Town of Belgrade

2013 Comprehensive Plan Update

DRAFT for State Review: January, 2014
## Table of Contents:

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Plan Development and Public Participation</td>
<td>6</td>
</tr>
<tr>
<td><strong>Planning Elements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Belgrade’s Past, Present, and Future</td>
<td>9</td>
</tr>
<tr>
<td>4.</td>
<td>Historical and Cultural Assets</td>
<td>19</td>
</tr>
<tr>
<td>5.</td>
<td>Recreation and Community</td>
<td>24</td>
</tr>
<tr>
<td>6.</td>
<td>Natural Resources</td>
<td>29</td>
</tr>
<tr>
<td>7.</td>
<td>Water Resources</td>
<td>39</td>
</tr>
<tr>
<td>8.</td>
<td>Public Services and Finances</td>
<td>47</td>
</tr>
<tr>
<td>9.</td>
<td>Transportation</td>
<td>58</td>
</tr>
<tr>
<td>10.</td>
<td>The Local Economy</td>
<td>67</td>
</tr>
<tr>
<td>11.</td>
<td>Housing</td>
<td>78</td>
</tr>
<tr>
<td>12.</td>
<td>Farming and Forestry</td>
<td>85</td>
</tr>
<tr>
<td>13.</td>
<td>Growth and Development</td>
<td>89</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Land Use Plan and Map</td>
<td>97</td>
</tr>
<tr>
<td>15.</td>
<td>Capital Investment Plan</td>
<td>112</td>
</tr>
<tr>
<td>16.</td>
<td>Implementation of the Planning Recommendations</td>
<td>114</td>
</tr>
<tr>
<td>17.</td>
<td>Regional Coordination</td>
<td>130</td>
</tr>
<tr>
<td><strong>Appendices:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included Maps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1: Executive Summary

Belgrade citizens regard the Town's lakes, water quality and its rural and recreational characteristics as mainstays of the local economy and the reasons many of us live here. Moderate growth is desirable and unavoidable, but it should be managed to prevent sudden events and creeping change which can undermine the Town's core values.

The Town of Belgrade is a $3 million business, and growing. Long range planning is necessary to evaluate growth and anticipate problems before they become crises and opportunities before they are lost. State law mandates requirements and a procedure for Maine towns to do their long range planning. Belgrade did so in 1998, and much of what was approved then is still valid. But the plan had little, if any, implementation. This version of the plan needs to be a living, working document if it is to be used to create a better future.

A Comprehensive Plan is not a state mandate. It is a community imperative. To know where we are going as a community and as a culture is the only way in which we can preserve what we love and change things that interfere with getting where we want to go. A Comprehensive Plan is one of those rare opportunities to come together and make decisions about our future together. It’s a chance to make a better life for generations to come. It is a basic part of democracy, our right to debate and find the path that demands the best from everyone.

A plan does not just benefit residents and certainly does not impede development. Landowners and developers considering projects in Belgrade will make better decisions when they are aware of community priorities -- the types of activities encouraged and their preferred locations, as well as those activities which are discouraged. Better development decisions lead to more profitable developments.

***

The plan development process is described in Chapter 2, but the efforts and energy of the many volunteers and participants are the essence of this plan and must be acknowledged. Volunteers participated in six subcommittees (as well as the steering committee). Subcommittee reports were developed, then reviewed and accepted by the Steering Committee for inclusion in this report. The process of integrating the individual reports into this Plan was managed by Chris Huck, KVCOG consultant. Their services are recognized and deeply appreciated.

The plan that we present to you now is the result of many conversations, emails, phone calls, and meetings. We have gathered opinions and ideas from many segments of the community, from school children, to businesses, to the elderly retired people who live in Belgrade. Some are year round residents, some seasonal, and others are visitors or out-of-town businessmen. The Natural Resources Subcommittee (for example) solicited the opinions of
scientists and specialists who may not live in town, yet have knowledge of how the lakes and waterways function in optimal settings.

We have used a general questionnaire, public meetings, and displays at the polling place on Election Day to solicit public input. We will continue to use the Town Newsletter, newspaper articles, and public gatherings to expand information about the plan.

* * *

The Goals of the Comprehensive Plan are to:

- Protect the quality of Belgrade’s lakes by making sure that all development and land use activities do their fair share to limit phosphorous impacts on the lake from sources including stormwater runoff, erosion, and septic systems.
- Conserve and enhance the traditional character of our village and rural areas by ensuring that new development complements existing style, density, setbacks, etc
- Encourage economic growth and development to maintain a strong local economy and property tax base that is consistent with the town’s character and compatible with maintaining the qualities of our lakes and lands.
- Minimize the future costs of municipal services by limiting sprawl, strip development, and fragmentation of open space.

Details of the subcommittee goals and recommendations are reported as part of each chapter and in tabular form in Chapter 15. Here are some extracts:

**Historic . . .**

The historic and cultural subcommittee identified the need for a space to call their own and the necessity for a viable, strong website as a resource. The Town House provides an opportunity for the Belgrade Historical Society, and there is a group launched this year to further develop the possibility. The subcommittee also noted need for land use and subdivision ordinances that make developers more aware of historic resources.

**Recreation . . .**

A priority of the recreation subcommittee is to promote the Center for All Seasons and the North Belgrade Community Center for community events; to establish clubs and put on events such as arts and crafts, open mike, and music venues, and senior events such as Senior Ball or Evening at the Pops. In addition, there is a great need to map existing hiking and biking trails, evaluate public and private lands for trail development, and determine priorities and timelines for building and linking trails.

**Natural Resources . . .**

Priority in this area for the Town of Belgrade lies in promoting landowner awareness and action to protect essential, significant, and other wildlife habitats and unusual natural features.
Building upon the state program *Beginning With Habitat*, this includes Tree Growth, Farmland, and Open Space Taxation Programs and other approaches to conservation planning.

The second priority in this arena is to strengthen regulatory protections by extending shoreland zoning to include all areas within 75 feet of all perennial streams, adopting provisions which ensure open space protection in rural areas, protecting deer yards and other unique wildlife resources, and requiring applicants for new development to plan for areas of known unusual communities or rare plants.

*Water Resources . . .*  

The topic of water quality and the health of the lakes is important across the board. It is an economic imperative, with up to 65 percent of our taxes paid by people living on the lakes. Lakes create culture and shared history. Many lakeside residents are in their fourth or fifth generation. Area farms their goods and services to visitors from away and hotels and camps housed them. Even though the landscape is different and many farms and hotels are gone, the lakes remain our chief wealth generator, and will continue to be for the foreseeable future.

To protect this fragile, elusive, and threatened resource is at the top of everyone’s list, including the school children who will be the next generation of stewards of the watershed. The lakes are in trouble and it is imperative that we protect them from further degradation.

The greatest priority is to control phosphorous and other pollutants from all sources of development and other land use disturbances. Another effort is controlling invasive water plants. Water quality protection must be integrated with other parts of the comprehensive plan, such as economic development, land use, recreation development, and natural resources. With this, we can go a long way towards sustaining the future for our children and grandchildren.

*Agriculture and Forestry . . .*  

The comprehensive plan prioritizes the active use of fields and pastures for agricultural endeavors, such as Christmas tree farms and nursery crops, while maintaining their visual and wildlife values. There should be incentives that encourage development designs which maximize the preservation of field and forests.

*Public Services . . .*  

The goal is to get the most for our tax dollar while at the same time ensuring adequate public safety for citizens. Belgrade is ideally located to work with surrounding communities to share services that make sense and reduce overall costs. We have recommended a master plan process to explore siting options for the development of a new town office and fire station.

Public agencies also provide road and transportation services. The plan recommends that the inventory and condition of road surfaces be the basis for annual budget decisions for road reconstruction, repairs, and maintenance while we continue to explore innovative techniques to
improve road quality. Citizens need to keep in mind that stormwater runoff from inadequately built and maintained roads is a major contributor to phosphorous in the lakes.

**Economy . . .**

The goal here is to continue to develop Belgrade as a viable, thriving community where new businesses are welcomed. This plan attempts to ensure that new commercial developments do not create adverse impacts on public roads and abutting properties, are compatible with the neighborhoods they occupy, and do not create a nuisance, health hazard, or pollution.

Secondly, the commercial development review process needs to be reviewed, improved, and enforced as necessary to a) clarify standards so they are more easily understood; b) require Planning Board decisions to be consistent with the plan; and c) Lessen some requirements for redevelopment of an existing business location. Other, more specific recommendations, many of which are shared with the Land Use section, are included in the full plan.

**Housing . . .**

Our housing goal is to encourage and promote affordable, decent housing opportunities for all Belgrade residents. It is recommended that there be a review of the dimensional requirements such as setbacks and frontages, and revise any that increase costs without a rational basis. There also needs to be a consideration and study focused on permitting higher density for multi-family units and cluster development for seniors.

**Land Use . . .**

As the town develops, we need to prepare an updated land use ordinance based upon the goals in the comprehensive plan. There is also a need to provide an approach for future use, using updated technologies that reflect GIS Map Layers such as were used for developing the Land Use Plan.

**The Land Use Plan:**

A Land Use Plan is a required element of comprehensive planning. The plan developed by the land use subcommittee was based on existing development patterns and constraints. It suggests patterns for development of Belgrade's land area that recognize established uses, expected trends, characteristics of the land, natural and legal constraints and public opinion. The town consists of both growth areas and rural areas, as follows:

<table>
<thead>
<tr>
<th>Growth Areas</th>
<th>Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>Rural</td>
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<tr>
<td>General Development</td>
<td>Residential/Mixed Use</td>
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<tr>
<td>Route 27 Corridor (overlay)</td>
<td>Shoreland Districts</td>
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<td></td>
<td>Critical Resource Conservation</td>
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Boundaries on the land use plan are approximations, subject to further public input and refinement as the Town proceeds with districting. Examples of the uses encouraged or discouraged in each district are offered in Chapter 14.

Once the Comprehensive Plan is adopted, the Town would use the foundation of existing ordinances to define the proposed districts and their uses. Ideally, existing land use ordinances would be merged into a single Land Use Ordinance to make development review easier on both the Town and applicants. These ordinance changes and additions should be professionally drafted and reviewed to conform to legal guidelines and to avoid property rights issues.

This plan also preserves the concept in the 1998 Plan that a minimum percentage of Belgrade's land area should be maintained as undeveloped. The 1998 Plan, adopted by Town vote, identified a figure of 60 percent of its 27,917 land acres as the target for undeveloped open space, based on both public perceptions and water quality thresholds. The 60 percent goal still leaves several thousand acres of Belgrade open for development.

The Town can monitor progress towards our goal by more closely monitoring new development and utilizing aerial photography and GIS mapping technology. Future Town Meetings will have the opportunity to periodically review this goal, taking into consideration prevailing public attitudes and the effectiveness of private and public conservation efforts.

***

This proposed Comprehensive Plan is offered in response to Town Meeting directives and funding. We are indebted to Town officials and committees and numerous Belgrade citizens for their interest, constructive criticism, and support. We especially thank our KVCORG consultant, Chris Huck, for his skill, energy, and genuine interest in Belgrade's future as he guided us through this project. He willingly devoted many more hours than originally planned for the work and kept us all on track throughout.

We recommend this Growth Management Plan to the Town as an essential building block for Belgrade's future. If implemented, it will:

- Provide the foundation for needed land use policy
- Encourage compatible growth and development in appropriate locations
- Outline a long-range capital investment plan for the Town
- Recommend public and private conservation initiatives.

We appreciate the opportunity to submit this proposal to the Town of Belgrade.

Respectfully submitted by the
Comprehensive Planning Steering Committee
Kathi Wall, Chair
2: Plan Development and Public Participation

The proposed comprehensive plan contained in this report is part of a line of planning efforts by the Town of Belgrade and the citizens therein. This plan is an update of the town’s 1998 Comprehensive Plan, which was created to conform to the Maine Growth Management Law. The 1998 plan was itself an update to Belgrade’s first comprehensive plan, adopted in 1987. The 1987 plan predates State comprehensive planning requirements.

The Town has also engaged in more targeted planning efforts. Belgrade Lakes village was the topic of a Streetscape Plan in 1998; that plan was updated and re-submitted to MaineDOT in 2011. Belgrade’s lakes have been the subject of multiple plans aimed at improving water quality.

These past planning efforts have contributed to the current report. Specifically, several informational passages were preserved from the 1998 plan, and the recommendations were examined in detail to determine how they were implemented and whether they needed to be carried over into this plan.

Development of the 2013 Plan

Preparations for the current planning process began in earnest in 2011. Some volunteers had worked on updating the plan prior to 2011, but lacked the time and energy to do more than initial data collection. Many townspeople recognized that the 1998 plan was outdated and ineffective in its land use component. Meanwhile, state guidelines had been adopted which will make the 1998 plan no longer consistent with the law in 2013, making it important for the Town to accelerate its planning process.

After funds were raised at the 2011 Town Meeting, the Town went through a competitive bidding process to select a consultant to assist in developing the plan. The Kennebec Valley Council of Governments was selected and a contract for service signed in March of 2012. The Town sponsored an organizational meeting in May, but due to the summer months, another meeting was not held until the Fall.

Residents have engaged in the formal planning process between November of 2012 and October of 2013. The process consisted of designating a set of subcommittees and a steering committee to coordinate the work of the subcommittees and review the final work. Subcommittee work and reporting progressed through the spring of 2013, with additional work through the summer.
A draft of the plan was produced in October of 2013. This draft has been submitted to the State’s land use planners for review for consistency with the state laws. Once this review has been completed, the plan will be submitted to the voters of the Town.

Adoption of the plan is not the end of the process. The 1998 plan faltered when it came to putting its recommendations into effect. One of the recommendations of this plan is to form a standing committee with the charge to monitor implementation of the plan. It must be emphasized that this plan is not a regulation or rule that must be followed, and does not have the authority of an ordinance. It is a policy statement, intended to set a direction for the town that will result in our stated goals for making efficient use of public dollars while preserving the quality of life that makes Belgrade unique. But if we do not follow the direction, we are not likely to arrive at our goal.

Public Participation in the Planning Process:

The planning process has utilized the talents and ideas of a large number of Belgrade residents.

The formal planning process kicked off in November with a meeting attended by close to 30 residents. Most of the attendees volunteered for and worked on one of the six subcommittees and each subcommittee was represented on the steering committee. Each subcommittee was responsible for one or more of the chapters in this plan. Each subcommittee engaged with other interest groups, residents, or stakeholders within their area. For example, the Economic Development Subcommittee sponsored several informal meetings with local businessmen and realtors, and met individually with others.

Subcommittee members and additional contributors are listed below:

Land Use Subcommittee/Planning Board:
- Rich Baker (Planning Board)
- Kenny Brechner
- Alan Butterfield
- Roger Derosier (Planning Board)
- Stephen Foster (Planning Board)
- Gary Fuller (Code Enforcement Officer)
- Mark Heuberger
- Peter Rushton (Planning Board)
- George Seel (Planning Board)
- Nora Sosnoff
- Tom Streznewski
- Jack Sutton
- Dan Trembly (Planning Board)

Recreation Subcommittee:
- Linda Bacon
- Joe Adlam
- Valencia Schubert (Recreation Director)
- Board of Parks and Recreation
- Kellie Guarino

Economic Development Subcommittee:
- Pam Cobb
- George Seel
- Diane Oliver
- Fred Fontaine
- William Redlevske
- Matt Gauthier
In addition to committee participation, the steering committee developed and distributed a public opinion survey. The survey was sent to every Belgrade taxpayer. A total of 327 responses were received and painstakingly tabulated by Mary Vogel and Mary Derosier. The results of the survey are summarized in every chapter addressed by the survey, and the complete tally is reproduced in the appendix to this report.

The Recreation Subcommittee went a step further and, following an informational session at Belgrade Central School, invited all the students to take a Survey Monkey questionnaire on what they would like to see in Belgrade’s future. The results are summarized in chapter 5.

Additional public meetings are planned prior to putting this plan before the voters. Suggestions for additions, deletions, or changes will be welcomed.
3: Belgrade’s Past, Present, and Future

Finding #1: Our community has developed as a result of population and economic trends that continue to operate today.

The community we know today has evolved over time. The influences that created it still operate, and help to define the community. Historical trends in population, shown on Figure 1, below, demonstrate that Belgrade and its neighbors have followed a pattern common to many rural Maine towns: rapid settlement in the early 19th Century, followed by long decline as westward expansion and industrial urbanization emptied out New England farm towns.

That trend in turn was reversed by the influence of more convenient transportation systems, widening the radius between people’s homes and workplaces. Belgrade, long a farm town and later a summer resort, has for the past several decades and into the foreseeable future, been a suburban “bedroom” community, its population supported in great measure by the automobile.

![Figure 1: Historical Population Trends](chart.png)
As the graph illustrates, Belgrade’s population at the most recent census was 3,189, rising from a low point of 957 (in 1920). The population since 1960 has just about tripled. Neighboring towns on the graph show similar trends, with Sidney outpacing all others since 1980.

Growth throughout this region has slowed since the accelerated rates of the 80’s and 90’s, primarily due to economic conditions. Belgrade recorded only nine new (year-round) housing units in 2011 and twelve in 2012, after averaging more than 26 per year during the prior decade. Growth from 2000 to 2010 actually represented a slowing of Belgrade’s population trends. The population only grew by seven percent. Growth from 1990 to 2000 amounted to a 25 percent increase, with an average of 29 housing units per year.

Whether this slowing is a long-term trend remains to be seen. While construction may pick up as the economy improves, high fuel prices and an aging population may make suburban towns less attractive long-term.

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<tr>
<td>Belgrade</td>
<td>3,189</td>
<td>211 (7%)</td>
<td></td>
</tr>
<tr>
<td>Sidney</td>
<td>4,208</td>
<td>694 (20%)</td>
<td></td>
</tr>
<tr>
<td>Rome</td>
<td>1,010</td>
<td>30 (3%)</td>
<td></td>
</tr>
<tr>
<td>Smithfield</td>
<td>1,033</td>
<td>103 (11%)</td>
<td></td>
</tr>
<tr>
<td>Mt. Vernon</td>
<td>1,640</td>
<td>116 (8%)</td>
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Belgrade’s current growth rate closely resembles Mt. Vernon’s. Towns to the north and west, further from the Augusta job market, are growing more slowly. Kennebec County as a whole grew only 4.3 percent in population during the 2000’s. Belgrade was #11 in growth rate among 29 Kennebec County towns.

Population growth consists of two components: “Natural Increase,” which is the difference between births and deaths, and “Migration,” which is the difference between those moving into town and those moving out.

Natural increase tends to reflect the characteristics of existing residents: if the population is older, any natural increase will be lower (or negative); if it is more in the range of young adults, it will be higher. Belgrade’s natural increase was 85 between 1990 and 2000, and 97 between 2000 and 2010. This suggests a healthy turnover in population; aging residents are supplemented by new young families. This is not necessarily the case with Kennebec County as a whole, where the 2000-2010 natural increase of 968 was less than one-half of its 1990-2000 figure (2,064).

The direction and rate of migration tends to be a function of economics. People will choose to move into or out of a community based on factors such as availability of employment, cost of housing and transportation, and perceptions of community vitality. Migration is calculated as the difference between total population change and natural change. In the 1990’s, Belgrade experienced a net in-migration of 518 persons, while in the 2000’s, in-migration slowed to 114. This suggests that economic growth factors were tougher in the 2000’s than in the 1990’s, especially in comparison to the rest of the region (where migration usually begins or ends).

Another trend of note is the changeable nature of the household. While “population” is the standard by which most communities are measured, the real driving force in a community is
its households. Households consist of everyone living in a housing unit, primarily families but sometimes also unrelated individuals. There are occasionally persons who do not live in a “household,” (for example, group homes); there were only 12 of these in Belgrade in 2010.

Table 3-1, below, identifies households by family type in Belgrade, and how they are transitioning. The table illustrates a long-standing trend – that traditional families with two parents and children are becoming less dominant. Even though they still make up about 6 out of 10 households, single-person households are becoming more common. Thus, the average “family” size in Belgrade is 2.85, but the average “household” size is only 2.51.

<table>
<thead>
<tr>
<th>Household Type:</th>
<th>2000</th>
<th>2010</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Households</td>
<td>1,178</td>
<td>1,265</td>
<td>7.4</td>
</tr>
<tr>
<td>Single-person Households</td>
<td>223</td>
<td>248</td>
<td>11.2</td>
</tr>
<tr>
<td>Single-person “over 65”</td>
<td>77</td>
<td>114</td>
<td>48</td>
</tr>
<tr>
<td>Married-couple families</td>
<td>739</td>
<td>769</td>
<td>4.1</td>
</tr>
<tr>
<td>Male-headed families (no wife)</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Female-headed families (no husband)</td>
<td>66</td>
<td>66</td>
<td>0</td>
</tr>
</tbody>
</table>

In Belgrade the single-person, elderly household makes up almost one-tenth of all households. Though the numbers are small, this type of household is growing at seven times the rate of households overall, and will accelerate as the baby boom moves into its elder years. This is very important for planning of public safety and social services for the aging.

The value of the term “Households” is that a household requires a house, and so it becomes the link between population and housing. “Average persons per household” becomes a critical indicator, and “household size” becomes a better predictor of housing demand than population growth.

For at least the past 40 years, households have been getting smaller. This is a national trend. The trend is the net result of social trends: fewer children, broken families, more independent living among the elderly, and delayed marriage among the young. Belgrade is in no way exempt from those trends. As can be observed in Figure 2, Belgrade’s average household size has been shrinking since 1970.

There are indications in this graph that the trend is leveling off, but it may be a function of the poor economy of the past few years. A major driver – at least in Belgrade – is the increase in the number of empty nest and elderly households, and that will not ease up until many more baby boomers are well into retirement.
Smaller household sizes create demand for new housing even if the population itself is not growing. In 1970, when Belgrade averaged 3.35 people per household, the population of 1,302 occupied 385 houses. Hypothetically, if we had no population growth between 1970 and 2010, the decrease to 2.51 people per household in 2010 would now require 519 houses. That’s about three new units per year, just to accommodate the changing demographic. What about the future? If our household size drops just another tenth in the next decade, from 2.51 to 2.41, the current population of 3,189 will require another 58 new housing units.

Even so, this may not be enough. As the box to the left shows, many of our neighbors have fewer people per household than Belgrade. Oakland, Rome, and Mt. Vernon were all similar to Belgrade in 2000, but are now much smaller. Kennebec County’s average is only 2.32 persons per household. In practical terms, this could be an indicator that Belgrade’s existing housing stock is not responding to demand. For example, there could be an unmet need for housing that suits smaller households (such as elderly or single-bedroom apartments).

Finding #2: Belgrade accommodates a significant seasonal population.

All population figures cited in the prior section refer to year-round population – more specifically, population counted by the census on April 1st. In Belgrade, there is significant population fluctuation as a result of seasonal movement.

Seasonal population consists of two main elements: full-season residents, such as camp owners/renters, and visitors, which may include anyone from summer camp enrollees to day-trippers.

There is no accurate measure of seasonal population, so it is heavily dependent on assumptions. We know from the census how many seasonal homes are in town. If we take the 818 “seasonal” units tallied in 2010 and assume an average household size of 2.38 (the average for Kennebec County), we come up with a maximum of 1,950 camp residents. That alone is a 60 percent increase over the year-round population. (This assumes full occupancy at peak season, and the household size is just a guess.)

Summer camps include:
- Camp Modin (capacity of 400, including staff),
- Camp Runoia (220)
- Maine Golf and Tennis Academy (75), and
- Pine Island Camp (110)
- Camp Bomazeen (Boy Scout Camp – no steady enrollment)

At the high point of the summer, organized camps therefore contribute about 900 to the population. Tourist lodgings include Whisperwood, Loon Ridge Cottages, and Castle Island.
Camps. At the height of the summer, therefore, we can expect about a doubling of the 3,200 year-round population.

Belgrade is also the service center for many of the surrounding camp communities in Rome and Mt. Vernon, possibly contributing another 3,000 summer residents. Many of these regard Belgrade Lakes village as their own, some even arriving across the lakes by boat.

**Finding #3: Belgrade’s population is aging.**

The age profile of the population has a big impact on the type of community services to be planned for. A town with lots of entry-level homes needs to plan for new schools; a town with established housing may need to focus more on social services and senior citizen centers. America’s story for the past 50 years has been the Baby Boom. These are persons born between 1945 and 1965. There were a lot of them; so many that the 60’s saw a boom in school construction, the 80’s a boom in suburban starter homes, now more interest in second homes, and soon in retirement centers.

Figure 3 shows the impact of age group shifts in Belgrade. Each bar represents the number of persons in that age group at the census year. In 1990 and 2000, the Baby Boom was primarily in the 20-44 age group. In 2010, it suddenly jumps to the 45-64 group. Meanwhile, those aged 65 and over are already gaining in numbers. Imagine what will happen with these bars in the next 20 years.

**Figure 3: Belgrade Age Cohorts: 1990-2010**

![Bar chart showing age cohort population changes from 1990 to 2010.](image)

The population as a whole rose by 34 percent from 1990 to 2010. From 1990 to 2010 Belgrade had no significant change in the “under 5,” and an increase of just 12 percent in school aged children. The young adult group lost four percent, after gaining in 2000. At the same time, the 45-64 bracket has grown at three times the rate of population growth, while the “65 and older” has grown at twice the rate.
This overall shift is reflected in Belgrade’s “Median Age.” A median is a point at which exactly half the population is above and half below, and is not the same as “average.” Belgrade’s median age in 2010 was 43.8. This is about a 4.3 year aging from 2000. Now, while most of us, as individuals, age ten years in a decade, it is not the same with a community. If the median age of a population rises, it means that more people are being added to the “old” side of the balance than the “young” side.

As can be seen from the box at right, Belgrade is about middle of the pack within its neighborhood. Mt. Vernon started younger in 1990, but is now older than Belgrade. Rome was the oldest town in 1990, and has aged more quickly than any other in the past decade. Meanwhile, Kennebec County has a median age of 42.8, and Maine 41.4. Belgrade is slightly older (and aging slightly faster) than the county and state.

Finding #4: Current trends in population growth can be used to predict future growth and its effects on the community and economy.

Census data in this chapter has been used to show us how Belgrade has changed and continues to change. But we can also use it to predict the future. With a good idea of the numbers of people, houses, and jobs to expect, we can make planning decisions. We can decide what is needed to adapt and prepare for growth, or we can decide to manage the rate.

The conventional mechanism of forecasting the future is to project past trends, population being the most common. A typical forecast would draw on the growth rate from the past 20 years, and assume that it will continue into the next 20. KVCOG’s growth forecast is based on such a formula. KVCOG’s estimate for Belgrade’s population in 2030 is 4,000. That is basically taking our gain of 800 people between 1990 and 2010 and adding it to the 2010 number.

Economists for the State use a more sophisticated formula that takes into account the survival rate of different age groups in town, migration trends, and other factors, but sometimes comes up with head-scratching results. Belgrade is a case in point. The State’s projection looks at the aging population and estimates that the 2030 population will be only 3,236 – a gain of just 37 people.

The box at right illustrates State projections for neighboring towns. Oakland and Rome are both projected to lose population. Sidney is the big gainer. Whatever estimate we use, we should view formula forecasts with a suspicious eye; Belgrade’s 1998 plan anticipated that our population today would be over 4,100.
Population forecasts are simply numbers unless we use them to visualize how growth will affect the town. We can do this by establishing a set of “what if” scenarios – alternate forecasts. These scenarios estimate the impact on the town in three visible areas: population, housing, and employment. By looking at the physical impact of the alternatives, the town can make decisions, which will lead it down its preferred path.

For Belgrade forecasting the future is tricky because the recent past has been so erratic. Belgrade grew by 25 percent in the 1990’s, thanks to 287 new homes built. But the growth rate in the 2000’s was just seven percent, with less than 100 new homes. How much we will actually grow over the next 20 years is a function of several factors. Encouraging growth is the available land in Belgrade, a visually attractive community, elongation of Augusta’s Route 27 commercial district and relocation of the hospital. Inhibiting growth, higher gas prices and unaffordable housing, coupled with a lack of local job opportunities or senior services could slow growth.

For the purpose of planning, this section poses two alternate scenarios. In the first, illustrating slower growth, we will presume a growth curve at about the rate that has occurred over the past ten years. In the second, labeled “moderate growth,” we will use the average over the past twenty-year span.

**Scenario 1: Slow Growth**

Belgrade’s population in 2010 was 3,189, a gain of 211 residents and a growth rate of seven percent from 2000. Extrapolating this to 2030 yields a population of 3,650.

The first step in gauging impacts is to translate population into households. Here we have to make an assumption about household size. Because the average size of households has declined continually, the number of households will increase even with zero population growth – and so does the demand for housing. There is some evidence that the rate of shrinkage is slowing, but Belgrade’s average household size is still larger than many of its neighbors (see table on page 4), and as the baby boom ages, more families will become “empty nests”.

The assumption for all these projections is that average household size will decline from 2.51 in 2010 to 2.4 in 2030. This is a little slower than the period 1990-2010. With a population of 3,650 and a household size of 2.4, the town would support 1,521 households. That will require an increase of 256 housing units between 2010 and 2030, an average of 12.8 per year.

Despite being “slow growth,” 256 new housing units over twenty years will have an impact on Belgrade’s resources. Belgrade’s Minimum Lot Size Ordinance requires every new dwelling unit to have at least 40,000 square feet of land and 200 feet of road frontage. We all know that because of market demand and unbuildable land, the average new building lot is more often 2-5 acres. But if every new home were built on the *absolute minimum* lot size, 256 new homes would consume 235 acres. Two hundred fifty six new homes will also occupy 51,200 feet of road frontage, equivalent to almost five new miles of road occupied on both sides.

We can also estimate the number of workers out of these households. Both Belgrade and the larger region (Kennebec County) averaged 1.26 workers per household in 2010. Again, there
is some evidence that as baby boomers retire, the ratio of workers to households will decline. (In fact, many economists predict a labor shortage once all baby boomers retire.) If we presume that the average number of workers will decline 10 percent, to 1.15 per household, the new labor force in 2030 will be 1,750, an increase of 205 workers over 2010.

<table>
<thead>
<tr>
<th>Scenario 1:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>New Residents:</td>
<td>461</td>
</tr>
<tr>
<td>New Housing:</td>
<td>256</td>
</tr>
<tr>
<td>New Jobs:</td>
<td>192</td>
</tr>
</tbody>
</table>

If the unemployment rate stays the same, 13 of those 205 workers will be added to unemployment rolls, leaving 192 jobs to be created. Eighteen percent of Belgrade’s workers have jobs in town, so 37 new jobs would have to appear in town to support the growth; the remaining 155 workers would commute out of town.

**Scenario 2: Moderate Growth:**

In Scenario 2, population will grow about twice the rate as in Scenario 1, to 4,062 in 2030. This is a growth rate of about 13 percent, almost double what the town saw in the 2000’s, but only half as fast as the town grew in the 90’s.

Using the same assumptions about declining household size, 4,062 residents would occupy 1,693 households in 2030. That is an increase of 428 from 2010, an average of 21 per year over the twenty years. The addition of 428 new homes, if all built according to the minimums in Belgrade’s ordinance, would consume 393 acres of land and 85,600 linear feet of road frontage. That is equivalent to about eight miles of new road.

<table>
<thead>
<tr>
<th>Scenario 2:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>New Residents:</td>
<td>873</td>
</tr>
<tr>
<td>New Housing:</td>
<td>428</td>
</tr>
<tr>
<td>New Jobs:</td>
<td>402</td>
</tr>
</tbody>
</table>

In 2030, 1,693 households would generate 1,947 workers, using the same multiplier as in Scenario 1. That is an increase of 402 workers. If the unemployment rate remains unchanged, 25 will be unemployed. Of the 377 jobs required to be created to support the growth, 72 of them would be located in Belgrade, the remaining 305 outside of town.

Is there a “fast growth” scenario? Although the town has grown faster than either of these scenarios during several decades in the past, indications are that growth in rural communities is slowing. Maine’s growth overall has slowed, and people seem to be rediscovering urban areas. A combination of an aging population and high gas prices may be making urban living more attractive than suburban towns. National studies indicate that young people are also more interested in city lifestyles.

Many unforeseen events could accelerate growth in Belgrade: the subdivision of a single large tract of land, several major employers moving into the area, or just the resumption of the boom times of the 70’s and 80’s. New business development in Oakland (FirstPark) or Augusta (hospital) could create enough regional demand to suddenly accelerate development in Belgrade.

While many of the trends mentioned are not within the power of the town to influence, some of them are. The town’s land use regulations and road maintenance policies could affect the availability of land for development. The level of investment in local or regional economic
development influences the rate of job growth. Even such a thing as the quality of water in Belgrade’s lakes can affect home values and promote (or slow) new development. The town can also influence the style of growth. If the town prefers to accommodate retirees rather than young families, it can encourage the development of senior housing. If the town wants to slow development in the rural areas while speeding it elsewhere, it can raise the minimum acreage requirement in selected locations.

The anticipated population growth of Belgrade will result in an increase in demand for the financial as well as natural resources of Belgrade:

**Population Growth and the Cost of Government**: The two scenarios described above project population growth of between 460 and 870 residents by the year 2030. That is an overall growth of between 14 and 27 percent. The cost of population-based public services is likely to increase by that percentage (before inflation) over the next 20 years. However, most services are more closely tied to the household. Since the average size of the household is decreasing, the growth rate for households will be between 20 and 34 percent. Therefore, the best estimate for the increase in the cost of general government services (town office, recreation, public works, general assistance) is between 20 and 27 percent over 20 years.

**Tax Revenue**: In 2010, the median home value in Belgrade was $193,900, and using the town’s (equalized) mill rate at the time, paid $1,943 in property taxes. If the homes to be built in the next 20 years averaged the same value as the current housing stock, the increase in tax revenue would be between $500,000 and $832,000. The town’s total expenditures (including education) for 2011 came to $7.75 million. The added tax revenue would increase the revenue side of the budget by 6.5 to 10.7 percent – about 1/3 the rate of expenditures. (It has been shown through dozens of national case studies that the average home falls well short of the tax revenue needed to support it; about $1.25 in services is needed for every dollar in revenue.)

**Impact on Schools**: It might be assumed that a population increase of 14-27 percent would result in an increase in school enrollment, but this is not necessarily the case. Between 2000 and 2010, Belgrade’s population increased by 7 percent, but school enrollment only increased by 2.5 percent. In the past 20 years, the “under 5” segment of the population has grown very little, while the overall population has grown by 34 percent. As the baby boom continues to age out of child-bearing years, numbers of children will drop. While this trend will alleviate any pressure to expand, the district will instead be dealing with lower enrollments but the same fixed costs.

**Impact on Senior Services**: In contrast to the youth population, the senior population is expanding rapidly and expected to continue to do so. Seniors have special service demands, for emergency services, recreation, transportation, health care, and possibly general assistance. In 2010, Belgrade had 1,070 residents between the ages of 45 and 65, and 466 at 65+. Assuming no population growth or movement and an average 88 percent survival rate, 20 years from now, Belgrade will have an additional 941 seniors, more than triple the current number. As much as one-third of all residents could be seniors. If the anticipated growth came in at the same ratio, it would add between 150 and 300 more, yielding between 1,300 and 1,450 total seniors. That is a little under three times the number of school-aged children.
**Land Consumption:** Belgrade’s minimum lot size is 40,000 square feet, double the State minimum. If built at the absolute minimum, between 256 and 428 new housing units would consume no less than 235 to 393 acres. However, lots are never designed to the minimum. In fact, the 1998 plan reported that new lots between 1971 and 1997 averaged about five acres each. If we continue to see five acre lots in new development, growth will consume between 1,280 and 2,140 acres, adding about five percent to Belgrade’s developed area. This does not include additional land necessary for roads to serve these lots.

