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ROUTE 28 VISIONING PROJECT



FINAL REPORT

February 26, 2014



Acknowledgements:

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The Cape Cod Commission wishes to thank all those who contributed to the project, especially the Town of Chatham staff, Board of Selectmen and Planning Board.



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INTRODUCTION AND BACKGROUND

The Town of Chatham requested technical assistance from the Cape Cod Commission to conduct a land use planning study of the Route 28 corridor from the Crowell Road intersection to the Harwich town line. The purpose of the project is to address local concerns for both the form and layout of future development along the roadway. The purpose of the study was to address local land use and streetscapes adjacent to but not including the Route 28 road layout. This report provides an overview of the study and includes summaries of the project's analyses, public participation/input, and recommendations for options the town may wish to pursue.

The overall scope of the planning study includes identification of potential opportunities to enhance or change development patterns along the corridor and/or other streetscape improvements consistent with the town's Comprehensive Plan.

As the recommendations of this report are contingent on broad support, the Commission has aimed to fully understand how the community wishes to grow, and with this guidance and input offer ways in which that vision can be accomplished through changes in the land use regulations.

OBJECTIVES AND GOALS

To complete the scope of work, the project team had four broad objectives that helped guide the project and which were essential to the success of the project, these were:

- Reinforce or re-affirm the Comprehensive Plan Vision.
- Educate the community about land use terminology and the effect of the zoning regulations on land use.
- Involve the broadest range of citizens and stakeholders and get their opinions.
- Listen and identify the problem(s) in the corridor before thinking about the solution.



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STUDY AREA

The study area includes 352 parcels stretching the length of Route 28 from the Harwich Town Line to the intersection of Route 28 and Crowell Road. It includes all parcels that either have frontage on Route 28, or are zoned SB or GB3 in this area. The study area also includes the GB3 properties that are located on the southerly part of Crowell Road and contiguous with the GB3 District on Route 28. The study area is shown in Figure 1.

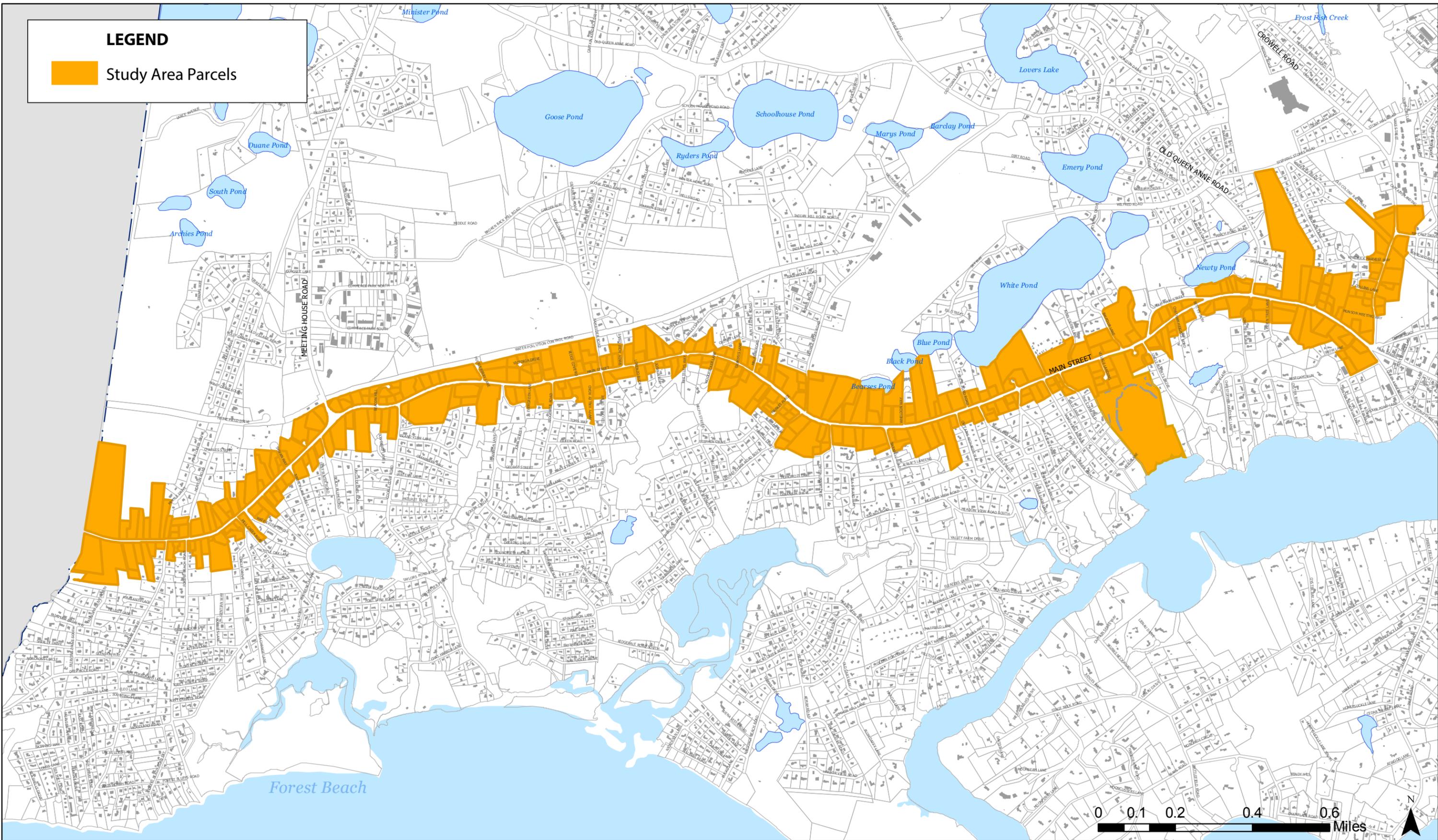


Figure 1 | Study Area Map

This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County. The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research. The parcel datalayer was acquired from the Town of Chatham's GIS Department and all other base datalayers are acquired from MassGIS. Illustrative additions to this map were created using Adobe Illustrator CS4 by TH





ZONING TIMELINE

In order to understand the existing land use pattern, it is helpful to look back at the history of the land use regulations in this area. In 1954, when the Town first adopted zoning, the corresponding zoning map included only two districts, Residential and Business. Generally the Main Street (now Route 28) corridor between Crowell Road west to the Harwich border was zoned primarily for residential use with small areas delineated for business activity in the Crowell Road/Main Street area, West Chatham and South Chatham. Business zones in South Chatham and West Chatham were limited to the south side of Route 28 at the time, with the South Chatham district extending from Pleasant Street to Mill Creek Road and West Chatham district between George Ryder Road South and Barn Hill Road.

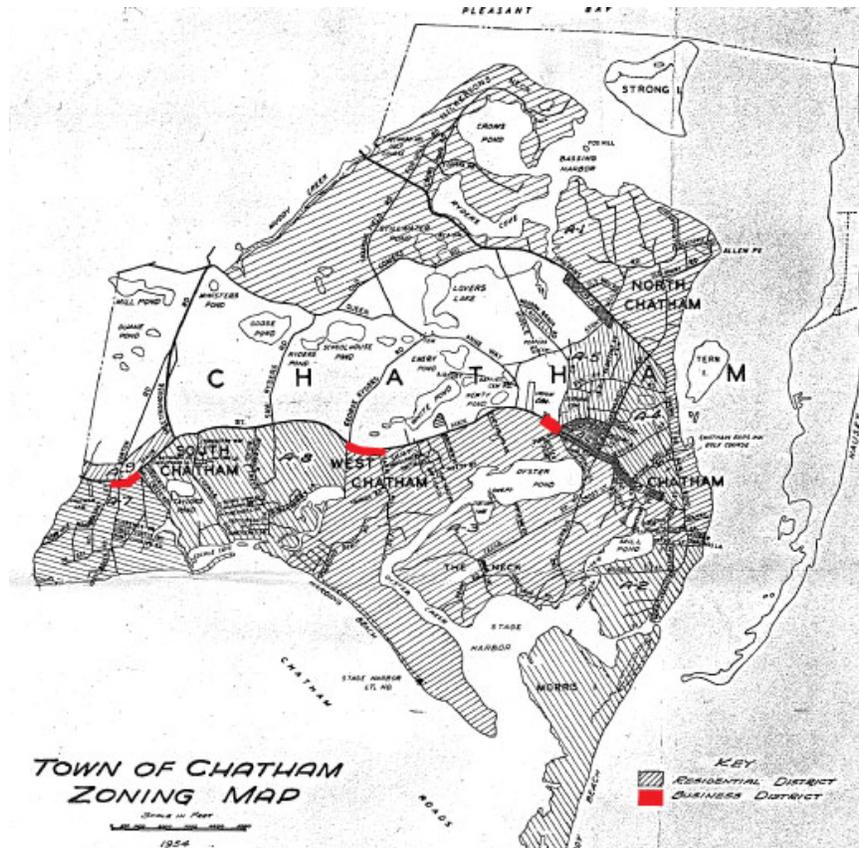


FIGURE 2: 1954 ZONING MAP (COLOR ADDED (RED) TO IDENTIFY BUSINESS DISTRICTS IN STUDY AREA)



Districts along the corridor devoted to business expanded in 1957, with the creation of more extensive Limited Business (LB) and General Business (GB) zones, greatly reducing the area zoned exclusively for residences, and altering the land use pattern of distinct neighborhood centers.

In the mid to late 1980s, further growth and refinement of the business zoning districts along the corridor continued, leaving only two exclusively residentially zoned areas in West Chatham and South Chatham. This zoning pattern has persisted for the last 25 years and has been guiding land use in the corridor during that time.

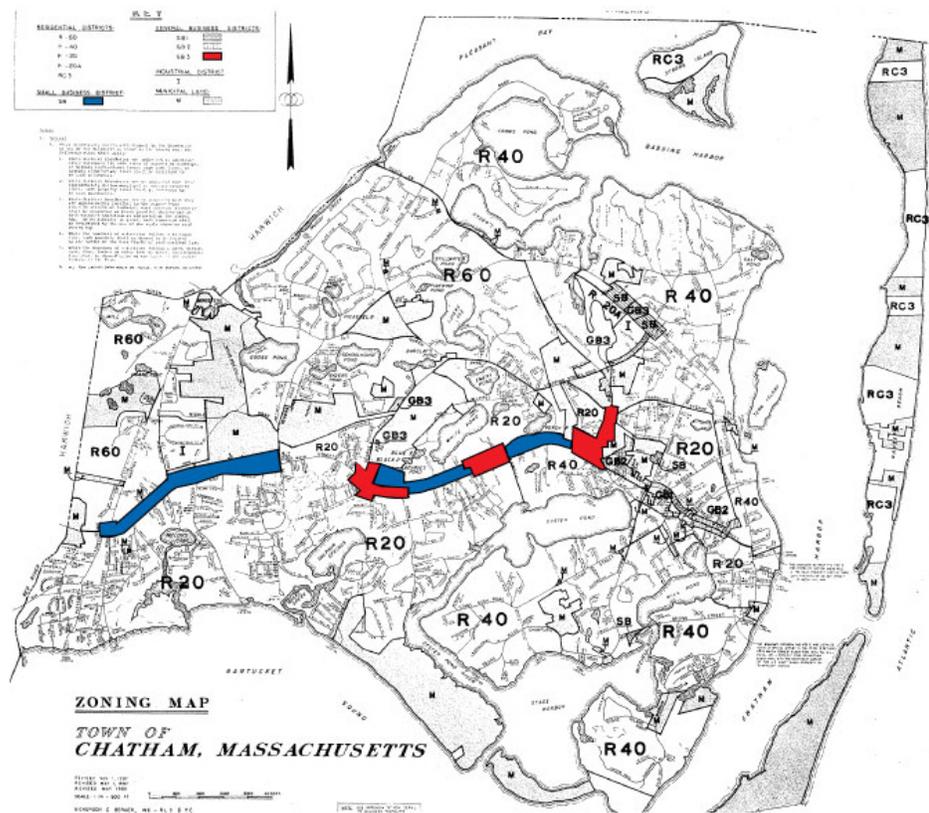


FIGURE 3: 1987 ZONING MAP (COLOR ADDED (RED AND BLUE) TO IDENTIFY NON-RESIDENTIAL DISTRICTS IN THE STUDY AREA (GB3 AND SB))

In 1987, the Flexible Development Overlay Districts were added along the corridor - in the Crowell Road Area, the Cornfield, West Chatham and South



Chatham. The primary purpose of these districts was to provide a mix of commercial and multi-family development in selected zones.

In 2009, a minor adjustment to the GB3 zone in the Crowell Road area was approved adding one parcel to the district to facilitate the redevelopment of the Chatham Village Market site.

CURRENT ZONING

The study area contains six separate zoning districts and one overlay district, as shown in Figure 4. These are:

R-20 Residential District:

A residential district with a minimum lot size of 20,000 square feet. The R-20 areas directly abut Route 28 between Sam Ryder Road and West Chatham, and on the south side of Route 28 to the west of South Chatham. The R-20 district also is located to the rear of many Small Business lots along the corridor, particularly on the south side of Route 28. Of the parcels in the study area, 54 are entirely zoned R-20, and 34 are partially zoned R-20.

R-60 Residential District:

A residential district with a minimum lot size of 60,000 square feet. The R-60 areas directly abut the north side of Route 28 to the west of South Chatham, and also extends to the rear of Small Business lots along the corridor on the north side of Route 28. Six of the parcels in the study area are entirely zoned R-60, and 12 are partially zoned R-60.

Small Business District (SB):

A district that allows residential uses and a mix of mostly small business uses. This zoning district applies along large stretches of Route 28, with 148 parcels in the study area zoned SB, and 46 are split between SB and a residential district (either R-20 or R-60).

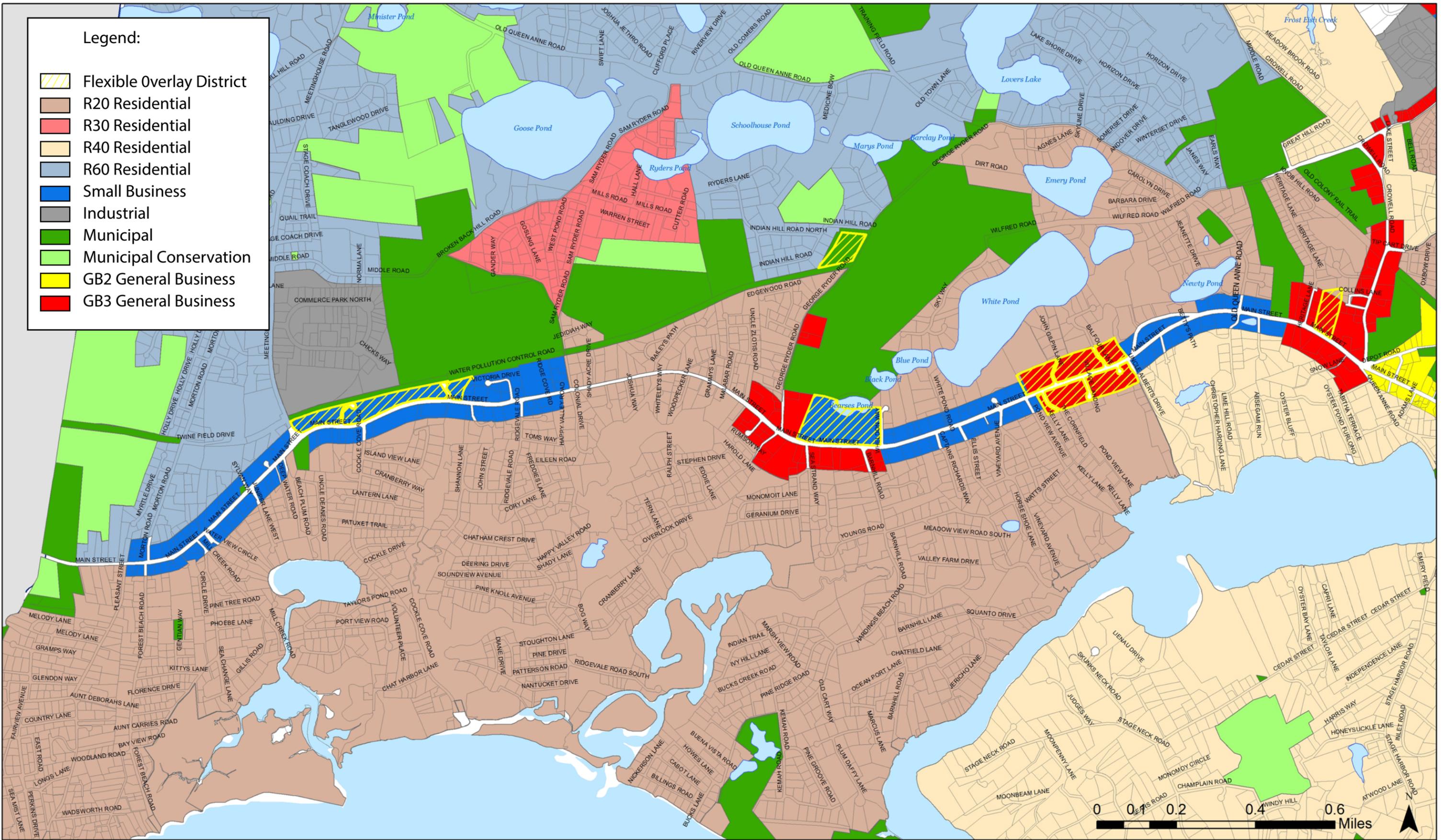


Figure 4 | Existing Zoning

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General Business (GB3):

A business district that allows a mix of commercial and residential uses. GB3 areas are focused in West Chatham, the Cornfield area and around the intersection of Crowell Road and Route 28. Ninety one of the parcels are entirely zoned GB3, two are split GB3 and residential.

