

**LAND USE INVENTORY**

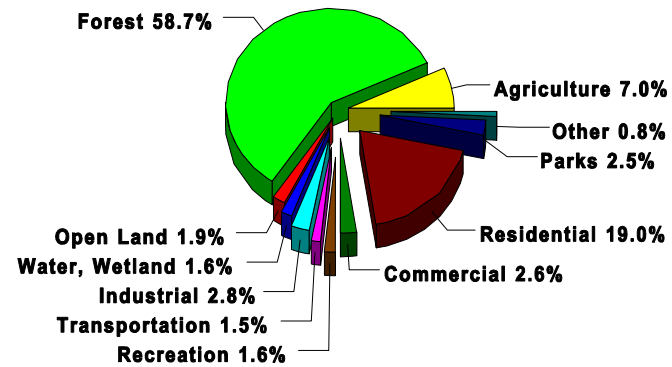
**LAND USE AND SETTLEMENT PATTERNS**

The map “Land Use” shows the geographical location of land uses in the City of Fitchburg. Much of the northern tier of the city is undeveloped. Commercial uses are primarily along major arterial roads in the city. Industrial uses are predominately located along the North Nashua River, and in the areas of Princeton Road and Airport Road. Except for the Cleghorn neighborhood, which historically was a village unto itself, most of the multifamily neighborhoods are within close proximity to the downtown area. These neighborhoods include the College Neighborhood, the Elm Street Neighborhood, Intown, and the Water Street Neighborhood. Single family homes or more suburban neighborhoods are located throughout the city.

**THE CITY AND THE RIVER**

The North Branch of the Nashua River played a key role in the development of the City of Fitchburg. Before electric power became inexpensive and widely available, industry relied on water for power. The river, which flows through the center of the city, is spotted with mills along its banks that were constructed during this era.

**Fitchburg Land Use**



**THE NEIGHBORHOODS**

Fitchburg is a community of neighborhoods. Finntown, Cleghorn, Greektown and the Patch are all examples of Fitchburg’s older neighborhoods that were once ethnic enclaves of immigrant communities that came to work in the city’s mills. These neighborhoods are clustered around the downtown area and are characterized by mixed uses. The housing stock in these neighborhoods was originally constructed to house the employees working in the mills. Many of the homes are multifamily, and constitute the majority of the rental units in the city.

### THE NEW SUBURBS

Much of the new residential growth in Fitchburg has occurred in the more suburban or rural sections of Fitchburg. Of 304 new homes which received occupancy permits between April of 1990 and October of 1997, 298 were single family homes. The location of these homes can be found on the map "New Single Family Homes." Of these, approximately 95% were located in the Rural Residential, Residence A1 and Residence A2 zoning districts. These zoning district are characterized by single family homes and are located around the periphery of the more densely settled center of the city.

### INTOWN FITCHBURG AND OTHER COMMERCIAL AREAS

Fitchburg has several concentrated areas of commercial activity including the downtown (Main Street), the John Fitch Highway, the Parkhill Plaza and the Twin Cities Plaza (which straddles the Fitchburg/Leominster Line). Commercial uses can also be found on almost every arterial street in the city including South Street, Water Street, River Street, Westminster Street, Lunenburg Street and Summer Street.

Geographically located in the center of the City, Intown Fitchburg serves as the center for government activities. City Hall, the Post Office, the District Court House and the Federal Building are all located downtown. The downtown area, like most downtowns throughout the county, experienced a significant decline in economic activity with the advent of the mall and an increase in the reliance on the automobile after the 1950s. While the downtown has lost its role as the premiere retail center of the

region, a renewed effort is being made to make the downtown a prominent center of economic activity. In 1994, a nonprofit organization called Pride, Inc. commissioned the planning consultant Hyett-Palma, Inc. to prepare the Intown Fitchburg Economic Enhancement Strategy 1995. This plan aims at revitalizing Intown Fitchburg and is currently being implemented by Fitchburg by Design, a nonprofit organization dedicated to improving the conditions of the downtown.

### BLACK BEAR COUNTRY

While Fitchburg is viewed primarily as an urban community, the majority of land area in the city is in reality rural. Remarkably, of 17,999 acres of land in Fitchburg 12,170 acres (68%) are either forest, field or in agricultural use<sup>1</sup>. Vast areas of open space can be found in West Fitchburg and the northern half of the city. White tailed deer, beaver and even black bear and moose have been reported in the city. The majority of the city's undeveloped land is located in its northern section. This area has been largely undeveloped because of its hilly topography, its inaccessibility, and its lack of city sewer and water services.



Steep slopes and ledge characterize Fitchburg's undeveloped land.

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<sup>1</sup>Mass GIS, 1985

In addition to forested areas of the city, there are still a number of working family farms in Fitchburg. According to the data kept by the City Assessor's office, nearly 1500 acres of land are currently being used for agriculture in the city. This figure differs from that provided by Mass GIS due to methods of classifying some field and wooded land. During the Summer months two vibrant farm markets operate, supplying city residents with fresh and healthy produce. Farming in Fitchburg meets a local demand for fresh produce, provides local jobs, and provides tax revenues while requiring little in the way of city services.

