Quality Treatment	STORM	New	$2,927,000	$585,400				$3,512,400
New Water System along Farrington Highway Connecting to Existing 2	WATER	New	$544,000	$108,800				$652,800
Regional Drainage (kolai and hunehune realignments)	SEWER	New						
Intersections (1 large interx. at Kualakai Parkway and 1 at Farrington)	STREETS	New						
60' ROW Backbone Road	STREETS	New						
Onsite Development	ONSITE	New						
Storm Water Quality Treatment	SEWER	New						
Intersections (1 large interx. at Farrington Highway)	STREETS	New						
60' ROW Backbone Road	STREETS	New						
Onsite Development	ONSITE	New						
Storm Water Quality Treatment	SEWER	New						
East-West Connector Road (from Kualakai Parkway/Keahumoa Park	STREETS	New						
*108' ROW Backbone Road	STREETS	New	$33,637,000	$6,727,400				$40,364,400
*Intersections (1 large interx. at Farrington Hwy and 1 large interx at K	STREETS	New	$11,000,000	$2,200,000				$13,200,000
*Regional Drainage	STORM	New	$8,393,000	$1,678,600				$10,071,600
Farrington Highway Frontage	STREETS	New						
North-South Connector Road (Connecting Campus Drive Extension at	STREETS	New						
*78' ROW Backbone Road	STREETS	New						
*Intersections (1 large interx at Kualakai Parkway)	STREETS	New						
Onsite Development	ONSITE	New						
78' ROW Backbone Road	STREETS	New	$13,908,000	$2,781,600				$16,689,600
Intersections (3 small interx. at Keahumoa Parkway)	STREETS	New	$10,800,000	$2,160,000				$12,960,000
Onsite Development	ONSITE	New	$20,723,000	$4,144,600				$24,867,600
Storm Water Quality Treatment	STORM	New	$1,440,000	$288,000				$1,728,000
Elementary School (5) @ $60 million each	SCHOOL	New	$60,000,000	$0		($60,000,000)		
Middle School (2) @ $120 million each	SCHOOL	New	$120,500,000	$0		($120,500,000)		
High school (1 mega*) @ $200 million for mega high school	SCHOOL	New	$250,000,000	$0		($250,000,000)		
			$ 915,914,000	$ 51,363,000	$ -	$ (506,200,000)	$ -	$ 444,102,000

*Note: This table does not include onsite project infrastructure.
** Subject to change based on UHWO Mauka MP demand.



Hālawa-Stadium TOD Priority Area

Preferred Alternative: Hālawa-Stadium

- ✓ Stadium redevelopment on site with additional ancillary mixed-use development
- ✓ Pu‘uwai Momi at maxed out density
- ✓ Additional public-school capacity
- ✓ Assume OCCC relocates to Hālawa

Preferred Alternative: Hālawa-Stadium Anticipated Development Model

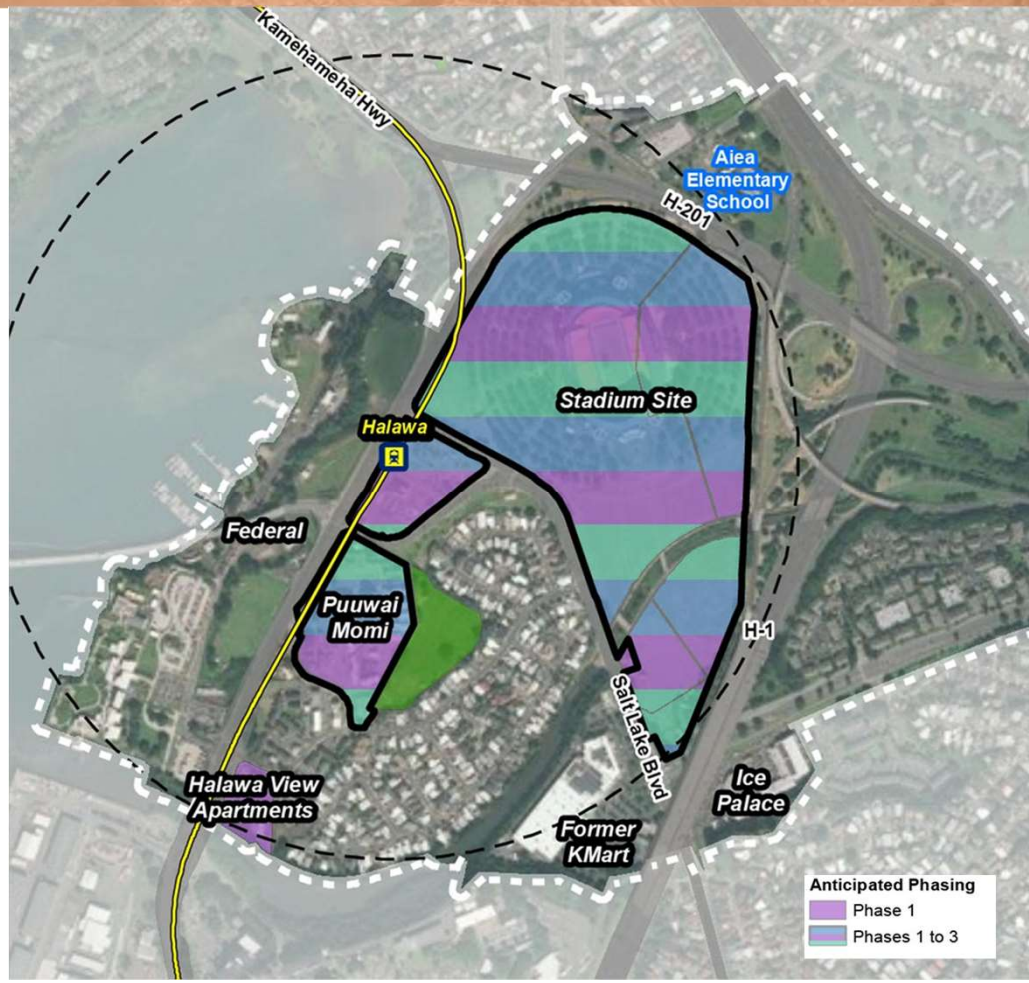
	Residential (Units)	Commercial (SF)	Industrial (SF)	Hotel (rooms)
Existing	1,140	---	0	0
Phase 1: Additional (0-10 Years)	1,400	333,000	0	~230
Phase 2: Additional (11-20 Years)	1,940	413,500	0	0
Phase 3: Additional (20-40+ Years)	2,590	973,500	0	0
Total Anticipated Buildout*	**7,070**	**1,720,000**	**0**	**~230**

*Development estimates subject to change. Includes existing inventories.

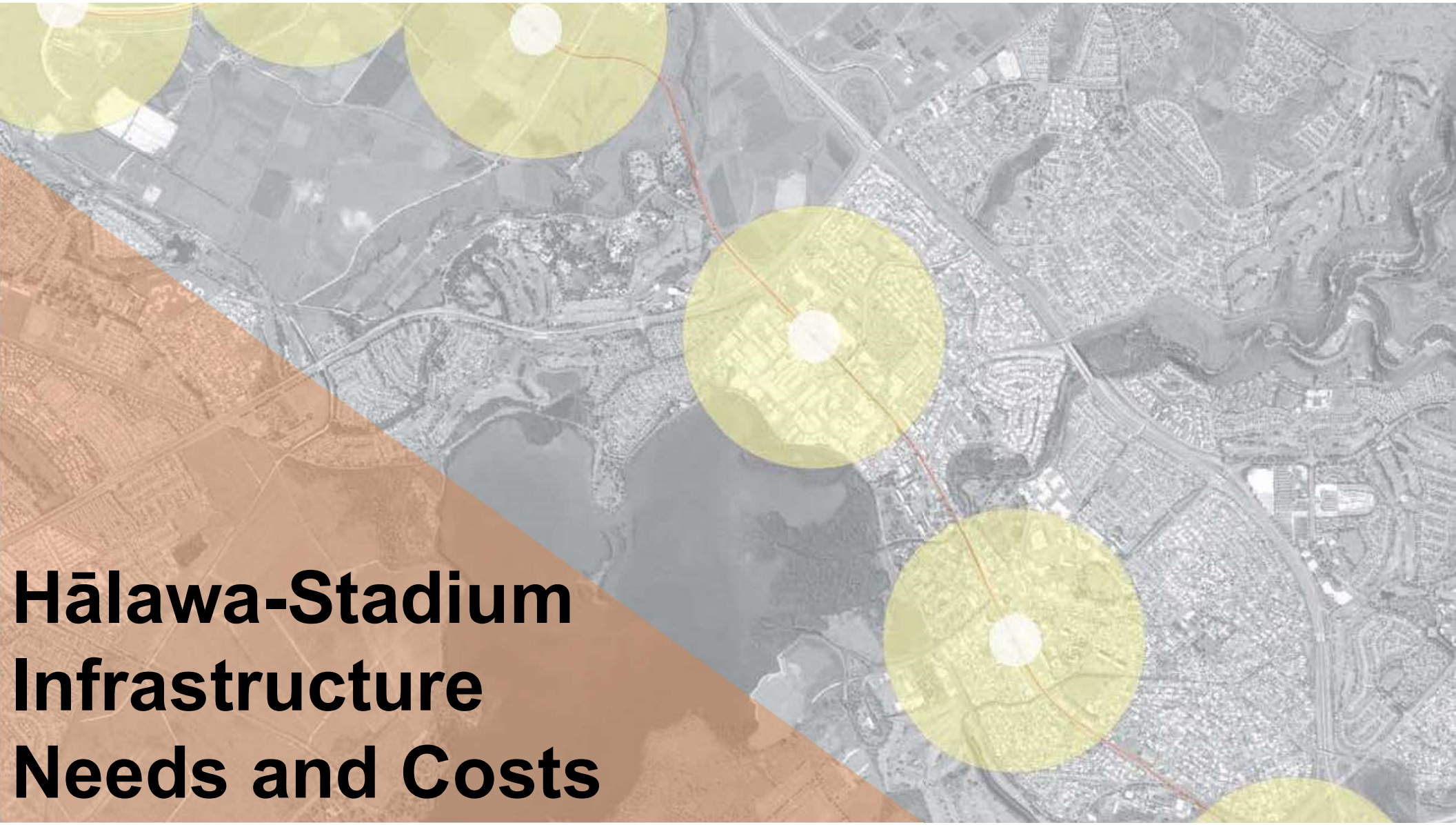
Hālawa-Stadium: Phase 1 Plan (2020-2029)

Net new development*

- Residential – 1,400 homes
- Commercial/Mixed-Use – 0.3 million SF
- Hotel – 230 rooms
- New stadium – 35,000 seats

