

**Executive Office of
Housing and
Community Development (EOHHC)**

Introduction

DHCD has prepared this compliance model to help your community demonstrate compliance with Chapter 40A, Section 3A of the Massachusetts General Laws and the accompanying Compliance Guidelines for Multi-Family Zoning Districts issued by DHCD on August 10, 2022.

Why Use the Compliance Model?

This Excel workbook and the information from the accompanying GIS database will help you with the following tasks:
 Test one or more existing zoning districts for compliance.
 Test one or more proposed districts for compliance.
 Demonstrate to DHCD that your community complies with the legislation and guidance document.

If the results of the compliance model indicate that you are not in compliance or you have questions about the results, there are many sources of technical assistance to help communities with these calculations. Don't be afraid to reach out for help! Contact your Regional Planning Agency GIS staff, Massachusetts Housing Partnership (MHP) or EOHHC at DHCD3A@Mass.gov.

What You Need

In addition to this model, you will need the following information resources:
 Compliance Guidelines for Multi-Family Zoning Districts
 Multi-Family Zoning Requirement for MBTA Communities | [Mass.gov](https://www.mass.gov/info-details/multi-family-zoning-requirement-for-mbta-communities)
<https://www.mass.gov/info-details/multi-family-zoning-requirement-for-mbta-communities>
 The GIS "Land Maps" (available for download at the link above) and Appendix 1 of the Compliance Guidelines.
 Your zoning regulations or the draft zoning you are testing.

Purpose of the Checklist

The purpose of the checklist (this and the next three tabs) is to gather two sets of information: The base data that the model will use to calculate the district capacity and dwelling units per acre. Supplementary data that will help DHCD evaluate whether your community is in compliance.

How to Use the Checklist

Please enter the requested information in yellow cells only in the checklist tabs. These will be the only unlocked cells.

Information in gray cells is from a formula based on your previous answers.

In a table:

Shaded cells with white text indicate a warning.

Shaded cells with black text indicate that your answer is in compliance with the guidelines.

Outside of a table:

A text box beginning with **INFO** explains the reason for the question or offer more details about the question.

A text box that begins with **GO** indicates information about compliance or the next step.

A text box that begins with **CAUTION** indicates a possible problem with compliance.

A text box that begins with **STOP** indicates that your answer does not comply with the guidelines. This does not mean that you need to stop your test - it is worth proceeding to see what other parts of your zoning may not comply. **This information will also be useful if you apply for technical assistance.**

Checklist Parameters Tab

Some of the information you input on the checklist parameters tab will feed directly into the model. Please follow directions on the type of information to enter. If the question does not apply to your community, do not enter 0 or N/A unless specifically asked to do so. Entering the wrong type of information will create invalid results in the model.

You can enter information for up to five districts in this workbook. If you want to test more than five districts or if you have zoning districts with subdistricts, just open a new workbook. Remember, each subdistrict must be tested as a separate district.

Please identify your community.

Community: (Please use the drop-down menu to enter)	Concord
Community Category: (Solo-population)	Commuter Rail
2020 Housing Units (Census PL-90): (Solo-population)	1,294
Minimum Multi-Family Unit Capacity:** (Solo-population)	1,094
Minimum Land Area** (Solo-population)	50
Developable Station Area*** (Solo-population)	519
Percent of District to be Located in Station Area (Solo-population)	50%
Please Use GIS Maps/How to check you	
Name of Person Entering Form:	
Name of Contact Person:	
Email:	
Phone Number:	
Address:	

- * Minimum multi-family unit capacity for most communities will be based on the 2020 housing stock and the applicable percentage for that municipality's community type. In some cases, the minimum unit capacity is derived from an extrapolation of the required minimum land area multiplied by the statutory minimum gross density of 15 dwelling units per acre. In cases where the required unit capacity from these two methods would exceed 25% of the community's housing stock, the required unit capacity has instead been capped at that 25% level.
- ** Minimum land area is 50 acres for all communities in the rapid transit, commuter rail and adjacent community types. There is no minimum land area requirement for adjacent small towns. Where 50 acres exceeds 1.5% of the developable land area in a town, a cap has been instituted that sets minimum land area to 1.5% of developable land area in the town.
- *** Developable station area is derived by taking the area of a half-mile circle around an MBTA commuter rail station, rapid transit station, or ferry terminal and removing any areas comprised of excluded land.

