

Project Orientation:

# Vermont Homes for All Toolkit:

A 'Design & Do' Toolkit for Small-scale Home Builders,  
Investors & Community Leaders

May 25, 2023





# Project Team Introduction

## Vermont Agency of Commerce & Community Development, Department of Housing & Community Development



**Josh Hanford**  
Commissioner of Housing &  
Community Development



**Chris Cochran**  
Director of Community Planning  
& Revitalization



**Jacob Hemmerick**  
Planning & Policy Manager



**Dan Groberg**  
Community Planning & Project  
Manager



**Richard Amore**  
Planning & Outreach Manager



**Amy Tomasso**  
Planning Coordinator

## AARP Vermont



**Kelly Stoddard Poor**  
Director of Outreach,  
AARP Vermont

AARP VT is partnering with the State of Vermont to support increased community engagement on neighborhood infill design considerations for this project.

AARP Livable Communities initiative supports the efforts of state entities, local leaders and residents to make communities more livable and age-friendly. Among the keys to livability is housing that's both suitable for and adaptable to the diverse and ever-changing needs of Vermont households and individuals.



# Consultant Team Introduction

The project lies at the intersection of:

- Residential design
- Community planning and regulatory frameworks, and
- Feasibility, financing, and implementation

This is our specialty and where our passion lies.

### Utile Roles & Expertise

- Project Management
- Engagement Lead
- Planning
- Urban Design
- Architecture
- Sustainable Design

### Subconsultant Roles & Expertise

- Policy and Feasibility Analysis (Neighborhood Workshop)
- Local Community Development Advising (CommonLand Solutions)

### Core Management Team



**Matthew Littell, LEED AP**  
Principal-in-Charge, Utile



**Zoë Mueller,**  
Project Manager & Urban Planner, Utile

### Dedicated Specialist Team



**Jessy Yang,**  
Architectural/Urban Design Lead, Utile



**Alex Davis, AIA, CPHC®**  
Housing Architect, Utile

Vermont Local



**Neil Heller**  
Policy and Feasibility Analysis, Principal, Neighborhood Workshop  
Faculty, Incremental Development Alliance



**Liz Curry**  
Local Community Development Advisor, Principal, CommonLand Solutions

Vermont Local

# Purpose & Scope Overview



# Why now? Why does this matter?

- Vermonters need more diverse, affordable housing options in walkable communities.
- Meeting that need requires changing the ways homes are built in Vermont, especially the location and types of new homes.
- Building from [Enabling Better Places: A Zoning Guide for Vermont Neighborhoods](#), this Toolkit and community engagement process will re-introduce “Missing Middle Homes” to Vermont as a strategy to address Vermont’s housing and affordability crisis through small-scale, gentle infill and incremental development.



# What do we mean by “Missing Middle Homes”?

**Missing Middle Homes** is a housing term that describes a range of house-scale residential building types that have multiple units that are compatible in scale and form with detached single-family homes. In the context of this project, this term is intended include Accessory Dwelling Units (ADUs), duplexes, townhouses, courtyard apartments and mixed use neighborhood commercial building types.





# What do we mean by “Missing Middle Homes”?

Here are some examples of potential “Homes for All” design & development approaches



## Two Household Dwellings



# What do we mean by “Missing Middle Homes”?

Here are some examples of potential “Homes for All” design & development approaches



Fourplexes



Sixplexes



Village Live-Work



# What do we mean by “Missing Middle Homes”?

Here are some examples of potential “Homes for All” design & development approaches



**Townhouses**



**Cluster and Courtyard Development**



# What do we mean by “Missing Middle Homes”?

Here are some examples of potential “Homes for All” design & development approaches



**Accessory Dwelling Units (ADUs)** is a technical term used most by planners, inspectors, and governments referring to a home that is secondary to the primary home on a single platted property containing all the facilities necessary for living, including cooking and sleeping.

## Detached Accessory Dwelling Units and Cottages



# Missing Middle Homes Development Approaches

## Gentle Infill & Incremental Development

**Gentle Infill** is infill compatible with existing surroundings to achieve community design goals. Many times, this type of new development goes largely unseen due to its location within or behind an existing structure.

**Incremental Development** is small-scale development that is primarily undertaken by developers who live in the community they are operating in. This term includes both housing and commercial development types. Can also be a development strategy.





# Project Overview

## What is the purpose of this project?

- Provide a policy, design, and development foundation to encourage the creation of more diverse housing typologies in Vermont that meet housing needs.
- Develop “homes for all” typologies and designs with a character and scale that is modest, sensible, and aesthetically familiar to a broad range of Vermonters.
- Develop educational capacity building and training tools to encourage broad support of and contribution to a healthy and diverse implementation of the housing concepts developed through this effort.

