

Chapter 3 - Land Use and Zoning

Current Land Use Pattern

Brookfield's land use pattern has changed little in the past 50 years. While many communities adjacent to metropolitan areas experienced explosive growth from the construction of the interstate highway system and from post-war baby-boom families seeking a less urban lifestyle, Brookfield's location at the fringe of the Worcester metropolitan area left it relatively unchanged by the outward spread of suburbanization. In many respects, Brookfield still retains the character of an old New England village.

Brookfield Center contains the Town's principal concentration of population and services. Within the triangle formed by Route 9, Central Street, and the Town Common are many of the Town's institutions and commercial services. Rt. 9 serves as a bypass around the Town Center for thru-traffic, and it allows the village to remain free of the nuisance effects of heavy congestion. Central Street is the location of the Town Hall, Library, Elementary School, TipTop Country Store, and Fire Department. Within the village are a number of businesses that provide general commercial services for residents. Land use is decidedly mixed, with high density single family homes, duplexes, and multi-family units. In several instances, commercial and residential uses occupy the same building. The Town has worked continuously to improve the street network in the area, including improving older sidewalks and providing new walks on some streets. As a result, the Town Center is very pedestrian friendly, and residents can easily walk to church, become involved with Library programs, patronize local establishments, or participate in local government at the Town Hall. This compact, village style of development is supported by the presence of a public water system. Edges of the village are well defined; where water service is not present, a low intensity pattern of development predominates.

Brookfield Common is on the National Register of Historic Places. This designation provides well-deserved recognition of the notable historic structures of a 19th century New England Town Common. There are few businesses on the Common to intrude on the tranquil residential neighborhood or diminish the cohesiveness of the Common's appeal. The outdoor spaces of the Common and Mall provide a congenial venue for local fairs and cultural activities, helping to foster an active community spirit. While placement on the Register affords distinction, it does little to protect the area from unwarranted changes. Brookfield should consider the creation of a "Local Historic District" to protect the Common's historic assets. Upon adoption of a town by-law, a local historic district commission has authority to approve exterior alterations. The Commission may work with property owners to prevent inappropriate changes to buildings and insure the continuation of the historic integrity of the Common for future generations of Brookfield citizens.

Route 9 contains many highway-oriented services that provide residents with essential goods. These include a Cumberland Farms convenience store and gas station, the Post Office, an auto dealership, several restaurants, a liquor store, and other general retail stores. There are no strip shopping centers, big-box retail, or home improvement centers in Brookfield. Given the low population here and in neighboring towns, most businesses have limited floor space and tend to offer discount merchandise to cater to the modest income of most of the population. Residents desiring upscale goods must travel to Sturbridge, Worcester, or one of the region's suburban malls. Most of Brookfield businesses occur on small lots and have little room



For Sale: The Gables, Route 9 and Central Street

for expansion. With few design standards to govern commercial development, many of these businesses have an auto-dominated appearance and few amenities to break up the expanse of pavement and utilities.



Northern High Farm

Away from Brookfield Center, a rural aspect prevails. There are a few remaining farms and fields, and widespread forests lend an open space quality to most of the Town. Large expanses of open space provide unfragmented habitat for wildlife. Most new homes arise along rural roads as frontage lots. Few subdivisions have occurred in recent years. Brookfield has a great deal of land in public ownership, and the widespread presence of wetlands and steep slopes will naturally restrict development. It is unlikely that Brookfield will witness significant housing growth in the coming decades given its location, limited amount of available land, lack of major employers to stimulate demand, and difficult topographic constraints. Brookfield will continue to attract families seeking a rural lifestyle and lack of commercial services; newcomers must be willing to

commute to distant job locations or have the ability to make a living in a rural environment by providing a service that is not dependent upon a large near-by population. In addition, as telecommuting becomes commonplace, proximity to a work location will become less important and could allow more office professionals to live in Brookfield.

Master Plan Survey Results Pertaining to Land Use

Results from the 2008 Master Plan Survey give a clear sense of the future residents hope for Brookfield. By and large, respondents like the Town the way it is and desire to retain many of the defining characteristics that make Brookfield a desirable place to live. Some of the key findings from the survey related to land use include:

- When asked what they like about the Town, the greatest responses were Brookfield's "small town character" and "open spaces." Thus, the unifying land use strategy of this Plan is to retain the rural character and open space of outlying areas and direct growth to the Town Center.
- 69% of respondents indicated that preserving historic landscapes was a high priority.
- When asked preferences for rezoning, the responses confirmed the priority for open space. Many respondents also seem to feel that Brookfield should provide more areas for small scale commercial activity and office and professional services.

Table 1
Preference for Re-Zoning

Land Use	Rank
Open Space	1
Retail / Commercial	2
Office and Professional	3
Light Industry	4
Do not support rezoning	5
Manufacturing	6

- When asked which commercial services they desire, respondents selected small retail stores, convenience services, professional services, restaurants, and banking. Residents did not want to encourage large retail stores, shopping centers, or fast food restaurants. In light of this response, residents might support rezoning more land to Business A in the Town Center to provide additional sites for small-scale commercial services.
- Providing for elderly housing was the top choice among housing needs. Brookfield does not have an elderly housing bylaw. In general, respondents did not see a need for more multi-family housing. Residents also prefer single family homes and in-law apartments, dwelling types that are already authorized by zoning.
- Respondents favored slow residential growth, but a zoning bylaw for limiting new building permits is not needed. Brookfield has experienced slow growth for many years, a trend that is not likely to change. When asked about the pace of building, 60.5% of those responding felt the issuance of building permits was “about right.”

