Visions of Hopkinton

Steps Toward Downtown Revitalization

Prepared For the Downtown Revitalization Committee
Hopkinton, Massachusetts

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Executive Summary

Hopkinton is a town with a strong community, a rich history, and an appealing character. Leading into the second decade of the twenty-first century, however, the town center is not thriving or effectively serving Hopkinton. The town's Downtown Revitalization Committee has partnered with downtown business and property owners to solicit a plan to bring life to the town center, the 0.7-mile length of Main Street.

Analyses and input from Hopkinton residents illustrate community and regional patterns and what is not working about the town center. Research and, again, residents' input inform recommendations to address issues.

Opportunities and challenges

Hopkinton is growing; in the past twenty years, the town has seen a dramatic population increase from around 9,000 to over 14,000, and growth is projected to continue over the next twenty years. Recent growth has taken the form of low-density residential development. Commercial development in Hopkinton has not kept up with residential development, and the larger, more diverse commercial bases of surrounding towns currently draw Hopkinton residents away from the downtown.

Frequent traffic accidents, especially at intersections, and anecdotal evidence point to problems in Hopkinton's town center for both pedestrians and drivers. The perceived danger to pedestrians from cars when they cross Main Street is so great that it seriously deters people from walking in the downtown. Cars move fast along Main Street. Due to I-495, Routes 135 and 85, and several other major roads that intersect Main Street, downtown traffic is heavy throughout the day and dominates the downtown experience. There are no separate travel lanes for bicyclists. The pedestrian experience also leaves much to be desired, with long waits to cross the street, street crossings that are too long and not visible enough, deteriorating sidewalks, walkways completely exposed to the sights and sounds of traffic, and parking often inconvenient for downtown destinations.

Diverse, beautiful architecture and expansive views are attractive features of downtown Hopkinton. However, the streetscape also has many unappealing qualities, including visually dominating utility wires and poles, crumbling sidewalks, minimal greenery, and fast, loud traffic. The street feels mostly exposed, due to relatively small, widely-spaced buildings with large setbacks. The vast differences in character between downtown neighborhoods feel unharmonious.

Due to a combination of impervious surfaces, topography, and insufficient catch basins, a few blocks of downtown Hopkinton experience flooding. Flooding causes expensive damage and poses safety and health risks.

Downtown Hopkinton currently has several places for people to socialize, but in public meetings residents have said that they want a more diverse range of social spaces for all times of day and year, all ages, and a wider range of interests. Social spaces focused on the arts and on youth are particular desires of residents.

Recommendations

The population growth Hopkinton is facing poses choices about how the town should accommodate its population increase. Rather than continue to build on the open land that defines Hopkinton's valued rural character, the town should preserve open land and concentrate development within already-developed areas. Mixed-use infill development could bring life to the downtown by increasing the number of people living, walking, and shopping there. The town should perform a retail market analysis to set economic revitalization in motion, encourage improvements to building façades and storefronts, pursue economic incentives, and focus on stimulating local economy.

Hopkinton should implement measures to calm speeding traffic and improve the pedestrian experience such as installing medians, narrowing the road, buffering walkways from traffic, shortening and raising pedestrian street crossings, and offering consolidated municipal parking.

The town should make streetscape changes to enhance the aesthetics and unify the character of downtown, like signs, trees and seasonal plantings, interesting walkways, streetscape ornaments, and defining gateways.

Hopkinton should address flooding through on-site stormwater infiltration techniques like rain gardens, bioswales, rooftop gardens, and pervious pavement. Where feasible, excavation for some of these measures or for more catch basins should be combined with another public works project important for Hopkinton's downtown experience—burying utility lines.

The town should create or partner to create more public social spaces like parks, arts and youth centers, and better sidewalk spaces. Hopkinton should also encourage a range of businesses to offer social spaces.

Hopkinton's planning should respect ecological and social systems through valuing diversity, integrating ecological considerations into decision-making, using local and renewable resources, and promoting ecological and social justice values through education.

In other communities where revitalization efforts have been limited to streetscape changes, results have also been limited. A downtown thrives through the diverse combination of factors that this report explores, and Hopkinton should give attention to each factor. The town can begin to implement some measures immediately at little cost. A multifaceted approach to revitalization that considers physical, social, and economic aspects of the downtown over time and in relation to the region will lay the groundwork for a vibrant town center.

Contents

Hopkinton's public library is enjoyed by many residents.

Introduction

PROJECT OVERVIEW

On your mark . . . get set . . . go! And they're off, thousands of runners making their way down Main Street of Hopkinton, Massachusetts. While the town is currently most famous for hosting the start of the Boston Marathon each year, Hopkinton's 14,000 residents appreciate many other characteristics of this developing suburb. Hopkinton enjoys its proximity to the numerous attractions of Boston and surrounding towns. Beautiful Hopkinton and Whitehall State Parks are set amongst rolling pastoral views that make up much of the town.

Residents also enjoy many downtown amenities, like the public library and the extensive programs it offers, as well as a handful of locally owned businesses, including a coffee shop, an Italian restaurant, and a grocery store. Hopkinton values its strong sense of community. As one resident put it, "Hopkinton takes care of its own."

While residents enjoy many aspects of the downtown, they also have concerns that have led to previous design projects. A charrette in 2003 (Hopkinton Downtown Revitalization Committee) revealed that Hopkinton residents were dissatisfied with the look of their downtown because of visually dominating utility lines, deteriorating sidewalks, little and inconsistent greenery, and street furniture, lighting, signs, and some building façades that are inconsistent with the historical character of much of the town center. In addition, residents wanted their downtown to attract more businesses and offer more attractions, social spaces, and events. They also expressed concern about downtown traffic accidents, rush-hour congestion, poorly maintained sidewalks and crosswalks, and potentially insufficient parking. Momentum from the charrette led to new benches and trash cans on Main Street. The Downtown Revitalization Committee, a group affiliated with the municipal government whose members are a mixture of Hopkinton businesspeople, other interested

Colella's Supermarket is frequented by many Hopkinton residents.

citizens, and officials from several town departments, has also tried to get town approval for measures to address pedestrian and traffic safety issues downtown, with little change implemented so far. Several years ago, separate from Downtown Revitalization Committee efforts, a downtown property owner hired a design firm to make a revitalization plan for the downtown, but the plan has not been implemented, reportedly due to a lack of consultation with other stakeholders.

Hopkinton residents' concerns about their town center in 2010 have changed little since the 2003 charrette. In public meetings for this project, residents expressed their desire for access to more downtown businesses and social and community spaces. They want to be safe walking and driving downtown. They want their downtown to be a beautiful, lively destination.

The Downtown Revitalization Committee's efforts several years ago led to new trash receptacles and benches.

Giving streets back to people

Town centers all over the world have struggled with issues like Hopkinton's. A factor commonly contributing to these issues is cars. Since the advent of the automobile, the centers of cities and towns all over the world have been challenged: accommodating cars is very different from accommodating pedestrians. Designs for automobile convenience demand enough width for at least two lanes, plus parking, and long stretches without stopping. A pedestrian-friendly road, on the other hand, is narrow enough to provide a sense of enclosure and has frequent, easy crossings. Generally, as streets were rebuilt to better accommodate cars, their quality for pedestrians deteriorated. Over the past several decades, many cities and towns have realized that their vehicle-centered design detracts rather than contributes to the quality of life of their communities and economies. Many communities have made efforts to bring new life and character to their town centers, highlight historical character, and provide good experiences for people and not just throughways for cars.

Leading into the second decade of the twenty-first century, other movements can inform revitalization projects like Hopkinton's. People all over the world are gaining a deeper understanding of global and local ecological, social, and economic relationships. These insights are sparking efforts to strengthen communities and find creative new ways to meet people's needs. People are working to localize economies, food, and resources. The sustainability movement seeks ways not just to reduce human impact on the planet but to improve quality of life for everyone.

Components of a thriving town center

A lively downtown has enjoyable spaces where people interact. There are many different things to do, and accordingly there are enough facilities for businesses. In thriving downtowns, people live in a higher concentration than in other parts of the town. There are frequent and clear pedestrian crossings, and clear signals to cars to drive slowly and carefully. Streets are well-lit at night, and trees shade wide sidewalks during the day. But these qualities alone are not enough to make a downtown a lively place; revitalization projects that stop with infrastructure and beautification efforts have met with limited success (Holdsworth 59).

The efforts of a revitalization project begin in the present and continue long into the future; some of the most meaningful changes a town can make may take years. We are also living in a time of great change in the world. Populations are growing. The economy is faltering. Sources of conventional energy are diminishing and our modes of transport must adapt. As communities are investing in long-term change, it makes sense to provide for both current needs and flexibility of future uses.

PROJECT SCOPE

In late 2009, Hopkinton's Downtown Revitalization Committee and downtown business and property owners hired the Conway School to create a plan to make the downtown safer and more pleasant for walking and driving, a place that attracts more businesses and patrons and better serves as a center of community life.

Main Street looking west towards the crossroads of Routes 135 and 85.

The focus area for this project, chosen by the Downtown Revitalization Committee, encompasses Main Street and 500 feet to the north and south, from Wood Street on the west to Ash Street on the east (see Figure 1.0, p. 4). This region is partly a dense commercial and mixed-use village core, partly less dense commercial and mixed uses, and partly residential.

In order to understand Hopkinton's vision of a thriving future and lay out a plan for the town to follow to realize that vision, students involved in this project met multiple times with the Downtown Revitalization Committee, downtown business and property owners, officials from town agencies, and interested town residents. The vision and goals for this plan have been guided by what these stakeholders shared about what they value in Hopkinton and their hopes for the future.

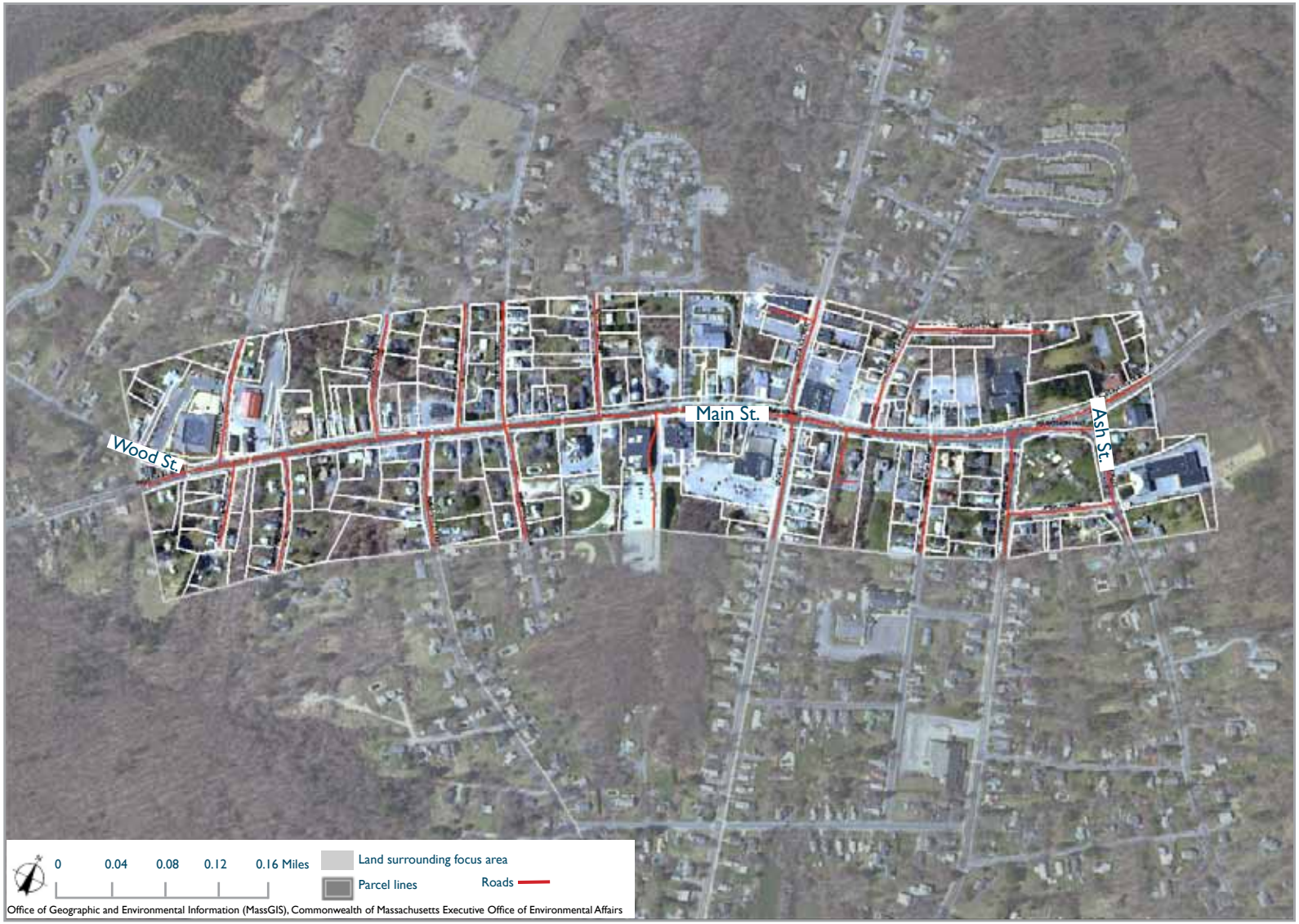


FIG. 1.0 PROJECT FOCUS AREA: Main Street from Wood Street to Ash Street, and 500 feet to the north and south.

The stakeholders in Hopkinton's downtown revitalization are all the people who use the downtown for living, working, shopping, entertainment, travel, and socializing. Downtown business and property owners have the most to gain in the short term from an enlivened downtown, but all Hopkinton residents stand to benefit from increased tax revenue from more downtown businesses, and all Hopkinton residents and residents of nearby towns who use Hopkinton stand to benefit from improved downtown infrastructure, amenities, and atmosphere, and from an improved local economy.

PROJECT VISION

Hopkinton's revitalized town center reflects the vibrancy, values, and resilience of this historic New England community.

A wide array of small, locally owned businesses thrives in the bustling village center, frequented by residents and visitors alike; shops, restaurants and cafés, ample venues to entertain all ages, and other businesses allow Hopkinton to provide for its own community.

People choose to move around town on foot because it is safe, efficient, and appealing; Hopkinton's landscape offers beautiful paths for pedestrian traveling and exploring.

Infrastructure adds to the sense of place rather than detracting and distracting from it; awareness of energy, water, waste, and transportation systems results from their proper functioning and educational utility.

The downtown is a beautiful New England village, with lush vegetation with appeal in all four seasons; Hopkinton's sense of place comes from the mixture of traditional and newer architecture in the mixed-use village center surrounded by well-maintained historic homes, situated in a rolling landscape with cherished open space and conserved land.

The downtown is the heart of the community, and offers a diverse range of gathering places and activities—outdoor and indoor, public and private, for daytime and nighttime—with appeal and meaning for Hopkinton's residents in all walks of life.

Residents recognize the greater ecology and their interconnections and interdependence within it; the design of the town reflects those interconnections for the benefit of all.

This sketch shows a vision of a pedestrian-friendly downtown with wide sidewalks, attractive building facades, places to sit, and trees to provide shade and soften the hardscape. Photo courtesy Wikimedia Commons.

PROJECT GOALS

This report offers Hopkinton guidelines:

To strengthen and localize the **economy** of the town through increased number and diversity of small, independent businesses;

To improve **pedestrian and vehicular movement** in the town through traffic calming, increased efficiency of the intersection of Routes 85 and 135, pedestrian safety measures, and connectivity of pedestrian routes throughout Hopkinton;

To modify **infrastructure** to solve flooding problems and remove unsightly utility lines from view;

To highlight and enhance the **beauty and character** of the downtown through streetscape design and land use planning;

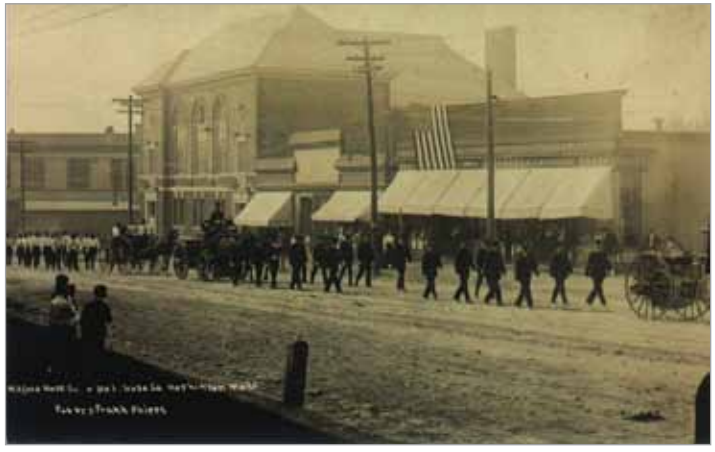
To make the downtown the heart of the community through effective **social spaces**; and

To develop the **sustainability** of the town through vibrant social connection, a local economy, energy-efficient and ecologically regenerative infrastructure, and local and regional transit.

