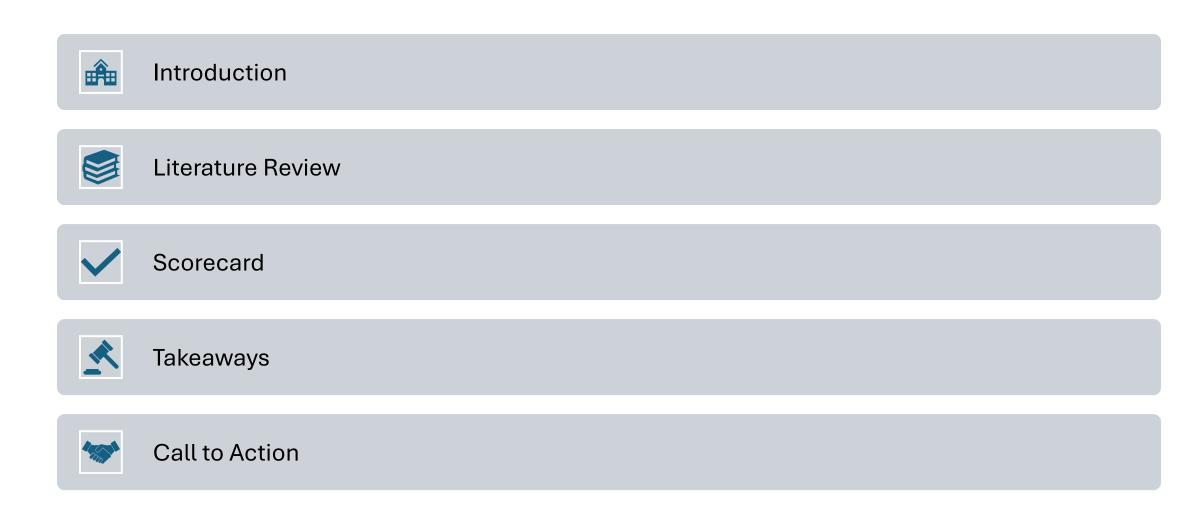
#### TOD COUNCIL PRESENTATION

# A Scorecard to Measure The Progress and Implementation of Transit-Oriented Development In Honolulu

Jonathan Vuylsteke ("JV") November 21, 2025

## Agenda



- Who I am
  - University of Hawai'i at Mānoa
  - Master of Urban and Regional Planning
  - Earned August 2025
  - Mahalo to committee:

Peter Flachsbart

Priyam Das

Harrison Rue

Gratitude and aloha...



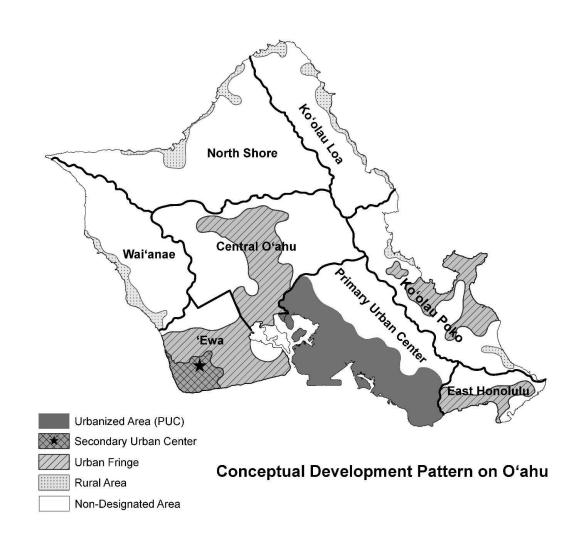
- Who I am
- East Asian cities
  - Taipei and Hong Kong
  - Good transit as freedom
  - How does something like this happen?
  - First semester at DURP
  - Two years later...



- Who I am
- East Asian cities
- Transportation and Land Use
  - Access—to places
  - Investment in one reinforces the other
  - Urban infrastructure
  - It has staying power...



- Who I am
- East Asian cities
- Transportation and Land Use
- Honolulu
  - Our island home
  - Small but incredible city
  - Pressure is building for change...



