

# Missing Middle Housing and the Use of Pattern Books

A Practical Visual Guide to Gentle Density

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# What I Will Present Today

## **Framing the Context**

Quick summary of New Jersey's housing emergency and why pattern books are the chosen roadmap for recovery.

## **Methodology**

How we analyzed NJ's settlement patterns and lot types to match the right housing to the right community.

## **Landscape & Toolkit**

**The Focus:** Deep dive into Sections NJ landscape and applying the toolkit.

## **Regulatory Barriers**

Identifying the obstacles that make missing middle housing illegal and the legal framework for reform.

# Defining Pattern Books



## Visual Codes

Moves beyond text-only codes to define building types and design standards through diagrams and 3D renderings.



## Certainty

Reduces uncertainty for developers and planners. Communities see exactly what "gentle density" looks like before it is built.



## Context-Sensitive

Adapts standards to local lot sizes, street patterns, and historic character rather than one-size-fits-all zoning.

*"Pattern books enable a small-builder ecosystem, distributing housing incrementally across neighborhoods rather than concentrating it in superblocks."*

# Methodology: Analyzing the NJ Fabric

The report follows a rigorous multi-step analysis to ensure missing middle housing integrates seamlessly into existing NJ municipalities.

Phase	Process	Outcome
Comparative Scan	Analysis of 12 national pattern books (DC, Syracuse, Roanoke, etc.)	Identified 6 consistent elements (Typologies, Bulk, Context).
Landscape Mapping	Classifying NJ's settlement patterns across the NJTPA region.	Defined 6 landscape types from Urban Core to Rural exurbs.
Lot Configuration	Cataloging dominant lot dimensions (Width, Depth, Setbacks).	Matched housing types (ADU, Duplex, etc.) to specific lot sizes.
Legal Framework	Review of Mount Laurel, MLUL, and the 2021 ADU Legislation.	Streamlined compliance path for Fourth Round obligations.

# Reading the Landscape



## Historic Borough (9%)

Eg. Flemington, Red Bank

Dense walkable cores,  
strong historic character.

## Rural (8%)

Eg. Monmouth exurbs

Large parcels, scattered  
settlement, no transit.

## Inner-Ring Suburb (18%)

Eg. Irvington, Belleville

Strong transit. Originally  
diverse fabric.

## Urban Core (8%)

Eg. Newark, Paterson

Dense blocks, mixed  
uses, transit served.

## Auto-Oriented (35%)

Eg. Parsippany, Wayne,

Cul-de-sacs, large lots  
0.5–2 ac, car-dependent.

## Transit Suburbs (22%)

Eg. Montclair, Westfield

Walkable downtowns, NJ  
Transit stations.

# Matching Lots to Implementation

The Toolkit begins by identifying what is physically possible based on standard NJ lot dimensions.

Lot Type	Width / Depth	Density (u/ac)	Best Implementation
Narrow Urban	25–35 ft   100 ft	40–80	Stacked Duplex, Row House
Standard Urban	40–55 ft   100 ft	20–40	Side-by-side Duplex, ADU
Standard Suburban	60–80 ft   120 ft	8–20	Backyard Cottage, Garage ADU
Large Suburban	100+ ft   150 ft	4–10	Cottage Court, Lot Splits
Commercial Strip	Variable   Variable	15–40	Mixed-Use, Triplex / Fourplex

# Regulatory Barriers

In most NJ municipalities, every housing type is currently illegal by right. The barriers are not physical — they are regulatory.

**91%**  
Residential Land

Of NJ residential land allows ONLY single-family detached homes by right.

## Lot Coverage limits (20–30%)

Prevents ADUs or additional even when they fit within building envelope.

## Height Caps (25 ft)

Effectively blocks 3-story townhouses and stacked units in transit nodes.

## Minimum lot size (0.5 ac+)

Mandates car-dependent sprawl and prohibits the dense fabric found in NJ's pre-war towns.

## Parking Minimums (2+ spaces)

Often makes smaller missing middle buildings physically impossible to build on standard lots.

## Single Family Exclusive Zoning

Prohibits all multi-family uses by right, hence duplexes, triplexes in most of NJ.

