HAWAIʻI COMMUNITY FOUNDATION

DRIP Committee

Mar 19th, 2025

OPTICOS

Contents

What is the MMH Study?

The Missing Middle Housing (MMH) Study provides recommendations to help Maui expand housing choice and affordability.

MMH Scan™

- Identifies areas suitable for MMH
- Determines MMH types for Maui
- Zoning and policy analysis

>> **MMH Scan™ Report (available on House Maui website)**

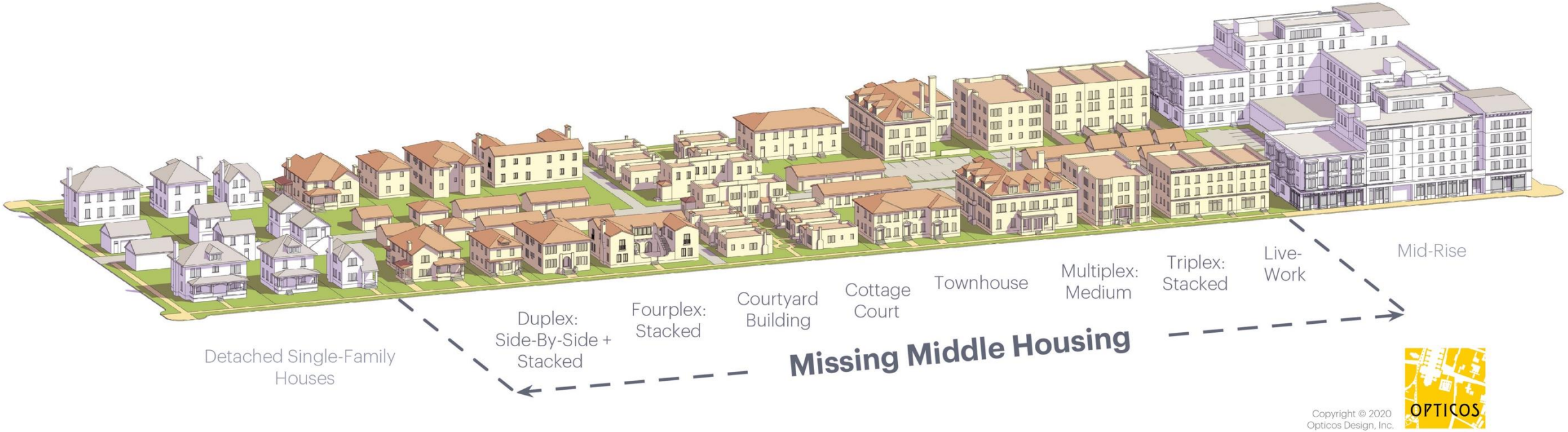
MMH Deep Dive™

- Design testing on typical lots
- Financial feasibility analysis
- Zoning and policy recommendations

>> **MMH Deep Dive™ Report**

Jan – Jul 2024 ⟷ **Aug 2024 – Jan 2025**

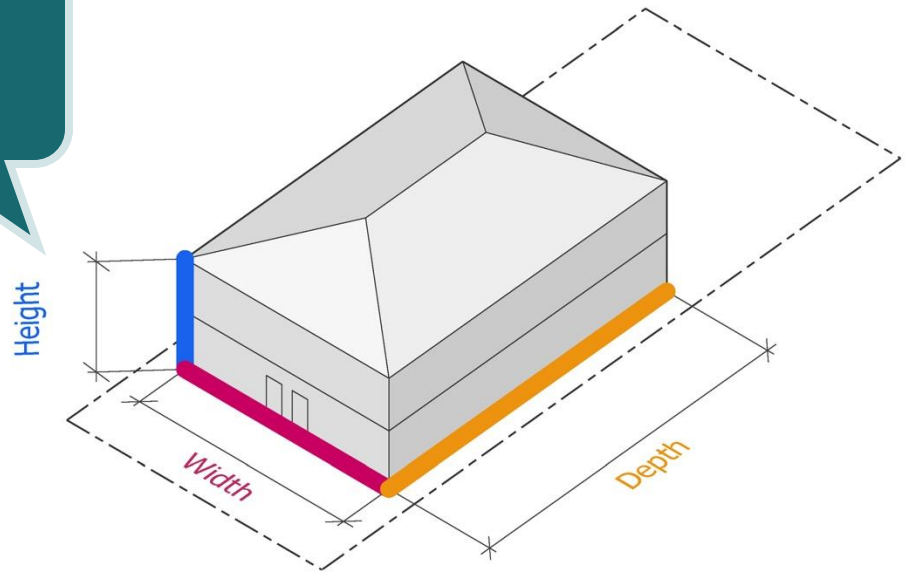
What is Missing Middle Housing?



House-scale buildings
with **multiple units**
in **walkable** neighborhoods

"Middle" in two different ways

"house" scale



lower cost by design

Missing Middle

The Alliance for Housing Solutions

1. A **middle form and scale** between single-family and multi-family buildings.
2. Can deliver **attainable housing choices** to middle-income families.

Part of the housing affordability solution

The barbell of affordable housing

Subsidize

Increase market rate supply

Lower cost by design

- ✓ Lower land costs
- ✓ Lower construction costs
- ✓ Smaller units
- ✓ Local, incremental development