- Who I am
- East Asian cities
- Transportation and Land Use
- Honolulu
- Rail and TOD
  - Changing tracks
  - Enables *more* to happen
  - Joined HART, September 2025



#### **Research Questions**

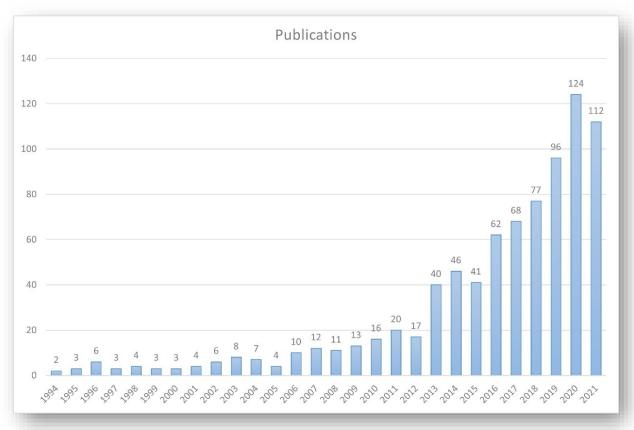
- 1. How has TOD lived up to the **benefits** it proposed to achieve? What are factors that improve or hinder benefits?
- 2. Can progress on TOD goals be **measured** objectively? What frameworks exist in literature and in practice that can inform the measurement of TOD outcomes?
- 3. What is the **status** of the goals in Honolulu's TOD plans? What conditions, factors, or roles are critical to their implementation?

- Covered...
  - Built Environment
  - Travel Behavior
  - Walkability
  - Urban Design
  - Urban Growth
  - Safety and Livability
  - "Equity"



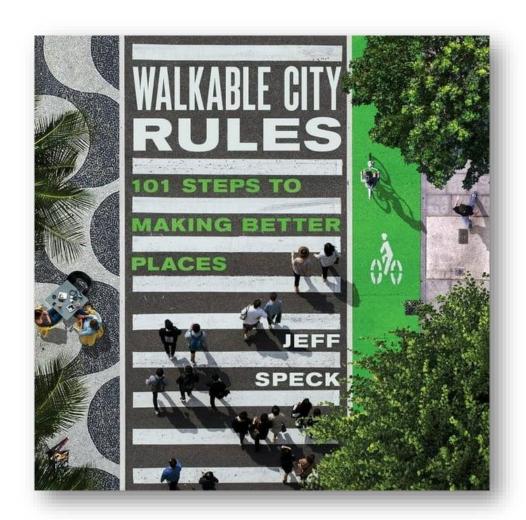


- Covered... A lot
- Scholarly literature
  - Exponential growth
  - Global interest in "TOD"
  - Many models and frameworks
  - But—each place is unique (read: we are special)



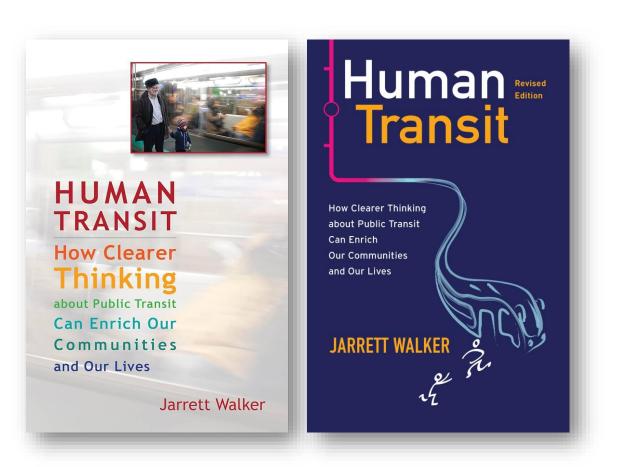
Publications of TOD-related literature 1994–2021. (Fang et al., 2023)

- Covered... A lot
- Scholarly literature
- Key text: Walkability
  - Walkable City (2013) & Walkable City Rules (2018) by Jeff Speck
  - Original spark for me
  - He visited Honolulu in 2019
    - !! Pedestrians are #1!!



