

VISION

CHAPTER 1.1

The Charlotte Town Plan expresses our vision for the future of Charlotte. In its vision for the future, the Charlotte Town Plan builds on the town's most valuable characteristics – its rural landscape, healthy environment, increasingly diverse population, small-town character, history, and a long tradition of active participation by citizen volunteers in local government and community activities.

Charlotte shall continue to be a town that honors its agricultural heritage, adapts to present-day forces and factors, and provides for citizens to live in a traditional rural Vermont setting of village areas surrounded by countryside homes that are compatible with healthy natural areas and working landscapes. We will strive to provide a safe, clean and beautiful environment. We also develop policies and standards that protect our natural and cultural features while encouraging entrepreneurial and traditional economic activities compatible with our values.

Goals

- To balance property owner rights to reasonably use their land in keeping with overall public health, safety, welfare and the goals of this Town Plan;
- To reinforce historic settlement patterns by focusing growth in our villages and hamlets and by further developing our town center;
- To maintain and enhance the integrity and continued viability of natural and cultural features with high public value, including prime and statewide agricultural soils; steep slopes; surface and groundwater resources; shoreland buffers; wildlife habitats and other ecologically important natural areas; scenic views and vistas; historic districts, sites and structures; land in active agriculture; and conserved land;
- To recognize and preserve the Town's natural and cultural resources through both regulatory and non-regulatory actions;
- To promote social, economic, cultural and racial diversity and sense of community through actions that encourage moderately priced and affordable housing, a sustainable agricultural economy, social, educational and commercial services, and environmentally-sound rural and small business enterprises;
- To promote access and appropriate use for open land and recreational resources;
- To plan for and prioritize capital improvements consistent with the fiscal ability of the Town;
- To promote community interaction, volunteerism and spirit.

FUTURE LAND USE

CHAPTER 1.2

Charlotters value their connection to nature and rural quality of life including an active, outdoor lifestyle. Charlotters value their town as a highly scenic rural community that seeks to provide community services at a scale that complements their small rural community. Similarly, smaller scale farm and forest enterprises, home occupations, commercial and industrial enterprises are also valued and encouraged. Charlotte continues to promote its agrarian heritage with its abundance of excellent productive soils and proximity to the Burlington, NYC, and Boston markets. Charlotte continues to support efforts towards the realization of more active village centers and is in the midst of transition as the discussion regarding community water supply and wastewater disposal in these areas continues. Like much of the region, it is hampered by a dwindling school population higher taxes and by land values that make it more difficult to provide affordable and moderately priced housing. In this Town Plan, we seek to address these key issues through regulatory and non-regulatory means.

This Chapter lays out the policies and strategies which the Town will use to review and guide development proposals in all of Charlotte's land use districts while also informing land use discussions and voluntary implementation activities in the next 8 years.

Key Planning Considerations:

Land Use can be defined as the framework for integrating the uses and values mentioned in this plan. As such, the key planning considerations specific to land use can be considered as a summary of the key planning considerations described within each of the previous sections and therefore, they will not be repeated here.

Land Use Policies:

1. We will support small rural community with excellent and affordable educational opportunities for our younger generations, and strengthen our strategies to address our changing demographics and moderate our tax burden. With an aging population, we will work to attract younger families.
2. We will plan for healthy communities by working to monitor, maintain and enhance the health of our community by encouraging land use activities that are informed by all sections in this plan.
3. We will identify and preserve the important features of Charlotte that are treasured by residents including the working landscape, natural resources, scenic views and gravel roads, public access to Lake Champlain, historic and cultural resources and small town character.
4. We will build community pride and cohesion through continued emphasis on volunteer participation in planning and public services, through competent and respectful governance, and through designing and maintaining attractive, environmentally sound and efficient public facilities.

5. We will preserve the best of the past, embrace the new opportunities and meet the challenges of the present and future, such as the new food economy, technological advances and climate change, with investments and regulations that provide livability, flexibility and encourage creativity and entrepreneurship.

Land Use Strategies:

1. The Town will develop a framework for moving forward with the work completed by the Charlotte Wastewater Committee.
2. The outcomes of the East Charlotte Village Planning Project will be considered by the Planning Commission when proposing future land use regulations.
3. The Town will consider the adoption of an Official Map for village areas which enables the reservation of lands for drainage, streets, parks, schools and other public facilities. To foster the creation of “complete streets” (multi use) within the village areas, the Town should require the layout of infrastructure including roads to be in accordance with an Official Map.
4. The Town should consider establishing design guidelines for the existing village areas, which will be advisory only. The design guidelines could apply to site and building design and guide new development to protect the rural, historic character of the village areas.
5. The Town will reevaluate the adequacy of the commercial / light industrial district to incubate and attract entrepreneurial enterprises that will provide high quality local employment.
6. The Town will encourage through its regulations and policies the development of a more economically active town center with business services to fulfill local needs and moderately priced housing.
7. During development review, Areas of High Public Value will be identified and prioritized based on the qualities and relative values of each resource. This analysis will be site specific but will also consider resources in the broader context as appropriate. Land development projects will be designed to complement existing land uses.
8. The Town will continue to promote the use of non-contiguous PRDs and PUDs as a means to transfer density to areas deemed appropriate for development.
9. The Town will evaluate the need for more specific zoning districts or overlay districts within the currently defined rural area. These may include but not be limited to areas intended to protect the long-term viability of productive farmland in Charlotte; areas appropriate for low density, clustered residential development; and areas with significant, limited or irreplaceable natural or scenic resources.

10. The Town will complete an Open Space and Conservation Action Plan to aid in the identification of parcels or portions of parcels for nature based economies, resource protection and stewardship.
11. The Town will develop a program to work with public and private organizations to insure the protection of resources identified in the Open Space and Conservation Action Plan.

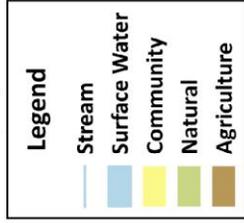
MAP: change title to future settlement plan, add settlement areas to legend, add transportation and north rte 7 underpass and south rte 7 underpass, include future density range in yellow settlement areas. Move narrative to another page.

Areas circled with dashed lines need definition. Deleting all of the bullets – legend needs to be expanded to define the map and explain where it came from. Add something to the effect that this is the basis of future land use/zoning maps.

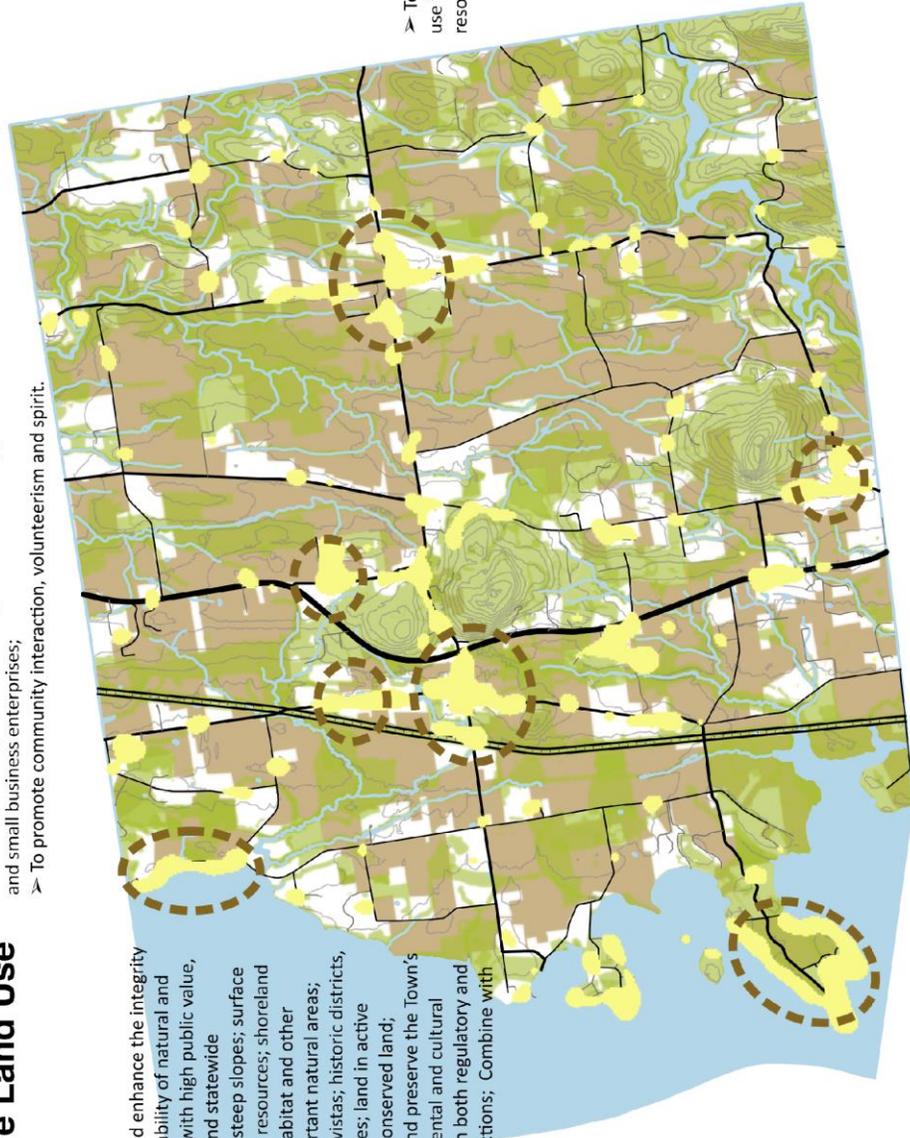
Future Land Use

- To maintain and enhance the integrity and continued viability of natural and cultural features with high public value, including prime and statewide agricultural soils; steep slopes; surface and groundwater resources; shoreland buffers; wildlife habitat and other ecologically important natural areas; scenic views and vistas; historic districts, sites and structures; land in active agriculture; and conserved land.
- To recognize and preserve the Town's unique environmental and cultural resources through both regulatory and non-regulatory actions. Combine with above?

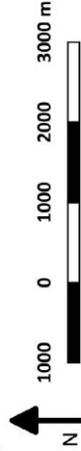
- To balance property owners' rights to reasonably use their land with overall public health, safety, welfare and the goals of this Town Plan;
- To promote social, economic, cultural and racial diversity and sense of community through actions that encourage moderately priced and affordable housing, enhance the agricultural economy, provide essential commercial services, and enable environmentally responsible rural and small business enterprises;
- To promote community interaction, volunteerism and spirit.