**Land Consumption (Alternative):** For several decades, Belgrade has developed as a typical suburban community as far as the housing market is concerned. The market has been large, 3- to 4-bedroom homes on a large lot or small acreage. However, 20 years from now, as much as one-third of the population will be over 65, without children (for the most part) or the will to maintain a 5-acre lot. The housing market will have shifted dramatically. Design for seniors is more appropriate with small homes on small lots, or multi-family developments on even smaller lots with common sewage disposal. If one-third of the anticipated new housing units were built to these standards, it would save between 43 and 70 acres off of the 400-600 acres to be consumed by conventional practices.

**Road Impacts:** Every housing unit must have a minimum of 200 feet of road frontage. The estimated growth would require at least 51,000 to 86,000 feet of road frontage. Since every road has two sides, this would be equivalent to between five and eight miles of new road. That is the minimum. Lots of five acres are more likely to have 500-600 feet of road frontage. That would require between 10 and 16 new miles of road. While some lots would be placed onto newly-constructed roads or camp roads, possibly the majority would go onto existing public roads. Belgrade currently has 52.3 miles of public roads. With roughly 1,000 existing homes located on public roads, approximately 24 miles are already built out, not counting commercial frontage.

**Transportation Demand:** Every housing unit generates traffic. The national average is ten trips per day per household (out and back is two trips). Ten homes on a dead end road would generate 100 vehicles past the mouth of the road per day. The traffic would become more dispersed as it spreads through town, but nearly all trips would involve a state highway at some point and probably one in five will pass along Route 27. The anticipated growth would generate between 2,500 and 4,300 new vehicle trips per day. Current volume on Route 8/11 (Oakland Road) is approximately 4,000 and on Route 27 about 5,600 trips per day. Traffic on Route 27 could increase by as much as 15 percent. This does not account for the fact that trips and trip lengths have been growing at about three times the rate of population on a national average.

**Economic Development:** Presently, 1,450 Belgrade residents have jobs, but only 538 jobs in Belgrade. Anticipated population growth would result in demand for between 190 and 400 new jobs in 20 years, between 70 and 150 of them local. Job growth in the form of commercial development also demands land area, but varies widely based on the type of employer. If all the new jobs were in retail, the demand would be only 3-6 acres; if the jobs were manufacturing, the demand would be nine to 18 acres. These are national averages, and rural commercial development tends to be more widely dispersed and land-consumptive.
4: Historical and Cultural Assets

Finding #1: Belgrade has a rich heritage, reflected today in our architecture, landscape, and economy.

Before 1800 only the boldest of white men, including explorers and hunters of game and/or Indians, explored this area far inland from an easy travel route like the Kennebec River. Some came with a vision of establishing a homestead. The Kennebec Proprietors' lots were being sold. Some men had money to buy land; some were veterans of the Revolution claiming their recompense. Some did not have the cash but came anyway and settled up later when the Proprietors in their Boston office offered a low price to "quiet" the squatters who had no deeds. The Belgrade area, first called Washington Plantation, West Ponds, and/or Prescott's and Carr's Plantation, lay at the western edge of the Kennebec Purchase, which was comprised of large blocks of land 15 miles east and west of the Kennebec River.

By 1790 the first Federal Census gives these names of families in Belgrade, names we see on cemetery stones and on old deeds – Bean, Blake, Crosby, Crowell, Fall, Gilman, Hall, Leighton, Linnell, McGrath, Mosher, Page, Philbrick, Rankins, Richardson, Snow, Staples, Taylor, Tilton, Tozier, and Wyman. In 1796 Belgrade was incorporated as a town in Lincoln County with about 250 inhabitants. (The 1800 Census counted a population of 295; Kennebec County was formed in 1799.)

It is thought that roads and settlements were first clustered around waterways and trails used by natives before us. The earliest road map that we have seen, 1856, shows roads just about where they are now with indications of sawmills at natural dam sites.

In early days, each family or cluster of farms was very self-sufficient – clearing their land, depending on their own crops and livestock. Sheep became important locally in the first half of the 1800's, first for domestic use and then for the woolen mills prospering off the importation and breeding of high-quality stock. By 1840, the population of Belgrade had peaked at over 1,700 and was declining, probably from a combination of severely cold weather and westward migration, which started before the Civil War. Not until the 1970's did our population recover to its level in the 1840 census.

Sheep's wool yielded to the Jersey cow's milk as a cash crop, and trains which first came through in 1849 increasingly took our milk, wood products, and apples to ready markets in Boston. About the mid-1800's, horses began to replace oxen for farm work and travel.

After the Civil War the train also worked in our favor in a new way. Wealthy rusticators began to find the Belgrade lakes a welcome summer break from cities to the south. Fishing was the primary draw (and still is), but in 1900 "The Belgrade" hotel was built to entice summer
visitors to vacation by the clear waters of Central Maine. It complemented the inns and more rustic lodgings around Belgrade's lake shores. At about the same time, the numbers of new private cottages and summer youth camps were growing. Over one hundred businesses eventually joined the list of accommodations in operation in those decades before World War II.

Automobiles and overnight cabins became the new vacation travel mode after the War, but cottages continued to increase. Since that era, hundreds of private cottages have crowded the lakeshores; a few children's camps remain active; and many sets of camps have been sold separately. One or two farms are still viable and many families continue to maintain vegetable gardens for family use, but the truck farms that sustained hotels and camps with a central dining hall are gone.

The businesses that sustain the town now include the camps and vacation rentals, small retail stores, two large lumber yards, a cement/stone business, a building supply company, steel fabrication, storage units, gravel mining, and lake-related businesses.

We have John Clair Minot's writing and his grandfather's good memory to thank for much of our written history. It was published as a chapter in *Illustrated History of Kennebec County* in 1892.

**Finding #2: Belgrade has historic and archeological assets worth preserving, and is active in that effort, with much left to do.**

The small Belgrade Historical Society is currently trying to save and document our heritage, but they, like the Heritage Society of the 1970-1980's, need more help to capture the memories, preserve the 200-year-old Town House, and bring an awareness of local history through interesting programs. The failure of an earlier attempt to have a secure display area resulted in the Heritage Society ultimately dying, its collection dispersed. Townspeople since have little incentive to donate historic items when there is no secure home and display space for them. However, in October, 2013 the Historical Society began work on converting the former library space at the Center for All Seasons into a new "history room."

- There is no secure repository for archival material or artifacts and no public access to such materials. The Town Office is too small for its purpose, and its vault is quite full.
- There seems to be no local history taught in our school district.
- There is no comprehensive history book to raise awareness and understanding of Belgrade's past.

Belgrade Lakes Village and Belgrade Depots should be considered as Historic Districts, but more information is needed about that designation, its significance, and the cost of doing a proper house survey. The Maine DOT, in planning to rebuild Route 27 through Belgrade Lakes, has classified the village as an historic district, but that is not the same as a National Register designation.

Two properties are listed on the National Register of Historic Places, and the Town House would be eligible if restored. Several other properties may also be eligible, but more
effort is needed to conduct a survey of properties. An inventory and map of historic homes was begun for the 1998 Plan, but is incomplete. The Historic Society is currently working on completing the inventory. The two properties now on the National Register are:

- **The Birches**, built in 1916 as part of "The Belgrade" hotel complex
- **Chandler's Store**, built in 1838 by John Chandler of granite, in Belgrade Lakes Village

We know also that Native Americans used routes throughout the lakes area in their seasonal travels, camped, fished and hunted our waters on a regular basis. Lakeshores and streamsides in particular have been shown to contain significant archeological resources. The only land with extensive exploration are the shores of Messalonskee Lake, surveyed by Central Maine Power for the process of relicensing the dam. They identified ten archeological sites on the lake.

We also know that early European settlers built mills and homesteads in Belgrade, which have deteriorated to the point where only archeological evidence exists. Long-time residents and landowners may know of cellar holes scattered through the town, but no effort has been made to document these.

The Town’s land use ordinances all contain language requiring developers to identify and accommodate any historic or archeological resources found on their development sites.

The public opinion survey contained several questions regarding identification and preservation of historic resources in Belgrade:

- Respondents said that the Town’s priorities for preserving historic/cultural assets should be 1) scenic views, 2) historic documents and photos, 3) landscapes, and 4) historic buildings.
- When asked how we can protect and teach our history, respondents’ favorite answers were: 1) a town history website, 2) a controlled environment for documents and artifacts, 3) outreach to schools, and 4) a comprehensive book on Belgrade’s history.
- By a margin of 8 to 1, the survey favored having a public display space for historic artifacts and documents.
- Respondents were less enthusiastic when asked where they would like municipal funding allocated. With the strongest support were “documenting oral histories” (39 %), “establishing an historic district in Belgrade Lakes village” (38 %), and “researching older homes and identifying with date signs” (36 %).

**Finding #3: Belgrade has a number of cultural assets that help to maintain our sense of community.**

Since the 1998 Comprehensive Plan was written, Belgrade has taken steps which can enrich our opportunities for physical activities and cultural events. Construction of the Center for All Seasons with private money has given us space to implement new summer youth programs, after-school activities, and adult classes, all of which can include cultural aspects. Special cultural events can be held in the Social Room.
Planning for a public library was begun in 1998 after private money was donated for that purpose in the proposed Center for All Seasons. The library has prospered, outgrown its small space, and now has moved to a small private building closer to the geographic center of Belgrade, an unusual arrangement for a public service. Perhaps it can also accommodate small cultural events. Additional information on the library may be found in Chapter 8 Public Services.

The new Maine Lakes Resource Center, built with private money, also promotes some public cultural programming, as well as housing the natural-resource group staffs and programs.

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**Recommended Actions to Protect Historic and Cultural Assets:**

**State Goal:** Preserve the State’s historic and archeological resources.

Our Vision: Even as our needs change, Belgrade will become a closer community, with a strong sense of place, where:

- all citizens are aware of our town’s heritage and take pride in conserving its history, its family stories, artifacts and resources;
- we all feel responsible for protecting that heritage, with its classic old buildings and precious landscapes; and
- all age groups can be actively engaged in cultural and social gatherings that enrich our Town.

**Issues:**

1. Public and Private historical documents and artifacts are at risk. They are material evidence of our history.

2. Ongoing Collection of present evidence for future generations. It documents our way of life.

3. Little information is quickly accessible about Belgrade’s history or Society activities.

4. Identification, protection and preservation of historic structures including Town House, landscapes, and cemeteries.

5. Local history seems absent in the schools. Integrate or supplement local history in the school curriculum.

6. Need for more opportunities for cultural interactions and group activities – music, theater, etc.
Priority Recommendations:

4-1. Within the Center for All Seasons, display artifacts, images, and paper-based records of our past. The secure, climate-controlled “History Room” will be open to the public on a regular schedule.

4-2. Establish a website for the Belgrade Historical Society, separately or linked to the Town website.

Additional Recommendations:

4-3. Community outreach to involve students, volunteers, families and groups.

4-4. Survey of Historic House/cellar holes and historic areas.

4-5. Restoration of Town House

4-6. Continue care of 3-4 small, old cemeteries.

4-7. Develop an Historic Preservation Ordinance and identify Belgrade Lakes Village as an Historic District. Amend the land use ordinances to require the planning board to incorporate maps and information provided by the Maine Historic Preservation Commission into their review process.

4-8. Work with administration and teachers in Belgrade Central School to develop teaching modules.

4-9. Establish clubs with a cultural focus to put on events such as fiddler/ guitar jams, open microphone, art demos/ displays, crafting, etc.

4-10. Host seasonal plays/ concerts; Host senior citizen specific cultural events (e.g., Evening at the Pops, Senior Ball)

4-11. Through the land use and subdivision ordinances, incorporate maps and information provided by Maine Historic Preservation Commission into existing review process.
5: Recreation and Community

Recreation is an important element of Belgrade. The lakes provide an obvious opportunity for water-based recreation; undeveloped land provides open space; plenty of businesses make their living off of recreation and tourism. This chapter addresses primarily those recreation opportunities provided by the Town.

Finding #1: Outdoor recreation in Belgrade is a way of life, with abundant opportunities and assets, particularly for water-based recreation.

Belgrade’s natural environment provides an exceptional setting for outdoor recreation. Belgrade is the center of a large complex of lakes and forested hills, providing opportunities for residents and visitors. Outdoor recreation opportunities are an economic asset, drawing summer residents and day trippers alike. Belgrade has four summer youth camps and at least 800 summer homes, all of which are here to take advantage of the town’s recreational assets.

Belgrade is virtually carved from lakes. Forming portions of Belgrade’s boundaries are Great Pond, Long Pond, Messalonskee Lake (Snow Pond), and Salmon Lake (McGrath Pond). All of these lakes are heavily developed along their shorelines, providing individual recreation opportunities, but limited public access.

All of Belgrade’s larger lakes are suitable for boating and swimming. The great majority of shoreline is developed private property, but all of the lakes have at least one public boating access. Belgrade boat launches are described as follows:

- Great Pond: Located south of Belgrade Lakes village near Great Pond Marina. Owned by the Maine Department of Agriculture, Conservation and Forestry (DACF), is has a 20-foot wide, hard-surfaced ramp and 15 parking spaces.
- Salmon Lake: Located on the west shore of Salmon Lake, near North Belgrade village. Owned by Department of Inland Fisheries and Wildlife. Includes a hard-surfaced ramp and parking spaces for six trailer rigs and four additional vehicles.

Boat accesses to Belgrade waters: Long Pond (Mount Vernon – State-owned ramp just across the bridge on Castle Island Road), Belgrade Stream (Mount Vernon – State-owned, carry-in launch), Messalonskee Lake (Oakland, at the northern tip of the pond). The Maine Atlas also shows a launch at the north end of McGrath Pond, but it is not listed in the State’s database.
Belgrade Lakes village is bounded on three sides by water, and there are several boat tie-ups available for visitors. Commercial ones include Day’s Store and the Village Inn, while public space is available at the Maine Lakes Resource Center, Post Office, and Center.

The Town maintains two public swimming beaches, both located in Belgrade Lakes. The beach on Long Pond (Lakeshore Drive) has about 50 feet of beach area and has restrooms and parking spaces. The beach on Great Pond is associated with the Center for All Seasons. Parking and restrooms are available at the Center. The beach is about 200 feet long. It is heavily used by the Town’s day camp programs and other residents.

Belgrade residents also engage in other outdoor recreation activities. There is a lot of undeveloped back land in town, although private land is sometimes posted. Areas are available for hunting, bird-watching, and botanical study. Approximately 36 miles of snowmobile trails are maintained by the local Draggin’ Masters Snowmobile Club, and may be used for summer hiking and biking. There is a shortage of maintained hiking trails in town, but residents have access to the 6,500 acre Kennebec Highlands tract, mostly in Rome and Mount Vernon, with its well-developed trail network.

Facilities are also available for more organized forms of recreation. Ballfields, a tennis court, and a basketball court are located at Kenneth Workman Field and the school. The championship-caliber Belgrade Lakes Golf Course is privately-owned but open to the public. The four summer camps have recreation fields but these are mostly limited to campers.

Finding #2: The Center for All Seasons is the nucleus of recreation activities in Belgrade.

Partly resulting from the impetus of the 1998 Comprehensive Plan, the Town of Belgrade built the Center for all Seasons in 2001. The center is now the hub of community cultural and recreational activity. It houses an indoor basketball court/multi-purpose floor, two activity rooms, and a kitchen, as well as offices for the recreation program. The library was located in the center until it outgrew its space and relocated in 2012. In 2012, over 15,000 people participated in an activity in or around the center.

Surrounding the Center are the town pool, town beach, and park area with picnic tables and grills and open green space. The adjacent acreage is wooded, with potential for nature trails.

The North Belgrade Community Center is located on Route 8/Smithfield Road. It is used for community gatherings, potluck dinners, and rented out for special events. It has a single large meeting room and a kitchen.

Finding #3: Belgrade has a healthy and expanding recreation program.

Belgrade has had a recreation program for several years, but between 2006 and 2010, it was managed by the Alfond Youth Center. The Town resumed managing it in 2011. Now directed by the Board of Parks and Recreation and staffed by a full-time recreation director,
Belgrade’s recreation program takes full advantage of the natural surroundings and facilities available at the Center for All Seasons. The program offers approximately 35 different programs, ranging from toddler programs to senior trips.

The most popular programs offered by the Town are:

- Camp Golden Pond, for grades K-6. 8-week day camp, enrollment averages 50-60 per week. Swimming, crafts, games.
- Camp Loon for Teens, grades 6-9. Focuses on water crafts and skills, nature study, etc. enrollment of about 15 per week.
- After school program at the Center, averages 15-20 per day.
- Adult basketball, dance and yoga classes.
- Senior walking and exercise programs, bus trips.

The Kenneth Workman Youth Sports Program runs team sports in Belgrade, offering elementary-level soccer, basketball, baseball, softball, t-ball, tennis, field hockey, golf and cheerleading. This program has been run by volunteers since the 1970’s.

The Town is budgeting approximately $137,000 per year for recreation programs. The programs themselves bring in about $80,000 per year in revenue towards that total.

Finding #4: The Board of Parks and Recreation is active in exploring opportunities for new and expanded programs and facilities, and aggressively seeks public input.

The Board of Parks and Recreation has ambitious plans to expand its programs and activities to serve more local residents. The Board provided a series of questions for the 2013 public opinion survey to garner ideas about what programs might be most in demand.

One question asked which outdoor recreational facilities should be developed or improved. The highest interest from respondents included (in order): walking/hiking trails, sidewalks in the village, town beach, lake access, cross-country ski trails, and a trail between the Center and village. In this question, walking and lake access seemed to be the preferred activities; developed activities such as tennis and basketball courts were much lower.

Another question asked which indoor facilities were worthy of improving. Among the highest responses (in order): exercise equipment, more space for group meetings, a game room, indoor pool, and technology. In general, there seemed to be far less demand for indoor activities than outdoor (fewer people checked any of the boxes).

The survey also asked which of the Town’s 35 programs were of greatest importance. Respondents ranked the summer youth camps very highly. Also ranked well were senior programs and senior trips, outdoor recreation, and youth sports programs.

The Board went a step further, to the Belgrade Central School, and turned a survey into a learning experience for kids there. They asked many of the same questions. Here are some of the answers, from elementary-aged kids:
- The Town should develop outdoor trails, parks, etc., before athletic fields or courts;
- Of most interest for new indoor facilities were an indoor pool and climbing wall. A game room/arcade also scored well.
- The most important recreation programs, from the kids’ point of view, were outdoor sports, open gym, indoor sports, and swimming lessons. The kids clearly placed a higher importance on programs overall than the general survey of residents.
- Forty one percent of the kids said that they use the recreation center either “all the time” or frequently throughout the year. Only 10 percent said they never use it.

Based in part on the responses from these questionnaires, the Board of Parks and Recreation is developing a workplan to include expanded engagement with clubs and cultural activities, expanded outdoor walking opportunities, increased beach and open space access, and developing a community E-space. Many of these ideas are reflected in the recommendations below.

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### Recommended Actions to Promote Community Recreation:

**State Goal:** Promote and protect the availability of outdoor recreation opportunities, including access to surface waters. Plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth.

Our Vision: Belgrade will be a place:
- that is appreciated by its people for its high quality outdoor environment, with ready access to natural resources for a variety of outdoor pursuits;
- where community spirit and pride enrich our lives, and people gather regularly for shared activities and enjoyment;
- where available public and private land is used responsibly for recreation, and where Belgrade’s Center for All Seasons is highly utilized along with all other public recreational facilities; and
- where a variety of recreational programming activities and community events enhance the quality of life of townspeople of all ages.

**Issues:**

1. While our surface water resources are abundant, our access to them lags behind for those residents that do not have shorefront property. In particular, swimming access should be expanded.

2. Our open space, too, is abundant, but most of it is privately owned. This has not been a problem in the past, but may become so as the town gets more crowded and we have more landowner-guest conflicts. (Chapter 6 contains a recommendation for an open space plan.)
3. Belgrade is likely to grow in population by about 20 percent over the next 20 years. Recreation facilities and programs that may be adequate today may be stressed in 20 years. This must be taken into account as the Town expands its programs and facilities.

4. As well as growing in numbers, the population of Belgrade will most likely grow older. Demand for youth programs may stagnate, while demand for adult and senior programs expands.

**Priority Recommendations:**

5-1. Develop a Trail Plan: map existing walking, hiking and cycling trails; evaluate both private & public lands on which additional trails may be established; determine resources needed, priorities and timelines for building and linking trails; locate educational stations along trails (“Trails that Teach”).

5-2. Seek North Belgrade opportunity (deeded trust, donation or other) for waterfront access.

**Additional Recommendations:**

5-3. Expand waterfront access at existing beaches.

5-4. Update signs and maps of public spaces.

5-5. Evaluate underutilized town lands and facilities including existing land by Transfer Station for recreational purposes and develop a strategic plan (short-term, long-term) that enables largest potential benefit to community.

5-6. Utilize website as Community E-Space to Electronically Build Community Spirit Around Recreational Activities.

5-7. Build customer database & tracking tool, with email, Facebook and emerging social media to improve communication.

5-8. Maintain ongoing, effective communication campaign “goings-on”, volunteer opportunities, and wish lists.

5-9. Develop partnerships to support specific teen & senior needs with RSU18, Belgrade Historical Society, Belgrade Health Center, Senior Spectrum, etc.

5-10. Update Board of Parks and Recreation committee structure with Selectboard approval.
6: Natural Resources

Belgrade’s natural assets contribute greatly to the town’s character, economy, and self-image. The most important of these become worth preserving so that future generations may enjoy the same benefits that we do. Although the land and water assets of Belgrade are closely intertwined, they are addressed in two separate chapters in this plan. This chapter examines the significant natural resources of the town and identifies measures to protect these resources, while Chapter 7 addresses surface and groundwater resources.

Finding #1: The natural assets of a town begin with the backbone of land. The capability of land to support environmental assets as well as development is an important factor in planning.

In many cases, topography defines a town, but it can also have an impact on the built environment. Topography is not generally a constraint on development, until the ground becomes too steep or unstable. For example, the Maine Plumbing Code prohibits conventional septic systems on slopes steeper than 25 percent.

Belgrade does not have extensive areas of steep topography. The only constrained areas according to topographic maps of the town would be isolated steep slopes adjoining some of the lake shores. In many cases, these would already be zoned Resource Protection associated with Shoreland Zoning requirements. (As in many cases throughout this chapter, maps don’t always tell the whole story, and sometimes reality on the ground is different.)

Belgrade does have a series of interesting and sometimes exemplary landforms generated by glacial activity during the last ice age. Belgrade’s eskers and moraines, built up from glacial deposits, are an excellent source of sand and gravel for construction. Gravel extraction is a significant contributor to Belgrade’s economy, and is discussed later in this chapter.

Soil consists of mineral and organic particles, but is more than just dirt. In different sizes and ratios, these particles form soil types that may be well suited for a variety of uses, and ill-suited for others. We know that some soil is particularly fertile, making it well suited for agriculture. Soil with a very stable combination of sand, silt, and clay particles may be ideally suited for building homes, businesses, and roads. But some types of soil, especially those which are saturated for an extended part of the year, are unsuitable for development, while at the same time providing environmental values.

Soils are typed and mapped by the US Department of Agriculture Natural Resource Conservation Service. The NRCS also publishes ratings of soil suitability for various purposes,
including agriculture and development. The Maine State Plumbing Code subsequently adapts these ratings to determine which soil types might not be suitable for subsurface wastewater disposal (septic systems).

Soil types which appear as unsuitable on the map are a constraint to development, but not an insurmountable one. Generally, they are unsuitable for individual septic systems, but with the NRCS maps at a large scale there is bound to be some variability within an area mapped as unsuitable. The way to increase the chances of development finding a suitable site is to require larger lot sizes or more detailed soil surveys on tracts shown as “unsuitable.” Belgrade has extensive areas shown as unsuitable due to soil characteristics.

**Finding #2:** While the majority of Belgrade is still undeveloped and in its natural state, within these areas are smaller habitats with characteristics much more rare. These can be considered “critical” natural resource areas.

This section details some of the natural resources in Belgrade that can be classified as “critical” because they are in short supply in the environment. The Maine Department of Agriculture, Conservation and Forestry (MACF) Natural Area Program provides information and descriptions of critical natural resources. The *Critical Natural Resources Map* illustrates the locations of these resources, to the extent that they can be mapped.

**Endangered Plants and Animals:**

Animals that have been identified as rare, threatened, or endangered have been spotted in Belgrade. In many cases, the reason that animals are threatened is because their habitat has been destroyed. The key to protecting rare wildlife is protecting its habitat from destruction.

Bald eagles, while no longer considered a threatened species, are still protected under federal law. Development within half a mile of bald eagle nests is restricted. There are several bald eagle nests in Belgrade – on Long Pond, Messalonskee Lake, and McGrath Pond. Only the nest site at the northern end of Messalonskee Marsh impacts significant land area in Belgrade.

Several other rare species of birds inhabit Messalonskee Marsh. American Coot, Least Bittern, and Black Tern have all been identified in the marsh. They are on the list of species endangered in Maine. As recently as the summer of 2013, Sandhill Cranes have been identified on Messalonskee Lake and Meadow Brook.

Ribbon Snake is the only other rare animal species spotted in Belgrade. An occurrence was noted along Castle Island Road.

Rare or exemplary plants are those with limited range or only a few sightings in Maine. That Maine Natural Areas Program tracks and maps sightings of rare plants, but has none in its inventory for Belgrade. That does not mean that there are none. There are extensive natural areas in Belgrade that have not been explored. The Town should be vigilant with respect to rare plants.
Natural Communities:

Natural communities are groupings of plants and animals that occur under similar conditions. While there are over 100 identified natural communities in Maine, outstanding examples of them are relatively rare. Belgrade has a number of exemplary natural communities, primarily associated with wetlands. These are shown on the Critical Natural Resources Map.

Just west of the town office and running to the foot of Great Pond is a bog area known as a *leatherleaf bog*. This is characterized by peatland-style vegetation—shrubs under four feet tall. This type of community is well-represented in Maine. Associated with the leatherleaf bog is a *black spruce bog*. This has similar characteristics, but has a canopy of black spruce and larch.

The *tall sedge fen* is similar to a leatherleaf bog, in that they are both commonly seen as peatlands. The tall sedge fen is dominated by sedge and other grassy vegetation, as opposed to shrubs. A prime example of the tall sedge fen is located in southwestern Belgrade just north of Wings Mills Road, known locally as Weston’s Meadow. It is part of an exemplary unit of a streamshore ecosystem.

A *kettlehole bog-pond* ecosystem is a grouping of individual natural communities around a “kettle” which is a glacial depression left by melting glacial ice. It often consists of a floating peat bog surrounded by fens. One of the best examples in Maine is located in southeastern Belgrade east of the Penney Road.

Focus Areas:

Focus Areas contain exceptionally rich concentrations of rare plants and animals, high quality natural communities, or significant wildlife habitat within the context of large blocks of undeveloped habitat. These areas have been identified through the Beginning with Habitat Program, not for regulatory purposes but as a planning tool for landowners, conservation entities, and towns. They warrant place-specific conservation attention through a variety of methods ranging from conservation acquisition to landowner education on best management practices.

Belgrade is unusually fortunate to have two such focus areas. The *Belgrade Kettle and Esker Complex* runs along the Belgrade esker from the south end of Great Pond through southeastern Belgrade and Sidney, and into North Augusta. It is considered one of the finest examples of kettle ponds and esker ecosystems in New England. It encompasses both the leatherleaf bog and kettlehole bog ecosystems described earlier.

The *Messalonskee Marsh* is highly visible as one drives up Route 27 after entering town from the south. It stretches from the Sidney town line to the Depot, and at 1,300 acres is recognized as an excellent waterfowl habitat. It includes one of the largest of only a dozen black tern nesting sites known in Maine.

Vernal Pools
Vernal pools have only recently been identified as essential habitat in the life cycle of several species of animals. Vernal pools are characterized by their ephemeral nature: in the spring they look like wetlands, but for most of the year they more closely resemble dryland habitat. Because protection of vernal pools is fairly new, not all of the pools have been identified and mapped. Also, the pools tend to be tiny. It would not make sense to regulate development based on locations which have not yet been identified. Instead, vernal pools should be assessed during a development process and protected through development standards.

Finding #3: Many elements of the natural environment, though not being particularly critical, must be taken into consideration as constraints to development.

Significant natural resource constraints are those which need to be taken into consideration when developing, but can be managed rather than protected outright. In many cases, property with significant constraints can be developed if care is taken to lessen the impact on the resource. While not a prohibition on development, these constraints will make development more expensive. Thus, it would be prudent to identify these areas in advance, to provide prospective developers adequate warning.

Floodplain

Any land that is adjacent to a water body is subject to some degree of flooding. The higher the water rises, the more serious the flood. The federal government has designated “floodplain areas” as those likely to be subjected to a flood every 100 years, or a one percent chance of being flooded in any given year. These are considered catastrophic floods, and the Town of Belgrade has an ordinance restricting development in the 100-year floodplain.

For the most part, the floodplain is limited to the immediate proximity of the water body. That means development would be subject to both the Floodplain Management Ordinance and the Shoreland Zoning Ordinance. Places where the floodplain is much broader are mostly wetland. There are several wide areas of floodplain along Belgrade Stream and also along Chandler Road.

Wetlands

There is extensive wetland area in Belgrade. While much of it has been mapped, mapping is generally done from aerial survey, and not necessarily accurate on the ground. Filling of wetlands for development or any other purpose is strictly regulated by the federal government, but other activities such as logging are permitted.

Like other resources, wetlands have a range of values, based on their size, location and ecological diversity. The State has identified and mapped wetlands that are valuable for habitat for waterfowl and wading birds. These are the wetlands shown on the accompanying maps.

The Town is required under the Shoreland Zoning Law to zone the area around moderate and high value wetlands of more than ten acres into a Resource Protection Zone. The Town is
not required to zone the wetland itself, although building in it would be mostly impossible, nor is it required to zone a buffer around wetlands of less than ten acres.

**Deer Wintering Areas**

Deer are certainly not a rare species in Maine, but they are sensitive to their habitat. While summer habitat is plentiful, their winter habitat is not. They need food and shelter in a place where they can move around without too much deep snow. Without these wintering areas, their numbers would diminish dramatically.

The Maine Department of Inland Fisheries and Wildlife (IFW) has mapped deer wintering areas in Maine. The maps depict suitable habitat and may not actually have deer in them. These mapped deer wintering areas – generally consisting of mature softwood forest – cover a significant portion of Belgrade.

Like the other resource constraints described here, deer wintering areas do not have to be off limits to development. The general recommendation of the IFW is to manage the wooded area to maintain a percentage of the habitat. This can be done with targeted logging techniques or with development that minimizes removal of forest cover.

**Undeveloped Habitat Blocks**

All forms of wildlife have a natural range where they will travel. In general, the larger the animal, the larger the range. With most animals, if the natural range is interrupted by roads or other development, they will retreat into an area more suited. In the case of animals with the largest range, they are likely to be driven out entirely as a town develops more of its land base.

The state’s Beginning with Habitat Program recognized that large tracts of undeveloped land are needed to support the ranges of multiple species, and has mapped these blocks by the simple expedient of identifying all forested areas more than 500 feet from roads. This eliminates much of rural Belgrade, which is punctuated by camp roads. However, some tracts along the central spine (on either side of West Road) contain significant acreages.

*Finding #4: Due to Belgrade’s geological pattern of glacial remainders, the Town also has active gravel pit development and usage.*

The presence of the glacial esker formation in Belgrade has provided significant sand and gravel resources. Gravel pits have been an important industry in Belgrade. According to the State of Maine DEP website on licensed mining facilities (revised February 2013), there are five gravel pit operations in Belgrade that are licensed under the Maine State performance standard (e.g., greater than five acres):

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Pit Name</th>
<th>Company/Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>339</td>
<td>Gagne Pit</td>
<td>Gagne &amp; Sons Concrete Block Co.</td>
</tr>
<tr>
<td>390</td>
<td>Steven's Pit</td>
<td>Robin L Day &amp; Sons</td>
</tr>
</tbody>
</table>
There are also additional, smaller gravel pits in Belgrade that do not fall under the State licensing requirements, but are regulated under the Town’s Commercial Development Review Ordinance and are permitted and annually licensed by the town. Table 6-1, below, provides a listing of gravel pits on file with the Town of Belgrade:

### Table 6-1

**Non-DEP Gravel Pits on record as of 2009**

<table>
<thead>
<tr>
<th>Name</th>
<th># of Pits</th>
<th>Location</th>
<th>Pit Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gagne &amp; Sons</td>
<td>3</td>
<td>28 Old Route 27 Rd</td>
<td>Gagne Lane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rt. 27 (near cemetery)</td>
<td>Gagne Pit # 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Off Pinkham Cove Rd.</td>
<td>Gagne Pit # 2</td>
</tr>
<tr>
<td>Hallowell Construction</td>
<td>4</td>
<td>Depot Road</td>
<td>Hallowell Pit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Horsepoint Road</td>
<td>Pit #1, Pit #2, Pit #3</td>
</tr>
<tr>
<td>Clifton Hammond</td>
<td>2</td>
<td>Depot Road</td>
<td>Depot Road Pit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(South of the School)</td>
<td>Storage Road</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depot Road</td>
<td></td>
</tr>
<tr>
<td>Richard Labbe</td>
<td>1</td>
<td>Horsepoint Road</td>
<td>Labbe Pit</td>
</tr>
<tr>
<td>David M. Stevens</td>
<td>1</td>
<td>Cemetery Rd</td>
<td>Stevens Pit #1, Stevens Pit # 2</td>
</tr>
<tr>
<td>Maurice Childs</td>
<td>1</td>
<td>Point Rd</td>
<td>Childs Pit</td>
</tr>
<tr>
<td>Robin Day</td>
<td>1</td>
<td>Route 27</td>
<td></td>
</tr>
<tr>
<td>Thomas Dowd</td>
<td>1</td>
<td>Route 27</td>
<td>Farnhham Road</td>
</tr>
<tr>
<td>Allison, LLC (Steve Foster)</td>
<td>1</td>
<td>Route 27</td>
<td>Allison's Pit</td>
</tr>
<tr>
<td>Town of Belgrade</td>
<td>1</td>
<td>Route 27</td>
<td>Town Pit</td>
</tr>
</tbody>
</table>

There are additional inactive gravel pits in Belgrade that are not included on either the Town or State list.

Gravel Pit operations in Belgrade are regulated by: 1) Belgrade Commercial Development Review Ordinance, Article 8, Section 1, and 2) Maine Title 38, Chapter 3, Sections 490-a through 490-K. Key requirements of the Town Ordinance include the following:
- Reclamation within 12 months following completion of extraction (< 100 yards extracted in a 12 month period).
- No part of extraction may occur within 50 feet of roadways or property boundaries.
- Grandfathered operations lose grandfathered status after 2 years of no operation (< 200 yards extracted in a 24 month period)
- There is no size minimum for coverage under the ordinance other than the extraction of 1000 yards over a 12-month period.

Finding #5: Belgrade residents have a strong commitment to preserving the natural environment and have a history of doing so.

Belgrade residents have long shown an appreciation for natural resource assets. Although the lakes are the town’s most visible asset, the sheer volume of undeveloped land has also been worthy of note. In the public opinion survey done for the town’s 1998 plan, 74 percent of respondents said that they live in Belgrade because of its environmental quality (more than the 60 percent that answered “the lakes.”)