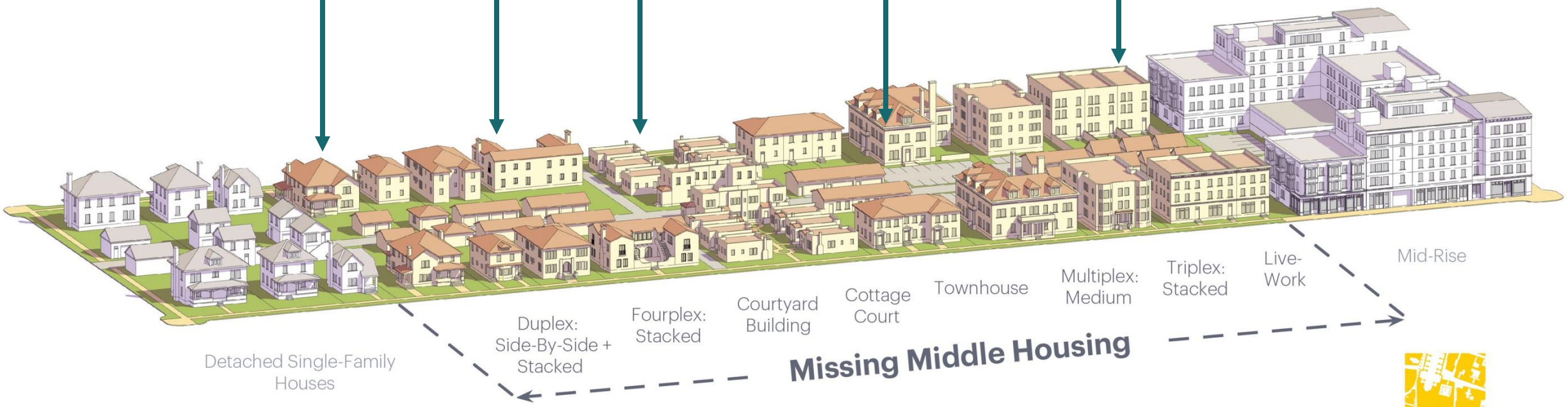
Characteristics of Missing Middle types

Smaller, well-designed units in house-scale buildings

Private and shared open spaces create community

Support walkable environments, less car-dependance

Accommodate a wide range of lifestyles and household types



Local examples

Why consider MMH for Maui?

In Maui County, only **18%** of residential land is zoned for multi-family.

36% of all households are renters.

$1,000,000 | $880,000 median price of single-family home | condo

27% of single-family homes and

50% of condos bought by **out-of-state** buyers

33% of Maui households can afford a mortgage on a median-price single-family home

54% of local renters are house-burdened

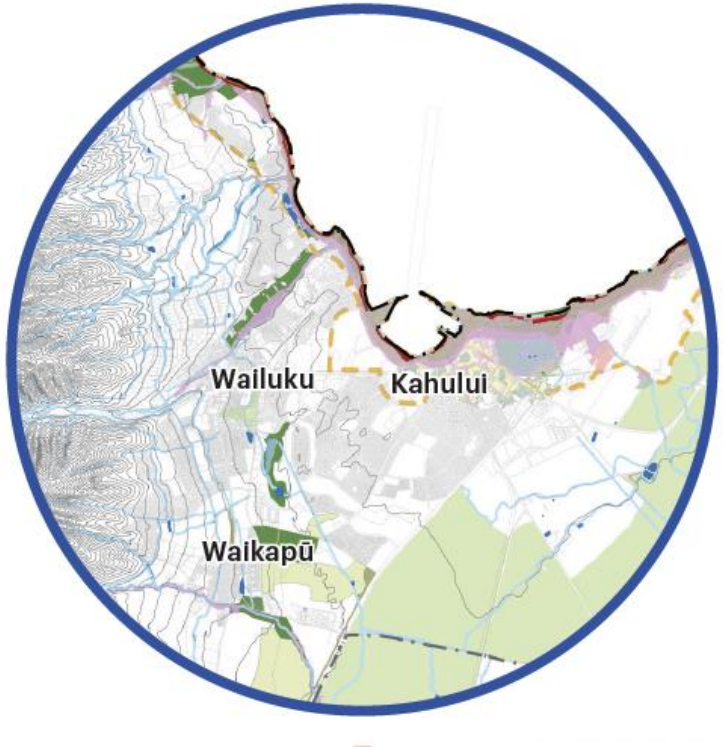
paying >30% of total household income for rent. Of these, **28%** are severely rent-burdened paying >50%.

Maui County has the state's highest median asking rent, the highest median condo price and is the most "severely rent burdened"

Since 2000, Maui has experienced a 339% price growth for homes.

Median housing costs in Hawaii = 2.7 times higher than the national level

Analysis Methodology



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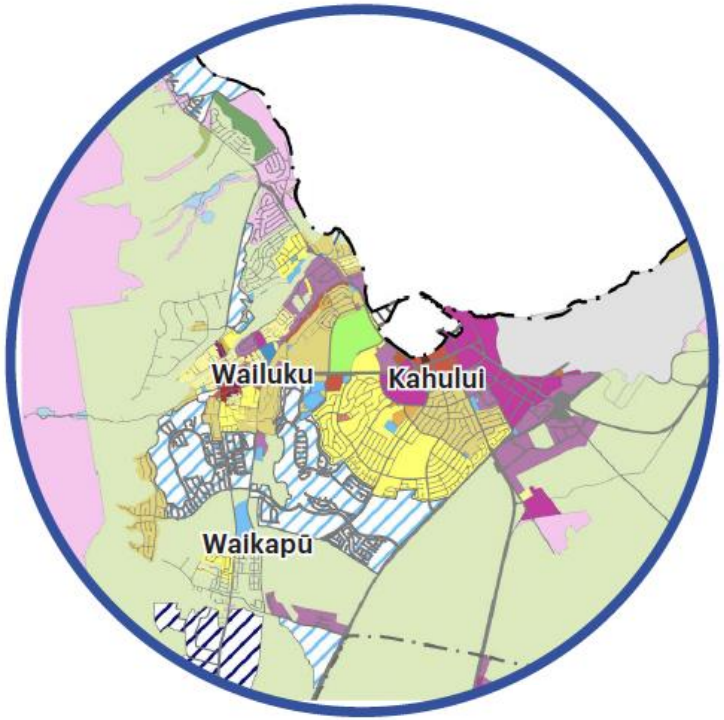

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Natural Constraints

Built Form
Zoning + Land Use

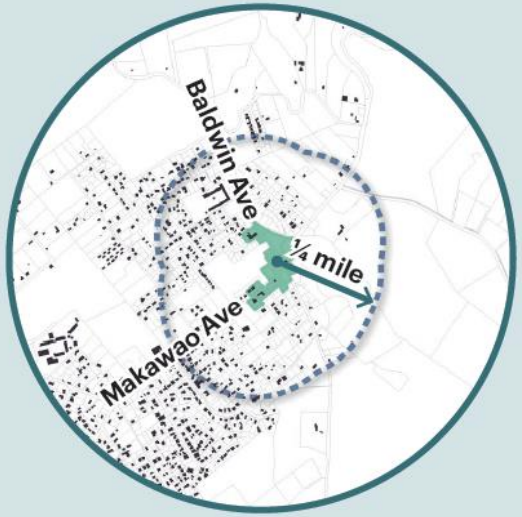
Connectivity +
Access to Amenities

Existing Centers in Maui

Mixed-use centers **can support additional housing including MMH**

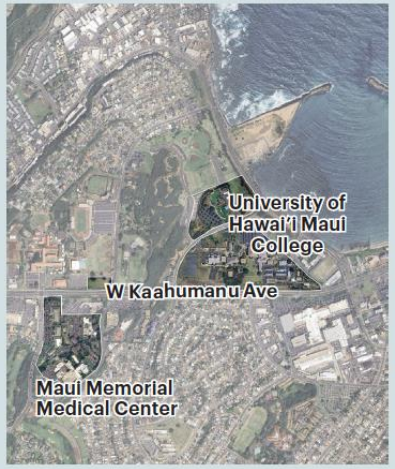
MMH-Ready Areas around centers (5 to 10-minute walk distance)