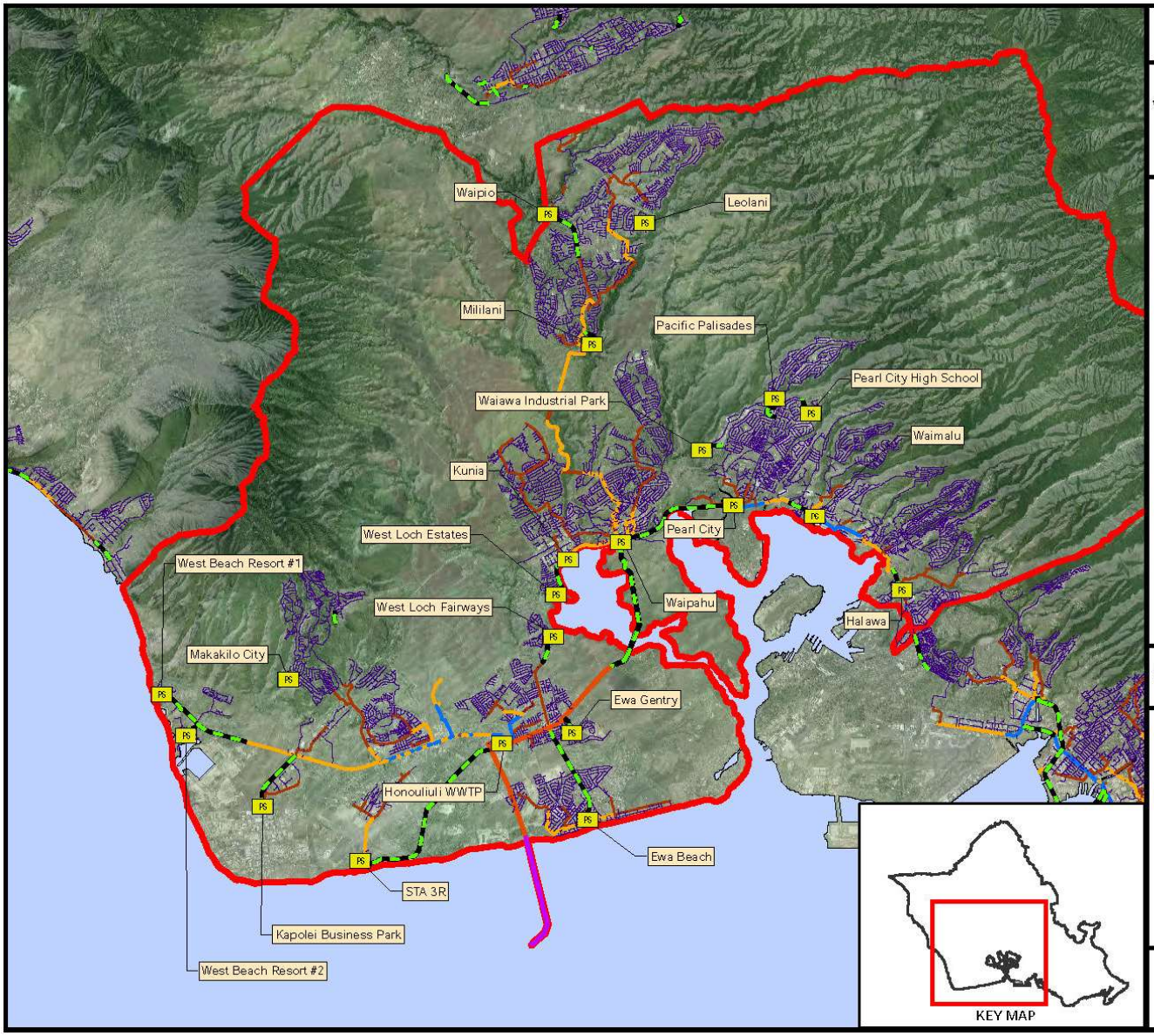


* Figures based on preferred plans by agency and other stakeholders and represent new facilities NET OF existing facilities expected to be demolished.



Hālawa-Stadium Infrastructure Needs and Costs

HĀLAWA-STADIUM STATE LANDS: WASTEWATER FACILITIES PLAN



City and County of Honolulu

HONOULIULI/ WAIPAHU/ PEARL CITY WASTEWATER FACILITIES PLAN

Legend
- Honouliuli Basin
- PS Pump Station
- Force Main
- Sewer Main
- <= 16 inch
- 18-24 inch
- 28-36 inch
- 40-66 inch
- 68-78 inch
- 80-84 inch

0 12,000 Feet

1 inch = 12,000 feet

Task 4 D.1 TM
No Tunnel Alternatives For Conveyance And Storage

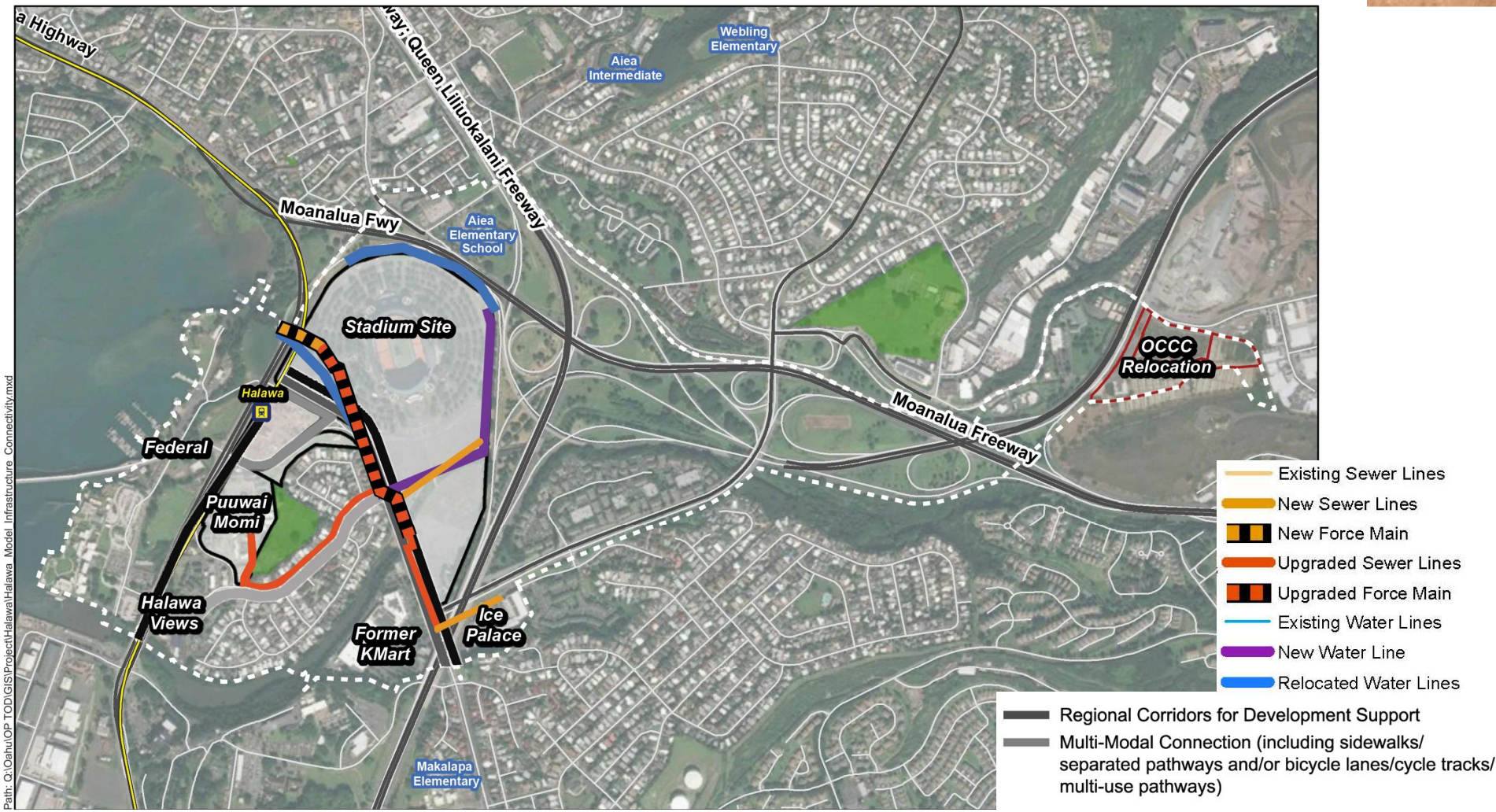
FIGURE 2-1

HONOULIULI BASIN EXISTING FACILITIES

October 2010

AECOM
1001 BISHOP ST, STE 1600
HONOLULU, HAWAII 96813

HĀLAWA-STADIUM STATE LANDS: NEW-UPGRADED FACILITIES



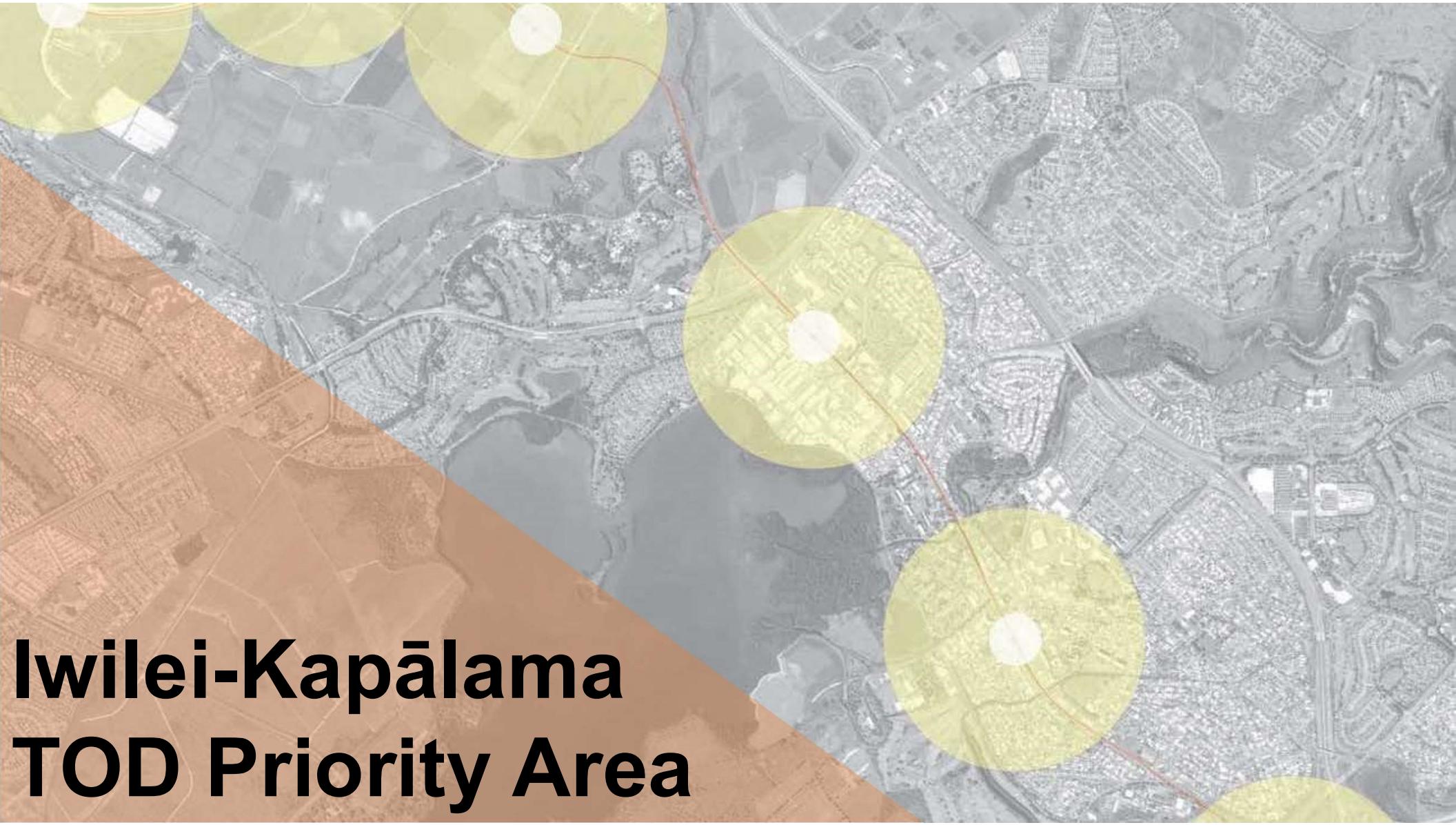
Hālawa Stadium – Total Regional and Regional-Project Costs by Phase (2019 dollars, in millions)