Furthermore, Brookfield already ties residential lot requirements to the presence of the public water system. The minimum lot size of 70,000 sq. ft. in the Rural Residential district is reasonable given health regulations for on-site wells and septic systems to serve new homes.

2005 Interpreted Land Use

MassGIS prepared a land use layer from digital orthophotographs¹ in April 2005. The minimum mapping area was approximately one acre, which means small, isolated land uses or wetlands may not be captured. The interpretation was performed automatically by classifying bands in the ortho imagery; analysts then spot-checked the result to attain a greater degree of accuracy. Open water and wetlands data were transferred from DEP wetlands coverages. Map 1 displays the location of the land use categories, and Table 2 quantifies the results. One can draw some interesting observations from this data:

- ◆ Over 26% of Brookfield is unbuildable due to water constraints. 10.5% of Brookfield is open water, 11.1% is non-forested wetlands, and 4.2% is forested wetlands.
- ◆ Forest remains the largest land use category, with 5,659.1 acres (53.3%) of the Town in forest cover.
- ◆ Only 6.9% of Brookfield is in an agricultural use: 5.2% is in cropland, 2.1% is in pasture, and .4% is an orchard or a nursery.
- ◆ Little land is devoted to commercial and industrial uses; only .4% is commercial and .1% is industrial.
- ◆ Land in residential use amounts to 1,035.1 acres, or 9.8% of the Town.
 - ◆ Most residential land use consists of low density², or very low density housing, comprising 891.2 acres, or 8.4% of the Town.
 - ◆ Medium density, high density, and multi-family residential uses comprise 143.8 acres, or 1.4%.
 - ◆ Mobile home parks (Wagon Wheel, Nanatomqua, Brookfield Meadows) comprise approximately 60 acres of the high density residential category.

¹ An **orthophotograph** is an aerial photograph geometrically corrected ("orthorectified") such that the scale is uniform: the photo has the same lack of distortion as a map; it is an accurate representation of the earth's surface, having been adjusted for topographic relief, lens distortion, and camera tilt. (Source: Wikipedia)

² Very low density consists of house lots greater than 1 acre; low density consists of house lots between .5 and 1 acres; medium density consists of house lots between .25 and .5 acres; high density consists of house lots less than .25 acres.

