UNION

Places of value.
Value of place.

Strategies for Encouraging Smart Growth and More Affordable Housing

Presented to the

RI State Land Use Committee – March 28, 2022

Presented by

Donald Powers, President
Union Studio Architecture & Community Design

Part 1

Impediments to Affordability

Costs of Development

- Land Cost
- Design Costs
- Costs of Approvals
  - time,
  - legal,
  - subconsultant,
  - etc.
- Materials Cost
- Labor Cost
- Other soft costs:
  - Marketing
  - Broker fees
  - Etc.

Costs of Development

- **Land Cost**
- Design Costs
- **Costs of Approvals**
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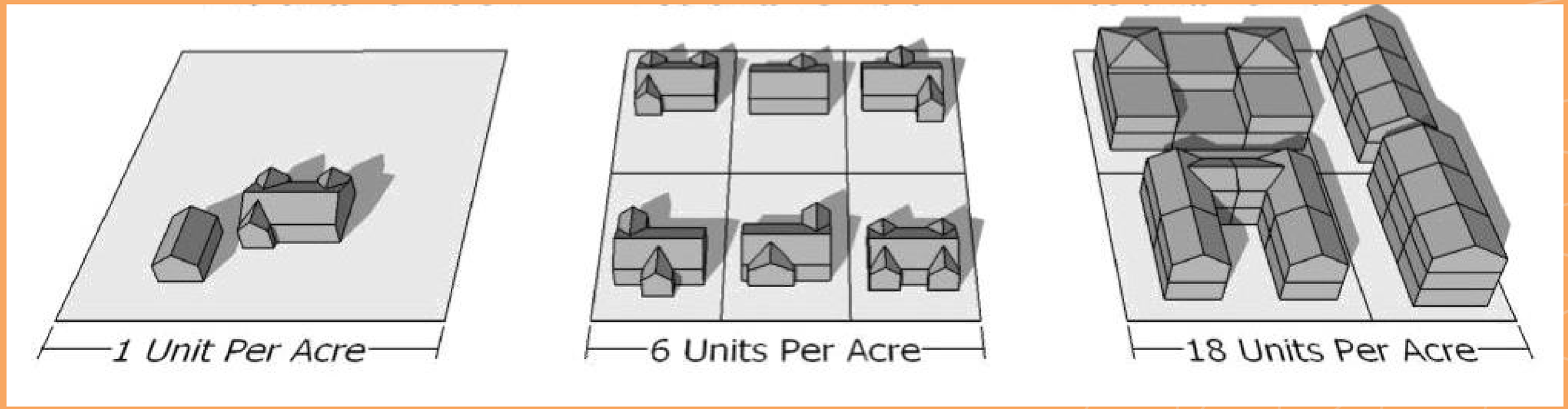
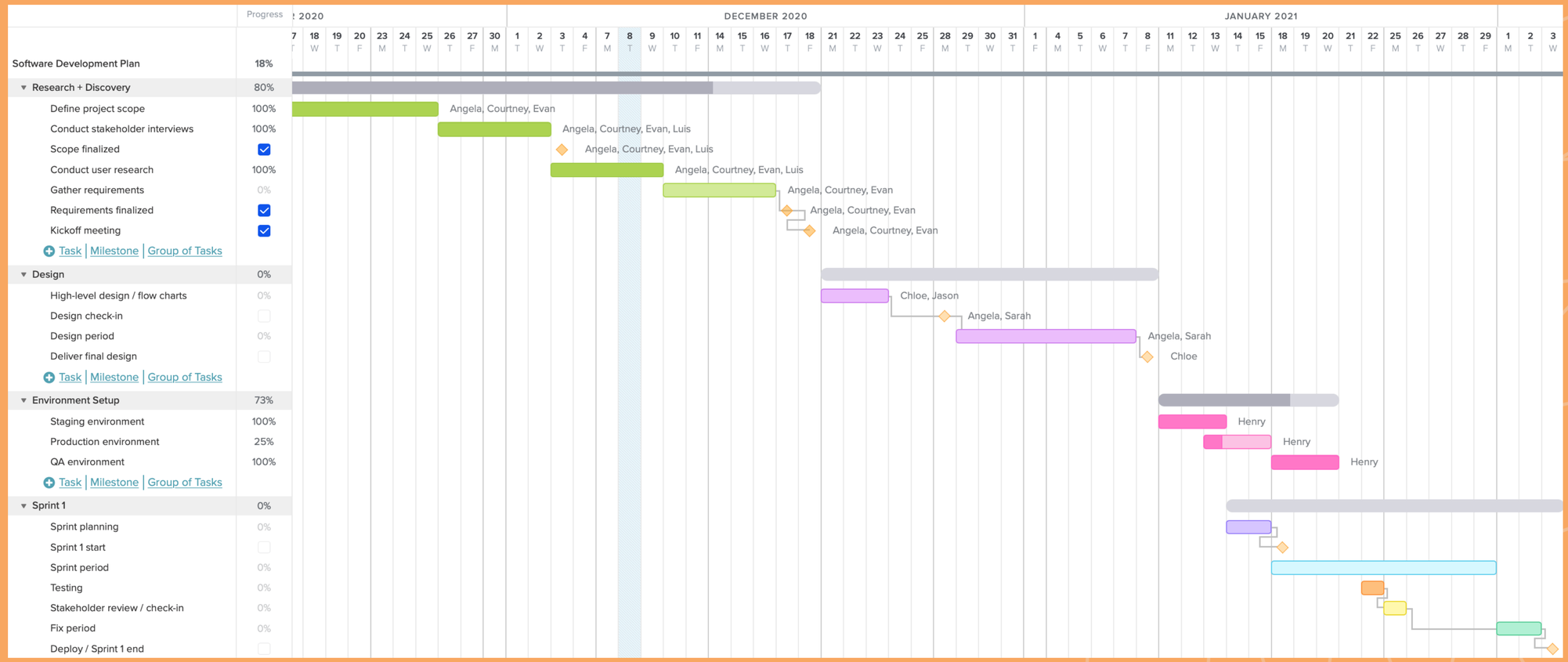
  - subconsultant,
  - etc.
- Materials Cost
- Labor Cost
- Other soft costs:
  - Marketing
  - Broker fees
  - Etc.

Land cost as component of DU cost can only be lowered by allowing more density (*less land cost per unit*).



Cost of approvals and entitlement as a component of DU cost can only be lowered by making them more predictable and less time consuming.



