

LITTLE TO MIDDLE HOUSING TYPES

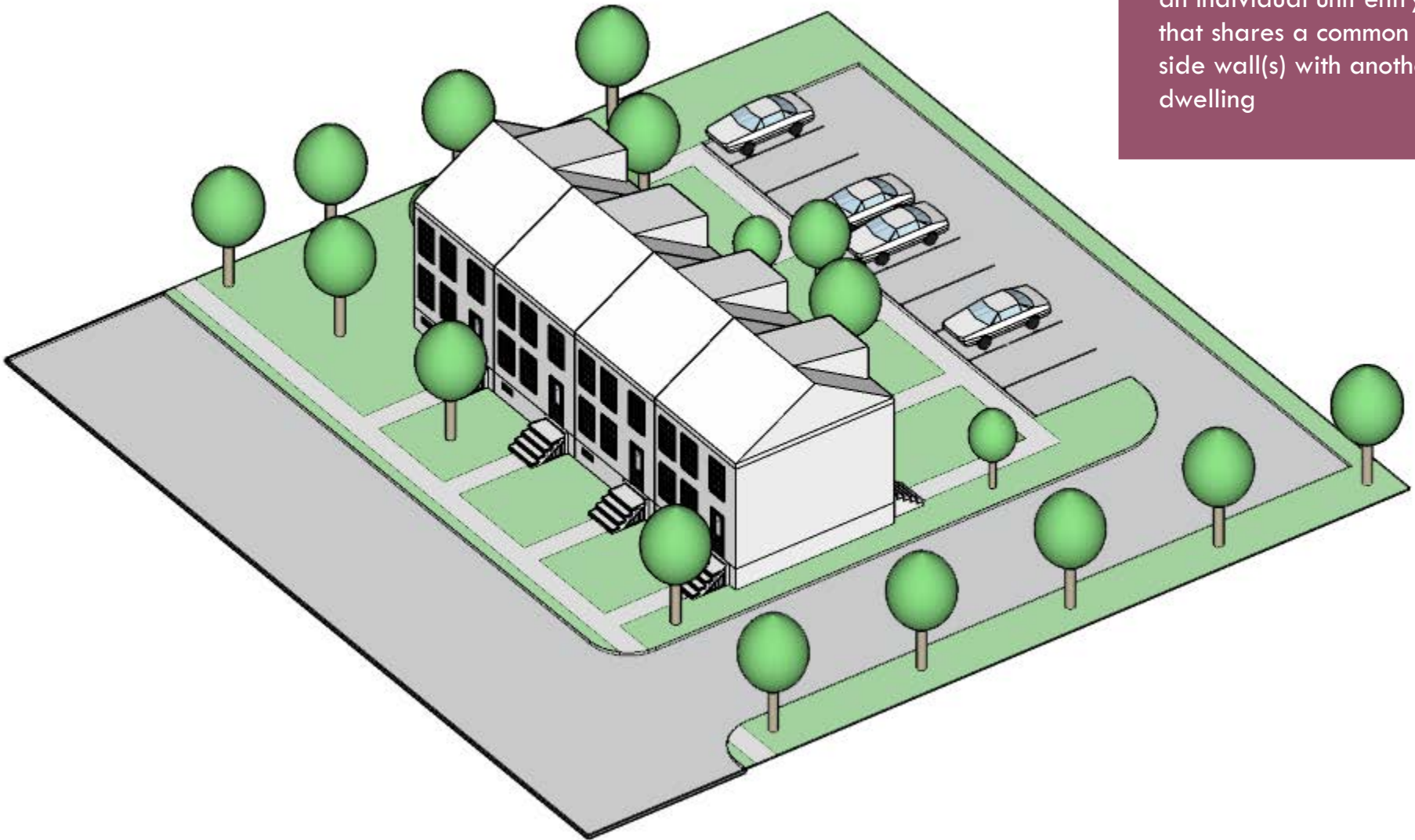


TOWNHOUSES

Opticos Design | Sightline Institute: Missing Middle Homes via Flickr

TOWNHOUSES

Definition: A narrow, multi-level home with an individual unit entry that shares a common side wall(s) with another dwelling



OVERVIEW AND HISTORY

From the brownstones of Back Bay to historic homes in and around town centers across Massachusetts, townhouses have a special place in Greater Boston's history. Originating in London and Paris, townhouses became popular in New England in part thanks to Bostonian architect Charles Bullfinch, who designed some of Boston's first townhouses after spending time in Europe. Compact yet private, townhouses emerged as a popular housing type for the urban middle class. The townhouse concept was also widely employed to meet increasing demand for workforce housing during the industrial revolution.⁴

While suburban zoning bylaws in the mid- to-late twentieth century largely discouraged or prohibited townhouses through minimum frontage and setback requirements, in recent years this housing type has been gaining more attention. Townhouses now come in many different shapes and sizes and, harkening back to their middle-income origins, they represent a single-family housing option that tends to be more affordable than large-lot detached homes.