Example of a Village Center: Makawao

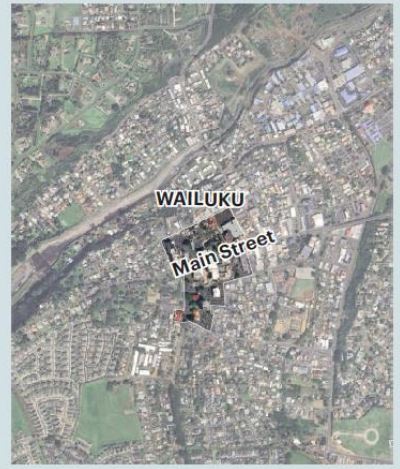


Example of a Town Center: Wailuku

Transit-Oriented Corridor

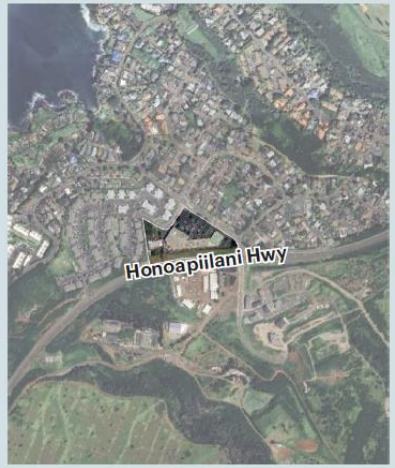


Campus