Context

HISTORY

Like many New England towns, Hopkinton had its beginning in agriculture. In the nineteenth century, the town's economy was based in industry; a number of factories were located in Hopkinton, by the 1840s making up the American center of shoe and boot production. The nearby village of Woodville, now incorporated into Hopkinton, was home to the second cotton cloth mill in the United States. A geographical shift in the shoe and boot industry, along with a series of factory fires in 1876, 1882, and 1900, catalyzed a transition back to agriculture in Hopkinton and erased the physical evidence of that part of the town's history. The hurricane of 1938 wiped out even more of the historical architecture of the downtown.



The Town Hall on Main Street. Hopkinton's 200th Centennial Anniversary, 1915.
Photo courtesy of Hopkinton Public Library

The rise of the automobile and the construction of Interstate-495 has had significant impact on the physical character of Hopkinton and on the downtown specifically. Since I-495 reached Hopkinton in 1967, the town has largely been a growing bedroom community for Boston, although thousands of workers also commute into Hopkinton. Change downtown has not kept up with development in the rest of the town.

EXISTING CONDITIONS

Overview

Downtown Hopkinton is concentrated along Main Street (a segment of Route 135) from Wood Street in the west to Ash Street in the east, with a mix of residential, commercial, municipal, and civic buildings. At the center of Hopkinton is the crossroads of Routes 135 and 85, both main throughways for regional commuter traffic. Beginning at Wood Street and moving east through the downtown, the landscape changes significantly, sloping downhill through the eastern medium-density residential and commercial parts of downtown to the denser mixed-use town center at the bottom of the hill and climbing back uphill, ultimately ending at Ash Street, where a more rural

FIG. 2.0 EXISTING CONDITIONS: Within this 0.7-mile stretch, four distinct character zones are evident.

FIG. 2.1 AERIAL VIEW OF MAIN STREET: Downtown Hopkinton is surrounded by forested and open, undeveloped land. Photo courtesy of Google.

landscape begins. Within this 0.7-mile stretch, four distinct character zones are evident (see Figure 2.0, p. 8).

Residential on the Hill

Beginning at the intersection of Wood Street and Route 135, travelers encounter one of two downtown traffic lights. A large single-story child care center and adjacent lumber yard make up one of two nodes of commercial development in this area of town. Heading east along Main Street, fast-moving traffic is occasionally interrupted by cars pulling in and out of the many residential driveways. Utility poles poke up through the deteriorating sidewalk at regular intervals, supporting snarls of overhead wires. A mix of largely well-preserved early-nineteenth-century single-family and multifamily homes lines the street, with small side and back yards in between. A single-story car service shop in a sea of pavement and a joined hair salon and dry cleaner represent another small node of commercial development in this area. Surrounding these pockets of development are a mix of mature Norway spruces and pockets of mixed deciduous trees amidst lawn, softening the street feel.

The feel of the Residential on the Hill district is of a residential neighborhood with heavy traffic. The district's buildings are all set back from the sidewalk with lawns and the occasional white picket fence. The wide roads, the absence of street parking and pedestrians, and the open spaces between buildings offer no indicators that this area is part of a downtown, nor any suggestion for the fast traffic going to or coming from I-495 to slow down.

Historic homes dot the hillside.

Side streets lead to pockets of newer homes.

Daily traffic headed west towards I-495 moves quickly along the wide roads.

Existing historic homes in good condition add character to the neighborhood.

Commercial at the Crossroads

Continuing east on Main Street, the road curves slightly to the south and begins a gradual descent down the hill, proffering a view of the wide, busy intersection of Routes 135 and 85. A new three-story brick business building stands on a large open lot with newly planted street trees and a large rear parking lot. A recently constructed three-story fire station is a few doors up from the former high school, a three-story late-nineteenth-century brick building now repurposed to house various businesses. Across the street, which is now broader with widened travel lanes and some on-street parking, the new police station sits far back from the road with a swath of lawn, dotted with plantings, leading up to the modern brick building, standing three stories high.

At the bottom of the hill, downtown Hopkinton's other traffic light controls the crossroads of Routes 135 and 85. A group of mostly single-story businesses, including a locally owned supermarket, a gas station, a package store, and a hardware store, makes up the commercial development at this major intersection. With more businesses and a higher volume of traffic, the sense of a downtown starts to become evident. While there are more pedestrians along this stretch, they face a protracted wait and long crosswalks to walk from one side of the street to the other.

The Commercial at the Crossroads district feels exposed, with wide spacing between buildings, large setbacks, and, in some places, like at the major intersection, single-story buildings. A decrease in the density of trees on the properties heading east in this district heralds its transition from a residential zone to a commercial zone.

New civic buildings, like the police station, are set far back from the road

Many businesses are housed in historic buildings.

Routes 135 and 85 bring traffic through town.

Dense Commercial

Continuing east on Route 135, the road begins a slight climb uphill. On the north side of Main Street, a vacant lot breaks up the otherwise closely-spaced building façades. Adjacent to the vacant lot, a row of one- and two-story commercial buildings, including an Italian restaurant and catering business, a copy shop, an antiques store, and a hair salon, creates a significant sense of being downtown. The buildings are tightly spaced and meet the sidewalk, with parking now filling the north side of the street. A newly renovated pizza restaurant is situated between the four-story brick Town Hall and a brick bank. On the crest of the hill, a single-story Masonic Lodge and a large Greek revival Presbyterian church stand out on the north side of Main Street. There are no houses, and the proximity of the buildings to each other and the street, as well as cars parked on the road, help enclose the street. With its dense, mixed development, large windows displaying sale items, a stone wall outside the Town Hall with some good sitting space, and buildings close to the sidewalk and to each other, this small stretch of Main Street feels personal and lively, and is the area that most clearly evokes a sense of being downtown.

But little vegetation greens the streetscape. The sidewalks are wider and can hold more pedestrians, but the faded crosswalk paint makes pedestrian street crossings risky, with no indicators to drivers of crossing pedestrians. The wide road allows traffic to move through at high speed, also increased by the downhill slope from the east. Driveways and an overgrown vacant lot separate many of the buildings from each other and break the continuity of building façades in the district, and the utility wires distract from the inviting storefronts.

The Dense Commercial district comprises mostly one and two-story buildings.

There are a variety of architectural styles on Main Street, including this Money Box-style building.

Crosswalks are long and the paint has faded.

Downtown Residential and the Common

The row of single- and multifamily homes just south of Main Street on Route 85 sits close to the road. Nearby on the south side of Main Street, large historic homes sit far back from the street, presiding over expansive lawns. A coffee shop in a single-story former home and a high-end bistro in a bungalow lend a commercial flavor to this residential swath. The library, a stone Richardsonian Romanesque former church, sits at the crest of the hill and receives many visitors on a daily basis, while various businesses inhabit a large three-story old brick home on an extensive lawn. Street parking can be found all along this stretch and many pedestrians cross the street in this area between the library and the various shops on the north side of Main Street.

The town common straddles the top of the hill, highlighted with a recently-constructed gazebo. Well-maintained historic homes and a historic brick elementary school surround the common and evoke the feeling of a traditional New England village. A large clapboard colonial-style house stands to the east of the common on a slightly downhill slope, denoting the end of downtown.

This district gives its portion of Main Street an especially open and austere feel due to the common, the cemetery mirroring it across the road, and the wide spacing and large setbacks of the buildings, including former homes converted to business space whose window frontage is too distant for pedestrians to see inside. While these setbacks disconnect pedestrians from the buildings, many of them offer potential social spaces more intimate than the expansive common.

Summary

In downtown Hopkinton, variations in density, amenities, vegetation, setbacks, parking, topography, and road width shape four distinct areas. Streetscape improvements and other revitalization efforts can tailor changes to the identity of each area while providing elements that create a stronger, more cohesive character through the downtown.

Multi-family housing extends down Rte. 85 South.

Many businesses are housed in historical buildings.

Large historic homes sit far back from the street.

The town common sits at the top of the hill and is considered the jewel of the town.

Analysis

OVERVIEW

Design solutions that meet people's needs and are sustainable require a clear understanding of the problems. This understanding comes from analysis of the existing conditions—the physical and social components of Hopkinton's town center, seen in relationship to the town as a whole and the regional context.

REGIONAL AND COMMUNITY CONNECTIONS

A number of aspects of Hopkinton's relationship to surrounding towns and its place in the region can inform the town's decisions about planning and downtown revitalization. For instance, statistics about commuting into and out of the town help to explain the nature of the community. The last census, in 2000, reported 1,330 Hopkinton workers commuting to work within the community, compared with about 5,200 commuting to Boston and surrounding towns and over 7,000 traveling from elsewhere to work in Hopkinton. Many of the commuters into Hopkinton work at EMC, a data storage company with headquarters in an industrial park several miles outside the downtown. Hopkinton is simultaneously a bedroom community and a place where people come to work. Part of what a vibrant downtown could do for

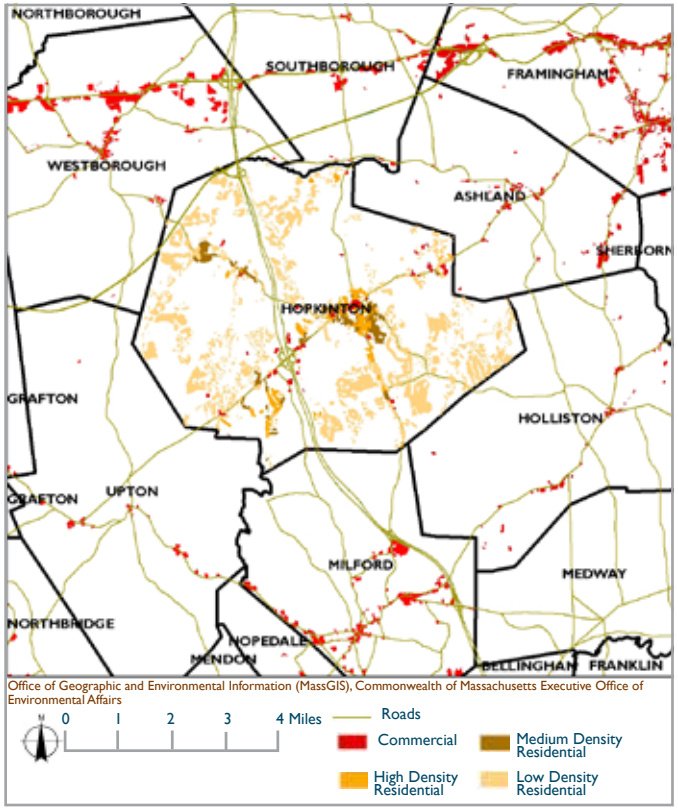


FIG. 3.0 SURROUNDING COMMERCIAL CENTERS: Strong commercial centers in surrounding towns draw Hopkinton residents out of town.

Hopkinton is to create a center of community life for a town of people who spend much of their time in other communities.

Surrounding commercial centers draw residents

For commercial activity, people leave Hopkinton more than they travel to it or stay within it. The commercial districts of neighboring towns offer a much wider array of retail options, restaurants, and entertainment than Hopkinton's does (see Figure 3.0, p. 13). These larger commercial centers can better serve people's business needs and currently draw potential economic activity away from downtown Hopkinton; in order to compete with neighboring towns' commercial areas, Hopkinton would need to provide services that the other towns do not. The town center has the potential to develop a highly attractive, unique character with commercial options different from those of nearby towns. The commercial centers of surrounding towns consist primarily of chain businesses; Hopkinton's small base of independent businesses lays the foundation for a different type of commercial center.

Regional population is growing

The Metropolitan Area Planning Council (MAPC) projects that the populations of Hopkinton and other developing suburbs like it will continue to grow in the foreseeable future (www.mapc.org/data-services/available-data). However, Hopkinton faces choices about how to grow. The majority of the town's housing is in low-density residential developments throughout the town. Hopkinton can either continue with low-density development or increase the density of new development. Through public forums in recent years, Hopkinton residents have said that they value the rural character of the town. Continued growth inherently means the diminishing of a rural character. But the town can choose how to become less rural: by filling in all open space with houses or by increasing the density of the downtown and potentially other nodes. (Developing other nodes of density would require zoning changes.) Preserving undeveloped land enhances not only that aspect of Hopkinton's rural character but also the ecology of the region: in general, the more open spaces connect with each other, the better habitat they offer (Dramstad 42-44).

Hopkinton could connect better with regional transit

Currently, the various highways that pass through Hopkinton make cars an extremely easy option for getting around, into, and out of the town. The last census, in 2000, reported that 90% of Hopkinton residents travel to work in their own cars, with only 3% taking public transportation—buses or nearby commuter trains. Over half of those commuters travel more than thirty minutes each way. Public transit requires a high concentration of people, so higher-density development in downtown Hopkinton could facilitate improved access to both local and regional public transit as well as reduce fuel use. Interestingly, the town has had public transit in the past: in the early twentieth century, a trolley offered passage through town. Improved public transit could mean building on the local bus system, which currently serves to connect downtown Hopkinton with nearby Framingham MBTA commuter rail and Amtrak stations. Bicycle access could also be improved by expanding the Center Trail, a multi-use path corresponding with an old railway that intersects with Main Street, and connecting it with the Upper Charles Trail, a proposed loop connecting Hopkinton with surrounding towns (see Figure 3.1, p. 15).

SPOTLIGHT ON HOPKINTON

UPPER CHARLES TRAIL SYSTEM

Walking and biking loops in downtown Hopkinton could potentially connect with the Upper Charles Trail, a proposed loop connecting Hopkinton with nearby Milford, Ashland, Sherborn, and Holliston.

Milford has had great success with their portion of the trail. The town has received state and federal funding for property acquisitions and construction through the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), as well as through Parkland Acquisitions and Renovations for Communities (PARC) grants and the Congestion Management and Air Quality Program. The Town of Milford has supported the trail through preliminary design development, property acquisitions, final design development, and permitting. Friends of the Milford Upper Charles Trail maintains the trail in the town.

Milford residents enthusiastically use their section of the Upper Charles Trail and many Hopkinton residents have expressed interest in their section. Connecting Hopkinton walking and biking loops with the trail would give residents more options for using alternative transportation and could also serve as an ecological corridor for wildlife in Hopkinton.

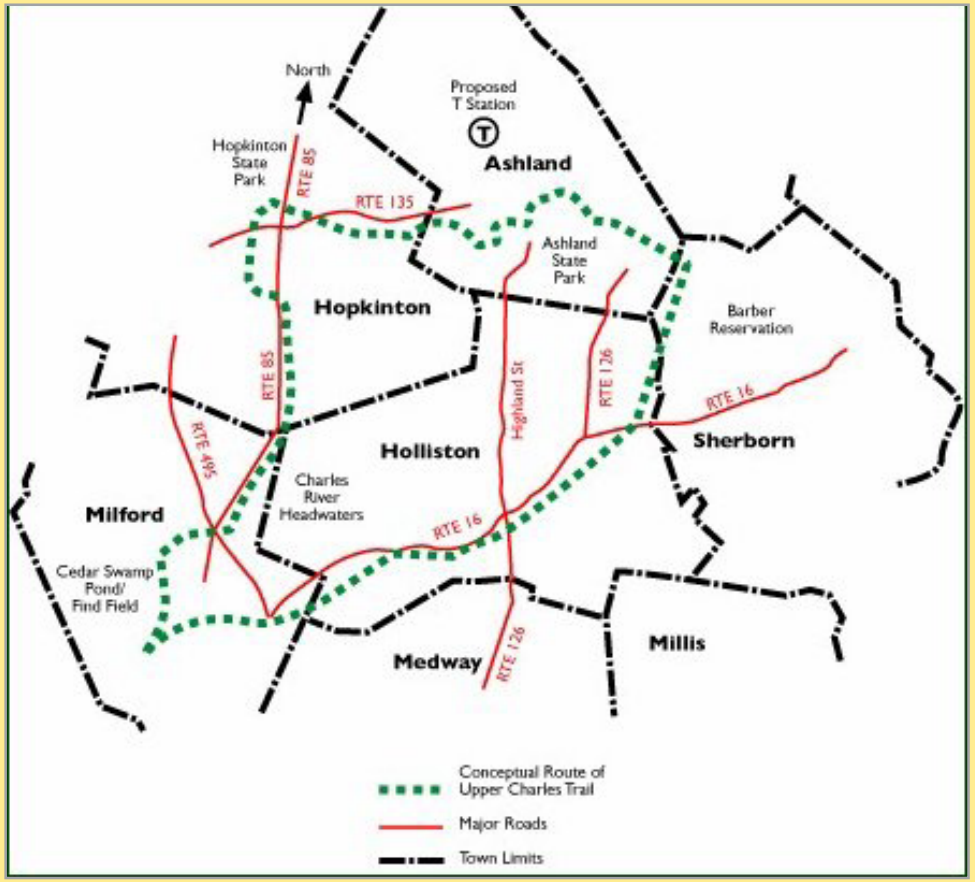


FIG. 3.1 UPPER CHARLES TRAIL SYSTEM:
The proposed trail loop would link Hopkinton with many other surrounding towns. Since this map was made, a portion of the trail in Milford has been built. Map courtesy of Upper Charles Trail.