## Vermont Homes for All Toolkit

*This, when compiled, will provide a foundation for the implementation of “homes for all” typologies in Vermont by providing predevelopment-ready site and building designs, guidance on how to address design factors for incremental infill development in existing communities, and start to finish guidance on the development process.*

### 1. Missing Middle Homes Design Guide

### 2. Vermont Neighborhood Infill Design Case Studies

### 3. Builders’ Workbook

### 4. Training Resources

## Toolkit Trainer Summit



# Part 1. Missing Middle Homes Design Guide

What this section of the Toolkit will cover

Codify context-sensitive “homes for all” typologies with illustrated designs.

- Research typologies, vernacular design elements, and local case studies
- Develop schematic floor plans, elevations, and 3D modeling of different typologies
- Create predevelopment-ready building and site designs

Submit photos of Vermont vernacular typologies: <https://vnrc.org/housinghunt/>

Deadline: June 30th

Tyler Street District Housing PlanDevelopment Concept


Parcels on the north-south “ladder streets”  
The Triplex

A majority of the parcels in the blocks north and south of Tyler Street can accommodate the Triplex, a three-unit building comprised of two accessible one-bedroom units on the ground floor and a single two-bedroom unit on the second floor. Parking is accommodated by a small four-car parking lot in the rear yard behind the building, allowing each unit to have one on-site parking space per bedroom.

Development Metrics

Building metrics			
Height	2 floors		
Footprint	1,300 SF (30' x 40')		
Total units	3 units		
Total gross floor area	~2,600 SF		
No. of parking spaces	4 spaces		
Parking ratio	1 space/bedroom		

Unit metrics	Type	Average area	Count
1-Bedroom	1-Bed / 1-Bath	~720 SF	2 units
2-Bedroom	2-Bed / 2-Bath	~1,600 SF	1 unit



Second Floor Plan

Ground Level Plan

Tyler Street District Housing PlanDevelopment Concept

Quirky small parcels  
The Carriage House

A two-bedroom Carriage House is proposed for the parcels in the neighborhood that are not deep enough to accommodate the Triplex. Based on the width of each parcel, more than one Carriage House may be accommodated side-by-side. However, in almost all cases, the depth of these parcels does not allow for any parking to be provided on-site.

Development Metrics

Building metrics			
Height	2 floors		
Footprint	540 SF (18' x 30')		
Total units	1 units		
Unit type	2-Bed / 1.5-Bath		
Total gross floor area	~1,080 SF		
No. of parking spaces	No on-site parking		



Second Floor Plan

Ground Level Plan

Pittsfield Tyler Street District Plan

City of Boston Coastal Flood Resilience Design Guidelines

Elevate on Open Foundation

In this flood resilient strategy, a building is elevated on piles, piers, or posts with open foundations so that its first occupiable floor is at or above the SLR+DFE.

Technical Considerations

Subsidence

Groundwater

Structural stability

Below-grade Enclosures

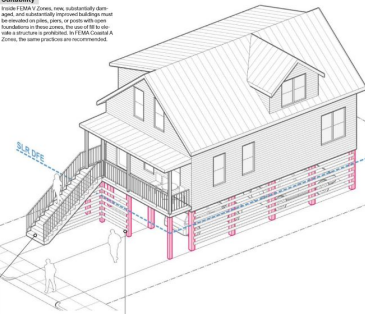
Materials

Cost and Insurance Considerations

Public Realm Considerations

Sustainability Co-benefits

Additional Resources



City of Boston Coastal Flood Resilience Design Guidelines

Three-family Residential

New Construction

Resilient Design Strategy

Enhanced Envelope

On-Site Energy Generation

Protect Critical Systems


Building Materials and Assemblies

Building Form

Building Envelope and Assemblies

Size Level Rise Conditions

Conceptual Floor Plans



Adaptive Reuse Study: Rehabilitation

Stone Houses near Boylan Ave.