Municipal and Municipal conservation (M and MC)

There are a combined total of 5 parcels in the study area that are within one of these two zoning districts, including the chamber of commerce, and two cemeteries. Uses allowed in these districts include public use, including conservation areas, waters supply, agriculture and public offices.

Flexible Development District:

As described in the zoning bylaw, this is a district to provide a mix of commercial and multi-family, senior or congregate residential development. This overlay occurs in four places: parts of West Chatham; the Cornfield Area; the north side of Route 28 near Route 137; and properties near Crowell Road. Fifty-five of the parcels in the study area are subject to the Flexible Development District overlay, with the underlying zoning being either SB or GB3.

HISTORIC BUSINESS DISTRICT (HBD)

The Historic Business District was established in 1985 and incorporates all properties that were zoned either General Business 1, 2 or 3, Limited Business or Residential Business on that date. The District was modified in May, 2010 to include a parcel off Oyster Pond Furlong. The district was established with the purpose of protecting, maintaining and improving the characteristics of the district and encouraging designs that are compatible with the existing buildings. The HBD covers a significant portion of the study area, only a small part of the corridor between Sam Ryder Road and West Chatham, and a small number of properties west of Morton Road, not within the district. The district regulations are administered by the Historic Business District Commission (HBDC) which has



broad responsibility for reviewing all buildings and structures that are erected, reconstructed, altered or restored within the district.

COMPREHENSIVE PLAN

The Chatham Comprehensive Plan was adopted by Town Meeting on May 13, 2003 and sets out the community's vision for the future growth of the town through a series of goals and policies. The Land Use and Community Character Chapters of the Comprehensive Plan are of particular relevance to the Route 28 Visioning Project. A full version of the Comprehensive Plan can be viewed on the town's website, the land use and community character chapters are included in Appendix A.

The Land Use section of Chatham's Comprehensive Plan contains two broad goals accompanied by policy directives to guide implementation. The goals are repeated here for reference and to provide context for the study:

Goal 1.1: To permit only that growth and development that is consistent with the carrying capacity of Chatham's natural environment in order to maintain the quality of life in our Town. Chatham should retain its small town and seaside resort character and any development should maintain that, not minimize or destroy it. Promote the re-development and reuse of existing developed property rather than the development of vacant land. Bylaws and regulations should be created to ensure that intensity is maintained or minimized - never maximized.

Goal 1.2: To preserve existing Neighborhood centers by limiting their boundaries based on the collective needs and desires of each specific neighborhood's residents. Maintain a concentration of commercial, residential and mixed use in these neighborhoods, including affordable housing, beneficial retail and service uses as needed.

Neighborhood Centers

The Comprehensive Plan identifies six "neighborhood centers", four of which are located in the Route 28 Study Area. These neighborhood centers are described as areas where a "mix of business and residential development is located" and that the future "boundaries, regulation of future land use, public improvements,



and the character of development shall be guided by provisions of this plan for the individual Neighborhood center. Decisions on site plans and special permits shall be strictly guided by the plan's first land use section goal." The Comprehensive Plan also describes discouraging commercial uses between these neighborhood centers and allowing single family residential as the primary use.

The plan identifies and describes the four neighborhood centers within the study area, a summary description is provided here for context, but Appendix A should be consulted for specific wording.

- *South Chatham:* The plan identifies the location of South Chatham neighborhood center as *"roughly from west of Morton Road to east of Post Office Square along Route 28"* and describes it as a *"quiet, rural neighborhood with very limited commercial activity."* It is zoned SB. Policies focus on preserving South Chatham's character and limiting commercial uses to small neighborhood establishments.
- *West Chatham:* The plan identifies the West Chatham neighborhood center location as *"along Rte. 28 (Main St.) roughly between George Ryder and Barn Hill roads"*. It describes this neighborhood center as the *"second most important commercial area in Chatham after Downtown."* Developed commercial areas (zoned GB-3) are located along the south side of Route 28 and on the north side at the intersection of George Ryder Road. Low density residential uses are located on the north side of Route 28 in the area now zoned SB and Flexible Overlay. The plan's policies direct the town to limit commercial development and redevelopment to the existing commercial areas, improve the strip development character of the area, and restrict the area zoned SB to residential uses.
- *The Cornfield:* The plan identifies the location as *"along Route 28 roughly between Pond View and Uncle Albert's Drive"*. It describes the Cornfield as an area of *"residential and commercial mix that sprawls along Rte. 28 with little cohesiveness."* The policies call for varied residential uses and limiting commercial uses to serve the neighborhood, with improved aesthetics, traffic safety, and pedestrian amenities.



- *Crowell Road*: The plan identifies the location of the Crowell Road neighborhood center as “along Rte. 28 from west of Heritage Lane to the Rotary and along Crowell Road from Rte. 28 to Tip Cart Road”. It describes the area as “Chatham’s cultural, public facilities, and recreation center.” Commercial and residential uses are interspersed with cultural and public facilities through the neighborhood. The policies call for allowing a mix of multi-family residential (affordable housing encouraged), cultural, recreational, public facilities, and neighborhood commercial uses focused around the Route 28/Crowell Road intersection. It should be noted that the description of this neighborhood center extends to areas outside the study area of this project.

The Comprehensive Plan does not provide great detail or specifics surrounding the land use changes envisioned, however, the policies described do set out a vision of the future and identifying an appropriate pattern of land use. For the purposes of this project, the Commission has kept the concepts identified in the Comprehensive Plan as guiding principles for the land use study being undertaken.

Through public participation at the workshops, listening sessions and through public comments, the project team sought to re-affirm that the Comprehensive Plan’s vision established in 2003 is still a goal in 2013. Based on this input, there seems little basis for major changes to the vision, goals or policies articulated in the Comprehensive Plan, and therefore the recommendations contained herein are focused on implementing the vision rather than updating or modifying it.

PUBLIC PARTICIPATION

One of the most important objectives of the project was to hear from the broadest range of citizens and stakeholders as possible. In collaboration with the town, the project team developed a Public Participation Plan to provide numerous and varied ways for stakeholders and interested parties to receive information, provide input, express comments and questions, and participate in



project-related activities. Key elements of the public participation plan include “listening” sessions with stakeholder groups; presentation of project information and materials via the project websites; and public workshops.

LISTENING SESSIONS

The Cape Cod Commission and town staff conducted a series of listening sessions in Chatham in December 2012 and January 2013. These sessions provided an opportunity for the project team to have a discussion and gather input directly from local stakeholders. Listening sessions were held with the following groups: Chatham Alliance for Preservation and Conservation; West Chatham Village and Business Association; South Chatham Neighborhood Association; the West Chatham Association; a group of builders; and Chatham Chamber of Commerce members. To ensure that similar ground was covered in each session, discussion was prompted with each group by the same set of questions. These were:

1. What do you like about the Route 28 corridor?
2. What do you dislike about the Route 28 corridor?
3. What is your top concern for the corridor?
4. What if any changes would you like to see on the Route 28 corridor?
5. What does “Chatham” style development mean to you?

The project team created a summary of the points raised (see Appendix B); these were presented at the first workshop and posted on the website. To provide a visualization of the points raised, “word clouds” were created to illustrate the frequency of particular responses (see Figure 5). The questions used to frame these discussions were also used for the on-line survey available through the website (see below).

The listening sessions revealed that many people shared similar perspectives on several issues, with several “likes”, “dislikes” and concerns being raised repeatedly by the various stakeholder groups. In general, participants indicated a desire to maintain the corridor’s current land use pattern but were concerned about potential future changes and new development resulting from zoning or



WEBSITE

The Cape Cod Commission and Town of Chatham websites were intended to serve as a primary mechanism for disseminating project information; they also provided a forum for comment from the public. Both websites provided announcements, and contact information and provided a form for people to submit comments. In addition, the town's website provided a "frequently asked question" section with responses to issues/questions raised during the process.

The Commission's project website provided copies of project materials such as workshop presentations, monthly reports to the Selectmen, buildout analysis reports, maps, etc. In addition, an on-line survey provided members of the public with an opportunity to respond to the questions posed during the listening sessions with stakeholder groups. The responses to these questions were anonymous, and could be viewed by others interested in the project. The aim of this survey tool was to allow members of the community to contribute, and see the opinions of others, particularly for those individuals who were not able to attend the workshops or listening sessions. However, few individuals took advantage of this tool, indicating a continued community preference for involvement through public meetings and workshops.

WORKSHOPS

The project team conducted three public workshops, jointly hosted by the Board of Selectmen and the Planning Board. These workshops are described briefly below, including the structure and goals for the workshop. The workshops were intended to build off one another, and had the dual purpose to both educate the participants about development patterns and potential as well as establish a clearer picture of the future vision.

Workshop 1

The first of the workshops was held on May 2, 2013 at the Chatham Community Center and was attended by approximately 35 people. The main focus of the workshop was to provide the participants with an understanding of the current pattern of development along the corridor and the effect of the existing



regulations in shaping both the existing and future land use pattern. A major element for the successful implementation of any land use plan is to ensure that the bylaws and regulations applicable in the area enable the vision sought in the Comprehensive Plan. As such, this workshop focused on the existing regulations and the amount and distribution of development that could be possible under those rules. The intention was to identify whether the current rules could result in development that was consistent with the Comprehensive Plan vision.

Participants were provided with an overview of the existing setting and applicable zoning designations, as well as information about key terminology used in zoning. A series of “case studies” highlighted the uses allowed under zoning and the relative flow limits under the towns regulations. However, the majority of the workshop centered on summarizing the key findings of the baseline buildout analysis conducted for the project, including a range of estimates of the maximum number of residential dwellings and nonresidential square-footage that could be foreseen in the study area under four baseline scenarios.

As part of the workshop, participants provided opinions concerning the way they thought zoning effected buildout projections by using electronic polling devices. Participants used the same devices to provide their opinion of whether the existing zoning enabled the land use pattern envisioned in the Comprehensive Plan. The electronic polling provided real-time results for the audience and helped the project team gauge the level of understanding of local zoning and provided a broad indication of opinions of those present. The questions and results of the polling are provided in Appendix C.

The results of the baseline buildout analysis, and the Commission’s report on the sewer regulations, were presented in detail at the workshop. Detailed reports on these topics are included as Appendix E and F. A summary of the main points is listed below:

- Most future development potential occurs in the form of redevelopment, there are very few buildable, vacant properties in the area.



- There is a relatively high residential development potential in commercial zones and the Flexible Development District, under certain assumptions.
- There is a potentially high non-residential development potential in the small business zone under certain assumptions.
- Growth potential is generally high outside the neighborhood centers.
- Formula businesses are an allowed use in the Small Business zone.
- The sewer regulations may not dramatically limit development potential, but may affect whether some development types are economically feasible.
- 70% of people at the first workshop indicated that the buildout picture presented to them didn't match their vision for the future.
- While it is un-realistic to think that all the parcels in the corridor will re-develop as in the buildout scenarios, if development of the size allowed under buildout happens in one or two places then the character of the area may change.

Workshop 2

The second of the workshops was held on June 15, 2013 at the Chatham Community Center and was attended by approximately fifty people. The workshop focused on refining the future land use vision expressed in the Comprehensive Plan, with participants more specifically identifying the distribution of land use types within the study area. Participants were encouraged to think more about the type of land use they wanted to see, rather than on how to make it happen or what they didn't like today.

Participants were led through a series of exercises as described below:

1. The first exercise involved participants identifying areas where they liked the current uses. Participants were asked to place green dots in areas where they did not want to see any changes and were happy with the land uses currently in place. Participants placed yellow dots in any location where they felt that some change was needed, regardless of what that change was. This was a group exercise conducted with a single base map that showed the neighborhood centers described in the



Comprehensive Plan (see Figure 6). The aim of this exercise was to try to establish the degree to which people liked the existing pattern of development, or wanted to see an altered pattern in the future. This exercise is primarily intended to encourage participation, and although un-scientific, the resulting map showed that participants generally liked the South Chatham area and the areas in between the neighborhood centers to the eastern end of the corridor. Areas where change was identified included the Cornfield and West Chatham, as well as an area to the east of the Route 137/Route 28 intersection.

2. For the second exercise, participants were tasked with establishing a general land use pattern. Participants were divided into two groups, each group was asked to place colored sticky notes representing broad land use categories onto a new map of the area. Four land use choices were available: commercial only; residential only; mixed use; and green space. In this exercise, individuals did not have their own allocation of colored notes, but instead had to discuss their thoughts with the group before placing the colored notes. Each of the group discussions were facilitated by the Commission. The aim of this exercise was to get a consensus feel for the general land use pattern desired (see Figure 7 for the resulting maps). At the start of the exercise, participants were reminded that there was no need to vote or reach a consensus on their vision; however, both groups were able to rapidly articulate their desired vision and produce a map of the general land use pattern discussed. Members of the public reported back on their discussion. An examination of the two maps shows striking similarities between the two groups and appears to strongly re-affirm the vision articulated in the Comprehensive Plan.
3. The final exercise aimed to refine the land use plan. Participants were divided into three groups. Each group was given one of three tasks to accomplish in a 15 minute period of time, these were:
 - i. Develop a more refined pattern for residential uses in the corridor
 - ii. Develop a more refined pattern for commercial, and/or mixed uses in the corridor



- iii. Develop a more refined pattern for green space and landscaping in the corridor.

Each of these group discussions was facilitated by the Commission, and colored sticky notes were used to identify a range of development types for each of these broad categories (see legend of Figures 8, 9, and 10). Again, each group had to discuss their plan before committing their colored notes. After each 15-minute period, the groups moved to a different task at another table and repeated the process to create their own refined map for each land use type. This rotation happened twice during the workshop so that each group got to complete each of the three tasks. The facilitators reported their observations from the groups at the conclusion of the workshop; the resulting maps are shown in Figure 8, 9 and 10.

The resulting maps provide important direction and detail for the land use vision in the area, and help clarify the Comprehensive Plan policies by identifying more specific locations for certain land uses along the corridor. The following observations can be made about the outcome of these exercises:

Residential Land Use pattern:

- No group identified multi-family in large buildings as a desired land use.
- Small scale multi-family residential was focused in the centers.
- Slightly higher density in neighborhood centers were described as transitioning to lower density residential as you move away from the center (concentric rings).

