



Hubbardston Massachusetts

MASTER PLAN LAND USE SECTION

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Prepared by Montachusett Regional Planning Commission

464 Abbott Avenue

Leominster, MA 01453

Hubbardston Land Use

SECTION 1 – OVERVIEW

All communities have recognizable arrangements of residential, commercial, industrial, and institutional development, transportation features, vacant land, and water. These arrangements make up land use patterns that can be grouped into categories with common attributes. The presence of distinctive land use patterns contributes to that hard-to-define virtue known as “community character”. Hubbardston’s community character is composed of several faces, each with defining natural and built features: large tracts of forests, wetlands and water, farms, historic buildings and sites, municipal buildings, a town center, and residential homes dotted throughout the town.



Hubbardston Town Center

Hubbardston’s Town Center consists of many historic buildings, churches, businesses professional uses, and municipal buildings such as the library, town hall police and fire and a recreational field.

Communities regulate their land use policies through zoning: the practice of dividing land into mapped districts, each with prescribed uses, density, and intensity regulations. Since zoning involves a multitude of policy choices and adoption by town meeting, it is inherently political. Development that predates zoning tends to be organic, whereas development that follows the adoption of zoning tends toward a more uniform appearance because the lots and structures must meet specific dimensional requirements.



Hubbardston Land Development

Hubbardston has large amounts of developed forest or wetlands and water which can be observed from just about any road in town or in aerial photographs.

Single-family home development is the most common type of developed land use in Hubbardston. According to data as calculated through MRPC GIS in 2015 (depicted in Figure LU-1), land devoted to residential uses account for about 4.8% or 1,290 acres of the town's total acreage (26,871). Hubbardston has large amounts of developed forest or wetlands and water amounting to 87.8% or 23,593 acres of the total acreage (26,871). This can be observed from just about any road in town or in aerial photographs.

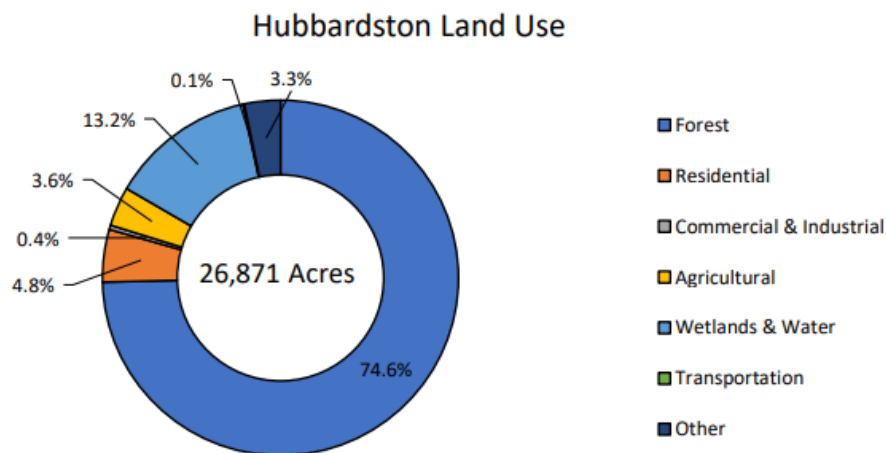


Figure 1. Land Use in Hubbardston (Town of Hubbardston and MRPC, 2015)

Figure LU-1

QUANTITATIVE ASSESSMENT

The existing land use covering the Town, as calculated through MRPC GIS in 2015, is shown in Figure LU-1. As indicated in Table LU-1, 20,045 acres or 74.6 percent of total area, is classified as forest. The next major land use within the Town of Hubbardston is wetlands and water uses with a total of 3,547 acres or 13.2% percent, of total area, Agriculture uses total 967 acres or 3.6% percent, of total area. Residential uses make up 1,289 acres or 4.8% percent of total land area.

TABLE LU-1: EXISTING LAND USE BREAKDOWN BY PERCENTAGE

LAND USE	PERCENTAGE	ACRES
Forest	74.6	20,046
Residential	4.8	1,290
Commercial and Industrial	0.4	107
Agriculture	3.6	967
Wetlands and Water	13.2	3,547
Transportation	0.1	27
Other*	3.3	887

*where the zoning does not fit one of the previously mentioned classifications

Map LUM-1 in Appendix C illustrates the land use categorized in Figure LU-1. Here it is possible to see the prevalence of forest dedicated lands, wetland, water, and agriculture uses and residential uses, as well as other land use categories.

SECTION 2 – CONDITIONS AND DEVELOPMENT TRENDS

RESIDENTIAL – LOCAL AND REGIONAL TRENDS

Given Hubbardston’s rural history and large lot zoning requirements it is not surprising that single-family homes only occupy for 4.8% of land use with a 2-acre zoning (2 acres equals 80,000 square feet. A builder’s acre is 40,000 square feet) and a 200’ frontage requirement. This large lot zoning requirement led to sprawling residential growth pattern.

Much of Hubbardston’s moderately dense housing is a result of historical (pre-zoning) development rather than present day land use policy. Map LUM-2 in Appendix C illustrates single-family homes on lots less than 80,000 square feet many concentrated in the town center.

TOOL KIT

Although, Hubbardston has large lot zoning requirements it does have zoning tools in place that cluster development while preserving open space such as the Open Space Residential Development (OSRD).

To learn more about other Sustainable Development Principles [click here](#)

COMMERCIAL AND INDUSTRIAL

Hubbardston's commercial and industrial districts comprise of 67.27 acres zoned business (Town Center) and 341.60 acres zoned for commercial/industrial. Refer to the Zoning District Map LUM-3 in Appendix C.

The Hubbardston Town Center (Business District) is located on Worcester Road (Route 68). The Commercial Districts (Light Industrial) lie adjacent to the Town Center Business District along Worcester Road (Route 68) and the Intersection of Route 68 and Route 62.

Due to large lot and frontage requirements a small retail/social center exists with several businesses located away from the center.

TOOL KIT

Another zoning tool Hubbardston could consider is exploring Smart Growth Development by concentrating development and mixed use in the Town Center. Below is a sampling of possible tools:

- Smart Growth District 40R / 40S
- Mixed Use / Village Zoning
- Form Based Codes
- Design Guidelines
- Transfer of Development Rights (TDR)

To learn more about Sustainable Development Principles [click here](#)

EDUCATION AND RELIGIOUS

Hubbardston has one elementary School grades K-6 located in the town with a land area of 7.3 acres. This parcel also includes the town hall, fire and police departments and the public library. Hubbardston is a member of the Quabbin Regional Middle School (7-8) and High School (9-12) located in Barre and a member of the Montachusett Regional Vocational Technical School located in Fitchburg.

Places of worship include: Evangelical Congregational Church (.7 acres), First Parish Unitarian Church/Hubbardston Federated Church (1.05 acres), and Church in Wyldewood¹ (2.25) with a total land area of 4.10 acres.

TOOL KIT

Hubbardston should consider identifying land / property for future municipal uses/expansion opportunities.

¹ Property is located on the border of Templeton and Hubbardston with the address in Templeton

PRIVATE, PUBLIC AND NON-PROFIT PARCELS FOR CONSERVATION AND RECREATION

Map LUM-4 in Appendix C shows Open Space by owner. As indicated in Table LU-2, accounts for 10,881.81 acres or 40.62 percent of total land in Hubbardston protected open space by public (federal, state, and municipal). Conscious efforts have been made by the Town of Hubbardston to acquire open space in a way which produces larger and contiguous parcels. The aggregation of adjacent parcels enhances protection of natural resources by reducing fragmentation and widening corridors. Connecting parcels also creates opportunity for trail building within the town and region. Collaboration among many owners, whether public or private, has resulted in a large, protected open space inventory. Municipal protected lands abut private lands and other public lands throughout the town.

TOOL KIT

It will be important to continue to work with various public and private agencies to protect adjacent lands of conservation interest that are not yet permanently protected.

Included in this inventory are areas, both public and private, protected in perpetuity with a Conservation Restriction (388.43 acres) and another 10,493.38 protected acres (without Conservation Restrictions). The lands in this inventory are spread relatively evenly throughout Hubbardston, making them accessible to all populations. They help to protect valuable water resources and wildlife habitats. Public and private recreation and conservation lands are protected in perpetuity if they have been dedicated to such uses by deed. Municipal properties may be protected if specified in funding for acquisition. Private land can be protected in perpetuity if there is a conservation restriction placed on the property. The Town has private land parcels (67.73 acres) protected in perpetuity.

Other open space may be protected by Hubbardston Zoning Regulations. The Wetlands Protection Bylaw, the Massachusetts Wetlands Protection Act, and the Massachusetts River Protection Act. Lands under special taxation programs, including Chapter 61 Forestry (694.11 acres), 61A Agriculture (409.41 acres), and Chapter 61B Recreation (338.25 acres) are actively managed by their owners for forestry, agricultural, or recreational use and are in protection but not in perpetuity. The town has the right of first refusal should the landowner decide to sell and change use of the land.

TOOL KIT

The Town should assess and prioritize Chapter 61 lands for possible future acquisition or other protection measures, such as an Agricultural Protection Restriction or a Conservation Restriction. When abutting other conservation areas, such lands may enhance the value of current conservation and recreation land by providing greater ecological services.

TABLE LU-2: OPEN SPACE BY OWNERSHIP

OWNER	OWNER CLASS	CR	ACRES
ARMY CORPS OF ENGINEERS (ACOE)	FEDERAL	NO	46.67
M97	FITCHBURG	NO	465.96
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (DEM)	STATE	NO	1,150.48
DIVISION OF FISHERIES AND WILDLIFE (DFW)	STATE	NO	231.44
DEPARTMENT OF CONSERVATION & RECREATION (MDC)	STATE	NO	8,514.05
DEPARTMENT OF CONSERVATION & RECREATION (MDC)	STATE	YES	320.70
NA	STATE - TOTAL	NA	10,216.66
M140	TOWN	NO	84.78
M140	TOWN	YES	67.73
NA	TOWN- TOTAL	NA	152.51

AGRICULTURE

Throughout Hubbardston's history, agriculture was the mainstay of the economy. Originally called the "Northeast Quarter", Hubbardston was part of Rutland until it became a town in 1767. It was named for Thomas Hubbard, one of the original proprietors. The first European settlers were recorded in 1737. The community has been described by historians as a poor town in its early years, sparsely settled and almost solely agricultural. By the 18th century, there were sawmills, potash works and cottage industries, including the making of palm leaf hats, chairs, cabinets, shoes, and horse blankets.

