

Town of Londonderry, New Hampshire



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Comprehensive Master Plan

Town Planning & Urban Design Collaborative, LLC

VISION STATEMENT

Londonderry is a close-knit, vibrant community, set in a landscape of protected forests and farms, that provides its residents, families and businesses with efficient services, inviting public spaces, a top-tier school system, and diverse options for housing, recreation, and transportation. These qualities attract knowledge-oriented businesses drawn to Londonderry's educated work force, access to commercial transport, and superior quality of life.

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Table of Contents

Introduction

WHY PLAN?	7
HOW TO USE THE PLAN	9

The Process

PUBLIC OUTREACH	12
TELEPHONE SURVEY	14
PLANAPALOOZA	16
STUDENT WORKSHOP	20

The Vision

COMMON VISION & GUIDING PRINCIPLES	24
------------------------------------	----

Reflections

TIMELINE OF LONDONDERRY	28
REGIONAL CONTEXT	30
DEMOGRAPHICS & POPULATION	32
COMMUNITY CHARACTER	36
BUSINESS CLIMATE	40
HOUSING & NEIGHBORHOODS	46
NATURAL RESOURCES & OPEN SPACE	50
TRANSPORTATION & MOBILITY	56
INFRASTRUCTURE & MUNICIPAL SERVICES	62
CULTURAL & HISTORIC RESOURCES	65
HAZARD MITIGATION	68

Considering Alternative Futures

CONSIDERING ALTERNATIVE FUTURES	72
---------------------------------	----

The Toolkit

FOREVER GREEN	81
ECONOMY	109
CENTERS	119
HOUSING	129
TRANSPORTATION	137

Plan Framework

CONSERVATION & GROWTH MAP	150
ACTIVITY CENTER PLANS	154
PETTENGILL ROAD INDUSTRIAL VILLAGE	156
NORTH VILLAGE ARTISAN DISTRICT	164
TOWN CENTER RECREATIONAL VILLAGE	170
TOWN CENTER COMMON	178
SOUTH VILLAGE SUBURBAN CORRIDOR RETROFIT	186

Community Facilities & Services

GREEN PRINT INITIATIVE	194
SCHOOL SYSTEM	194
TRANSPORTATION	196
POLICE & FIRE PROTECTION	200
TELEPHONE & ELECTRIC SERVICE	200
STORMWATER MANAGEMENT	200
WATER & SEWER SERVICE	201
ENERGY & FUEL SUPPLIES	201

Regulatory Barriers

REGULATORY BARRIERS	204
---------------------	-----

Driving Success

SETTING TARGETS	210
PROJECTS, PLAN, POLICIES, & INITIATIVES	211
PLAN IMPLEMENTATION MATRIX	211
RESOURCE ALLOCATION	212
COMMUNITY REPORT CARD	212
MASTER PLAN IMPLEMENTATION	220



introduction

In 2011, Town officials kicked off “Get It Right Londonderry!”, a community-wide initiative to update the Town’s Comprehensive Master Plan. This Plan represents the official blueprint for long-term, responsible growth in the Town, supported by a grassroots initiative to include residents, business owners, property owners, local interest groups, and elected officials throughout the planning process.

Introduction

Building on past planning efforts, the Comprehensive Master Plan (the Plan) seeks to implement a vision that preserves the character of Londonderry, still perceived by some as a rural community, while addressing growth in a more explicit way that provides, protects and improves upon the high quality of life of all residents. Patience may be needed for many aspects of the Plan, as it sets a long-term vision to guide growth over time.

This Plan focuses on sustainable development — measured by environmental stewardship, economic prosperity, and an equitable distribution of community resources — that reflects the community's unique character and local values. As population grows, commitment to sustainable development will be tested.

The Comprehensive Master Plan document provides a vision and a policy framework from which the zoning ordinance, site and subdivision regulations, capital improvements plan, and annual budget are guided. It also supports the Town's administration of development impact fees, helps manage municipal service areas, and influences other planning documents. It should be used by elected officials and appointed board members to evaluate development applications, amend ordinances, and plan future expenditures. Together, the Plan and its implementation tools ensure future decision-making regarding development that is consistent with the

community's vision and residents' expectations for a higher quality of life.

Ultimately, the Comprehensive Master Plan's relevance will be measured by its use during everyday decision-making. Monitoring the Plan's implementation should be an open and on-going process, summarized each year in a community report card that examines performance, measures achievement, and reflects change generated by the Plan. This work can be completed by an outside third party.

WHAT IS THE LONDONDERRY COMPREHENSIVE MASTER PLAN?

The Comprehensive Master Plan is the official adopted statement for future development and conservation in the Town. It establishes a Common Vision and Guiding Principles; analyzes existing conditions and emerging trends; describes and illustrates a plan for future development and supporting infrastructure; provides the Town with a toolbox for sustainable growth; and outlines steps for implementation. The long-term horizon for the Plan keeps the document somewhat general; however, the broad range of development issues and town services addressed makes it a true blueprint for smart, sustainable growth. Data was collected and reported for the Town consistent with the intent of rules and requirements set forth in NH RSA 674:2 for developing a Comprehensive Master Plan.

Why Plan?

The citizens of Londonderry value its rural character and small town charm. A great school system and many recreation and sporting opportunities significantly contribute to the quality of life enjoyed by current residents. Additionally, residents and visitors from around New England enjoy the luxuries of Londonderry's expansive natural areas, trail systems, and apple orchards.

Despite all of these amenities, Londonderry is facing some challenges going forward. Demographic data shows that Londonderry's population is disproportionately composed of seniors and elderly citizens. While people in this age cohort have much to offer the community in the way of experience and wisdom, an imbalance in the demographic profile of any community can become unsustainable. Not only is the population of Londonderry aging but there is an abnormally large gap in the population between the ages of 20 to 34, the future leaders within a community.

As a result of the aging population, school enrollment is down, giving the school department the ability to utilize school facilities more efficiently and catch up with much needed improvements. However, residents participating in Planapalooza expressed concerns regarding the future of public investment in the schools, as a growing segment of residents do not have school aged children. In Londonderry, a decrease in school funding could be particularly problematic because the superior education and activities offered by the schools

appear to be the number one reason that people move to Town. The indication from residents interviewed at Planapalooza was that their primary motive to move to Londonderry was the quality school system. This is evidenced by the number of real estate signs that pop up in front yards around Town at high school graduation time.

The previous Master Plan is now 10 years old. As with many of the documents written prior to the Great Recession of 2007, the last Master Plan could not have anticipated the financial hardships and resulting lifestyle changes that have occurred in the past five years. Not only have many people changed the way they live because of economic necessity, but before the downturn, many people had already begun to reshape the "American Dream" into a vision that did not consist solely of the large detached single family house on a one acre lot. Many people are now striving for pedestrian friendly, walkable neighborhoods where the requirement of driving everywhere, for everything can be mitigated and alternatives are available.

With the economy now in recovery mode, development pressures are again mounting in the region and in Londonderry, with major projects in the pipeline, such as the current widening of Interstate 93. These pressures will continue to increase as the housing market gains strength and banks once again begin to make commercial loans. Now is the time to prepare for the anticipated growth.

Today, the Town of Londonderry is truly at a crossroads and residents must decide how to deal with future growth. There is a strong dichotomy in public opinion among local citizens about how to prepare for change and development. One school of thought is that Londonderry is wonderful the way it is and should not change at all. When it becomes evident that growth is inevitable, it should be in a form that is similar to the status quo of the past 50 years. On the other hand, many other people value the things that originally brought them to Londonderry, such as the schools, sports, and the trail system, but are not content with only having the one lifestyle choice of single-acre lots, strip shopping centers, and hour-long commutes to work. Additionally, they are excited by the prospect of positive change and the potential benefits that can come with a well planned future. While both of these perspectives are valid positions, the reality is, unless property available for development is purchased for permanent conservation, growth is going to occur in

Londonderry. It will change the quality of life experienced by its residents and business owners. The question is, “Will this change be for the better or the worse?”

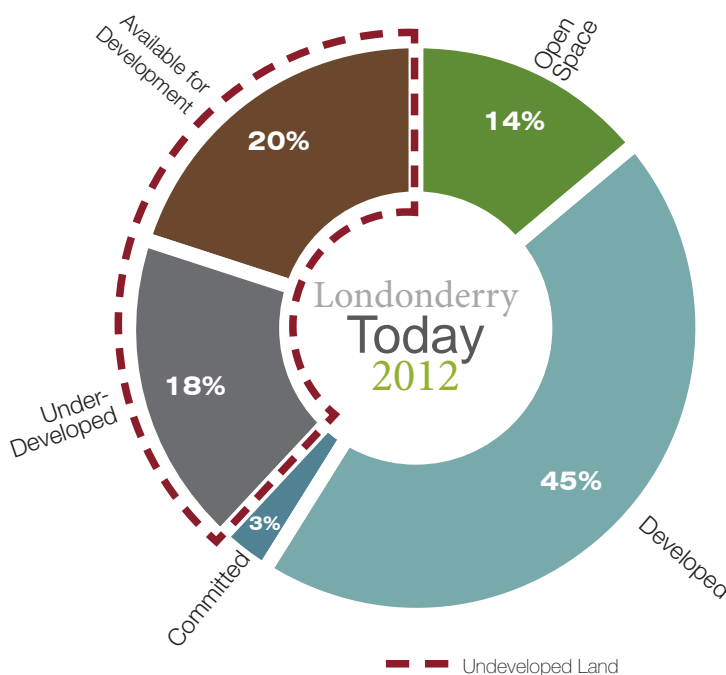
For all of these reasons, the Town of Londonderry Planning Board and Staff became interested in partnering with community leaders and landowners in the area to promote greater balance between the community’s desire for environmental stewardship, economic prosperity, and protection of the small town character and quality of life found in Londonderry. The Comprehensive Master Plan and Planapalooza were the culmination of this effort and a hallmark public process for the Town that saw a new level of open communication and consensus around building a new vision for the future.

A case for proactive planning . . .

Every town has a finite amount of land. It is critical for citizens to understand how this land is occupied today and what could possibly happen with it in the future. Broken into five categories, land in Londonderry ranges from fully developed (45%) to completely preserved (14%). In both of these cases, change is unlikely to occur. However, nearly 40% of all land in Town is either undeveloped or “under-developed”. This portion of Town represents a critical opportunity to determine a new future. And while it often takes time for under-developed land to be fully capitalized, vacant land is subject to change at any moment.

Which leads to an important question...

What Happens to the Undeveloped Land?



How to Use the Plan

Be a champion of the Plan even if you don't like ALL of the ideas.

The Common Vision and Guiding Principles in this Plan reflect the ideas of an entire community and include many differing points of view — a bit of something for everyone. We don't have to love everything in the Plan, but rather consider the big picture and whether the Plan as a whole takes Londonderry in the right direction.

Be a champion of the Plan even if all of your ideas aren't included.

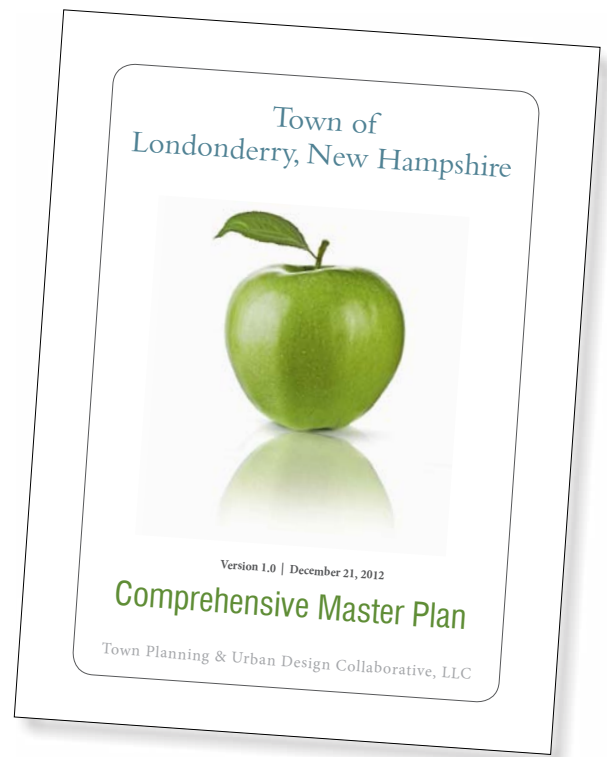
This Plan is the culmination of an extensive and transparent community planning process. It is possible that not all ideas were included in this document because (A) there was disagreement on the topic and the decision was made to go with the consensus of the community, (B) the idea was tested and deemed to be unrealistic at this time, or (C) there was simply not enough room to include ALL the good ideas. Remember, there is something for everyone!

Respect the Rule of the Golden Ticket.

A recurring theme throughout Planapalooza was how to make sure the planning work is palatable to those who aren't participating. Agreement was reached among participants that if you don't make the effort to get involved then you don't have the right to complain. Long-time Londonderry resident Reed Clark says, "If you don't vote, if you don't show up, you don't have the golden ticket."

In Londonderry, it is easier than in most places to stay informed. The Town maintains a high level of transparency by providing on-line video of all council and board meetings and quickly and efficiently posting meeting minutes.

But it's not just a right for people to be informed. It's everyone's duty to participate.



Take responsibility and be a part of the implementation team.

Although we all wish our tax dollars bought us unlimited Town services, the reality is there is more work to be done than staff to do the work. All of these great ideas take time, money, and capacity. For this Plan to become a reality, a large number of people must decide that they care enough to get involved and help execute the Plan. This is the reality of the new economy. Communities that work together, and work smartly, succeed.

"If you don't vote, if you don't show up, you don't have the golden ticket."

—REED PAIGE CLARK, III

Understand the element of time.

At first glance, the Plan can seem ambitious, daunting, and even a little frightening. Included are some big ideas that would bring about transformative change. It is important to understand that not everything in this Plan will happen at once, or happen at all. Some things will happen right away; while other ideas will take years or even decades to come to fruition. Ultimately, the success of this Plan will be measured by its implementation. We challenge our elected and appointed officials with making the community vision a reality.



PHOTO BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE

the process

The Town of Londonderry led a one-year public engagement process to generate interest and involvement in the development of the Town's Comprehensive Master Plan. Over the course of the process, the Steering Committee pounded the pavement, using a number of creative techniques to reach a broad cross-section of the community and spread the word about the project, emphasizing the importance of having a voice in shaping the future of the Town. In today's busy world, where there is no one way to reach people, Londonderry set a new standard for outreach, inventing creative ways to engage the public.

Public Outreach

Project Steering Committee

A Steering Committee was appointed by the Town's Planning Board for developing the Comprehensive Master Plan. Primary duties of the Committee include direct oversight of the planning process, review of draft materials, and coordination with key stakeholders, elected officials, and local residents. Membership on the Committee included elected officials, business owners, interested citizens, and representatives of boards, commissions, and organizations.

The Committee met regularly for just over a year (12 Committee meetings plus occasional ad hoc subcommittee meetings) with each committee member dedicating 20-40 hours of time to guide the development of the Comprehensive Master Plan.

Telephone Survey

For the first public engagement activity, the Steering Committee worked with the UNH Survey Center to carry out a 15-minute telephone survey of 500 randomly selected residents. Residents were urged to "pick up the phone" and answer a series of questions designed to gauge the attitudes and opinions of Londonderry residents regarding development styles and capital projects in Town. Questions covered a wide range of topics including transportation systems, natural resources, energy, recreation, housing and economic development, as well as open questions about likes and dislikes. See page 14 for results.

Social & Online Media

Town Planning & Urban Design Collaborative, LLC (TPUDC) and Town Staff maintained a web presence on both the Town website and project Facebook page. The Town site was used to post documents, reports and static resources, while the project Facebook page was the Town's first social networking platform. Staff, Steering

Committee members and TPUDC coordinated to keep the Facebook page updated with the latest announcements, pictures and illustrations, questions-of-the-day, meeting videos, and member discussions of the planning process. It remained very active throughout the Planapalooza events with more than 130 users "liking" the page. In a similar vein, press releases were sent to the major community blogs in Londonderry, including www.townupdate.com, www.visitlondonderry.com and www.londonderrynh.net. The latter site provided a redistribution of press releases via a Twitter feed to over 2000 registrants. Email blasts were also utilized by Committee members to encourage large groups of people to attend the events.

Print Media

Staff and Committee members supplied press releases, "letters to the editor" and access to local media outlets that covered and reported on the events. Prior to the Planapalooza, the *Londonderry Times* published editorials encouraging public participation, while other journalists from the *Times*, *Derry News* and the *NH Union Leader* reported on Steering Committee meetings and events throughout the process.

TPUDC and Town Staff also designed and produced posters, postcards, and advertisements that were provided to media outlets and distributed during events announcing the planning event. Printed media was placed throughout the community in prominent locations while an advertisement ran in the *Londonderry Times* for five weeks leading up to Planapalooza. Additionally, a large banner hung over Mammoth Road that announced Planapalooza to passers-by and an electronic message board in front of the Library displayed the week's schedule, with daily updates. Public service announcements were broadcast on the Town and School cable channels (5 channels in all) before and during the planning week.

Personal Outreach

Letters were sent to approximately 75 stakeholders in the business community inviting them to participate in all Planapalooza events. In the weeks leading up to the process, TPUDC interviewed policy makers, including members of the Town Council and Planning Board. Formal invitations were sent to the home addresses of nine State Representatives and one Senator whose districts include Londonderry and who also reside in the community. Internally, Steering Committee members, who each represents at least one Board, committee or organization, created their own “word of mouth” campaigns, sending formal and informal emails soliciting participation in all the Master Planning events. Each member also was required to bring no fewer than five people to the planning events.

Target Meetings

In order to capture input from younger residents, Steering Committee members reached out to the schools via presentations by TPUDC and Town Staff, a student planning workshop, and announcements distributed by the School District Superintendent to parents in the district. Eighteen middle and high school students engaged in the youth workshop with TPUDC through various hands-on activities and dialogue. Younger children also had an opportunity to express their vision in a poster drawing exercise coordinated through the YMCA-led after school program at each of the three elementary schools.

The Steering Committee Chair visited the Senior Center on two occasions to encourage participation in the planning process and issue seniors the challenge to respond to the student perspective by creating a vision for the Community. A special topic meeting was then scheduled and held during Planapalooza dedicated to the interests of seniors and Londonderry’s aging population.

Special Events

Staff and Steering Committee members, along with TPUDC, took the public outreach campaign “to the people” beginning with an interactive booth on voting day in March, 2012, and a postcard blitz at the spring High School band concert, where over 300 cards were passed out to parents of band members. Committee members also volunteered every weekend at Londonderry Athletic Field Association baseball games and Youth Soccer Association games, coupled with one-time events (like Adams Pond Day, the Moms Club Toy Swap, and Old Home Day) to display banners, hand out postcards, and answer questions about the Comprehensive Master Plan and Planapalooza.

Public Workshop

On April 12, 2012, the Steering Committee and TPUDC held the first Citizen Workshop of the Planapalooza process at the Londonderry High School Cafeteria, where approximately 50 participants began discussing their hopes for the future of Londonderry. Participants represented a wide range of ages, backgrounds and interests, and a solid foundation for subsequent events emerged.

Public Access

Londonderry intentionally conducted transparent meetings and events throughout the planning process, including the process to select TPUDC as the consultant to create a Comprehensive Master Plan for the Town. Steering Committee meetings were carried both live and in subsequent re-broadcasts over the community access channel. The High School cafeteria, Lions Hall, and Council Chambers at the Town Hall were selected as venues for Planapalooza events because of location and ability to support the broadcast of workshops/presentations while offering access to the public at all times. Presentation recordings and Steering Committee meeting minutes were likewise subsequently posted online.

Telephone Survey

In advance of Planapalooza, the Town contracted with the UNH Survey Center to perform a public opinion survey. The intent was to capture the public's opinions on general planning matters from a broad, randomized segment of the Town's population who may not otherwise participate in the Comprehensive Master Plan process.

It should be noted that because the phone survey called land-lines only, the demographic profile of respondents tended to include a preponderance of Londonderry residents over the age of 55.

In addition to a series of closed-ended questions, five open-ended questions allowed residents an opportunity to provide candid opinions on broad and important topics, including:

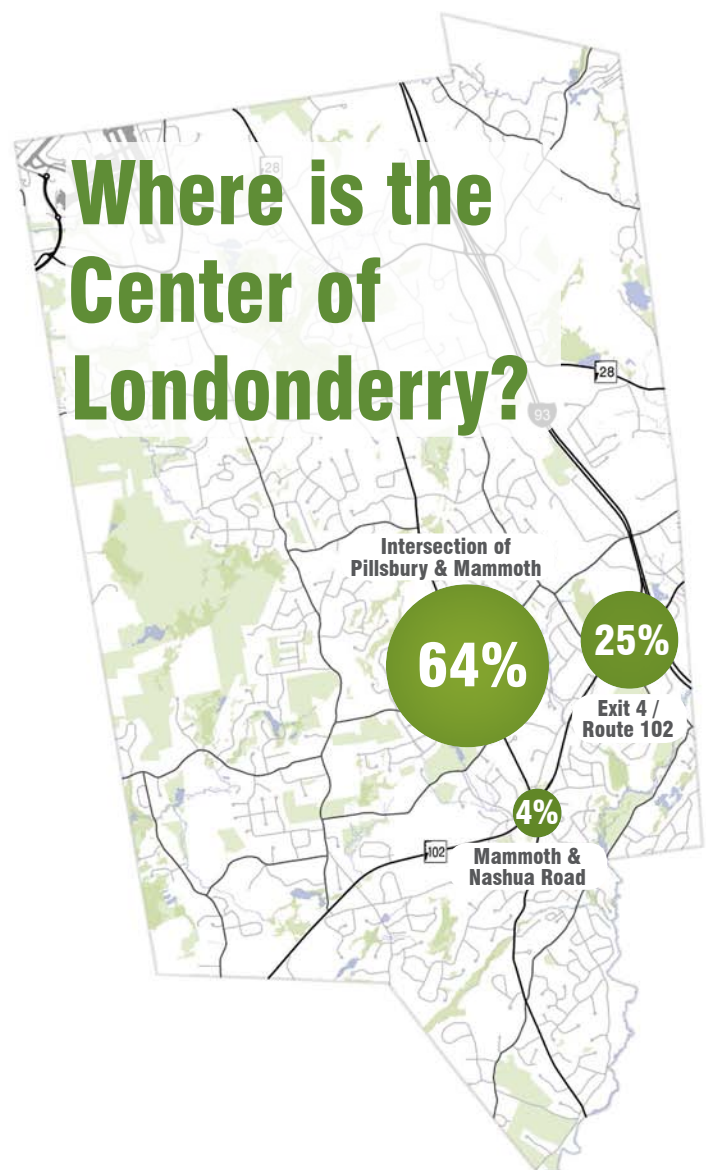
- Where do you think the center of Town is?
- Ideally, what characteristics should a Center of Town possess?
- What do you like most about living in Londonderry?
- What do you like least about living in Londonderry?
- What is your biggest hope for Londonderry in the future?

Where do you think the center of Town is located?

Sixty four (64%) percent of the survey respondents consider the area surrounding the intersection of Mammoth Road and Pillsbury Road to be the center of Town, based on their description of surrounding street names, schools, churches, the Town Common and/or Town facilities. Roughly 25% described the Route 102 corridor between Mammoth Road and I-93 Exit 4 by identifying the street segments or landmark businesses along the corridor. Further, 4% of the population identified the Mammoth Road/Nashua Road intersection as the center, and 3% stated that Londonderry does not have a center. The remaining 3% identified no Town center or other locations.

What do you like most about living in Londonderry?

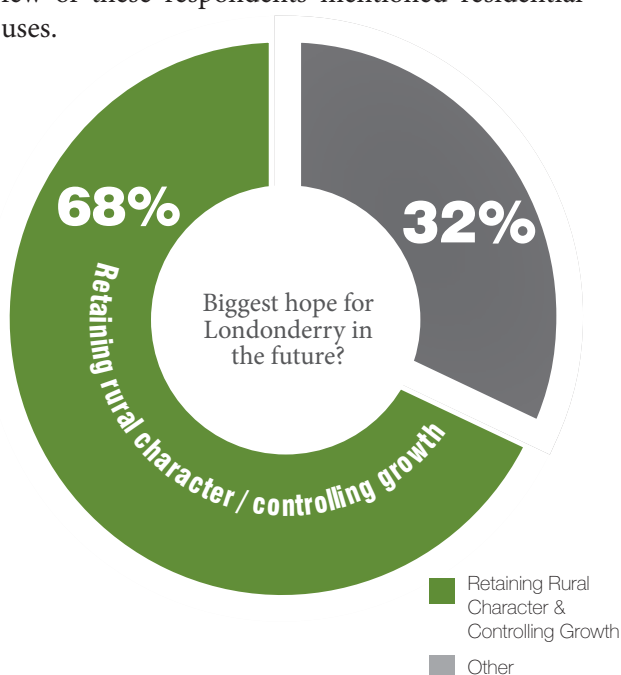
A plurality of respondents cited Londonderry's rural, small-town atmosphere as the feature they most like about living in Town. The second most popular feature noted was the schools. Nearly as many people identified Londonderry's convenient geographic location, offering close proximity to shopping needs, the highway system, and open spaces. The perception of rural amenities in such an accessible location is clearly a defining theme.



Ideally, what characteristics should a center of Town possess?

In general, respondents described the characteristics of a Town center in terms of development or uses. Because most responses included multiple ideas, it is difficult to quantify the information. Many described a mix of uses, including civic, commercial, and recreational, with a focus on accessibility to both vehicles and pedestrians. The notion of sidewalks and safe crossings was often repeated. In addition, the theme of a gathering place was prominently mentioned, and described as a place to meet people, to hold events, or to play outside. Of those who mentioned commercial activities, the strong majority suggested they be small in nature, referring to them as “small shops” or “a couple shops”.

In contrast, there are many who described the characteristics of a Town center as being limited to civic functions, including the Common, the Town Hall, Schools, Library, and Police Station. In many ways, these comments describe the Mammoth/Pillsbury Road area as it exists today. While commercial and civic uses were identified, very few of these respondents mentioned residential uses.



What do you like least about living in Londonderry?

In sharp contrast to what people like about Londonderry, themes including high taxes, over-development, traffic, and loss of open spaces were identified as the things people like least about living in Londonderry. Roughly 25% of the respondents cited concerns that are associated with development such as growth in general, its pace, and associated traffic and congestion. Roughly another 25% cited high property taxes. A perceived lack of recreational and entertainment opportunities was also a popular topic (11%). Just slightly more (14%) suggested there was nothing that they disliked about living in Londonderry. The remaining ideas included a lack of sidewalks and/or public transportation, the police and school facilities, and the lack of a Town Center. When development was mentioned, it was not clear what type or what general location was most disliked.

What is your biggest hope for Londonderry in the future?

Over 2/3 of respondents (68%) mentioned retaining rural character and/or controlling growth and development as their biggest hope for Londonderry's future. Respondents appeared hopeful that much of the Town's current charm would be preserved and that the Town would continue to have a good mix of open spaces and sound development. Retaining the “rural” and “small town features” was mentioned repeatedly and respondents seem hopeful that the identity of Londonderry will remain unique and decidedly rural. A handful of ideas filled out the remainder of the responses, including lowering taxes, keeping the quality of schools high, fostering a family-friendly environment, preserving orchard spaces, carrying out various political or social ideals and finally, making no changes at all.

Planapalooza



From May 31 through June 5, 2012, the citizens of Londonderry were invited to participate in a multi-day planning and design event to develop a vision for the future of the Town using smart growth and sustainable design principles.



PHOTOS BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

Planapalooza was an intensive community design workshop that involved citizens interested in the future of their community. This intensive engagement process provided an open forum for the public to work closely with the Town and planning consultants from TPUDC to identify big ideas and generate a comprehensive vision for the future.

Planapalooza was held in the heart of Londonderry. The planning team, along with Town planning staff, set up a full working office and studio in the Moose Hill Room in Town Hall.

Planapalooza kicked off with a planning workshop for local teens who contributed their thoughts on Londonderry and why it is important to plan for the future. That evening, the entire community was invited to a cookout at the Londonderry High School, followed by an introductory presentation on planning and smart growth principles. Immediately following the presentation, the consultant team facilitated a hands-on design workshop where the 100 participants were invited to roll up their sleeves and brainstorm their ideas for improving the Town, working over base maps. Participants identified key areas of concern and opportunity related to the sections of the Comprehensive Master Plan.

On the second and third days of Planapalooza, the team conducted focus group meetings in the studio related to topics important to the Town. These included Land and Business Owners; Public Utilities; Transportation; Land Use and Community Design; Natural Resources and Open Space; Housing and Neighborhoods; Economic Development; and Community Facilities. In addition, there also was a special meeting with senior citizens. Meanwhile, members of the team began developing growth scenarios and illustrative plans, pulling input from the planning workshop and information gathered real time from the technical meetings.

On the third night of Planapalooza, a public pin-up was held in the studio, giving the team a chance to present alternative growth scenarios and illustrative plans based on ideas generated by the public. A varied group of people assembled to see the draft plans and provide feedback on what they liked about the ideas presented, and where further work was needed.

During the remainder of the planning week, members of the public continued to filter into the studio, adding their ideas at the base map station and talking to the team. Feeding



PHOTOS BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

off this buzz of activity, the team entered production mode, synthesizing ideas, collaborating over design challenges, preparing renderings, compiling precedent images, and refining the illustrative plans. Over 400 members of the public stopped by to attend meetings, provide input, or talk with the team.

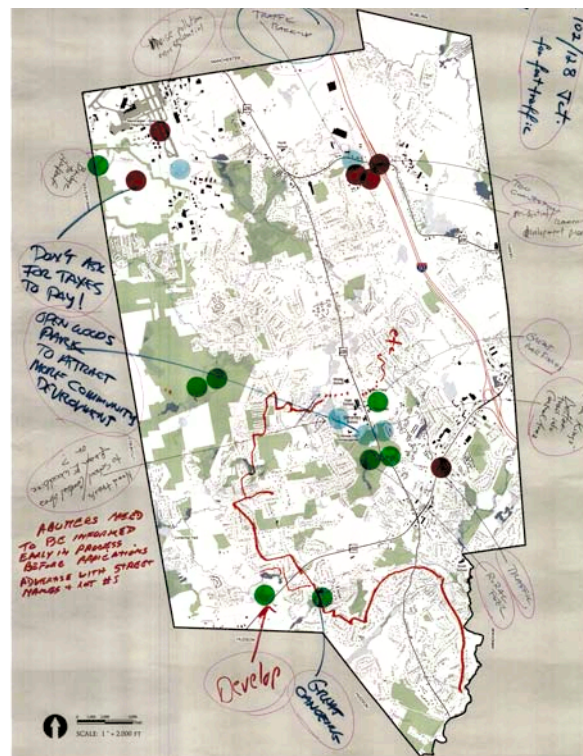
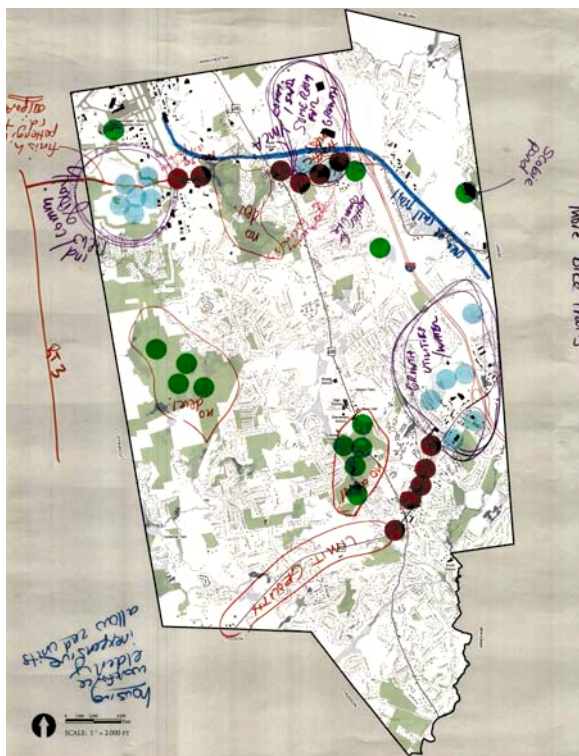
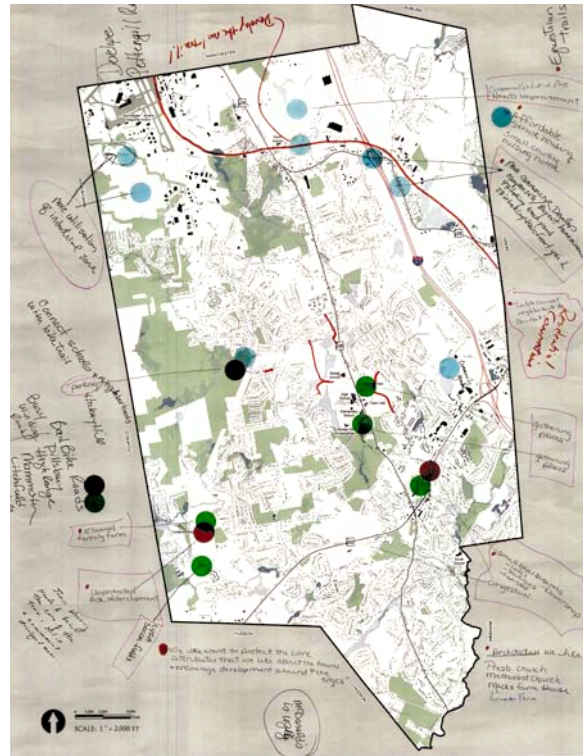
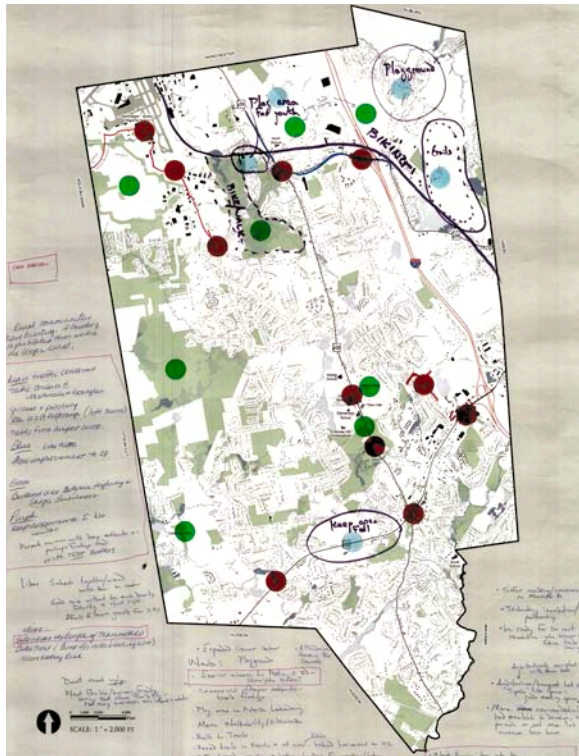
Based on all the input from the public gathered at the hands-on workshop, stakeholder meetings, the intermediate pin-up, and drop-ins, the TPUDC team developed a series of illustrative plans for areas in the Town where the community was comfortable with additional growth. These plans capture the spirit of Londonderry and depict possible building configurations, parks and plazas, street connections, and public facilities.

A final presentation took place at the Lions Hall on the last day of Planapalooza, at which time all of the work produced during the week was presented and explained. The meeting was attended by over 60 members of the community.

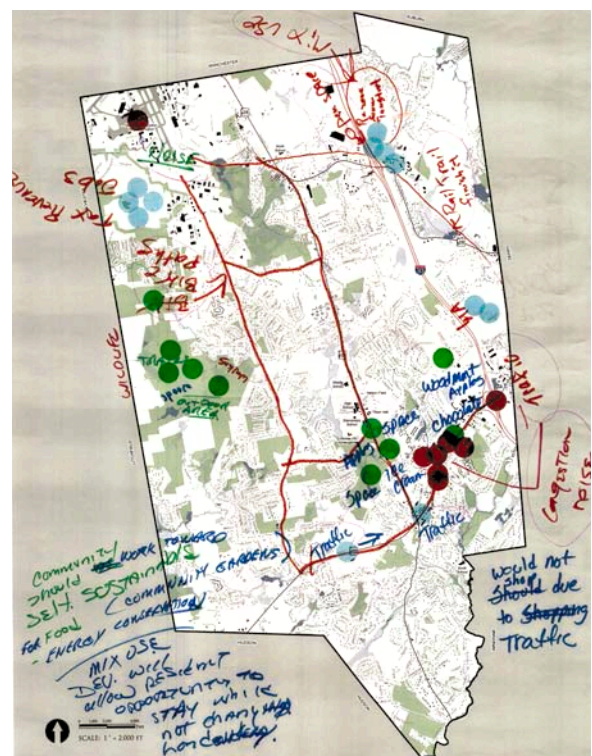
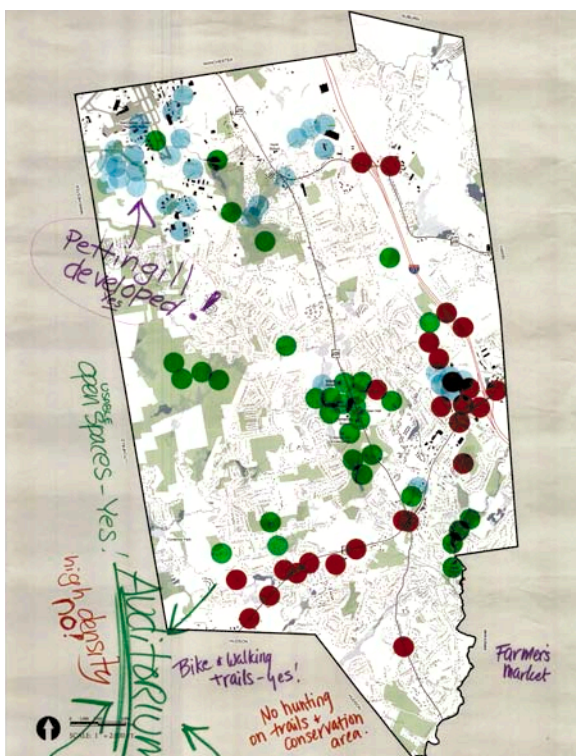
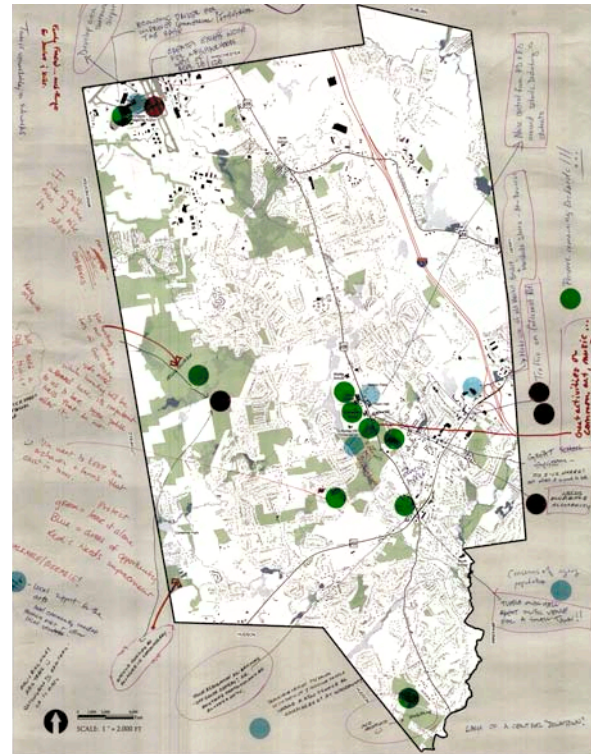
Following the presentation, there were tough questions, along with an unprecedented showing of support for the vision as presented, a clear indication that the community achieved consensus and knows what it wants for the future of the Town.

Hands-On Workshop Table Exercises

The maps below were produced by small groups of community members during the Hands-On Community Workshop that took place on the first night of Planapalooza. Many of the ideas generated are consistent and share common themes, helping to build consensus around one preferred vision



for the future. Comments from this exercise and other public input received during Planapalooza is recounted in the Reflections section of this Plan and is also embedded in the Common Vision and Guiding Principles.



Student Workshop

On this first day of Planapalooza, a Student Workshop was held at Londonderry High School to get the perspective of local school youth. Students were asked, “what’s the point of planning for the future?” They were also engaged in a hands-on exercise to draw their neighborhoods, identifying places that are important to them.



PHOTOS BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

QUESTION: “what’s the point of planning for the future?”

ANSWERS:

“to create a concrete plan for future development”

“THIS IS WHERE WE LIVE”

“to make life sustainable for future generations”

“to make sure Londonderry is economically and environmentally safe”

“to always have things to do in Londonderry”

“to make life better for our children”

“to get more of what we want in our Town”

“to make sure people will want to come back to Londonderry”

“so we don’t waste money”

“to be the most efficient and logical in the development of the Town.”



PHOTO BY JACK FALVEY DURING A FALL, 2011 FLIGHT WITH EARL ROSSE

the vision

The Common Vision and Guiding Principles on which the Comprehensive Master Plan is based express the community's aspirations for smart growth, greater diversity and choice, sustaining public services, and protecting the Town's natural environment and resources. Together, the Vision and Principles direct all other sections of the Plan document, and provide the organizational framework for key recommendations and the tools for implementing the community's goals.

Common Vision & Guiding Principles

The Common Vision and Guiding Principles generated by the community during Planapalooza set priorities for moving the Town in a new direction. The value of the recommendations contained within this Plan depend on local leaders incorporating the intent of the Vision and Principles into the decision-making culture.

Common Vision

The Common Vision for Londonderry is to remain a close-knit, vibrant community in the heart of protected forests and farms. Residents, businesses, and visitors should expect a government that works diligently to link development with quality-of-life, while strengthening community and economic vitality. Efficient Town services, inviting public spaces, and a top-tier school system make the Town a great place to live and raise a family. A highly-educated work force, proximity to a regional airport, and an efficient transportation system make the Town an ideal place to work and invest in new business.

Guiding Principles

TPUDC worked with the Steering Committee, property owners, key stakeholders, and members of the general public to identify a set of enduring Guiding Principles critical to the current and future quality of life in Londonderry. These Principles embody the core philosophy and Common Vision expressed by the community. Though the local context and approach for achieving these goals may change over time, the Guiding Principles should endure for generations to come.



STAY FOREVER GREEN

Promote and preserve Londonderry's green advantage, including ponds, wetlands, woods, trails, agricultural lands, tree canopy, and the services they provide. Strive to create an interconnected network of green space that conserves critical natural areas, provides recreational linkages, protects water quality and quantity, and contributes to the identity and sense of place within the community. As part of this holistic system, integrate sustainable stormwater practices that contribute to the beauty of the public realm.



PROMOTE UNIQUE ACTIVITY CENTERS

Encourage the development of unique activity centers that include a mix of uses and activities located close together, providing people with new options for places to live, work, shop, and participate in civic life. Centers should vary in scale, use, and intensity, represented by a hierarchy of rural hamlets, walkable neighborhoods, mixed-use village centers, and the Town Common, all of which reflect the rural character of Londonderry. The presence of activity centers should further the economic vitality and sustainability of the Town, while also promoting social interaction and community building.



EMPHASIZE HOUSING CHOICE & DIVERSITY

Provide a greater range of housing choices to enable a diversity of people at all stages of life to enjoy Londonderry, including young adults, families, retirees, seniors, and people of different income levels. Housing opportunities should include small cottages, dignified multi-family housing, and live-work units, in addition to single family homes. A more diversified housing strategy will promote affordable housing and a more livable community.



INCREASE TRANSPORTATION CHOICE & WALKABILITY

Provide a safe, reliable transportation system that balances all modes of transportation, including walking, biking, public transportation, and cars. Consider land use and infrastructure together, promoting complete streets that emphasize the quality and character of both the thoroughfare and the private realm. Emphasize both destination-based as well as recreational trips, promoting active living for all ages, with special attention given to the mobility of children and seniors. Investment in the transportation system should favor multi-modal travel solutions, especially in new, walkable activity centers and along the corridors that link them, with capital improvements and Town policies targeted for vehicle, bicycle, pedestrian, and transit users.



ENHANCE THE MUNICIPAL ADVANTAGE

Promote a healthy and sustainable business environment by investing actively in infrastructure, providing favorable incentives, and building a community that is attractive to employers and their workers. Continue to promote Londonderry and build a competitive advantage to attract knowledge-based businesses to the area. Investment and recruitment initiatives should realize “triple bottom-line” benefits for Town residents by seeking to improve the tax base, promote economic vitality for local shops and businesses, and increase access to employment opportunities in Town.