- Covered... A lot
- Scholarly literature
- Key text: Walkability
- Key text: Transit
  - Human Transit
     (2012; 2nd ed. 2024)

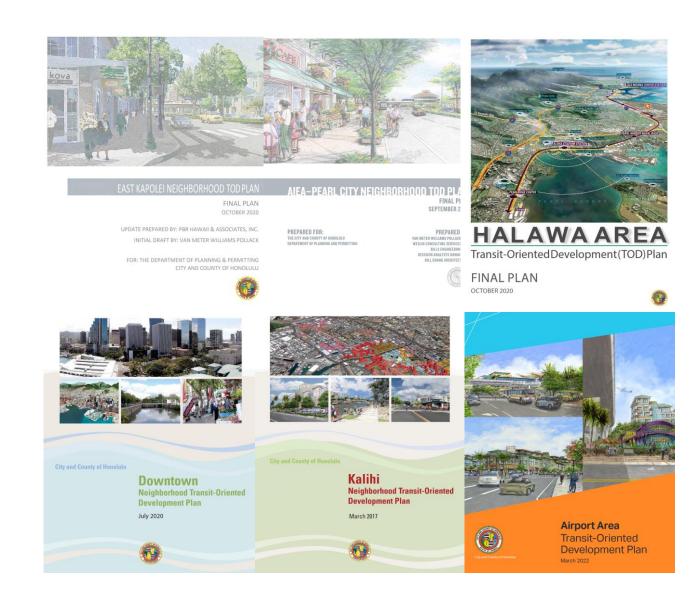
     by Jarrett Walker
  - Wealth of practical knowledge
  - Easy-to-digest, good advice
    - !! Frequency is freedom!!



- Covered... A lot
- Scholarly literature
- Key text: Walkability
- Key text: Transit
- Honolulu Plans
  - State, City, MPO...



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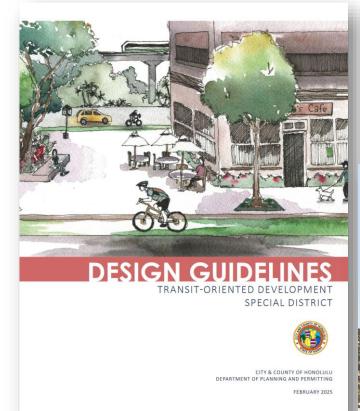
- Covered... A lot
- Scholarly literature
- Key text: Walkability
- Key text: Transit
- Honolulu Plans
  - State, City, MPO...
  - Reviewed 50+ plans & reports related to TOD

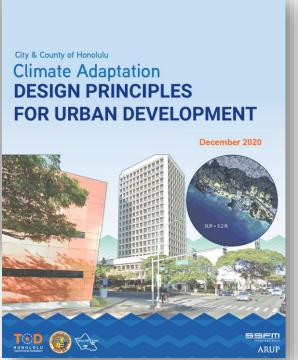


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  - Design Guidelines and City Ordinances





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17-54

BILL **74 (2015), CD2** 

#### A BILL FOR AN ORDINANCE

TO AMEND CHAPTER 21, REVISED ORDINANCES OF HONOLULU 1990, AS AMENDED (THE LAND USE ORDINANCE), RELATING TO THE TRANSIT-ORIENTED DEVELOPMENT SPECIAL DISTRICT.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION 1. Purpose and intent. The purpose of this ordinance is to establish a special district with appropriate land use standards and guidelines for those areas around the Honolulu Rail Transit Project stations. Transit-oriented development ("TOD") in this special district should be designed to have a positive, robust economic impact, improve transit ridership and the use of multimodal transportation, contribute to open spaces and parks, and provide a broad range of housing units.

SECTION 2. Figure 21-2.1, Revised Ordinances of Honolulu 1990, is repealed and replaced with the following:

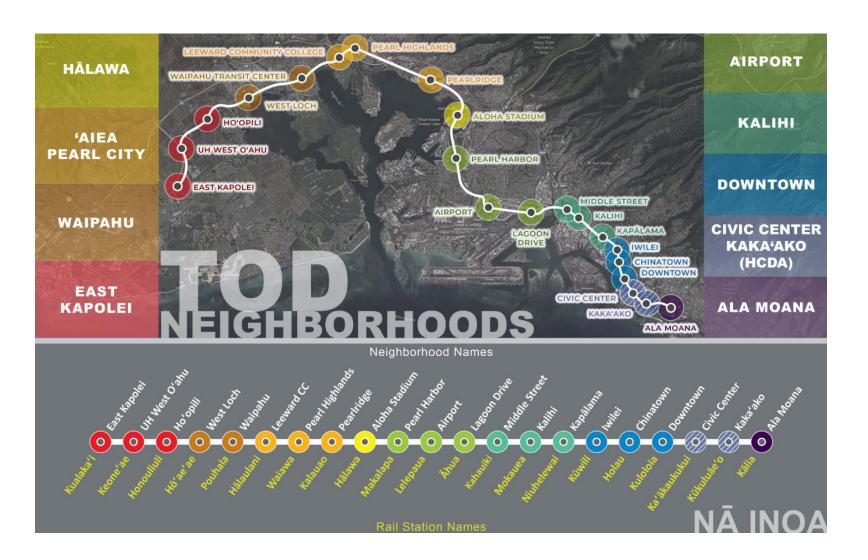
- Covered... A lot
- Scholarly literature
- Key text: Walkability
- Key text: Transit
- Honolulu Plans
- Summary—
  - TOD is maturing...
  - How do we benchmark Honolulu?



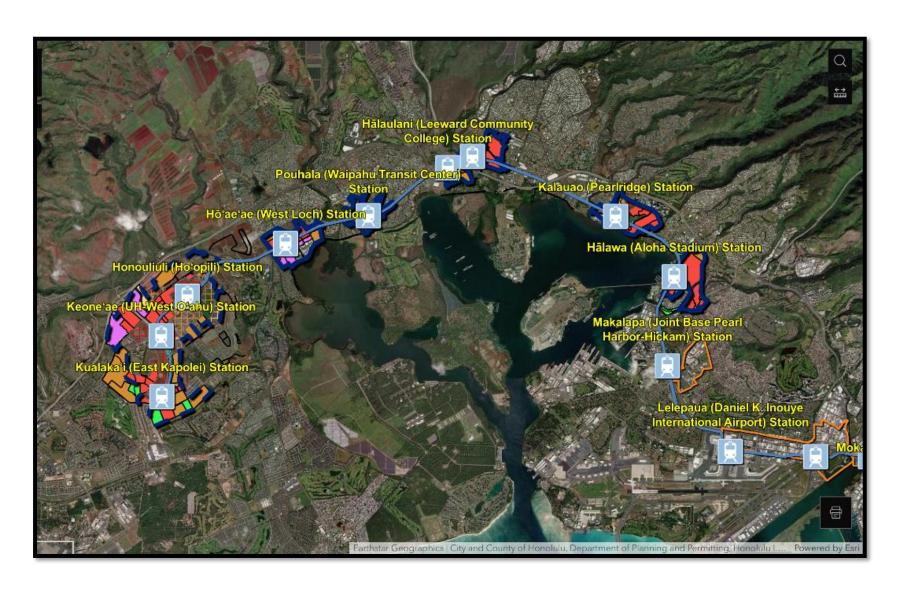
 Honolulu Rail Transit Project (HRTP)



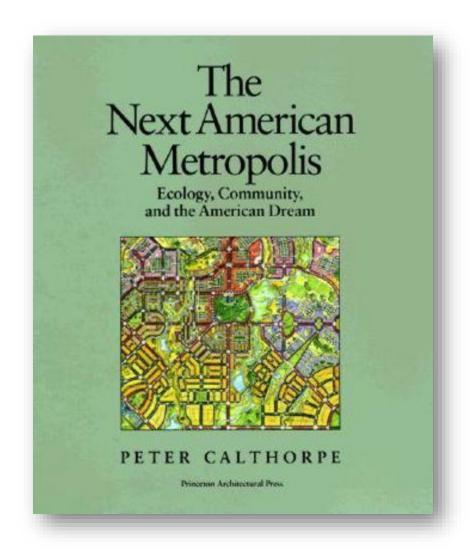
- Honolulu Rail Transit Project (HRTP)
- Neighborhood TOD Plans