- To promote access and appropriate use for open land and recreational resources



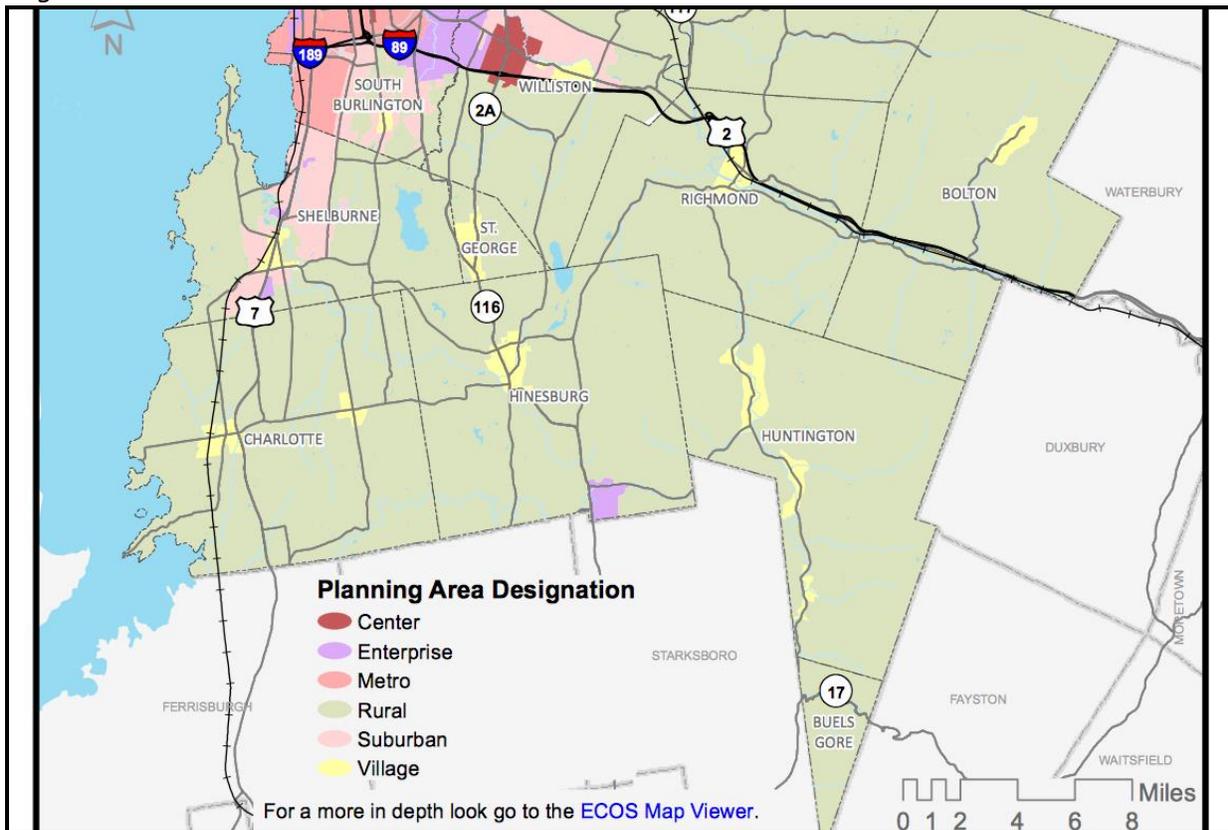
- To reinforce historic settlement patterns by focusing growth in our villages and further developing our town center;
- To plan for and prioritize capital improvements consistent with the fiscal ability of the Town.



Map Created by J. McCrumb, June 2016.
Map is to be used for planning purposes only.

REGIONAL CONTEXT**CHAPTER 1.3****Regional Plans**

The 2013 Chittenden County Regional Plan - ECOS Regional Plan – identified two types of planning areas (broad land uses) in Charlotte: Village and Rural. An Enterprise Area and Suburban Area are identified in Shelburne on Charlotte’s northern border and lands in Hinesburg that are adjacent to Charlotte are identified as Rural. The ECOS Plan uses the Planning Areas concept to identify places that share similar existing features and future planning goals. Following are the descriptions for the Rural and Village Areas from the ECOS Regional Plan:

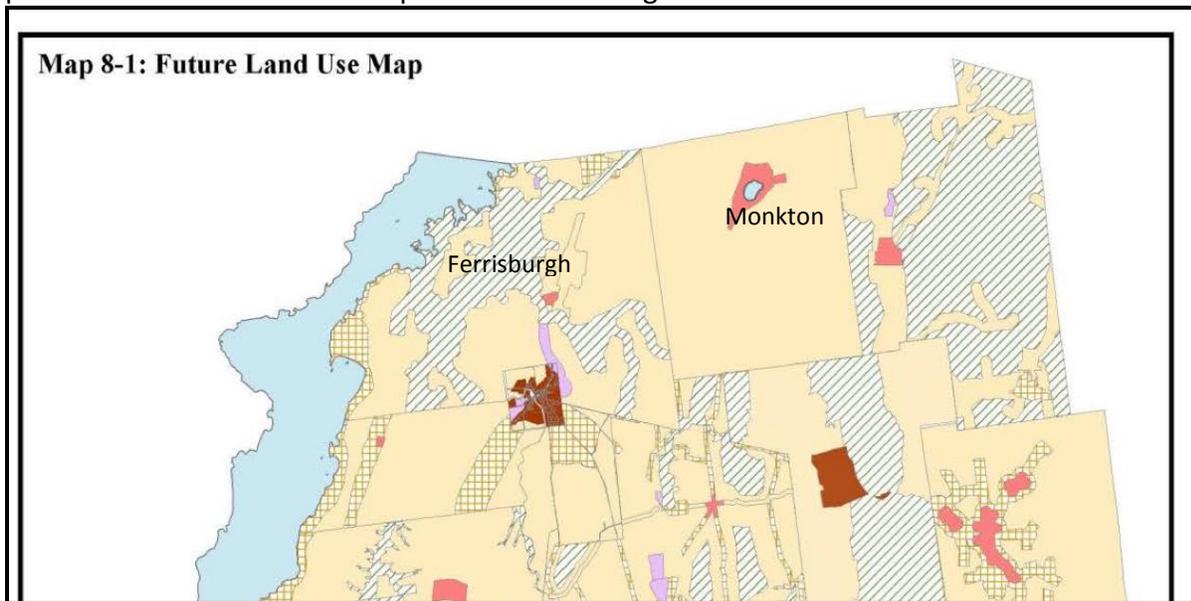


Village Planning Areas are areas where local zoning authorizes a variety of future residential and nonresidential development at densities and scales in keeping with the character of a Vermont village, generally between 2 and 9 dwelling units per acre if sewered and between 0.2 and 4 units per acre if not sewered. Village Planning Areas are compact areas of mixed-use activities that maintain the character of a Vermont village. This type of Planning Area is intended to serve its local surroundings as a place where people can live, work, shop and recreate.

Rural Planning Areas are areas where regional and town plans promote the preservation of Vermont’s traditional working landscape and natural area features. The Rural Planning Area also provides for low-density commercial, industrial, and residential development (generally 1

dwelling unit per acre or less) that is compatible with working lands and natural areas so that these places may continue to highlight the rural character and self-sustaining natural area systems. Development in the rural planning areas is typically outside the sewer service area.

The 2016 Addison County Regional Plan identified three broad categories of land uses in the town of Ferrisburgh immediately south of Charlotte: Forestland and Conservation Floodplain, Residential (lots less than 2 acres w/ mixed use), and Rural and Agriculture. Lands in Monkton that abut Charlotte were categorized as Rural and Agriculture. The Addison County Plan did not provide a more detailed description of these categories.



Neighboring Town Plans

Shelburne

Shelburne's Town Plan (2016) identifies a Planned Residential Growth Area 2 just north of the Charlotte border between the Vermont Railway and Route 7 (Wake Robin and Ridgefield Subdivision). The plan states that this area will be 'comprised of pleasant neighborhoods with a mixture of attached and detached dwellings.' Town sewer serves this area. The remaining areas adjacent to Charlotte are designated as Rural or Conservation on Shelburne's future land use map. Shelburne's policy is clear in discouraging development in the Rural areas in favor or encouraging in growth areas. The plan states that 'While some development is anticipated in the Rural Area, it should be limited, of low density, and should give very high priority to identifying and preventing undue adverse impacts to the area's scenic and natural features and resources.'

Hinesburg

The Hinesburg Town Plan (2013) describes the area bordering Charlotte as Rural Agricultural. Protection of natural resources and land conservation is envisioned in this area and Hinesburg and Charlotte currently work together on resource related projects.

Monkton

All abutting lands in Monkton are designated as Rural Residential in the Monkton Town Plan (2014). Per the plan, this region houses medium and low-density residential areas, and all of Monkton’s agricultural, forest and other open space land.

Ferrisburgh

Ferrisburgh’s Town Plan (draft 2016) identifies the following five planning areas along its border with Charlotte: Northern Business Area, North Ferrisburgh Historic Area, Conservation Area, Rural Area and Shoreland Area. The Northern Business Area is located along both sides of Route 7 and extends from the Charlotte border to Lewis Creek. The North Ferrisburgh Historic Area is as its name implies located in North Ferrisburgh and its boundaries are defined by the North Ferrisburgh Historic District. Conservation Areas protect Ferrisburgh’s surface waters and wetlands including areas along Lewis Creek and Kimball Brook. The Shoreland Planning Area includes the lands adjacent to the shores of Lake Champlain, running the entire length of Ferrisburgh’s most westerly boundary, and includes the lands of the Basin Harbor Club. The rural planning area covers the majority of land in Ferrisburgh. This planning area is characterized by woodlands, wetlands, open farmland and sparse residential development.

Proposed future land uses in Shelburne, Hinesburg, Monkton, and Ferrisburgh are generally consistent with those proposed in Charlotte. Future development should be designed to limit impacts to abutting rural properties including agricultural operations and conserved natural resource areas. Agricultural and resource protection and conservation efforts should continue to be coordinated across town boundaries.

Policies:

Strategies:

NATURAL RESOURCES**CHAPTER 1.4**

Charlotte's landscape is a mosaic of uplands and lowlands, forest communities, the lake and its shoreline, stream corridors and wetland areas. Interactions of climate, geology, topography, hydrology and land use have shaped its natural resources and provided the essential clean air, water, soil and quality habitat for diverse species of plants and animals, land-based economies, extraordinary scenic beauty and related tourism. The Town Plan acknowledges these resources as having high public value that provide the basis for Charlotte's agrarian economy, quality of life and rural character.

Key Planning Considerations:

1. Water quality – Soil erosion is a significant factor influencing water quality. When soil from tilled fields, construction sites, gravel roads or severely eroding streambanks reach a stream, it often results in negative effects on water quality and aquatic habitat. In 2015, the Legislature enacted *Act 64 - An act related to improving the quality of State waters*. This Act outlines an 'all in' approach and includes requirements pertaining to stormwater runoff from roads and existing development, agricultural practices, tactical basin planning and forestry.
2. Habitat Fragmentation - Fragmentation of habitat blocks and barriers to wildlife movement caused by housing, commercial development, roads and utility corridors can result in the direct loss or inaccessibility of important habitat which can render the forest and other habitats unsuitable for some species of plants and animals.
3. Invasive Species – Exotic, invasive species are introduced either accidentally or intentionally into an ecosystem where they do not naturally occur. They proliferate and can aggressively replace native species and even alter natural communities.
4. Climate Change – Changes in weather patterns impact Vermont's unique natural resources and quality of life. Warmer conditions and an overall increase in precipitation are expected to continue over the next 50 years. More frequent short-term droughts are also expected in the summer months resulting in reduced streamflows at that time. These warming temperatures and changing precipitation patterns affect snowpack and the timing and volume of streamflow.

Natural Resource Policies:

1. Surface water and river corridor planning will be promoted recognizing the importance of streams, rivers, lakeshores, wetlands and upland forests in fostering wildlife movement, improving water quality, stream stability and attenuating and moderating flood and fluvial erosion events.

2. Existing contiguous forest habitat will be maintained and conserved and the subdivision or parcelization of that habitat will be discouraged. In addition, the town will seek means to expand large patches of contiguous forests and to protect corridors linking these areas through regulation, conservation and outreach.
3. State significant natural communities and other large-scale natural communities within the region will be protected. The town will ensure that conserved lands encompass a diversity of habitats and landforms and will control and when possible eradicate invasive species on town lands to minimize ecological and economic impacts to our native species and habitats, working forests and agricultural fields.
4. This and future town plans will be reviewed and written within the framework of climate change adaptation. Our strategies are and will continue to be consistent with management actions recommended by the Agency of Natural Resources. The actions identified in the 2013 Climate Change Report include identifying and conserving natural areas that provide important ecosystem services (i.e. flood control, water filtration; carbon capture); capturing as much clean precipitation as is possible using low impact development; building streams crossing (bridges, culverts) to accommodate sediment transport and connectivity; promoting riparian stability and filtering functions through appropriately sized stream, river, lake and wetland buffers; and monitoring pests and invasive species.
5. Development projects will continue to be evaluated using a suitability analysis that incorporates Charlotte's Areas of High Public Value.

Natural Resources Strategies:

Water Quality

1. Protect lakes, ponds, rivers, streams and wetlands to maintain, and in some instances restore, their natural conditions. Fluvial erosion hazard areas and areas prone to inundation flooding will be examined to ensure that regulations adequately protect these areas.
2. Assess (field) and map seasonal streams and their associated watersheds to increase the overall understanding and oversight of the hydrologic systems in the Town.
3. Evaluate riparian buffer and setback standards in the land use regulations and revise as necessary to incorporate new and best available science in the protection of natural resources and Areas of High Public Value.
4. Partner with local organizations and state regulatory personnel in identifying and rectifying violations.