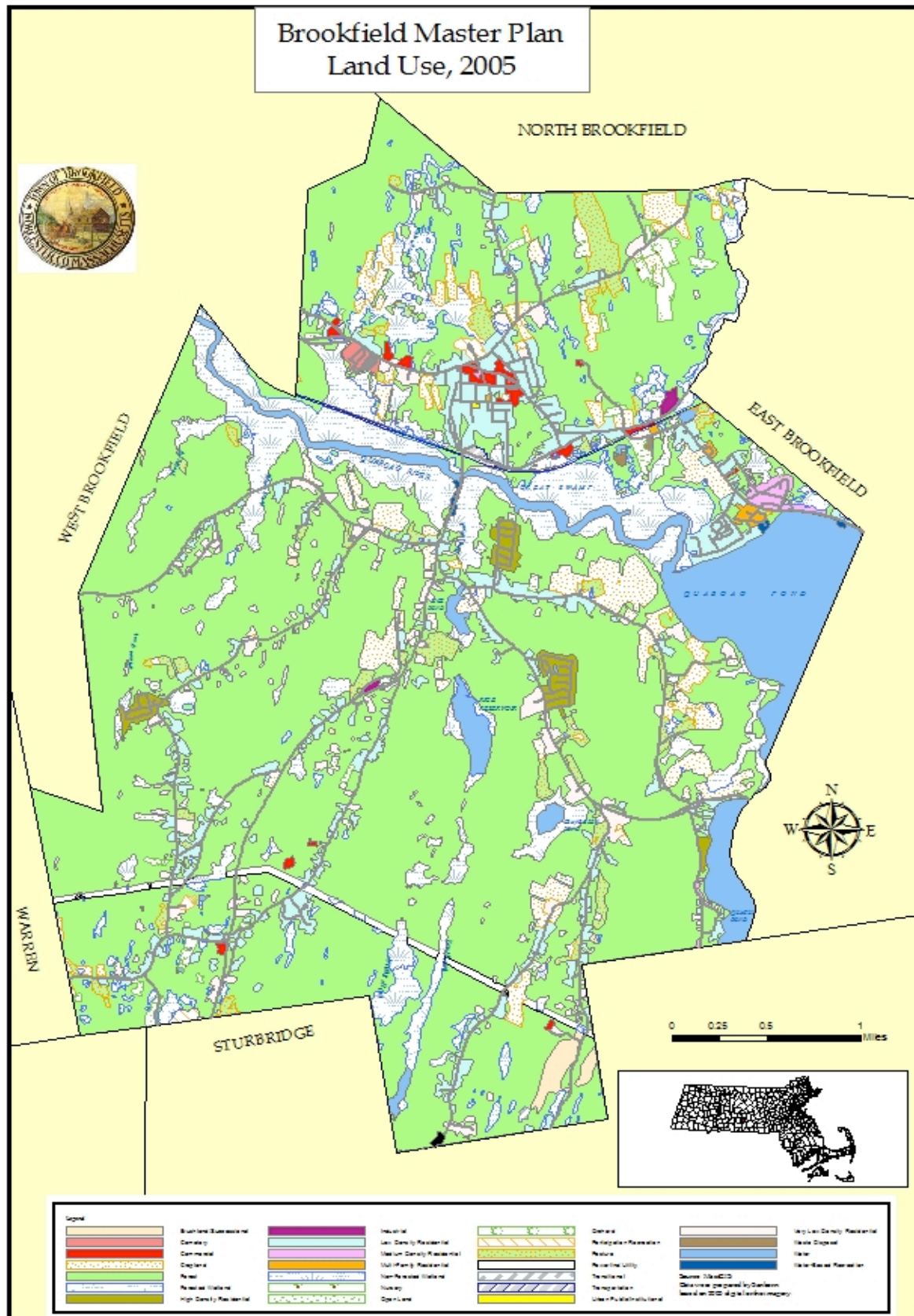


Table 2
2005 Land Use

Land Use	Acres	Percent	Land Use	Acres	Percent
Cropland	511.9	4.8%	Industrial	14.2	0.1%
Pasture	218.6	2.1%	Transitional	7.3	0.1%
Forest	5,659.1	53.3%	Transportation	37.7	0.4%
Non-Forested Wetland	1,182.6	11.1%	Waste Disposal	4.2	0.0%
Open Land	91.7	0.9%	Water	1,111.6	10.5%
Participation Recreation	40.8	0.4%	Powerline/Utility	65.1	0.6%
Water-Based Recreation	7.9	0.1%	Public/Institutional	27.9	0.3%
Multi-Family Residential	15.2	0.1%	Cemetery	15.5	0.1%
High Density Residential	83.0	0.8%	Orchard	33.2	0.3%
Med. Density Residential	45.6	0.4%	Nursery	7.0	0.1%
Low Density Residential	664.5	6.3%	Forested Wetland	450.3	4.2%
V. Low Density Residential	226.8	2.1%	Brush/Successional	44.2	0.4%
Commercial	45.5	0.4%	Total	10,611.2	100.0%

Source: MassGIS 2005 Land Use Datalayer

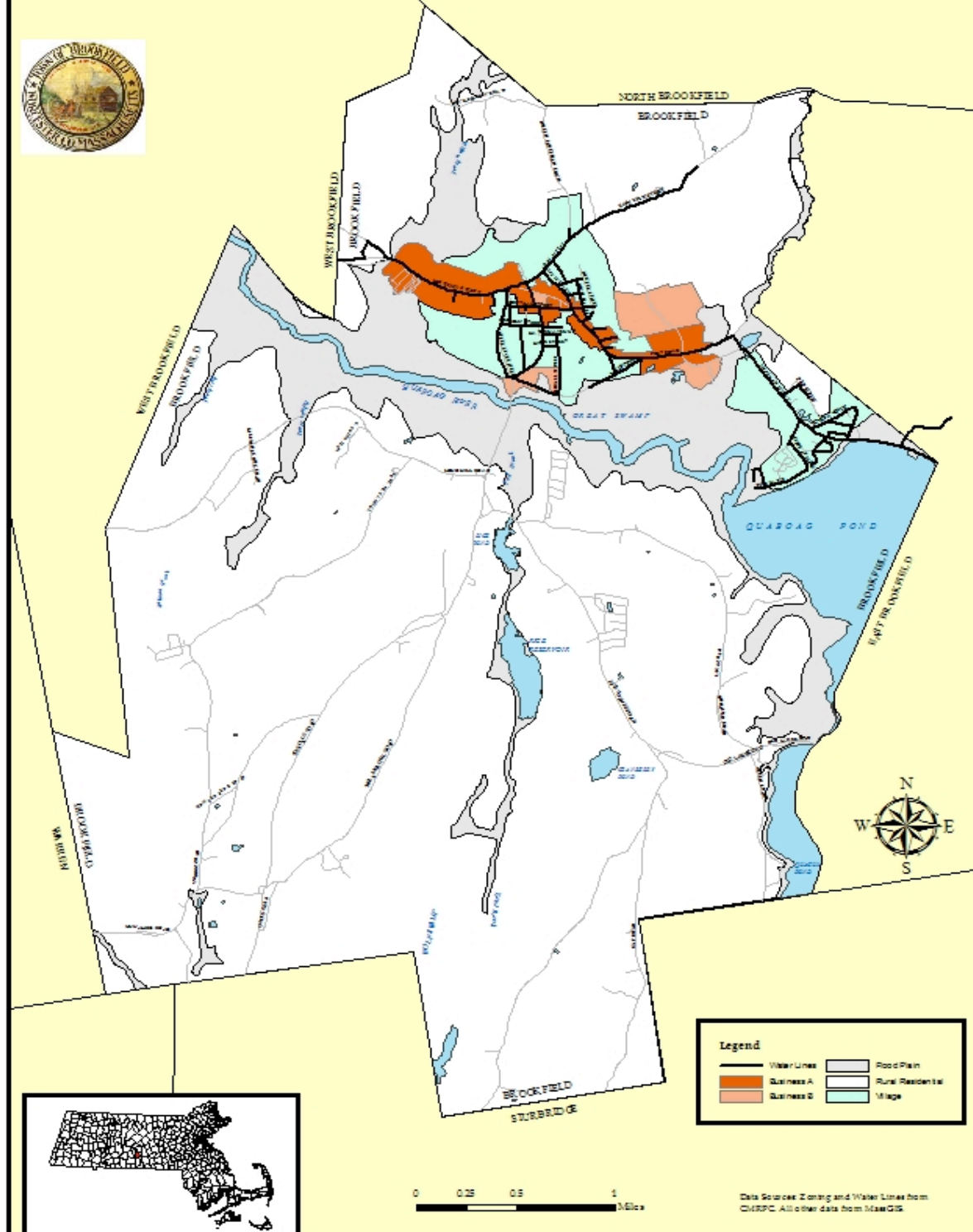
Water and Sewer Systems

Brookfield does not have a public sewer system. The high costs of constructing sewers lines and a treatment plant make it unlikely the Town will ever develop a municipal sewer system. Landowners will continue to build new homes where soils comply with state requirements to properly treat domestic effluent. Absent innovations in septic technology that would permit housing on land that cannot pass today's tests, Brookfield will remain a predominantly rural town.