EXISTING AND CONCEPTUAL

EXISTING

CONCEPTUAL

CONCEPTUAL AERIAL VIEW

EXISTING

CONCEPTUAL

EXISTING

CONCEPTUAL

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Boston Flood Zoning Overlay Design Guidelines

Store Houses near Boylan Ave Adaptive Reuse Study

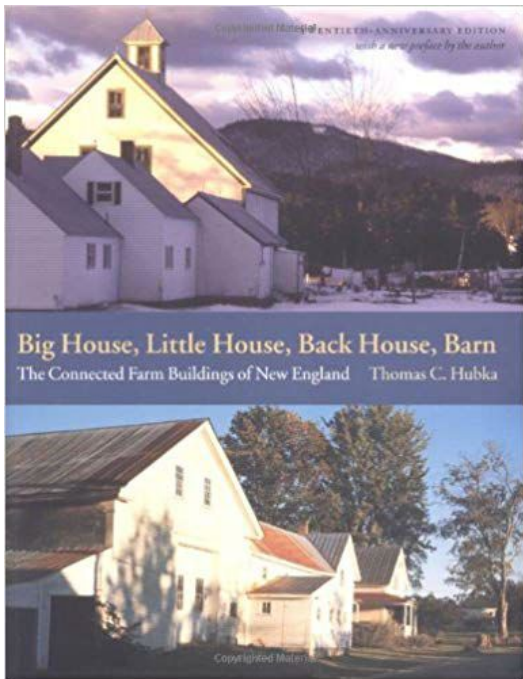


# Part 1. Missing Middle Homes Design Guide

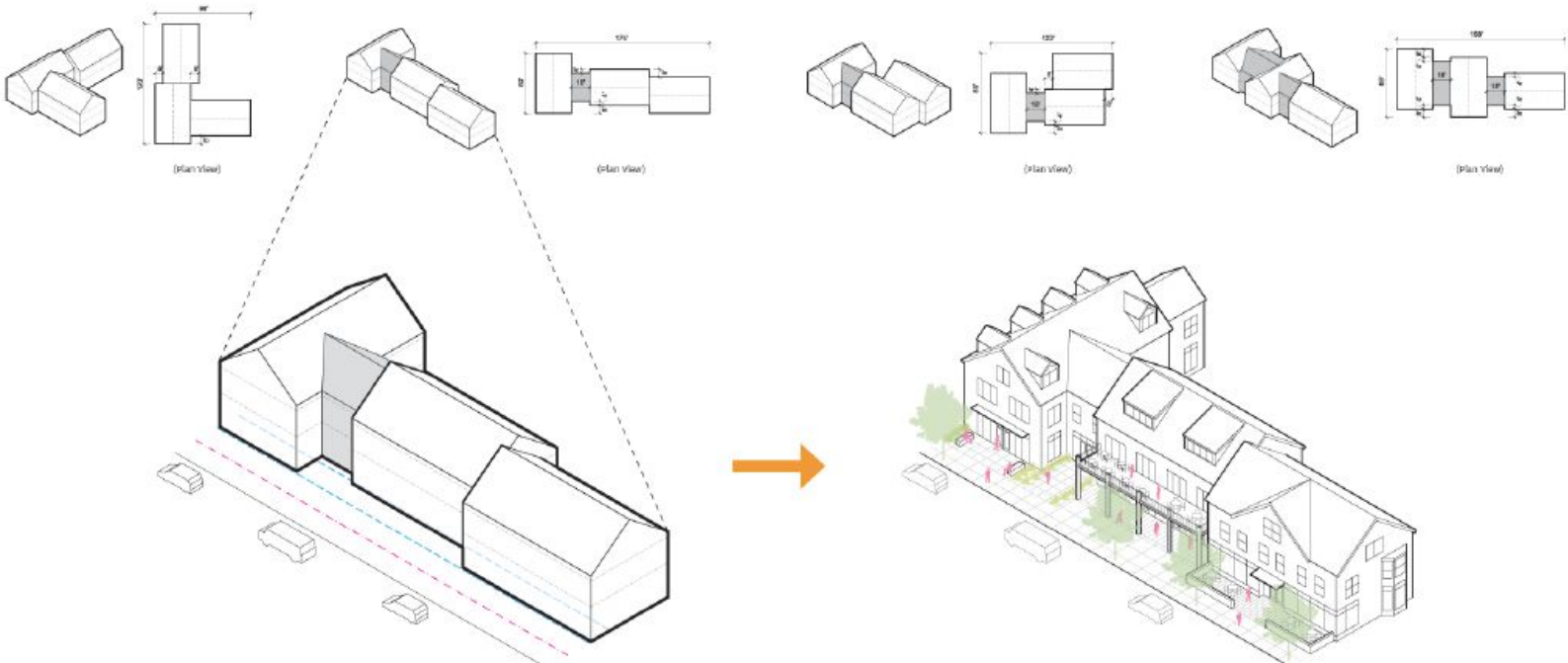
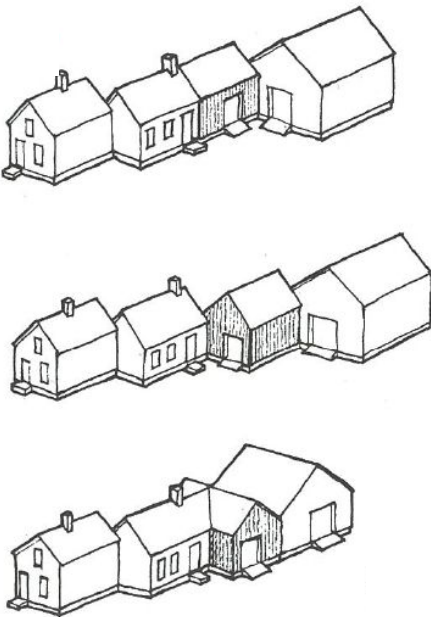
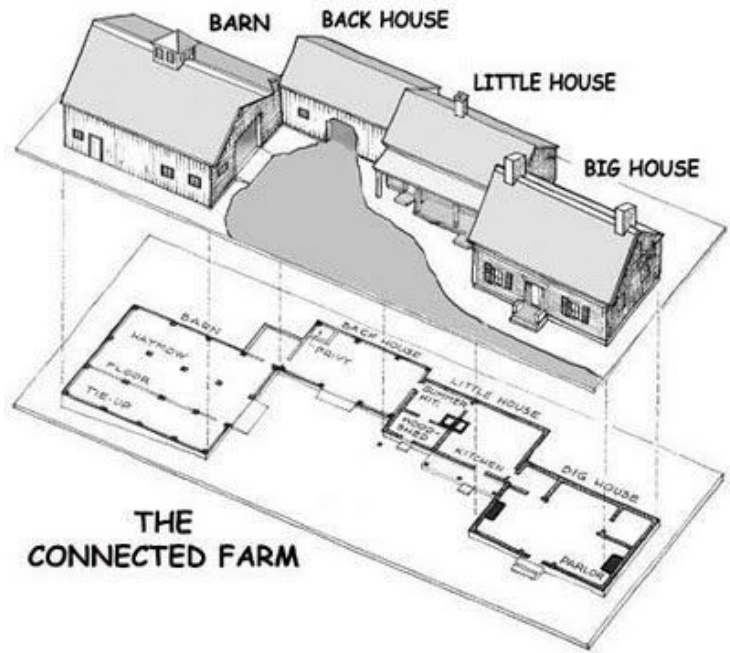
We understand the patterns that define rural New England vernacular design