North Kingstown, RI | Union Studio Architecture + Nat Rea Photography



⁴ Schoenauer, Norbert. *6,000 Years of Housing*. W. W. Norton & Company, 2003.



Curtis Adams via Pexels

LAYOUT

GENERAL LAYOUT:

Lot Size	1,800-3,000 sq.ft. per townhouse
Height	2 - 2½ stories
Setbacks	0' between adjacent buildings, 10' between clusters; front face of building 0-15' from sidewalk
Density	5-15 units per acre
Width	Each townhouse 15-25'
Unit Size	1,200-2,400 sq.ft. per townhouse 1-4 bedrooms

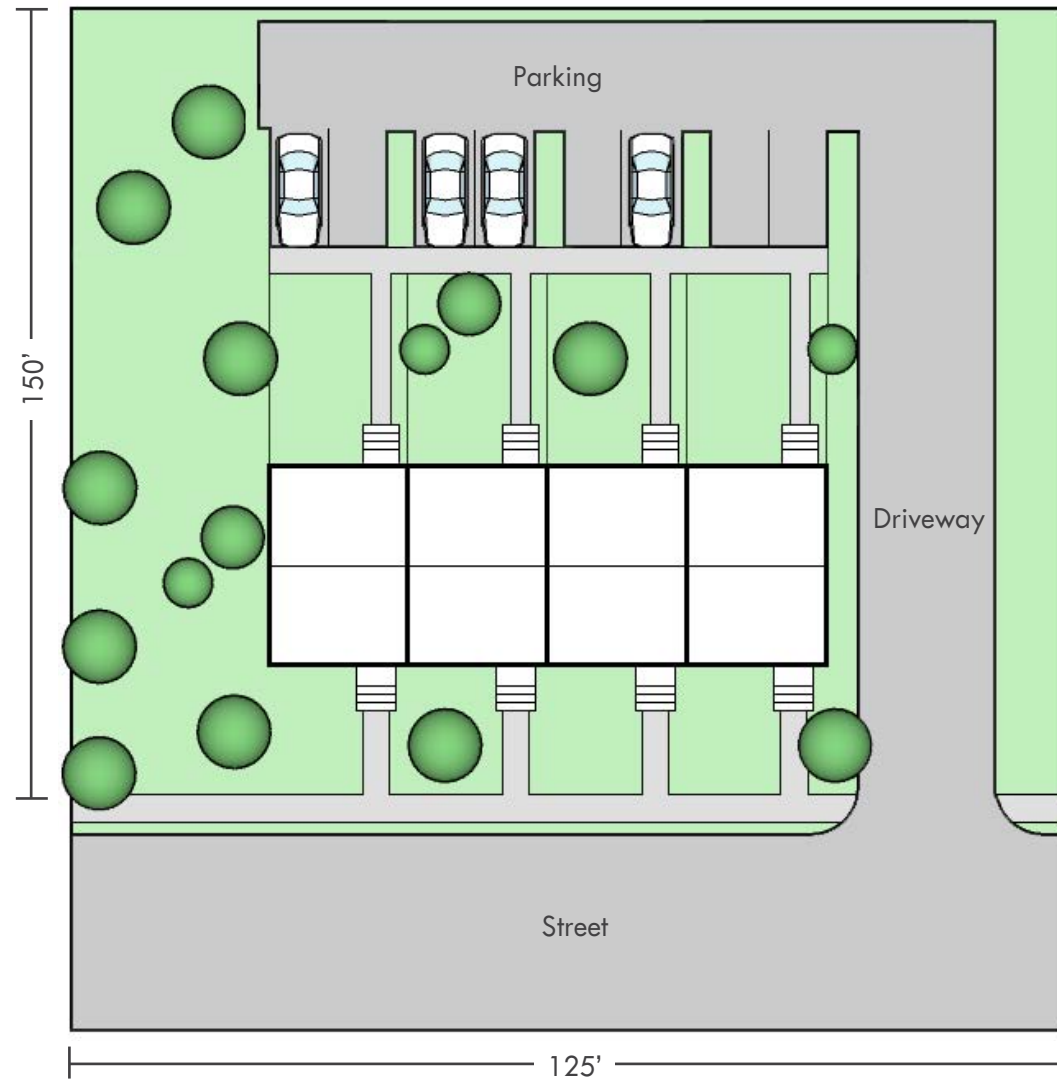
POLICY EXAMPLES:

Danvers
Northampton
Portsmouth, NH
Reading

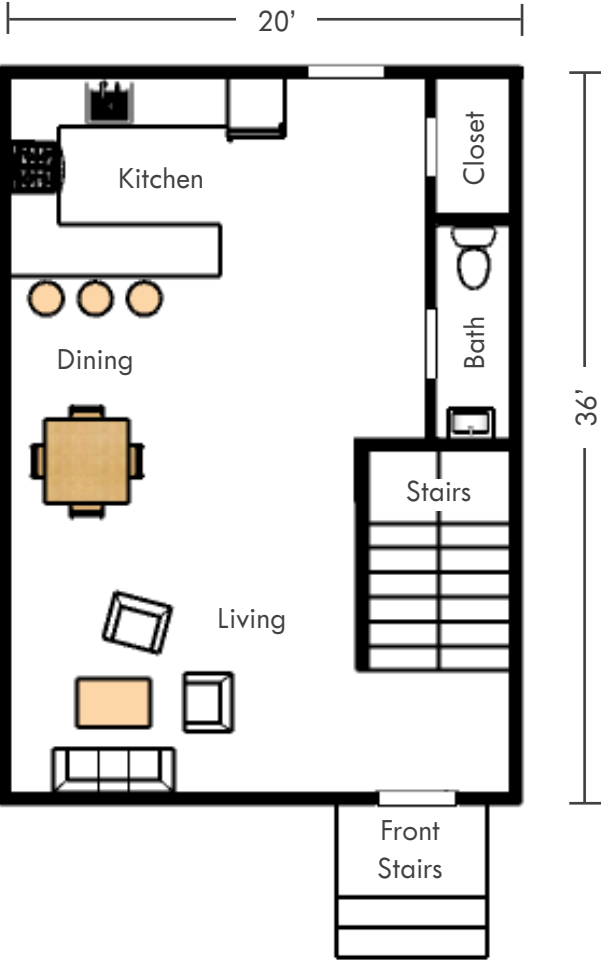
BUILT EXAMPLES:

Gloucester
Lincoln
Manchester-by-the-Sea

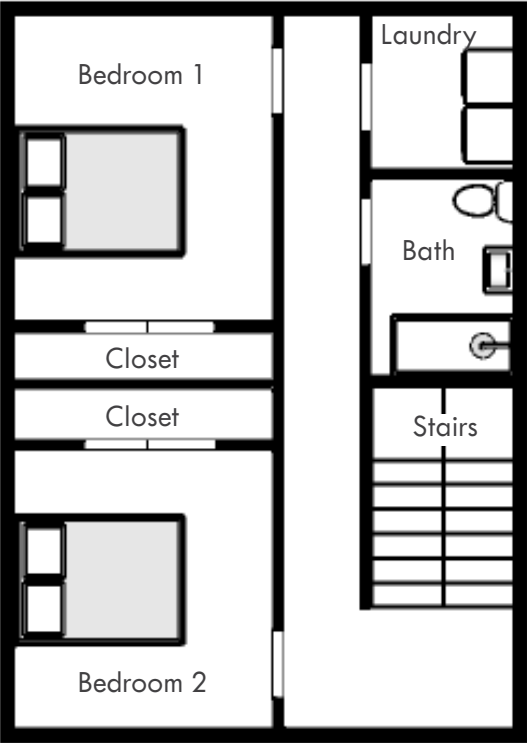
SITE PLAN LAYOUT:



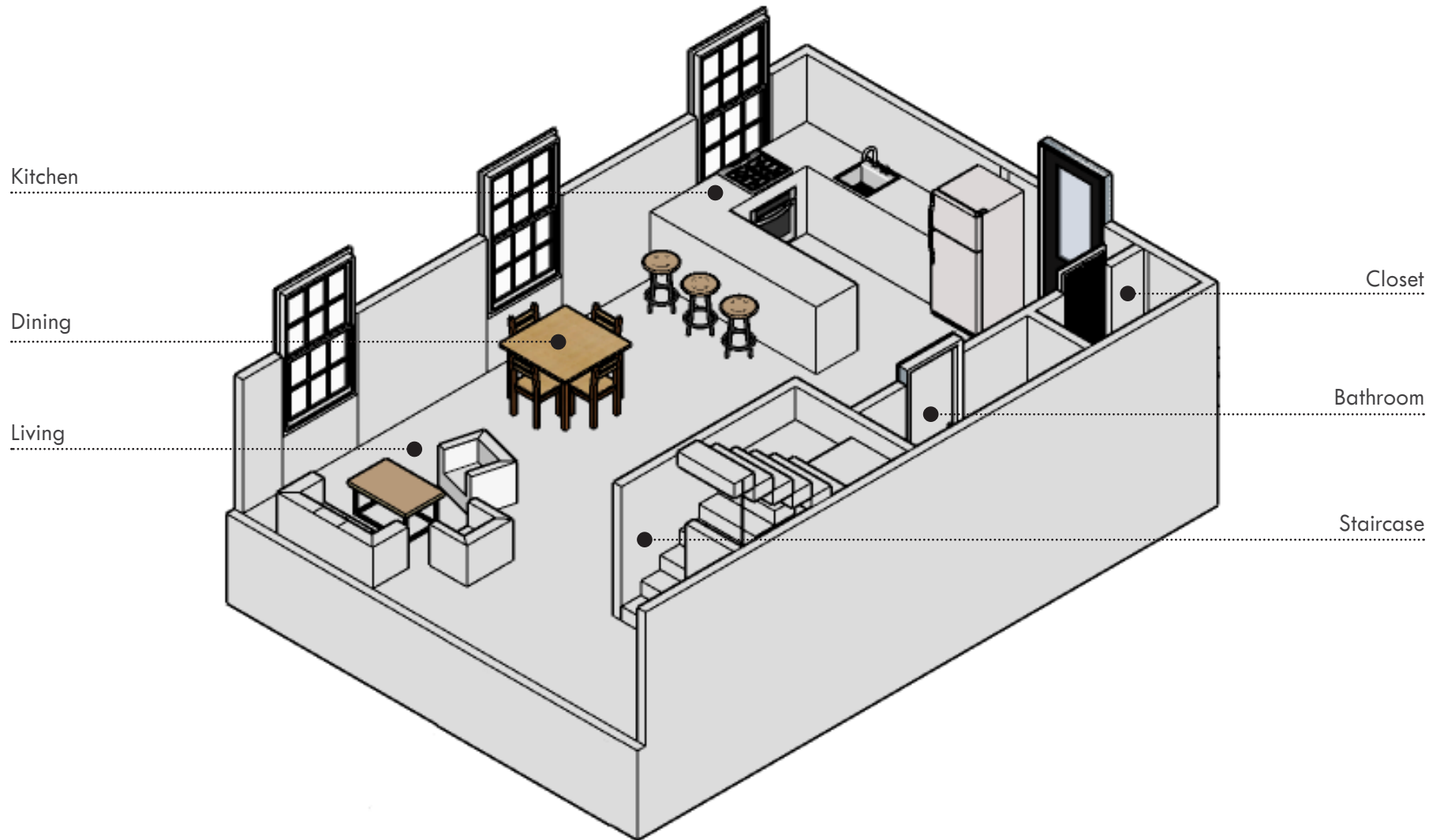
FIRST FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR LAYOUT





Sightline Institute: Missing Middle Homes via Flickr

BARRIERS

BARRIERS

Due to their lot line-to-lot line layout, townhouses can face unique zoning challenges, particularly if they are not defined in a town's zoning bylaw and must comply with more general multifamily dimensional requirements. Additionally, their relatively high density can pose challenges both in terms of infrastructure and public perception. However, many common concerns can be addressed through thoughtful site planning, and many towns would be well-served by the mix of privacy and density afforded by this housing type.

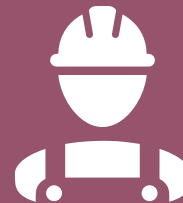


BARRIERS BY STAKEHOLDER



TOWN OFFICIALS

- Zoning bylaws
- Parking and trash access
- Building and fire codes
- Water and Sewer



DEVELOPERS

- Zoning bylaws
- Ownership structure
- Permitting process



COMMUNITY CONCERNS

- Traffic
- School enrollment
- Neighborhood character

BARRIERS FOR TOWN OFFICIALS

Zoning

Because townhouses are essentially attached single-family homes, they can be either be built side-by-side on a single lot or on adjacent narrow lots with no side setback. Because of this, it can be difficult to craft appropriate dimensional regulations if townhouses are not defined as their own typology. If townhouses are classified as single-family housing, typical suburban zoning regulations that require a minimum lot size, frontage, and side yard setback would preclude the narrow parcels and lot-line common walls that make townhouses possible. However, classifying townhouses as multifamily housing can also be problematic. Even multifamily zoning districts, when designed for apartment use rather than townhouses, often include setback and lot coverage restrictions can impede townhouse development. Open space requirements can also be challenging if they can only be met through the provision of a large contiguous shared open space rather than the smaller, individual open spaces afforded by townhouses. If local regulations are too rigid, some Massachusetts developers opt to utilize state-enabled zoning tools such as Chapter 40B or Chapter 40R.



Sightline Institute: Missing Middle Homes via Flickr

Parking and Trash Access

A well-designed townhouse site plan should locate parking and trash behind the house, not visible from the street, to promote an attractive and pedestrian-oriented façade. However, because townhouses are built side-by-side, direct access from the street is not possible for each townhome. This is easily addressed through shared driveways, but could pose a challenge if lot and subdivision regulations do not have the flexibility to accommodate shared drives.

Building and Fire Codes

Residential building codes and fire safety codes provide clear guidance on construction requirements for dwelling units with shared walls and to ensure adequate access for emergency vehicles on shared driveways. However, local officials that deal primarily with detached single-family homes may not be accustomed to reviewing this type of construction and may need to familiarize themselves with the ways in which life safety standards are met in attached housing.