By the 19th century, dairy and berry farming and market gardening were major enterprises. Immigrants from Ireland, French Canada, England, Sweden, and Finland moved to town to work on local farms. The town's early economy was based on agriculture and small-scale chair, boot, and shoe manufacturing. Dairy and berry farming and market gardening were major pursuits in the town. There are prime farmlands soils throughout Hubbardston. Most overlay coarse glacial deposit and till bedrock zones. As agriculture shifted westward from New England, many farm fields were abandoned and slowly became reforested.

Table LU-3 below shows, 1,441.77 acres in Hubbardston are under Chapter 61 agreements. Lands under special taxation programs are presently managed by their owners for forestry (Chapter 61), agriculture (Chapter 61A), or recreation (Chapter 61B). This means the land is taxed at its forestry, agricultural, or recreational value, not fair market value. The intent of the state laws that authorize these agreements is to encourage productive and extensive land uses.

TABLE LU-3: LANDS UNDER CHAPTER 61

CHAPTER LANDS		ACRES
61	FORESTRY	694.11
61A	AGRICULTURE	409.41
61B	RECREATION	338.25
TOTAL ACRES		1,441.77

TOOL KIT

The State of Massachusetts is losing agricultural lands and land for farming opportunities at an alarming rate. The loss of agricultural land not only alters the traditional New England landscape, but it also creates a growing dependence on imported food and increases food prices due to transportation costs. Preservation techniques not only protect agricultural land but also protect existing natural resources, maintains groundwater recharge areas, protects wildlife habitat and cultural and historic landscapes, and fosters local economies by strengthening resource-based businesses.

Bylaws, ordinances, and regulations (bylaws) and initiatives/programs can be adopted to preserve these precious lands. Among them are:

- Accessory uses allow farms to diversify uses making them more sustainable by allowing pick your own, farm tours, farm stays, retail facilities, restaurant, winery, brewery, value added product processing facilities, educational, recreational, harvest festivals, private events, and weddings.
- Transfer of Development Rights (TDR)
- Agriculture Preservation Restrictions (APR)
- Community Gardens
- Farm Viability Enhancement Program (FVEP)
- Concentrate development e.g., Town Center zoning, cluster zoning, large lot zoning and Open Space Residential Design (OSRD)

To learn more visit [State of Massachusetts Smart Growth Tool Kit](#)

SECTION 3 – WATER SUPPLY, AQUIFERS, RECHARGE AREAS AND WATER RESOURCES

LUM-5 Map in Appendix C depicts Hubbardston's water supply, aquifers, and recharge areas. This map includes streams, rivers, lakes, ponds, and reservoirs; DEP public water supplies, community, and non-community ground water sources; well protection areas; aquifers; and FEMA flood zones.

Hubbardston is part of the Nashua River watershed. The Nashua River watershed covers an area of 538 square miles within 31 communities in Massachusetts and New Hampshire. LUM-6 Map in Appendix C depicts Hubbardston's water resources, watershed boundaries, drainage sub basins, and state certified vernal pools. These two maps show its rivers, streams, and aquifers that connect Hubbardston to neighboring towns. Every neighboring town sits over the same high and medium-yield aquifers that run through Hubbardston. Hubbardston is served by private well water and septic. [Town of Hubbardston's Sewer Feasibility Study 2011](#)

TOOL KIT

Bylaws, ordinances, and regulations (bylaws) can be adopted to better protect a community's water and natural resources. Among them are:

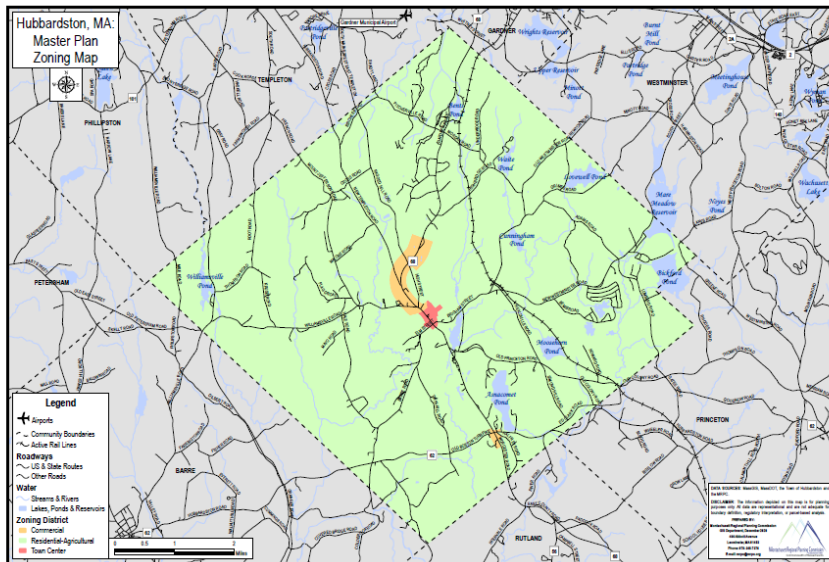
- local wetland bylaw
- steep slope and erosion control bylaw
- wellhead and aquifer protection bylaw
- riparian (river) corridor protection bylaw
- open space residential development bylaw
- low impact development bylaw
- stormwater bylaw

Visit the [Nashua River Watershed Association](#) to learn more.

SECTION 4 – EXISTING LAND USE REGULATIONS

ZONING DISTRICTS AND ANALYSIS

The Table LU-4 Dimensional and Zoning Table below depicts the existing zoning districts that comprise Hubbardston's zoning bylaw. Currently the Town of Hubbardston has one Residential-Agricultural District; one Town Center District; one Commercial District; and one Light Industrial District. The Light Industrial District located on the east side of Gardner Road between High Street and Morgan Road and on the west side of Gardner Road between Ragged Hill Road and Pitcherville Road was amended to be included in the Residential-Agricultural District.



Zoning

Communities regulate their land use policies through zoning: the practice of dividing land into mapped districts, each with prescribed uses, density, and intensity regulations

TABLE LU-4-DIMENSIONAL AND ZONING TABLE

District	Lot Area	Frontage	Rear/Side Yards	Max Lot Coverage	Max Building Height
Residential-Agricultural	80,000 sf	200'	75'	25%	30'
Town Center	80,000 sf	200'	75'	25%	30'
Commercial	80,000 sf	200'	100'	50%	35'
Light Industrial	100,000 sf	300'	250'	50%	50'

DISTRICT	BY- RIGHT	SPECIAL PERMIT BY PLANNING BOARD
Residential – Agricultural District	Intended for personal residence, agriculture, conservation, recreation, and open space <ul style="list-style-type: none"> • Single & 2-family homes • agricultural, conservation, recreation, open space • public and private non-profit educational museums, municipal uses, educational uses • home occupation • guest houses, bed and breakfast, in-law apartments • solar photovoltaic installations 	<ul style="list-style-type: none"> • libraries, health care facilities, public utility facility • country club, tennis club and golf course, • commercial greenhouse • multi-family residences up to four family units • radio, television, and communications towers • nursing, convalescent and rest homes, day care centers, kennels • senior residential development (SRD) & open space residential developments • accessory apartments, • outdoor marijuana cultivation establishments
Town Center District	Intended for traditional town center residential activities <ul style="list-style-type: none"> • single & two-family residences • religious uses • conservation or open space areas, recreation & park land, agriculture, nursery, orchards. Sale of farm products, cemetery, • public and private non-profit educational museums, municipal uses, library, government building or facilities, educational uses • guest houses, bed, and breakfast • home occupations. 	<ul style="list-style-type: none"> • retail or service establishments, • markets, delicatessen • business and professional offices • outdoor marijuana cultivation establishments
Commercial District	Intended for residential and commercial activities <ul style="list-style-type: none"> • all uses allowed in the residential district and retail or service establishments (no automobile sales) • markets, restaurants (no drive throughs) • individual business, professional or campaign offices • schools, colleges, libraries, funeral homes, post office, public transit terminal, bank, municipal, government facilities • commercial greenhouses • research labs, light manufacturing, or processing facility • warehouse, storage facilities, construction business, fuel retail distribution business • country clubs, tennis club, golf, amusement/recreation facilities, swimming pool, ice skating arena • private and commercial stable • hospital, health care facility, nursing, convalescent and rest homes, day care center • salerooms and yards for sale of farm, contractor equipment, and freight, transportation terminals, transfer terminals, motor and rail, motor truck yards. 	<ul style="list-style-type: none"> • The Planning Board has authority to grant special permits for by-right uses allowed in the Residential District • shopping center or complex of offices, businesses, or retail establishments • motor vehicle service, repair, washing or fuel business • hotel, motel, inn, campground • sales of new or used motor vehicles • senior residential development (SRD) • marijuana establishments
Light Industrial	Intended to be used for light industrial and residential purposes which include by-right residential uses	<p>Research labs, light manufacturing or processing facility, warehouse, and storage facility (no junk vehicles or scrapped metals)</p> <p>construction business, enclosed heavy vehicle storage, and fuel retail distribution</p>

OVERLAY DISTRICTS AND OTHER LAND USE TOOLS

The Town's bylaw also allows for overlay districts and other land use tools such as a Flood Plain District; an Aquifer Protection District; and Wireless Communications Overlay District.

Aquifer Favorability Protection District – The future growth of the Town of Hubbardston is dependent upon the ability of the town to provide clean drinking water. Areas identified as having a high degree of potential for future development of a municipal water supply be protected. The purpose of the Aquifer Favorability Protection District is to limit activities that may occur in areas which have a high degree of potential groundwater yield, and which could pose a threat to the quality or quantity of groundwater that may be available in such areas.

Estate Lots – Single family lots in the Residential/Agricultural, Town Center, and Commercial Districts may be created with 150' of frontage on an existing public way provided the lot area is a minimum of 435,600 sf or 10 acres. And cannot be further subdivided. Dimensional requirements are the same as described for these districts.