EXCEL IN EDUCATION & TOWN SERVICES

Continue to advance quality-of-life for all residents of Londonderry by maintaining and expanding education and Town services, while ensuring that elected officials are good stewards of Town finances. This includes a strong partnership with the Londonderry School District to support their high quality programming and academic achievement, while continuing to earn strong community support.



**ELWOOD
ORCHARDS**
WHOLESALE  RETAIL
BY THE WOOD & SON

←
**FARM
STAND**

reflections

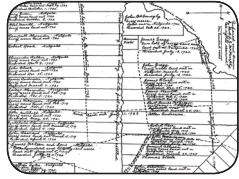
A focus on existing conditions, emerging trends, and priority issues raised by the community set the stage for where the Town needs to go in the future. The technical analysis, insights, and recurring themes discussed during Planapalooza formed the foundation on which the rest of this Comprehensive Master Plan was based. The following insights touch on community character, regional forces, mobility and a number of other elements that all directly influence the Town's development and sustainability into the future.

Timeline of LONDONDERRY, NH

1700's to Today

1700

1800



First Scotch-Irish Settlers arrived in area known as Nutfield
1718

Nutfield incorporated as a Township and renamed Londonderry
1722

General Court approves creation of West Parish of Londonderry
1740

Parish of Windham formed out of southern portion of Londonderry
1742

Town of Derryfield incorporated from parts of Chesterfield, parts of Londonderry, and formerly unincorporated areas (later renamed Manchester)
1751

Morrison House built along Rockingham Rd.
1760

Matthew Thornton signs Declaration of Independence
1776



Present Presbyterian Church built along Mammoth Road.
1837

First Baptist meetinghouse constructed
1829

Construction of Mammoth Rd. from Lowell, Mass., north to Concord
1831

Manchester & Lawrence Railroad line opened — today's rail-trail
1849

1832 President Jackson travels Mammoth Road dining at White's Tavern on his way to Concord

1837 Original West Parrish Meeting Hall moved to Mammoth Road and becomes Old Town Hall

1860 Abraham Lincoln traveled through Londonderry



1824 Town divided east and west into Derry and Londonderry

1772 Mack Farm purchased, in part from Matthew Thornton



1778 Portion of Londonderry separated and joined to Hudson

1769-70 Dr. Morrison's Meeting House constructed as first meeting house for West Parish near intersection of Pillsbury and Hardy Roads

1740 Dr. Matthew Thornton settles in Londonderry

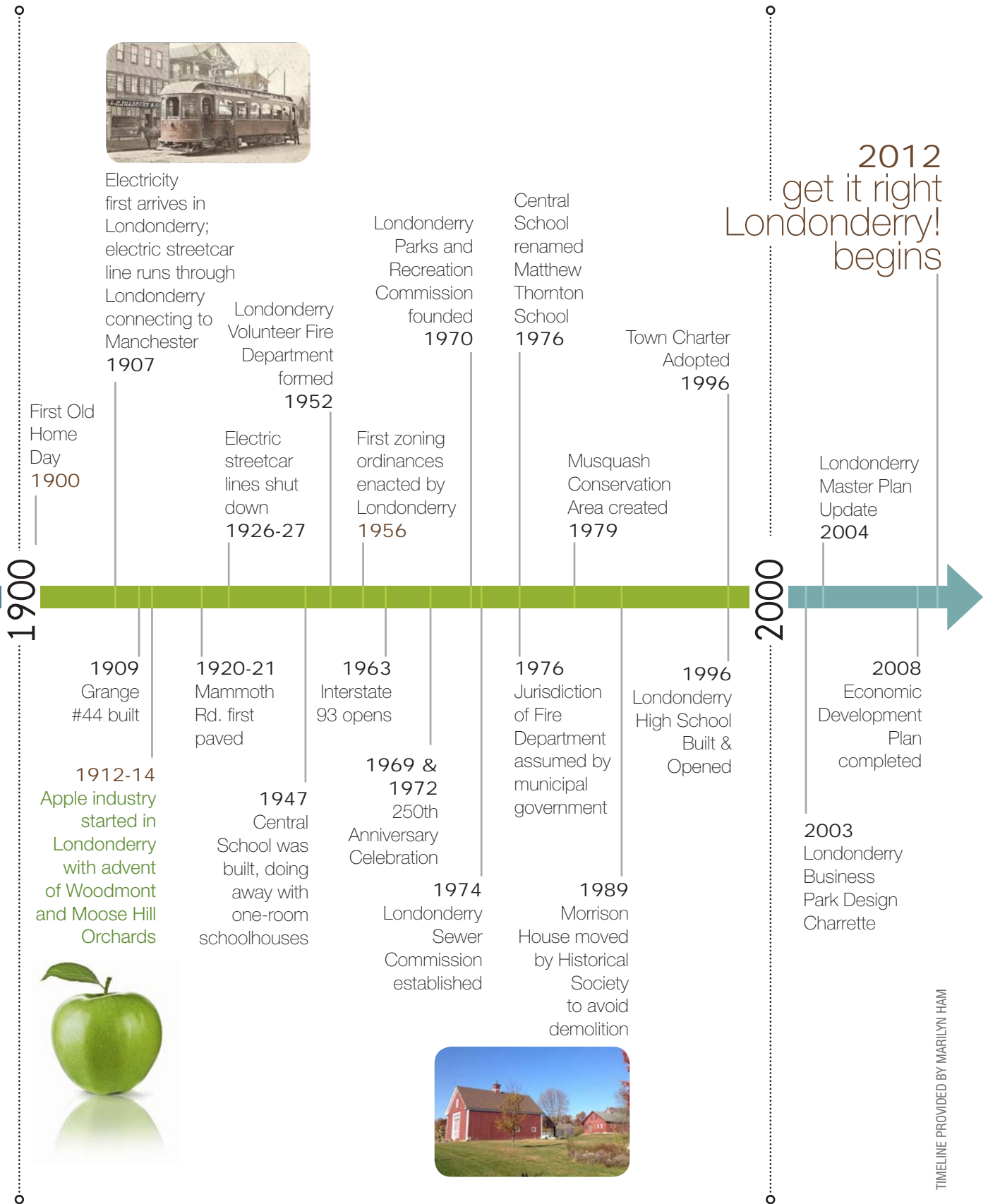
1735 Petition to create West Parish of Londonderry granted by town

1733 Birth of George Reid, Revolutionary War hero



"LIVE FREE OR DIE!"

1728 Birth of John Stark, Revolutionary War hero, at Londonderry



Regional Context

The Town of Londonderry, New Hampshire is located in Rockingham County within the Southern New Hampshire Planning Commission Region and is nestled among broad expanses of open spaces. The Southern New Hampshire Planning Region includes the communities of Auburn, Bedford, Candia, Chester, Deerfield, Derry, Goffstown, Hooksett, Londonderry, Manchester, New Boston, Raymond and Weare, an area inclusive of 492 square miles and 259,521 residents. Originally a rural agricultural community, Londonderry experienced extreme growth in the 1980's, making it the suburban community that it is today, with a mix of low-density residential neighborhoods, auto-oriented retail, and a strong office and industrial presence. With a population of 24,129, the Town is the third largest in the Southern New Hampshire region and functions as a suburban bedroom community for Manchester and Boston, with almost 80% of residents commuting out of town for work.

Londonderry is a transportation hub within the Golden Triangle formed by I-93, I-293/NH 101, and the Everett Turnpike, all converging on the Manchester-Boston Regional Airport. Interstate 93 connects Londonderry to Boston, located 45 miles to the south and Manchester, located just 10 miles north.

Londonderry is within a practical commuting distance (30 minutes) of approximately 750,000 people and beyond that, has easy access to the City of Boston and the I-495 corridor. Its prime geographic location affords access to employment, health, education, and commercial resources provided by the greater Boston metropolitan area.

Besides providing convenient access for commuters, Londonderry benefits from the presence of Manchester-Boston Regional Airport,

and has the only large area of undeveloped land around the airport. How this land is used in the future is critical to the Town and region. In addition to the airport, there is also a proposal to extend passenger rail service from Boston, Massachusetts through Nashua and Manchester.

Londonderry also benefits from its proximity to both the seacoast and the mountains. A 45-minute drive brings you to the coast and an hour drive takes you to the White Mountains and/or the Monadnock Region, giving the community easy access to large scale recreational areas.

Within the region, Londonderry is known for its apple orchards. A New Hampshire Scenic and Cultural Byway runs through the Town, fittingly called Apple Way, which connects the orchards, old farmhouses, and local landmarks revealing the history of the area.

Londonderry is particularly well known for its quality school system, attracting people from across New England who move to Town for the schools and the opportunity for their kids to participate in the local recreation, sporting events, and the world-renowned music program at Londonderry High School.

To remain competitive in the region, Londonderry needs a clear vision that supports and builds on the Town's municipal advantages, preparing the community for a long and sustainable future. Of critical importance is protecting the natural resources that attract residents and visitors alike, continuing to grow businesses that employ local residents and draw in workers, and maintaining a strong tax base so that the school system can remain well funded and strong.

Regional Context Map



Demographics & Population

As of the 2010 US Census, approximately 24,129 people lived in the Town of Londonderry, making it the third largest community in the Southern New Hampshire Planning Region, behind Manchester and Derry. For the first 258 years since its charter, Londonderry's population grew gradually. Then, starting in 1980 and continuing through the 1990s, an explosion of growth occurred that changed the landscape of Londonderry forever. Development occurred in the form of residential subdivisions on formerly rural land, with an influx of new residents moving into single family homes.

Historically, Londonderry has not attracted a significant share of younger professionals under the age of 35. While this cohort is not a major demand driver in the Londonderry market, there is an opportunity to attract this demographic through appropriately scaled multifamily development with complementary retail amenities and entertainment options. Live/work buildings, such as rowhouses, as well as apartment buildings that have the appearance of single-family homes, and accessory dwelling units, all represent building types that could be integrated into the housing mix and expand options for smaller family units.

Londonderry's age profile is skewed older (with a median age of 40.5, as compared to 38.4 throughout the region) by a relatively large concentration of people between age 35 and 54, which is indicative of families with school-aged children.

In order to create a more well rounded community with a better distributed demographic profile, Londonderry can offer more choice in the types of housing, shopping, and entertainment options. Additionally, some demographic segments not currently plentiful in Londonderry have preferences related to sense of place and community character. These preferences will need to be met if the Town hopes to attract new residents and businesses.

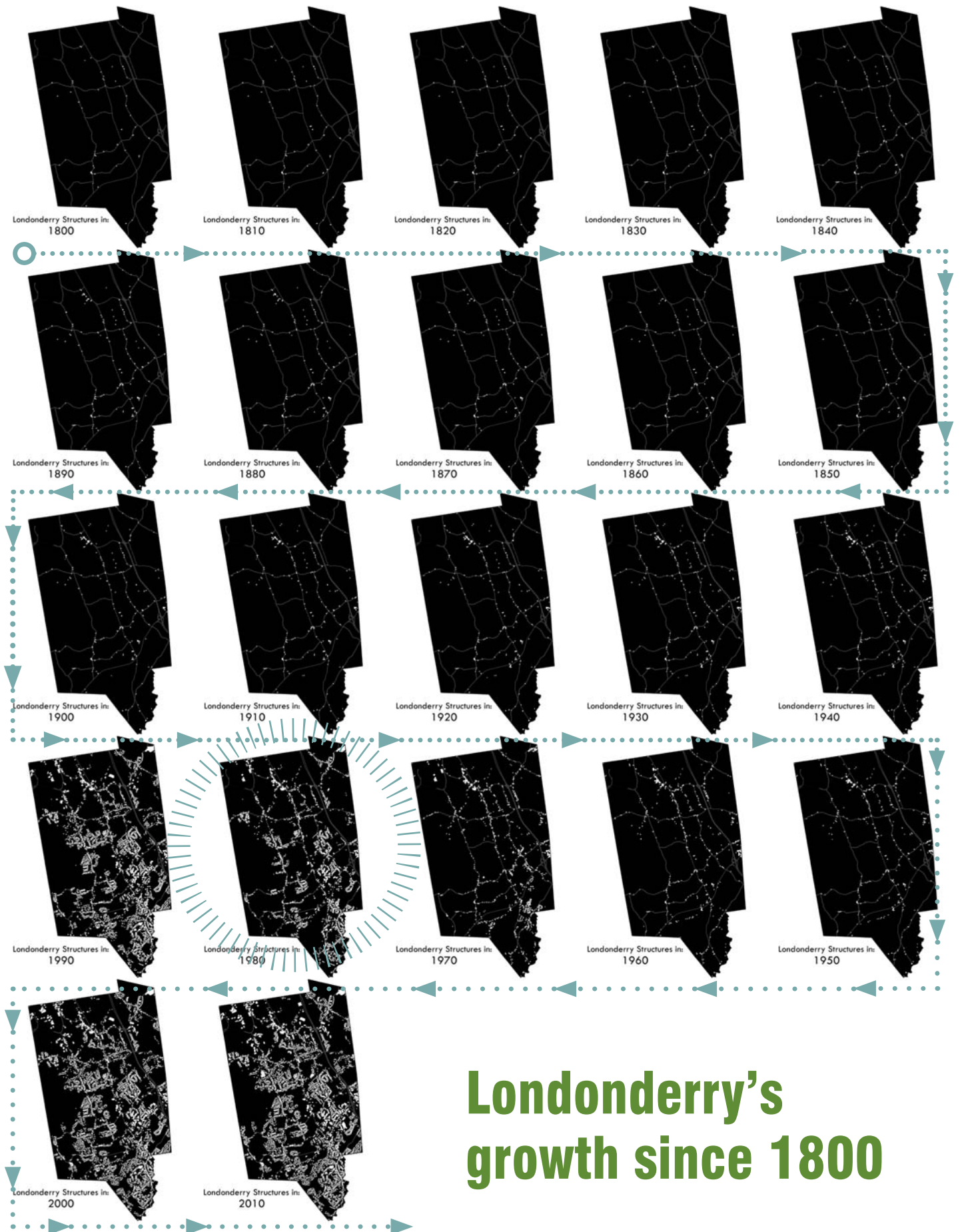


MARY WING SOARES, STEVE YOUNG, AND OTHERS

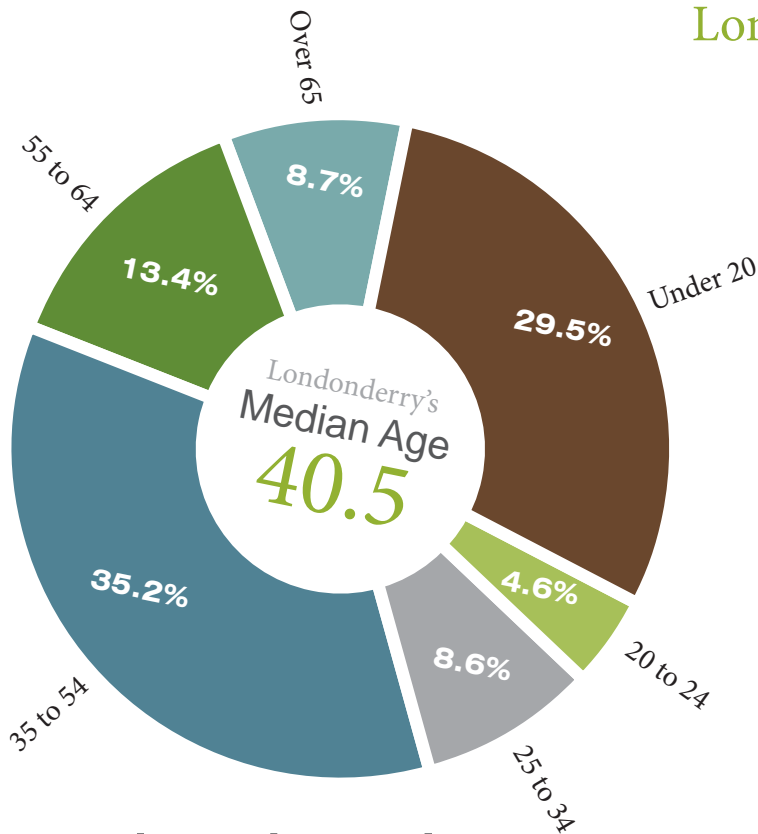
PHOTOS OF LONDONDERRY RESIDENTS

What We Heard . . .

Londonderry is a great place for parents of young children. Many move to Londonderry while their children are in school and move away afterwards. The elderly population could use more housing options and more communication about the services that are available for them. The younger generations are interested in a more walkable, compact lifestyle and the Town needs to keep this in mind in order to attract younger people to Londonderry.



demographic profile



Londonderry is the

3rd

most populous
community in the
Southern New
Hampshire Planning
Region

Londonderry is projected to capture

over 16%

of the region's growth
between now and 2020

Londonderry's Age Breakdown

SOURCE: US CENSUS BUREAU; SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION; TEG ECONOMICS

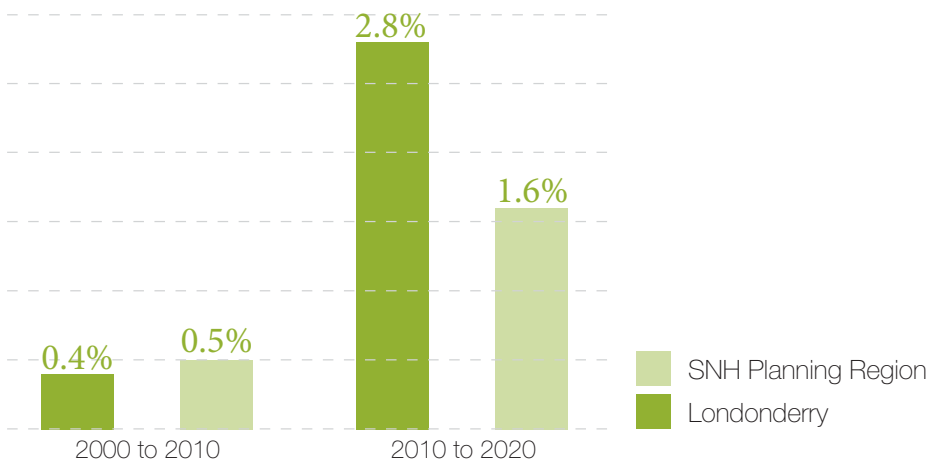
24,129

2010 population of Londonderry



31,688

2020 Londonderry population
projection



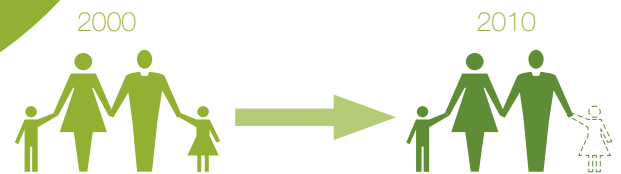
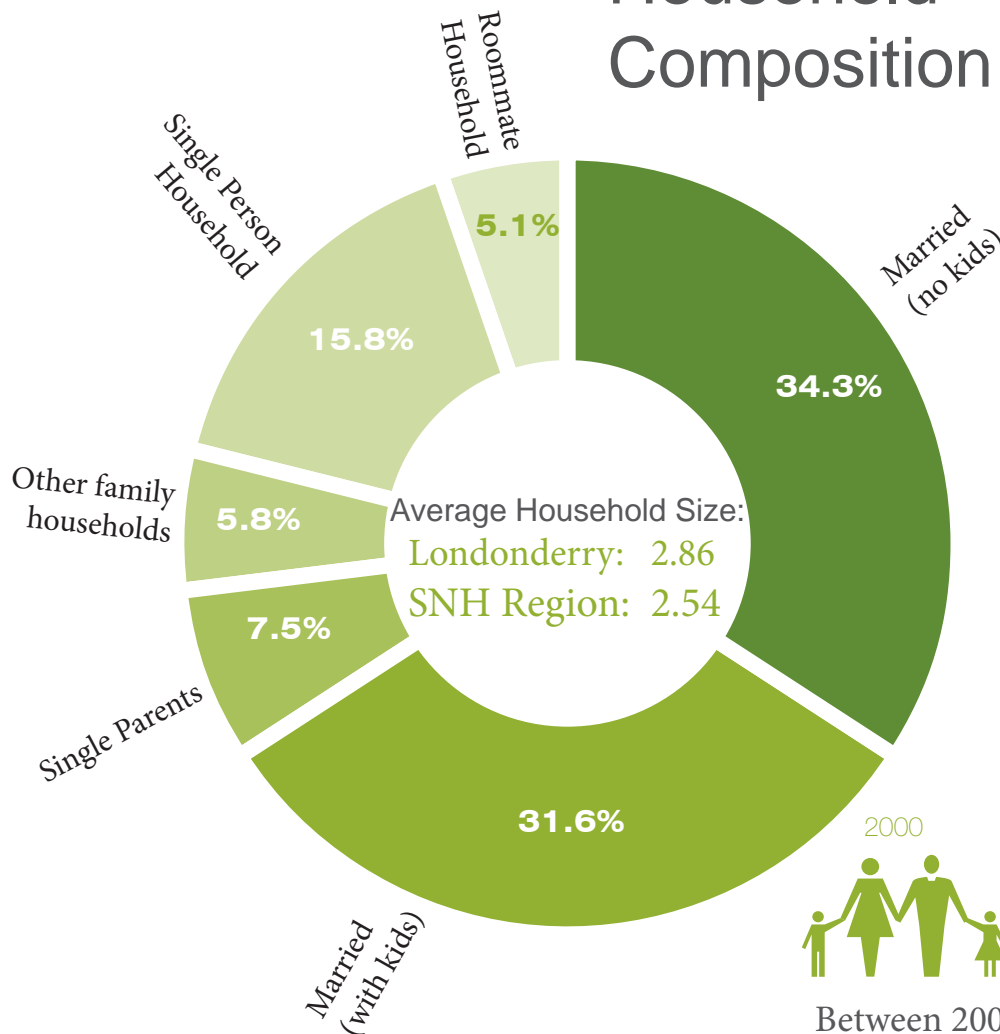
Annual Population Growth Rate

Household Composition



8,438
Households in
Londonderry

61%
of the households
in Londonderry do
not have children.



Between 2000 & 2010 the average household size in Londonderry shrank from 3.06 to 2.87.

SOURCE: US CENSUS BUREAU; SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION; TEG ECONOMICS

41%

of Londonderry residents over 25 years old have a bachelor's degree or higher.

whereas only

27%

of the population of the U.S. has attained the same level of education.

Insight:

Londonderry's age profile is skewed older (median age of 40.5, as compared to 38.4 throughout the region) by a relatively large concentration of people between age 35 and 54, which is indicative of families with school-aged children.

There is a notable gap in the population of 20 to 24 year olds and 25 to 34 year olds, which represents only 4.6% and 8.6% of the population respectively, compared to a US average of 6.9% and 19.8%, respectively. Londonderry has a highly-educated work force that should attract knowledge-oriented businesses.

Community Character



PHOTO BY JACK FALVEY DURING A FALL, 2011 FLIGHT WITH EARL ROSSE

Londonderry's physical characteristics reflect the time of its greatest change, when suburban development was a common and cherished practice. As a suburban town, its physical form is defined by separated uses with a heavy focus on detached single-family neighborhoods and commercial strip centers (as seen in the images that follow), with some remnants of the rural landscape remaining intact.

Neighborhoods are typically built as quiet enclaves; streets have limited access and terminate into cul-de-sacs. Both residential and commercial development is surrounded by heavily wooded buffers giving Londonderry a pseudo-rural appearance.

The road network includes a combination of smaller, rural roads used primarily by local traffic as well as more suburban, heavily traveled roads that link to I-93. Despite a lack of connectivity within Londonderry defined by its suburban pattern of development, these roads manage to deal effectively with traffic. However, there

is a general sense among the community that, in areas heavy with commercial and industrial development, roadways become congested and unattractive in their appearance.

Within the historic center of Town, which is generally regarded as being at the intersection of Mammoth Road and Pillsbury Road, there is a strong sense of Londonderry's rural and community-oriented spirit. This area functions as a civic center containing four schools, Town Hall, Library, Police Station and Town Common, several churches, and a working apple orchard. Despite these amenities, there is a lack of cohesion in the center and limited daily use of the Common resulting from a development pattern that does not define the space, promote walkability or encourage spontaneous activity.

Finally, apple orchards dot the landscape, providing the rural character that is beloved by the community. They also help to instill the sense that Londonderry's built environment, though suburban, possesses a quiet, rural character that is equally beloved by the community.

Development Status Map



Insight:

With nearly 80% of land area in Town already built in the suburban condition or protected as open space, there are only a handful of large undeveloped parcels remaining. Londonderry is in a position to determine the future of these remaining parcels, whether they are protected or developed, and how. Outside of these large parcels, most future development will occur as retrofit or infill.

■ Developed Areas
□ Undeveloped Areas



Strip Retail

Strip retail is characterized as diverse commercial developments arranged in long, narrow buildings. Each building may house as many as ten different tenants occupying as little as 500 square feet of leasable space. These developments are oriented to highways and advertise their services with large signage. Parking tends to be located between the road and retail buildings. Though mostly generic in its design, this format allows for quick, convenient shopping via automobile and a multitude of services at one location.



Big Box Retail

Big box retail is easily recognizable for its large (40,000 square feet or more) buildings that are one-story in height and designed with minimal architecture. The most familiar buildings of this type feature large parking fields with hundreds of spaces to support high volumes of customers. These “big box” buildings are served by highways but set back from traffic by hundreds of feet. Though this development type is often difficult to restore after vacancies occur, its presence still plays a major factor in the Town’s economy.



Cul-de-sac Neighborhood

The most common development type in Londonderry, the cul-de-sac neighborhood, is a limited-access, low intensity, suburban enclave named after its trademark dead end streets. Such streets separate connections between neighboring areas and prevent any non-local traffic, resulting in increased travel distances and congestion. Uses are almost exclusively single family residential with homes of a consistent shape and size on large lots (usually 1 acre or greater). Though widely prevalent in the Town, these developments are seldom seen by visitors as they are frequently buffered with trees from major roadways.



Apartment Complex

Apartment complexes are high-density residential uses that are commonly designed as “stacked flat” developments, with buildings scattered throughout the landscape. These developments include shared parking areas typically located in the front of the buildings, multi-story designs, and easy access from major roadways. Though these developments can vary greatly in quality, the best examples are often smaller in scale and made compatible with single-family neighborhoods through the use of high quality public spaces, compatible architecture, a clear relationship to the street, and with parking in the rear.



Office Complex

Office complexes range from single-story buildings to multiple-story buildings in a campus setting, with buildings often times scattered along an access road. Access is often limited solely to employees and parking is arranged around the site in equal distributions. These complexes are often times located in remote locations or in proximity, but physically separated, from other uses such as homes and commercial areas. These complexes can be suitable for a variety of uses given their versatile form.



Industrial Park

The industrial park is a single-use pod dedicated to businesses that require large building footprints, extended business hours, and a heavy reliance on truck traffic. Characteristics include functional design for buildings, wide roads, and easy highway access. With new technologies, few industrial uses are noxious to surrounding neighbors, though residences are seldom within walking distance. Though often located in remote parts of Town, these parks are visited by large numbers of workers. Industrial parks are not commonly a place designed for public access and enjoyment.

What We Heard . . .

Most Londonderry residents moved to Londonderry for the traditional New England atmosphere. They want to preserve that character and see new places built that will add to that character and to Londonderry's walkability. Many people mentioned Nashua Road (NH 102) as a place in Londonderry that they didn't find appealing. While people appreciate the convenience of having those businesses available, they are not happy with how it looks.

Overall, Londonderry residents want growth to be appropriately scaled for a small town, and they want new development to be located in its proper place. As some stated, this will mean working towards making Londonderry more walkable, compact, and with a discernible and vibrant center.

Many stated that industrial businesses should be restricted to the industrial area or to the area surrounding the I-93 connector. Additionally, big box stores should be limited to the interstate exits. At the same time, residents acknowledge how changes in growth patterns will affect tax revenue, yet they want to protect the things that drew them here in the first place and improve upon the Town's character.

Business Climate



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

Londonderry has an impressive and diverse collection of businesses, including nationally recognized brands such as Stonyfield Yogurt, Coca-Cola, Harvey Industries, and Ecco Shoe; high tech manufacturing such as L-3 Warrior Systems, Wire Belt Company of America, Buderus and Meggitt Avionics; prominent food distribution companies such as Freezer Warehouse and Highwood Cold Storage; transportation businesses such as FedEx, Penske Corporation and UPS; and a broad retail sector including Home Depot, Staples, three supermarkets and hundreds of local and franchise retail and food service businesses.

Londonderry's geographic location, at a transportation crossroads with easy access to the Manchester-Boston Regional Airport, two highway exits, and proximity to Boston, MA, provides access to a broad labor market and enables easy transport of goods and services to local, regional, and international markets.

The manufacturing sector is particularly strong and has a major regional concentration in Londonderry, with opportunities for growth. The

office sector is similarly growing with a focus on small businesses needing 2,000 square feet of space or less. This small office space is conducive for incubator niche business partnerships, including young professionals, start-ups, and building the Town's reputation for technology and innovation.

Londonderry should continue to diversify the mix of business activity and round out the workforce, thereby increasing the Town's sustainability and reducing economic risk. In order to grow as a vital economic center, Londonderry should make efforts to strengthen its municipal advantage by identifying, promoting, and building upon local assets, engaging in regional cooperation for mutual benefit, and adjusting the regulatory framework to adapt and support the Town's vision.

Londonderry should invest in initiatives that increase community character, which also positively impact economic vitality & overall quality of life. By focusing on the values and characteristics that set the Town apart, Londonderry will be able to attract the kinds of businesses that want to locate where people prefer

to live, visit, and retire. According to the National Association of Realtors, a community's appeal drives economic prosperity.

For economic development to be successful, goals must be market realistic and consistent with the character and scale of the community. Initiatives should include enhancement of gateways to showcase an attractive and inviting place to live, visit, and grow a business, while also investing in activity centers with diversity and a mix of activity.

This Plan takes a first step at identifying and taking inventory of community assets and resources. Readily identifiable assets include the Manchester-Boston Regional Airport and direct access to I-93 and Route 3 by way of the recently opened Airport Access Road, along with the adjacent 1,000 acres of prime business land, a commuter market of roughly 750,000 people, and a strong existing business mix suitable for agglomeration.

Londonderry can also build on a growing food storage and distribution industry, the well-established orchard and pick-your-own farms, the potential for spin-off energy sources associated with AES, and the expansion of the Eco-park model already in place. Because green building is now more cost effective, it should be increasingly promoted within Londonderry to build the community's green advantage.

An educated work force is one of Londonderry's greatest assets. Efforts should be made to promote agreements between technical/community colleges and businesses who want to locate and grow within the community by training a work force specifically for their needs.

The Town must also encourage the development of a variety of housing types that are convenient to employment centers, affordable, and provide the amenities desired by a young, well educated work force. The Plan should also seek to develop, promote, and retain local 'home grown'

entrepreneurs. Efforts should be made to enter into regional cooperative partnerships for mutual benefit and shared success. Londonderry should work with state and regional partners to develop incentives, promote legislation, expand educational opportunities, and create voluntary initiatives to attract high quality businesses while growing those already here.

Based on input received throughout the process of creating this Plan, there is a strong appreciation for buying local goods, products, and services. However, there seems to be less follow-through when it comes time to make a purchase. With all of the small business located in Londonderry, a Buy Local campaign could easily find good traction if the right organizational steps are put in place and marketing efforts are executed.

There is a perception that opening a business in Londonderry is difficult due to zoning and permitting issues. These concerns may be alleviated and perceptions reversed with revisions to the zoning ordinance.

What We Heard . . .

Residents and small business owners want to create a more encouraging business climate. Many stated that it is currently difficult for businesses to work through the planning and approval process because it is unclear and cumbersome. They want a simpler, easier process for opening and running a business. They also want to support small and local business by buying local. Many residents also mentioned an interest in making sure big businesses and chain retail are a good fit for Londonderry and are located in the right place.

manufacturing trends

1,420

manufacturing jobs are projected to be lost in the SNH Planning Region by 2018

----- however -----

There is anticipated expansion in the wholesale trade, transportation and warehousing sectors.

11,729

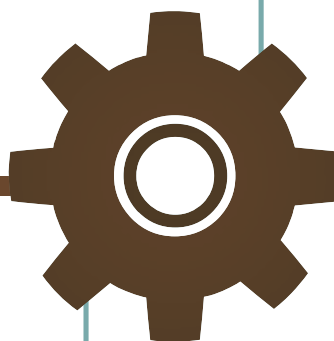
Manufacturing Jobs in the Southern NH Planning Region

3,267

Manufacturing jobs in Londonderry

\$64,893

Average Manufacturing Wage in SNH Planning Region



\$79,960

Average Manufacturing Wage in Londonderry

27.9%

of regional manufacturing sector jobs are located in Londonderry

11.3%

of all regional jobs are located in Londonderry

Insight:

Londonderry's Employment Concentration Index for manufacturing is nearly twice as high as the target for a strong concentration of jobs.

A majority of the largest employers in Londonderry are in the high tech and aerospace manufacturing field.

The largest concentration of manufacturing jobs in Londonderry are around the Manchester-Boston Regional Airport and Route 102.

SOURCE: "TARGET INDUSTRY ANALYSIS"; PREPARED BY MORAN, STAHL & BOYER, JAN 2010; SOURCE: "TARGET INDUSTRY ANALYSIS"; PREPARED BY MORAN, STAHL & BOYER, JAN 2010; NEW HAMPSHIRE ECONOMIC + LABOR MARKET INFORMATION BUREAU; TEG ECONOMICS



25%

of all jobs in Londonderry are based in manufacturing

An Employment Concentration Index greater than 1.25 is considered a strong concentration of jobs.

Londonderry's Employment Concentration Index for Manufacturing is

2.47

retail sector trends

66% favor living within walking distance of stores, restaurants, and other places in a community

80% favor single-family detached homes

.....
The development of new walkable communities may be more promising in the suburbs than in cities.

Londonderry Retail Rent

\$3.00 ← range of rents → **\$17.65**
per square foot per square foot

Volume of sales that will trigger further investment in the retail sector

 **\$250** per square foot*

* Annual sales needed for a store to trigger more investment

5,000 s.f. to **10,000 s.f.**

The amount of area required by the typical modern retailer, as well as high ceilings and on-site parking.

SOURCE: BUILDING A BETTER FOUNDATION FOR URBAN RETAIL'S FUTURE, ROBERT GIBBS, 2012; WALKABLE COMMUNITIES SURVEYS BY JEFFREY SPIVAK, 2011; TEG ECONOMICS

Insight:

Londonderry has a robust retail sector with many stores from which to choose. The broad variety has led to a wide range of rents, allowing many types of retailers to enter the market.

Many small to medium-sized local, regional and national retailers can adapt their standard formats to buildings as shallow as 25 feet and as small as 200 sf. These microstores should be grouped around anchor-type tenants capable of attracting shoppers from outside the area.

These “destination retail centers” already exist in Londonderry. The missing ingredients are a complete mix of uses and more appealing design that creates meaningful public streets and spaces, and walkable destinations.

office sector trends

Office Users in the Southern NH Planning Region are projected to add over 2,000 jobs by 2018. This is driven in large part by expansion in the professional, scientific and technology services sectors.

2,000 sf. or less

is the amount of space in which the typical office in the Londonderry market could easily function.

277,000 sf

of office space is available for rent in the Londonderry market

35% of which will be located at the Falling Water Office Park under construction near the airport

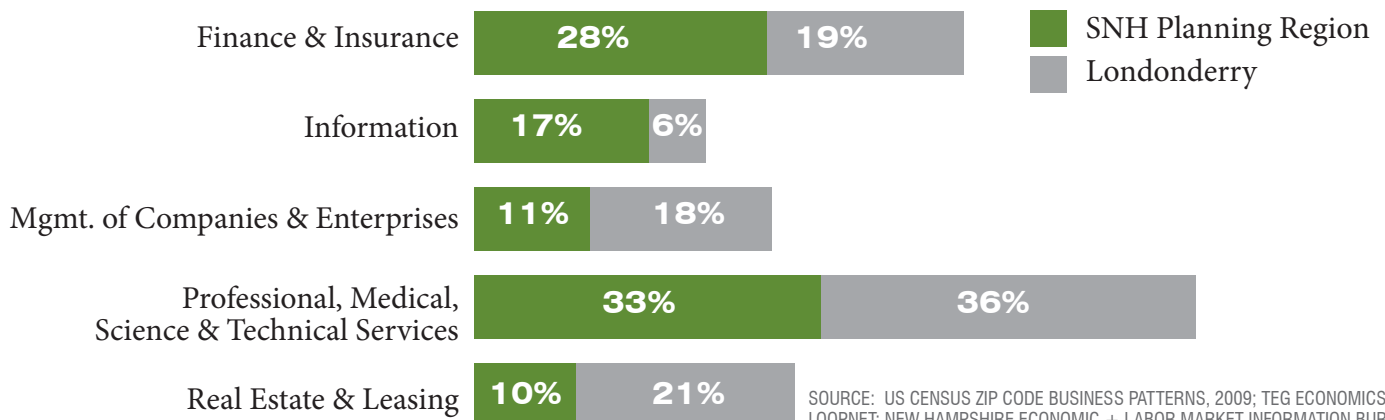
\$72,898

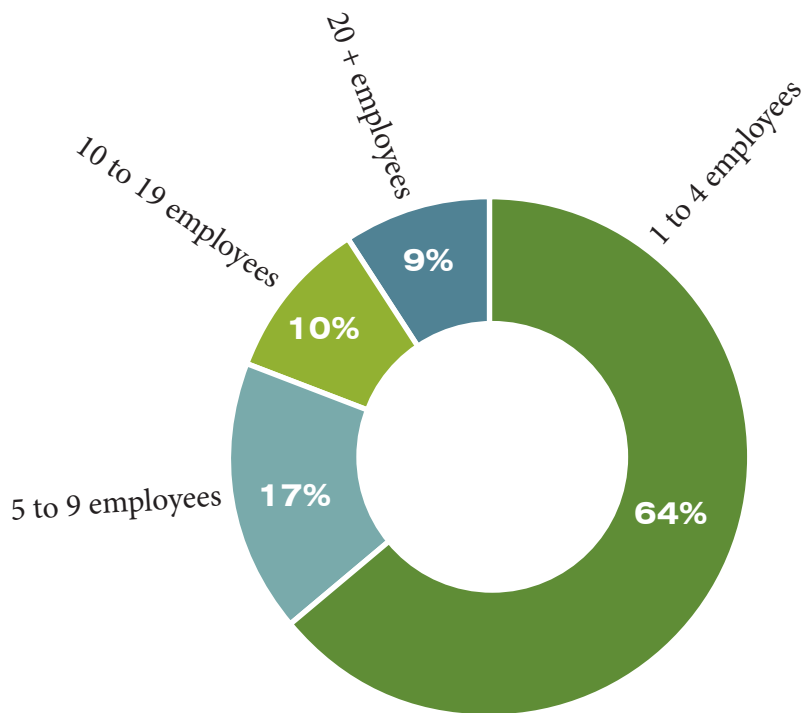
Average Office Wage in SNH Planning Region

\$62,033

Average Office Wage in Londonderry

Office Jobs by Sector





Typical Firm Size in Londonderry Office Users

An Employment Concentration Index greater than 1.25 is considered a strong concentration of jobs.

Londonderry's Employment Concentration Index for Office is

0.48

5.4%

of regional employment in Londonderry are in office jobs

11.3%

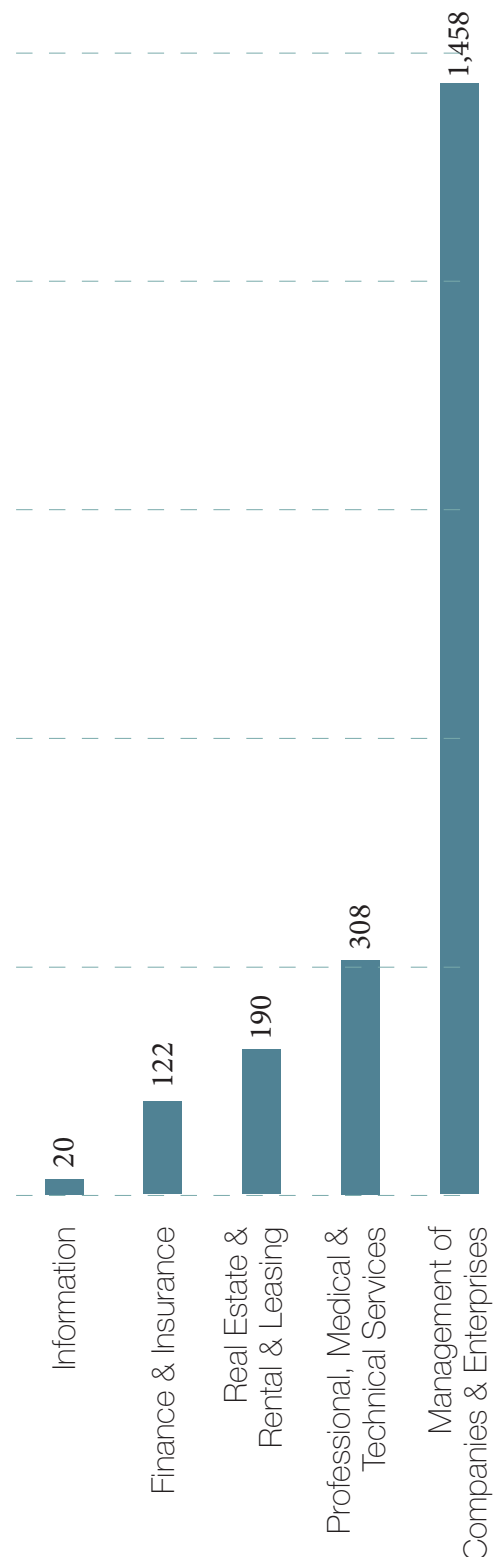
of all regional jobs in Londonderry are in office jobs

Insight:

There are few jobs in the medical office sector, which is expanding locally and nationwide.

The Employment Concentration Index for office jobs is relatively low compared to the target of 1.25 or greater.

SOURCE: US CENSUS ZIP CODE BUSINESS PATTERNS, 2009; TEG ECONOMICS; LOOPNET; NEW HAMPSHIRE ECONOMIC + LABOR MARKET INFORMATION BUREAU



Projected Change In Londonderry Office Sector By 2018

Housing & Neighborhoods

Neighborhoods are the backbone of society; besides being a place to live, they also provide the essential components for living a complete life that includes places to socialize, stores to buy necessities, and nearby schools and employment centers. Traditionally, neighborhoods were organized around an interconnected street network, which allowed easy movement for both vehicles and pedestrians. These streets and natural features defined the edges of neighborhood areas, each with their own unique pockets of community life along smaller residential streets and in neighborhood centers.

Londonderry had the majority of its growth after the advent of the automobile. During this time, growth patterns spread in a low density form, requiring use of a car to meet most needs of daily life. Today, Londonderry has a lack of visibly discernible neighborhoods, even though residents identify with the social construct of their subdivisions and most frequently their cul-de-sacs.

Housing in Londonderry is a mix primarily consisting of homes built after 1980 and some historic homes scattered across the Town. With a few notable exceptions on major roads, and in some historic districts, Londonderry does not give the impression to the passerby or a visitor that it is such a historic community. While single family homes dominate the landscape, there are few options for other living arrangements based on preferences or needs.

Londonderry does not offer the elderly the opportunity to age in place unless they can afford to pay for at-home nursing or have friends and family to help them once they can no longer care for themselves. At this stage in life, many people

have to move out of Londonderry because there is no housing option for those who can't drive or care for themselves.

Additionally, housing prices keep new graduates, people looking for starter homes, and employees of many local businesses and of the Town itself from being able to purchase in Londonderry.

In 2008, Londonderry adopted an Inclusionary Housing amendment to the zoning ordinance to permit units targeted for workforce housing. This was adopted following a report by the Affordable Housing Task Force that identified a definitive need for workforce housing in Londonderry. Adoption was also a response to New Hampshire statutes that codified case law relative to workforce housing. Since that time, no developments have proceeded under this ordinance.

What We Heard . . .