That attitude made it into the 1998 plan as an element in its four-part vision statement: “conserve the special character of rural areas and minimize municipal costs by limiting sprawl, strip development, and the fragmentation of open space.” In the followup survey done for the current plan, that statement was reiterated and respondents were asked on a scale of 1-10 how strongly they agreed (or disagreed) with it. Fifty-two percent marked a “10,” indicating the strongest agreement. Another 29 percent expressed lesser levels of agreement. A further question asked whether the Town needed to make additional efforts to protect our natural resources. Eighty-six percent responded “Yes” to “plants and wildlife,” 88 percent “yes” to “undeveloped land,” and 85 percent “yes” to “wetlands.”

One of the most prominent recommendations of the 1998 plan was to form a conservation committee. The conservation committee would take the lead on resource protection strategies, including lake issues and open space protection, as has been done in several towns through Maine. Unfortunately, with a lack of implementation to the 1998 plan, a committee was never formed. The Water Resources Chapter (7) advocates for implementation of this recommendation.

The Town of Belgrade has no shortage of regulatory protections for resources. In addition to Floodplain Management and Shoreland Zoning Ordinances, the Town has Commercial Development and Subdivision Ordinances that contain performance standards to protect particular resources. The Commercial Development Ordinance contains provisions specifically protecting natural features, critical natural areas, wetlands, deer wintering areas, and groundwater, as well as erosion control and air and water quality. It also has provisions specific
to gravel pits. The Subdivision Ordinance contains a provision requiring a percentage of large subdivision be set aside for open space, and provisions for clustered development.

The town also benefits from land conservation efforts by public and private entities. Property donated by the Gawler’s encompasses some of the most valuable resource land, in the Belgrade Esker and Kettle Complex and on Messalonskee Marsh. The George Bucknam Wildlife Management Area is located mostly in Mount Vernon but protects Belgrade Stream. The Belgrade Regional Conservation Alliance Land Trust is primarily responsible for the Kennebec Highlands parcels, but maintains 129 acres in Belgrade. The land trust was founded in 1988 and claims over 1,200 contributors.

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**Recommended Actions to Protect Natural Resources:**

**State Goal:** Protect the State’s critical natural resources, including wetlands, wildlife and fisheries habitat, shorelands, scenic areas, and unique natural areas.

Our Vision: Belgrade will be a place where:

- rural features dominate the landscape, including plentiful views of forests, fields, mountains, and lakes,
- large diverse, and interconnected forests and other natural areas which sustain wildlife populations, ecosystem functions, and traditional pastimes such as hunting, walking and snowmobiling,
- the community understands and appreciates the tremendous value of its natural resources, rural character, and scenic vistas, and
- landowners are willing to work together with the Town to protect these resources.

**Issues:**

1. The town must assure that wildlife and plant communities have sufficient quantity and quality range by providing large contiguous and interconnected tracts with a mixture and diversity of habitat types.

2. We must maintain an interconnected system of undeveloped lands which sustains views, fields, forests, shorelands, habitats, wetlands, wildlife corridors, informal trails, and other natural features.

3. Historic landscapes; panoramic views of mountains, lakes, streams, wetlands, and fields; and tree-lined country roads must continue to be the dominant nature of Belgrade's character.

4. Gravel is an important natural and economic resource. We must permit its extraction while being mindful of potential for ground water contamination and water level fluctuation, erosion, infringement on other natural features and neighboring properties, and nuisances such as dust and noise. Ensure that pits are properly reclaimed so they do not detract from the Town's natural beauty and pose no safety or health hazard.
5. We must recognize and work towards the regional nature of our natural resource assets by cooperating with neighboring towns and regional entities.

**Priority Recommendations:**

6-1. Promote landowner awareness and action by developing or obtaining and distributing information about the need to protect Essential, Significant, and other wildlife habitats, wetlands, and unusual natural features.

6-6. Establish an Open Space Acquisition Reserve Account to receive funding from grants, private donations and other sources for the purchase of fee title, easements, or development rights of key parcels of land identified in the open space plan.

**Additional Recommendations:**

6-2. Strengthen regulatory protection by adding deer yards and other State-listed wildlife resources to be protected in subdivision and site plan review based on current information from Beginning with Habitat database. Require applicants to request review from the Natural Areas Program when in area of known unusual communities or rare plants.

6-3. Revise the shoreland zoning ordinance or adopt other land use provisions as needed to include all areas within 75 feet of all perennial streams and to ensure adequate protection for kettle hole bogs.

6-4. Establish a Critical Resource Conservation District, encompassing all areas of known critical resource assets.

6-5. Prepare an open space plan including criteria for public land acquisition to provide direction and establish priorities for conserving an interconnected system of open space areas.

6-7. Aggressively enforce existing regulations and determine whether additional protection is needed for wetlands and their buffers through regulation, voluntary landowner action, or initiative by nonprofit organizations.

6-8. Monitor the disturbance of forested wetlands, particularly those adjacent to water bodies and wetlands and not included in shoreland zoning, and request IF&W to evaluate those which have not yet been evaluated to determine their need for protection.

6-9. Continue to enforce the Town's floodplain ordinance and determine whether the shoreland zone should extend beyond 250 feet in areas where floodplain boundaries are greater.

6-10. Amend land use ordinances to:
   a) adjust setbacks for new structures in rural areas.
   b) Limit tree cutting within new development to enhance rural character by the maintenance of existing forested buffers.
c) Encourage development designs which maximize the preservation of views and rural features, i.e. stonewalls; and which limit outdoor lighting.

d) Regulate the size, lighting, number, color, and height of signs, especially in rural areas.

e) Regulate the visual impact of communication towers.

6-11. Discourage the expansion of street lights in rural areas except where safety necessitates.

6-12. Educate landowners about the availability of the Open Space Tax law.

6-13. Include the Belgrade Esker/Delta Complex in districts where:
• uses which threaten ground water are excluded or controlled through performance standards, &
• residential development is allowed but not encouraged, at least until extraction is complete in the vicinity.

6-14. Encourage redevelopment of pits for other uses.

6-15. Initiate and/or participate in interlocal and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.
7: Water Resources

Belgrade’s water resources, to the extent that they can be separated from our land-based natural resources, consist of surface water – lakes and streams – and groundwater. Together, they represent not only a natural resource but a tremendous economic asset to residents and businesses alike.

Finding #1: Belgrade’s lakes are its principal economic and natural asset, but can only be viewed in a regional context.

The Belgrade Lakes are a chain of seven lakes, draining the better part of six communities and a fraction of five more. The chain flows into Messalonskee Stream and eventually the Kennebec River. Belgrade is at the center of this complex, with frontage on five of the seven lakes, and a total of nearly 41 percent (56 miles) of the total shoreline in the chain.

Except for a very small acreage in the southeastern corner, the entire town is within a lake watershed. (See the Water Resources Map.) A total of five watersheds cover Belgrade; North Pond and East Pond, at the top of the chain – do not extend watersheds into Belgrade. As illustrated by Figure 7-1, just over 1/3 of the total watershed area of the seven lakes is in Belgrade, comprising about 42 square miles (including lake surface area).
Belgrade is not the largest town in the watershed region, by either geography or population, but it is the central town with the largest stake in the quality of lake waters. It has historically been perceived as the leader in efforts to promote and protect the lakes.

Belgrade relies on the continued rising value of its shoreland properties to support its tax base. A 2009 report commissioned by the Cobbossee Watershed District (CWD) said that for Winthrop “waterfront property in 1997 was worth $81 million. By 2009, the same property had increased by 170 percent to $219 million.” (During the same time, housing prices overall in Kennebec County rose only 63 percent.) Research by the University of Maine considered property sales and water quality data from all over Maine, including Great Pond, Snow Pond, and East and North Ponds in the Belgrade region. For these lakes and most others, the research showed that a small decline in water clarity could easily reduce shoreline property values by 10%. This would not only affect shorefront landowners. Since their property valuations would decline, tax revenue would go down accordingly, thus requiring non-shorefront property taxpayers to make up the shortfall. Everyone would lose.

The cost of water quality decline could also affect other aspects of the local economy. Another study by the University highlighted the great value of lakes in Maine’s economy ($11.4 billion in 1996 alone, supporting up to 50,000 jobs). The University study suggests that a noticeable reduction in water quality will result in reductions in use rates, money spent and enjoyment of the lake "experience." A study which included East and North Ponds suggested that area lakes contribute $200 per lake acre to the annual economy of the region.

**Finding #2:** The water quality of Belgrade’s lakes, while generally accepted as good, is continually threatened by activities ranging from pollution and phosphorous import to invasive water plants. Vigilance is necessary to monitor and address the threats.

Belgrade has decades of data and study invested in its lakes, mostly from local volunteers. Throughout summer season, volunteer monitors use secchi discs to measure water clarity -- how far light penetrates to the bottom. Clarity is directly related to how much algae is growing in the water and how people perceive water quality. The more algae that grows, the less clear the water and the less satisfied people are with their lake experience.

Monitors also collect data on dissolved oxygen from different depths and parts of the lakes to measure the amount of phosphorus. Phosphorus is a limiting factor to the amount of algae growing in the water and the amount of algae controls the dissolved oxygen in the deep lakes. When oxygen levels become too low because the algae are using it up, coldwater fish cannot survive -- and, to make matters worse, more phosphorus is released from the bottom of the lake to fuel the growth of more algae. This cycle is hard to break, once started.

The data for these three measures -- clarity, phosphorus and oxygen -- tells us that the Belgrade Lakes overall have good water quality, but some problems still exist. The following is a brief summary of the information available on the lakes. (There are volumes of data on these lakes, which need not be replicated here.)
Great Pond Great Pond is the lynchpin in the Belgrade lakes chain. It is listed on the DEP’s list of “Lakes most at Risk from Development.” The amount of phosphorus is gradually increasing, though clarity has not yet been significantly affected. Low dissolved oxygen is a problem, however.

Long Pond Long Pond consists of two basins – north and south. The water quality of both basins is relatively stable. A consistent loss of oxygen in deep water is troubling, though some is due to natural conditions.

Messalonskee Lake (Snow Pond) This is the lowest lake in the chain. More consistent and complete data is needed for this lake. However, there are some signs of oxygen loss and phosphorus elevation.

East Pond East Pond watershed does not extend into Belgrade, though being above Great Pond, it definitely affects our water quality efforts. The pond is experiencing definite recurring and worsening algae blooms. It is listed on the DEP’s list of “Lakes most at Risk from Development.”

North Pond Like East Pond, the North Pond watershed is above Belgrade but affects it. There are signs of decreasing clarity and increasing algae growth in recent years, though it is not in as much trouble as East Pond. North Pond is also listed on the DEP’s list of “Lakes most at Risk from Development.”

Salmon Lake (Ellis) This lake experienced algae blooms in the 1970’s and since has gone through occasional periods of high algae productivity although clarity has slightly improved. Dissolved oxygen losses and phosphorus levels continue to be troublesome in the summer. It is listed on the DEP’s list of “Lakes most at Risk from Development.”

McGrath Pond The pond also had high algae productivity in the 1970’s, but has since shown a slight improvement in clarity. Nevertheless, it is listed on the DEP’s list of “Lakes most at Risk from Development.”

Sources of phosphorus in lakes include both those coming into a lake from overland or upstream lakes (external) and those being released from lake sediments that were deposited on the bottom prior to land development (internal). When phosphorus levels cause increases in algae growth, oxygen loss in deep water can result and promote the release of phosphorus from sediments. Since we have little direct control over internal phosphorus, our best opportunity for controlling lake water quality is to manage external sources.

External sources of phosphorus come primarily from erosion, which exposes and carries soils particles containing phosphorus into lakes in stormwater runoff. Eroding soils, especially from camp, town, and state roads, can be a major source. Contractors and equipment operators are increasingly becoming aware of, and using, such techniques, though sources are still frequently created without benefit of such control.
Development can have a significant impact on phosphorus loading and lake water. The effects are subtle, as lakes respond slowly to new phosphorus inputs from the watershed. But each new house lot, section of road, or driveway that is built adds its individual and incremental share to the lakes, both during construction and then afterwards from lawns, pet wastes, gardens, driveways and roofs.

New development is the source expected to most impact water quality in the Belgrade Lakes in the future. Without care to reduce the impacts of construction, each new house lot adds as much as 0.5 pound more of phosphorus each year, and 300 feet of driveway or road can add about a pound. Put in the perspective of Salmon Lake, it would only take 30 to 40 new homes and their driveways to significantly alter water quality. Recognizing the potential for phosphorous from development, Belgrade long ago established strong performance standards for new development.

Woodcutting and farming operations that expose soils can be significant sources of phosphorus. There have been many wood harvesting operations over the years in Belgrade. If landowners follow a forest management plan and contractors apply common sense operating practices (i.e. "best management practices"), significant problems should be minimized. Belgrade currently has very little agriculture, but resources are available to farmers to help with erosion control and best management practices are common.

Invasive water plants have emerged as a significant threat to Maine’s waterbodies in the past decade. Belgrade’s lakes have experienced invasions of two species:

- Eurasian Milfoil is a highly aggressive species that can form dense mats on surfaced waters that crowd out native plants and impair recreational uses such as fishing, boating, and swimming. It thrives in areas with elevated phosphorous and accelerates phosphorous loading by bringing more nutrients up from lake sediments. Eurasian Milfoil is native to Europe, but has shown up in Salmon Lake.

- Variable Leaf Milfoil is similar to Eurasian Milfoil, not as aggressive as the latter but more widespread in Maine. Originally found only in the southern U.S., it is now distributed throughout the northeast. In Belgrade, it is now evident in Great Pond and Snow Pond, as well as Belgrade Stream and Messalonskee Stream.

The key to controlling the spread of invasive water plants is prevention. The Belgrade Regional Conservation Alliance (BRCA) coordinates volunteer courtesy inspections of boats at seven launches throughout the region, and inspects over 10,000 boats per year.

Once a plant has become established, however, it is an expensive and laborious process to eradicate it. For example, when Variable Leaf Milfoil was discovered in the North Basin of Great Pond, a focused effort by the Belgrade Lakes Association to raise $300,000 was launched. To date, over 50,000 gallons of milfoil has been removed from Great Pond, which appears to be over 90% of the total. In 2013, using these funds, milfoil removal began in Belgrade Stream and at the Messalonskee boat launch on Route 27. This is an attempt to reduce the presence of the plant and improve recreational opportunities for visitors and residents.
Finding #3: Belgrade’s lake water quality efforts are supported by a network of local and regional organizations.

Lake water quality has been a continuing concern for decades. While Colby College in Waterville has utilized the lakes as a laboratory for education and research, other organizations have been involved in educating landowners, mitigating pollution threats and cleaning up those that already exist. Since 1998, there have been new efforts focused on the water quality of the lakes within the watershed, due in large part to a significant grant from the National Science Foundation secured by Colby College. It has allowed the increased involvement of faculty and student researchers in a variety of areas. Not only are there biologists involved, but also economists, social scientists, and increased technology support for lake and conservation associations.

In terms of local, volunteer groups, we have the Belgrade Lakes Association, the Belgrade Regional Conservation Alliance (BRCA), the Friends of Messalonskee, as well as North Pond, East Pond, and Salmon/McGrath Pond Associations. These have been consolidated into a lakes trust group, fostered by the BRCA. BRCA originated in 1988 as a land conservation effort, but has since expanded its scope into water quality education, cleanup, and restoration efforts. Lake monitors, lay people trained by the Department of Environmental Protection, have been gathering water quality data from the Belgrades for almost three decades.

In 2011, the Maine Lakes Resource Center (MLRC) was opened as a building dedicated to providing the community with a variety of resources to push forward the necessity to preserve and conserve the national resources of the region. The MLRC works with Colby College, the Belgrade Lakes Regional Business Group, the Belgrade Market staff, the Belgrade Historical Society, and other partners to help promote local economic growth and sustainability.

Working together as well as separately, these organizations have stepped up their efforts towards public engagement and education about the critical need to save the lakes and improve water quality in order to maintain the base for economic growth. The Belgrade’s are in the business of tourism and families. Clean, safe water is the critical resource for all of us.

Measures of progress were created for some of the initial strategies with the thinking that the a Belgrade Conservation Committee, once it is initiated, will establish a more comprehensive list of what will be tracked, how, and by whom. The tracking of results should also be established in concert with the Belgrade Lakes Association, the Belgrade Lakes Conservation Alliance, the Maine Lakes Resource Center and Colby College, since they have the most intimate knowledge of research and trends in Great Pond and Long Pond.

Thinking ahead, since the water in East Pond, North Pond, and Salmon/McGrath Pond all flow into Great Pond, a Conservation Committee for the Town of Belgrade needs to be reaching out to those lake associations in order to develop a comprehensive approach based on regional water quality. The development of a Belgrade-based Watershed District needs to be explored by the town’s Conservation Committee as a means of developing sustainable funds for that effort. This may require 5-6 years and work should begin now.
Finding #4: Belgrade also contains several smaller ponds and streams whose waters flow into the larger lakes.

The smaller ponds include: Hamilton (19 acres), Penney (44 acres), Stuart (12 acres), and Chamberlain and 5 others (10 acres or less). Stuart, Penney, and Wellman Ponds are fine examples of kettle hole ponds created by the glaciers (see Natural Resources, Chapter 6). They are all considered "moderate/sensitive" by the Department of Environmental Protection with respect to potential effects of development on water quality.

Belgrade Stream connects Long Pond and Snow Pond, but Belgrade has many other smaller perennial and intermittent streams. The largest are Meadow Brook, Sanford Brook, and Hoyt Brook which all flow into Belgrade Stream. All are classified as Class B. Belgrade Stream offers the best fishing opportunities, but is subjected to an infestation of Variable Leaf Milfoil.

Finding #5: Belgrade residents and businesses rely on clean drinking water. Almost all of Belgrade’s water supplies come from groundwater.

Belgrade has no municipal water supply. Except for isolated cases of camp residents drawing from lakes, virtually all domestic water comes from groundwater supplies. Belgrade has abundant supplies, owing in part to the permeable nature of the soils. The glacial soils responsible for Belgrade’s sand and gravel deposits are also recognized water-bearing strata.

While nearly any well in Belgrade will provide suitable water, certain locations have been identified as yielding over 10 gallons per minute, sufficient for a public water source. Because of their potential for public water supply, these aquifers have been identified for protection. Belgrade’s 10-gpm aquifer is shown on the Water Resources Map. It lies underneath the Belgrade esker complex from the Summerhaven Ponds in Manchester to the east side of Great Pond as far as North Belgrade.

Areas with highly permeable soils are generally suitable for higher densities of residential development. They yield abundant water and effluent from septic systems is rapidly diluted by rainwater infiltration. The same cannot be said for non-organic commercial waste. Chemicals, petroleum products and other liquid wastes can easily contaminate an aquifer. While there are no known contamination issues in Belgrade, the Town has strong performance standards to regulate future development.

Despite not having a municipal water supply, Belgrade has a number of wells considered by the State to be public drinking water supplies. A public drinking water supply serves more than 25 people or more than 15 individual hookups. All summer camps in Belgrade have public water supplies, as does the Central School. The Village Inn and Sunset Grill both have public water supplies.

Public water supplies are monitored by the State through their Drinking Water Program. The State reports on any contamination issues. State rules also advocate for control of land use
activities in a radius surrounding the supply points – usually 300-1,000 feet. There are no wellhead protection plans in place for any of the public supplies in Belgrade.

There are a total of 15 public water supplies in Belgrade. Of greatest concern to the town should be the system at Belgrade Central School. The well is assessed by the State at high risk for contamination, testing positive for Chromium and for high levels of nitrates even though it is a 560’ deep bedrock well.

Four additional systems in Belgrade are listed as moderate to high risk for existing contamination, with evidence of high nitrate counts or coliform in testing. These and others are also at high risk for future contamination. In all cases, the issue seems to be the high density of development in built-up areas, with septic systems nearby. The principal recommendation in all of these cases is to establish a 300-foot radius of protected area, but this is unfeasible.

Recommended Actions to Protect Water Resources

State Goal: Protect the quality and manage the quantity of the State’s water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas.

Our Vision: Belgrade will be a place with clean, clear, beautiful lakes and streams with natural appearing wooded shorelines, where the community understands and appreciates the tremendous value of its resources, and landowners are willing to work together with the Town to protect these resources.

Issues:

1. Belgrade’s lakes are the principal environmental and economic asset of the Town. With multiple threats to the quality of the lakes, the Town needs to maintain significant effort in monitoring and protecting water quality.

2. Lake protection is not a job that town government either can or should do alone. The Town needs to continue efforts to involve neighboring towns and establish public-private partnerships aimed at maintaining the asset.

3. Groundwater is a valuable local asset, reflecting the fact that Belgrade has no municipal water supply. The Town should maintain strong protective mechanisms and should consider additional protection for small public water supplies such as the elementary school.

Priority Recommendations:

7-1. Establish the conservation committee that was recommended in the 1998 comprehensive plan
7-5. Ensure continued strong levels of protection to control phosphorus from all sources of new development and other land use disturbances. Improve implementation of the Ordinance’s existing phosphorous, storm water and soil erosion control standards by utilizing the Board’s existing authority to hire technical reviews of these submissions to ensure they are complete and meet the requirements of the ordinance, paid for by the developer.

Additional Recommendations:

7-2. Inventory town roads to determine which segments have the greatest impact on water quality and develop and implement a remediation program.

7-3. Continue to train town road crews in DEP's standards for erosion and sedimentation control and apply to all Town-owned road & facilities projects.

7-4. Continue commitment to clean storm drains in Belgrade Lakes village.

7-6. Actively support the lake associations, land trust, and private initiatives aimed at protecting and improving lake water quality and educating the public about appropriate techniques. Continue to annually support the BRCA Conservation Corps.

7-7. Actively pursue the development of Watershed District in order to receive increased conservation funding.

7-8. Request lake associations to provide information for distribution at the town office, promoting boater awareness of sensitive wildlife populations and habitats on the lakes.

7-9. Track groundwater contamination sites and encourage citizens to share the results of problematic water quality test results with the Town.

7-10. Use, and update as possible, existing data from DEP and DHS and the Town's plumbing inspector regarding identified contaminated sites and sites which have old underground tanks when reviewing development proposals to determine whether available ground water is already contaminated or likely to become so.

7-11. Strengthen standards to protect private and public drinking water supplies from contamination from petroleum and hazardous substances. Requiring proposed petroleum storage facilities and businesses using or generating hazardous substances to provide documentation of compliance with State laws and regulations governing drinking water protection.

7-12. Consider whether a protective district is needed for the school's water supply.

7-13. Continue to engage local officials in other watershed towns in making lake protection plans, regulations, and activities consistent.
8: Public Services and Finances

Belgrade’s town government provides or coordinates a range of services to its residents and visitors. These range from road maintenance and waste management to recreation and education. These services are made possible only through local taxes, so we have a strong interest in ensuring that we get good quality services as cost-effectively as possible. We achieve this goal by tracking and planning for service needs, including expansion where necessary and cost-sharing where possible. The comprehensive plan pays a crucial role in this process, by identifying growth trends and the evolving desires of residents for services and facilities.

Finding #1: The Town has been experiencing capacity problems in some of its municipal buildings, but is actively working towards solutions.

The town office is located at the intersections of Routes 27 and 135, as near the geographic center of town as possible given the topography and road network. The town office houses administrative functions of local government – the town manager, town clerk, assessor, code enforcement officer, town records, and other administrative functions. The town office is open 42 ½ hours a week for residents to register vehicles or pets, get information, or pay taxes.

The town office is also the primary meeting location for town committees, although because of lack of space many committees are now meeting in the Center for All Seasons by choice. The town office itself has become inadequate for the functions of a town of Belgrade’s size and complexity. The single meeting room is cramped with desks and file cabinets and has little room for public. The front office is workable but tight. Storage space is at a premium, with files stuffed into hallways and private office space. Parking is limited and the lot is too small to accommodate expansion of either parking or the building.

This situation has been noted as far back as the 1998 Comprehensive Plan. A proposed solution, which would have combined a new town office with a library and other services, was set forward in 2010 but proved too expensive. Since that time, a reserve account has been established for a new town office, with a current balance of $129,000. The design and site for a new office have not been established, though. The Town does own a 12 acre site further to the south of the existing office. The site was formerly the Town’s gravel pit. The 2013 public opinion survey asked residents about disposition of this site, and the plurality (41 percent) responded that it should house the new town office, while 37 percent wanted it for a town park and only 14 percent wanted to sell it.

The Town owns a number of other public buildings. The Center for All Seasons is located approximately ½ mile south of Belgrade Lakes Village, and was constructed in 2001.
The center houses meeting facilities and a kitchen as well as recreation venues. The library occupied space in the center for a number of years, but outgrew its space and moved. The Town recently completed a major project to insulate and re-roof the Center.

The current library building is a former private home in Belgrade Depot, purchased and converted in 2012. The building belongs to Friends of the Library and is leased to the Town contingent on continued funding for the library program. This new quarters gives the library adequate room for the foreseeable future.

The North Belgrade Community Center, located on Route 8, is also used for public meetings and events. The NBCC had a former life as an elementary school, has been well-maintained, and is in good condition.

The Town of Belgrade leases and manages two of its three fire stations, located in North Belgrade, Belgrade Lakes Village and Belgrade Depot. While all of the stations suffer from lack of space, the most critical is the Depot Station. This is the most centrally-located station and should have the primary equipment housed there, yet has the least available space.

The Town has an opportunity (first refusal) to acquire the MDOT maintenance garage property when it is vacated. The property, including a seven-bay garage, is located on Cemetery Road adjacent to the central triangle.

Finding #2: The Town’s public safety services have been functioning well.

The most important service that Belgrade can offer its residents is public safety. This includes police and fire protection, ambulance service, emergency management, and associated services.

Police protection has historically been provided in Belgrade through a regional service provider, the Kennebec County Sheriff or Maine State Police. Townspeople have long been satisfied with this arrangement; response times are good and no problems have been observed. Dispatching has been another issue, with the State’s mandate for consolidating Public Service Answering Points (PSAP). The Town currently has contracts with three different agencies: Somerset County, the City of Waterville, and Maine Department of Public Safety. This does not seem to be the most efficient mechanism for dispatching, but for the moment is the least costly.

Fire protection is handled locally, through Belgrade Fire and Rescue. The fire chief is appointed by the selectmen and has (currently) 38 on-call firefighters to staff the three fire stations. Several of these are also EMTs. Staffing is a continuing problem. Belgrade suffers from the same issues as many suburban towns, with the majority of able-bodied firefighters working out of town during the weekday. This, combined with training and record-keeping requirements and many additional obligations, makes it increasingly less attractive for young people to join or stay in the force. The time is coming when the Town will need to provide full-time, salaried positions to ensure coverage.
The Town owns two tanker trucks and three pumpers. It also owns one rescue truck, an ATV and a boat. The Town aims to purchase one new pumper every ten years, with the newest purchased just this year. The Town also purchased a new tanker this year, and is scheduled to purchase a new rescue truck in the near future. Majority funding for vehicles and equipment comes from capital reserve accounts.

There has been a slight downward trend in the number of service calls for the fire department. Over the past six years, fire and rescue has averaged about 320 calls per year – a little under one per day. About half of the calls are for medical services, and ten percent for mutual aid. Only about a dozen calls a year are for active fires.

The Town has been engaged in civil emergency preparedness for several years. We have an appointed Civil Emergency Management Director and assistant. The Emergency Management Plan identifies the Center for All Seasons as a warming/cooling center and the Augusta Civic Center as a regional facility. Belgrade’s Center is equipped with a generator and kitchen facilities, and could be set up for 40-50 overnight occupants.

**Finding 3:** Educational services are provided and managed by a regional school district. Belgrade enrollments are steady or declining and per-pupil expenditures are lower than other nearby districts.

Belgrade is part of Regional School Unit #18, along with China, Oakland, Rome, and Sidney. Elementary students in Belgrade attend Belgrade Central School, with middle school and high school students travelling to Oakland.

Figure 8-1 on the next page illustrates enrollment trends for Belgrade residents. Although 2008 looks like an anomaly, enrollment gradually rose between 2002 and 2008, when it appears to have leveled off. Even though Belgrade’s overall population has continued to rise, this trend in enrollment is not unusual. Even in growing communities, student enrollment has been declining. This is primarily due to the decline in the numbers of women of child-bearing age, as the baby boom progresses into middle age. In most towns, the decline was apparent a decade ago, but in Belgrade it only appeared in the past couple of years and is still unclear. Enrollment over the past six years has remained essentially level in Belgrade, while enrollment from other RSU 18 towns has declined by about nine percent and enrollment statewide has declined 8.6 percent.

Enrollment levels have an impact on school operations and in particular funding levels. Operating costs are to some extent fixed, while enrollments fluctuate. “Per pupil” operating costs rise as the numbers of students decline. Since State reimbursements follow a formula based in part on enrollment levels, a decline in enrollment could result in a decline in State funding. In particular, a decline in RSU enrollment could result in lowered State funding, even if Belgrade’s share is increasing (or not declining as quickly), resulting in a double whammy for the town (increased share of district enrollment/appropriation plus reduced state funding.)
Table 8-1 below shows per-pupil operating costs for RSU 18 compared to other districts in the region. While elementary operating costs are middle-of-the-road, secondary operating costs are significantly lower than other districts, resulting in a lower average than any other districts in the region. Lower operating costs can be interpreted in a number of ways. They could be an indicator that the school system is being run very efficiently, or they could indicate that we are not putting enough into the budget.

**Table 8-1: Comparison of Per-Pupil Operating Costs (2011-12 School Year)**

<table>
<thead>
<tr>
<th>Town/District</th>
<th>Elementary</th>
<th>Secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSU 18</td>
<td>$8,480</td>
<td>$9,158</td>
<td>$8,696</td>
</tr>
<tr>
<td>RSU 49 (Fairfield)</td>
<td>$8,627</td>
<td>$9,566</td>
<td>$8,918</td>
</tr>
<tr>
<td>Waterville</td>
<td>$8,122</td>
<td>$11,025</td>
<td>$9,025</td>
</tr>
<tr>
<td>RSU 38 (Readfield)</td>
<td>$9,414</td>
<td>$10,607</td>
<td>$9,798</td>
</tr>
<tr>
<td>Maine (average)</td>
<td>$9,121</td>
<td>$11,078</td>
<td>$9,727</td>
</tr>
</tbody>
</table>

Source: Maine Department of Education

Management of the school budget and curriculum is the responsibility of the governing body of RSU 18, and beyond the scope of this plan. Current school infrastructure seems to be in good condition and no capacity problems at the district level are anticipated due to flat enrollments.

**Finding #4: The Town maintains a diverse set of public works infrastructure.**

“Public Works” encompasses the infrastructure of the town, including roads, solid waste management, dams, and cemeteries – although in Belgrade these duties are parceled out and not under any single manager. Public Works tends to be the second largest single budget category in local budgets, behind education.
Belgrade’s 2013 budget for public works is just shy of $1.1 million, a little under one-half of the town’s non-education budget. That includes over $708,000 for roads and $237,000 for solid waste.

Road maintenance is provided under the direction of an elected Road Commissioner, advised by the Road Committee. The Road Commissioner and Committee set the priorities for which roads are to receive improvement treatments year-by-year. The Road Commissioner performs summer and winter maintenance, although larger projects such as paving and snowplowing are contracted out. Further information on local road maintenance and responsibilities is provided in Chapter 9, Transportation.

The transfer station and solid waste management is provided under the supervision of the transfer station manager. The manager has three staff and is advised by the Transfer Station and Recycling Committee. The transfer station, located on the Dunn Road, is open Wednesdays and Saturdays for a total of 16 hours a week.

Solid waste from the transfer station is taken to Crossroads Landfill in Norridgewock, and from there to other locations. The fee to the Town is $57.93 per ton and in 2011 the Town reported accepting 999 tons of solid waste. Every ton recycled saves the taxpayers’ money, and Belgrade has a comprehensive recycling program.

About 172 tons of paper and cardboard alone are recycled each year, and the town also recycles metals, plastics, tires, white goods, and construction debris. Revenue from recycling grosses about $25,000 per year. Rome residents are permitted to bring recycling to Belgrade, but the Town does not have any formal regional collection or marketing arrangements. It does participate with the Maine Resource Recovery Association. The transfer station also has a composting facility for leaves and yard waste, and in 2011 composted over 300 cubic yards of organic waste, making the resulting compost available to local residents. The Town also receives and processes universal waste, such as electronics, and burns waste oil to heat the transfer station facility.

Cemeteries in town are managed by the town sexton assisted by the cemetery committee. The Town’s primary cemetery is Pine Grove, located on Cemetery Road. There are no issues with maintenance or capacity at the cemetery.

The Town is also responsible for three dams: Wings Mill, Salmon Lake, and Belgrade Lakes. These dams help to regulate water levels in the lakes. Since the lakes are also within other towns, Belgrade has a cooperative funding arrangement with Rome and Oakland. Dam maintenance and management is governed by the Belgrade dam committee. The dams are in good condition but require constant maintenance.

Finding #5: Utility service in Belgrade is limited to that provided by non-local entities, and does not include public water or sewer service.
No part of Belgrade is served by public sewer or water service. In the majority of the town, development density is too low to consider installation of such service. It is conceivable that at some point in the future, a sewer may be required. Belgrade Depot could need one if groundwater is ever contaminated by industrial operations, or Belgrade Lakes could need one simply because of its density. However, there have been no discussions to this point.

Internet and wireless services are commonly available in Belgrade from private providers. There are no known capacity issues.

According to plans provided by Summit Natural Gas of Maine, natural gas service will be available in Belgrade within the next five years. The Town of Belgrade granted Summit’s predecessor a Tax Increment Financing arrangement to supplement the cost of installation, but Summit does not require the TIF. Summit has discussed a new TIF for the purpose of providing homeowner conversion rebates, but has not yet submitted a request. The extension of natural gas into Belgrade is seen as reducing the cost of business for existing businesses and possibly stimulating additional business growth.

Finding #6: Belgrade has the third high taxable valuation in Kennebec County, but thanks to conservative budgeting a relatively low tax rate.

Belgrade provides its public services through a blend of property taxes and other revenues. Once residents determine the level of services they want, it is up to town government to find the most efficient way to provide these services. While operating expenses can vary from year-to-year, the main threat to stable budgeting is the one-time, capital expense. A capital expense is usually a large piece of equipment or building, but may also be a road improvement job or infrequent service (such a townwide revaluation).

Local property taxes make up the substantial majority of budgeted revenues. In 2012, the Town raised $6,572,878 from the property tax – an 11.95 mil assessment on taxable valuation of $554,830,780. That is 85 percent of total revenues of $7,715,000. Other significant revenues included excise tax ($641,317) and State revenue sharing and reimbursements ($198,950). Of concern for future funding is the fraction from State funding. The State budget for FY2014 includes a cut in revenue sharing plus a cut to State funding of schools.

The State share of funding for municipalities has already declined. In 2005, the total of State funding exceeded $253,000 and made up 4.3 percent of the total revenue stream of $5,898,000. In 2005, property tax made up only 79 percent of revenues. In seven years, the Town’s total revenue requirement has increased by 31 percent while State funds have declined by 22 percent.

Belgrade’s tax rate of 11.95 mills cannot be directly compared with other towns. Each town applies its tax rate to its local valuation, and towns are not necessarily up to date nor consistent on their valuations. For this reason, the State develops “State Valuations”, which bring each town’s valuation up to a single standard, and “Full Value Mill Rates,” which allow us to compare between towns.
The box at right shows the results for Belgrade and four neighboring towns. In general, towns with less development (therefore fewer service demands) have lower mill rates. The Kennebec County average mill rate is 13.54.