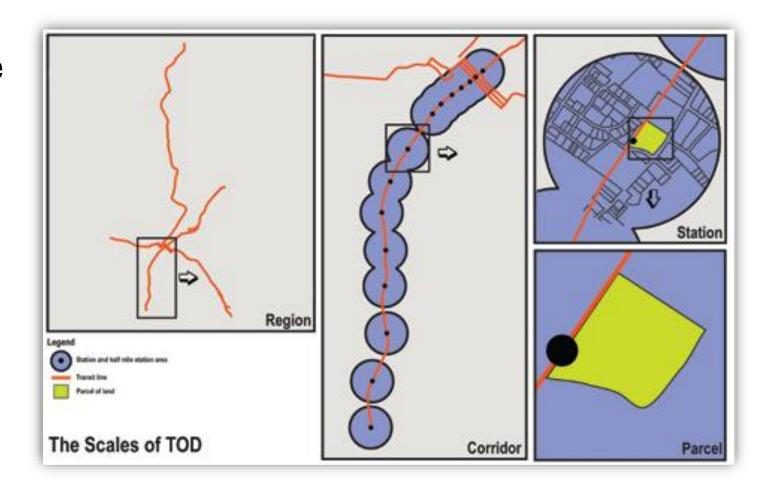
- Honolulu Rail Transit Project (HRTP)
- Neighborhood TOD Plans
- TOD Special Districts



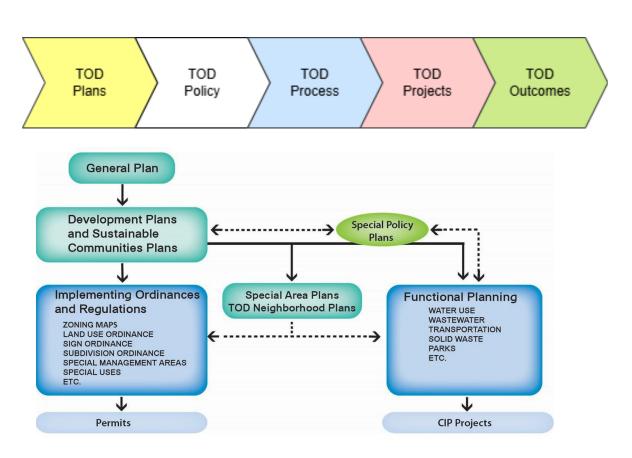
• Defining "TOD" Scale



- Defining "TOD" Scale
  - Urban and Regional
  - Neighborhood
  - Station Area
  - Parcel/Project

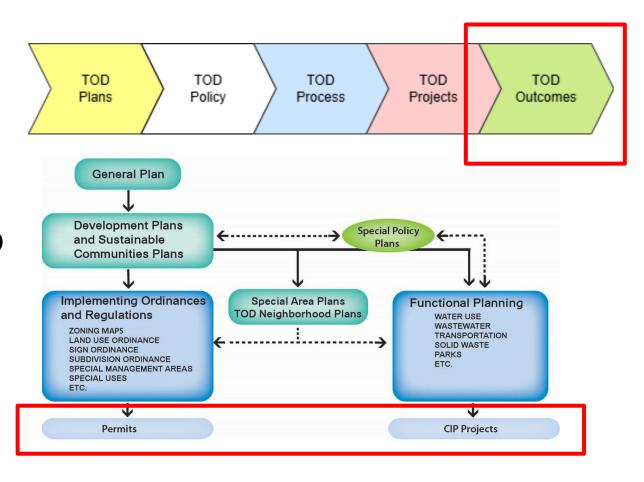


- Defining "TOD" Scale
- Defining "Progress"
  - Plans TOD Vision
  - Policy Enable TOD
  - Process Operationalize TOD
  - Projects Develop TOD

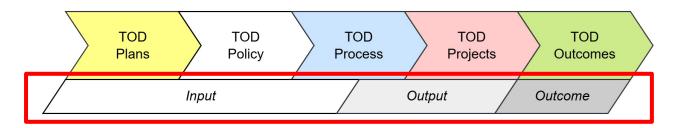


- Defining "TOD" Scale
- Defining "Progress"
  - Plans TOD Vision
  - Policy Enable TOD
  - Process Operationalize TOD
  - Projects Develop TOD
  - Outcomes

Tangible, observable Infrastructure



- Defining "TOD" Scale
- Defining "Progress"
- Defining "Measurement"
  - Indicators capture metrics
    - Input
    - Output
    - Outcome
  - Measure what matters
  - Which outcomes matter most?
  - Is the data feasible to collect?