Phase 1	Phases 2-3	Total
$385.1	$662.0	**$1,047.1**

- Developed from detailed analysis from engineering consultant based on preferred plans, existing, needed, and deficit infrastructure
- $271.3 million funding already committed to Phase 1 projects

	Description	Improvemer	New/Deficit	(2020-2030) Phase 1	Soft Costs [1]	Existing Funding 2-year CIP	Existing Funding 6-Year CIP	Existing Funding Other	Required Net Funding Amount Phase 1 Costs
1									
2									
3	Halawa WWPS Force Main System Improvements (CCH CIP)	SEWER	Deficit	$4,600,000	$0	($4,600,000)			$0
4	Hālawa WWPS (New from PER), Const 2032-2036	SEWER	New		$0				$0
5	Hālawa FM (New from PER), Const 2031-2034	SEWER	New		$0				$0
6	Pearl City WWPS, Force Main, and Sewer System Alternative	SEWER	Deficit	$16,800,000	$0	($16,800,000)			$0
7	Waipahu WWPS Force Main (Proposed New 3rd FM for Waipahu WWPS, CCH C	SEWER	Deficit	$65,000,000	$13,000,000			($78,000,000)	$0
8	Waipahu WWPS Force Mains Rehabilitation (Rehabilitation of Existing Dual FM	SEWER	Deficit	$45,200,000	$0	($800,000)	($44,400,000)		$0
9	Pearl City/Waipahu Sewer Tunnel (Proposed New Trenchless Gravity Line from	SEWER	Deficit						$0
10	Pearl City/Waipahu Tunnel WWPS (Proposed New WWPS by Waipahu to Recei	SEWER	New	$16,700,000	$3,340,000			($20,040,000)	$0
11	Pearl City and Waimalu Trunk Sewers to Provide Capacity between Pearl City a	SEWER	New						$0
12	Waimalu WWPS Force Main (New)	SEWER	New						$0
13	Waimalu WWPS Reconstruct/Replace	SEWER	New				$0		$0
14	Temporary WWTP for Phase 1	SEWER	New	$15,000,000				($15,000,000)	$0
15									$0
16	Relocation and Upgrade of Existing Sewer (with New School in Puuwai Momi p	SEWER	New	$7,554,000	$1,510,800				$9,064,800
17									$0
18									$0
19	Modify the section of Salt Lake Blvd. between Kamehameha Hwy and Puuloa R	STREETS	New	$360,000	$72,000				$432,000
20	Off-street shared use path on the mauka side of Salt Lake Blvd. between Kame	STREETS	New	$6,000,000	$1,200,000				$7,200,000
21	Off-street shared use path on the Diamond Head side of Kamehameha Hwy fro	STREETS	New	$4,800,000	$960,000				$5,760,000
22	Traffic calming on Kalaloa Street.	STREETS	New	$600,000	$120,000				$720,000
23	Salt Lake Blvd Widening (CCH CIP)	STREETS	New	$93,300,000	$0		($86,560,000)		$6,740,000
24									$0
25	Complete Street	STREETS	New	$20,000,000	$4,000,000				$24,000,000
26	Elevated Pedestrian Crossings (3)	STREETS	New	$11,000,000	$2,200,000				$13,200,000
27									$0
28									$0
29	Halawa Stream Dredging (Sediment is built up in Halawa Stream and dredging	STORM	Deficit	$5,100,000	$1,020,000	($750,000)			$5,370,000
30									$0
31									$0
32	Salt Lake Boulevard 36" Main - Foster Village to Aliamanu (525 feet South of M	WATER	New	$4,300,000	$0	($4,300,000)			$0
33	Relocation and Upgrade of Existing Water Main	WATER	New						$0
34	Relocation and Upgrade of Existing Water Main (IF existing doesn't remain wit	WATER	New	$0	$0				$0
35									$0
36									$0
37	46-kV Underground Duct System	ELECTRICAL	New	$11,000,000	$2,200,000				$13,200,000
38									$0
39									$0
40	84' ROW Backbone Road, from Salt Lake Blvd Intersection to Kamehameha Hwy	STREETS	New	$9,104,000				$0	$9,104,000
41	Intersections (1 large inters. at Kamehameha Hwy)	STREETS	New	$6,000,000				$0	$6,000,000
42	116' ROW Salt Lake Blvd Realignment	STREETS	Deficit	$0	$0				$0
43	Intersections (1 large inters conn. at Salt Lake Blvd/Kamehameha Hwy)	STREETS	Deficit	$6,000,000	$1,200,000				$7,200,000
44	78' ROW Road Connecting to Salt Lake Blvd	STREETS	Deficit						$0
45	Intersections (1 large inters. at Salt Lake Blvd and 1 large inters at Kamehameh	STREETS	Deficit	$12,000,000	$2,400,000				$14,400,000
46	Slip Ramp (from H-1 Freeway to Stadium Site, Length=1,200 LF)	STREETS	Deficit						$0
47	Pedestrian Bridge Improvements (Ped. Bridge Overpass at H-1 Freeway from S	STREETS	Deficit						$0
48									$0
86									
	TOTAL			$ 360,418,000	$ 33,222,800	$ (27,250,000)	$ (130,960,000)	$ (113,040,000)	$ 122,390,800

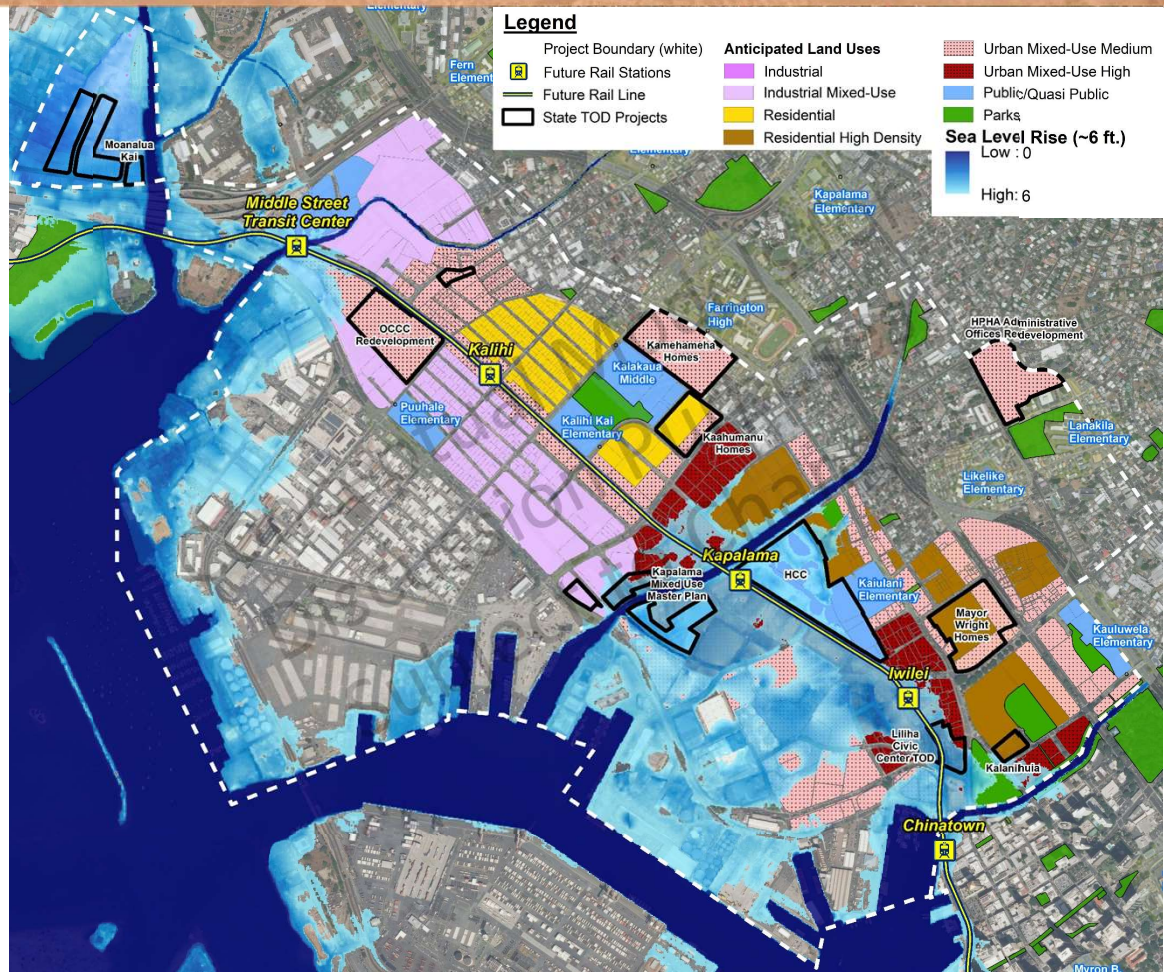
*Note: This table does not include onsite project infrastructure.
** Subject to change.



Iwilei-Kapālama TOD Priority Area

Preferred Alternative: Iwilei-Kapālama

- ✓ Baseline = TOD identified zoning without Sea Level Rise
- ✓ Order of magnitude costs for the region, based on Adaptation Pathway hypotheticals
- ✓ Additional public-school capacity: two 3-acre DOE sites
- ✓ Assume OCCC relocates to Hālawa and the property is rezoned for TOD