Non-residential and Mixed Use pattern:

- None of the groups identified locations for formula business and moderate to large scale commercial.
- Small commercial uses were focused in the neighborhood centers.
- Mixed commercial/residential land use types were identified in the neighborhood centers.

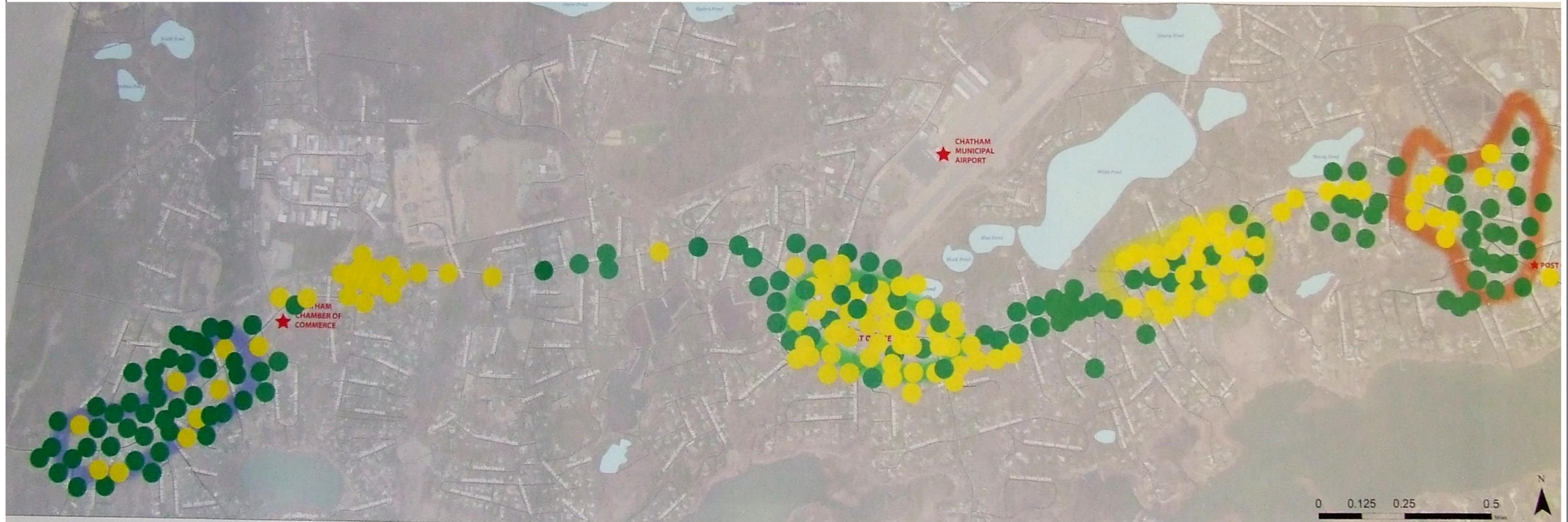
Green or landscaping pattern:

- Landscaping and streetscape improvements were identified along most of corridor.



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- All groups thought incorporating pocket parks into the neighborhood centers was desirable.
- Recreational opportunities for bike routes & connections to trails were identified.
- Conservation areas around ponds and other existing open space were desirable.



-  Areas "liked" by participants
-  Areas "for change"

Figure 6 | Likes and changes identified in Workshop 1

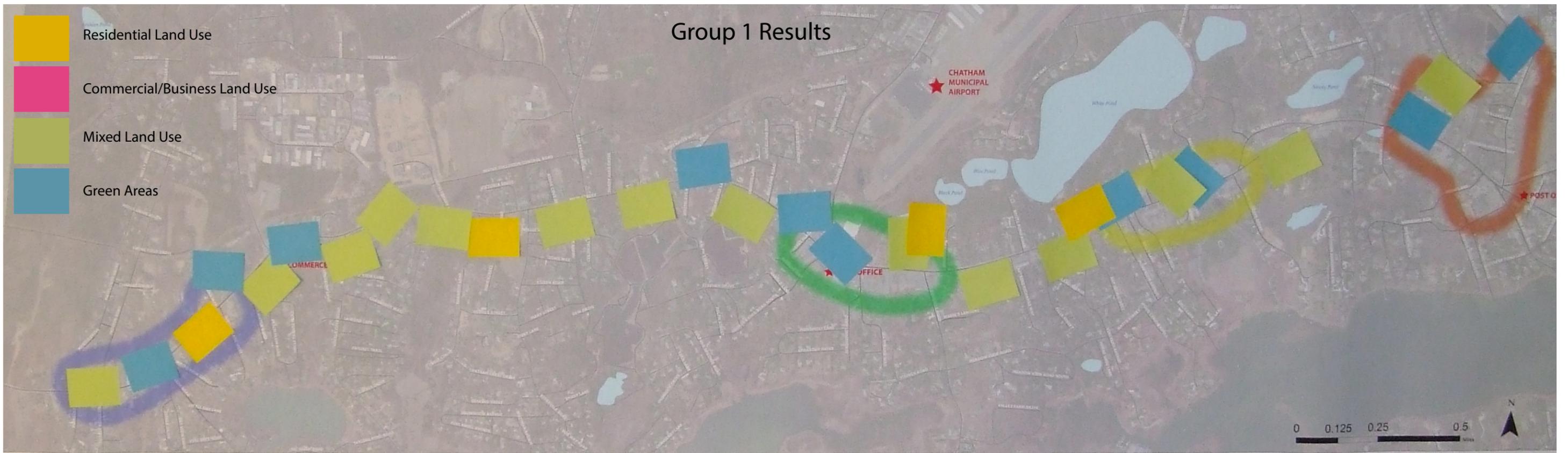
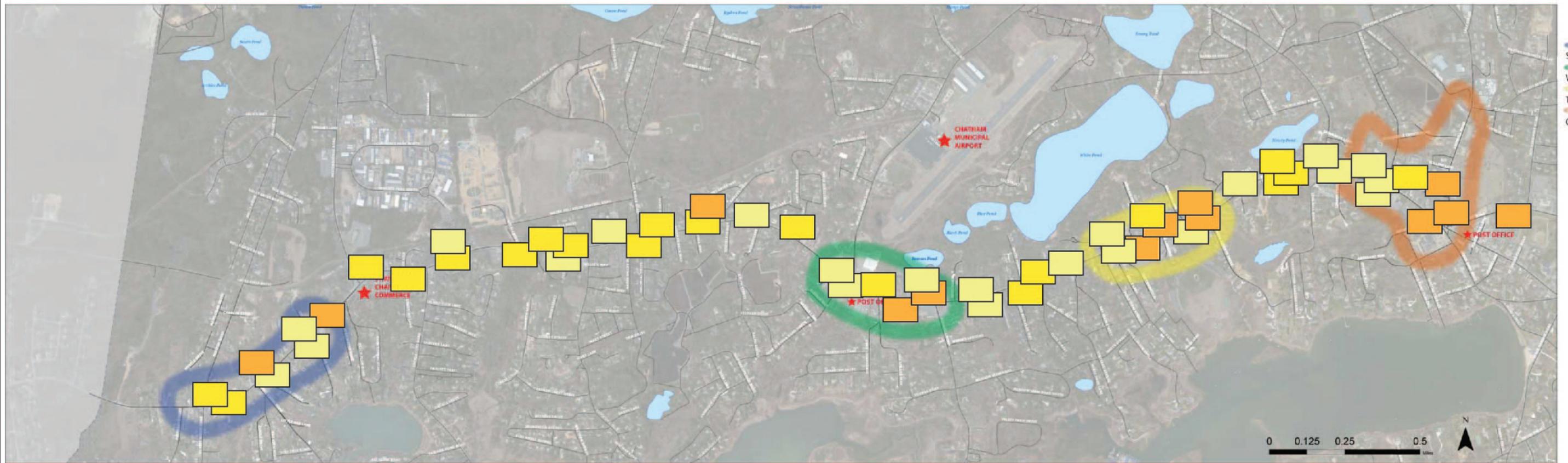


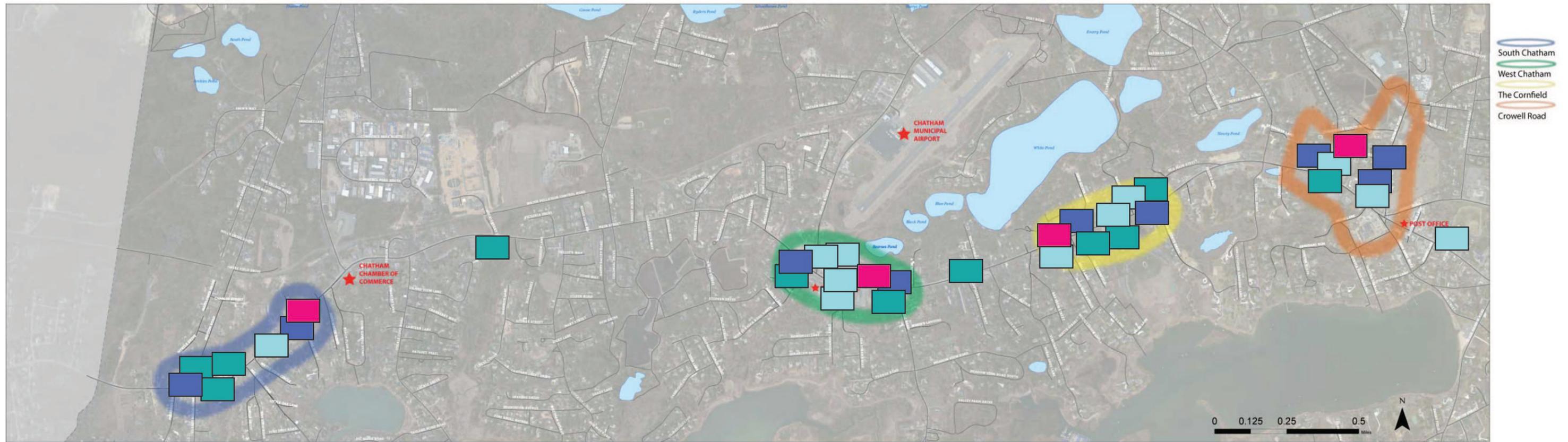
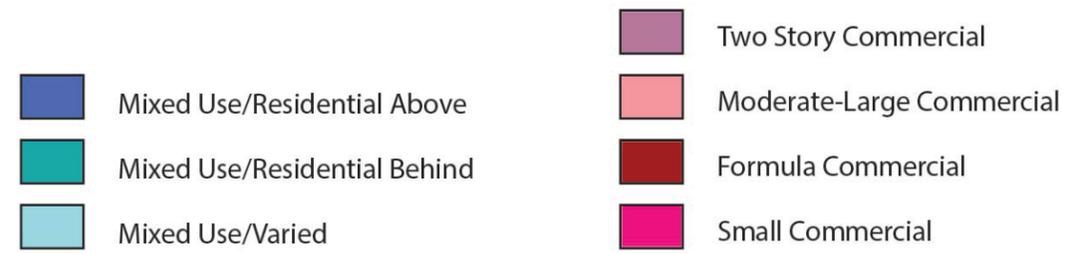
Figure 7 | General Land Use from Workshop 2

- Single Family
- Single Family with Small Business/Home Occupation
- Multi Family in Small Buildings
- Multi Family in Large Buildings



- South Chatham
- West Chatham
- The Cornfield
- Crowell Road

Figure 8 | Residential Land Use pattern from Workshop 2



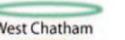
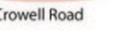
-  South Chatham
-  West Chatham
-  The Cornfield
-  Crowell Road

Figure 9 | Commercial/Business and Mixed Use Land Use pattern from Workshop 2

- Conservation Area
- Recreation Area
- Buffers and Landscaping
- Pocket Park

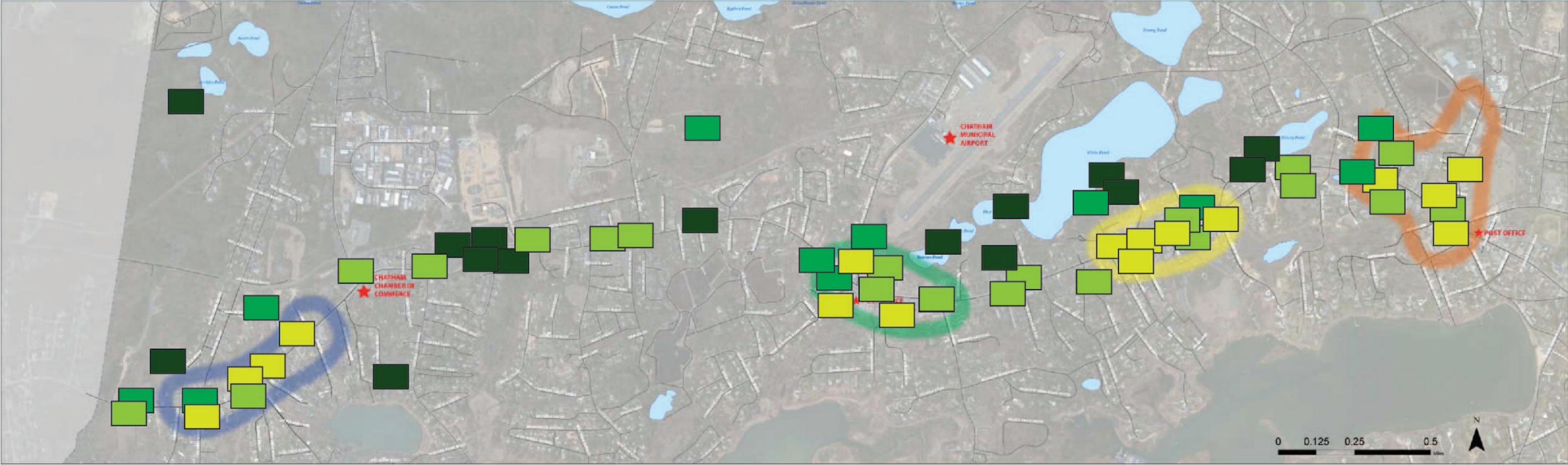


Figure 10 | Green space pattern from Workshop 2



Workshop 3

The third of the workshops was held on September 11, 2013 at the Town Hall Annex and was attended by approximately 85 people. The focus of this final workshop was to gather feedback about the choices and options available to the community to implement the Comprehensive Plan vision. The workshop also provided another opportunity for participants to re-affirm their agreement with elements of the Comprehensive Plan. The participants were guided through a series of questions that sought to encourage input on options relevant to the entire corridor, and were followed by more specific choices for the neighborhood centers. For each of the neighborhood centers, similar questions were asked about potential boundaries, mix of uses, and the size and placement of buildings. Opinions were gathered using the electronic polling devices used in Workshop 1, the questions and results are all included in Appendix D. Participants also asked numerous questions and provided comment during the course of the workshop.

During the course of the workshop, many questions were raised by members of the public in attendance about the content of prior workshops and project reports prepared to-date. In addition, some in the audience appeared to have a certain level of discomfort using the polling devices and/or understanding fully the question being asked. As such, the results have some limitations, but they provide another means of assessing opinions about land use along the corridor, albeit only from those present in the room that provided responses.

Issues/opinions identified during the workshop include:

1. A general concern with pre-existing non-conforming properties in the town.
2. The four neighborhood centers identified in the Comprehensive Plan should be retained.
3. A significant number of people thought the four centers should be treated differently under zoning.
4. Non-residential uses should be focused in the neighborhood centers.
5. Almost 70% of the opinions cast wanted to see residential density stay the same as current, or be lowered.
6. There was general support for incentives for re-use of structures, depending on what they were.