5. Adopt, and update every four years, the State approved 2013 "Vermont Town Road and Bridge Standards" and meet or exceed these codes and standards to help maintain safety and flood resiliency and to protect water quality and riparian corridors in close association with transportation corridors. Adopting these standards will enable the Town to be eligible for federally declared disaster State share benefits, and maximum match benefits for class two roadway and Town highway structure improvements.
6. Endorse Vermont Agency of Natural Resources (ANR) and Vermont Agency of Transportation (VTrans) Act 110 standards as recommended minimums, and consider adopting more specific flood resiliency and water quality standards related to transportation infrastructure oversight, planning and management.
7. Work with CCRPC and VTANR in completing a road inventory and road stormwater management plan as is required under Act 64.
8. Evaluate current land use regulations and other town standards and ordinances as relates to stormwater runoff and will consider drafting local stormwater regulations that incorporate low impact design and Green Stormwater Infrastructure (GSI) design principles for attenuating stormwater flows and diverting them from direct discharge into town right-of-way and eventually surface waters. Options should include, but not be limited to, the use of green infrastructure such as vegetated swales, infiltration trenches, raingardens, and constructed wetlands.

Fragmentation

9. Develop a procedure for updating resources when new data become available (e.g. through site assessments associated with development review).
 - a. Continue to update the Town Significant Habitat Map and associated database in accordance with the procedure and review overall map accuracy at least every 8 years.
 - b. The Conservation Commission and the Planning Commission will meet annually to review current trends.
10. Develop a Town Open Space/Conservation Action Plan that identifies priority areas for protection and conservation. The plan will include information on state and locally significant natural communities, areas of regionally significant contiguous forest and supporting habitats, riparian corridors, flood and erosion hazard areas, locally identified wildlife road crossings, locally significant natural areas, scenic views, and other features that have been identified as having high public value in Charlotte's Land Use Regulations.
11. Encourage the maintenance, restoration, protection, and long-term stewardship of habitats and natural communities that support rare, threatened and endangered species as

identified by the Wildlife Diversity Program and the Charlotte Significant Habitat map.

Invasive Species

12. Develop and recommend roadside mowing schedules to control the spread of invasive plant species. The Town will create no-mow zones to prevent the cutting of certain invasive plant populations, including Japanese Knotweed, as advised by the Conservation Commission.
13. Eliminate the use of plants identified as invasive in the State of Vermont for landscaping of Town-owned lands¹. Through education, encourage similar practices on private lands.
14. Create and execute invasive management plans for Town-owned lands and right-of-way (ROWs) employing a combination of paid and volunteer labor to control invasive plant populations.
15. Consider means for funding work (including invasive species control) that restores and maintains ecosystem services and significant natural areas.

Climate Change

16. Protect groundwater resources, including aquifer recharge areas by regulating land use and development to avoid aquifer contamination and aquifer depletion.
17. Identify wetlands that exemplify the most biologically diverse or characteristic native wetlands within town. Develop a procedure for providing information on site-specific delineations to the Agency of Natural Resources. Identify stressors (i.e. non-permitted uses, invasive species, altered hydrology) to wetland values and functions and develop a plan to mitigate these effects.
18. Map existing riparian forest cover throughout the town using GIS. Overlay these areas with fluvial erosion hazard and flood areas to identify priority areas for protection and conservation. Incorporate this information into the Open Space / Conservation Area Plan.
19. Review management practices on Town-owned lands and if necessary, establish management plans that protect the ecological functions of riparian areas associated with these lands.

General, Administrative, Education, Outreach, Funding

¹ The Nature Conservancy. "Invasive Plants in Vermont." 2015.
<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/vermont/volunteer/invasives-in-vermont.xml>.

20. Develop procedures for updating and maintaining Charlotte-based GIS layers. Identify other clearinghouses for resource related information and work to ensure that the best, available data are used in all resource related work involving mapping and analysis.
21. Work with local watershed associations, conservation commissions, and Natural Resource Conservation Districts to assist landowners in protecting and restoring riparian and upland forest habitats on their lands.
22. Continue allocating a percentage of the Town tax rate for the Conservation Fund to protect significant natural and agricultural resources. Explore potential use of conservation fund for other conservation protection projects including stewardship activities.
23. Work with neighboring towns to protect large, undeveloped habitat blocks that span town borders.
24. Support the Charlotte Conservation Commission's role in: maintaining and updating databases and maps of natural resource information relevant to Charlotte; advising the Planning Commission and Selectboard on natural resource issues and development reviews; and promoting public understanding of local natural resources and ecosystem functions.
25. Public and private stewardship work and sustainable use of natural resources will be promoted by supporting education, field work and outreach programs of the Conservation Commission, Recreation Committee, Lewis Creek Association, Charlotte Sustainable Living Network, Charlotte Central School, and other similarly qualified groups.
26. Research and support financial incentives and strategies that aid in the protection of Areas of High Public Value and will provide outreach on new and existing approaches such as Vermont's current use program, conservation easements, and purchase and lease options.

LAKE AND SHORELINE

CHAPTER 1.5

The Town of Charlotte has approximately 14 miles of shoreline² and seven islands in Lake Champlain. The natural communities along the lake include marshy wetlands, rock outcrops and promontories, stony and sandy beaches. Two named streams, Holmes Creek and Thorp Brook, intersect the shoreline and drain directly into Lake Champlain. These two streams are comprised of numerous tributaries which drain interior lands. Through the responsible management of areas in and along Lake Champlain, Charlotte will work to protect the aesthetic, recreational and natural systems into the future.

Key Planning Considerations:

1. The phosphorus Total Maximum Daily Load (TMDL) for Lake Champlain - The State of Vermont and the U.S. Environmental Protection Agency (EPA) have developed a new restoration plan for Lake Champlain and its tributaries. The Vermont Clean Water Act of 2015 (i.e. Act 64) and the Shoreland Protection Act of 2014 (i.e. Chapter 49A of Title 10 §1441 et seq.), include regulations aimed at improving the Lake's water quality.
2. Shoreline Aesthetics / Flood Damage/ Shoreline Stabilization – In addition to water quality benefits afforded by maintaining a forested buffer and limiting / restricting development in the shoreline area, damage from flooding can also be minimized.
3. Public Access – Currently, primary access points to Lake Champlain in Charlotte include the Town Beach off of Lake Road and the Converse Bay Fishing Access off of Converse Bay Road. There are also a few, smaller access points off of Thompson's Point; however, parking is limited and concerns related to leaseholder privacy have been raised.

Lake and Shoreline Policies:

1. The biological diversity and unique geological characteristics of the lake and shoreline will be protected through limiting and managing existing and proposed uses of the land and water.
2. Indirect discharges to surface waters, including those associated with agricultural practices and access management, will not be allowed to accelerate the degradation of lake water quality.
3. The Town will provide, protect and enhance opportunities for the public to enjoy the shoreline. This should be accomplished by consideration of the provision of public access by

² *Shoreline area is defined as area 250 feet from the mean high water mark.* - [The Vermont Shoreline Protection Act](#) (Summary), Vermont Department of Environmental Conservation (DEC). October, 2015.

acquisition through purchase, donation, or other agreement, or by requiring the provision of public physical or visual access from uplands to the water. Where public access is provided, the access should be designed and used in a manner consistent with the natural shoreline character, private property rights, and public safety.

4. Work in and around Class 2 wetlands, including those along the shorelines of Lake Champlain requires review and approval from the State of Vermont Agency of Natural Resources and the Army Corps of Engineers. The Town will partner with the State in identifying alleged violations and will petition for enforcement actions that will minimize impacts. The Town will also request restoration where applicable.
4. Cutting vegetation, dredging, draining, filling and other land development activities in the Shoreland and Shoreland Seasonal Home Management Districts will be limited in order to protect the scenic beauty and environmental qualities of the lake and shoreline. There will be no additional dwelling units permitted in the Shoreland Seasonal Home Management District. Other man-made structures will be evaluated in the context of total lot coverage and the addition of such structures shall not reduce scenic beauty or increase surface water runoff to the Lake. Charlotte shall continue to evaluate and manage town implemented shoreline protection management practices that may exceed the requirements of the State.

Lake and Shoreline Strategies:

1. Zoning regulations will continue to emphasize preserving natural land cover along the shore to protect the natural systems for their environmental, recreational and scenic values.
2. Advisory design standards will be established to encourage man-made structures to blend into the natural landscape, including buildings and facilities within the Shoreland District whether visible from land or the Lake. Existing design standards for the Shoreland Seasonal Home Management District will be evaluated and revised as necessary, to blend into the natural landscape as well as the cultural and historic landscape of Thompson's Point.
3. Shoreline stabilization methods which can be vegetated and/or blend in with the natural surroundings in areas of erosion will be required.
4. A subcommittee comprised of members of the Planning Commission, Conservation Commission and Recreation Commission will inventory existing public access areas and the shoreline. The inventory will include information on existing site conditions. The subcommittee will complete an access management plan that will outline recommended improvements to allow for fair and responsible access to the Lake and maintain the overall integrity of the shoreline vegetation. A timeline for the completion of these improvements will be included in the management plan and the plan will be updated at least every five years.

5. The ferry docking facilities at McNeil Cove will be maintained and protected from private boat traffic and facilities.
6. The Town should explore stabilizing the old rock foundations of the Old Dock to save the dock from further deterioration.
7. The Selectboard will monitor the possible future need to establish Mooring Management Areas for the Lake Champlain shoreline. If the Town determines that it is necessary to control these mooring areas, the Town will apply to the Natural Resources Board to delegate authority to the Town to manage these areas through a mooring management ordinance in accordance with 24 V.S.A. Chapter 59.
8. Stormwater management “best practices” should be applied to all development, regardless of whether a state stormwater permit is required. Low impact development (LID) methods of stormwater management should be considered during all development reviews, and required where site circumstances warrant.
9. Land use regulations will be reviewed and updated as necessary to be compliant with statutory requirements. Charlotte will also encourage the use of best management practices for preexisting development as a means to prevent degradation of water quality and to preserve habitat and the natural stability of shorelines.

AGRICULTURE & FORESTRY**CHAPTER 1.6**

Agriculture has been a significant part of the landscape, rural character, and economy of the Town of Charlotte since the Town's early settlement. Loss of forestlands, farms and farmers would dramatically change the Town's rural character, which is strongly valued by current Charlotte residents. The preservation of working farms and natural areas is a clear, longstanding community priority, as is access to healthy, locally produced food.

Key Planning Considerations

1. Charlotte has an abundance of fertile soils well suited to agriculture and forestry. Of the Town's total land area (26,520 acres), 12.4% is classified by the Natural Resource Conservation Service (NRCS) as "Prime Farmland" (having the ideal availability and combination of physical and chemical characteristics for producing food, feed fiber, forage, and oilseed crops)³. Another category of soil known as "Additional Farmland of Statewide Importance" (with similar, but limited characteristics)⁴ determined by the State of Vermont constitutes an additional 56.1% of Charlotte land area. In tandem, the two categories total some 68.5% of the Town.⁵
2. The amount of land in active agricultural production has been observed to have decreased over the years, due to the conversion of farmland to residential subdivisions.
3. For the past 70 years, commodity dairy farming has been the primary form of agriculture in Charlotte. The number of dairy farms has continued to decline, however, from 16 in 1995 to 6 in 2016, due to low milk prices, high production costs, capital and labor shortages and other industry trends. Small to medium dairy farms have consolidated into larger, more efficient, confined feeding operations, shifted into crop or hay production, converted to estate farms, horse farms or ceased production altogether.
4. Charlotte's agricultural base is diversifying into production of a variety of products for the local and regional wholesale and retail markets. The 2007 USDA Census of Agriculture identified 71 farming operations within the Charlotte zip code area.⁶ Of these, more than half (56%) were less than 50 acres in size. This previous Census Agriculture which also collected data by zip code in 1997 reported 58 farming operations (of which about 41% were less than 50 acres). The Town's smaller farms produce sheep, beef, pork and poultry products, organic grains, vegetables, berries and flowers, nursery stock and orchard and vineyard products. Horse boarding, breeding and training facilities are important

³ [Code of Federal Regulations 7CFR657](#), U.S. Government Publishing Office.