Purpose of Compliance Model

The purpose of the compliance model (Zoning Input Summary, Districts 1-5, and Summary Tab) is to use the zoning restrictions and the parcel information from the GIS land database to calculate the average dwelling units per acre and the unit capacity for each district.

The results will either show compliance with Chapter 40A, Section 3A, or indicate that the tested zoning or geographic district does not apply.

How to Use the Compliance Model

Each page has a different purpose.

The **Zoning Input Summary** tab shows you some of the primary zoning information from the Checklist Parameters tab used in the compliance model. This allows you to quickly check that you have entered the correct information for each district.

The **Districts** tab (1-5) has all the calculations. You will copy the information exported from the GIS Land Map database into Columns A through M, starting at cell A20. These cells are unshaded.

Column O allows you to override the designation of public land as undevelopable. For example, if your town is disposing of a former school for housing, you could add the number of square feet of land available for development in this column; you must write the reason for the override in column P.

All other cells are locked.

At the top of each District sheet, a box provides additional information based on the calculations. On the left, the information is about the district's ability to comply with the density (units per acre) and the unit capacity (units per district) requirements.

On the right, the information indicates areas where you might be able to gain more units (if you adjusted your zoning regulations or the geography of the district). If the model shows that your community is not in compliance, this will help you understand why and will be useful if you request technical assistance.

The **Summary** tab brings the information from all five District tabs into two tables. The top table provides a comparison of the model results to any additional zoning restrictions from the Checklist Parameters Tab. The second table provides additional summary information by district as well as calculating the gross density metric for each district. These tables are useful to check compliance if you are testing several zoning districts, one district with several subzones, or comparing your zoning to the model bylaw.

Checklist - District ID
 Municipality: Concord
 Community Type: Commuter Rail
 Contact: 0

Step 1. Identify Zoning Districts for Evaluation

In this first step, you are gathering information about the zoning districts and regulations that may restrict land use in your municipality.

Table 1. Existing Zoning Districts

Does your municipality have one or more zoning districts within a 0.5-mile radius of a...

Transit Center Type	Y/N	If yes, list name of district(s)
Commuter rail station?		
Subway station?		
Ferry terminal?		
Bus station?		
Not applicable - my community is an Adjacent Community or Adjacent Small Town and no part of our community is within a 0.5-mile radius of an existing transit center type in another community.		

INFO: We ask about multiple transit centers because your municipality may have more than one, or may have land within a half-mile of another community's transit center. A yes to this question allows you to consider several geographic areas for your Multifamily District. Check the definitions of these terms in the Guidelines to make sure you comply!

Table 2. Existing Overlay Districts

Does your municipality have one or more overlay districts applicable to the 0.5-mile radius from a...

Transit Center	Y/N	If yes, list name of district(s)
Commuter rail station?		
Subway station?		
Ferry terminal?		
Bus station?		
Not applicable - my community is an Adjacent Community or Adjacent Small Town and no part of our community is within a 0.5-mile radius of an existing transit center type in another community.		

INFO: One way to comply with Section 3A of MGL c. 40A is to use an overlay district, so it is important to consider whether one of your existing overlay districts is in compliance with the regulations.

Table 3. Other Overlay Districts that Control Development

Do any of the following district types apply to the zoning districts listed above?

District Type	Y/N	If yes, identify restrictions on building footprints, building height, or number of dwelling units allowed.
Wetlands Overlay District		
Floodplain Overlay District		
Water Conservation/Wetland Protection Area		
Designated Port Area		
Other		
List district name in the second column, along with any restrictions.		
Does your municipality allow restricted areas (for example, no-build wetland buffers or surface water) to be included in the required minimum open space?	Y	
If your municipality does not have a minimum open space requirement, please enter N.		