LAND USE

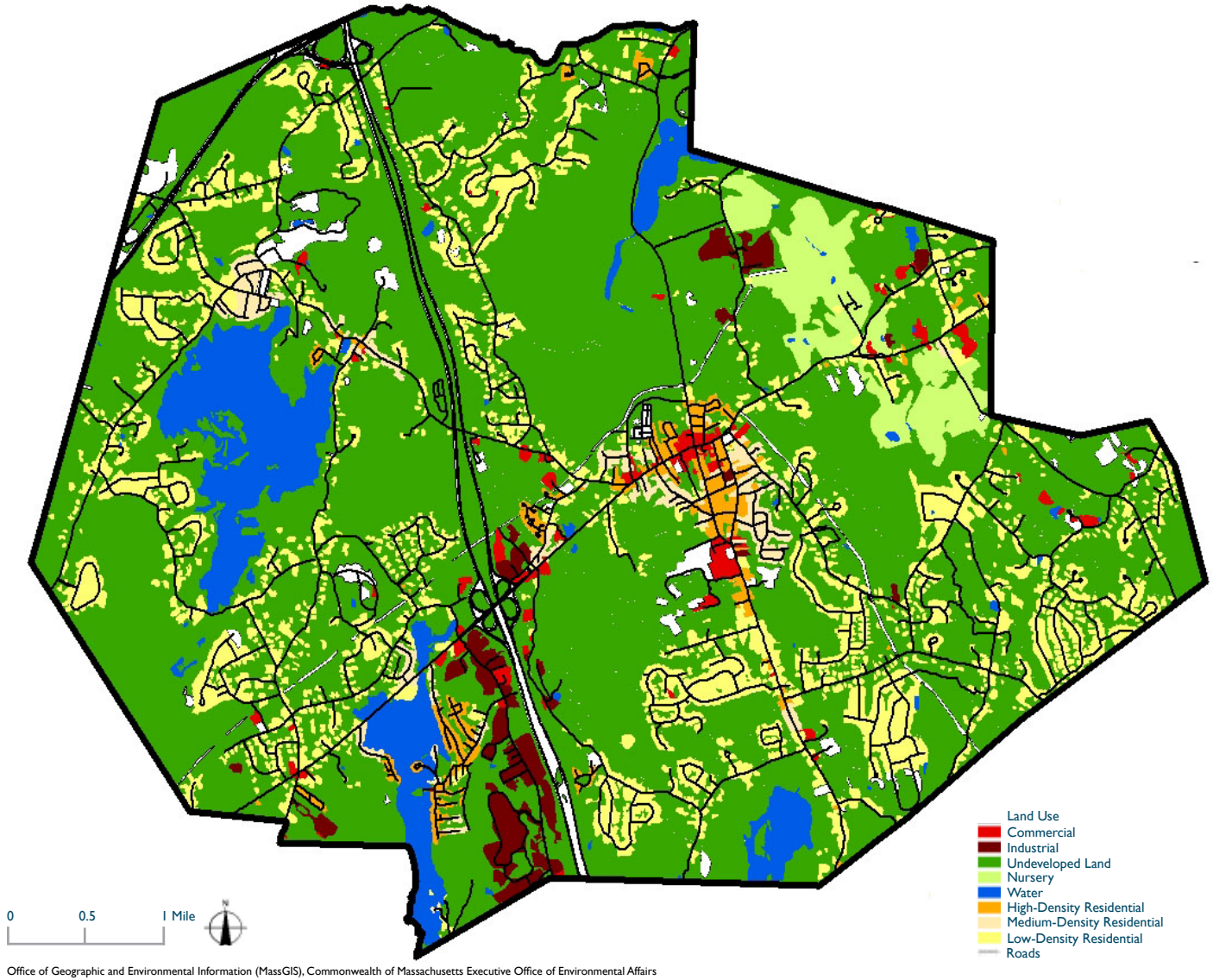
The town's rural landscape is becoming developed

Much of Hopkinton is rural, a combination of rolling, formerly agricultural land and pockets of dense forest and wetland (see Figure 3.2, opposite page). Of Hopkinton's 17,280 acres, 770 acres are municipally owned and protected for conservation or for drinking water supplies (Hopkinton 2007 Master Plan, p. 14). Hopkinton sits at the convergence of three watersheds: the Blackstone, the Charles, and the Concord. Most of the town, including the downtown area, falls within the Concord watershed. The quality of the water that passes through Hopkinton's borders on and underneath the land's surface directly influences and is influenced by all these water flow systems; Hopkinton has power to improve watershed health and water quality in downtown revitalization efforts by filtering stormwater runoff on-site, before it joins water bodies.

The Commonwealth of Massachusetts owns 1,600 acres of land in Hopkinton, comprising Whitehall and Hopkinton State Parks. Another 287 acres are owned and managed by land trusts. A total of 2,657 acres, or 15% of the area of the town, is protected.

Hopkinton's remaining land is under increasing development pressure. Existing development takes a number of forms. Homes from throughout the past two centuries pepper the town. Industrial uses are mostly concentrated in the southern part of town along I-495 in a few large business parks. The town's growth in recent decades has taken place mostly in low-density residential development, the majority of which is zoned at a minimum lot size of about 1.4 acres. Currently low-density residential uses cover around a quarter of the town's total area. Significantly, about a mile east of downtown, a roughly 730-acre tract of land owned by Weston Nurseries has been sold and is slated for development as Legacy Farms, with a mixture of uses, including 450,000 square feet of commercial and retail space and up to 940 new single-family homes, town homes, and apartments, including some affordable-qualifying rental units, in all increasing Hopkinton's number of housing units by about 20%. There is a large potential for Legacy Farms to contribute to the revitalization of downtown Hopkinton. With people moving into the residential development at Legacy Farms, there will be a large increase in the number of residents living close to downtown. If future commercial development in the downtown offers commercial and retail options that differ from commercial development at Legacy Farms, the two could work together to bring more people to the broader downtown area.

Weston Nurseries, indicated here by the patchwork pattern, has been sold to Legacy Farms and is slated for mixed-use development. Photo courtesy of Google.



Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

FIG. 3.2 TOWN-WIDE LAND USE: The low-density residential development throughout Hopkinton is surrounded by undeveloped land, which residents value highly.

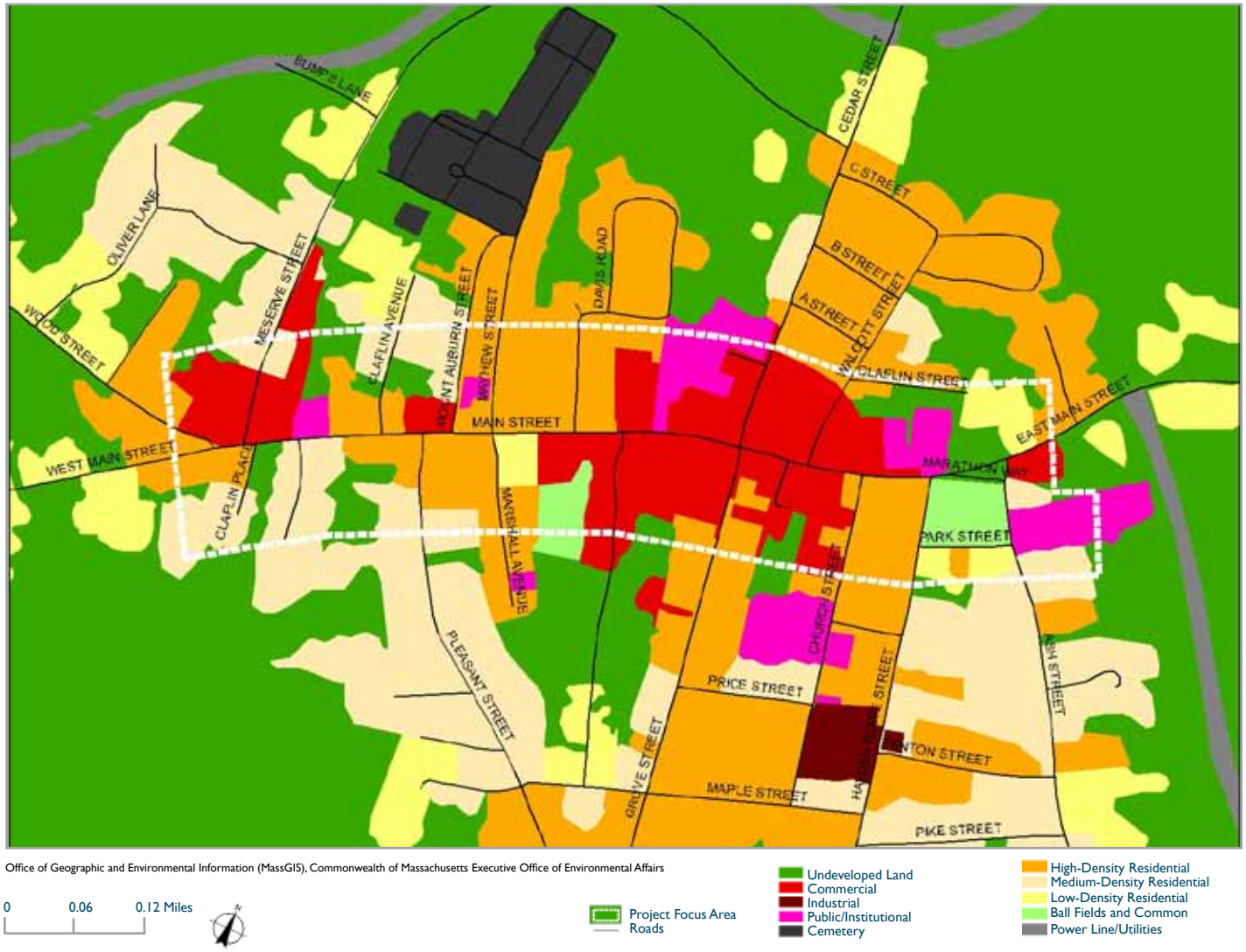


FIG 3.3 DOWNTOWN LAND USE: While there is a small amount of high-density residential development downtown, most Hopkinton residents live outside of the downtown.

Downtown land use is mostly residential

As described earlier, Hopkinton's town center is made up of a small, concentrated commercial district of local businesses along Main Street, with municipal and civic buildings mixed in (see Figure 3.3, opposite page). Some of the downtown landscape is open, including the town common and nearby baseball fields. The historic, high- and medium-density residential properties, ranging from a minimum lot size of a quarter-acre to half an acre, within a quarter-mile of the downtown commercial area make up 457 of the town's 5,883 acres of residential development (Hopkinton 2007 Master Plan, p. 12).

Downtown Hopkinton offers a few significant amenities used widely by town residents, like Colella's Supermarket. Residents have shared that for most other shopping and other commercial activity like entertainment, what is available in Hopkinton and in the downtown in particular does not adequately address the needs of the town's residents, leaving them no option but to engage in that commercial activity in surrounding towns rather than in Hopkinton.

POPULATION GROWTH

Hopkinton is growing. Over the past twenty years, the town has seen a remarkable population increase of over 50%, from around 9,000 people to over 14,000 people (MAPC Workforce Investment Area sheet). The Metropolitan Area Planning Council (MAPC) projects that the town's population will continue to grow, as part of a regional trend: by 2030, the greater Boston area, from the city westward to the towns along I-495, can expect around 465,000 new residents (see Figure 3.4). That growth is expected to be especially concentrated in suburbs with large areas of undeveloped land, like Hopkinton. The town's population will also be aging (Changing Population Fact Sheet).

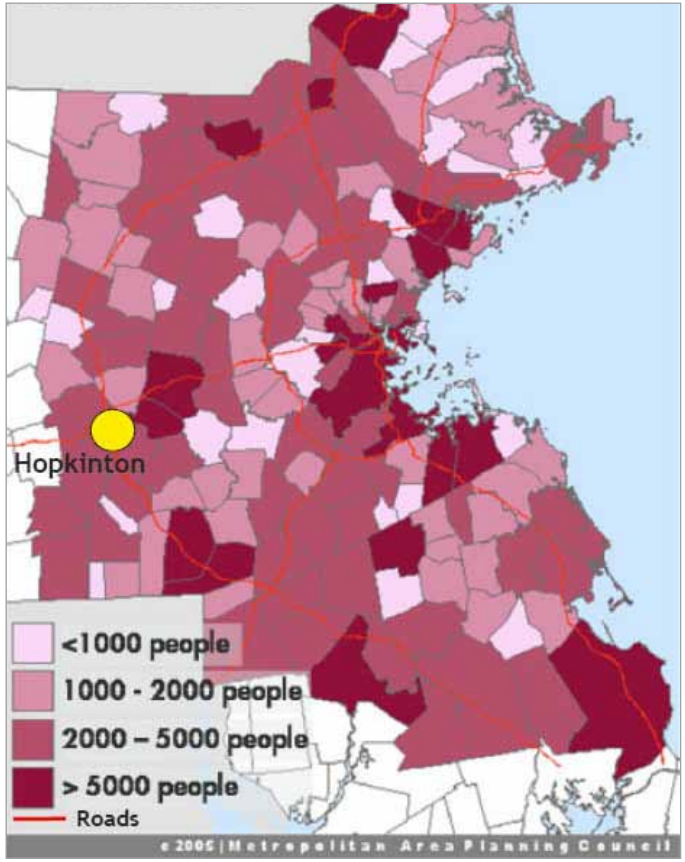


FIG. 3.4 REGIONAL POPULATION GROWTH SINCE 1990:
As a developing suburb, Hopkinton continues to feel impacts of regional population growth, mostly in an increase of residential development.

The town faces choices about how to grow. If Hopkinton accommodates its population increase through the town's

current growth model—low-density residential development spread throughout the town—then more of Hopkinton's landscape will transform from rural openness to large houses on large lots and other infrastructure to meet the demands of such development, like expanded roads. Such development could have direct impact on a large proportion of Hopkinton; 3,450 acres of currently undeveloped land are privately owned with no deed restrictions or legal barriers to prevent development. When surveyed in 2007, many residents named the town's rural character as their favorite aspect of Hopkinton. Their biggest fear for the town was over-development (Hopkinton 2007 Master Plan, p. 9). It is also important to note that the cost of low-density development to communities through necessary infrastructure and services like schools, fire protection, and road maintenance is much greater than the cost of higher-density development.

The MAPC is proposing a new approach to development in the region, focusing growth in existing town and village centers, through cluster and higher-density housing and closer to existing infrastructure and public transit. Developing the commercial bases of such towns to meet the needs of residents reduces the necessary distances traveled to work, to purchase goods and services, etc. This kind of change helps to create sustainable local economies. It cuts down on miles driven, reducing carbon emissions and dependency on fossil fuels. It can promote walkability by increasing the potential to access amenities on foot. The proximity of amenities to residences is especially important for the quality of life of those without cars and elderly people, of whom there will be an increasing number in Hopkinton in the future (Changing Population Fact Sheet).