Lower **land cost** ***(density)*** and lower **cost of approvals** ***(predictability)*** are both encouraged through **better design**.:

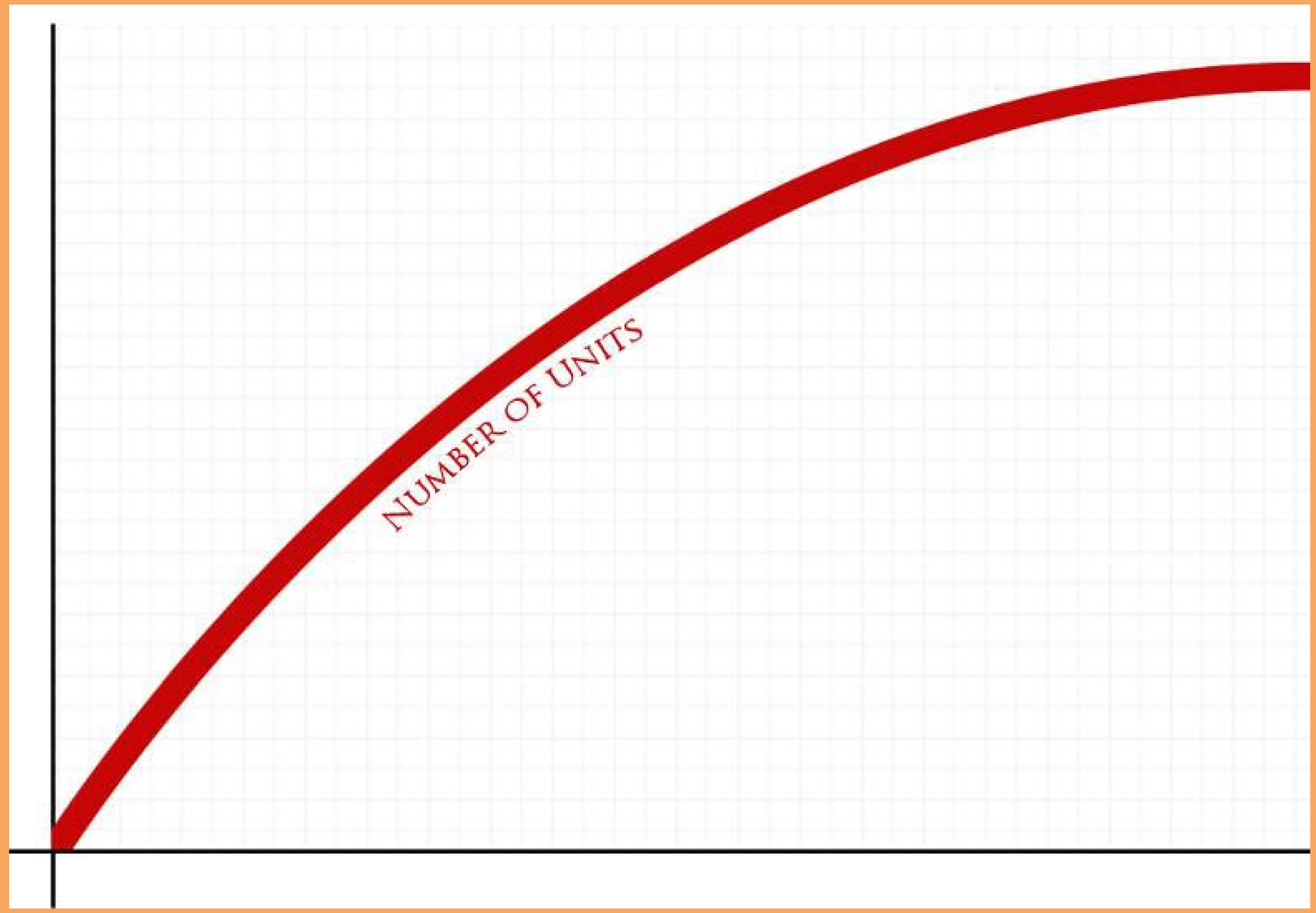
Why do Municipalities and neighbors resist “density” (and development generally)?

Most recent experience suggests their life will not be better with whatever development is being proposed.

Not a fair trade.

Costs of entitlement encourage larger projects, which then inspires greater resistance and fear in community

Costs of entitlement encourage larger projects, which then inspires greater resistance and fear in community



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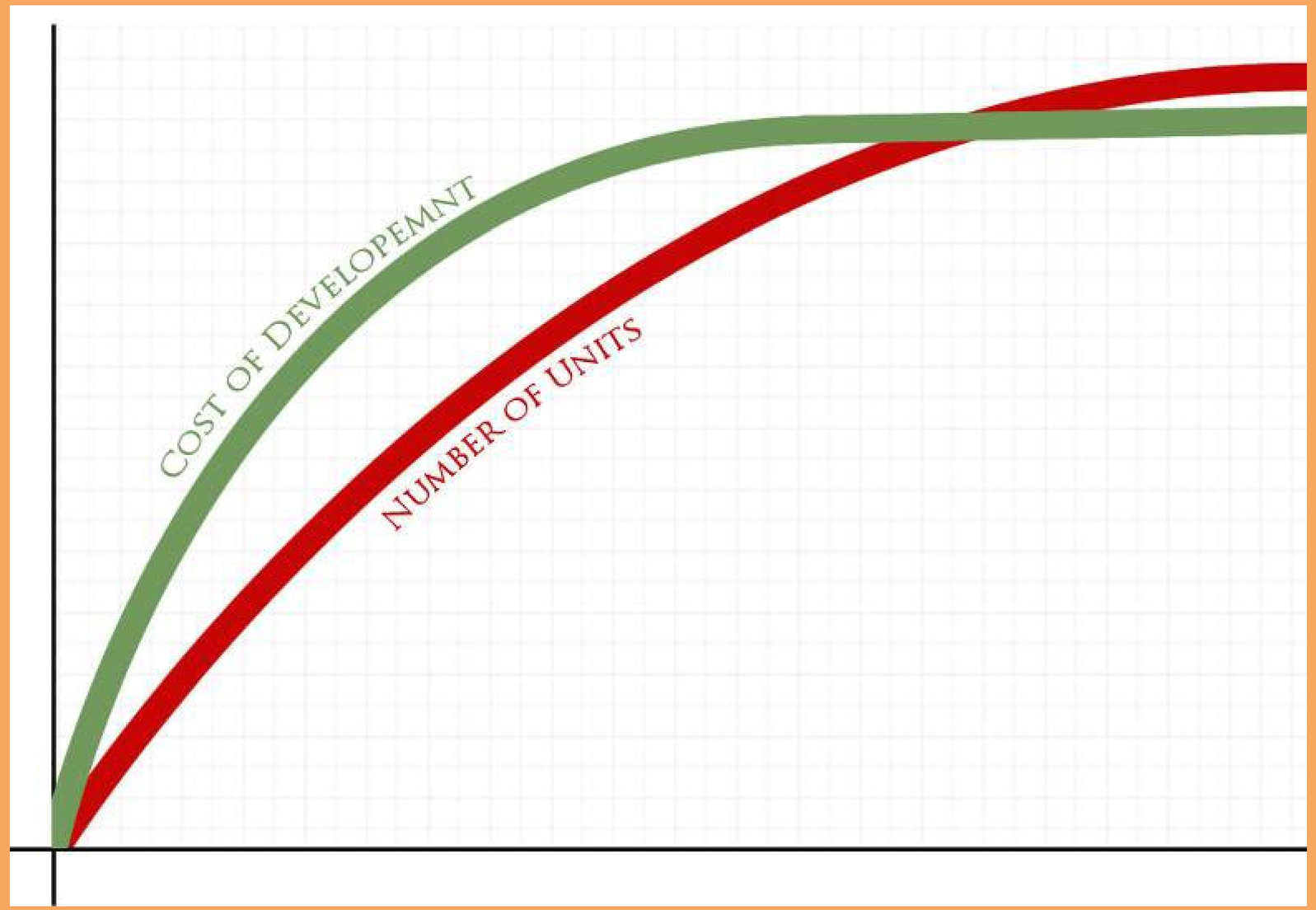
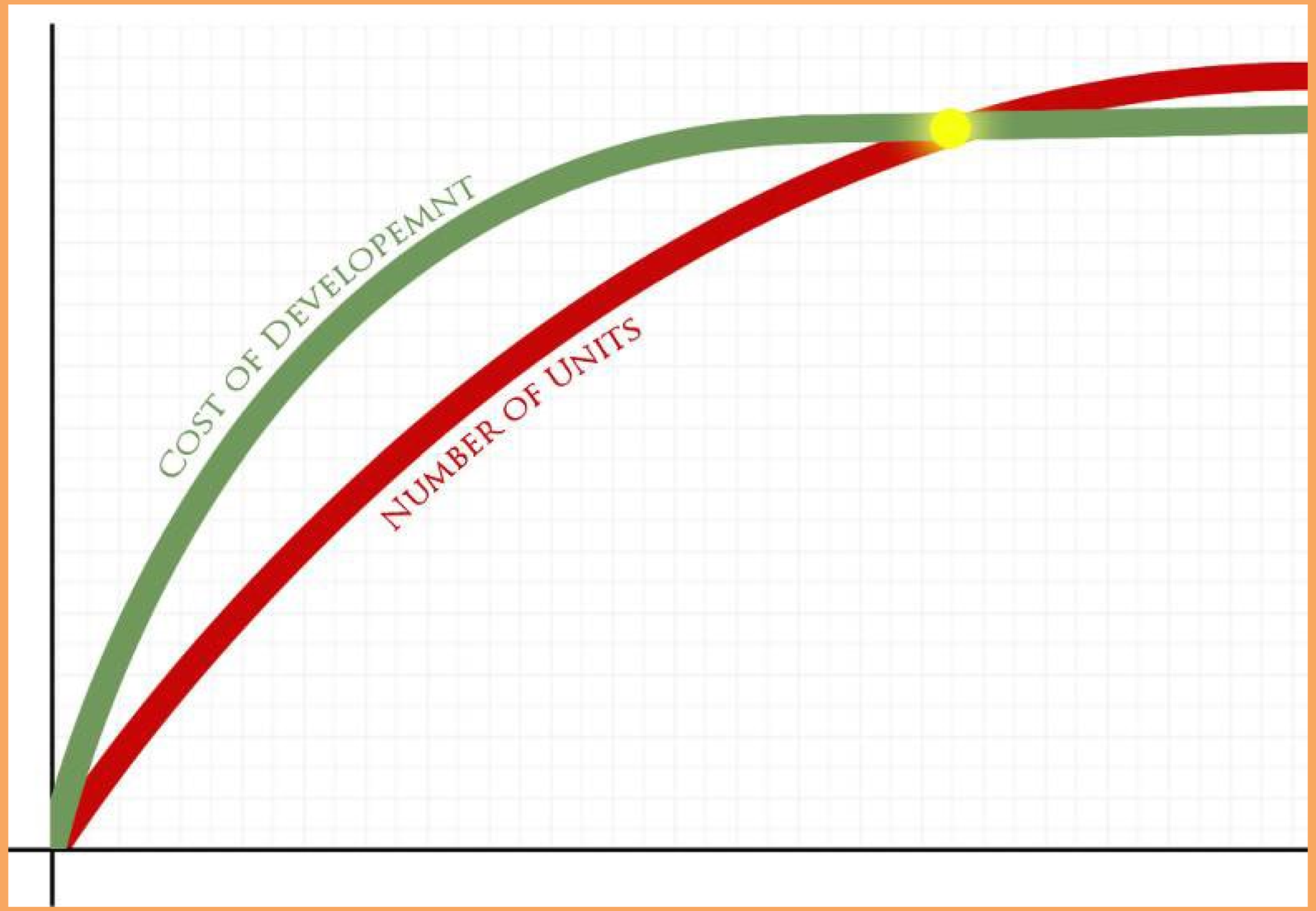