If health considerations in the Town Center dictate the need to build a small treatment plant, sewers would primarily benefit the existing land uses that have problematic septic systems. Alternatively, it may be possible to extend a sewer line from an adjacent municipality to the Town Center, but the cost would impose heavy financial burdens on landowners who would benefit. Such an action would have the effect of spurring growth along the new sewer main, and would have the potential to open up portions of the Town to large-scale commercial or industrial development. Therefore, the Master Plan calls for reliance upon existing septic system technologies for sewage disposal for the foreseeable future. This will result in continuation of current land use patterns and limited development potential.

Brookfield's municipal water system serves the Town Center, Route 9, and neighborhoods by Quaboag Pond, but it does not yet extend south of the Quaboag River. Map 2 displays the extent of the public water system in Brookfield. The Water Department has been actively replacing old, cast iron water mains from the late 19th century with new ductile iron pipes in Map 2, Water Lines and Zoning

Brookfield Master Plan Water Lines and Zoning



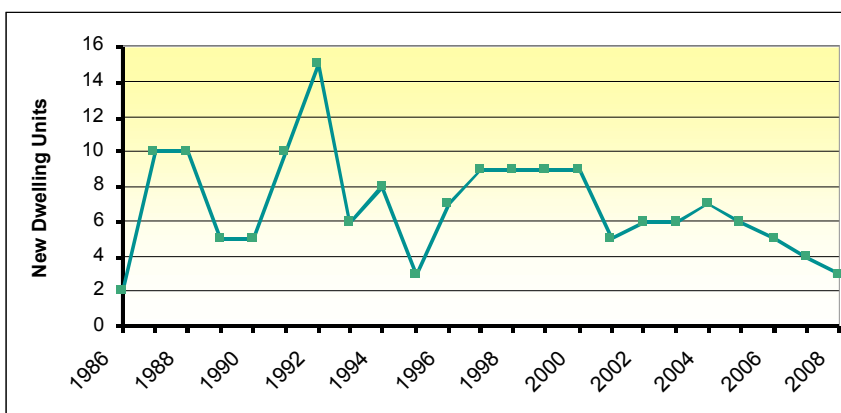
the Town Center. The Town's water supply is located in East Brookfield. With a danger of ground water contamination from tight soils in the densely developed Center, the public water system helps to provide clean water for residents. The availability of the system allows for smaller lot sizes, although many homes in the area exist on lots that do not meet minimum area requirements.

The Department is searching for a new groundwater source and may decide to extend the water system south of the Quaboag River to serve the southern part of town. This might benefit existing mobile home parks, but with low intensity development for the most part, the cost per homeowner might be higher than many can afford. If the Town does extend water across the River, large lots will not be needed to provide adequate separation for on-site wells and septic systems. Open Space Subdivisions (see discussion below) would provide a means to allow smaller lots while protecting open space and maintaining the rural character of this area.

Residential Building Trends

Brookfield has experienced slow residential growth for over two decades. As shown in Figure 1, Brookfield has averaged ten or fewer building permits for new dwelling units in 22 out of the past 23 years. 1992 was the high point, when new permits totaled 15. The average for the 23-year period was 6.9 permits per year. There is no indication that this trend will reverse in the years ahead.

**Figure 1
Building Permit Trends**



Source: U.S. Census

There have been two residential subdivisions approved by the Planning Board in recent years: Molasses Hill Village containing 17 lots, and Clear Creek Estates containing 6 lots. As a rural community, Brookfield does not attract home-owners seeking a suburban lifestyle in well-manicured subdivisions. Rather, most new homes arise in rural areas on large lots with frontage on existing roads. It is not uncommon for landowners to split off a lot from a larger tract for a son or daughter. Most approved lots outside of Brookfield Center are well in excess of the minimum lot size. Brookfield seems to attract residents who desire a large wooded lot with privacy and ready access to open spaces.