Belgrade’s mill rate is relatively low in part because its State Valuation is so high. While Belgrade has relatively little commercial property, it has an enormous amount of lake frontage, which inflates the values of both land and homes. Although only the 14th most populous town in Kennebec County, Belgrade’s valuation ranks third, behind only Augusta and Waterville.

Applied to home values from the 2010 census, that means that the taxes paid by the average homeowner in 2010 were $1,953. In Mount Vernon, taxes paid by the average homeowner amounted to $1,921, while in Oakland, the average homeowner paid $1,737. Even though those two towns had higher mill rates, their lower home values made a difference in their final tax bill.

State Valuation figures also allow Belgrade to look at its figures over time in a way that cannot be done with local valuations in cases such as the revaluation that Belgrade went through in 2011. Valuation figures show the rate of increase of Belgrade’s tax base, but don’t necessarily show the source. Valuation can rise through an increase in property values or through addition of new construction to the tax rolls. The only information we have on property value increase is from the census, which shows home values but does not include seasonal properties. The census showed that Belgrade property values rose by 95 percent between 2000 and 2010 – about seven percent per year, which is well above the consumer inflation rate.

Belgrade’s State Valuation was $616 million in 2010, up from $235 million in 2000. That is a 162 percent rise in ten years, or 10 percent per year. So roughly 70 percent of the valuation increase came from inflation of property values, and 30 percent from new construction or accelerated rise in seasonal properties.

<table>
<thead>
<tr>
<th>Neighborhood Snapshot: Full Value Tax Rates</th>
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<tbody>
<tr>
<td>Town</td>
</tr>
<tr>
<td>Belgrade</td>
</tr>
<tr>
<td>Rome</td>
</tr>
<tr>
<td>Sidney</td>
</tr>
<tr>
<td>Oakland</td>
</tr>
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<td>Mt.Vernon</td>
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</tbody>
</table>

Table 8-2: Equalized Valuation and Tax Rates, 2005-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>State Valuation</th>
<th>Full Value Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>$393,150,000</td>
<td>8.62</td>
</tr>
<tr>
<td>2006</td>
<td>$427,750,000</td>
<td>8.75</td>
</tr>
<tr>
<td>2007</td>
<td>$542,100,000</td>
<td>8.96</td>
</tr>
<tr>
<td>2008</td>
<td>$566,350,000</td>
<td>9.24</td>
</tr>
<tr>
<td>2009</td>
<td>$593,000,000</td>
<td>9.97</td>
</tr>
<tr>
<td>2010</td>
<td>$616,100,000</td>
<td>10.02</td>
</tr>
<tr>
<td>2011</td>
<td>$632,000,000</td>
<td>10.72</td>
</tr>
</tbody>
</table>

Source: Maine Revenue Services, Maine Municipal Association

Table 8-2 illustrates equalized valuation and mill rate figures for Belgrade over seven years. (2011 is the most recent data available.) During this period, valuation increased by an
average of 8.2 percent per year. Full value tax rates have risen, too, indicating that even though property values have risen, taxes have risen faster. The State’s valuation calculations lag behind actual property transactions; since the recession of 2008, property values have been steady.

Balancing the revenue side of the equation are the Town’s expenditures on facilities and services. Belgrade has just so much we can do to manage our budget. For the 2012 fiscal year, Belgrade’s expenditures included $4,828,000 in education assessment and $623,000 in county tax. The two of these account for 56 percent of total expenditures. Another $1,872,000 (19 percent) of the budget went to debt service, leaving only 25 percent of the budget for funding of day-to-day operations. (The large debt service in 2012 was a one-time tax anticipation note. In 2011, debt service amounted to only $20,000.)

The assessment for RSU #18 (formerly SAD 47) has grown slowly over the years. Since 2006, the assessment has grown from $4,035,000 to $4,828,000, an increase of 19.6 percent – 3 percent per year. That is about consistent with inflation. County tax has grown a little more dramatically, from $465,000 to $623,000 – an increase of 34 percent, or 5 percent per year.

Table 8-3, below, illustrates the trend in local expenditures since 2006. The table shows several categories of expenditures fluctuating dramatically. Public Safety rose between 2006 and 2010, dropped in 2011, then more than doubled in 2012. Public Works went from a six-year low of $557,000 to its high of $1.1 million in one year. Recreation, also, is fluctuating. This has an impact on the bottom line, as total municipal expenditures went from a low of $1.53 million in 2007 to a high of $2.29 million in 2009, and since dropped back to $2.09 million. Over six years, Belgrade’s municipal budget has grown by 33 percent, or about 4.9 percent per year.

<table>
<thead>
<tr>
<th>Category</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government</td>
<td>279,680</td>
<td>294,833</td>
<td>354,978</td>
<td>350,891</td>
<td>399,606</td>
<td>395,189</td>
<td>419,124</td>
</tr>
<tr>
<td>Public Safety</td>
<td>109,920</td>
<td>138,982</td>
<td>168,923</td>
<td>238,494</td>
<td>265,445</td>
<td>191,174</td>
<td>430,686</td>
</tr>
<tr>
<td>Public Works</td>
<td>660,648</td>
<td>578,771</td>
<td>556,750</td>
<td>1,140,662</td>
<td>916,231</td>
<td>1,048,399</td>
<td>671,312</td>
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<tr>
<td>Solid Waste</td>
<td>263,160</td>
<td>263,916</td>
<td>257,348</td>
<td>229,417</td>
<td>230,200</td>
<td>197,352</td>
<td>226,967</td>
</tr>
<tr>
<td>Soc.Services</td>
<td>22,197</td>
<td>23,576</td>
<td>26,470</td>
<td>22,549</td>
<td>20,834</td>
<td>20,896</td>
<td>18,920</td>
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<tr>
<td>Gen.Assist.</td>
<td>15,369</td>
<td>4,201</td>
<td>5,440</td>
<td>1,567</td>
<td>4,540</td>
<td>18,325</td>
<td>17,807</td>
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<tr>
<td>Recreation</td>
<td>159,259</td>
<td>173,199</td>
<td>233,992</td>
<td>219,239</td>
<td>180,280</td>
<td>189,501</td>
<td>267,118</td>
</tr>
</tbody>
</table>

Source: Town Reports (Audit Tables)

It is likely that the fluctuation in individual expense categories is due to capital expenditures. Certainly in the case of public works, large annual expenditures can be traced to individual road improvement projects.

While capital expenditures are a necessary part of government, their financial impact can be spread out over a number of years through the use of capital improvement planning. A Capital Improvement Plan (CIP) lays out anticipated expenditures over the coming decade and organizes them so that not all come due during the same year. In some cases, this leads to a
capital improvements budget, which is a set amount raised each year, but distributed to different projects from one year to the next.

Belgrade’s 1998 Comprehensive Plan recommended the adoption of a CIP for the town, and established a baseline “Capital Investment Plan”. Either the recommendation was never implemented, or the process was abandoned shortly thereafter, because the town has not had a CIP for over 10 years. The town manager is working to reestablish the process.

Advanced planning for capital needs also helps to identify funding sources. While the two common mechanisms for funding large expenditures are reserve accounts (saving before the expense) and bonding (borrowing to pay back after the expense has been incurred), the CIP provides an opportunity to identify other forms of revenue, including grants, matching funds, or private contributions.

The Town holds eight departmental or project-based capital reserve funds, the largest (as of December, 2012) being for road maintenance and paving, at $287,000. Five of these received appropriations in 2012. Reserve accounts fit in with the traditional way of doing business, where you don’t pay for something until you have the money and can avoid interest charges. However, with today’s mobile economy, there are a couple objections to this approach: saving for an item means paying a higher price in the future (possibly more than the cost of interest in buying it now); and today’s residents are paying for something several years in the future, a time when a wholly different set of residents will benefit.

Borrowing brings a whole different set of issues. The legislature has set a cap of 15 percent of total valuation on the borrowing limit of municipalities. This limits towns’ ability to go into debt, although in practice virtually never do towns approach that number. In Belgrade, the Town is authorized to borrow up to $94 million, but has just $332,000 in debt (not including a portion of school and county debt). This debt consists of loans for two fire trucks and the sand and salt shed. Borrowing tends to be the solution when the reserve accounts come up short, due to shifting needs or inflation.

After establishing a CIP, some towns go an extra step and establish a single capital reserve fund. This fund is pegged to the needs of the CIP, so that if the CIP says (for example) that we need $1 million over ten years, then the town appropriates a constant amount, e.g. $100,000 every year. The fund gets spent on a different mix of items each year, and anything left gets carried over so that a $100,000+ item can be purchased later. The town avoids paying interest or putting off purchases just because it doesn’t have the money.
Recommended Actions to Provide Efficient Public Services:

**State Goal:** Plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

**Our Vision:** Belgrade will be a place where:
- Tax rates are consistent and conservative;
- Municipal services are efficient, responsible, and delivered on a regional basis where quality and cost effectiveness can be improved; and
- Roads and other capital improvements are well-maintained; new development is managed to minimize town costs.

**Issues:**

1. Capacity issues, particularly for the fire department and town office, must continue to be addressed.

2. The cost of road maintenance increases more each year. The Town may consider bonding road improvements to get ahead of price increases by doing a major portion in one year.

3. Capital expenditures have led to fluctuations in the municipal budget over the past several years. This suggests a need for a long term plan for managing capital expenditures.

**Priority Recommendations:**

8-1. Develop a master plan exploring sites in the “central triangle” location for the development of a new town office and fire station.

8-14. Locate new public facilities comprising at least 75% of new municipal growth-related capital investments in designated growth areas.

**Additional Recommendations:**

8-2. Identify changes in government structures and staffing, i.e. elected verses staff positions, bidding policies; and facilities needed to meet services demands in the next 25 to 50 years.

8-3. Continue seeking private or regionalized services when quality service and cost effectiveness can be attained. Continue contracting yearly agreements to local service providers.

8-4. Minutes of all town boards and committees should be prepared electronically (if not already being done), published in a standard format for ease of reading, and published on the town’s website. This would greatly enhance the openness of town government and perhaps encourage more citizen involvement.
8-5. The town's website should be significantly upgraded and marketed to our citizens. We should also continue offering electronic communications to our citizens, for instance, sending Annual Reports, newsletters, etc. via email.

8-6. Develop and update annually a five year fire protection, management, and budget plan, including evaluation of need for a full time Fire Chief and Rescue Director.

8-7. Continue to maintain effective mutual aid agreements, especially during week days, and recognize the contributions of local businesses which allow employees to respond to alarms during work.

8-8. Adequately compensate fire and rescue personnel for expanded reporting, response, and inspection duties.

8-9. Develop and implement mandatory recycling and work with commercial hauler to increase recycling rate.

8-10. Work with surrounding communities in selling recyclables and explore the need for a storage facility for recyclables.

8-11. Provide free access to library services for the entire community, including free technology based library services. Continue to partner with Maine State Library.

8-12. Explore the impact of TIF development as directed towards expanding Belgrade’s commercial tax base.

8-13 Use impact fees to offset infrastructure costs and allow TIF districts to help develop commercial tax base.

8-15. Reserve Capital funds for anticipated facilities needs on a regular basis.
9: Belgrade Transportation

Transportation systems in Belgrade have grown from farm lanes and wagon trails to the paved roads and highways we use now, without too much planning or thought in between. As the cost of building and maintaining the system grows, though, we suddenly have to begin planning for how to manage “more with less”. This chapter explores how we can provide the most cost-effective transportation choices, while promoting land use and economic development choices that make the best use of the system.

Finding #1: The state highway network is built to the highest construction standard and carries the majority of traffic in Belgrade.

The backbone of Belgrade’s transportation system is the state highway system, designed to accommodate large volumes of motor vehicles. “State highways” also include the category of state aid roads, maintenance of which is only partially borne by the state. Belgrade’s state highways are:

**State Route 27:** Route 27 is the major arterial road through Belgrade, running from southeast to northwest. Although not considered by the state as one of the principal components of the statewide network, the highway does receive heavy usage by commuters into Augusta, tourists to western Maine, commercial traffic, and local residents and visitors. Traffic at the Sidney town line is almost double that at the Rome end, indicating that about half the traffic ends up locally.

As a state highway, the State DOT assumes full maintenance responsibility. The road is in very good physical condition along its entire stretch except for the portion in Belgrade Lakes village. The DOT is planning for improvements to the village segment, using input from the Town’s Streetscape Committee. Work will probably not commence until 2015.

**State Route 11:** State Route 11 separates from Route 27 near the Depot, and runs northward along the western shore of Messalonskee Lake towards Oakland. Route 11 is classified as a major collector. This category permits a slightly lower construction standard and lower priority for investment, generally based on lesser traffic volumes. Route 11 does receive more traffic on average than Route 27 through Belgrade Lakes village, mostly due to rapid recent growth. The roadway is much narrower than Route 27, although having recently been rebuilt north of Route 8.

**State Route 8:** Although Route 8 originates in Augusta, it does not separate from the rest of the system until North Belgrade, branching off towards Smithfield. From that point, Route 8
is a “state aid” road, meaning that the state is responsible for maintenance and improvement of the roadway, but the Town is responsible for winter maintenance. The road is in good physical condition for the most part.

State Route 135: Route 135 originates at Route 11 near the depot, crosses Route 27, and proceeds south into Manchester. Route 135 is a minor collector, which puts it even lower priority for improvement dollars. The Town would have to put up 1/3 of any improvement costs. Route 135 has seen a substantial increase in traffic over the past decade, primarily due to development of southern Belgrade and Manchester. The roadway is in fair physical condition.

Castle Island Road: Castle Island Road originates along Route 27 about 1.5 miles south of Belgrade Lakes, and runs west to Mount Vernon. Although not assigned a route number, Castle Island Road is in the same category for maintenance responsibilities (minor collector) as Route 135 and receives about the same traffic volume.

The DOT Work Plan through 2015 lists several projects of interest to Belgrade:

- Funds have been set aside for planning improvements to Route 27 through Belgrade Lakes village. That means that actual engineering funds will not be available until at least 2016.
- Highway reconstruction is planned for a portion of Route 8/11 for three miles northward from Route 27. This will probably be done in 2015.
- Highway resurfacing is planned for Route 11 north of Route 8 and a portion of Route 27 south of Belgrade Stream.
- The DOT will replace the flashing light at the Route 27/135 intersection with a LED light and install a raised island southeast of the intersection.

Finding #2: Local roads – town ways and private roads – serve residential uses, with many more miles of roadway, fewer vehicles, but more maintenance needs.

Belgrade has approximately 34 miles of town ways. The Town is entirely responsible for maintenance of these roads. The Town maintains a road and paving management plan for the purpose of identifying priorities in maintenance and upgrades. The large majority of town road length is paved. The plan calls for re-paving every eight years or so, but the variable cost of paving materials makes it hard to stick to that schedule.

The Town maintains a Road Maintenance Capital Reserve Account. In 2013, the Town budgeted $286,300 for road maintenance/paving, $107,000 for general maintenance, and $301,000 for winter maintenance, making the road system second only behind education as the largest budget component of the Town. $157,000 of that came from the Reserve Fund and the Town receives $50,000 a year in Maine DOT local road assistance and over $600,000 a year in vehicle excise taxes, so very little road funding comes from property taxes. DOT contribution has not changed in over twenty years, but local excise tax revenues have more than doubled.
A large number and mileage of local roads are private ways, where the users are directly responsible for maintenance. Most of these are in the form of camp roads. Private ways are extremely variable in their quality. The Town has no standards for construction or maintenance of private ways. Two significant problems have been identified with private ways: 1) they are not constructed to permit emergency vehicles passage, and are not maintained in the winter, creating potential for delays in fire protection and public safety response. 2) Poorly constructed roads, especially leading into lakefront camps, generate serious runoff and erosion problems, leading to pollution and phosphorous loading in the lakes.

The latter problem is being addressed by the Belgrade Regional Conservation Alliance and other groups. These groups are actively working with road owners to alleviate erosion problems, through education and work projects.

Belgrade has a Road Ordinance, which contains standards for roads proposed for Town acceptance. However, in order to be eligible to acceptance, a road must serve at least two year-round residences, so many camp roads would not qualify, even if they met the construction standard. The Town also has road standards in its Subdivision Ordinance, which apply to private roads as well as those proposed for acceptance; however, most camp subdivisions predate the ordinance.

**Finding #3:** The road network contains critical elements, such as bridges and intersections. These require special treatment and monitoring.

In order to function efficiently, the highway system needs certain additional elements of infrastructure. These include bridges, traffic controls (signals, directional controls), and parking.

**Bridges:** Belgrade’s road system of necessity includes a number of stream crossings. Many of these are small culverts, which are the responsibility of the town to maintain. Culverts must be cleaned and inspected regularly, and replaced as necessary. Most bridges are the responsibility of the State, depending on the length of their spans. The Maine DOT inventories all bridges on a regular basis. These are:

- **“Crank Bridge,”** Route 135 over Sanford Brook. This is technically a steel culvert, but state responsibility because it is 14 feet long. It is in excellent condition, replaced in 2003.
- **“Mill Bridge,”** Route 8 over Mill Stream. This is a concrete culvert with a span length of 13 feet, constructed in 1947. The substructure is rated “fair,” but the rest of the components are satisfactory, and the bridge is overall in good condition.
- **“Bachelders Road Crossing,”** Route 135 over the railroad. Though owned by the railroad, the bridge is maintained by DOT. It was rebuilt in 1986 and is in very good condition.
- **“Welman Bridge,”** Route 135 over Belgrade Stream. Built in 1941, this bridge consists of concrete girders spanning 50 feet. The bridge is considered in satisfactory condition.
- **“Belgrade Lakes Bridge,”** on Route 27 over the Great Pond outlet. Rebuilt in 1996, it consists of three precast concrete slabs totaling 146 feet. The bridge is generally in very good condition.
• “Belgrade Bridge,” on Route 27 over Belgrade Stream. The 102 foot steel girder bridge was built in 1971. All components are rated in good or better condition.

• “Narrows East Bridge,” Castle Island Road over the narrows of Long Pond. The bridge is 36 feet long, built of precast concrete in 1986, and is rated in very good condition overall. It should be noted that there is a “Narrows West” bridge just 50’ west of the town line, which is a steel culvert and is in very good condition.

No work is contemplated on any bridges in the near future. The location and maintenance responsibility of bridges is shown on the Transportation Map.

Traffic Controls: Traffic controls are infrastructure to help manage the flow of traffic. They range from STOP and YIELD signs to signals and raised islands.

Despite having state highways crisscross the town, the traffic counts in Belgrade do not yet warrant many traffic controls. There is one flashing yellow “caution” signal at the intersection of Routes 27 and 135. Most intersections are controlled only by “stop” or “yield” signs. Several intersections have traffic islands at the junction – notably Route 135 with 8/11, and 8/11 with 27 – but these are vestiges of earlier designs, not modern traffic controls. Due to safety concerns at the intersection of Routes 8 and 11, the DOT erected a reflectorized median strip to channel traffic but it was abandoned in 2013. It appears to have made some difference, combined with some shifting in alignment with the recent Route 11 improvements.

In Belgrade Lakes village there are a number of pedestrian crosswalks. These have been put in rather casually over the years, and do not meet modern DOT standards for safety. The Belgrade Lakes Streetscape Plan contains recommendations for reduction and improved design of new crosswalks for better pedestrian safety.

Parking: Parking in Belgrade is traditionally provided by the business responsible for generating the demand. Except in Belgrade Lakes village, where land is at a premium, businesses provide their own on-site parking. Belgrade’s Commercial Development Review Ordinance contains a comprehensive set of standards for off-street parking for new development.

No public parking is provided other than that associated with public facilities, such as the town office, school, and community center. Parking in Belgrade Lakes village is a continuing problem. On-street parking aisles are too narrow and spaces unmarked. The Town has discussed development of off-street municipal parking several times, without progress. The village area is so constrained for space, there are very few options. Even converting a private lot into parking could damage the charm of the closely-developed village.

Finding #4: Many miles of road network -- and the vehicles that pass along it -- create environmental impacts.

By the very nature of its location and extent, the road system has great potential for impact on natural and environmental assets. In Belgrade, perhaps the most sensitive of these is the potential for stormwater runoff affecting lake water quality. Belgrade’s Commercial Development Review Ordinance has strong standards to protect waterbodies from private
construction activities as well as post-construction runoff (erosion control and stormwater management standards). Belgrade Regional Conservation Alliance has completed over 600 erosion control projects since 1995, most along roadsides, especially private roads. Belgrade’s public works crew is trained and certified in “best management practices” for erosion control on road maintenance activities.

Transportation facilities can also impact wildlife habitat, including travel corridors. This can be particularly evident at stream crossings or near wildlife management areas. There are several wildlife areas in Belgrade adjacent to roads, but no recognized locations where wildlife movements have been impacted by existing roads.

Noise and light pollution can occur adjacent to roads; however the roads in Belgrade do not carry enough traffic to rise to a nuisance level. There has been some concern with noise from commercial vehicles in Belgrade Lakes village, where homes are so close to the road, but there is little to be done about it. The use of speed tables in the village to calm traffic was briefly considered, but rejected because of the noise potential. Light from development can also spill onto the roadways, creating a safety issue for motorists. Belgrade’s Commercial Development Ordinance contains standards limiting the light spilling from new development.

Finding #5: The transportation network contains alternatives to the motor vehicle and roads, but because we have gotten so used to the car, we often overlook them.

Even though in today’s society, a huge majority of trips and miles travelled are by motor vehicle, there is still demand for alternatives. Some segments of the population (notably youth and some elderly) cannot use motor vehicles to get around, and the increasing costs and impacts of energy consumption argues for reduced automobile use into the future. While we do not anticipate an enormous shift in demand over the period of this plan, transportation systems take an enormous amount of time and money to put in place, and require planning well in advance.

Common alternatives to the car or truck in densely developed areas are the rail or public transit service; Belgrade does not have enough development density to support either. The rail line from Lewiston to Waterville (Pan Am Railways) runs through the eastern edge of town, with a siding at the Depot. While it is possible that this line could see restoration of passenger rail service, the chances of a stop in Belgrade are remote.

Public transit, either commercial or public bus lines, is not available in Belgrade. For special needs services, Kennebec Valley Transit provides limited on-demand bus service. If the van is not available, volunteer driver services are available to residents through KV Transit.

A variation on public transit is the use of carpooling or vanpooling. Some small towns have advocated for or developed park-and-ride parking lots, which allow commuters and others to consolidate their trips by sharing rides. In Belgrade, no park-and-ride is in place or proposed. This has not prevented residents from adopting their own practices; the census reports that roughly one in 14 Belgrade workers carpool to work. GoMaine (a state-sponsored service) has a ridesharing sign up; five Belgrade residents are currently signed up looking for carpools.
Informal arrangements are common, but undocumented. The attraction of carpooling is expected to rise consistent with the increase in gasoline prices.

Belgrade’s 1998 plan noted that there is good potential for a park-and-ride lot along Route 27 at some point. A park-and-ride lot could reduce traffic on the southern end of Route 27 and commuting costs. However, since the usual commute is just ten minutes or so into Augusta, it may not be utilized. A lot located near Belgrade Lakes village could double as public parking during the weekends, but finding a location is the hurdle.

There are limited pedestrian options in town. The only sidewalk is located in Belgrade Lakes village. It has been in place for many years, is not maintained in the winter, and does not meet standards for width or handicapped access. A new sidewalk in the village could help to alleviate the parking problem and together with improved crosswalks could make the village more attractive. These improvements were recommended in the Streetscape Plan and appear in the DOT’s current plans for the village.

The Town applied for DOT funding to extend the village sidewalks to the Center for All Seasons, a distance of about half a mile, but has since decided not to pursue the project.

Bicycle travel in Belgrade is limited to on-street routes or cross-country trails. The town has a lot of potential to develop biking as both transportation and recreation, through projects such as dedicated bike trails or dedicated lanes on roadways. Strategies could be as simple as facilities for bike storage at strategic locations. The town should identify bicycle-friendly destination points, such as the school, community center, and the village areas and target them for bike facilities.

There are a large number of active cyclists in town. Route 27 is the only road with shoulders wide enough to accommodate bikes, but the volume of truck traffic may intimidate some people, and the village area is so constricted, cyclists have to use the driving lane. Other local roads are not as busy but do not have decent shoulder width for bikes.

Bicycle touring is a large and growing component of tourism, especially in scenic areas such as Belgrade. Most of Belgrade’s rural roads are narrow and the shoulders are too poor to permit safe biking (or walking), but traffic is low enough that it should not threaten bicycle touring by experienced riders. If interest exists, the town could designate a bike tour loop and post with signs to encourage use, possibly in conjunction with other lake towns.

There are no public airports in Belgrade. There are three private, unimproved airstrips: one off of Route 11, one off the Guptil Road, and one on the West Road. Augusta State Airport is the nearest airport.

Finding #6: The transportation system must be considered in the context of growth and development. Traffic volumes and development patterns drive the demand for expansions or alternatives.
A transportation system is a function of the usage it receives. Government has historically been responsible for maintaining the infrastructure, but until recently has not exerted much control over how (and how much) it is used. In urban areas, we are seeing how lack of attention to land use patterns has overburdened transportation systems, leading to increased costs for safety, congestion, and added capacity.

Traffic levels are a function of the location of trip points ("traffic generators"); traffic conflicts ("crashes") are often the unintended consequence of those locations.

Traffic levels grow continuously – a function of the economy and lifestyles. The price of gas coupled with the recession of 2008 generated a pause in traffic growth of only a couple years. Freight (truck) traffic continues to grow, a result of our increased standard of living (more consumer goods and food travelling longer distances) and an increasing reliance on roads by freight carriers.

In terms of road use, however, automobile traffic has the greater impact. Most trips originate in the residence and move to employment centers, schools, or shopping. Belgrade is an example of the "residential" end of traffic generators. Residential traffic is very dispersed, characteristic of the town’s pattern of development. There are few large businesses that draw a large number of employees or customers. The three largest are Hammond Lumber and Gagne Concrete, in the depot, and Tukey Lumber in North Belgrade. None of these are large enough to create congestion on their own. Belgrade Lakes has a cluster of small businesses and residents. Because of the road alignment, a good tourist day sees significant congestion.

The transportation impact of suburban growth is that more residents drive further to get to their destinations. Statistically, this would show up as increased use of roads leading into rural areas and stable or declining use of urban roads. This is illustrated in the table, below.

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
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<td>Route 8 @ McGrath Pond Rd.</td>
<td>1,040</td>
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<td>1,840</td>
<td>1,700</td>
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<td>Route 8/11 south of jct w/11</td>
<td>3,520</td>
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<td></td>
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<tr>
<td>Route 8/11/27 south of Depot Rd.</td>
<td>4,320</td>
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<td>5,260</td>
<td>6,230</td>
<td>5,640</td>
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<tr>
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<tr>
<td>Route 135 @ Manchester town line</td>
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<td></td>
<td>1,520</td>
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<tr>
<td>Castle Island Road</td>
<td>1,050</td>
<td>1,190</td>
<td>1,550</td>
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<tr>
<td>West Road west of jct w/135</td>
<td>680</td>
<td>620</td>
<td>760</td>
<td>1,060</td>
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</table>

* Traffic volume numbers are average daily trips past a given point over one year.

Source: MDOT Traffic Counts

Most of the counting points show a decline in traffic between 2006 and 2008. This is due to the gas price spike followed by the recession; the same trend appeared statewide. Dropping 2008, we see substantial increases in traffic over the prior ten years. The majority of points showed more than 50 percent increase in one decade. Route 135 almost doubled in 12 years.
The 1998 plan contained figures as far back as 1980 for some of the counting points, indicating that the trend of substantial traffic growth goes even farther back. On Route 8/11, there were only 1,840 trips per day, less than half what was counted in 1998. Route 27 north of Route 135 had 2,070. West Road had only 250. That means that on Route 27 and West Road, traffic has pretty much tripled between 1980 and 2006.

Belgrade’s population in 1980 was 2,043. In 2010, it was 3,189. While traffic tripled, the population grew only 56 percent. What caused the increase in traffic, and what can we expect over the next 20 years? Traffic is a function of the distance between destinations, so when a resident has to drive further for a job, or the local hardware store yields to the big box, or schools merge, more miles are generated for every resident.

Counts of commercial (truck) traffic are much more sporadic than general traffic counts. In Belgrade, only Route 27 is available. In 2006, trucks accounted for about 7.8 percent of all traffic. In 2008, the number of trucks dropped dramatically and they accounted for only 7.5 percent of all traffic.

From an engineering perspective, none of the traffic counts set off alarm bells, although the rate of growth should be monitored. Route 27 cannot sustain another tripling of traffic. Just a doubling of traffic — which could happen as soon as 2025 — would bring it close to today’s traffic counts at Civic Center Drive north of I-95. Traffic volumes should be of concern to a town promoting quality-of-life. We are not accustomed to congestion. More traffic means more conflicts with farm vehicles and bicycles, less pedestrian comfort, harder times getting out of driveways, and crashes.

The visible result of traffic conflict is the traffic crash. While crashes can happen anywhere and for any reason, traffic engineers can use a statistical analysis to determine if there are certain crash locations that are particularly prone. An analysis of crash locations over the past four years indicates some unusually high crash locations in Belgrade. Along Route 27, there are a cluster of crashes at the junction of Route 135 and the junction of Routes 8/11, and in Belgrade Lakes Village. Along Route 8/11, there appear to be crashes spread out along the road below where the routes separate. In all locations, the largest single cause of crashes is turning into or out of driveways or intersections.

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**Recommended Actions to Support the Transportation System**

**State Goal:** Develop an efficient system of public services and facilities to accommodate anticipated growth and economic development.

Our Vision: Belgrade is a place where roads and other capital improvements are well-maintained, and development, traffic, pedestrian access, and parking are managed to complement the vitality of our villages.
**Issues:**

1. While state-maintained highways in Belgrade are generally in good repair, the short segment of Route 27 through Belgrade Lakes village is in immediate need of reconstruction. Improvements to the road are also an opportunity to make the village more attractive and accessible.

2. The Town is not able to keep up with maintenance of its local roads, due to rising prices and reduced revenue. It may be necessary at some point in the future to bond for the cost of major road projects.

3. Growth to date has not put undue pressure on the transportation system, except for some local roads.

4. Transportation enhancements such as sidewalks and walking trails, bicycle routes, park-and-ride lots, and public transit will make Belgrade more attractive for long-term growth.

**Priority Recommendation:**

9-1. Make annual budget decisions for road reconstruction, repairs, and maintenance based upon RSMS Inventory and Condition of Road Surface annual report. Growth areas, historical costs, pavement management techniques, and road related revenues must also be taken into account.

**Additional Recommendations:**

9-2. Collaborate with DOT to maintain and improve state highway system, including storm drain systems, in a good and safe condition.

9-3 Contract with the County or State for increase traffic control in summer especially in the Belgrade Lakes village.

9-4. Establish on-road bicycle routes and signage connecting Belgrade villages.

9-5. Review land use ordinances to ensure they are compatible with the Sensible Transportation Policy Act, State access management regulations and State traffic permitting regulations for large developments.

9-6. Amend land use ordinance standards to encourage efficient transportation systems and provide for future street connections.
10: The Local Economy

Finding #1: A healthy local economy is reflected in local wealth. Belgrade’s income levels suggest that we are a relatively wealthy town.

The most conventional measure of the economic health of a community is the income realized by its residents. The US Census measures and reports on income levels, including “per-capita income,” which is simply the aggregate income of all households divided by its population, and “Household Income,” which is the income (usually the median) of the households within the town. The latter is more helpful from a planning perspective because it controls for the variable size of households, while the former is useful for comparison between populations. It should be noted, though, that census figures are based on annual sampling done by the American Community Survey, so is subject to a margin of error and annual fluctuations.

<table>
<thead>
<tr>
<th>Neighborhood Snapshot: Per Capita Income</th>
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<tbody>
<tr>
<td>Town</td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>Belgrade</td>
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<tr>
<td>Rome</td>
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<tr>
<td>Sidney</td>
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<tr>
<td>Mt. Vernon</td>
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<tr>
<td>Oakland</td>
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</table>

Per capita income (PCI) is an indicator of the relative wealth of towns. Belgrade had a PCI in 2010 of $28,231, about average for the communities in the area. Notably, the towns closer to the employment centers seem to have lower incomes, while those farther away are higher. This supports conventional wisdom that people with better jobs can afford the longer commute to a more rural community.

Belgrade’s rate of increase since 2000 was slower than other towns, but that may be in part because Belgrade began the decade higher than all but Rome. During the decade, inflation ran at 28 percent, so all towns are running slightly ahead. Belgrade is also more well off than Kennebec County, which in 2010 had a PCI of $24,575, and Maine, with a PCI of $24,980.

Household income represents the actual budget that most families have to draw from. Two factors distinguish it from per capita income: 1) decreasing household size over time, and 2) changes in the number of members of the household getting income. How Belgrade’s Household Income has
changed over time is illustrated in Figure 5, with the actual breakdown of income levels in Table 10-1. Notable in the graph is that the household income figure has jumped by 44 percent over the past decade. The rate of inflation (CPI) for the decade was 28 percent, so families are, on average, better off than they were in 2000.

Household income figures are used to determine whether housing is affordable. Maine’s criteria says that an “affordable home” is one that can be afforded by a household earning 80 percent of the median household income (See Chapter 11 for a definition of affordability.) In Belgrade’s case, 80 percent of median is just over $45,000, but the closest the census breakdown comes to that number is $50,000. According to Table 10-1, 556 households, or approximately 45 percent of the households, fall below that threshold.

The census also reports on levels of poverty. The “poverty line” is not defined as a number, because it varies according to family size and other factors. The census only reports the (estimated) percentage of people or households which fall below that threshold. In Belgrade, the census reports that 15 percent of the population lives below the poverty line. The figure is much higher among children, however – 29.5 percent. In Kennebec County, about 13 percent of the population falls below that threshold, and just 19 percent of children. This suggests that even though Belgrade’s income levels are, on average, fairly high, there are still many people at the bottom of the income ladder.

The census identified 441 households with social security income – about 36 percent of the total. It also identified 284 with retirement income. There is probably significant overlap between the two. By comparison, only 31.5 percent of households in Kennebec County had social security income.

Finding #2: Local economies are more flexible and adaptable when the work force is well-educated.

Another measure of how well-placed we are to progress economically is the educational attainment of our work force. Jobs that require mastery of certain skillsets are more likely to flow to areas with higher educational levels. College graduation is almost a basic requirement for many professional, managerial, and educational professions. Income levels will invariably be lower in areas of low educational attainment.

This is illustrated by the box at left. The level of college education by town exactly matches up with the towns’ rankings in per capita incomes. Rome has the highest college graduate rate and highest incomes; even though Sidney is highest in

<table>
<thead>
<tr>
<th>Neighborhood Snapshot: Graduates -- 2010</th>
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<tbody>
<tr>
<td>Town</td>
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<tr>
<td>--------</td>
</tr>
<tr>
<td>Belgrade</td>
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<tr>
<td>Sidney</td>
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<tr>
<td>Rome</td>
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<tr>
<td>Mt. Vernon</td>
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<tr>
<td>Oakland</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 10-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Income by Category, 2010</td>
</tr>
<tr>
<td>Range</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Less than $10,000</td>
</tr>
<tr>
<td>$10 – 25,000</td>
</tr>
<tr>
<td>$25 – 50,000</td>
</tr>
<tr>
<td>$50 – 100,000</td>
</tr>
<tr>
<td>$100,000 – 200,000</td>
</tr>
<tr>
<td>$200,000 and over</td>
</tr>
</tbody>
</table>
high school graduation rates, it is lowest in the college rate as well as per capita income.