Town Centers

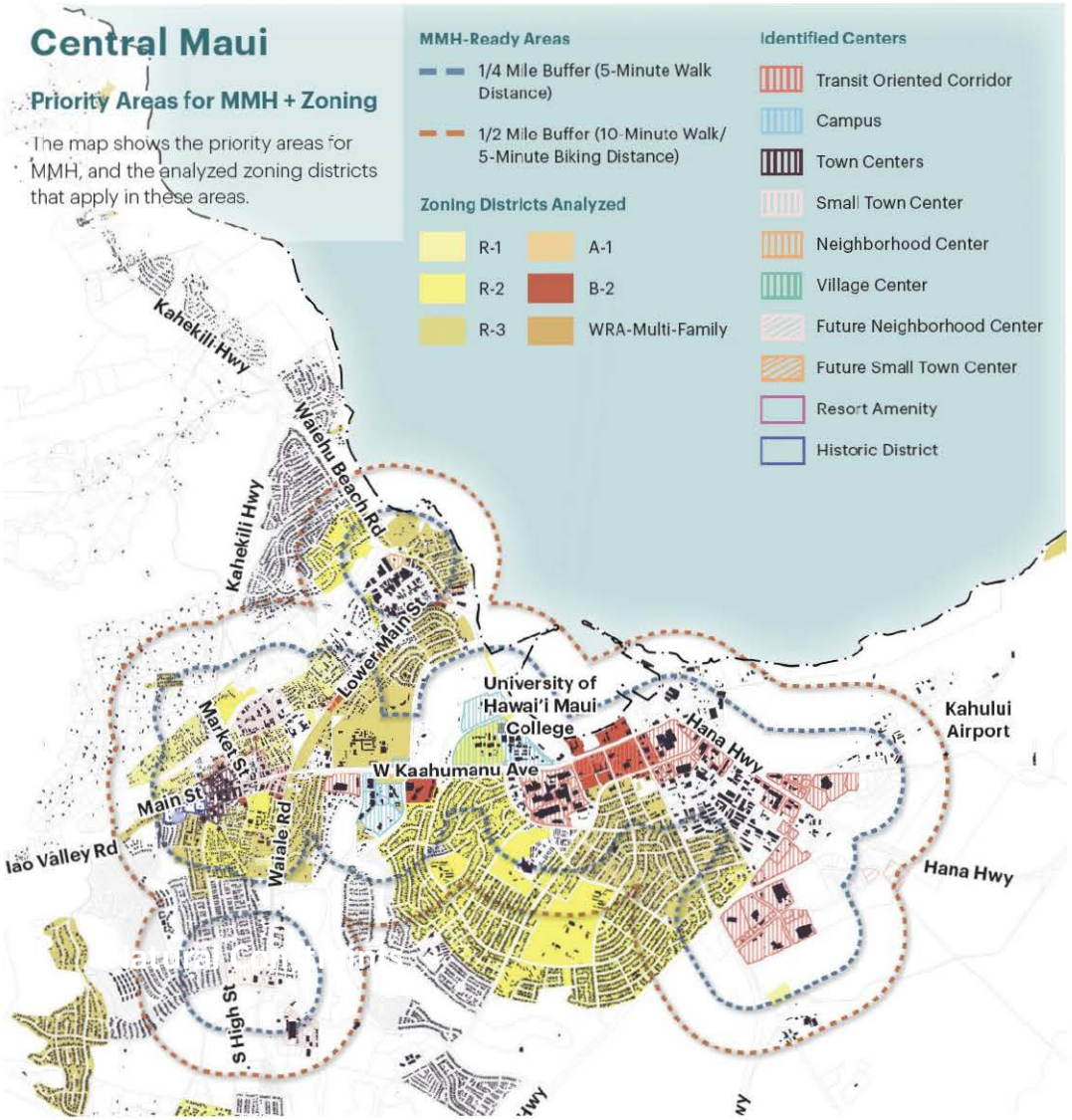
Small Town Center

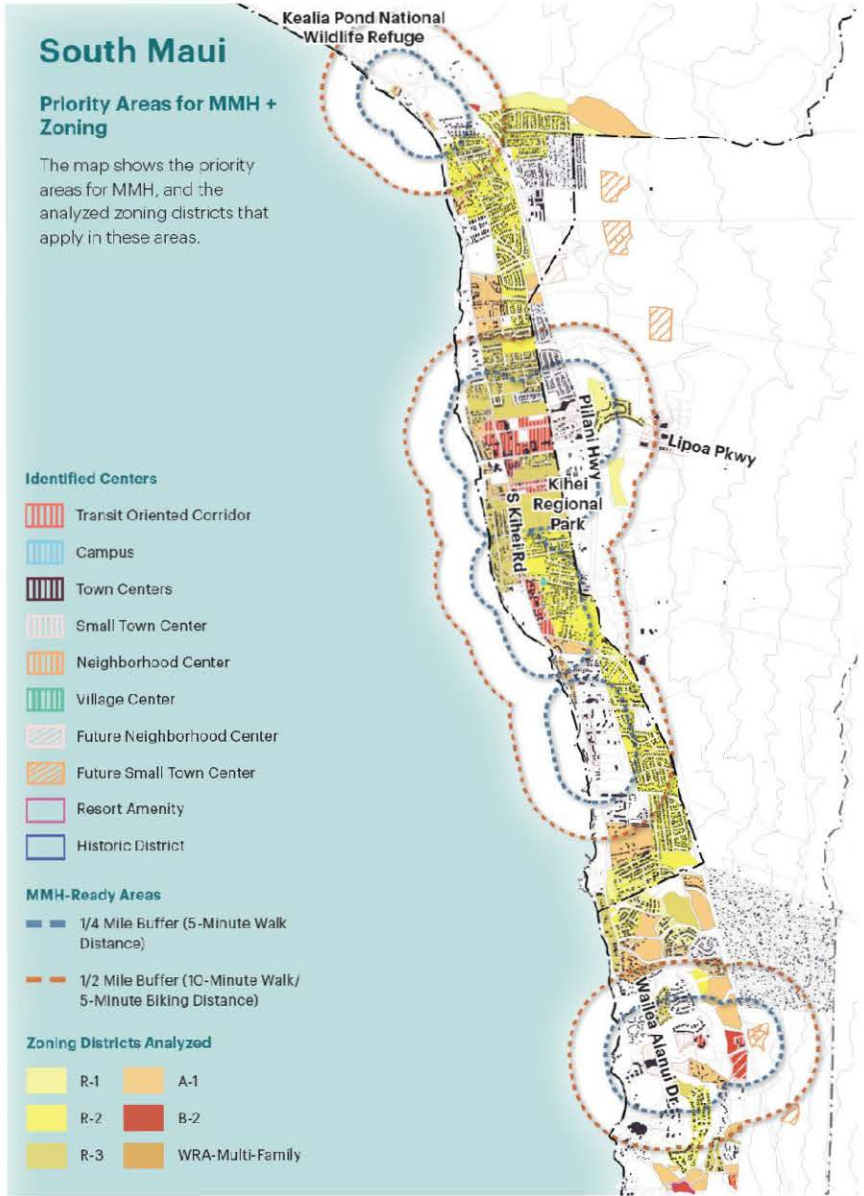


Neighborhood Center

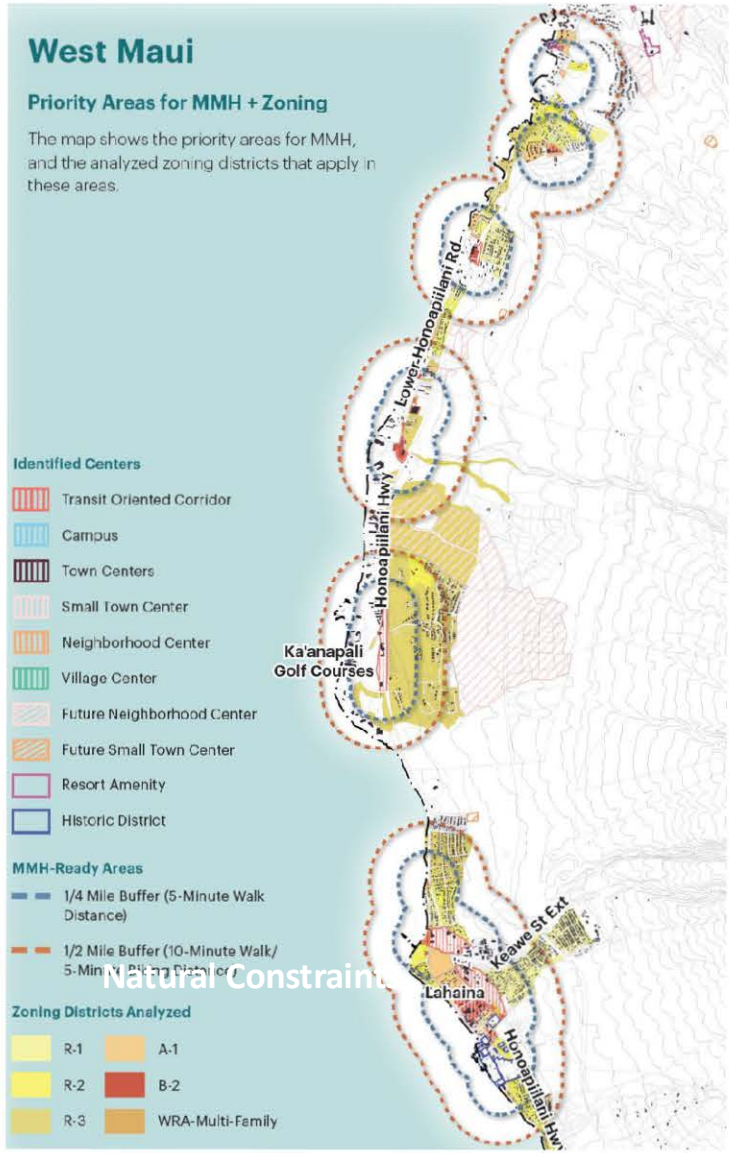
Village Center