ZONING

Hopkinton's zoning bylaws for the majority of the area outside of the downtown currently require low-density growth; around 90% of the town's landscape is zoned for houses on lots at least one or one-and-a-half acres. If the town were to adopt a new growth model like the one described above, zoning would need to be changed to preclude such continued development and facilitate denser development in places that already have development. While the zoning of the downtown area provides for a certain level of density, with a one-third-acre minimum lot size, buildings up to 35 feet tall (three stories), setbacks only five feet from the road, and a mixture of uses allowed, there are some changes that may be necessary to allow for more infill. An infill-oriented growth model would require zoning districts like the one in the downtown area, with the changing of minimum lot sizes from one-third acre to a smaller lot size allowing a higher level of density. The town could also establish an urban-growth boundary which would allow for growth in a concentrated area while maintaining the valued rural qualities of the majority of the town. Providing effectively for infill would also require a greater number of mixed-use buildings, i.e. first-story retail and second-story residential space. Incentive programs which encourage downtown property owners to bring mixed uses into their buildings could work toward increasing the number of mixed-use buildings downtown.

PEDESTRIAN AND VEHICULAR MOVEMENT

The vitality of a town center depends on people's ability to get there and move around within the neighborhood. In Hopkinton, access and circulation through the downtown are complicated by the fact that the downtown holds the

FORM-BASED ZONING

Zoning has historically separated land uses, leading to "the modern challenges of urban sprawl, deterioration of historic neighborhoods, and the neglect of pedestrian safety in new development" (Wikipedia 2009). Form-based zoning, on the other hand, relates to the shapes, sizes, and appearances of buildings in relation to one another and to the scale and types of streets and blocks, rather than to land uses. It is conducive to a mixture of uses and to more walkable neighborhoods. Form-based zoning takes a different approach in every town and is designed by the town to achieve a community vision.

Adopting form-based zoning for at least part of Hopkinton's town center could facilitate infill development and in particular close up some of the gaps between building façades. Form-based codes include a regulating plan, a project review process, technical definitions, and illustrations and text explaining the intentions of code provisions. They can also include standards for architecture, public space, building form, planting plans, signs, and environmental resources. For an example of a form-based code study, see http://www.gvmc.org/land use/formbasedcode.shtml.

RTE. 135 WEST BEFORE:
Varying setbacks and spaces between buildings create an open and exposed feeling at the crossroads. Original photo courtesy of Google.

CONCEPT OF RTE. 135 WEST AFTER:
Employing the principles of form-based zoning, now the crossroads and view up the hill is enclosed and framed by buildings, which have similar heights and come right up the sidewalk. Original photo courtesy of Google.

crossroads of two major travel routes. Currently, Hopkinton residents express a sense of danger and inconvenience in driving, walking, and biking around downtown Hopkinton. These feelings of danger and inconvenience are directly related to many elements of vehicular and pedestrian movement, such as long crosswalks and wide roads.

Cars dangerously dominate Hopkinton's town center

Traffic in downtown Hopkinton is:

- *Fast*. While the speed limit is 25 miles per hour throughout the downtown, much of the traffic seems to move faster. For pedestrians, even 25 miles per hour is high-speed traffic if street crossings are not sufficiently visible. Wide streets facilitate fast driving, and the width of Main Street, ranging from 30 to 60 feet, may contribute to the speed of traffic. Topography may also be a factor; cars may accelerate to higher speeds to make it up the hills and speed up going downhill.

- *Destructive*. Topography also contributes to another challenge in downtown Hopkinton. A member of the Downtown Revitalization Committee shared that the braking of large commercial trucks as they descend the hills of Main Street exerts so much pressure that the road folds in places, requiring costly resurfacing every three years.

- *Heavy*. Downtown Hopkinton's proximity to I-495 and the presence of Routes 135 and 85 mean that traffic downtown is substantial and continuous during the daytime. Within the 0.7-mile span of the project focus area, there are also seventeen streets intersecting Main Street. Six of these are major roads. While cars flow steadily through downtown Hopkinton all day, there is serious traffic congestion during the morning and evening rush hours. If plans address pedestrian safety partly by slowing traffic down, they should slow down only fast traffic and not the already-slowed rush hour traffic.

- *Conducive to conflicts*. Many accidents take place within downtown Hopkinton each year. (see Figures 3.5 and 3.6).

REVITALIZATION STRATEGIES

PEDESTRIAN SAFETY

Raised crosswalks can help increase pedestrian visibility and safety. Photo courtesy of Drdul/Creative Commons License

The Federal Highway Administration conducted a five-year study showing that marked crosswalks at uncontrolled locations or mid-block do not significantly improve the safety of pedestrians. Two-lane roads with a high volume of traffic need extra measures to improve crosswalk safety. Such measures can include crosswalk lights or beacons, signs alerting both vehicles and pedestrians, bump-outs reducing crosswalk length, traffic and pedestrian signals, raised crosswalks, and traffic calming measures like changes in road geometry to incorporate raised medians or speed tables (explained in more detail in the Design Guidelines section). Crosswalks especially need extra safety measures or traffic control devices where sight-lines are limited or where large truck traffic passes.

FIG. 3.5 CAR-TO-CAR ACCIDENTS:
Numerous intersections along Main Street contribute to frequent accidents. Accident data from Gallaher 2010.

A high proportion of these accidents take place at intersections. For example, in 2007 there were 43 collisions downtown. Eleven of Main Street's seventeen intersections were sites of multiple accidents (Gallagher).

Bicyclists are not provided for

Hopkinton currently has no bicycle lanes. Riding amidst the fast, heavy traffic downtown is very risky for bicyclists. Downtown also offers no bike racks.

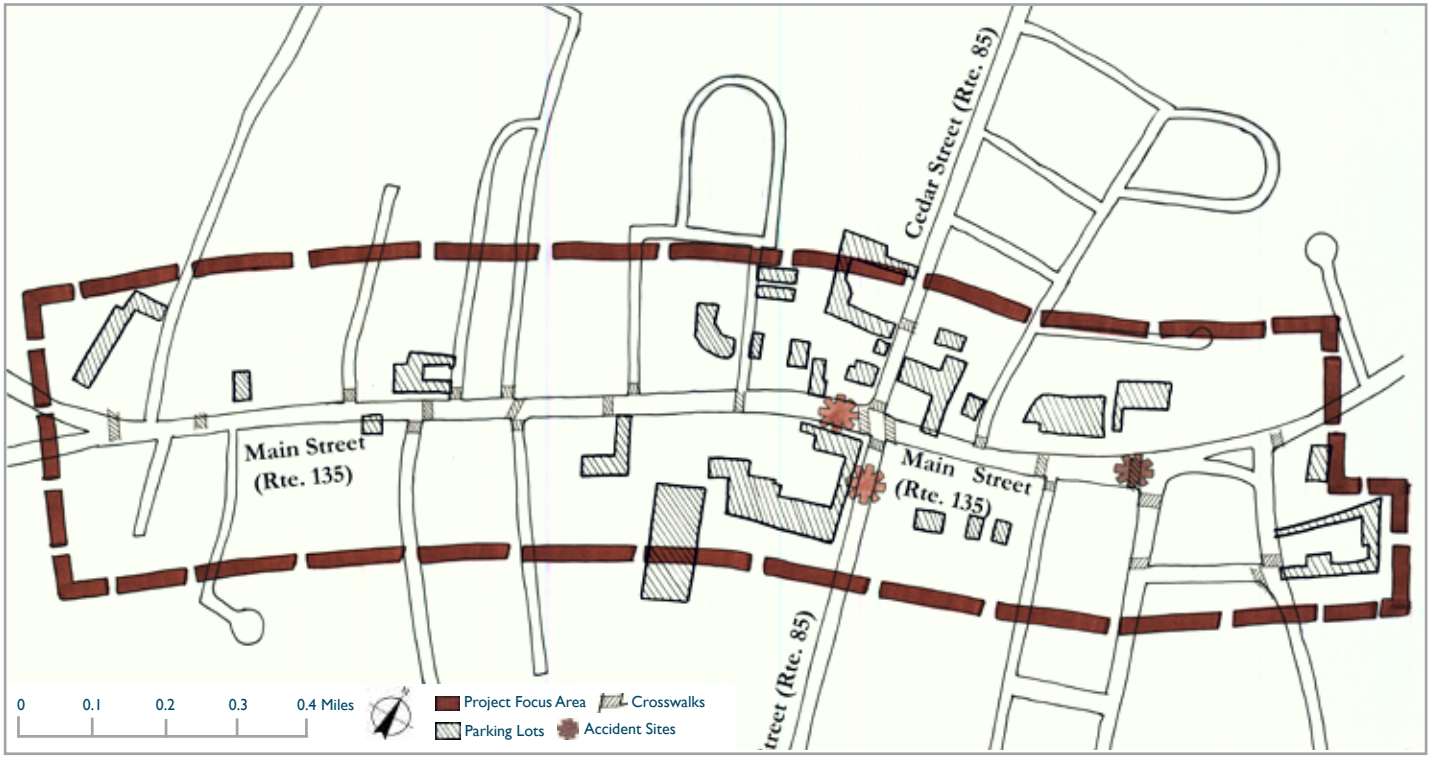


FIG. 3.6 CAR-TO-PEDESTRIAN ACCIDENTS:
Three pedestrian accidents in the last five years have left many residents apprehensive about crossing the street.

The pedestrian experience in downtown Hopkinton has been neglected

A downtown is to be experienced on foot. A lively downtown is a destination in itself rather than a place to park, run one errand, and leave. Retail businesses depend on the ability to get people out of their cars. But a number of vehicle collisions with pedestrians—three in the past five years, the most recent in December 2009—reflect that downtown Hopkinton is hazardous for pedestrians.

At public meetings, town residents also expressed their discomfort with and concerns about walking around the town center. A number of factors make downtown Hopkinton's pedestrian experience a poor one:

- *Street crossing signals are timed poorly.* At the intersection of Routes 135 and 85, pedestrians can face a wait of several minutes for the walk signal. The walk signal displays for both directions at the same time, yet too briefly to safely cross even one direction. Hopkinton residents have

expressed that as a result of the too-brief "walk" signal, even if they need to reach the corner diagonal to where they are, they cross only one direction at a time, doubling the wait time.

- *Street crossings are too long*. Downtown Hopkinton's street crossings range from 27 feet to 60 feet, and Hopkinton residents feel unsafe crossing many of them.

- *Crosswalks are invisible*. The paint at many crosswalks in downtown Hopkinton is not refreshed often enough to maintain visible street crossings. Crosswalks have no other indicators like reflectivity, flashing lights, signs, or bollards. Pedestrians feel unprotected from drivers; drivers feel unable to see pedestrians well enough and they recount many near-collisions.

- *Sidewalks are crumbling*. The sidewalks are not maintained often enough to keep them in smooth condition. Their condition reveals a low priority placed on the pedestrian experience. Crumbling sidewalks are unsafe for most people and completely unusable for some.

- *Walkways are exposed*. Comfortable walkways separate and buffer pedestrians from traffic by raising sidewalks at least six inches and placing objects, such as vegetation, bollards, or parked cars, between walkways and traffic. But many of downtown Hopkinton's sidewalks are at street elevation. Furthermore, street parking exists in only a small part of the downtown, with no other buffer between sidewalks and traveling cars except for utility poles on the northern side of the street, whose lines preclude the presence of most trees on that side of the street and where lines intersect.

- *Sidewalks are discontinuous*. The entire length of Main Street has sidewalks or pedestrian walkways on both sides. But on connecting roads, for example between downtown and the middle school and high school, sidewalks are not continuous on both sides of the street, making pedestrian access to downtown less convenient than it could be.

Parking is inconvenient

Hopkinton residents have said that due to the discomfort and danger of crossing downtown streets on foot, not being able to find parking very near their destination—especially on the same side of the street—is a major deterrent to patronizing downtown businesses. In downtown Hopkinton, most parking spaces are privately owned, and the culture discourages parking in spaces owned by a business other than one's destination. Additional municipal parking could encourage stopping downtown even if a space is unavailable in front of a particular business.

Private parking also occupies a large amount of space. Town zoning bylaws currently require downtown businesses to provide their own parking—for example, one space for every two seats in a restaurant, and four per 1,000 square feet of floor area (e.g. 25 feet by 40 feet) in a retail store. Requiring every business to have a parking lot makes a neighborhood less dense and less walkable, and the most thriving downtowns do not require it; for example, Northampton, Massachusetts has a thriving downtown with ample parking and gives businesses the option to pay a fee in lieu of offering off-street parking. Shared municipal parking consolidates the area taken up by parking, providing for downtown parking needs as well as private parking. A study in Hopkinton in early 2010 conducted by the town's Planning Board showed that even at the

downtown's busiest times, plenty of parking is available; consolidated, shared parking with the same number of spaces that currently exist would more than provide for current downtown parking needs, and a future increase in parking needs could be accommodated by more shared parking. Garages can accommodate more parking spaces in a given amount of land than lots can.

In a thriving downtown, people feel, and are, safe moving around. Plans for the downtown need to address the pedestrian experience, as well as problems with vehicular movement, indicated by the high number of accidents downtown.

STORMWATER

Downtown Hopkinton's stormwater flows from the street into catch basins, then through culverts that ultimately empty into Cedar Swamp about four miles northwest of downtown.

In the heaviest rainstorms, a few blocks of downtown Hopkinton experience flooding, at and immediately west of the intersection of Routes 85 and 135 (see Figure 3.7). Why does this area flood? Several major factors likely contribute.

Several factors contribute to flooding

Downtown topography contributes to the flooding (see Figure 3.8). The major intersection sits low, between two hills. Water from both of the hills collects at the lowest point, slowly emptying into the stormwater infrastructure that moves the water away to the Atlantic white cedar swamp to the northwest. Wetlands sometimes treat stormwater very effectively before returning it to the water table. However, this wetland is not only situated above an aquifer that is an important drinking water resource for nearby public and private wells, but the wetland is also a recreation area, home to many endangered plant species, and Massachusetts' first Area of Critical Environmental Concern (Cedar Swamp Conservation Trust). Inputs of pollutants from stormwater culverts could be contaminating this drinking water source.

Flash storms can lead to downtown flooding around the intersection of Routes 135 and 85. Photo courtesy of hopnews.com.

It is also important to look at pervious and impervious surfaces. A pervious surface is one through which water can infiltrate into the ground, like forest cover. An impervious surface is one that allows no water through, so the water runs off, like pavement and building roofs. Impervious surfaces cover 4% of Hopkinton. Within the project focus area, a much higher 46% is impervious surfaces (MassGIS). This means that in nearly half of the

FIG. 3.7 FLOODING IN DOWNTOWN HOPKINTON:
Topography, impervious surfaces and insufficient catch basins contribute to flooding in downtown Hopkinton.

FIG. 3.8 MAIN STREET TOPOGRAPHY:
Stormwater flows downhill from the residential area west of town and the dense commercial area to the east, and pools at the crossroads.

central downtown area, water does not percolate down into the water table but rather drains and pools, contributing to flooding. Furthermore, because the water is channeled out of the town center, the water table there is not recharged.

Finally, in the part of downtown where flooding occurs, there are not enough catch basins to deal with the largest storms' water volume.

Flooding can be damaging to both built and natural infrastructure, and can pose safety and public health risks. Flooding detracts from a thriving community, so Hopkinton needs to resolve flooding issues.

Hopkinton should address stormwater on-site

The Department of Public Works already plans to install more catch basins to better accommodate large volumes of stormwater. The excavation for that project could potentially be combined with the excavation for another project of importance to the town—burying the utility lines.

Conventional stormwater infrastructure moves water off-site as quickly as possible, not allowing for groundwater recharge. New engineering practices allow for more water infiltration as close to the site as possible. Many measures are available to increase infiltration and reduce runoff, such as rain gardens, bioswales, rooftop gardens, and pervious pavement. (See the Design Guidelines section for details.) These sorts of measures can be implemented both privately and publicly. Hopkinton could sponsor education on these sorts of measures, as well as implement them in streetscapes. The town could even offer incentives to implement such measures, potentially supported by savings on flood damage.

Addressing stormwater issues is key for a thriving town center, for safety, infrastructure integrity, and a welcoming and beautiful place. While Hopkinton has used conventional stormwater management practices until now, new strategies could infiltrate stormwater on-site and beautify the downtown. New strategies for stormwater catchment could improve the quality of water leaving through catch basins incorporated into biowales and help protect sites of outflow, such as Cedar Swamp, from contamination.

AESTHETICS

The vitality of a downtown depends in part on how it looks, sounds, smells, and feels to be there. The physical appearance of a place defines visitors' first impressions; the whole sensory experience significantly influences people's feelings about the place and how they use the place.