⁴ [Vermont Soil Fact Sheet- Detailed Definitions & Explanations](#), Vermont Important Farmland Classification, USDA Natural Resources Conservation Service (NRCS).

⁵ Calculated from the NRCS County Soil Survey Data.

⁶ The census definition of a farm is: *any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year* ([USDA, Census of Agriculture](#)).

agricultural services that rely on pasture and hayfields. The viability of these smaller enterprises is enhanced by their proximity to the larger Chittenden County market.

5. New business models, including on-farm and farm-related businesses are critical to the economic viability of Charlotte farms. Local agricultural cooperatives, community supported agriculture (CSAs), direct and online marketing operations, value-added production (e.g., specialty foods and commercial composting), farm equipment sales, supply and support services, farm cafes, and “rural or agricultural enterprises”⁷ can benefit farms and keep them economically viable.
6. Historically, local farmers, through high local taxes, partially subsidized the rural character and open land enjoyed by all Charlotte residents. Farmers have indicated that without the state’s tax abatement (use value appraisal or current use) program, they could no longer afford to farm. High land values also affect the ability of new and existing farmers to access land, and / or to transfer farms from one generation to the next.
7. Charlotte residents currently have access to locally grown food through on-farm sales and local CSAs. There are no farmers’ markets or general grocery stores in town. The nearest full service grocery stores are located in Shelburne and Hinesburg. Both of these communities also support local farmers’ markets.
8. Forested lands are important for wood and non-wood forest products, aquifer recharge, wildlife habitat, erosion control, stream buffer zones, nature study and aesthetics.
9. Compared to many towns in Vermont, Charlotte has few productive woodlands remaining, and the Town values those few that exist. Conversion to agricultural use is the primary reason for limited woodlands.
10. Forest products such as maple sap, mushrooms, fiddleheads, nuts, and Christmas greens, are harvested from Charlotte’s forested land. Only firewood, maple syrup and Christmas trees have important commercial value, but many residents gather the other products for their own use. Many economically unproductive wooded areas are also extremely valuable for wildlife habitat including forest habitat, aquatic habitat (riparian and wetland protection), shrubland habitat or other linkage habitat and for prevention of soil erosion.

Forestry and Agriculture Policies

1. Agriculture is and shall remain one of the primary land use activities in Charlotte.
2. Economic activities must not be in conflict with the existing agricultural and rural character of the town.

⁷ NOFA-VT defines “rural enterprises” as activities on the farm that support the farm operation, but are not considered agriculture. <http://nofavt.org/resources/rural-enterprises-information>

3. Healthy, locally produced food should be available for consumption by Charlotte residents, through local stores, farmsteads and farmers' markets.
4. Agricultural soils will be protected for agricultural use under town regulations according to the following priorities:
 - a. Prime (high potential) agricultural soils will be given priority for permanent conservation and protection;
 - b. Agricultural soils of statewide importance will be protected wherever physically feasible;
 - c. Low potential agricultural soil will be protected when they support an existing agricultural operation.
5. To conserve farmland, development or subdivisions on farms shall use the minimum amount of land feasible for development purposes. In major subdivisions, land set aside for agricultural use shall be subject to permanent conservation restrictions held by the municipality, State of Vermont, and/or a qualified, nonprofit organization. Co-holding of restrictions will be pursued wherever possible. Such easements or agreements shall specify the allowable uses of the restricted property, restrict or prohibit further land subdivision, control the type and placement of structures and the location of roads and other infrastructure, remove density, and achieve the maintenance of the restricted property as a viable agricultural unit. The restricted farmland may be held in common or individually as long as the goal of farmland preservation is met.
6. Where residential subdivisions and PRDs are proposed adjacent to farm operations, reasonable setbacks will be required for wells and residences from lot lines next to farm land. Buffers between new residences and active farming areas (e.g., farm roads, crop and pasture land) will be required as necessary to minimize conflicts between farming operations and residential and other nonfarm uses.
7. Renewable energy facilities, including solar farms, shall be sited, clustered and designed to avoid siting on prime agricultural soils, and to minimize their encroachment on soils of statewide significance and farmland currently in production. Off-site mitigation and/or site restoration that allows for the resumption of agricultural use shall be required for any facility that impacts primary agricultural soils or farmland currently in production.
8. Sustainable, economically viable farming alternatives are important to the future of farming in Charlotte. Diverse agricultural enterprises, including dairying, livestock and hay production, and specialty farms such as nurseries, orchards, vineyards, vegetable, flower and berry farms are encouraged.
9. The production, processing, and marketing of food and fiber and other natural resources and agricultural products will be accommodated and promoted as important local industries.

10. Charlotte endorses the use of “Required Agricultural Practices” (RAPs) on local farms and sees itself as a partner in the enforcement of these practices.
11. Charlotte observes Vermont’s “Right-to-Farm” laws, recognizing that reasonable agricultural practices, as defined by state policy, benefit farming operations and contribute to a working landscape, harmony with neighbors and community pride. New and potential residents should be aware of the importance of agriculture to the community, and should recognize that agricultural practices may create conditions, including noise and odors, that can impact neighboring properties and desired lifestyles.
12. Farm-related businesses and housing will be allowed on farm properties as permitted or conditional uses.
13. The town encourages forestland owners to have a forestry management plan for their land. Forest management plans should address the ecological functions of the property while providing for the sustainable extraction of forest products. Any new forest plantations in Charlotte should be established with species native to the Northeastern United States only.
14. Maple sugaring is a relatively low impact, sustainable industry that is supported in Charlotte.
15. Increased use of wood as a renewable energy source, particularly for firewood should be encouraged, using sustainable management procedures.

Forestry and Agriculture Strategies

1. Establish a Charlotte “Farm and Food Council” to create a directory of local farms and food outlets, to work with local farmers and businesses on agricultural development strategies, to access outside resources such as the UVM Extension Service and the Vermont Agency of Agriculture, Food and Markets, and to increase community awareness of and access to healthy, locally produced food (Selectboard).
2. Inventory and track farmland acreage, the number and type of farming operations, and farm ownership patterns in town (Conservation Commission, Farm and Food Council).
3. Explore establishing a farmers’ collaborative to help expand the market for local agricultural products and to increase access to healthy, locally grown food (Farm and Food Council).
4. Continue to support the efforts of the Charlotte Land Trust, the Vermont Land Trust, the Vermont Housing Conservation Board, and similar organizations to provide technical assistance, to develop master plans for farm properties, and to negotiate private, voluntary agreements for the protection and management of designated agricultural and natural resource lands (Conservation Commission, Farm and Food Council, Selectboard). In particular, the town supports and will work with the Charlotte Land Trust to:

- Provide technical assistance to farmers and other large property owners to maximize the preservation of farmland, natural resources and rural character;
 - Collaborate on public outreach initiatives; and
 - Assist farmers in planning for the disposition of their property in conformance with the Charlotte Town Plan, e.g., by helping farmers and other large property owners to prepare master plans for their properties that maximize farmland and natural resource protection, including soil health and water quality.
5. Update town land use regulations as needed to accommodate farm-related businesses on farm property in the Rural District – including but not limited to direct-marketing, value added production (such as cheese and wine), farm equipment sales, supply and support services, associated services, commercial on-farm composting facilities, methane digesters and services, and agri-tourism events and activities – with consideration given to the scale of the operation, frequency of events and the potential impacts on the community, community facilities and services, local traffic and neighboring properties (Zoning Board of Adjustment, Planning Commission, Selectboard).
 6. Strongly promote the use of “non-contiguous PRD/PUD” provisions under town land use regulations to help conserve farmland and other open land by allowing the transfer of development rights from conserved farmland into village and other areas zoned for development (Planning Commission).
 7. Maintain a registry of available, conserved farmland for access and use by new and existing farmers, in collaboration with regional and statewide farmland access programs (Conservation Commission, Farm and Food Council). Town properties should be included on this list.
 8. Continue to pursue both regulatory and non-regulatory techniques (e.g., conservation easements, tax abatements, bylaw amendments) to implement agricultural development and farmland conservation objectives (Planning Commission, Conservation Commission, Farm and Food Council, Select board). These include, but are not limited to the following: preservation of largely contiguous tracts (“critical mass”) of productive farmland, preservation of the scenic characteristics of open farmland while promoting agricultural use, agricultural diversification and on-farm business development, including agri-tourism, value-added production, and direct marketing and sales, and the potential development of a local food hub or food incubator space as needed to support value-added production (e.g., specialty, frozen foods) and the aggregation, marketing and distribution of agricultural products.
 9. Direct landowners to resources for forest management. This includes but is not limited to the State Agency of Natural Resources, Forestry Division *Acceptable Management Practices*

for Maintaining Water Quality on Logging Jobs, 2016 and Voluntary Harvesting Guidelines for Landowners in Vermont, 2015; and Vermont's Use Value Appraisal Program.

10. Encourage landowners to band together cooperatively their small holdings into units of larger size that could support professional forestry services and increase opportunities for marketing.

HISTORICAL & CULTURAL RESOURCES**CHAPTER 1.7**

In addition to its agricultural heritage, Charlotte residents have consistently sought to identify, protect and preserve other important cultural and historical features of Charlotte's landscape and built environment including historic districts, sites and structures; traditional settlement pattern; and scenic views and vistas.

Key Planning Considerations

1. In 2013, the Vermont Legislature enacted Act 59: An act relating to neighborhood planning and development for municipalities with designated centers. Designated centers including Village Centers, recognize and encourage local efforts to revitalize Vermont's traditional settlement patterns. Once designated, the community receives priority consideration for state grants and other resources and commercial property owners are eligible for tax credits to support building improvements. In 2015, the Charlotte Town Plan was amended to include a statement of intent to apply for village center designation.
2. Several camps on Thompson's Point have undergone renovations in the past 10 plus years. Design review requirements associated with development in this area are incomplete and often result in uncertainties encountered during the development review process.
3. The lack of outreach in the siting of new energy installations and the process for public notice and involvement associated with these facilities often leads to drawn out permitting processes and local land use disputes. Recent state legislation stipulated minimum setback and screening requirements for these facilities and also requires town plans to be 'energy compliant' with regional and state plans. 'Energy compliant' towns will receive substantial deference in Public Service Board proceedings. In 2015, the Charlotte Town Plan and Land Use Regulations were amended to include some direction regarding the siting of energy projects.
4. Advisory design review guidelines, similar to those used for Thompson's Point, have been suggested for other areas of town including village areas, Ferry Road / Ethan Allen Highway intersection, and Church Hill Road (historic district).
5. Adaptive reuse of eligible structures may be limited by existing development and potential land use conflicts. Subdivisions of land involving structures that may be considered for adaptive reuse should be designed to foster future uses.
6. A dark night sky is considered to be a part of Charlotte's rural character and heritage. While still relatively undisturbed, Charlotte's natural darkness at night, augmented by a brilliant array of stars, is beginning to be threatened by light pollution and glare. Energy efficiency improvements may result in increased or ongoing light pollution and glare.