Existing historic landscape and farmhouses in Littleton, MA



Big House, Little House, Back House, Barn: The Connected Farm Buildings of New England



Examples of farmhouse-inspired massing assemblies and their potential building designs

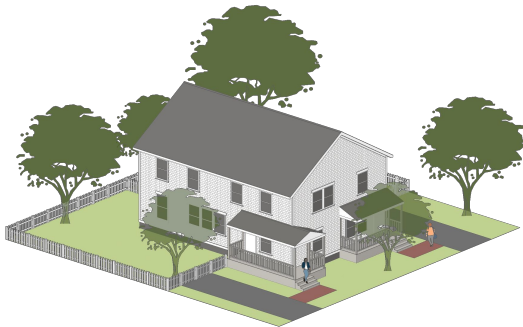


# Part 1. Missing Middle Homes Design Guide

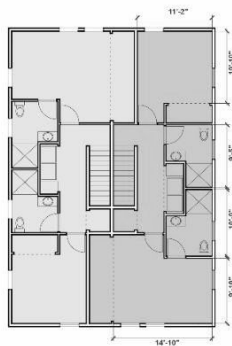
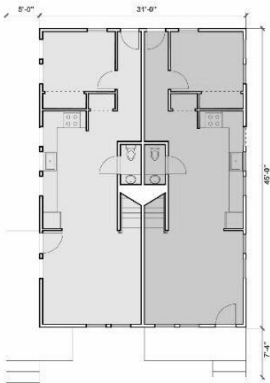
We have experience designing and building affordable missing middle homes



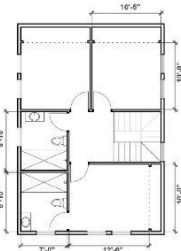
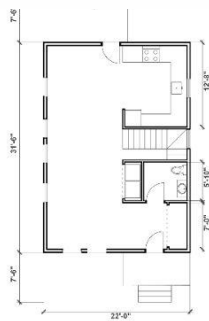
Chatham, MA Small Scale Infill Typology Development