In public meetings for this project and in earlier surveys, Hopkinton residents have expressed dissatisfaction with the look and feel of their downtown. The factors that they have named especially often are the visually dominating utility wires and poles, the crumbling sidewalks, the lack of greenery and the road's "hard" character, and the loud, busy, car-dominated streetscape. These issues are highly significant to Hopkinton's Main Street experience.

Downtown topography offers views

A streetscape experience is influenced not only by the buildings, road, trees, and other immediate surroundings, but also by what is visible at greater distances. There are attractive views in Hopkinton that can be highlighted, and others that can be down-played.

CROSSROADS OF ROUTES 135 AND 85: Overhead utility lines dominate the views of the downtown.

RTE. 85 SOUTH: Low buildings and expansive areas of pavement create an open feeling.

RTE. 135 EAST NEAR COMMON: Roads are wide and well-maintained while sidewalks are narrow and crumbling.

RTE. 135 WEST: The narrow sidewalk is exposed to busy traffic headed towards I-495.

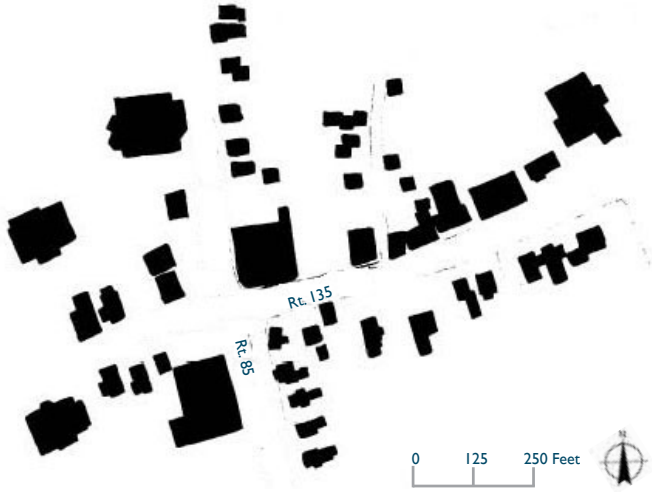


FIG. 3.9 HOPKINTON MASS/VOID:
Buildings (black) have a large amount of space (white) between.

FIG. 3.10 CONCORD MASS/VOID:
Buildings (black) have little space (white) between.

For example, Main Street's hills on both sides of the intersection with Route 85 provide extensive views of the downtown. These views are currently dominated by the pavement and overhead utility lines of Main Street. The views from those hills also make the single-story buildings at the major intersection look particularly small, creating a visual openness. On the other hand, approaching the top of the eastern hill from either direction, the Town Hall makes an especially stately impression through its size, position at the top of the hill, and proximity to the road. Tall buildings enclose a street, giving a physical boundary for movement and the feeling of a protective wall for pedestrians. Towns such as Northampton, Massachusetts have three- and four-story buildings that give definition to the streetscape. Taller buildings could better define Hopkinton's downtown as a place of commercial and residential activity.

To the east, north, and west of the downtown, treetops on the horizon reveal that the downtown is surrounded by forest on three sides.

Buildings and the spaces between them vary in size

An especially important element in the look and feel of a place is the composition of buildings (mass) and open spaces (void). A comparison with Concord, Massachusetts, a town with a similar population size to Hopkinton's and one with a downtown that Hopkinton residents have identified as appealing, illustrates how mass and void affect aesthetics.

While downtown Hopkinton's buildings are generally small (except for several municipal buildings, the grocery store, the drug store, and the Korean Presbyterian church), downtown Concord's buildings are larger and more

consistently sized. Hopkinton's buildings are mostly set back from the road at some distance, and widely spaced—sometimes with expansive parking lots; downtown Concord's buildings sit close to the road and so close to each other that they frequently share walls (see Figures 3.9 and 3.10). While only one corner of Hopkinton's major intersection of Routes 135 and 85 has a building close to the street, downtown Concord's corners are strongly defined by buildings. On Hopkinton's wide Main Street, inconsistent building sizes and setbacks break up the continuity of the commercial district. Building façades far from the street dissociate pedestrians from buildings' functions and forms. Concord's narrower street with buildings set consistently right up to the sidewalk creates a pleasing sense of enclosure. Pedestrians enjoy a closer look at available art, merchandise, services, and entertainment.

Awareness of the effects of mass and void can guide future development. There may not be significant change to downtown Hopkinton's buildings in the near future, but streetscape design elements could achieve the effects of some of the desirable qualities of downtowns like Concord's. For example, street trees can help to enclose a street. Sidewalk sales can bring activity close to the street. Infill can take the form of additional stories on buildings.

Hopkinton's strong individual elements do not currently blend together coherently. The street feels alternately exposed and enclosed, with a strong tendency toward exposure. While unifying the downtown is valuable in some ways, highlighting the differences in character between the different districts due to architecture, spacing, function, and activity could give the downtown a feeling of a rich, diverse personality. The downtown's topography could be a special asset if streetscape changes and future development keep views in mind.

SPOTLIGHT ON HOPKINTON

ARCHITECTURAL INVENTORY

Hopkinton has numerous architectural styles including Greek Revival.

Downtown Hopkinton's architecture represents a wide range of nineteenth- and twentieth-century styles. Out of the four districts of the downtown identified in the Existing Conditions section, the Dense Commercial district is the most architecturally unified, with many of the buildings sharing a similar early-twentieth-century commercial style. The Commercial at the Crossroads architecture takes various modern vernacular forms. The Residential on the Hill district is primarily composed of houses built since 1950 in various vernacular styles, but on the eastern side of the district, buildings are older and represent Greek Revival, Queen Anne, and Italianate styles. The Downtown Residential and the Common district boasts the most diverse range of historic architectural styles, including Georgian, Italianate, American Renaissance Revival, Queen Anne, Greek Revival, Richardsonian Romanesque, and bungalow. Hopkinton's architecture is already eclectic; new development is not limited to a particular style.

SPOTLIGHT ON HOPKINTON

SPACES FOR YOUTH

Hopkinton is a town of families. With schools from kindergarten through high school within walking distance, the downtown is a gathering place for much of Hopkinton's youth. Popular after-school spots are Bill's Pizza, the library, and seasonally the ice cream bar behind Hopkinton Drug. But these spaces do not sufficiently accommodate kids and teenagers after school. There are also signs downtown prohibiting skateboarding, a popular youth activity.

At public meetings, high school students and adults both expressed the need for more downtown social spaces for youth, as well as better sidewalk connectivity between the schools and downtown. Like most towns, Hopkinton could better involve its youth in the community; part of sustainability means incorporating people of all ages into community life and character. There are many possibilities for a network of social spaces for youth. As with social spaces in general, offerings should be diverse, and in particular should include both outdoor and indoor spaces. Some possibilities include an open gymnasium, a community swimming pool, a skate park, a playground, a removable ice skating rink, a bicycle cooperative (see www.westtownbikes.org/youth programs), other eating places for lower budgets, gardens, and art programs.

In some towns, youth successfully partner with community organizations to create facilities for youth-managed spaces and activities like performances, games, food, and hanging out. The future uses of several downtown buildings are up in the air; one of these buildings could potentially house youth-focused spaces.

Currently downtown Hopkinton does not provide adequate space or a welcoming atmosphere for youth. Providing space for youth is an important aspect of serving all populations and creating a vibrant downtown.

SOCIAL SPACES

The heart of a community is made of the places where people interact and connect. Participants in public meetings strongly expressed a desire for more social spaces. Currently, downtown Hopkinton is not a place where most of the town's residents go to interact with friends or fellow community members.

The downtown has several important social spaces

The downtown does have a number of important spaces for meeting with or running into people: the restaurants and coffee shop, Colella's Supermarket, the library, and, during various events especially in warmer seasons, the town common. But Hopkinton residents strongly feel the need for more social spaces.

While valued highly, the common doesn't function well as a social space.

Social spaces are inadequate

The town common could potentially serve more effectively as a casual social space outside of organized events. Currently, seating consists only of isolated benches. Clusters of seating could better promote gathering.

Social spaces need to be easily accessible. The downtown's social spaces may be difficult to access due to walkability issues. Walkability improvements will make pedestrians more comfortable. Due to the fast, dominating traffic and exposed, poorly maintained walkways, residents are uncomfortable walking around the downtown. They have said that if they are unable to find parking on the same side of the street as their destination, they may leave rather than park across the street and walk to their destination. In addition to other walkability improvements, municipal parking lots on both sides of Main Street would also make amenities more convenient.

New gathering places should be diverse

Diversity of function is important for creating lively social spaces. The existing meeting places in Hopkinton are mostly for eating. They are mostly indoors and privately owned, they primarily cater to adults, and they are largely daytime attractions. Jane Jacobs explains in *The Death and Life of Great American Cities* that social spaces "must serve more than one primary function; preferably more than two." These spaces must "insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common" (Jacobs, p. 150).

New spaces need to increase nightlife and offer morning-time meeting places. Some spaces should be small, others large; some should be public, others private. There should be places to take children. Parks offer many different kinds of spaces. Sidewalks should be widened to accommodate seating and sidewalk café tables, dog walkers, and universal access.

In public meetings, Hopkinton residents named two particular unmet needs for social spaces: spaces for youth and spaces for art. Hopkinton is home to considerable artistic talent; galleries and performance venues, or a public space like a visual and performing arts center, could help that talent to be better expressed in the community, as well as giving community members a highly meaningful gathering space. Businesses could better cater to Hopkinton's youth, and there are possibilities for youth-focused public spaces. A skateboarding park could turn

what is now a conflict into a lively social space. The town or another organization could partner with youth to find a venue for youth-run recreation, performance, and hangout space.

It is not enough to create places of diverse social connection. There needs to be the density of people to use these spaces (Jacobs 151). Infill of both residential and business units will increase the number of potential users of new and existing social spaces.

The town of Hopkinton is growing and with continued growth, there will be more demand for new and improved social spaces and their accessibility. Efforts to create and facilitate diverse, effective social spaces would likely be well rewarded by a more vibrant downtown.

ANALYSIS SUMMARY

Hopkinton's population is growing. The town center does not currently offer commercial amenities to meet the demands of the town's population. Hopkinton faces choices about how to accommodate its increase in population; the town could focus development in the downtown and other already-developed areas, preserving Hopkinton's valued open spaces and helping to enliven the downtown.

Downtown Hopkinton is currently characterized by frequent accidents, a sense of danger and inconvenience among pedestrians and bicyclists, and a sensory experience dominated by fast, heavy traffic. Collisions occur often, especially at intersections. Walkways are poorly maintained, not visible enough to drivers, and exposed. Improvements to intersections, traffic calming measures, and walkability improvements could significantly improve Hopkinton's downtown experience.

A few blocks of the town center flood during Hopkinton's heaviest rainstorms due to a combination of topography, impervious surfaces, and insufficient catch basins. Addressing stormwater runoff through on-site infiltration methods could reduce maintenance and expense as well as beautify the downtown.

The downtown has attractive architecture and pleasant views. Currently aesthetics are strongly defined by the overhead utility lines, poorly maintained sidewalks, minimal greenery, and heavy traffic. The street feels inconsistently exposed and enclosed. Four parts of downtown feel strikingly different from each other. Streetscape design could both build on those differences and introduce elements to unify the whole town center.

Downtown Hopkinton has several important social spaces, but residents wish for more. Hopkinton could enliven the town center by creating and encouraging a diverse range of spaces to accommodate a broad spectrum of activities, interests, ages, and times of the day, week, and year.

Design Guidelines

OVERVIEW

The analyses in the previous section highlight many challenges and opportunities facing downtown Hopkinton. The potential responses to these issues presented here as design guidelines have emerged from what residents shared at public meetings, from ways that other towns have responded to similar issues, and from the methods and theories of planners, scholars, and organizations working on these issues. This section of the report is intended to provide a palette of possible solutions, or a tool kit; it explains the reasons behind the choices made in the plan phases and provides more information about how to use them. The design guidelines that follow correspond with the project goals: economic development, pedestrian and vehicular movement, infrastructure, aesthetics, social spaces, and sustainability. The Plans section, beginning on page 53, illustrates how the principles and strategies here could be implemented in Hopkinton.

ECONOMIC DESIGN GUIDELINES

Downtown Hopkinton could become a unique neighborhood that substantially serves the community's commercial demands and complements the other commercial offerings of the region, contributing to a thriving local economy and enhancing quality of life. There are many principles that help create a vibrant economy.

Principles for economic revitalization and development

Revitalizing and developing a downtown economy requires a multi-faceted approach. Here are some steps Hopkinton could take:

1. Promote a range of local businesses that could offer a diverse shopping experience different from that available in surrounding commercial areas. Local businesses are also likely to reinvest more of their profits back into the local economy than chain businesses are (Civic Economies).

2. Encourage the development of businesses that serve the community.

3. Develop public/private partnerships to make improvements to aesthetics.

REVITALIZATION STRATEGIES

ECONOMIC INCENTIVE PROGRAMS

Communities across the country are making efforts to revitalize their downtowns. Various local, state, and federal programs and strategies are available to help new business start-ups in a downtown, including:

- Economic development overlay district
- Community Development Block Grant
- Community Preservation Act
- Empowerment Zones

4. Concentrate development and encourage mixed use, which makes it easier for residents and visitors to access amenities.

5. Harness local resources to create exports that can support local businesses.

6. Encourage businesses to contribute to the quality of life of residents and support social connections. Businesses that contribute to quality of life are a key part of thriving downtown, which in turn is good for business.

SPOTLIGHT ON HOPKINTON

IMPROVED QUALITY OF LIFE

In public meetings for this project, Hopkinton residents shared examples of what types of businesses they would like to see downtown to improve quality of life in the town. Their suggestions included bookstores, restaurants, boutiques, music venues, and youth and arts centers.

Hopkinton residents would like more restaurants downtown. Many residents frequent Ciao Time, an Italian restaurant on Main Street. Photo courtesy of John Phelan/ Creative Commons Attribution 3.0 Unported license.

SPOTLIGHT ON HOPKINTON

STEPS FOR ECONOMIC DEVELOPMENT

There are some specific strategies Hopkinton can employ to develop its downtown economy. For example:

- A retail market analysis would help the town better understand what types of businesses could thrive downtown. Such an analysis identifies the existing trade area, looks at the area's socioeconomic trends, examines how much of local commercial activity a town can capture, and explores the community's potential to support additional retail.
- When thinking about harnessing local resources, Hopkinton could develop the market for its two state parks, bringing into the community recreational tourists who could support local businesses when purchasing goods and services to accompany their recreational experience, like meals, lodging, and retail items.

PEDESTRIAN AND VEHICULAR MOVEMENT DESIGN GUIDELINES

Pedestrians play a fundamental role in creating thriving, vibrant downtowns. Safety, an inviting environment, and easy access to shopping all contribute to pedestrian-friendly spaces. Downtown Hopkinton faces challenges in creating this pedestrian-friendly environment due to the high volume of traffic passing through.

Most pedestrians arrive downtown in their cars, so planning needs to provide for convenient access by car as

well as on foot. Effective movement in a downtown means that it is easy for traffic to flow through, drivers understand where to go, and interactions between pedestrians and cars are safe. A thriving downtown is walkable—safe and appealing to pedestrians—and also safe for vehicles.

Principles to improve walkability

The Walkable and Livable Communities Institute defines walkability as

> *"the measure of the overall walking and living conditions in an area, defined as the extent to which the built environment is friendly to the presence of people walking, living, shopping, visiting, enjoying or spending time in an area."*

Walkability is an experience that relates to every aspect of moving through a space on foot. Walkability encompasses what a place looks like, what kinds of businesses are there, and what kinds of activities take place on the streets and sidewalks. Towns can follow a number of principles to improve walkability:

1. Allow a mix of land uses that serves commercial, residential, and community needs.

2. Connect streets to allow pedestrians to reach destinations quickly.

3. Develop high residential density to allow a local population to live within and next to downtown amenities.

4. Encourage building renovations and new construction to provide a sense of enclosure.

5. Design so pedestrians can see into storefront windows.

Storefront windows at pedestrian eye level contribute to a sense of walkability of a street, such as this shop in Pennsylvania. Photo courtesy of Cabinfevergallery/ Creative Commons Attribution 3.0 Unported license.