7. There was general support for the concept of requiring parking to the side or rear of buildings.
8. There was an indication that additional design standards, guidance and better enforcement of design rules was needed.
9. For South Chatham, most participants thought the boundaries presented were either correct or should be smaller than shown, with buildings less than 5,000 square feet and placed to match the existing pattern.
10. For West Chatham, most participants thought the boundaries presented were either correct or should be smaller than shown, but opinion was more divided on the appropriate size and placement of buildings.
11. For The Cornfield area, most participants thought the boundaries presented were either correct or should be smaller than shown, but opinion was also more divided on the appropriate size of buildings. There seemed to be stronger opinions about buildings not being placed close to the street in this area.
12. For Crowell Road, a greater number of participants thought the boundaries presented were correct. There seemed to be stronger support for slightly larger buildings here, but little support for them to be located close to the street.
13. The mix of uses desired in each of the centers appeared to be very similar, but in all cases there seemed to be little support for formula business uses.
14. In the areas between the neighborhood centers, very few people indicated that they wanted to see stand-alone businesses, but home occupations and small businesses within a residence seemed supported.
15. Several questions were asked about the Flexible Development District with the aim of establishing whether the main provisions of this district are supported. A strong majority thought that the density allowed in the Flexible Development District was too high, although many in the audience thought that multi-family and congregate care facilities should be allowed in the areas currently occupied by the Flexible Development District Overlay. During the meeting, a member of



the audience asked for an impromptu show of hands for support of the removal of the Flexible Development District. Roughly half of those in attendance indicated their support for this idea.

BUILDOUT

As part of the project, the Commission conducted a baseline buildout analysis to help understand the remaining development potential along the corridor. The value of this exercise is to establish the potential effect of the town's regulations on the distribution of growth and land use types in the area. The complete report is provided for reference in Appendix E. The summary observations are repeated here for context.

1. Overall Development Potential

The results show that despite a perception of being generally built-out, significant amounts of additional development potential remains. In reality, it is unlikely that every property will be developed to its maximum potential, since many other factors such as other regulations, economic decisions and market demand will temper the development in many locations. However, on any of these lots, development or redevelopment that could intensify the existing development pattern is possible under certain circumstances.

Depending on the assumptions used, increases in both the number of dwellings and non-residential square footage may either be fairly modest, or could be large (two or three times the existing). The most likely scenario probably places the maximum potential amount of development somewhere in between these extreme totals. It should be emphasized that most of this development potential involves redevelopment (demo and rebuild, or additions) rather than construction on vacant lots. The effect of re-development that happens under the pre-existing non-conforming provisions of the bylaws was not accounted for in the analysis because of the wide variety of outcomes possible through this review. However, it is unlikely that redevelopment happening in these cases is going to decrease the development potential as estimated in the buildout.



2. Residential zones nearly builtout

Very few new additional dwellings are possible in either of the residential zoning districts (R-20 or R-60). Ignoring the possibility of Comprehensive Permits, it is unlikely under existing zoning that any significant changes in density in these areas will occur. However, the buildout does not take into account the mass or bulk of new housing or modifications to existing residences. The bulk and mass of structures in the residential districts are controlled through a combination of lot coverage, setbacks and height regulations. These dimensional standards limit the overall size of buildings but in most cases would still allow significant additions to be made to existing structures. Sewer regulations in place may affect the number of bedrooms that a residence could have but would not prevent expansions or the addition of other rooms. Such changes could have a dramatic effect on the character of the corridor.

3. General Business District limited potential

Twenty-two percent of the lots in the study area are either entirely, or partly, in the GB3 zone. Depending on the scenario, growth in this district could be as little as 7% of the total additional non-residential floor area projected.

Distributing this growth among the 68 parcels in this district seems to indicate that in many cases only fairly modest increases in floor area may be possible under current regulations. With limited non-residential expansion potential in the GB3 areas, it is possible that if there is demand for additional commercial development, there may be a shift of business growth to other locations, including parts of the small business district or out of town.

In areas where the Flexible Development District overlays the GB3 district, there is no requirement for residential developments to incorporate commercial space into the development as there is under the GB3 regulations. In the Cornfield Area, the entire GB3 district is overlaid by the Flexible Development District. This pattern could have consequences to the future development along the corridor. If demand for residential development remains higher than that for commercial space, it is conceivable that areas like the Cornfield may become increasingly, or entirely, residential in nature.



4. Flexible Development District residential development potential

Significant amounts of the future residential development potential exists within the Flexible Development District. This is not surprising given that the district allows 12 residential units/acre for congregate care facilities and 8 bedrooms per acre for residential uses, versus the four units/acre and two/units per acre of the GB3 and SB/R-20 districts respectively. Typically, densities of this magnitude would be expected within centers but some of the areas designated for the Flexible Development District are not within neighborhood centers.

5. Small Business District commercial development potential

The largest amount of new non-residential development potential occurs in the SB zoning district, at least when it is assumed that these develop entirely as non-residential uses. This does not include small commercial/businesses located within residences. There are more SB zoned parcels than any other designation in the study area, with these properties centered in South Chatham and areas in between the neighborhood centers.

Many properties in the study area are effectively split between two designations; SB in the front and typically a residential district behind. In these cases, under the provisions of Section III D 3 h of the zoning regulations, certain ancillary uses associated with non-residential uses permitted in the SB district (e.g. commercial parking) are allowed to be located on the residential portions of the site. This effectively increases the area available for commercial uses in the SB District, because the space needed for land consumptive parking is accommodated on areas zoned for residential uses. This provision could allow as much as 150,000 square feet of additional non-residential development in the corridor than would be allowed if commercial uses were limited to commercially zoned areas.

SEWER REGULATIONS

At the request of the town, the Cape Cod Commission staff conducted a review of the town's sewer regulations (Article II of the Town of Chatham Rules and Regulations of the Sewer Department and the Board of Health Nitrogen Loading



Regulations) to understand how sewer flow limits affect future development potential, i.e. “buildout.” The primary purpose of the review was to clarify whether zoning or the sewer regulations play a greater role in controlling development/growth, or whether the sewer regulations limited development potential. Data collected by the town was reviewed in detail, and compared to buildout estimates based on a variety of uses in order to fully understand the affects. The results were presented as part of the first workshop, using a series of case studies to illustrate the broad categories of example observed by the Commission’s project team.

The sewer report is included in full in Appendix F, and a summary of the observations is repeated here:

- The review conducted by the Commission reveals that the regulations allow most properties sufficient wastewater flow for most uses to be developed to the potential allowed under current zoning. However, this conclusion does not include a determination on the economic viability/feasibility of the resulting development, options which are subject to changing market conditions and other financial/economic factors.
- Land use is primarily controlled by the zoning, and the sewer regulations do not allow for more development than allowed under zoning. In most cases, the sewer regulations did not appear to prevent properties from reaching buildout under the current zoning rules but the flow limits should be considered one of a variety of additional rules and regulations that will shape the intensity or the viability of a particular use. For example, under zoning a restaurant may be allowed but the sewer regulations may affect how many seats it could have, or in the case of a residence the number of bedrooms.
- In some cases, the maximum number of dwellings allowed under zoning may not be achievable. In many cases, the dwellings allowed by zoning may be achievable if all were one bedroom units; however, whether this is economically feasible was not considered in the analysis.
- Depending on the use, some properties can also reach the estimated buildout conditions and have flow remaining. In these situations, the town could review the locations of these properties and their relationship to neighborhood centers with a view to allowing a transfer



of additional flow capacity to areas where additional flow is needed to produce the desired land use pattern.

RECOMMENDATIONS

The following list of recommendations is intended to provide the town with a framework for achieving the Comprehensive Plan vision. The recommendations are focused on retaining the character of the corridor and shaping future development in a manner that is consistent with this character. Some changes to zoning are needed to accomplish this goal; however, sweeping zoning changes do not appear to be necessary. Due to the number of recommendations, the town should develop a plan that prioritizes the recommendations and a strategy for implementation.

The recommendations are grouped into primary, supporting and administrative recommendations.

PRIMARY RECOMMENDATIONS

- 1. Create four unique, neighborhood centers, tailoring the boundaries to create areas where similar land use is desired.***
-

The town should continue to support the Comprehensive Plan vision and retain the four neighborhood centers identified in the plan while improving the overall appearance in these centers. To accomplish this, and to minimize the amount of changes to the zoning, four specific overlay districts should be created to modify and tailor the underlying regulations to the four neighborhood centers.

Figure 11 shows the existing land use along the corridor based on the land use codes from the town Assessor's records. Figure 12 shows the recommended land use pattern, which groups areas where similar uses, character and appearance are desired. These areas form the basis of the



proposed zoning shown in Figure 13, which would implement the land use plan.

The proposed neighborhood center boundaries follow the general description in the Comprehensive Plan, and are focused on areas of business activity. To the extent that any changes to these boundaries are needed, the town should incorporate this discussion into workshops focused specifically on individual centers and their associated zoning.

The proposed zoning boundaries are locations where zoning is intended to create a similar land use pattern; they are not intended to define a “neighborhood” which will extend well beyond these centers.

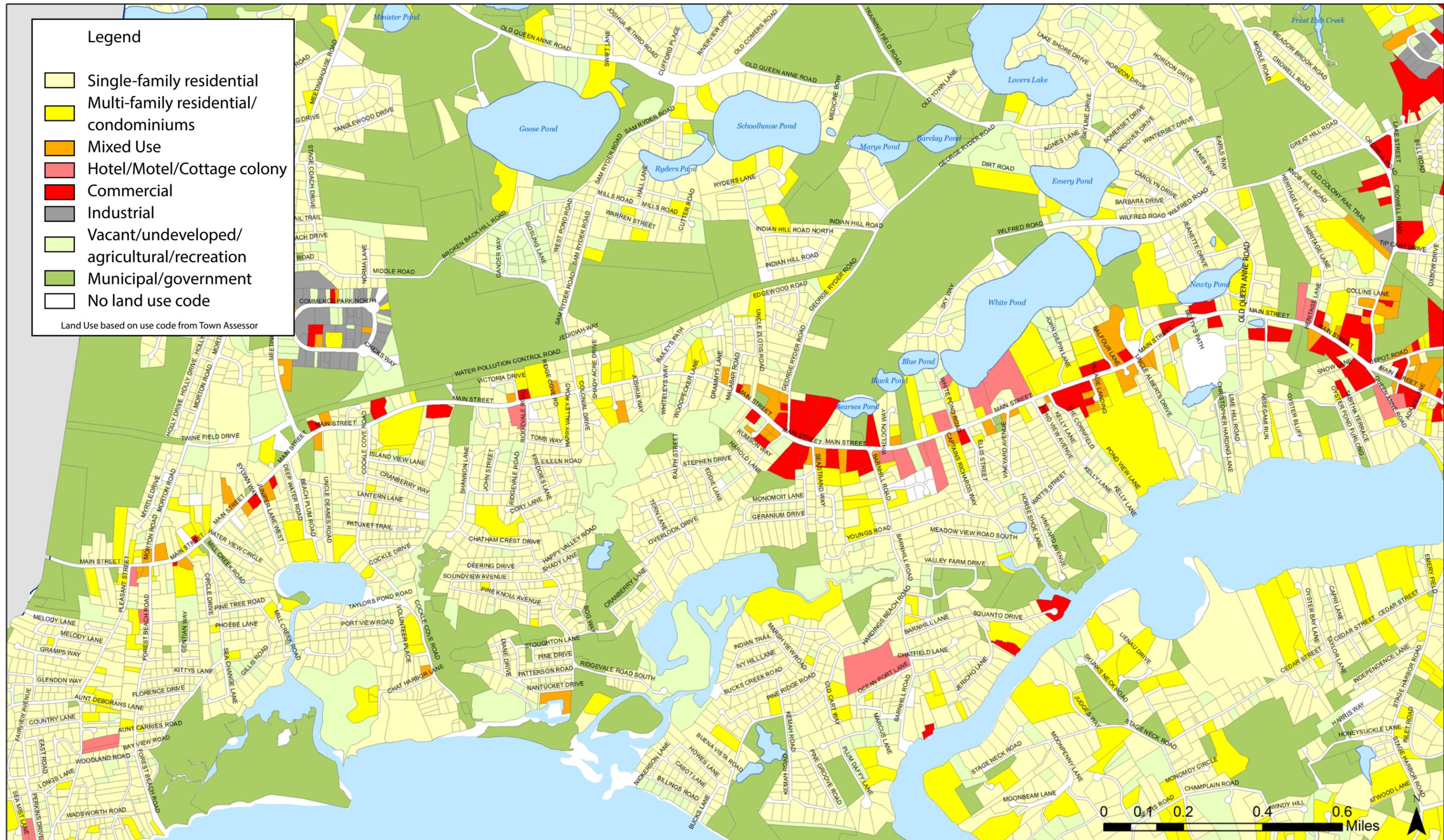


Figure 11 | Existing Land Use

This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County. The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research. The parcel datalayer was acquired from the Town of Chatham's GIS Department and all other base datalayers are acquired from MassGIS. Illustrative additions to this map were created using Adobe Illustrator by PD

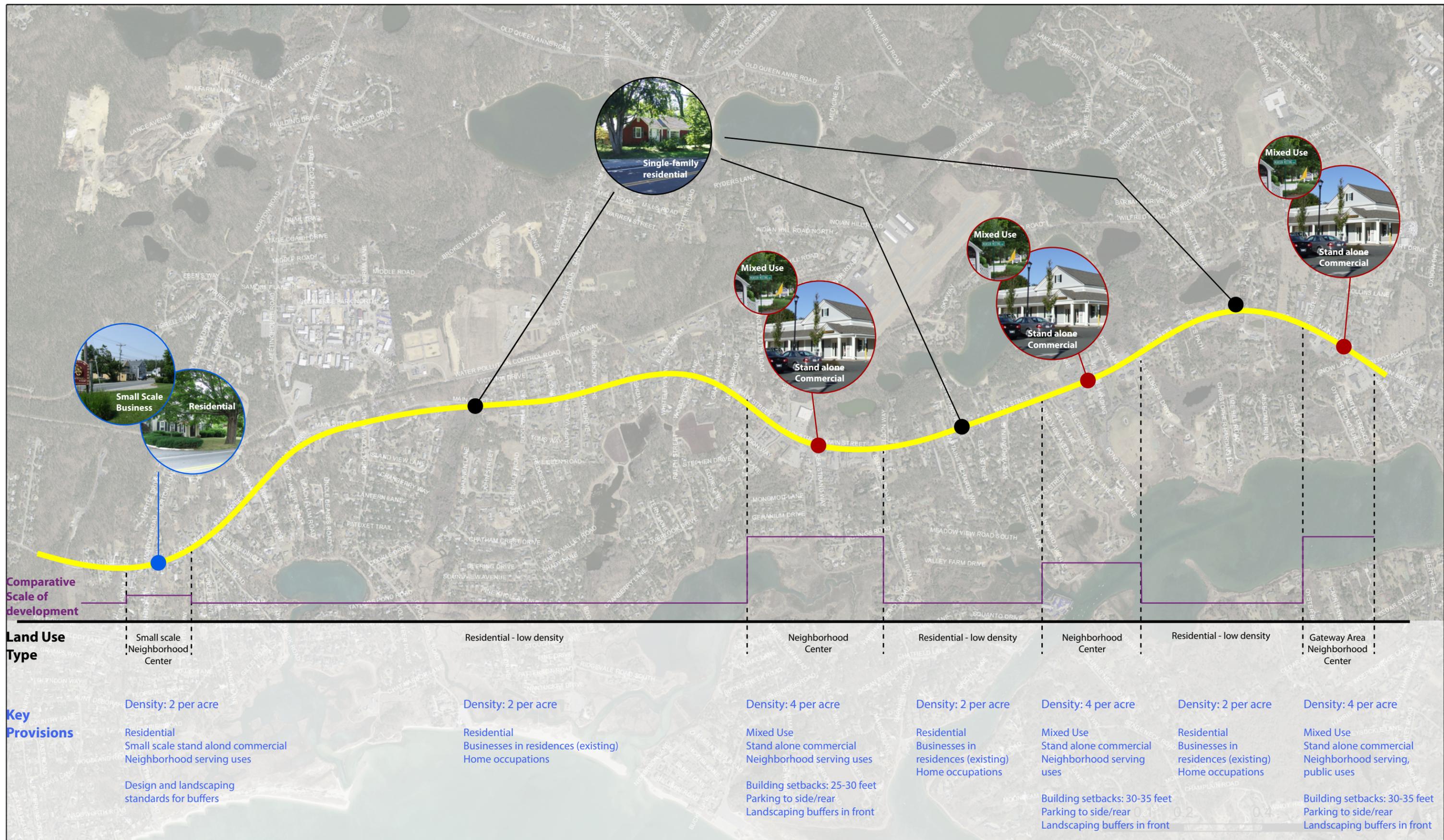


Figure 12 | Land Use Vision

This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County. The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research. The parcel datalayer was acquired from the Town of Chatham's GIS Department and all other base datalayers were acquired from MassGIS. Illustrative additions to this map were created using Adobe Illustrator by PD