Duplex Type



Single-family 3BR Type



Single-family 2BR Type



Hyde-Blakemore; Roslindale MA



# Part 2. Vermont Neighborhood Infill Design Case Studies

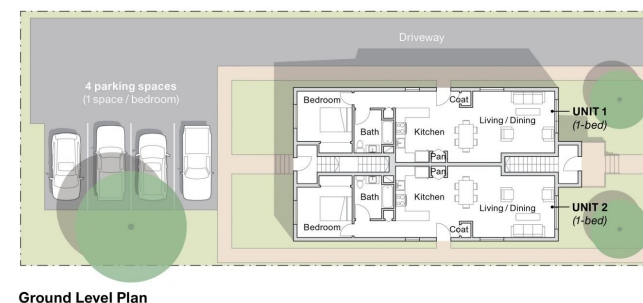
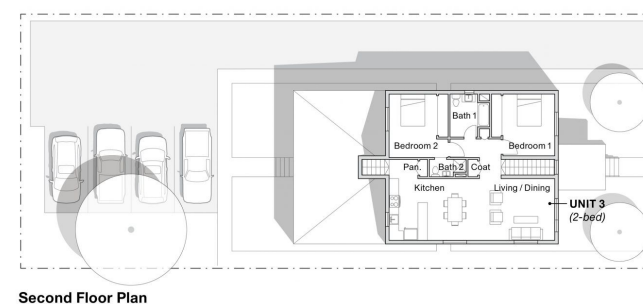
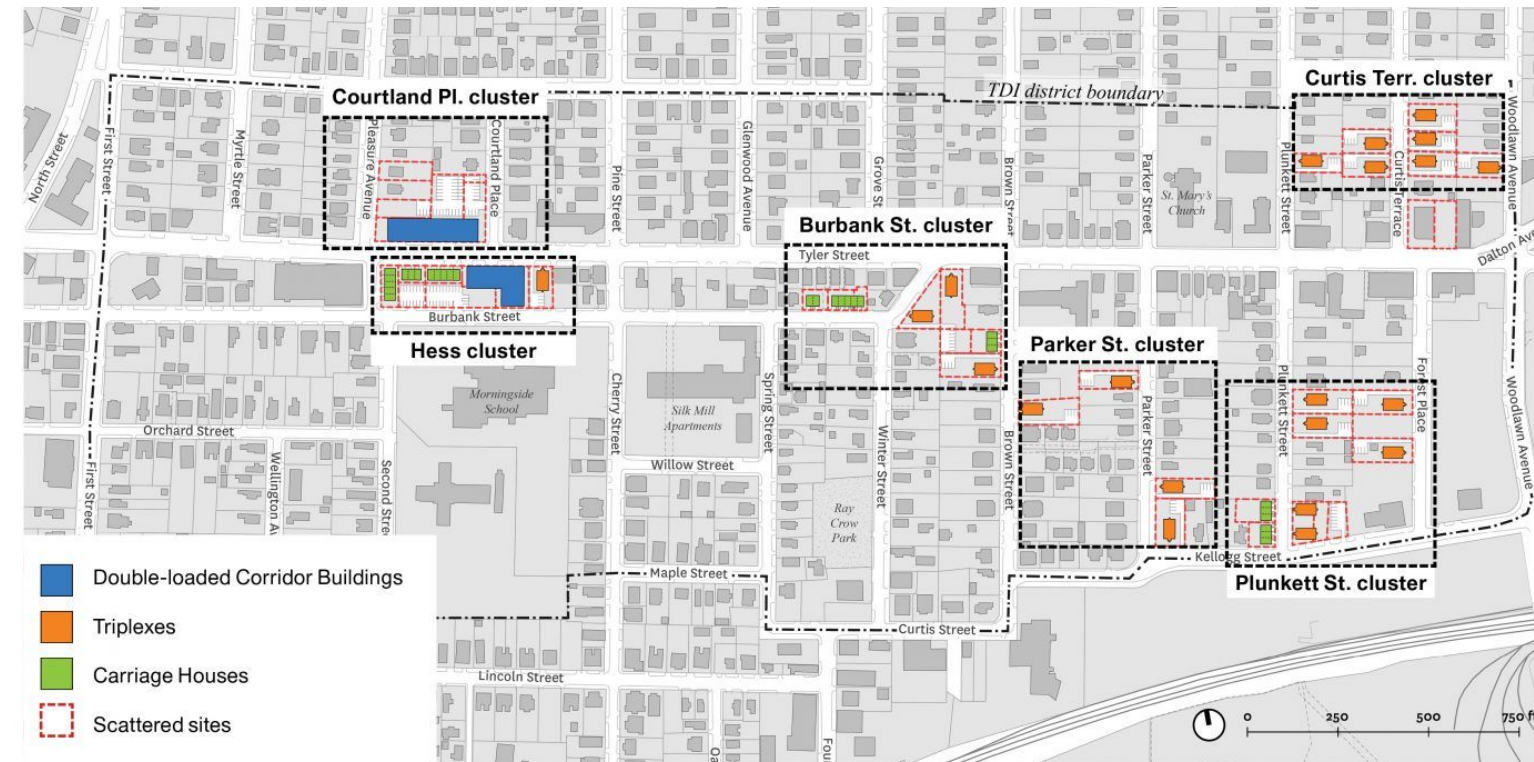
What this section of the Toolkit will cover