6. Keep pathways open during the winter for year-round access.

7. Offer well-laid-out public spaces like parks and squares, which facilitate important social connections.

8. Make walkways wide enough for at least two people side by side.

9. Offer diverse things to see and do on the street.

10. Highlight the unique character of the community.

Principles for safe interactions between pedestrians and vehicles

In addition to the principles above to improve walkability, a number of elements of streetscape and road design can contribute to a safe and positive experience for pedestrians, bicyclists, and drivers.

SOLUTIONS FOR STREETS, SIDEWALKS, AND CROSSWALKS

Streets and intersections can be dangerous and unpleasant for drivers as well as pedestrians. In recent years many towns have implemented creative, beautiful solutions to problems with safety and traffic. Some of these solutions can inform street infrastructure redesign for Hopkinton. To see how these strategies can be employed in Hopkinton, see the Plans section beginning on page 53.

Roundabouts

At the same time that roundabouts slow down traffic and reduce crosswalk length, they also typically move cars through with less than half the delay of a traditional four-way intersection with traffic signals. There are many styles of roundabouts and they can be beautiful. For pedestrian safety, roundabouts on busy roads need traffic signals.

Curved roads can slow traffic significantly. Photo courtesy of Project for Public Spaces.

Curves in the road

Traffic can be calmed through narrowing and adding curves to roads. Built-in curves can offer places for plantings. Alternatively, curves can be painted so that they do not change the built shape of a road, but they designate some areas as off-limits to drivers, which has the same effect as built curves. The area lost to drivers can be gained as parking space.

Medians, islands, and diverters

Built structures between travel lanes can slow traffic. They also reduce crosswalk length and provide refuge for pedestrians. They provide space that can contribute to a sense of place through art, signs, local materials, and vegetation. These built structures most effectively shorten street crossings when they are placed in the middle of a road; alternatively, they can be placed close to one side of the road to create a pedestrian or bicycle lane.

Medians slow traffic and give crossing pedestrians a place to rest. Photo courtesy of Richard Drdul/Creative Commons Attribution-Share Alike 2.0 Generic license.

Crosswalks

The visibility of pedestrian crossing areas can be improved by constructing them from materials different from street pavement, especially materials of strikingly different colors and textures like bricks or stone. Different materials are also more attractive than parallel painted lines. Diagonal crosswalks at four-way intersections, where traffic stops from all directions, allow pedestrians to cross directly to any other street corner.

Bollards help separate vehicles from pedestrians. Photo courtesy of <div xmlns:cc="http://creativecommons.org/ns#". about="http://www.flickr.com/photos/38607288@N03/4072928542/">http://www.flickr.com/photos/38607288@N03/ / CC BY 2.0

Bollards

Low, frequently-placed posts can safely separate pedestrians from cars, reducing the number of pedestrian-to-car accidents. They can serve other functions at the same time, like bike racks, and they provide ways to improve aesthetics through the addition of art or vegetation.

Sidewalk extensions increase visibility of crossing pedestrians Photo courtesy of Richard Drdul/Creative Commons Attribution-Share Alike 2.0 Generic license.

Sidewalk extensions and bump-outs

These structures can slow traffic by narrowing roads and increasing visibility of pedestrians. They can also enhance sidewalk life by adding space for existing sidewalk activities, such as signs or retail sale racks, or by adding more or different kinds of seating or socializing areas. They can be beautiful with plants, art, etc. Bump-outs can integrate well with and help to break up stretches of on-street parking.

Woonerven

Narrow streets where pedestrians come first and cars are visitors are being used extensively in European cities and towns, especially in the Netherlands. These streets are often surfaced with bricks or cobblestones to alert drivers that they are entering an area of increased pedestrian activity and are sometimes curved to further slow traffic.

Woonerven are narrow roads that cater primarily to pedestrians and force vehicles to drive very slowly. Photo courtesy of Project for Public Spaces.

SPOTLIGHT ON HOPKINTON

REMOVING UTILITIES FROM THE STREETSCAPE

A web of overhead utility wires detracts from the aesthetics of a downtown and also limits the placement of street trees. Utility lines can be removed from view through relocation or burial. While moving the lines costs less, doing so merely transfers the burden of their visual impact rather than eliminating it. Burying utility lines removes their visual impact entirely, but the process is expensive. The citizens of a town must vote to spread out the cost of the burial in their utility bills over a period of years.

The burial in Hopkinton should run the length of Main Street. An engineer from each utility company would need to evaluate Main Street to make a cost estimate. There is precedence for town-wide support for downtown utilities burial in many Massachusetts towns, including Canton, Westwood, and Norfolk.

This photo simulation shows what burying utility lines could do for improving the visual streetscape of downtown.

1. Make pedestrian street crossings easily visible to pedestrians and drivers.

2. Ensure that pedestrian street crossings are a comfortable length for people with diverse levels of mobility.

3. Set pedestrian crossing times of adequate length to allow people with diverse levels of mobility to cross the street safely, while minimizing wait times for crossing.

4. Employ traffic calming measures to keep cars traveling within the posted speed limit and slow enough through the downtown to allow reaction time to pedestrian movements.

5. Facilitate smooth traffic with brief delays.

6. Minimize car-to-car and car-to-pedestrian accidents.

INFRASTRUCTURE DESIGN GUIDELINES

Infrastructure should add to the efficiency and aesthetics of the downtown, be easy to maintain, employ sustainable practices where possible and be able to evolve with changes in land uses.

Utilities and stormwater are two types of infrastructure that are of particular concern to residents of Hopkinton and should be addressed in revitalization efforts.

Principles for effective infrastructure systems

When planning for stormwater management and utilities, a few principles can help create attractive and functional infrastructure systems:

1. Make utility wires easily accessible and ensure that they do not clutter the visual streetscape. A web of overhead utility wires detracts from the aesthetics and also limits the

SPOTLIGHT ON HOPKINTON

ON-SITE STORMWATER INFILTRATION

In Hopkinton, flooding detracts from downtown safety and aesthetics. Measures to mitigate stormwater runoff will become even more necessary as more buildings are constructed in the downtown and impervious surfaces increase. Hopkinton's Department of Public Works is already planning to build more catch basins in the flooding area; present and future stormwater needs could also be addressed through on-site infiltration mechanisms like rain gardens, bioswales, rooftop gardens, and pervious pavement.

Rain gardens help slowly infiltrate stormwater and can also be beautiful. Photo courtesy of Natural Resources Conservation Service.

Rain gardens

Rain gardens are shallow gardens into which water flows from roads, sidewalks, roofs, and parking lots and slowly infiltrates into the soil. In many municipal applications, rain gardens and bioswales are connected with existing stormwater infrastructure and they help filter pollutants out of the water before it enters drainage pipes. They are planted with plants tolerant of occasional flooding, in the case of heavy storms or flash floods. Bioswales are elongated rain gardens that run along roads to capture runoff. For the greatest infiltration, compaction of the soil must be minimized to allow for maximum permeability. Rain gardens should not be established in hardpan, which is almost impermeable. Any pipes that are part of the system must be cleaned of debris a few times each year, and removing accumulated sediment and debris, particularly at the inflow point, is normally the primary maintenance function for rain gardens. The plants should be native so that fertilizers and pesticides are unnecessary. For a maintenance schedule for a rain garden, see Urban Design Tools for Low Impact Development at www.lid-stormwater.net/bio_maintain.htm.

Curb cuts can be made to allow stormwater to infiltrate gardens. Photo courtesy of Natural Resources Conservation Service.

Bioswales are rain gardens that run parallel to streets and infiltrate stormwater. Photo courtesy of Natural Resources Conservation Service.

Rooftop gardens

Rooftop gardens help infiltrate rainfall that would normally run off of impervious roof surfaces. They require structures that can support the weight of a garden. The sizes of gardens and the types of plants grown vary according to the weight-bearing capacity of the structure. Rooftop gardens can be implemented into new built structures and, where possible, designed into existing structures.

Rooftop gardens are another way to infiltrate storm water. Photo courtesy of Santa Barbara Project Clean Water.

placement of street trees. Consider burying or moving masses of utility lines.

2. Infiltrate stormwater on-site. Conventional stormwater infrastructure transports water away from the site through underground pipes. These systems can effectively prevent flooding; however, they can be costly to maintain or expand if problems occur, and they deplete the water table.

AESTHETIC DESIGN GUIDELINES

Many of the elements that give a downtown aesthetic appeal are important for other aspects of a thriving downtown. For instance, well-maintained sidewalks are important not only for aesthetics but also for pedestrian safety. Visually important elements can also contribute to ease of access and circulation for pedestrians and vehicles, clarity of connections throughout the town, improved infrastructure, traffic calming, and overall coherence. Aesthetics can add greatly to a town's character and identity and can highlight the unique qualities of the community (Fisk). Some aspects of aesthetics to consider include :

- Horizons and vistas
- Pathways and approaches
- Districts and their edges
- Landmarks
- Architectural styles
- Vegetation and surfaces
- Amount of space between buildings
- Gateways
- Pedestrian amenities (lighting, seating, signs, etc.)

Principles for beautifying and unifying the downtown

Communities and town departments can take a number of steps to improve aesthetics:

1. Develop signs that embody the community's character and are clear for both drivers and pedestrians.

2. Implement a cohesive planting plan throughout the downtown.

3. Maintain sidewalks in good, working order and widen them to accommodate pedestrians and sidewalk life.

4. Encourage continuity between building façades when buildings are renovated.

5. Define gateways to help identify a downtown area or district and provide an opportunity to hang banners about events or to welcome or thank visitors.

REVITALIZATION STRATEGIES

COLLABORATION FOR FACADE IMPROVEMENTS

The appearance of buildings is a significant part of downtown aesthetics and influences whether people want to shop, spend time there, and open new businesses. Business and property owners can individually make improvements to building façades, or they can create a pool to improve façades throughout the neighborhood. Chambers of Commerce in some towns have met with success by holding trainings for business owners in storefront display improvements and encouraging sidewalk sales and the interface between businesses and public space.

REVITALIZATION STRATEGIES

CREATING CONTINUITY DOWNTOWN

Visual continuity between the different parts of a downtown can make the space more beautiful and coherent. Building density and streetscape design elements play a large role in achieving that.

Similar facades and setbacks among buildings can contribute greatly to aesthetics. Photo courtesy of LGagnon/ Creative Commons Attribution-Share Alike 2.5 Generic license.

Ornaments like poles for flower baskets, signs, seating, trash receptacles, movable pots, and light posts can enhance downtown character and identity. Signs can be used to highlight key features of the city and can be consolidated at key points to reduce visual clutter.

Buildings should be tall enough to provide a sense of enclosure yet short enough to prevent claustrophobia. Engaging with façades and being able to see inside buildings is important for the pedestrian experience, so building setbacks should be small. Tight, consistent spacing of buildings also contributes to the feeling of a downtown, and breaks in that pattern can be used to draw attention to places of interest.

6. Redirect the focus away from parking and cars and onto gathering places, plants, signs, vistas, etc.

7. Establish a cohesive design palette for streetscape infrastructure.

8. Develop a continuous street feel through building height, setbacks, and spacing.

REVITALIZATION STRATEGIES

PLANTINGS AND SIDEWALK DESIGN

Plantings can be done in a variety of places and help to beautify the street. Photo courtesy of Richard Drdul/Creative Commons Attribution-Share Alike 2.0 Generic license.

Street trees, seasonal plantings in hanging baskets and raised planters can add beautiful colors and aromas to the streetscape, and they can visually link the different areas of a downtown. Plants in medians, islands, curb extensions, and sidewalks can also buffer pedestrians from traffic, improving safety and comfort.

When designing sidewalks, twelve feet is a desirable width for sidewalks in town centers, which allows two or more people to walk side by side.

Varying paving materials for different kinds of pathways like sidewalks, crosswalks, curb-cuts, and driveways can also enhance aesthetics and improve pedestrian safety through visibility of crosswalks.

SPOTLIGHT ON HOPKINTON

PARKS, SQUARES, AND PLAZAS

These types of public outdoor social spaces are important and valuable parts of a downtown. The Project for Public Spaces suggests that the influence of these types of places should extend beyond their borders for at least a block in multiple directions, and that these places should be funded by a range of different sources such as town departments, taxes on adjacent properties, benefit fund-raisers, and rent from commercial uses on the site. In Hopkinton, pocket parks, small parks tucked in between buildings and open spaces, would contribute to the social spaces downtown.

Parks are important social spaces. Photo courtesy of http://www.flickr.com/photos/yourdon/ / CC BY-SA 2.0 .

SOCIAL SPACES DESIGN GUIDELINES

A downtown is about people. The best-loved downtowns facilitate diverse interaction—between friends, between strangers, planned, and unplanned. That social chemistry develops organically, as a downtown becomes lively. But public and private revitalization efforts can lay important groundwork for a socially thriving downtown, through the design of public spaces and events.

Principles for effective social spaces

Creating frequented social spaces that serve community needs requires a number of considerations:

Sidewalks provide great opportunities for social connections, like this sidewalk cafe on Newbury Street in Boston. Photo courtesy of Momos/Creative Commons Attribution-Share Alike 2.5 Generic license.

1. Provide a diverse range of public spaces that serves a variety of activities and people.
2. Offer activities with broad appeal all year and at multiple times of day and week. Diverse events like art shows, fairs and sales, and seasonal festivals would draw people downtown throughout the year.
3. Ensure the ability to move around public spaces safely.
4. Keep the streetscape clean, safe, and well-maintained.
5. Offer a range of appealing seating options to suit all ages and abilities.

REVITALIZATION STRATEGIES

THE IMPORTANCE OF SEATING IN PUBLIC SPACES

In the film *The Social Life of Small Urban Spaces,* planner William Whyte identifies seating as the single most important element of public spaces. Where there are places to sit, he says, people like to sit—especially where they can see whatever is going on, and near but not quite in pedestrian flows.

Green Acre, in New York City, has a variety of seating options for pedestrians. Photo courtesy of http://www.flickr.com/photos/bettyx1138/ / CC BY 2.0 .

A variety of different types of seating options is ideal—stationary and movable, lower and higher, in the sun and in the shade, solitary and in groups, closer or further from activity. Effective seating options help bring people into a space.

SUSTAINABILITY DESIGN GUIDELINES

Good planning looks not only at the focus area in the present but also beyond it to consider its interconnections and interdependence within the surrounding region and the world over time. Sustainability is about designing and living in ways that recognize these relationships, valuing the health of whole ecological and social systems, and understanding that the existence of any part of a system depends on the well-being of the whole system, just as the whole system depends on the well-being of its parts.

In the twenty-first century, increasingly clear understanding of global and local ecological and social relationships is inspiring many forms of action, like the local and organic food movements, community-building efforts, and policy to address climate change. Planning for sustainability works toward improving the integrity of the interconnected systems of ecology, social equality, and the economy. Sustainability works toward improving quality of life in the present while also making steps that will maintain quality of life in the future. How a community, and specifically a downtown, is planned has direct links to sustainability; community social life, aesthetics, pedestrian and vehicular movement and transportation, infrastructure, and the economy can all be designed to implement sustainable strategies. Many of the changes that this report suggests could contribute to Hopkinton's sustainability—like improved walkability, on-site stormwater infiltration, a more local economy, more diverse social spaces, and infill and mixed-use development.

Principles for working toward sustainability

Some principles to guide development and community life toward sustainability, adapted from the Ontario Round Table on Environment and Economy, include:

1. Value cultural and biological diversity.

2. Integrate ecological considerations into all municipal, business, and personal decision-making processes.

3. Make decisions and plans in balanced, open, and flexible ways.

4. Harness local resources and efforts.

5. Use renewable sources of energy and materials.

6. Promote ecological and social justice values throughout the community through education.

7. Minimize harm to the natural environment.

8. Establish growth limits taking into consideration the carrying capacity of a system.

Cedar Swamp is a valuable resource for wildlife habitat and water for the region. Photo courtesy of Cedar Swamp Conservation Trust.

SPOTLIGHT ON HOPKINTON

SUSTAINABILITY

Many revitalization measures suggested in this report could contribute to ecological and social connections and local resiliency:

- Protecting and connecting green spaces; recognizing ecologically special places, like the Atlantic white cedar swamp
- Encouraging a local economy
- Improving local transit and connection with regional transit
- Focusing development in already-developed areas
- Developing a curriculum for local schools focused on Hopkinton, its ecology and natural resources, history, economy, and regional relationships to raise awareness of ecological and social justice issues
- Enhancing walkability
- Using more renewable energy

Hopkinton's police building recently installed solar panels and reduced their dependence on traditional energy.