Water and Sewer

While their relative density makes townhouses an example of smart growth design, they may be constrained if a location is not served by public water and sewer lines. This is especially true in smaller towns and suburban communities, many of which rely on septic systems and limited public infrastructure. The Battle Road Farm development in Lincoln, MA, used an onsite sewer treatment plant, but this option is only financially feasible for developments above a certain size. Smaller projects may be able to utilize a shared septic system. It is also worth remembering that, in comparison to single-family homes, townhouses generally are more compact and have fewer bedrooms and therefore accommodate fewer people, requiring less water and sewer capacity per unit.

PARTNER TOWNS ZONING

While technically each of the five partner towns has at least one zoning district where townhouse development is permitted, some of these districts' dimensional standards do not easily lend themselves to townhouse design, and others require an approvals process so involved that it would likely discourage development altogether. Hingham and Scituate each have at least one district whose dimensional requirements work well for townhouse development, though even these require a special permit.

- Two of the five participating South Shore towns include a specific definition for townhouses or rowhouses.⁵ In the other towns, a townhouse development would likely be defined as multifamily housing and would need to comply with the bylaw's multifamily dimensional requirements.



- With attached side walls and widths of only 15-25', townhouses are best facilitated by correspondingly narrow and small lots. Scituate's bylaw is the only one with at least one district that permits lots narrow and small enough for this type in at least one of its zoning districts. In a similar vein, townhouses are most commonly situated close to the sidewalk with a relatively small front yard; again, Scituate's bylaw is the only one of the five where this is possible.
- If it is not possible to build townhouses on adjacent individual lots, a developer may choose to build them on a single lot as condominium units. A townhouse developer in Hingham could pursue this route with relative ease in at least one zoning district, which permits up to four connected townhouses with suitable minimum required lot size and frontage.
- In the three remaining towns, the only vehicle for building townhouses is through a floating overlay district or planned unit development, with minimum lot sizes of one acre or more. Lots of this size would lend themselves to a larger planned development of cluster of townhomes built around a courtyard or mews, but preclude small-scale, incremental pockets of three or four townhouses. A courtyard townhouse arrangement could be further limited in Norwell, which allows only one structure on each lot, thus excluding two rows of facing townhouses.
- Most towns' bylaws require that at least one third of the site be reserved as open space. While this is easily accomplished on larger sites, it can be prohibitive for smaller townhouse developments of just a few units, which rely on smaller private yards for open space rather than large, contiguous shared yards.
- Two out of five limit the number of bedrooms that can be included in townhouses, which conflicts with federal and state fair housing laws that protect familial status.
- All towns allow a height of at least two and a half stories, which is appropriate for a townhouse and would not be particularly limiting.

To encourage townhouse development, bylaws should provide a definition for this development, allow multiple buildings on one lot, and offer flexible design guidelines that can accommodate various site dynamics.

⁵ Most bylaws refer to this housing type as either a "townhouse" or a "rowhouse;" the two terms are used interchangeably here.

PARTNER TOWNS ZONING

	COHASSET	DUXBURY				HINGHAM	NORWELL	SCITUATE
Zoning District	Residential Cluster District (RCD)	Planned Development District				Residence D and E Districts by special permit		R-3 by Special Permit
Defined in Zoning Bylaw	No	Classified as semi-detached				Attached party walls on one or both sides, has a separate ground level entrance and front and rear yards. Exempt from lot shape requirements.	No	Attached single family residential buildings. Each unit is separated by a common wall and groups of buildings may be separated by a common driveway or community space.
More than one Structure Permitted on a Lot	Single-family separate, Multifamily together	One structure by right. Multiple by special permit.				By special permit	No	Yes
Unit limitation	30% Multifamily buildings max, must be attached	5% min detached SF. Must have a mix of detached SF, attached SF, semi-attached townhouse, and multifamily or garden apartments. Max 70% of one type.				At least four connected dwellings, no more than 10 units on one lot		Max 8 units can be attached by a common wall before accessway of 20 ft. is provided for pedestrians, vehicles, or outdoor amenity space
Bedroom Limitation	2	2 (multifamily)						
Unit Size						Affordable town houses must be a min of 1,200 sq. ft. GFA		
Minimum lot size (sq. ft.)	10 acres in Residence B or C District	1.5 acres unless specified in underlying zoning district				Residence D	1 acre	1,200 sq. ft. (if on separate lot)
						5,000		
						Multi-unit Standards		
						5 acres, Max 8 units per acre		
Lot Width (ft.)	Underlying districts, min 30 ft between group of lots and group of clustered buildings						150	Min/max depth - 50
Frontage (ft.)		Single-family	Semi-detached	Three- and four- family	Multi-family	30 per unit		18/24
Buffers (ft.)		75	125					
Front yard (ft.)		At least one yard must be 35 ft.	Min 10 ft between exterior walls, if no windows	Underlying district	Preferred to be only one dwelling unit deep so that each dwelling unit extends through the building	50	At least 35 ft between structures and 50 ft landscape buffer adjacent to each property line.	
Side yard (ft.)				20 ft.		20	15-50	5/15
Rear yard (ft.)						20	20	0
Height (ft.), (stories)	35	35 (2.5), setbacks must be equal or less than required height				35 (2.5)	34 (2.5)	30 (2.5)