Londonderry residents have mixed feelings about living and working in the same place. Some want to live close to their jobs so they can walk to work. Others want the geographical separation of work and home. Residents know that a better variety of housing options is needed in the Town, but they want to make sure that options such as apartments are designed and sited in the best places. Residents would prefer to have their garages connected to their houses even if the garage must be set back from the street.

household growth

472

households headed
by someone age 65 or
older were added in
Londonderry between
2000 & 2010

**MORE THAN ANY OTHER
COMMUNITY IN THE SNH
PLANNING REGION**

469

single-person households
were added in Londonderry
between 2000 & 2010

Total Number of households added between 2000 and 2010: **815**

Between 2000 and 2010,

Londonderry primarily added
households with incomes in excess
of

\$100,000

Between 2000 and 2010, in the SNHPC Region, Londonderry captured:

14.0% of new households
comprised of one
or two people

11.9% of new owner-
occupied households

11.4% of total house-
hold growth

10.0% of new households
earning more than
\$150,000 per year

59.1% of households
headed by someone
age 65 or older

Insight:

Londonderry is attracting an unusually high number of senior and single-person households compared to the SNH Planning Region.

From 2000 to 2010, the number of households earning more than \$100,000 grew from 1,943 to 3,793. This occurred at a time when Londonderry's population grew by only 893 persons.

SOURCE: US CENSUS BUREAU; TEG ECONOMICS

housing & income profile

\$300,900

Median Home Value
in Londonderry

which is

12% Higher

than all owner-
occupied homes in
the SNH Planning
Region

\$1,105

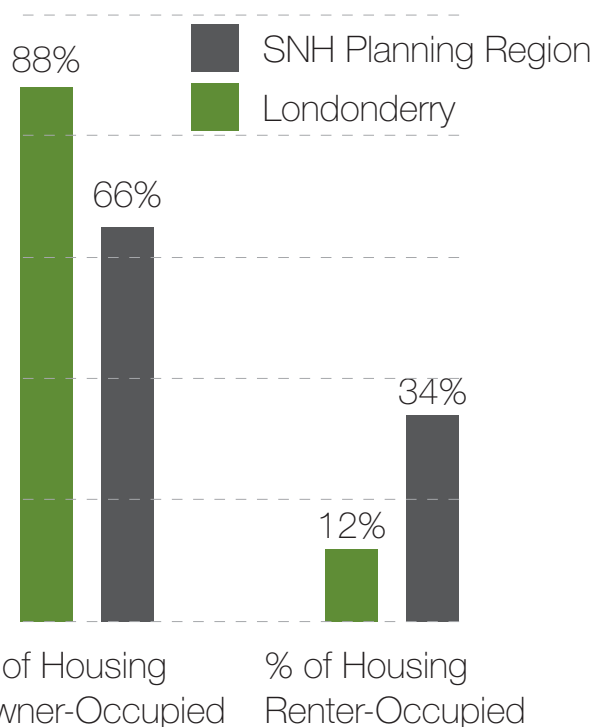
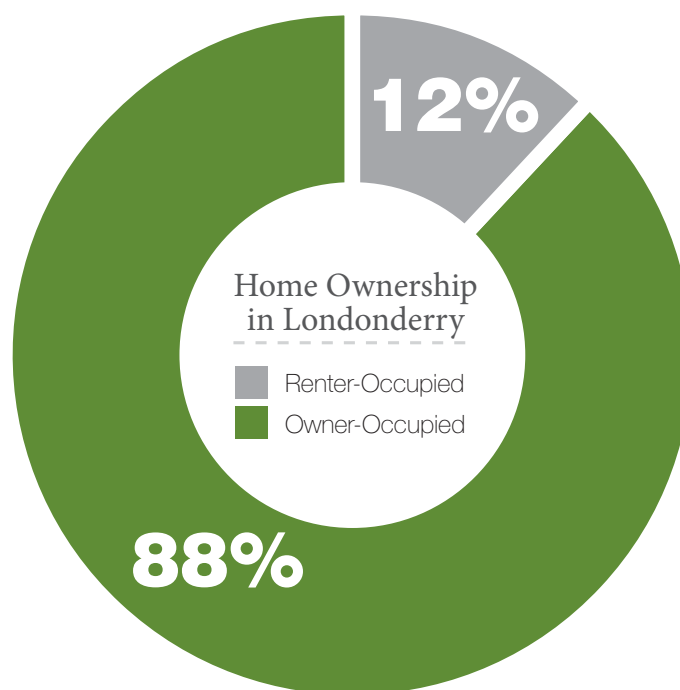
Median Rent in
Londonderry

which is

30% Lower

than the highest median
rent in the SNH Planning
Region

Home Ownership



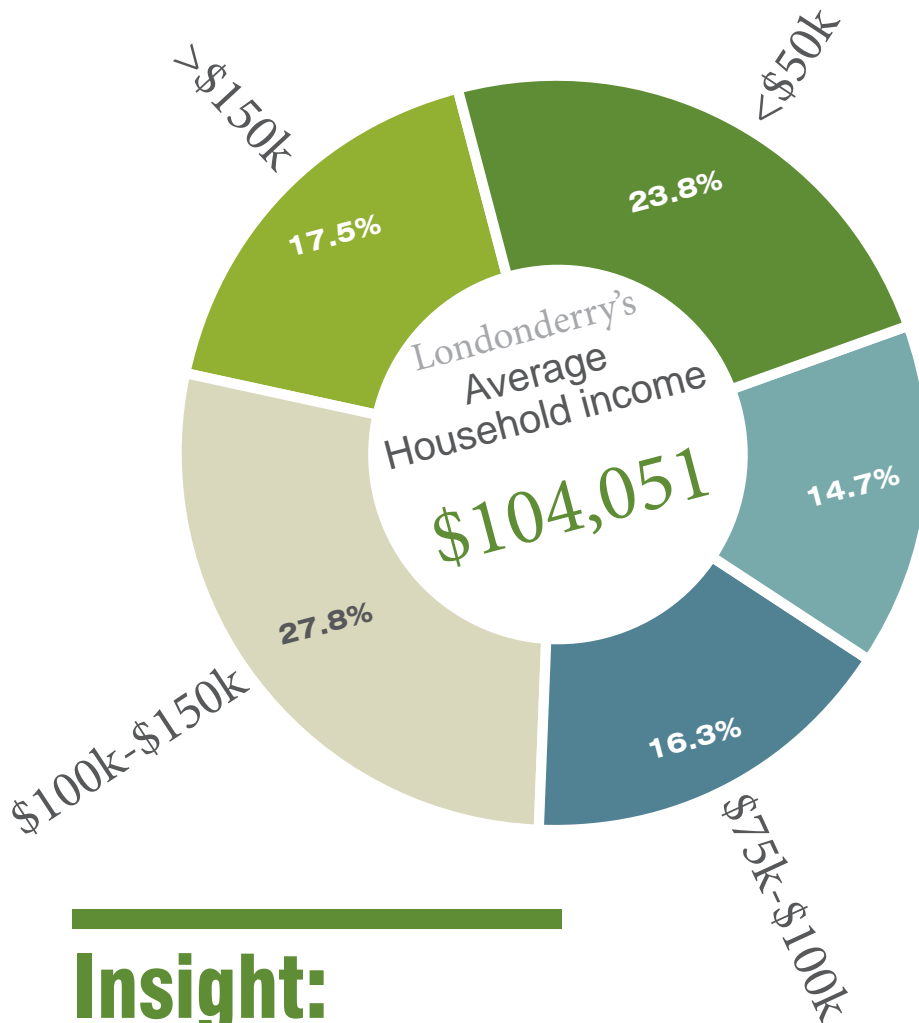
Insight:

Nationwide trends indicate that future housing needs will continue to be impacted by the preferences of aging baby boomers, emerging millennials, and a growing immigrant population. The demand for large lot single family homes continues to decrease. Increasingly, millennials are choosing not to drive or own vehicles.

Walkable neighborhoods command a 40% to 200% premium over auto dependent places.

SOURCE: US CENSUS BUREAU; SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION, 2010; TEG ECONOMICS, EDWARD T. MCMAHON, URBAN LAND INSTITUTE, NNECAPA PRESENTATION, OCTOBER 2012

Household Income Distribution



Londonderry is the **4th** most affluent per capita of the 13 municipalities in the Southern New Hampshire Planning Region

Insight:

Overall, household incomes in Londonderry are significantly higher than in the SNH Planning Region as a whole, especially in comparison to Manchester and other suburban communities east of the Town.

Since spending behavior and household budget allocation is often dictated by the amount of income available to all members of a household (including children and other non-earners), from this perspective, residents in Londonderry are relatively more affluent than their counterparts elsewhere in the Region.

SOURCE: US CENSUS BUREAU; SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION, 2010; TEG ECONOMICS

Per Capita Income in Londonderry

\$36,387

Per Capita Income in SNHPR

\$31,676

Households with income more than \$75k

61.5%

Londonderry

46.3%

SNH Planning Region

Natural Resources & Open Space



PHOTO BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

Londonderry is defined in large part by the significant amount of open space serving the community as parkland, conservation areas, athletic fields, and agricultural lands. These areas allow residents and visitors to explore the natural beauty of the Town through wooded trails, marshlands, and “pick-your-own” opportunities at local farms. When parkland, protected open space, and athletic fields are combined, there are 3,572 acres (14.2% of total land area) dedicated to some recreational purpose. Based on the 2010 census, there are 24,219 people living in Londonderry, which means that the service delivery of active and passive recreational opportunity is 147.5 acres per 1,000 residents.

The maintenance and accessibility of each natural resource or open space varies since they are managed by different organizations. The Conservation Commission, assisted by Londonderry Trailways

and other volunteer organizations, take care of Town-owned conservation land and Town-held easements. The Heritage Commission, with the help of the Londonderry Historical Society, maintains the Town Common and Historic District. The Recreation Department and the School District, assisted by the Londonderry Athletic Field Association, share maintenance responsibilities for the athletic fields. Rockingham County Conservation District currently holds easements on the Sunnycrest and Merrill orchards and has an ongoing contract to monitor the Ingersoll parcels. Londonderry Trailways has also taken the initiative to make these areas more accessible by working with the Town’s GIS staff to develop recreational maps, improve trail networks, particularly in the Musquash and Kendall Pond Conservation Areas, and add signage and bridges. Some areas are still largely inaccessible, allowing the area as a whole to remain natural.

Since the late 1970's, beginning with the purchase of the first Musquash parcel, Londonderry has pursued a conservation program that has permanently protected approximately 4,000 acres of land through simple fee ownership or easements by a variety of protection entities. This permanently protected land represents approximately 15% of the Town. An additional 14% of land is considered partially protected due to easements, uses, or resource features that preclude development. With this in mind, almost 30% of Londonderry is either permanently or partially protected as open space.

Thanks mostly to volunteer efforts by groups such as Londonderry Trailways, a total of 14 miles of recreational trails have been developed in the Musquash and an additional 10 miles can be found throughout Town.

Protecting open space provides intrinsic value, clean and abundant water, recreational opportunities, and scenic views for Londonderry's residents and visitors. Though a great number of local farms and natural areas are protected through agricultural easements and/or Town ownership, not all land in Londonderry with valuable natural resources is safe from development. Londonderry's 2010-11 Open Space Task Force identified a list of high priority parcels for future protection that are consistent with the Town's green infrastructure and local resource priorities (see Community Facilities and Services section). In addition, the Task Force identified recommendations regarding stewardship, water resources, education, regulation and funding that are being examined by the Town staff and Boards/Committees. Principal among them is the need for protection of water quality and quantity. Rapid development, sprawl, flooding due to increasing storm frequency and intensity, and increased impervious surface have made the protection and control of the Town's water resources, both in quality and quantity, the Town's most pressing open space task.

Water resources in Londonderry include the lakes, ponds, streams, wetlands, floodplains, and ground water resources important to the everyday lives of residents. Collectively, these resources

provide drinking water via private wells, control the quantity and quality of stormwater runoff, and provide flood protection during significant storm events. Safeguarding these resources will be essential to the Town's long-term sustainability, especially in the face of rapid decentralized growth and dramatic increases in impervious surface area observed over recent decades.

Increasing impervious surface area in Town — such as new roads, parking lots, and rooftops — prohibits stormwater from soaking into the ground. It runs off quickly across an impervious surface, picks up pollutants, and carries them to nearby lakes, ponds, streams, or wetlands. The end result is significant erosion levels in environmentally-sensitive areas and degraded water quality throughout the community.

The type, pattern, and intensity of development have a significant impact on the amount of stormwater runoff generated in the Town. Decentralized growth patterns of the past 50 years have led to several unintended consequences to local water resources: stream erosion, impaired watersheds, isolated flooding issues, and overreliance on private wells for drinking water.

What We Heard . . .

Many residents have chosen Londonderry as their home because of the natural resources and undeveloped open space. We heard about the beautiful views, the trails, the wildlife, and the farms. Residents want to continue to protect as much open space as possible and have options for protecting agricultural land through easements. Residents are aware that allowing higher density in some areas will leave more land undeveloped. They know that open space can be a draw for new residents.

open space profile

Managing Groups for Conservation/Recreation Properties

- Conservation Commission
- Londonderry Athletic Fields Association (LAFA)
- Londonderry Trailways
- Londonderry Recreation Department
- Londonderry School District
- Londonderry Youth Soccer Association (LYSA)

356
acres of active parks/athletic fields

3,000
acres of passive recreation

14.2%
of all Londonderry available for recreation

For every thousand residents,



147.5

acres of open space is available for recreational activities.

Status of protected open spaces in Londonderry:

15% permanently protected

14% partially protected

Insight:

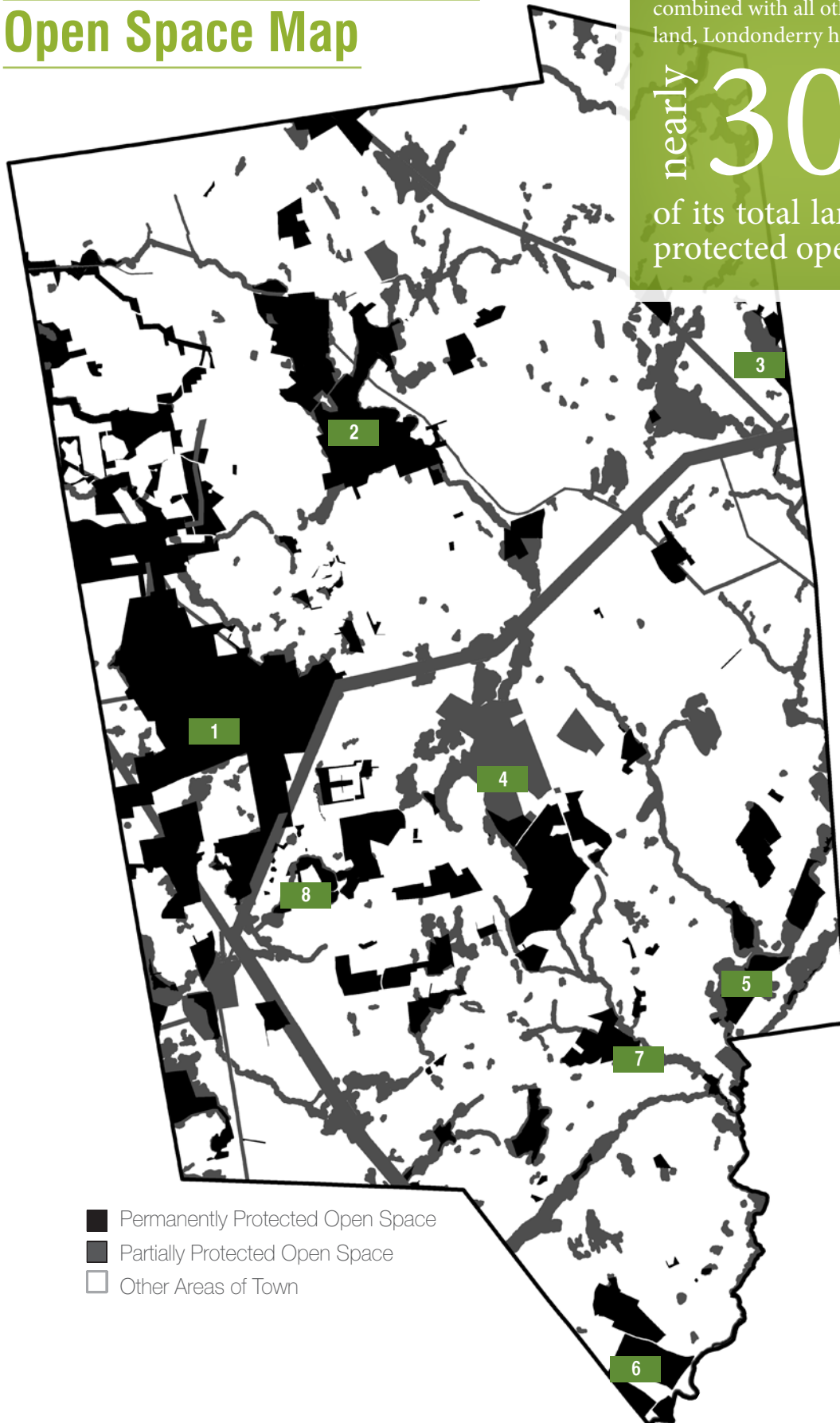
Londonderry provides a tremendous amount of open space for its residents. These amenities help to preserve the unique character of the Town. When combined with all protected open space, these resources give people excellent access to beautiful areas, bolster public health, and strengthen community pride. Most importantly, Londonderry has a plan to buffer and connect these open spaces and the natural services they provide so that they are sustainable over the long term.

SOURCE: 2010 & 2011 OPEN SPACE TASK FORCE FINAL REPORT

Natural Resources and Open Space Map

When recreation spaces are combined with all other natural land, Londonderry has preserved

nearly **30%**
of its total land area as protected open space.





Musquash Conservation Area

The Musquash Conservation Area has expanded from an initial purchase of 500+ acres in 1978 to over 1,300 acres today. The area is protected by a patchwork of Town ownership (1,150 acres), conservation easements held by numerous protective entities (100 acres), and other owners (50 acres). The Musquash Conservation area has been the focus of extensive stewardship activities including creating/maintaining 14 miles of recreational trails, development of a forest management plan, carrying out activities such as trail work days and the annual Musquash Field Days, and reestablishing the habitat of the endangered New England Cottontail Rabbit.



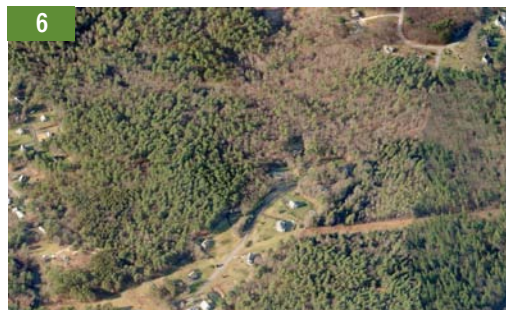
Little Cohas Marsh

Little Cohas Marsh contains 500+ acres of wetland habitat in the northwest area of Londonderry. The area was protected in the late 2000s through a series of easements and purchases by the NH Department of Transportation as mitigation for wetland impacts associated with the Manchester Airport Access Road. The area provides scenic views from Hall Road and vicinity, flood storage, and diverse wetland habitats. Public access will be provided by the envisioned rail trail, which runs through the area.



Kendall Pond Conservation Area

Kendall Pond Conservation Area includes nearly 60 acres along Beaver Brook. The area includes a walking trail, scenic views and parking at the trail head. This area was protected in the early 1980s through a Town appropriation matched by a grant from the Land and Water Conservation Fund. The primary use is passive recreation for bird-watching or quiet walks by residents. The area contains one mile of managed trails.



Bockes / Ingersoll Forest

The Bockes/Ingersoll Forest is protected by both ownership and conservation easements held respectively by the Society for the Protection of NH Forests (SPNHF) and the Town. The area was protected in the early 2000s and offers nearly 300 acres accessible to Londonderry, Hudson and Windham, consisting of parcels located and protected in each town. This area is perceived to be underutilized and a recommendation from the 2010-11 Open Space Task Force was to maintain and improve trails throughout the area to maximize recreational benefits.



Scobie Pond

Scobie Pond is a 25-acre pond located in Northeast Londonderry. It is the largest open water body in Town and is located in an area of low development, with a largely undisturbed shoreline. Protection is afforded by two conservation parcels located along the eastern shore. Though the Town has a right-of-way access to the pond, there appears to be little use or awareness of the pond as a recreational resource.



Moose Hill Orchard

The Town holds an agricultural easement over much of this nearly 180 acres of scenic and productive orchard. The Mack Family and Londonderry Trailways have developed walking trails throughout the area for passive recreation in the summer and cross-country skiing in the winter. In combination with the trails throughout the school facilities, the Moose Hill Orchard/Adams Pond area contributes roughly 11 of the 26 miles of mapped, public trails in Town. The easement was financed with an open space bond. This orchard and the surrounding public spaces are considered to be emblematic of the heart of Londonderry.



Estey Conservation Easement

A conservation easement including nearly 75 acres was secured at the southwesterly corner of Nashua Road (Rte 102) and Old Nashua Road in 2009. This easement provides protection of open fields and prevents development along sensitive streams and wetland areas in the busy Route 102 corridor. At present, no recreational investments have been made in the property. The public has guaranteed access to the forested portion of the property in accordance with the conservation easement deed.



Sunnycrest Orchard

The land comprising Sunnycrest Orchard (60 acres) is completely protected through a series of agricultural easements secured in the early 2000's. This action protected a working family farm and secured its place in perpetuity for the Londonderry community. The current ownership includes such amenities as pick-your-own apples/strawberries/pumpkins/flowers, a small petting zoo, and a farm stand for the purchase of locally grown fruits, vegetables, and homemade baked goods.

Transportation & Mobility

The transportation system in Londonderry includes streets, a handful of sidewalks, a bike path in the center of Town near the schools, trails, an international airport, and limited transit service. Together, this system connects residents with their jobs, schools, and other destinations inside and outside of Town.

Street Network

The street network includes a hierarchy of arterial, collector, and local streets focused on moving automobiles efficiently through the Town. Interstate 93 is a limited access freeway, which serves a dual role as long-distance travel corridor and in-town connector between nearby destinations. Major north-south arterial and collector routes in Londonderry include Rockingham Road (NH 28), Mammoth Road (NH 128), High Range Road, Hardy Road, and South Road. Major east-west arterial and collector routes include Rockingham Road (NH 28), Litchfield Road, Stonehenge Road, Wiley Hill Road, Pillsbury Road, and Nashua Road (NH 102). Nearly all major streets are two lane facilities, with some having center left turn lanes at major traffic generators. Only Nashua Road is a multilane facility (four lanes) with center left turn lanes. Miles of two-lane, local neighborhood streets typically dead end in cul-de-sacs.

The grid network of arterial and collector streets built to serve historic farms and village centers in Londonderry works well for traffic circulation today. Existing traffic volumes are highest on four primary thoroughways: Interstate 93, Rockingham Road, Mammoth Road, and Nashua Road. Other streets carry only modest traffic volumes; typically between 2,000 and 5,000 vehicles per day. None of the streets in the network were noted as “over capacity” based on a link analysis using 2010/11 daily traffic volumes (see page 60). The limited number of signalized intersections and relatively few driveways along major streets contribute significantly to maintaining the viability of the two-lane network into the future.

Sidewalks & Bike Lanes

Sidewalks and bike lanes in the existing transportation system are nearly non-existent. The success of transit and other alternative travel modes are highly dependent on the state of pedestrian facilities and amenities in the study area. As a travel mode and recreation activity, walking offers the potential to reduce traffic congestion, improve air quality, and contribute to healthier citizens. In Londonderry, sidewalk deficiencies and a largely inhospitable pedestrian environment contribute to a reliance on the automobile even for shorter trips.

Trails & Greenways

The system of trails and greenways in Londonderry provides opportunities for residents to walk, bike, cross-country ski, or snowshoe in the Town. The existing network is limited to four general areas: Town Center, Musquash Conservation Area, Kendall Pond, and the Londonderry Rail Trail (currently under design). Each area provides its own system of paved, unpaved, or informal trails to meet recreation or non-motorized transportation needs. Overwhelming support for the trail and greenway system is provided by elected officials, volunteers, and outdoor enthusiasts in Town.

Londonderry Trailways is an all-volunteer group formed in 1999 to increase and improve the quantity and quality of trails and greenways. This group has been instrumental in building and maintaining the existing system, and in making plans to expand it through their own funding, education, and agency partnering initiatives.

Thoroughfare Network Map



Insight:

Despite the largely suburban pattern of development that has occurred in Londonderry since the 1980s, with predominantly dead-end streets, the Town originally developed along a loose grid of 2-lane arterial and collector streets. This network has continued to work well, adequately managing existing traffic volumes. Future roadway projects should maintain and enhance the character, quality, and connectivity of the system.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

Airfield

The Manchester-Boston Regional Airport is a gateway to Southern New Hampshire, providing residents of Londonderry with convenient access to national and international destinations. Airport statistics report that nearly 1 million passengers and 34,010 tons of cargo arrived and departed from the airport in 2011.

Recent improvements at the airport include the opening of the new Airport Access Road in 2011; providing access to more than 1,000 acres of land set aside for commercial and industrial development south of the airport. Ultimately, this road will connect into the new Pettengill Road planned as a major east-west connector in the area.

Public Transit

Public transit service is limited to demand service, such as dial-a-ride, provided by the Cooperative Alliance for Regional Transportation (CART). Park-and-ride lots near Exits 4 and 5 of Interstate 93 offer residents regional transit service via the Boston Express to South Station and Logan International Airport.

Emerging Trends

Large neighborhood blocks, low street connectivity, and single-point entry/exit points to the street network contribute to an overreliance on the automobile for meeting daily needs. Safe, convenient pedestrian or bicycle facilities and access to public transit are limited within the Town.

Future year traffic volumes generated by new development will contribute to greater congestion on local streets and potentially expensive capacity-building projects. Increased traffic volumes could also mean longer travel times, greater delay at key points in the system, and potential decrease in quality of life for residents spending more time in their vehicles.

Residents expressed a resistance to unnecessary road widening, instead favoring sustainable alternatives such as “complete streets”, where roads are built to support the needs of all users, both motorized and non-motorized.

What We Heard . . .

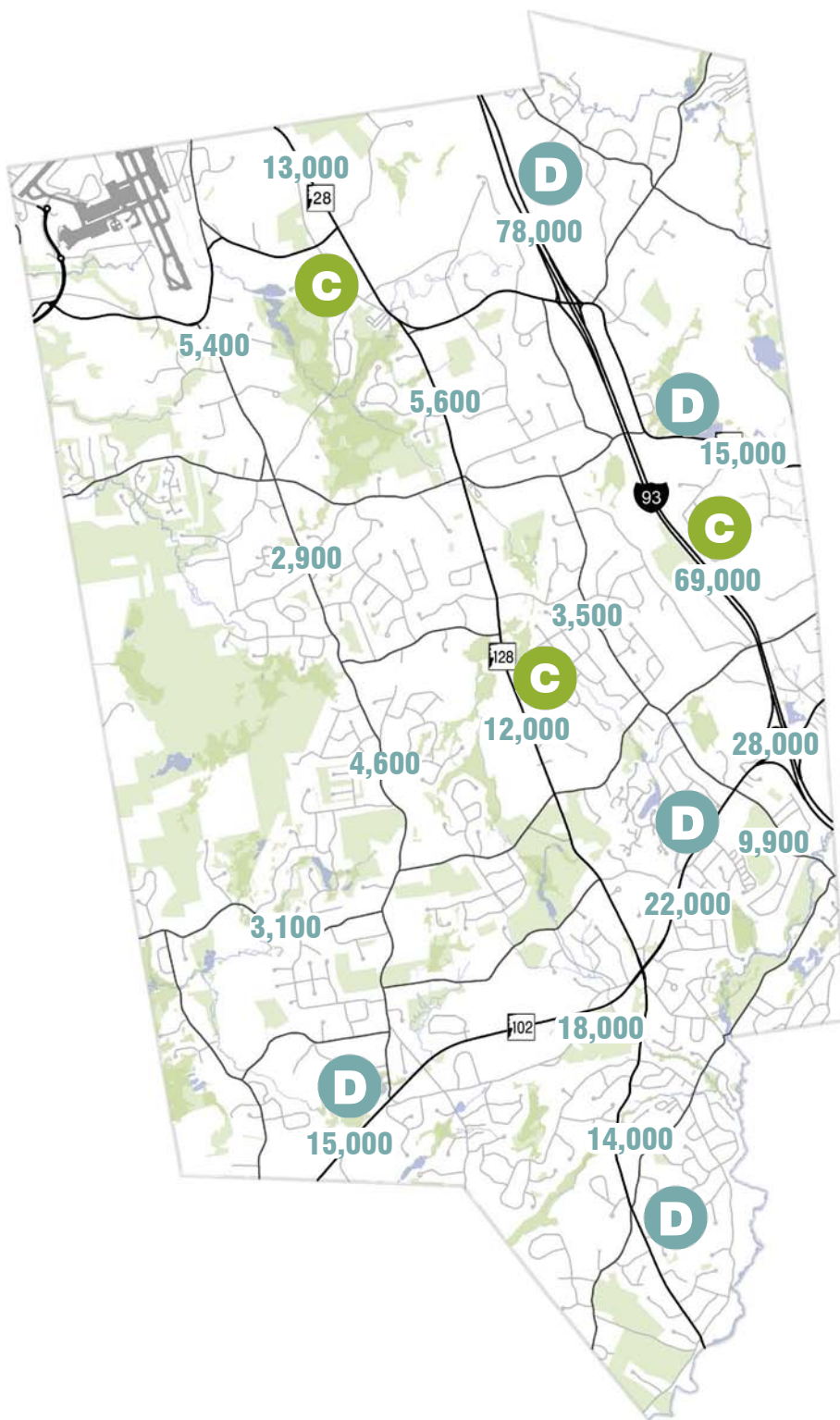
Residents have said that Londonderry is currently not very walkable. The roads and large intersections don't seem safe for walkers or bikers; particularly Nashua Road (NH 102). Some residents suggested simple fixes to these problems such as painting crosswalks and installing push-to-cross buttons. Many residents mentioned additional paths that connect schools and neighborhoods. Overall, residents want walking and biking in Londonderry to be easier and safer.

Trail System Map



Insight:

Londonderry has a substantial network of trails, primarily clustered in three areas of Town, including the Musquash Preserve, the Moose Hill Orchard, and the Bockes / Ingersoll Forest. There are opportunities to create additional linkages between these areas and throughout the rest of the Town to enable more people to safely walk or bike to schools, jobs, and shopping areas.



Level of Service A:

Free-flow traffic with individual users virtually unaffected by the presence of others in the traffic stream.

Level of Service B:

Stable traffic flow with a high degree of freedom to select speed and operating conditions but with some influence from other users.

Level of Service C:

Restricted flow that remains stable but with significant interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level.

Level of Service D:

High-density flow in which speed and freedom to maneuver are severely restricted. Comfort and convenience have declined even though flow remains stable.

Level of Service E:

Forced traffic flow in which the amount of traffic approaching a point exceeds the amount that can be served. LOS E is characterized by stop-and-go waves, poor travel times, low comfort and convenience, and increased accident exposure.

Level of Service F:

Unstable flow at or near capacity levels with poor levels of comfort and convenience.

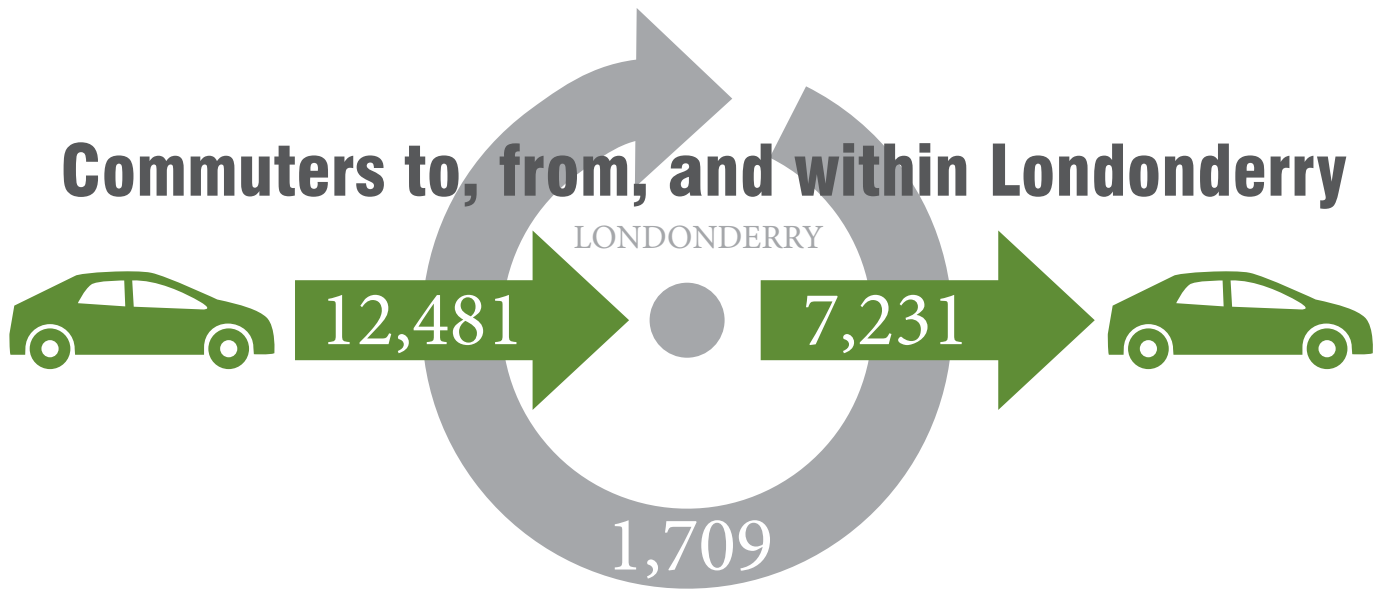
LONDONDERRY AVERAGE DAILY THOROUGHFARE TRAFFIC VOLUMES

Level of Service & Traffic Counts

In spite of the fact that neither the Town nor SNHPC has Level of Service (LOS) standards, the thoroughfare network in Londonderry functions exceptionally well. The lowest LOS in the Town is D which still maintains a stable flow of traffic. LOS is not related to the grading system people are familiar with in the academic world. For instance LOS C, which is found on many of the main thoroughfares in Londonderry like Mammoth Road functions exceedingly well. Only automobiles are accounted for in the analysis, meaning that thoroughfares with a higher automotive LOS may be substandard or even failing for pedestrians and cyclists. Specific intersection improvements are discussed in the Community Facilities & Services section.

SOURCE: SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION 2010-2011 AVERAGE DAILY TRAFFIC VOLUMES

labor commute patterns



Unlike most towns near the New Hampshire/
Massachusetts border...

more than **1 1/2** times as many people commute into
Londonderry for work as residents that
leave Londonderry to work elsewhere.

Insight:

More people commute into Londonderry for work than commute from Londonderry to another location. Many commuters choose to live in neighboring municipalities because they can't afford to live in Town. The large lot subdivision form of development that dominates in Londonderry drives up housing prices due to the cost of land and roads. The cost and time required to commute is acceptable to most people who work in Londonderry. To become a viable alternative, public transportation will have to become a more convenient and affordable option.

only

1,709 of the **18,411**
labor force who live in
Londonderry work in
Londonderry.

these local workers represent only **14%**
of the Town's worker population

SOURCE: US CENSUS BUREAU; ONTHEMAP APPLICATION AND LEHD ORIGIN-
DESTINATION EMPLOYMENT STATISTICS

Infrastructure & Municipal Services

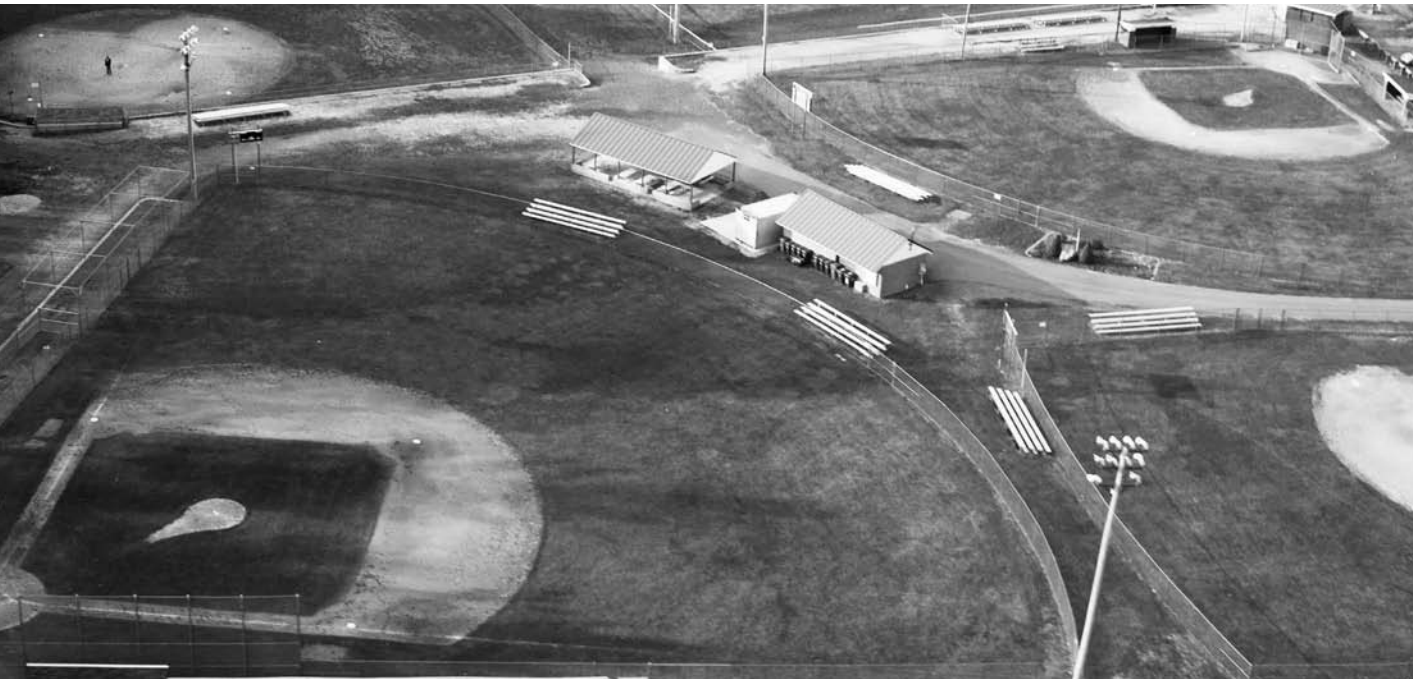


PHOTO BY JACK FALVEY DURING A FALL, 2011 FLIGHT WITH EARL ROSSE

School System

The Londonderry School District is autonomous from the Town of Londonderry but very important to its residents. The school system includes six facilities: Londonderry High School, Londonderry Middle School, Matthew Thornton Elementary, North Londonderry Elementary, South Londonderry Elementary, and Moose Hill Kindergarten. Total enrollment in the 2011/12 school year was 4,845.

There is an interest from a segment of the community in pursuing the construction of an auditorium to support the school's robust music program and to serve as a space for larger community activities.

Statistics reported in the District's Accent on Achievement Report for 2012 outperform the State of New Hampshire in several categories: student retention, post-secondary education attendance,

per pupil average cost, and standardized test scores. Participants at Planapalooza continually ranked the school system as one of the biggest contributors to a high quality of life for residents in Londonderry.

Continued coordination between the Town and School District will ensure efficient and high-quality services into the future. Specifically, the timing and location of new development influenced by the Comprehensive Master Plan and the zoning ordinance should be closely coordinated with the District's strategic plan and Capital Improvement Plan.

Leach Library

The Leach Library is located in the Town center campus on Mammoth Road. The Library has a diverse book collection for children, young

adults, and adults on a variety of topics, as well as an extensive audio-visual collection, including audiocassettes, CDs, DVDs, playaways, and audio / e-book downloads. In fiscal year 2011/12, 362,689 items were checked out, an increase of over 6% from the previous fiscal year. The Library hopes to upgrade the current Integrated Library System (ILS) in the coming years.

Water Service

Three water utilities provide potable water service to the Town of Londonderry including Manchester Water Works (MWW), Pennichuck Water Works (PWW), and the Derry Water Division. Water source locations for all three utilities are located outside the Town of Londonderry.

MWW provides service to the northern area of Londonderry, including the Manchester-Boston Regional Airport and the industrial parks immediately south. Distribution mains along High Range Road, Litchfield Road, Mammoth Road, Rockingham Road, Auburn Road and Old Derry Road serve residential, commercial and industrial areas in close proximity.

PWW mains serve the central and southern parts of Londonderry and extend along Mammoth Road, Pillsbury Road, Nashua Road, Gilcrest Road and Kendall Pond Road, serving residential and commercial customers. Other isolated community systems managed by PWW are spread throughout the Town.

Mains from Derry, with water treated water from Manchester Water Works, supply a small area of Londonderry located between I-93 and the Derry town line in the vicinity of exit 4.

Roughly 20% of residents are connected to a public water supply. The remainder use private wells to satisfy their potable water needs.

Sewer Service

The Town of Londonderry operates collection and interceptor sewer systems, which drain to the Manchester and Derry Wastewater Treatment Facilities for treatment and disposal. The northern service area leads from the Town center campus on Mammoth Road to residential, commercial, and industrial points north. Waste from that system is treated by the Manchester Wastewater Treatment Facility. Currently, the Town reserves capacity with the City of Manchester through an inter-municipal agreement for the treatment of 3.0 million gallons per day (MGD). Town staff reports an average daily demand of 1.67 MGD (2005 statistic).

There is also a small, privately-owned sewer collection system in the Mill Pond Development, which flows north to the Manchester Wastewater Treatment Facility. The demands of this system are included in the inter-municipal agreement with the City of Manchester for sewer treatment capacity.

The southern service area extends along Nashua Road (NH 102) from Interstate 93 to Constitution Drive, expanding to include residential and commercial uses in the Rte 102 corridor. Waste from the system is sent via a pump station at Charleston Avenue to the Derry Wastewater Treatment Facility. Currently, the Town reserves capacity with the Town of Derry through an inter-municipal agreement for the treatment of 0.33 MGD at the facility. Town staff reports an average daily demand of 0.085 MGD (2005 statistic).

Large portions of Town are not served by public sewer. These properties rely on privately-owned septic systems with a subsurface disposal field. Most properties served by a septic system are residential homes; however, some commercial buildings also use a septic system for the treatment of wastewater. Private septic haulers

collect effluent from private septic systems for disposal at the Manchester Wastewater Treatment Facility. Town staff reports that approximately 1.8 million gallons of septage per year (2005 statistic) is collected.

Fire Protection

The Londonderry Fire Department provides fire protection and emergency medical services to the Town with resources from three facilities: Station One, Station Two, and Central Station. Each station supports a “first run” engine company and forestry unit. Central Station also supports a rescue truck, two ambulances, a command car, and aerial platform truck. Fifty-one full-time and two part-time employees serve the fire department in one of five divisions: administration, operations, fire prevention, communication, and technical services.

Resources of the fire department were used to respond to 46 fire protection calls, 1,844 emergency medical service calls, and 117 hazardous conditions calls in 2011. Another 1,228 service calls were made in the same year. The monetary value of lost properties at fire incidents was roughly \$525,000 in 2011, including structures and vehicles. In 2011, the Fire Department received mutual aid support 131 times and reciprocated almost equally, providing aid to other communities 129 times.

Police Protection

The Londonderry Police Department operates out of the headquarters building at the Town center campus on Mammoth Road. Eighty-one full time and seven part-time employees serve the department in one of four divisions: administration, operations, airport security, and special services. The police department also sponsors several community programs in the planning area; including neighborhood watch, college internships, bike rodeo, and senior volunteers among others.

Resources of the police department were used to respond to 26,335 incident dispatches in 2011. Circumstances at the incidents resulted in 3,077 police reports and 10,153 vehicle summons. Seven hundred and sixty arrests and 925 vehicle accidents were handled by the police department in 2011.

Cemeteries

The Town currently maintains 8 public cemeteries, of which only one (Pillsbury Cemetery) has lots available for sale. The Town Sextant reports that the Town has enough unused capacity for less than 10 years and that the available, unsold lots in Pillsbury Cemetery are quickly selling out. The Trustees of the Trust Fund who oversee the cemetery properties and associated rules/regulations have worked recently to improve documentation of burial and plot ownership records and improve mapping in all of their properties. The Town should have a discussion on obtaining new cemetery space to provide for future capacity.

What We Heard . . .

Many residents are seeking improvements in utilities service. We heard about power outages and the need for utilities to improve system reliability. Some stated that Londonderry may need to consider expanding sewer service in the Town. Residents see the necessity of improving and extending utilities, but are concerned about the associated costs. Residents mentioned the possibility of building new parks and other amenities, and there was strong support for the construction of an auditorium.