*Test designs and builders workbook concepts in the context of five representative Vermont communities, and make refinements as needed.*

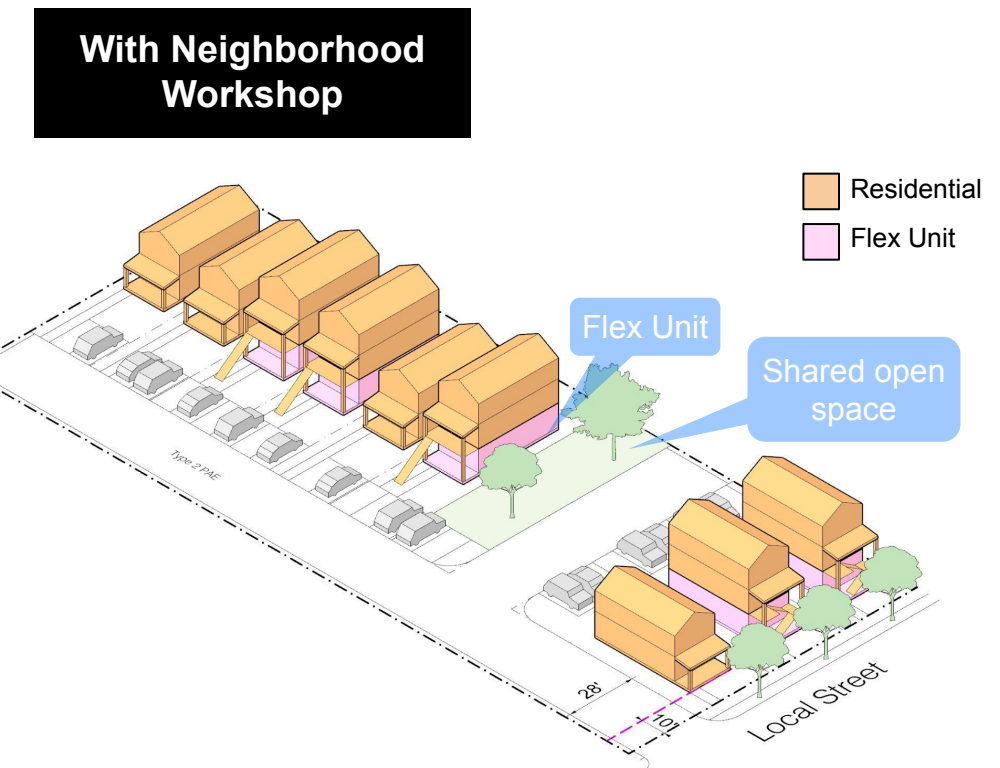
- Analysis and review of selected sites and neighborhoods
- Test-fits of typologies in selected pilot communities
- 3D aerial and streetscape views with schematic designs for Missing Middle Home types in context
- Community engagement site visits to 5 pilot communities to refine approach and visualizations of infill Missing Middle Homes in context

Apply to be a pilot community to develop these case studies at  
<http://accd.vermont.gov/homesforall>

**Deadline:** June 23rd by 5pm



Pittsfield Tyler Street District Plan



Houston Gulfton Affordable Housing Plan Typologies



# Part 3. Builders' Workbook

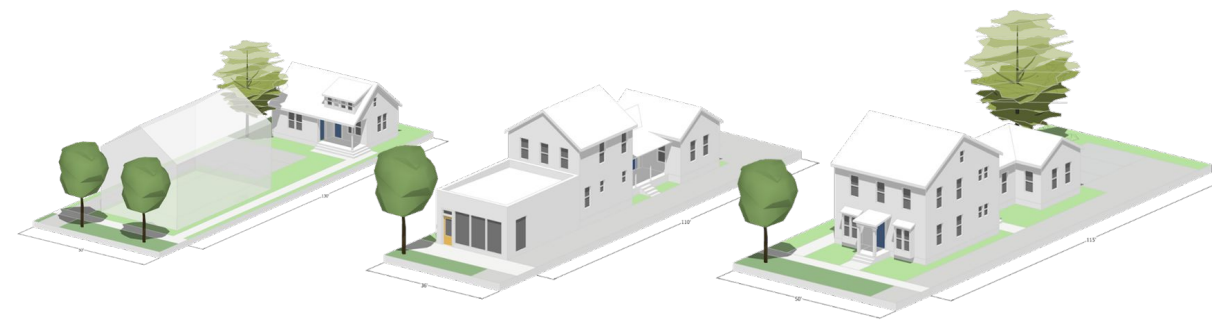
What this section of the Toolkit will cover