Preferred Alternative: Iwilei-Kapālama Anticipated Development Model

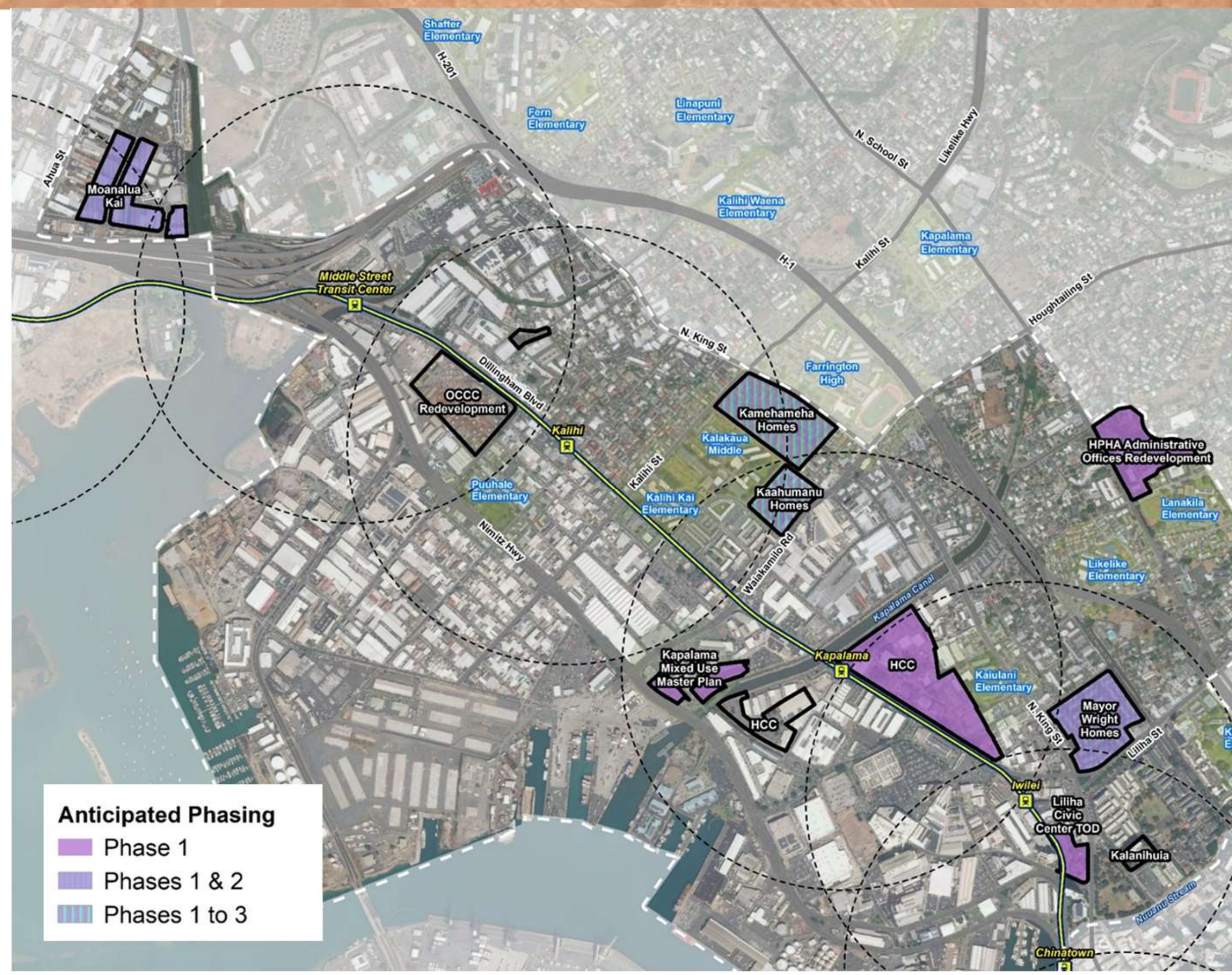
	Residential (Units)	Commercial (SF)	Industrial (SF)*
Existing	8,810	19,764,700	---
Phase 1: Additional (0-10 Years)	6,950	1,067,000	1,482,000
Phase 2: Additional (11-20 Years)	9,880	3,856,000	635,000
Phase 3: Additional (20-40+ Years)	6,030	2,986,000	0
Total Anticipated Buildout*	**24,870**	**20,037,300**	**2,117,000**

*Development estimates subject to change. Includes existing inventories.

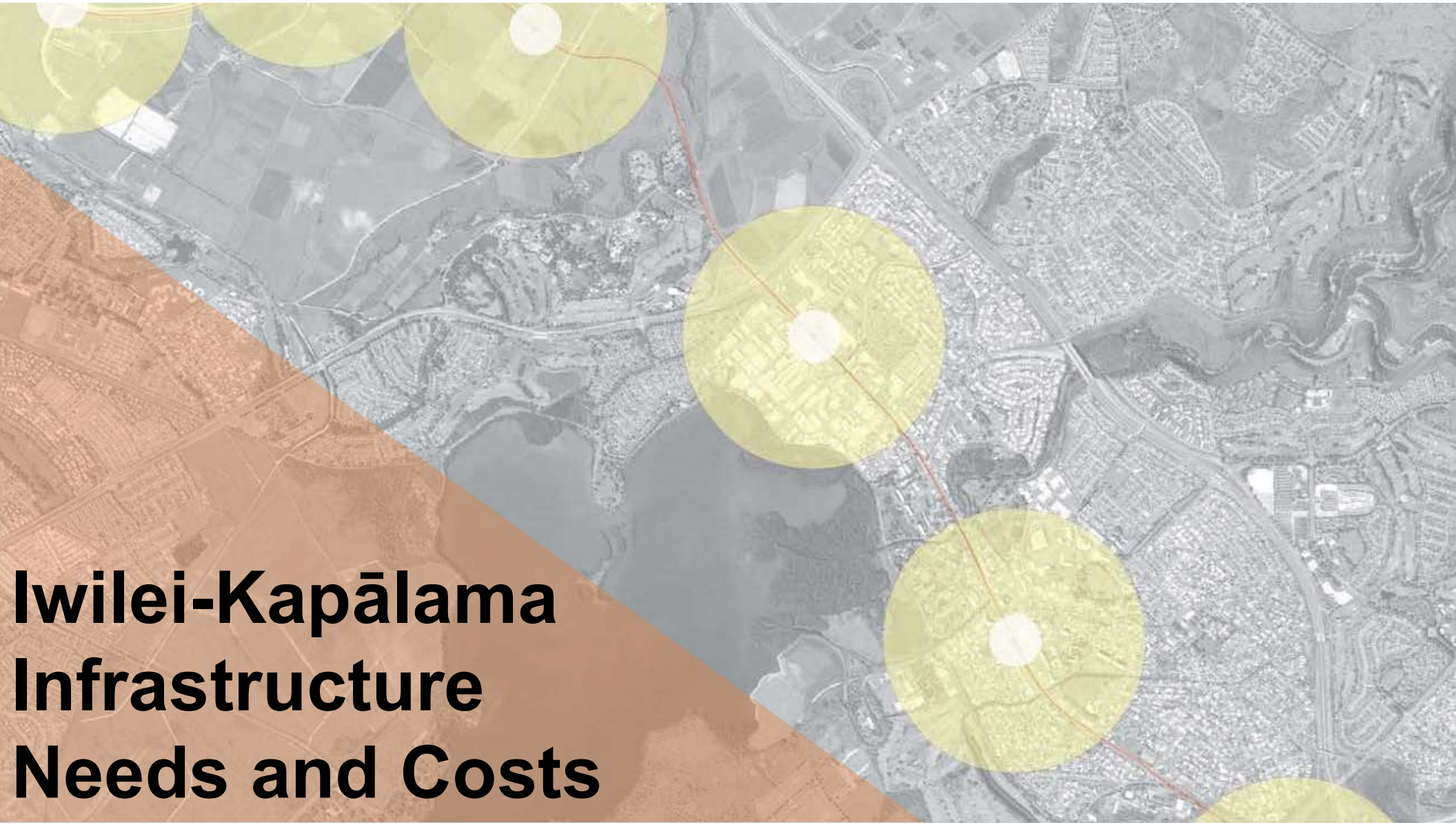
Iwilei-Kapalama: Phase 1 Plan (2020-2029)

Net new development*

- Residential – 3,400* homes
  - 4,500 total re/development
- Commercial – 0.5 million* SF
  - 0.9 million SF total re/development
- Industrial – (0.2) million* SF decline
  - 0.5 million SF total re/development

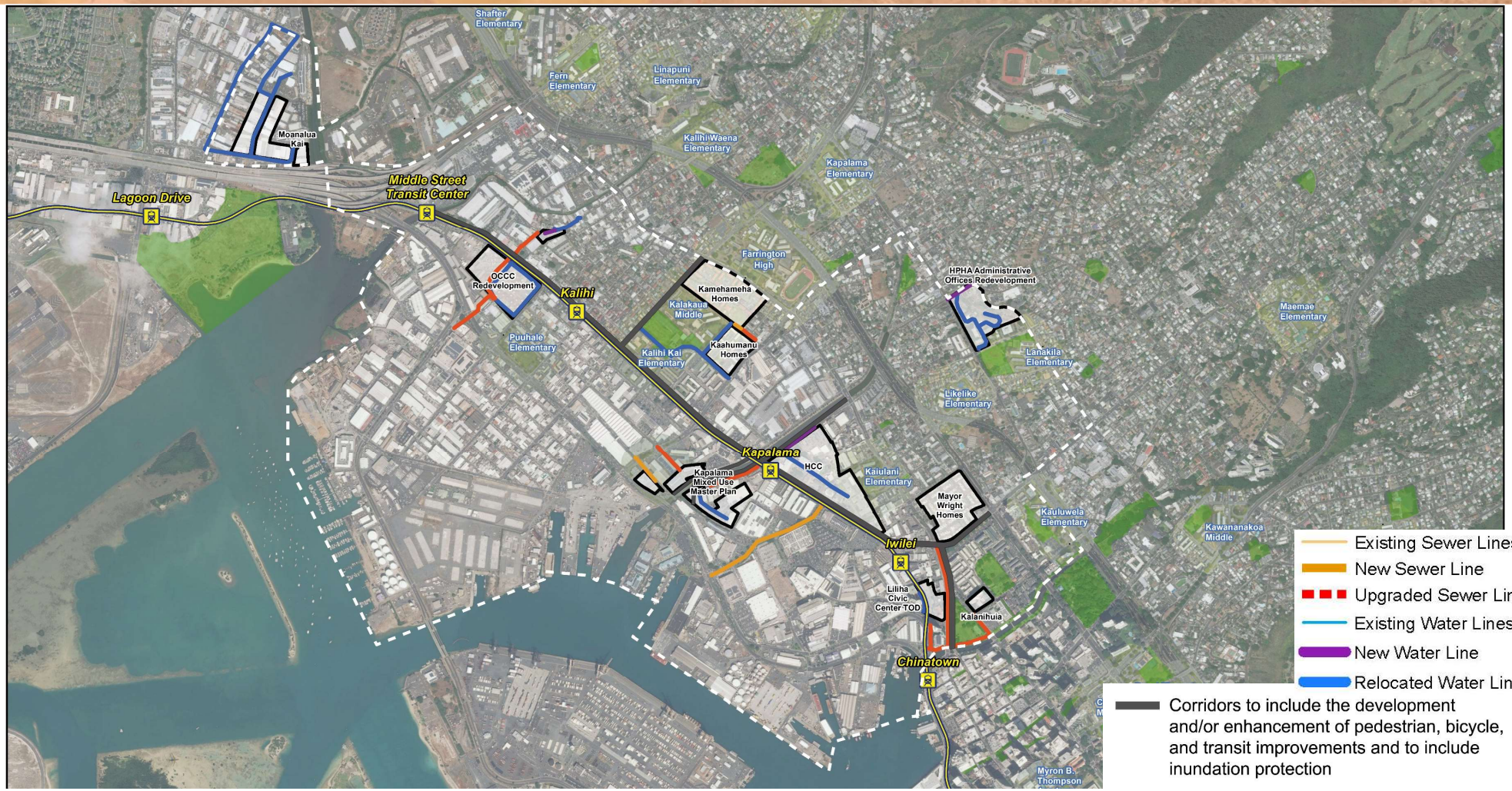


* Figures subject to change based on stakeholder inputs; and represent new facilities NET OF existing facilities expected to be demolished.