- A selection of indicators
- Spanning enablement to outcomes
- Observable and measurable
- Focused on "Urban" scale results
- Measured at "Station Area" scale
- Bounded by Special Districts
- 36 indicators "Top 12"

				Transit &	Built		
	Indicator	Policy		Mob.	Env.	Econ.	Comm
	Policy Support for TOD						
1	City guidelines, regulations, & enforcement	•	•				
2	Inter-agency & departmental collaboration	•	•	•		•	•
3	Funding directed to critical infrastructure	•	•	•	•		
4	Funding for TOD planning & administration	•					•
5	Community involvement in TOD planning	•					•
	Transit Network Quality						
6	Frequent transit network coverage	•	•	•			
7	On-time performance of scheduled service	•				•	•
8	Bike, Ped, Complete Streets implementation	•		•	•		•
9	Transit/connections facilities & maintenance			•	•		•
10	Community feedback on transit routes	•		•	•	•	•
	Modal Shift						
11	Total transit network ridership	•		•			
12	Bicycle and pedestrian counters			•			
13	Parking spaces to DU/HH or FAR	•	•	•			
14	Vehicle Miles Traveled (VMT) per capita	•	•	•			
15	Vehicles owned per household			•			•
	Land Use Changes						
16	Density of destinations (using Walk Score)	•	•		•		•
17	Intensity of land use (as percent of max. FAR)	•	•		•	•	
18	Diversity of uses, housing, and people	•	•		•		•
19	Conformance with Urban Design Guidelines	•	•		•		
20	Conformance with Climate Design Principles	•	•		•		•
	Community Benefits & Green Space						
21	Value of community benefits secured	•	•		•		•
22	Acres of park dedicated & improved	•	•		•		•
23	Conformance with Urban Tree Plan	•	•		•		
24	Percentage of households with access to parks		•		•		•
25	Square footage of "green streets" implemented	•	•		•		
	Housing, Access, and Inclusion						
	Affordable housing units (preserved/produced)	•	•				•
	Housing + Transportation Affordability Index	•	•			•	
	Access to food, healthcare, and education	•	•				•
29	Age-friendly, safe, and ADA compliant	•		•	•		•
30	Title VI & Environmental Justice coverage	•	•	•	•		•
	Adequate Critical Infrastructure						
	Sewer, water, stormwater, & drainage systems	•	•		•		
	Electrical and telecommunications systems	•	•		•		
33	Climate resilient regional transportation	•	•	•	•		
	Economic Growth						
_	New & in-fill development within area	•	•		•	•	•
	Increased in tax revenue (property, GET)						
36	New employment generated						•

## Top 12 Indicators

- Investments into critical infrastructure
- Frequent transit network coverage area
- On-time performance of scheduled service
- 4. Complete Streets implementation
- 5. Total network ridership
- 6. Total parking spaces

- 7. VMT per capita
- 8. Walk Score (activity density)
- 9. Max FAR (building intensity)
- Affordable housing—or just, housing units in total
- 11. H+T Affordability Index
- 12. Tax revenue