PARTNER TOWNS ZONING CONTINUED

	COHASSET	DUXBURY		HINGHAM		NORWELL	SCITUATE
Open Space Requirement	45%	60% (general standard)		Residence D	Multi-unit Standards	1/3 of the lot	Specific design standards, Section 752
					At least 2,000 sq. ft. of undeveloped and unpaved land and 1,000 sq. ft. of open space per dwelling unit		
Parking	2 spaces per DU	Multifamily	Single-family	2 spaces per dwelling unit	Guest parking required when no off-street parking is available determined by site plan review, not to exceed 10% of total required spaces	1 space – one-bed or less 2 spaces – two-bed or more	SF – 2 spaces Two-family – 4 spaces Other – 1 per bedroom
		1.5 per one-bed, 2 per two-bed	2 for two- and three-bedrooms, 3 for four-bedrooms or more				

PROGRESSIVE BYLAWS

Bylaws that best facilitate townhouse development typically define townhouses as their own building type, independent of detached single family and multifamily housing. Each of the example bylaws on the following pages include specific definitions for townhouses and allow them by right in at least one district. Other notable features include:

- Visual examples can communicate the town's vision to developers and provide guidance to local boards while maintaining sufficient flexibility for individualized designs. In the examples below, Danvers and Portsmouth utilize form-based code with corresponding graphics to clearly communicate desired design elements.
- Progressive bylaws permit the small and narrow lots that are unique to townhouses. Danvers' bylaw incorporates minimum lots sizes and lot frontages that are well-suited for townhouses, while Portsmouth and Reading's bylaws offer even more flexibility by not requiring a minimum lot size or frontage at all. Likewise, bylaws should stipulate no minimum density or a density that is high enough to accommodate the small townhouse lots.
- It is also essential that towns allow for attached dwellings. The dimensional requirements in some bylaws regulate distance between structures (i.e. multiple attached townhouses in a cluster), while others include setback requirements between individual townhouse units. If the latter, the side yard setback must be zero. Bylaws should be clear about this distinction.
- Bylaws should enable townhouses to be located close to the street by setting minimal or no required front setback.

Even with these elements, many townhouses are developed through 40B or 40R or other flexible districts. Northhampton utilized a M.G.L Ch. 40-R Smart Growth Overlay District to facilitate townhouse development and other communities could use this state tool if they do not have bylaws that are well-suited for this development.



PROGRESSIVE ZONING EXAMPLES

Key elements are highlighted.

	DANVERS, MA	NORTHHAMPTON, MA	PORTSMOUTH, NH	READING, MA	VIRGINIA BEACH, VA
Zoning Districts	Character-based Zoning Districts	Village Hill Smart Growth Overlay District	Character District 4 (below) and Character District 5	Business C (requirements of this district are described below) and Planning Subdistrict A	Residential Townhouse District, Apartment Districts, and Mixed-use Districts
By-right	Y	Y	Y	Y	Y
Definition	A small footprint and attached residential building with one dwelling unit where each unit is separated horizontally by a common wall. Rowhouses are not allowed for non-residential uses.	A row, attached side-to-side (not on top of each other), of at least two and not more than eight dwelling units. Each unit in the row may be owned by a separate owner.	A dwelling unit in a group of three or more attached units, foundation to roof, open space on at least two sides, separated by a fire-rated wall	A dwelling unit that is arranged, intended or designed to be occupied by a single family and that is attached to one or more other dwelling units by one or more common walls, with each dwelling unit having its own exterior entrance.	A building containing three (3) or more dwelling units attached at the side or sides in a series, separated by a boundary wall and each unit having a separate lot with at least minimum dimensions required by district regulations for such sections.
More than one Structure Permitted on a Lot	Y	Y	Y, Townhouses are exempt	Y, In Business A and Business C	Y
Minimum lot size (sq. ft)	1,200	2,000	None	None	1,400
Density		Sub district A – 8 units per acre Sub district B and C – 21 units per acre			
Minimum Lot Width (ft)			None		30
Frontage (ft)	18 min/ 24 max			None	
Front yard (ft)	5 - 15	Consistent with other buildings on the block (can be adjusted by the planning board based on natural constraints)	10 max	10	30
Side yard (ft)	None	For units extending behind front units, where entries orient to the side lot, 20-foot side setback (can be adjusted by the planning board)	None	10	10
Rear yard (ft)	15		Greater of 5 ft from rear lot line or 10 ft from center line of alley	10	20
Height (ft), (stories)	35 ft /2.5 stories	Minimum two stories/ underlying		55 max	36
Open Space Requirement	20%	Mandatory park/common area accessible to the public of at least 300 sq ft or 30 sq ft per dwelling unit of buildable land area	10%	30%	