## Setback Requirements

Minimum distances from lot lines prevents ADU placement in rear yards.

# Narrow Urban lot

Hoboken, Jersey City, Newark pre-war blocks

Found in NJ's pre-war urban cores. These lots reflect the 19th-century pedestrian grid, platted before car ownership.

Buildings sit flush or nearly flush to the sidewalk with zero lot-line construction common. Often mixed-use on ground floor with residential above. Majority date from 1850–1920.



# Row house implementation in Narrow Urban lot

Stacked duplex, ADU, Row-houses

The highest-yield lot type for missing middle. The narrow urban lot is the natural home of the stacked duplex and rowhouse, two to four units per lot are physically achievable within existing bulk envelopes. Upper-floor apartments on commercial buildings are the lowest-barrier intervention.



# Row house implemented in Narrow Urban lot

Attached multi-story units. Traditional NJ urban form along commercial streets and transit corridors. Often for-sale ownership. Produces housing quickly at moderate density. Strong along transit corridors and main street.

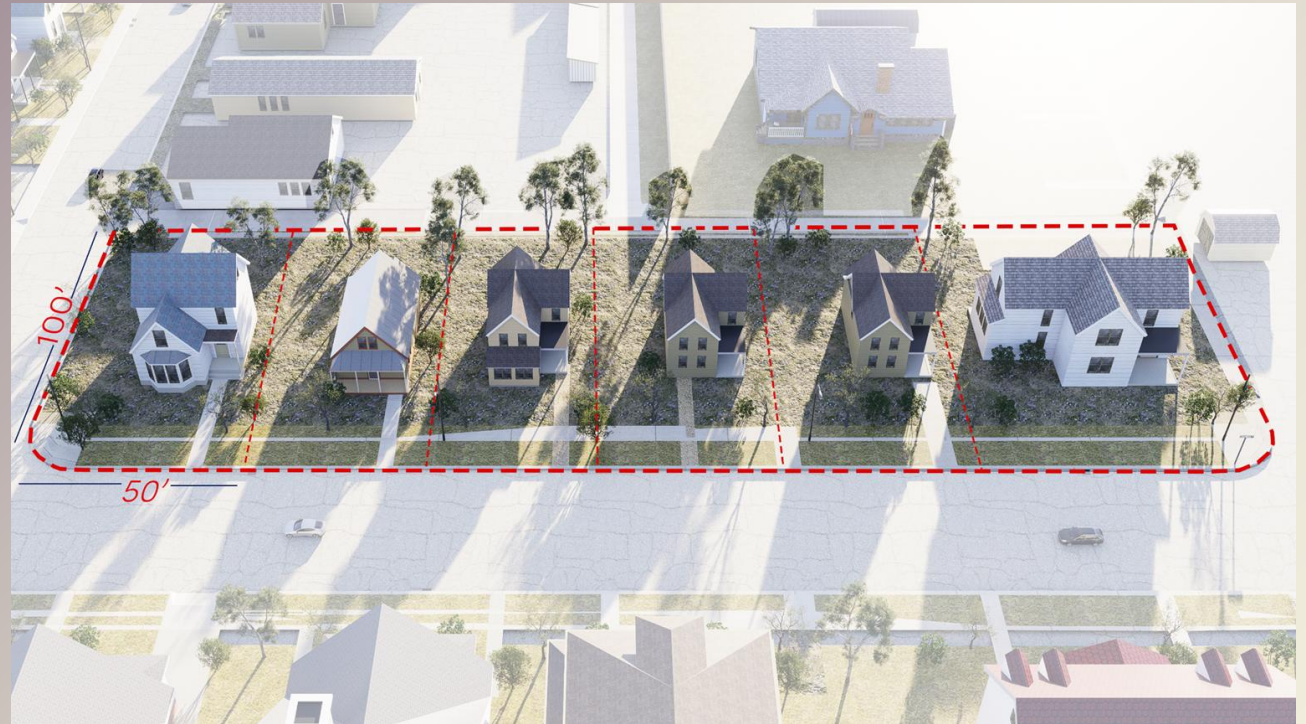


# Standard Urban lot

Inner-ring suburbs: Irvington, Linden, Belleville

The dominant lot type in NJ's inner-ring suburbs . Platted between 1890 and 1930 for working-class and immigrant families.