Cultural & Historic Resources

PHOTO BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC



Londonderry is a community that strives to preserve local history and culture in order to maintain a connection with its rural heritage. Organizations like the Londonderry Historical Society, Heritage Commission, the Londonderry Grange, and the Morrison House Historical Museum are actively involved with finding, sharing, and preserving historic resources. Cultural events are also hosted by the Town—including Old Home Days, numerous sporting events, and foreign exchanges—that encourage continued interest and involvement in the community. Such events take place in the ball fields, parks, the Historic District, and Town Common that can accommodate these and other functions. Numerous clubs and church congregations are also present, encouraging residents to further find their place in the community.

Historic Resources

Londonderry has successfully preserved local history by setting up organizations to protect important historical resources that remind residents of the Town's history and encourage local pride. These organizations are critical as the community continues preservation efforts that will benefit future generations.

Londonderry Historical Society

The Londonderry Historical Society was formed in 1956 and incorporated as a non-profit organization in 1968. With a mission to preserve Londonderry's past, it collects and stores artifacts while maintaining the Morrison House Historical Museum.

The Museum is made up of three historical structures—the 18th century Morrison House, the 19th century Clark Blacksmith Shop, and the Parmenter Barn (the last barn in Londonderry assembled through community barn-raising)—all of which were relocated from their original sites to Pillsbury Road. In addition, the oldest house in Londonderry has been disassembled, preserved, and stored on site for restoration when future funding permits. The museum sits on over 2 acres of orchard land whose original deed belonged to Charter David Morrison and was donated by the Mack family.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

The Morrison House showcases items related to Londonderry's industry of flax and linen, 19th century tools, and a reproduction forge with authentic leather and wood bellows. As the Londonderry Historical Society continues to support this important collection, the museum will remain a great way to educate visitors about the area.

Historic Properties Preservation Task Force

Established by the Town Council in 2006, the Historic Properties Preservation Task Force was formed to identify and prioritize historic buildings and cultural resources to be protected from demolition or redevelopment. They generated criteria for defining what characterizes a historic structure or site in Londonderry. The Task Force determined that 141 properties qualified as sites for preservation. A map showing the properties can be found in the final report from 2007.

Heritage Commission

The Heritage Commission oversees the preservation of historical and cultural resources for the Town, educates the public on matters of historical interest, and works with other boards, committees, and commissions to assure responsible development that reflects the Town's Comprehensive Master Plan, per State law. A major focus of the Heritage Commission is the preservation of historic architectural elements,

including style, material, color, lighting, signage, and landscaping. Guidelines for residential, industrial, and commercial buildings help guide historically appropriate construction and reconstruction throughout the Town.

The Commission also oversees the preservation of Londonderry's fieldstone walls, an important cultural artifact found throughout the region. Guidelines have been established for the reconstruction of stone walls disturbed by construction activity. In addition, recent state-wide legislation has revised a centuries-old law to protect New Hampshire's historic stone walls. While this law specifically protects stone walls against theft, it demonstrates an understanding of the historical significance of the walls and the need to preserve them.

Historic District

The Historic District was set up to protect and maintain a collection of significant historic properties within the center of Londonderry. The Historic District is comprised of the Grange #44, the Town Common, the Town Forest (or Woodlot), the Historical Society property on Pillsbury Road (Morrison House Museum) and 2 Litchfield Road, in which Nutfield Publishing currently operates. Also of historic interest is the Town Pound on Mammoth Road which is owned by the Town, but is not in the Historic District.

The Town Common contains monuments dedicated to veterans of the Revolutionary, Civil, and World Wars. The Town's bandstand and a memorial to the Londonderry 99 from the Revolutionary War were dedicated during the Town's Bicentennial. Located diagonally across the intersection from the Common, the Grange Hall was built to be used in conjunction with farming after the National Grange Order of Patrons of Husbandry began in 1867. This historic building was built in 1909 and added to the New Hampshire State Register of Historic Places in 2004. If the Town developed in a more walkable fashion around this important space, the Londonderry Common and surrounding historic buildings could become a place that is used for more than just special events.

Cultural Resources

Londonderry provides access to a variety of events and activities both for daily life and special events. The Recreation Department offers many options for community members of all ages to be involved with sports and summer camp programs.

Sports leagues drive community life in Londonderry. To accommodate this activity, about 77 acres is maintained by the Town and designated as active recreational land. The Sargent Road LAFA Complex and Continental Park on West Road provide a playground, skateboard park, tennis and basketball courts, and multiple fields for baseball, softball, soccer, and other activities. This recreational land is utilized by Town residents and maintained by various groups and organizations including the recreation department, MOMs group, LAFA, LYSA, LUSC, and the School District. These resources are extremely important to Londonderry's cultural identity.

Besides sports, there are numerous clubs and organizations formed either for recreation, entertainment, or community service purposes, as well as 17 places of worship. As Londonderry continues to develop a sense of place, especially around the Town center, existing and new organizations and events will have a chance to thrive.

Once a year since 1899, Old Home Days are faithfully observed on the third weekend in August. This long-standing Londonderry tradition is a family celebration that attracts over 12,000 people from around the state for concerts, fireworks, parades, contests, exhibits, talent and music shows, and church services.

What We Heard . . .

Londonderry residents are concerned about preserving historic buildings, particularly those on Mammoth Road. Some mentioned that the Town should find ways to make it easier and more affordable to save and rehab historic buildings, offering incentives for doing so. Similarly, some residents have expressed an interest in putting mechanisms in place to preserve stone walls and retain the historic character of Town.

Hazard Mitigation



TOWN OF LONDONDERRY, DEPARTMENT OF PUBLIC WORKS

A natural hazard is a physical event or phenomenon that occurs in a populated area causing loss of human life and significant property damage. In 2010, the Town of Londonderry completed a Hazard Mitigation Plan to be proactive in identifying actions that could reduce vulnerability to these destructive forces of nature. In addition to protecting human life, implementation of the plan's recommendations is intended to reduce the potential negative economic impacts of natural hazards.

The 2010 Hazard Mitigation Plan identified potential natural hazards for Londonderry, including Nor'easters, ice and snow events, and major rain storms. These events trigger flooding, downed trees and power lines, dam breaches, and soil erosion, all which threaten lives and property. Power outages and disrupted travel corridors are the most prevalent impacts of storms in Londonderry. Over the last several years they have occurred with increasing frequency and at a significant economic cost. Other less-likely events to impact Londonderry include hurricanes, tornados, earthquakes, and wildfires.

The Hazard Mitigation Plan includes maps highlighting risk areas and the probability of occurrence for each of the natural hazard areas. The plan identifies five natural hazard zones within the planning area and critical facilities existing in each zone. Most of the identified facilities are municipal or utility services and include bridges, schools, offices, telephone services, media communications, and service buildings. There are also homes and historic properties identified within the natural hazard zones. Vulnerability assessments for potential natural hazards estimate the cost of damage and clean-up to be in the hundreds of thousands to

millions of dollars. In most cases, the location and distribution of human settlements have increased the severity of natural hazards. Hazard mitigation planning, public education, and policy changes are key steps in minimizing the threat and negative outcomes of natural phenomena.

Emergency Notification System

Town residents expressed the need for a notification system with information on road closures and emergency contact details during power outages, prolonged storm events, or other natural hazards. The Town now uses Nixle, a phone text and e-mail notification system that offers alert messages to subscribers. While successful, residents need other information sources for getting the word out. Examples for further study include signage, cable channel or radio announcements, door-to-door notification tree, roving police announcements over speaker, or warning sirens.

Evaluation & Monitoring

It was recommended that the Londonderry Hazard Mitigation Plan be reviewed on an annual basis and updated every three to five years by the Londonderry Planning and Economic Development Department in coordination with the Londonderry Town Council.

ALERT (A Londonderry Emergency Response Team)

Londonderry is fortunate to have a dedicated response team of trained citizen volunteers who aid the Community and its public safety departments during emergency situations and Town wide events. The ALERT team members perform search and rescue operations, assist with communications during major storms, and conduct traffic control assistance during Town activities, including elections and Old Home Day. ALERT members are committed to continual training and also provide emergency preparedness and prevention education for the Community.

2011 Hazard Mitigation Goals for Londonderry:

1. Improve upon the protection of the general population, citizens and guests of the Town, from all natural and man-made hazards.
2. Reduce the potential impact of natural and man-made disasters on the Town's Critical Support Services and Critical Facilities.
3. Reduce the potential impact of natural and man-made disasters on the Town's infrastructure.
4. Improve the Town's Emergency Preparedness, Disaster Response and Recovery Capability.
5. Reduce the potential impact of natural and man-made disasters on private property.
6. Reduce the potential impact of natural and man-made disasters on the Town's economy.
7. Reduce the potential impact of natural and man-made disasters on the Town's natural environment.
8. Reduce the Town's liability with respect to natural and man-made hazards generally.
9. Reduce the potential impact of natural and man-made disasters on the Town's specific historic treasures.
10. Identify, introduce and implement cost effective Hazard Mitigation measures so as to accomplish the Town's Goals.
11. Address the challenges posed by climate change as they pertain to increasing risks in the Town's infrastructure and natural environment.

SOURCE: LONDONDERRY 2010 HAZARD MITIGATION PLAN



considering alternative futures

How should we grow? Where should we grow? Are we proud of where we live? These were some of the important questions discussed during Planapalooza. Participants were asked to contemplate two “big picture” growth alternatives for the future, measure their impacts, and evaluate the trade-offs. The trend development scenario reflects the status quo and a future where the town builds out under existing plans and policies. The alternative, the villages and corridors scenario, considers a development framework focused on new mixed-use activity centers and walkable neighborhoods in key areas of town, leaving existing residential neighborhoods throughout the community intact.

Considering Alternative Futures

During Planapalooza, the community was asked to imagine life under two distinct “big picture” growth alternatives, including Trend Development and Village & Corridors, each offering clear choices for how the Town could develop and the impact on future sustainability. Scenario planning tools, including the Town’s CommunityViz Modeling Application, were used to measure the outcomes and explain the trade-offs. The impacts of each alternative were measured at full build-out, the condition where all available land suitable for residential, commercial, or industrial growth is developed.

Trend Development Scenario

The Trend Development growth alternative contemplates how the Town would build out if the dispersed pattern of residential and non-residential development were to continue. New growth would appear as single-use, low-density development. Common features of the scenario include greenfield development patterns, low development densities and intensities, outward expansion of public utilities reliance on private wells and septic systems for low-density development in rural areas, and transportation investments that favor convenience for automobiles.

The trend development scenario followed closely the Town’s 2004 Comprehensive Master Plan, zoning ordinance, and subdivision ordinance. Properties or buildings were maxed out for development following the rules and requirements in the existing ordinances. New open space in the study area increased as land considered ‘temporarily-protected’ remained undeveloped. Typical market and development forces in the Town support continued build-out under this scenario.

Villages & Corridors Scenario

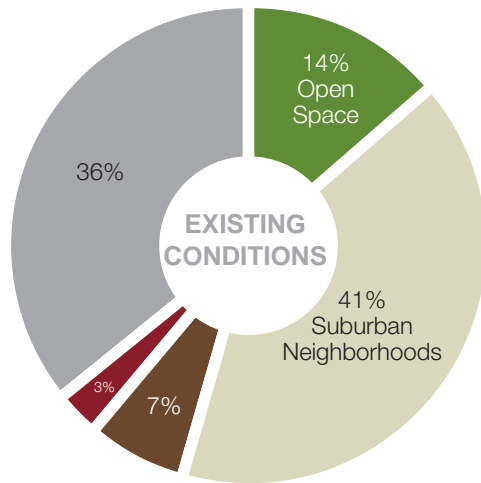
During Planapalooza participants supported the idea of activating the town center, improving the Route 102 Corridor, revitalizing the North Londonderry area, and fully-developing the Pettengill Road area. By encouraging new development in these designated areas, more land can be preserved for open space or agriculture uses in the remainder of Town.

The Villages and Corridors growth alternative contemplates how the Town would build out if new growth was focused into more compact, walkable neighborhoods with nearby opportunities to live, work, shop, and engage in civic life. Development in these activity centers, focused in villages and along corridors, would vary in scale, use, and intensity, in accordance with the community’s goals of establishing greater options and vitality in select areas.

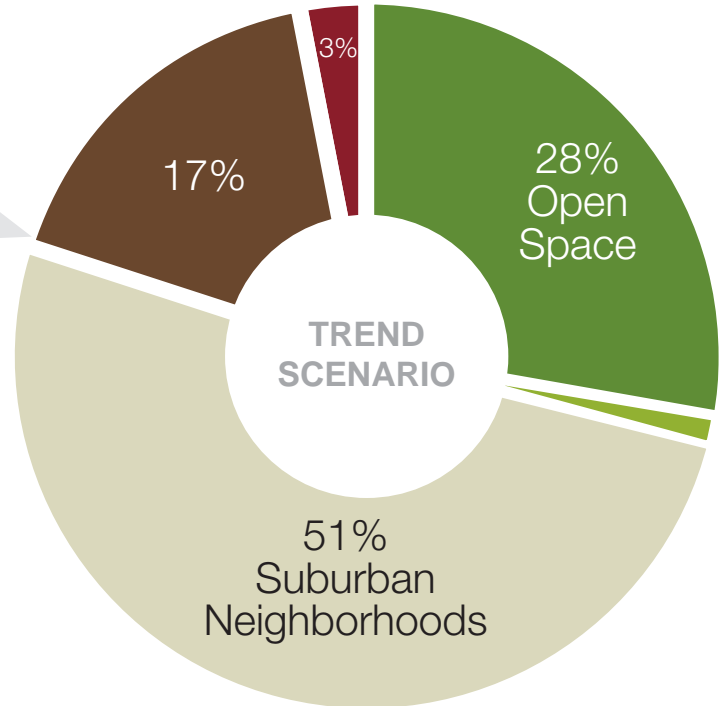
Common features of the Villages & Corridors scenario include: walkable activity centers, greater land preservation, more variety in development types and intensities, new public spaces within activity centers, and more options for walking, biking, and transit. Existing low-density residential neighborhoods would remain untouched in the Villages & Corridors alternative. Existing commercial and industrial areas would also remain as built today, but would be encouraged to phase into a more mixed-use and walkable environment over time as owners reinvest in their property.

To prepare this scenario, lots and buildings were maxed out for development in accordance with the Guiding Principles. New open space in the study area increased as land identified as ‘temporarily protected’ in the Open Space Task Force Report remained undeveloped. The Villages & Corridors scenario is anticipated to direct market forces, providing a greater degree of choice while closely responding to market-driven realities.

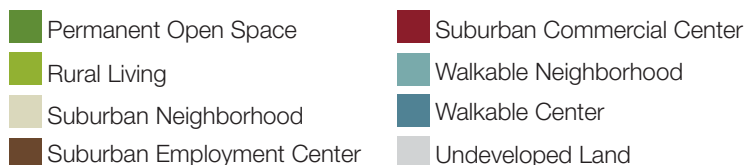
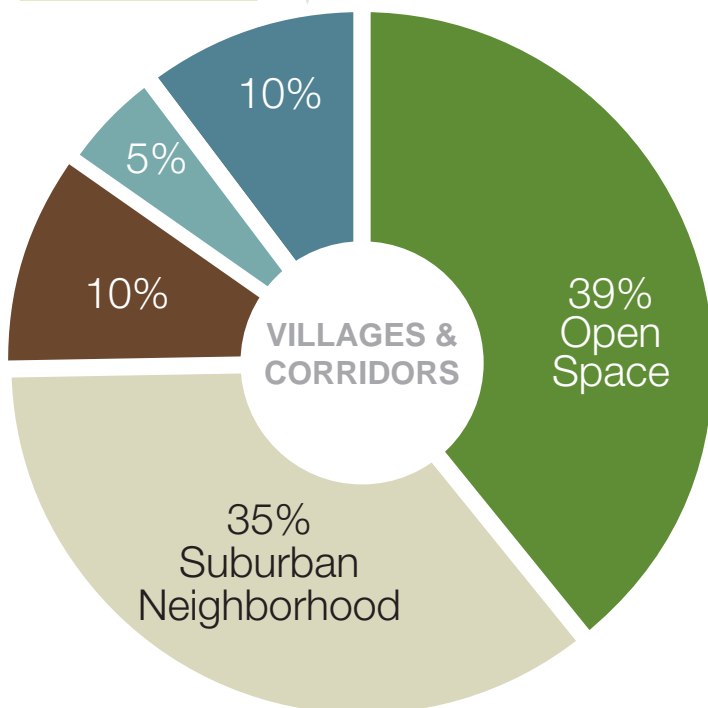
Existing Condition



Trend Development Scenario



Villages & Corridors Scenario



TREND DEVELOPMENT SCENARIO

This scenario continues to use low-density, single-use development patterns to meet future demand, which means rural areas will become new residential neighborhoods or strip center development.

VILLAGES & CORRIDORS SCENARIO

This scenario introduces the concept of mixed-use, walkable neighborhoods and activity centers to Londonderry, which should capture a significant amount of growth through build-out within small nodes. Development concentrated in these centers (impacting only 15% of the total land area in town) protects existing residential neighborhoods and provides the opportunity to permanently preserve more open space.

Trend Development Scenario



Villages & Corridors Scenario



Current Population:	24,129
Build-Out Population:	37,850
Current Employment:	13,474
Build-Out Employment:	55,380

Build-Out Potential

Both growth alternatives will bring new residents and employees to town as available land suitable for residential, commercial, or industrial growth is developed. Presently, of the 26,911 total acres in Londonderry, 9,593 acres are considered built, 11,378 acres are considered undeveloped or under-developed, and 5,940 acres are considered development-constrained for either permanent open space or right-of-way. The undeveloped or under-developed acreage represents the build-out potential for both scenarios.

The Trend Development alternative supports a population of 30,786 and a labor force of 27,510 at build-out. This is an increase of 28% and 104% compared to current conditions, respectively. The Villages & Corridors alternative supports a population of 37,850 and a labor force of 55,380 at build-out. This is an increase of 57% and 311% compared to current conditions, respectively. Maps presented on the following page depict the location and intensity of new residential dwelling units and new square feet of building space for non-residential uses at build-out under both growth alternatives.

Measuring the Trade-Offs

Comparing the growth alternatives side-by-side provides an opportunity to highlight the strengths and weaknesses of each and how each scenario measures up against the community's Common Vision and Guiding Principles. Below is a summary of key information for evaluating the two growth alternatives against the Guiding Principles.

Conclusion

Growth and development will occur under either alternative and will impact Town facilities and services, as well as quality-of-life for residents. Based on the two distinct choices that were presented, the opportunities for a more sustainable future provided by the Villages & Corridors growth alternative was preferred by participants during Planapalooza. This alternative clearly presents a future that satisfies the community's Stated Vision and Guiding Principles. Detailed illustrative plans for each activity center suggested within the Villages & Corridors scenario are detailed in the Plan Framework section of this document.

TREND DEVELOPMENT SCENARIO	VILLAGES & CORRIDORS SCENARIO
Housing Choice & Diversity	Housing Choice & Diversity ★ ★ ★
Transportation Choice	Transportation Choice ★ ★ ★
Unique Activity Centers	Unique Activity Centers ★ ★ ★
Stay Forever Green ★	Stay Forever Green ★ ★
Enhance Municipal Edge ★	Enhance Municipal Edge ★ ★ ★
Excellence in Education ★	Excellence in Education ★
Excellence in Town Services ★	Excellence in Town Services ★ ★

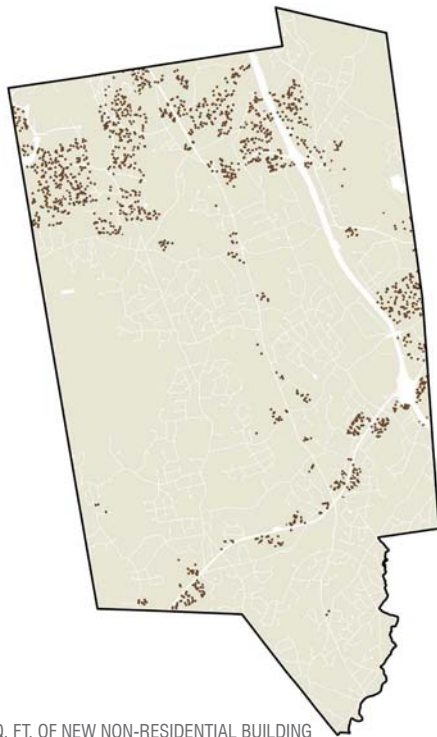
The number of stars indicates the relative degree of consistency with each Guiding Principal.

TREND DEVELOPMENT SCENARIO

VILLAGES & CORRIDORS SCENARIO

THE VILLAGES & CORRIDORS GROWTH ALTERNATIVE PROVIDES THE POTENTIAL FOR SIGNIFICANTLY MORE DEVELOPMENT IN TOWN BY ENCOURAGING A TRADITIONAL PATTERN OF GROWTH WITHIN ACTIVITY CENTERS. BY ALLOWING BUILDINGS TO BE CLOSER TO THE STREET AND TO EACH OTHER, MORE SQUARE FOOTAGE IS AVAILABLE FOR A MIX OF USES.

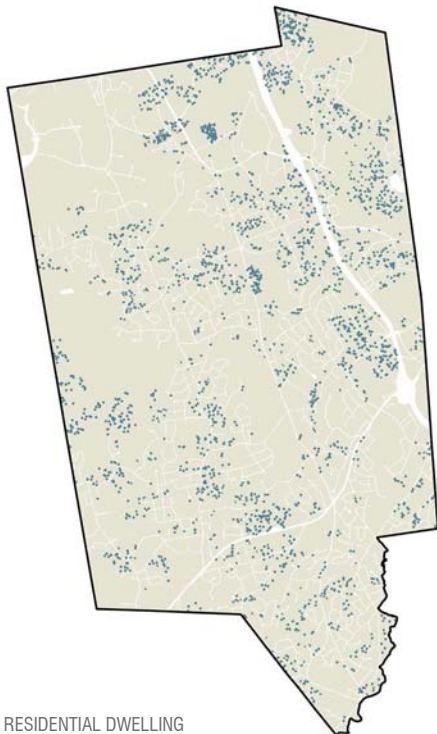
Non-Residential SF at Build-Out



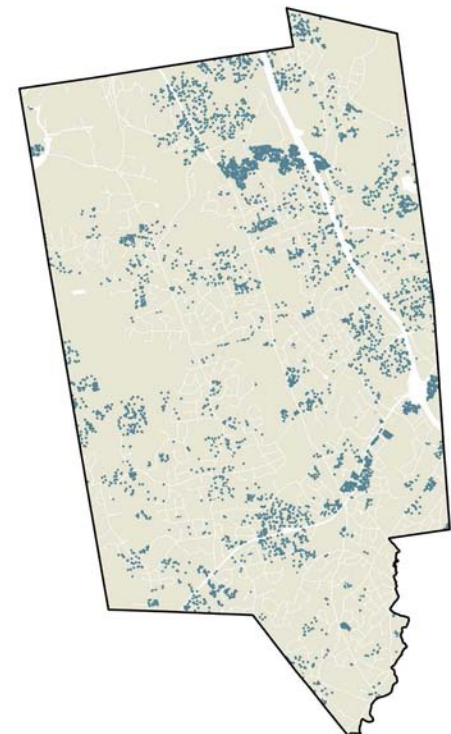
1 DOT = 500 SQ. FT. OF NEW NON-RESIDENTIAL BUILDING



Residential Dwelling Units at Build-Out



1 DOT = 1 NEW RESIDENTIAL DWELLING





the toolkit

This Toolkit is intended to be a source for concepts, ideas and actions related to the future of conservation and growth in Londonderry. It works as a kit of parts, each able to be utilized on its own or as part of a cohesive application of several tools. The Toolkit is organized around five of the six Guiding Principles from this Comprehensive Master Plan.

While there was overwhelming support for many of the concepts and ideas generated during Planapalooza, there were still some topics where consensus was not clear. The Toolkit is an excellent resource, where over time, the citizens of Londonderry can decide which tools they want to implement and which they don't. Some tools might be readily accepted today, while others may be too progressive for current views and will find their supporters in future generations. In the Toolkit there is something for everyone because, we know in Londonderry, there is not a one-size-fits-all solution.

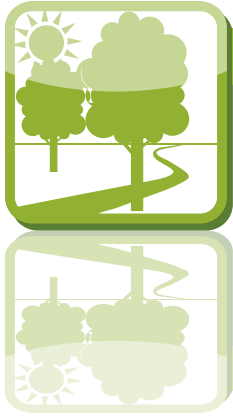


Where Applicable



The Fix





forever green

Keep Londonderry Forever Green

- Promote sustainable stormwater solutions that contribute to the beauty of the public realm.
 - Create an interconnected network of green space.
 - Encourage energy-efficient design in new construction.
-

↑ tools ↓

Urban Agriculture
Reduction of Stormwater Infrastructure
Maintain Existing Hydrological Patterns
Green Streets
Rain Gardens
Infiltration Parks
Green Plazas
Pervious Parking Lots
Staircase Cascade
Green Bike Path
Green Roofs
Energy Efficient Design

Shade Trees
Solar Orientation
Natural Light
Ventilation & Air Conditioning
Greywater Recycling
Rainwater Harvesting
Xeriscaping
Land Conservation
Conservation Subdivisions
Transfer of Development Rights
Green Building Design

Urban Agriculture

Raising vegetables, fruits, herbs, and meat, coming together to prepare and store food, and sitting around a table and sharing a meal are fundamental acts that bring us together as a community. There are many reasons that draw people to the practice of urban agriculture, including self-sufficiency, tradition, recreation, saving money, a sense of security, exercise, activism, and a way to get outdoors, connect with family and neighbors, and put long-held values into practical action.

As the cost of food and fuel increases there is mounting concern about food security and the availability of consistent and reliable access to food. Because the majority of food for the average American travels about 1,500 miles from the farm to the plate, most families, other than those who live on or near a farm, are in jeopardy if there is a disruption in the long distance food shipping supply chain. Then there is the question of food – is it good for you, is it safe, is it fresh, is it nutritionally balanced food that you can afford?

Londonderry would benefit in many ways from making a commitment to an equitable, healthy, and sustainable food supply through urban agriculture. In doing so, the Town can strengthen a local food system grounded in community and linked to rapidly developing state and regional efforts.

Londonderry is already home to a small community of local food practitioners. However, local food production is not relegated solely to the large family farm. Backyard homesteading, rooftop gardens, and schoolyard gardens are all part of a growing trend in which individuals, families, and communities seek to grow or locally source as much of their own food as practical, limiting input from outside sources.

With thoughtful planning and innovative techniques, agriculture can be infused throughout the Town from rural farms to the window boxes of commercial buildings.



FRONT STUDIO ARCHITECTS



STONE'S THROW URBAN FARM

PERI-URBAN FARMS

Farms producing food on relatively large areas of open land within the Town limits.



TPUDC

COMMUNITY GARDENS

A private, not for profit, or public common area used by a group of households to grow and harvest food crops or non-food crops for personal or group consumption or donation.



[HTTP://EJFOOD.BLOGSPOT.COM/](http://EJFOOD.BLOGSPOT.COM/)

SCHOOLYARD GARDENS

Schoolyard gardens can be used as a tool to integrate classroom curriculum with an outdoor hands-on experience, environmental education, culinary arts, and nutrition.



TPUDC

YARD GARDENS

These are appropriate on residential lots for household use by the residents.



LIZ HOFWEISTER

CONTAINER GARDENS

These gardens utilize containers to hold the planting medium and include window boxes, balcony gardens, and roof gardens. They can be used to provide household produce needs in more urban areas where space is limited.



TPUDC

EDIBLE LANDSCAPES

This refers to the utilization of plants and landscaping that produce edible food in settings that conventionally would have been limited to ornamental or non-food producing plants. Edible landscapes are not limited to use on private lots and can be planted on public property, including parks, which present great opportunities for flower and vegetable gardens, as well as fruit trees.



Urban agriculture should be promoted throughout Londonderry at all scales, focusing on school yards, specifically Matthew Thorton Elementary School, municipal property, and proposed activity centers.



Adopt form-based regulations that include standards for urban agriculture within Londonderry.

Reduction of Stormwater Infrastructure

Conventional infrastructure used to maintain the suburban lifestyle is often oversized, designed to handle the worst possible scenario. This is costly to install and maintain and has a negative impact on the environment. It is for these reasons that a sustainability strategy should begin with finding ways to reduce dependence on complicated infrastructure systems to meet our daily needs.

The most environmentally sensitive method for dealing with stormwater is also the least expensive — the reduction of impervious surfaces. Automobile dominated sprawl development has made stormwater management more difficult and expensive, and has resulted in increased impervious surfaces in the form of wider roads and large parking lots.

In the past few years, there has been a push to deal with stormwater in a more sustainable way in order to reduce infrastructure needs and protect ground water. One of the first attempts was Low Impact Development (LID). While LID was based on sound ecological principles, its solutions were based on conventional suburban land use

and planning concepts. The result was more auto-oriented sprawl that utilized natural infiltration, but failed to address the system of the single-use, car-dependent development form on which it was predicated.

Building on the groundwork laid by Low Impact Development, a new approach, Light Imprint has been developed. Light Imprint reduces the need for expensive stormwater infrastructure and provides more sustainable solutions than do conventional engineering approaches. Techniques incorporate natural drainage, modern engineering infrastructure, and innovative infiltration practices, many of which are based on time-tested practice. This comprehensive collection of methodologies has been used for generations to deal with stormwater runoff, each with an appropriate application across a range of rural to urban contexts. The University of New Hampshire Department of Civil Engineering is home to the UNH Stormwater Center. This is an excellent resource for communities like Londonderry that want to implement more sustainable stormwater solutions.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

PERVIOUS COBBLE PAVERS

Maintain Existing Hydrological Patterns

All sustainable stormwater solutions should begin with the least technologically complex actions. The simplest technique is to preserve the existing hydrological patterns of drainage and percolation. This allows the land to handle the water naturally with minimal, if any, human intervention. Successful sustainable stormwater management is largely related to staying out of nature's way and avoiding the problems we struggle to remediate. By following natural hydrological patterns and using them as the framework, sustainable stormwater practices can alleviate much of the

need for expensive conventional engineering approaches and will inform the planning and design of communities as a design element.

In Londonderry, some of the natural hydrological patterns in the landscape have been compromised by years of development. Opportunities exist to restore water systems and strengthen the interconnected network of greenways so they can begin to function as a system for natural infiltration and human enjoyment.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

NATURAL STREAMBED PRESERVED AND INCORPORATED INTO STREET DESIGN



Seek to maintain existing hydrological patterns within any areas that become developed in the future. Future residential neighborhoods should be strictly designed around hydrological patterns, while future activity centers should be allowed to use more high tech stormwater infrastructure solutions to achieve both light imprint goals and a high quality built environment.



Adopt form-based regulations that include standards for sustainable stormwater that require new development to plan around existing hydrological patterns with a range of standards according to the intensity of development.

Green Streets

Green streets are thoroughfares that capture, temporarily store, and treat road runoff at its source by incorporating vegetated water catchment and filtration devices in the form of small rain gardens and bioretention systems. Components such as bioswales, infiltration planters, and flow-through planters, and other sustainable stormwater solutions allow plant material to remove impurities before water naturally infiltrates into

the soil or into a storage or stormwater system. Water-loving plants as well as plants that are able to remove the impurities while thriving close to traffic and in more urban environments are used in green street design, adding beauty and function. Additional infiltration can be achieved through the use of pervious paving materials for sidewalks and streets.

Shade Tree

Captures rain, filters air, provides shade

Flow-Through Stormwater Infiltration Planter

Stores and filters collected road runoff

Overflow Drain

Transfers overflow to wetland system

Pavers

Enhance permeability of sidewalk

Curb Opening Inlet

Captures road runoff



Flow-through Planters (shown on previous page), are used in urban environments where infiltration is not desirable near building foundations or where soils resist infiltration. Unlike infiltration planters, the bottom of the system is sealed. Water enters the planter through cuts in the curb, water is stored and an overflow pipe is provided that connects the planter to a drainage system, with excess water channeled into the storm sewer.

Bioswales and infiltration planters utilize the concept of short term storage and infiltration to allow water to percolate into the soil. They treat stormwater runoff from rooftops, streets, and parking lots by slowing and filtering the water as it passes through the system. Bioswales

are essentially linear rain gardens formed by depressions with gently sloping sides that are planted with vegetation. The naturalistic aesthetic of the plantings make bioswales an excellent solution for rural and suburban applications. Infiltration Planters are similar to flow-through planters in their appearance and are also appropriate for urban environments, yet similar to bioswales must be used in areas where soil allows for easy infiltration.

It may be possible for Londonderry to retrofit existing neighborhoods and thoroughfares around the Town Center to accommodate these kinds of bioretention systems, while also requiring these systems for new projects.



CITY OF PORTLAND, ENVIRONMENTAL SERVICES

GREEN STREET WITH BIOSWALES AND FLOW-THROUGH PLANTER



Green streets should be the standard for all future roadway improvement projects as well as for any new street construction throughout Town, with priority funding for activity centers.



Steps should be taken to amend Londonderry Public Works Standards to require the use of green street techniques in lieu of the conventional pipe and pond approach.

Rain Gardens

Rain gardens are a natural infiltration solution that incorporates short term storage of stormwater in basins and swales. Also known as a vegetated infiltration basin, a rain garden is a man-made or naturally occurring low spot in the landscape in which stormwater is collected and stored temporarily until it infiltrates the

ground. While incredibly functional, rain gardens can add an element of beauty, with a diverse array of water-loving plants adding life and color to a yard, park, median, or parking lot. With some adaptation in design and size, rain gardens can be located in all settings, from the most rural to the most urban locations.



RESIDENTIAL RAIN GARDEN



Rain gardens can be encouraged throughout Londonderry, along more rural roadways, in yards, and on municipal properties. These beautiful and functional landscapes would add beauty while also helping to promote light imprint solutions to stormwater management.



Steps should be taken to amend Londonderry Public Works Standards to require the use of rain gardens on municipal properties and as part of the green street initiative in the rural context. Schools could partner with the Public Works Department to build test rain gardens as a way to educate students and parents.

Infiltration Parks

While rain water naturally percolates through the ground in a park, a few changes in design and construction can allow them to capture, store for a short time, and clean stormwater runoff. Breaks in the curbing along the street allow the water to reach the grassy surface of the park. Creating a gradual and imperceptible depression allows water to collect and remain in the park long enough to infiltrate. Surrounding areas can be graded so that the rain water flows towards the parks.

It is important that the park has ample landscaping, rain gardens, street, trees, benches, and lighting so it does not appear as a stormwater facility.

As a recreational civic space, infiltration parks work well because they store rainwater during a storm event and shortly after, when people are not generally not interested in playing outside. After the water percolates and the ground dries, the space is available as a park again.

Street Trees

Capture rain, filter air, provide shade

Woodland Buffer

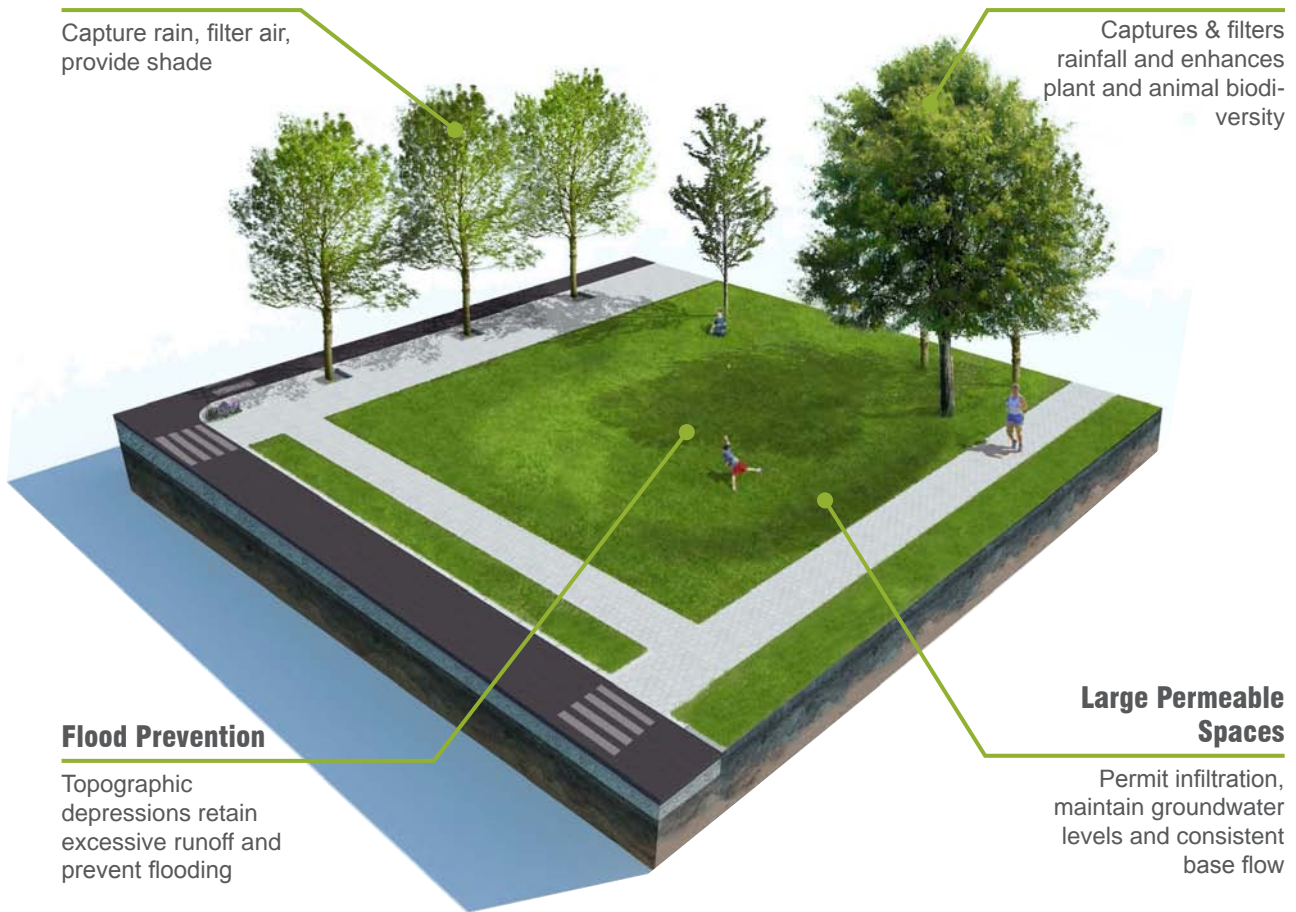
Captures & filters rainfall and enhances plant and animal biodiversity

Flood Prevention

Topographic depressions retain excessive runoff and prevent flooding

Large Permeable Spaces

Permit infiltration, maintain groundwater levels and consistent base flow



Green Plazas

Plazas are not often thought about as opportunities for stormwater infiltration, but when well planned and designed correctly, they can provide an excellent solution in a more formal environment. The majority of a green plaza is hardscaped with pervious pavers. Infiltration planters with shade trees and lawn areas are strategically located for

maximum pedestrian comfort and infiltration benefit. If necessary or desirable, a cistern can be located under the plaza and drainage channels can be integrated into the paving pattern to collect excess runoff and send it to the cistern for later use in irrigation.

Shade Trees

Capture rain, filter air, provide shade

Lawn and Planted Areas

Capture rain; recharge groundwater levels through detention and infiltration; store overflow from cistern

Roof Overflow Drain

Transfers overflow from adjacent green roof to underground cistern

Underground Cistern

Collects stormwater runoff from plaza and adjacent building; irrigates plaza plants

Drainage Trench

Collects stormwater runoff from impermeable areas of plaza, drains to cistern



Promote green plazas within activity centers to provide civic gathering spaces that also promote light imprint solutions to stormwater management.



For large private development projects, require the construction of civic spaces that use light imprint techniques.

Pervious Parking Lots

Conventional paved surfaces, including roads, sidewalks, and particularly parking lots, utilize asphalt, concrete, or tar surfaces that are entirely impervious. As a result of the paving material chosen and their lack of permeability, these surfaces tend to exacerbate stormwater runoff related issues. There have been many recent innovations in materials and pervious pavement systems that allow water to infiltrate large- and small-scale paved surfaces.

In New England, pervious surfaces face the challenge of frost and clogging from salt and sand. However, different materials and applications

continue to be tested successfully. The University of New Hampshire (UNH) installed both asphalt and concrete pervious pavement, concluding that stormwater management systems using infiltration and filtration mechanisms, if properly designed, can work well in cold-weather environments. The UNH Stormwater Center is a valuable resource for the Town, with studies presently underway testing materials and management practices.

In addition to pervious paving, infiltration planters with shade trees should be applied in parking fields to further enhance the area's ability to manage and treat stormwater.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

A BEAUTIFUL AND FUNCTIONAL PERVIOUS PARKING LOT



Following in the footsteps of Stonyfield, additional pervious parking lots should be constructed throughout Town, especially in areas where soil drains well.



Amend Public Works Standards to require any parking lot over a certain size to be constructed of pervious material, where feasible. Consider relaxing standards for projects located within activity centers.

Staircase Cascade

Incorporating stormwater treatment into a staircase can add an element of beauty and interest, with a water cascade playing a vital role in the conveyance of runoff in areas with substantial topographic changes. The stairs are gently sloped toward a series of parallel tiered infiltration

planters. Because of the slope, the high side of the staircase remains free for pedestrians to walk without water underfoot. At the bottom of the staircase the knee wall of the stairs can extend further and be used to direct the flow, if necessary.

Sloped Stairs

Direct runoff toward the planters with a gentle slope and slow the runoff as it traverses the staircase

Stormwater Infiltration Planters

Store and filter collected road runoff

Curb Opening Inlet

Captures road runoff and directs it into the infiltration planters



Green Bike Path

Because bike paths are often adjacent to and link open spaces throughout a community, there are opportunities for them to become a contributing part of the overall sustainable stormwater system. A green bike path utilizes the linear form of the path to direct the stormwater runoff to the appropriate elements of the sustainable stormwater system. The

paving material, if any, could be pervious to allow some infiltration along its surface but an adjacent filter strip is also recommended to help process stormwater and filter it into the ground. In Londonderry, the design of the bike path could incorporate a variety of surface treatments and stormwater technologies as it moves from rural to more urban conditions.



WWW.CI.MINNEAPOLIS.MN.US

AN ACTIVE RAIL AND TRAIL



Prioritize transportation funding for bikeways, including bike paths connecting key areas in Town. The rail trail should be constructed, providing a valuable amenity to the community, and spurring investment in the North Village activity center.



Incorporate bikeways in all transportation construction projects and prioritize funding for construction of the rail trail.

Green Roofs

Green roofs are waterproof, vegetative roofing systems in which a root barrier, drainage system, light weight planting medium, and plants are layered on top of an impermeable membrane. They serve to insulate the building, reduce heating and cooling costs, absorb heat from sunlight, and limit solar heat reflection into the atmosphere, which contributes to the phenomenon known as the

“heat island effect”. Stormwater not used by the vegetation can enter and be stored for later use in a collection system such as rain barrels or cisterns. Green roofs are not only utilitarian, they also can be designed as an outdoor garden amenity. Finally, green roofs can be used as part of an urban agriculture program to produce food for the building or others nearby.



NATURAL FLOW DESIGNS

URBAN ROOFTOP GARDEN



Promote green roofs throughout Town, particularly on municipal buildings and large commercial and industrial buildings.



Consider providing incentives for green roofs on buildings exceeding 10,000 SF in size.

Energy Efficient Design

Energy efficiency is one of the greatest interests of the “green” design movement. There are high-, low-, and no- tech solutions related to sustainable design, although it seems that high-tech solutions receive the most attention and enthusiasm. It is important to remember, however, that low- and no-tech solutions should be deployed first. Only after they have been fully explored and utilized should high-tech solutions be considered. Most high-tech systems have some additional up-front costs associated with them, although those costs may be recovered in the long term through savings in operating costs. Low- and no-tech solutions, however, can be put in place more quickly due to the reduced initial capital cost.

Some low-tech solutions require a change in mindset and educating consumers. This is especially applicable to the way in which we conceive of air conditioning systems, lighting and building materials. Air conditioning should be viewed as a backup for cooling only on extremely hot days, replaced in part by ceiling fans and natural ventilation. Similarly, electric lighting requirements can be reduced by taking advantage of natural sunlight. Finally, there are a number of building materials and products, such as windows, doors, water heaters, appliances, and advanced insulating materials that have been developed specifically with a view toward energy efficiency.



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SOLAR COLLECTION SHADE STRUCTURE



Promote energy efficient design throughout Town, particularly for new construction.



Consider providing educational information and incentives for energy efficient building design for all building types.