Iwilei-Kapālama Infrastructure Needs and Costs

IWILEI-KAPĀLAMA STATE LANDS: NEW-UPGRADED FACILITIES

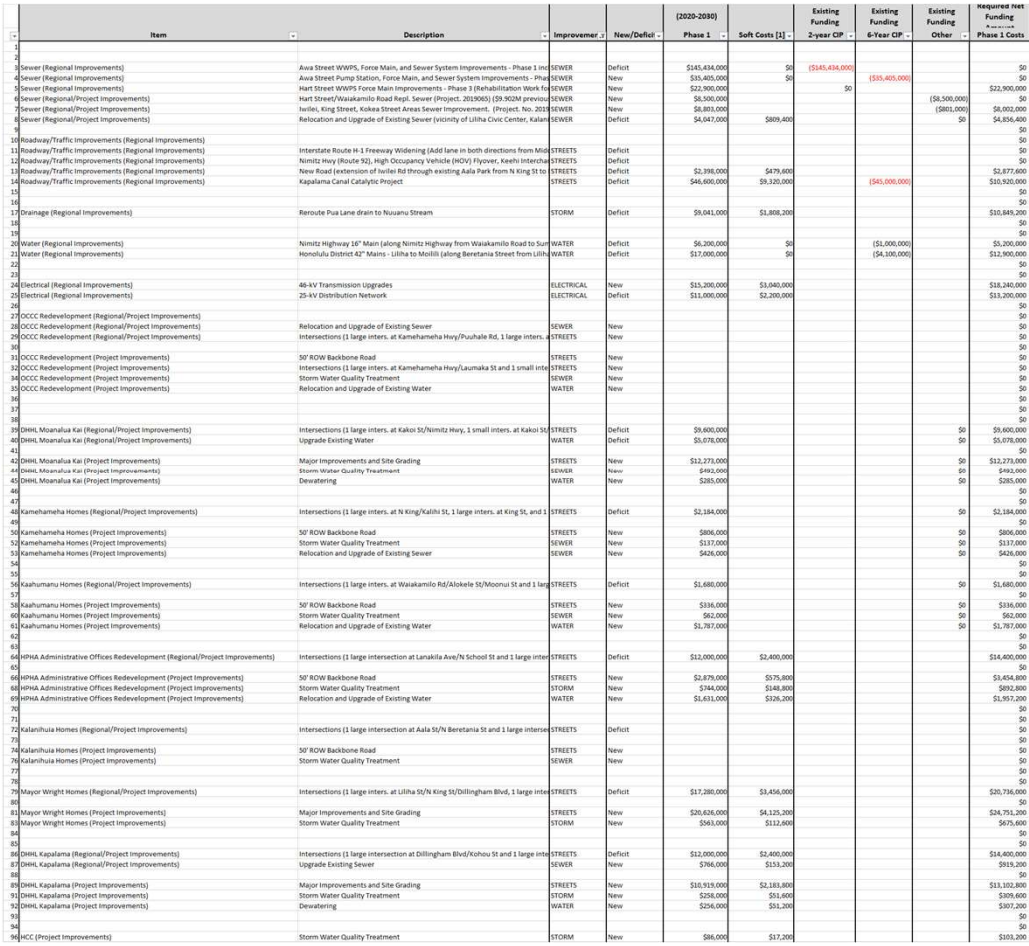


Iwilei-Kapālama– Total Regional and Regional-Project Costs by Phase (2019 dollars, in millions)

Phase 1	Phases 2-3	Total
$444.6	$1,340.5	**$1,785.1**

- Developed from detailed analysis from engineering consultant based on preferred plans, existing, needed, and deficit infrastructure
- $240.2 million funding already committed to Phase 1 projects

*Note: This table does not include onsite project infrastructure.
** Subject to change based on UHWO Mauka MP demand.



Item	Description	Improvement	New/Deficit	(2020-2030) Phase 1	Soft Costs [1]	Existing Funding 2-year CIP	Existing Funding 6-Year CIP	Existing Funding Other	Required Net Funding Phase 1 Costs
Sewer (Regional Improvements)	Awa Street WWPS, Force Main, and Sewer System Improvements - Phase 1 inc	SEWER	Deficit	$145,434,000	$0	($145,434,000)			$0
Sewer (Regional Improvements)	Awa Street Pump Station, Force Main, and Sewer System Improvements - Phas	SEWER	New	$35,405,000	$0		($35,405,000)		$0
Sewer (Regional Improvements)	Hart Street WWPS Force Main Improvements - Phase 3 (Rehabilitation Work fo	SEWER	New	$22,900,000		$0			$22,900,000
Sewer (Regional/Project Improvements)	Hart Street/Waiakamilo Road Repl. Sewer (Project. 2019065) ($9.9GM previou	SEWER	New	$8,500,000				($8,500,000)	$0
Sewer (Regional/Project Improvements)	Iwilei, King Street, Kokea Street Areas Sewer Improvement. (Project. No. 201	SEWER	New	$8,803,000				($801,000)	$8,002,000
Sewer (Regional/Project Improvements)	Relocation and Upgrade of Existing Sewer (vicinity of Liliha Civic Center, Kalam	SEWER	Deficit	$4,047,000	$809,400			$0	$4,856,400
									$0
Roadway/Traffic Improvements (Regional Improvements)									$0
Roadway/Traffic Improvements (Regional Improvements)	Interstate Route H-1 Freeway Widening (Add lane in both directions from Mid	STREETS	Deficit						$0
Roadway/Traffic Improvements (Regional Improvements)	Nimitz Hwy (Route 92), High Occupancy Vehicle (HOV) Flyover, Keehi Intercha	STREETS	Deficit						$0
Roadway/Traffic Improvements (Regional Improvements)	New Road (extension of Iwilei Rd through existing Aala Park from N King St to	STREETS	Deficit	$2,398,000	$479,600				$2,877,600
Roadway/Traffic Improvements (Regional Improvements)	Kapalama Canal Catalytic Project	STREETS	Deficit	$46,600,000	$9,320,000		($45,000,000)		$10,920,000
									$0
									$0
Drainage (Regional Improvements)	Reroute Pua Lane drain to Nuuanu Stream	STORM	Deficit	$9,041,000	$1,808,200				$10,849,200
									$0
									$0
Water (Regional Improvements)	Nimitz Highway 16" Main (along Nimitz Highway from Waiakamilo Road to Sun	WATER	Deficit	$6,200,000	$0		($1,000,000)		$5,200,000
Water (Regional Improvements)	Honolulu District 42" Mains - Liliha to Moiliili (along Beretania Street from Lilih	WATER	Deficit	$17,000,000	$0		($4,100,000)		$12,900,000
									$0
									$0
Electrical (Regional Improvements)	46-kV Transmission Upgrades	ELECTRICAL	New	$15,200,000	$3,040,000				$18,240,000
Electrical (Regional Improvements)	25-kV Distribution Network	ELECTRICAL	Deficit	$11,000,000	$2,200,000				$13,200,000
									$0
OCCC Redevelopment (Regional/Project Improvements)									$0
OCCC Redevelopment (Regional/Project Improvements)	Relocation and Upgrade of Existing Sewer	SEWER	New						$0
OCCC Redevelopment (Regional/Project Improvements)	Intersections (1 large inters. at Kamehameha Hwy/Puuhale Rd, 1 large inters. a	STREETS	New						$0
									$0
OCCC Redevelopment (Project Improvements)	50' ROW Backbone Road	STREETS	New						$0
OCCC Redevelopment (Project Improvements)	Intersections (1 large inters. at Kamehameha Hwy/Laumaka St and 1 small inte	STREETS	New						$0
OCCC Redevelopment (Project Improvements)	Storm Water Quality Treatment	SEWER	New						$0
OCCC Redevelopment (Project Improvements)	Relocation and Upgrade of Existing Water	WATER	New						$0
									$0
									$0
									$0
DHHL Moanalua Kai (Regional/Project Improvements)	Intersections (1 large inters. at Kakoi St/Nimitz Hwy, 1 small inters. at Kakoi St/	STREETS	Deficit	$9,600,000				$0	$9,600,000
DHHL Moanalua Kai (Regional/Project Improvements)	Upgrade Existing Water	WATER	Deficit	$5,078,000				$0	$5,078,000
									$0
DHHL Moanalua Kai (Project Improvements)	Major Improvements and Site Grading	STREETS	New	$12,273,000				$0	$12,273,000
DHHL Moanalua Kai (Project Improvements)	Storm Water Quality Treatment	SEWER	New	$492,000				$0	$492,000
DHHL Moanalua Kai (Project Improvements)	Dewatering	WATER	New	$285,000				$0	$285,000
									$0
									$0
Kamehameha Homes (Regional/Project Improvements)	Intersections (1 large inters. at N King/Kalihi St, 1 large inters. at King St, and 1	STREETS	Deficit	$2,184,000				$0	$2,184,000
									$0
Kamehameha Homes (Project Improvements)	50' ROW Backbone Road	STREETS	New	$806,000				$0	$806,000
Kamehameha Homes (Project Improvements)	Storm Water Quality Treatment	SEWER	New	$137,000				$0	$137,000
Kamehameha Homes (Project Improvements)	Relocation and Upgrade of Existing Sewer	SEWER	New	$426,000				$0	$426,000
									$0
									$0
Kaahumanu Homes (Regional/Project Improvements)	Intersections (1 large inters. at Waiakamilo Rd/Alokele St/Moonui St and 1 larg	STREETS	Deficit	$1,680,000				$0	$1,680,000
									$0
Kaahumanu Homes (Project Improvements)	50' ROW Backbone Road	STREETS	New	$336,000				$0	$336,000
Kaahumanu Homes (Project Improvements)	Storm Water Quality Treatment	SEWER	New	$62,000				$0	$62,000
Kaahumanu Homes (Project Improvements)	Relocation and Upgrade of Existing Water	WATER	New	$1,787,000				$0	$1,787,000
									$0
									$0
HPHA Administrative Offices Redevelopment (Regional/Project Improvements)	Intersections (1 large intersection at Lanakila Ave/N School St and 1 large inter	STREETS	Deficit	$12,000,000	$2,400,000				$14,400,000
									$0
HPHA Administrative Offices Redevelopment (Project Improvements)	50' ROW Backbone Road	STREETS	New	$2,879,000	$575,800				$3,454,800
HPHA Administrative Offices Redevelopment (Project Improvements)	Storm Water Quality Treatment	STORM	New	$744,000	$148,800				$892,800
HPHA Administrative Offices Redevelopment (Project Improvements)	Relocation and Upgrade of Existing Water	WATER	New	$1,631,000	$326,200				$1,957,200
									$0
									$0
Kalanihuia Homes (Regional/Project Improvements)	Intersections (1 large intersection at Aala St/N Beretania St and 1 large intersec	STREETS	Deficit						$0
									$0
Kalanihuia Homes (Project Improvements)	50' ROW Backbone Road	STREETS	New						$0
Kalanihuia Homes (Project Improvements)	Storm Water Quality Treatment	SEWER	New						$0
									$0
									$0
Mayor Wright Homes (Regional/Project Improvements)	Intersections (1 large inters. at Liliha St/N King St/Dillingham Blvd, 1 large inter	STREETS	Deficit	$17,280,000	$3,456,000				$20,736,000
									$0
Mayor Wright Homes (Project Improvements)	Major Improvements and Site Grading	STREETS	New	$20,626,000	$4,125,200				$24,751,200
Mayor Wright Homes (Project Improvements)	Storm Water Quality Treatment	STORM	New	$563,000	$112,600				$675,600
									$0
									$0
DHHL Kapalama (Regional/Project Improvements)	Intersections (1 large intersection at Dillingham Blvd/Kohou St and 1 large inte	STREETS	Deficit	$12,000,000	$2,400,000				$14,400,000
DHHL Kapalama (Regional/Project Improvements)	Upgrade Existing Sewer	SEWER	New	$766,000	$153,200				$919,200
									$0
DHHL Kapalama (Project Improvements)	Major Improvements and Site Grading	STREETS	New	$10,919,000	$2,183,800				$13,102,800
DHHL Kapalama (Project Improvements)	Storm Water Quality Treatment	STORM	New	$258,000	$51,600				$309,600
DHHL Kapalama (Project Improvements)	Dewatering	WATER	New	$256,000	$51,200				$307,200
									$0
									$0
HCC (Project Improvements)	Storm Water Quality Treatment	STORM	New	$86,000	$17,200				$103,200


Priority Areas
Combined:
Infrastructure Costs

Plans Require an Estimated $5.5 billion in Infrastructure Investments (2019 dollars)