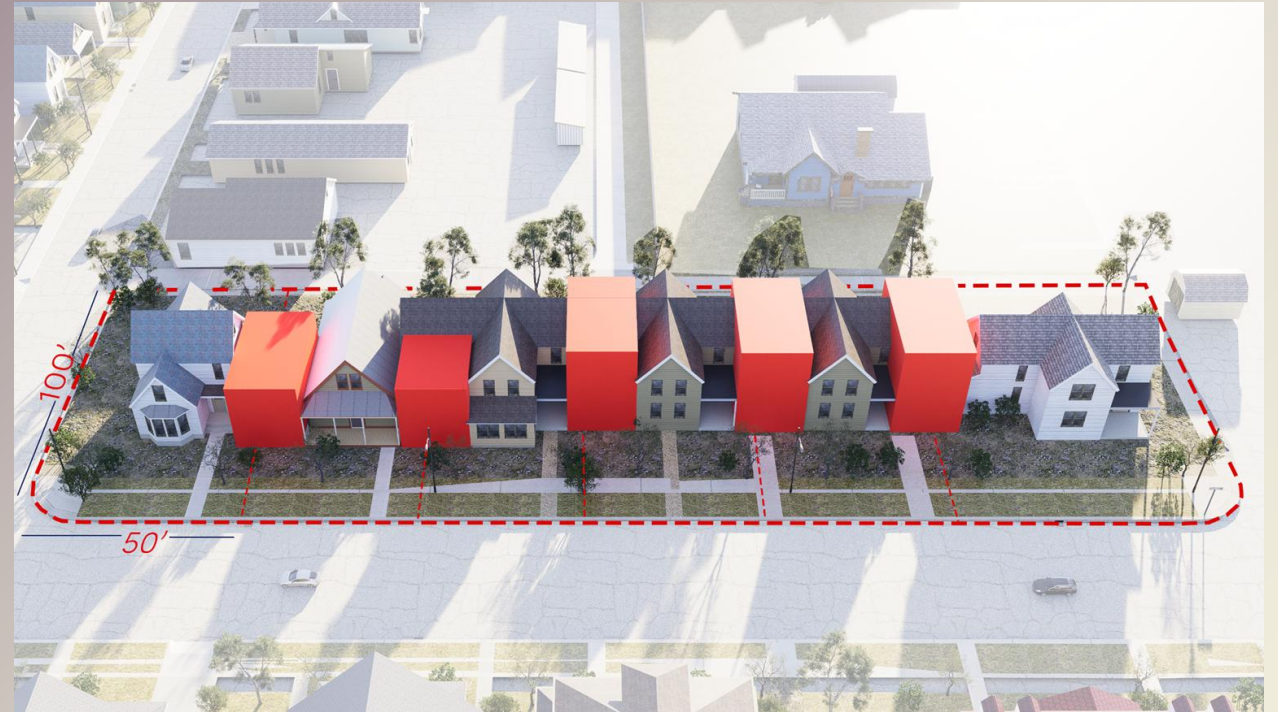
Originally built with 2–3 family homes as a matter of course; subsequently down zoned to single-family in the 1950s–60s. Many existing homes operate as illegal 2–family. Strong transit access in most locations.



# Stacked duplex house implementation in Standard Urban lot

## Stacked duplex, ADU, Row-houses

The single highest-opportunity lot type for missing middle in NJ. The 40–55 ft width is the ideal dimension for a side-by-side duplex, both units have usable floor plates and exterior exposure. An amnesty program for the estimated thousands of already-operating illegal 2-family homes on this lot type would produce affordable units immediately at zero public cost.