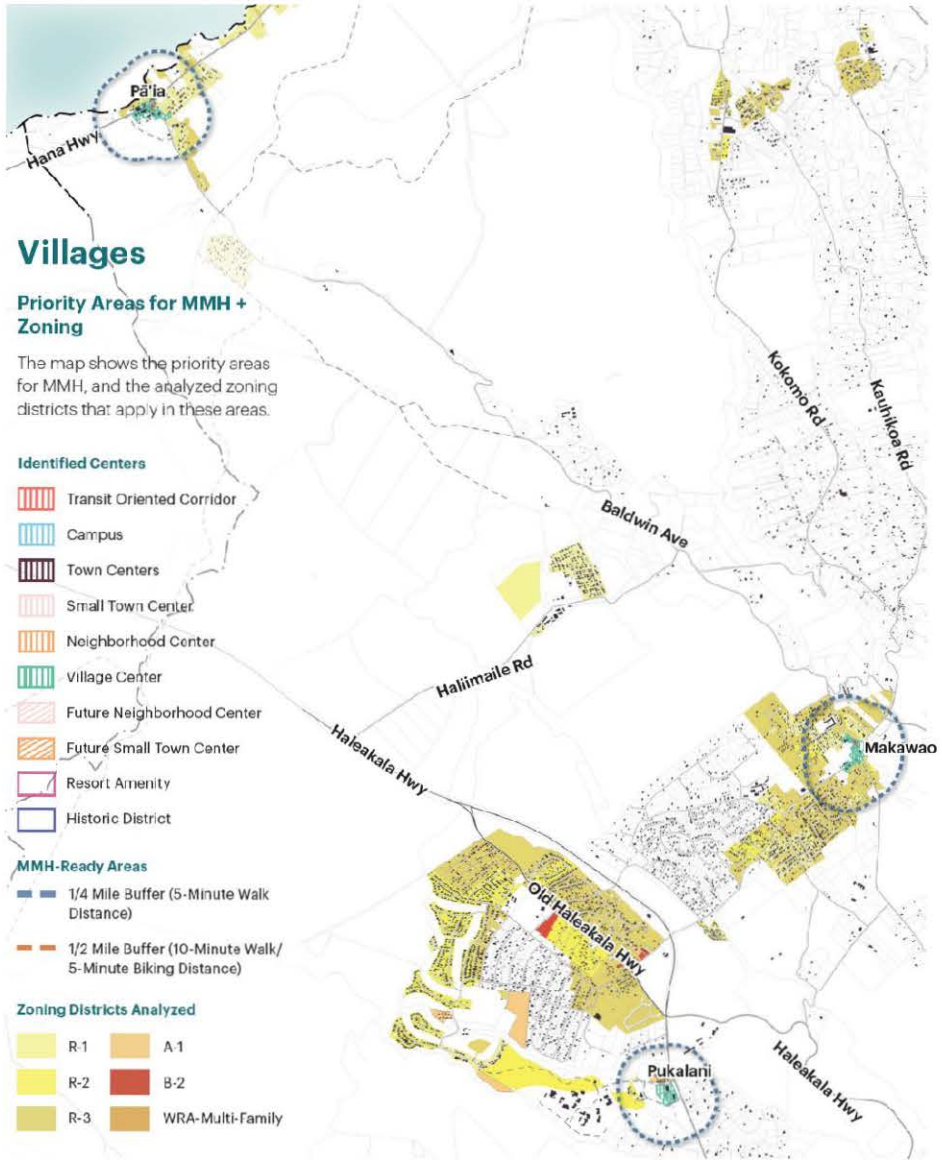
Centers + MMH-Ready Areas





Centers + MMH-Ready Areas





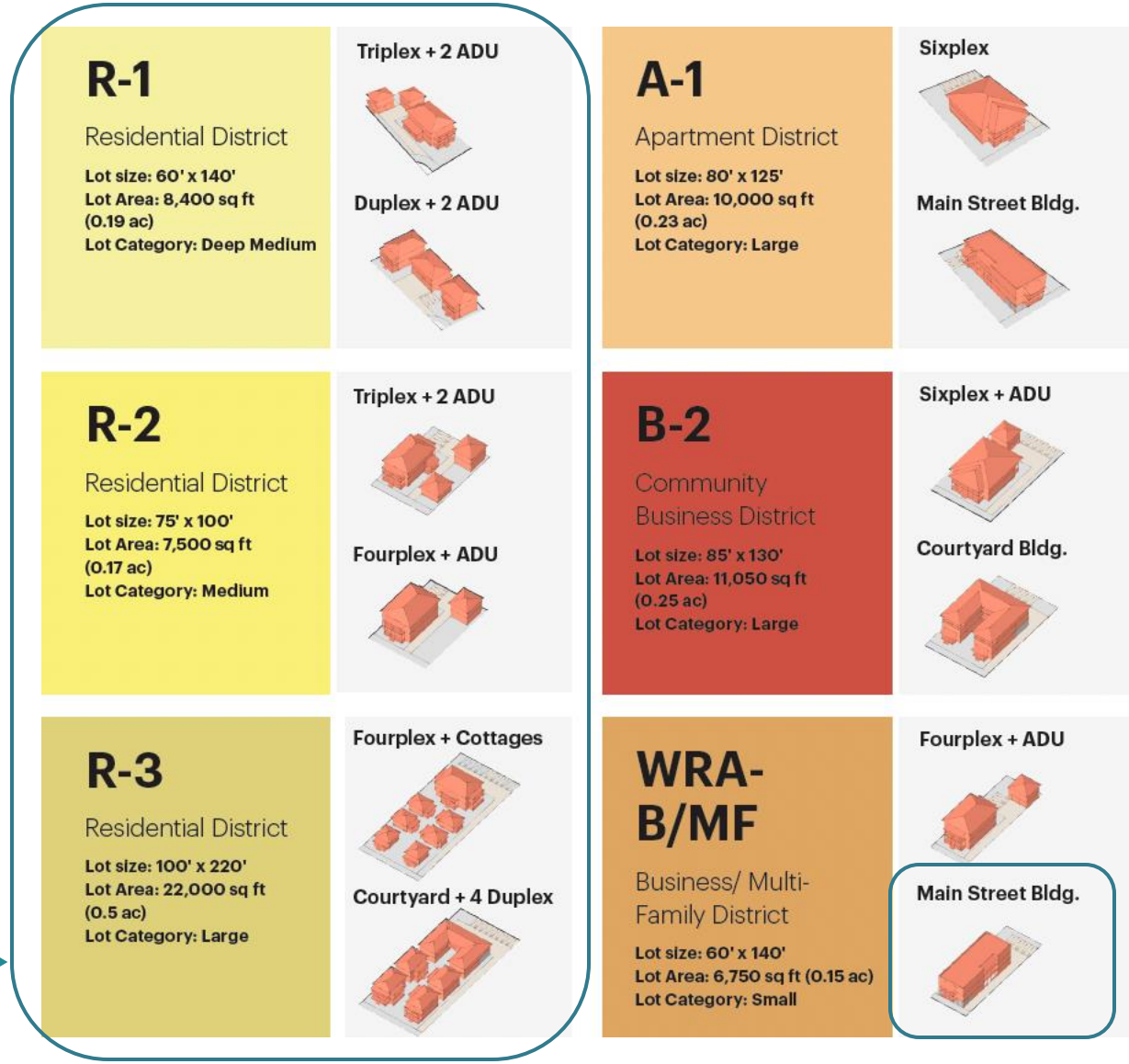
Test Fits Analysis

What was tested in each zone?