Belgrade is clearly improving its educational attainment. In 2000, only 21.8 percent of the adult population had a bachelor’s degree; in 2010, it was up to 33 percent. Belgrade’s education levels are well above Kennebec County. Only 25 percent of adults in the county have a college degree, and 90.6 percent have high school degrees; in 2000, the county’s college graduate rate was 20.7 percent.

Finding #3: Belgrade has a diversified work force, but our jobs are generally elsewhere in the region.

Belgrade’s work force – labeled “labor force” by the census – refers to the number of people either working or looking for work within the working-age population. The working-age population includes everyone age 16 and over, including those of retirement age.

Belgrade had 1,545 people in the labor force in 2010, 62 percent of the working-age population -- 737 women and 808 men. With 1,240 households in Belgrade, the average household yields 1.25 workers, or one out of every four households having two workers. This figure is probably much higher in reality, since several hundred households in Belgrade are retired and provide zero workers. In 2000, 68 percent of the working-age population was in the labor force; more retirees in 2010 probably accounts for most of the decline.

Men and women seem to participate almost equally in the work force. Females in the work force totaled 60.8 percent of working age women; Males total 63.8 percent. In 1980, participation by females was only 48.4 percent.

Being in the labor force is not the same as being employed. The census is a poor gauge of unemployment, because it only measures one point in time. It reports that in 2010, only 70 people, or 2.8 percent of the labor force, was unemployed. Unemployment is much better tracked by the Maine Department of Labor, which takes monthly surveys. Figure 6 shows the unemployment trend in Belgrade since 1990.

**Figure 6: History of Unemployment Rates, 1999-2011**
As can be seen from the chart, Belgrade’s employment is slightly better than but almost a mirror image of Kennebec County. The economy was fairly steady in the mid-2000’s, and Belgrade’s unemployment rate averaged four percent or below. When the recession hit in 2008, it dramatically hiked the ranks of the unemployed. Belgrade’s rate now is higher than any point in the past 20 years, but it has leveled off and will probably drop once 2012 is released. (Update: in 2012, Belgrade’s unemployment rate dropped to 6.0 percent.)

Despite this message, there is very little Belgrade can do as a town to improve opportunities for its citizens. Belgrade is a relatively small part of a regional economy. Only about 18 percent of Belgrade’s workers actually work in town, and more than 900 more workers leave the town for their jobs than travel into town. This perspective on a regional economy is referred to as a “Labor Market Area” (LMA). Belgrade is considered to be in the Augusta Labor Market Area. The Augusta LMA has a labor force (in 2011) of nearly 44,000; Belgrade’s contribution is only 3 ½ percent of that. The unemployment rate in the overall market area was 7.2 percent in 2011, so Belgrade is actually better off than the region overall.

Belgrade is a net contributor of workers to the regional economy, as are all small towns in this area. Augusta is the only net importer. “Journey to work” figures are reported by the census. They indicate that of the 1,366 residents of Belgrade’s work force, 399 (29 percent) work in Augusta, 180 (13 percent) work in Waterville and only 85 (6.2 percent) work in Belgrade. In 2000, 572 Belgrade residents worked in Augusta, about 40 percent of the entire work force, and 260 worked in Belgrade. Those numbers seem to indicate that over the past decade, residents have gone further and to more dispersed job centers to find work.

According to the census, there are 506 workers in Belgrade (which seems low, but it is based on a sample.) While 85 of those workers live in town, 46 live in Oakland, 32 in Augusta, and 20 in Waterville.

The census identifies jobs by industry type (Table 10-2), which allows us to see which industries are thriving and which are in decline. Because each industry has different public service demands, the trends over time allow us to plan for future investments.

<table>
<thead>
<tr>
<th>Industry of Employment</th>
<th>2000</th>
<th>Percent of total</th>
<th>2010</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>102</td>
<td>6.7</td>
<td>150</td>
<td>10.2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>208</td>
<td>13.6</td>
<td>83</td>
<td>5.7</td>
</tr>
<tr>
<td>Wholesale and Retail</td>
<td>194</td>
<td>12.7</td>
<td>227</td>
<td>15.4</td>
</tr>
<tr>
<td>Services, exc. health and education</td>
<td>338</td>
<td>22.1</td>
<td>356</td>
<td>24.3</td>
</tr>
<tr>
<td>Health and education services</td>
<td>465</td>
<td>30.4</td>
<td>497</td>
<td>33.9</td>
</tr>
<tr>
<td>Agriculture and Forestry</td>
<td>13</td>
<td>0.9</td>
<td>19</td>
<td>1.3</td>
</tr>
<tr>
<td>Public Administration</td>
<td>208</td>
<td>13.6</td>
<td>83</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Source: US Census (2000) and American Community Survey, 2006-10
The table shows that employment in manufacturing has fallen way off, as has public administration. Technology and shifts in location economies account for the loss of manufacturing jobs, but the loss of public administration jobs is puzzling. These would be mostly State workers. The largest jumps are in the two service sector categories. Health and education services has been the dominant sector, and is becoming more so. This is not surprising, considering that the Maine Department of Labor has predicted that health and education sectors will account for about 80 percent of all job growth in Maine for the next couple of decades. Construction is a strong gainer, although construction jobs tend to be ephemeral and can fluctuate quickly.

Belgrade’s figures roughly match up with those for Kennebec County. In the county, only 28 percent are employed in the health and education sector, while eight percent are engaged in public administration.

Census figures also break down the work force by occupation. Unlike the “Industry” categories, certain occupations can be linked to higher wages. A town with a higher proportion of low-wage occupations can be expected to have lower home prices and higher service demands, and vice versa.

In Belgrade, 41 percent of workers are engaged in “Management, Business, Science, Arts” occupations, typically higher wage, while 14 percent are in service occupations and 11 percent in “Production, Transportation, Material Handling,” typically lower wage jobs. An additional 23 percent are in sales and office occupations, which are mixed. In Kennebec County, only 34 percent of workers are in management, while 16.6 percent are in sales and office. In Belgrade, 72 percent of the workforce is employed in the private sector (about the same as Kennebec County), 15 percent in the public sector, and 13 percent self-employed.

These figures help us to develop or support local or regional economic growth. Manufacturing, for example, grabs the headlines when another mill shuts down. Yet, it is clear from the figures that manufacturing is only a small fraction of our economic strength. Our strength is among the health and education industry jobs, which, fortunately, are the growth industry both regionally and nationally. That means we are well-placed to take advantage of foreseeable economic trends.

Finding #4: The pillars of Belgrade’s economy have traditionally been manufacturing and tourism. Based on national trends, manufacturing is stable or declining, while tourism, particularly nature-based, is on the rise.

Two of Belgrade’s largest employers are manufacturers of building products. Hammond Lumber and Gagne Concrete Products are both located near Belgrade Depot. These companies continue to be strong in their sectors. Tukey Brothers Lumber is located in North Belgrade. However, J&R Metal Frame is the only manufacturer to locate in Belgrade since 1998.

Belgrade generally lacks the assets and infrastructure to be attractive to manufacturers and large scale retailers, such as public sewer and water, railroad freight yard or immediate access to the Interstate highway system, a large or specialized labor pool, or another similar edge
over other communities also looking to attract such businesses. The prospect of extending natural gas into Belgrade is regarded as a good way for existing businesses to improve their competitiveness, but may do little to make Belgrade more attractive than other towns in the region.

Becket House, a mental health and educational services facility, is the other major employer. This facility is in the process of growing significantly to 50-60 employees with a new education facility under construction.

The tourist economy is an entirely different animal. At the peak of the season, Belgrade’s population doubles, with an associated bump in business for retail stores, gift shops, gas stations, restaurants, B&Bs, vacation/sporting camps, children’s camps, realtors, seasonal camp rental firms, and recreation facilities (e.g. golf course, marina, canoe/kayak sales). Many of these businesses do not even function in the off-season. A common characteristic is that these are all small businesses, with employment that fluctuates from month to month and year to year. Tourism-dependent employment by small businesses is undocumented, but probably equals or exceeds the Town’s largest employers.

Most Belgrade businesses benefit financially from the quality and attraction of the Belgrade Lakes chain, and the rural character and subsequent appeal of town as a place to live and raise a family. These include:

- Retail, gift shops, food and lodging, children’s’ camps, sporting/vacation camps, seasonal camp rentals, building and grounds maintenance contractors
- Outdoor recreation based businesses – golf course, marina and boating services, fishing guides
- Building contractors and trades, private road maintenance and excavation contractors, building material suppliers, gravel and loam suppliers
- Real estate – year round family, retirement, 2nd home sales and camp rentals

Belgrade has been attractive to retirees from elsewhere in Maine as well as other states. They purchase or build homes, and bring with them their financial assets, while requiring fewer and less expensive municipal services. From 2000 to 2010, 65 and older segment of Belgrade population increased by 79% to 466 residents. This trend may prove to be a “growth sector” in the future, as retirees require more services.

Finding #5: Belgrade has a number of assets available to support both local and regional growth.

Despite the absence of obvious economic development assets, such as a public sewer system or water system or industrial park, Belgrade has a number of assets that play to its strength. Belgrade’s natural beauty and recreation potential are essential to the growth of tourism and recreation, and cannot be underestimated. Belgrade has a number of other economic assets:

- Businesses as well as residents benefit from clean ground water for potable and affordable drinking water.
- Southern Belgrade is just minutes from the nearest I-95 interchange.
• RSU 18 has a very active adult education program and technology initiative, enabling Belgrade residents to upgrade their job skills.

• Natural gas is planned to extend into Belgrade over the next five years, reducing operating costs for many local businesses as well as residents. Belgrade residents approved their first TIF for extension of the gas line, although it is now irrelevant, since the gas companies’ plans have changed.

The best opportunities for future growth of Belgrade’s local economy are in the areas of small businesses, the tourism sector, single family, retiree & second home development, and professional home occupations (e.g. accountants, financial services, computer services, web based businesses, consultants, real estate, etc.)

Expansion of Belgrade’s employment base will probably always be dependent on the health of the regional economy. Belgrade can play a role in regional economic development activities.

• The Belgrade Lakes Region Business Group is a membership group of businesses in Belgrade, Rome, Oakland, and Mt. Vernon that sponsor local activities and promote the area.

• Many Belgrade businesses also belong to the Kennebec Valley Chamber of Commerce (Augusta) or MidMaine Chamber of Commerce (Waterville).

• The Town of Belgrade is a member of Kennebec Valley Council of Governments, a regional organization which does economic development planning, grant-writing, business loans, and small business counseling.

The town will have many other opportunities for regional coordination on economic activities. For example, as development continues to creep out of Augusta along Route 27, there will be opportunities to partner with Sidney and Augusta on management of the corridor.

Finding #6: Local businesses and residents have a clear idea of what is needed to improve Belgrade’s economy.

In the development of this plan, the Economic Development Subcommittee diligently worked to include the ideas of the existing business community, with focus group meetings and individual outreach. Many conversations came around to discussion of Belgrade’s regulatory environment. Belgrade currently has a Commercial Development Review Ordinance. The ordinance has a basic set of performance standards and review processes. The business community identified many issues with the ordinance and its enforcement:

a. A widespread perception found in the Belgrade business community (large and small businesses) of favoritism and inequitable treatment of some business applicants for permits under the ordinance.

b. Perception of the Commercial Development Review Ordinance as rarely enforced by the Town CEO.

c. A pattern of accepting incomplete applications for review by the planning board.

d. Inconsistent implementation and enforcement of ordinance requirements, including approval of incomplete applications, allowing some applicants to avoid costs incurred by
others, thereby providing a competitive business advantage to some businesses over others in town.

e. Phosphorous runoff, storm water management, soil erosion control and visual screening standards of the Commercial Development Review Ordinance have been routinely waived without any documented justification, potentially undermining protection of the Belgrade Lakes and the attractiveness of Belgrade.

f. The planning board’s need for technical assistance to adequately review application submittals. The Planning Board has not utilized the Ordinance’s provision to provide it with a professional technical review of application submittals, such as the phosphorous or storm water runoff plans, the cost of which is paid by the developer, not the Town.

g. Lack of adequate protection of public (e.g. Belgrade Central School, restaurants, large businesses, children camps, etc.) and private drinking water supplies from new businesses using hazardous substances or storing larger volumes of petroleum or waste oil, including auto body shops, auto repair businesses, manufacturing facilities using solvents, gasoline stations, bulk oil storage distribution facilities, etc.

h. No provision for re-development of parcels previously in commercial or industrial use.

i. Lack of landscaping standard or requirement to ensure attractiveness of new development.

j. No architectural standards to protect the attractiveness of Belgrade Lakes village or other village areas.

k. Lack of adequate standards to prevent residential or mixed-use neighborhoods (e.g. lighting, noise, odor, signage, traffic).

l. Permits are difficult for the CEO to enforce because of incomplete or poor quality applications and site plans and a lack of findings of fact documenting how a development complies with the ordinance and the specifics of the approved development.

m. Ordinance does not currently address specifics of how the ordinance will be enforced by the CEO nor provide a financial penalty schedule.

n. Inconsistent implementation of ordinance standards has undermined the ordinances’ effectiveness toward achieving the goals of the Town’s 1998 Comprehensive Plan.

o. Inequity resulting from inconsistent enforcement opens Town to legal liability and potential accusations of discrimination.

Additional ideas and concerns raised by members of the local business community included:

- Maintaining the existing water quality and recreational value of the Belgrade Lakes, as the most important economic asset of Town – what attracts the tourists, second home buyers/developers and retirees.

- Maintaining what remains of rural New England character and visual attractiveness of Belgrade as community in which to live and to which attract tourists, retirees and 2nd home buyers.

- Maintaining the attractiveness of the Rte 27 tourism gateway and corridor to the Belgrade Lakes by preventing uncontrolled commercial sprawl development encroaching from Augusta and Sidney.
- Better marketing for the Belgrade Lakes and Belgrade:
  - Improve promotion of town and region
  - Enhance town as tourist destination
  - Expand tourist season to fall or winter without a ski area

- Build on Belgrade’s strength and attractiveness as a bedroom community and retirement destination while not negatively impacting nutrient loading and lake water quality and the town’s rural attractiveness.

- Belgrade should be encouraging small businesses and home occupations that do not create neighborhood nuisances, environmental pollution, or are otherwise incompatible with residential neighbors.

- Given Belgrade’s residents and businesses total dependence on ground water for drinking water, better protection of ground water to ensure its availability for drinking water for both future and existing users.

  The public opinion survey asked residents about several issues related to economic development. Some of the notable results:

- Belgrade’s most important economic assets are the town’s lakes and its rural character.

- Seventy two percent of respondents feel that future development in Belgrade Lakes village should be designed to blend in with the traditional architecture.

- Respondents are interested in maintain traditional businesses that support farming and forestry, and other businesses such as accommodations and tourist services. The strong preference for new retail development is for stores of less than 10,000 square feet.

- The Town should not attempt to create its own commercial or industrial park. In its consideration of future commercial development, the town should strongly consider locating it away from sensitive natural areas and residential neighborhoods. Location within a village should not be an important factor.

- By a margin of 79 percent to 21 percent, respondents feel that commercial development proposals that exceed a certain size should be subject to Town Meeting approval as well as that of the planning board.

- Home occupations are common throughout town, and could be construed as nuisances. Respondents feel that businesses such as carpentry, B & B’s, day care, and home cleaning can easily be classified as home-based, while auto/small engine repair and construction contractors should not be classified as home-based.

- Residents were pretty evenly split on whether to regulate wind turbines and cell towers.
Recommended Actions to Encourage Local Economic Development:

**State Goal:** Promote an economic climate that increases job opportunities and overall economic well-being.

Our Vision: If well planned and done in accordance with best management practices, Belgrade still has sufficient room for commercial development without negatively impacting its two most important economic assets – the quality of the Belgrade Lakes, and Belgrade’s rural character and overall charm. Smart management of future growth is fundamentally important to the Belgrade economy and to residents, now and in the future.

**Issues:**

1. The recommendations of the previous comprehensive plan regarding economic development were not adequately implemented.

2. Belgrade is primarily a bedroom community, with most of the work force dependent on the regional economy.

3. The local economy is heavily grounded in seasonal tourism, with a smaller number of manufacturing and commercial employers.

4. Belgrade generally lacks the assets and infrastructure to be attractive to manufacturers and large scale retailers, such as public water and sewer, rail and interstate access, or a specialized labor pool.

5. Most Belgrade businesses benefit financially from the quality and attractiveness of the Belgrade Lakes chain and the rural character of the town.

6. Belgrade has also been attractive to retirees from other states and elsewhere in Maine.

7. Both businesses and residents are entirely dependent on clean ground water.

**Priority Recommendations:**

10-2. Ensure that new commercial developments are attractive, well landscaped and maintain adequate vegetative buffers from public roads and abutting properties, are compatible with the neighborhood, and do not create a nuisance, health hazard, or pollution.

10-3. Maintain the attractiveness of the Rte. 27 gateway into Belgrade and the Belgrade Lakes region.
Additional Recommendations:

10-1. Prohibit new manufacturing and large scale commercial in rural areas. Allow expansion of existing manufacturing facilities.


10-5. Adopt changes to the regulatory framework for commercial development:
   a. Clarify standards so more easily understood by applicants
   b. Lessen some requirements for redevelopment of an existing business location
   c. Strengthen standards that serve to reduce nuisance potential in village, residential, or mixed use neighborhoods, including noise, lighting, signage, solid waste, odors, and traffic
   d. Enforce requirement that site development plan to be to scale.
   e. Establish architectural design and landscaping standards for formula businesses in the Belgrade Lakes village, the Belgrade Depot and the Rte. 27 rural corridor.
   f. Strengthen language to address how the ordinance will be enforced and financial penalties.

10-6. Improve code enforcement following permit issuance:
   a. Monitor implementation and maintenance of required landscaping plans to ensure the attractiveness of new development within the community.
   b. Require on-site meetings with CEO prior to the start of construction and again upon completion to review the conditions of approval and to ensure compliance.

10-7. Add standard language to all permits issued clarifying that the permit is only for what was approved by the Planning Board, nothing more or different.

10-8. Create a permit by rule for very small, non-obtrusive businesses. This alternative permitting system would be administered and enforced by the CEO, with performance standards for new development with a small footprint (e.g. less than 15000 square feet of disturbance and less than 7500 sq. feet of impervious surfaces) with minimal stormwater impact. Include a requirement to notify the CEO and certify compliance with the applicable standards prior to issuance of occupancy permit, or start of operation.

10-9. Continue to participate in regional business and economic development activities and planning initiatives.
11: Housing

Finding #1: Belgrade’s housing stock consists primarily of high-quality, single-family, owner-occupied homes with a generous fraction of seasonal housing units.

Housing is the single most important asset for most households, and the largest single component in the town’s tax base. The number and type of housing units available to a community helps to define the community’s character. While people come and go, the “built environment” stays. Housing is a part of the landscape, and without homes, there is no community. In fact, population estimates are quite often based on housing counts, because new homes can be counted a lot more easily than people.

Table 11-1, below, illustrates the numbers and type of housing stock in Belgrade. Clearly, the overwhelming majority of housing is of the traditional single-family type. In 2010, only four percent of housing units were multi-family, and seven percent mobile homes. Since 1980, the number of housing units has grown by 59 percent; multi-family units have increased by 68 percent and mobile home units by 27 percent.

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (including seasonal)</td>
<td>1,381</td>
<td>1,621</td>
<td>2,007</td>
<td>2,198</td>
</tr>
<tr>
<td>Single-Family (stick-built)</td>
<td>1,273</td>
<td>1,435</td>
<td>1,782</td>
<td>1,982</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>53</td>
<td>52</td>
<td>83</td>
<td>89</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>113</td>
<td>101</td>
<td>142</td>
<td>144</td>
</tr>
</tbody>
</table>

The figures indicate a relative scarcity of multi-family units (apartments) and mobile homes. In Kennebec County, 22 percent of all housing is multi-family, and 10 percent are mobile homes. Since these are the two housing types generally regarded as “affordable,” it would not be surprising to find that Belgrade has a shortage of low-cost housing options.

The 2010 Census reports on the age of houses in Belgrade. Housing growth has been fairly steady since 1970, at about 33 houses per year. Due to the recent recession, development tailed off in the 2000’s, with only 196 homes from that era, nine in 2011 and 12 in 2012. The town also has an estimated 408 pre-war homes – now over 70 years old. That is over one in every five homes in Belgrade. Older homes may contribute more to a community’s character but are more likely to have structural problems such as old electric installations or poor insulation.
The tenure of housing (whether they are owned or rented) will also have an impact on their maintenance and affordability. Towns with a high percentage of rental housing tend to be more affordable but have larger blocks of homes with maintenance issues. They tend to be located where populations are more mobile, such as urban areas. Belgrade is not one of these towns. In 2010, Belgrade’s percentage of owner-occupied homes is 87.6 percent, up from 85.5 percent in 2000. This is a pretty standard percentage in rural towns, where there are few multi-family units. In Kennebec County, only 71.3 percent of housing units are owner-occupied.

It should be a goal of every community to ensure that local housing is decent and sanitary. This is the basis for health and construction codes. There is no set definition for “decent,” but it is generally considered to be a measure of whether there are any defects in the homes and whether they are overcrowded. The vast majority of Belgrade’s homes are in good structural condition. The census does estimate that nine occupied homes lack complete plumbing facilities (defined as kitchen and bathroom). An estimated 120 households use wood as their principal heating source. The census considers this as an indicator that the house has no central heating system, though in many homes these days it could be a matter of choice.

The census also estimates that some 60 homes – about five percent of the total – have more occupants in the home than rooms. This is the traditional definition of overcrowding. There is no explanation in the statistics as to why Belgrade has a rate more than five times higher than the county average. Since it is based on a sampling of households, it could be a statistical anomaly.

Seasonal Housing:

Figure 11-1 below gives us a perspective on the role of seasonal housing in Belgrade. Seasonal homes (camps) have always been a major component of Belgrade’s housing stock. The number of seasonal units has increased only 33 percent since 1970. As the graph illustrates, year-round homes – only a fraction of the housing stock in 1970 -- now easily outnumber camps.

<table>
<thead>
<tr>
<th>Neighborhood Snapshot: Occupancy</th>
<th>2010 Owner-occupied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town</td>
<td>Percentage</td>
</tr>
<tr>
<td>Belgrade</td>
<td>87.6 %</td>
</tr>
<tr>
<td>Rome</td>
<td>86.1 %</td>
</tr>
<tr>
<td>Sidney</td>
<td>86.2 %</td>
</tr>
<tr>
<td>Mt. Vernon</td>
<td>88.6 %</td>
</tr>
<tr>
<td>Oakland</td>
<td>75.9 %</td>
</tr>
</tbody>
</table>

![Figure 11-1: Housing Stock Growth](image)
The dramatic growth of year-round housing has lessened the impact of camps on town operations. In 1970, camps made up close to 2/3 of all housing in Belgrade. In 2010, they make up only about 1/3. The census does not track conversions of seasonal to year-round (or vice-versa) so it is possible that some of the homes listed as year-round in 2010 may have been camps a few years earlier.

In the Belgrade Lakes area, seasonal homes are proportional to the amount of shoreline in a town. Belgrade is at the center of a complex of lakes, so that all of our neighboring towns have substantial seasonal housing. Belgrade has by far the most; Rome is second, but theirs is a larger percentage of their overall housing stock. In all towns, seasonal housing is becoming a smaller fraction of the total over time.

Finding #2: Belgrade has the highest-value housing in the region, creating a significant affordability gap, even though local incomes are also above average.

Belgrade homeowners, like many in Maine, have been on a roller coaster ride of property values for the past thirty years. Between 1980 and 1990, the value of a census-designated “specified” (stick-built, year-round, on less than ten acres) owner-occupied home more than doubled, the median going from $40,300 to $91,300. Home values easily outpaced inflation, which rose only 60 percent over that decade. Between 1990 and 2000, however, median home values rose only nine percent, to $99,400. Inflation over that period was 32 percent, so homeowners fell behind. Between 2000 and 2010, property values again more than doubled, to $218,800. The inflation rate for that period was only 28 percent.

Anecdotal evidence says that housing values have dropped over the past few years, though neither the census data nor local realty listings pick that up. A spot check of real estate listings in spring of 2012 revealed 34 of 58 listings (58.6 percent) above $218,000, and another in fall of 2013 showed 48 of 81 homes (59 percent) listed at over $218,000. The median asking price in the 2013 check was $245,000.

Property values in Belgrade are well above the average in a relatively affluent part of the county. In fact, among all towns in Kennebec County, only Readfield, at $202,000, even comes within 10 percent of Belgrade’s prices. The median home value for Kennebec County is $142,200, for Maine, $172,100.

The price of housing is a big factor in whether it is affordable (the other factor being the incomes in the community). Affordability – the relationship between housing cost and income – is a major issue in many parts of Maine, and a goal of the Growth Management Law.

The most recent figures for Belgrade show a median household income of $56,379. An affordable home for the median income household in Belgrade would be approximately

<table>
<thead>
<tr>
<th>Neighborhood Snapshot: Home Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town</td>
</tr>
<tr>
<td>Belgrade</td>
</tr>
<tr>
<td>Rome</td>
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<tr>
<td>Sidney</td>
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<tr>
<td>Mt. Vernon</td>
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<tr>
<td>Oakland</td>
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</tbody>
</table>
$160,000. About 200 of the 1,050 homes in Belgrade that the census has values on fall below that figure. Simply put, only 20 percent of homes in Belgrade are affordable to a family making the median income.

The census also measures affordability more directly by figuring monthly housing costs (mortgage, taxes, and insurance) as a percentage of household income. Table 11-2, below, shows those figures for 2000 and 2010. Most lenders and housing consultants advise that housing costs should not exceed 30 percent of income. In the case of Belgrade, 204 homeowners (28 percent of those sampled) are currently living in “unaffordable” circumstances. That figure is more than 50 percent higher than in 2000, when only 135 were in unaffordable homes.

Table 11-2
Housing Costs as a Percentage of Income, 2000 and 2010

<table>
<thead>
<tr>
<th>Percentage of Monthly Income</th>
<th>2000 #</th>
<th>2000 %</th>
<th>2010 #</th>
<th>2010 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner – ownership costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20 percent</td>
<td>366</td>
<td>54.3</td>
<td>288</td>
<td>38.2</td>
</tr>
<tr>
<td>20 to 30 percent</td>
<td>170</td>
<td>25.2</td>
<td>243</td>
<td>33</td>
</tr>
<tr>
<td>More than 30 percent</td>
<td>135</td>
<td>20.1</td>
<td>204</td>
<td>27.7</td>
</tr>
<tr>
<td>Renter – gross rent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20 percent</td>
<td>44</td>
<td>26.5</td>
<td>33</td>
<td>20.4</td>
</tr>
<tr>
<td>20 to 30 percent</td>
<td>27</td>
<td>16.3</td>
<td>45</td>
<td>27.7</td>
</tr>
<tr>
<td>More than 30 percent</td>
<td>60</td>
<td>36.1</td>
<td>84</td>
<td>51.8</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2006-10

Comparison with 2000 illustrates that housing costs are outpacing incomes across the board. The number of homeowners spending less than 20 percent of their income on housing costs is shrinking at about the same rate that those spending more than 30 percent are growing. Among renters, more than half are now paying too much of their income towards housing costs.

With these figures, Belgrade is significantly less affordable than neighboring towns. Ironically, it is about average for Kennebec County, where 29 percent of all households devote more than 30 percent of income for housing costs. Kennebec County has the opposite circumstance as Belgrade; housing prices are lower, but incomes are significantly lower.

Belgrade has a relatively small rental population. Rental units comprise 12.4 percent of the overall housing stock. About half of these are multi-family units; the other half single family homes. The percentage of renters has gone down slightly since 2000. Renters tend to be households whose living situations are in flux; they may be young people just getting established, families moving into the area, or elderly who do not have the desire or capacity to own their own homes anymore.
The small percentage of rental housing in Belgrade limits our access to this type of household. In Kennebec County, 29 percent of all housing is rental. It is more likely that young adults or the elderly will not find suitable housing in Belgrade. Not only does this mean fewer people for entry-level jobs, it means long-time residents forced into moving away from town.

The median monthly rent in 2010 was $751. This is a 33 percent rise over the median rent in 2000, about in line with inflation. Nevertheless, as illustrated in Table 11-2, over half of renter households devote more than 30 percent of their income for rent. This may be because, according to a 2009 estimate by Maine State Housing Authority (MSHA), the median income among renters in Belgrade is only $25,000 per year. The high percentage of unaffordable rentals and shortage of rental properties suggests a high level of turnover among renters.

**Affordable Housing Goals:**

Maine’s growth management goal for affordable housing states that ten percent of new housing should be affordable to households making less than 80 percent of the median household income. The goal leaves it up to towns to determine whether that ten percent should be as stick-built homes, or mobile homes or rentals or elderly apartments.

According to most recent census figures, the median annual household income in Belgrade is $56,379, which would put the 80 percent threshold at $45,000. An affordable home for an annual income of $45,000 is about $133,000. According to the census, about 550 of Belgrade’s households are at or below that income level (see table 10-1), but only 168 of Belgrade’s homes. An affordable rental for that income level would be $1,125 per month. This would seem to indicate that it would be much easier to meet the affordable housing goal through providing more rental housing than trying to build stick-built homes for that price. However, MSHA reports that, in 2009, 91 rental households earned less than 50 percent of the median household income, which would make their target rent $700 per month.

**Finding #3: Belgrade has historically had little involvement in housing development within the community.**

Like many small towns, Belgrade has deferred to the private sector in the supply and pricing of the local housing stock. But the affordable housing situation has arisen fairly quickly and the private sector has not responded. Larger towns have formed regional housing consortiums or even municipal housing districts, resulting in public-private housing development projects. The most common example of this effort is the senior housing projects under development in a smattering of towns around the region. Belgrade has made no effort to date towards this goal, however, the Town does own one parcel (“Dalton property”) with two housing units that it is renting out. There are no affordable housing projects being contemplated by private developers.

Belgrade does issue land use/building permits, but does not enforce the Maine Uniform Building and Energy Code (MUBEC). Local enforcement is only required for towns over 4,000 in population. A bill was introduced this past legislature to lower the population requirement to 2,000, which would have included Belgrade, but died.
MSHA is the state agency responsible for providing assistance programs for households seeking housing. One of the most popular is the first-time homebuyers program. MSHA also coordinates individual housing subsidies “section 8” vouchers and subsidies for affordable housing projects. 2008 figures (most recent available from MSHA) indicate that Belgrade has 14 subsidized family units, zero subsidized elderly units, and seven individual housing vouchers.

**Recommended Actions to Encourage Housing Development:**

**State Goal:** Encourage and Promote affordable, decent housing opportunities for all Maine citizens.

Our Vision: Belgrade will be a place where growth is affordable, environmentally responsible, and diverse, promoting a balanced tax base and a caring and stimulating society.

**Issues:**

1. Belgrade has a little over 2,200 housing units, and is adding at the rate of about 10 per year. Of its year-round housing, only 157 units are rental, including an estimated 89 multi-family units.

2. Thirty-seven percent of Belgrade’s housing units are “seasonal,” a substantial percentage, but not particularly surprising given our location.

3. Belgrade has the highest-priced housing in Kennebec County, more than half again as expensive as the average for the county. Even though Belgrade is also relatively affluent, the affordability gap is large and growing. In 2009, Belgrade had nearly the least affordable housing in the Augusta market area, second only to Augusta itself. A lack of affordable homes creates barriers to access by young people and working families, and reduces opportunities for seniors to remain in town.

4. According to 2010 figures, roughly 290 households cannot afford the homes they already occupy, including more than half of all rental households. Paying more than they can afford for housing means that these households have to cut back in other areas, often becoming a burden on the public.

5. Currently, there are no local or regional efforts to plan for or increase the stock of affordable housing.

**Recommendations:**

11-1. Review subdivision requirements and revise any that increase costs without a rational basis.
11-2. Consider permitting higher densities for multi-family units and cluster development designed for seniors, consistent with open space recommendations in the land use plan.

11-3. Continue to permit mobile home parks in growth districts.

11-4. Maintain the provision permitting the addition of one accessory apartment per dwelling unit in growth districts.

11-5. Encourage or participate in regional initiatives to support a workforce housing committee and/or regional affordable housing coalition.

11-6. Monitor the construction/addition of new housing units and report annually on whether at least 10% of new residential development is affordable.
Finding #1: Farmlands, forests and other aspects of Belgrade’s rural character still resonate with local residents, even though their economic importance has diminished.

Belgrade’s community image is based in its rural character. Although we are past the era when most families owned a farm or worked in the woods, rural and suburbanizing towns like Belgrade still value the traditional land uses that maintain open space.

There is another reason for maintaining farm, forest, and other open space land – they are good for the tax rate. Some towns, particularly fast-developing ones, conclude that, in order to get on top of rising taxes and service demands, they have to add more development to their tax base. But the opposite is true; while open land pays very little in taxes, it demands even less in services, effectively subsidizing developed uses. The same cannot be said of commercial, residential, or any other type of land use.

To illustrate, a tract of undeveloped land valued at $10,000 in Belgrade would pay $119.50 in taxes at last year’s 11.95 mill rate. The land may require fire protection and possibly road access, but would not require education, recreation, library, cemetery, a transfer station or any of several other local functions that together make up more than three-quarters of the town’s annual expenditures. The same $10,000 of “developed” valuation requires four times the expenditures. These figures show why, throughout Kennebec County, Maine, and the US, taxes in rural areas are lower than in suburbs and cities with a much higher tax base.

Farming has faded from the attention of local residents as silos and farm fields have disappeared. Forest management, while still a productive use of land, is a little less visible because the results are not obvious every year. According to the records of the Town Tax Assessor, there are 7 parcels in Belgrade listed as commercial farms to qualify for the State’s farmland valuation status. But in addition to these, there are a number of additional smaller non-commercial farms, tree farms, orchards, and hayfields in Belgrade.

A combination of changes in the agriculture industry, competition, demand for suburban land, improvements to transportation and other factors have contributed to a significant drop-off in traditional agriculture. There are, however, signs of a transition in farming. It’s like a small retail store adapting to compete with the “big boxes.” The large, commodity-based farms such as dairies and orchards struggle in Maine to compete with other parts of the world. But the emerging success story among Maine farmers is the small, labor-intensive farm that can market unique or superior crops locally, feeding into emerging consumer demand for locally-grown
produce. This approach requires a whole different set of skills among farmers, and a different support structure from the community. It is also more in line with Belgrade’s capacity; the town has never had sprawling farmland or particularly good agricultural soils, but it does have parcels that could be used for smaller farms and a built-in strong potential market for local produce.

Belgrade has begun to respond to this opportunity. The following steps have already been taken:

- There is a local farmer's market in the Belgrade Lakes village on Thursdays and Sundays, May through October. It promotes and features local farm products. The Farmer's Market is managed by a committee and promoted through the Maine Lakes Resource Center.
- Local conservation organization BRCA partnered with Maine Farmland Trust to establish an agricultural easement and a conservation easement for the Winterberry Farm property, creating a "forever farm" in Belgrade.

Sustainable forestry is recognized as an important industry in Belgrade. Much of Belgrade is still heavily forested and held by individual landowners. In some cases forest lands are managed as small wood lots and harvested based on a forest management plan.