Costs of entitlement encourage larger projects, which then inspires greater resistance and fear in community



Better design often can overcome residents' fears and speed up approval.

The Cottages on Greene, East Greenwich, RI

Comprehensive plan and zoning called for “high density housing”.

15 Units/.9 acres

The Cottages on Greene, East Greenwich, RI

15 units is not just 15 units

15 Units/.9 acres

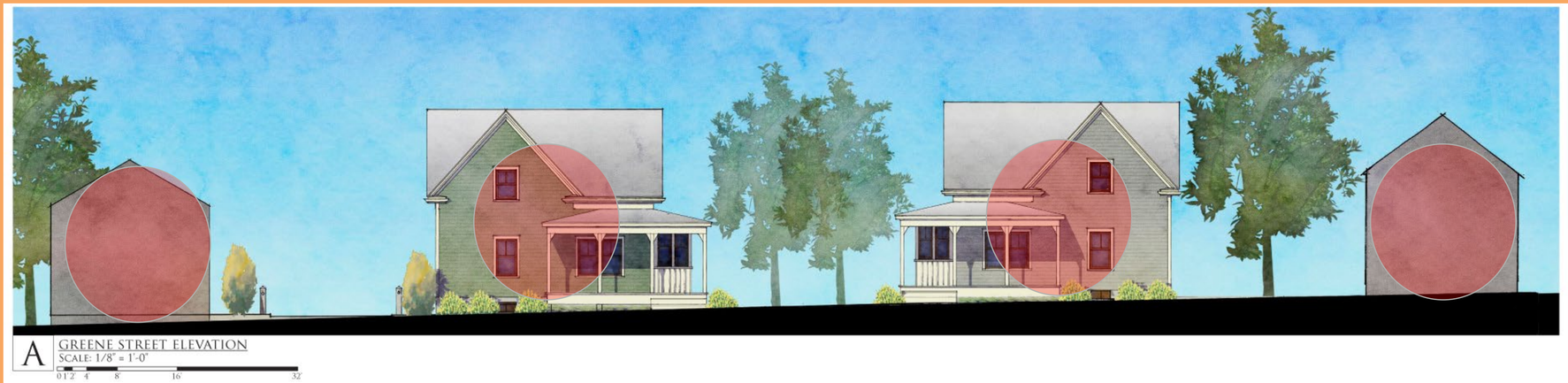
The Cottages on Greene, East Greenwich, RI

15 units is not just 15 units

15 Units/.9 acres

The Cottages on Greene, East Greenwich, RI

The Cottages on Greene,
East Greenwich, RI



The Cottages on Greene,
East Greenwich, RI

What they had feared:

The Cottages on Greene, East Greenwich, RI

What they were shown:

The Cottages on Greene, East Greenwich, RI

What they got:

The Cottages on Greene,
East Greenwich, RI

CASE STUDY: HOUSING ON CAPE COD

MISSING MIDDLE

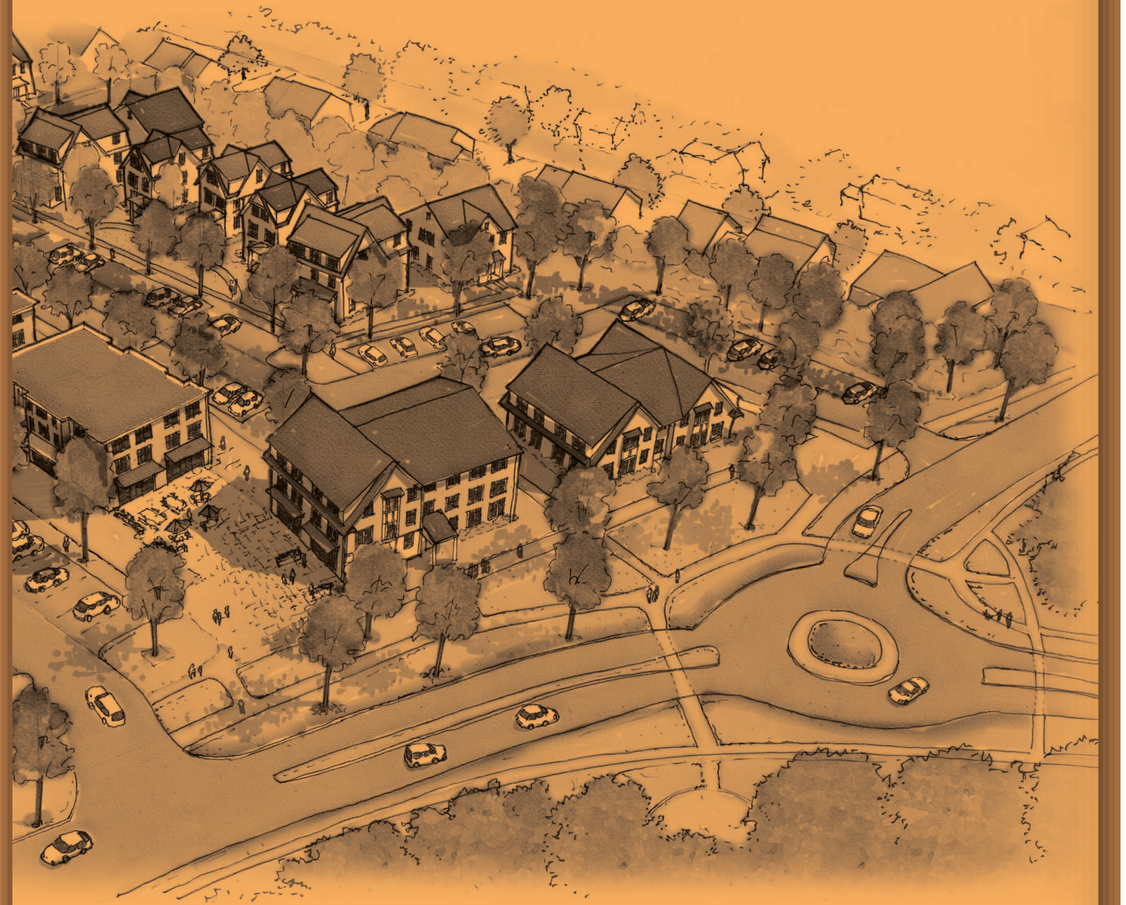


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Figure 3-1. Major causes of Cape Cod's housing shortage

Source: Quinn and Coxe, "Housing on Cape Cod: The High Cost of Doing Nothing." Housing Assistance Corporation. 2018.

Can Missing Middle Housing Save the day?

According to a 2017 report by the Cape Cod Commission, there is a need for an additional 4,441 rental units.[51]

THE MULTI-FACETED ROLE OF MISSING MIDDLE HOUSING

Missing Middle housing can provide several benefits to a region, including the addition of housing choice. Housing choice is crucial in providing ample housing for diverse communities with a range of income and familial compositions. Missing Middle housing is not synonymous with affordable housing but it can help alleviate an affordable housing shortage by increasing supply and providing a myriad of building types. The following section explores the role of Missing Middle housing in an affordable context, but keep in mind that Missing Middle housing is most successful when it is able to support a mixed-income community. Although Cape Cod is currently experiencing an affordable housing crisis, the cost of housing is steadily increasing, affecting more households every year and creating a greater urgency for housing choice.

CONVENTIONAL ZONING AND VACATION RENTALS HAVE EXASPERATED CAPE COD'S AFFORDABLE HOUSING CRISIS

The forces behind Cape Cod's affordable housing shortage are multifarious, interdisciplinary, and undeniably complex. However, there are two factors that are recognized to have had a significant impact on the lack of affordable housing on Cape Cod - traditional and outdated euclidean zoning combined with the region's seasonal vacation culture.[52]

Our Approach to Missing Middle Housing

The following diagram illustrates the local range of Missing Middle housing types that Union Studio developed for the New England region. The types range in scale and density and can be used individually or in combination, depending on the size of the project. Here, the types are ordered approximately by dwelling units per acre. Types can additionally be clustered together, like with the cottage court, to achieve higher density. Each type is discussed in more detail on the following pages.