Shade Trees

The use of trees planted around houses is a simple and beautiful solution to reducing heating and cooling needs for buildings. When planted on the south and west sides of buildings, shade trees drop their leaves during the cooler fall season

allowing warming sunlight to reach buildings. Additionally, they create a lush canopy in the warmer months providing shade to keep the building cool. This provides a low-tech, low-cost solution to reduce energy needs.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

SHADE TREES



To preserve and promote Londonderry's incredible tree canopy, shade trees should be preserved throughout Town.



The Green Print Map requires that property owners maintain shade trees when possible.

Solar Orientation

Solar orientation is a no-cost energy efficiency solution. By taking solar orientation into consideration during the design process of not only buildings but entire neighborhoods, significant energy savings can be achieved. To ensure that passive solar heating, natural ventilation, and daylighting can occur, window placement and size and the inclusion of shading structures are important. In areas with smaller lots and buildings closer together, it is important to

make walls facing neighboring homes light in color to reflect light into the building next door. In considering solar orientation in the design of a neighborhood, it must not be allowed to supersede considerations of walkability. Neighborhoods designed for walking, biking, and riding transit rather than driving have greater energy saving potential than small scale measures to make individual buildings more energy efficient.



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BARN HOUSE WITH SOLAR PANELS

Natural Light

Buildings should have a sufficient number of windows and shallow enough floor plates to meet the majority of the daytime lighting needs with natural light. The energy efficiency of natural lighting must be balanced against the increased air conditioning and heating

demand that may be created by the use of additional glazing. Building orientation, deep eaves, and interior window treatments can be used to minimize the direct sun.



THE BOURSE CO-WORKING LOFT

NATURAL LIGHTING IN THE BOURSE CO-WORKING SPACE

Ventilation & Air Conditioning

A no-tech energy saving solution that has been used for centuries is natural ventilation. Natural ventilation is achieved by providing vents or windows in the upper and lower levels of a building. Warm air, which naturally rises, is allowed to escape to the outdoors from the upper vents and/or windows while cooler air is drawn into the building through the lower openings. Cross ventilation occurs when openings such as doors and windows, located on the same level on opposite or adjacent walls, are opened to allow cooler exterior air into the building, which, in turn, forces warmer interior air up and out.

One method to improve the efficiency of natural ventilation is a solar chimney, often referred to as a thermal chimney, which uses the convection of air heated by passive solar energy. In some instances the air is further cooled by movement through underground ducts before it enters the building. Electric fans, such as ceiling fans, allow efficient cooling and consume much less electricity than traditional air conditioning systems. When used in conjunction with some of the no-tech methodologies listed above, traditional air conditioning use can be significantly reduced or eliminated with little effort or energy consumption.



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WIND CHIMNEY

Greywater Recycling

Greywater is water that has been used for laundering, dish washing, or in showers or sinks. Depending on the local climate and soil conditions, it is possible to recycle greywater for several uses such as landscape

and food irrigation or constructed wetlands. Recycling greywater reduces the amount of fresh water needed for each household and reduces the amount of wastewater entering the sewer system.



SYMBIOSIS FARMS

GREYwater FROM INSIDE THE HOME IS USED TO IRRIGATE A GARDEN

Rainwater Harvesting

Rainwater harvesting is the collection and storage of rainwater that otherwise would be lost during a storm event. For centuries, rainwater has been collected for drinking, irrigation and other uses; however, since the advent of indoor running water, this practice fell out of favor. More recently, as sustainable resource use has increased, this practice has gained popularity. Rainwater is now being captured and used for washing cars, showering, flushing toilets, washing clothes, and in some places, even for drinking after treatment with ultraviolet light.

Rainwater can be harvested by way of rooftop or ground catchment systems. Most systems consist of gutters and pipes attached to roofs that channel rainwater to a storage facility. The form of storage varies, based on the scale of the

system and whether it is located in a more rural or urban setting. The most rural storage option is a pond. Cisterns, which are large concrete, wood, or plastic storage chambers that often are installed underground, provide another storage alternative suitable for use both in rural and more urban areas.

A small storage alternative that works well for residential applications is the rain barrel. Rain barrels have become very popular in recent years and are sold even at national chain grocery and hardware stores. Because these systems, at their simplest, can be added to existing gutter systems with little cost, rainwater harvesting is an easy strategy that should be widely implemented at all scales.



TRADER TRAVIS

A RAIN BARREL COLLECTS WATER FOR USE IN THE GARDEN

Xeriscaping

Xeriscaping is a landscaping design strategy that uses drought resistant plants which require small amounts of water and maintenance. While this practice can be utilized anywhere, it is particularly important in places where water shortages occur. Because non-native plant species and varieties often require more water and chemical treatment to ensure their survival,

xeriscapes typically take advantage of native plants accustomed to the climate of the region in which they are planted. Other xeriscape practices include conserving the moisture in soil by mulching planting beds, drip irrigation, and limited use of turf grasses.



NATIVE LOCAL PLANTS ADD BEAUTY AND REQUIRE LESS WATER AND MAINTENANCE



Native plants should be encouraged throughout Londonderry as a way to conserve water and minimize use of chemical treatment.



Consider requiring use of native plants as part of form-based regulations.

Land Conservation

Numerous techniques are available to ensure the permanent conservation of land with scenic, recreational or habitat value. The development rights associated with a piece of property can be purchased, which allows the land to be conserved in perpetuity. Additionally, the land may be purchased outright by a conservation

organization or private citizens interested in protecting a piece of property or protecting themselves from the impacts of development adjacent to their property. Without tools like these in place, most private property is available for development. (See also Transfer of Development Rights, page 106.)



LOUIS FISHER

CONSERVATION LAND PROVIDES A PLACE FOR CHILDREN TO PLAY



Londonderry should continue its efforts to conserve land throughout the community, building an interconnected green network throughout Town.



Move forward with the recommendations of the Open Space Task Force Report.

Conservation Subdivisions

In contrast with conventional subdivisions, which divide land into large lots leaving fragments of leftover open space, conservation subdivisions are a more sustainable development method that can help preserve larger areas of significance. With this development pattern, buildings are built closer together on a development site, thus leaving more land untouched. Instead of having large, underutilized private lots, homeowners benefit from living near large areas of preserved open

space that can be improved with a trail system. Roads in the conservation subdivision are built to a standard that promotes walkability and slow traffic movement, rather than to conventional standards that require oversized streets with an excess of stormwater infrastructure. In the following illustrations, the same number of homes are provided in the conservation subdivision as in the conventional approach.



EXAMPLE OF CONVENTIONAL DEVELOPMENT



EXAMPLE OF CONSERVATION SUBDIVISION, WITH SIGNIFICANT PORTIONS OF THE PROPERTY CONSERVED

Transfer of Development Rights

Establishing a transfer of development rights (TDR) strategy would allow Londonderry landowners the opportunity to transfer the right to develop one property to another. The typical TDR program protects open space and agricultural areas from development by transferring development potential to designated growth zones such as neighborhood centers. In such a scenario, the land where the development rights originate is called the “sending” property. When rights are transferred from the sending property, the land becomes permanently protected

for agriculture, recreation, natural resource or habitat preservation. The land to which the rights are transferred is called the “receiving” property. By acquiring additional development rights, the receiving property is able to be developed at a higher density, allowing for greater development potential in areas that may be underutilized. Development rights may be transferred by buying and selling on an open market, as in real estate, or through a transfer of development credits (TDC) program run by the Town or other non-profit organization.



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TDR PROVIDES A MECHANISM FOR PRESERVING LAND ZONED FOR DEVELOPMENT



TDRs can be applied within Londonderry to encourage the sale of development rights from the conservation sectors to the growth sectors, described in The Framework section. This would enable the Town to conserve critical lands that are currently zoned for development, while helping to drive growth to activity centers.



Determine whether TDRs are feasible within Londonderry and move forward with implementing a TDR program.

Green Building Design

Wherever possible, the elements of sustainability should be incorporated for new building construction. There are numerous sustainability rating programs, including the most prominent, Leadership in Energy and Environmental Design, LEED. These standards should be used to inform everything from global design decisions down to specific material selections.

Part of making a building green is locating it in a place that is already walkable. In Londonderry, where there is a limited number of walkable centers, new buildings should try to contribute to the transformation of the suburban condition into activity centers that are oriented toward the pedestrian, making an incremental transition, one building at a time.



BILL BENNETT

LEED-CERTIFIED APARTMENT HOUSE



Green building techniques can be used for new construction throughout Londonderry.



LEED Standards should be adopted for inclusion in local site plan regulations, reflecting the high level of support among the community for energy-efficient design for new construction.



LOWBONDERET
Market Stand
GEMISSE GARTEN
gemüse mit charakter
An Wochenenden + Feiertagen verlängert

Green Beans
1,50 €

Parsley
1,50 €

Green Onions
1,50 €

Spinach
1,50 €

Tomato
1,50 €

PHOTO BY TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC



economy

Enhance the municipal advantage

- Provide a healthy and sustainable business environment.
 - Build a community that is attractive to employers and their workers.
 - Promote Londonderry and build a competitive advantage within Southern New Hampshire.
-

tools

Ecotourism
Place-Based Tourism
Place-Based Business
Artisan Industrial Space
Agritourism
Value-Added Production
Eco-Industry
Expanding the Londonderry Brand

Ecotourism

In the past two decades, a new type of tourism known as “Ecological Tourism” or, more simply, “Ecotourism” has gained popularity. Since 1990, The International Ecotourism Society (TIES) has defined ecotourism as “Responsible travel to natural areas that conserves the environment and improves the well-being of local people.” Due to the enthusiasm about sustainability and “Going Green” that has swept across the world, many people are interested enough in places that have

adopted and implemented these strategies to travel there to see those practices in action. A new subset of ecotourism developed which extends the concept of ecotourism from natural environments into human habitats such as cities and towns. Ecotourism can include sightseeing and educational tours of sustainable communities, LEED-certified buildings or infrastructure such as wind farms, as well as many other areas of interest to green-minded tourists.



SUASCO AL

MUSQUASH CONSERVATION AREA



Ecotourism should be pursued throughout Londonderry, expanding use of protected lands to visitors and highlighting any new green elements.



Pursue funding as available to improve access and marketing for protected lands.

Place-Based Tourism

Before the advent of niche tourism, such as ecotourism and agritourism, most tourism and travel typically was place-based. People traveled to historic or significant cities, towns, villages, or sites to experience different cultures.

Place-based tourism is dependent on a high-quality built environment that is interesting, authentic, beautiful, and useful. In contrast, the suburban places in which most people live today would never be visited by place-based tourists because suburban environments are everywhere and lack distinction.

It is possible to create the type of place that may have never existed in the community before or to build on the historic character of a place. Communities can create the type of places where people will want to visit by placing high priority on the quality of the built environment.

In Londonderry, it is possible to emphasize and build on the strong sense of the past and the agricultural heritage to create enhanced centers of activity that will appeal to both locals and tourists alike.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

VISITORS STROLL ALONG AN ATTRACTIVE NEW ENGLAND MAIN STREET



There is significant opportunity in Londonderry to grow place-based tourism by implementing the Comprehensive Master Plan and specifically focusing resources within activity centers.



Pursue form-based regulations, targeted transportation funding, and other recommended actions within activity centers.

Place-Based Business

In today's idea-based economy, where creativity and innovation are often valued more than experience and seniority, a new type of business environment has taken shape. The internet and other technologies have minimized old ways of doing business based on the physical office, time spent at your desk, and a long commute. The new resource is creative people and finding ways to attract them.

The office park of the 80's and 90's has been replaced with mixed-use corporate campuses and urban lofts and warehouses. Previously, municipalities competed to attract business with the tax breaks or Class A office space. Today, many companies will only locate in a community that is walkable, mixed-use, and diverse.

This is because the best employees will no longer settle for a suburban lifestyle and are seeking employment in vibrant communities with active street life and culture.

To take advantage of this shift in culture and mindset, Londonderry should promote the creation of high quality built environments through smarter land use regulations and development incentives, and then rigorously tailor a marketing message to feature this aspect of the Town. Investments in place-making will pay off and should be considered an important part of Londonderry's "Business is Good. Life is Better" economic development program, in addition to a quality of life benefit for existing and future residents.



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REAL-ESTATE OFFICE FOCUSED ON PLACE-BASED BUSINESS

Artisan Industrial Space

Londonderry has an opportunity to introduce a variety of new creative building types, increasing opportunities to attract different kinds of people to the Town. Artisan industrial space is often times low cost space that can accommodate entrepreneurs who are involved in making products. These kinds of businesses often occur in rehabilitated historic buildings, in no frills new construction, or within live/work units, which accommodate a workshop and living quarters in one building and with one mortgage. This allows creative entrepreneurs the means to affordably engage

in small scale artistic and light industrial pursuits. These buildings can also be used for artist studios and creative knowledge workers. Artisan industrial space can be set up with ground floor workshops facing onto streets, with large doors that can expose the passerby to the work happening inside.

The process of encouraging new business development can be spurred by incentives for low cost incubator space as well as more permanent artisan industrial space, where land values are lower than those in the rest of Town.



ARTIST MICHAEL HEENEY

ARTISAN INDUSTRIAL SPACE IN A REHABILITATED HISTORIC MILL BUILDING



Low cost space needs to be available within activity centers so that new business can be located in high visibility areas, where locals and visitors alike can see work in process.



Incentivize the construction or rehab of low cost space within activity centers through the use of form-based regulations. Also consider financial incentives to attract and grow artisan-industrial businesses.

Agritourism

Many people are willing to pay to experience the rural character and authentic experiences associated with farming. As suburban life spreads, people have become more and more removed from their food sources and the ability to “put their hands in the soil”. Recently, the search for authenticity has expanded to include a desire for an increased understanding of food sources and production.

Agritourism, which is essentially another form of ecotourism, taps into the human desire for authenticity and a more direct relationship with food. People are seeking opportunities to spend time on a farm, stay in a farmhouse, help with planting, tend gardens and farm animals, and prepare and eat meals derived from their efforts. Although a working vacation, agritourists find it so rewarding that they pay for their experience, just as if they were relaxing in a resort.

Agritourism programs also can be provided as day programs for school groups and parents and children during the week.

With proper planning, an entire community or region can become an agritourism destination. This kind of transformation requires a rigorous marketing and branding strategy, as well as the infusion of agriculture into all aspects of the community.

Agritourism at a community level is an economic development program and should be treated as such. It needs to be provided a budget and manpower necessary to make it thrive. Community agricultural plots should be thought of much in the way a town thinks about creating new parks or creating an economic development program. Accessibility and visibility are critical to the success.

Agricultural form changes as you move from rural to more urban, with the commercial family farm on the periphery, to the neighborhood plot, to the urban rooftop garden and edible streetscape. Programming should include festivals celebrating seasonal harvests and coordination with local restaurants so they use products that are grown and produced locally.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

TOURISTS PARTICIPATE IN APPLE PICKING

Value-Added Production

There is potential to build on Londonderry's established position as a center for orchards and pick-your-own farms by incentivizing value-added propositions. This involves taking basic products and increasing the value of that product (and usually also the price) by adding extras in the manufacturing process. Value-added processing includes bakeries, canneries, breweries, distilleries, and butcher shops.

Londonderry could also try to market potential cooperative agricultural-related facilities to enable local small scale farmers to pool resources so they can generate a diversity of new value added products.

Londonderry could expand the types of agricultural offerings and identify and fill niche market needs to add an important level of diversity to the local economy and position Londonderry for a greater level of economic resilience.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

MOONLIGHT MEADERY TRANSFORMS RAW HONEY INTO MEAD



Low cost space needs to be available within activity centers so that new value-added businesses can be located in high visibility areas, where locals and visitors alike can see the production in process.



Incentivize the construction of low cost space through the use of form-based regulations, which can promote single-mortgage mixed-use buildings as well as other building types that fit into pedestrian-oriented activity centers. Also consider financial incentives to attract and grow value-added businesses.

Eco-Industry

Often, companies that are in the business of producing goods and services related to sustainability and green building are not only concerned with profit, but also take a more principle-based approach to doing business. They adopt a “triple bottom line” approach in which they factor in quality of life for people, the planet, and profit, aspiring to “do well by doing good”.

This socially, environmentally, and financially responsible model makes

it critical that these companies have a physical presence, identified by their stores and factories, that closely follows the principles of their corporate mission. As a result, “green” industries seek out towns that embrace these same philosophies and actively encourage these companies to locate in their community. Becoming well known as a green town that is open for business to green and sustainable companies will go a long way toward attracting eco-industry operations.



GREEN INDUSTRY THAT MANUFACTURES SOLAR PANELS



Depending on the type of production, many eco-industries can occur adjacent to other uses. These types of industries can either be located within activity centers or, for heavy industrial uses, in more conventional industrial parks.



Londonderry should promote and build upon its existing Eco-Park and use this area to generate competitive advantages that attract sustainable industries to Town.

Expanding The Londonderry Brand

The Londonderry brand is already associated with value and quality, and many small entrepreneurs have been successful in using this to their advantage to expand locally, regionally, and even nationally. These businesses create local jobs

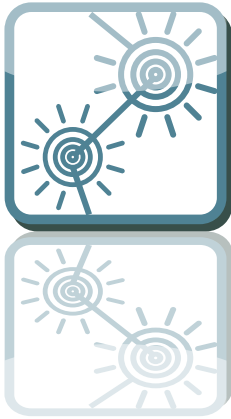
and an expanding market for local agricultural products. Londonderry should continue to promote local companies and help them to grow, building a reputation as a community that values and partners with local business.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

MACK'S APPLES FARM STAND





centers

Promote Unique Activity Centers

-
- Promote a variety of walkable, mixed-use centers that respect the rural character of the community.
 - Provide new options for people to live, work, shop, and participate in civic life.
 - Strengthen the Town Common as not only an emotional, but also physical center of the community.
-

Tools

Neighborhood Structure

Character Zones

Mixed Uses

Boutique Craft Business

Business Incubators

Transitions (like facing like)

Suburban Retrofit

Universal Design

Neighborhood Structure

Neighborhoods should contain a discernible center and a clear edge. This is an organizational concept that provides an identity to the community. While it may be more difficult to have a well-defined edge surrounding a neighborhood, it is imperative that its center be well formed. The center of the neighborhood should include a civic open space such as a park, square, or plaza depending on its location within the range of contexts, from rural to urban. This center should

have the most urban character in the community, with buildings pulled up close to the street and a generous sidewalk in front. If transit is available in the community, the transit stop would be found in the neighborhood center. In Londonderry, where there is a lack of clear neighborhood structure, there are opportunities to create small nodes of activity within walking distance of nearby residents, while also continuing to strengthen and improve linkages to the existing civic and commercial centers.



TRADITIONAL COMMUNITY WITH CLEAR CENTER AND A RURAL EDGE



The type of neighborhood structure described above does not fit every part of Londonderry, but can be pursued within activity centers as they change and grow in the future.



Pursue form-based regulations to facilitate the expansion and growth of walkable neighborhoods in the areas identified in this Plan as activity centers.

Character Zones

Compact development is an effective method to preserve land having agricultural, habitat, or scenic value. While it may not be the preference of all citizens, the most sustainable way to grow is with higher densities. However, simply building more densely without taking into consideration the preferences of potential buyers will end in failure.

A sophisticated and nuanced approach is required, as is the recognition that there is no “one-size-fits-all” solution. Utilizing the concept of Character Zones, a range of lifestyle options can be accommodated within a community, from most rural to most urban, and everything in between.

Character Zones organize the built environment according to a range of development intensities from least intense to most intense. C1 consists of permanently conserved areas, including waterways, buffers, and other protected lands. C2 is rural in character and is often used for agriculture or working forest, with homes scattered along roadways. C3 is traditional single-family residential neighborhoods with a more regular arrangement of homes. C4 is a transitional area that has a more dense and diverse residential mix with some commercial activity. C5 is the characteristic main street, with attached buildings that have commercial on the ground floor and residential above. This transect is calibrated according to local precedent or preference for how people would like to see their community evolve.

Using this declension of development intensity as an organizing framework, community’s can provide a range of character areas and choices. People can then choose whether to live on a rural road, in a residential neighborhood, or in an apartment above a shop.

All elements of design within each Character Zone should be arranged according to this conceptual framework, from untouched nature to man-made centers. Elements such as density, plantings, setbacks, building heights, signage, lighting, thoroughfare design and other elements vary according to Character Zone, but still holistically coordinated to make up one authentic place.



Mixed Uses

Whenever possible, neighborhoods should include a mix of commercial (i.e. retail, restaurants, and offices), residential, recreational, and civic uses. This mix should be well-balanced, incorporating both vertical and horizontal mixed-use within the neighborhood, the block, and the building. An example of vertical mixed use is when a multiple story building contains commercial activity on the first floor and residential above. Horizontal

mixed use occurs when buildings with different uses are located next to each other. The image below contains both examples. An ideal mix would allow residents to meet all of their daily needs within a short walking distance. When this occurs, the number of automobile trips per household is substantially reduced. This mix of uses is optimized when commercial establishments have residential dwelling units above to help promote active streets.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

MIXED-USE STREETSCAPE

Boutique Craft Business

There is a growing trend among the creative class to seek out local coffee roasters, brew pubs, artisanal cheese makers, and other businesses that offer high quality and locally produced products. Londonderry could seek out the kind of entrepreneurs looking for space in up-and-coming

urban places and provide them with incentives for setting up their home base in Londonderry. These kinds of businesses would provide locals with a more diverse set of opportunities to patronize and support local businesses.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

A BAKERY PROVIDES ARTISANAL BAKED GOODS AND A CENTER OF COMMUNITY LIFE

Business Incubators

Local start-ups and new businesses form the foundation of a community because they generate both financial and social capital. Local businesses serve as a morale booster that help the local economy and create the entrepreneurial spirit and buzz that attracts other creative types. The process of encouraging new business development can be spurred by the provision of incubator space.

Incubator space can be a light weight structure that is modular and moveable or it can be permanent. For an incubator space to be successful, it needs to be reasonably priced to

facilitate the start-up phase, with the understanding that the business will eventually move into a larger space once they are more established and their business begins to grow.

Often times, incubator space occurs within a transitional zone of a community, where there is an interest in promoting economic development and a greater sense of vitality. They can be placed in vacant lots, in or near parks, or along a sidewalk to buffer a surface parking lot. As the incubator location generates value, a temporary structure may eventually be replaced by more permanent buildings.



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INCUBATOR RETAIL



Business incubators can be used in the short term to help generate energy and screen parking lots within activity centers.



Enable and promote incubator spaces within the zoning code.

Transitions (like facing like)

Like facing like refers to the way different building types are situated on a street. Ideally, the same building types should be across the street from each other. In many places with conventional planning regulations, blocks are built so that the same or similar building types are built along the same side of the street with different building types located

across the street. This approach can be unpredictable and also result in lowered property values. Instead, similar building types should be facing each other because it protects the character of the streetscape, ensuring that buildings with similar densities are facing one another.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

DUPLEXES SEAMLESSLY TRANSITION TO SINGLE FAMILY HOMES



As development occurs within Londonderry, new construction should not negatively impact existing residential areas. Appropriate transitions should occur throughout Londonderry.



Use form-based regulations to ensure appropriate transitions between areas that transition from one character to another.

Suburban Retrofit

Suburban retrofit refers to the process of transforming a suburban condition, where single-story buildings are spaced out with parking in front, into a more diverse, pedestrian-oriented environment where mixed-use buildings are located more closely together. Typically, this involves either infill, redevelopment, or a combination of both, with the element of time playing a significant role. In the most ambitious situations, redevelopment can result in the eventual removal of the original suburban buildings. More commonly, suburban buildings with shallow setbacks can be added onto, essentially pulling the buildings toward the street by creating a new facade.

Suburban retrofit has been used for everything from residential cul-de-sac neighborhoods, to office parks, to big box redevelopment, while the most common use is a slow transition from a commercial strip to a mixed-use street.

Suburban retrofit can also involve the transformation of drive-throughs into a more pedestrian-friendly form. The image below shows a pharmacy that is pulled to the street, with parking and the drive-through located in the rear.



Suburban retrofit should be encouraged and promoted along commercial strip roads and within activity centers.



Pursue form-based regulations to facilitate the conversion of strip retail and other suburban commercial areas into more pedestrian oriented environments.

Universal Design

Universal design refers to broad-spectrum ideas meant to produce buildings, products, and environments that are inherently accessible to both people both with and without disabilities. In addition, consideration should be given to the elderly, mothers with strollers, and children.

Buildings should be designed or retrofitted to enable all people to access the interior space, with side or rear ramps easily accessible from both rear parking areas as well as from sidewalks.

In addition to buildings, parks should be designed with all abilities in mind, with smooth surfaces available for ease of walking and moving, as well as ramps where a grade change occurs.

Playgrounds can also take into consideration children of all abilities, so that everyone is able to play in the same area. To create a truly inclusive environment, children should have access to safe, independent, active, comfortable, fair, and equitable play.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

THE COACH STOP RETROFITTED A HISTORIC BUILDING BY BUILDING A SIDE RAMP

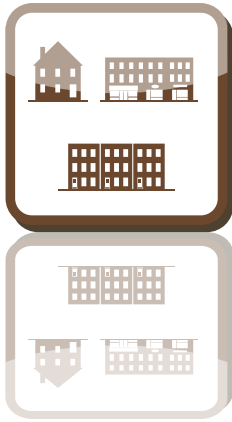


Universal design should be incorporated throughout Londonderry, with emphasis on commercial buildings and civic spaces within activity centers, so that all people can take advantage of these more compact places.



Promote smart solutions to universal design with particular emphasis on buildings and public spaces within activity centers. New standards could be included in form-based codes developed for activity centers.





housing

Emphasize Housing Choice & Diversity

- Provide work force housing to reduce commute times and impacts on road networks.
 - Create multigenerational communities and assisted housing for seniors so they can age in place.
 - Provide new graduate and starter homes.
-

tools

Mixed Housing & Diversity

Self-Sufficient Homestead

Farm Compound

Accessory Units

Neighborhood Parks

Graduated Care Facility

Mixed Housing & Diversity

Demographic diversity of people in age, income level, culture, and race provides a sense of interest and vitality within the most loved places in the world. In order to attract this type of diversity to a community, the physical form must be conducive to the varied lifestyles of these groups. A key component of creating an environment where diversity thrives is the provision of a mix of housing options. There should be many different types, sizes, and price points intermingled in close proximity, with a range of living experiences from rural to more dense, so that there is something for everyone.

The variety of dwelling types should include: different sizes of detached single family houses,

rowhouses, multifamily condo buildings, and live-work buildings. In addition, small ancillary buildings with a living space above the garage should be permitted within the rear yard of each principal building for extended family, tenants, or guests to stay or live. Residential units should be available either for leasing or for ownership. This allows young and old, singles and families, and residents having a range of income levels to find a dignified home that suits their preferences and lifestyles.

An additional benefit of this mix of housing types is that workers can live within walking distance of their jobs, rather than requiring that they commute to work, worsening traffic on local roads.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC



SMALL HOUSES, MIXED-USE BUILDINGS, DUPLEXES, AND MANSION APARTMENTS ARE EXAMPLES OF BUILDINGS TYPES THAT COULD BE INTEGRATED WITHIN LONDONDERRY

Self-Sufficient Homestead

Self-sufficient homesteading is a way for average homeowners to use their property to maintain a more self-sufficient lifestyle, such as growing their own food, raising small animals, and even beekeeping. Homeowners do not need several acres of land to create a self-sufficient homestead. They can do these kinds of things on plots that are less than one acre. Most communities have regulations that would prevent homeowners from having these kinds of animals unless the property is in a rural zone. But

self-sufficient homesteads should be encouraged by municipalities because they help citizens live more sustainably. Land use regulations can be updated to allow property owners to pursue this kind of sustainability and self-sufficiency. Although there may be opposition to relaxing the regulations that prevent small farming and livestock in urban areas and residential subdivisions, certain towns may decide that it is important to promote values such as greener living and food connection.



The self-sufficient homestead can occur within existing residential neighborhoods as well as along rural roads.

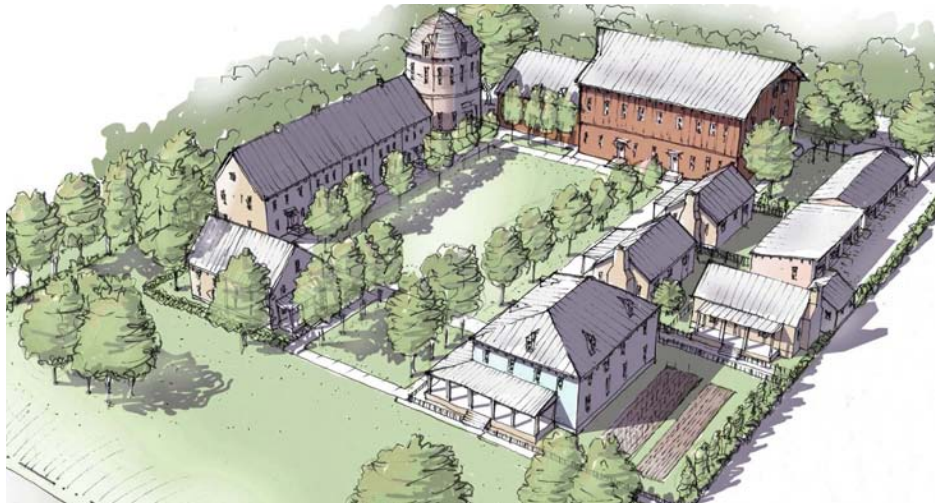


Allow farm animals within Londonderry. The type of activities, animals, and facilities allowed should be tied to lot size and the character of the neighborhood.

Farm Compound

A farm compound is a multi-unit complex with a mix of types and sizes of residential units. The conceptual plan below accommodates 22 residential units and 22 parking spaces on 2.5 acres. The concept is designed to create an opportunity for density in a rural context without having a negative impact on the rural character. This is achieved by designing the site plan and building architecture as if it were a historic farm that has been converted into a new use. For instance, the barn is

divided into 10 loft units. Two condo units have also been incorporated into the silo. The two-story out-building has been designed as four townhouses. The large farm house along the highway could either be a detached single family residence or corner store and the associated guest house is a duplex. Behind the farm house three caretakers cottages and sugar shacks will be available as single units. Parking is provided for all of the units in the rear corner in loafing sheds and stables.



The farm compound is appropriate on larger undeveloped parcels where development is currently allowed but where the community desires the appearance of rural character.



Adopt form-based regulations that allow for density in the rural context.

Accessory Units

An accessory unit is a flexible space that shares ownership, site, and utility connections with the principal building on the lot, but has its own entrance. Usually situated over a garage toward the rear of the principal house, the outbuilding increases privacy and enclosure in the backyard by screening the yard from the house next door. Accessory units are significantly different from the “bonus rooms” that are found in conventional suburban subdivisions because they are not connected to the rest of the house. Instead it is much more private—making it well suited for use

as a home office, guest room, or rental property. If rented out, the additional “eyes on the street” help make the neighborhood a more safe and lively place. In addition to providing a potential source of income for the primary mortgage holder, accessory units also provide additional low-cost housing options within the community. In Londonderry, permitting accessory units would be a sustainable and cost effective way for the Town to encourage affordable housing that complements the character of the existing neighborhoods, by putting the control in the hands of the residents.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

ACCESSORY DWELLING UNITS HAVE THEIR OWN ENTRANCE AND KITCHEN



Accessory units can be integrated throughout Londonderry in both existing residential neighborhoods and in new housing construction.



Adopt form-based regulations that allow for accessory dwelling units.

Neighborhood Parks

Londonderry is blessed with a number of large recreation areas; however, there is a noticeable shortage of smaller neighborhood parks that can serve as gathering places. The Town should consider finding locations for

playgrounds within an easy walk of most homes to better serve the needs of local families and help attract new families to the Town.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

NEIGHBORHOOD PARK



New, small neighborhood parks should be integrated throughout Londonderry to supplement larger school-related playgrounds and ballfields.



Engage in a strategic planning effort to identify locations for neighborhood parks. Identify a funding strategy.

Graduated Care Facility

A graduated care facility provides a range of housing alternatives and varied levels of care for seniors. The complex is made up of detached single-family independent-living cottages and condos, assisted living units, and related services. Each housing alternative has a different level of care: the cottages are for those who can live independently, while the condos are for those who need slightly more care, and the assisted living facility provides full time nursing and supervision. In addition, all the typical amenities that are found in an assisted living facility, such as the hairdresser and the eye doctor, are located on the ground floor in the form of storefronts facing onto the street and sidewalk. These amenities are open to the public, raising the quality of the services to meet the higher level of scrutiny given by paying customers who can choose to go elsewhere. On-street parking and a portico drop off area would be on the main streets, with a covered drop-off area and additional parking provided in the interior of the block.

The entire collection of cottages and the main building can be situated on one block within a walkable environment, located in a prominent position in the community and preferably next to a civic space. This location ensures elderly people are able to remain an integral part of the community even when they can no longer drive.

In Londonderry, such a facility could be situated so it is contiguous to the ball fields and near the Library. Here, residents can watch the activity from their porches or walk across the street and be an active spectator. There should also be small parks located internal to the facility, providing civic and social space for those residents who would rather not be in public. By having a variety of living conditions, services, and social opportunities all within one compact area, the elderly can be an independent and fully functioning member of society long into their senior years.







transportation

Balancing transportation choices in Londonderry

-
- Provide a safe, reliable transportation system that balances all modes of transportation.
 - Prioritize complete streets that emphasize the quality and character of both the road and the private realm.
 - Promoting active living for all ages, with special attention given to the mobility of children and seniors.
-

tools

Walkability
Connectivity
Complete Streets
Bikeways
Cycle Track
Bicycle Lane
Sharrow
Bike Parking & Storage
End-of-Trip Facilities

Walkability

The term “walkability” has become a buzz word in recent years without much effort to provide definition. As a result, it is often misunderstood to mean a place that would be pedestrian-only or anti-automobile. In fact, the term describes an environment where there is balance between many modes of transportation. Most importantly, it describes an environment in which people feel comfortable walking. In Londonderry, where

there is a strong interest in promoting walking and biking, the following information will help clarify how to achieve the community’s goals.

The constituent elements of walkability are referred to as “The 3 D’s”: Distance, Destination, and Design. When each of these elements are addressed, people are more likely to walk.

Distance.

The average pedestrian is willing to walk up to one-quarter of a mile (1,320 feet) or roughly five minutes to a destination. This ¼-mile walk from a neighborhood to a meaningful destination at the center is called a “pedestrian shed”. For most Americans, distances requiring more than a five minute walk will typically be made in a car rather than by walking. This walking versus driving threshold is locally calibrated.

Destination.

People will tend to walk more if they have somewhere meaningful to go. Meaningful destinations include civic spaces, schools, meeting halls, and commercial areas like neighborhood or town centers where daily or weekly shopping needs can be met. Often these destinations, when centrally located, become the “heart” of the community.

Design.

An interesting street and wide sidewalks are critical for a walkable environment. Pedestrian safety and comfort is also directly related to roadway width. Studies have demonstrated that traffic speeds increase in proportion to lane width, regardless of the posted speed limit. Narrow travel lanes, street trees, and on-street parking all act as effective psychological cues, helping to slow automobiles and, in turn, enhance pedestrian comfort.



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A PEDESTRIAN-ORIENTED STREET FACILITATES SOCIAL INTERACTION

Connectivity

Unless there are topographic or ecological constraints prohibiting it, every street should be connected to another street. By avoiding the construction of dead ends or cul-de-sacs, an interconnected network of streets can be achieved. The street network provides a multitude of routing alternatives to and from all destinations in a neighborhood, dispersing traffic and limiting congestion. Having a street network with a high degree of connectivity also enables individual streets to become more narrow, which slows traffic and increases vehicular and pedestrian safety. High connectivity also allows emergency service vehicles

many options to get to the site of an emergency call.

Connectivity standards in Londonderry should not be limited to streets and automobiles. Encouraging a network of connected sidewalks, paths, and passages makes walking more convenient and enjoyable and increases pedestrian access throughout the community. Finally, by increasing the number of routes through the community, pedestrians are provided more interesting walking and jogging alternatives access to a variety of neighborhoods and destinations, and more opportunity for social interaction.



LARS PLOUGHMANN

A NETWORK OF STREETS PROMOTES WALKING & BIKING, AND REDUCES TRAFFIC CONGESTION



Connectivity should be emphasized within activity centers, creating a finer-grained network of streets that will promote walking and biking.



Consider adding streets proposed in the activity center plans to the Town's official street plan.

Complete Streets

It is imperative that choices be provided for alternatives to driving, such as bicycling, walking, hiking, and using public transit. While driving is not to be shunned, it should certainly not be the only option. Pedestrian-friendly neighborhood design is important to ensure a greater inclusion of alternative modes of transportation.

Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to safely move along and across a complete street. Complete streets

make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for children to walk to and from school.

Because complete streets contemplate the context through which they pass, all streets in Town should be complete streets, incorporating as many of the elements as possible or appropriate.

The following images show all of the elements important to street design standards and future roadway improvement projects under a complete streets initiative.





Sidewalks



Pedestrian Refuge



Small Curb Radii



Planting Strips



Street Furniture



Bike Lanes



Street Lighting



Transit Shelters



On-Street Parking



Crosswalks



Street Trees



Vehicle Lanes

Bikeways

There are a variety of bikeway types that accommodate users with different experience levels, including trails, cycle tracks, bike lanes, sharrows, and riding with traffic. Communities should customize their approach to integrating bikeways, providing for a diversified system, including cycle tracks, sharrows, and other locally-calibrated solutions. This will ensure that the appropriate treatment is used on each street

within the network, avoiding the one-size-fits-all approach and enabling users of different abilities to enjoy a safe and direct route to their destination. Making cycling convenient, safe, and enjoyable for the greatest number of people will position the Town to reduce reliance on the car and move toward a more sustainable biking future. See the following pages for more information on bikeway options.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

A BEAUTIFULLY LANDSCAPED BIKE PATH



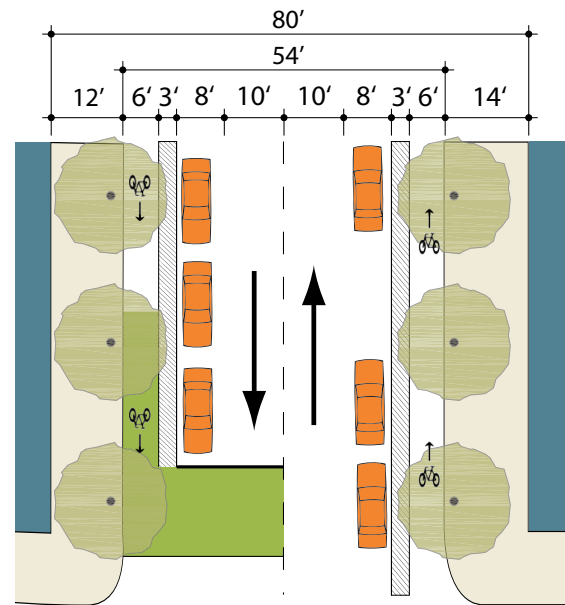
Bikeways should be integrated throughout Londonderry and carefully calibrated to the local context.



Londonderry should prepare a bicycle plan for the Town, integrating the full range of bikeway types from paths to cycle tracks. This work should be incorporated in a form-based approach. Future roadway projects should include money to construct these facilities.

Cycle Track

A cycle track is an exclusive bicycle facility that combines a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are separated from vehicle travel lanes, parking lanes and sidewalks with a physical barrier. A buffer strip can also be integrated to protect cyclists from car doors. Cycle tracks can be either one-way or two-way and be on one or both sides of a street. Unlike a more standard bike lane, this design physically protects cyclists from vehicular traffic, which has the benefit of greatly improving the rider comfort. Cycle tracks have been shown to decrease accident rates and increase the overall number of cyclists by over 15%, especially among older populations and families who would not normally use an urban bike lane. Because cyclists are not riding directly in view of drivers, intersections must be carefully designed to ensure safe mixing of cyclists in advance of vehicular turning movements.



for the
novice biker

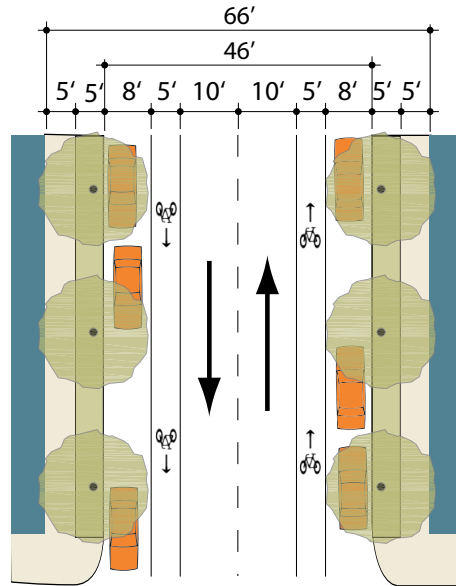


PAUL KRUEGER

CYCLE TRACKS ARE PHYSICALLY SEPARATED BIKE LANES, ALLOWING NOVICE BIKERS TO FEEL SAFE

Bicycle Lane

A bicycle lane is the portion of a street that has been dedicated for the exclusive use of bicycles. Bike lanes are typically located between the parking lane and the travel lane, moving in the same direction as vehicular traffic. They can support one-way or two-way travel and be on one or both sides of a street. The simple white line can be effective at channelizing motorists and bicyclists, while in some cases the perceived extra width of pavement can cause motorists to drive faster. In cases where existing vehicular lanes are greater than 15 feet in width, the roadway can be re-striped to include bike lanes.



for the
confident biker

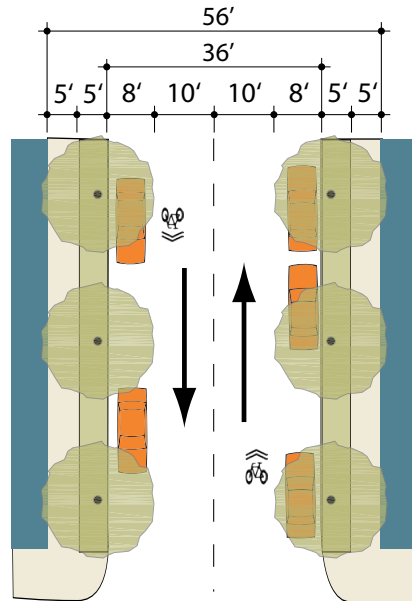


TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

A BIKE LANE IS A PORTION OF THE STREET DEDICATED FOR CYCLISTS

Sharrow

A sharrow refers to the condition where cars and cyclists share the travel lane. Although bicycling is allowed on all streets, sharrows are a way to communicate to drivers that they should be aware of the potential presence of cyclists. Sharrows are typically marked by a bicycle symbol and a chevron, making it clear to drivers that the travel lane is a shared space. Unlike a bike lane, a sharrow does not require additional lane width, which keeps vehicular speeds in check. Sharrows are a good solution for streets that are too narrow for conventional bike lanes or cycle tracks. They also have the benefit of being relatively inexpensive to install.



for the
experienced biker



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

A SHARROW INDICATES THAT A TRAVEL LANE SHARED BY BOTH CARS AND BICYCLES

Bike Parking & Storage

Cyclists must have safe and convenient places to store their bicycles at a trip's end. One of the most user-friendly designs is the "u-shaped" bicycle rack, though locally-made options that maintain a high level of function should be encouraged. Racks should be placed around Town at popular destinations, including schools, businesses, and civic buildings.

There are currently not enough bike racks and secure bike storage in Londonderry. A public / private partnership could be created

between local non-profits and the Town to fund and install racks and bike storage in proximity to schools, municipal buildings, or other popular destinations.

Racks and secure bike storage should also be available for those who access the Town via bike trails and for use during events. Secure storage could be something as simple as a covered bike locker or a more elaborate bike station that includes a repair station, showers, lockers, changing rooms, rentals, and even cafe space.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

A USER-FRIENDLY U-SHAPED BIKE RACK

End-of-Trip Facilities

Easily identifiable bike shops, repair stations, cafes, and other businesses that cater to the needs of hungry and thirsty bikers will do much to build the Town's reputation as a bike-friendly destination. These kinds of highly

functional end-of-trip facilities, combined with incentivized programs and other "soft" improvements, will continue to build on Londonderry's bikeability.