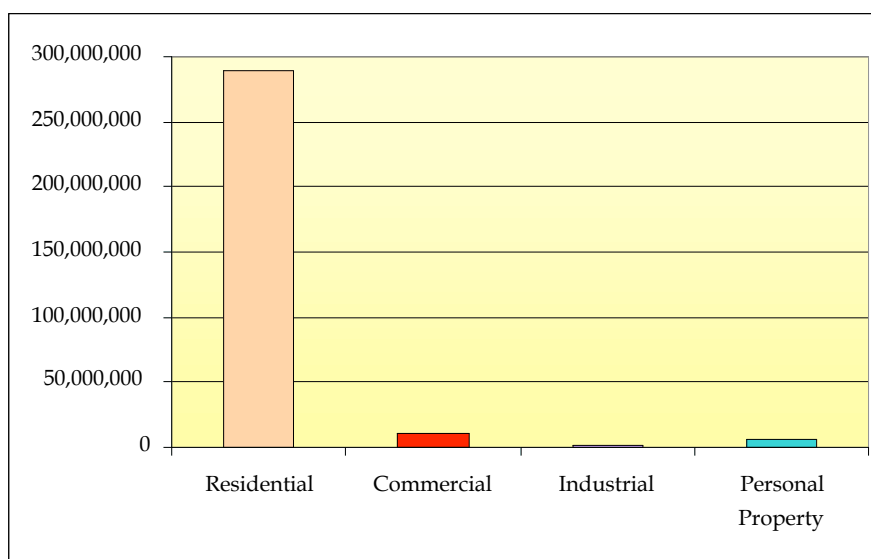
Clear Creek Estates

Examining these trends, it appears that Brookfield will not experience significant residential growth for at least another decade. Sufficient frontage remains on rural roads that can meet the Town's needs for new family housing. Backland is not likely to develop for well into the future since most residents are content to retain large lots for personal use. As noted above, over 26% of the Town is open water or wetland, and approximately 3,261 acres of Brookfield is permanently protected open space.

Assessors' Data

Examining Assessors' data provides another way to understand local land use patterns. The predominant developed land use in Brookfield is residential. Residential property is valued at \$290 million and comprises 93.7% of the tax base. Commercial and industrial property combined is valued at about \$13 million and makes up just 4.3% of the tax base.

Figure 2
Assessed Values, 2009



Source: Department of Revenue

Each parcel has a land use code to denote its current use for assessing purposes. Table 3 provides a summary of privately owned land by both parcel count and acreage.

- There are over 1,100 parcels developed for residential purposes, accounting for over 3,000 acres of land, and averaging 2.8 acres per parcel.
- Almost 1,900 acres of undeveloped land remain for residential purposes in 272 parcels, at an average of 6.9 acres per parcel.
- For commercial and industrial land, only 4 undeveloped parcels remain, comprising 14.4 acres. There are just 40 developed commercial or industrial parcels in Brookfield.
- The Assessors classify 28 parcels as forest, agriculture, or recreation under Chapters 61, 61A, and 61B, respectively. These laws allow land to be assessed at its actual use rather than for its development value. By providing lower assessed values, the programs lower property taxes, thereby enabling landowners to keep the land in an open or natural state.

Table 3
Assessors' Private Land Use Data, 2009

Category	Parcels	Acres
Residential Land		
Developed Residential Land	1,106	3,082.2
Undeveloped Residential Land	272	1,878.9
Total Residential Land	1,378	4,961.1
Commercial and Industrial Land		
Developed Commercial and Industrial Land	40	179.7
Undeveloped Commercial/Industrial Land	4	14.4
Total Commercial and Industrial Land	44	194.1
Chapter Land		
Chapter 61 Forestry	7	349.4
Chapter 61A, Agriculture	5	264.4
Chapter 61B, Recreational	11	159.4
Other	5	186.5
Total Chapter Land	28	959.7

Source: Brookfield Assessors Data

Brookfield should develop a Geographic Information System (GIS) to include computerized mapping of existing parcels. Linking Assessors' data with parcels will provide a powerful tool to understand existing conditions and to make informed choices concerning future development. A GIS will provide local officials with the ability to overlay aerial photographs, zoning districts, environmental factors (e.g. soils, wetlands, rare species habitats, steep slopes), and infrastructure systems (public water, drainage, roads). A GIS can identify potential impacts of development proposals before they occur. Finally, a GIS can empower local citizens to understand their own neighborhood and larger community and make informed decisions based upon accurate geographic information.

Zoning Districts

Map 2 displays Brookfield's zoning scheme. Table 4 displays the extent of the various districts, and Table 5 shows the dimensional requirements that lots must possess for new development to occur on legally conforming lots. Brookfield has five zoning districts with minimum lot sizes ranging from 35,000 sq. ft. (.8 ac.) to 70,000 sq. ft. (1.6 ac.).

Table 4
Extent of Zoning Districts

District	Acres	Percent
Business A	187.5	1.8%
Business B	97.6	0.9%
Flood Plain	2,077.5	19.6%
Rural Residential	7,743.7	73.0%
Village	504.9	4.8%
Total	10,611.2	100.0%

Table 5
Dimensional Requirements

District	Minimum Lot Size	Minimum Frontage	Front Yard	Side and Rear Yards	Maximum Height
BA	35,000	175'	75' (1)	15'	35'
BB	60,000	175'	75' (1)	25'	35'
FP	70,000	200'	75' (1)	25'	35'
RR	70,000	200'	50' (1)	25'	35'
V	35,000	150'	25' (1)	10'	35'

1. Or aligned with the front face of an existing building on an adjacent property

The Flood Plain District corresponds to the 100-year flood plain established by the Federal Emergency Management Agency and comprises over 2,000 acres, or about $\frac{1}{5}$ of the Town. In order to provide subsidized flood insurance for properties in flood plains, communities must adopt land use regulations to prohibit structures that might be damaged during a flood, and to prevent loss of flood storage capacity downstream.

Most communities adopt the flood plain boundaries as an overlay district, which adds special development regulations to property in the district. In Brookfield, the flood plain district is an underlying, or conventional, district. Residential development is prohibited. The district permits uses that will not increase flooding downstream or result in substantial new buildings that may be damaged during a flood. Thus, agriculture, recreation, forestry, greenhouses, conservation areas, and boat sales are allowed uses. Uses that are exempt

under zoning, such as educational and religious uses, are permitted. In addition, commercial uses, including warehouses and contractors' yards, may be permitted by special permit. Any proposal in a flood plain must contain evidence from a professional engineer that the use will not cause an increase in flood levels. Provisions of the Building Code dictate construction requirements within flood plains.