A Scorecard to Measure TOD in Honolu Sample Conce

#### **POUHALA**

Waipahu Transit Center Station

20	Waipana n	ransit Centi	or otation
	Indicator	Score	Notes
>	Frequent transit network coverage [NBHD Score]  Area of coverage around transit stops that have service frequencies of 15 min or less, measured at different times of day (AM/PM peaks, midday, and late night)	9 of 15 weighted: 1.0 = 9	ITDP's Atlas of Sustainable City Transportation shows that around 80% of this station area has frequent access
Transit Network Quality	On-time performance of scheduled service [NBHD Score] Reliability of transit service by adherence to published schedules for bus and rail (Note: This score is shared with Ho'ae'ae station area)	6 of 15 weighted: 1.0 = 6	[TheBus does not report neighborhood statistics yet] The system-wide average for OTP was used, from 2025 May: 71.2%
twork	Bike, Ped, Complete Streets implementation Build-out of active transportation and Complete Streets improvements in and around the station area	9 of 15 weighted: 1.5 = 13.5	Weighted more due to TOD Plan (2014) calling for "safe, pedestrian-first environment"; many projects in pipeline
sit Net	Transit/connections facilities & maintenance Quality and upkeep of physical transit infrastructure, including shelters, signage, elevators, and amenities	4 of 5 weighted: 1.0 =4	Rail station remains in good condition, as well as Hikimoe bus transfer and comfort station; some bus stops need cleaning
Tran	Community feedback on transit routes [NBHD Score] Survey reported rider satisfaction and priorities regarding transit service design, frequency, and safety (Note: This score is shared with Hö'ae'ae station area)	4 of 5 weighted: 1.0 =4	[Example text:] Surveys report general satisfaction about ease of connection, multi-modal options and bus network
	Total transit network ridership [Region Score] Total annualized network ridership across Skyline rail, TheBus, and paratransit (Note: This score is shared with across all station areas)	3 of 15 weighted: 1.0 = 3	TheBus Reports from 2015 (July-Dec) were averaged to use as baseline: 5,651,600 (pre-COVID ridership)
	Bicycle and pedestrian counters [NBHD Score] Measures non-motorized travel volume in the surrounding area through permanent or mobile counters (Note: This score is shared with Hö'ae'ae station area)	of 5 weighted: 1.0 =1	Bicycle counter at Managers Drive showed a slight decrease in overall count since 2023 when data began
بر	Parking spaces to DU/HH or FAR  Assesses parking intensity relative to residential density or floor area ratio (FAR) as a proxy for this station area's orientation to cars	of 15 weighted: 0.5 =1.5	[In absence of data:] Due to the single- family pattern of residences dominant here, parking is assumed to be >2.0/unit
<b>Modal Shift</b>	Vehicle Miles Traveled (VMT) per capita [NBHD Score] Tracks driving behavior and emissions through distance traveled in a personal vehicle, averaged per person (Note: This score is shared with Ho'ae'ae station area)	3 of 15 weighted: 1.0 = 3	Based on Center for Neighborhood Technology (CNT) data, VMT at this station area is above the county average
Mod	Vehicles owned per household Measures car dependency within the area and relative attractiveness of transit	of 5 weighted: 1.0 =2	Based on American Community Survey (ACS) data, imperfectly disaggregated: this station area has 1.71 vehicles/HH
	Density of destinations (using WalkScore) WalkScore measures access to destinations such as Jobs, shops, and services within the station area	9 of 15 weighted: 1.0 = 9	Using an oversimplified average based on five multi-family addresses, the Walk Score for this station area is: 72.2
Š	Intensity of land use (as percent of max. FAR) Tracks the actual development intensity relative to what zoning allows	3 of 15 weighted: 1.0 = 3	The TOD Plan (2014) calls for urban form that includes higher-density housing and mixed-use commercial; none observed
hange	Diversity of uses, housing, and people mix of residential, commercial, and civic uses, along with housing and demographic variety within the station area	2 of 5 weighted: 1.0 = 2	The TOD Plan (2014) envisions "infill mixed use" along key streets, which has not materialized yet; sf homes dominate
Land Use Changes	Conformance with Urban Design Guidelines Assesses station-wide conformance of built form with the City TOD Special District Design Guidelines (2025), focusing on "key streets"	of 5 weighted: <u>1.0</u> =1	As the Design Guidelines (2025) were recently updated, this score is likely to be low; from field walk: low conformance
Land	Conformance with Climate Design Principles Evaluates how well new development incorporates climate resilience, green building, and passive design	1 of 5 weighted: 0.5 = 0.5	Weighted less because of little new development within the area and no evidence yet of climate adaptive design
ure	Sewer, water, stormwater, & drainage systems [NBHD Score] Evaluates if core wet infrastructure systems can support expected TOD intensity and population growth (Note: This score is shared with Hô'ae'ae station area)	of 5 weighted: <u>1.5</u> = <u>1.5</u>	Weighted more: TOD Plan (2014) calls for significant spending on flood control (\$20.0M); no evidence of spending yet
nfrastructure	Electrical and telecommunications systems [NBHD Score] Assesses whether energy and digital infrastructure can support TOD growth and climate goals (Note: This score is shared with Hörae'ae station area)	of 5 weighted: 0.5 = 0.5	Weighted less because Most utility lines have not been located underground yet, besides along rail
Infrast	Climate resilient regional transportation [Region Score] Evaluates if emergency access, freight, and air connections can support TOD	of 5 weighted: 1.0 =1	The TOD Plan (2014) calls for significant spending on new streets (\$17.2M) and bridge work (\$16M); none recorded yet