PLANS

OVERVIEW

This section of the report weaves specific solutions from the palette of the Design Guidelines section into coherent phases of a vision for a revitalized town center of Hopkinton. Changes to the streetscape, infrastructure, and social spaces of Hopkinton will cost money and take time. But each part of revitalization can be implemented gradually.

PLAN PHASE 1: STREETSCAPE REVISIONED

Phase 1 focuses on first steps that Hopkinton can take to revitalize the town center. It outlines measures to improve pedestrian safety and traffic flow, aesthetics, social spaces, and other elements that work toward making the downtown lively and engaging.

1. Gateways

Gateways highlight the entrances to the downtown, near the intersection of Wood and Main Streets on the west and Ash and Main Streets near the common on the east (See Figure 4.0). Through coordinated signs, ornamental trees, and other vegetation, these areas welcome visitors to the downtown area and let them know that they are entering an area with more pedestrians, activities, and amenities.

2. Points of interest

Signs on Main Street announce points of interest like historical sites and direct visitors to attractions like town ball fields, the Center Trail head, and the town common. Some of these attractions and points of interest are not immediately visible on their own from Main Street, and signs help visitors and residents find them more easily.

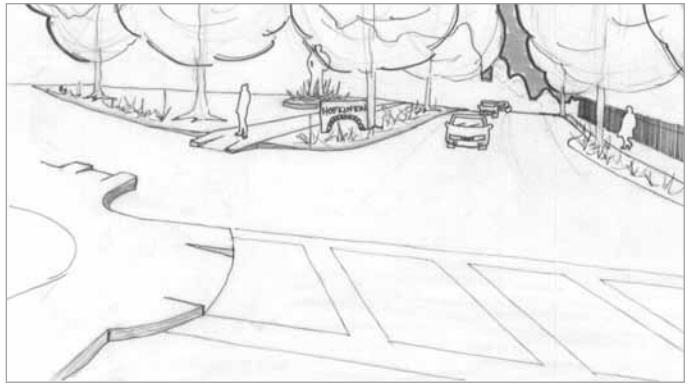
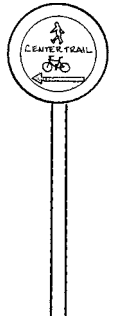


FIG. 4.0 GATEWAY: A gateway added near the common would alert visitors to a distinct downtown area.



3. Tree-lined streets

The experience of driving and walking through the residential and less dense parts of downtown is enhanced by the addition of tall, broad trees along the roadways and between the sidewalk and vehicular travel lanes. These trees narrow travel lanes. A narrowed street

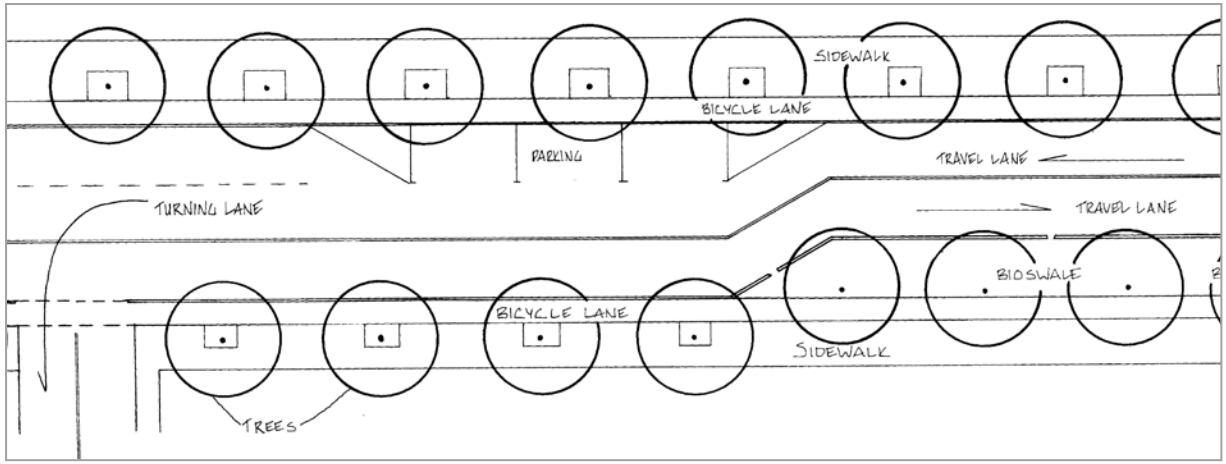


FIG. 4.1 TREE-LINED STREETS: This planting pattern narrows travel lanes and unifies districts.

helps slow speeding traffic, and the trees create a visual buffer between pedestrians and vehicles. To accommodate street trees as well as improve overall aesthetics, utility lines have been buried. Bioswales have also been installed to infiltrate stormwater runoff on-site. The trees lining the streets unify the various districts of the downtown. Breaks in the street trees could provide spaces for on-street parking (see Figure 4.1).

4. Downtown commercial center

The center of the downtown is designated in the existing commercial area and is highlighted by cohesive signs, street lamps, planters, seating, waste receptacles, and other elements (see Figure 4.2). These street elements help visually connect the formerly disjointed scene found throughout Main Street and improve the overall appearance of the area, while downtown property and business owners are encouraged to make necessary façade improvements in stylistically similar ways. Unifying streetscape elements extend from the first hints of commercial development near the old high school at 78 Main Street, eastward along Main Street to the town common.

FIG. 4.2 COMMERCIAL CENTER: Cohesive seating, street lamps, and other street elements can help establish a downtown center.

PLAN PHASE 1: STREETSCAPE REVISIONED

5. Crossroads of Routes 135 and 85

Rain gardens surround and beautify this intersection, softening hard surfaces and providing a soft barrier between pedestrians waiting to cross the street and moving traffic (see Figure 4.4). The vegetation catches and infiltrates stormwater runoff. Sidewalks are angled to drain into these rain gardens. The southern segment of Route 85 is widened by a few feet to allow for the addition of a left turn lane to decongest heavy traffic (see Figure 4.3).

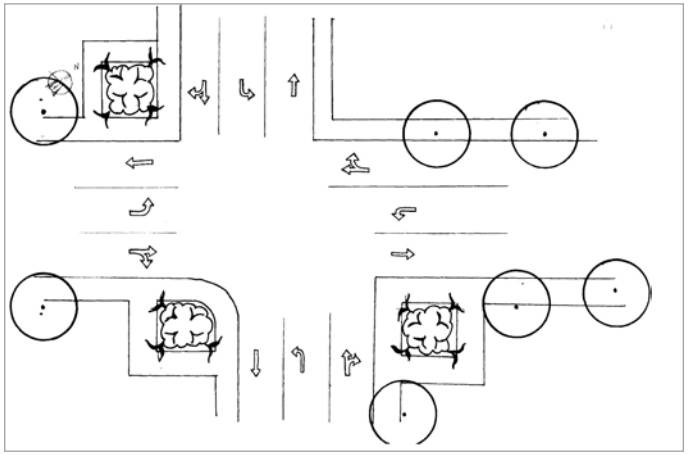


FIG 4.3 CROSSROADS: Turning lanes on all sides help move traffic, and surrounding rain gardens drains stormwater.

SPOTLIGHT ON HOPKINTON

PEDESTRIAN CROSSING BEACONS

PEDESTRIAN CROSSING BEACONS: Crossing beacons can help make pedestrians safer when crossing the street.

Crossing beacons provide pedestrians with a safer, more visible street crossing by alerting traffic in both directions that someone is crossing the road. They are pedestrian-activated and can stop traffic with a red light or warn traffic to yield with a flashing yellow light. Beacons are especially important at crossings where visibility is diminished by parked cars, heavy traffic moves through, or where people cross frequently.

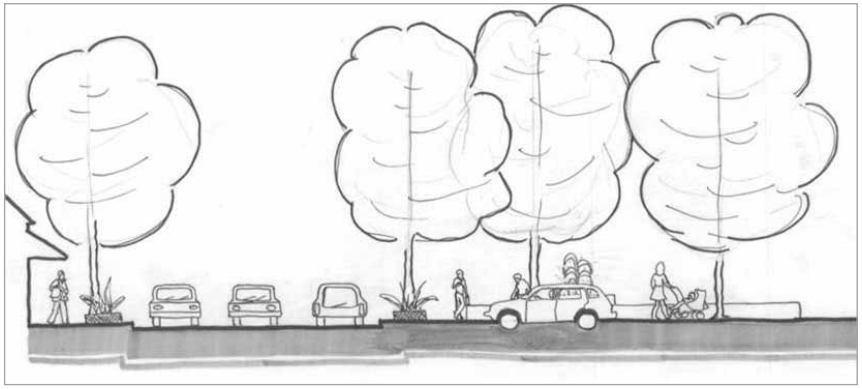


FIG. 4.4 RTE. 135 LOOKING EAST: Street trees, rain gardens, and a pocket park improve the crossroads.

6. Crosswalks

Pedestrians feel safer crossing the street due to resurfaced and raised crosswalks along all of Main Street (see Figure 4.5). Red bricks help crosswalks to visually stand out from the asphalt, and their height above the street helps to slow cars as they move through these pedestrian-heavy areas. Crossing times are also longer to allow adequate time to cross the street. The especially heavily-used crosswalk between the library and Bill's Pizza has the additional measure of a pedestrian-activated crossing beacon.

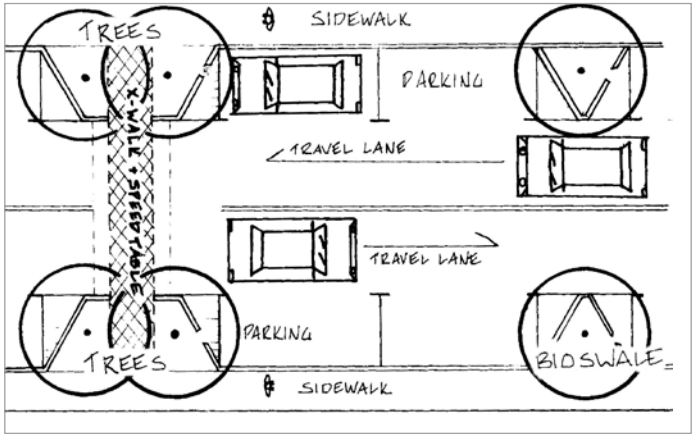


FIG. 4.5 CROSSWALKS AND COMMERCIAL ON-STREET PARKING: Raised and resurfaced crosswalks are surrounded by street trees.

7. Pocket parks

Small parks, established through public-private partnerships, are found throughout downtown. Undeveloped parcels of land and the large setbacks of historic former homes that now house businesses are ideal places for pocket parks (see Figure 4.6). These public places allow for social interactions and incorporate open spaces into the streetscape.

8. Street trees and on-street parking

Small ornamental trees beautify on-street parking in the downtown commercial district. These trees improve the pedestrian experience by enclosing the sidewalk and adding seasonal interest. They carry the theme of tree-lined streets from the rest of downtown into the town center's commercial heart. As in the rest of downtown, these street trees are planted in bioswales to infiltrate stormwater (see Figure 4.5).

9. Municipal parking lot and shared parking

When street parking is full, visitors to the downtown can easily find parking behind the Town Hall in the now-municipal parking lot, previously privately owned. Appropriate signs alert drivers on Main Street to this parking lot, and vegetation visually buffers Claflin Street residences from parked cars. Shared lots and access points between businesses allow pedestrians to reduce the use of their cars by being able to stay parked in the same space during their time in the downtown. Business owners sharing access points to parking lots also reduces the number of curb cuts along Main Street, improving the streetscape and pedestrian safety. (see Figure 4.10, p. 55, and Figure 4.13, p. 57).

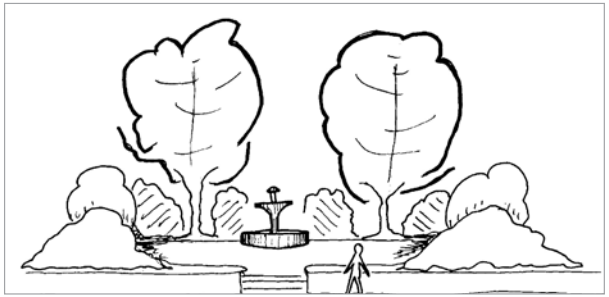


FIG. 4.6 POCKET PARKS: They can go in a variety of small spaces around buildings

PLAN PHASE 2: GROWING THE HEART

In the Hopkinton that this phase envisions, the town has made the changes described in Phase 1 and the downtown is becoming the heart of the community with many lively places where people interact. Phase 2 outlines steps to continue improving pedestrian safety and social spaces, while beginning infill development to encourage more businesses and residents downtown. All of these factors and more contribute to a downtown that is part of an increasingly resilient, thriving community.

1. Mixed-use and commercial infill

In the commercial and mixed-use areas of the downtown, zoning has been adjusted and development is taking place to fill in the spaces between buildings. New buildings are two or three stories to better enclose the street (see Figure 4.7). Property owners have added stories to some older buildings to provide additional space for businesses and residences. Additional residential infill in mixed-use buildings, condos, and single-family homes brings more people downtown for living and using the downtown

FIG. 4.7 MIXED-USE INFILL: Looking south on Rte. 85, mixed-use infill adds more businesses and people living downtown.

PLAN PHASE 2:GROWING A HEART

businesses and amenities; an increased rental stock draws more residents into the downtown. The development of mixed-income housing helps to bring diversity to the downtown and meet the state requirement for affordable housing.

2. More parks

The downtown park system is expanding, allowing public access to downtown forested areas and other open spaces in addition to the smaller pocket parks along Main Street in front of businesses and municipal buildings.

3. Medians

In areas of fast-moving traffic around intersections along the western, northern, and southern corridors into town (for example, the intersection of Pleasant and Main Streets), vegetated medians slow speeding cars before they enter the heart of the downtown (see Figure 4.8)

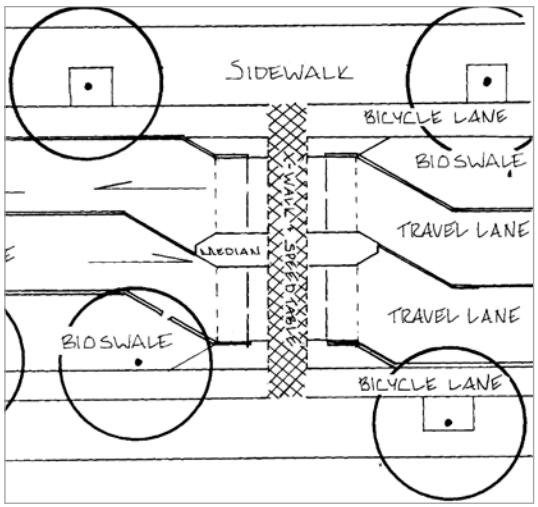


FIG. 4.8 MEDIANS: On roads coming into town, medians help slow speeding traffic.

4. Crosswalks and bicycle lanes

Street trees and bioswales in widened sidewalks narrow the overly-wide road. Raised and resurfaced crosswalks with bump-outs make pedestrian street crossings safer (see Figure 4.8). As more people are choosing to live downtown and get around by bicycle, bike lanes are added to the street (see Figures 4.8 and 4.9).

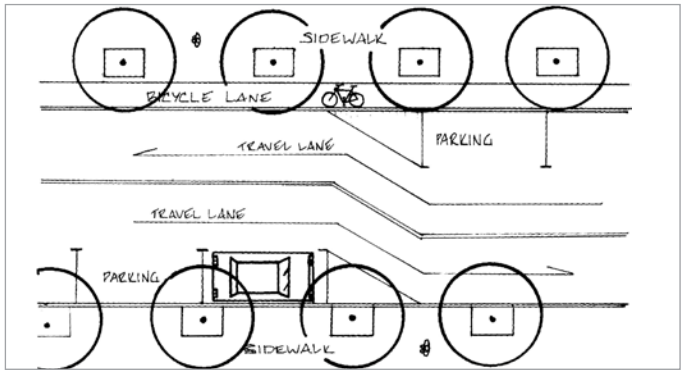


FIG. 4.9 BIKE LANES: Widened sidewalks planted with street trees and bike lanes help to create a pedestrian and bike-friendly downtown.

5. Downtown programming and the common

A weekly farmers market helps make use of the valued town common. Other activities like fund-raisers, ice sculpture contests, and a temporary ice skating rink also draw residents to this historic site throughout the year.

6. Municipal parking lot and garage

The parking lot behind Colella's is now another municipal lot. More parking is available to visitors in a three-story municipal parking garage behind the Town Hall, built on the municipal lot, in response to increased downtown activity. Green screens, panels with vegetation, cover blank façades and beautify the garage(see Figures 4.10 and 4.11).