Nearly three-fourths of Brookfield's land area falls within the Rural Residential (RR) District. New lots must contain 70,000 sq. ft. of land and have 200' of frontage. The intent of the district is to permit low density residential development, agriculture, and other compatible uses to preserve Brookfield's rural character. The district permits single and two-family homes by-right and multi-family development by special permit. A wide range of commercial uses are allowed by-right or special permit, including retail sales, offices and wholesale sales containing up to 2,000 sq. ft. of floor area, farm equipment sales, restaurants, funeral homes, nursing homes, repair shops, trades businesses, kennels, veterinarians, galleries, and craft shops. These uses allow homeowners to have low-impact businesses on their property, enabling them to live in a rural area that has few prospects for large-employee companies. Some industrial uses are allowed by special permit, including, warehouses, lumber yards, truck terminals, fuel storage, contractors yards, and research labs. Manufacturing, assembly, processing, and recycling facilities are prohibited. The RR district will likely retain its low density character for decades. Much of the district is permanently protected open space, and development constraints, especially wetlands and steep slopes, will limit potential home sites.

The three remaining districts apply to Brookfield Center. Because the area has access to the municipal water system, regulations here permit smaller lot sizes than in outlying areas. These districts occur north of the Quaboag River and are generally framed by the 100-year flood plain. Tight, slowly percolating soils are a fact of life in the Center. Development depends upon finding a site that can comply with Title 5 standards for

septic system approval. The area developed before the advent of modern septic regulations, and many systems would probably not comply with today's standards. When systems fail, landowners must often go to great lengths to design a system that will conform to modern requirements. The presence of public water removes health concerns about individual well contamination from poorly functioning septic systems.

The zoning scheme in the Town Center reflects the development pattern that existed prior to adoption of zoning. Many single family, two-family, and multi-family dwellings exist on small lots, interspersed with a variety of commercial, institutional, and industrial uses. Many lots are non-conforming in relation to area and frontage, but new development on vacant land must conform to current minimums. The Use Table encourages a wide mix of residential and commercial uses to provide services to the local population. As a result, Brookfield Center has a pedestrian-scale, with residents able to easily access shops, restaurants, offices, churches, and public institutions.

The Village (V) district makes up the largest portion of the Center, about 500 acres, and comprises 4.8% of the Town. The minimum lot size is 35,000 sq. ft., and a lot must have 150' of frontage. The Buildout Study performed by CMRPC in 2001 indicated that there was sufficient vacant land to accommodate 227 new lots. The actual number will probably be less given the difficulty of finding soils that will satisfy Title 5 requirements. However, it is sound land use policy to direct new development into areas with available infrastructure, in this case, a good road network and high quality public water system.



Rural Residential Business

The Village district is primarily residential in nature, but it does permit a mix of land uses typically found in a village setting. Uses permitted by special permit include multi-family dwellings, residential and commercial uses in the same building, business, medical and professional offices of any size, restaurants, retail sales, galleries, craft shops, contractors' yards, lumber yards, and research laboratories.

Because the Center developed prior to adoption of zoning, many single and two-family homes do not comply with current dimensional requirements. Homeowners seeking to alter or expand their property must first receive a special permit from the Board of Appeals. The Board must find that the proposed alteration or extension is not "substantially more detrimental than the existing nonconforming use or structure to the neighborhood." State law enables communities to adopt a provision that allows some alterations of nonconforming single and two family homes without a special permit. Brookfield should consider an amendment that gives the Building Inspector authority to issue a building permit if he determines that the proposed extension or alteration meets certain guidelines and does not increase the nonconforming nature of the structure.



Business A and B District, Route 9

Business A and Business B districts cover the remainder of the Town Center and combined amount to 2.7% of the Town. Both districts allow a variety of business uses by right, but residential uses, even single family homes, require a special permit. The principal difference between the two districts is that the BB district allows most industrial uses by-right, while such uses require a special permit in the BA district. The BB district requires a larger minimum lot size than the BA district perhaps to accommodate industrial uses that should have greater separation from surrounding residences. The BA district covers much of Route 9 between East and West Brookfield.

There are several approved parcels for commercial development within these districts; however, a small

population and lack of demand have slowed commercial development. Survey results revealed that residents desire more small-scale services and would support re-zoning to encourage such growth. The buildout study from 2001 indicated that within BA and BB districts there was enough land to support nearly 500,000 sq. ft. of floor area. While this number would be difficult to achieve without a public sewer system, there appears to be an ample supply of commercial land for Brookfield's needs. The largest tract of available land is on the north side of Route 9 opposite Quaboag Street. Road frontage has BA zoning, and the rear of the parcel has BB zoning. If the tract ultimately proves to be undevelopable, Town Meeting could consider re-zoning property south of Route 9 and east of Brookfield Cemetery to Business A. Land proposed for re-zoning should have access to the municipal water system.

The survey indicated that residents support business expansion to provide more commercial services locally. However, the Zoning Bylaw requires a special permit from the Board of Appeals to allow more than one principal use on a lot. While intended to protect the character of the Town from uncontrolled commercialism, the provision places a roadblock in the path of small-scale commercial development that would benefit the Town. For example, homeowners in BA and BB may wish to convert a portion of their residence to business uses, but if done properly, would not have a negative impact on near-by homes or other businesses. Brookfield should consider relaxing this provision, perhaps with a site plan approval process, and specifying controls that will minimize unwanted impacts.