PROGRESSIVE ZONING EXAMPLES CONTINUED

	DANVERS, MA	NORTHHAMPTON, MA	PORTSMOUTH, NH	READING, MA	VIRGINIA BEACH, VA
Parking	Two spaces per dwelling unit plus one space for each bedroom over two to a maximum of 3 spaces per dwelling unit Must be located behind building	No minimum parking required Parking must be located in the rear Parking of five or more cars must be distributed on the site to minimize impact to the neighborhood character	Less than 500 SF - .5 space per unit Between 500-750 SF - 1 space per unit Greater than 750 SF - 1.3 spaces over Planning board may grant a conditional use permit to provide less than minimum.	2 spaces per du	1 per DU
Additional Attributes	Design standards for roof type, façade, and other design elements. Standards are demonstrated by graphics and example photos.	All projects shall provide equal access to all building amenities, park and civic space and public entrances to buildings to residents of both affordable and non-affordable units. 20% of housing units must be Affordable Housing	Design guidelines that permit and prohibit different building forms such as a forecourt or balcony		No side yard setbacks required for up to six dwelling units

BARRIERS FOR DEVELOPERS

As with many alternative housing types, zoning can be a major barrier for developers; this is particularly true in the case of townhouses. Minimum lot sizes and frontages can influence whether a townhouse development is sold as condominium units on a single parcel or as individually-owned attached structures on separate lots. If it is cumbersome to design townhouses within the framework of dimensional regulations intended for larger multifamily structures, a developer may simply opt to build a more conventional multifamily building. If lot size, frontage, or setback regulations are overly restrictive, the developer may opt to simply build larger single-family homes instead.

COMMUNITY CONCERNS

For many residents accustomed to single family housing on large lots, the biggest concern is the attached construction, which some may perceive to be urban and out-of-character with their town. Unlike many other Living Little housing types, which are typically not more than two bedrooms, townhouses could include three or more bedrooms, potentially raising concerns about school impacts (addressed in the last section of the report).

2. ROWHOUSE AND TOWNHOUSE

1.1. DEFINITION AND PERMITTED USES

A small footprint and attached residential building with one dwelling unit where each unit is separated horizontally by a common wall. Rowhouses are not allowed for non-residential uses.

1.2. LOT STANDARDS

A. Min. Lots Size (S.F.)	1,200 SF
B. Frontage (Min./Max.)	18 Min./24 Max.
C. Build-To-Zone (Min./Max.)	5 Ft./15 Ft.
D. B-T-Z/Façade Build Out (Min.)	80%
E. Side Yard Setback (Min.)	0 Ft
F. Rear Yard Setback (Min.)	15 Ft
G. % Outdoor Amenity (Min.)	20%
H. Parking Setback (Min.)	Behind Building

1.3. DESIGN STANDARDS

A. Building Height (Max.)	2.5 Stories/35 Ft
B. Roof Types	All
C. Street Facing Wall Width (Max.)	24 Ft.
D. Street Facing Wall Off-Set (Min.)	N/A
E. Street Facing Transparency - Ground Floor/Upper Floor (Min.)	20% / N/A
F. Street Facing Entrance	Required

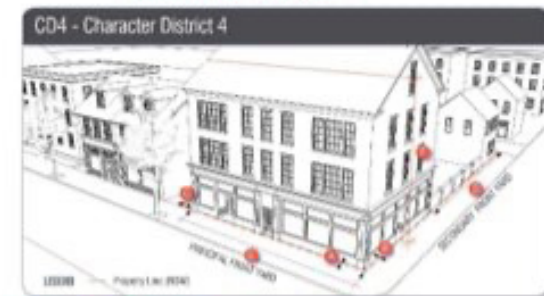


1.4. ADDITIONAL STANDARDS

- On-site parking is not allowed between the buildings; rear vehicle access is required.
- A maximum of 8 units can be attached by a common wall before access is provided for pedestrians, vehicles, or outdoor amenity space.



FIGURE 10.5A41.10C DEVELOPMENT STANDARDS
CHARACTER DISTRICT 4 (CD4)



BUILDING PLACEMENT – PRINCIPAL BUILDING*

Maximum principal front yard	10 ft	2
Maximum secondary front yard	15 ft	3
Side yard	NR	2
Minimum rear yard	Greater of 5 ft from rear lot line or 10 ft from center line of alley	2

Front lot line buildout	On Ceres Street	50% max. (See Map 10.5A21C)
Everywhere else		50% min.