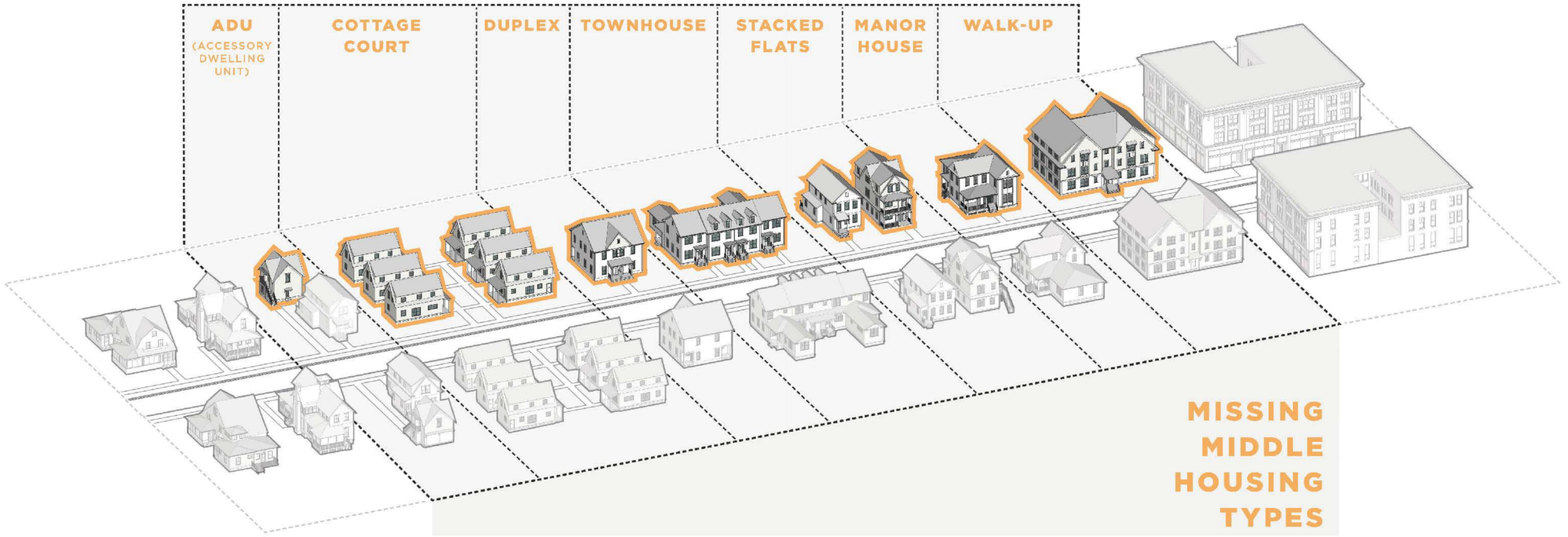


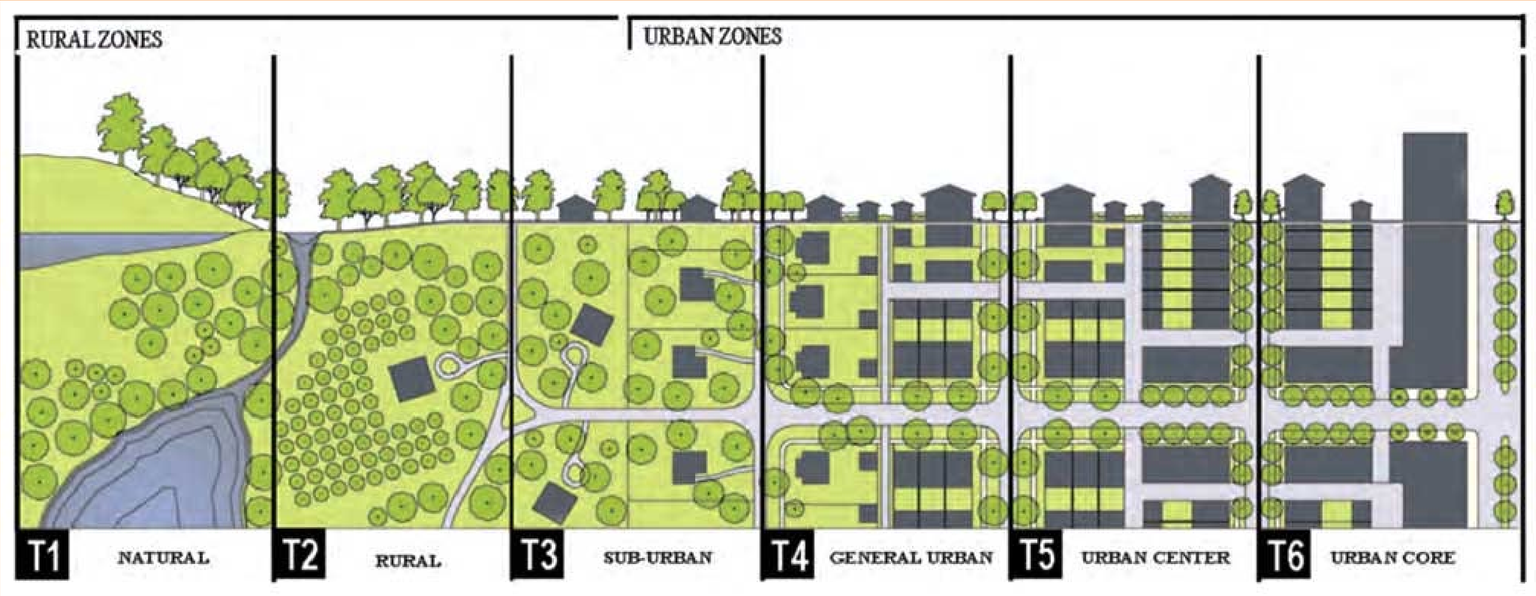
Figure 6-3. Missing Middle Housing Types

But “good design” is very hard to regulate or mandate.

Hammetts Hotel
Newport, RI

Possible Approaches

Form-Based Codes seem to promise a way of getting appropriate design, but often too vague – and hard to implement.



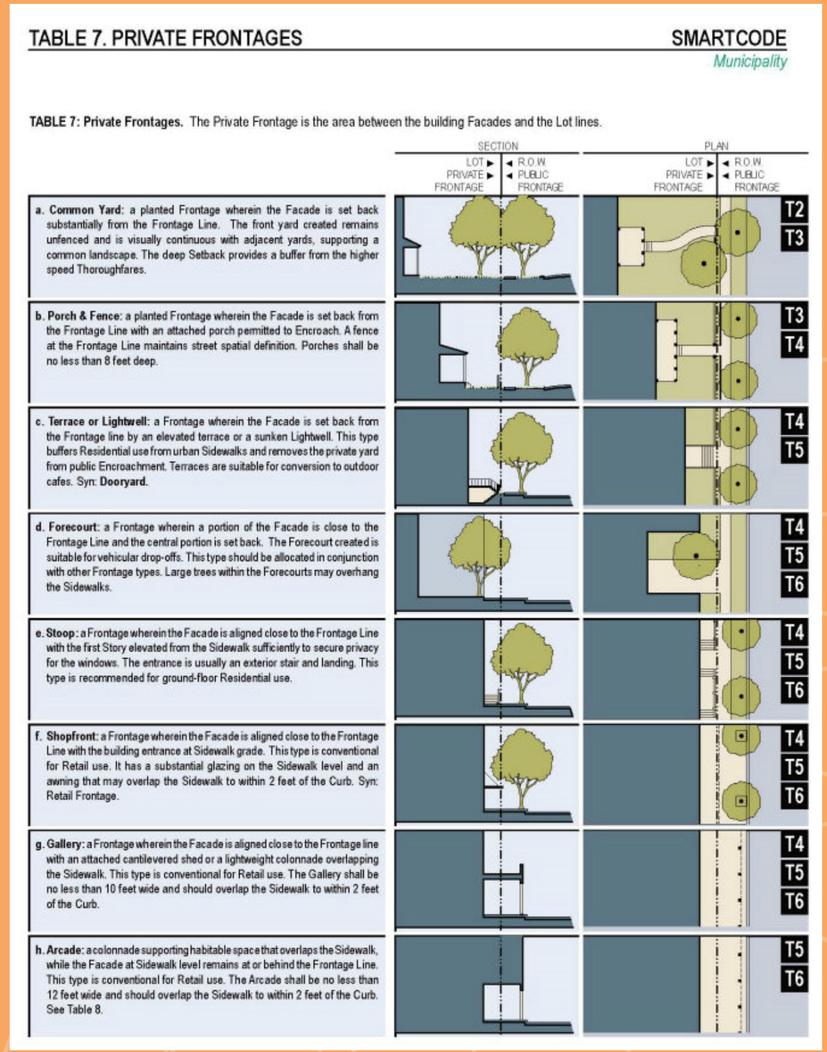


TABLE 7. PRIVATE FRONTAGES — SMARTCODE *Municipality*

TABLE 7: Private Frontages. The Private Frontage is the area between the building Facades and the Lot lines.

	SECTION: LOT PRIVATE FRONTAGE ▶ ◀ R.O.W. PUBLIC FRONTAGE	PLAN: LOT PRIVATE FRONTAGE ▶ ◀ R.O.W. PUBLIC FRONTAGE
a. Common Yard: a planted Frontage wherein the Facade is set back substantially from the Frontage Line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. The deep Setback provides a buffer from the higher speed Thoroughfares.		T2 T3
b. Porch & Fence: a planted Frontage wherein the Facade is set back from the Frontage Line with an attached porch permitted to Encroach. A fence at the Frontage Line maintains street spatial definition. Porches shall be no less than 8 feet deep.		T3 T4
c. Terrace or Lightwell: a Frontage wherein the Facade is set back from the Frontage line by an elevated terrace or a sunken Lightwell. This type buffers Residential use from urban Sidewalks and removes the private yard from public Encroachment. Terraces are suitable for conversion to outdoor cafes. Syn: **Dooryard.**		T4 T5
d. Forecourt: a Frontage wherein a portion of the Facade is close to the Frontage Line and the central portion is set back. The Forecourt created is suitable for vehicular drop-offs. This type should be allocated in conjunction with other Frontage types. Large trees within the Forecourts may overhang the Sidewalks.		T4 T5 T6
e. Stoop: a Frontage wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk sufficiently to secure privacy for the windows. The entrance is usually an exterior stair and landing. This type is recommended for ground-floor Residential use.		T4 T5 T6
f. Shopfront: a Frontage wherein the Facade is aligned close to the Frontage Line with the building entrance at Sidewalk grade. This type is conventional for Retail use. It has a substantial glazing on the Sidewalk level and an awning that may overlap the Sidewalk to within 2 feet of the Curb. Syn: Retail Frontage.		T4 T5 T6
g. Gallery: a Frontage wherein the Facade is aligned close to the Frontage line with an attached cantilevered shed or a lightweight colonnade overlapping the Sidewalk. This type is conventional for Retail use. The Gallery shall be no less than 10 feet wide and should overlap the Sidewalk to within 2 feet of the Curb.		T4 T5 T6
h. Arcade: a colonnade supporting habitable space that overlaps the Sidewalk, while the Facade at Sidewalk level remains at or behind the Frontage Line. This type is conventional for Retail use. The Arcade shall be no less than 12 feet wide and should overlap the Sidewalk to within 2 feet of the Curb. See Table 8.		T5 T6

Design Guidelines can be effective if written correctly

Difficult to legally implement.