Forest management is still going strong in Belgrade, in part because forests grow even when no one is looking and we have a great expanse of forested open space in Belgrade. Table 12-1, below, illustrates from local assessment records, the expanse of open land for which Tree Growth or Farmland and Open Space Tax Valuation reductions have been granted. Even though the total is just a fraction of the total land area in Belgrade, the percentage of land in Tree Growth is 15 times larger than that in Farmland.

| Table 12-1: Lands Enrolled in Farmland and Open Space or Tree Growth, 2012 |
|---------------------------------|----------------|----------------|
|                                 | Number of Parcels | Total Acreage |
| Farm                            | 7               | 482 (plus an additional 163 acres in Tree Growth) |
| Tree Growth                     | 52              | 7,385         |
| Open Space                      | 2               | 44.5          |
| Open Space and Conservation     | 4               | 56.7          |
| Total                           | 7               | 7,968.2       |

Source: Municipal Tax Records

As part of the Comprehensive Plan effort, the parcels listed as “farm, open space, or tree growth” have been mapped on a GIS layer and have been used in the development of the Future Land Use Plan (Chapter 14).

The following conservation lands have been established in or near Belgrade. Some of these lands may also be enrolled as open space (Table 12-1) and may have been identified in the natural resources maps in this plan.

- Department of Inland Fisheries and Wildlife – Wildlife Management Area (WMA) (also known as the Gawler WMA) – 383 Acres
- George Bucknam WMA (Belgrade Stream, Mt. Vernon)
- Department of Conservation Land (Great Pond at mouth of Belgrade Stream)
- Winterberry Farms – 39 Acres – Agricultural and Conservation Easements
- Belgrade Regional Conservation Alliance Lands – 129 acres
- Town Forest (Dunn Road – 102 acres)

The Kennebec Highlands is an extensive (6,500 acre) tract of undeveloped land, with portions in Rome and Mount Vernon, but not in Belgrade. The Kennebec Highlands is a project of the BRCA, with partial funding from the Land for Maine’s Future Program. Though not located in Belgrade, its proximity contributes to open space values in the region.

Forestry-related businesses and operations in Belgrade include the following:
- Hammond Lumber Company, Route 27, Belgrade Depot
- Tukey Brothers Lumber Inc., Smithfield Road, North Belgrade
- Kevin Hawes, Route 27, Belgrade Depot

Belgrade also has an active program for urban forestry. The town has one of the most active Tree Committees in the State, and a Tree Ordinance to authorize and support it. The committee assists with all forest-related needs on public land, but is most active in keeping a canopy over Main Street in Belgrade Lakes village, which currently sports several ancient silver maples. The Tree Committee is concerned that the maples are nearing the end of their lives and is in the process of monitoring and pruning the older trees, at the same time as planting prospective replacements. The Town maintains a capital reserve fund to support the activities of the committee.

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**Recommended Actions to Protect Agricultural and Forest Resources:**

**State Goal:** Safeguard the State’s agricultural and forest resources from development that threatens those resources.

Our Vision: Belgrade's farm and forest lands will continue to be important to the local economy and for their visual and wildlife values.

**Issues:**

1. Though there are still a smattering of farms in Belgrade, there is not sufficient “critical mass” to make farming an economic engine. Gravelly soils and a lack of infrastructure make for difficult conditions for new farming enterprises. There is a potential demand for local farm products.

2. A large expanse of Belgrade is covered by forest. None of it is owned by large forest management companies, but some is actively managed as woodlots. The two sawmills provide significant local employment.
3. Well over 70 percent of Belgrade is currently undeveloped – open fields, forest, or wetland. A small portion of it (less than 600 acres) is legally protected from development, with another 8,000 acres in a reduced-valuation program.

**Recommendations:**

12-1. Provide literature about farm practices and conservation planning to landowners and inform them about farm and open space and tree growth tax laws.

12-2. Adopt standards which encourage clustered development designs which maximize the preservation of fields and pastures.

12-3. Adopt clustered development designs that maximize the preservation and interconnection of forested land and open space set asides or in lieu payments to the conservation land acquisition reserve account.

12-4. Increase and actively manage all town-owned forest land and dedicate the revenues to the conservation land acquisition reserve account.

12-5. Educate landowners about the water quality and other impacts of poor forestry practices.

12-6. Monitor logging roads and timber harvesting to determine whether State laws and regulations provide adequate protection for Belgrade's watersheds and wildlife.

12-7. Amend shoreland zoning to ensure maintenance of vegetative buffers within 75 feet of the normal high water line of all perennial streams.

12-8. Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations.

12-9. Include agriculture, commercial forestry operations, and land conservation that supports them in local economic development planning.
13: Growth and Development

Finding #1: The historical development pattern of Belgrade included villages, lakeshore development and rural homesteads. That pattern is still evident today.

Belgrade’s development pattern is a history of the town itself. Settlements grew into villages, which were then augmented by the boom in lakefront living. Rural farms gradually turned into subdivisions under the influence of suburbanization, while large tracts, consisting of forest land and abandoned farms, remain undeveloped.

The Villages

The Belgrade Lakes Village generally includes the area from the Center for all Seasons to the Bridge. The bridge (narrow between Great Pond and Long Pond) denotes the boundary with Rome, but development on the Rome side is often considered part of the village. It contains a mix of residential and small commercial properties in close proximity and is a center of community activity in Belgrade.

This area has received considerable attention due to its development challenges. Over the last 10 years, the Streetscape design/study addressed issues of aesthetics, traffic, and pedestrian flow, and the construction of the new Maine Lakes Resource Center and renovation of the Post Office property created much-needed public space and boat access. Sandwiched between Great Pond and Long Pond, space for new development in the village is extremely constrained. Route 27 to the south provides the only opportunity for expansion, though much of that area is occupied by the golf course.

The area known as Belgrade Depot is located along Route 27 between Belgrade Stream and Route 135. At the southern end of this area is the Hammond Lumber Company. In the village area along Depot Road are Belgrade Central School, Belgrade Public Library, and several residences. A youth baseball park is situated on Route 27.

Belgrade’s central triangle, at the northern tip of the village area, is bounded by Route 27, Routes 8/11, and Route 135. The triangle area includes the Pine Grove Cemetery, Christie’s Store, the Town Office, Skowhegan Bank, Belgrade Canoe and Kayak, Christmas Shop, U.S. Post Office, residences along Rtes. 8/11, several gravel pits, and most recently a used car lot. The Town of Belgrade owns an undeveloped portion of the land in this triangle (formerly a gravel pit). There is emerging interest in development of a master plan for growth in the triangle area, including expansion of municipal facilities and commercial development.
The village of **North Belgrade** is located along Rte 8, east of Great Pond. Tukey Lumber (a saw mill) and the North Belgrade Community Center (a former school) are defining elements of the village. A one-time general store is now closed, and there are a loose cluster of homes and small businesses. Although not within the village, prominent in the immediate vicinity are several children's summer camps located on Salmon Lake (Ellis Pond) and Great Pond that are accessed by way of Route 8. Route 8 has a lot less traffic than Route 27 through Belgrade Lakes and the Depot, so there is less opportunity for commercial development.

**Lakefront**

Belgrade includes a staggering 56.3 miles of lakefront on five lakes, including Great Pond, Long Pond, Messalonskee (Snow), Salmon (Ellis), and McGrath. Most of it is built out, with family camps handed down from generation to generation, commercial summer camps, and many year-round homes. A few areas are unsuitable for building due to wetlands and steep slopes etc. A handful of large undeveloped lakefront parcels are long-time family holdings. Examples include the Merriweather land off the Horse Point Road and the Sutton property off the West road.

Since few undeveloped lakefront lots are available, the building trend during the past several decades has typically been to do substantial renovation on an existing camp or raze it and start anew. This often occurs when a property is sold. Most new owners do at least a remodel (e.g., new kitchen and baths) and winterization. With innovations in the style and type of seasonal waterfront docks, lakefront owners are choosing to upgrade from the traditional hand-made wooden docks. The new designs are lighter and often larger, with less maintenance required. With shoreland zoning regulations prohibiting or restricting expansion of decks on land, the new designs give owners more usable outdoor space right on the water.

**Route 27 Corridor**

Route 27 is the most attractive venue for new commercial development. Retail and service businesses, in particular, are attracted to the exposure and high seasonal traffic counts. Recent development proposals along Route 27, and the potential for additional future development, has highlighted the need for town oversight and planning.

At a February 2012 meeting of the Comprehensive Plan Economic Development Committee and local realtors, the overwhelming consensus was that it is critically important to ensure that commercial development along the entrance to Belgrade is planned and managed in a way that does not create an unbroken strip development scheme that detracts from the rural and village qualities of Belgrade. While not wanting to prohibit commercial uses altogether, it will be important to manage access points and development designs to reduce the visual and traffic impacts of growth. A Route 27 corridor overlay district, such as the one proposed in the 1998 plan, would be a suitable vehicle for this form of management.
Subdivision Development

Subdivision development is not a new trend in town. Subdivisions, particularly along the lakeshore, date from well before the 1978 State Law that required towns to regulate them. The 1998 Comprehensive Plan reported that between 1970 and 1997, the Belgrade Planning Board issued permits for 52 subdivisions, encompassing 438 lots. The average lot size was five acres, so the 52 subdivisions consumed a total of 3.4 square miles of Belgrade. The 336 new lots that were actually developed accounted for only 41 percent of residential development during the period.

The town only has 43 ¼ square miles of land area. The loss of at least ten percent of it to residential development was enough of a concern that the 1998 plan recommended establishment of an overall goal of preserving a majority of the town in open space, together with development of an open space plan.

The 1998 plan also recommended that the Town continue to monitor the rate and location of new development. However, at the time of preparation of this update, the Town of Belgrade did not even have organized records of approved subdivisions. Spurred by this observation, the Land Use Committee began to organize approved subdivisions and is continuing this effort.

According to these records, since 1998 approximately 33 subdivisions have been approved. The data on the specific locations, acreage, and whether or not the lots have been developed was not yet available.

One recommendation of the Comprehensive Plan is to establish a database of new subdivisions, commercial development, and residential development that can be tracked and updated over time to monitor trends.

Finding #2: Belgrade has a number of ordinances regulating land use and development, but lacks a cohesive and user-friendly system.

Existing Town of Belgrade Ordinances include the following:

1) Shoreland Zoning Ordinance, governing development along Belgrade’s 56 miles of lake shore, plus Belgrade Stream and smaller tributaries.

2) Road Ordinance, regulating the design of new roads in town.

3) Commercial Development Review Ordinance, adopted to implement the 1998 plan, regulates establishment or construction of commercial uses with permitting requirements and design/development standards. The ordinance contains somewhat different standards for Belgrade Lakes village (parking and buffers) but has not been interpreted as containing zoning elements.

4) Floodplain Management Ordinance, following federal mandate, regulates development within the 100-year floodplain.
5) Manufactured Homes and Mobile Home Park Ordinance, governs the construction and placement of mobile homes in Belgrade, and the design of mobile home parks.

6) Adult Business Ordinance, sets standards for the permitting of any adult businesses that may want to locate in town.

7) Minimum Lot Size Ordinance, sets minimum lot size dimensions for residential (40,000 s.f.) and commercial (60,000 s.f.) uses, as well as frontage (200 feet) and other dimensional requirements for lots not in the shoreland zone.

8) Subdivision Ordinance, regulating subdivisions as required by State Law. The subdivision ordinance was last updated in 1995 (prior to the 1998 Plan) and contains multiple legal and procedural errors and obsolete performance standards.

9) Multi-family Housing Ordinance, setting dimensional standards and a review process for multi-family developments.

As mentioned above, records of building, subdivision, and commercial development permits are not readily accessible. This may be partly because of the extremely crowded conditions in the town office. Another reason could be the limited hours of the Code Enforcement Officer. Belgrade’s CEO, though thoroughly competent, only spends a few hours a week with the town; record-keeping is a low priority.

A lack of code enforcement hours has also prevented the Town from developing a more efficient and user-friendly permitting system. The several ordinances have differing definitions, application requirements, and review procedures, making them confusing to administer. Both the Land Use Committee and Economic Development Committee received comments critical of the current permitting process.

Finding #3: Belgrade taxpayers are strongly in favor of retaining Belgrade’s rural feel, and favor stronger regulations to do so.

The 2013 Belgrade Public Opinion Survey included several questions related to growth and development. The survey explored perspectives for the town’s future development, as well as the state of existing ordinances (see survey questions 20, 21, and 22). A summary of the responses relating to development issues is provided below:

- 77 percent of respondents indicated that protecting lake water quality by limiting land use activities was extremely important to them. 52 percent indicated that limiting sprawl and protecting rural character was extremely important (with another 29 percent saying it was moderately important).

- Only 38 percent think that the pattern of rural development will be a problem within the next ten years.
Most town residents indicated that existing ordinances were either adequate or should be strengthened (61 percent agree that they should be strengthened). A much smaller number of responses indicated that ordinances should be weakened.

The two ordinances that the majority of responders felt should be strengthened were the Commercial Development Review Ordinance, and the Manufactured Home and Mobile Home Park Ordinance.

76 percent of taxpayers think that the town should identify specific districts for residential and commercial development and open space, with 53 percent agreeing “strongly.”

More than half (54 percent) would like to see more village-style development with preserved open space in Belgrade. 80 percent agree that the town should encourage new subdivisions to be designed so as to preserve open space and farmland.

The plurality of responders (43 percent) indicated that existing code enforcement was effective, but many responders (31 percent) indicated that it needs improvement.

48 percent indicated that the Town should spend more to improve code enforcement, while 26 percent indicated that the Town should not, and 25 percent had no opinion.

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**Recommended Actions to Manage Growth and Development**

**State Goal:** Encourage orderly growth and development in appropriate areas of the community while protecting the State’s rural character, making efficient use of public services, and preventing development sprawl.

Our Vision:
1. Protect the quality of Belgrade’s lakes by making sure that all development and land use activities do their fair share to limit phosphorous impacts on the lake from sources including stormwater runoff, erosion, and septic systems.

2. Conserve and enhance the traditional character of our village and rural areas by ensuring that new development complements existing style, density, setbacks, etc.

3. Encourage growth and economic development to maintain a strong local economy and tax base that is consistent with the town’s character, and that protects the qualities of our lakes and lands.

4. Conserve the special character of rural areas and minimize municipal costs by limiting sprawl, strip development and fragmentation of open space.
Issues:

1. The recommendations of the 1998 Comprehensive Plan were largely ignored.

2. The location of growth in Belgrade is largely unmanaged except in shoreland areas, resulting in emerging signs of sprawl along Route 27 and rural roads. Of particular concern are the loss of open space and the resultant increase in developed area that will affect the quality of the lakes.

3. The land use permitting system is fragmented and not user-friendly, resulting in increased administrative time by town office staff and frustration on the part of prospective developers.

4. Continued increases in traffic along Route 27, improvements to the street in Belgrade Lakes village, and the arrival of natural gas service within the next few years will bring added pressure for commercial development in town.

5. A significant majority of taxpayers in Belgrade, according to the survey, feel that Belgrade should have a more robust form of growth management to protect lake water quality and the rural character of the town.

Priority Recommendations:

13-1. Incorporate the Future Land Use Plan (Chapter 14) into new or amended land use ordinances.

13-4. Review/revise/create a job description and performance goals for the CEO, and provide funding and hours for the CEO as necessary to meet these goals. Job functions should include:
   a. Providing guidance to developers, builders, and homeowners.
   b. Identifying and reporting violations and prosecuting violations and administering fees or penalties.
   c. Compliance inspections of active permits.
   d. Completing site inspections before, during, and after development
   e. Investigating citizen complaints and reporting on investigations.
   f. Annual reporting to include accounting of number of compliance inspections conducted and violations found, and how resolved, and tracking of location and type of permits issued.

13-16. Develop and present a plan for phased development of the central triangle area (bounded by Routes 27/8-11/135) to include consideration of use for town office, central fire station, cemetery expansion, recreation, public works, or commercial development.
**Additional Recommendations:**

13-2. Create and maintain a functional electronic system to track development applications and approvals for the town. Incorporate GIS Map Layers developed as part of the Comprehensive Plan. This may include periodic review and update of the map layers, printing of selected map products, etc.

13-3. Conduct a systematic review of existing ordinances and revise and/or combine existing ordinances in conformance with recommendations of this plan. In addition to recommendations in other chapters, the following items should be incorporated:
   b. Existing requirements for gravel pits (within the Commercial Development Review Ordinance) should be reviewed to verify that Belgrade gravel pits are in compliance - particularly the reclamation requirements.
   c. Review setback and frontage requirements in all existing ordinances for consistency and revise as needed.
   d. Ensure that ordinances include standards for private roads.
   e. Develop new standards for existing septic systems.
   f. Develop new Wind Tower standards.
   g. Adopt provisions which ensure open space protection in rural areas (i.e. cluster development; open space set asides or contributions to the Conservation Land Acquisition Reserve account; incentives such as density bonuses; and transfer of development rights.

13-5. Explore the possibility of a CEO shared with one or more other towns in watershed.

13-6. Provide ongoing periodic third party oversight/ review of code enforcement activities and the permitting process.

13-7. Undertake a comprehensive compliance review and inspection of existing developments approved under the Ordinance since 2001, providing a time line to come into compliance.

13-8. Prepare “Citizen’s Guide” to Town Ordinances and Permit Process to inform and educate the public, developers, and town officials.

13-9. Provide training for Planning Board members on ordinance and permit requirements and processes. Ensure new Planning Board members attend Maine Municipal Association planning board training, or equivalent training.

13-10. Planning Board agendas should be published in advance, like Select Board meeting agendas. Agendas and minutes should be posted on website in a timely manner. Records of decisions and permits issued should be filed and indexed.

13-11. Ensure all existing permit approval standards are met by applicants, including phosphorous control, storm water, soil erosion control and visual screening standards.
Phosphorous and storm water control plans to be developed by a Maine professional engineer, certified geologist, certified soil scientist or other appropriate certified professional.

13-12. The Planning Board and CEO will meet annually with Town Manager and Board of Selectmen to review policies, procedures and to discuss challenges faced implementing the ordinance.

13-13. The Town Manager will attend Planning Board meetings at least once per quarter to evaluate how well operating and if properly implementing ordinance.

13-14. Development of a more complete review checklist, findings of fact and permit templates with project specific and standard conditions of approval to give the CEO more concrete permit to enforce.

13-15. Schedule periodic meetings with Rome, Sidney and other towns as needed to discuss development issues and planning efforts.
14: Land Use Plan

Introduction: Vision for the Land Use Plan

The goals and recommendations set forth in this plan provide specific direction for how the Town of Belgrade plans to guide growth and development over the coming decade. These stem from a vision for land use and development in Belgrade:

1. Protect the quality of Belgrade’s lakes by making sure that all development and land use activities do their fair share to limit phosphorous impacts on the lake from sources including stormwater runoff, erosion, and septic systems.

2. Conserve and enhance the traditional character of our village and rural areas by ensuring that new development complements existing style, density, setbacks, etc.

3. Encourage growth and economic development to maintain a strong local economy and tax base that is consistent with the town’s character, and that protects the qualities of our lakes and lands.

4. Conserve the special character of rural areas and minimize municipal costs by limiting sprawl, strip development and fragmentation of open space.

This vision was originally stated in the 1998 Comprehensive Plan, and was overwhelmingly supported in the opinion survey that we distributed in the winter of 2013. It describes the basic premise of growth management – to encourage growth in portions of the town where it is readily and efficiently served by taxpayer-supported facilities, and discourage it in locations where development could adversely affect water quality, environmental assets, or the local economy.

Identification of Growth and Rural Areas:

Identification of the areas described above – areas where new development is to be encouraged and those where it would be discouraged – is best done in map form. The Future Land Use Map (page 111) uses a number of factors to identify the most suitable land for development within the town. The map, along with the accompanying district definitions and descriptions, translates the goals of the Comprehensive Plan into a plan for future growth and development in Belgrade.

In the short term this map, definitions, and guidelines will provide the general direction for the planning board and Town in developing or amending ordinances and policies. The map,
as depicted in this plan, is not enforceable in the sense of regulation. As it is incorporated into ordinances, which must be voted on at Town Meeting, refinements can be made to district areas and boundaries.

The *Future Land Use Map* was developed using software known as Geographic Information System (GIS), and is based on digitized map layers containing data on town parcels, *Beginning with Habitat* (BwH) designated natural resource assets, town assessors records on parcels enrolled in tax-favored status, aerial photograph imagery, etc. The Town will have access to these GIS map layers for future planning and modification of the map.

**Determination of Area Requirements for Growth and Rural Areas:**

As suggested by Maine’s Growth Management Program, this map shows which areas are most appropriate for growth, i.e. areas that are suitable for development and in which the Town will direct at least 75 percent on growth-related capital expenditures. Rural areas, by contrast, are those areas which for reasons of environmental constraints or public service limitations, are less suited for significant residential or commercial development.

The critical step in the delineation process is the determination of how much land will be in the growth area and how much in the rural area. For an estimate of how much land will be required for growth, we turn to the growth scenarios developed in Chapter 3.

In chapter 3, estimates of future population growth were translated into demand for land use, based on assumptions of 1) new homes at the minimum lot size (40,000 square feet), and 2) new homes at the average lot size from the 1990’s (5 acres). Two scenarios were put forward: “slow growth” and “moderate growth.”

In the slow growth scenario (a growth rate of seven percent per decade and Belgrade's minimum lot size) 256 new homes will consume at least 235 acres over 20 years. In the moderate growth scenario (a growth rate of 13 percent per decade and minimum lot size) 428 homes would consume 393 acres of land. But if future lots are five acres rather than one acre (as they were in the average subdivision in the 90’s), the slow growth and moderate growth scenarios would consume 1,280 acres and 2,140 acres, respectively.

Based on these growth scenarios, it is anticipated that the total acreage needed for new growth through the year 2033 could be as little as 235 acres or as much as 2,140 acres. While 235 acres of new development would have far fewer impacts on water quality, public services, and other constraints, 2,140 acres cannot be ruled out under current ordinances.

On the other side of the equation, we need to look at the amount of undeveloped land to be retained in the town. For the purpose of this plan, we are setting a goal of no less than 60 percent of the town’s land area, meaning 40 percent would be developed. The rationale for this figure is as follows:

- Several lake biologists have expressed the opinion that if more than 35 percent of Belgrade’s land area is developed, the current water quality will decline. The phosphorous standards are based on no more than 35 percent of the watershed being
developed; if more is to be developed, phosphorous limits would have to be stricter.

- The 1998 Comprehensive Plan established a goal of 60 percent undeveloped area, and it was supported by an overwhelming Town Meeting approval. In that plan, it was claimed that case studies showed towns with development covering more than 40 percent of their area were no longer perceived as “rural” by their residents. This perception is crucial to our vision for Belgrade.

The Future Land Use Map can be viewed on page 111, with a larger version in the appendix. Districts shown on the map include the following:

**Rural Areas:**

These are less developed areas and contain natural and scenic resources. Growth in the rural areas should be limited and managed to preserve their character. These include lands that contain critical natural resources and habitats and/or are currently enrolled in protective status such as conservation lands and easements, Tree Growth parcels, and Open Space parcels. It also includes sufficient currently undeveloped tracts of land to achieve the Town’s goal of 60 percent of the total area of the Town of Belgrade.

The Rural Areas consist of four districts:

- Residential/Mixed Use
- Shoreland Zone
- Critical Resource Conservation District (including existing conservation lands (Federal, State, and Private), critical natural resources, and critical habitat areas.)
- Rural District (encompassing other non-critical natural resources and habitat, enrolled Tree Growth, Open Space, and Farmland parcels, undeveloped habitat blocks, island habitat, and additional undeveloped lands to achieve the undeveloped land goal of 60 percent.

Note: In order to be allowed to expand, existing commercial businesses within the proposed rural areas should be initially designated as General Development Districts in the Land Use Plan. They do not appear on the map because of lack of specific information.

**Growth Areas:**

These are more densely settled areas, efficiently served by public facilities, and contain area to accommodate future residential and commercial growth. We have identified three districts, based on characteristics of existing development within them:

- Village Districts
- General Development District
- Route 27 Rural Corridor (Overlay District)

**Acreage Calculations and Targets for Development:**

This plan acknowledges that the dynamics of private land ownership and the free market mean that not all of the land use decisions made by private individuals will fit nicely into the
district definitions we have set out. In addition, much of the land is already developed. We felt it would be slightly easier to set out development targets in each district as a means of visualizing our developable area and 60 percent goal.

Table 14-1 below provides estimates of future development in each of the districts on the map. It assumes that during the foreseeable future, the Village and General Development District will be all but 10 percent developed, the Residential/Mixed Use District will become 70 percent developed, the Shoreland Zone(s) will be 50 percent developed, only 20 percent of the Rural District will be developed, and 90 percent of the Critical Resource District will remain undeveloped.

The Town contains 26,270 land acres. Even though the proposed rural areas contain 24,800 acres – 94 percent of Belgrade’s land area – some of it will be developed, just as some of the growth areas will be left undeveloped. Based on these estimates, at full buildout the town will still contain 16,854 undeveloped acres, or 64 percent of the land base.

<table>
<thead>
<tr>
<th>District</th>
<th>Map Color</th>
<th>Total Acres</th>
<th>Assumed %</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>VILLAGE</td>
<td>YELLOW</td>
<td>1,055</td>
<td>10%</td>
<td>106(at full build-out)</td>
</tr>
<tr>
<td>GENERAL DEVELOPMENT</td>
<td>RED</td>
<td>409</td>
<td>10%</td>
<td>41 (at full build-out)</td>
</tr>
<tr>
<td>RESIDENTIAL/MIXED USE</td>
<td>BROWN</td>
<td>5,610</td>
<td>30%</td>
<td>1,683 (at full build-out)</td>
</tr>
<tr>
<td>CRITICAL RESOURCE</td>
<td>DARK GREEN</td>
<td>5,391</td>
<td>90%</td>
<td>4,852 (at full build-out)</td>
</tr>
<tr>
<td>RURAL</td>
<td>LIGHT GREEN</td>
<td>10,897</td>
<td>80%</td>
<td>8,718 (now)</td>
</tr>
<tr>
<td>SHORELAND ZONE</td>
<td>BLUE</td>
<td>2,908</td>
<td>50%</td>
<td>1,454 (at full build-out)</td>
</tr>
</tbody>
</table>

| TOTALS                      |            | 26,270      |           | 16,854|
| UNDEVELOPED LAND GOAL:      |            | 15,762      |           |       |

Identification and Management of Individual Districts:

As described in the section above, this plan recommends a set of growth and rural areas, with individual districts based on current uses. The use of land within each district, particularly with respect to development, will be of great importance going forward. Each district emphasizes certain values and together they have worked to create the town that we have now. The purpose of this plan is to ensure that those uses which make each district unique are maintained and incompatible uses are screened out.

Rural Areas:

Purpose: Rural areas recognize existing low density development and conservation lands that are protected under various types of easements, critical natural resource areas and habitats, and the importance of large, contiguous open space areas. Open space is recognized as essential to preserve wildlife habitat, lake and stream water quality, ground water protection, field and forest resources for agriculture, forest management, and traditional recreational activities such as
CRITICAL RESOURCE CONSERVATION DISTRICT

Definition: Critical Resource Conservation District boundaries were drawn to incorporate:
- Existing Conservation Lands (State Conservation Land, BRCA conservation land and easements)
- Critical Natural Resources as identified by the State on Beginning with Habitat Maps
- NWI Wetlands (from Beginning with Habitat – BwH – Map 1)
- High Value Plant and Animal Habitats, including Rare or Exemplary Natural Communities (BwH Map 2)
- Rare, Threatened or Endangered Wildlife (BwH Map 2)
- Rare or Exemplary Plants and Natural Communities
- Rare Plant Locations
- Focus Areas of Statewide Ecological Interest

Encouraged/Allowed Uses are those which are currently being practiced and which should be permitted to continue, including:
- Sustainable forestry, in accordance with recognized best management practices
- Low impact agriculture (pastureland, hayland)
- Tree nurseries
- Preservation of wildlife habitat, with connectivity between open space areas
- Passive recreation, private and public (with landowner approvals)
- Educational and scientific
- Roadside enhancement and scenic view preservation
- Critical Natural Resource and Habitat areas defined on Beginning with Habitat Maps

Prohibited Uses are those which would be incompatible with the objectives of the district. It should be noted that almost all lands in this district are currently under long-term conservation ownership or protection, so no residential or commercial development would be expected. Any form of building or structural development should be prohibited, except that which is in support of the resource values of the district.

RURAL DISTRICT

Definition: The Rural Districts are intended to incorporate the majority of non-development values as well as low-intensity development. The Rural District was originally drawn to include all of the following land uses:
- Parcels listed by the Town in Tree Growth Status
- Parcels listed in Open Space status, but not with further conservation restriction
- Parcels listed in Farm Status
- Non-Critical Natural Resources identified by the State on Beginning with Habitat Maps
- The significant sand and gravel aquifer (BwH Map 1)
• Significant Wildlife Habitats (BwH Map 2)
• Undeveloped Habitat Blocks (BwH Map 3)
• Islands

This made for a somewhat complex map, so Rural District boundaries were later simplified, and include most land more than 500 feet from existing public roads that was not currently developed nor qualifying for Critical Resource Conservation or Shoreland.

It is anticipated that parcels of land in Rural Districts may be re-classified to other land use districts where consistent with the goals of the Land Use Plan; provided that the total acreage in Rural Areas does not fall below 60 per cent of Belgrade's total land acreage.

Encouraged/Allowed Uses are those which are currently being practiced and which should be permitted to continue, including:
• Forest management, tree nurseries, forest-related industries
• Farming, market gardening, roadside farm stands, farm-related value-added industries
• Preservation of open space and wildlife habitat, with connectivity between open space areas
• Passive recreation, private and public (with landowner approvals)
• Recreational and educational uses and supporting facilities
• Roadside enhancement and scenic view preservation
• Golf Courses
• Residential – single family only
• Gravel pits (subject to State and Town Ordinance operation and reclamation requirements)

Prohibited Uses are those development activities which would be incompatible with existing uses, including mobile home parks and commercial and institutional uses that do not require rural locations.

RESIDENTIAL/MIXED USE DISTRICT

Purpose: The Residential/Mixed Use District reflects the established pattern of scattered residential and small-scale, compatible commercial development along public roads in Belgrade. It recognizes the need to balance Belgrade’s rural character with anticipated housing demand in a fiscally responsible manner. This development pattern promotes more efficient use of existing public road and utility infrastructure, avoidance of future public costs for building or maintaining new roads or reliable access to sites for fire, emergency, school transportation, utilities and other purposes.

Definition: The boundaries of the Residential/Mixed Use Districts extend 500 feet from the centerline of public roads. This nominal distance may be reduced or relaxed to accommodate existing uses and conditions.

Encouraged/Allowed Uses are those which reflect neighborhood character and do not place significant burden on public infrastructure and include:
• Uses permitted in Critical Resource Conservation Districts and Rural Districts
• Single-family and duplex residences and subdivisions
• Multiple or clustered residences with configurations based on a multiple of per-unit area
requirements while simultaneously meeting open space goals.

- Home occupations
- Mobile home parks
- Commercial activities which would not adversely impact residential property values or create safety hazards (e.g. generate high traffic, heavy equipment operation, etc.), pollution (in particular threat to neighbors drinking water supply wells), a nuisance (e.g., excessive lighting, noise, odors, dust, etc.). Examples of permissible commercial activities include Group Homes, Day Care Facilities, Antique Dealerships, Indoor Boat or Equipment Storage.

Prohibited Uses are those which are not generally compatible with maintaining residential property values and rural neighborhoods, including:

- High impact commercial uses such as junk yards, auto sales, franchise businesses.
- Uses which may cause unsafe traffic flow or volumes
- Uses projected to increase local groundwater demand beyond sustainable limits;
- Uses which would generate sewage disposal demand beyond the carrying capacity of soils.
- Uses with significant potential to create or attract nuisances, including noise, disturbances, vandalism, litter, signage or lighting, odors, etc.; e.g. adult entertainment, permanent flea markets, etc.
- Uses involving hazardous materials or processes with potential for accidental injury to the public or for environmental damage, e.g. major fuel and chemical storage.

SHORELAND ZONING DISTRICTS

Purpose: These districts are designed to safeguard the water quality, wildlife and natural surroundings of Belgrade's lakes, streams and freshwater wetlands. It implements State Shoreland Zoning Law under home rule and the Town’s Shoreland Zoning Ordinance, which prohibits or limits certain land uses and activities such as timber harvesting, road and driveway construction, placement of fill, etc. It contains provisions to limit the impact of development.

Belgrade's Shoreland Districts are identified on the Future Land Use Map. For the purpose of the plan, all individual districts as defined in the ordinance are mapped as one. The shoreland zones exist within 250ft. of normal high-water line of great ponds, freshwater wetlands, etc. and within 75ft. of of certain streams. Shoreland zones take precedence where they overlap with other districts. Definitions of allowed and prohibited land uses and activities within the Shoreland zones are provided by existing State Law and Town Ordinance.

Growth Areas:

VILLAGE DISTRICT

Purpose: Village Districts are characterized by higher density residential development, intermingled with a variety of commercial and public development offering retail, service, community activities, and economic opportunities for residents. Villages in particular provide services attractive to visitors and tourism, and attract both residents and visitors to a village setting. They provide centralized hubs of residential and commercial development for the community.
Definition: Village Districts are located at Belgrade Lakes Village, Belgrade Depot, and North Belgrade. Boundaries generally include existing recognized village area. Village District boundaries extend outside of existing villages along established roads, to accommodate natural growth of the villages. As a rule, expansion of villages is a good thing, and it should not be difficult to enlarge Village District boundaries. Development densities in Village Districts are governed by on-site sewage disposal constraints, as they are elsewhere throughout Belgrade.

Encouraged/Allowed Uses are those which are similar to those currently in place, including:
- Residential: single, multi-, senior
- Professional offices
- Small retail stores, pharmacies, banks, etc.
- Restaurants, bed & breakfast inns
- Small hotels
- Schools and daycare, public and private
- Health care facilities
- Places of public assembly, including churches
- Municipal/public facilities
- Recreation/tourist business
- Personal service businesses
- Home occupations

Prohibited Uses are those development activities which would be incompatible with existing uses and the objectives of the district. In general, this refers to commercial development which by virtue of its size or impact on district characteristics or public services are inappropriate. Examples of such uses or impacts include:
- Junk yards, auto sales, franchise businesses, "big box" retail outlets
- Uses which may cause unsafe traffic or pedestrian conditions, or which require parking spaces exceeding on-site capacity;
- Uses projected to increase local groundwater demand beyond sustainable limits;
- Uses which would generate sewage disposal demand beyond the carrying capacity of the soil.
- Uses with significant potential to create or attract nuisances such as noise, lighting glare, waste management, immoderate signage, odors, etc. Examples include adult entertainment, permanent flea markets, commercial animal care.
- Uses involving hazardous materials or processes with potential for accidental injury to the public or for environmental damage, e.g. major fuel and chemical storage

GENERAL DEVELOPMENT DISTRICT

Purpose: General Development Districts recognize the value and convenience to Belgrade citizens of commercial enterprises and other high-intensity uses which provide employment, generate tax revenues, and offer local services. They provide for growth within defined and established centralized areas as opposed to unplanned sprawl. While permitting the broadest range of uses in Belgrade, commercial development standards would continue to ensure that new development remains consistent with Belgrade's desired character and environment.