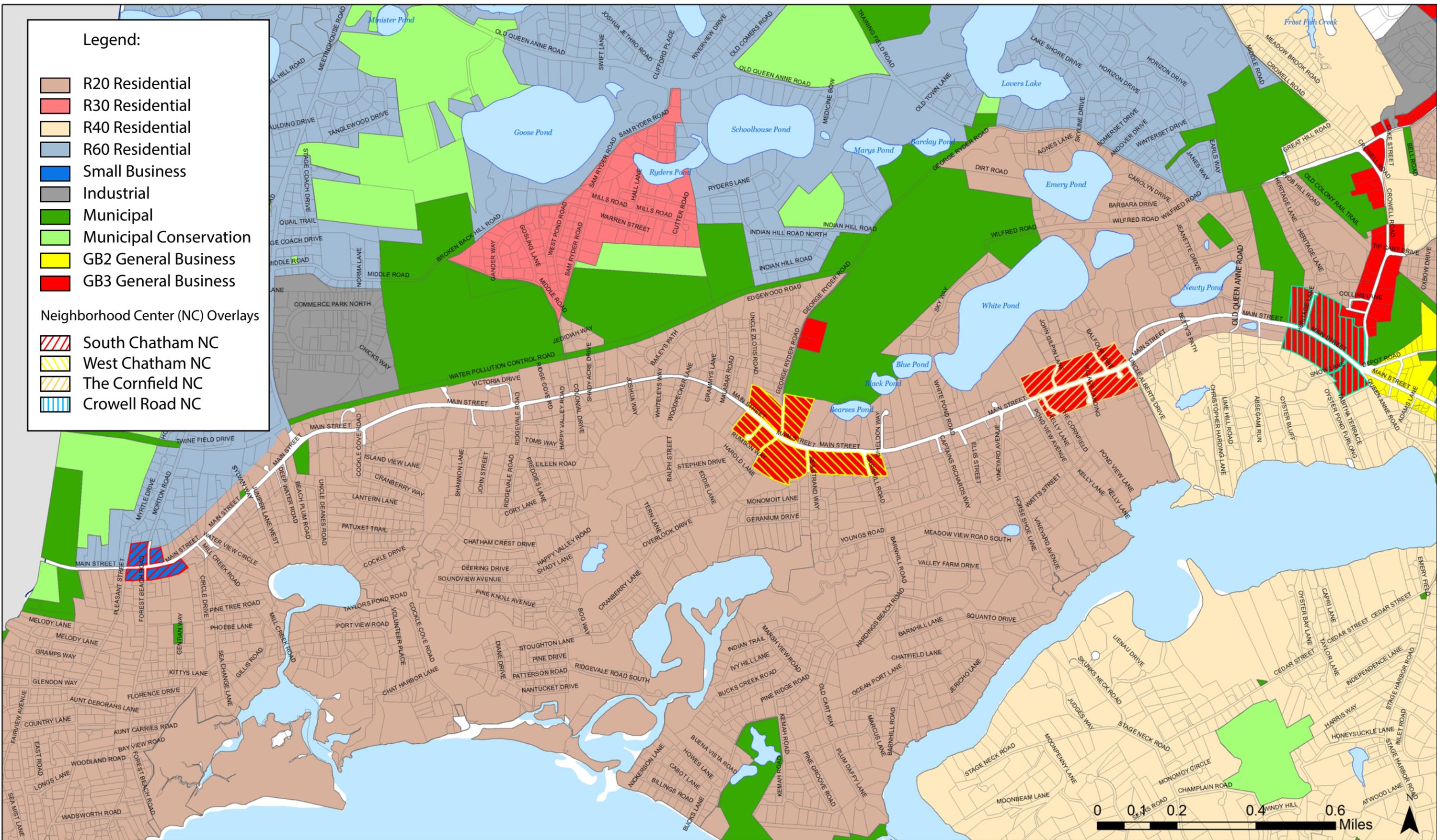


Figure 13 | Proposed Zoning

This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County. The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research. The parcel datalayer was acquired from the Town of Chatham's GIS Department and all other base datalayers are acquired from MassGIS. Illustrative additions to this map were created using Adobe Illustrator by PD



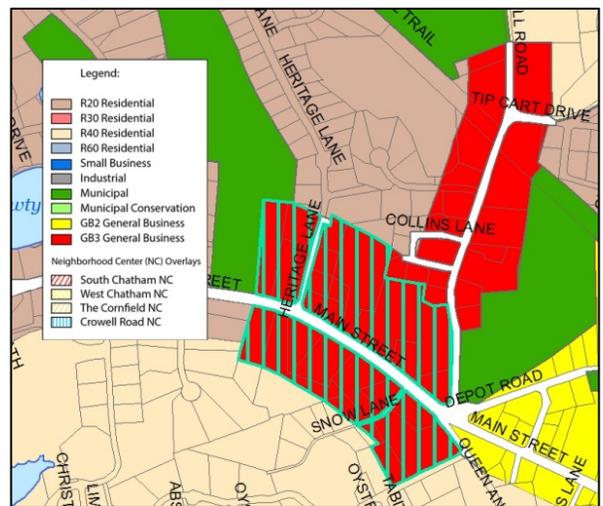


The following summarizes the general goals for these center designations and each is accompanied by a detail of the center boundaries shown on the proposed zoning map (Figure 13).

Crowell Road

This neighborhood center is envisioned to be a mix of residential, neighborhood business and public facilities and recreational uses. The major focus in this area should be an improvement of the appearance, pedestrian and bicycle amenities and encouragement of an appropriate mix of uses for its gateway location.

The Crowell Road area is described in the Comprehensive Plan as extending from west of Heritage Lane to the Rotary and along Crowell Road from Route 28 to Tip Cart Road. The Crowell Road area is Chatham’s cultural, public facilities, and recreation center, and covers a fairly large geographic area, some of which extends well beyond the study area of this project. This area is one of the major gateways into Chatham, particularly the Route 28 intersection. The area along Crowell Road to Tip Cart Road is secondary in terms of its gateway feel. As such, the neighborhood center overlay in this area should focus around Route 28 only, leaving the adjacent General Business 3 area untouched. The overlay in this area is intended to limit the uses allowed under GB3 to those consistent with a non-waterfront, neighborhood center and gateway, and should include modifications to setbacks, landscaping and parking requirements.

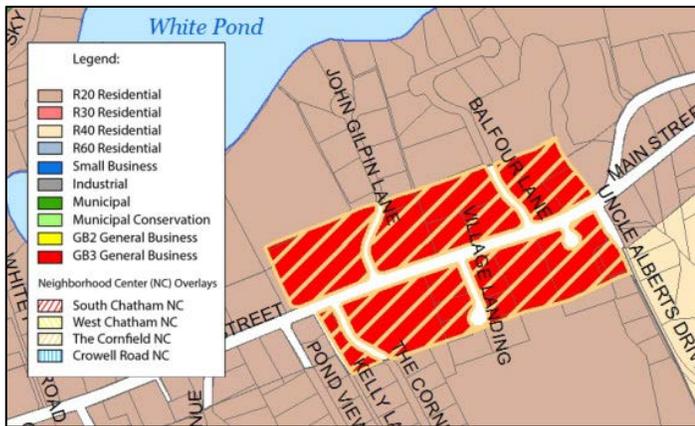


The Cornfield

This neighborhood center is envisioned to be a mix of residential and neighborhood serving uses, with comfortable pedestrian and bicycle



access. The major focus in this area should be improvement of the appearance and encouraging mixed uses.

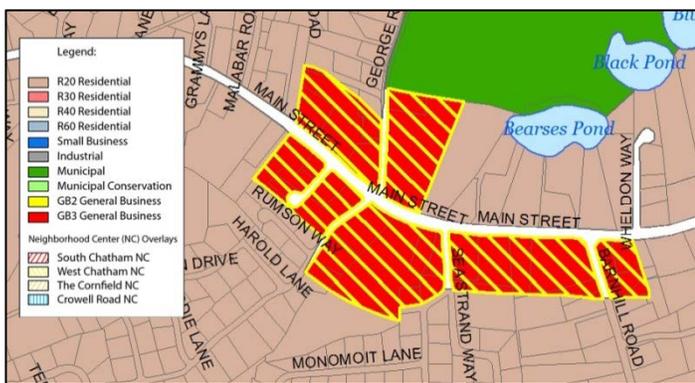


The proposed zoning would create an overlay that extends across all those properties that are currently zoned General Business 3 in the Cornfield. The uses in this area should be tailored to support its neighborhood serving function, with improved landscaping and design related standards.

West Chatham

This neighborhood center is described in the Comprehensive Plan as the second most important commercial area in the town; as such the mix of uses here may be more focused on commercial/business activity,

although residential uses should also be allowed if mixed with commercial uses. The major focus in this area should be improvement of the appearance and amenities for pedestrians/bicycles, with the boundaries focused on the parts of West Chatham currently zoned General Business 3.



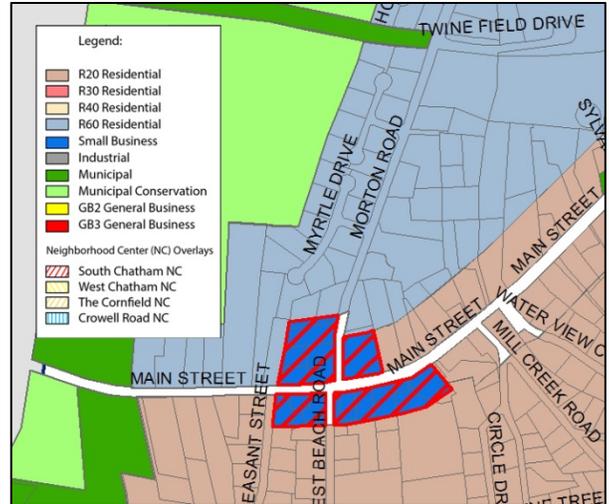
South Chatham

This neighborhood center is intended to be very limited in terms of the amount, scale and type of commercial/business development. No significant change to the existing pattern of land use is intended. The core of this center is currently around the Morton Road/Route 28



intersection, with commercial uses scattered along the roadway, most notably congregated around Post Office Square. This is reflected in the Comprehensive Plan description of the neighborhood center extending roughly from west of Morton Road to east of Post Office Square along Rte. 28.

The area described in the Comprehensive Plan extends for almost a 0.5 mile along Route 28 and includes approximately 25 acres of land area. By comparison, West Chatham is only 0.33 miles in length, and covers around 27 acres. A half-mile long center appears too large to be one center, especially if it is a center envisioned to be small scale. Therefore, the neighborhood center in this area is shown as limited to the



intersection of Morton Road and Route 28. The remainder of the center described in the Comprehensive Plan could continue to support small commercial/business uses (as described below), but would not permit additional stand-alone commercial uses and would not have neighborhood center-style zoning. Existing non-residential uses in this area should be allowed to stay and will continue to support the surrounding neighborhood. The major focus in this area should be limiting business expansion, encouraging small scale development and improving pedestrian/bicycle circulation.

2. Limit formula-business activity in the corridor by, at a minimum, prohibiting them in the Small Business District.

During the course of the land use study, participants were asked to articulate their preferences for the location of formula businesses.



These uses are defined in the bylaw as *“a business which does or is required by contractual or other arrangement or as a franchise to maintain two (2) or more of the following items: standardized (Formula) array of services and/or merchandise including menu, trademark, logo, service mark, symbol, décor, architecture, façade, layout, uniforms, color scheme, and which are utilized by ten (10) or more other businesses worldwide regardless of ownership or location.”* Businesses along the corridor that appear to meet this definition include Dunkin Donuts, Gulf Gas Stations, CVS and Hess Gas Station.

The zoning bylaw’s use table indicates that these uses are allowed in the Small Business, General Business and Industrial zones by Special Permit/Site Plan Approval. Although there does not seem to be strong support for allowing these uses in any part of the corridor, allowing formula business uses in the current Small Business District appears counter to the purpose of that district. These uses tend to be at a scale that is inconsistent with the residential nature of these areas and in many cases may generate higher levels of traffic and therefore would be more appropriately located in neighborhood centers where they could share parking and customers with adjacent uses, if they are desired at all. At a minimum, the use table should therefore be modified to clearly identify formula businesses as prohibited in the Small Business District. If further locational restrictions on these kinds of businesses are desired, the town can make modifications to the underlying GB3 district in the neighborhood centers to prohibit these kinds of uses in specific centers along the corridor.

3. Adopt zoning provisions to encourage mixed use in neighborhood centers.

The workshops conducted for this project generated strong support for encouraging a mix of residential and business uses in the neighborhood centers. To achieve this goal, the town should amend the zoning bylaws to encourage mixed uses, while not increasing the density allowed in the GB3 and SB districts.



In the GB3 district, the existing zoning regulations include a provision that allows residential apartments “incidental” to a commercial use with a Special Permit. These provisions set limitations on the configuration and the size of the lots that may provide this mix of uses. The purpose of this regulation is to ensure some commercial or business activity in the centers. However, the term “incidental” is undefined and subject to interpretation. Lack of clarity in zoning often results in unsatisfactory development for the development community, citizens, or both.

To encourage mixed use In the GB3 neighborhood centers, the town should adjust the regulations to more clearly articulate the type of development pattern desired, rather than on whether residential is “incidental” to commercial, or not. It is appropriate to encourage commercial activity in neighborhood centers to serve those living in and around that center, particularly if pedestrian activity is to be encouraged. Encouraging residential uses in these centers also provides opportunities to have more walkable areas where some residents may not need to drive, thus reducing traffic congestion. This pedestrian activity is also essential to supporting the neighborhood serving businesses, especially in a seasonal economy.

Current market conditions seem to favor residential development which could eventually change the character of these centers. To enable the Comprehensive Plan vision to be reached, the town should ensure that these neighborhood centers retain some level of commercial/business use in the future by providing guidance through its bylaws and design guidelines on the type of development envisioned, but let the exact mix of uses and configuration be determined by the property owners. This may result in a variety of residential and non-residential use mixes on a site rather than one being “incidental” to the other.

For example, the regulations for the neighborhood centers could specify the following:

- a. “Mixed Use” development could be specifically listed as a permitted use. This would require adding mixed use to the use table and a definition to the bylaw.



- b. To guide the configuration, commercial uses could be required to occupy some portion of the lower levels of all structures adjacent to the street. The aim is to have the majority of the space within the area of pedestrian activity be commercially oriented, with display windows and uses that are open in the evenings and weekends, such as eating and drinking, retail and personal service uses.
- c. Residential uses could be allowed above, behind or in separate rear buildings but generally not on the ground floor in areas where pedestrian activity is desired. The configuration of these residential uses will be dictated by the types of commercial uses proposed and as developments are designed.
- d. Parking should be allowed to be shared between commercial and residential uses on site and reduced if appropriate to provide more flexibility for mixed use developments.
- e. Uses that could result in only residential development could be prohibited in these centers if the community wants to retain a commercial base in the neighborhood centers.

4. Re-zone parts of the corridor in between the neighborhood centers to low density residential districts.

Figure 11 shows the existing land use along the corridor. Residential uses dominate land use in the corridor (yellow colors). However, commercial and mixed use development can be seen throughout, but are generally focused to the east of Route 28, and mostly in the neighborhood centers. Figure 11 also illustrates how several non-residential uses are scattered along the corridor in between the centers. The majority of these uses are not “stand alone” commercial (i.e. not the only use of the property), but for the most part are small scale business either within a home or in a residentially scaled building. There appears to be support in the community for the existing non-residential uses to remain in these “in-between” areas. Workshops and listening sessions conducted for the project seemed to indicate limited support for additional residentially scaled, small business uses in the future in



these areas. There does not appear to be a desire in the community for additional “stand alone” commercial in these “in-between” areas.