The large areas of open space located in close proximity to the city's dense, urban center provide Fitchburg with a unique asset. Rollstone Hill and Parkhill Park are two of the green spaces located within the city's densest neighborhoods, and much of the land surrounding the Nashua remains undeveloped. Large tracks of undeveloped, sparsely populated land, such as those in northern Fitchburg and surrounding Oak Hill Country Club, are a short drive or bicycle ride from downtown.

**Land Use Acreage Figures**

<b>Category</b>	<b>Acres</b>
Agriculture	1261
Forest	10560
Open Land	349
Water, Wetland	281
Industrial	512
Transportation	272
Recreation	281
Commercial	473
Residential	3415
Parks	454
Other	142
<b>TOTAL</b>	<b>18000</b>

**LAND USE REGULATIONS**

THE ZONING ORDINANCE

The Fitchburg Zoning Ordinance was first adopted in 1945 and has been updated several times since. Like other zoning ordinances and bylaws in Massachusetts, the Fitchburg Zoning ordinance conforms to the Zoning Act, M.G.L., Chapter 40A. The Zoning Act is a type of Massachusetts General Law known as enabling legislation, which provides a framework for local ordinances and bylaws. A municipality cannot adopt a zoning amendment which conflicts with the Zoning Act.

There are 10 zoning districts designated in the Fitchburg Zoning Ordinance. The Fitchburg Zoning Map displays the zoning district boundaries. The Zoning Ordinance stipulates dimensional requirements and restrictions on uses for each zoning district. The Zoning Ordinance also regulates signs, provides use definitions, establishes zoning enforcement procedures, sets parking requirements and regulates other elements related to land use.

NONCONFORMING LOTS

The map “Lots Nonconforming by Area” shows residential lots that do not conform to the minimum lot area requirement of the Fitchburg Zoning Ordinance. Most of these lots conformed to the lot area requirement in the past but were made “nonconforming” by a zoning change or the adoption of zoning in Fitchburg. A smaller number were given a variance from the Zoning Ordinance

by the Zoning Board of Appeals. Not included in this analysis are smaller lots which were approved through the Cluster or The chart attached to the map provides the percentage of lots that do not meet the minimum lot area requirement for each zoning district. Although only the lot area requirement was considered in this analysis, many of these lots probably do not conform to other dimensional requirements of the zoning ordinance such as



Many downtown homes are built on lots smaller than currently allowed by the city's zoning ordinance.

Planned Unit Development provisions in the Zoning Ordinance.

setback requirements because of their small size. As can be observed from the enclosed chart, the problem of nonconformity is most common in the dense RC district, and becomes less prevalent in each succeeding district. The large number of nonconforming lots is problematic. Although existing structures are exempt from zoning changes by the Zoning Act, a burden is placed on homeowners seeking to build an addition, garage, porch or other external alteration to their property because the Zoning Ordinance requires that a special permit from the Zoning Board of Appeals be issued for any alteration, enlargement, or reconstructed. In addition to the burden on the homeowner, this situation is a drain on the resources of the Zoning Board of Appeals.

#### REDUCED AREA REQUIREMENTS WITH MUNICIPAL SEWER

A relatively unique feature in Fitchburg's Zoning Ordinance is the fact that minimum lot area requirement varies depending on whether or not a site is hooked up to municipal sewer. For example, in the Rural Residential Zoning District the minimum lot area requirement is 65,000 square feet if no municipal sewer is available and 30,000 square feet if municipal sewer is present. From an engineering standpoint this requirement makes sense; by requiring larger lots if a septic system is to be installed, the risk of the contamination of groundwater and drinking water supplies is reduced. This requirement also provides a substantial incentive for developers of large parcels of land to extend the City's sewer system at no cost to the city.

By extending the sewer system the developer is rewarded by being allowed to develop more than twice the number of lots in the same area, thereby increasing project profitability. The city as a whole benefits as well, since it is generally recognized that municipal sewer systems are more “environmental friendly” than on-site septic systems, especially where soils are not conducive to septic systems. The importance of this incentive is further magnified because much of the recent residential development in Fitchburg has been concentrated in the more suburban parts of city, where there is a lack of infrastructure such as sewer lines to support new growth. Sewer line extensions were constructed at no cost to the city by the developers of virtually all of the residential subdivisions which have been constructed in Fitchburg in the last 10 years. Of 304 new homes which received occupancy permits between April of 1990 and October of 1997, 283 (93.1%) tied into the municipal sewer system.

It should be noted that many communities have chosen to discourage the expansion of municipal sewer systems as a method of restricting residential growth. The lack of municipal sewer limits growth by increasing the cost of development and by restricting development where soils are not suitable for on-site subsurface septic systems.