Flood Plain District - The purposes of the Flood Plain District are to protect the health, safety, and welfare; to protect human life and property from the hazards of periodic flooding; to preserve the natural flood control characteristics and the flood storage capacity of the flood plain; and to preserve and maintain the ground water table and water recharge areas within the flood plain. The Flood Plain District is established as an overlay district to all other districts. All development in this district, including structural and on-structural activities, whether permitted by right or by special permit must be in compliance with Chapter 131, Section 40 of the Massachusetts General Laws.

Open Space Residential Development (OSRD) - The purpose of an OSRD is to encourage the preservation of open land by providing an alternative pattern of development that offers flexibility and creativity in the design; provides permanent preservation of Open Space, agricultural lands, forest lands and other natural resources to encourage less sprawling development that consumes less open space; maintains traditional new England rural character and land use pattern, economical and efficient streets, utilities and public services; respects natural features; preserves natural views from roadways and provides wildlife corridors and greenways that connect Open Spaces.

Parking Requirements – Located on same lot as the principal use or on a lot adjacent to the lot on which the principal use is located. Shared parking is allowed between 2 or more uses. Parking requires do not apply to single or 2 family dwellings.

HUBBARDSTON PARKING SCHEDULE

USE	SPACES REQUIRED
1. Multi-Family Dwellings	2 spaces per unit 1 space per dwelling unit for units designed for, and occupied by, the elderly under government subsidized programs
2. Places of assembly including but not limited to churches, auditoriums, theaters, and stadiums	1 space for each four (4) persons, capacity based on design capacity
3. Food and beverage establishments, clubs (public and private), fraternal organizations and lodges	1 space for each seventy-five (75) sq. ft. of gross floor area but not less than three (3) spaces per separate enterprise
4. Hotels, motels, and boarding, lodging, and rooming houses	1 space for each rooming unit, plus required parking for facilities used for eating, drinking, assembly and other such uses
5. Automotive services including but limited to gas stations, auto dealers, auto accessories, auto repair, overhaul shops and car wash	1 space for each 500 sq. ft. of gross floor area; or three (3) spaces per bay, lift or equivalent, whichever is greater. An attendant operated or self-service car wash shall have at least five (5) waiting positions for each bay between the street line and such by for cars approaching and at least two (2) waiting positions for cars leaving said bays
6. Appliance, carpet, furniture, electrical, heating, and plumbing retail sales	1.5 space for each 1,000 sq. ft. of gross leaseable floor area but not less than five (5) spaces per separate enterprise
7. Other retail sales and service establishments	3 spaces for each 1,000 sq. ft. of gross leaseable area but not less than five (5) spaces per separate enterprise
8. General business and professional and financial institutions	2.5 spaces for each 1,000 sq. ft. of gross floor area, but not less than five (5) spaces per separate enterprise. A drive-in bank window shall have at least five (5) waiting positions between the street line and said window for cars approaching and at least one (1) waiting position for cars leaving said window
9. General hospital, convalescent, nursing or rest home	1 space per three (3) patient beds
10. Manufacturing and industrial establishments	1 space for each 500 sq. ft. of gross floor area
11. Wholesale and distribution, businesses, warehousing and storage businesses, truck terminals, and other enclosed non-industrial storage uses	1 space for each 1,000 sq. ft. of gross floor area or one (1) space each for each one and one half employees on the maximum work shift, whichever is less

Subdivision Phasing - No more than fifteen lots or 12.5% of the total number of lots within the approved subdivision, whichever is greater may be built upon for residential purposes in any 12-month period commencing on the date of approval of the subdivision. The purpose of this bylaw is to encourage a steady pace of residential development, provide long-term support to the local building industry, and stabilize property values and facilitate adequate provision of public services.

Senior Residential Development (SRD) - The purpose of the Rate of Development Bylaw is to ensure orderly growth and development of the Town of Hubbardston and the adequate provision of services to its residents while the Town is in the process of updating its master plan, zoning bylaws, and subdivision regulations. Building permits shall not be issued for the construction or conversion of more than 28 new dwelling units. This bylaw expires July 1, 2021.

Site Plan Approval – The purpose of site plan review is to assure that development proposals are consistent with the environmental and siting objectives of the Town of Hubbardston. Site Plans are approved by the Planning Board.

Wireless Communications Overlay District – The purpose of the Wireless Communications Overlay District is to protect the town from the effects

TOOL KIT

INVENTORY OF INNOVATIVE PLANNING AND ZONING TOOL

Although Hubbardston already has many best practices in place, the town can still implement the use of other planning and zoning tools or amend or enhance existing ones.

The table below shows what Hubbardston has in place and what can be done to achieve an optimal level of land use planning and can serve as a “road map” for compliance with the best practices guide.

Planning Tool	In Place
Accessory Apartments	No
Agricultural Protection – Right to Farm	Yes
Community Preservation Act (CPA)	Yes
Design Guidelines	No
Earth Removal	Yes
Form Based Codes	No
43D	No
Green Communities Designation	No
Inclusionary Zoning	No
LID (Low Impact Development)	No
Mixed Use	No
Open Space Residential Development	Yes
Rate of Development (Subdivision Phasing)	Yes
Renewal Energy Bylaw	No
Scenic Roads Bylaw	No
Sign Bylaw	Yes
Site Plan Review	Yes
Solar Bylaw	Yes
Town / Village Area	Yes
Transfer of Development rights (TDR)	No
Water Supply / Wetland Protection	Yes
Wind Energy	No
Wireless Bylaw	Yes

TOOL KIT

Current Zoning requirements result in very low-density commercial development pattern in the town center, commercial and industrial districts.

To learn more about Smart Growth Tools visit [State of Massachusetts Smart Growth Tool Kit](#)

TOWN CENTER

Water and Sewer

Hubbardston has been working to develop more sustainable land use practices with a vision to promote more development in the town center while maintaining the rural scenic character of the town. To increase development in the town center, the town will need infrastructure to handle water demands and wastewater discharge. The Town's 2004 Community Development Plan identified the need for adequate infrastructure including water, sewer and drainage for retail businesses to locate in the town center and to accommodate existing businesses and residences. In 2011 the town conducted a [public water and sewer feasibility study](#) that provided four wastewater management alternatives:

- 1) Title 5 repairs/upgrades
- 2) Shared Septic Systems
- 3) Decentralized wastewater collection treatment System
- 4) Connection to a centralized wastewater collection system

And three water supply alternatives:

- 1) Individual supply
- 2) Public water surface/groundwater
- 3) Interconnection to nearby community

The town will need to decide on the appropriate wastewater management and water supply systems and explore funding sources that would support existing and future expansion/growth for the town center.

5-year Road Maintenance Plan

The [Town Center Maintenance Plan](#) identifies town center improvements that include roadwork, sidewalks, multi-use lanes, and signage. The estimated work will cost 5.45 million dollars and may be done during FY2020-2023. Funding mechanisms could include Massworks grants, Chapter 90 funding, and Complete Streets.

Town Survey

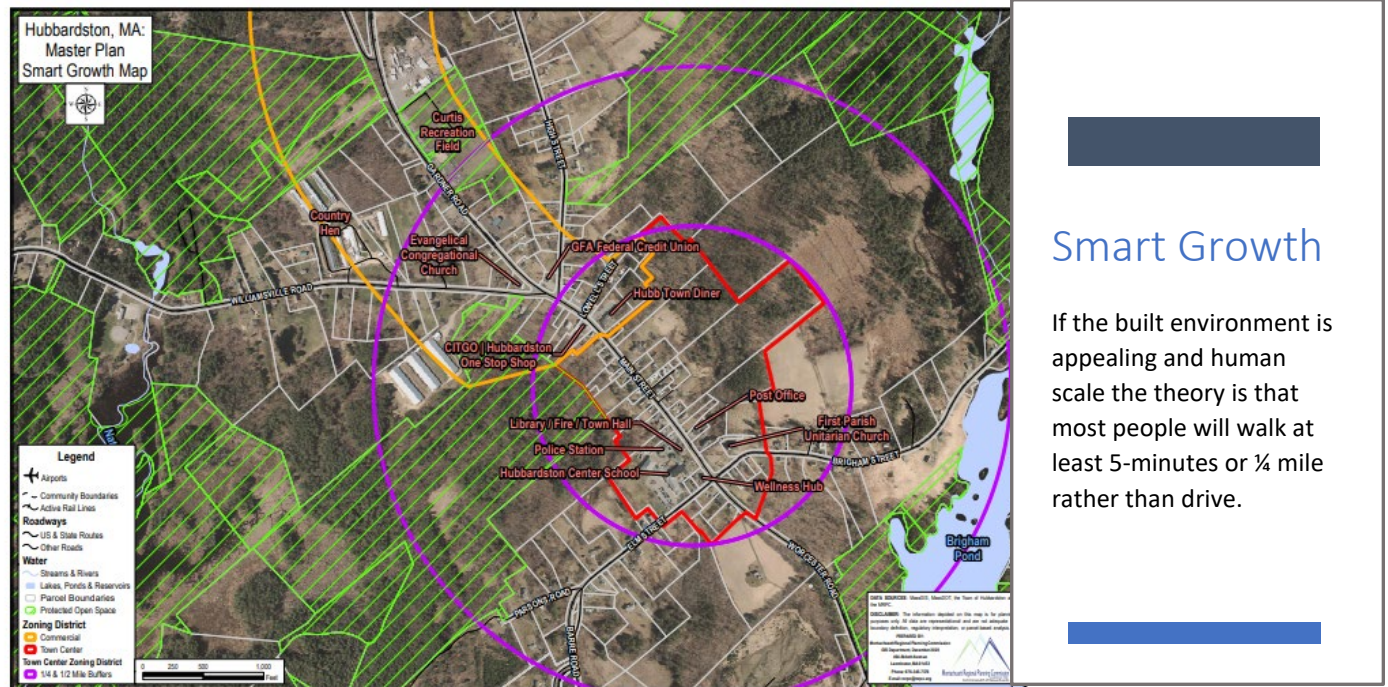
The [Town Center Survey](#) was conducted in February 2016 with 340 residents responding.

In the 2016 Town Center Survey, Hubbardston Residents indicated that they would like an active, walkable vibrant town center with improved parking and sidewalks; a center that offers a range of services, and offers more food choices, restaurants, pubs and shops, ice cream shops, and affordable housing options. Beautification improvements that include flowers, greenery and trees while retaining the historic character, small town charm and family friendly atmosphere.