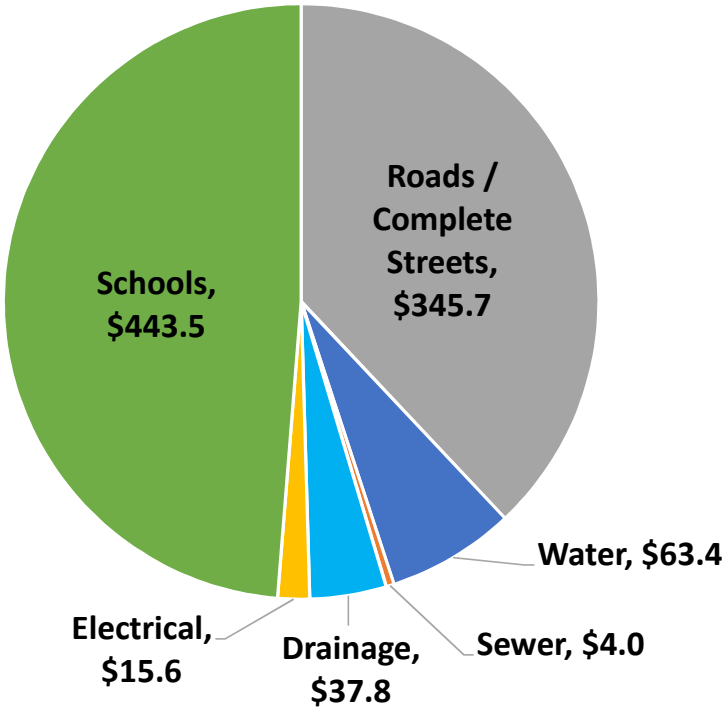
In millions:

	Phase 1	Phases 2-3	Total
East Kapolei	$909.9	$1,683.1	$2,593.0
Hālawa-Stadium	$393.6	$662.0	$1,055.6
Iwilei-Kapālama	$493.7	$1,340.5	$1,834.2
Total	**$1,797.3**	**$3,685.6**	**$5,482.8**

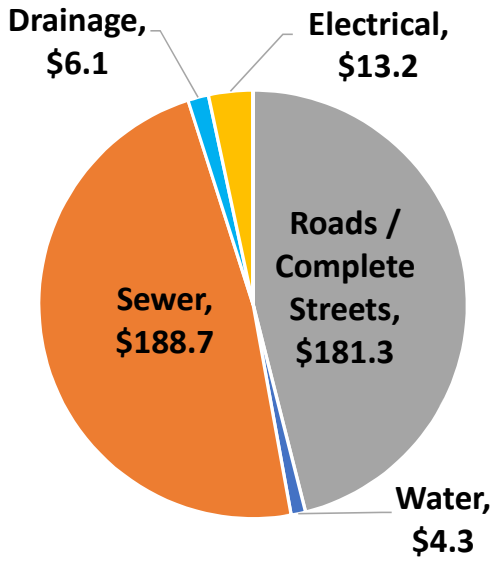
Source: RM Towill Corporation. Figures in 2019 dollars. Rough order of magnitude estimates based on preferred plans as identified by agency and other stakeholders; all figures subject to change.

Phase 1 Costs by Type and TOD Area: Estimated $1.8 billion (2019 dollars, in millions)

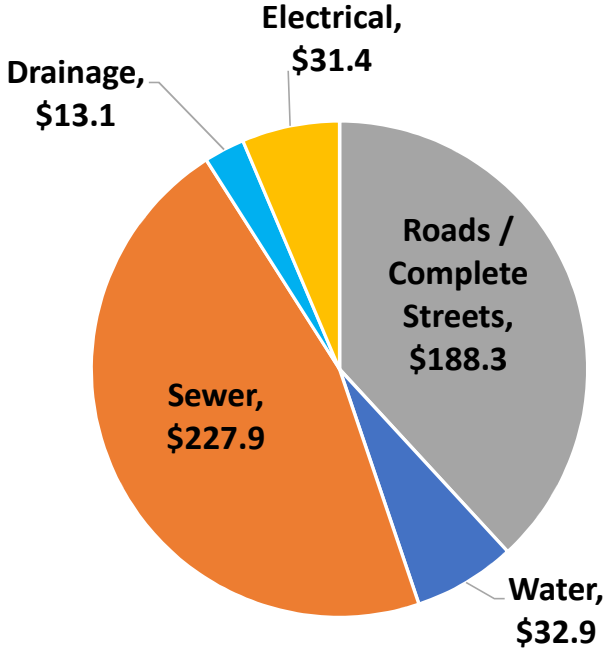
East Kapolei
$909.9 million



Hālawa-Stadium
$393.6 million

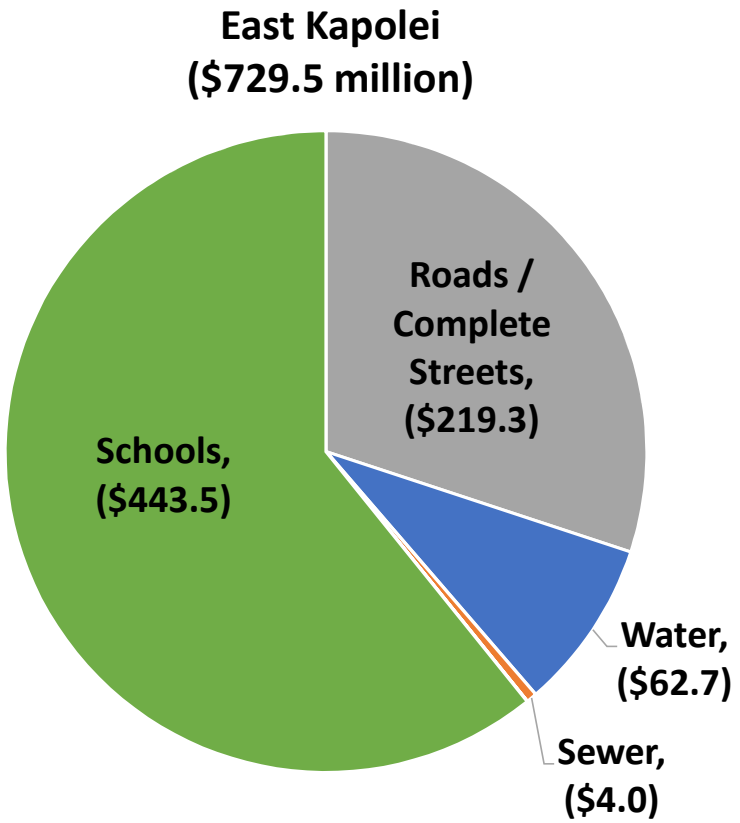


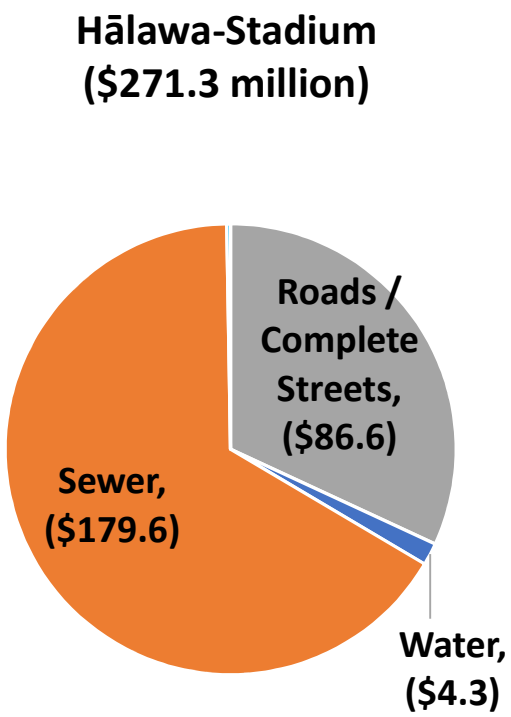
Iwilei-Kapālama
$493.7 million

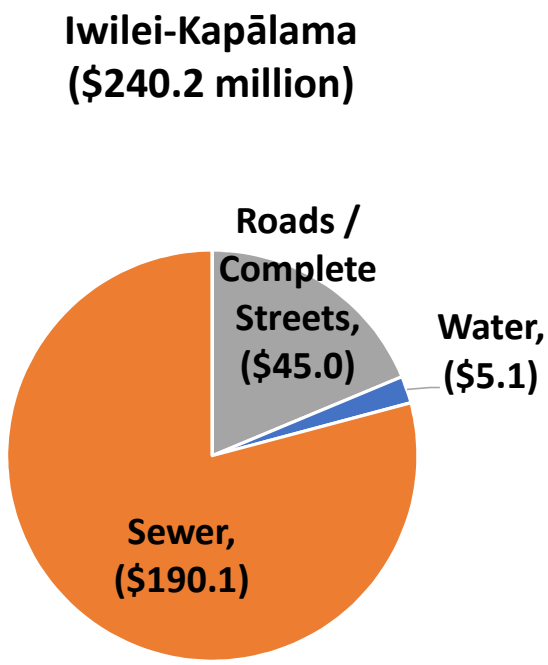


Source: RM Towill Corporation. Figures in 2019 dollars. Rough order of magnitude estimates based on preferred plans as identified by agency and other stakeholders; all figures subject to change.

Current Phase 1 Funding by Project Type and TOD Area: Estimated $1.24 billion (2019 dollars, in millions)





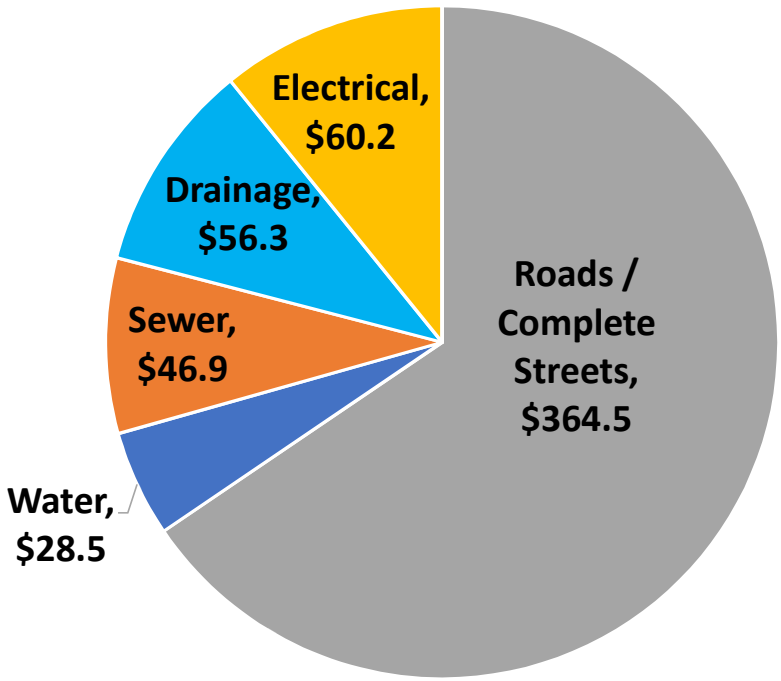


Source: RM Towill Corporation. Figures in 2019 dollars. Rough order of magnitude estimates based on preferred plans as identified by agency and other stakeholders; all figures subject to change.