# Stacked duplex house implemented in Standard Urban lot

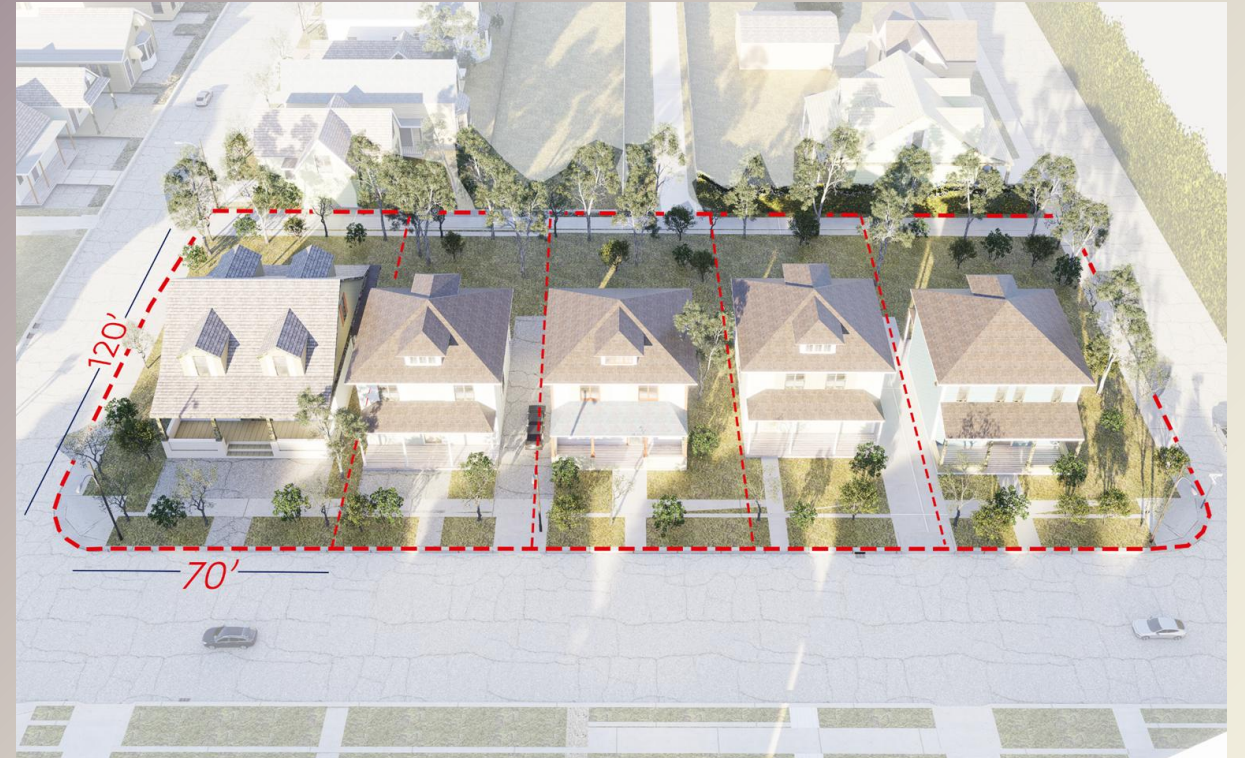
Two vertically stacked units. Works on narrow urban lots.  
Common in Hoboken and Jersey City row-house fabric.  
Separate ground-level entrances required.



# Standard Suburban lot

Transit suburbs: Westfield, Rutherford, Cranford

The defining lot type of NJ's transit suburbs . Built primarily 1920–1960, single-family detached with attached or detached garages, generous lawns, and 25–30 ft front setbacks. Walkable to town centers and transit stations in most cases, but zoning codes treat them identically to car-dependent outer suburbs. Strong community attachment to "neighborhood character."





# ADU implemented in Standard Suburban lot

Garage conversion, basement apartment, or backyard cottage. Enabled by 2021 NJ state law as a by-right use on all single-family lots. Most immediately deployable tool available.