Hubbardston's town center has many key destinations (commercial, civic, educational, churches, recreational) all within a 5-10-minute walk as depicted in the Map below and LUM-7 in Appendix C. Hubbardston can adopt Smart Growth Principles to enhance and improve the Town Center. These principles will be further explored below.

SMART GROWTH (SUSTAINABLE DEVELOPMENT)

Smart Growth (or Sustainable Development) is a theory of land development that accepts that growth and development will continue to occur, and so seeks to direct that growth in an intentional, comprehensive way. Its proponents include planners, architects, community activists, and historic preservationists. It also advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices.



Smart Growth emphasizes mixing land uses, increases the availability of a range of housing types in neighborhoods, takes advantage of compact designs, and fosters distinctive and attractive communities. It preserves open space, farmland, natural beauty, and critical environmental areas, strengthens existing communities, provides a variety of transportation choices, makes development decisions predictable, fair, and cost effective and encourages community and stakeholder collaboration in development decisions.

Smart Growth is not “no-growth”, as growth is needed to keep a place economically and culturally vibrant. This means that some land will be needed to accommodate a place’s growth needs, and among the most common Smart Growth techniques, Open Space Residential Development (OSRD) or cluster development is a direct tool.

The Commonwealth has released a set of [Sustainable Development Principles](#) that guide the creation and implementation of state agency policies and programs, as well as investments in land and infrastructure. Municipalities are also asked to modify their planning, regulatory, and funding actions to achieve consistency with the Principles.

The state's Sustainable Development Principles include promoting clean energy, in the form of energy

efficiency and renewable power generation, in order to reduce greenhouse gas emissions and consumption of fossil fuels. They also encourage the creation of "pedestrian-friendly" districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with parks and homes. Regarding housing, the Principles call for building homes "near jobs, transit, and where services are available. Table LU-5 below shows how Hubbardston's zoning districts correlate with Smart Growth Principles. [Click here](#) to learn more about the state's 10 Sustainable Development Principles.

TABLE LU-5 SMART GROWTH PRINCIPLES

SUSTAINABLE DEVELOPMENT PRINCIPLES	HUBBARDSTON RESIDENTIAL	HUBBARDSTON TOWN CENTER	HUBBARDSTON COMMERCIAL
Concentrate Development / Mixed Uses	Yes (OSRD) No mixed use	Yes, but improve No mixed use	Yes, but improve No mixed use
Advance Equity	No inclusionary zoning		
Make Efficient Decisions	Improve	Improve	Improve
Protect Land and Ecosystems	Yes	Yes	Yes
Use Natural Resources Wisely	Yes	Yes	Yes
Expand Housing Opportunities	No inclusionary zoning	No inclusionary housing	n/a
Provide Transportation Choice	Promote/enhance bicycle and walking opportunities		
Increase Job & Business Opportunities	n/a	Yes – expand opportunities	Yes – expand opportunities
Promote Clean Energy	Y	Y	Y
Plan Regionally	Y	Y	Y

BUILD-OUT AND DEVELOPMENT IMPACT STUDY METHODOLOGY AND RESULTING MAPS

An environmental and development characteristics analysis involves two phases: mapping followed by quantification of development. In order to reach accurate results, it is crucial to have the necessary geographical data as well as skillful Geographic Information Systems (GIS) staff to perform the initial phase of the analysis. To conduct the analysis, current parcel data from the Town of Hubbardston was utilized, as well as current Zoning. Additionally, environmental and land use data was provided by MassGIS, the state GIS agency.

Environmental data is a key component of the development potential analysis. Certain environmental constraints are considered inappropriate for development and can be defined as "Absolute Constraints" or "Partial Constraints" for the purposes of the development potential analysis. Absolute constraints are defined as water (as coded by the Land use data), 100 Foot DEP (Department of Environmental Protection), RPA (River Protection Act), Buffers, slopes greater than 26 percent, and Permanently Protected Open space. Partial Constraints are defined as FEMA 100 and 500-year Flood Zones as well as DEP Wetlands. Absolute Constraints are completely unsuitable for development, while partial constraints could be developed if pursued in an appropriate manner.

Once the constraints have been determined and defined; the next step is to identify lands that have already been developed. Based on MassGIS Land use data, the categories that are included in "Developed Lands" are active/passive/water recreation, residential, commercial, industrial, transportation, waste disposal, power lines, cemeteries, and urban public/institutional.

The final category that is determined is “Future Developable Lands”. GIS tools are utilized to determine what has potential for development, considering all of the constraints and currently developed lands. The result is a new category indicating lands that are developable without any existing development or constraints.

The Development Limitation with Zoning Map LUM-8 in Appendix C of this report depicts all these data categories (Absolute Constraints, Partial Constraints, Developed Lands, and Future Developable Lands) and provides information for local officials to identify the location and current zoning of future developable lands. GIS tools offer additional useful information by calculating the acreage for each category by zoning district. The data provided by the GIS phase of the build-out analysis is then given to the planning staff or planning board who further investigates the future developable lands within the given zoning districts and provides recommendations for development opportunities. The Development Potential Map LUM-9 in Appendix C depicts all the data categories and applies the zoning to the map.

ENVIRONMENTAL AND DEVELOPMENT POTENTIAL BY ZONING DISTRICT

Table LU-6 and Figure 2 display information on existing conditions in Hubbardston quantifying acres of land by zoning districts for four categories: Developed, Undevelopable, Developable Land and Developable with Partial Constraints. Table LU-7: Further breaks down existing conditions by Zoning Districts. LUM-8 in Appendix C depicts development limitations and LUM-9 depicts development potential.

- More than 13,555 acres or 51 percent of the land in Hubbardston is undevelopable with absolute constraints.
- 2,168 acres or 8% percent is already developed.
- 9,787 acres or 37% is undevelopable with partial constraints.
- 1,273 acres or 5% is developable with no constraints and is in the residential district.

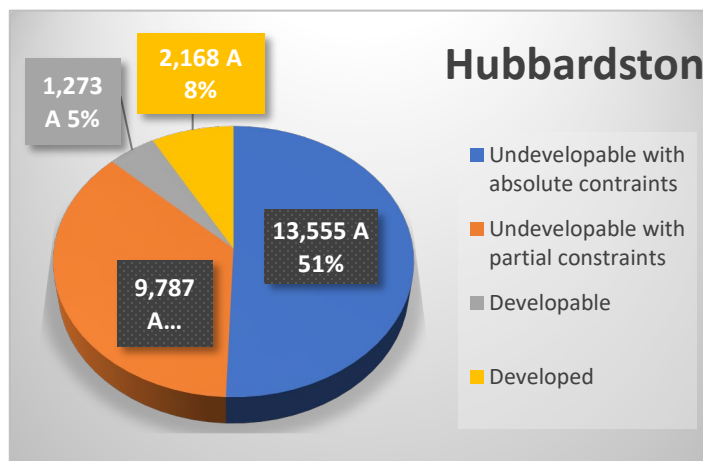


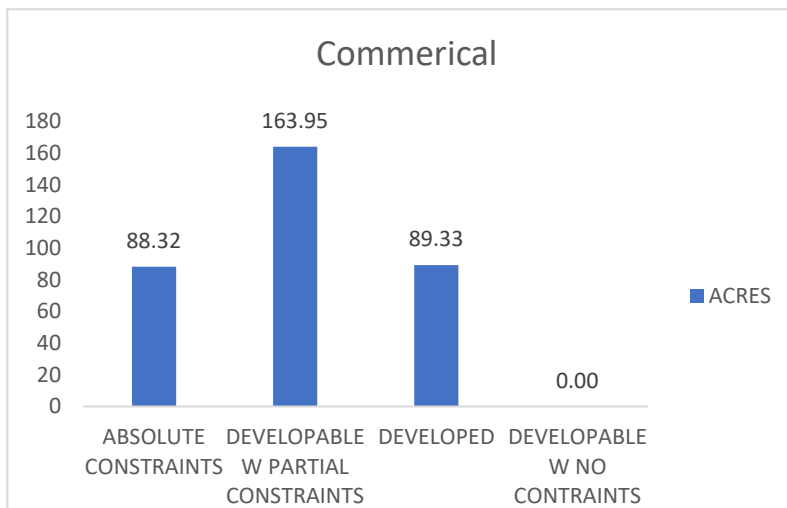
Figure 1 Existing Conditions

Table LU-6: HUBBARDSTON EXISTING CONDITIONS

CATEGORY	ACRES	PCT
Undevelopable with absolute constraints	13,555.43	51%
Undevelopable with partial constraints	9,786.59	37%
Developable	1,273.11	5%
Developed	2,168.14	8%
TOTAL	26,783.26	100%

Table LU-7: EXISTING CONDITIONS BY ZONING DISTRICT

ZONECODE	CATEGORY	ACRES	PCT
COMMERCIAL	DEVELOPED	89.33	0.33%
COMMERCIAL	ABSOLUTE CONSTRAINTS	88.32	0.33%
COMMERCIAL	DEVELOPABLE W PARTIAL CONSTRAINTS	163.95	0.61%
RESIDENTIAL-AGRICULTURAL	DEVELOPED	2,045.24	7.64%
RESIDENTIAL-AGRICULTURAL	ABSOLUTE CONSTRAINTS	13,464.21	50.27%
RESIDENTIAL-AGRICULTURAL	DEVELOPABLE W PARTIAL CONSTRAINTS	9,591.83	35.81%
RESIDENTIAL-AGRICULTURAL	DEVELOPABLE W NO CONSTRAINTS	1,273.11	4.75%
TOWN CENTER	DEVELOPED	33.56	0.13%
TOWN CENTER	ABSOLUTE CONSTRAINTS	2.90	0.01%
TOWN CENTER	DEVELOPABLE W PARTIAL CONSTRAINTS	30.80	0.12%
NA	TOTAL	26,783.26	100.00%



COMMERICAL

A total of 341 acres is zoned commercial.

89 acres has been developed.