Can be a “soft ordinance” which enourages improved design

SHANNOCK
HISTORIC MILL VILLAGE

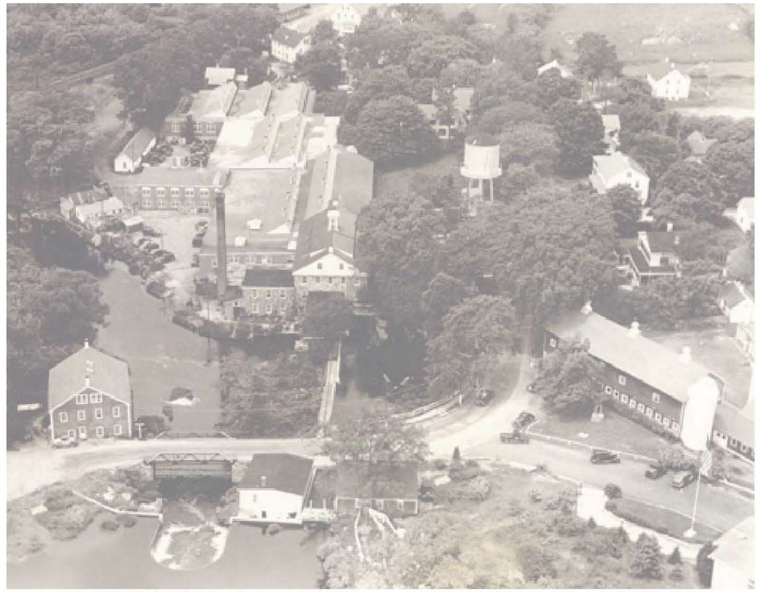


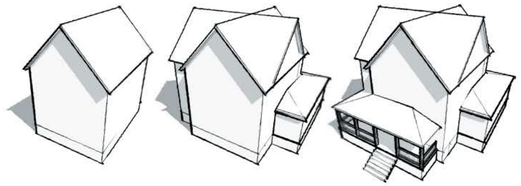
Photo: Aerial circa 1942 (The Hartford Courant, 1984)

DESIGN GUIDELINES
FOR BUILDING IN THE VILLAGE

OCTOBER 30, 2010

Horsley Witten Group
Sustainable Environmental Solutions
90 Route 6A • Sandwich, MA 02563 • 508-833-6600 • fax-508-833-3150
30 Green Street • Newburyport, MA 01950 • 978-499-0601 • fax-978-499-0602
370 Ives Street • Providence, RI 02906 • 401-272-1717 • fax-401-439-8368

DPA DONALD POWERS ARCHITECTS
140 UNION STREET
PROVIDENCE, RHODE ISLAND 02903-1714
T 401.272.4724 F 401.272.4825
WWW.DONALDPOWERSARCHITECTS.COM



The transformation of a simple primary volume with a succession of secondary elements.

SECONDARY MASSING

ADDITIONAL FORMS CAN ADD INTEREST AND SPACE TO A SIMPLE BUILDING.

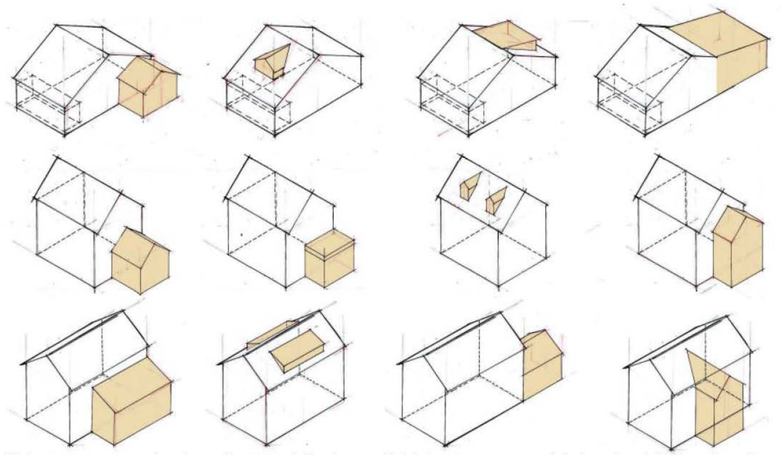
Traditional buildings change over time to accommodate the needs of new generations. Additions may provide for an expanding family, but always defer to the mass of the original home.

DO

Historic homes in the village have a variety of additions, including new porches, wings and dormers. The new spaces provide room for growth of the changing inhabitants or trends in residential amenities.

Key Points

- Smaller homes may be one single clear form - larger homes may incorporate a second or a third volume.
- The scale and treatment of secondary massing features should remain secondary to the main form.



Various ways to expand and transform an existing home. Additions are most successful when they defer in scale and proportion to the primary form of the original building. Secondary masses may also be used to compose a new building to create a modern structure with the character of a traditional home that has been around for generations.

Pre-designed, pre-approved building plans.

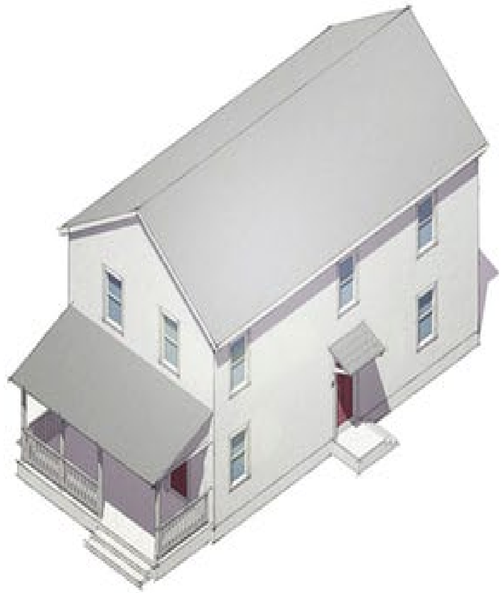
Helps empower small increment development.

More developers = more housing

South Bend Neighborhood Infill | Stacked Duplex

The Stacked Duplex

The Stacked Duplex provides two identical 2-bedroom units that support a slight increase of density and the development on the city's most narrow infill lots with affordable housing options. The massing and elevation options fit within the scale and vernacular character of South Bend's oldest urban neighborhoods. An optional basement could provide storage or expansion of the ground floor unit.