- Test Fits include testing of **different MMH types on typical lot sizes** in Central, West, and South Maui.
- The process seeks to optimize the unit count and parking for a given lot size. It uses actual building types and site parking layouts to provide more precise results.
- Seven options were selected for Feasibility Analysis
- Identifies key regulatory barriers that were identified in the MMH Scan:

1. **Multi-family housing is not allowed** in residential zones
2. **Maximum density** allowed in R-1, R-2, and R-3 is too low
3. **Minimum lot size** standards in R-1, R-2, R-3, A-1 and B-2 is too large
4. **Minimum setbacks** are too large in R-1, R-2, R-3 and A-1
5. **Minimum off street parking** required in all zones is too high
6. **Maximum lot coverage** is too low in A-1

Options selected for Feasibility Analysis



Feasibility Takeaways

How can we improve Feasibility and Attainability?

Reduce Parking Requirements

On small infill sites, parking competes with leasable area. With less parking, larger units are possible leading to a more feasible project.

Increase Density / Reduce Unit Size

Increasing density allowances on lots, allows for smaller units to be offered at lower cost.

Streamline Permitting

Longer permitting times increase costs, delay revenues, and create additional risk for middle housing projects.

Waivers and Subsidies

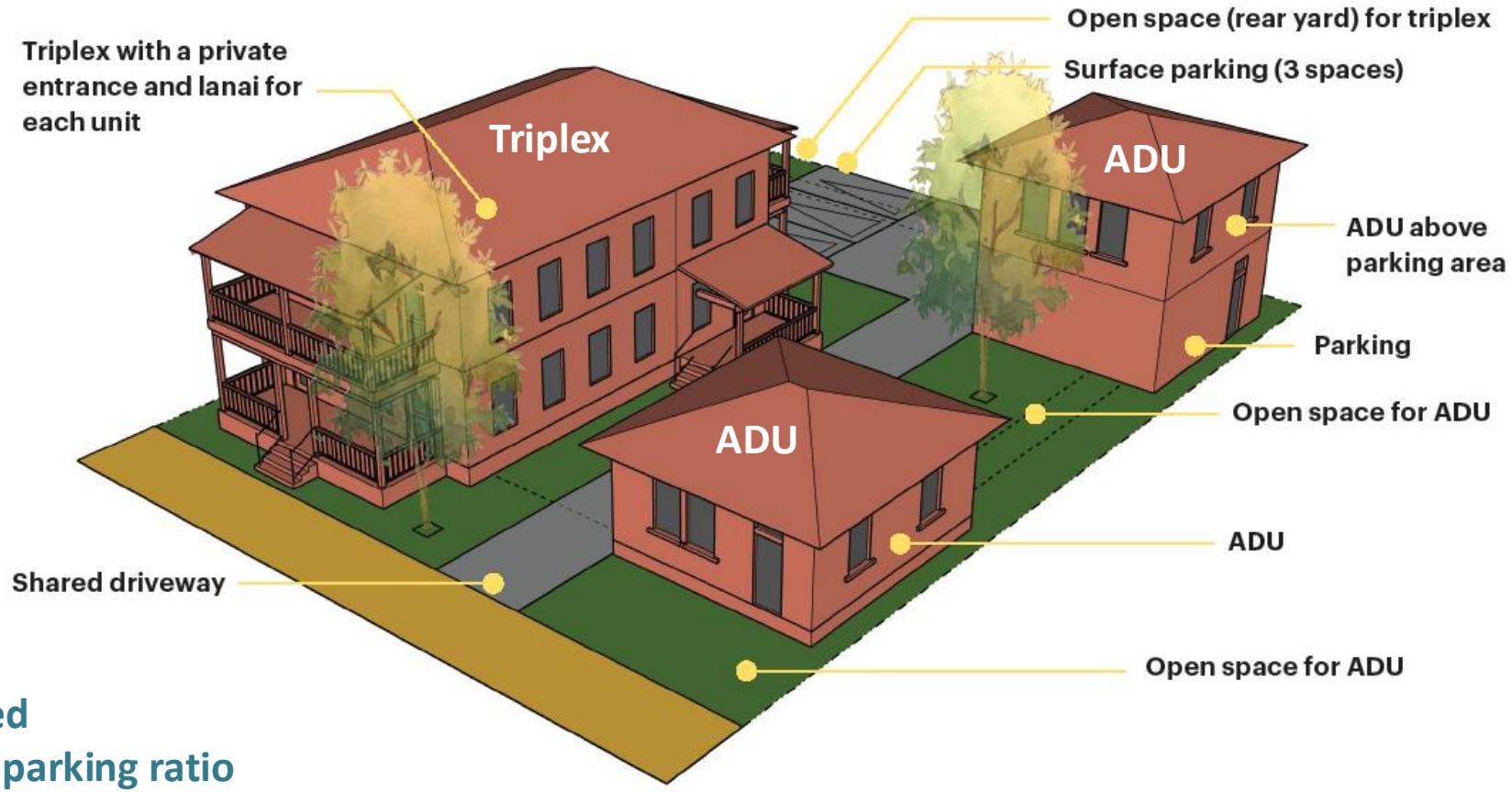
Workforce housing (80-120% of AMI) is hard to build on Maui. Consider fee waivers or other forms of subsidy.