Historical & Cultural Resources Policies

1. Development shall be sited and designed to be consistent with Charlotte's traditional settlement pattern, including historic densities and scales of development, local road networks, and streetscapes, particularly within designated historic districts.
2. Development shall be sited and designed to avoid adverse impacts to Charlotte's historic sites and structures, and historic architectural styles should be considered when developing within designated historic districts.
3. Changes to historic structures should maintain their historic integrity to the extent feasible. Adaptive reuse shall be allowed where appropriate to preserve structures that no longer serve their original function.
4. Development shall be sited and/or clustered to avoid undue adverse visual impacts to scenic resources. Screening, buffer areas and/or landscaping may be required where appropriate to minimize visual impacts.
5. Energy and telecommunication facilities, including utility lines shall be sited and designed in a manner that avoids impacts to cultural and scenic features (AHPV).
6. Utilities serving developments shall be located underground, unless the Board of Adjustment or Planning Commission finds that requiring utilities to be placed underground is not necessary due to the presence of above-ground utilities serving nearby contiguous properties and that the requirement would place an unfair financial burden on the applicant.
7. The dark night sky shall be protected through the design and control of lighting to prevent glare and light pollution. Cut-off fixtures, down casting and limiting levels of illumination are examples of techniques to be used to avoid new light pollution and reduce existing pollution.

Historical & Cultural Resources Strategies

1. Apply for village designation from the Vermont Department of Housing and Community Development for West Charlotte and East Charlotte Village areas to access additional resources and financial assistance for historic preservation and economic development.
2. Continue to inventory, catalogue and map Charlotte's historic and cultural features.
3. Update land use regulations as needed to further protect Charlotte's historic and scenic resources, including the consideration of adopting additional historic and/or design review

overlay districts to protect the town's traditional settlement pattern, cultural resources, and scenic landscape.

4. Adopt specific lighting standards under the town's land use regulations and, at the same time, conduct public informational meetings to educate the public regarding strategies to avoid light pollution.
5. Improve upon the current scenic road inventory by recommending guidelines for development review and road maintenance.

DEMOGRAPHICS AND HOUSING**CHAPTER 1.8**

Population trends in Charlotte and Chittenden County have generally outpaced those of the state in the past 50 years. The age distribution of the county population differs slightly from that of the state in that the county has a smaller proportion of older persons as compared to younger persons. That being said, the population of the region, including Charlotte, is aging with the 65 and older age group expected to increase by 122% over the next 20 years.

Housing in Charlotte has been concentrated in the village settlements, clustered in summer camp communities, or located in a dispersed pattern in the surrounding countryside. It is this dispersed pattern that has become prevalent over the past 30 years. Subdivisions in rural areas have increased, while the village settlements have remained relatively unchanged. Significant concerns of water and septic capacity in the west village have been repeatedly raised by some in the village. While the dispersed pattern has offered a desirable lifestyle, it has the potential to reduce air quality, increase energy consumption and consume open space including viable farmland. It has also failed to provide adequate housing located more convenient to services and prospective public transportation to accommodate a diverse array of residents. Surveys continue to reinforce the importance of protecting Charlotte's rural character, natural resources and agricultural resources. Changes to the land use regulations have been made over the last 15 years to retain these characteristics by encouraging clustered, well-integrated housing and development.

Key Planning Considerations:

1. Charlotte is projected to experience a slower rate of growth over the next 20 years (8.1%) compared to that of the last 30 years (47%).
2. Our regional population is aging. The number of individuals aged 65 and older in Chittenden County is projected to increase by 122% over the next 20 years. The next fastest growing age group is those aged 30-44. This age group is projected to increase by 22% over the next 20 years.
3. Broad diversity in housing will continue to be necessary to support the required tax base to keep Charlotte financially sound. This must include opportunities for more affordable and senior housing.⁸

⁸ In general, housing for which the occupant(s) is/are paying no more than 30 percent of his or her income for gross housing costs, including utilities is considered affordable housing. In the context of this plan, Charlotte further defines affordable housing as that affordable to low or moderate-income households. Households whose incomes are less than 80 percent of the median income for the area are considered low-income families. Households whose incomes are between 81 and 95 percent of the median income for the area are considered moderate-income families (Source: United States Department of Housing and Urban Development).

4. Over the past twenty years, the development of new homes has occurred primarily in rural areas.
5. The quality of education provided by the Charlotte Central School is critical to the continued evolution of the Town's population, financial health of the Town, support of property values and is a key driver for young families selecting Charlotte as a place to live.

Housing Policies:

1. The Town, primarily through its Land Use Regulations, and through other incentives, will encourage the development of affordable and senior housing as well as moderately priced housing to meet the needs of individuals and families who live and/or work in Charlotte and families who wish to settle in Charlotte. This will include encouraging alternatives for the elderly who live in their own homes and would like to continue to do so.
2. The Town recognizes the need for safe, sanitary, energy efficient and affordable housing in locations convenient to existing public and community services and facilities, and will seek solutions to address this need. Creating opportunities for affordable housing supports the town's goal of promoting diversity in Charlotte. Affordable housing created in the town through density bonuses shall be perpetually affordable.
3. The rate and pattern of residential growth shall remain compatible with Charlotte's rural character. The town will work to direct the majority of future growth into the village areas and existing and new community settlement areas and hamlets so as to preserve the Areas of High Public Value in the rural areas.
 - a. Housing in rural areas should maximize open space by clustering development and using conservation agreements when applicable. More emphasis on non-contiguous Planned Residential Developments will promote development in the village areas and minimize the impact on Areas of High Public Value.
 - b. Development in the village districts should be encouraged. Such development should consider planned improvements and capital expenditures and allow for the adequate provision of services.

Senior or elderly housing is defined as housing which is specifically designed and intended for occupancy by at least one person who is 55 years of age or older. In accordance with the federal Fair Housing Act, elderly housing includes housing that: (1) is specifically designed for and occupied by elderly persons under a federal or state housing program; (2) is to be occupied by a person 62 years or older; or (3) at least 80% of the dwelling units are to be occupied by at least one (1) person who is 55 years or older, in adherence to adopted policies to house persons who are 55 years or older.

- c. New development in the village areas should provide strong visual, vehicular and pedestrian connections to the existing settlement and infrastructure.
4. The Town recognizes the importance of and will strongly encourage adaptive reuse of existing buildings as a means of providing affordable and market rate housing. This will result in the preservation of structures that might otherwise fall into disrepair and be demolished.

Housing Strategies:

1. Charlotte's Land Use Regulations provide for the creation of Planned Residential Developments (PRDs) and Planned Unit Developments (PUDs) as well as simultaneous conservation of contiguous and non-contiguous areas. The use of these provisions will be strongly encouraged, and in most cases required, in development projects.
2. The Planning Commission will work to promote the use of non-contiguous PRDs as a means to increase project densities in desired locations and protect rural open space areas.
3. Evaluate strategies for the possible build out of areas in and around existing villages, including the analysis of existing and planned facilities (e.g. wastewater, runoff, and highway access, and Complete Streets).
4. Reappoint members to an Affordable / Senior Housing Committee. This group will work with the Planning Commission in evaluating land use regulation incentives for the creation of affordable / senior housing. (Selectboard)
 - a. Work with regional organizations in educating citizens about available resources including in home services. (Affordable Housing Committee)
 - b. Work with the Planning Commission in identifying locations for potential projects and project partners. (Affordable Housing Committee)
5. Encourage development review applicants to consider affordable or senior housing when presenting their subdivision proposals at Sketch Plan Review and provide information about the Affordable Housing Trust Fund. (Planning Commission)
6. Establish an annual meeting between the Planning Commission and the Affordable / Senior Housing Committee to assess the Town's progress in meeting housing needs. (Planning Commission)
7. Encourage the preservation and reuse of existing buildings through the application of density bonuses and / or flexibility in other dimensional requirements of Charlotte's Land Use Regulations. (Planning Commission)
8. Continue to remit permit fees for affordable housing units. (Selectboard)

ECONOMIC DEVELOPMENT**CHAPTER 1.9**

The long-range success of economic development projects generally hinges on an area's competitive advantages (e.g. policies), market characteristics and community values. Smart economic development recognizes that prosperity both depends on and drives quality of life. The economy in Charlotte is inextricably linked to agriculture, the environment and sustainability. While agriculture contributes little to the job /wage base in Charlotte, it does contribute to the overall economy (wholesale trade) and the preservation of the cultural landscape which is appealing to both residents and visitors alike. Opportunities exist, however, for supplementary businesses that could provide products and services to residents and visitors and for entrepreneurial enterprises that could create jobs within the community.

Key Planning Considerations:

1. Preservation of Charlotte's natural, cultural and historic resources is essential to the maintenance of key industries including agriculture, real estate, and construction. Water and wastewater rights and use, solid waste management, stormwater management and transportation all have a profound effect on the Town.
2. Charlotte is bisected by Route 7, the main north / south arterial on the western side of the state. Route 7 provides easy access for those travelling to and from Charlotte as well as for business related shipping and receiving. Ferry Road provides another transportation link to the region connecting ferry traffic with Route 7 and northern New York. The location of businesses directly on Route 7 is not a desirable land use and opportunities along Ferry Road are limited.
3. The 2015 Vermont State Rail Plan calls for the expansion of both freight and passenger travel along the railway in Charlotte. Passenger stops may be planned in Charlotte. Recent controversy regarding the siting of a railroad facility has resulted in questions regarding a Town's ability to regulate rail projects.
4. Potential economic development can be either encouraged or discouraged by the availability of public infrastructure – water, wastewater, broadband, transportation, etc. Some existing businesses in the West Charlotte Village cannot grow due to limitations associated with their wastewater systems and physical limitations for system expansion.
5. Home occupations and agricultural enterprises are a thriving component of Charlotte's economy. Excessive traffic, noise, etc. associated with some businesses can create conflict among / between neighbors.

Economic Development Policies:

5. The Town will promote actions that protect and enhance agriculture and other traditional industries and support local job creation. Compatible, entrepreneurial enterprises will also be supported.
6. The Town will encourage the provision of adequate infrastructure that is supportive of a healthy economy and environment.
7. The Town will advocate for the safe and responsible use of the railway and associated facilities.
8. The Town will continue to support agricultural enterprises and home-based occupations that do not detract from the character of the area.

Economic Development Strategies:

1. Encourage and support the formation of a local 'Farm and Food Council' to create a directory of local farms and food outlets, to work with local farmers on agricultural development strategies, to access outside resources such as the UVM Extension Service and the Vermont Agency of Agriculture, Food and Markets, and to increase community awareness of and access to healthy, locally produced food.
2. Support efforts by the Charlotte Library to serve as a clearinghouse for job seekers.
3. Support the development of community based water and wastewater systems in West Charlotte Village. Develop a framework for moving forward with the work completed by the Charlotte Wastewater Committee in 2010-2011. This framework should include the establishment / reestablishment of a Wastewater Advisory Committee made up of one or more members of the Selectboard, Planning Commission, Community Development Group; village residents; and at least 1 non-village resident.
4. Review environmental assessments completed for the state owned property near the railway (north of Ferry Road) and determine if more information is needed. This information will be used when considering zoning alternatives or acquisition as part of the Land Use Regulation process update.
5. Evaluate the Charlotte Land Use Regulations and determine if there are opportunities for improvement in the regulatory and permitting process. Examples would include consideration of changes in use category and / or establishment of clear and non-redundant review standards.
6. Consider consolidating development review related functions under one Development Review Board. This Board would be responsible for reviewing applications against all development review standards outlined in the Land Use Regulations providing clarity and

certainty to both applicants and interested parties to the application including abutting property owners.

UTILITIES, FACILITIES & SERVICES**CHAPTER 1.10**

Town government and many locally supported nonprofit groups rely heavily on volunteer time and community financial support to provide the facilities, infrastructure, services and programs needed to serve local residents and enhance community life. As a rural community, Charlotte's capacity to accommodate new growth and development and adapt to changing circumstances, is limited by available community resources, supporting infrastructure, and the town's tax base. That said, because of the generosity of its residents, the town has been able to provide and continues to support truly exceptional facilities, programs and services that help make for a strong and vibrant community.