# Large Suburban lot

## Outer suburbs: Parsippany, Morris Township

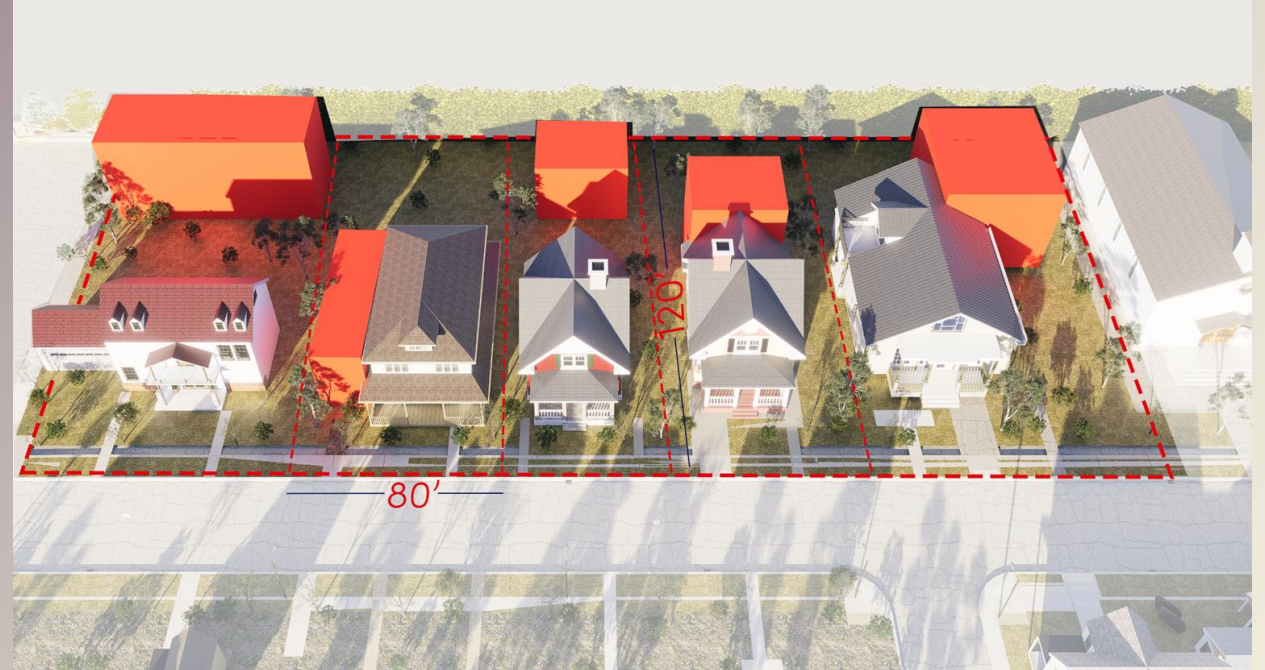
Built primarily 1920–1960, single-family detached with attached or detached garages, and generous lawns. Walkable to town centers and transit stations in most cases, but zoning codes treat them identically to car-dependent outer suburbs. Strong community attachment to "neighborhood character of NJ's outer suburbs, built predominantly post-1960 for the car-owning family."



# Side by side duplex implementation in Large Suburban lot

Side by side duplex, ADU, Cottage court

The lot type with the widest gap between physical capacity and legal permission. A 15,000 SF lot can easily accommodate a detached ADU (600–800 SF) in the rear yard with private access, or a cottage court of 4–6 units around a shared green if subdivided. Lot splits are the most impactful intervention, a 150 ft frontage can yield two 75 ft standard suburban lots, each capable of supporting a duplex or ADU.



# Side by side duplex implemented in Large Suburban lot

Two attached units reading as one large house from the street. Most community-acceptable form. Ideal for owner-occupied rental. Common in NJ's pre-war inner suburbs.