ZONING DISTRICTS ALLOWED

S1 S2 U1 U2 U3 UF NC DT

Option A

Option B

Option C

Ground Floor

Second Floor

Building Type Overview	
Building Dimensions	
Building Height	2 story
Building Width	22'
Building Depth (incl. porch)	48'
Program	
Unit Configuration	2 bed / 1 bath
Unit Size (finished gross)	1,760 sq. ft.
Basement (unfinished)	880 sq. ft.
Porch (unconditioned)	176 sq. ft.
1st Floor	880 sq. ft.
2nd Floor	880 sq. ft.
Lot Standards	
Lot Width (min.)	32'
Lot Width (max.)	70'
Cost Assumptions	
Preliminary Construction Estimates *	$320,000 - $370,000
Financing Options	30-yr mortgage

* Numbers shown are for basic estimation purposes only. Pricing is based on Fall 2021 cost assumptions and are subject to future market variation.

Pre-designed, pre-approved building plans.

Appropriate for accessory structures and single-family infill to small multi-family.

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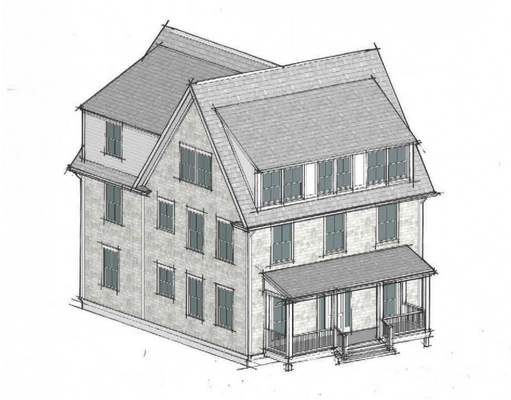
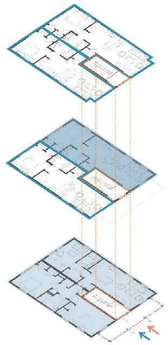
BUILDING TYPE:



Manor House

A manor house is a small-scale multi-family that looks like a large home.

- **Typical Size:** Usually 1.5 to 3 stories
- **Considerations:** Usually a large family home converted to smaller units.
- **Density:** 4 to 6 units per building / 5 to 12 dwelling units per acre



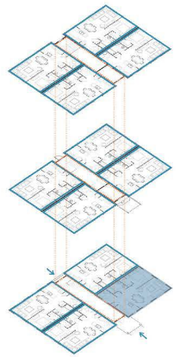
UNION STUDIO

BUILDING TYPE:

Walk-Up

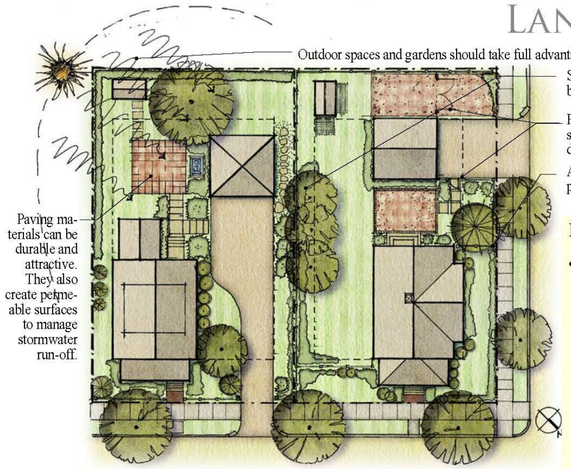
Walk-ups are small scale multi-family buildings, which are commonly comprised of a series of flats with shared circulation

- **Typical Size:** Usually 2 to 3 stories
- **Considerations:** Typically comprised of studio and 1-bedroom units. Can be comprised of single-room occupancy or micro-units to achieve higher density.
- **Density:** 8 to 12 units per building / 5 to 25 dwelling units per acre



Construction documents, combined with pre-approved generic site placement this would drastically simplify small scale new construction

Landscaping



Discussion

- Traditional neighborhood patterns in the United States rely heavily on the landscape to connect the edges and to define a satisfying public realm. Vegetation, walls, fencing and paving materials, and light constructions (i.e., trellises) can define edges, carve out outdoor spaces and enhance privacy.

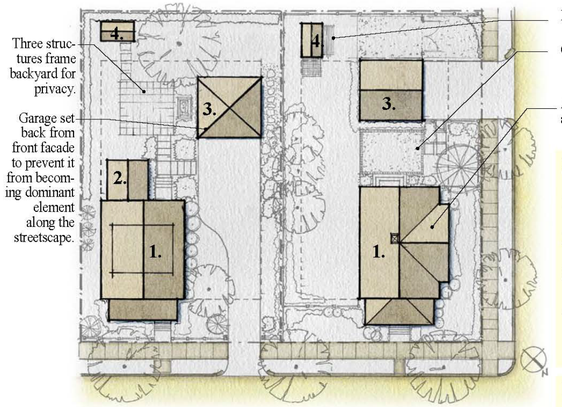


6.1 Simple fences, plantings and walls create small or large sanctuaries outside. A brick wall of a garage can be utilized as a backdrop for gardens. While an attractive masonry wall acts as an edge between neighbors, a well placed gate invites visitors inside.

AVOID

6.2 The lack of landscaping, both hard and vegetated, is visually unappealing and creates ill-defined spaces where nothing really takes place.


Locating Structures



Legend

1. Principal Building

2. Back Building

3. Out Building

4. Auxiliary Structure

Discussion

- The location of various buildings on a lot helps to create a variety of public, semi-private and private spaces. Principal structures located along the front setback line define a continuous building edge along each block. Outbuildings and auxiliary structures can help frame private spaces on the interior of each lot.

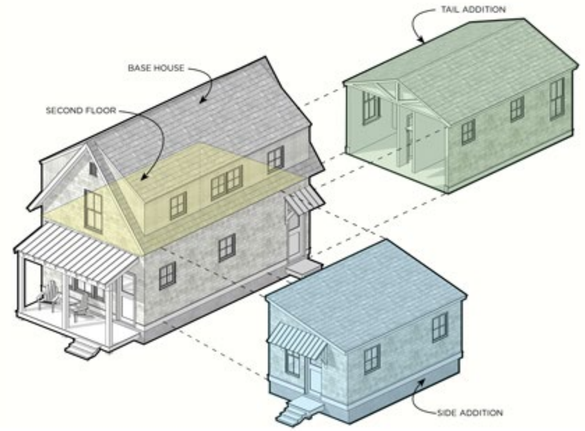

4.1 Auxiliary structures, although small, can be elegantly constructed and placed in a yard to complement the landscaping and other structures of the property. The garden shed (above right) was designed to complement the principal building since it was in a visible location from a busy sidewalk.

AVOID

4.2 Locating the garage doors in the same plane as the principal structure creates a very uninviting presence. The garages and homes become indistinguishable from one another.

4.3 Conversely, the lack of structures on lots can create large voids and exposures between dwellings. Without these smaller structures, the lot may lack the sense of privacy that well-placed outbuildings can provide.

Combine pre-approval with additional uses.



Income increases affordability

SIDE HUSTLE HOUSE

Eastham, MA

Buying your first house used to be a rite of passage, but it is no longer a realistic option for many Americans. There are many things causing the current housing crisis; the Side Hustle House was created so that design isn't one of them.