Definition: General Development Districts are located near Belgrade Depot, and in North Belgrade, where commercial activities are already concentrated. District boundaries are drawn to encompass additional land for expansion of the commercial base.
Encouraged Uses include those which are more consumptive of land or with higher demand for public services than in other districts, including:

- Light Industrial (see Table 14-2)
- Building supply sales
- Retail stores
- Banks
- Office complexes
- Municipal facilities
- Overnight accommodations (size limit)
- Active recreational uses
- Clustered commercial development

Other development activities would be allowed up to a limit, based on a measurement of their impacts. Examples include:

- Gravel extraction
- Wholesale, warehousing and distribution
- Automotive service and repair
- Residential (if buffered from commercial)

Prohibited Uses are those for which Belgrade simply does not have the capacity to accommodate. “Capacity” may refer to a road system or sewer system, or major impacts to our principal economic asset – small-town character. Examples include:

- Major bulk fuel storage
- Large scale trucking terminals
- Demolition and waste disposal
- Industrial scale recycling operations
- Major hotels or motels
- Franchise (Formula) businesses

Of concern is the potential for impacts from industrial uses, which can scale up from simple garage operations to significant consumers of resources. Table 14-2 illustrates the distinction of “heavy” industrial uses to be discouraged or prohibited:

### Table 14-2: Light vs. Heavy Industrial Uses

<table>
<thead>
<tr>
<th>Light Industrial Uses (low impact industrial)</th>
<th>Heavy Industrial Uses (high impact industrial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can meet water needs by private wells without impacting water quantity off-site</td>
<td>Requires public water system</td>
</tr>
<tr>
<td>Low traffic flows and traffic conflicts.</td>
<td>High traffic generator</td>
</tr>
<tr>
<td>Waste water generation suitable for subsurface waste water disposal</td>
<td>Requires public sewage &amp; treatment system</td>
</tr>
<tr>
<td>Does not generate or store large quantity of hazardous wastes</td>
<td>Generates and stores larger quantities of hazardous waste for 90 days or more</td>
</tr>
<tr>
<td>Does not discharge airborne hazardous substances</td>
<td>May discharge airborne hazardous substances</td>
</tr>
<tr>
<td><strong>Some Examples:</strong></td>
<td><strong>Some Examples:</strong></td>
</tr>
<tr>
<td>Lumber mill</td>
<td>Paper mills</td>
</tr>
<tr>
<td>Commercial recycling</td>
<td>Electro metal plating plant</td>
</tr>
<tr>
<td>Warehousing &amp; storage</td>
<td>Tannery</td>
</tr>
<tr>
<td>Metal fabrication</td>
<td>Electronics manufacturing</td>
</tr>
<tr>
<td>Commercial water bottling</td>
<td>Large boat building</td>
</tr>
<tr>
<td>Concrete product manufacturing</td>
<td>Steel and iron mills</td>
</tr>
<tr>
<td>Concrete &amp; asphalt plants</td>
<td>Auto manufacturing &amp; assembly</td>
</tr>
<tr>
<td></td>
<td>Computer components manufacturing</td>
</tr>
</tbody>
</table>
The Route 27 Corridor District:

Purpose:  The Route 27 Corridor District recognizes Belgrade's goal to preserve rural aspects, scenic views, and safe travel along the Route 27 corridor.  Safe and convenient travel along Rte. 27 is preserved by restricting the number of new access points; rural aspects and scenic views are maintained by reducing the visual aspects of new development.  This district is designed to maintain rural character and promote safe, smooth traffic flow along Rte. 27 while preserving opportunities for compatible residential and commercial development.

Definition:  The Route 27 Corridor District is depicted on the Future Land Use Map.  The district represents a buffer zone along Route 27 within which standards for vegetative buffers, setbacks, and limited road cuts apply.  Development can occur within the district following the rules of the underlying districts.  Widths of the buffer zone may vary if warranted by the impact on scenic views or other resources.  The Route 27 Corridor District is a means of transitioning rural areas (Residential/Mixed Use District) into growth areas while maintaining the rural and scenic nature of the driving experience.

Specific standards which will apply within the district include:
- Vegetative buffers
- Service roads from common access points onto Route 27
- Pedestrian trails
- Residential uses will have deeper setbacks and protected road frontage
- Non-residential uses would incorporate greater setbacks, road frontage protection and other conditions
- Coordinated signage
- Limited commercial and directional signage (limits to be determined)

Tools to Manage Growth

The ultimate result of the Land Use Plan is the management of new development such that it enforces the goals of the plan while preserving private property values and freedom of action.  Because the comprehensive plan can only recommend actions available to the municipality, we are somewhat circumscribed in the actions we can take to manage growth.  Basically, they fall into two groups: regulatory tools and incentives.  Regulatory tools are reflecting in our land use ordinances; incentive tools are actions taken or policies adopted by local government which will either a) discourage new development in rural areas or b) encourage it in growth areas.

The range of tools available to Belgrade is further limited by the capacity of the town.  Most visibly, we do not have public water or sewer service and do not expect to provide any in the foreseeable future.  We also have limited capacity to make investments in new or maintained infrastructure, such as sidewalks, roads, public open space, etc.  To go with this, the town also has limited political capacity to enact new regulatory limits.
The tools offered in this section are recommended because they have been demonstrated to be effective in towns similar to Belgrade, but must be taken as a package. We cannot provide only one tool and expect it to address the complex forces that drive development.

Tools to be applied Townwide:

The recommendations in Chapter 13 address growth and development without looking at the specific issues of land use planning. They are intended to be implemented townwide. The following is a summary of those recommendations.

- All development proposed must show evidence that on-site water supply is adequate for intended purposes and that on-site sewage disposal capacity will comply with the Maine State Plumbing Code.

- Project designs must recognize and accommodate the following land use constraints:
  - Mitigation of impacts to lake water quality for all projects with potential to degrade lake water quality through soil erosion, elevated phosphorus levels, septic contamination, leakage or runoff of petroleum products, chemicals, leachates, or other avenues of pollution.
  - Wetlands and permanent stream courses.
  - Floodplains
  - Underlying aquifers
  - Significant wildlife areas, natural features, and open space areas
  - Sites recognized by the National Register of Historic Places or of local historical or archaeological significance
  - Roadside vistas and scenic views of significant public interest.

- For mineral extraction: Assurance that operations conform to laws and ordinances, including enforceable operation plans, enforceable closure and reclamation plans to reclaim properties following completion of extraction.

- Evidence of consistency with Belgrade 's goals to manage growth and development in keeping with the Town ’s traditional rural, residential and recreational character.

- The Town should develop a new land use ordinance or coordinate existing ordinances to identify the types and intensities of uses which will be encouraged, allowed, or prohibited within each district. The objective will be to develop a simple, user-friendly system which will provide predictable and consistent results — without burdensome administration for applicants or the Town;

- The "bureaucratic hoops" for obtaining a development permit will be easier in order to encourage development while protecting the public investment in services and facilities. For example, limitation on curb cuts, i.e. one per lot of record, in the Route 27 Corridor would reduce sprawl and conserve the transportation function and safety of this regional corridor. The Town may also adopt a curb cut permit system for rural local roads to ensure that safe sight distances are retained. This will avoid expensive construction
projects later to widen, flatten, or straighten roads to solve safety problems that could have been avoided with more careful planning

- Ensure that public investments reinforce the desired growth pattern of the Town. As Belgrade implements its Capital Investment Plan it will locate new investment in growth areas unless the facility is dependent on a rural location (such as parklands). Also, the Town will develop an open space plan and work with affected landowners to purchase easements or fee title to land vital to the Town's rural character and heritage from its open space acquisition account.

Of particular concern is our ability to monitor future growth to ensure that the land use plan has been implemented and effective. This will enable us to make small corrections over the life of the plan, rather than being forced to change course dramatically at some point. The 1998 plan suggested that the Town monitor new development, but this was not done consistently, leading to frustration as we developed this plan trying to understand what has happened since.

Monitoring and evaluation will be the primary responsibility of the planning board and code enforcement officer. Together they will track the timing, type, and location of new development. The purpose of the evaluation process will be to determine to what extent new development is conforming to growth and rural area designations and whether the rate of development is consistent with our projections. It is particularly important to assess whether the land area “buildout” goals in each district are threatened (see Table 14-1), so they can be adjusted if necessary.

The Town will utilize technology where useful, implementing digital mapping capability and examining land use maps and aerial photographs. As the amount of remaining open space and/or growth areas approaches the targets, the Town can decide to move the targets or take increasingly stronger measures to safeguard its open space, such as increasing funds for conservation easements and land purchase.

Tools to Encourage Growth in Growth Areas and Discourage it in Rural Areas:

The Land Use Plan must demonstrate how we can use to tools available to us to encourage growth in the areas we can serve most efficiently, and discourage it where there could be adverse impacts to community values or public service costs. These tools fall into a number of categories of varying effectiveness.

Lot Sizes and Density:

The usual practice among towns with growth and rural areas is to distinguish each area with a minimum lot size – larger lots for rural areas, smaller ones for growth areas. The rationale is that larger lot sizes preserve the rural feel and reduce the density of development. While in theory this may be true, in practice requiring larger lot sizes tends to simply drive homes further apart without slowing development unless the minimum lot sizes are dramatically different. In Belgrade, a lack of public sewer means that every lot must exceed the State’s minimum lot size at the low end of the scale. Also, if the average lot size within subdivisions is already 5 acres, raising or lowering the minimum is not going to make any difference.
Belgrade’s Minimum Lot Size Ordinance was enacted in 1991. It requires a minimum of 40,000 square feet for residential lots and 60,000 square feet for commercial lots throughout town. Multiple residential units on one lot requires a multiple of 40,000 square feet for each unit. Since 1991, several attempts have been made to amend the ordinance to require larger lots sizes in rural areas. These attempts have failed, often dramatically. Our conclusion is that there is not sufficient value in increasing lot sizes to overcome the town’s political resistance.

Therefore, this plan does not recommend a change to the minimum required lot size for residential development. Nevertheless, we do have several recommendations to modify the impact of the minimum lot size to encourage growth in appropriate areas:

- In Village and General Development Districts, the minimum lot size for commercial development should be reduced to 40,000 square feet. We now have a Commercial Development Review Ordinance, which has standards to reduce the impacts of commercial development on neighboring properties. Reducing the lot size for commercial development will increase the density of commercial development in these districts, including allowing one acre lots that may currently only be used for a house to be available for conversion to a small business.

- While retaining the minimum lot size, we should permit increased density for multiple housing units in the Village and General Development Districts. (“Density” refers to the number of housing units per land unit, e.g. one unit per 40,000 square feet currently.) Landowners should be permitted to add an accessory housing unit even if their lot is less than the 80,000 required area. Additional units should require only 20,000 square feet instead of 40,000. This means that an 8-unit apartment would only require four acres of land instead of eight. This will also act as incentive to provide more affordable housing. The Town’s existing Multi-family Ordinance has a very clunky provision requiring ½ acre for each bedroom, which should be scrapped.

- The mapped configuration of the Residential/Mixed Use Districts provides a depth along roads of 500 feet. In contrast, many original tracts are 1,000 feet or more in depth. While a landowner may have sufficient land area for a number of new lots, the cost of a new road into the interior of his property might be prohibitive. We should permit him (or her) to calculate the number of lots he could have gotten from developing his property as a whole and get the same number in just the front 500 feet. The Town would waive the 40,000 square foot minimum (as far down as the State-mandated 20,000 square feet) and the required road frontage, and the landowner would avoid the cost of building a road into his back land. This concept is very similar to the open space subdivision designs described below.

Open Space and Subdivision Development:

The concept of open space (clustered) subdivision design has been around for decades. An open space design uses the permissible density of development (in Belgrade: 40,000 square feet per housing unit) but permits individual lot sizes to be smaller in exchange for a portion of...
the original tract to be undeveloped open space. This permits developers to get the same value from their property as under “conventional” subdivision design, but avoid the cost of developing half of it. Market research in areas which use open space design frequently shows that lots in this type of development generally average higher resale values, too.

Belgrade has had a provision for clustered design in its Subdivision Ordinance since it was adopted in 1998. It permits individual lots as small as 20,000 square feet, or even smaller if the developer installs community septic systems. (The wording in the Subdivision Ordinance refers to a “zoning ordinance” which the Town does not have and also creates a legal conflict with the Minimum Lot Size Ordinance.) To date, no one has utilized this provision of the ordinance, possibly because the market in Belgrade is not perceived to be for 20,000 square foot lots. This plan recommends that open space designs be utilized to create more dedicated open space, particularly in rural areas, with the following changes:

- In Residential/Mixed Use Districts, landowners may utilize this design to cluster his development into the R/MU District and out of the Rural District, as described above. The design must show that at least 30 percent of the tract will remain as permanent open space.

- Subdivision proposals in the Rural Districts will be required to present an open space design at the sketch plan phase of the approval process. If the developer chooses to present a “conventional” alternative, the planning board will evaluate both alternatives and direct the developer to pursue one or the other. The open space design will show an amount of open space equivalent to 10 times the total estimated developed area (building footprints plus roads and driveways plus septic systems).

- The Subdivision Ordinance when originally drafted evidently did not anticipate the condominium form of ownership, which is common in clustered developments, particularly if they are designed for senior citizens or second homes. In the condo form, only the buildings are owned by the buyers; there are no individual lot lines. These should be treated as multi-family developments in the ordinance.

The Future Land Use Plan will only lead to the kind of future townspeople want for Belgrade if it is accompanied by the tools which directly influence where growth occurs. The recommendations presented in this chapter set forth several such tools. Belgrade is a desirable community today, and should continue to be in the future due primarily to civic pride and good stewardship of many local citizens and landowners, and the continuation of this tradition.
15: Capital Investment Plan

The Capital Investment Plan (CIP) component of the Comprehensive Plan identifies growth related capital investments and a strategy for accommodating them. The CIP anticipates future expenses, sets priorities and timetables, and proposes a mechanism to fund them. The plan is important because it alerts both municipal officials and citizens about future expenses and allows the Town to find the most cost effective way to finance the Improvement.

The Capital Investment Plan will include items identified in this plan which are called capital expenses. A capital expense is defined as having a cost that is not a maintenance or operating expense.

The Town of Belgrade already does some form of capital planning for its municipal facilities. The Town maintains a prioritized listing of anticipated capital needs, together with a road improvement master plan, and designates separate capital reserve accounts for 1) Town office building, 2) solid waste improvements, 3) fire department, 4) rescue equipment, 5) facility maintenance, 6) recreation, 7) public works roads & paving, 8) sidewalk(s), 9) library, 10) cemetery, and 11) water quality. That leaves very little additional for the Capital Investment Plan.

Table 15-1 at the end of this chapter contains those capital items already in the Town’s queue plus items identified in this plan.

As the coordinator for all the town’s activities, the Town Manager is responsible for the CIP. However, he/she must rely on the department heads to submit needs and cost estimates, and on the selectboard to help set priorities. Thus, the CIP process should be prepared alongside the annual budget, so that a portion of the annual budget is set aside to fund the CIP. This can be in the form of contributions to a reserve fund, one-time appropriations, or commitment to pay interest on a loan.

Belgrade’s CIP will continue to be developed as directed by the Town Manager, with input from the budget committee and selectboard, by incorporating the guidelines needed to reach the goals of the initial project list presented in the plan.

The revised CIP will be integrated with the budget process beginning in 2014. The capital investments listed in the table below include both those identified by this plan and other capital improvement projects that have come up in town discussions over the past three years.
Table 15-1: Recommended Capital Investments

<table>
<thead>
<tr>
<th>Capital Item</th>
<th>Estimated Cost ($)</th>
<th>Funding Source</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Town Charter</td>
<td>10,000</td>
<td>Appropriation</td>
<td>2014-15</td>
</tr>
<tr>
<td>Central Fire Station</td>
<td>1,000,000</td>
<td>Grants, taxation, bonding</td>
<td>2018</td>
</tr>
<tr>
<td>New Town Office</td>
<td>1,200,000</td>
<td>Reserve, bonding</td>
<td>ASAP</td>
</tr>
<tr>
<td>Land purchase adjacent to transfer station</td>
<td>25,000</td>
<td>Reserve (in hand)</td>
<td>ASAP</td>
</tr>
<tr>
<td>Weight scales at transfer station</td>
<td>65,000</td>
<td>Appropriation, fees</td>
<td>2019</td>
</tr>
<tr>
<td>Rescue Truck</td>
<td>130,000</td>
<td>Reserve, donations</td>
<td>2014-15</td>
</tr>
<tr>
<td>Add Cemetery lots</td>
<td>20,000</td>
<td>Capital funds</td>
<td>2017-18</td>
</tr>
<tr>
<td>Pole Barn at transfer station</td>
<td>20,000</td>
<td>Appropriations</td>
<td>2016-18</td>
</tr>
<tr>
<td>Gazebo</td>
<td>35,000</td>
<td>Grant, donations</td>
<td>2018-2023</td>
</tr>
<tr>
<td>Development Plan for central triangle</td>
<td>10,000</td>
<td>Appropriations</td>
<td>2014</td>
</tr>
<tr>
<td>Acquire space for historic display</td>
<td>unknown</td>
<td>Appropriations, donations</td>
<td>ASAP</td>
</tr>
<tr>
<td>Open Space Plan</td>
<td>15,000</td>
<td>Appropriations</td>
<td>2014-15</td>
</tr>
<tr>
<td>Land Use Ordinance development</td>
<td>10,000</td>
<td>PB reserve</td>
<td>2014</td>
</tr>
<tr>
<td>Acquire digital mapping capability</td>
<td>10,000</td>
<td>Appropriations</td>
<td>2016</td>
</tr>
</tbody>
</table>
16: Implementation of the Planning Recommendations

This chapter consists of a table, collecting the recommendations of chapters 4 through 13 and offering strategies for implementation. Actions shown in **Bold Face** correspond to the priority recommendations in each topic area; this does not necessarily mean they will be the first in time to be implemented. A target year for implementation is estimated, although we understand these may change with competing priorities or limited resources. Only a few of the actions are “interconnected” to the point where one cannot be done without the other.

This plan presumes the active involvement of an implementation committee to shoulder the burden of carrying the recommendations forward. This may be the existing long-range planning committee or a new committee formed and appointed by the Selectboard. The committee will be responsible for fleshing out and delegating certain of the strategies and working directly on such items as revising ordinance language. Where the implementation table does not assign a task to a specific person or group, it is expected that the implementation committee will take responsibility for the action. The implementation committee is identified as “IC” in the table.

All of the recommendations must function within the existing context of Belgrade’s governmental structure. The plan is a GUIDE, and not intended to overrule or circumvent the normal operation of the Town. No budgetary or regulatory actions may be implemented without the authorization of Town Meeting, and no executive actions without authorization from the Town Manager or Selectboard. In fact, the suggested implementing agent is identified in an effort to spread the work around and not place too great a burden on one committee or individual. But we understand that situations may change, and the Town Manager or Selectboard may have other ideas on how best to carry out the plan.
## Chapter 4: Historic and Cultural Resources

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanently preserve evidence of our history</td>
<td>4-1. Within the Center for All Seasons, display artifacts, images, and paper-based records of our past. The secure, climate-controlled “History Room” will be open to the public on a regular schedule.</td>
<td>Town Historian. As soon as space allows. Belgrade Historical Society - on-going and habitual for items of historical significance</td>
</tr>
<tr>
<td>Better preservation and access to family stories, early settlers, and previously published pieces.</td>
<td>4-2. Establish a website for the Belgrade Historical Society, separately or linked to the Town website.</td>
<td>Web designer, Town Historian; 2014</td>
</tr>
<tr>
<td></td>
<td>4-3. Community outreach to involve students, volunteers, families and groups.</td>
<td>Belgrade Historical Society. To be started as soon as possible, space and volunteers permitting</td>
</tr>
<tr>
<td>Identify and preserve historic structures (including Town House) landscapes, and cemeteries.</td>
<td>4-4. Survey of Historic House/cellar holes and historic areas.</td>
<td>Belgrade Historical Society; Requires volunteers and professional assistance and funding. 2020</td>
</tr>
<tr>
<td></td>
<td>4-5. Restoration of Town House</td>
<td>Belgrade Historical Society. Current project</td>
</tr>
<tr>
<td></td>
<td>4-6. Continue care of 3-4 small, old cemeteries.</td>
<td>Sexton, ongoing</td>
</tr>
<tr>
<td></td>
<td>4-7 Develop an Historic Preservation Ordinance and identify Belgrade Lakes Village as an Historic District. Amend the land use ordinances to require the planning board to incorporate maps and information provided by the Maine Historic Preservation Commission into their review process.</td>
<td>IC, Historical Society. 2015</td>
</tr>
<tr>
<td>Integrate local history into the school curriculum</td>
<td>4-8. Work with administration and teachers in Belgrade Central School to develop teaching modules.</td>
<td>Belgrade Historical Society; Town Historian 2014</td>
</tr>
<tr>
<td>Promote use of Center for All Seasons and North Belgrade Community Center for Community Cultural Events</td>
<td>4-9. Establish clubs with a cultural focus to put on events such as fiddler/guitar jams, open microphone, art demos/ displays, crafting, etc.</td>
<td>Partner with organizations having a cultural focus (e.g., Historical Society, Gardening Club, Friends of the Belgrade Public Library). 2014</td>
</tr>
<tr>
<td></td>
<td>4-10. Host seasonal plays/concerts; Host senior citizen specific cultural events (e.g., Evening at the Pops, Senior Ball)</td>
<td>Recreation Department arrange tents, basic sound system, indoor stage improvements, simple outdoor stage, simple dance floor. As needed</td>
</tr>
</tbody>
</table>
Regulatory protection of historic resources from development

4-11. Through the land use and subdivision ordinances, incorporate maps and information provided by Maine Historic Preservation Commission into existing review process. Planning board, CEO during course of application reviews, ongoing

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Multi-purpose Trail Systems within Belgrade (“Trails that Teach” model)</td>
<td>5-1. Develop a Trail Plan: map existing walking, hiking and cycling trails; evaluate both private &amp; public lands on which additional trails may be established; determine resources needed, priorities and timelines for building and linking trails and recreation sites; locate educational stations along trails</td>
<td>Permanent Trail Map signage on porch at Center for All Seasons. 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Funding sought for expansion and marketing of educational trail system. Board of Parks and Recreation (BPR), schools, 2020</td>
</tr>
<tr>
<td>Expand public Water access in North Belgrade and use at existing access points</td>
<td>5-2. Seek North Belgrade opportunity (deeded trust, donation or other) for waterfront access</td>
<td>BPR: 2015: Identify suitable properties 2015: Establish contact with landowners 2014-2017: Raise funds</td>
</tr>
<tr>
<td></td>
<td>5-3. Expand waterfront access at existing beaches</td>
<td>2014: Develop a communication strategy</td>
</tr>
<tr>
<td></td>
<td>5-4. Update signs and maps of public spaces</td>
<td></td>
</tr>
<tr>
<td>Optimize use of town-owned properties to meet community recreational needs</td>
<td>5-5. Evaluate underutilized town lands and facilities including existing land by Transfer Station for recreational purposes and develop a strategic plan (short-term, long-term) that enables largest potential benefit to community.</td>
<td>Selectboard establish study committee in 2014 Develop strategic plan by 2015 Ongoing: Begin focused discussion with town entities involved with other properties</td>
</tr>
<tr>
<td>Use electronic and social media to engage community in recreational activities</td>
<td>5-7. Utilize website as Community E-Space to Electronically Build Community Spirit Around Recreational Activities</td>
<td>BPR find creative partner, funding &amp; utilize student interns (MHS or college), 2017</td>
</tr>
<tr>
<td></td>
<td>5-8. Build customer database &amp; tracking tool, with email, Facebook and emerging social media to improve communication</td>
<td></td>
</tr>
<tr>
<td>Offer recreational activities for ALL community members, with particular focus on Seniors and Teens</td>
<td>5-9. Maintain ongoing, effective communication campaign “goings-on”, volunteer opportunities, and wish lists</td>
<td>Community resource database to include contact information for customers, volunteers, partners, local organizations. BPR establish sub-committees and volunteer base ready for teen and senior focus, and other priorities, 2014</td>
</tr>
<tr>
<td></td>
<td>5-10. Develop partnerships to support specific teen &amp; senior needs with RSU18, Belgrade Historical Society, Belgrade Health Center, Senior Spectrum, etc.</td>
<td></td>
</tr>
</tbody>
</table>
5-11. Update Board of Parks and Recreation committee structure with Selectboard approval

Selectboard add two senior citizen positions and three youth positions, one each from BCS (5th grader), MMS, and MHS; to committee, 2014.

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**Chapter 6: Natural Resources**

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants and Wildlife</td>
<td>Maintain extensive and diverse wildlife resources and habitat for ecosystem vitality. Prevent destruction or degradation of rare plants and significant natural communities.</td>
<td><strong>6-1.</strong> Promote landowner awareness and action by developing or obtaining and distributing information about the need to protect Essential, Significant, and other wildlife habitats, wetlands, and unusual natural features.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-2. Strengthen regulatory protection by adding deer yards and other State-listed wildlife resources to be protected in subdivision and site plan review based on current information from Beginning with Habitat database. Require applicants to request review from the Natural Areas Program when in area of known unusual communities or rare plants.</td>
</tr>
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<td>6-3. Revise the shoreland zoning ordinance or adopt other land use provisions as needed to include areas within 75 feet of all perennial streams and to ensure adequate protection for kettle hole bogs.</td>
</tr>
<tr>
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<td></td>
<td>6-4. Establish a Critical Resource Conservation District, encompassing all areas of known critical resource assets.</td>
</tr>
<tr>
<td>Land Conservation</td>
<td>Maintain an interconnected system of undeveloped lands which sustains rural resource and recreation values,</td>
<td><strong>6-5.</strong> Prepare an open space plan including criteria for public land acquisition to provide direction and establish priorities for conserving an interconnected system of open space areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-6. Establish an Open Space Acquisition Reserve Account to receive funding from grants, private donations and other sources for the purchase of fee title, easements, or development rights of key parcels of land identified in the open space plan.</td>
</tr>
<tr>
<td>Wetlands. Protect the integrity and natural</td>
<td>6-7. Aggressively enforce existing regulations and determine whether additional protection is needed for wetlands and their</td>
<td>CEO, ongoing</td>
</tr>
<tr>
<td>Functions of Valuable Wetlands.</td>
<td>6-8. Monitor the disturbance of forested wetlands, particularly those adjacent to water bodies and wetlands and not included in shoreland zoning, and request IF&amp;W to evaluate those which have not yet been evaluated to determine their need for protection.</td>
<td>CEO and volunteers, beginning 2014</td>
</tr>
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</tr>
<tr>
<td>Floodplains. Maintain the flood storage capacity of floodplains and eligibility for federal insurance.</td>
<td>6-9. Continue to enforce the Town's floodplain ordinance and determine whether the shoreland zone should extend beyond 250 feet in areas where floodplain boundaries are greater.</td>
<td>CEO, ongoing</td>
</tr>
</tbody>
</table>
| Visual Resources. Assure that scenic views, historic landscapes, tree-lined roads, and rural character are protected. | 6-10. Amend land use ordinances to:  
   a) Adjust setbacks for new structures in rural areas.  
   b) Limit tree cutting within new development to enhance rural character by the maintenance of existing forested buffers.  
   c) Encourage development designs which maximize the preservation of views and rural features, i.e. stonewalls; and which limit outdoor lighting.  
   d) Regulate the size, lighting, number, color, and height of signs, especially in rural areas.  
   e) Regulate the visual impact of communication towers.  
   6-11. Discourage the expansion of street lights in rural areas except where safety necessitates.  
   6-12. Educate landowners about the Open Space Tax law. | Regulatory changes, 2015 |
| Gravel Mining. Recognize gravel as a valuable economic resource and permit extraction while preventing adverse impacts. | 6-13. Protect Belgrade Esker/Delta Complex in districts:  
   • uses which threaten ground water are excluded or controlled through performance standards, and  
   • residential development is allowed but not encouraged, at least until extraction is complete in the vicinity.  
   6-14. Encourage redevelopment of pits for other uses. | Land Use Plan, 2015 |
| Regional Coordination | 6-15. Initiate and/or participate in interlocal and/or regional planning, management, and/or regulatory efforts around shared critical and | Selectboard, conservation committee, 2014 |
| | | |

Belgrade Comprehensive Plan DRAFT
Coordinate resource protection with neighboring towns.

## Chapter 7: Water Resources

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lakes.</strong> The Belgrade Lakes will continue to be known throughout Maine and the nation for their outstanding water quality and scenic beauty.</td>
<td>7-1. Establish the conservation committee that was recommended in the 1998 comprehensive plan</td>
<td>Selectboard, authorize by 2014.</td>
</tr>
<tr>
<td></td>
<td>7-2. Inventory town roads to determine which segments have the greatest impact on water quality and develop and implement a remediation program.</td>
<td>Conservation committee, 2014.</td>
</tr>
<tr>
<td></td>
<td>7-3. Continue to train town road crews in DEP’s standards for erosion and sedimentation control and apply to all Town-owned road &amp; facilities projects.</td>
<td>Selectboard, town manager, ongoing</td>
</tr>
<tr>
<td></td>
<td>7-4. Continue commitment to clean storm drains in Belgrade Lakes village.</td>
<td>Public works, ongoing</td>
</tr>
<tr>
<td></td>
<td><strong>7-5. Ensure continued strong levels of protection to control phosphorus from all sources of new development and other land use disturbances.</strong> Improve implementation of the Ordinance’s existing phosphorous, storm water and soil erosion control standards by utilizing the Board’s existing authority to hire technical reviews of these submissions to ensure they are complete and meet the requirements of the ordinance, paid for by the developer.</td>
<td>Retain DEP’s phosphorus control methods and erosion and sedimentation standards in land use ordinances, including roads, individual new homes (with flexibility for existing small lots), and significant earth moving disturbances. Require code enforcement inspection at critical time(s) to ascertain compliance.</td>
</tr>
<tr>
<td></td>
<td>7-6. Actively support the lake associations, land trust, and private initiatives aimed at protecting and improving lake water quality and educating the public about appropriate techniques. Continue to annually support the BRCA Conservation Corps.</td>
<td>Selectboard, Conservation Committee, ongoing</td>
</tr>
<tr>
<td></td>
<td>7-7. Actively pursue the development of Watershed District in order to receive increased conservation funding.</td>
<td>Conservation Committee, Long-term</td>
</tr>
<tr>
<td><strong>Ground Water</strong></td>
<td><strong>Regional Coordination</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Belgrade will continue to have a high quality ground water resource of ample quantity for public and private drinking supplies.</td>
<td>Cooperate with communities and regional/local advocacy groups to protect water resources.</td>
<td></td>
</tr>
</tbody>
</table>

| **7-8.** Request lake associations to provide information for distribution at the town office, promoting boater awareness of sensitive wildlife populations and habitats on the lakes. | **7-9.** Track contamination sites and encourage citizens to share the results of problematic water quality test results with the Town. |
| **7-10.** Use, and update as possible, existing data from DEP and DHS and the Town's plumbing inspector regarding identified contaminated sites and sites which have old underground tanks when reviewing development proposals to determine whether available ground water is already contaminated or likely to become so. | **7-11.** Strengthen standards to protect private and public drinking water supplies from contamination from petroleum and hazardous substances. Requiring proposed petroleum storage facilities and businesses using or generating hazardous substances to provide documentation of compliance with State laws and regulations governing drinking water protection. |
| **7-12.** Consider whether a protective district is needed for the school's water supply. | **7-13.** Continue to engage local officials in other watershed towns in making lake protection plans, regulations, and activities consistent. |

**Designate the code enforcement officer as a contact and resource, and establish a procedure for dealing with problems. 2015**

**Planning Board, Ongoing**

**Add to commercial development performance standards, 2015**

**Selectboard, 2016**

**Selectboard, planning board engage in regular multi-town meetings through Maine Lakes Resource Center, beginning 2014.**

### Chapter 8: Public Services and Management

<table>
<thead>
<tr>
<th><strong>Community Goals</strong></th>
<th><strong>Recommended Actions</strong></th>
<th><strong>Implementation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adapt personnel, facilities and</strong></td>
<td><strong>8-1. Develop a master plan exploring sites in the “central triangle” location for the development of a new Town Office and</strong></td>
<td>Committee to develop a plan outlining infrastructure needs and Capital funds needed.</td>
</tr>
</tbody>
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Belgrade Comprehensive Plan DRAFT
| Public Safety: Maintain high standards of responsiveness, professionalism, and cost effectiveness. | **8-2.** Identify changes in government structures and staffing, i.e. elected verses staff positions, bidding policies; and facilities needed to meet services demands in the next 25 to 50 years. | Begin in 2014  
Town manager, 2015 |
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<tr>
<td><strong>8-3.</strong> Continue seeking private or regionalized services when quality service and cost effectiveness can be attained. Continue contracting yearly agreements to local service providers.</td>
<td>Transfer Station services should be explored along with winter storm road maintenance agreements. 2014 on going</td>
<td></td>
</tr>
<tr>
<td><strong>8-4.</strong> Minutes of all town boards and committees should be prepared electronically (if not already being done), published in a standard format for ease of reading, and published on the town's website. This would greatly enhance the openness of town government and perhaps encourage more citizen involvement.</td>
<td>Town office and board/committee secretaries, webmaster, ongoing.</td>
<td></td>
</tr>
<tr>
<td><strong>8-5.</strong> The town's website should be significantly upgraded and marketed to our citizens. We should also continue offering electronic communications to our citizens, for instance, sending Annual Reports, newsletters, etc. via email.</td>
<td>Webmaster, 2015</td>
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<tr>
<th>Solid Waste: Meet and exceed the State Goal of recycling 50% of the mainstream waste.</th>
<th><strong>8-6.</strong> Develop and update annually a five year fire protection, management, and budget plan, including evaluation of need for a full time Fire Chief and Rescue Director.</th>
<th>Fire chief, town manager, 2013 on going</th>
</tr>
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<tr>
<td><strong>8-7.</strong> Continue to maintain effective mutual aid agreements, especially during week days, and recognize the contributions of local businesses which allow employees to respond to alarms during work.</td>
<td>Fire Chief, Selectboard, 2013 on going</td>
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<td><strong>8-8.</strong> Adequately compensate fire and rescue personnel for expanded reporting, response, and inspection duties.</td>
<td>Town manager, ongoing</td>
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<tr>
<th>Library: Extend Library Services to</th>
<th><strong>8-9.</strong> Develop and implement mandatory recycling and work with commercial hauler to increase recycling rate.</th>
<th>Town manager, transfer station staff, ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8-10.</strong> Work with surrounding communities in selling recyclables and explore the need for a storage facility for recyclables.</td>
<td>Town manager, MRRA, 2016</td>
<td></td>
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<tr>
<td><strong>8-11.</strong> Provide free access to library services for the entire community, including free technology based library services.</td>
<td>Increase hours of operation contingent on funding, 2015</td>
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<tr>
<td>Community Goals</td>
<td>Recommended Actions</td>
<td>Implementation</td>
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<tr>
<td><strong>Road System:</strong> Continue providing excellent quality roads with a well planned stable budget.</td>
<td>9-1. Make annual budget decisions for road reconstruction, repairs, and maintenance based upon RSMS Inventory and Condition of Road Surface annual report. Growth areas, historical costs, pavement management techniques, and road related revenues must also be taken into account.</td>
<td>Five year road management plan and update it annually, Road commissioner, 2014 and beyond. Continue exploring innovating techniques to improve road quality and minimize long term costs. 2013 on going.</td>
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<td></td>
<td>9-2. Collaborate with DOT to maintain and improve state highway system, including storm drain systems, in a good and safe condition.</td>
<td>Collaborate with Maine DOT on RT # 27 improvements through the Village district to the Rome Town line. Reserve local matching funds on a regular basis for state highway projects in Belgrade. 2014 on going.</td>
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<td></td>
<td>9-3 Contract with the County or State for increase traffic control in summer especially in the Belgrade Lakes village.</td>
<td>Selectboard, 2014 and ongoing</td>
</tr>
<tr>
<td><strong>Alternate Modes:</strong> Encourage pedestrian and</td>
<td>9-4. Establish on-road bicycle routes and signage connecting Belgrade villages.</td>
<td>Board of Parks and Recreation, 2016</td>
</tr>
</tbody>
</table>