TOWN PLANNING & URBAN DESIGN COLLABORATIVE, LLC

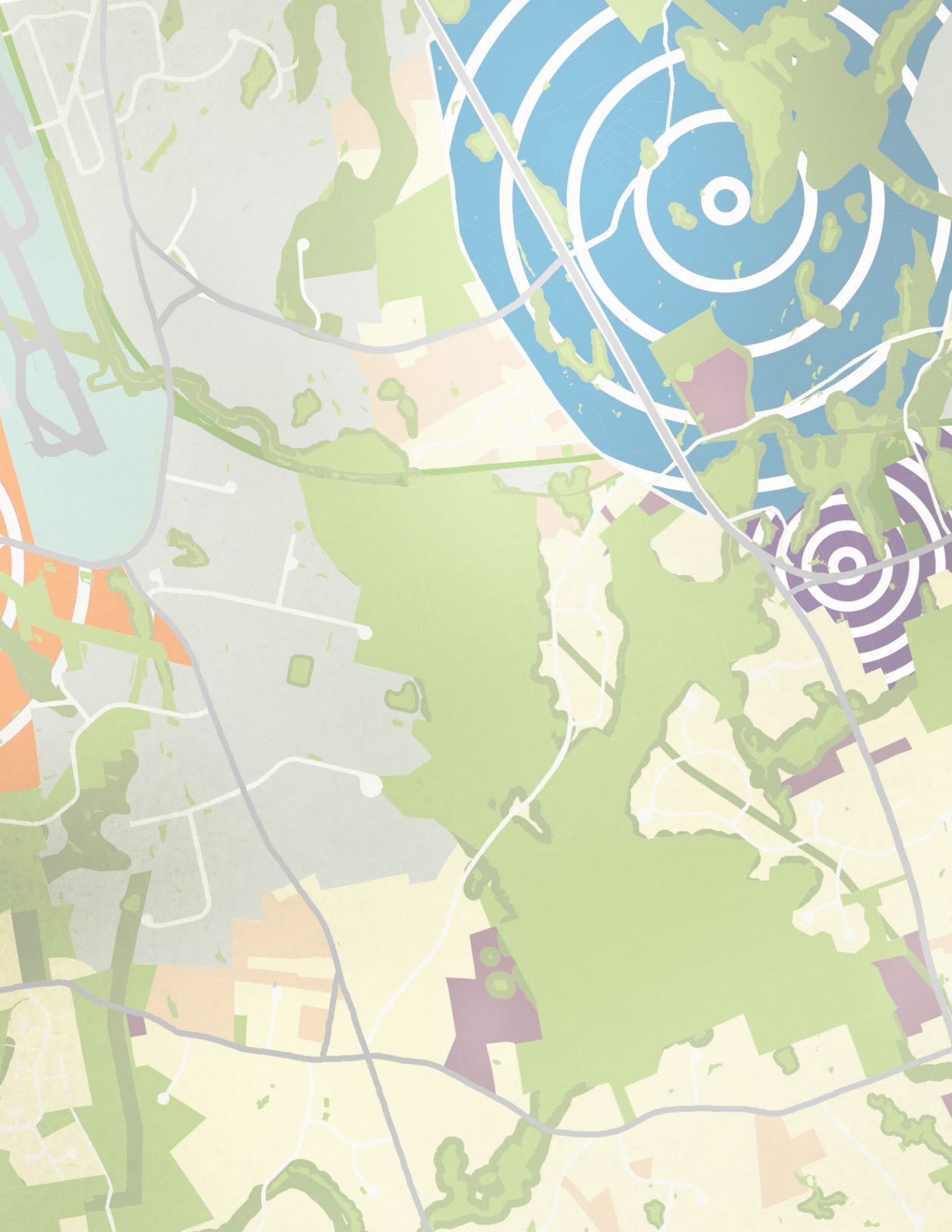
A WELL-MARKED CAFE THAT CATERES TO CYCLISTS



End-of-trip facilities should be provided where activity centers and bikeways interface.



Adopt form-based standards to promote opportunities for retail spaces linked to walkable and bikeable neighborhoods.



plan framework

This section presents a new planning framework to implement the Comprehensive Master Plan. The Conservation & Growth Map provides general guidance for how to proactively address change. Illustrative plans for activity centers show one potential outcome for development within the identified growth areas. These plans, generated during Planapalooza, reflect the intent of the Common Vision and Guiding Principles and are one physical manifestation of many of the ideas presented in the Toolkit. Future zoning changes and other policy decisions should be based on the framework provided here to address the Town's hopes for the future and strengthen the municipal advantage.

Conservation & Growth Map

The majority of Londonderry citizens understand that growth will inevitably occur and that planning for this growth will result in a stronger local economy, greater sustainability, and a better quality of life for current and future residents. This section provides a description of the Conservation and Growth Map, which provides a town-wide framework for protecting open space and directing new development. A description of how this map is organized, according to conservation sectors and growth sectors, is provided. The identified growth sectors include activity centers in villages and along corridors. These activity centers are illustrated in detail to show one possibility for how development could occur to reflect the goals and aspirations of the community.

Why a New Framework for Growth?

While Londonderry has remained a vital and desirable place to live, the Town struggles to maintain the tax base required to support municipal services and the world-class school system. For years the Town has experienced extreme population growth without a clear plan in place to proactively deal with increasing development pressures. As a result, Londonderry has lost much of its rural land, while maintaining pockets of rural character and greenery along many of the roadways. While Londonderry remains a desirable place to live, the community lacks choices and high quality affordable housing, making it difficult for singles, young professionals, and retirees to find a place to live. A lack of walkable destinations and shortfalls in the quality of the public realm further deter potential residents and visitors. A complex regulatory framework also suppresses the potential for investment by the private sector.

In order to respond to these issues, the Plan provides a new framework for growth to address quality of life while also seeking to have a positive impact on the economy, business climate, tax base, and the sustainability of the Town long into the future. The community overwhelmingly supports the idea of preserving and enhancing Londonderry's natural areas while also identifying strategic areas to focus growth within walkable activity centers while leaving existing residential neighborhoods unchanged.

Conservation & Growth Map

Input from participants at the Planapalooza event supported the Villages and Corridors Growth Scenario for developing the Comprehensive Master Plan. The framework provided by this Scenario, which focuses new development into distinct activity centers located in villages and along corridors, is the starting point for developing a new direction for the Town's Future Land Use Map. The Conservation & Growth Map instead organizes the community according to priorities for land protection and the character of new development as a way to more effectively direct planning and other system wide enhancements within the Town. Conservation Areas include both permanently and partially protected open spaces, while Growth Areas include specific activity centers in villages and along corridors, where citizens expressed a comfort with additional investment and development. Existing residential areas of Town remain unchanged and are not affected by this mapping.

By organizing the Town according to conservation and growth areas, intentional and informed decisions can be made about how to most efficiently spend municipal dollars on infrastructure improvements that will support the Comprehensive Master Plan. In this way, the intensity of development allowed and encouraged in villages and along corridors can be matched with planned infrastructure.

Sectors and Special Districts

The Conservation & Growth Map is organized by Sectors, which distinguish conservation priorities and intensity and the character of new growth, instead of just use. Sectors are used to guide where and to what extent Conservation Areas and Growth Areas are to be encouraged and directed. Sectors are assigned to different areas based on a number of factors, including preservation of valuable open space and availability of planned and existing infrastructure.

There are two (2) conservation sectors in Londonderry: O-1 Preserved Open Sector and O-2 Reserved Open Sector. There are five (5) growth sectors in the Town: G-1 Restricted Growth Sector, G-2 Controlled Growth Sector, G-3 Intended Growth Sector, and G-5 Retrofit Growth Sector. See page 152 for specific descriptions on the attributes of each Sector.

In addition to Sectors, Special Districts are used for areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of an activity center. In Londonderry, Special Districts are assigned to the Airport, Heavy Industrial areas, the Quarry, Pettengill Road, and the schools.



CONSERVATION &
GROWTH MAP



GROWTH
SECTOR



ACTIVITY CENTER
PLAN

Growth Sector Activity Centers

Within each of the growth sectors, new and existing development is anticipated to occur as complete neighborhoods that provide for a mix of uses and housing types oriented toward a center of activity. Activity centers are also organized on the basis of a five minute walk from center to edge and a 10-minute walk to meaningful public open space. An interconnected network of streets promotes walking and cycling and minimizes traffic pressure on existing streets. Future development should include conservation protection as part of the Town's growth, consistent with the Green Print Map (see Community Facilities & Services section).

In Londonderry, each growth sector anticipates one or more complete activity centers, each with its own character and composition. This includes the Pettengill Road Industrial Village, the North Village Artisan District, the Town Center Recreational Village, the Town Center Common, and the South Village Suburban Retrofit. These activity centers are detailed starting on page 154.

In all Sectors, the Town should work proactively to permanently protect open spaces that are identified in the 2010/2011 Open Space Plan and maintain the rural character of Town. Designations within the Conservation & Growth Map do not preclude the acquisition of parcels for protection.

Sectors

O-1 Preserved Open Sector

The Preserved Open Sector is assigned to areas that are permanently protected from development by law, conservation easement, ownership by land trust, or other similar means, and includes surface water bodies. Certain properties may possess reserved rights within existing conservation easements.

O-2 Reserved Open Sector

The Reserved Open Sector is assigned to open space areas that should be, but are not presently permanently protected from development. This Sector is comprised of floodplains and special flood hazard areas, steep slopes, utility corridors, farmlands, and land subject to the Town's Conservation Overlay District.

G-1 Restricted Growth Sector

The Restricted Growth Sector is assigned to areas that are currently vacant but may be subject to development. Future development should be restricted to that permitted under existing zoning or occur in the form of conservation subdivisions containing open space.

Special Districts

SD-PR Parks & Rec. Special District

The Parks & Recreation Special District represents land reserved for active recreation purposes, including athletic fields, community buildings, and supporting facilities.

SD-IV Industrial Village Special District

The Industrial Village Special District represents the concept for a self-sustaining, industrial village south of the airport near Pettengill Road. The center would promote industrial, office, and retail development acting as a sustainable, closed-loop eco-village, where businesses feed each other for productivity.

SD-INT Institutional Special District

The Institutional Special District represents land used, or reserved, for schools and their ancillary uses such as athletic fields or facilities associated with running a school.

G-2 Controlled Growth Sector

The Controlled Growth Sector is assigned to areas that may support mixed use development due to proximity to one or more existing or planned thoroughfares. Development in this Sector should occur in the form of conservation subdivisions containing open space or activity centers.

G-3 Intended Growth Sector

The Intended Growth Sector is assigned to areas that may support substantial mixed used development due to proximity to existing or planned regional thoroughfares or transit. Future development should occur as complete communities in the form of activity centers.

G-4 Infill Growth Sector

Reserved. Not applicable in Londonderry.

G-5 Retrofit Growth Sector

The Retrofit Growth Sector is assigned to areas that are already developed in a suburban development pattern and have potential to be modified or completed as activity centers.

SD-GI General Industrial Special District

The General Industrial Special District represents industrial parks, manufacturing centers, and warehouses near Interstate 93 (Exit 3, Grenier Field Road, and Harvey Road). These single use, large format buildings contribute to more suburban scale development patterns.

SD-Q Quarry Special District

The Quarry Special District represents the land reserved for mining operations along West Road in Londonderry and Morgan Road in Manchester (extending into Londonderry).

SD-AIR Airport Special District

The Airport Special District represents the Manchester-Boston Regional Airport and the immediate surrounding area used for airside activities.

Conservation & Growth Map



Conventional Suburban

Conventional Suburban Neighborhoods

Conventional Suburban Neighborhoods are assigned to existing residential neighborhoods that contribute to more suburban type development patterns. These existing neighborhoods do not get redesignated as either Sectors or Special Districts, remaining “as is”.

Activity Center Plans

During Planapalooza, the TPUDC team worked with the community to develop long-range conceptual plans that illustrate many of the big ideas that emerged during the process. The activity center plans detailed in this section show one potential development outcome for five of the growth sectors designated within Londonderry. These plans illustrate complete neighborhood design principles for specific areas within the Town and are for illustrative purposes only. The eventual build-out of these areas could vary significantly based on future landowner interests, zoning regulations, location of available infrastructure, or other factors.

These plans embody the hopes and dreams of the community and set a standard by which future policy decisions, capital improvements, and development proposals can be measured. They incorporate the ideas and input of hundreds of citizens, stakeholders, and Town Departments, all of whom will play a critical role in turning this vision into a reality.

These plans attempt to depict traditional New England styles that are consistent with local preferences expressed during Planapalooza. In addition, stone walls are preserved as best as possible, given available information about their location within the activity centers.



Activity Center Key Map



PETTENGILL ROAD INDUSTRIAL VILLAGE

The Pettengill Road area is largely accepted by the community as a desirable location for growth given its industrial zoning, proximity to the airport, and relative distance from residential neighborhoods.

This plan abandons the idea of the conventional industrial park and instead imagines Pettengill Road as a self-sustaining industrial village. People who currently work in this area must drive to meet all of their daily needs. The Pettengill Road Industrial Village would accommodate a variety of manufacturing, office, and industrial uses, as well as the services and recreational opportunities needed to support workers and reduce the number of car trips on local roads.

Taking it one step further, this Village could be planned as a national model for a sustainable, closed-loop eco-village, where the businesses feed and service each other. Imagine one factory using the waste from another. Local restaurants could serve food grown in agricultural lands within the Village.

Designed around a network of interconnected streets, the Pettengill Road Industrial Village would not only provide a healthy and convenient place for workers and employees, but would also become a tourist destination.







PETTENGILL ROAD INDUSTRIAL VILLAGE

1 OFFICE USES

This plan accommodates for a number of large format buildings that could be used for office space or light industrial uses. A plan organized around a block system is extremely flexible and can accommodate for a variety of building footprints and sizes, allowing for the full range of office and industrial users.



Develop zoning regulations that emphasize building form. Consider adopting architectural standards to ensure a high quality pedestrian realm.



Planning and Economic Development Department

2 FACTORY BUILDINGS

The plan includes locations for clusters of manufacturing and warehouse buildings, for both large-scale and medium-sized footprints. This arrangement allows for these industrial uses to be physically separated from office and retail. It accommodates for potential noise and fumes, while still being close enough to be a reasonable walk to nearby support services. Like historic factories, the Industrial Village Plan shows the buildings pulled to the street and located close to adjacent buildings to enable this area to remain convenient for walking. Light Imprint design principles have been incorporated to promote sustainable stormwater solutions.



Develop zoning regulations that emphasize building form. Consider adopting architectural standards to ensure a high quality pedestrian realm consistent with a strategy for recruiting target industries to the area.



Planning and Economic Development Department
Economic Development Task Force

3 PEDESTRIAN-FRIENDLY ROAD NETWORK

The Industrial Village plan includes a primary road network geared toward pedestrians and cyclists, with continuous sidewalks, buildings pulled up to the street, high quality architecture, and slow traffic. A secondary road network to accommodate truck traffic is located to the rear with direct access off Pettengill Road and the large rear parking lots.



Revise typical street section requirements in the Subdivision Ordinance to promote more walkable streets in the Industrial Village; emphasizing complete street design.



Planning and Economic Development Department
Public Works Department

4 SUPPORT SERVICES

The Industrial Village is intended to function as a place where office and factory workers can meet their daily needs within a 5-minute walk. These services might include restaurants, dry cleaning, florists, and other services that are often performed during lunch breaks or after work. It is likely that these service businesses would also attract the community at large because of the interesting activities taking place and the attention to the quality of the public realm. This area might also serve as a viable location for night life, with its separation from residential areas and ample parking made available when office workers leave at the end of the business day. Some of these smaller format buildings could also serve as business incubator space.



Amend zoning regulations to allow a wider mix of uses and the type of support services recommended for the Industrial Village.



Planning and Economic Development Department

5 CIVIC & RECREATIONAL SPACES

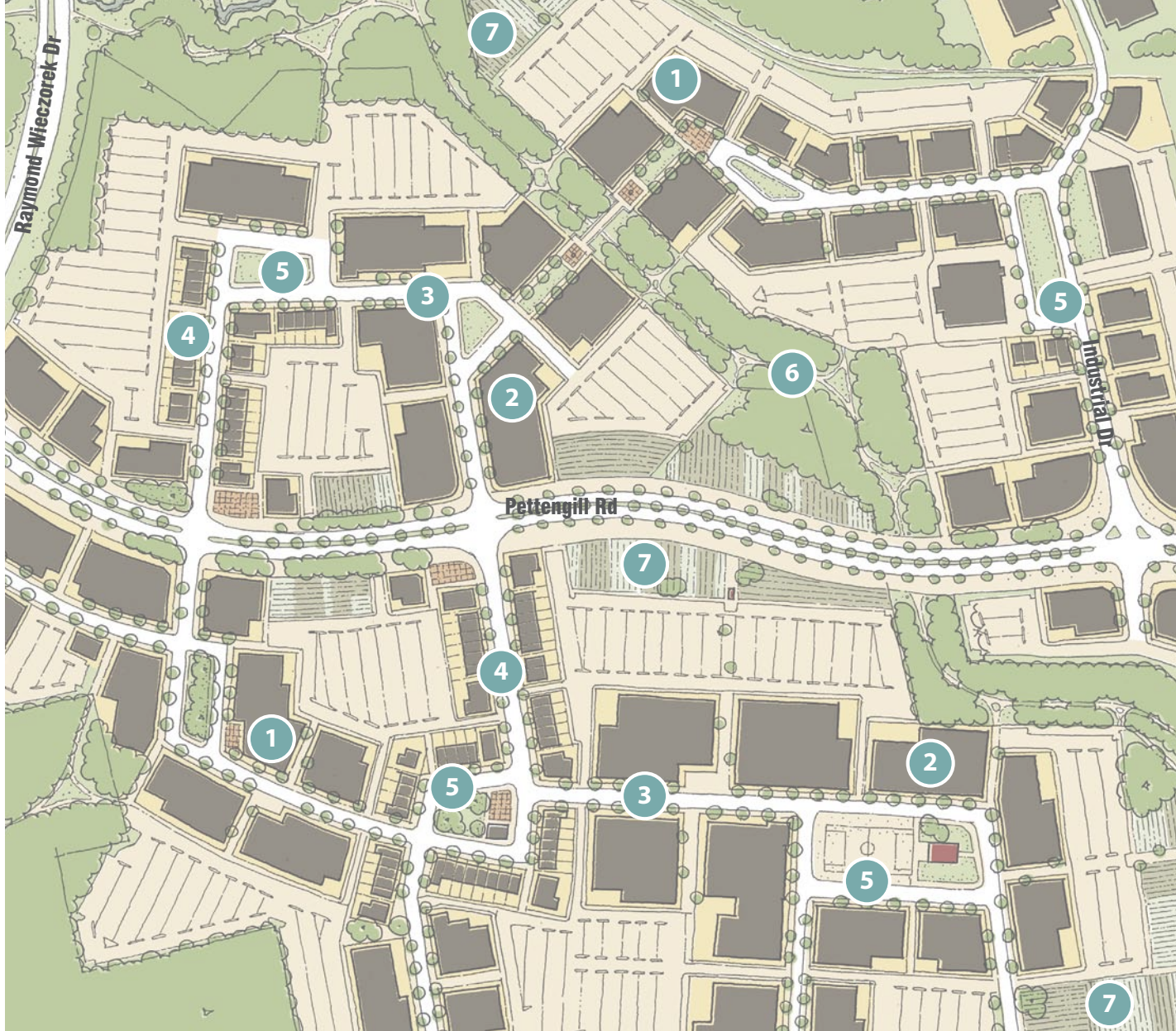
A park or plaza is located within a 5-minute walk of every building, with one outdoor civic space provided in each of the four quadrants of the plan. In the manufacturing and warehouse district, the plan accommodates for a soccer field and a fitness center (shown in red) to provide for active team recreation and convenient work out space.



Amend zoning regulations to allow a wider mix of uses.



Planning and Economic Development Department
Conservation Commission
Open Space Task Force



6 RECREATIONAL TRAIL

The Industrial Village is knit together with a swath of green conservation land and the completed rail trail. This trail will provide a high quality open space for workers to run or walk and will allow the fitness enthusiast to commute to work by bicycle.



Continue fundraising campaign to build the rail trail, beginning work soon on a preliminary engineering study. Explore opportunities to partner with the development community to expedite construction of the segment proposed through the Industrial Village.



Trailways Committee
Planning and Economic Development Department

7 AGRICULTURAL LAND

Agricultural land is located along Pettengill Road to provide a visual buffer from this high speed thoroughfare. Agricultural land also rings the Village, providing significant tracks of land for agricultural production, as well as small plots for specialty crops.

This agricultural land plays an important role in letting the Industrial Village function as a self-sustaining, closed loop system. Food grown in this area can be used by nearby manufacturers or served in the local restaurants. Consider the possibility of locally grown barley used by a new local brewery to produce a craft beer that could then be served in a restaurant down the street.



Amend zoning regulations to emphasize building form and ensure that agriculture is allowed as a permitted use.



Planning and Economic Development Department
Londonderry Conservation Commission
Open Space Task Force

THIS BIRD'S EYE VIEW OF THE PETTENGILL ROAD INDUSTRIAL VILLAGE SHOWS A WORLD CLASS CENTER FOR MANUFACTURING, INDUSTRY, OFFICE, AND SUPPORTING RETAIL SPACE, BALANCED WITH RECREATIONAL ACTIVITIES, AGRICULTURE, AND LAND CONSERVATION.

IN THE CENTER OF THIS VIEW, YOU CAN SEE ONE OF THE SERVICE CENTERS SHOWN IN THE PLAN. A CIVIC GREEN IS SURROUNDED BY SMALL-SCALE MIXED-USE BUILDINGS, WITH SHOPS, RESTAURANTS, AND ARTISAN INDUSTRIAL SPACES LOCATED ON THE GROUND FLOOR, WITH OFFICE, AND OTHER USES LOCATED ABOVE.

ON THE FAR SIDE OF THE GREEN IS A HOTEL TO SERVICE AIRPORT TRAVELERS, TOURISTS, AND BUSINESS EXECUTIVES.

IN THE DISTANCE YOU CAN SEE AN AREA OF LARGE MANUFACTURING AND WAREHOUSE BUILDINGS ORIENTED AROUND A SOCCER FIELD. A FITNESS CENTER IS FACING ONTO THE FIELD, PROVIDING AN OPPORTUNITY FOR WORKERS TO FIT IN A WORKOUT WITHOUT HAVING TO TAKE AN EXTRA CAR TRIP.

THE VILLAGE IS SURROUNDED WITH AGRICULTURAL AND CONSERVATION LAND. GREEN ROOFS ARE SHOWN ON LARGE BUILDINGS TO MINIMIZE THE HEAT ISLAND EFFECT AND PROVIDE ADDITIONAL SPACE FOR GROWING FOOD.





ILLUSTRATIVE BIRD'S-EYE VIEW OF PETTENGILL ROAD INDUSTRIAL VILLAGE



THIS RENDERING SHOWS HOW LARGE INDUSTRIAL BUILDINGS CAN BE DESIGNED AND LOCATED IN A WAY THAT CREATES A PLEASANT AND INTERESTING PEDESTRIAN ENVIRONMENT. A LARGE CIVIC SPACE, ACTIVATED WITH A BASKETBALL COURT, SOCCER FIELD, AND CAFE, PROVIDES AN INCENTIVE FOR PEOPLE TO CONGREGATE AND ENGAGE IN PHYSICAL ACTIVITY IN THE HEART OF THIS PRIMARILY INDUSTRIAL CENTER. INSTEAD OF DRIVING TO LUNCH, WORKERS CAN WALK TO DELIS AND OTHER USEFUL SERVICES. IN ADDITION, THE QUALITY OF THIS PLACE WILL DRAW PEOPLE WHO DON'T WORK HERE, SIMPLY BECAUSE THEY WANT TO BE A PART OF WHAT IS HAPPENING IN THIS LIVELY PLACE.



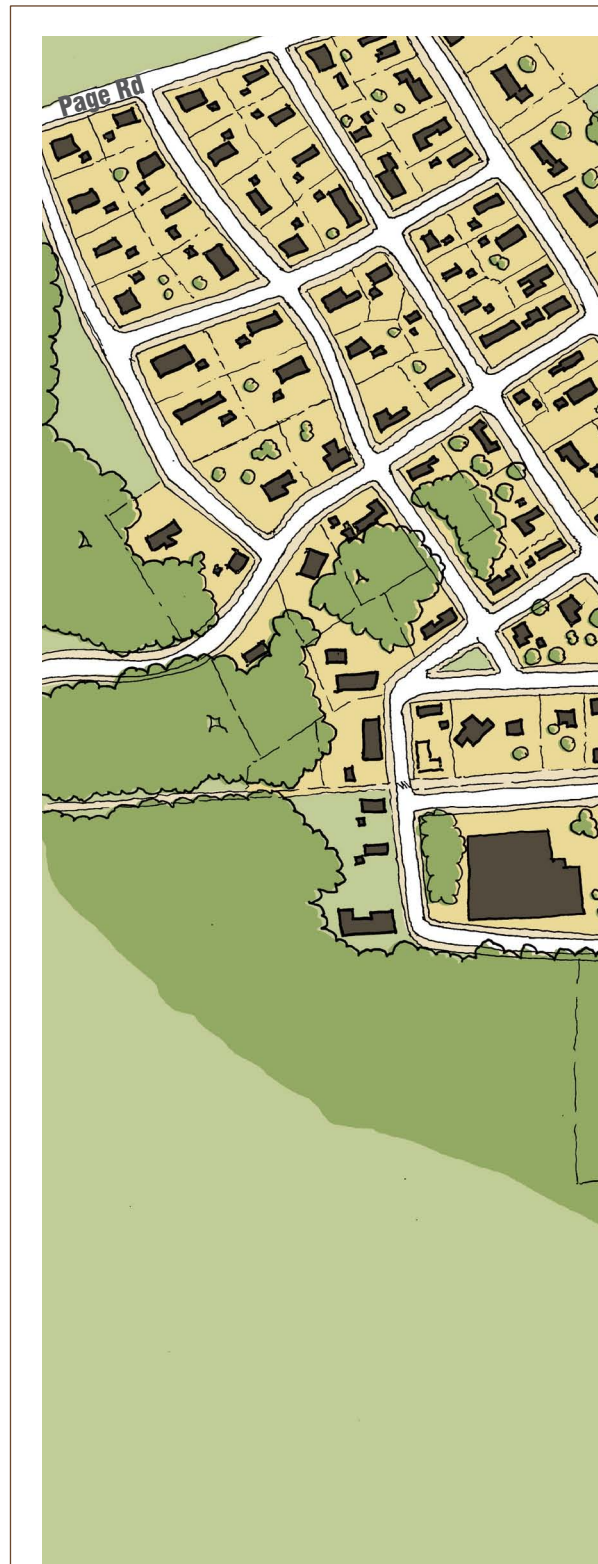
ILLUSTRATIVE STREETScape IN THE INDUSTRIAL VILLAGE

NORTH VILLAGE ARTISAN DISTRICT

At the turn of the century, North Village was the center of Londonderry, with a train depot, White's Tavern, and the largest cluster of homes in Town. This plan emphasizes North Village, building on its incredible history, and restores it to a hub of activity within the Town of Londonderry.

The North Village Artisan District Plan provides a way to expand the historic village in a way that reflects what might have organically happened if the area had continued to grow. The plan honors the great historic buildings that remain and provides an opportunity for new buildings to generate economic vitality that could revitalize the neighborhood.

This plan capitalizes on the underutilized industrial buildings and the towering smoke stack that provides a point of visual interest within the Village. A collection of smaller complementary buildings are carefully stitched into the fabric of the existing warehouse structures along Mammoth Road, creating a rich mix of activities and an interesting series of outdoor spaces enclosed by these new and old buildings. This kind of space, centered on the creative economy and the production of value-added agricultural products, is a key element of the Comprehensive Master Plan.







NORTH VILLAGE ARTISAN DISTRICT

1 NEIGHBORHOOD EXPANSION

Currently, the neighborhood street network in North Village is largely the same as it was in 1900. This plan illustrates how the neighborhood can be expanded in a way that respects its existing character by extending the traditional street grid. Homes are located close to the front right of way and set parallel to the street. New residents would be within walking distance of local shops, the rail trail, and North Londonderry Elementary School.



Complete a formal study of the local street network to evaluate the feasibility of neighborhood expansion in this area. Develop zoning regulations that emphasize building form and community character.



Planning and Economic Development Department
Public Works Department

3 RAIL TRAIL

The rail trail is an untapped asset within Londonderry. This illustrative plan envisions a completed multi-use trail for walking, cycling, and horseback riding. The design of the trail would change in character as it moves from nature into the urban environment, setting up a dramatic moment where you slow down and notice the dramatic change in scenery and buzz of human activity. The rail trail provides an important connection from the residential neighborhoods east of Rockingham Road with North Londonderry Elementary School.



Continue fundraising campaign to build the rail trail, beginning work soon on a preliminary engineering study.



Londonderry Trailways Committee
Planning and Economic Development Department

2 ARTISAN INFILL

Currently, a historic mill building with a distinctive smoke stack and shed style industrial buildings occupy this site. The existing buildings have a rough and gritty appearance, characteristic of spaces that are popular for loft style living and artisan industrial work space. Twenty to thirty year olds are flocking to these kinds of rehabilitated mill buildings, presenting an opportunity for Londonderry to attract this missing demographic.

The plan shows the historic structures and complementary new buildings, carefully stitched together to create a rich mix of activity and enclose an interesting series of outdoor spaces.

It is anticipated that the buildings would accommodate a mix of uses, geared toward the creative class, entrepreneurs, and artisans. Small street level workshops would spill out in the streets, alleys, and rail trail. Larger buildings could be used for value-added production of local agricultural products. Loft-style housing and offices could be located on upper floors. An indoor or outdoor farmer's market could be located here as well.



Develop zoning regulations that emphasize building form and a mix of uses.



Planning and Economic Development Department

4 INTERSECTION REDESIGN

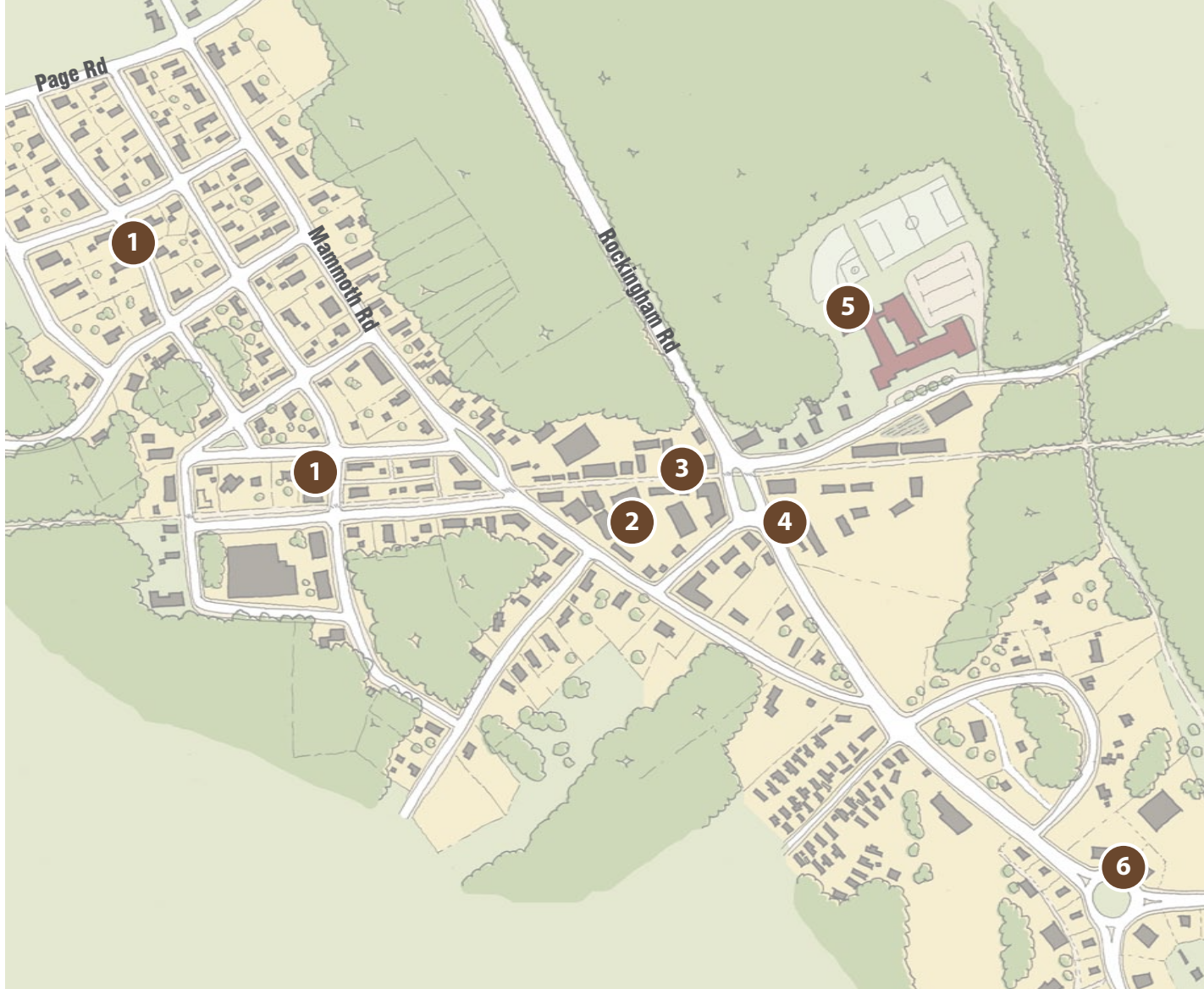
The intersection of Rockingham Road and Sanborn Road will need to be improved to accommodate increased foot traffic from residential neighborhoods to the North Londonderry Elementary School. Currently this road is a limited-access high speed arterial that connects Londonderry to Manchester and the airport. Maintaining traffic flow, a modified round-about, or turbine intersection, will slow traffic, and only stop flow when a pedestrian needs to cross the street. Pedestrians and cyclists would use the rail trail to cross the intersection, which is aligned to provide a pedestrian refuge in the center of the turbine.



Coordinate with the New Hampshire Department of Transportation to program recommended improvements at this location.



Public Works Department



5 SCHOOL EXPANSION

The plan provides for expansion of the North Londonderry Elementary School with additional buildings to accommodate future growth. A small garden plot is integrated into the landscape to provide an opportunity for students to grow their own food. Stronger connections are also made with the rail trail.



Program improvements to North Londonderry Elementary School in the School District's Capital Improvements Program.



Town Council
Londonderry School District

6 ROUNDABOUT

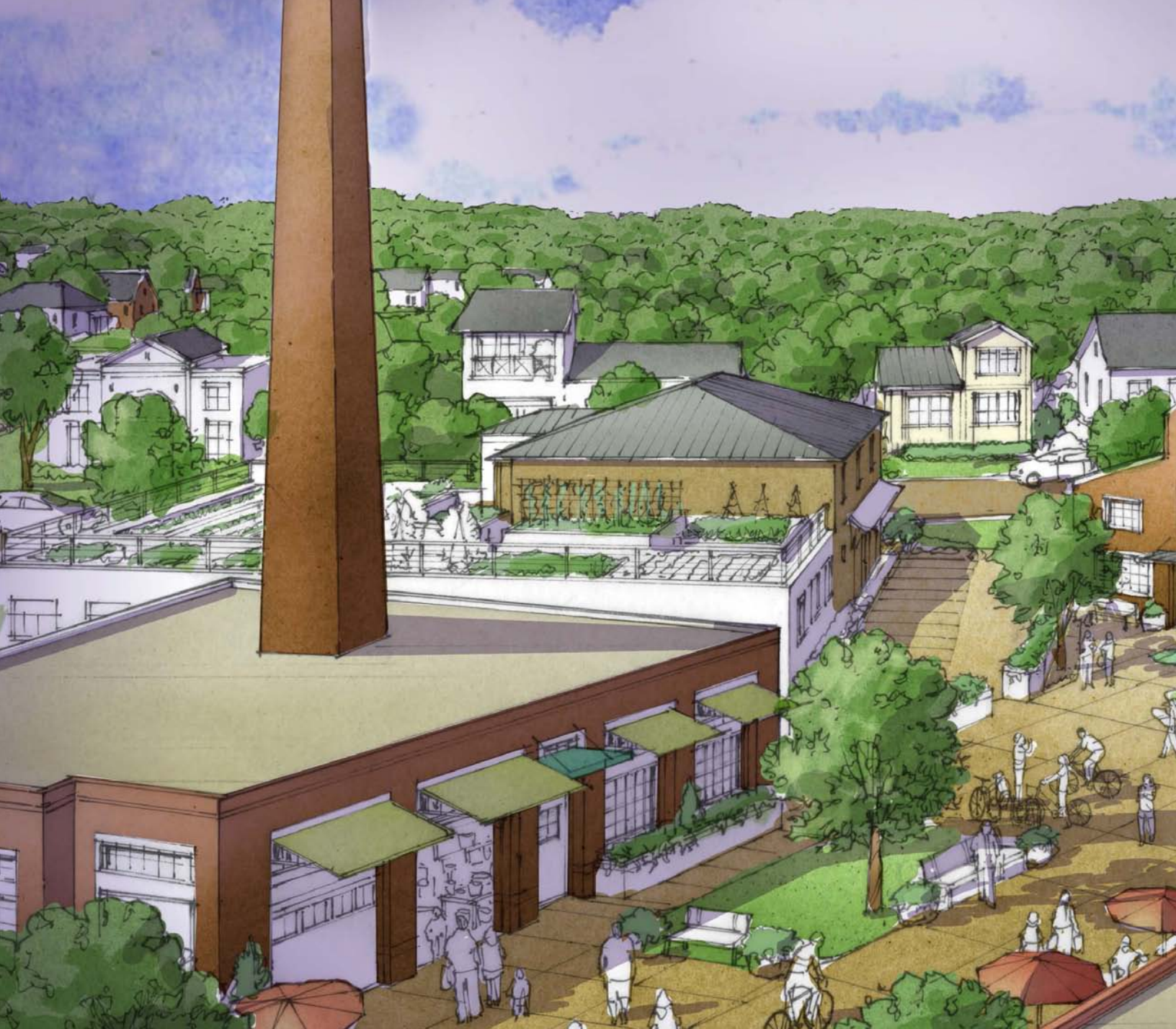
The intersection of Mammoth Road and Rockingham Road is currently challenging to navigate and fails to create a proper gateway for the Town Center of Londonderry when coming from the Interstate. This plan shows a small roundabout that would improve safety for those turning south onto Mammoth Road while also providing a focal point and an opportunity for more clear signage.



Coordinate with the New Hampshire Department of Transportation to program recommended improvements at this location.



Public Works Department



ILLUSTRATIVE BIRD'S-EYE VIEW OF NORTH VILLAGE ARTISAN DISTRICT



THIS BIRD'S EYE VIEW OF THE NORTH VILLAGE ARTISAN DISTRICT IS LOOKING WEST FROM THE INTERIOR OF THE ARTISAN INDUSTRIAL SITE, TOWARD MAMMOTH ROAD. THE MILL BUILDING HAS BEEN REHABILITATED WITH LARGE ROLLING DOORS THAT, WHEN OPEN, PROVIDE VIEWS OF PEOPLE WORKING AND MAKING THINGS. CAFE TABLES AND OTHER ACTIVITY SPILLS OUT ONTO THE RAIL TRAIL, WHICH OPENS INTO A BROAD PAVED PLAZA IN THE INTERIOR OF THIS ARTISAN INDUSTRIAL CENTER. A NEW INDUSTRIAL STYLE BUILDING SITS IN THE MIDDLE OF THE SPACE, WHICH MIGHT FUNCTION AS A MARKET BUILDING OR PROCESSING FACILITY FOR MAKING VALUE-ADDED PRODUCTS FROM LOCAL AGRICULTURE, IN THIS CASE APPLES. ROOF TOP DECKS AND GARDENS PROVIDE FUNKY EXTERIOR SPACES FOR CREATIVE TYPES AND AN OPPORTUNITY FOR RESIDENTS TO GROW THEIR OWN FOOD.

ALONG THE OPPOSITE SIDE OF MAMMOTH ROAD, NEW HOMES TUCKED INTO THE TREES LINE THE STREET, KEEPING THINGS GREEN.



TOWN CENTER RECREATIONAL VILLAGE

During the public engagement process, participants were repeatedly asked what area they consider to be the center of Londonderry. Overwhelmingly, people agreed that the cluster of activity around Town Hall, the schools, and the Town Common represents the center of Town.

Despite this consensus, the center of Londonderry lacks clear definition and, for anyone visiting Town, there is little to indicate where the center begins and ends. Buildings are set back from the street and lack a clear relationship to each other, there are limited destinations to encourage walking and biking, and the roadway is designed to promote high speed traffic.

This Town Center Recreational Village illustrative plan re-imagines the area as a center for civic activity, tying together the fields, schools, and municipal buildings into a complete village, with a focus on recreation. Traditional New England architectural styles are depicted.

This plan responds to local interest in having additional recreational facilities, which could be built over time and as funding becomes available. Reorganized ball fields provide an opportunity to use the space more efficiently and provide civic spaces for people to gather.

Small lot homes for young families enable more children to walk to school, while senior housing provides an opportunity for people to stay engaged in the life of the community while aging in place.





TOWN CENTER RECREATIONAL VILLAGE

1 FIELD HOUSE & COMMUNITY POOL

We heard during Planapalooza that there is a need for more indoor recreation space. This plan accommodates for a field house sized for ice hockey and indoor soccer. An outdoor community pool is located next to the field house, convenient to local schools.



Evaluate the feasibility of building a field house and community pool at this location; start the process to secure funding for these improvements.



Recreation Department
Londonderry Recreation Committee

3 COMPLETE NEIGHBORHOOD

The plan integrates a range of starter homes on small and medium sized lots to accommodate for young families, retirees and others who want to live within walking distance of the schools and fields. These new neighborhood streets will provide continuous energy and a sense that something is always happening, with residents functioning as guardians of the civic space. A new central green anchors the neighborhood, providing a focal point for civic life. Concessions, cottages, and the graduated care facility open onto the space, in addition to second story residential units.



Develop zoning regulations that emphasize building form and community character.



Planning and Economic Development Department

2 REORGANIZED BALL FIELDS

This Recreational Village plan anticipates reorganizing existing ballfields to make better use of the space. A championship field, with a grand entrance, press boxes, stadium seating, and possibly lighting for night games, opens onto a central civic space with a central green. All of the fields are organized around a civic plaza to provide places for people to gather.



Evaluate the feasibility for reorganizing the ball fields in this location and start the process to secure funding for these improvements.



Recreation Department
Londonderry Recreation Committee

4 SENIOR HOUSING

To provide for the strong interest among local residents to age in place, this plan includes a graduated care facility in this central location within the community so that retirees can remain involved in civic life. The facility includes independent living cottages for able-bodied people looking to downsize where residents can sit on their porches and watch the ballgame and say "Hello" to kids as they walk by. The main facility accommodates different levels of care, with ground floor retail that serves residents in the form of storefronts. These these amenities would also be open to the public, and may include a cafeteria, optometrist, dry cleaner, hair dresser, cafe, and pharmacy. Senior housing would also be within a short walking distance of the Town Library.



Develop zoning regulations that emphasize building form and allow for a wider mix of uses and building types.