*Provide step-by-step guidance on all aspects of the development process for a broad audience of potential developers.*

- Introduction to small-scale, incremental development
- Team building evaluation
- Development ready community and site identification
- Development feasibility methodology
- Legal and financial frameworks
- Design and construction process
- Implementation and management

Our team will rely on local advisors and our existing understanding of small scale development in rural communities in Northeast New England and beyond.

## Diagnostic for Enabling More Incremental Development



**Detached ADU**  
(Carriage Barn)

**Live-Work ACU**  
(Accessory Commercial Unit)

**Mansion Flats**  
(3 units)

For small or  
"un-bankable"  
projects.

Cash / personal debt

1-4 units, flexible  
terms, fairly simple. *In  
your own name.*

Residential mortgages

The deep end. More  
complicated, more  
cash needed.  
*LLC zone.*

Commercial mortgages

Many times more  
complicated.  
*Consultant zone*

Tax Credits, PPPs, Gov't Grants

## Example: Bellows Falls, Vermont

What is in demand?  
What is legal?  
What fits?



Match financing to  
building type.





# Part 4. Training Resources & Summit

What this section of the Toolkit will cover

*This will support collective implementation of the Toolkit concepts by training veterans and newcomers alike to serve in different implementation roles throughout Vermont.*

*Training Resources will include:*

- *Presentation Slides*
- *Presentation zoom video recording*
- *Handouts and posters*
- *Facilitation guide with talking points and activities*

*The Summit will serve as a:*

- *Promotional launch of the toolkit*
- *Training on how to make use of the Toolkit*
- *Networking and capacity building opportunity*
- *Template for future similar events*



*Public Draft Plan Workshop, Worcester Now | Next Citywide Plan, 2023*



*Community Asset Mapping, Worcester Main South, TDI District, 2019*



*Community Trade-off Game, PlanBeverly, 2019*



# What is the desired impact? What does success look like?

Regulatory and financial barriers have made developing diverse, affordable homes on a small footprint harder and more complicated.

This project aims to change that by creating the framework and resources needed to:

- Build Affordably,
- Grow Small Developers,
- Cultivate Local Support, and
- Empower MMH Champions.

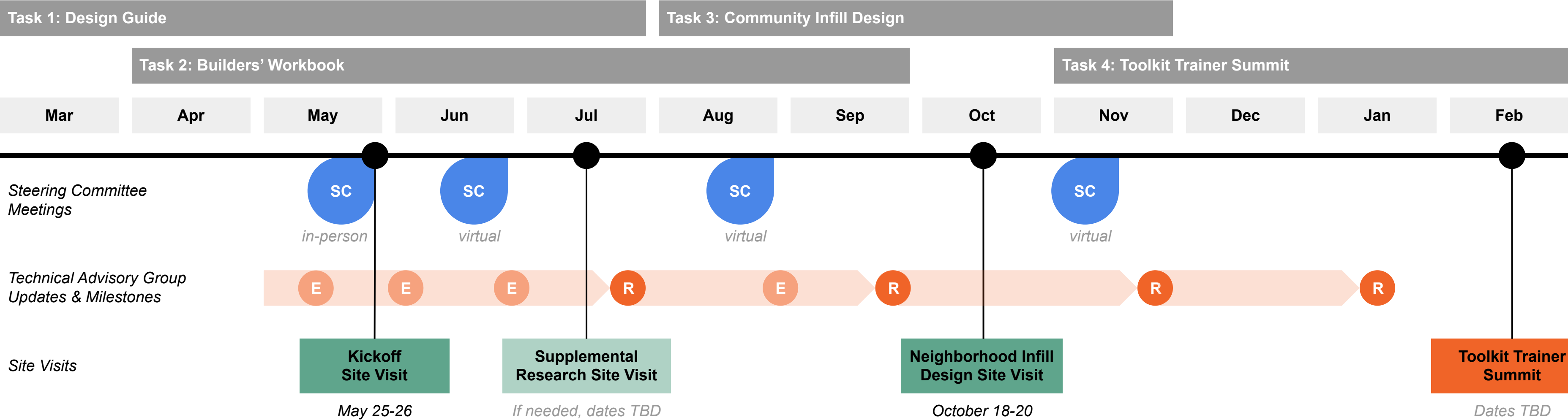
By doing this we hope to establish a viable approach to deliver diverse, affordable homes while enabling community members to earn a living by developing homes that contribute to communities they love.