Development Regulations

While Brookfield has had few subdivisions, the Planning Board's Subdivision Regulations are up-to-date and include reasonable provisions to govern the construction of new roads and utilities to serve the development. Minor streets and lanes require a width of 24' and 20' respectively. These provide ample room for travel while minimizing unnecessary paving during construction and lower the Town's long-term maintenance costs. Dead-end streets may contain 10 lots but may not exceed 500' in length. With a 200-foot frontage requirement in the RR district, a 500-foot road can only accommodate five homes in a conventional subdivision. Rather than specifying a maximum length, the Planning Board may wish to modify the Regulations to simply retain the maximum number of lots (10).

Lot size and frontage requirements are sound given the limited availability of public water, no public sewer system, and soils that have limitations for on-site treatment of wastewater. One change to consider to the dimensional requirements is to lower the minimum front yard setback. While footnote 1 allows for a reduction of the front setback to match that of buildings on adjacent properties, where no such buildings exist, large front setbacks consume a large portion of a lot and hinder good site planning. The 75-foot front setback in BA and BB requires buildings to be placed a long distance from the street, which discourages pedestrian activity. Parking will likely be placed in the front yard, creating an impression that automobiles dominate the site, with architecture and visual quality taking a back seat. Front setbacks should allow buildings to be placed closer to the street in the Town Center in keeping with past practices where buildings have a close relationship to the street. In the RR district, the 50-foot front setback should be retained as the large lot size allows the structure to be well off the street, which softens the impact of new homes on rural character.

As noted previously, it is likely that most residential development for quite some time will take place as single lots along the Town's rural roadways. State law makes it easy for landowners to carve out a lot without local oversight if the lot simply has the minimum frontage required by zoning and there is adequate access to the buildable portion of the lot. Fortunately, an alternative exists to prevent pervasive frontage development and preserve rural character, retain scenic views along rural roads, and prevent loss of agricultural land. Brookfield adopted an Open Space Residential Development (OSRD) Bylaw to provide an alternative to conventional subdivision development.

By special permit of the Planning Board, an OSRD allows smaller lot sizes and frontages than are otherwise required by clustering buildings closely together. In return, at least 30% of the tract will be retained as open space, which may be used for agriculture, recreation, or conservation. Builders use the more suitable portions of the tract for homes, thereby preventing less disruption to the environment. OSRD provides an important tool for preserving the Town's historic landscapes³, which citizens rated a high priority on the Master Plan Survey. Developers gain a distinct savings by building shorter roads and utility systems. The Bylaw stipulates that the number of lots in an OSRD shall not exceed that otherwise permitted in a conventional subdivision unless the Planning Board grants a special permit for a density bonus. This insures that developers cannot take advantage of the provision to build more lots than zoning allows. Developers that provide affordable housing units that meet Chapter 40B requirements may receive a density bonus of one additional market rate unit for each four affordable units provided.

Some minor tweaking of the OSRD bylaw may make it more useful to potential subdividers. Since it offers more advantages than conventional subdivisions, encouraging greater use will help the Town to realize more benefits. These changes could include:

- Eliminating the special permit requirement to put OSRD on an equal footing with conventional subdivisions.

³ Brookfield's historic landscapes are thoroughly documented in the Brookfield Reconnaissance Report, of the Mass. Heritage Landscape Inventory Program, prepared by Dodson Associates, 2008.

- Eliminating the minimum tract size of 10 acres in RR and 7 acres in Village. There is no reason why small parcels should not be able to take advantage of the provision. In Brookfield, most subdivisions are likely to consist of a small number of lots.
- Reducing the frontage requirement in an OSRD in the RR district. Since the principal advantage to subdividers is shorter street lengths, placing units closer together will reduce road construction costs and create a more neighborhood-scale development.
- Reduce the minimum lot size in RR from 50,000 sq. ft. to 35,000 sq. ft. The proposed lot area still provides sufficient room for a septic system and on-site well if good soils are present, and the less area required for individual lots means more land can be set aside for open space purposes. In addition, developers could build a common water supply or septic system with costs for maintenance shared by a homeowners association.
- Reduce the front setback provision in the RR district from 50' to 25'. Since homes in OSRDs will be on new streets, placing homes closer to their access street will not affect views from adjacent streets. Shallower front yards will yield larger rear yards, which provide more back yard space for recreation, and it provides greater separation of homes from abutting property owners.
- The affordable housing bonus of providing four affordable units to allow one additional market rate unit appears excessive and is unlikely to generate any affordable units. The density bonus may be more effective if each affordable unit will allow one additional market rate unit up to the maximum increase of 25%.

Planning for Renewable Energy Sources

The dramatic spike in the prices of gasoline and heating oil in 2008 hammered home the dependence of the United States on foreign energy supplies. Reducing reliance on these sources suddenly became a cornerstone of domestic policy. State and federal agencies have enacted new programs to lessen dependence on fossil fuels. Development of alternative energy sources, including wind, solar, hydro, and geo-thermal, is an essential component of the strategy. Increasing fuel efficiency, retrofitting older buildings, adopting new energy standards for appliances, and revising building construction techniques are important steps that will help to lower foreign imports.

Brookfield should incorporate energy planning in its budgeting decisions to manage its energy costs. The Town should develop an energy policy to guide actions that reduce consumption of non-renewable energy sources and promote renewable sources. Such actions can include:

- ◆ Retrofit existing buildings to maximize energy conservation savings.
- ◆ Explore the use of alternative, renewable sources of energy and develop zoning provisions to authorize such uses.
- ◆ Conduct energy audits of municipal buildings and work with electricity providers to implement cost effective strategies for reducing energy use.
- ◆ Seek state and federal grants for energy conservation measures and renewable energy sources.
- ◆

Parking Regulations and Commercial Design Standards

The Zoning Bylaw contains few standards to regulate the appearance and impact of commercial and industrial development. It is important to set guidelines for desirable development practices in order to promote more beneficial projects for the community. Brookfield should consider adopting standards to improve the appearance and function of new commercial development.