Planning and Economic Development Department

5 DOG PARK

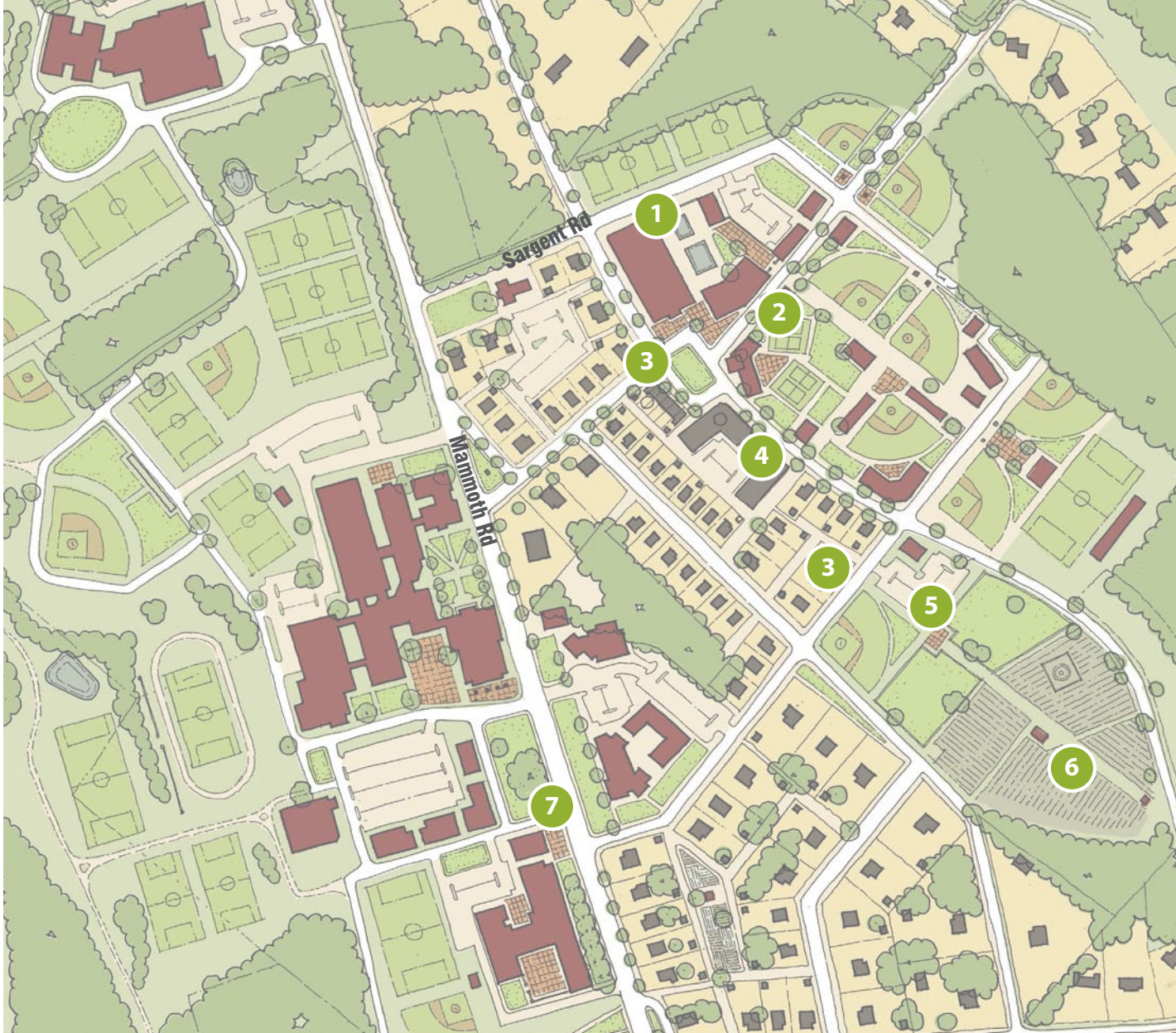
During Planapalooza, people expressed an interest in a dog park, something that Londonderry currently lacks. This plan accommodates for our four-legged friends at the edge of the new neighborhood adjacent to the ballfields. Two separate fenced areas are shown to allow for the standard rotation, where one area is actively used while the other recovers.



Evaluate the feasibility of a dog park at the proposed location in the Recreational Village and secure funding for these improvements.



Town Manager
Planning and Economic Development Department



6 COMMUNITY GARDENS

The plan integrates small scale agriculture into the Village to provide more opportunities for people to grow their own food. A small community garden is also shown in the mid-block of the residential neighborhood. A larger community garden is located on the land that surrounds the FAA beacon, a low impact use that could transform this underutilized space into a shared agricultural space.



Sponsor and administer a community garden program for Town residents, with fee-simple purchase or lease agreements for agriculture uses.



Town Manager
Planning and Economic
Development Department

7 THE AUDITORIUM

Residents indicated the need for a number of public facilities, but nothing received more attention and debate than the idea of an auditorium. The community is largely split, with people both supporting and opposing the need for this facility. This controversial debate comes down to money and the tax burden from the capital expense and subsequent operational cost. The plan accommodates for a public auditorium located adjacent to the high school. A new civic space is framed by the auditorium and an additional new building that could provide space for future school expansion. This space would serve both as an academic quad for recreation as well as a gathering space before and after events and performances.



Update the Auditorium Study Committee report completed in 2006 to determine if the conclusions and recommendations are still valid for 2012.



Town Manager
Auditorium Study
Committee
(Reconvened)



ILLUSTRATIVE BIRD'S-EYE VIEW OF THE TOWN CENTER RECREATIONAL VILLAGE



THIS BIRDS EYE VIEW OF THE TOWN CENTER RECREATIONAL VILLAGE SHOWS REORGANIZED BALL FIELDS IN THE FOREGROUND, WITH PLAZAS AND CONCESSION STANDS, PUBLIC REST ROOMS, AND OTHER SERVICE BUILDINGS LOCATED IN CLOSE PROXIMITY. A CHAMPIONSHIP SOCCER STADIUM WITH BLEACHERS IS PROVIDED, WITH ADDITIONAL FIELDS LOCATED TO THE NORTH. A CHAMPIONSHIP BASEBALL FIELD AND TENNIS COURTS ARE ALSO PROVIDED, WITH GRAND ENTRANCES TO EMPHASIZE THEIR IMPORTANCE. A NEW FIELD HOUSE FOR INDOOR SOCCER AND ICE HOCKEY IS LOCATED ADJACENT TO THE NEW OUTDOOR COMMUNITY SWIMMING POOLS. THE FIELD HOUSE FRONTS ONTO A CENTRAL GREEN, THAT IS ALSO SURROUNDED BY SMALL SHOPS THAT MIGHT PROVIDE CONCESSIONS, AS WELL AS THE GRADUATED SENIOR HOUSING FACILITY.

IN THE DISTANCE, ACROSS MAMMOTH ROAD, IS THE HIGH SCHOOL, WITH TWO NEW ADDITIONS ADDED ON THE FRONT, INCLUDING A COMMUNITY AUDITORIUM AND EXPANSION SPACE FOR THE SCHOOL. THESE BUILDINGS FRAME A NEW CIVIC SPACE THAT CAN BE USED BY STUDENTS AND PEOPLE ATTENDING SHOWS AND PERFORMANCES IN THE AUDITORIUM.





THIS RENDERING ILLUSTRATES THE NEW CIVIC GREEN IN THE CENTER OF THE TOWN CENTER RECREATIONAL VILLAGE. THE PARK IS FRAMED BY A NEW GRAND ENTRY FOR A CHAMPIONSHIP BASEBALL STADIUM AS WELL AS THE SENIOR HOUSING FACILITY, WHICH HAS GROUND FLOOR RETAIL USES THAT SERVE THE RESIDENTS AND ARE ALSO OPEN TO THE PUBLIC. IN THE FOREGROUND, INDEPENDENT LIVING COTTAGES WITH FRONT PORCHES PROVIDE AN INTERMEDIARY STEP FOR ABLE-BODIED PEOPLE BEFORE MOVING INTO THE GRADUATED CARE FACILITY. SHADE TREES ARE PROVIDED THROUGHOUT THE VILLAGE, WITH COMPLETE STREETS THAT PROVIDE SIDEWALKS, STREET TREES, ON-STREET PARKING, AND SLOW MOVING TRAFFIC SO THAT BICYCLISTS WILL FEEL COMFORTABLE AND ENCOURAGED TO RIDE IN THE STREET.



ILLUSTRATIVE STREETScape IN THE TOWN CENTER RECREATIONAL VILLAGE

TOWN CENTER COMMON

In the spirit of creating a true center for Londonderry, the Town Center Common illustrative plan imagines a more intentional gathering place for the community. The plan anticipates that any change to this important civic space would occur incrementally over time and result in the kinds of changes that generate greater use of this important resource.

Surveys taken prior to Planapalooza indicated that a majority of people want to see some kind of building around the Town Common. People generally agree that there is not enough going on at the Town Common and that it is underutilized and difficult to access. If it weren't for two churches and the statue, it would be hard to know that the space is a civic common rather than left over land on the corner.

Responding to the interest for activating this space while maintaining the rural character of the Town Common, the Town Center Common plan tries to balance what is palatable to most people against the interest of those who don't want any change at all.

The result is a plan that might have evolved naturally at an agricultural crossroads, with the park framed by detached buildings that look residential in character, but might provide amenities that appeal to students and others using this civic gathering space.





[] TOWN COMMON VILLAGE

1 CHURCH INFILL

A church has expressed an interest in building in this location. The Town Center Common plan emphasizes the church by locating it on a formal green. A parish house and/or single family homes line the street and conceal the parking lot. Orchards at the rear of the site are preserved, providing an ideal setting for weddings and community events. If designed with quality and attention to detail, this new church could contribute to the civic life and beauty of the Town Center.



Create zoning regulations that emphasize form to allow the design proposed for the church site.



Planning and Economic Development Department

3 SKATING POND & TRAIL NETWORK

During Planapalooza, we heard that the Town Forest is underutilized and functions poorly as habitat. We also heard that there is a strong interest in having a skating pond to provide additional activities for kids. The plan suggests celebrating this community asset by making the Town Forest an extension of the Town Common. In the plan, nature trails are pulled into the woods and a skating pond provides a focal point and special gathering place in the forest, capitalizing on the views across the countryside.



Evaluate the feasibility of a skating pond in the Town Forest and start pre-planning for extension of the trails leading to the pond.



Recreation Department
Londonderry Recreation Committee
Londonderry Trailways Committee

2 FRAMING THE TOWN COMMON

The Town Common is the emotional heart of Londonderry, although the space is rarely used outside of scheduled events such as Old Home Day. For those not from Londonderry, there is nothing to indicate that this is the center of Town, and it is easy to miss the Common altogether as you drive by. In response to community interest, the Town Center Common plan transforms the Common into a destination and place for daily civic life, while carefully maintaining the rural character of this important corner. This careful redesign involves some complex land negotiations and is anticipated to take place incrementally over time.

This plan shows a narrow two lane road added along the back edge of the Common, fronted by detached buildings that look like houses but could be used in a number of ways. Imagine a coffee shop, ice cream parlor, or bookstore, and maybe a small cafe, the kind of shops that would appeal to teens as well as adults. To enable this kind of change, a sliver of land from the underutilized Town Forest would need to be used, a tradeoff that most people seem comfortable with as long as new buildings are low scale in nature.

To further define the edge of the Common, homes, which could also be converted into retail or offices, line Pillsbury Road. New civic buildings are shown next to the Lion's Club to frame the Common along Mammoth Road. Parking is located in the rear so it is not visible from the street, with parallel parking to help slow traffic along the roads that front the Common and extend to the schools.



Complete a formal study of the Town Common area to refine recommendations and develop zoning regulations that will ensure proper execution of the vision.



Town Council
Planning and Economic Development Department

4 FORMALIZE THE GREEN SPACE

The Common currently lacks a functional layout reminiscent of a traditional common. There are no paths that invite you in, few places to sit, and nothing that defines the space. The Common is rarely used and if it weren't for the churches and statue, there would be little to identify this as an important civic space. There is general agreement that the Common should be improved to make it a place that people want to use more regularly.

This plan shows a central path that leads from the corner of Mammoth and Pillsbury Roads, terminating at a new, larger bandstand, with secondary paths leading in from the side. A low stone wall runs along the edge of the Common, helping to indicate to those passing by that this place is intentional and important.



Move forward with funding to make the recommended improvements to the Town Common.



Town Council
Planning and Economic Development Department



5 SAFE STREETS

To help people understand that they are entering the Town Center, Mammoth Road should be redesigned to slow traffic and give priority to pedestrians and cyclists. A retrofit with complete street design should be considered, with smaller curb radii to shorten pedestrian crossing distances at intersections. Wide sidewalks, a planting strip with street trees, on-street parking, and narrowed vehicular travel lanes are recommended from the southern end of the common to the high school.



Work with the New Hampshire DOT to make improvements for Mammoth Road that emphasize complete street design; program funding for these improvements as a catalyst for redevelopment in the Town Commons area.



Town Council
Public Works Department

6 NEIGHBORHOOD CREATION

There have been ideas discussed about what could happen on this parcel in the future. It is currently listed as a potential site for future conservation, but if permanent protection does not occur, the parcel may be considered for development. Understanding this possible outcome, this plan shows the best case for the kind of tradeoff that should be expected if open space doesn't receive permanent protection. Here, a complete neighborhood is created, with an interconnected system of narrow streets, sidewalks, street trees, parallel parking, and slow traffic speeds. This kind of block structure is flexible and can accommodate a variety of potential development scenarios. The result should be a real place that is walkable, safe, and interesting.



Determine whether this area should become permanent open space, and secure funding for its purchase. Alternatively, create zoning regulations that emphasize form and community character.



Londonderry Conservation Commission
Planning and Economic Development Department



ILLUSTRATIVE BIRD'S EYE VIEW OF THE TOWN CENTER COMMON





THIS BIRD'S EYE VIEW SHOWS THE ILLUSTRATIVE PLAN FOR THE TOWN CENTER COMMON, WHICH WOULD OCCUR INCREMENTALLY OVER TIME. TO THE RIGHT, YOU CAN SEE THAT THE PRESBYTERIAN CHURCH PARKING LOT WAS RELOCATED TO THE REAR OF THE LOT, AND REPLACED BY A PROPER CHURCH GREEN THAT VISUALLY EXTENDS THE COMMON ACROSS PILLSBURY ROAD. NEW HOMES FILL IN THE GAPS ALONG THIS STREET, HELPING TO PROVIDE THE COMMON WITH A SENSE OF ENCLOSURE. FURTHER UP THE STREET, A NEW CHURCH HAS BEEN INCLUDED, WITH A PARISH HOUSE THAT CONCEALS THE PARKING LOCATED IN THE REAR.

IN THE FOREGROUND, A NEW SLIP LANE HAS BEEN ADDED THAT EXTENDS FROM THE GRANGE TO THE LIONS CLUB, TRANSFORMING AN EXPANSE OF ASPHALT ALONG THE STREET INTO A SHARED STREET WITH A SIDEWALK, PARALLEL PARKING, AND SLOW-MOVING TRAFFIC. OFF-STREET PARKING IS RELOCATED TO THE REAR OF THE BUILDINGS.

THE CENTERPIECE OF THE TOWN CENTER COMMON PLAN INVOLVES CREATING A BACKDROP FOR THE COMMON AND A MEANS FOR ACTIVATING THE SPACE. CURRENTLY, THE COMMON DISAPPEARS INTO THE SHADOWS OF THE TOWN FOREST. THIS PLAN SHOWS THE ADDITION OF A NARROW TWO-LANE ROAD LINED WITH A ROW OF DETACHED BUILDINGS THAT ARE RESIDENTIAL IN APPEARANCE. THESE BUILDINGS CAN BE MIXED USE, WITH SHOPS ON THE GROUND FLOOR THAT HELP GENERATE FOOT TRAFFIC. TRAILS LEAD FROM THE COMMON INTO THE TOWN FOREST TO THE NEW SKATING POND THAT OVERLOOKS THE COUNTRYSIDE.



STREETSCAPE VIEW OF THE TOWN COMMON





THIS VIEW OF THE TOWN CENTER COMMON HELPS TO ILLUSTRATE THE LOW IMPACT PRINCIPLES BEHIND THE PROPOSED VISION AND THE DESIRE TO PROTECT THE RURAL NATURE OF THIS IMPORTANT CROSSROADS. IN THE DISTANCE, YOU CAN SEE THE WAY IN WHICH ADDITIONAL BUILDINGS PROVIDE A SENSE OF SCALE AND ENCLOSURE TO THE COMMON AND GENERATE A LEVEL OF ACTIVITY THAT ATTRACTS THE PEDESTRIAN. YOU CAN ALSO SEE THE SKATING POND THROUGH THE WOODS.



SOUTH VILLAGE SUBURBAN CORRIDOR RETROFIT

Currently this area along Route 102 in Londonderry is dominated by suburban big box stores, strip centers, and isolated apartment buildings. It captures local customers and residents because of its convenient location, but does not entice visitors to spend much time there. However, further development in the right form can transform this area into a gateway to Londonderry, and create a sense of place around this intersection at Route 102 and Mammoth Road.

The Route 102 corridor links Londonderry and serves as the “catch all” destination for many needs. Physically changing the appearance and functionality of Route 102 by rebuilding the street as a tree-lined boulevard and locating buildings close to the road will signal to drivers that they have entered an important place, naturally slowing traffic. A new block system is strategically placed to use as much existing infrastructure, rights-of-way, and existing property lines as possible to physically connect existing and new buildings within an interconnected street network. This network not only serves vehicular traffic but also provides safe sidewalks for pedestrians connecting residential, commercial, recreational, and agricultural uses. The retrofit will encourage new development or building upgrades that add value and lead to increased revenue for the Town.

When viewing this Corridor Plan, it is important to remember that these ideas and suggestions may be phased incrementally over time. Instead of following the plan exactly, it should be understood as a holistic vision and long-term goal. Decisions can be made incrementally to ensure that the Town eventually develops South Village in accordance with the community’s vision.



SOUTH VILLAGE SUBURBAN CORRIDOR RETROFIT

1 IMPROVED INTERSECTION

Currently, the intersection of Route 102 and Mammoth Road is oversized and unsafe for pedestrians. The plan shows a solution for defining the street with buildings pulled closer to the sidewalk, including the addition of a new hotel on the south side of the intersection. Route 102 is redesigned as a boulevard, with an alley of street down the middle, providing a pedestrian refuge for crossing. New civic plazas and greens have been added to emphasize the importance of this location.



Amend zoning regulations to emphasize form and character along the Nashua Road Corridor.



Planning and Economic Development Department

3 ALIGN TO DEFINE

The existing and seemingly arbitrarily located apartments in this location are reimagined as two to three-story traditional apartments that are pulled to the street with parking located in the rear. The buildings define the block edges and create a well-defined streetscape. The interior of the new blocks can contain community gardens, parks, playgrounds, or community open space.



Promote redevelopment of the existing apartment complex through policy incentives. Reach out to the property owner to gauge interest in moving forward with the redevelopment project.



Planning & Economic Development Department
Private Developer

2 SUBURBAN RETROFIT

An existing strip shopping center is “turned inside-out”. The orientation of new mixed-use buildings defines blocks, creates walkable streets, and brings buildings up to the sidewalk to create an activated pedestrian environment. A large grocery store footprint is accommodated in the program.



Amend zoning regulations to promote good form.



Planning and Economic Development Department

4 ROUTE 102 BOULEVARD

In this area, Route 102 becomes a multi-way boulevard for 4 blocks. Its success depends on adding more activity along the Corridor, which allows for future transit opportunities.



Apply the Town’s new complete streets policy to make the street more walkable and ready for future fixed-route bus service.



Planning and Economic Development Department
Public Works Department

5 HISTORIC REUSE

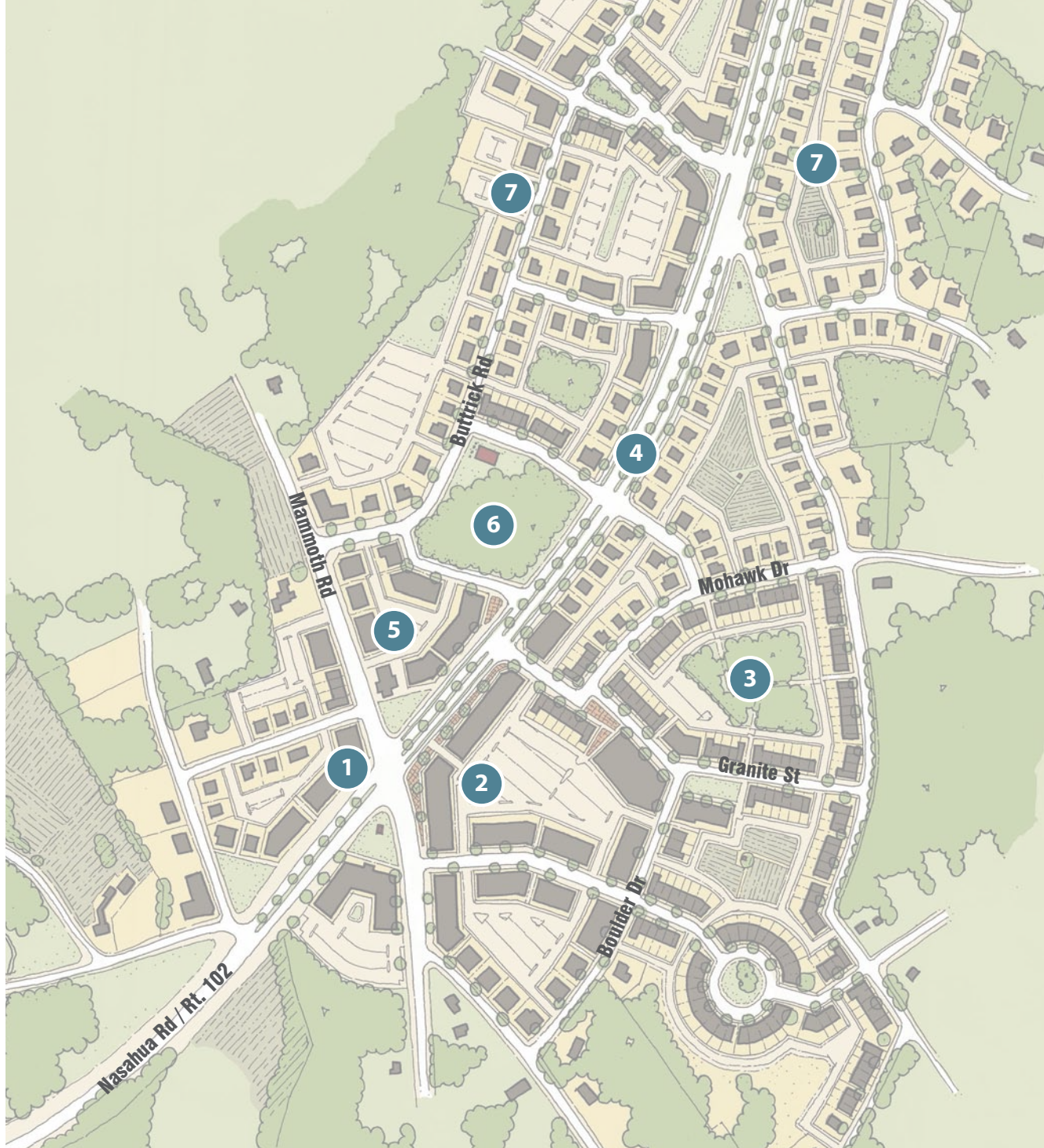
The Coach Stop Restaurant is preserved and integrated within the urban fabric of this enhanced activity center. The green in front of the buildings is enhanced to promote the use of the space along the improved Route 102 corridor.



Make the Coach Stop Restaurant a focal point for any new development at the intersection.



Planning and Economic Development Department
Historic District Commission



6 WETLANDS PARK

This existing underutilized open space is made into a wetland civic park, surrounded with uses that activate the space by increasing accessibility. This park is made safe by locating new buildings around the edges to frame the space and provide "eyes on the street".



Support construction of a new park in the location that becomes the civic space for activating this quadrant of the activity center.



Planning and Economic Development Department

7 RESIDENTIAL EXPANSION

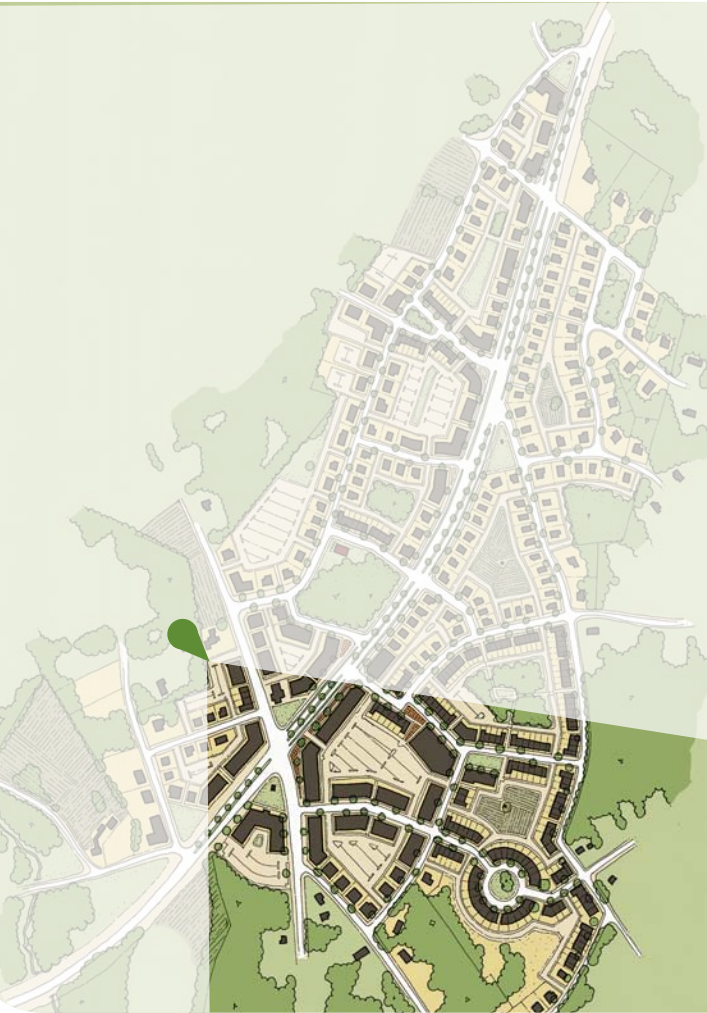
To make this area more vibrant, the plan shows new residential streets within walking distance of existing and potential new businesses. Having homes and apartments within close proximity provides businesses with the benefit of additional customers who can access shops on foot or by bike.



Amend zoning regulations to allow for mixed use and good form.



Planning and Economic Development Department



THIS BIRD'S EYE VIEW IS LOOKING EAST ACROSS THE ROUTE 102 AND MAMMOTH ROAD INTERSECTION. NOTICE THE ADDITION OF THE GREENS AND BOULEVARD DEFINED BY NEW BUILDINGS AND THE SENSE OF PLACE THEY CREATE. THIS CORRIDOR PLAN ACCOMMODATES MIDBLOCK PARKING FOR THE COMMERCIAL BUILDINGS THAT LINE THE STREETS. IN THE DISTANCE ONE CAN SEE THE CREATIVE ALTERATION OF A DEAD END CIRCLE INTO A DEFINED PLACE AND THROUGH-STREET.





SOUTH VILLAGE SUBURBAN CORRIDOR RETROFIT ILLUSTRATIVE BIRD'S-EYE VIEW



PHOTO BY STEVE YOUNG

community facilities & services

The information that follows summarizes how community facilities and services offered in Londonderry should be organized to support implementation of the Town's Conservation & Growth Map.

A brief narrative for each topic area identifies the improvements that should be moved forward in subsequent capital planning initiatives or coordination activities. Work should be done with cooperation between government agencies and other partners responsible for implementing the proposed projects and recommendations.

Community Facilities & Services

The information that follows summarizes how community facilities and services should be organized to support implementation of the Comprehensive Master Plan. A brief narrative for each topic area identifies issues or projects important to the recommendations.

Green Print Initiative

The Green Print Initiative represents a vision for how to create a network of open space with a contiguous boundary that encapsulates protected spaces and high value natural resource areas. These spaces are important for drinking water quality and quantity, flood storage, active farms, scenic views, outdoor recreation, high value plant and animal habitat, large contiguous forests, and historic structures. The Map represents the ideal for open space protection, contributing to local identity and sense of place.

The Green Print Map to the right includes areas for preservation or reservation, as identified on the Conservation and Growth Map. O-1 Preserved areas include water bodies and land purchased for permanent conservation. Wetlands, also included in the O-1 area, are shown on this map as a separate color to help clarify the make-up of the Town's green print. O-2 Reserved areas include lands that are temporarily protected, including floodplains and special flood hazard areas, steep slopes, utility corridors, and land subject to the Town's conservation overlay district.

Forested areas are also shown on the Green Print Map in light green. While not formally included as part of the Green Print, the Town may consider preparing a tree preservation and buffer ordinance for protecting mature tree stands in the community (in lieu of a Town-wide policy that protects tree stands regardless of age, species, or health of the trees therein).

The Green Print Initiative has a number of goals, including the ideal of permanently protecting critical lands that are at risk or do not have permanent protections (including O-2 Reserved Areas), which is also a primary goal of the Town's 2010/2011 Open Space Plan.

The Town should take a proactive approach to building the community's green network. This initiative should benefit from coordinated public investment, no different from other Town programs that build and maintain roads, provide sewer collection service, or support parks and recreation activities.

Landowners should consult the Green Print Map for guidance on preserving green spaces during development of their property. The location of dedicated open space required under the Town's zoning or subdivision ordinances should be located in a complementary manner to existing green elements depicted on the map.

School System

Continued coordination between the Town and the Londonderry School District will ensure efficient and high-quality services into the future. Specifically, the timing and location of new development influenced by the Comprehensive Master Plan and the zoning ordinance (i.e. Section 1.4–Growth Management & Innovative Land Use Control) should be closely coordinated with the School District's strategic and capital investment plan.

Green Print Map



Transportation

Several improvements to the transportation system will be needed to keep pace with achievement of the goals within the Comprehensive Master Plan. The emphasis for improving the system is to:

- Expand and improve existing infrastructure;
- Shift away from overreliance on the automobile for daily travel needs; and
- Implement a Town-wide complete streets policy.

Together, these emphasis areas should improve mobility, reduce congestion, and provide greater travel mode choice for residents in future years.

A brief summary of key transportation projects and initiatives recommended for the Town follows.

Street Network

Maintain Two-Lane Street Network

Town officials should continue their resistance to widening entire street segments, focusing instead on maintaining the grid street system to disperse traffic, a complete streets policy to encourage other modes of travel, and building more walkable, mixed-use activity centers that capture trips before they reach the major street network.

The Town did designate the Pettengill-Harvey-Grenier Field-Rockingham Road Corridor as the preferred route between Interstate 93, the Manchester-Boston Regional Airport, and points west of the Merrimack River (i.e., the cross-town connector). It could be widened to four lanes; however, preliminary analysis of the Corridor for the Comprehensive Master Plan found that only a limited amount of widening may be necessary (especially near major intersections) to accommodate expected traffic volumes.

This should be the policy of the Town until a detailed engineering analysis can be completed in coordination with the New Hampshire Department of Transportation and Southern New Hampshire Regional Planning Commission.

Build New Complete Streets

The extension of Pettengill Road between Industrial Drive and Raymond Wieczorek Drive will increase mobility and serve new development anticipated for the Pettengill Road Industrial Village. Town officials should work with representatives of the New Hampshire Department of Transportation and Southern New Hampshire Planning Commission to include construction of this major thoroughfare in their adopted plans and work programs.

Bicycle & Pedestrian Facilities

The Town should provide a safe, convenient, continuous, comfortable and aesthetically pleasing transportation system that promotes bicycling and walking as legitimate alternatives to the automobile for trips shorter than one mile. Specific recommendations for pedestrian and bicycle facilities in Town are summarized below and on the map on the following page.

Pedestrian Facilities

The recommended pedestrian network for Londonderry relies on expanding the trail system in the short-term, and the implementation of new activity centers and a complete streets policy to meet residents' long-term demand for a more walkable community. Slowing traffic, narrowing streets to reduce pedestrian crossing distance, adding on-street parking, and including better signage, crosswalks, and signal phasing for pedestrians will also make corridors within or leading to new activity centers more walkable.

Bicycle Facilities

The recommended bicycle network for Londonderry relies on designated bicycle routes on local streets and off-street, shared-use trails. Way-finding signage and pavement markings should be used throughout the proposed system to designate bicycle routes and reinforce the presence of bicyclists in the travel realm. Off-street portions of the network should be designed to work with inter-mixed pedestrian or equestrian activity. Funding for missing links in the network could come from grants or donations; including the Federal Safe Routes to School Program or Transportation Enhancement Funds.

Pedestrian & Bicycle Facilities Map



- Trail Heads
- Existing technical trails
- Existing soft-paved or woodland trails
- Existing paved trails
- Potential unpaved trails
- Potential paved trails

Major Intersection Improvements

Town officials generally should advocate for limited capacity improvements at major intersections as one way to discourage regional pass-through traffic. Specific hot-spot intersection locations identified for improvement during a preliminary analysis for the Comprehensive Master Plan include:

1. Pillsbury Road at Gilcreast Road

This is an offset intersection that experiences A.M. and P.M. peak hour delays. The proposed long-term solution is the construction of two single-lane roundabouts. The southern roundabout would include a right-turn bypass lane from Gilcreast Road (northbound) to Pillsbury Road (eastbound). In the interim, the two intersections could be reconfigured for stop control with signs placed to stop traffic on Gilcreast Road (southbound at both locations) and Pillsbury Road (eastbound and westbound).

2. Sanborn Road at Rockingham Road

Proposed development in the vicinity of this intersection calls for a rural village street section, promoting greater connectivity and walkability along Sanborn Road and Rockingham Road. The proposed reconfiguration of the intersection is for a turbine treatment, which essentially is a modified roundabout. The turbine design will manage travel speeds on Rockingham Road while maximizing safety and comfort for pedestrian crossings.

3. Grenier Field Road at Mammoth Road

Future traffic volumes are expected to increase at this location with designation of the Pettengill—Harvey — Grenier Field — Rockingham Road Corridor as the preferred route between Interstate 93, the Manchester-Boston Regional Airport, and points west of the Merrimack River (i.e., the cross-town connector). A new signalized intersection with added eastbound right and westbound left turn lanes on Grenier Field Road should improve intersection performance based on project traffic volumes.

4. Fire Station Emergency Signal at Grenier Field Road

Increasing traffic volumes on Grenier Field Road will exacerbate already difficult conditions for emergency vehicles exiting Fire Station One. A new emergency traffic signal is proposed at this location.

5. Harvey Road at Grenier Field Road

Future traffic volumes are expected to increase at this location with designation of the Pettengill — Harvey — Grenier Field — Rockingham Road Corridor as the preferred route between Interstate 93, the Manchester—Boston Regional Airport, and points west of the Merrimack River (i.e., the cross-town connector). The proposed solution is for a double-lane roundabout at the Webster Road and Grenier Field intersection, and conversion of Harvey Road to two-way traffic between Webster Road and Grenier Field Road. Webster Road will need to be widened to four lanes between Harvey and Grenier Field Roads to support proposed turning movements.

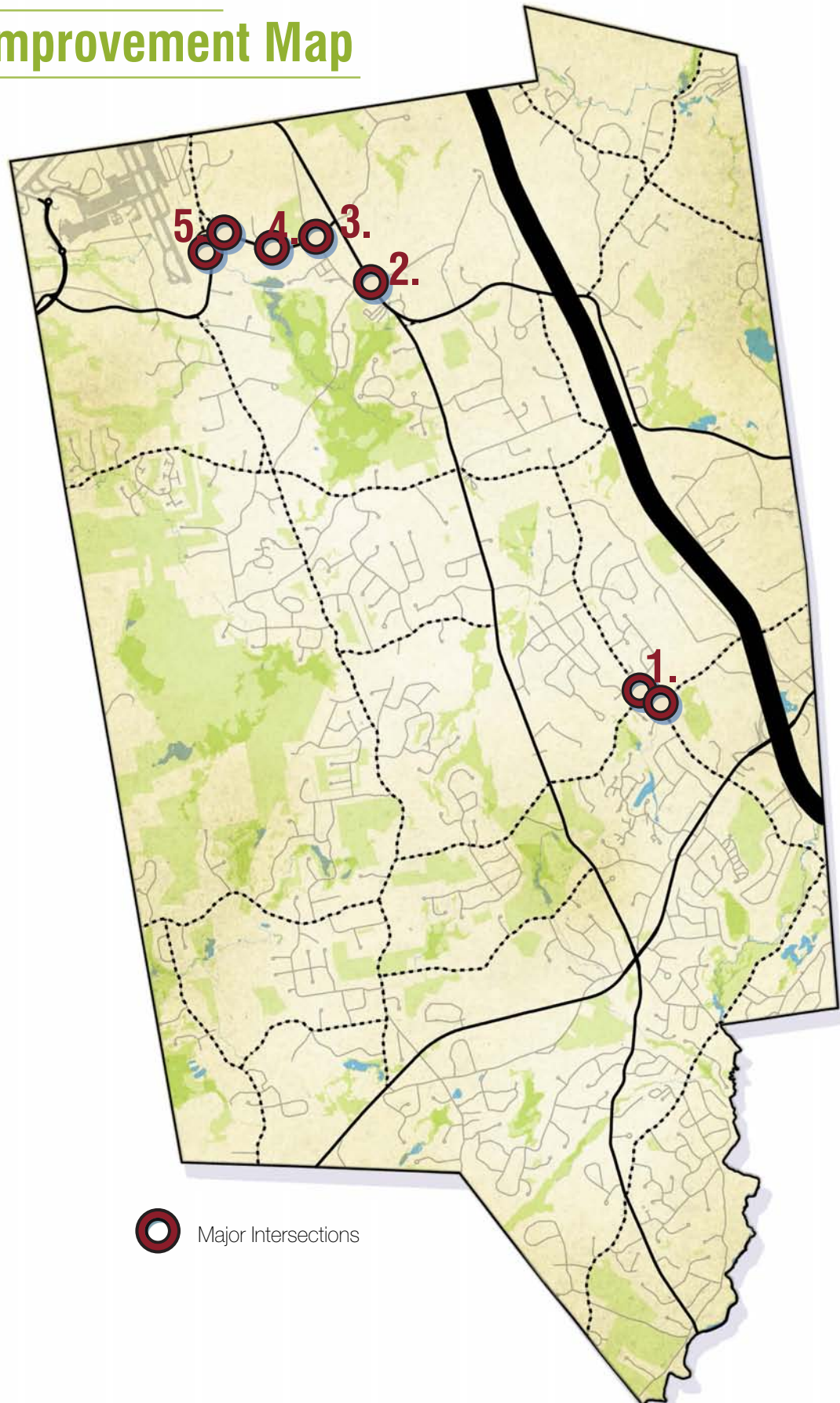
Town officials should work with the New Hampshire Department of Transportation and Southern New Hampshire Planning Commission to complete more detailed engineering analyses required before implementing the recommended improvements.

Airport

The location of the Manchester-Boston Regional Airport has a significant impact on future development in Londonderry. It accounts for over 3,800 jobs and contributes \$1.24 billion to the economy in this region of New Hampshire. This airport can accommodate significant air traffic needed by large national and international businesses in the region. Easy access to the airport will help Londonderry compete for new businesses. Potential residents also appreciate the convenience of an airport closer to home.

Because much of the area around the airport is still undeveloped, Londonderry has an opportunity

Intersection Improvement Map



to encourage the type of development that is desirable to potential businesses and residents. Building form, setback, and parking requirements are just a few of the things that can be monitored. Because most of the area around the airport will be developed as office or industrial space, regulations should focus on the form of buildings that can be used for office or industry.

Local Transit Circulator

A Town transit circulator service (small bus) would connect key destinations internal to Londonderry using a continuous loop route with short headways. Destinations along the route may include the Town Common and school campus, new and emerging mixed-use activity centers, the senior center, and the park-and-ride lot at Nashua Road for service via the Boston Express. Specific stops along the route could also provide transfers to service provided by the Cooperative Alliance for Regional Transportation (CART) and Manchester Transit Authority (MTA).

A transit circulator feasibility study should be completed for the study area to confirm when demand for such a service would be high, and establish appropriate service parameters (i.e., technology, route, headways, etc.) and cost estimates for implementing the preferred system. In addition, new rules and standards should be considered for the Town's zoning and subdivision ordinances that would include specific use, density, and design elements to reinforce safe and efficient transit service between major activity centers (i.e., follow transit-oriented development principles). Some service contemplated for the new activity centers should run internal to the site, which would support a major transit node and surrounding development.

Police & Fire Protection

Demands for police and fire protection will continue to increase as the Town grows. More equipment and personnel will be needed to satisfy patrol or emergency response duties. The

concentration of new employment or population centers throughout the area could generate the demand for new police or fire stations. Some relief may be afforded by mutual aid agreements until such time as new infrastructure or personnel are in place; however, the Town's position should be to invest in local police and fire services adequately to keep up with the pace of growth.

Telephone & Electric Service

Disruptions to telephone and electric service seem to occur regularly in Town because of the frequency and severity of natural disasters experienced in the region. Strong winds, fallen trees, and ice can all bring down overhead utility lines, causing service disruptions and expensive repairs. The Comprehensive Master Plan advocates for the burial of overhead utilities in new development to minimize the risk for outages in the community. Furthermore, Town officials should coordinate with local utility providers to identify opportunities to bury existing utility lines.

Emerging technologies and the necessary infrastructure, particularly broadband internet technology and cellular services, need to keep up with trends in order for Londonderry to remain competitive. The Town should participate in the New Hampshire Broadband Mapping and Planning Program to stay ahead of future opportunities and steer broadband investments, resources, and capacity toward the Town.

Stormwater Management

The Comprehensive Master Plan advocates for developing a Town-wide sustainable stormwater management strategy. This should span the boundaries of individual parcels to collect and store stormwater in local lakes, ponds, and streams, and should utilize sustainable tools and techniques such as green streets, bio-retention swales and pervious pavement for natural stormwater infiltration. Town-led initiatives to designate (and potentially build) areas for

stormwater detention should follow existing hydrological patterns and drainage characteristics. Natural 'drainage corridors' identified throughout the Town should be protected through land purchase or conservation easement secured on private property. The potential for a Town-wide stormwater management strategy and next steps for moving forward should be explored in an update to the 1990 Water Resources Management Plan.

Other important recommendations to protect water resources include:

- Embrace Light Imprint design principles for managing the impact of new growth on the natural environment, especially for minimizing the amount of impervious surface associated with new development, especially in activity centers. This will require an amendment to the Town's site plan regulations.
- Revise local land development controls to prohibit development in the floodplain areas.
- Resume annual monitoring of the Town's surface and ground waters, following the protocol set up by the Environmental Baseline Study Committee in 2001.
- Launch an education campaign and outreach program to let residents know about the benefits of vegetated areas for protecting surface waters.

Water & Sewer Service

Londonderry will continue to depend on surrounding water and sewer utility providers to extend bulk water or sewer treatment services to new residents and businesses. The Comprehensive Master Plan assumes adequate services will be provided concurrently with the development of new activity centers, either by public investment or developer financing and construction. Town officials should coordinate with utility providers to ensure that adequate capacity is reserved for the magnitude and timing of future development anticipated in the Comprehensive Master Plan.

Town officials also should plan for the expansion of its sewer collection and interceptor system to keep up with demand. This includes regular updates to the Londonderry Wastewater Facilities Plan, and targeted capital improvements to maintain system integrity and expand service.

Energy & Fuel Supplies

Heating Oil, Natural Gas, and Electricity are the primary sources of heating for Londonderry residents and businesses. Electricity is provided by Public Service of New Hampshire (PSNH). Given the cost and reliability of natural gas, there appears to be demand for expansion of infrastructure and service to new areas throughout town.

Londonderry has major gas lines running north-south through the center of town that feed the Granite Ridge electric generating plant. This plant was constructed to supply 750 MW of power, although it is currently generating well below capacity at peak times. The plant is located centrally within the Airport Industrial Area. Further, high volume gas lines provide potential for businesses that generate and utilize liquefied natural gas to fuel truck fleets or other heavy machinery. The Town should investigate mechanisms that can leverage the capacity of this facility and provide low cost energy to businesses in the area, significantly enhancing the attractiveness of the Pettengill Road area.

On a more local level, the Town should encourage energy efficiency in new construction or rehabilitation projects. Efficiency principles may be included in the zoning ordinance and may include a formal review of building siting, facility design, and materials and water consumption, to name a few. The Town should encourage alternate energy improvements to existing facilities such as improving weatherization or installation of solar panels, and should investigate the implementation of LEED standards in appropriate areas, including the Londonderry Eco-Industrial Park.



PHOTO BY JACK FALVEY DURING A FALL, 2011 FLIGHT WITH EARL ROSSE

regulatory barriers

To make the community's vision for the future possible, while also preserving existing neighborhoods, significant changes need to be made to Londonderry's zoning code. The Town's existing zoning promotes a single lifestyle choice, while an overwhelming majority of the community wants to see a greater selection of housing, recreational, retail, and civic opportunities. New, more nuanced approaches to regulating land use have made it possible for communities to focus on character and quality of place as a way to meet local goals.

Regulatory Barriers

As a result of the way in which the existing zoning in Londonderry is written, the predominant form of development over the past 30 years has been detached single family homes on one-acre lots with strip commercial uses along the main thoroughfares. The pattern of one-acre residential lots was also ensured by the Town's lack of a public sewerage system, forcing lots to be large enough to accommodate septic leach fields. Because of these factors, Londonderry has a limited range of lifestyle options, making it difficult for the Town to remain competitive in a national market where preferences have changed and more people desire smaller homes and apartments within walking distance of amenities.

Why Regulatory Change Now?

During Planapalooza it became clear that a majority of the community wants to see additional options. While everyone agreed that existing neighborhoods should be preserved to maintain the lifestyle preference of those who like Londonderry the way it is, there was broad consensus that new growth should occur in the form of clearly defined compact, walkable, mixed-use activity centers in villages and along corridors. This approach allows for greater lifestyle choices so that there is something for everyone in Londonderry, while attracting new people to buy homes and bring in additional businesses. Unfortunately, the current zoning ordinance has limited capacity to enable, encourage, and promote the diversity of high quality places desired by the community.