The current Small Business district extends for much of the Route 28 corridor, and covers almost all of the areas in between the neighborhood centers. Although the provisions of the SB district seem mostly appropriate, it does allow several “stand alone” commercial uses, including professional offices, lunch rooms and formula business establishments. While these types of uses may be appropriate in neighborhood centers, they seem to be at odds with the residential pattern described in the Comprehensive Plan vision and inconsistent with the general land use pattern identified by participants in the workshops.

The draft recommendations presented to the town on this project included a choice for the type of re-zoning to be made in these areas in between the neighborhood centers. During the comment period for the draft report, overwhelming support was expressed by the Board of Selectmen, Planning Board and public for these areas to be re-zoned for low density residential (R-20) rather than a new designation that would allow additional residentially scaled business uses. This recommendation would be consistent with the Comprehensive Plan and would not allow any new small businesses, with the exception of home occupations. All existing small business uses would be allowed to remain. This recommendation is shown in Figure 13.

5. Remove Flexible Development District.

There are four locations along the corridor where the Flexible Development District exists. Throughout the land use study, this overlay district designation has been a focus of attention, mainly from the perspective of the high density it allows and also because of the confusion some of its dimensional standards have caused (such as using bedrooms per acre as a measure of density rather than dwelling units). The baseline buildout analysis also identified that the areas of the



corridor that coincided with the Flexible Development District were the areas with the highest development potential. In some cases, the high residential density resulting from the Flexible Development District was seen by participants as inconsistent with the goals and policies of the Comprehensive Plan, and problematic.

The zoning bylaw describes the purpose of the district is to “provide a mix of commercial and multi-family, senior or congregate residential development in selected zones”. Although these provisions have been in place for more than 25 years (1987 adoption according to the town), very little development of the type desired has been constructed. This may be an indication that there is either little demand, or that the regulations do not encourage this type of facility.

Based on these factors, the simplest approach would be to delete the Flexible Development District from the zoning. Two Flexible Development Districts are located outside the study area, and have therefore not been studied by the Commission. However, it is presumed that these could also be removed if desired. Removing the Flexible Development District will create new non-conformities, especially for residential developments built at higher density. The town should therefore decide the appropriate process for allowing modifications to the configuration of these new non-conformities in the future.

To get a sense of the effect of removing the Flexible Development District, additional scenarios for buildout were completed to compare against those in the baseline buildout. Only two of the baseline buildout scenarios involved assumptions about residential development in the Flexible Development District, and therefore only the assumptions for the Residential Maximized and Commission Scenario 1 were altered (see Appendix E for a description of these scenarios). These scenarios were revised by removing the density assumed under the Flexible Development District areas and replacing it with the maximum density allowed under zoning (either GB3 or SB). The table below shows a comparison of the maximum number of dwellings allowed under current zoning for these scenarios and illustrates a potential reduction of between 35% and 50%. It should be noted that these numbers also



represent maximum amounts, or “worst case” and that these numbers only reflect the action of removing the Flexible Development District.

Table 1: Buildout projections after removing Flexible Development District (FDD)			
Baseline Buildout Scenario	Maximum Dwellings with FDD	Maximum Dwellings without FDD	Change resulting from removing FDD
Residential Maximized	509	254	-255 units (50% reduction)
Commission Scenario 1	379	248	-131 units (35% reduction)

6. Review Town’s zoning provisions for pre-existing non-conforming uses and structures.

At several of the public workshops, and in many of the listening sessions, the public has raised concerns about how changes and expansions of non-conforming lots, uses and structures are dealt with under the town’s regulations. Mass. General Laws, Chapter 40A, Section 6 lays out a series of provisions that guide the vesting of rights, the process for granting exceptions and the findings that need to be made by the local boards in such cases. Numerous workshop participants expressed concern that the local rules and practices governing non-conformities are at odds with these state provisions. The provisions governing non-conformities are complex and it is not unusual to have confusion about the rules. Given the degree of public comment, however, a thorough review of the town's “non-conformity” bylaws is appropriate.

This issue is of importance because changes in zoning will likely create new non-conformities. In such cases, the zoning bylaws should provide



a clear permitting and review process that is understandable by property owners, developers and members of the community. A study of these regulations is well beyond the scope of the current land use study. It is likely that continued confusion about the standards, and how to treat non-conforming structures and uses, will undermine any efforts to change zoning. Therefore, the town should start this review immediately and allow it to run concurrently with any land use decisions that the town may wish to make.

SUPPORTING RECOMMENDATIONS

7. Ensure the Historic Business District review continues to apply along the corridor, even if zoning is changed.

Currently, the Historic Business District applies to all properties that on 9/9/1985 were zoned either: General Business 1, 2 or 3, Limited Business or Residential Business. The District was modified in May, 2010 to include a parcel off Oyster Pond Furlong. The HBDC is responsible for reviewing all buildings and structures that are erected, reconstructed, altered or restored within the district. The regulations clearly establish a district within which the provisions of the HBDC review applies, regardless of use. The Commission believes that any change in zoning would not alter the district, and that a change to the zoning in these areas has no effect on the applicability of the HBDC on these properties. However, the town should consult with Town Counsel on this interpretation to ensure that any re-zoning does not undermine, or limit, the HBDC review process along the corridor.

The HBDC plays an important role in preserving historic buildings and protecting the character of the corridor. The town should consider strengthening the HBDC review process and that any revised dimensional standards be consistent with the HBDC's goals so that they can continue to guide development along the corridor.



8. Add design standards and guidance to zoning and review criteria, especially on building and parking setbacks, and landscape buffers.

A common goal articulated at the listening sessions, workshops and in the policies of the Comprehensive Plan is to improve the general appearance of the corridor. General “dislikes” include the visibility of parking areas, a lack of green space/landscaping and the treatment of buffer areas, especially between buildings and the street.

There are numerous ways that the town can address this goal, including incorporating more specific guidance about parking setbacks and front landscape buffers into the development standards, for example:

- a. Building and parking placement. The current Small Business district includes a provision that requires parking to be located 60 feet from the road and 15 feet from abutting properties. In combination with the 50 foot building setback requirement, parking will generally be behind or to the side of the structures. This arrangement of parking in relation to the building is important if the aim is to create a comfortable pedestrian environment. However, in the GB3 District, the 50 foot building setback requirement is combined with parking setbacks of 20 feet to the road, and 15 feet to abutters. As the lot coverage in the GB3 only allows 60% of the lot to be covered, the options available to provide parking for developments in the GB3 district are limited. This combination of setbacks, especially on smaller lots, forces the parking to be placed in front of the building and results in the pattern of development that is repeatedly seen in the corridor today. Figure 14 helps visualize this issue.

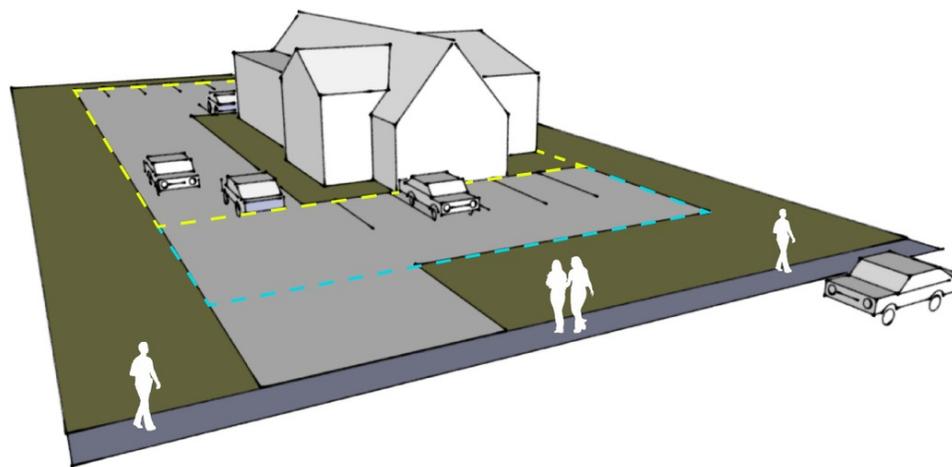
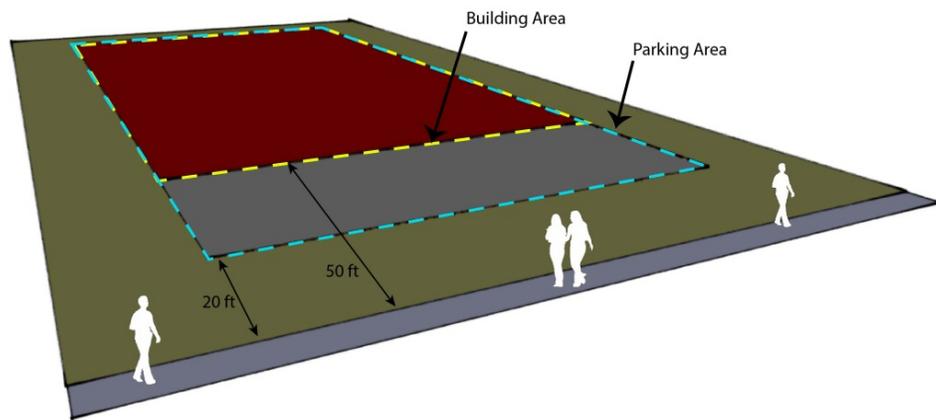


FIGURE 14: IN THE GB3 ZONING DISTRICT, A 50-FOOT FRONT SETBACK FOR BUILDINGS AND A 20-FOOT ROAD SETBACK FOR PARKING (TOP) LIMITS THE AREA FOR DEVELOPMENT AND FORCES PARKING TO THE FRONT (BOTTOM)



To address this situation, the three GB3-zoned neighborhood center overlays should include provisions that adjust these requirements, requiring the parking lots to be located to the side and rear of a structure, while allowing buildings to be placed closer to the street (by reducing the front setback requirements). The current 50-foot building setback in GB3 creates a large area in front of the businesses in these neighborhood centers and does not seem consistent with a pedestrian oriented center envisioned. The town should reduce this setback (i.e. between 25 and 35 feet) to allow parking to be accommodated to the side and rear more easily, and to encourage more interaction between the businesses and pedestrians in these areas. An additional option would be to create a minimum and maximum setback so that there is variety and flexibility in the building placement within a range, but that all structures must relate to the street and help define the street edge/public realm and contribute to a pedestrian oriented space. Finally, the 15-foot side setback for parking could also be reduced when business uses abut one another, as this both allows more flexibility in the parking design and could encourage shared and inter-connected parking that is more consistent with a center where pedestrian activity is encouraged. Figure 15 illustrates these concepts.

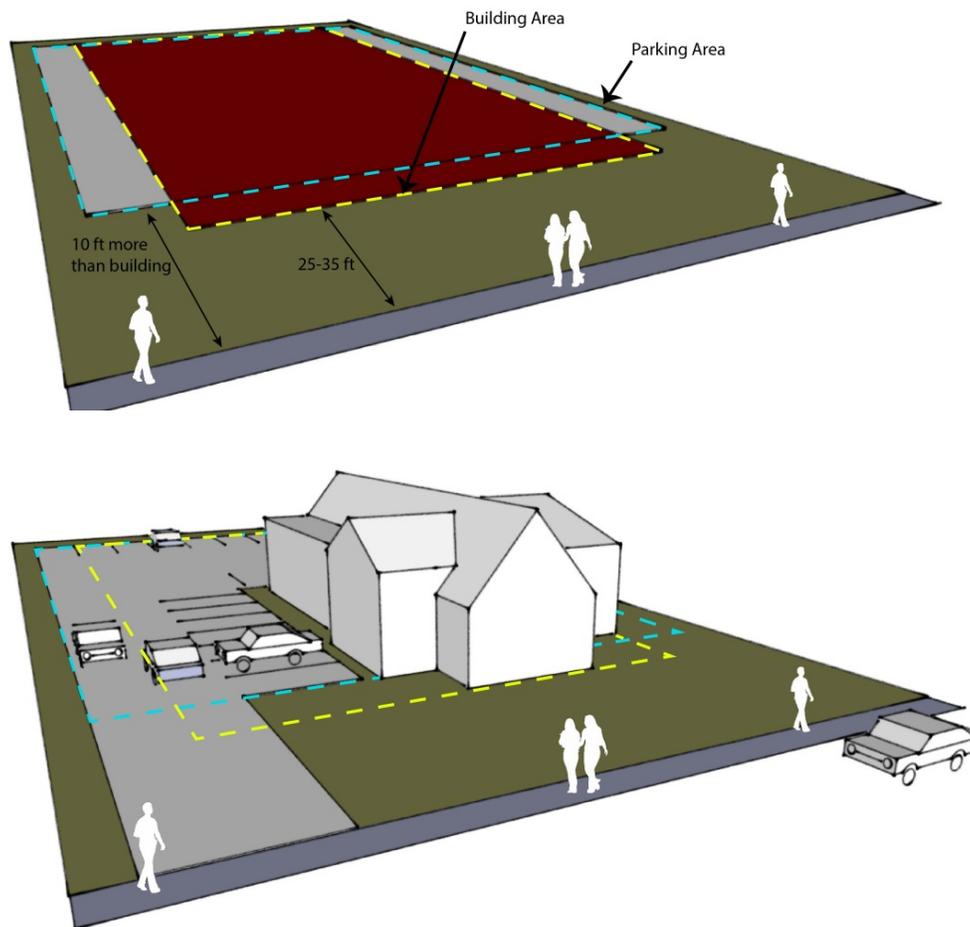


FIGURE 15: BY REDUCING THE BUILDING SETBACK, AND BY REQUIRING THE PARKING TO BE TO THE SIDE AND REAR OF THE BUILDINGS, THE AMOUNT OF PAVEMENT AT THE STREET EDGE IS REDUCED AND REPLACED BY AN AREA THAT CAN BE MORE PEDESTRIAN ORIENTED AND LANDSCAPED.



- b. Front setback landscaping. The current zoning regulations include numerous provisions for landscaping and buffering between non-residential and residential properties (Site Plan Review Criteria, parking requirements, etc.). For parking lots greater than ten spaces, there are additional requirements for shade trees within the parking lot. These provisions seem appropriate, but also apply exclusively to the sides and rear of properties. There is very little guidance or specific requirements for landscape buffers at the street edge and between the road/sidewalk and the buildings on private property. From the perspective of defining the character of a roadway, this is a critical location as most people's experience of the built environment is largely defined by the view from the street. Apart from their importance aesthetically, these buffer areas also provide opportunities for low-impact development strategies for dealing with stormwater run-off.

To address these issues, several additional requirements should be incorporated into the town's regulations; either as Site Plan review criteria, or preferably in the zoning requirements (see Figure 16 for illustration).

- i. Appropriate Low Impact Development strategies should be incorporated, including innovative stormwater practices such as pervious pavers, tree box filters, and appropriately designed bioretention facilities in the buffer areas (rain gardens, swales, etc).
- ii. In areas where conservation land is in areas of higher pedestrian activity, the planting of hardy shrubs along the edge of these natural areas would provide for an attractive transition between natural woodland and more formally landscaped portions of the roadway.
- iii. Incorporate specific front setback landscaping requirements into all districts in the corridor. Particularly in the neighborhood centers, the front setback landscaping should be functional and attractive; allowing good visibility to the businesses located there,



and should incorporate areas for public seating/resting. These areas will function like small pocket parks and would provide gathering places to support the pedestrian activity desired in the area. These areas need not be entirely “green”, as attractive pavement treatments would also connect business entrances, parking lots, sidewalk and connections between properties.

- iv. Appropriately scaled lighting, transit stops, public art, fences and walls should also be encouraged to enhance the pedestrian experience and amenities in the centers.
- v. All of these requirements should be incorporated into a “streetscape” plan or landscape guidance that would guide public and private improvements along the corridor to ensure consistency. A palette of landscaping and streetscape improvements could be established that would reinforce the identity of the neighborhood centers in particular, including broad selections of plant species, pavement/hardscape treatments and lighting.