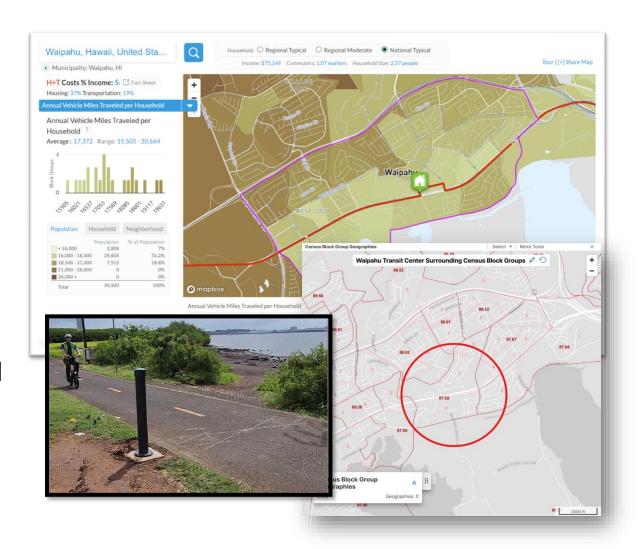


- Pouhala (Waipahu Transit Center)
   Station
  - High quality transit network
  - Major redevelopments yet to happen
  - Long way to go on green space and pedestrian network
  - Some policy adjustment needed to attain target ranges
  - Overall progress: in line with expectations





- Pouhala (Waipahu Transit Center)
   Station
- Data requires collaboration
  - Leaders: DTS, DPP, OahuMPO
  - Some GIS specialty mapping
  - Most data already exists
  - Limited additional effort
  - New parameters can be coordinated
- Needs will escalate
  - TOD planners and staffing
  - Counters, owners, coordinators



- Pouhala (Waipahu Transit Center)
   Station
- Data requires collaboration
- Needs will escalate
- TOD vision is shaping Honolulu
  - Planners must be reflexive and adaptive through implementation
  - A scorecard is a viable framework for measuring TOD progress
  - Room for refinement and tuning



# Call to Action

#### Call to Action

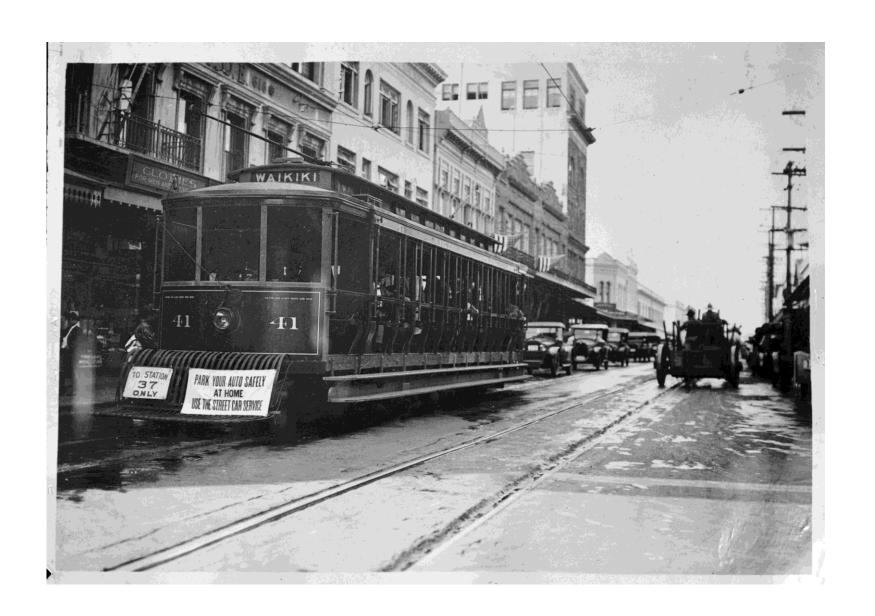
- Multimodal future is coming
- Relief from housing pressure
- Must pay attention to:
  - Parking—in its place
  - Transit-supportive form
  - Equitable growth
  - VMT target (policy)
  - Infrastructure financing



#### Call to Action

- Turning a corner: CCGS
- Longitudinal scorecard 5 yrs
- Can be scored retroactively
- It will take Council leadership
- Can reveal insights to action
- Inherently collaborative
- Goal: safer, more equitable, more livable Honolulu





Mahalo!

#### **Presentation References**

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