Pre-Approved Infill Housing

LANE COUNTY

Home | Residents | Business | Government | How Do I | Servicios

Lane County / Government / County Departments / Public Works / Land Management / Building Safety / **Ready-Build Plans**

BUILDING SAFETY

- Ready-Build Plans

READY-BUILD PLANS

A- A+

Pre-approved Plans for Residential Accessory Structures & a Single Family Dwelling

As part of Oregon's Ready-Build Plans Program, you can download pre-approved plans for a residential accessory structures such as garages, carports, decks, patios and a single family dwelling. The goal of this program is to reduce the time it takes to issues these permits and the time it takes to have plans prepared by offering these pre done plans for your convenience.

“Pre-development” of the community’s most important sites.

Cocheco Waterfront, Dover, NH

“Pre-development” of the community’s most important sites.

COCHECHO WATERFRONT

SITE LAYOUT

MAY 19, 2017

SCALE: 1"=100'-0"

PAGE 3

Ironwood Landscape Architecture • Planning

UNION STUDIO ARCHITECTURE & COMMUNITY DESIGN

The City intends to construct the public improvements themselves to add value and lock in the vision.

COCHECHO WATERFRONT

PERSPECTIVE VIEW #1

MAY 19, 2017

NOT TO SCALE

PAGE 4

Ironwood
Landscape Architecture • Planning

UNION STUDIO
ARCHITECTURE & COMMUNITY DESIGN

Extensive public process at community expense.

Less risk and cost to developer, more consensus on result.

COCHECHO WATERFRONT

PERSPECTIVE VIEW #2

MAY 19, 2017

NOT TO SCALE

PAGE 5

Ironwood
Landscape Architecture • Planning

UNION STUDIO
ARCHITECTURE & COMMUNITY DESIGN

Public comment and review happens without the developer at the table.

More public confidence in the output.

NEWBURYPORT WATERFRONT REDEVELOPMENT

ILLUSTRATIVE SITE PLAN

SEPTEMBER 12, 2012

UNION STUDIO
ARCHITECTURE & COMMUNITY DESIGN

Public comment and review happens without the developer at the table.

More public confidence in the output.

But:
Must prove its economical feasibility with realistic cost assumptions and development proforma

SUMMARY PUBLIC IMPROVEMENT COST ESTIMATES - 3/22/17

	Phase 1 & 1A (2)	Phase 3	Total
PARK IMPROVEMENTS	**$3,056,000**	**$1,502,000**	**$4,558,000**
NON-PARK IMPROVEMENTS	**$5,947,000**	**$1,915,000**	**$7,862,000**
DREDGE CELL CLOSURE	**$400,000**	**$0**	**$400,000**
TOTAL PUBLIC IMPROVEMENTS	**$9,403,000**	**$3,417,000**	**$12,820,000**

Note: All costs in unescalated 2017 dollars
Does not include costs of E-W Internal Mid-Block Park, South Bluff-top land improvements, assumed to be borne by developer(s)
* Cost of paddle boat dock offset by grant = $150,000
** Pre-construction Engineering & Soft Cost factor not applied to South Riverfront Earthwork & Walls (Bluff Excavation)

Public Improvements Bond Financing *(in inflated future year $)*

- FY 2018 $1,100,000 *Union contract thru FY 2017, Addtl Engineering/Soft Costs, Initial South Earthwork*
- FY 2019 $700,000 *Addtl Engineering/Soft Costs, Ongoing South Earthwork*
- FY 2020 $8,740,000 *Phase 1 & 1A(2) (River St N & S, Washington St), S. Earthwork, 2/3 Park Improvements*
- FY 2025 $4,330,000 *Phase 3 Public Improvements – Hillside St, parking lot, 1/3 Park Improvements*
- Total $14,870,000

Private Development delivered FY 2021 thru FY 2027

TIF Analysis

- Transfers from General Fund FY 2018 thru 2022 estimated to total $960,000
- Est. TIF revenues FY 2027 thru 2035 yield bond coverage ratio of approx. 1.8 – 2.0
  - Thereafter, coverage ratio increases by 0.04 - 0.05 per year thru FY 2042, then dramatically as bonds retire
- Bluff-top development (not included above) could increase coverage by approx. 0.2
- Land sales will provide additional revenues

PUBLIC IMPROVEMENT COST ESTIMATES - 3/22/17

	Phase 1 & 1A (2)	Phase 3	Total
PARK IMPROVEMENTS			
ADA ACCESSIBLE PADDLE BOAT DOCK*	$0	$0	$150,000
BOAT DOCKS	$128,500	$194,800	$323,300
PARK INFRASTRUCTURE	$1,909,950	$0	$1,909,950
PARK AMENITIES	$0	$335,000	$335,000
PARK BUILDINGS	$440,000	$246,400	$686,400
MAGLARAS PARK CONNECTOR	$0	$362,000	$362,000
SOUTH PARK ELEMENTS	$26,250	$0	$26,250
SUB TOTAL	$2,504,700	$1,138,200	$3,792,900
7% DESIGN AND CONSTRUCTION OVERSIGHT	$175,329	$79,674	$255,003
15% CONTINGENT	$375,705	$170,730	$546,435
12% PHASING PREMIUM (DESIGN AND MOBILIZATION)	$0	$113,820	$113,820
TOTAL PARK IMPROVEMENTS	**$3,055,734**	**$1,502,424**	**$4,708,158**
less Grant Funding for Paddle Boat Dock	$0	$0	-$150,000
TOTAL PARK NET OF GRANT	**$3,055,734**	**$1,502,424**	**$4,558,158**
NON-PARK IMPROVEMENTS			
NORTH			
Streets & Utilities: Riverfront Street	$1,585,000		$1,585,000
Streets & Utilities: Washington Street Extension	$755,000	$0	$755,000
Streets & Utilities: Hillside Street		$701,000	$701,000
Parking Lot	$35,000	$258,000	$293,000
Shoreline Improvements	$180,000	$60,000	$240,000
Earthwork & Walls	$643,000	$258,750	$901,750
North Subtotal	**$3,198,000**	**$1,277,750**	**$4,475,750**
Pre-construction Engineering & Soft Costs (10%)	$319,800	$127,775	$447,575
Contingency (25%)	$799,500	$319,438	$1,118,938
Phasing Premium (12%)		$153,330	$153,330
Total with Soft Costs and Contingencies - North	**$4,318,000**	**$1,879,000**	**$6,197,000**
SOUTH RIVERFRONT			
Streets & Utilities: River Street Rebuild	$497,000		$497,000
Shoreline Improvements	$70,500	$23,500	$94,000
Earthwork & Walls	$862,000		$862,000
South Subtotal Riverfront	**$1,430,000**	**$24,000**	**$1,454,000**
Pre-construction Engineering & Soft Costs (10%)**	$56,800	$2,400	$59,200
Contingency (25%)*	$142,000	$6,000	$148,000
Phasing Premium (12%)		$2,880	$2,880
Total with Soft Costs and Contingencies - South Riverfr	**$1,629,000**	**$36,000**	**$1,665,000**
TOTAL NON-PARK IMPROVEMENTS	**$5,947,000**	**$1,915,000**	**$7,862,000**
DREDGE CELL CLOSURE	**$400,000**	**$0**	**$400,000**
TOTAL PUBLIC IMPROVEMENTS	**$9,402,734**	**$3,417,424**	**$12,820,158**

Note: All costs in unescalated 2017 dollars
Does not include costs of E-W Internal Mid-Block Park, South Bluff-top land improvements, assumed to be borne by developer(s)
* Cost of paddle boat dock offset by grant = $150,000
** Pre-construction Engineering & Soft Cost factor not applied to South Riverfront Earthwork & Walls (Bluff Excavation)

Thank You