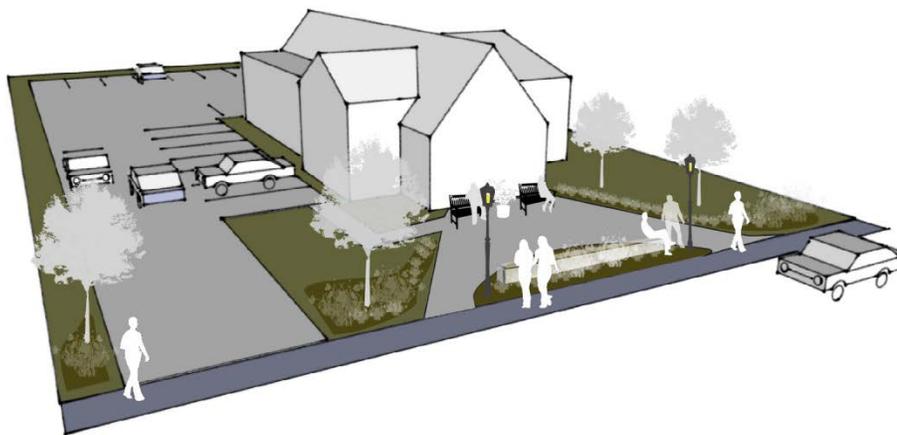


FIGURE 16: MOVING PARKING TO THE SIDE AND REAR ALLOWS THE FRONT SETBACK AREA TO BE USED FOR PEDESTRIAN AMENITIES AND TO ENCOURAGE ACTIVITY ON THE STREET. LANDSCAPING, HARDSCAPE AND STREET FURNITURE CAN BE INCORPORATED TO IMPROVE THE APPEARANCE OF THESE AREAS AND REDUCE THE AMOUNT OF VISIBLE PARKING AND PAVEMENT.



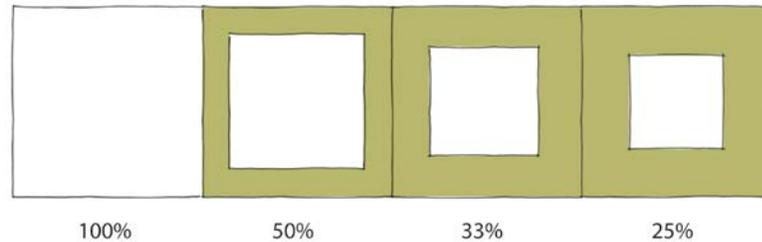
9. Adopt zoning provisions to limit the scale of development.

The Comprehensive Plan makes several references to the scale of development, in particular noting in the first land use goal that the intensity of development should be “maintained or minimized - never maximized’. Under current regulations, the bulk and mass of structures in the commercial/business district is only controlled by the lot coverage and height regulations. The town’s existing rules limit all development to a maximum of 2.5 stories and 30 feet, which seem appropriate for most of the corridor. However, height limits by themselves do not limit the bulk of structures.

One way to place additional limits on the size of structures through zoning is to establish a Floor Area Ratio (FAR) limit. FAR is a square-footage limit that is a ratio between the lot size and the structure. It is used in many communities, often as part of a range of dimensional standards that control development placement and configuration. However, floor area ratios can be difficult to understand and do not necessarily address the issue of building bulk. Figure 17 below shows four scenarios for a building on a lot, each scenario shows a FAR of 1:1 (i.e. the building square footage is the same area as the lot). This figure illustrates that although the FAR controls the amount of square feet of building, the configuration of that floor space within a structure may have very different impacts on its bulk and mass. In addition, as a regulation related to floor space, single story structures with cathedral ceilings may appear to have two or three story bulk yet still be well within a Floor Area Ratio limit.



Lot Coverage



Height

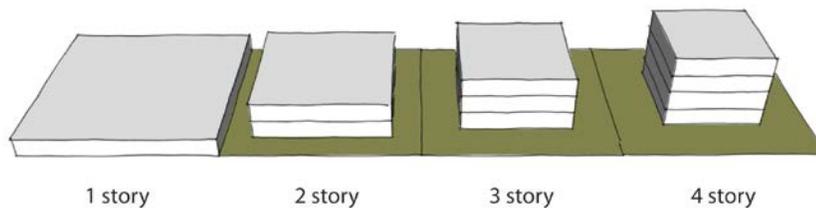


FIGURE 17: FLOOR AREA RATIO. EACH OF THE “BUILDINGS” SHOWN AT THE BOTTOM OF THE IMAGE HAVE THE SAME FLOOR AREA RATIO, BUT THE BULK, MASS AND FORM OF THESE STRUCTURES VARIES DEPENDING ON THE AMOUNT OF THE LOT THAT IS COVERED AND THE HEIGHT OF THE STRUCTURE.

Given the limitations of FAR standards, it is not recommended that the town incorporate FARs into the bylaws at this time. There are several alternatives to creating a FAR that the town could implement that would achieve the same goal of limiting the scale of development, such as:

- a. Implementing a building coverage limit for GB3 that confines the spread of the building footprint (e.g. based on existing coverages). Currently, there is a 60% lot coverage limit in GB3, but no building footprint limit.
- b. Revisit the town’s existing regulations for building coverage in residential zones. The building coverage in residential districts is currently 10% except that maximum coverage allowances for



lots less than 30,000 sf is provided on a sliding scale that allows a more generous percentage (up to 15%) for smaller lot sizes. The current building coverage limits would allow buildings that have substantially bigger footprints than existing residences. The majority of the existing single-family structures in the study area have footprints between 1,000 and 2,000 square feet; with none exceeding 4,000 square feet. The table below shows that the size of building possible under the existing bylaws is larger than the existing development.

Buildable Upland (SF)	Maximum Building Footprint (SF)	Potential Building Size (2 stories) (SF)
20,000	15%, but not more than 2,800	5,600
30,000	3000	6,000
40,000	4,000	8,000
60,000	6,000	12,000
80,000	8,000	16,000

The town should consider reducing the building coverage allowances to reflect the existing footprint sizes in the study areas to maintain the existing scale of development. A sliding scale coverage allowance is recommended as it allocates a maximum footprint size based on lot size, but is modified to ensure that development occurs in a manner consistent with the scale of development along the corridor.

- c. Guidance or standards could be included that require a certain amount of articulation in the building facades. Buildings that incorporate variation and recesses in their façade, and have associated changes in roof and eave height, more effectively reduce the apparent bulk and mass of the structure. Even if the building square-footage is large, a well-articulated building will give the appearance of several smaller building masses attached to one another rather than one larger structure (see Figure 18).



- d. Establishing clearer, and illustrated, design guidelines that more fully explain the massing and placement desired in the corridor, particularly as buildings relate to the street. For instance, illustrations could show how the buildings mass can be reduced by orienting the narrowest façade of the building to the street, or incorporating smaller masses near the building edges. Guidance could also be provided encouraging variety in the wall/eave heights and the inclusions of exterior elements such as porches, awnings and balconies. Elements that break up the roof mass should also be incorporated, such as cross gables and dormers.



FIGURE 18: ILLUSTRATION OF HOW BUILDING ARTICULATION AND VARIETY IN THE FORM CAN REDUCE THE APPARENT MASS AND BULK. BOTH FOOTPRINTS ARE THE SAME SQUARE-FOOTAGE AND ARE THE SAME HEIGHT.

10. Adopt zoning provisions to encourage re-use of buildings.

In the neighborhood centers, the town could consider adopting regulations that encourage the reuse of building (rather than demolition and replacement). This could be achieved in a number of ways, but the aim would be to create an incentive to preserve the existing scale of construction along the corridor, especially as viewed from the street. Using this approach, the town could also set parameters about how additions to existing structures are to be made, such as requiring additions to the rear, or below the existing ridge height. These provisions could also be incorporated into the HBDC regulations.



Strategies that can be followed include:

- a. Simpler permit pathway for projects that re-use the existing buildings, i.e. allowing by right if a re-use. Special Permits could be required for new construction/tear down and rebuild.
- b. Give square footage bonuses for reuse of property, provided the additions are added to the rear.
- c. Flexibility on parking and landscaping requirements, or increased building coverage, could be incorporated for re-used structures.
- d. Density bonuses for residential developments that re-use existing structures could be allowed up to a modest increase over zoning regulations.

11. Incorporate existing actions in the Open Space and Recreation plan and build/enhance on green and non-automobile connections in and around the study area.

The study area mostly consists of land that is developed, although some areas are permanently protected or in municipal use. But the areas immediately adjacent to the study area include a variety of open space and recreational opportunities, including the rail trail, beaches, ponds, walking trails and open space. Participants at the second workshop were asked to identify ways green areas and recreational opportunities in the vicinity could be improved. This exercise identified a desire to make better bicycle connections, protect land adjacent to existing open space and ponds, and to provide better landscaping and buffering along the corridor including small “pocket parks” in the centers.

In order to capture these ideas, Figure 19 shows how these green areas and connections fit within the overall land use plan. This Open Space Connections plan is intended to compliment the town’s more detailed open space and recreation plan, as well as the land use plan presented in Figure 12.

Another way the town could increase the amount of contiguous open space would be to make use of existing bylaws for Open Space



Residential Development (OSRD) in the R-20 zone, which is a type of cluster subdivision where half a parcel's developable upland is protected as open space, while housing lots are clustered on the remaining upland. The Chatham zoning bylaw allows OSRD through a special permit, on parcels of five acres or more. Based on analysis of the study area parcels, OSRD has minimal applicability along the corridor, as only four properties within the study area are over five acres in size. However, the cottage colony sites could make use of the OSRD option should it be subdivided and redeveloped. For example, the cottage colony property could be redeveloped with up to 10 single-family lots under existing zoning, each with a much larger dwelling than the existing cottages. A traditional subdivision could alter the character of the sites significantly, so making an OSRD clustered subdivision more attractive to the owners would be potentially beneficial.

Many of these recommendations do not require implementation through zoning, but instead would require additional action by town departments, boards and committees. The town should continue efforts to:

- The town should consider amending the OSRD zoning bylaw to allow OSRD by right (or even requiring it), thus putting OSRD on equal ground with conventional/grid subdivisions. While OSRD may be of limited value in the study area given the size of the parcels, for cottage colony uses it could provide an option to traditional subdivision. A change in the OSRD could also help encourage its application in other parts of town. In addition, the town could consider lowering the minimum parcel size for OSRD cluster subdivisions (e.g. from 5 acres to 3 acres) to broaden the applicability of these provisions.
- Improve bicycle connections between Route 28 and destinations within the vicinity of the corridor. The town should ensure that there are clear bicycle connections between South Chatham and the rail trail, and between West Chatham and the rail trail. In addition, several popular beaches are located to the



south of the corridor, and in these areas pavement markings and “share the road” signage could improve bicycle/pedestrian access.

- Improve pedestrian connections and access to ensure safety of residents and visitors moving between these locations, including upgrading of sidewalks that are in poor condition.
- Prioritize open space acquisition adjacent to existing open space areas to provide green space and to improve habitat. Particularly in the vicinity of the network of ponds in the West Chatham area (white Pond, Emery Pond and Lovers Lake, etc.).
- Incorporate additional landscaping requirements into the zoning bylaws to improve the appearance of the development in the corridor, especially in the neighborhood centers.
- Provide a gateway feel at the intersection of Route 28 and Route 137. As one of many gateway areas, this location should be improved by reducing the impact of the large intersection with improved landscaping in combination with improved bicycle and pedestrian amenities.

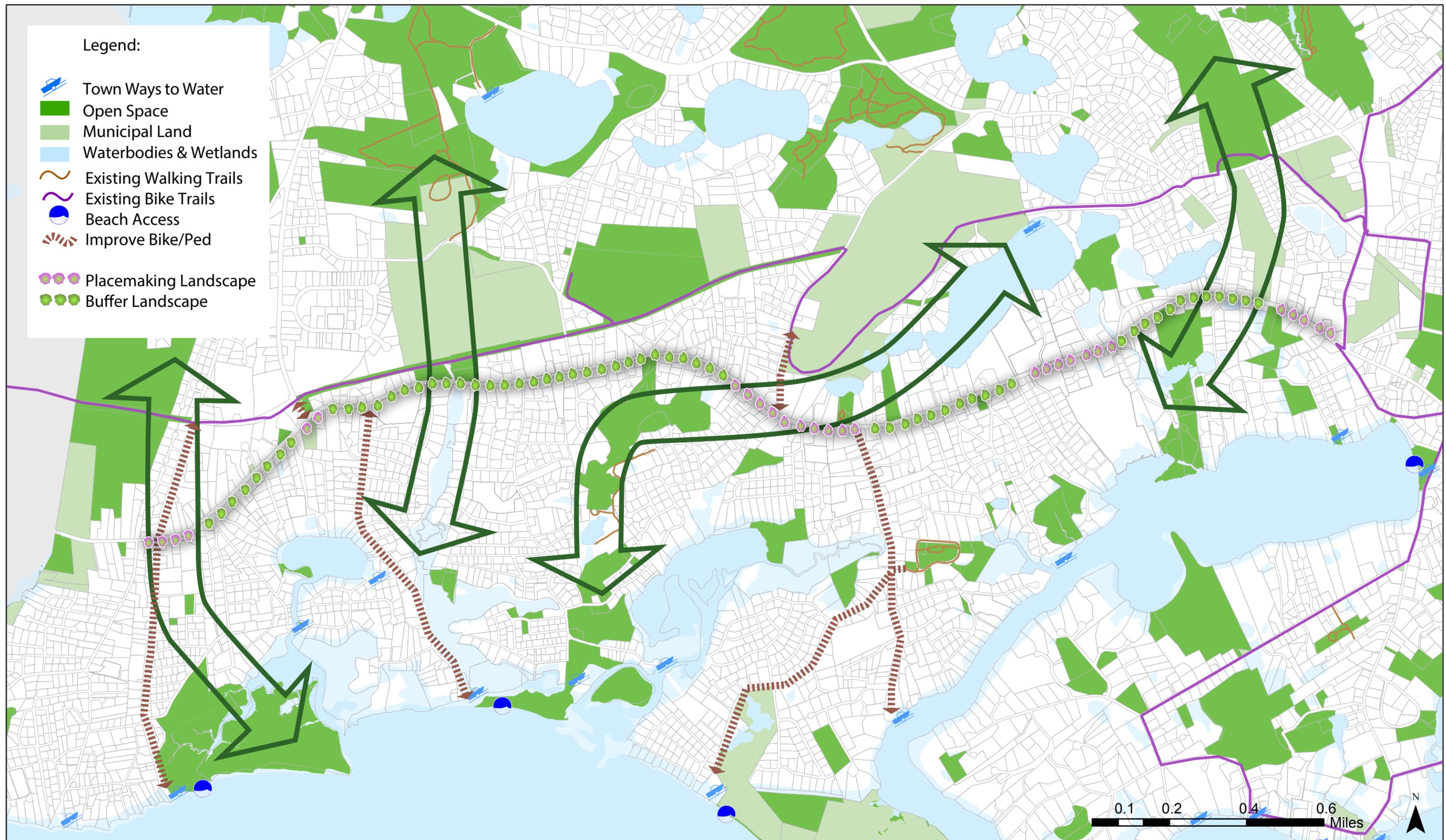


Figure 19 | Open Space Linkages

This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County. The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research. The parcel datalayer was acquired from the Town of Chatham's GIS Department and all other base datalayers were acquired from MassGIS. Illustrative additions to this map were created using Adobe Illustrator by TH.



12. Clarify areas of the bylaw that are unclear, or inconsistencies between sections in the zoning bylaws.

During the course of the project, several areas of the town’s bylaws have been identified as needing re-wording or clean-up to remove inconsistencies, ambiguity or to clarify intent. The following is not an exhaustive list, but is provided here as an example of those areas that have been raised questions during this project.