# Process & Next Steps



# Milestones & Local Presence



**TAG** = Technical Advisory Group  
**SC** = Steering Committee Meeting  
**E** = Email Update to TAG  
**R** = Deliverable Review by TAG & SC



# Advisory Bodies

## Steering Committee Role

1. Advise on key issues, contextual factors, and technical issues the Toolkit should address.
2. Assist with coordination and alignment with existing policies as well as ongoing or future projects and initiatives.
3. Assist with outreach, communication and increasing awareness of the community infill design events and final toolkit trainer summit to boost participation and understanding with key stakeholders, agencies, and members of the public.
4. Review and provide constructive feedback on proposed process, initial findings, interim deliverables and final Toolkit.

## Technical Advisory Group Role

1. On-call advising based on area of technical expertise.
2. Review and provide constructive feedback on interim deliverables and final Toolkit.

## Steering Committee Roster

- **Leslie Black Plumeau**,  
Research and Community Relations Manager, Vermont Housing Finance Agency
- **Emily Phillips**,  
Associate Housing Director, Vermont Housing and Conservation Board
- **Kelly Stoddard-Poor**,  
Associate State Director, AARP Vermont
- **Kelly Lucci**,  
Director of Strategy and Partnerships, Vermont Energy Investment Corporation
- **Bill Colvin**,  
Executive Director, Bennington County Regional Commission
- **Kati Gallagher**,  
Sustainable Communities Program Director, Vermont Natural Resource Council
- **Katie Buckley**,  
Director, Federal Funding Assistance Program, Vermont League of Cities and Towns
- **Chris Halnon**,  
Business Loan Officer, New England Federal Credit Union
- **Jonah Richard**,  
Principal, Village Ventures

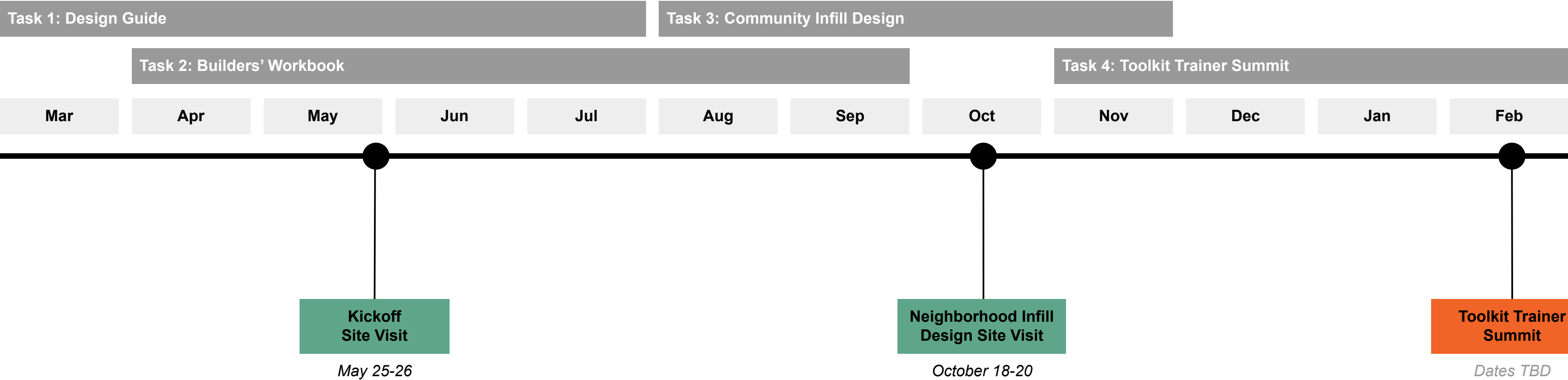
## Technical Advisory Group Expertise

- Small scale, cooperative, and affordable housing developers and property managers
- Local government, policy, zoning and land use experts
- Financing partners
- Architects, builders, and experts in code, energy and sustainable design standards
- Real estate professionals
- Community advocates and experts in diversity, equity, inclusion, and accessibility



# How to get involved

- 1. Visit the project website  
<http://accd.vermont.gov/homesforall>
- 2. Submit photos of Vermont vernacular typologies by June 30th  
<https://vnrc.org/housinghunt/>
- 3. Apply to be a Neighborhood Infill Design Pilot community by June 23rd at 5pm  
<http://accd.vermont.gov/homesforall>





# Thank You!

Questions Welcome!

Primary Contact: Dan Groberg  
([dan.groberg@vermont.gov](mailto:dan.groberg@vermont.gov))