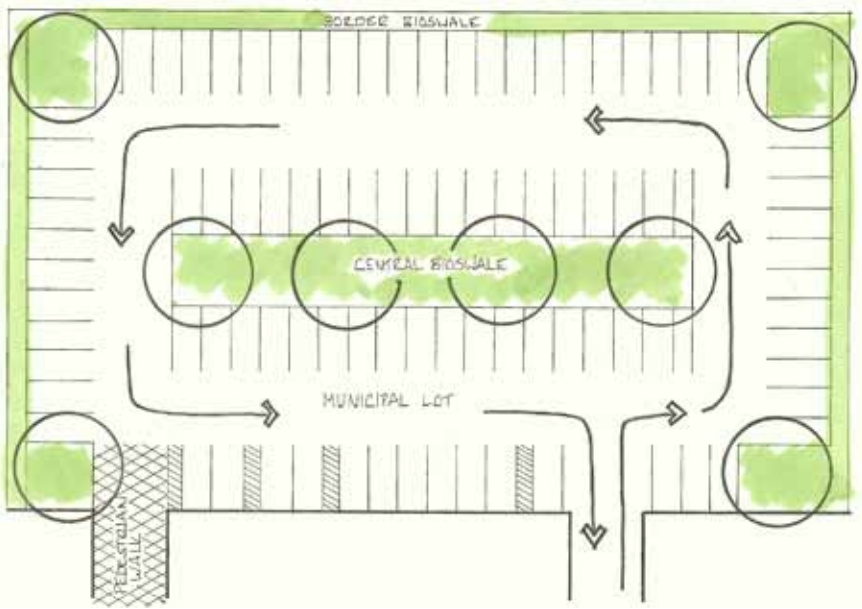


FIG. 4.10 MUNICIPAL PARKING LOT: A municipal lot behind the Town Hall offers 93 parking spaces, including four handicap and two motorcycle spots, close to amenities.

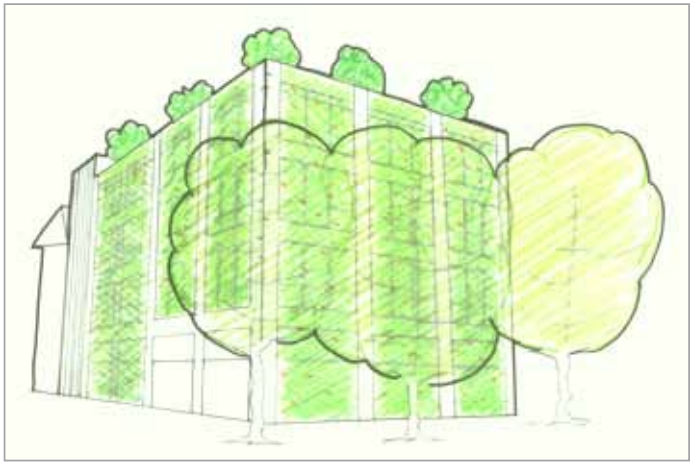


FIG. 4.11 MUNICIPAL PARKING GARAGE: Green screens help beautify a parking garage.

7. Increased and repurposed social spaces

New businesses and repurposed buildings offer new social spaces. The shuffling of uses of the Center School, library, and Town Hall buildings opens up possibilities for public spaces like a visual and performing arts center, a youth center, or a community meeting hall.

8. Greenway

Residents enjoy new pedestrian and bike routes as well as social and outdoor spaces with the addition of a greenway around the perimeter of the downtown. The greenway connects many of the pocket parks, following an old rail bed, utility lines, and property lines. The greenway incorporates a portion of the Upper Charles Trail and connects to the new Legacy Farms development along Wilson Street. Legacy Farms residents can access downtown amenities through the greenway or extended sidewalks along Route 135.

FIG. 4.12 GREENWAY: Greenways provide opportunities for making social connections and enjoying Hopkinton's rural qualities.

REVITALIZATION STRATEGIES

STREET TREES

Ginkgo trees are fine street trees and offer brilliant fall color. photo courtesy of Sunroofguy/

Street trees provide cooling shade and a visual buffer from traffic; they soften hard surfaces and beautify the streetscape. They can mitigate flooding by slowing down water before it hits the pavement. Street trees need frequent maintenance. A plan to incorporate them must include the initial cost of implementation as well as yearly maintenance costs for pruning, leaf collection, and potentially sidewalk maintenance if tree pits are not designed properly. To maximize tree longevity, plants must be handled properly and continually cared for. Some problematic conditions to watch for are soil compaction, air and water pollution, drought, and poor soil quality. For tree planting requirements, see the New York City Department of Parks and Recreation Department Tree Planting Standards, April 2008, and Cornell Structural Soil. Some of the most tolerant street trees for New England include (Dirr 452):

- Hedge maple/ *Acer campestre*
- European hornbeam/ *Carpinus betulus "Fastigiata"*
- Thornless honey locust/ *Gleditsia triacanthos var. inermis "Shademaster"*
- *Ginkgo biloba "Princeton sentry"* male only
- Chinese elm/ *Ulmus parvifolia "Drake"*
- Littleleaf linden/ *Tilia cordata*

SPOTLIGHT ON HOPKINTON

FUTURE CONNECTIVITY BETWEEN HOPKINTON AND LEGACY FARMS

As the extensive Legacy Farms development is built over the next ten years in east Hopkinton, new residents living in the development could increase Hopkinton's population by over 20%. Such a population increase represents a large increase in potential users of downtown amenities. Route 135 connects Legacy Farms with downtown Hopkinton, but that section of road currently has no sidewalks or bike lanes. A multi-use path could connect the downtown and Legacy Farms for biking and walking. Such a trail could also connect with the greenway around the downtown proposed in this report. Hopkinton's sustainability depends on its resilience in the face of the changing economy, environmental issues, and growing population; enabling walking and biking as transportation can improve quality of life and reduce dependency on cars and diminishing sources of non-renewable energy.

SPOTLIGHT ON HOPKINTON

REDESIGNED CIRCULATION ROUTES

The many streets, driveways, and parking lot entrances currently intersecting with Main Street expose pedestrians to entering and exiting traffic and give rise to frequent vehicle collisions. These intersections and curb cuts also break up the visual consistency of downtown Hopkinton's streetscape. Rerouting some traffic and reducing the number of curb cuts on Main Street could make the street safer and improve the street feel.

9. Rerouting of roads and driveways

Car access to streets like Mount Auburn and Summer Streets—primarily residential streets intersecting with Main Street that can be accessed easily via other roads—is closed off from Main Street, reducing the number of intersections and associated collisions along Main Street as well as pedestrian exposure to turning cars (see Figure 4.13). Closed-off side streets in residential areas are calmer with less traffic driving through. To further reduce curb cuts and accidents, businesses share driveways to parking lots, and Main Street driveways to businesses that also have side-street entrances are closed off. Access to municipal parking is limited to one curb cut per lot or garage.

FIG. 4.13 REROUTED ROADS AND DRIVEWAYS: Closing off some of the roads into Main Street would help reduce collisions.

10. Green buffers in front of street-side parking lots

Street-side parking lots, such as those in front of Colella's and the gas station and beside Hopkinton Drug, currently break the continuity of the streetscape and expose pedestrians to expanses of pavement. In Phase 2, vegetated buffers along the fronts of these parking lots help to incorporate them into the streetscape and beautify the area (see Figure 4.14).

FIG. 4.14 PARKING LOT BUFFERS: Vegetation can help buffer views of large expanses of pavement in street-side parking lots.

11. Walkway to municipal parking

To improve pedestrian access to the municipal parking behind the Town Hall, the driveway between the Town Hall and Bill's Pizza has been turned into a pedestrian-only path. Seating, lighting, and vegetation make the walkway an inviting social space. Along with improved crosswalks, sidewalks buffered from traffic by trees, and the various other pedestrian safety measures already described, this walkway contributes to a better pedestrian experience throughout the town center (see Figure 4.16).

FIG. 4.15 BILL'S PIZZA DRIVEWAY BEFORE: The current road between the Town Hall and Bill's Pizza is open to vehicles one way.

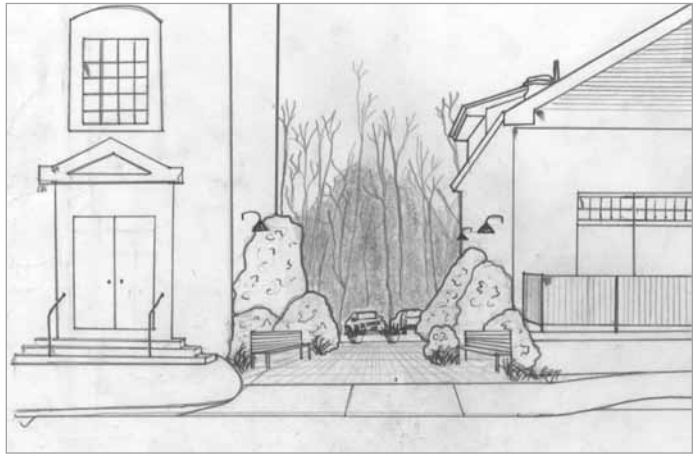


FIG. 4.16 BILL'S PIZZA DRIVEWAY AFTER: Now only open to pedestrians, a beautified walkway with vegetation and seating greets pedestrians as they park in the municipal lot behind the town hall and have an easy walk to amenities. Cars now enter and exit using the driveway between Bill's Pizza and the Masonic Lodge.

FIG. 4.17 PLAN PHASE 2 REALIZED: looking east along Route 135, infill, vegetation, traffic calming and other measures have all contributed to a thriving, vibrant downtown Hopkinton.

PLANTING SEEDS: IDEAS FOR THE FUTURE

Many communities are thinking through the implications of changes like population growth and rising costs of fuel, infrastructure, and transit. A number of planning choices could help prepare Hopkinton for the changes that lie ahead while building a vibrant downtown and preserving the qualities the community values.

Infill

At present, the growth pattern in Hopkinton outside of the downtown takes the form of single-family homes on large lots. If growth continues in this way, the town's valued rural qualities will be lost. Focusing development within the existing downtown allows for the preservation of open spaces in other parts of town. Infill could also provide housing near existing and new amenities, especially important for an aging population, which Hopkinton will see in the near future.

Transportation

In the near future, population growth in Hopkinton is likely to be accompanied by more cars on the road and, as the downtown becomes more of a destination, an increased demand for parking. However, with rising fuel prices, individual transportation will continue to become more expensive, and more people will be weighing the costs and benefits of owning a car.

With a significant traffic volume increase, a bypass around the downtown for trucks and commuter traffic might be warranted. A bypass could allow for more efficient traffic flow and a calmer downtown. If not effectively controlled, heavy traffic could drive business out of town.

To aid community access to the downtown and its businesses, Hopkinton could improve local bus transportation. The town could also improve links to the commuter rail to reduce regional fuel use and emissions.

SPOTLIGHT ON HOPKINTON

A FUTURE BYPASS

Studies have shown that bypassing traffic around a commercial district can make it a quieter, safer, and more pleasant place to shop and can increase commercial activity (Anderson). But in order for that to happen, the commercial district must already be a destination (Leong and Weisbrod). Re-routing traffic away from a commercial district that does not sufficiently attract people as a destination can negatively affect local employment, income, and sales volume (Srinivasan and Kockelman). The higher the volume of traffic diverted, the greater the potential negative economic impact. If downtown Hopkinton becomes more of a destination in the future, the town could conduct a study on the feasibility of a bypass around the town center.

Social and green spaces

As Hopkinton's downtown continues to develop, the town should take steps to enhance social spaces and protect existing green spaces. It will benefit the town to continue to protect and enhance the expansive green spaces within and surrounding the downtown. The need for these green spaces as water catchments, islands of natural exploration and learning for schools, playgrounds, community gardens, and forested parks will only grow with the growing population. Connecting these green spaces with paths to facilitate movement in and around the downtown will also support a healthy, happy community.

TIMELINE OF IMPLEMENTATION

Hopkinton can implement downtown revitalization measures gradually, beginning immediately with inexpensive changes and working toward higher-investment, longer-lasting changes.

First steps

While the detailed planning for road geometry adjustments, public social spaces, and other large revitalization measures is taking place, and the town and business and property owners are seeking funding for the changes, Hopkinton could take some initial steps toward revitalization, like:

- Striping the pavement to lay out proposed changes to parking, travel lane width, crosswalks, and other road alterations. This initial step would allow pedestrians and drivers to begin to adjust to changes before larger infrastructure changes are made.
- Funding and installing items like benches, street lamps, trash receptacles, and planters to improve the streetscape.
- Establishing gateways with signs, trees, and other vegetation.
- Encouraging downtown property owners to work together and with the Garden Club to plan and implement cohesive seasonal plantings for businesses and homes in the downtown.
- Fostering strong communication between town government departments like the library, School Board, and town offices to exchange ideas about repurposing existing buildings to best meet community needs.

Next steps

To build on the first steps and continue laying the foundation for larger and longer-term changes, Hopkinton can take a number of steps further, such as:

- Burying utility lines, which is a prerequisite for tall street trees.
- Constructing rain gardens and bioswales and planting trees, which could take place at the same time as the burial of utility lines.
- Narrowing travel lanes, widening sidewalks, and incorporating bicycle lanes, which could all also take place at the same time as the burial of utility lines.
- Planting vegetation to buffer street-side parking lots from the road.
- Raising and resurfacing crosswalks.
- Conducting a retail market analysis and making an action plan to stimulate business downtown.
- Making arrangements for a municipal parking lot, and encouraging downtown businesses to adopt a shared parking approach.
- Continuing to install cohesive streetscape elements like signs, street lamps, and seating.
- Encouraging downtown business and property owners to make façade and storefront improvements.
- Establishing public-private partnerships to turn large building setbacks into pocket parks; exploring sites, funding, and partnerships to create other public social spaces.

- Expanding downtown programming to bring people to downtown public spaces regularly throughout the year.

And into the future

As Hopkinton is continuing the revitalization efforts above, the town could branch out to even bigger changes, such as:

- Closing off some residential side streets and driveways to car traffic from Main Street to reduce accidents.
- Installing a pedestrian-activated crosswalk signal between the library and Bill's Pizza; changing or replacing the traffic signals at the intersection of Routes 135 and 85 to improve timing for pedestrians.
- Making arrangements for additional municipal parking, if necessary.
- Encouraging infill.
- Expanding the downtown park system to incorporate larger, more diverse parcels, and connecting them with the greenway.
- Developing a curriculum focused on Hopkinton, its ecology and natural resources, history, economy, and regional relationships to promote an awareness of local ecological and social justice issues.

CONCLUSION

Hopkinton's fast growth in today's quickly-changing world presents the town with exciting choices. The town is in a position to assess what types of growth will be most helpful in maintaining and developing the qualities the community values, and in creating a sustainable future for the community. We hope that this report inspires conversation about how to grow Hopkinton in the long term, as well as giving the town tools to cultivate a thriving town center, starting now.

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To the faculty and staff at the Conway School of Landscape Design, thank you for guiding us through unfamiliar territory.

Hopkinton, Massachusetts, is a town with a strong community, a rich history, and an appealing character. The town is currently most famous for hosting the start of the Boston Marathon each year. Leading into the second decade of the twenty-first century, however, the town center is not thriving or effectively serving Hopkinton.

The town's Downtown Revitalization Committee and downtown business and property owners hired the Conway School to create a plan for Hopkinton's town center. Downtown Hopkinton, situated only four miles from I-495, holds the intersection of Routes 135 and 85 and is characterized by fast, heavy traffic and frequent accidents. Overhead utility wires overshadow the downtown's beautiful old buildings, and crumbling sidewalks and minimal greenery also visually define the streetscape. For a town of 14,000 people, Hopkinton's town center has relatively few businesses or lively social spaces.

This report takes a multifaceted approach to revitalization. It proposes economic development measures, walkability improvements and traffic calming measures, streetscape improvements, stormwater runoff mitigation techniques, and strategies for creating lively social spaces.

The Conway School of Landscape Design is the only institution of its kind in North America. Its focus is sustainable landscape planning and design. Each year, through its accredited, ten-month graduate program just eighteen to nineteen students from diverse backgrounds are immersed in a range of applied landscape studies, ranging in scale from residences to regions. Graduates go on to play significant professional roles in various aspects of landscape planning and design.

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