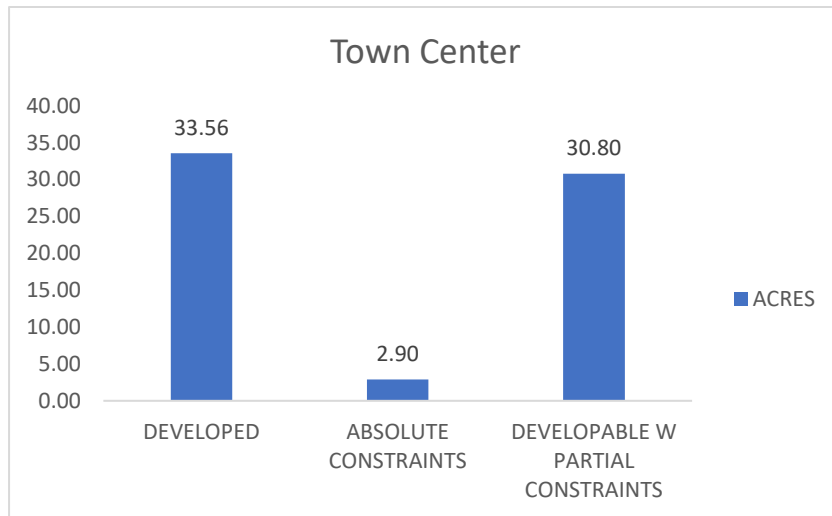
88 acres is undevelopable.

164 acres is developable with partial constraints.

The Commercial District has no available land to be developed that is without constraints.

Table LU-8: COMMERICAL EXISTING CONDITIONS

ZONECODE	CATEGORY	ACRES	PCT
COMMERCIAL	ABSOLUTE CONSTRAINTS	88.32	0.33%
COMMERCIAL	DEVELOPABLE W PARTIAL CONSTRAINTS	163.95	0.61%
COMMERCIAL	DEVELOPED	89.33	0.33%
COMMERICAL	DEVELOPABLE W NO CONSTRAINTS	0	0%



TOWN CENTER

A total of 36.47 acres is zoned Town Center.

33.56 acres has been developed.

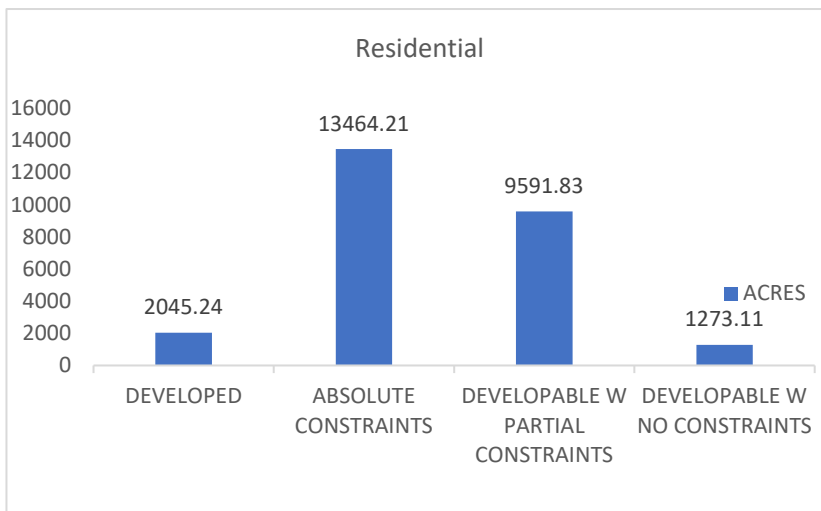
2.90 acres is undevelopable.

30.80 acres is developable with partial constraints.

The Town Center District has no available land to be developed that is without constraints.

Table LU-9: TOWN CENTER EXISTING CONDITIONS

ZONECODE	CATEGORY	ACRES	PCT
TOWN CENTER	DEVELOPED	33.56	0.06%
TOWN CENTER	ABSOLUTE CONSTRAINTS	2.90	0.01%
TOWN CENTER	DEVELOPABLE W PARTIAL CONSTRAINTS	30.80	0.06%
TOWN CENTER	DEVELOPABLE W NO CONSTRAINTS	0.00	0.00%



RESIDENTIAL

A total of 25,107.27 acres is zoned Residential- Agricultural.

2045.24 acres has been developed.

13,464.21 acres is undevelopable.

9591.83 acres is developable with partial constraints.

The Residential-Agricultural District has 1,273.11 acres available land to be developed that is without constraints.

Table LU-10: RESIDENTIAL EXISTING CONDITIONS

ZONECODE	CATEGORY	ACRES	PCT
RESIDENTIAL-AGRICULTURAL	DEVELOPED	2,045.24	3.95%
RESIDENTIAL-AGRICULTURAL	ABSOLUTE CONSTRAINTS	13,464.21	26.00%
RESIDENTIAL-AGRICULTURAL	DEVELOPABLE W PARTIAL CONSTRAINTS	9,591.83	18.52%
RESIDENTIAL-AGRICULTURAL	DEVELOPABLE W NO CONSTRAINTS	1,273.11	2.46%

TOOL KIT

The Residential-Agricultural District has 1,273.11 acres available land to be developed without constraints. That means an estimated residential buildout under current zoning could mean an additional 693 additional single-family homes (80,000 SF lots) or 127 Estate Lots (10-acre lots). This is an estimate and does not account for dimensional zoning requirements, or accommodating roads, driveways, utilities, septic, and water.

The Commercial and Town Center Districts cannot be further developed due to environmental constraints such as water, 100 Foot DEP (Department of Environmental Protection), RPA (River Protection Act), buffers, slopes greater than 26 percent, and Permanently Protected Open space. These Absolute Constraints are completely unsuitable for development.

Of the 26,783.26 total acres in Hubbardston 9,786.59 or 37% has partial constraints which are defined as FEMA 100 and 500-year Flood Zones as well as DEP Wetlands. Partial constraints could be developed if pursued in an appropriate manner.

The Town of Hubbardston can consider:

- Zoning amendments that would allow greater density in the Town Center and/or Commercial Districts.
- Allow mixed uses and other appropriate uses
- Expand Town Center and Commercial Districts by rezoning adjacent residential-agricultural district.
- Analysis existing uses whether they are appropriate
- Explore redevelopment and infill opportunities in these districts

SECTION 6 – LAND USE GOALS, OBJECTIVES AND RECOMMENDATIONS

Land use goals and policies are largely regulatory, and policy oriented to preserve the elements and features that contribute to Hubbardston's New England rural town character. The majority of the town is zoned residential and agricultural with a small-town center and commercial along Worcester Road (Route 68) and the Intersection of Route 68 and Route 62.

Due to large lot and frontage requirements a small retail/social center exists with several businesses located away from the center.

There are 5 main goals that have been identified to encourage the preservation of the Town's assets and focus on new development in the Town Center and commercial areas which supports the town's commitment to sustainability while retaining Hubbardston's New England rural town character.

OBJECTIVES:

- Promote a sense of community
- Preserve natural and man-made features that contribute to Hubbardston's character such as farms, open fields, woodlands, and ponds and streams that also help to enhance habitat protection protect the quality of the Town's water resources, and link large tracts of open space together
- Support commercial and industrial growth that will fit in Hubbardston and contribute to the community's quality of life and fiscal stability
- Ensure that housing opportunities are available for a broad range of income levels and household types
- Maintain Hubbardston's rural and historic character

Goal 1: Preserve Hubbardston's Current Land Uses: Open Space, Forestry, Agriculture

Core actions used to advance this strategy:

1. Continue to work with various public and private agencies to protect lands of conservation interest that are not yet permanently protected.
2. Assess and prioritize Chapter 61 lands for possible future acquisition or other protection measures, such as an Agricultural Protection Restriction (APR) or a Conservation Restriction (CR).
3. Explore bylaws, ordinances, and regulations (bylaws) and other initiatives/programs to preserve these precious lands. Among them are:
 - Accessory uses allow farms to diversify uses making them more sustainable by allowing pick your own, farm tours, farm stays, retail facilities, restaurant, winery, brewery, value added product processing facilities, educational, recreational, harvest festivals, private events, and weddings.
 - Transfer of Development Rights (TDR)
 - Agricultural Protection Zoning
 - Agriculture Preservation Restrictions (APR)
 - Community Gardens
 - Farm Viability Enhancement Program (FVEP)

Responsible Board: Planning Board, Conservation, Agricultural Commission

Goal 2: Explore Bylaws, ordinances, and regulations (bylaws) to better protect a Hubbardston's water and natural resources. Core actions used to advance this strategy:

- local wetland bylaw
- steep slope and erosion control bylaw
- wellhead and aquifer protection bylaw
- riparian (river) corridor protection bylaw
- open space residential development bylaw
- low impact development bylaw
- stormwater bylaw

Responsible Board: Planning Board, Conservation

Goal 3: Explore zoning alternatives that enable higher density, mixed use, walkable and economically drivers near/within town center while preserving the rural qualities of outlying areas

Core actions used to advance this strategy:

1. Evaluate alternate zoning methods for Hubbardston's Town Center:
 - Consider Village Zoning / Mixed Use Zoning / Formed Based Codes / Transect zoning
 - 40R and 40S
2. Develop Design Guidelines for the Town Center

- Hubbardston should work to ensure that appropriate design guidelines are in place to retain community character along with adequate performance standards to protect the character of the town center
- 3. Consider allowing increased density in the Town Center:
 - lot size, frontage, setbacks, height, lot coverage, parking ratios
- 4. Explore housing alternatives in the Town Center:
 - multi family, town houses, mixed use
- 5. Examine and prioritize alternative transportation options to make the town center more pedestrian friendly by linking housing and businesses by sidewalks and/or bike lanes. Refer to the 5-year Maintenance Plan to coordinate efforts.
- 6. Decide on appropriate wastewater management and water supply systems and explore funding sources that would support existing and future expansion/growth for the town center. Funding sources could include Massworks grants.
- 7. Analyze existing and new allowed uses to make sure they are appropriate for a town center
- 8. Explore redevelopment, readaptation, and infill opportunities to enhance the town center
- 9. Explore beautification/placemaking opportunities/programs for the town center

Responsible Board: Planning Board, DPW, Board of Selectmen, Board of Health

Goal 4: Support expansion of commercial and industrial uses within existing zoned area to improve the town's long term financial sustainability and expanded tax base and provide services to residents and continued viability and support for businesses (Existing and future) is critical.