Key Planning Considerations:

1. Charlotte's population is aging. Additional health care, emergency response, transportation and in-home support services will be needed to assist an aging population. Senior housing options are also needed for local residents that want to downsize or need additional care, but want to remain part of the community. Additional cemetery space may also be needed.
2. School enrollments are expected to decline through 2020. Ongoing strategic planning, involving the town, school board and larger community, is needed to ensure that our children continue to receive a quality education, at a reasonable cost per pupil, and that the Charlotte Central School is maintained for use as both an educational and community facility.
3. Additional wastewater infrastructure is needed in the West Charlotte Village. As documented in the 2011 "Final Report on Potential Community Wastewater Service to the West Charlotte Village" issued by the Charlotte Wastewater Committee, there is sufficient in-ground capacity available to expand the existing wastewater system to address inadequate or failed onsite systems, and to accommodate limited new development in West Charlotte Village.
4. The Universal Recycling law (Act 148), an "act relating to establishing universal recycling of solid waste," passed into Vermont law in 2012. The law includes bans on the disposal of certain materials into landfills; collection requirements for transfer stations, drop-off centers, and other facilities permitted to accept trash; curbside collection requirements for haulers licensed to accept trash; a hierarchy for managing food scraps and yard debris; the implementation of 'pay-as-you-throw' variable rate pricing; and requirements for recycling containers to be provided in publicly owned spaces.
5. Greater community responsiveness will be needed to adapt to changing community needs, and a changing environment. Charlotte, as a relatively undeveloped rural town with a long history of active, volunteer governance, is better suited than many communities to adapt to a changing climate, including anticipated increases in severe storm events. Nevertheless, ongoing efforts will be needed to plan for, mitigate and respond to natural and manmade hazards, to strengthen community networks and emergency response services, to increase

the energy efficiency of public buildings, and to update municipal facility and infrastructure standards to accommodate changing environmental conditions.

6. Changing community needs, and additional demands on local government, may require some changes in local governance. The town and town-supported organizations, including fire and rescue services, depend heavily on volunteers and the local property tax base to support needed facilities, equipment and services. As a rural community with an aging population, reliance on volunteers to provide critical services will become increasingly difficult – especially as the demand for those services increases.

Utilities, Facilities and Services Policies:

1. The rate of growth and development in Charlotte shall not exceed the ability of the town and other organizations serving the community to provide supporting public facilities and services.
2. The Town will, within its means, continue to plan for, finance and provide public facilities and services necessary to meet existing and anticipated community needs, in an efficient and cost-effective manner. These include town government, highway, fire and rescue, police, educational, library, recreational and senior services and facilities, water and wastewater systems and solid waste management, and other planned facilities and services supported by the Charlotte community.
3. Public investments in land, facilities and infrastructure shall reinforce the traditional pattern and character of development in Charlotte, consisting of compact villages, including West and East Charlotte, hamlets and historic summer communities on Thompson’s Point and Cedar Beach – separated by rural countryside, including large blocks of productive farm and forest land and undeveloped lakeshore.
4. Public investment in land, facilities and infrastructure will be planned and designed to minimize development pressure on and adverse impacts to Areas of High Public Value, including prime and statewide agricultural soils, steep slopes, surface and groundwater resources, shoreland buffers, wildlife habitat and other ecologically important natural areas, scenic views and vistas, historic districts, sites and structures, land in active agriculture, and conserved land.
5. New public facilities and infrastructure shall be designed to avoid or withstand flood and fluvial erosion hazards. Improvements to existing facilities will avoid new impacts and will minimize or mitigate existing impacts to these same areas.

Utilities, Facilities and Services Strategies:

Recreation

1. The Town of Charlotte will continue to develop, maintain and enhance recreational facilities and programs for local residents and visitors, in association with the state and other organizations that have facilities and programs that serve the community.

2. Public access to noncommercial outdoor recreational opportunities, including walking and hiking trails, recreation paths, municipal and state parks and conserved lands, and to Lake Champlain, will continue to be identified, developed, managed and protected.
 - a. The Trail Committee, in association with the Planning Commission, will continue to plan for, develop and maintain an interconnected, town-wide network of trails and public byways.
 - b. The Conservation Commission will work with the Trails Committee and the Recreation Commission in evaluating the suitability of sites for recreation and shoreline access, and access to conserved land.
3. In village areas, trails or sidewalks to serve development shall be incorporated in subdivision or site plan design to where feasible, connect to existing and planned public trail and sidewalk networks as expressed elsewhere in this plan (see Map 5B).
4. Outdoor recreational facilities, including trails, shall be sited, designed and managed to complement and incorporate their natural settings, and to minimize adverse environmental and ecological impacts. Trails should follow and/or incorporate local topography and landscape features in their design.

Education

5. The Town will work closely with the CVU and CCS School Boards to monitor the educational needs of the town's children and adults and the condition and level of use of local school facilities and to address existing and anticipated needs in a cost-effective manner that maximizes the community's benefits.

Social Facilities & Services

6. The Town will, within its means, continue to support and provide access to social and cultural facilities, organizations, and events that serve the needs of Charlotte residents and highlight and celebrate the Charlotte community.
 - a. The Town will continue to fund, through annual appropriations, those organizations that provide needed family, social and health services for Charlotte residents, as approved by Charlotte voters.
 - b. The Town will continue to advocate for affordable childcare services to meet the needs of local families, including after school and early education programs offered through the Charlotte Central School.
 - c. The Town will continue to monitor the availability of childcare services in association with the update of the town plan; and ensure that home-based childcare facilities are adequately accommodated under the land use regulations.

- d. The Town will work with the Charlotte Senior Center to survey local residents, to identify additional resources, programs and housing options that may benefit Charlotte's aging population, including their desire and ability to age in place.
 - e. The Town, in association with local organizations, will continue to plan for and host events that celebrate community history, diversity and volunteerism.
7. The Town will work with the Senior Center in developing a parking plan. The plan will help to identify areas for additional parking including opportunities for shared parking with other uses in the West Charlotte Village.
 8. The Town supports the ongoing communication between / among the Senior Center, Charlotte Central School and Library in an effort to pool resources and provide compatible services within the community.

Public Safety

9. The Town will continue to support the Charlotte Volunteer Fire and Rescue Services Inc. (CVFRS). Major capital improvement projects and equipment purchases for CVFRS will be programmed through the Fire and Rescue capital budget and program.
 - a. The Selectboard and Planning Commission will continue to work with the CVFRS to plan for and strategically locate fire ponds and dry hydrants needed to improve local fire protection.
 - b. The Planning Commission, in association with the Selectboard, Road Commissioner and CVFRS, will update standards for the creation, maintenance and repair of private roads, driveways, fire-protection ponds and dry hydrants.
 - c. The Planning Commission will update municipal bylaws as necessary to ensure that private roads, driveways, fire ponds, dry hydrants or other fire protection measures necessary to serve new development, as recommended by CVFRS, are paid for and installed by the developer.
10. The Town will continue to contract for policing services to enforce town traffic ordinances and improve safety on town highways.
 - a. The Selectboard will continue to sponsor traffic studies to establish enforceable speed limits under the town's traffic ordinance.
11. The Selectboard will continue to contract with neighboring or state police departments to provide limited crime response, reporting and investigation services, as available funding permits.
12. The Town will continue to update the E911 database and map in a timely manner and will encourage the immediate installation of newly assigned and appropriately designed 911 numbers (addresses).

13. The Town will work to strengthen community resiliency in response to natural and manmade hazards and the anticipated effects of changing climate.
 - a. The Selectboard and Planning Commission, with the assistance of the Chittenden County Regional Planning Commission and local emergency service providers, will continue to plan for and regularly update its hazards mitigation plan for FEMA-approval, and its emergency response and operation plans.
 - b. The Selectboard and Planning Commission will implement recommendations included in Charlotte's All Hazards Mitigation Plan as resources allow.
 - c. The Town will study, based on available information, the potential effects of rising lake levels on the Charlotte shoreline, and shoreland property owners.
 - d. The Town will continue to limit and regulate new development within known hazard areas, including mapped flood hazard areas to ensure community participation in the National Flood Insurance Program.
 - e. The Selectboard will continue updating the town's road standards, including local culvert and bridge standards, as necessary to improve infrastructure resilience to flooding, and to qualify for available state program incentives.
 - f. The Planning Commission will update the town's flood hazard area bylaws as necessary to meet any new National Flood Insurance Program (NFIP) requirements, and to qualify for state and federal program incentives for improved infrastructure resilience.
 - g. The Planning Commission will consider regulations to limit development within fluvial erosion hazard areas (river corridor protection areas) identified on maps provided by the state, as recommended in the Town's adopted All-Hazard Mitigation Plan.

Solid Waste Management

14. The Town will continue to participate as an active member of the Chittenden Solid Waste District (CSWD) to meet its municipal responsibilities for sustainable materials (aka solid waste) management under the Universal Recycling Law (Act 148).
 - a. The Town will consider opportunities for the development of small composting facilities. Town regulations and policies will be updated as determined necessary.
 - b. The Town will continue to support its Policy Regarding Waste Management at Town Facilities as adopted in 2014.

Wastewater & Potable Water

15. The Town will develop a framework for moving forward with the work completed by the Charlotte Wastewater Committee in 2010-2011.

- a. This framework should include the establishment / reestablishment of a Wastewater Advisory Committee made up of one or more members of the Selectboard, Planning Commission, Community Development Group; village residents; and at least 1 non-village resident.
 - b. The reassessment of local need should be considered including information on potential health concerns and current use constraints.
 - c. If the Advisory Committee decides to move forward based on need, then a town-wide education and outreach campaign should be initiated. This campaign should include alternatives to a public system including private, community systems. A consultant could evaluate alternatives and the evaluation could be funded through a grant.
16. All development outside of municipal infrastructure service areas shall be served by privately owned systems and maintained onsite, or via community potable water supplies and wastewater systems. The Town will continue to regulate private systems under its state-delegated authority.
17. All new or expanded subdivisions will be required to demonstrate that there will be an adequate supply of potable water to serve their development without adverse impacts to Areas of High Public Value, existing water supplies or to land uses on neighboring properties.
18. Private water and sewer utility lines may cross town roads only with Selectboard approval, and only if the development served meets applicable goals and policies of the Charlotte Town Plan or the lines are necessary to serve a failed system for which no physically feasible alternatives exist. The Selectboard will require permits and licensing agreements or similar legal agreements for utility lines that cross town rights-of-way.
19. Land development shall be restricted and regulated within designated Source Protection Areas (SPAs) serving community water supply systems.
 - a. The Planning Commission will evaluate the approach to protect other groundwater resources under the land use regulations, including recharge areas identified on groundwater maps recently developed for the town (see Map 1).
20. All new development will be designed to conserve water, through site planning and development techniques that maximize onsite stormwater retention and infiltration, and through the use of low-flow fixtures.
 - a. Low flow fixtures shall be included in the development and construction of all new, renovated or expanded public buildings and facilities.
 - b. The Planning Commission will review and update the land use regulations as necessary to incorporate “Low Impact Development” (LID) standards that maximize

onsite stormwater retention and infiltration thereby limiting the need for more capital intensive stormwater collection and treatment facilities.

- c. The Town will seek State funding to prepare a storm water master plan for the Town of Charlotte.

Telecommunications Facilities & Services

21. The Town of Charlotte supports new and relocated telecommunications facilities and services that are consistent with land use regulations, and are necessary to provide adequate wireless and high speed internet coverage for Charlotte residents, businesses and emergency response services.
22. Radio frequency interference and emissions from telecommunications facilities, while currently subject to FCC jurisdiction, should not be allowed to adversely affect public health and safety or interfere with existing telecommunications equipment and signals.
23. New and relocated telecommunications facilities shall be sited to avoid where physically feasible, or to otherwise minimize adverse visual and physical impacts to areas of high public value, electrical and signal interference, and potential health impacts to the occupants of residences, schools and other public facilities in the vicinity of the facility.
24. New telecommunications towers shall be designed to allow for the co-location of additional telecommunications equipment. New equipment shall be co-located on existing towers wherever physically feasible, unless it is determined by the regulatory board that a new tower would have less adverse impact on areas of high public value or existing uses in the vicinity of the facility.
25. New and relocated telecommunications towers in locations that are highly visible from public vantage points shall be sited and designed to minimize their visibility and to avoid the need for nighttime lighting.