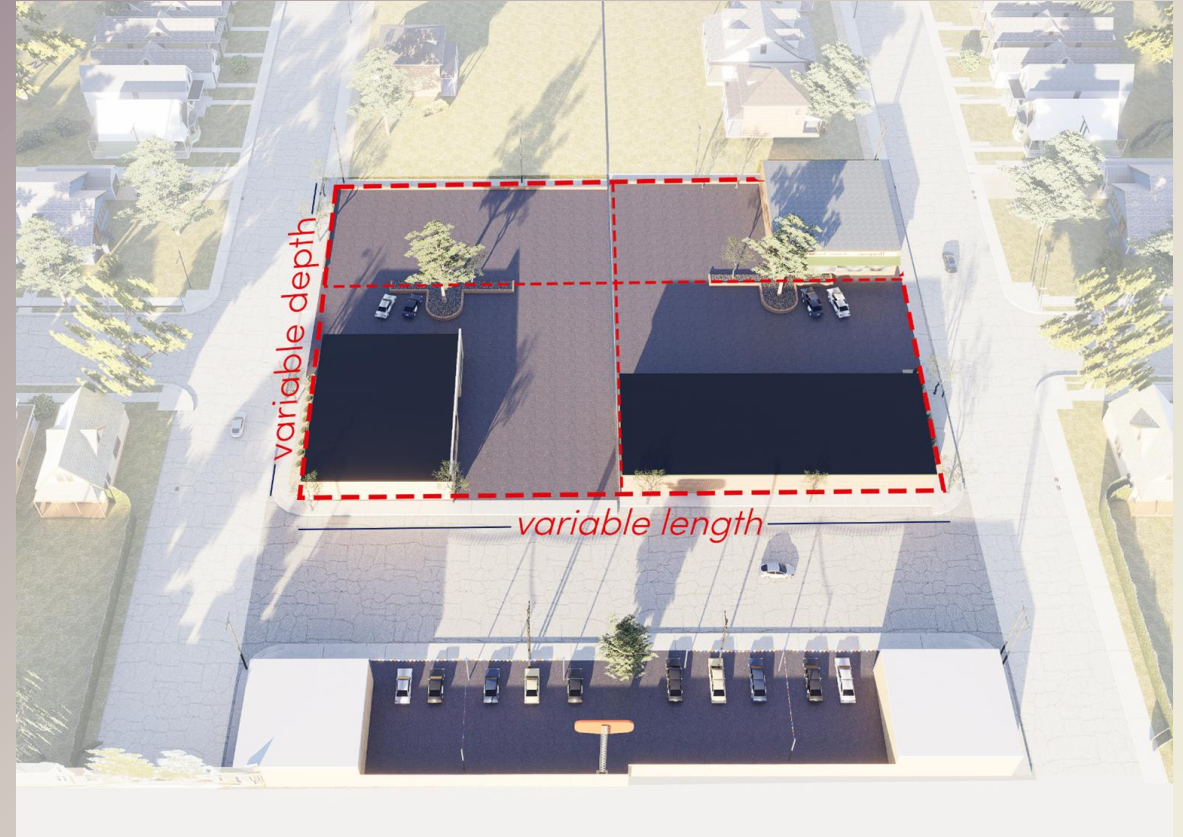


# Commercial Strip lot

Outer suburbs: Route 1, 9, 22, 46 corridors

NJ has hundreds of miles of B-2 or HB highway business-zoned strips where 60–70% of the parcel area is surface parking.

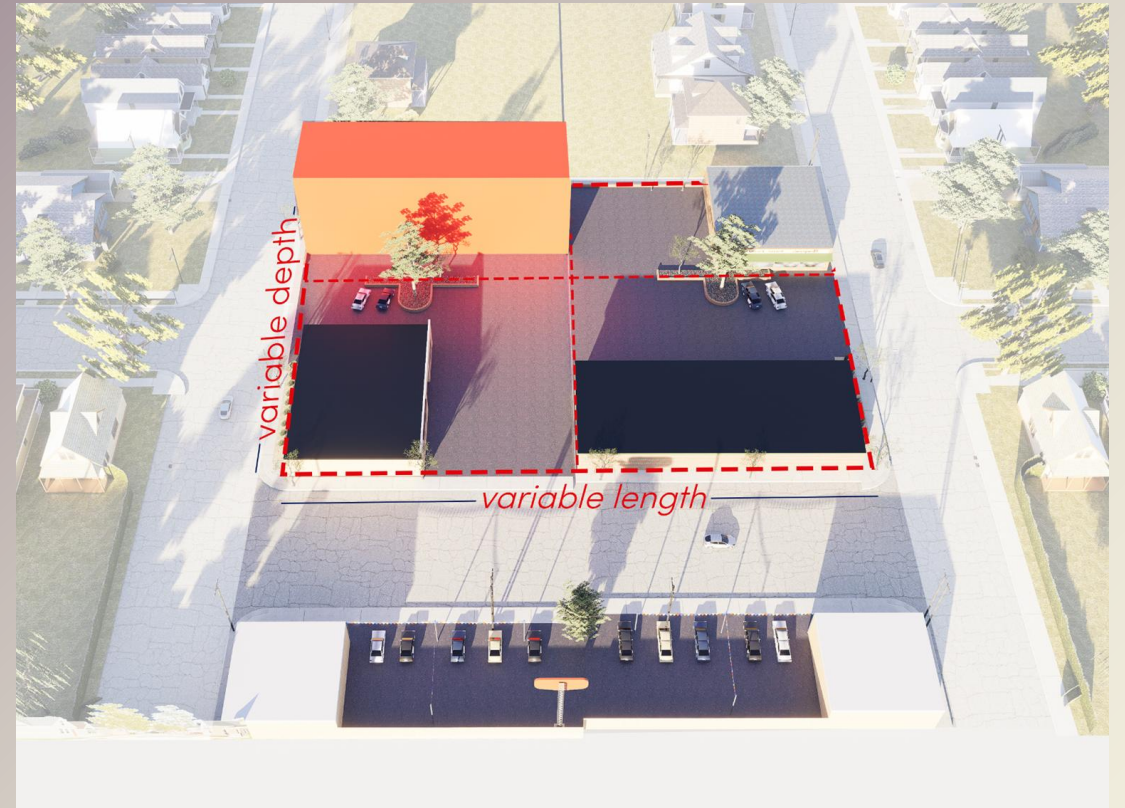
Parcels typically have full utility infrastructure, already sized for intensive commercial use. Despite this, residential use is prohibited entirely by right. A use variance (D-variance) requiring a supermajority Planning Board vote is the only path under current codes.