* Except for items listed under Section 10.5A42.12

BUILDING AND LOT OCCUPATION

Maximum building block length	200 ft	3
Maximum façade modulation length	80 ft (see Section 10.5A43.20)	
Maximum entrance spacing	50 ft	
Maximum building coverage	90%	
Maximum building footprint	15,000 sf (or as allowed by Section 10.5A43.40)	

Minimum lot area	NR
Minimum lot area per dwelling unit	NR
Minimum open space	10%
Maximum ground floor GFA per use	15,000 sf

BUILDING FORM – PRINCIPAL BUILDING

Building height	See Map 10.5A21.B & Section 10.5A43.30	2
Maximum finished floor surface of ground floor above sidewalk grade	36"	
Minimum ground story height	12 ft	
Minimum second story height	10 ft	
Façade glazing		
Shopfront façade	70% min.	
Other façade types	20% min. to 50% max.	
Roof type	flat, gable, hip, gambrel, mansard	
Roof pitch, if any		
Gable	6-12 min. to 12-12 max	
Hip	3-12 min.	
Mansard gambrel	6-12 min. to 8-12 max.	

Portsmouth, NH



Sightline Institute: Missing Middle Homes via Flickr

CASE STUDIES

SUMMER STREET DEVELOPMENT, MANCHESTER- BY-THE-SEA, MA

Total Housing Units

42 (21 new units, 21 renovated units)

Affordability

5 for-sale units designated for first-time homebuyers, 21 Affordable rental units

Tenure

Mix of ownership and rental

Housing Types:

Townhouses, mixed-use, and multifamily

Zoning

M.G.L. Chapter 40B

The Summer Street development involved multiple partners and a variety of project components. It included 18 new condominium townhouses, five of which are reserved for first-time homebuyers; a mixed-use building with three condominium units above ground floor retail; and the renovation of an existing apartment building with 21 Affordable units. Residents of the development benefit from its proximity to the Manchester commuter rail station, downtown Manchester businesses, and the harbor and its associated open space. The project was led by a mission-driven partnership that included the Manchester Affordable Housing Corporation, the Manchester Housing Authority, and the Town.

Similar to several of the case studies in this report, the flexibility offered by the Chapter 40B comprehensive permitting process was key to the project's success. M.G.L. Chapter 40B is a state statute that enables local Zoning Boards of Appeals to approve affordable housing developments under flexible rules if at least 20-25% of the units have long-term affordability restrictions. In addition to offering more leeway with regards to dimensional requirements, participation in the state's Local Initiative Program, part of M.G.L. Chapter 40B, enabled the Town to receive technical and financial assistance from the state for the development.

POND VIEW VILLAGE, GLOUCESTER, MA

Total Housing Units

118

Affordability

77 Affordable rental units, 15 for-sale units
designated for first-time homebuyers

Housing Types

Townhouses and multifamily

Tenure

Mix of ownership and rental

Zoning

M.G.L. Chapter 40B

Pond View Village is a mixed-income townhouse development on the site of the former Lepage Glue Factory. The project was spearheaded by an area nonprofit and, thanks to the involvement of a mission-driven developer, includes 77 apartment housing units for households earning 60% of the area median income and 41 mixed-income townhouse condominiums, of which 15 are reserved for first-time homebuyers. The area surrounded by open space is adjacent to a publicly accessible pond.

A strong project team and the City's commitment to creating Affordable Housing was essential to the success of the project and overcoming public opposition. The development was facilitated through the Chapter 40B comprehensive permitting process, which enables developments with an Affordable Housing component to seek approvals under more flexible requirements than local zoning regulations. Partway through the project, the developers needed to request an amendment to the permit to allow for additional height for the townhouses making up the second phase of the development. Abutters appealed the City's decision to grant the amendment, and although the appeal was denied, it substantially lengthened the development timeline. Due to this extended timeline and a declining housing market in 2006, the initial developer had difficulty obtaining financing and ultimately backed out of the project. However, the project had strong support from the Mayor and the City's housing task force, and eventually another area non-profit stepped up to lead the final phase of development and complete the project, illustrating the importance of political support when pursuing out-of-the-box housing solutions.

BATTLE ROAD FARM, LINCOLN, MA

Total Housing Units

120

Lot Size

24 acres for housing, 47 acres total

Affordability

48 Affordable units

Tenure

Ownership

Zoning

M.G.L. Chapter 40B

Battle Road Farm is a townhouse development initiated by the Town of Lincoln, which purchased land adjacent to the Minute Man National Park to use for a new mixed-income housing development. The portion of the site used for housing comprises 24 acres, roughly half the total site area, situated next to a large conserved open space that provides a buffer between the housing and the park. The 120-unit development consists of 30 two-story structures each made up of 4 townhouse units.

This project demonstrates the power of using publicly-owned land and the RFP process to facilitate development consistent with a municipality's housing and affordability goals: forty percent of all housing units are Affordable, a direct result of leveraging publicly owned land to reduce development costs and reach deeper levels of affordability. More recently, Community Preservation Act (CPA) funds have been used by Lincoln to preserve the Affordable Housing on site.

The project also shows how a balance can be struck between housing development and preserving open space. Although the site was located in an environmentally sensitive area, the project team designed an on-site septic treatment facility that utilized an innovative tertiary treatment system. This system provided the on-site sewer infrastructure needed for the site without negatively impacting the surrounding park and wetlands.