Utility Lines

26. New or replacement electrical, telephone, cable or other utility lines, shall be located underground to protect areas of high scenic value, increase reliability, and potentially reduce long-term maintenance costs.
 - a. The Town will continue to require underground utility lines feeding and within subdivisions.
 - b. The co-location of utility lines and infrastructure is encouraged, as is utilization of existing rights-of-way.
27. The Town supports improvements to the power grid to adequately support existing uses and planned future growth.

- a. The height of utility poles will not be increased unless necessitated by technical requirements (e.g. to avoid interference).

Town Governance

28. The Town will retain a primarily volunteer form of government.
- a. The Selectboard will continue to evaluate the need for additional staffing and contracted services as necessary to meet the Town's obligations under state law, and to the Charlotte community.
 - b. The Selectboard will seek to maintain a constant effective tax rate, adjusted for reappraisals and inflations, consistent with past practice.

Town Land & Facilities

29. The Town will continue to manage and maintain existing public and community facilities, including town-owned land and buildings, in a cost-effective, ecologically sound and energy-efficient manner.
- a. The Selectboard will oversee and ensure the timely implementation of a master plan for the Burn's Property, as required under its agreements with the Vermont Land Trust, and to incorporate the recommendations of the 2011 Wastewater Committee for the upgrade and expansion of the municipal wastewater system.
 - b. The Selectboard, in association with the Energy Committee, will evaluate options to incorporate more energy-efficient heating, ventilation and air conditioning systems in public buildings.
 - c. The Town will develop a capital budget and 5-year capital improvement program (CIP), for Selectboard consideration and adoption, that identifies and schedules planned capital improvements in relation to existing debt service and available sources of funding.
 - d. The Town will prepare a land management plan for Thompson's Point to inform annual management strategies for resources such as AHPV, recreation, wastewater and scenic views.

Roads

30. The Town will continue to require that new roads be developed as private roads so as to reduce the cost of town provided road services.
- a. The Planning Commission will implement the 2013 "Vermont Town Road and Bridge Standards" on all new and existing roads, and will further consider alternative designs within sensitive areas.

- b. The Town will update the “Recommended Standards for Development and Homes, 1997” policy for private driveways.
 - c. The Town will redevelop the current “Highway Access Permit Policy and Procedure” into a municipal ordinance.
31. The Town will reevaluate the above policies as they relate to village area development. Complete Streets, which include accommodation for pedestrians, cyclists, equestrian, and other modes of travel are desired in these areas, and as such, municipal control of village roads may be warranted.
32. The Town will support the inclusion of appropriate accommodations for pedestrians and cyclists whenever improvements to major paved roads (e.g. Route 7, Spear Street, Hinesburg Road, Church Hill Road, Mount Philo Road, etc.) are undertaken.
33. The Town will continue to be a member of the Chittenden County Regional Planning Commission and will actively participate on the Transportation Advisory Committee.

Cemeteries

34. The Town Cemetery Commission will conduct a survey of existing locations for human burial and memorial and will assess future needs. This information will be used to review planning related concerns including zoning and long-term maintenance.

TRANSPORTATION**CHAPTER 1.11**

Charlotte is located within commuting distance of the cities of Burlington and South Burlington as well as areas in and around Middlebury. The town is bisected by 6.5 miles of US Route 7, a major north / south arterial highway and also contains approximately 74 miles of State Class 2 and 3 highways which serve as connectors to other regional arterial systems and as transporters of traffic within town. The remaining roads in Charlotte are private roads or Class 4 highways which provide access to adjacent land as their primary function. In addition to auto traffic, Charlotte's road network serves agricultural vehicles, bicycles, pedestrians, and equestrians. The larger transportation system includes a ferry route, a railroad, and limited sections of both on and off road routes for pedestrian, equestrian, bicycle, agriculture and / or snow mobile use. The Town encourages multi-modal forms of transportation while acknowledging that the most extensive portion of its transportation system is designed for use by automobile related traffic.

Key Planning Considerations:

1. Scheduled improvements to US Route 7 (Ethan Allen Highway) south of F-5 (Ferry Road) are on-track to begin in 2016. This project will result in temporary traffic delays for commuters and travelers along this route.
2. The planned expansion of Hinesburg's village will result in a significant number of new dwelling units and in square footage of commercial space. Plans for improvements to Route 116 to improve traffic flow in and around Hinesburg have been completed. Delays in the funding and timing for implementation of the traffic improvement plan associated with the planned increase in development in Hinesburg's village area may result in an increased use of Charlotte's north / south collector roads by commuters to and from Burlington.
3. The Vermont Agency of Transportation has asked the Chittenden County Regional Planning Commission to complete a scoping study of potential locations for a park and ride facility near US Route 7 in Charlotte to serve 50-80 vehicles.
4. In 2011, the legislature passed Act 34: *An act relating to a transportation policy that considers all users:*

The purpose of this bill is to ensure that the needs of all users of Vermont's transportation system— including motorists, bicyclists, public transportation users, and pedestrians of all ages and abilities—are considered in all state and municipally managed transportation projects and project phases, including planning, development, construction, and maintenance, except in the case of projects or project components involving unpaved highways. These "complete streets" principles shall be integral to the transportation policy of Vermont.

Accommodating a wide variety of users on major and minor collector roads can be challenging and necessitates thoughtful consideration as to design.

5. The repair and maintenance of town roads is the largest non-school budget item incurred by property owners in Charlotte.
6. Town residents have voiced concerns through a number of forums about excessive speeds of motor vehicles on Town highways. Adjusted Average Daily Traffic (AADT) and speed data for roads in Charlotte are gathered infrequently, making it difficult to observe trends over time.
7. Substandard design, development and maintenance of roads, bridges and culverts (ROWS) can contribute to an increase in repair and maintenance costs over time and can also result in environmental concerns related to water quality, control of invasive species, fragmentation of wildlife habitat and working lands, and inundation and erosion hazards.
8. The Town of Charlotte has not adopted a capital budget and program which would aid in the scheduling of capital expenditures, including road construction and maintenance over time.
9. There is little guidance within Town documents on types or priorities of improvements needed for better bicycling and walking conditions on Town highways or throughout the Town other than the Trail Vision Map.
10. The 2015 Vermont State Rail Plan calls for the expansion of both freight and passenger travel along the railway in Charlotte. Passenger stops may be planned in Charlotte. Recent controversy regarding the siting of a railroad facility has resulted in questions regarding a Town's ability to regulate rail projects.

Transportation Policies:

1. The function of Route 7 as the main north-south corridor in the Town and a regional arterial highway shall be protected through the limitation of access points and the control of land use along the highway. The Route 7 corridor shall be protected as a scenic travel corridor.
2. Expansion of Route 7 to increase its capacity by the addition of new lanes shall only occur when the need has been clearly demonstrated, when all reasonable alternatives have been carefully examined, and when such improvements have been prepared within the context of the Chittenden County Long Range Transportation Plan for the Route 7 Corridor. Any improvements to the corridor shall make provisions to enable safe agricultural, bicycle and pedestrian travel and crossings.
3. Improvements to Route 7 shall consider east west travel connectivity needs and not adversely affect Areas of High Public Value.
4. Alternative regional arterial highways will not be considered within Town boundaries due to the potential for adverse impacts to areas of high public value and the disruption to existing land use patterns.

5. Town highways will be upgraded according to a Town capital budget and program. Improvements to Town highways required by new development and not programmed by the Town will be the responsibility of developers. Conversion of gravel roads to paved roads will be discouraged unless there are compelling reasons to make the change.
6. The Town will not accept new roads for public ownership unless there is significant public input to do so to support land use policies of compact growth.
7. The Town will continue to support a privatized highway department.
8. The Town, with the help of the Chittenden County Regional Planning Commission (CCRPC) and the State of Vermont, will continue to monitor the intersection of Route 7 and Ferry Road (F5) and Church Hill Road to ensure that safety issues are rectified. The Town recognized that actual improvements or modification to the intersection are the responsibility of the State. In addition, the Town will control land development in the vicinity to minimize traffic congestion and safety problems at this location that inappropriate land uses might cause. The Town will work to make sure that pedestrian and bicycle safety will be given appropriate attention when improvements are considered for this intersection.
9. The Town supports the development of park and ride facilities within the Town but only at appropriate locations that have been examined by the Town and the CCRPC for their appropriateness and have been found acceptable. The Town supports the incorporation of electric vehicle charging stations at these locations.
10. The Town will incorporate appropriate accommodations for bicyclists and pedestrians of all ages and abilities when improving Class 2 and Class 3 Town highways, based on the number of anticipated walkers, bicyclists and other users; the AADT of the highway; the existing road widths; the posted speed limits and the surrounding land use and environmental conditions.
11. The Town will continue to be a member of the Chittenden County Regional Planning Commission and actively participate on the Transportation Advisory Committee and the Clean Water Advisory Committee.
12. The Town will advocate for the safe and responsible use of the railway and associated facilities.
13. The Town will maintain its covered bridges as transportation facilities and will seek to protect these bridges from damage, destruction or excessive or incompatible use because they are a significant part of the character of the community and its heritage.
14. Designated scenic roads (see Map 5A) will be maintained and only altered by the Town in accordance with "The Vermont Backroad," a 1974 manual prepared for the Scenery Preservation Council, the Agency of Transportation, and the Ottauquechee Regional Planning Commission and / or as required by the State of Vermont. All improvements of

other Town highways will be made as nearly as possible in conformance with the guidelines of this manual.

15. The Town supports the use of appropriate roads and trails to be available for uses such as bicycling, equestrian and walking for transportation.
16. The Town will maintain a uniform set of road and driveway standards for use in the development of new roadways or the expansion of use of existing roadways.

Transportation Strategies:

1. The Town will review and update, as necessary, the Recommended Standards for Homes and Development, 1997. Standards will then be considered for incorporation into the Land Use Regulations.
2. New private developments shall be required to establish adequate maintenance funds or other mechanisms to ensure compliance with the Town road and driveway standards. The Town will reserve the right to make improvements where needed and charge the development directly for the repairs.
3. The Selectboard will adopt a Capital Budget and Program, which will include transportation and stormwater control infrastructure, as well as other town structures and capital equipment. A Capital Improvements Program will allow for the scheduled maintenance of town roads as needed and will prevent budget and tax rate fluctuations associated with large single expenditures.
4. The Town will work with the State of Vermont / CCRPC to collect data on automobile, bicycle and pedestrian crashes; safety issues; and traffic volumes of Town roads on a routine basis.
5. The Town will consider the creation of park and ride lots at appropriate locations in the West Charlotte and East Charlotte villages, which might also serve as transit stops.
6. The Town will promote road development and maintenance regimes in accordance with the Vermont Better Roads Manual, as most recently updated.
7. The Town, with the help of the Trails Committee, will review and update and expand the Trail Vision Map into a town-wide walking, equestrian and bicycling master plan to provide guidance on where, when and how bicycling, equestrian and walking opportunities for on-road and off-road transportation will be expanded and upgraded.
8. The Planning Commission will, where appropriate, consider provisions for sidewalks or trails and user amenities for new development in village districts.
9. The Selectboard shall review posted speed limits and consider adjusting them in accordance with State guidelines to promote safety.

10. The Town will work with the Senior Center in developing a parking plan. The plan will help to identify areas for additional parking including opportunities for shared parking with other uses in the West Charlotte Village.
11. Railroad crossings on Town roads will be gated crossings with bicycle safe surfaces to ensure traffic, pedestrian and bicycle safety, and will include adequate mitigation of other adverse impacts from railroad activity.
12. The Town shall be proactive with regard to the prevention of further development of additional rail sidings used for storage of railcars, or an alternate railyard site. The storage of railcars represents an intensification of an industrial use amidst primarily residential and agricultural uses, and is not desired by the Town. The current use of the siding as a de-facto railyard is not desired by many residents along the line, who are impacted by late-night moving of cars and scenery degradation.

ENERGY**CHAPTER 1.12**

The Town Plan seeks to guide local policy as it relates to energy demand and potential generation. Charlotte seeks to minimize energy use and greenhouse gas emissions within the Town while ensuring a secure energy future through conservation, improvements in efficiency and an increase in renewable energy use and production.