- a. The town should review the use table and district regulations for inconsistencies. For example, the use table shows “Multiple Family Residential” as a use allowed by Special Permit in GB3, however, Multiple Family Residential is not listed as a use allowed by special permit in the GB3 district regulations, neither is GB3 listed as a zone in which new Multi-family can be constructed.
- b. Section III.D.3.i sets out the provisions for “Lots in More than One District”. This section has some difficult language about how the Zoning Board of appeals may allow uses on the entire lot. At a minimum, the language here should be clarified as to what the intention is behind these provisions, specifically in regard to what is “less stringent” and “more restrictive”. In addition, whereas flexibility is certainly desirable in these locations and situations, there should be clearer guidance on when it is appropriate for this flexibility.
- c. The definition of the term Home Occupations in Section II of the zoning bylaw seems to not allow retail sales as part of this use, but the Special Regulations of Section VII appear to allow retail sales under certain circumstances. This should be clarified.
- d. As noted above, the use of the term “residential incidental to commercial” in Section VII.b.4 presents an interpretation issue about what “incidental” means. For example, is it incidental in terms of size, traffic or bulk, and what is incidental in those terms? Many zoning bylaws use the term accessory to describe uses, although this may also raise similar questions. The town



could create a definition for these terms and adopt them in the zoning bylaw.

- e. In parts of the bylaw, density provisions are articulated in terms of the number of units per acre. The zoning bylaw should include a definition of an “acre” so that it is clear how these density calculations are made. An acre is usually defined as 43,560 square feet, however, in the construction industry a “builder’s acre” is equal to 40,000 square feet. On smaller lots, there is a negligible difference in the two measures; however, on larger lots there may be several units difference depending on which calculation is made.
- f. Section VII. B(6) of Chatham’s zoning allows existing single-family homes to be converted to multi-family homes in both the GB and SB districts. This section includes several restrictions as to the configuration and circumstances under which this can be achieved. Section VII.B(6)(b) states that for each new dwelling created, at least 10,000 square feet of upland must be provided. This translates to a density of roughly 4 units/acre. Furthermore, this same section allows the waiving of this density requirement if the dwelling is connected to sewer.

Without a waiver for sewer connection, the density allowed under this provision is the same as currently allowed in GB3, but twice that which is allowed in the SB district. With the waiver, this language provides a way to exceed both these density limits with a sewer connection, although it is assumed that the town’s flow regulations would also need to be met. It is unclear what this provision is seeking to achieve, and what role, if any, the flow limitations may play. With the zoning changes recommended in this report, the area zoned SB in the corridor will be significantly reduced, leaving a small center in South Chatham. As this provision only applies if there is an existing single-family residence, it appears that in South Chatham there will be very limited opportunity for this additional density as much of the area is either multi-family residential or non-residential. However, this provision would still apply in other SB districts in town. In the GB3 areas, many, but not all the



properties are also non-residentially used and so there is again limited opportunity to make use of this provision.

LAND USE PLAN BUILDOUT

One of the main reasons for completing a baseline buildout analysis is to allow comparisons to be made between recommended zoning changes and the development potential allowed under current zoning. A buildout was presented in the draft report, and amended based on the land use pattern described in this report was completed for comparison purposes. The major assumptions made for this “Recommended Land Use” scenario are described below, and shown in Table 2:

1. All areas zoned Small Business are assumed to be re-designated as R-20, with the exception of the Small Business District parcels in South Chatham (see Figure 13). In areas where lots were formally split between SB and a residential district (R-20 and R-60), those parcels are now treated as either entirely R-20, or those that remained split were assumed to be split in half R-20 and R-60. A composite density was calculated based on this assumption.
2. The Flexible Development District overlay was assumed to be removed, and designated with the underlying zoning district designation only.
3. In West Chatham, The Cornfield and Crowell Road neighborhood centers, it was assumed that mixed use would be pursued at the maximum residential density but with non-residential uses.
4. In South Chatham, lots designated as SB were assumed to be mixed use, but at a lower density than in GB3. Lots split between SB and residential districts were assumed to be developed as residential on half the lot, and non-residential on the other half.



Table 2: Buildout assumptions for recommended land use plan			
Zoning	Density	Non-residential floor area	Comments
R-20	1 unit/20,000 sf	-	Density per zoning
R-20 Split	Hybrid of 1 unit/20,000 & 1 unit/60,000	-	Assumed to be split in half, R-20 in the front, R-60 in the rear. This results in a composite density of 1.355 units per acre.
SB	1 unit/20,000 sf	0.13 FAR	Same floor area assumption as prior Small Business analysis, assumed that mixed use represents the maximum development potential.
SB Split	1 unit/20,000 sf	0.13 FAR	Development on these lots was assumed to be split 50:50.
GB3	1 unit/10,000 sf	0.16 FAR	Mixed use assumed for these areas, at slightly higher FAR.



The resulting changes in the amount of residential and non-residential development potential from following the recommended land use plan are provided in Table 3.

Table 3: Revisions to buildout results by scenario					
	Residential Maximized	Commercial Maximized	Comm. Max SB split	Commission Scenario 1	Recommended Land Use Plan
Additional Dwelling Units	509	5	26	379	239
Additional Floor Area (SF)	60,829	778,413	622,296	60,829	158,759

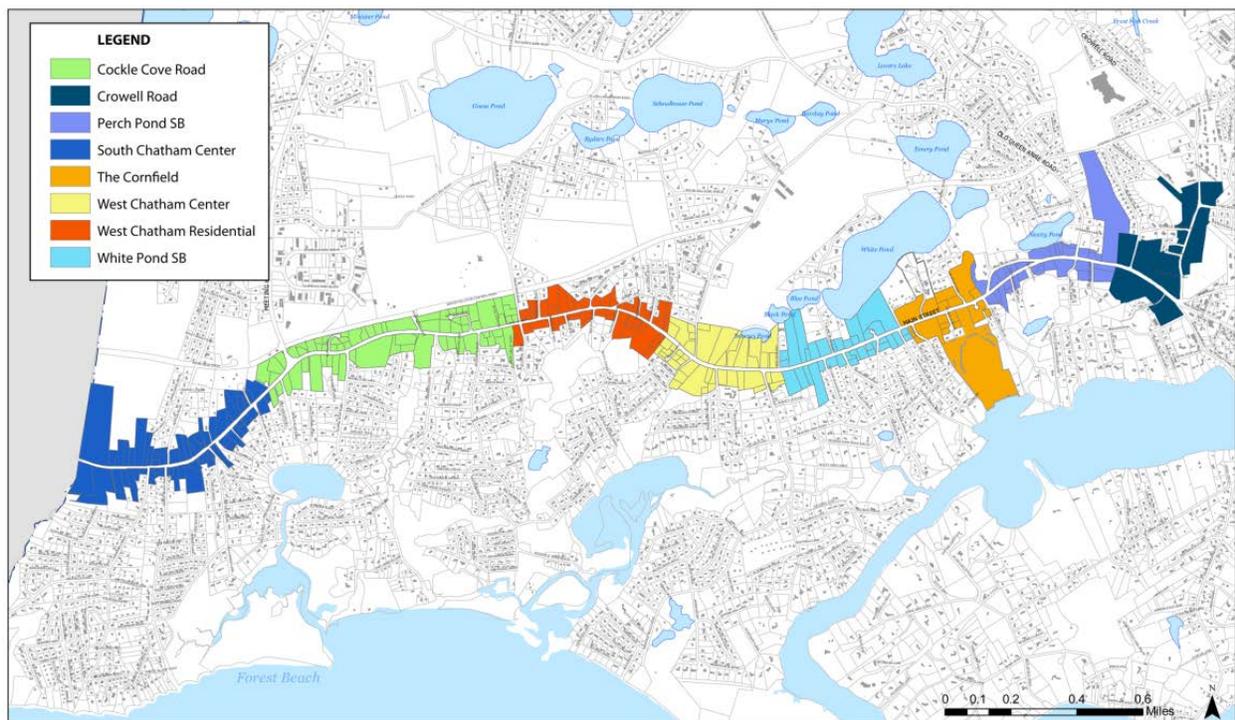
RESIDENTIAL BUILDOUT

The results show that the amount of residential development potential has been reduced in comparison to the residentially oriented baseline scenarios (Residential Maximized and Commission Scenario 1). This is a result of the removal of the density allowed under the Flexible Development District. As with the baseline buildout, although the overall number of dwellings allowed provides an idea of the development potential, the distribution of this development potential provides a clearer picture of the land use changes that could result from a changed zoning framework.

To allow easy comparison of the distribution of the potential, the revised buildout estimates for the recommended land use plan are presented in the same geographic sub-areas used to present the baseline buildout scenarios (Figure 20). Figure 21 shows the distribution of buildout based on these subareas, and Figure 22 shows the four baseline buildout scenarios for the same subareas. Figure 21 shows that the majority of the additional dwelling units are focused in the neighborhood centers, with most of those in the GB3 areas where the 4 units/acre density still applies. Overall, there are significantly less dwellings than was estimated under the existing zoning. However, Figure 21



also shows modest amounts of additional residential development are still possible in the areas between the neighborhood centers, particularly the “Cockle Cove Road” and “White Pond” areas. These additional units are almost exclusively occurring on lots that are currently not residentially used today, such as businesses, hotels/motels and cottage colonies, and is a result of assuming that a change in use happens in these locations. This raises an important policy issue for the town concerning the degree to which it is appropriate to guide re-development of these properties. In the case of motels, and particularly for cottage colonies that are more seasonal in nature, a change of use of these properties to single-family residential development is likely to alter the character of the corridor.



Chatham Route 28 Visioning Study | Corridor Sub-Areas Map

This map is provided by the US Department of the Interior, Bureau of Land Management, as a service to the public. The information contained on these maps is for planning purposes only. It is not intended for legal boundary, regulatory interpretation, or parcel level analysis. It should not substitute for actual site surveys. All information about resources on the ground should be verified with the State of California's Department of Conservation and other state agencies. All other resources should be verified with the appropriate state or federal agency. All other resources should be verified with the appropriate state or federal agency.



FIGURE 20: CORRIDOR SUBAREAS FOR REPORTING BUILDOUT



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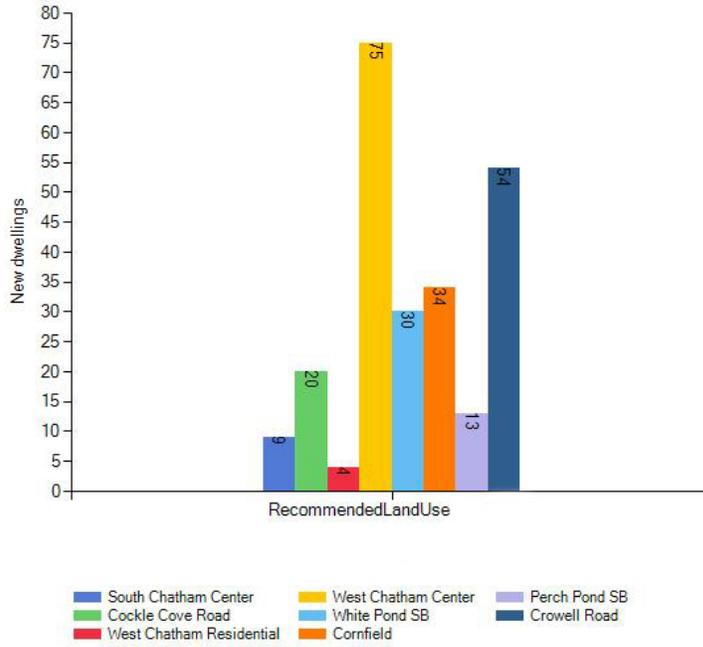


FIGURE 21: NEW DWELLINGS FOR BUILDOUT UNDER THE RECOMMENDED LAND USE PLAN BY CORRIDOR SUBAREAS.

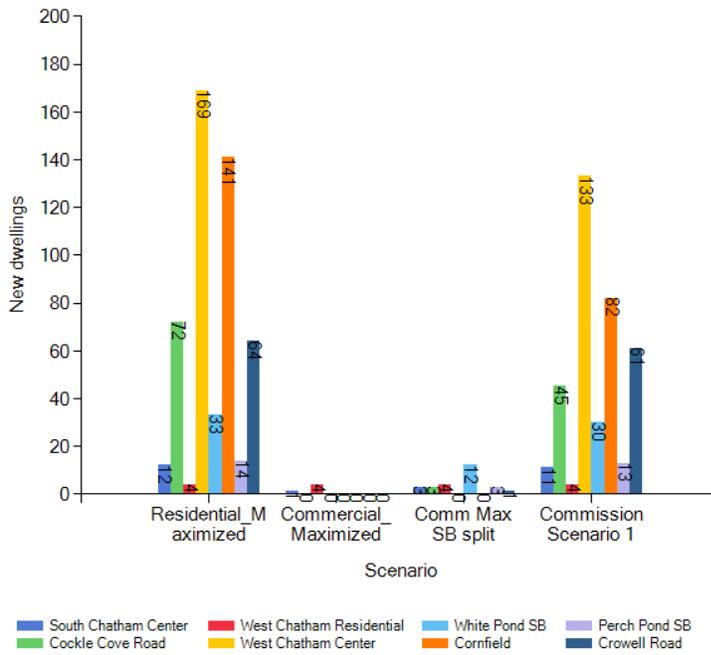


FIGURE 22: NEW DWELLINGS FOR BASELINE BUILDOUT SCENARIOS BY CORRIDOR SUBAREA



NON-RESIDENTIAL BUILDOUT

The total amount of non-residential development potential is reduced significantly from the maximums estimated in the baseline buildout for the commercially oriented scenarios. This is primarily the result of the removal of stand-alone commercial from the areas in between the neighborhood centers (currently SB) by designating them as R-20.

Figure 23 shows the distribution of buildout based on the corridor subareas which clearly shows the non-residential being focused in the four neighborhood centers, and a pattern that is more in keeping with the land use vision articulated in the Comprehensive Plan.

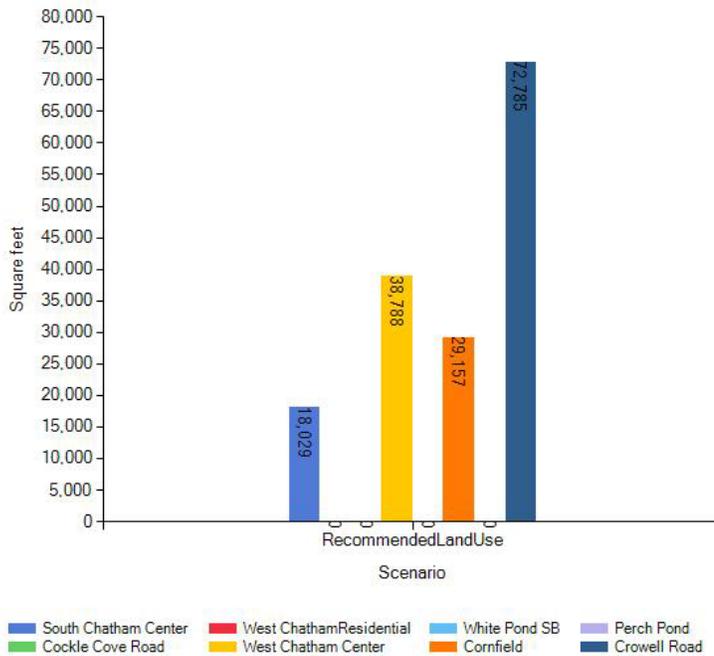


FIGURE 23: NON-RESIDENTIAL DEVELOPMENT POTENTIAL BASED ON THE RECOMMENDED LAND USE PLAN BY CORRIDOR SUBAREA



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APPENDICES

All Appendices can be accessed at
<http://www.capecodcommission.org/departments/planning/design/route28visioning/Draftreport>

Appendix A: Land use and community character sections of the
Comprehensive Plan

Appendix B: Summary of Listening Sessions

Appendix C: Workshop 1 questions and responses

Appendix D: Workshop 3 questions and responses

Appendix E: Baseline Buildout Report

Appendix F: Sewer Regulations Report

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