# Triplex/ Fourplex implementation in Commercial Strip lot

## Mixed-use, Triplex, Fourplex

The highest-yield redevelopment opportunity in NJ measured by total potential units. A single 2-acre Route 35 parcel that is currently 70% surface parking can accommodate 40–80 apartments, 10–18 for-sale townhouses, and 4,000 SF of ground-floor retail with a structured parking deck replacing the surface lot, at zero resident displacement. The LRHL pathway (N.J.S.A. 40A:12A-5) bypasses the B-2 zone entirely, creating custom zoning without a D-variance. Requires a 15% affordable set-aside, which directly satisfies COAH obligations.



# Triplex/ Fourplex implemented in Commercial Strip lot

Highest-impact affordability per lot. Three to four units in a building that reads as a larger home. Appropriate near transit nodes. Often owner-occupied.



# Estate/ agricultural lot

Warren County, rural Monmouth

New Jersey retains approximately 730,000 acres of farmland, about 33% of total land area, primarily in the southern and western parts of the state. Minimum lot areas of 1–5 acres are standard in A-1 agricultural zones. Most residents are car-dependent with no transit access. Population is aging and farmworker housing is a documented unmet need in agricultural communities.



# Cottage court implementation in Estate/ agricultural lot

## Cottage court, Farmworker ADU

Missing middle applies here primarily through two mechanisms. First, the ADU a farmworker cottage or attached in-law unit on a large agricultural parcel is the most culturally appropriate and physically feasible housing addition, and is permitted by-right under the 2021 NJ ADU Law on any residential lot. Second, lot splits on parcels over 2 acres can yield two or more standard suburban lots, enabling cottage courts or small clusters.



# Cottage court implemented in Estate/ agricultural lot

Cottage court, Farmworker ADU

Small detached cottages arranged around a shared courtyard. Works on larger suburban lots. Popular with seniors and downsizers. Creates community while maintaining privacy.



# Intervention: Transit Villages

**Residential streets (5–10 min walk):** Duplexes, ADUs, and small row houses by-right- governed by the pattern book

**Transition blocks:** Townhouse-scale infill bridging the residential neighborhood to the mixed-use core- pattern book with design overlay

**Mixed-use core (0–5 min walk):** Higher-intensity development- governed by redevelopment agreements and site plan approval



# Intervention: Historic Downtowns

**Residential side streets:** ADUs, carriage house conversions, and small duplex infill- governed by the pattern book

**Transition parcels (residential lots backing commercial blocks):** Rear-lot ADUs and accessory structures- pattern book

**Downtown commercial core:** Mixed-use buildings subject to design review and redevelopment authority- outside the pattern book's scope



# Thank You

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