INFO: Excluded land and Sensitive land are defined in the Compliance Guidelines for Multi-family Zoning Districts, released by DHCD on August 10, 2022. The overlay types in this question are related to those definitions. If your municipality has other restrictions on development based on physical conditions, for example, steep slopes or soil types, please enter those under Other.

Table 4. Acreage Calculations

Table 4 should include only the zoning district(s) you are testing for compliance with the guidelines. Use the shapefiles you drew for your district (from GIS) to calculate the number of acres in each district, and enter the name of the district and the associated data for that district in the table below. The numbers should come from GIS.

CAUTION: If your zoning district(s) have subdistricts with different dimensional requirements for residential uses, you may want to create a district for each subdistrict in this table. If you have more than five districts/subdistricts to test, then open a new workbook.

Name of Zoning District	Number of Acres	Acres within Station Area	Density Denominator	= or > Required Minimum Land Area? (Y/N)	= or > 5 Acres? (Y/N)
1 Subdistrict 1 - Lower Lowell Road Area	9.53	6.59	8.09	N	Y
2 Subdistrict 2 - Upper Lowell Road Area	5.76	0.34	4.72	N	Y
3 Subdistrict 3 - Thoreau Area	6.29	6.29	6.29	N	Y
4 Subdistrict 4 - Baker Ave Area	66.02	57.91	46.01	Y	Y
5				N	N
TOTAL	87.6	71.13	65.11	Y	Y

INFO: You can use this table to set up tests for your existing zoning district(s), modifications of your existing zoning districts, or comparisons of your zoning districts to the Model Bylaw developed by DHCD.

CAUTION: Contiguity check: At least half of the multi-family zoning district land areas must comprise contiguous lots of land. No portion of the district that is less than 5 contiguous acres land will count toward the minimum size requirement.

Are any of these districts non-contiguous (i.e. the boundaries do not touch any other district)? Enter Y or N.

CAUTION: Station Area Check: If the current zoning district(s) do not meet the location or area criteria, you may be able to create an overlay district that includes other areas of your municipality. However, pay attention to the percentage of land within station area. This is applied to both the number of acres and the number of units. This checklist has completed the calculations for you. When you complete the model, compare the number of units in the station area with the number above.

Minimum Land Area x Percent of Land within the Station Area =	25.00	Required minimum number of acres in the station area.
Total Acres within station area	71.13	
Difference (if this is positive, then you do not have enough acres within the station area to comply.)	-46.13	
Minimum Multi-family Unit Capacity x Percent of Unit capacity within the Station Area =	547	Required minimum number of units in the station area.

GO: Proceed to Step 2 in the Checklist - District Uses tab.

Checklist - Uses
 Municipality: Concord
 Community Type: Commuter Rail
 Contact: 0

Step 2. Identifying District Uses

Table 5. Multi-Family Housing Permissions

Evaluate the districts you identified in Table 4 in the District ID Tab for compliance with the requirement for multi-family as of right in M.G.L. Chapter 40A, Section 3A. Make the appropriate choice for each district under Approval Process below.

District Name	Approval Process
1 Subdistrict 1 - Lower Lowell Road Area	
2 Subdistrict 2 - Upper Lowell Road Area	
3 Subdistrict 3 - Thoreau Area	
4 Subdistrict 4 - Baker Ave Area	
5 0	

INFO: This table tests whether multifamily is allowed as of right or with restrictions related to the permitting process.
 Table 6 tests whether the zoning contains additional restrictions that may have a negative impact on compliance.

STOP: Do you have any answers marked "STOP"? Your community will need to make some zoning changes to allow multi-family as of right. You can keep testing the district(s) in Table 6 to see what else you need to modify.

CAUTION: Do you have any answers marked "CAUTION"? If so, you may need to make one or more modifications, depending on your answers to Table 6.

GO: Do you have any answers marked "GO"? Proceed to Table 6 to check other restrictions.

Table 6. Multi-Family Housing Conditions

Evaluate the districts you identified in Table 5 for additional restrictions. INFO: These restrictions will not change the compliance model, but may restrict your municipality's ability to comply with M.G.L. Chapter 40A, Section 3A and the associated regulations from DHCD. The district names will continue to flow through from the District ID tab.