Infill Site– Typical Lot (Kihei)

- Location: South
- Zone: Residential (R-2)
- Lot Characteristics:
  - Type: Medium Lot
  - Dimensions: 75’ x 100’
  - Area: 0.17 acres | 7,508 sq ft
  - TMK: 239032007
  - Address: 74 Kupuna St, Kihei, HI 96753

Infill Opportunity Site– Typical Lot (Kihei)

This example shows how neighborhood-scale MMH can fit on a typical “medium” category lot in Maui.



5 units achieved
29 du/ac | 1:1 parking ratio
1,500sf/unit

Infill Site– Typical Lot (Kihei)

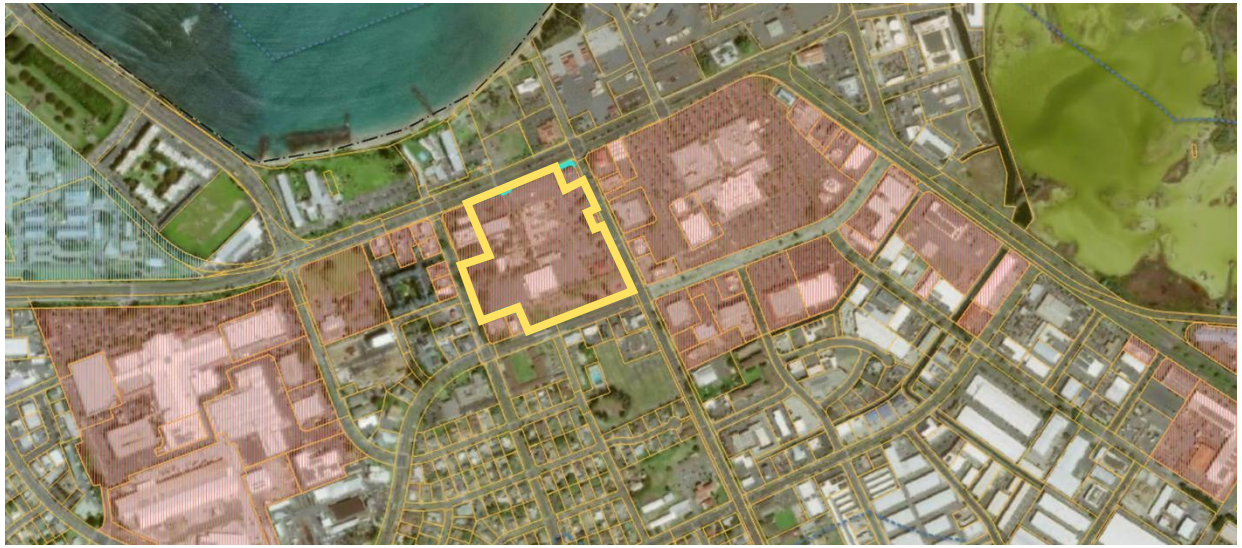
Design Highlights

1. House-scale triplex provides three housing units.
2. Shared and/or private lanais.
3. Each unit has a dedicated entrance.
4. Shared driveway with the previous surface.
5. Semi-private outdoor open space

Housing Types

1. Triplex
2. Accessory Dwelling Unit

Case Study #1 MMH in Kahului



- Location: Central Maui
- Zone: Business Community (B-2)
- Lot Characteristics:
  - Type: Corridor Infill
  - Dimensions: 935’ x 975’
  - Area: 16.75 acres
  - TMK: 237007009
  - Address: 65 W Kaahumanu Ave, Kahului, HI 96732

Case Study #1: MMH in Kahului

Existing Conditions

- The site is on Ka'ahumanu Ave Community Corridor.
- It contains existing businesses, but much of the site is an underutilized parking lot.
- This example assumes a lot of consolidation of B-2 parcels where multi-family residential is allowed.

Conceptual design of a Missing Middle neighborhood on a site in Kahului. Note this is for illustrative purposes only and does not indicate an actual project.


Aerial showing existing conditions

At a Glance	
This site in Kahului is a great example of how MMH types can work together with larger building types to create a neighborhood that responds to the desired development intensity and still provides pedestrian-scaled public spaces.	
Program Information	
Location	Kahului
Area	16.8 acres
Units Achieved	455 units
Density	27 du/ac
Parking Ratio	1 space per unit

Case Study #1: MMH in Kahului

Design Highlights

1. Internal courtyard with private entry for every unit
2. Shared central open space for a variety of activities
3. Green Paseo as pedestrian and bike connector
4. Pavillion for shaded gathering spaces

Housing Types

1. Courtyard building
2. Double-corridor building

Zoning Barriers to MMH

Key
- ✗ Major Barrier
- ● Minor Barrier
- ✓ Enables MMH
- N/A Not Applicable

Zones analyzed:
R-1, R-2, R-3, A-1, B-2, WRA-BMF

Major Barriers to MMH

1. Maximum Density
2. Minimum Setbacks
3. Minimum Off-Street Parking
4. Allowed Uses in Residential Zones

Minor Barriers to MMH

1. Maximum Height
2. Maximum Lot Coverage
3. Minimum Lot Size

Barriers to MMH	R-1	R-2	R-3	A-1	B-2	WRA-BMF
Max. Density	✗	✗	✗	N/A	N/A	N/A
Min. Lot Size	●	●	✗	✗	●	✓
Max. Lot Coverage	✓[5]	✓[5]	✓[5]	✗	✓	✓
Min. Setbacks	●	●	●	✗	●	●
Min. Off-Street Parking	✗	✗	✗	✗	✗	✗
Floor Area Ratio (FAR)	N/A	N/A	N/A	✗	✓	✓
Allowed Uses	✗	✗	✗	✓	✓	✓
Max. Height	✓	✓	✓	✓	✗	●
Fire Sprinklers Required for 3 or more units	✗	✗	✗	✗	✗	✗
Number of MMH Types Allowed	1[2]	2[2]	3[2]	3[3]	3[4]	3[1]

Major Barrier: Maximum Density

What are current standards?

Density is regulated by dwelling units per acre in R-1, R-2, R-3 and Floor Area Ratio (FAR) in the A-1, B-2, and WRA-BMF districts. Maximum density is a barrier in R-1, R-2, R-3 and A-1.