Over the years, the existing zoning has been amended in a piecemeal fashion to address specific issues as they have come up, without a major rewrite in the roughly forty years since it was first enacted. Because of this history of “tacking on” amendments, the zoning has many deficiencies and inconsistencies and is difficult to use. Because of the challenge in interpreting the regulations, the development review process has become increasingly unpredictable, time-consuming, and costly, deterring potential investment.

Comprehensive Rewrite of Ordinance

For both of these reasons, the Town of Londonderry should pursue a comprehensive rewrite of the Zoning Ordinance, including form-based components to deal with all aspects of community character and design. The form-based or “character-based” components will more effectively yield walkable, compact diverse mixed-use environments focused on activity centers, areas where the Town has determined that growth should occur.

Where existing suburban neighborhoods already exist, the form-based components would be written to maintain the current character and existing lifestyle. In areas where change is desired, existing buildings would be grandfathered until such time as a substantial change is made to the property. A comprehensive rewrite of this nature would allow the Town to simplify the regulations, which would promote private-sector investment in the Plan and expand lifestyle options in Town.

Following the adoption of the Comprehensive Master Plan, Londonderry should modify its zoning and subdivision ordinances in order to promote the Plan and make legal the vision for the activity centers. A form-based approach works to consolidate, simplify, and update zoning language to reflect the desires of the community.

What is a Form-Based Code?

In contrast with conventional zoning that emphasizes the separation of uses, a form-based code instead uses character — the look and feel of a place — as the primary organizing principle. Form-based codes take the approach that most uses, which fall into the broad categories of retail, residential, office, civic uses, even light industrial activities, are compatible, having traditionally co-existed happily in traditional communities for centuries. Given appropriate standards, all of these uses can be located close to each other, except for in unique cases where smells or extreme noise are an issue, in which case the conventional approach of separating uses is appropriate.

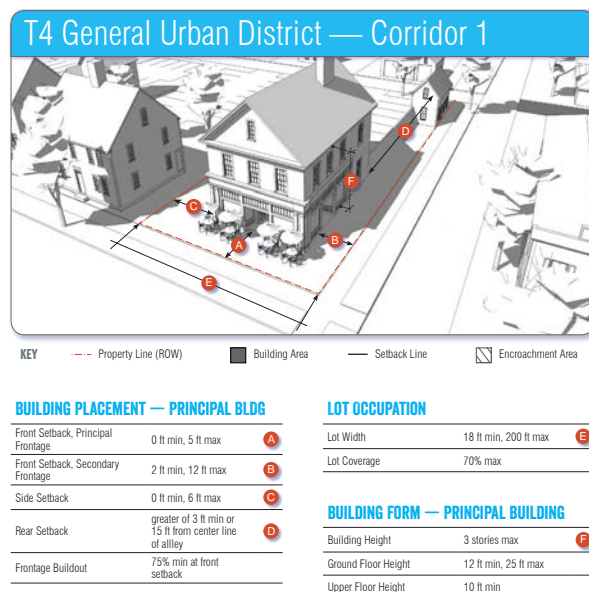
Form-based codes do the same job of setting the rules and expectations for development, but with an emphasis on character, and also a greater appreciation for the complexity and nuance involved in protecting and making great places. Form-based codes can be used to reenforce and protect existing land use patterns or promote new patterns depending on how a community wishes to grow and change. Having this kind of tool in place makes it easier to transform the built environment over time as the market calls for new development.

Most importantly, form-based codes focus on character and the feel of a place, allowing land owners and developers to build places that contribute to a more sustainable, healthy, and safe community. This includes: emphasizing sustainable stormwater systems; promoting a more interconnected street network when possible to alleviate traffic congestion; reducing traffic speeds in places that are appropriate for pedestrians and cyclists; allowing for more easy construction of traditional housing types including civilized apartment buildings and garage apartments; and enabling more intense infill development where there is a local interest in creating activity centers.

One of the many advantages of the form-based coding approach is the simplicity. The code language is written in plain English rather than in complicated legal speak and easy to understand diagrams are used to replace pages of text. The goal of a form-based code is to make it clear to the public and to land owners what is allowed.

A form-based code tells you what to do, instead of telling you what NOT to do. This is a subtle but important difference, both psychologically and practically. If a developer looking to invest in Londonderry knows what the community wants and submits plans that are in keeping with the intent of the Comprehensive Master Plan, they should more quickly move through the approval process, saving time and money.

Because form-based codes emphasize character, and the design and context of development, a number of elements are regulated, including the height and placement of buildings, the location of parking, the frontage, sidewalk, planting area,



drainage, and the street itself. Instead of building setbacks, form-based codes talk about where the front of a building should be placed. Instead of Floor Area Ratio, form-based codes talk about appropriate scale and massing of buildings. All of this information is conveyed through easy to understand diagrams of other graphic illustrations.

Structurally, a form-based code is organized according to intensity of development, or Character Zones (see following section for more information). A Regulating Plan is also generated that identifies the location of character zones. The code would also include standards for by-right, non-permitted, special and accessory uses, as well as Public Space Standards (street/sidewalk/parking), Site Development Standards, Architectural Standards, Signage Standards, the Administrative process and Definitions.

In Londonderry, a form-based code would establish character zones within the growth sectors and activity centers identified in the Plan Framework section of this document (page 150) and retain the existing character of residential areas in the remainder of Town. The character zones would be defined to represent the unique expression of the desires for development in Londonderry, representing the community's desires and goals. Within the growth sectors and activity centers, codes can be written to encourage a mix of uses, pedestrian comfort by making walkable streets, and a high quality public realm defined by buildings that have great architectural design. The process will likely involve a comprehensive rewrite of the zoning ordinance. If adoption is successful, Site Plan and Subdivision regulations would likely have to be amended to accommodate the new form-based code.

Character Zones

Every activity center is unique in its character and intensity of development. In order to help understand the elements that make up a complete neighborhood, activity centers can be organized by Character Zones, which are the building blocks of complete neighborhoods. Organizing a community based on character is in contrast to the existing protocol of regulating land primarily by use, which tends to produce the kind of auto-oriented development that is threatening the rural character that so many people love about Londonderry. By looking at character first, rules can be established in the future that honor and support the kind of walkable, mixed-use activity centers anticipated within the growth sectors.

During Planapalooza, the community described the parts of Londonderry that are most loved. This input helped to inform the customized Character Zones shown on the opposite page.

The Character Zones identified for Londonderry are the CZ1 Natural Character Zone, the CZ2 Rural Character Zone, the CZ3 Sub-urban Character Zone, the CZ4 General Urban Character Zone and the CZ5 Urban Center Character Zone, which are described to the right.

Should Londonderry decide to move forward with a form-based code, these Character Zones would be assigned on a Regulating Plan to land within each growth sector or activity center. In addition, standards would be written to describe and regulate each zone, including land use, density, height, frontage, and other elements of the intended built environment.

Character Zones

CZ1



CZ1 Natural Character Zone consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.

CZ2



CZ2 Rural Character Zone consists of sparsely settled lands in open or cultivated states, including woodland, agricultural land, and grassland. Typical buildings are farmhouses, agricultural buildings, cabins and villas.

CZ3



CZ3 Sub-urban Character Zone consists of low density residential areas, adjacent to higher zones that have some mixed use. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and roads irregular to accommodate natural conditions.

CZ4



CZ4 General Urban Character Zone consists of a mixed use, but primarily residential urban fabric. It may have a wide range of building types. Streets have curbs and sidewalks define medium-sized blocks.

CZ5



CZ5 Urban Center Character Zone consists of higher density mixed use buildings that accommodate retail, office, rowhouse and apartment buildings. It has a tight network of streets, wide sidewalks, steady street tree planting and buildings set close to the sidewalks.



PHOTO BY JACK FALVEY DURING A FALL, 2011 FLIGHT WITH EARL ROSSE

driving success

Implementing the Town's Comprehensive Master Plan depends on the ability of property owners, developers, Town staff, elected officials, and the general public to work together for a common purpose. This Comprehensive Master Plan should be the compass by which all decisions are measured, moving Londonderry toward the goal of becoming a more vibrant and green community.

Driving Success

The Toolkit presented in this document provides a menu of cutting edge strategies available to help implement the Comprehensive Master Plan, while the illustrative plans for the activity centers tie big ideas to specific locations within the community. Action items throughout the section entitled “Plan Framework” and in the section entitled “Community Facilities & Services” suggest steps for achieving the ideas and goals.

This section provides an action plan intended to:

1. Provide decision-makers with a blueprint for implementation.
2. Clearly define projects and action items and identify public or private investment opportunities that are achievable and reflect the goals of the Comprehensive Master Plan.
3. Regularly measure achievements against the action plan, enabling stakeholders to track progress and hold elected officials accountable for implementing this Comprehensive Master Plan.

The structure of the action plans does not require all projects or action items be completed in sequence. Instead, it promotes flexibility and partnership opportunities between the Town and other stakeholders for implementing the vision incrementally over time, consistent with the pace of growth, emerging regional initiatives, or available funding.

The information that follows summarizes key components of the Action Plan.

Setting Targets

The following targets define a desired, promised, minimum, or aspirational set of directives that should drive decision-making. The targets are implemented through specific projects, plans, or initiatives recommended in the Plan Implementation Phase; with each decision improving conditions consistent with the Comprehensive Master Plan.

Balanced Budget

Keep a balanced budget for the Town each year that does not borrow large sums of money from fund reserves to cover regular operating expenses.

Economic Development

Plan, program, and execute new Town economic development initiatives that bring in at least 200 new jobs per year. Jobs should be in target industries (especially goods producing or professional service industries) that provide wages to comfortably live in Londonderry. The average annual salary for workers in these industries was \$74,984 in 2011 (Source: New Hampshire Employment Security, Economic & Labor Market Information Bureau).

Jobs-Housing Ratio

Work to increase the jobs-housing ratio in Londonderry (i.e., total employment / total population in the civilian labor force) to 1.00 by 2018. The current jobs-housing ratio for the Town is 0.93 (Source: New Hampshire Employment Security, Economic & Labor Market Information Bureau).

Land Conservation

Fund the Town’s Conservation Fund for purchasing land or securing conservation easements that preserve key water resources, agricultural land, natural areas, or scenic view sheds identified in the Open Space Task Force Final Report. Provide at least \$500,000 per year for six years to fund purchases and maintain grant matching funds.

Police Protection

Keep consistent the number of sworn police officers for the Town as growth continues. The current service ratio is 3.36 sworn officers per 1,000 residents.

Fire ISO Rating

Allocate resources to the fire department that help improve the Town's ISO Class 5/9 fire protection rating to an ISO Class 4 fire protection rating throughout the Town. An Insurance Services Office (ISO) rating is a score from 1 to 10 that rates a municipality's ability to handle fire emergencies. A lower score indicates better fire protection abilities and generally translates to lower property insurance rates for residents and businesses.

Projects, Plans, Policies, & Initiatives

New or amended projects, plans, policies, and initiatives are recommended throughout this Comprehensive Master Plan to fulfill the community's vision for growth and quality of life. A brief summary of these items follows:

Town Plans & Policies

In order to implement many of the recommendations in this document, revisions need to be made to the local land use regulations, as well as supporting policies and ordinances. Additional plans and studies for specific sites will be needed to support their implementation.

Town Initiatives

New initiatives led by the Town will address a wide range of topics important to promoting economic development and improving the quality of life for residents. These initiatives are a critical opportunity to build local capacity by involving

active and new members of the community in seeing through the recommendations of this Plan.

Capital Projects

Capital projects identified for the Town address existing deficiencies and/or anticipated future year needs. Implementation of projects recommended in this Comprehensive Master Plan provides additional capacity to serve the magnitude and timing of development depicted on the Conservation & Growth Map. Some of the projects listed in the matrix require coordination with responsible county or state agencies.

Specific Plans & Studies

Some plans or initiatives recommended in following the Plan Implementation Matrix require additional resources to complete (e.g., a Water Resources Management Committee). The Town's Planning and Economic Development Department should coordinate with other Town departments to request funds and schedule special studies consistent with the time frames presented in the matrix.

Plan Implementation Matrix

The Plan Implementation Matrix helps policymakers and stakeholders implement this Comprehensive Master Plan. Each project, policy, or initiative identified in the document is also listed in the matrix. A brief description, budget allowance, funding options, timeframe, and responsible party provided for each item will help guide Town officials with implementation activities.

Many items in the matrix are underway, while others should be started with adoption of this Plan.

Resource Allocation

With adoption of this Comprehensive Master Plan, Town officials should allocate municipal resources with specific recommended outcomes in mind that meet the goals of this Plan. This includes funding specific projects, plans, and initiatives consistent within the timeframes presented in the Plan Implementation Matrix. These expenditures are critical to advancing the goals of the Plan and preparing Londonderry for a prosperous future.

Capital Improvements Plan

The Town's Capital Improvements Plan (CIP) guides future funding, schedule, and construction of capital improvements so that necessary infrastructure is in place consistent with demand. It distributes expensive projects over time, helping decision-makers coordinate improvements for greater efficiency and assess short-term financing requirements in the context of long-term fiscal needs and constraints. A well-coordinated and regularly-updated CIP document protects the community from abrupt tax increases.

Projects in the Capital Improvements Plan should focus on short-term and long-term investments identified in this Comprehensive Master Plan. Other projects recommended from year-to-year should “buy results” that citizens value, measured by fulfillment of the Common Vision and Guiding Principles, before being included in the CIP document.

Annual Budget

Spending for the coming year is authorized by the Town Council in an adopted annual budget. It authorizes spending, assures the budget is balanced, and levies property tax for the budget year.

The first year of the Capital Improvements Plan should become the annual capital budget submitted concurrent with the operating budget for consideration by the Town Council. The Town should also implement a five year budget strategy to allow for a more comprehensive approach to planning for future expenditures. The allocation of funding should direct resources toward specific projects detailed in the comprehensive master plan, so that results can be seen.

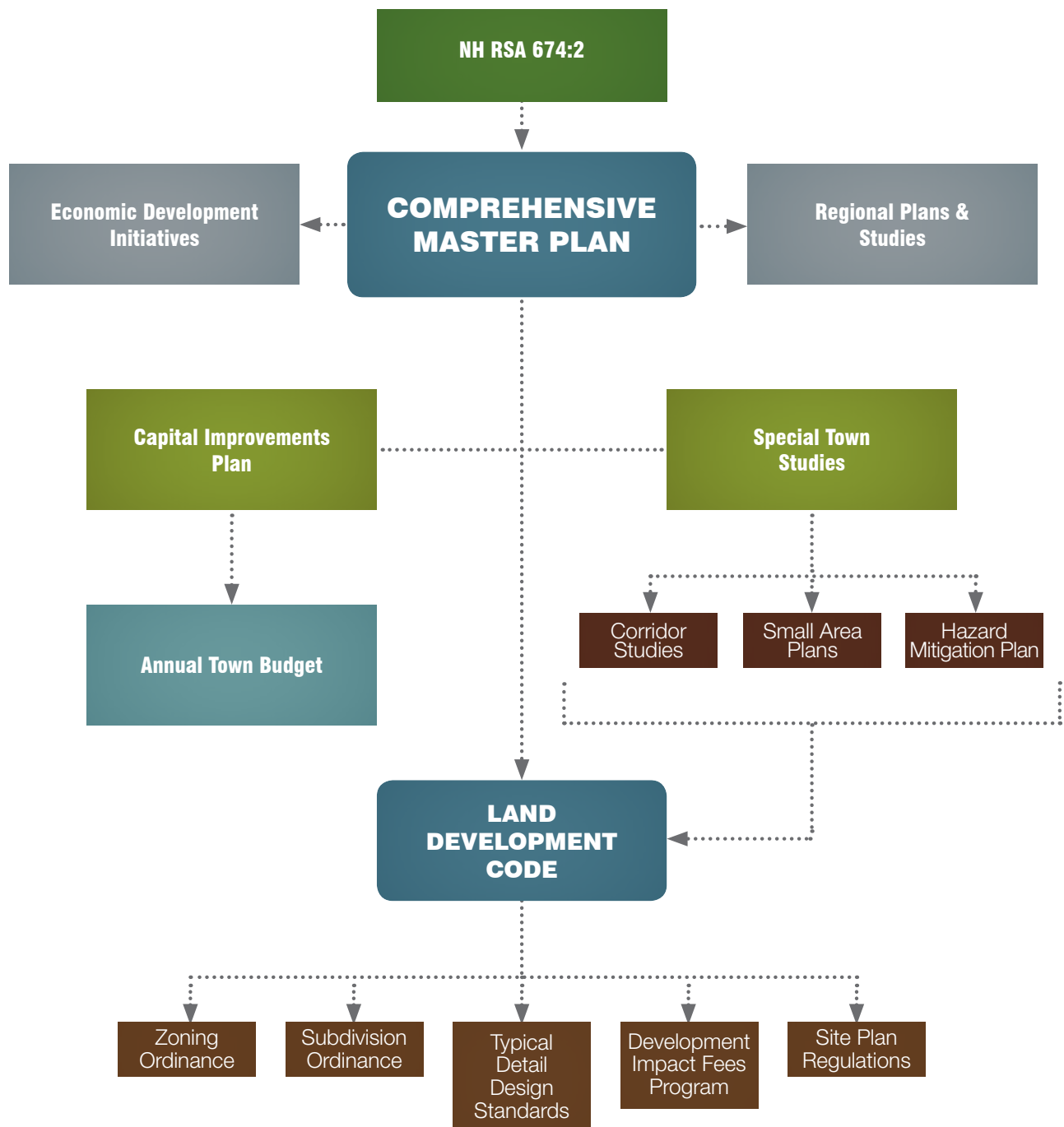
Community Report Card

A Community Report Card should monitor and evaluate progress as the Town implements the recommendations in this Comprehensive Master Plan. The report card should give a full and honest assessment of conditions in Town and be used specifically to monitor performance, measure achievement, and reflect change generated by the plan.

Formal presentation of the Community Report Card should be made to the Town Council at the first of each year. Adjustments to the implementation program for this plan, if necessary, should be made in the months following the presentation.

Regulatory Flow Chart

This flowchart illustrates the relationship of the Comprehensive Master Plan (CMP) to planning activities and procedures in New Hampshire, as defined by NH Statute. The CMP is the keystone document that informs and sets goals for local or regional plans and studies, economic development initiatives, Capital Improvement Plans, town budgets and local development codes.



ACTION	TIMEFRAME (COMPLETION DATE)	BUDGET ALLOWANCE	LEAD PARTY	OTHER PARTNERS	FUNDING SOURCE
TOWN-WIDE RECOMMENDATIONS					
Include new rules and standards that prohibit development in the 500-yr floodplain.	Near Term (2016)	See Budget Allowance	Planning Board	Community Development Department	N/A
Include tree preservation and buffer standards for protecting mature tree stands throughout the study area.	Near Term (2016)	See Budget Allowance	Planning Board	Open Space Task Force, Community Development Department	N/A
Include new rules and standards that incorporates open space as a meaningful component of new development. Open space could be used for tree preservation, stormwater retention, recreation, animal habitat protection, or preserving scenic views.	Near Term (2016)	See Budget Allowance	Planning Board	Conservation Commission, Open Space Task Force, Community Development Department	N/A
Include new rules and standards that reduces the amount of impervious surface for a development. This is a very cost-effective and environmentally-sensitive method for reducing stormwater runoff.	Near Term (2016)	See Budget Allowance	Planning Board	Community Development Department, Public Works Department	N/A
Fund a purchase of development rights program that allows landowners the opportunity to voluntarily sell their development rights on a parcel for permanent conservation.	Near Term (2016)	\$100,000 - \$200,000 (Annual, Demand-Driven)	Town Council	Conservation Commission, Open Space Task Force, Community Development Department	General Fund
Adopt a form-based code for the study area that consolidates, simplifies, and updates zoning and subdivision language to implement the vision and supporting recommendations from the comprehensive master plan.	Near Term (2016)	\$200,000 - \$250,000	Planning Board	Planning Board, Zoning Board of Adjustment, Community Development Department	General Fund
Provide incentives for preserving historic buildings in the study area, which take advantage of the uniqueness of these sites and buildings for creating cool spaces.	Near Term (2016)	In-House Resources (Policy) / \$10,000 - \$20,000 (Matching Grant)	Town Council	Heritage/Historic District Commission, Community Development Department	General Fund, Grant Opportunities
Permit accessory dwelling units in growth sectors (G1 - G4) depicted on the Conservation & Growth Map. These units encourage greater housing choice for young adults, new families, and elderly residents in the study area.	Concurrent Action (2013)	In-House Resources	Planning Board	Housing Task Force, Community Development Department	N/A
Include new standards in a form-based code that promotes neighborhood diversity and greater housing choice to meet the needs of young adults, new families, and elderly residents.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Housing Task Force, Community Development Department	N/A
Evaluate the feasibility of building a graduated care facility within an activity center, and actively seek a development partner for expediting its construction. Remove unnecessary hurdles in the zoning and subdivision ordinances for construction.	Near Term (2016)	In-House Resources	Town Council	Elder Affairs, Community Development Department	N/A
Include street connectivity standards in a form-based code that require every street be connected to another street in a new development, unless otherwise deemed not feasible because of topographic or environmental concerns.	Concurrent Action (2013)	See Budget Allowance for Form-Based Code	Planning Board	Traffic Safety Committee, Community Development Department, Public Works Department	N/A
Include new rules and standards in a form-based code that addresses specific use, density, and design elements to reinforce safe and efficient transit service between major activity centers.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Cooperative Alliance for Regional Transportation, Community Development Department	N/A
Connectivity standards should not be limited to automobiles. Implement rules and requirements in a form-based code to build a comprehensive network of sidewalks, paths, and passage ways that make walking more convenient and enjoyable.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Traffic Safety Committee, Community Development Department, Public Works Department	N/A
Streamline the development review process (where necessary) to promote business recruitment and economic development in the study area. Remove unnecessary hurdles for attracting new or expanding business, including rules and requirements that make the development review process unfair, unclear, or cumbersome.	Concurrent Action (2013)	In-House Resources	Planning Board	Community Development Department	N/A
Invest in agri-tourism activities at the community level as another tool for economic development. Provide a budget and the staff necessary to let it thrive, supporting a farmers market, general marketing and communication activities, etc.	Near Term (2016)	\$15,000 (Annual)	Town Council	Community Development Department	General Fund
Partner with the New Hampshire Cooperative Extension Service to provide resources for individuals, businesses, schools, and family farms interested in growing food for local consumption.	Near Term (2016)	In-House Resources	Community Development Department	Open Space Task Force, Conservation Commission	N/A
Provide incentives in a form-based code for development that includes high-quality architecture and place-making principles, which together reinforce the town's history and sense of place. Actively market the quality of development and Londonderry brand for recruiting new businesses and industries to the study area.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A

ACTION	TIMEFRAME (COMPLETION DATE)	BUDGET ALLOWANCE	LEAD PARTY	OTHER PARTNERS	FUNDING SOURCE
TOWN-LED INITIATIVES					
Embrace Light Imprint development principles for managing the impact of new growth on the natural environment, especially for minimizing the amount of impervious surface associated with new development.	Concurrent Action (2013)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department, Public Works Department	N/A
Advocate for a town-wide stormwater management strategy that spans the boundaries of individual parcels to collect and store stormwater in local lakes, ponds, streams, and swales for groundwater infiltration.	Near Term (2016)	In-House Resources	Planning Board	Community Development Department, Public Works Department	N/A
Resume annual monitoring of the town's surface and ground waters, following the protocol set up by the Environmental Baseline Study Committee in 2001.	Near Term (2016)	\$50,000 - \$100,000 (Annual)	Environmental Baseline Study Committee	Community Development Department	General Fund
Locate open space required in a form-based code to complement green elements depicted on the Green Print Initiative Map.	Near Term (2016)	See Budget Allowance for Form-Based Code	Conservation Commission	Conservation Commission, Open Space Task Force, Community Development Department	N/A
Launch an education campaign and outreach program to let residents know about the benefits of vegetated areas for protecting surface waters.	Near Term (2016)	\$5,000 - \$15,000 (Annual)	Community Development Department	Open Space Task Force, Community Development Department	N/A
Continue resistance to widening entire street segments in the study area; focusing instead on maintaining the grid street system to diffuse traffic, a complete streets policy to encourage other modes of travel, and building more walkable, mixed-use activity centers that capture trips before they reach the major street network.	Concurrent Action (2013)	N/A	Planning Board	Planning Board, Traffic Safety Committee, Community Development Department, Public Works Department	N/A
Make the town a more walkable community, focused on a hierarchy of new mixed-use, walkable activity centers and a complete street system that supports multi-modal travel behavior.	Concurrent Action (2013)	N/A	Planning Board	Community Development Department	N/A
Lead a town-wide initiative to encourage 'active living' in the study area, including plans and policies that promote more walkable development and programs that increase the frequency and level of daily physical activity for students, families, employees, and seniors.	Near Term (2016)	In-House Resources	Community Development Department	Open Space Task Force, Elder Affairs, Londonderry Recreation Committee	N/A
Participate in the Derry-Londonderry Chamber of Commerce, the Greater Manchester Chamber of Commerce, Metro Center, and other legislative or business organizations that promote economic development initiatives in Londonderry.	Concurrent Action (2013)	\$5,000 - \$15,000 (Annual)	Community Development Department	Town Manager, Economic Development Task Force	General Fund
Create a business liaison position within Town government responsible for helping new and existing businesses navigate the planning and approval process. Priority for this position should be on making it easier to open and run a business in Londonderry. Weekly office hours for drop-in questions and general education material to help businesses navigate the bureaucratic process should be maintained to support the initiative.	Concurrent Action (2013)	\$5,000 - \$15,000 (Annual)	Town Manager	Community Development Department	General Fund
Form an action committee to work with state and regional leaders on new incentives, legislation, education opportunities, or town initiatives that will attract (and grow) businesses and industries to Londonderry. Key partners for the action committee will include the New Hampshire Department of Resources & Economic Development, Regional Economic Development Center of New Hampshire, and Southern New Hampshire Planning Commission, among others.	Concurrent Action (2013)	In-House Resources	Town Manager	Economic Development Task Force, Community Development Department	N/A
Town officials should support 'buy local' and 'support small business' campaigns in the study area, building a reputation for a community that values and partners with local businesses.	Concurrent Action (2013)	In-House Resources	Economic Development Task Force	Community Development Department	N/A
Become the hub of sustainable development in Southern New Hampshire, promoting green town principles and technologies that will attract niche industries to the area.	Near Term (2016)	In-House Resources	Economic Development Task Force	Planning Board, Community Development Department	N/A
Coordinate with local water and sewer utility providers to ensure adequate capacity is reserved for the magnitude and timing of future growth anticipated in the comprehensive master plan.	Concurrent Action (2013)	In-House Resources	Public Works Department	Derry Water Works Department, Manchester Water Works Department, Penichuck Water Service Company	N/A
Coordinate with the Londonderry School District on the timing and location of new development influenced by the comprehensive master plan and zoning ordinance, and strengthen their ties to the District's strategic plan and capital investment plan.	Concurrent Action (2013)	In-House Resources	Town Council	Londonderry School District, Community Development Department	N/A

ACTION	TIMEFRAME (COMPLETION DATE)	BUDGET ALLOWANCE	LEAD PARTY	OTHER PARTNERS	FUNDING SOURCE
SPECIFIC CAPITAL PROJECTS					
Build or improve pedestrian facilities identified in the recommended pedestrian facilities map.	Concurrent Action (2013)	\$50,000 - \$100,000 (Annual)	Londonderry Trailways	Open Space Task Force, Community Development Department, Public Works Department	General Fund, New Hampshire DOT
Build or improve bicycle facilities identified in the recommended bicycle facilities map; including bicycle routes on local streets and off-street, shared-use trails. Way-finding signage and pavement markings should be used throughout the proposed system to clearly designate bicycle routes and reinforce the presence of bicyclists in the travel realm.	Concurrent Action (2013)	\$50,000 - \$100,000 (Annual)	Londonderry Trailways	Open Space Task Force, Community Development Department, Public Works Department	General Fund, New Hampshire DOT
Install a new emergency traffic signal at Fire Station One on Grenier Field Road.	Near Term (2016)	\$125,000 - \$200,000	Public Works Department	Southern New Hampshire RPC, Public Works Department	General Fund, New Hampshire DOT
Improve the intersection of Pillsbury Road and Gilcreast Road. In the short-term, reconfigure the off-set intersection for stop control with signs placed to stop traffic on Gilcreast Road (southbound at both locations) and Pillsbury Road (eastbound and westbound).	Long-Term (2020)	\$10,000 - \$15,000	Public Works Department	New Hampshire DOT, Southern New Hampshire RPC	General Fund, Development Impact Fees
Improve the intersection of Pillsbury Road and Gilcreast Road. In the long-term, construct two single-lane roundabouts that work together to ease congestion in the area. The southern roundabout should include a right-turn bypass lane from Gilcreast Road (northbound) to Pillsbury Road (eastbound).	Long-Term (2020)	\$500,000 - \$700,000	Public Works Department	New Hampshire DOT, Southern New Hampshire RPC	General Fund, Development Impact Fees
Improve the intersection of Sanborn Road and Rockingham Road. Reconfigure the intersection for a turbine treatment (i.e., a modified roundabout design).	Long-Term (2020)	\$250,000 - \$500,000	New Hampshire DOT	Southern New Hampshire RPC, Public Works Department	New Hampshire DOT
Improve the intersection of Grenier Field Road and Mammoth Road. Add eastbound right and westbound left turn lanes at the signalized intersection on Grenier Field Road to improve intersection performance.	Long-Term (2020)	\$75,000 - \$100,000	New Hampshire DOT	Southern New Hampshire RPC, Public Works Department	New Hampshire DOT
Improve the intersection of Harvey Road and Grenier Field Road. Construct a double-lane roundabout at the Webster Road and Grenier Field intersection, and convert Harvey Road to two-way traffic between Webster Road and Grenier Field Road. Webster Road should be widened to four lanes between Harvey and Grenier Field Roads to support proposed turning movements.	Long-Term (2020)	\$2.0 - \$3.0M	New Hampshire DOT	Southern New Hampshire RPC, Public Works Department	New Hampshire DOT
Expand the Town's sewer collection and interceptor system to keep pace with growth, with priority given to serving new and emerging activity centers.	Near Term (2016)	Total estimated project cost: \$3M to \$20M	Public Works Department	Manchester Wastewater Department, Derry Wastewater Department	Program Revenues
Invest in local police service to keep pace with growth. New police sub-stations, equipment and personal should be focused where development is most concentrated.	Long-Term (2018)	\$10,000 - \$20,000 (Annual, Demand-Driven)	Town Council	Police Department	General Fund, Program Revenues
Invest in fire protection and emergency medical services to keep pace with growth. New fire stations, equipment, or personnel should be focused where development is most concentrated.	Long-Term (2018)	\$10,000 - \$20,000 (Annual, Demand-Driven)	Town Council	Fire Department	General Fund, Program Revenues
Coordinate with local utility providers to identify opportunities to bury existing utility lines, and require buried utilities in new development (especially new activity centers) to minimize the risk of outages in the community.	Long-Term (2018)	\$100,000 - \$300,000 (Annual Town Contribution)	Planning Board	Community Development Department,	General Fund, Program Revenues, Utility Service Provider

ACTION	TIMEFRAME (COMPLETION DATE)	BUDGET ALLOWANCE	LEAD PARTY	OTHER PARTNERS	FUNDING SOURCE
FOCUS AREA RECOMMENDATIONS					
PETTINGILL ROAD INDUSTRIAL VILLAGE					
Include new rules and standards in a form-based code for minimum lot size, list of permitted uses, site design standards, and building design elements to be consistent with a strategy developed for recruiting target industries to the village.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Include new rules and standards in a form-based code to implement village-wide design guidelines for all lots and buildings.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Planning Board, Economic Development Task Force, Community Development Department	N/A
Include typical street section requirements in a form-based code to promote more walkable streets in the industrial village; emphasizing key principles from a new complete street design policy recommended for the town.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department, Public Works Department	N/A
Expand the type of uses allowed in a form-based code for this area to support services recommended for the industrial village; extending activities in the village area beyond normal work hours.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Include new rules and standards in a form-based code to allow recreation facilities as a permitted use.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Conservation Commission, Open Space Task Force, Community Development Department	N/A
Continue fundraising campaign to build the rail-trail, beginning work soon on a preliminary engineering study. Explore opportunities to partner with the development community to expedite construction of the segment proposed through the industrial village.	Near Term (2016)	Total estimated project cost: \$1.5M - \$2.0M (outside funding sources are being sought)	Londonderry Trailways	Community Development Department, Public Works Department	General Fund, Grant Opportunities, Donations
Include new rules and standards in a form-based code that increase minimum green space requirements and allow agriculture as a permitted use.	Near Term (2016)	See Budget Allowance for Form-Based Code	Community Development Department	Conservation Commission, Open Space Task Force, Community Development Department	N/A
TOWN CENTER RECREATIONAL VILLAGE					
Update the Auditorium Study Committee report completed in 2006 to reaffirm if the conclusions and recommendations are still valid for 2012.	Concurrent Action (2013)	In-House Resources	Town Manager	Auditorium Study Committee (Reconvened)	N/A
Evaluate the feasibility of building a field house and community pool at this location; start the process to secure funding for these improvements.	Near Term (2016)	\$100,000 - \$200,000	Recreation Department	Londonderry Recreation Committee	General Fund
Evaluate the feasibility for reorganizing the ball fields in this location and start the process to secure funding for these improvements.	Near Term (2016)	\$100,000 - \$200,000	Recreation Department	Londonderry Recreation Committee	General Fund
Include provisions in a form-based code to allow the type and scale of neighborhood development recommended in this location.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Include new rules and standards in a form-based code to allow assisted living facility and nursing home as permitted uses.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Sponsor and administer a community garden program for town residents, with fee-simple purchase or lease agreements for agriculture uses, loan garden tools or donate seed and supplies, and connect growers with a local farmers market.	Near Term (2016)	\$5,000 - \$15,000	Town Manager	Londonderry Recreation Committee, Recreation Department, Community Development Department	General Fund

ACTION	TIMEFRAME (COMPLETION DATE)	BUDGET ALLOWANCE	LEAD PARTY	OTHER PARTNERS	FUNDING SOURCE
FOCUS AREA RECOMMENDATIONS					
TOWN CENTER COMMON					
Support provisions in a form-based code to allow the unique design proposed for the church site.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Complete a formal study of the town commons area to refine recommendations for making it a formal destination in the community, and develop zoning regulations to ensure proper execution of the vision.	Near Term (2016)	\$35,000 - \$60,000	Town Council	Community Development Department	General Fund
Evaluate the feasibility of a skating pond in the town forest, and start pre-planning for extension of trails leading to the pond.	Near Term (2016)	In-House Resources	Recreation Department	Londonderry Recreation Committee, Londonderry Trailways	N/A
Determine whether this area should become permanent open space, and secure funding for its purchase if deemed appropriate. Alternatively, develop provisions in a form-based code to allow this type and scale of neighborhood development contemplated in this location.	Near Term (2016)	See Budget Allowance for Form-Based Code	Londonderry Conservation Commission	Community Development Department	N/A
Move forward with funding recommended improvements for the new town commons area proposed in the comprehensive master plan.	Long-Term (2020)	\$250,000 - \$450,000	Town Council	Community Development Department	General Fund
Work with the New Hampshire Department of Transportation to implement improvements for Mammoth Road that emphasize complete street design principals; program funding for these improvements as a catalyst for redevelopment in the town commons.	Long-Term (2020)	\$150,000 - \$250,000	Town Council	Public Works Department	New Hampshire DOT
NORTH VILLAGE ARTISAN DISTRICT					
Use provisions in a form-based code to allow expansion of the street network in a grid format.	Near Term (2016)	See Budget Allowance for Form-Based Code	Community Development Department	Public Works Department	N/A
Include provisions in a form-based code to allow retrofit of existing mill buildings for mixed use development.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Heritage/Historic District Commission, Community Development Department	N/A
Continue fundraising campaign to build the rail-trail, beginning work soon on a preliminary engineering study.	Near Term (2016)	\$35,000 - \$85,000	Londonderry Trailways	Community Development Department, Public Works Department	General Fund, Grant Opportunities, Donations
Coordinate with the New Hampshire Department of Transportation to program recommended improvements at the intersection of Rockingham Road and Sanborn Road.	Long-Term (2020)	\$150,000 - \$250,000	Public Works Department	New Hampshire DOT	New Hampshire DOT
Program improvements to North Londonderry Elementary School in the School District's Capital Improvements Program.	Long-Term (2020)	N/A	Londonderry School District	Town Council, Community Development Department	N/A
SOUTH VILLAGE SUBURBAN RETROFIT					
Include new rules and standards in a form-based code to reduce minimum front yard setback requirements along the Nashua Road Corridor.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Include new rules and standards in a form-based code to allow urban character development.	Near Term (2016)	See Budget Allowance for Form-Based Code	Planning Board	Community Development Department	N/A
Promote redevelopment of the existing apartment complex through policy incentives. Reach out to the property owner to gauge interest for moving forward with the redevelopment project.	Near Term (2016)	In-House Resources	Planning Board	Community Development Department, Private Developer	N/A
Undertake a corridor study for Route 102 to make the street more walkable and ready for future fixed-route bus service.	Near Term (2016)	\$50,000 - \$100,000	Planning Board	Community Development Department, Public Works Department	N/A
Make improvements to the town park on Route 102 to activate this quadrant of the activity center.	Long-Term (2020)	\$100,000 - \$300,000	Recreation Department	Recreation Committee, Community Development Department	General Fund

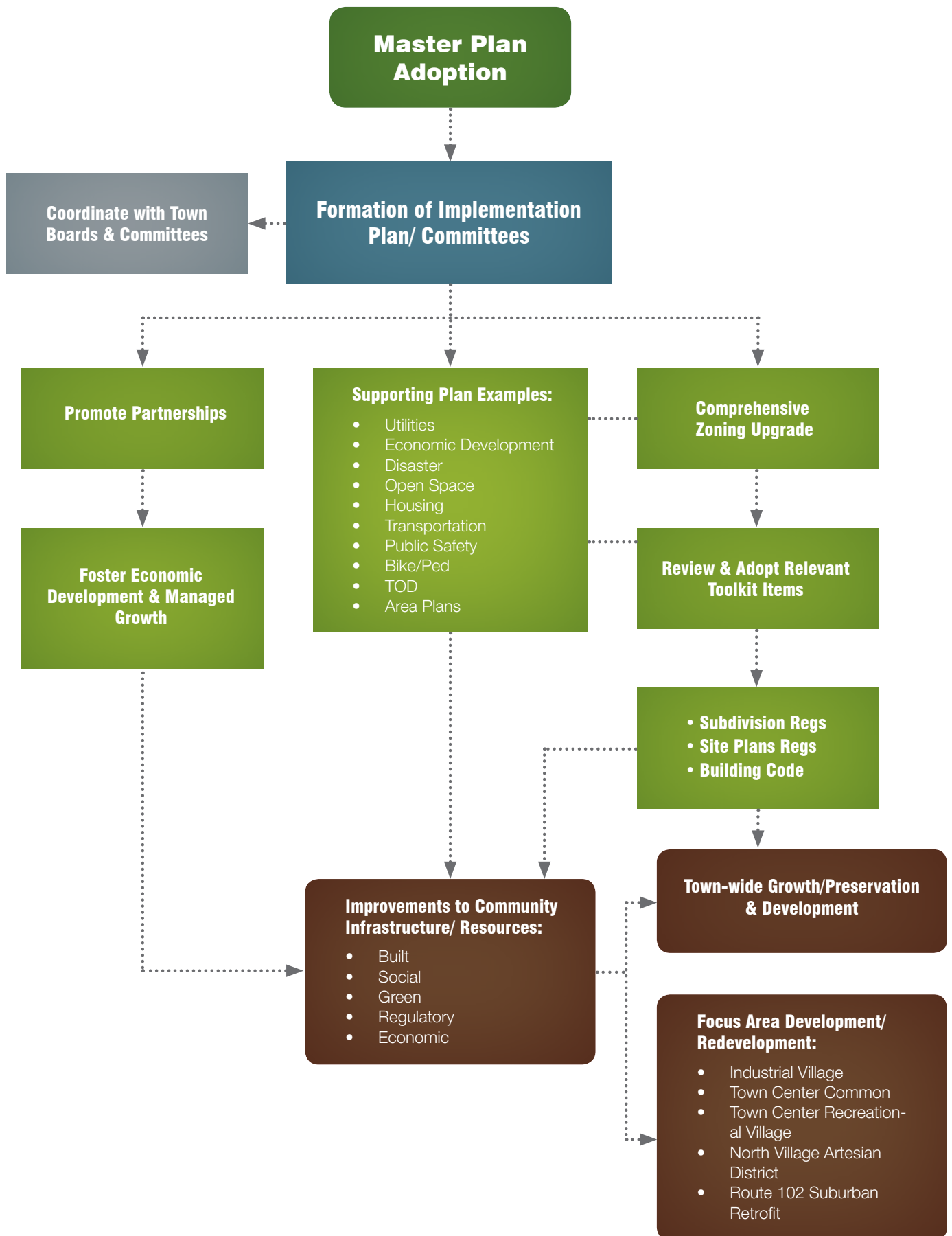
ACTION	TIMEFRAME (COMPLETION DATE)	BUDGET ALLOWANCE	LEAD PARTY	OTHER PARTNERS	FUNDING SOURCE
SPECIFIC PLANS & STUDIES					
Study the feasibility of implementing a transfer of development rights program to protect scenic view sheds and natural areas in town.	Near Term (2016)	In-House Resources	Town Council	Community Development Department	N/A
Update the 1990 Water Resources Management Plan to evaluate the potential for a town-wide stormwater management strategy and identify next steps for moving forward.	Near Term (2016)	\$50,000 - \$150,000	Town Council	Community Development Department, Public Works Department	General Fund
Work with the New Hampshire Department of Transportation and Southern New Hampshire Regional Planning Commission to include the extension of Pettengill Road, between Industrial Drive and Raymond Wieczorek Drive, in their adopted plans and work programs.	Concurrent Action (2013)	In-House Resources	Town Council	New Hampshire DOT, Southern New Hampshire RPC	N/A
Develop a comprehensive bicycle and pedestrian plan to facilitate the implementation of a safe and accessible system of trails in accordance with the recommendations of the master plan. The Town should work with Londonderry Trailways to look for alternative funding sources as matching contributions to state or federal grants.	Near Term (2016)	\$35,000 - \$65,000	Town Council, Londonderry Trailways	Open Space Task Force, Community Development Department, Public Works Department	General Fund
Complete a transit circulator feasibility study to confirm when demand for such a service would be high, and establish appropriate service parameters and cost estimates for implementing the preferred system.	Long-Term (2020)	\$20,000 - \$35,000	Community Development Department	Cooperative Alliance for Regional Transportation	General Fund
Stay committed to the www.thriveinlondonderry.com website as a one-stop resource for advertising sites, statistics, and quality-of-life in Londonderry important to recruiting new businesses or industries to the area.	Concurrent Action (2013)	In-House Resources	Community Development Department	Economic Development Task Force	N/A
Update the 2008 Community Economic Development Plan to reflect key economic drivers in the new economy (i.e., post 2008 Recession) and the development types, patterns, and intensities recommended in the comprehensive master plan. Key topics for the plan update should include: regional cooperative partnerships, growing existing business, education and training opportunities, and maximizing community assets for economic development.	Near Term (2016)	\$50,000 - \$80,000	Community Development Department	Town Manager, Economic Development Task Force	General Fund
Review the Londonderry Hazard Mitigation Plan on an annual basis and update the document every three to five years.	Near Term (2016)	\$15,000 - \$25,000	Community Development Department	Town Council	General Fund
Update the Londonderry Wastewater Facilities Plan based on the development types, patterns, and intensities recommended in the comprehensive master plan.	Near Term (2016)	\$85,000 - \$125,000	Public Works Department	Manchester Wastewater Department, Derry Wastewater Department	Program Revenues

Master Plan Implementation

This flowchart illustrates the path for Plan implementation. The Implementation Team should coordinate with Town Boards and Committees to identify priority tasks and the partnerships, studies, or mechanisms required to carry them out. The comprehensive zoning upgrade is informed by studies or supporting plans, and may incorporate toolkit items into new ordinances and subdivision/site plan regulations.



TURNING VISION INTO REALITY





Get it Right,
Londonderry!