1. Explore zoning alternatives or expansion of the commercial districts that enable higher density, economically drivers in the commercial district
2. Explore existing uses and new uses that are appropriate and highest and best use of the district

Responsible Board: Planning Board

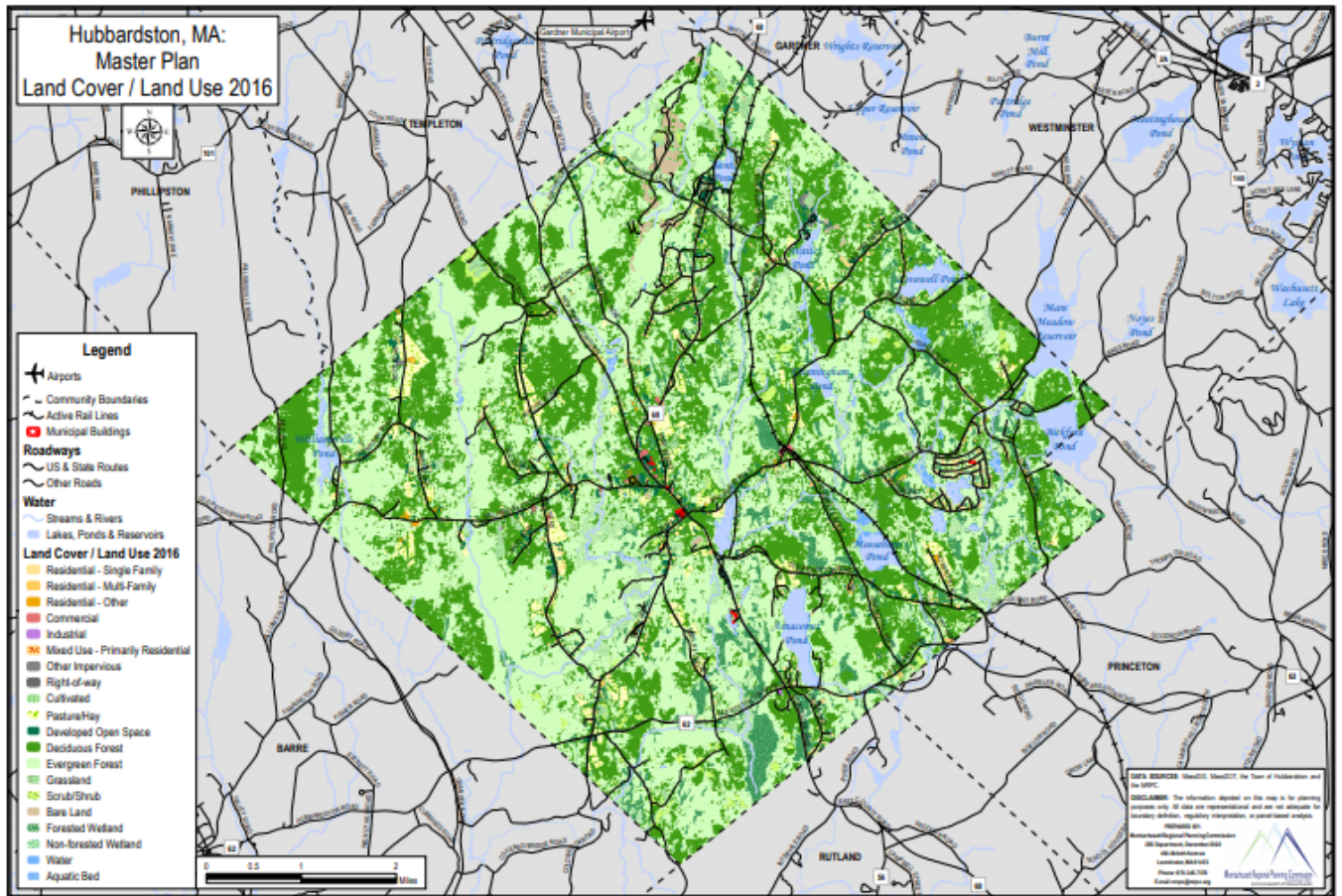
Goal 5 – Increase affordable housing in Hubbardston that provides housing choices for low income, seniors, disabled, young professionals, empty-nesters, and young families.

1. Inclusionary zoning
2. Multi-family: duplexes, town houses, in-law/accessory apartments, small house developments

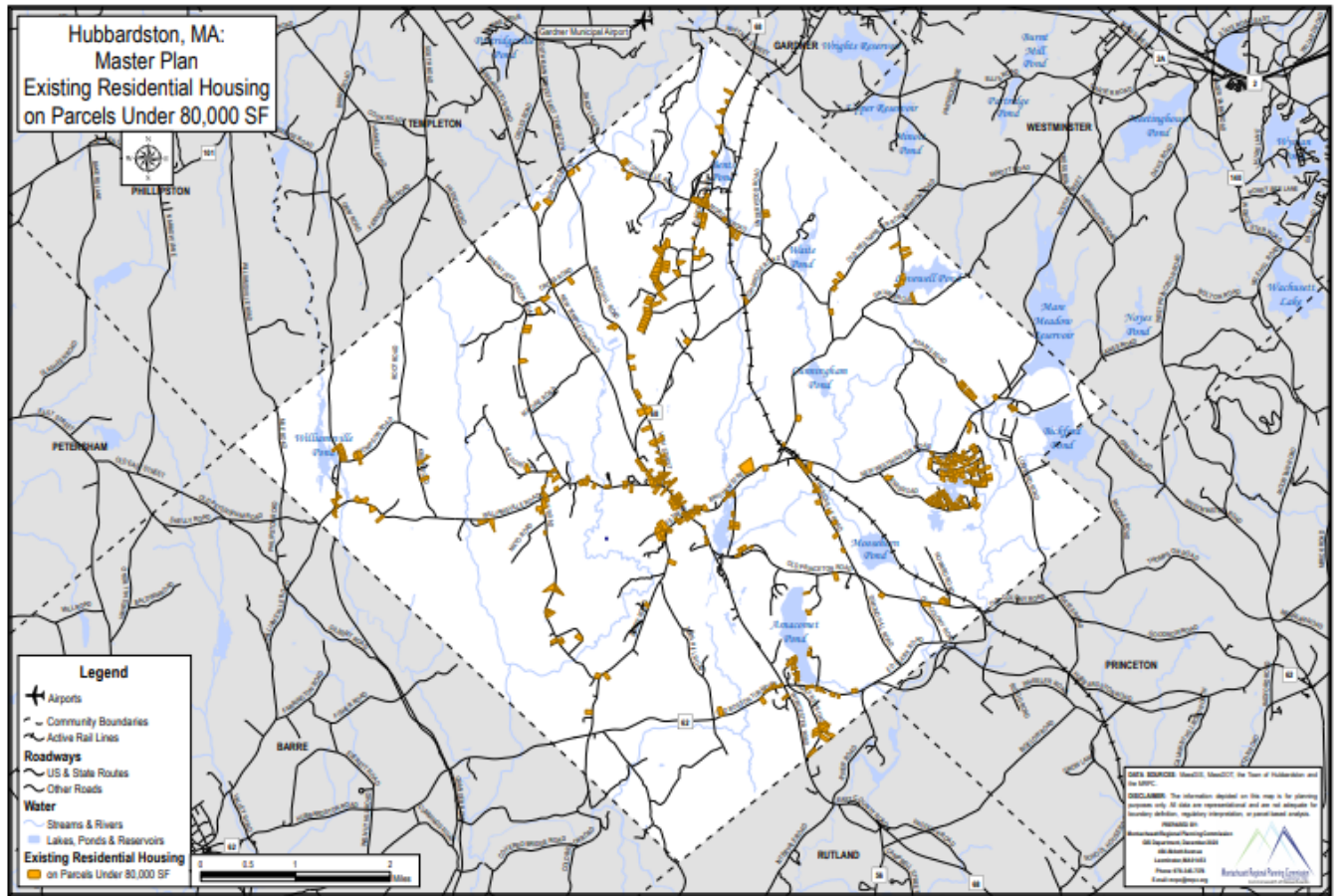
Responsible Board: Planning Board, Housing Commission