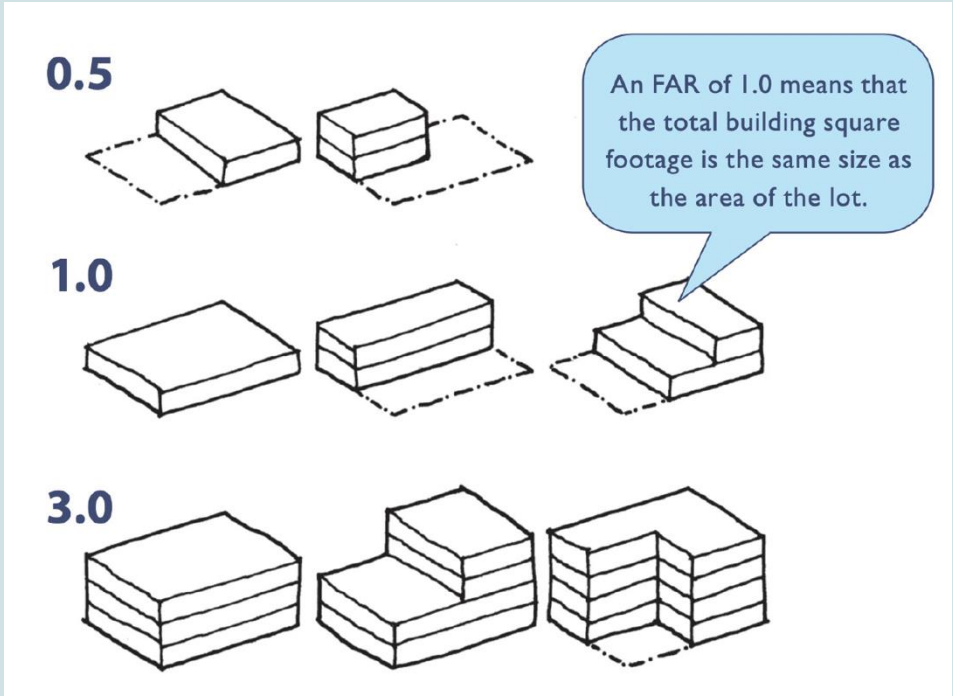
Maximum Allowed Density			
R-1	**R-2**	**R-3**	**A-1**
7.26 du/ac (6,000 sf/u)	5.8 du/ac (7,500 sf/u)	4.35 du/ac (10,000 sf/u)	0.5 (FAR)

Why is this a barrier?

MMH types have higher densities than single-family homes. These low-density thresholds prevent MMH from being built in contexts that are otherwise suitable for MMH.

Resultant Density from Test Fits			
R-1	**R-2**	**R-3**	**WRA**
27-33 du/ac	29 du/ac	20-28 du/ac	1.4 (FAR)

What is Floor Area Ratio (FAR)?



Floor Area Ratio (FAR) is calculated as the ratio of the total square footage of a building to the total area of the lot that the building is located on.

Emerging Topics for Implementation

1. Policy and Zoning
2. Application Review and Entitlement
3. Building Code
4. Infrastructure
5. Funding and Financing
6. Incentives/ Support for Local Developer

Community Conversations:

- Reactions to MMH Study findings
- Key opportunities
- Concerns/ Issues

Next Steps

1. Initiate two MMH pilot projects at different scales using Project Districts or Innovative Housing for quick implementation
2. Establish MMH Overlay Zones or Floating Zones while Title 19 update is ongoing
3. Partner with local entities to apply for state and national funding to fast-track infrastructure upgrades and key projects
4. Establish funds to set up a centralized “MMH resource center” to provide financial and technical assistance for MMH
5. Initiate a toolkit of resources to promote, facilitate, and expedite MMH

Thank You

Open House December 5th, 2024

Maui Planning Commission February 25th, 2025

Visit the House Maui Website

What can Missing Middle look like on Maui?

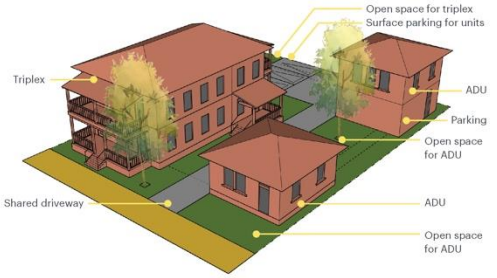
Missing Middle Housing types tested for Maui were adapted to accommodate **outdoor living** and **natural cross-ventilation.**

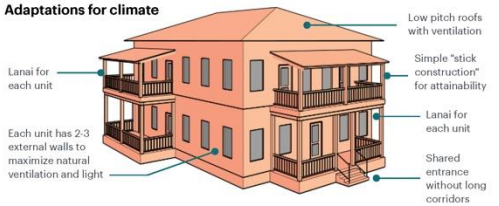
MMH Example: Triplex with two ADUs in a Maui Neighborhood.

Design Features

The Missing Middle types shown in this example include a two-storey **Triplex** and two **ADUs**. The ADU in the rear has tuck-under parking on the ground level with the residential unit on the second floor. The second ADU facing the street is a small single-story cottage. All of these infill buildings maintain the house-scale environment of the neighborhood. The building placement creates distinct open spaces for every building, in addition to lanais for each unit.

1. House-scale multi-family building provides multiple units.
2. Shared lanais provide semi-private shaded open spaces for the units.
3. Private entrances for all units.
4. Shared driveway with pervious surfaces for water infiltration and reducing the heat island effect.
5. Semi-private outdoor open space for each unit.





Central, West and South Maui
Missing Middle Housing Study
Maui MMH Scan + Deep Dive
February 25, 2025

OPTICOS

DRIP Committee

From: Jarret P. Pascual
Sent: Tuesday, March 18, 2025 8:33 AM
To: DRIP Committee
Subject: Invitation to the March 19 DRIP Meeting at 1:30PM on Missing Middle Housing
Attachments: MSD_Scan&DeepDive_031925.pdf

From: Stefan <stefan.pellegrini@opticosdesign.com>
Sent: Tuesday, March 18, 2025 6:49 AM
To: Jarret P. Pascual <Jarret.Pascual@mauicounty.us>
Subject: Re: Invitation to the March 19 DRIP Meeting at 1:30PM on Missing Middle Housing

Hi Jarret,
Thanks for the follow up.
You can download slides for tomorrow here:

MSD_Scan&DeepDive_031925.pdf
Password: MDbOV85f9S0r
https://opticosdesign.egnyte.com/dl/TsyYLCQ6Jr

Yes – 10-15 minutes is just fine.
Looking forward to meeting everyone tomorrow.

Best,
Stefan

Stefan Pellegrini (he/him), RA, AICP, Principal

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