Chapter 9: Transportation Systems
<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
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</thead>
<tbody>
<tr>
<td>Embrace and encourage Belgrade as a bedroom and retirement community, and a tourism destination</td>
<td>10-1. Prohibit new manufacturing and large scale commercial in rural areas. Allow expansion of existing manufacturing facilities. <strong>10-2. Ensure that new commercial developments are attractive, well landscaped and maintain adequate vegetative buffers from public roads and abutting properties, are compatible with the neighborhood, and do not create a nuisance, health hazard, or pollution</strong> 10-3. Maintain the attractiveness of the Rte. 27 gateway into Belgrade and the Belgrade Lakes region. 10-4. Maintain and enhance the Belgrade “brand” with New England style architectural standards for new commercial development in Belgrade Lakes village and Belgrade Depot, and uniform and attractive town signs.</td>
<td>See Land Use Plan, Chapter 14. Site development performance standards, 2015. Route 27 Corridor, in Land Use Plan Addition of design standards to commercial review standards, 2015 IC work with business groups, realtors, etc. on town “theme.” 2017</td>
</tr>
<tr>
<td>Improve the review process for commercial</td>
<td>10-5. Enact changes to how we regulate commercial development: a. Clarify standards so more easily understood by applicants b. Lessen some requirements for redevelopment of an existing</td>
<td>Commercial development performance standards, 2015.</td>
</tr>
</tbody>
</table>

Chapter 10: Economic Development

| System Efficiency: Manage land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled. | 9-5. Review land use ordinances to ensure they are compatible with the Sensible Transportation Policy Act, State access management regulations and State traffic permitting regulations for large developments. 9-6. Amend land use ordinance standards to encourage efficient transportation systems and provide for future street connections. | IC, Land use ordinance review, 2015 IC, Land use ordinance review, 2015 |

IC, Land use ordinance review, 2015

IC work with business groups, realtors, etc. on town “theme.” 2017

IC, Site development performance standards, 2015.
| Development, and its implementation and enforcement to ensure equitable treatment of prospective developers while protecting Belgrade’s economic assets. | business location

c. Strengthen standards that serve to reduce nuisance potential in village, residential, or mixed use neighborhoods, including noise, lighting, signage, solid waste, odors, and traffic
d. Enforce requirement that site plan to be to scale.
e. Establish architectural design and landscaping standards for formula businesses in the Belgrade Lakes village, the Belgrade Depot and the Rte. 27 rural corridor.
f. Strengthen language to address how the ordinance will be enforced and financial penalties. |

| Improve code enforcement following permit issuance: |
| a. Monitor implementation and maintenance of required landscaping plans to ensure the attractiveness of new development within the community. |
| b. Require on-site meetings with CEO prior to the start of construction and again upon completion to review the conditions of approval and to ensure compliance. |

| Add standard language to all permits issued clarifying that the permit is only for what was approved by the Planning Board, nothing more or different. |

| Ensure home occupations do not create nuisances, traffic hazards and other public health risks and fit into residential neighborhoods. |
| 10-8. Create a permit by rule for very small, non-obtrusive businesses. This alternative permitting system would be administered and enforced by the CEO, with performance standards for new development with a small footprint (e.g. less than 15000 square feet of disturbance and less than 7500 sq. feet of impervious surfaces) with minimal stormwater impact. Include a requirement to notify the CEO and certify compliance with the applicable standards prior to issuance of occupancy permit, or start of operation. |

| Participate in regional economic development planning efforts |
| 10-9. Continue to participate in regional business and economic development activities and planning initiatives. |

| The Planning Board and CEO will develop written permitting guidance to provide to potential business developers, to be made available on the Town website, 2014 |
| CEO, 2014 |

| Add process to existing commercial development review, 2015 |
| Selectboard, ongoing |
Chapter 11: Housing

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure a diversity of housing opportunities so that at least 10 percent of new housing is affordable to households earning less than 80 percent of median income.</td>
<td>11-1. Review subdivision requirements and revise any that increase costs without a rational basis.</td>
<td>IC, land use ordinance review, 2015</td>
</tr>
<tr>
<td></td>
<td>11-2. Consider permitting higher densities for multi-family units and cluster development designed for seniors, consistent with open space recommendations in the land use plan.</td>
<td>Land Use Plan, chapter 14</td>
</tr>
<tr>
<td></td>
<td>11-3. Continue to permit mobile home parks in growth districts.</td>
<td>IC, land use ordinance review, 2015</td>
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<td></td>
<td>11-4. Maintain the provision permitting the addition of one accessory apartment per dwelling unit in growth districts.</td>
<td>IC, land use ordinance review, 2015</td>
</tr>
<tr>
<td></td>
<td>11-5. Encourage or participate in regional initiatives to support a workforce housing committee or regional affordable housing coalition.</td>
<td>Selectboard/town manager contact Sidney, Augusta to solicit interest in regional initiative, 2016</td>
</tr>
<tr>
<td></td>
<td>11-6. Monitor the construction/addition of new housing units and report annually on whether at least 10% of new residential development is affordable.</td>
<td>CEO, 2014 and ongoing</td>
</tr>
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</table>

Chapter 12: Farming and Forestry

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>12-1. Provide literature about farm practices and conservation planning to landowners and inform them about farm and open space and tree growth tax laws.</td>
<td>Town office gather and distribute literature; website provide links., 2014</td>
</tr>
<tr>
<td>Belgrade's farm fields will continue to be important to the local economy and for their visual and wildlife values.</td>
<td>12-2. Adopt standards which encourage clustered development designs which maximize the preservation of fields and pastures.</td>
<td>Planning board consult with Soil and Water Conservation District staff if developing land use regulations pertaining to agricultural management practices. 2015 and ongoing</td>
</tr>
<tr>
<td>Forestry</td>
<td>12-3. Adopt clustered development designs that maximize the preservation and interconnection of forested land and open space set aside or in lieu payments to the conservation land acquisition reserve account.</td>
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<td>- Maintain forest land as a productive resource to:</td>
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<tr>
<td>• sustain the forest economy and jobs,</td>
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<td>• sustain diverse wildlife,</td>
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<td>• protect air and water quality and climatic stability,</td>
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<td>• ensure adequate drinking water supply (i.e. ground water),</td>
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<td>• manage stormwater,</td>
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<td>• maintain recreation opportunities, and</td>
<td></td>
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<td>• conserve rural character.</td>
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<td>12-4. Increase and actively manage all town-owned forest land and dedicate the revenues to the conservation land acquisition reserve account.</td>
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<td>12-5. Educate landowners about the water quality and other impacts of poor forestry practices.</td>
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<td>12-6. Monitor logging roads and timber harvesting to determine whether State laws and regulations provide adequate protection for Belgrade's watersheds and wildlife.</td>
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<td>12-7. Amend shoreland zoning to ensure maintenance of vegetative buffers within 75 feet of the normal high water line of all perennial streams.</td>
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<td></td>
<td>IC, amendments to performance standards for subdivisions, 2015.</td>
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<td></td>
<td>Preparation of forest management plans, 2016 and ongoing</td>
<td></td>
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<td></td>
<td>Town meeting policy on dedicated revenue, 2017</td>
<td></td>
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<td></td>
<td>Organize an outing to show the public what should be done to manage and improve town forest land, 2015</td>
<td></td>
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<tr>
<td></td>
<td>CEO, ongoing</td>
<td></td>
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<td></td>
<td>SZ amendments, 2015</td>
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<td></td>
<td>Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices</td>
<td></td>
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<tr>
<td>Local Economy:</td>
<td>12-8. Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations.</td>
<td></td>
</tr>
<tr>
<td>Support farming and forestry and encourage their economic viability.</td>
<td>12-9. Include agriculture, commercial forestry, and land conservation that supports them in local economic development planning.</td>
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<td></td>
<td>Land use plan, chapter 14.</td>
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<td></td>
<td>Selectboard, planning board, ongoing</td>
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</table>

**Chapter 13: Growth and Development**

<table>
<thead>
<tr>
<th>Community Goals</th>
<th>Recommended Actions</th>
<th>Implementation</th>
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</thead>
<tbody>
<tr>
<td>The Town should implement the Future Land Use Plan as guidance in review of new</td>
<td>13-1. Incorporate the Future Land Use Plan (Chapter 14) into new or amended land use ordinances.</td>
<td>IC and planning board, 2015</td>
</tr>
<tr>
<td></td>
<td>13-2. Create and maintain a functional electronic system to track development applications and approvals for the town. Incorporate GIS Map</td>
<td>Town manager, selectboard, planning board, 2015</td>
</tr>
<tr>
<td>Developments and Permits</td>
<td>Layers developed as part of the Comprehensive Plan. This may include periodic review and update of the map layers, printing of selected map products, etc.</td>
<td>Acquisition or contracting for GIS capability, 2016.</td>
</tr>
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</table>
| Ensure that local ordinances are up to date and utilize standards that are appropriate for the community. | 13-3. Conduct a systematic review of existing ordinances and revise and/or combine existing ordinances in conformance with recommendations of this plan. In addition to recommendations in other chapters, the following items should be incorporated:  
b. Existing requirements for gravel pits (within the Commercial Development Review Ordinance) should be reviewed to verify that Belgrade gravel pits are in compliance - particularly the reclamation requirements.  
c. Review setback and frontage requirements in all existing ordinances for consistency and revise as needed.  
d. Ensure that ordinances include standards for private roads.  
e. Develop regulatory procedures to ensure that existing septic systems are not polluting lakes and streams.  
f. Develop new standards for commercial wind power generation and other over-height structures.  
g. Adopt provisions which ensure open space protection in rural areas (i.e. cluster development; open space set asides or contributions to the Conservation Land Acquisition Reserve account; incentives such as density bonuses; and transfer of development rights. | IC, Land use ordinance review, 2015 |
| Provide increased and improved Code Enforcement | 13-4. The Town should review/revise/create a job description and performance goals for the CEO, and provide funding and hours for the CEO as necessary to meet these goals. Job functions should include:  
a. Providing guidance to developers, builders, and homeowners.  
b. Identifying and reporting violations and prosecuting violations and administering fees or penalties.  
c. Compliance inspections of active permits.  
d. Completing site inspections before, during, and after development  
e. Investigating citizen complaints and reporting on investigations.  
f. Annual reporting to include accounting of number of compliance inspections conducted and violations found, and how resolved, and tracking of location and type of permits issued. | Town manager review and recommendation based on job description and performance goals, 2016. |
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<tr>
<td>13-5.</td>
<td>Explore the possibility of a CEO shared with one or more other towns in Watershed.</td>
</tr>
<tr>
<td>13-6.</td>
<td>Provide ongoing periodic third party oversight/ review of code enforcement activities and the permitting process.</td>
</tr>
<tr>
<td>13-7.</td>
<td>Undertake a comprehensive compliance review and inspection of existing developments approved under the Ordinance since 2001, providing a time line to come into compliance.</td>
</tr>
<tr>
<td>Improve fairness and efficiency of town’s development processes</td>
<td>13-8. Prepare “Citizen’s Guide” to Town Ordinances and Permit Process to inform and educate the public, developers, and town officials.</td>
</tr>
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<td></td>
<td>13-9. Provide training for Planning Board members on ordinance and permit requirements and processes. Ensure new Planning Board members attend Maine Municipal Association planning board training, or equivalent training.</td>
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<td></td>
<td>13-10. Planning Board agendas should be published in advance, like Select Board meeting agendas. Agendas and minutes should be posted on website in a timely manner. Records of decisions and permits issued should be filed and indexed.</td>
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<tr>
<td></td>
<td>13-11. Ensure all existing permit approval standards are met by applicants, including phosphorous control, storm water, soil erosion control and visual screening standards. Phosphorous and storm water control plans to be developed by a Maine professional engineer, certified geologist, certified soil scientist or other appropriate certified professional.</td>
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<td>13-12. The Planning Board and CEO will meet annually with Town Manager and Board of Selectmen to review policies, procedures and to discuss challenges faced implementing the ordinance.</td>
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<td>13-13. The Town Manager will attend Planning Board meetings at least once per quarter to evaluate how well operating and if properly implementing ordinance.</td>
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<td>13-14. Development of a more complete review checklist, findings of fact and permit templates with project specific and standard conditions of</td>
</tr>
<tr>
<td>Town manager, 2016</td>
<td>Evaluation by the town attorney or another qualified professional of Planning Board and CEO operating policies and procedures for effectiveness, 2016.</td>
</tr>
<tr>
<td>Town manager, 2016</td>
<td>Town manager, planning board, 2015</td>
</tr>
<tr>
<td>Town manager, ongoing</td>
<td>Town manager, ongoing</td>
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<tr>
<td>Town office staff, ongoing.</td>
<td>CEO, 2014 and continuing</td>
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<tr>
<td>Beginning in 2014</td>
<td>Town manager, ongoing</td>
</tr>
<tr>
<td>Town attorney assist Planning Board, 2014</td>
<td>Town manager, ongoing</td>
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<tr>
<td>Action</td>
<td>Timeline</td>
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<td>------------------------------------------------------------------------</td>
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<tr>
<td>Planned development of the “Central Triangle”</td>
<td>13-16</td>
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17: Regional Coordination

This plan would not be complete without a focused look at opportunities for Belgrade to cooperate with neighboring towns and other entities to achieve our objectives. Regional coordination recognizes that while there are many things that Belgrade can accomplish on our own, some of these can be done cheaper, faster, and more effectively if we join forces.

Regional coordination is not a new concept. Belgrade has engaged in it many times in the past and today. Many of the recommendations in previous chapters of this plan presume that it will continue. Each instance will have to be evaluated, however, to determine if it will really result in a better outcome.

The following sections document existing instances of regional cooperation and suggest new areas to look at. Each of the suggestions is documented by recommendations elsewhere in this plan. The list is divided into three general areas: Natural Resource Management, Public Services and Facilities, and Growth and Development.

Natural Resources Management:

Existing Coordination:

- By far the most obvious and effective instance of regional cooperation is management of the Belgrade Lakes Watershed. The Town recognizes that it would be futile for only Belgrade to make an effort to protect lake water quality while those lakes are also bounded by Rome, Mount Vernon, Sidney, and Oakland. The actual act of coordination is achieved by organizations like the Belgrade Regional Conservation Alliance, the Belgrade Lakes Conservation Corps., and lake associations, but their efforts are supported both politically and financially by the Town.

Future Opportunities:

- Should the town establish a conservation committee (recommendation 7-1), as was recommended in the 1998 plan, one of its first activities will be to reach out to other towns and conservation organizations. The rationale for this is so that we can benefit from the work done by other entities and not duplicate it.
- The work of the conservation committee and groups from neighboring towns should eventually result in formation of a Belgrade Lakes Watershed District (7-7). A watershed district is a mechanism for bringing in more outside money and expertise for protection of the lakes.
• The conservation committee is also tasked with overseeing development of an open space plan (6-5). Since an objective of such a plan would be to prioritize regional assets, such as wildlife habitat and recreation corridors, it will require communication across town lines. The committee should also be able to learn from the planning effort for the Kennebec Highlands, and utilize the land trust structure and funding opportunities that already exist.
• The Town can also take the lead in management efforts to address other natural resource issues as they arise. (6-15).

Public Facilities and Services:

Existing Coordination:

• Public services are an area where the town has long recognized and relied upon the sharing of personnel which would be too expensive for us to afford alone. The best example of this is Belgrade’s use of the Kennebec County Sheriff and state police for law enforcement. Without these, Belgrade would need its own police force. Belgrade also uses regional emergency dispatch and PSAP.
• Other examples of personnel sharing are our mutual aid agreements with neighboring fire departments and our contracted use of assessing agent and code enforcement officer. Both are able to contract with other towns to perform at a level of expertise that Belgrade would otherwise have to hire full-time for.
• Belgrade’s use of a transfer station and recycling program are evidence of regional cooperation. Without them, the Town would still be burying all of its trash on Dunn Road. Trash is now transported to the Crossroads facility in Norridgewock, along with a dozen other towns, and recycling is marketed through the Maine Resource Recovery Association, which aggregates recyclables statewide for better prices.
• Belgrade is a member of a shared school system. RSU#18 consists of Oakland, Sidney, and Rome. Having a consolidated district and high school/middle school not only saves money over going it alone, but offers students a wider range of academic and extra-curricular opportunities.
• Belgrade also shares the cost of dam maintenance with Rome and Oakland.

Future Opportunities:

• The Belgrade Board of Parks and Recreation will be preparing a trail plan (recommendation 5-1). It will make sense to coordinate trail mapping and development with neighboring towns for a continuous regional trail system. The town should also look to the school system as well as neighboring towns for providing more facilities and opportunities for active youth recreation.
• Recommendation 8-10 suggests that there is more we can do to improve regional marketing of recyclables, including a regional storage facility.
• The plan also recommends that we continue to maintain mutual aid agreements (8-7), contract with the sheriff’s office for village traffic controls (9-3), and partner with the Maine State Library (8-11).
We should also continue to explore new opportunities for regional cooperation when they present themselves or a need is identified (8-3). These may include cooperative purchasing or equipment sharing, regional service delivery, or sharing of personnel.

Growth and Development:

Existing Coordination:

- Belgrade has seen the advantage in regional cooperation for economic development. The town supports the Belgrade Lakes Region Business Group, which includes businesses from Belgrade, Oakland, Rome, Mount Vernon, and Smithfield.
- Belgrade also supports Kennebec Valley Council of Governments, which develops economic development infrastructure throughout Kennebec County as well as providing counseling and financial assistance for individual businesses. The town manager is vice president of the organization in 2013-14.

Future Opportunities:

- The plan recommends that the Town continue to participate in regional business and economic development activities (recommendation 10-9).
- The town will have to address affordable housing needs at some point if it wants to continue its growth. Since the town is not able to tackle this issue alone, it should look for regional partners to promote affordable housing options (11-5).
- A major recommendation of this plan is to implement the Land Use Plan (13-1). In the course of doing so, the town should be taking into account development trends outside of our boundaries. In particular, the plan expresses concern about incremental commercial growth on Route 27, creeping outward from Augusta (10-3). This will require communication with Sidney and Augusta to anticipate regulatory issues and needs.
APPENDICES

#1: Raw Results of the Public Opinion Survey

#2: Referenced Maps
Belgrade Comprehensive Plan Survey
Tabulation by Mary Vogel and Mary DeRosiers

1. Belgrade’s 1998 Comprehensive Plan contained a broad vision statement with four goals. Please tell us if you think this vision is still important. *Please rank on a scale of 1-10 how important each goal is to you (10 = most important).*

   a. Protect the quality of Belgrade’s lakes by making sure that all development and land use activities do their fair share to limit phosphorous in storm water runoff.

   Responses: 1(least) – 10(most)
   
   1           2           3            4            5         6        7        8         9           10
   4           0           2            1          12        1        5        16        17        261

   b. Conserve and enhance the traditional character of village by ensuring that new development complements existing style, setbacks, etc.

   Responses: 1(least) – 10(most)
   
   1           2           3            4            5         6        7        8          9           10
   4           3           3            4            24      14       28     50      26         149

   c. Encourage economic development that is consistent with the town’s character by making it obvious and easy to locate in desired areas.

   Responses: 1(least) – 10(most)
   
   1             2           3            4            5         6        7        8          9           10
   15    3 11 7       42         9  35    59 19         110

   d. Conserve the special character of rural areas and minimize municipal costs by limiting sprawl, strip development and fragmentation of open space.

   Responses: 1(least) – 10(most)
   
   1             2           3            4            5         6        7        8          9           10
   4            1           6            7            17       2        28      34       34        176

2. How do you feel about the rate of development in Belgrade in the past twenty years?

   *Check one.*
   
   Too Slow  34  About Right  204  Too Fast  56  Much Too Fast 16

3. Do you think the current pattern of rural development is a problem in Belgrade?

   *Check one.*
   
   Problem Now 76  Problem in 10 years 53  Problem in the future 68  Not a problem 96

4. Shown below is a sliding scale depicting the tradeoff between residential and commercial development in the villages.

   *Please indicate by circling the number where you think our future emphasis should be:*

   a. Belgrade Lakes Village

   Responses:
   
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<thead>
<tr>
<th>Emphasize residential</th>
<th>----</th>
<th>Emphasize commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  2  3  4  5  6  7  8  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 13 21 60 58 24 42 19 27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b. Belgrade Depot

Responses: 23 14 16 21 97 20 37 30 36

c. North Belgrade

Responses: 33 26 30 33 86 19 26 14 19

5 As part of the comprehensive plan, the town will develop a Land Use Plan indicating how we manage development and growth within the town.

**How strongly do you agree or disagree with each statement on a scale of 1-10?**

1 (disagree) – 10 (agree)

a. The town should strengthen its land use ordinances

Responses 1 (disagree) – 10 (agree)

b. The town should identify specific areas/districts for residential development, commercial development, and open space preservation.

Responses 1 (disagree) – 10 (agree)

c. The town should NOT limit the location of new residential and commercial development (it should be allowed anywhere in town).

Responses 1 (disagree) – 10 (agree)

d. The town should work to limit the number of lots in future subdivisions to control the impact on schools, transfer station, roads etc.

Responses 1 (disagree) – 10 (agree)

e. Development should be managed to minimize impact on natural habitat, natural resources, scenic beauty, and special character of Belgrade

Responses 1 (disagree) – 10 (agree)

6 Do you think that future development in our villages should be designed to blend in with historic architecture?

BLV Belgrade Depot North Belgrade None

7 What types of NEW commercial development would you like to see in Belgrade?

**Check all that you agree with.**

a. 155 Retail Stores
b. 76 Manufacturing/industry
c. 188 Farming/forestry and support businesses
d. 185 Accommodations (motel, B&B, etc.)
e. 163 Tourist services
f. 118 Medical offices/labs
g. 19 Auto sales/service
h. 60 Call center
8 What size of new RETAIL development would you prefer to see in Belgrade? **Check one.**
   a. **71** None  
   b. **168** Small (up to 10,000 square feet)  
   c. **71** Mid-sized (10,000-50,000 square feet)  
   d. **6** Large (50,000-100,000 square feet)  
   e. **10** Shopping center/mall

9 With the future arrival of natural gas along Routes 27 and 11, should the Town actively promote the establishment of a commercial or light industrial park along this route?  
   **100** Yes  
   **159** No  
   **59** No opinion

10 The Town of Belgrade owns about 12 acres between Routes 11 and 27 (existing gravel pit). What do you think should be done with it?  
   a. **48** Sell to private developer  
   b. **139** Develop for town office or other municipal use  
   c. **124** Reclaim/preserve for open space or park  
   d. **19** Other: ____________________________

11 To promote economic development, we need to identify our assets and use them. In your opinion, what are Belgrade’s most important economic assets? **Check no more than two.**
   a. **13** Sand and gravel deposits  
   b. **31** Lands with agricultural potential  
   c. **282** Belgrade’s lakes  
   d. **24** Forest resources  
   e. **25** State highways (Routes 27, 8/11)  
   f. **34** Future natural gas lines  
   g. **68** Villages/existing businesses  
   h. **75** Proximity to I-95, Augusta & Waterville  
   i. **173** Belgrade’s rural character and landscape  
   j. **16** Overall commercial development potential  
   k. **2** Other (please specify)  
   l. ____________________________

12 Regulation of new commercial development is necessary to ensure that it does not damage existing neighborhoods or environmental resources. Which of the following areas do you think we should have stronger standards in? **Check all that you agree with.**
   a. **161** Traffic /parking  
   b. **203** Noise  
   c. **144** Signs  
   d. **152** Odors  
   e. **154** Exterior lights  
   f. **181** Exterior appearance  
   g. **92** Hours of operation  
   h. **210** Stormwater runoff  
   i. **220** Clutter/junk/solid waste  
   j. **20** Other: ____________________________

13 If the Town were to identify specific areas/districts for commercial development, what factors should be considered? **Check all that you agree with.**
   a. **199** Access to major roadways (Routes 8/11 or 27)  
   b. **237** Located away from residential neighborhoods  
   c. **277** Located away from sensitive habitat and natural areas  
   d. **60** Located within village areas  
   e. **193** Located near (clustered with) other existing or new commercial activities.  
   f. **170** Located so as to minimize impacts on scenic views and special character.
14 Should the town require town meeting approval for commercial development projects that exceed a certain minimum size? (approval now is required from planning board only).

Yes 63  No 21  No opinion

15 Home-based businesses are those which can operate throughout town on what is normally residential property – yours or your neighbors. What types of businesses would you agree should be classified as “home-based?” Check all that you agree with.

a. 219 Carpentry  g. 188 Beauty salon  
b. 155 Firewood sales  h. 266 Bed and breakfast  
c. 197 Antique sales  i. 85 Auto/small engine repair  
d. 107 Contractor/construction  j. 122 Craft/book/gun shop  
e. 165 Professional office  k. 217 Day care facility  
f. 133 Real estate sales  l. 228 Home cleaning service

16 Should the Town expand its regulation of commercial development to include wind turbines and cell towers?

wind turbines 187  cell towers 171  neither 73

17 What type of new residential development would you like to see more of in Belgrade? Check all that you support.

a. 252 Individual Homes  
b. 47 Multi-Family Homes  
c. 145 Small Residential Subdivisions  
d. 15 Large Residential Subdivisions  
e. 182 Village-style residential development with open space  
f. 9 Mobile Home/Trailer Park

18 The location of new housing affects the cost of public services, the impact on the environment, the ease of access and aesthetic values. Each statement below concerns the location of housing. Indicate on a scale of 1 to 10 how strongly you agree with them.

1 (disagree) – 10 (agree)

a. The town should encourage housing to develop on back land in order to slow development along existing town road frontage.

Responses 1 (disagree) – 10 (agree)

1 2 3 4 5 6 7 8 9 10
62 10 10 9 49 7 16 35 8 69

b. The town should encourage housing to develop along existing town roads.

Responses 1 (disagree) – 10 (agree)

1 2 3 4 5 6 7 8 9 10
46 10 9 11 52 14 13 37 7 61

c. The town should encourage new subdivisions to be built in a way that preserves land for open space or farming.

Responses 1 (disagree) – 10 (agree)

1 2 3 4 5 6 7 8 9 10
16 6 0 3 27 9 12 69 23 156
19. As part of the comprehensive planning process, we must look at strategies to keep local housing decent and affordable. Which of the following steps do you think the town should undertake? **Check all that you agree with.**

- a. Promote affordable housing among private developers
- b. Smaller lot sizes should be permitted in village areas versus rural areas
- c. Encourage rental housing units/apartments
- d. Encourage mobile home parks
- e. Apply for grants to improve/weatherize substandard housing
- f. Promote or build a senior housing community
- g. Promote the use of Maine State Housing financial assistance programs.

20. Belgrade has a number of existing land use regulations. If you are not familiar with them, please skip this question. **Indicate whether you feel our land use regulation is adequate.**

<table>
<thead>
<tr>
<th>Ordinance</th>
<th>Weakened</th>
<th>Adequate</th>
<th>Strengthened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Ordinance</td>
<td>5</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>Commercial Development Review</td>
<td>6</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Manufactured Homes/Mobile Home Park</td>
<td>5</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Adult Business</td>
<td>5</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Minimum Lot Size</td>
<td>7</td>
<td>47</td>
<td>30</td>
</tr>
<tr>
<td>Subdivision</td>
<td>6</td>
<td>33</td>
<td>38</td>
</tr>
</tbody>
</table>

21. How do you rate Belgrade’s Code Enforcement? **Check one.**

- Poor 18
- Needs improvement 87
- Effective 129
- Very Effective 17

22. Should the town invest in improving code enforcement?

- Yes 135
- No 71
- No opinion

23. Does the Town need to make additional effort to protect the quality and quantity of Belgrade’s natural resources?

<table>
<thead>
<tr>
<th>Natural Resources</th>
<th>Yes</th>
<th>No</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) lakes</td>
<td>286</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>b) plants &amp; wildlife</td>
<td>204</td>
<td>32</td>
<td>57</td>
</tr>
<tr>
<td>c) undeveloped land/natural features</td>
<td>211</td>
<td>28</td>
<td>62</td>
</tr>
<tr>
<td>d) wetland</td>
<td>214</td>
<td>37</td>
<td>52</td>
</tr>
<tr>
<td>e) flood plains</td>
<td>146</td>
<td>47</td>
<td>83</td>
</tr>
<tr>
<td>f) historic landscapes &amp; scenic views</td>
<td>226</td>
<td>23</td>
<td>54</td>
</tr>
<tr>
<td>g) groundwater</td>
<td>226</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>h) gravel</td>
<td>106</td>
<td>57</td>
<td>108</td>
</tr>
</tbody>
</table>

24. Should the Town take more aggressive action to control milfoil in Belgrade’s lakes?

- Yes 277
- No 28
- No opinion

25. Should the Town pay for maintenance and upkeep of cemeteries that are not town-owned?

- Yes 66
- No 185
- No opinion
If the Town wishes to preserve historic and cultural assets, what should be its priorities?

Check all that you feel are important.

a. 212 ______ Preserving landscapes
b. 190 ______ Open land
c. 246 ______ Scenic views
d. 206 ______ Historic buildings
e. 181 ______ Historic artifacts
f. 218 ______ Historical documents and photographs
g. 125 ______ Oral histories
h. 147 ______ Archeological sites

How can we best protect and teach our culture & history?

Check all that you feel are worthwhile.

a. 88 ______ more publicity
b. 149 ______ service projects by e.g. boy/girl scouts, volunteers
c. 160 ______ outreach to schools
d. 146 ______ documenting oral histories
e. 156 ______ a comprehensive book on Belgrade history
f. 161 ______ controlled storage of artifacts and documents
g. 137 ______ historical/genealogical display and research area
h. 205 ______ town history website

Would you like to see a public space where Belgrade historic artifacts and documents could be safely displayed?

204 ______ Yes 27 ______ No 70 ______ No opinion

Which of the following historic preservation activities would you be willing to appropriate MUNICIPAL FUNDING for? Check all that you support.

a. 94 ______ Completion of the 1998 old-house survey
b. 108 ______ Self-guided historic town tour (brochure and placards)
c. 132 ______ Collecting and documenting oral histories from elder residents
d. 54 ______ Performing an archeological survey of prospective local sites
e. 73 ______ Converting existing public space into historical displays
f. 129 ______ Establishing a Historic District in Belgrade Lakes Village.
g. 122 ______ Researching older homes and identifying with date signs

Which of the following outdoor recreational facilities do you think the Town should develop and/or improve further? Check all that you feel are worthy of Town time/investment

a. 119 ______ Trail starting from Center for all Seasons (e.g. to Village)
b. 127 ______ Cross-country ski trails
c. 69 ______ Snowmobile trails
d. 208 ______ Walking/hiking trails
e. 60 ______ Mountain bike trails
f. 175 ______ Sidewalks in village
g. 49 ______ Ice skating rink
h. 12 ______ Disc Golf course
i. 13 ______ Skateboard park
j. 70 ______ Playground equipment
k. 11 ______ Tetherball
l. 6 ______ Roller skating rink
m. 36 ______ Public access to private property for hunting, hiking
n. 152 ______ Public swim beach
o. 138 ______ Public access to our lakes
p. 72 ______ Bike paths on roads
q. 18 ______ Outdoor volleyball court
r. 38 ______ Tennis courts
s. 30 ______ Basketball courts
t. 28 ______ Sailboats
u. 38 ______ Row boats
v. 50 ______ Kayaks/canoes
w. 76 ______ Additional public lands
x. 16 ______ Shuffleboard court
y. 19 ______ Bocce court
z. 32 ______ Horseshoe court
31 Which of the following indoor recreational equipment or facilities do you think the Town should develop and/or improve further? Check all that you feel are worthy of Town time/investment

- Exercise equipment [93]
- Indoor pool [54]
- Sauna [12]
- Indoor golf simulator [8]
- Arcade [4]
- Climbing wall [24]
- More space for groups to meet/communicate/work together [84]
- Game room (for clubs, bridge, board play area) [62]
- Electronic games (video workouts, Wii Dance play/workout) [6]
- Technology for learning or fun [51]

32 Recreation Programming: Belgrade’s recreation program currently offers approximately 35 different programs and opportunities. Please tell us how important they are for you and your family.

Circle a number. 1 = least important, 5 = most important:

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. After school program</td>
<td>105</td>
<td>8</td>
<td>18</td>
<td>24</td>
<td>68</td>
</tr>
<tr>
<td>b. Summer youth camps</td>
<td>89</td>
<td>8</td>
<td>21</td>
<td>47</td>
<td>62</td>
</tr>
<tr>
<td>c. Teen programs</td>
<td>96</td>
<td>11</td>
<td>21</td>
<td>31</td>
<td>55</td>
</tr>
<tr>
<td>d. Toddler programs</td>
<td>110</td>
<td>14</td>
<td>30</td>
<td>19</td>
<td>41</td>
</tr>
<tr>
<td>e. Youth dance and gymnastics</td>
<td>102</td>
<td>19</td>
<td>43</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>f. Youth sports – outdoor</td>
<td>74</td>
<td>11</td>
<td>31</td>
<td>38</td>
<td>49</td>
</tr>
<tr>
<td>g. Youth sports – indoor</td>
<td>85</td>
<td>15</td>
<td>31</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>h. Open gym</td>
<td>80</td>
<td>12</td>
<td>38</td>
<td>41</td>
<td>48</td>
</tr>
<tr>
<td>i. Swimming lessons or open pool</td>
<td>83</td>
<td>13</td>
<td>30</td>
<td>26</td>
<td>48</td>
</tr>
<tr>
<td>j. Adult dance, zumba, aerobics, etc.</td>
<td>74</td>
<td>22</td>
<td>42</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>k. other Outdoor recreation (canoeing/kayaking,etc)</td>
<td>55</td>
<td>14</td>
<td>46</td>
<td>52</td>
<td>44</td>
</tr>
<tr>
<td>l. Adult activities (card clubs, crafts, etc)</td>
<td>66</td>
<td>20</td>
<td>38</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>m. Senior programs (55 &amp; Alive exercise)</td>
<td>47</td>
<td>7</td>
<td>29</td>
<td>34</td>
<td>45</td>
</tr>
<tr>
<td>n. Senior trips or fun learning activities</td>
<td>46</td>
<td>11</td>
<td>29</td>
<td>30</td>
<td>43</td>
</tr>
</tbody>
</table>

33 Would you support expanded recreational programming?

- 37 Yes  - 37 No  - 68 Maybe  - 26 No opinion

34 When would new recreation programs best meet your needs?

- 21 Week days  - 27 Week nights  - 27 Weekend days  - 20 Weekend nights  - 33 Not sure

35 The library in its new location is operating on the same schedule as in the old one. Do you think the schedule should be changed? Check any that you agree with

- 41 Expand Daytime hours  - 70 Add Saturday hours  - 32 Add evening hours
Town of Belgrade
Kennebec County, Maine
Transportation Map
2013 Comprehensive Plan