APPENDIX C HUBBARDSTON LAND USE MAPS

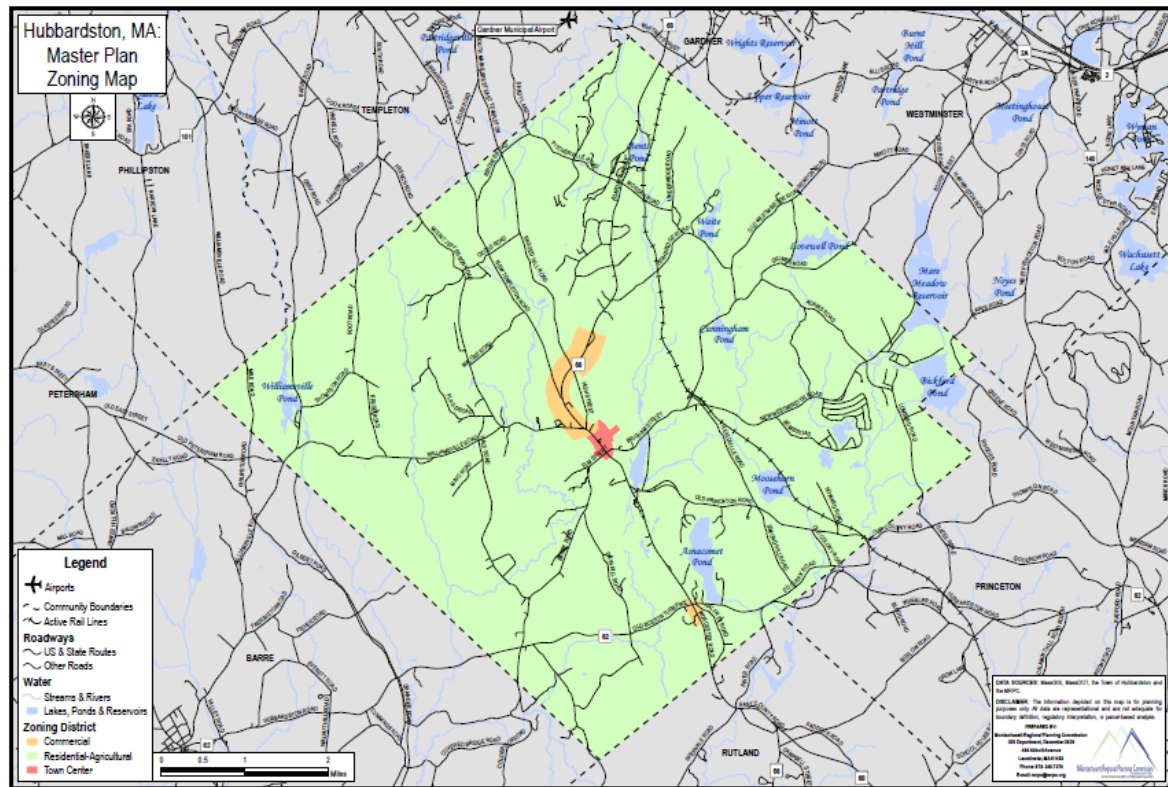
LUM 1 - LAND COVER / LAND USE



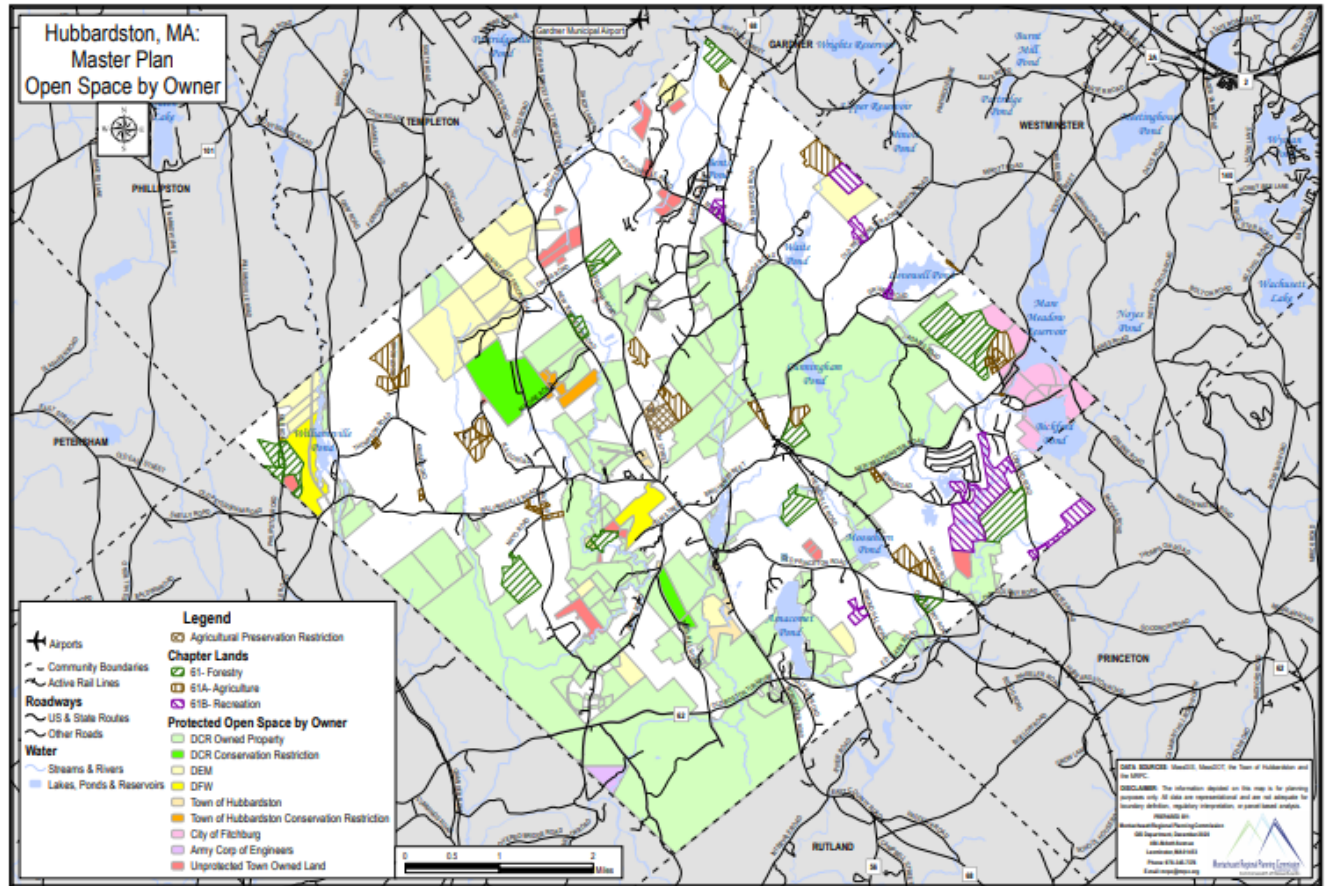
LUM 2 – RESIDENTIAL ON LOTS UNDER 80,000 SQUARE FEET



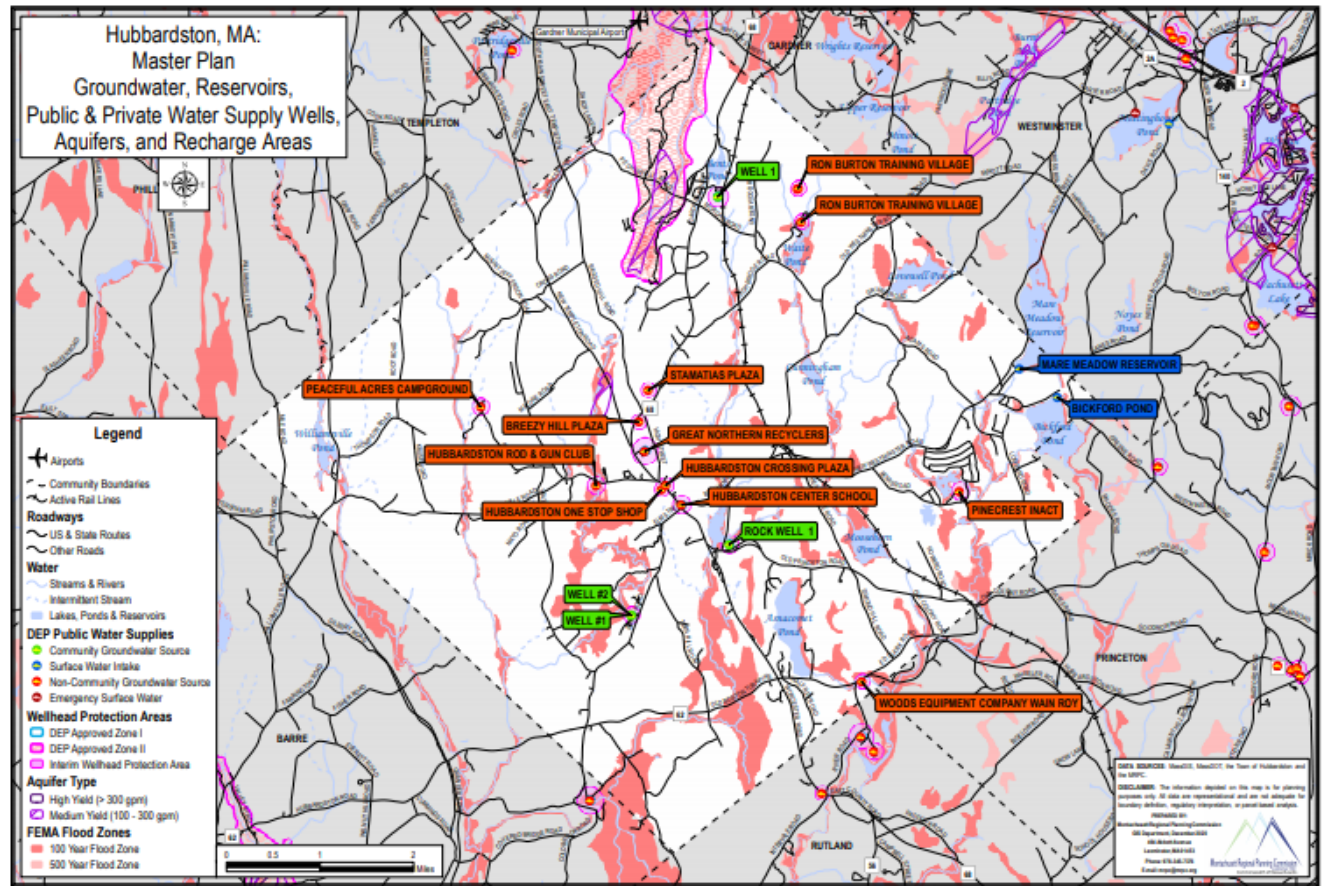
LUM 3 – ZONING MAP



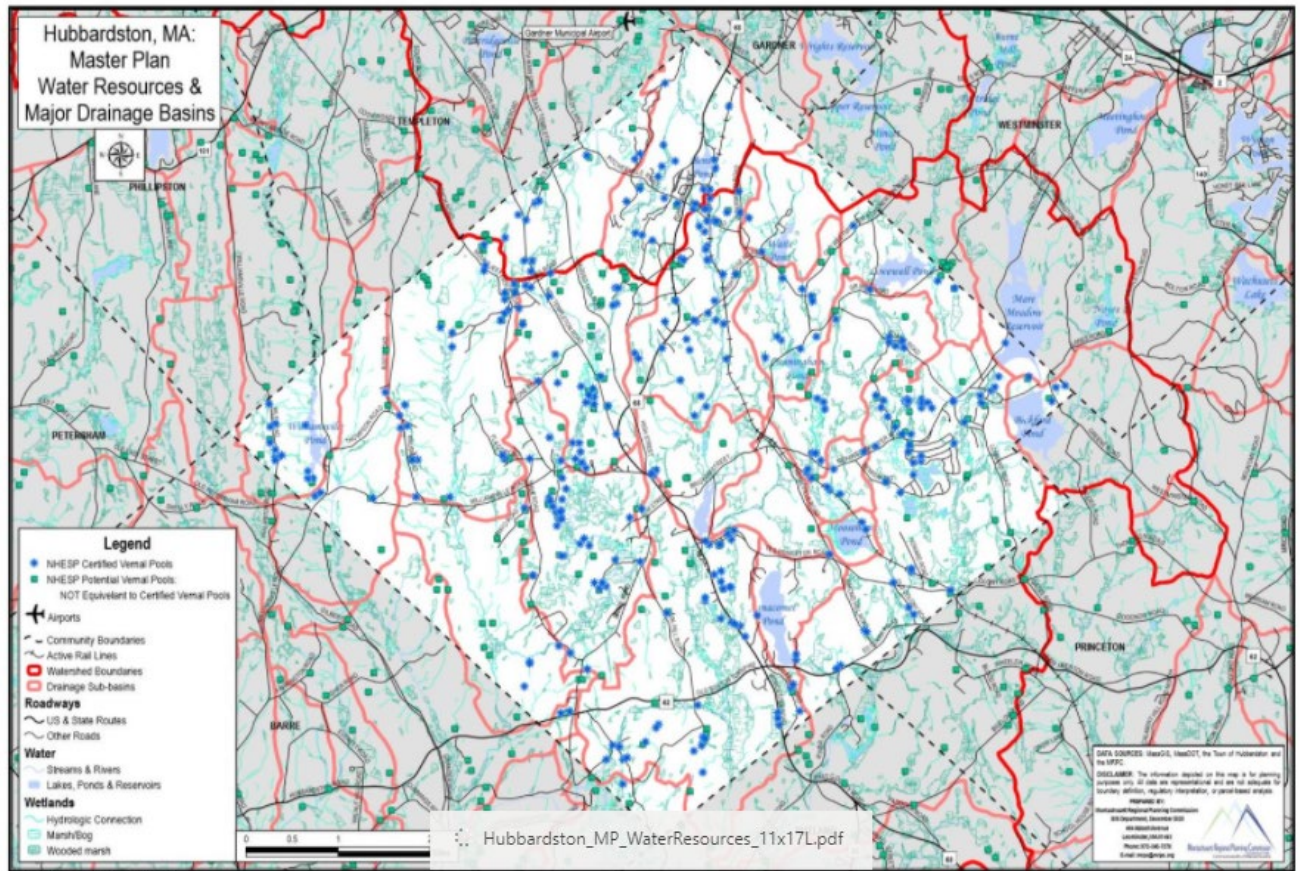