District Name	Restricted by Age (Y/N)	Limitations on the size of unit (Y/N)	Restricted to Studio, 1-bedroom, or 2-bedroom units (Y/N)	Limitation on the size of bedrooms (Y/N)	Restrictions on the number of occupants (Y/N)	Required commercial ("active") ground floor (Y/N)	Required mixed use (any floor) (Y/N)	Inclusionary Zoning in the District? (Y/N)	Inclusionary Zoning Town or City-wide? (Y/N)	Is this a 40R District? (Y/N)
1 Subdistrict 1 - Lower Lowell Road Area										
2 Subdistrict 2 - Upper Lowell Road Area										
3 Subdistrict 3 - Thoreau Area										
4 Subdistrict 4 - Baker Ave Area										
5 0										

STOP: If you answered yes to any column for any of the districts, then your community need to make some zoning changes to allow multi-family as of right. You can keep testing the district(s) in Step 3 (the Checklist Parameters tab) to see what else you need to modify.

CAUTION: If you want to link the dimensional standards for any of the districts identified in Step 4 to see what else you might need to change, then proceed to Step 3 (the Checklist Parameters tab).

GO: If you answered no for any of the districts in Table 6, then proceed to Step 3 in the Checklist Parameters tab.

ZONING INPUTS - DISTRICT 1 Subdistrict 1 - Lower Lowell St

Model Inputs for Calculating Unit Yield	Input
Minimum Lot Size	20,000
Additional Lot Square Feet per Dwelling Unit	0
Open Space %	20%
Excluded Land Counted Toward Open Space	Y
Parking Spaces per Dwelling Unit	2.00
Building Height	3
Maximum Lot Coverage %	40%
Floor Area Ratio	0.00
Zoning Restrictions that Cap Unit Counts	
Lot Area per Dwelling Unit	0
Maximum Dwelling Units per Acre	15.00
Cap on Maximum Dwelling Units per District	0.00

ZONING INPUTS - DISTRICT 2 Subdistrict 2 - Upper Lowell Road A

Model Inputs for Calculating Unit Yield	Input
Minimum Lot Size	20,000
Additional Lot Square Feet per Dwelling Unit	0
Open Space %	20%
Excluded Land Counted Toward Open Space	Y
Parking Spaces per Dwelling Unit	2.00
Building Height	3
Maximum Lot Coverage %	40%
Floor Area Ratio	0.00
Zoning Restrictions that Cap Unit Counts	
Lot Area per Dwelling Unit	0
Maximum Dwelling Units per Acre	15.00
Cap on Maximum Dwelling Units per District	0.00

ZONING INPUTS - DISTRICT 3 Subdistrict 3 - Thoreau A

Model Inputs for Calculating Unit Yield	Input
Minimum Lot Size	10,000
Additional Lot Square Feet per Dwelling Unit	0
Open Space %	20%
Excluded Land Counted Toward Open Space	Y
Parking Spaces per Dwelling Unit	2.00
Building Height	3
Maximum Lot Coverage %	40%
Floor Area Ratio	0.00
Zoning Restrictions that Cap Unit Counts	
Lot Area per Dwelling Unit	0
Maximum Dwelling Units per Acre	15.00
Cap on Maximum Dwelling Units per District	0.00

ZONING INPUTS - DISTRICT 4 Subdistrict 4 - Baker Ave Arm

Model Inputs for Calculating Unit Yield	Input
Minimum Lot Size	20,000
Additional Lot Square Feet per Dwelling Unit	0
Open Space %	20%
Excluded Land Counted Toward Open Space	Y
Parking Spaces per Dwelling Unit	2.00
Building Height	3
Maximum Lot Coverage %	40%
Floor Area Ratio	0.00
Zoning Restrictions that Cap Unit Counts	
Lot Area per Dwelling Unit	0
Maximum Dwelling Units per Acre	15.00
Cap on Maximum Dwelling Units per District	0.00