❖ The Bylaw contains no standards for parking and access.

- The Bylaw should contain a parking table that specifies the number of spaces developers must provide for various activities.
- Parking should occur on the sides or behind buildings. Allowing parking in the front creates an impression that automobiles take priority over people.
- There should be a limit on the number of curb cuts to control traffic circulation within the site and for safe entry to and from the access roads.
- To reduce turning movements onto the access roads, the Bylaw should allow inter-connections between lots, with rear locations preferred.
- Parking lot lighting should be the minimum necessary for safety. Light fixtures should have cutoffs to prevent light trespass and maintain clear night skies.



Business A District, Route 9

❖ Landscaping can improve the visual appearance of commercial projects.

- There should be a requirement for a percentage of a lot to be open space to provide some visual relief from buildings and pavement.
- Landscaping along property lines can buffer incompatible land uses.
- Green belts in the front setbacks can provide room for shade trees and attractive shrubbery.
- Parking lot landscaping can reduce the heating effects of large areas of pavement.

❖ Providing pedestrian amenities in the Village district can benefit local residents.

- Developments should provide new sidewalks or improve existing walks along their frontage.
- Buildings should be placed close to the street to lessen the walking distance from the road. A maximum front setback would require buildings to begin within a specified distance of the street, for example, 10' or 15'. This prevents parking in the front of buildings and helps to maintain the prevailing pattern of buildings and streets.

❖ Site development standards can improve visual appearance from public ways.

- Dumpsters, machinery, utility structures, etc. should be placed behind buildings and screened with landscaping or fencing.
- Outdoor storage of materials should be allowed with site plan review in order to consider measures that can minimize visual impacts.
- Commercial buildings should have features such as awnings, plazas, pitched roofs, balconies, and public seating to encourage visual interest for pedestrians.
- In the Town Center, overhead wires should be placed underground when public or private investment occurs.

Land Use Goals

The following land use goals will guide Town actions in fostering a clean environment and creating a sustainable pattern of development so that future generations of Brookfield residents may enjoy the Town's outstanding resources and rural way of life.

1. Preserve the Town's rural character, farms, scenic landscapes, and natural resources by promoting a low-density pattern of development outside of the Town Center.

2. Direct higher density residential and commercial development to the Town Center where water service and municipal facilities reduce the costs of serving new growth.
3. Develop appropriate safeguards to allow expansion of commercial growth in the Town Center while retaining the characteristics of a traditional New England town.
4. Promote a country lifestyle by allowing residents to engage in low impact economic activities in the rural areas of Brookfield.

Land Use Recommendations

Town Center -- Village, Business A, and Business B Districts

1. Adopt a Local Historic District to protect the historic qualities of the Town Common. (Note: The Reconnaissance Report also recommends adopting a local historic district for the Elm Hill Farm National Register District.)
2. Modify front setback requirements in the Town Center to allow the same building-to-street relationship that exists for older properties.
3. Identify land suitable for Business A zoning to allow small-scale commercial services.
4. Enact off-street parking requirements and design standards to shape the quality of commercial development.
5. Since many homes in the Town Center are non-conforming, adopt an expedited procedure for owners to obtain permission to alter or expand their dwelling without requiring a special permit.
6. Remove the requirement for a special permit for single family homes in BA.
7. Revise the requirement for a special permit for more than one principal use on a lot in BA and BB districts, and specify regulations that will provide safeguards for near-by residences.
8. Adopt a maximum size limit on commercial buildings to exclude shopping plazas and big box retail stores that are out of scale with a rural community.
9. Expand the sidewalk network to encourage walking to local shops and institutions.

Rural District

10. Revise the OSRD Bylaw by making it a by-right use and modifying standards that may discourage developers from using the provision.
11. Exclude industrial uses from the RR district, such as warehouses, lumberyards, fuel storage yards, truck terminals, research labs, and computer software manufacturing.
12. Develop design standards to soften the impacts of business uses in residential areas.
13. Support farmland preservation through purchase of development rights, especially the state's Agricultural Preservation Restriction (APR) program.

General Land Use Recommendations

14. Seek state funds to implement energy conservation measures and evaluate the potential for renewable energy sources to meet the Town's energy needs.
15. Remove any zoning impediments to the use of alternative energy sources, and develop a wind energy zoning bylaw to regulate the construction of new wind turbines.

16. Prepare a senior housing bylaw to allow development of age-restricted housing for local seniors who wish to remain in town after selling their residence.
17. Adopt a Right-to-Farm bylaw to protect farmers from nuisance complaints of adjacent residents, and establish an Agricultural Commission to promote the interests of farmers vis-à-vis local government.
18. Complete computerized mapping of land ownership parcels and develop a functional GIS to provide local officials and the public with an accurate depiction of physical, environmental, and socio-economic conditions in the community.
19. Prepare a new Official Zoning Map to display zoning district boundaries on a parcel base map.
20. Prepare a development guidebook that provides clear direction to developers and residents for navigating through local permitting procedures. Enhance coordination among local officials and land use boards to streamline the development review process and avoid conflicting decisions or conditions.
21. Revise the Flood Plain District regulations to remove ambiguity concerning permitted uses and activities.