LUM 4 - OPEN SPACE BY OWNER



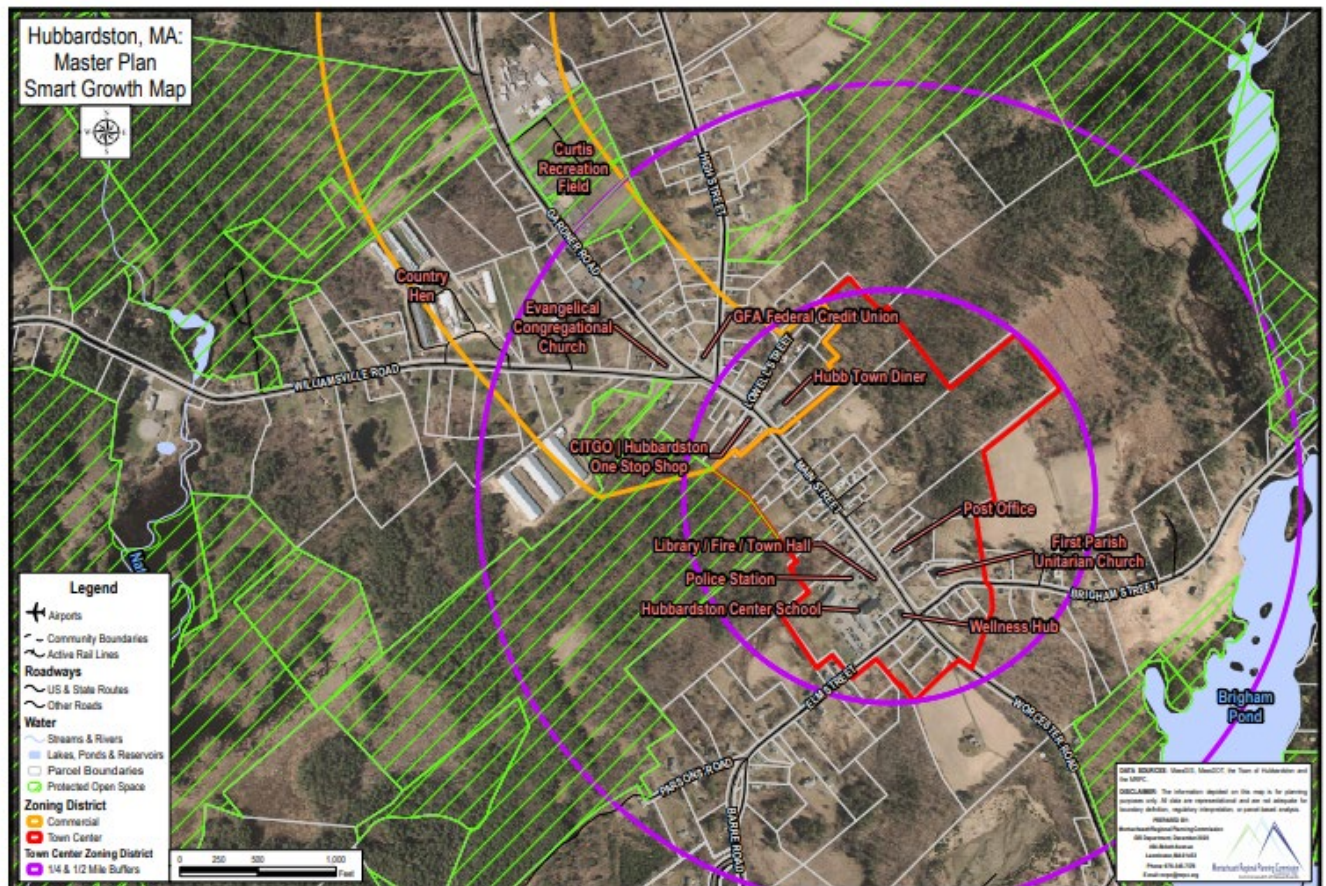
LUM 5 - WATER SUPPLY, AQUIFERS AND RECHARGE AREAS



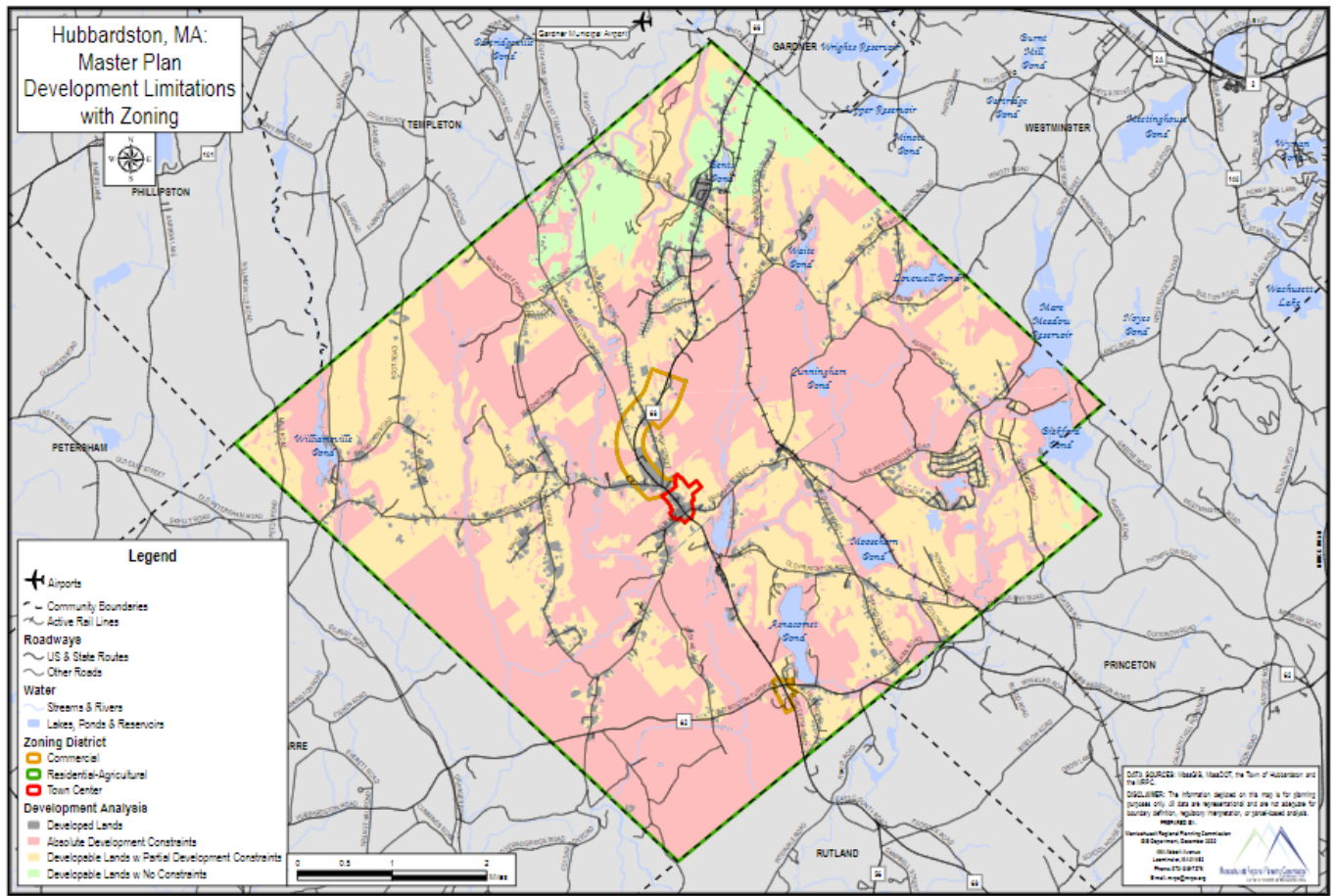
LUM 6 – WATER RESOURCES & MAJOR DRAINAGE BASINS



LUM 7 - TOWN CENTER – SMART GROWTH



LUM 8 – DEVELOPMENT LIMITATIONS WITH ZONING



LUM 9 – DEVELOPMENT POTENTIAL