ZONING INPUTS - DISTRICT 5

Model Inputs for Calculating Unit Yield	Input
Minimum Lot Size	20,000
Additional Lot Square Feet per Dwelling Unit	0
Open Space %	20%
Excluded Land Counted Toward Open Space	Y
Parking Spaces per Dwelling Unit	2.00
Building Height	3
Maximum Lot Coverage %	40%
Floor Area Ratio	0.00
Zoning Restrictions that Cap Unit Counts	
Lot Area per Dwelling Unit	0
Maximum Dwelling Units per Acre	15.00
Cap on Maximum Dwelling Units per District	0.00

INFO: All information on this sheet comes from the Checklist Parameters tab and provides the model user with a summary of zoning inputs for each district being tested. You DO NOT need to enter any information in this tab.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Unit Capacity per District Table

Data Metric	District 1	District 2	District 3	District 4	District 5	Totals
District Name	District 1 - Lower Lowell Road	District 2 - Upper Lowell Road	Subdistrict 3 - Thoreau Area	Subdistrict 4 - Baker Ave Area		
Modeled Unit Capacity	327	168	164	1,627	0	2,286
Dwelling Units per Acre Limit	140	84	82	835	0	1,141
District Unit Cap Limit						0
Max Lot Coverage Limit	489	294	286	2,909	0	3,978
Lot Area per Dwelling Unit Limit						0
Max Units per Lot Limit	327	168	164	1,627	0	2,286
FAR Limit						0
Final Unit Capacity per District	140	74	69	834	0	1,117

INFO: If the community does not have a maximum number of units per lot, then this row will equal the Modeled Unit Capacity (row 6).

Summary Table

Data Metric	District 1	District 2	District 3	District 4	District 5	Totals
District Name	District 1 - Lower Lowell Road	District 2 - Upper Lowell Road	Subdistrict 3 - Thoreau Area	Subdistrict 4 - Baker Ave Area		
District Acreage (see note)	9.5	5.8	6.3	66.0	0.0	87.6
District Density Denominator (see note)	8.1	4.7	6.3	46.0	0.0	45.1
Final Unit Capacity per District	140	74	69	834	0	1,117
DU/AC	17.3	15.7	11.0	18.1	0.0	17.2
Parcel Acreage	9.4	5.6	5.2	55.6	0.0	75.8
Total Built Square Feet	329,359	171,266	168,205	1,629,771	0	2,298,601
Total Units in Station Area	120	38	69	834	0	1,061
Non-Conforming Parcels	0	2	5	0	0	7
Total Excluded Land (sf)	58,968	45,319	0	871,771	0	976,058
Total Open Space (sf)	93,939	60,191	47,636	871,771	0	1,073,536
Total Parking Area (sf)	203,889	106,022	104,127	1,008,906	0	1,422,943
Units Forgone due to Unit Cap in Zoning	0.00	0.00	0.00	0.00	0.00	0

INFO: District Acreage measures the gross acreage of each district. This is used to test compliance with Minimum Land Area Requirement.

INFO: District Density Denominator measures the gross acreage of each district minus certain types of excluded land, as defined in the Guidelines. This is used as the denominator in the Dwelling Units per Acre calculation.

Comparison Table of Requirements and Modeled Results

Category	Guideline Requirements	Modeled Results
Community	Concord	Concord
Community Category	Commuter Rail	Commuter Rail
2020 Housing Units (Census PL 94)	7,295	7,295
Minimum Multi-family Unit Capacity	1,094	1,117
Minimum Land Area	50	87.6
Developable Station Area	619,401	619,401
% Unit Capacity within Transit Station Areas	50%	194%
% Land Area Located in Transit Station Areas	50%	285%

Guidelines Section 5c: Unit Capacity in Mixed-Use Development Districts

Unit Capacity of Mixed-Use District(s)		Enter value from cell H21 of the MMU compliance model
Minimum Multi-family Unit Capacity	1,094	
25% CAP	274	
3A-Compliant Unit Capacity Requirement	274	This unit capacity must be shown to be met in cell H21 of this sheet