Phase 1 Remainder to be Funded: Estimated $0.56 billion (2019 dollars)

In millions:

	New	Deficit	Total
Roads / Complete Streets	$251.7	$112.8	$364.5
Water	$5.3	$23.2	$28.5
Sewer	$42.0	$4.9	$46.9
Drainage	$40.1	$16.2	$56.3
Electrical	$47.0	$13.2	$60.2
Schools	$0.0	$0.0	$0.0
Total	**$386.1**	**$170.3**	**$556.4**



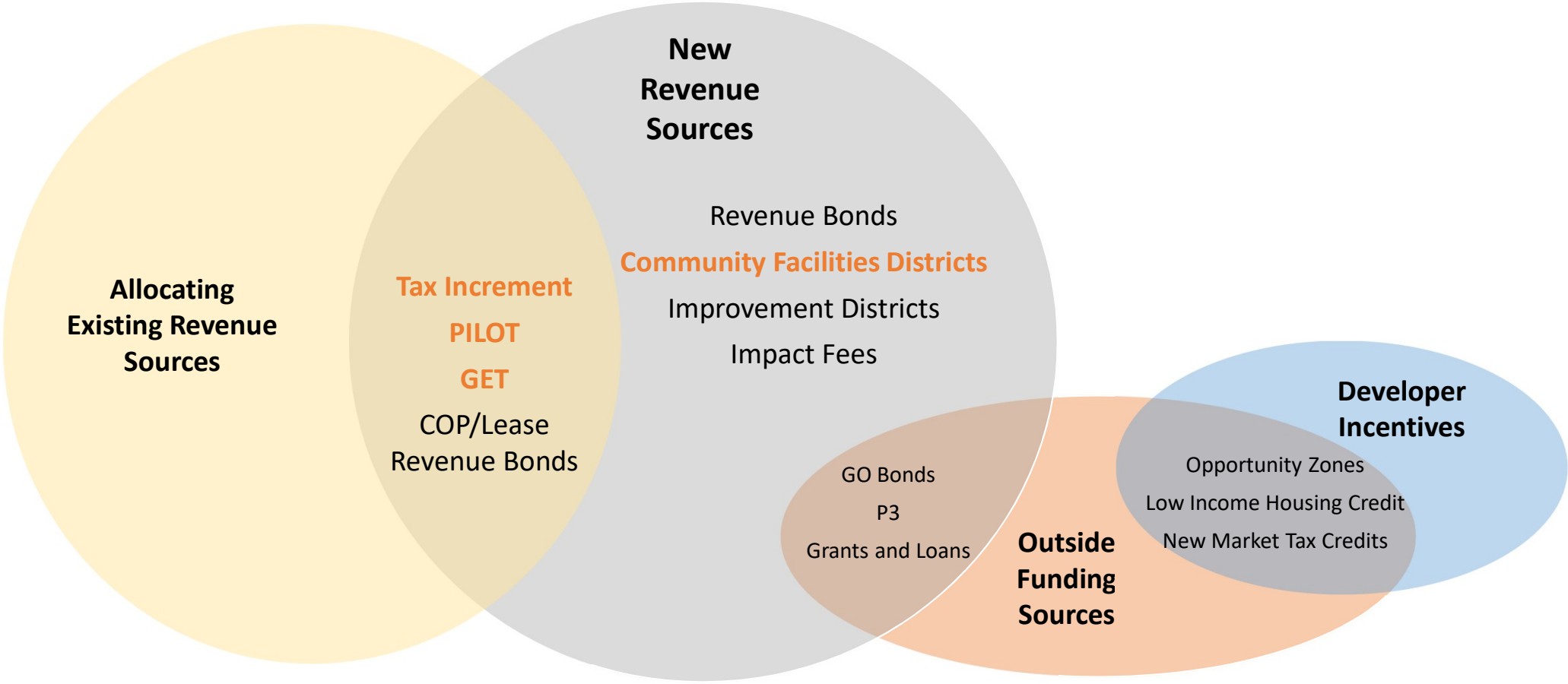
Source: RM Towill Corporation. Figures in 2019 dollars. Rough order of magnitude estimates based on preferred plans as identified by agency and other stakeholders; all figures subject to change.

Financing / Funding Tools

Review of Public Finance Alternatives:
Funding vs. Financing

- For a project to be financeable now, it needs a clear revenue stream in the future
- **Financing** is the raising of this upfront capital to expedite the process
- **Funding** is the revenue stream in the future to repay the financing

Review of Public Finance Alternatives:
Potential Funding Sources



Public Finance Alternatives Modeled:
No Reduction to Existing Public Revenues

	Brief Description
Value capture: One-time State GET on construction *	Allocation of existing GET resulting from new development in TOD areas
Value capture: Recurring State GET on operations *	Allocation of incremental amount of GET resulting from new expenditures or sales. Modeled for: • Retail sales • Commercial and industrial space rents • Hotel room revenues
Value capture: County real property taxes (RPT) *	Capture share of incremental increase in RPT revenue as a result of the new developments in TOD areas
Community Facilities Districts (CFDs)	District authorized by property owners and County to levy special taxes to fund public improvements

Similar tools have been successfully implemented elsewhere, implementation in Hawaii would require further investigation and legal counsel to determine how to structure.

* Most value capture methods may be structured for administrative purposes as a Payment in Lieu of Taxes, or PILOT.

Financing / Funding Scenarios

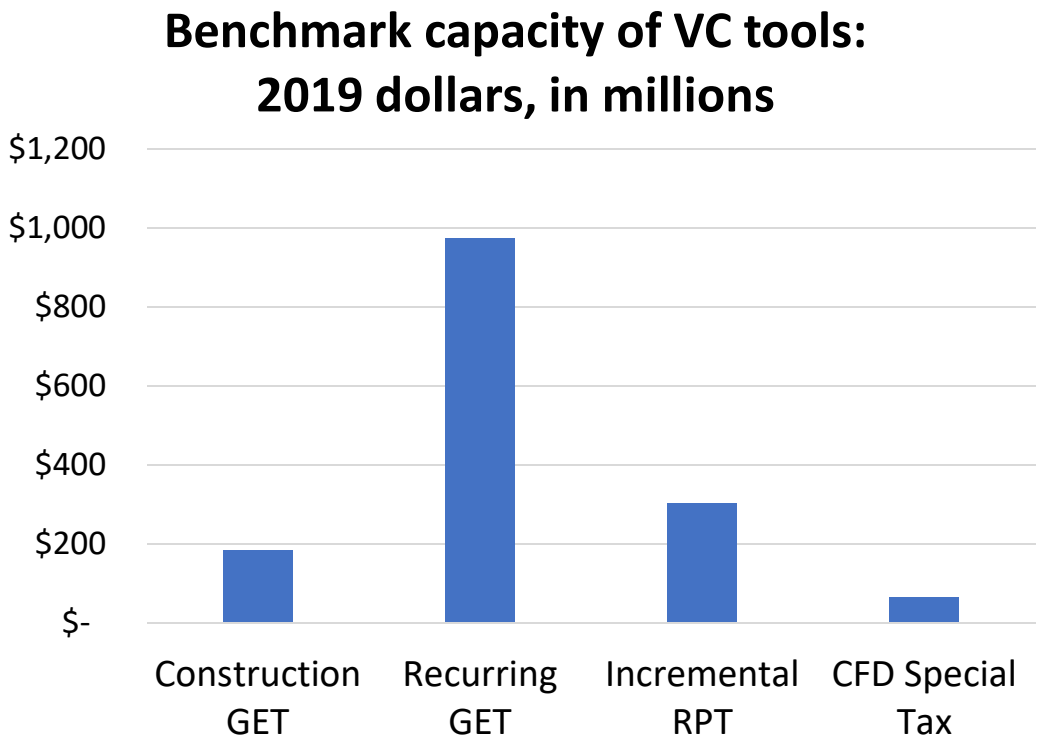
Framework of the Financing Model*

- Corridor approach, Phase 1 only (2020-2029)
- Goal is to fund the unfunded portion - $0.56 B
- Constant 2019 dollars
- Model tested combinations of various alternative mechanisms

*Subject to change based on assumptions related to costs and timing of TOD infrastructure, development projections, and other input parameters

Alternative Financing Tools Evaluated*

- Value Capture – share of future new revenues:
  - GET on new construction
  - GET on new operations
  - RPT on new/redeveloped properties
- CFD - Special Tax



*Subject to change based on development scenarios and timing, tax policy changes and other; does not represent recommended funding approach. Based on Phase 1 development yields from 2021 through 2040.

Scenario 1: Preferred Value Capture Tools

Applied to new facilities in TOD Priority Areas only (2019 dollars, in billions)

Relative Potential:

Construction GET:

13%

One-time GET applied as new facilities are developed in the three priority areas

+ Readily related to the three priority TOD areas
+ Yields may begin relatively early in Phase 1
- Unpredictable; difficult to bond
- Yields occur only when projects get built
- Yields end in 2029
- Affordable housing and certain other property classes are exempt

Recurring GET:

67%

On-going GET from retail sales, space leases, and hotel operations in the priority areas

+ Robust source levied on most transactions
- Unpredictable; difficult to bond
- Yields delayed until facilities are operational (2023+ for most)

Incremental RPT:

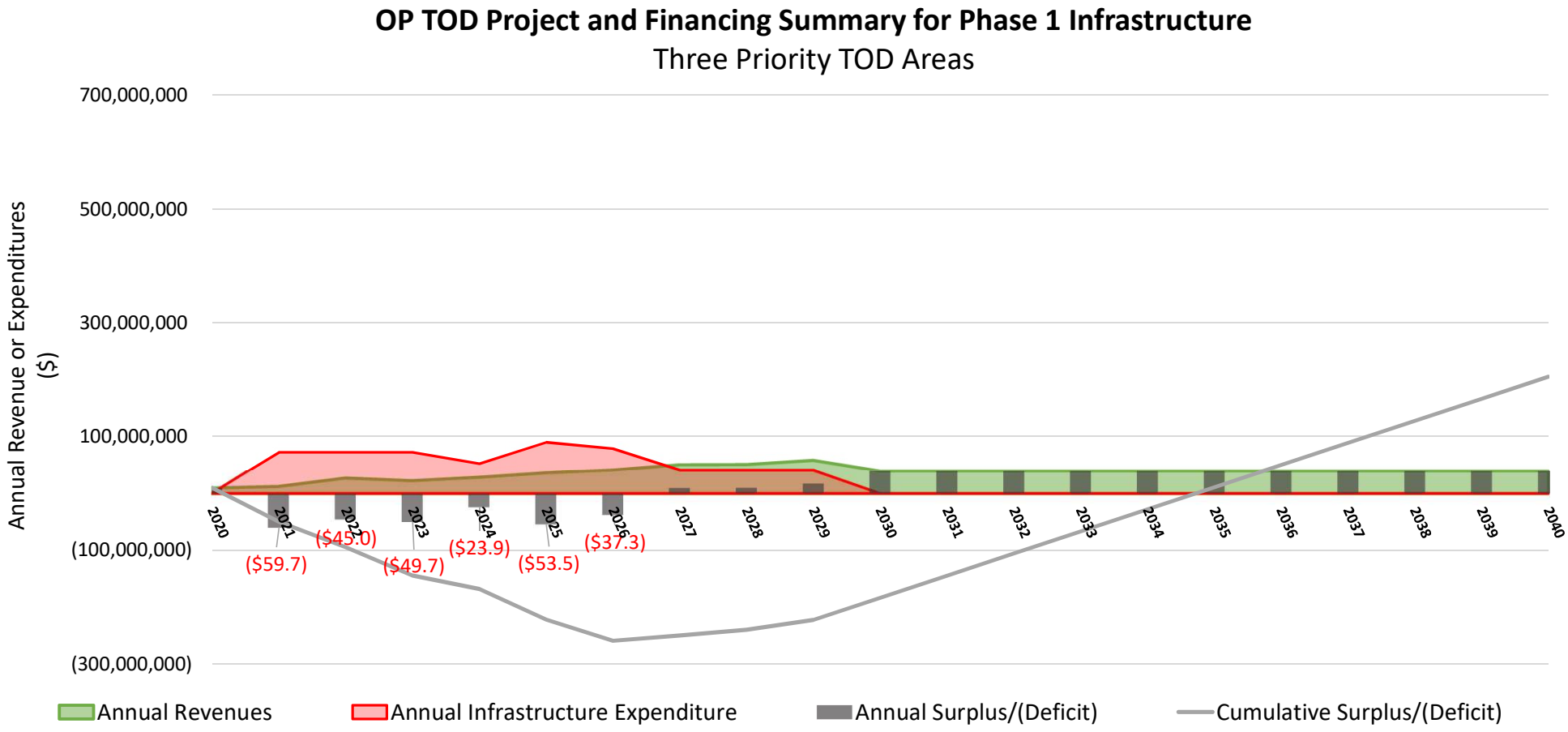
20%

Incremental new RPT from new developments in the priority areas

+ Predictable once facilities are operational
+ Can be bonded, if yield amounts warrant
- Honolulu RPT rates are relatively low
- Yields delayed until facilities are operational and assessments updated
- Many exempt classes, including public facilities and affordable housing