Key Planning Considerations:

1. The State of Vermont has promulgated a Comprehensive Energy Plan (CEP) that has set a statewide goal to reduce total energy consumption per capita by 15% by 2025, and virtually eliminate reliance on fossil fuels by 2050 by meeting 90% of the state's energy needs from renewable sources. This same plan has a goal of substantially improving the energy fitness of 25% of the state's housing stock by 2020.
2. Climate change and more frequent intense weather events have increased our focus on the link between energy planning and a secure future.
3. The average cost of energy inputs continues to rise with price fluctuations that are often volatile. Energy efficiency and conservation efforts such as improved insulation and weatherization of new and existing structures often have a dramatic impact on reducing fuel consumption and household bills.
4. There is a growing awareness of the complementary relationship between energy independence and a strong economy. Energy efficiency investments in Vermont continue to provide significant positive net impacts to the state's economy and the renewable energy sector continues to grow.
5. Siting renewable energy projects requires a careful balance between the local and regional public benefit of local generation, the appropriate use of land and the impacts on individuals and communities directly impacted by siting. Early communications and outreach can help to achieve an appropriate balance for new renewable energy projects.
6. According to the CEP, transportation fuel accounts for the largest portion (33.7%) of Vermont's total energy consumption and almost half (47%) of the state's greenhouse gas emissions.

Energy Policies

1. Energy planning will be incorporated into all planning efforts, most notably those related to healthy communities, sustainability, transportation and land use.
2. The Town, through its Energy Committee, will educate citizens (including other volunteer Boards and Committees) regarding energy related matters. This will include information on emerging technologies and policy discussions.

3. In keeping with the state energy plan, the Town will seek to minimize energy use in private, public and commercial buildings and work toward 'zero net energy' use in all sectors by 2050⁹.
4. The Town will support the siting of appropriately scaled renewable energy resources in Charlotte that avoid or minimize impacts to Areas of High Public Value. To this end, the Town will seek opportunities for early involvement in the planning / permitting process and will encourage outreach to and among neighbors. The Town will actively encourage and support the development of renewable energy that complements the working landscape and avoids dramatic impacts to the view sheds of the neighboring properties. Developers should practice a "good neighbor policy". The siting of projects should be done in such a manner that the project creates no greater burden on neighboring property owners or public infrastructure than it does on the property on which it is sited.
5. The Town will support efforts to reduce the use of greenhouse gas emitting transportation fuels and create opportunities for the increased use of high occupancy vehicles.
6. The town will support state legislation and regulations aimed at improving energy efficiency in buildings.

Energy Strategies

Renewable Energy

1. The Town Selectboard and Planning Commission will assess impacts to Areas of High Public Value from proposed energy projects and will participate in PSB proceedings if warranted.
2. The Town will review new projects using Site Plan Review Standards as identified in the Charlotte Land Use Regulations.
3. The Planning Commission and the Energy Committee will analyze town-owned lands for potential renewable energy generation projects. This analysis will include factors related to environmental constraints and aesthetic concerns as well as resource potential.
4. Charlotte will strive to generate 10% of its total energy needs through locally-produced renewable energy sources in Charlotte by 2020.
5. Sites planned for or intended to accommodate planned energy facility development, including the location of existing and planned commercial and net-metered generation facilities and utility corridors, are to be shown on site development and subdivision plans reviewed by the town.

⁹ A building that uses only as much energy as it produces through on-site renewable energy in a single year. Source: Efficiency Vermont.

6. Charlotte will support increased use of renewable energy by encouraging greater use of renewables among municipal buildings; supporting local production of biofuels, small-scale wind, solar, and other renewable electric generation by local residents and businesses.

Energy Efficiency in Structures

7. The Planning Commission will stress the importance of energy efficient design in the context of Subdivision and Site Plan design. Where applicable, the Zoning Board of Adjustment will do the same.
8. The Planning Commission will update the Outdoor Lighting Section of the Land Use Regulations to include specific energy efficiency standards for outdoor lighting.
9. The Town will support the Energy Committee's efforts to encourage greater energy efficiency among existing residences and businesses and the use of energy audits and building performance certification where appropriate, so that at least 25% of existing homes and 50% of new homes shall meet the minimum energy star requirements and 25% of existing businesses and 50% of new businesses meet the minimum requirements for the Efficiency Vermont Building Performance program by 2020.

Transportation

10. The Town will work with the Chittenden County Regional Planning Organization, the Chittenden County Transportation Authority and the Vermont Agency of Transportation in exploring opportunities for ridesharing, park-n-ride facilities, bus stops, bike and pedestrian amenities, and other measures to reduce energy consumption and greenhouse gas emissions in transportation.
11. The Energy Committee will work with the elementary school to improve bus ridership and carpooling percentages and analyze the potential for use of biofuels or other means to reduce the environmental impact of school transportation.
12. The Town will support the implementation of bike lanes to accommodate bicycle commuters, where feasible.

Incentives and Partnerships

13. The Energy Committee will review and where appropriate recommend the implementation of financial incentives such as a modified permit fee structure to encourage residents and businesses to undertake more weatherization renovations and energy efficient building.
14. The Town will support local organizations in their efforts to implement efforts to meet the Town's energy efficiency, conservation, sustainability and production goals.

IMPLEMENTATION

CHAPTER 1.13

Strategy	Responsible Town Party and / or Cooperating Entities	Timeframe	Status
The Town will develop a framework for moving forward with the work completed by the Charlotte Wastewater Committee in 2010-2011.	SB, PC		
<p>Review Land Use Regulations</p> <ul style="list-style-type: none"> • The outcomes of the East Charlotte Village Planning Project will be considered by the Planning Commission when proposing future land use regulations. • Advisory design guidelines – including TP, historic districts, Rte 7 / Ferry Road, seawalls • Reevaluate district boundaries • Riparian buffer and setback standards • Stormwater management including best management practices for existing development if involved in new development project • Farm related businesses • Flood hazard areas • Adequate water supply / no interference / public notice • Recharge areas • 	PC		
The Town will consider the adoption of an Official Map for village areas which enables the reservation of lands for drainage, streets, parks,	PC, SB		

schools and other public facilities.			
During development review, Areas of High Public Value will be identified and prioritized based on the qualities and relative values of each resource. This analysis will be site specific but will also consider resources in the broader context as appropriate. Land development projects will be designed to complement existing land uses.	PC, ZBA		
The Town will continue to promote the use of non-contiguous PRDs and PUDs as a means to transfer density to areas deemed appropriate for development	PC, Staff		
Complete an Open Space and Conservation Action Plan and work with organizations to insure protection of identified resources.	CC, CLT, PC		
Complete a road inventory and road stormwater management plan	SB, RC, CCRPC, VTANR		
Continue updating / maintaining the Significant Wildlife Habitat Map and review land use trends annually	PC, CC, CCRPC	Ongoing	
Update Road and Driveway Development Standards (or Development Standards) <ul style="list-style-type: none"> • Include stormwater management options, management recommendations like roadside mowing to control spread of invasives etc • Incorporate B71 and A76 standards as appropriate • Fire ponds and dry hydrants • Flood resiliency 	PC, RC, CVFRS, SB	1	
Develop procedures for updating and maintaining Charlotte-based GIS layers. Identify other clearinghouses for resource related information and work to ensure that the best, available data are used in all resource related work involving mapping and analysis.	Staff, CCRPC, VCGI		
Inventory existing public access areas and develop an access management plan which outlines recommended improvements if any	PC, CCC, ReC, TrC		
Monitor the possible future need to establish Mooring Management Areas for the Lake Champlain shoreline	SB	Ongoing	
Establish a Charlotte Farm and Food Council	SB		

Inventory and track farmland acreage, the number and type of farming operations and farm ownership patterns in town; create registry	FFC, CC		
Explore re-establishing a farmers market	FFC		
Apply for village designation from the Vermont Department of Housing and Community Development for West Charlotte and East Charlotte Village areas to access additional resources and financial assistance for historic preservation and economic development	CCDG, PC, SB		
Continue to inventory, catalogue and map historical and cultural resources	CC, PC, Staff		
Adopt specific lighting standards under the town's land use regulations and, at the same time, conduct public informational meetings to educate the public regarding strategies to avoid light pollution	PC, EC, SB		
Improve upon the current scenic road inventory by recommending guidelines for development review and road maintenance	PC, CC, Consultant, Staff, RC		
Complete a build out analysis of areas in and around existing villages. The analysis will be completed in the context of existing and planned facilities (e.g. septic). Land use regulations will be evaluated and revised, if appropriate, to encourage village densities that are greater than those in surrounding rural areas	PC, CCRPC, Consultant	Following WW	
Reappoint members to an Affordable / Senior Housing Committee. This group will work with the Planning Commission in evaluating land use regulation incentives for the creation of affordable / senior housing	SB, PC	2	
Encourage development review applicants to consider affordable or senior housing when presenting their subdivision proposals at Sketch Plan Review and provide information about the Affordable Housing Trust Fund	PC, Staff	Ongoing	
Establish an annual meeting between the Planning Commission and the Affordable / Senior Housing Committee to assess the Town's progress in meeting housing needs	Staff, PC, ASHC	2	
Review environmental assessments completed for the state owned property near the railway (north of Ferry Road) and determine if more information is needed. This information will be used when considering zoning alternatives as part of the Land Use Regulation process update	PC, Staff		
Consider consolidating development review related functions under one Development Review Board. This Board would be responsible for reviewing applications against all development	PC, SB, Staff		

review standards outlined in the Land Use Regulations providing clarity and certainty to both applicants and interested parties to the application including abutting property owners			
Continue to plan for, develop and maintain an interconnected, town-wide network of trails and public byways; establish annual meeting	TrC, PC, SB	1	
The Town will, within its means, continue to support and provide access to social and cultural facilities, organizations, and events that serve the needs of Charlotte residents and highlight and celebrate the Charlotte community. See Utilities and Facilities.	SB, PC, SC	Ongoing	
The Town will work with the Senior Center in developing a parking plan. The plan will help to identify areas for additional parking including opportunities for shared parking with other uses in the West Charlotte Village	SB, PC, SC, Consultant	1	
Regularly update the hazards mitigation plan for FEMA-approval, and the emergency response and operation plans	SB, PC, CVFRS, RC	Ongoing	
The Selectboard will oversee and ensure the timely implementation of the master plan for the Burn's Property	SB	1	
Evaluate options for energy efficiency in town buildings	SB, EC	Ongoing	
The Planning Commission will develop a capital budget and 5-year capital improvement program (CIP), for Selectboard consideration and adoption, that identifies and schedules planned capital improvements in relation to existing debt service and available sources of funding	PC, SB, RC	2	
The Town will support the inclusion of appropriate accommodations for pedestrians and cyclists whenever improvements to major paved roads (e.g. Route 7, Spear Street, Hinesburg Road (Church Hill Road), Mount Philo Road, etc.) are undertaken.	RC, SB, CCRPC	1	
Conduct a survey of existing locations for human burial and memorial and will assess future needs. This information will be used to review planning related concerns including zoning and long-term maintenance.	CeC	3	
The Town will work with the State of Vermont / CCRPC to collect data on automobile, bicycle and pedestrian crashes; safety issues; and traffic volumes of Town roads on a routine basis	SB, PC, CCRPC	1	
The Town will consider the creation of park and ride lots at appropriate locations in the West Charlotte and East Charlotte villages, which might also serve as transit stops	PC, SB, EC, CCRPC	Ongoing	

The Selectboard shall review posted speed limits and consider adjusting them in accordance with State guidelines to promote safety	SB	1	
Insert Energy Strategies here			

- 1- years 1 and 2
- 2- years 3 and 4
- 3- years 5 and 6
- 4- years 7 and 8

SB – Selectboard, PC – Planning Commission, EC – Energy Committee, CeC – Cemetery Commission, RC – Road Commissioner, ReC – Recreation Commission, TrC – Trails Committee, CCDG – Charlotte Community Dev Group,