Estimated funding yield when employed from **2020-2040**:

Scenario 1: Selected Value Capture Tools

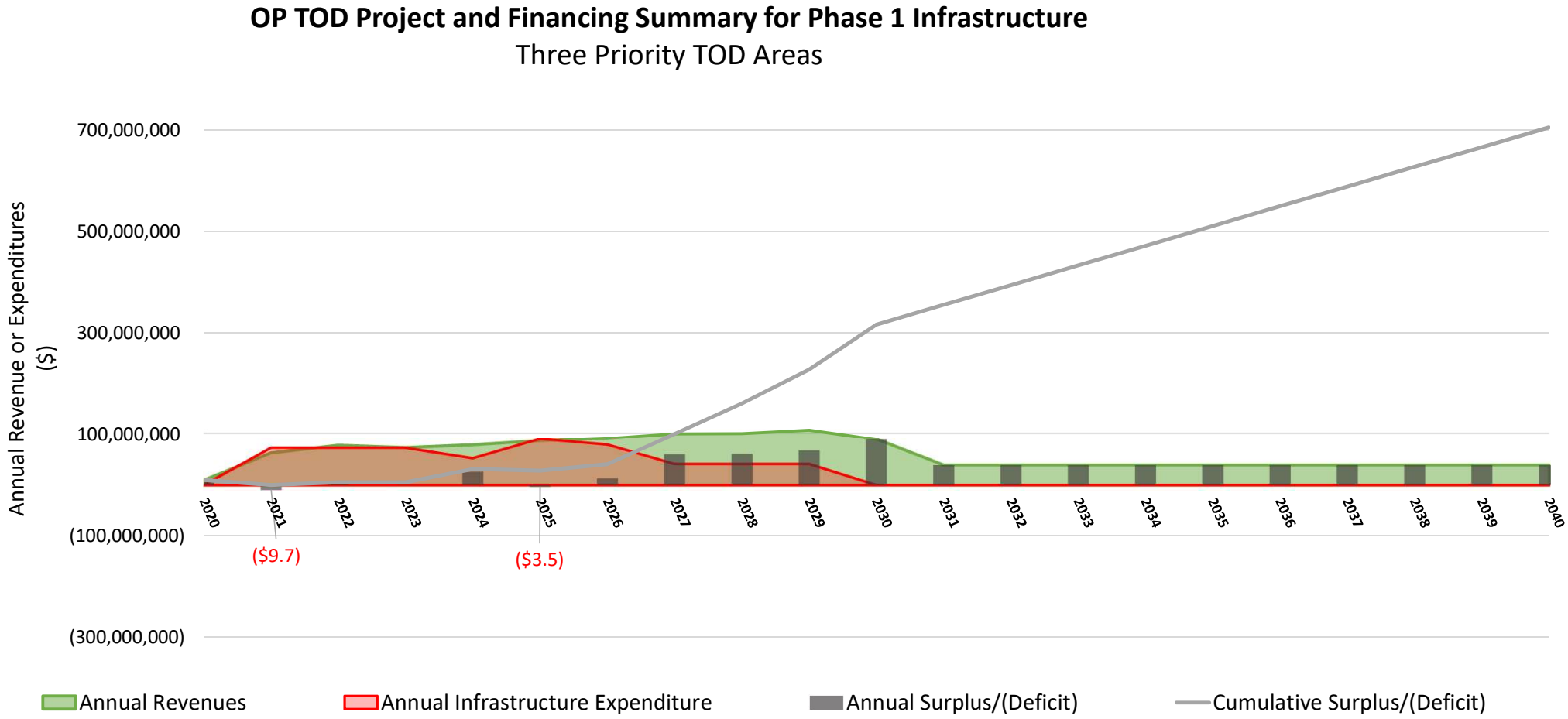


Figures in 2019 dollars. Numbers based on current maximum funding scenario as shown; all figures subject to change.

Scenario 2: Enhance Scenario 1 for Gap and Long-Term Funding

- GET surcharge was suggested by stakeholders as “gap” solution
- Allocate these monies to public/regional infrastructure needs of the TOD Priority Areas
- 0.10% of State GET revenues on O‘ahu for 10 years meets goals
- If implemented as a surcharge, will not impact revenues available to State General Fund or other uses, but will represent a rate increase to taxpayers
- Surcharge could sunset once initial gap funding needs are met

Scenario 2: Enhance Scenario 1 for Gap and Long-Term Funding



Figures in 2019 dollars. Numbers based on current maximum funding scenario as shown; all figures subject to change.

Review of Policy Considerations

Policy Considerations: Value Capture

State GET

- **Unpredictable, so difficult to bond – likely to require full faith and credit and/or general obligations**
- **GET on construction occurs relatively early, is short-term**
- **GET on operations is delayed but has biggest & long-term potential**

County RPT

- **Some share must be retained to address operations and maintenance of new infrastructure**
- **Low County RPT generally**
- **TOD goals include many exempt uses**
- **More readily bondable once established**

How to structure new value capture methods??

- PILOTs (to a public or a P3 fund) or allocations from general fund?
- Implementation would require further investigation and legal counsel.

Policy Considerations: CFDs

Benchmark based on maximum revenue potential as defined:

- **$65 million potential from Phase 1 developments through 2040, at 15% surcharge to RPT (with bonding)**

- **How would CFD affect marketability of properties on State lands?**
  - **Is a CFD more appropriate for amenities that enhance value?**
- **What should it apply to? (All new housing; commercial; industrial; hotels; public facilities; etc.)**
- **Greater yield if do not bond**

Figures in 2019 dollars. Numbers based on current maximum funding benchmark as presented; does not represent recommended funding approach; all figures subject to change.

Policy Considerations:
Other Potential Funding Sources

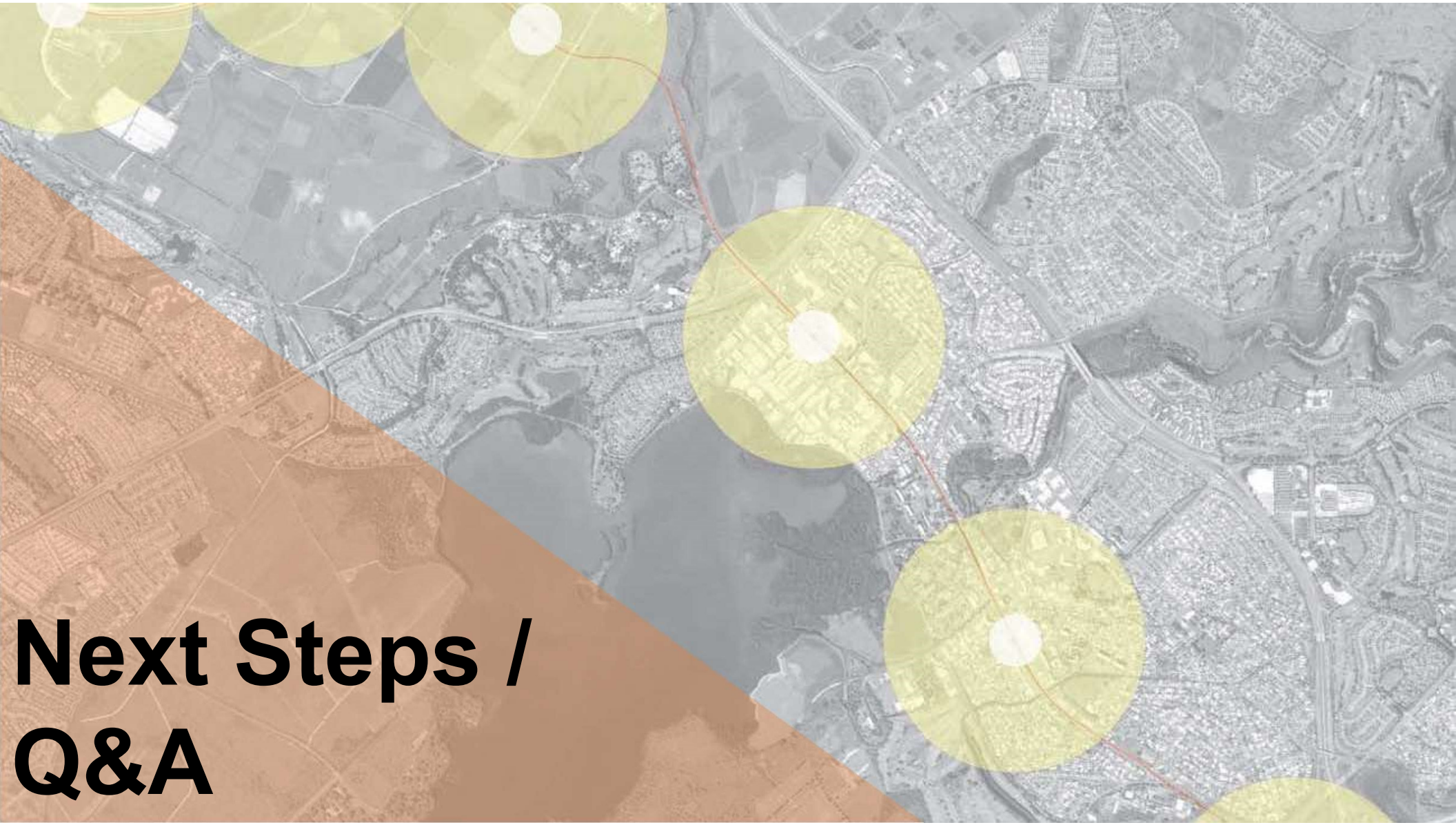
Change laws to permit new revenue sources – options identified by PIG members:

- Legalize and tax recreational marijuana
- Legalize and tax lotteries and/or gambling
- Other

New taxes or fees:

- Increase in GET or GET surcharge
- Special user fees for stadium or other facilities
- Expand application of impact or user fees

Potential other funding sources; does not represent recommended scenario.



Next Steps / Q&A

For requests for materials and project-related questions, please contact dbedt.op.lud@hawaii.gov or Rodney Funakoshi at: rodney.y.funakoshi@hawaii.gov

If you have additional comments, thoughts, or materials to share, please e-mail Nathalie Razo at: nrazo@pbrhawaii.com

Mahalo!