#### DENSITY

The Zoning Ordinance regulates the number of dwelling units allowed in a structure in each zoning district. Single family homes are allowed in all residential zoning districts in Fitchburg. There are two zoning districts in Fitchburg where multifamily dwelling units are allowed. Two and three family homes are

allowed only in Residence B and Residence C districts where they are allowed by right. Residential structures with more than three units are allowed by right in the Residence C district, and by Special Permit from the Planning Board in the Residence B district. All residential development in commercial districts require Special Permits from the Planning Board. Residential uses are not allowed in the city's industrial districts.

Unlike many zoning ordinances, Fitchburg does not have a maximum Floor Area Ratio requirement. Floor Area Ratios limit density by establishing how many square feet of floor area can be constructed on a lot of a given size. In this way, adequate space can be assured for yards and off-street parking. Further, there is no direct restriction on the number of dwelling units that can be constructed. The number of dwelling units is indirectly limited by the height limitation, the number of parking spaces required and the size of the parcel. For example, on a 10,000 foot parcel in the Residence C district, a developer can build a four family home, but is prohibited from constructing two single family homes. This situation creates an economic incentive for the construction of multifamily houses, which have much lower rates of owner occupancy than single family homes. Neighborhoods with high rates of owner occupancy are generally more stable than those with a high percentage of investor-owned properties.

#### USES ALLOWED BY SPECIAL PERMIT

The Zoning Ordinance's Table of Principal Uses identifies when special permits are required in zoning districts. The City Council, Planning Board, and Zoning Board of Appeals are all designated as special permit granting authorities as designated by: SP-C,

City Council; SP-P, Planning Board; SP-A, Zoning Board of Appeals.

The Zoning Ordinance requires special permit granting authorities make mandatory findings prior to the issuance of a special permit that the proposed use:

- C Is in harmony with the purpose and intent of the zoning ordinance.
- C Will not be detrimental or injurious to the neighborhood in which it is to take place.
- C Is appropriate for the site in question.
- C Complies with all applicable requirements of the zoning ordinance.

Although these required findings provide the special permit granting authority with a general framework for determining whether to grant a special permit, more specific guidelines are not provided in the Fitchburg Zoning Ordinance or Special Permit Rules and Regulations.

More specific guidelines would provide a checklist to measure each special permit application. Guidelines would make it clear to the applicant, the decision makers and abutters what the parameters are of what should be approved and what should not. This would help prevent special permit granting authorities from making arbitrary and capricious decisions. For this reason, clear guidelines or standards are more desirable from the applicant's perspective and are therefore generally accepted as "business friendly".

The city's Cluster Development Overlay District is a planning tool that is used to preserve large areas of continuous open space.

The Cluster Development Special Permit, granted at the discretion of the Planning Board, allows the creation of smaller lots than those normally allowed in the zoning district, in exchange for the dedication of at least 30% of the total area of the subdivision as protected open space. This section of the zoning ordinance does not allow the creation of more lots in a cluster development than could be created in a standard subdivision, unless the Planning Board finds that the project exhibits superior design. The decrease in dimensional requirements provides a substantial cost savings for the developer by lowering the amount of infrastructure which must be installed, making the preservation of large amounts of land economically viable.

Like the Cluster Subdivision Special Permit, a special permit for a Planned Unit Development (PUD) may be granted by the Planning Board. The PUD allows a mix of housing options, open space, and commercial uses. The purpose of the ordinance is to encourage efficient development patterns, protect open space, and encourage mixed use development which will benefit the neighborhood. By streamlining the development process, the PUD is also a tool for redevelopment in declining urban areas.



### SITE PLAN REVIEW

Site Plan Review is a common regulation used to ensure that the design of new development will not have a detrimental impact on surrounding properties. It is used to integrate new development



Cluster subdivisions are incentives to preserve open space.

into the community. While most communities in the region have Site Plan Review, Fitchburg does not. A petition to implement Site Plan Review was filed with the City Council in the Spring of 1998.

### WATERSHED PROTECTION

One of Fitchburg's greatest assets is its abundant water supply. Although the adoption of a Watershed Protection District was recommended in 1988, the city has yet to adopt an ordinance or regulations that would protect the city's drinking water supplies. Over 6,700 acres of privately owned land are located within the watersheds of Fitchburg's reservoirs. The city is in the process of building a new filtration plant by the Lovell and Falulah Reservoirs. The U.S.E.P.A. recommends using both watershed protection and water supply treatment to protect the quality of municipal water supplies.

In addition to protecting reservoirs in Fitchburg, the city needs to protect reservoirs which it owns that are located in other towns. Fitchburg must work with the towns of Ashby, Ashburnham, Westminster, Princeton, and Hubbardston to protect its watersheds located in these towns.

### DEVELOPMENT LIMITATIONS OVERLAY

The map "Environmental Constraints" shows that much of the undeveloped land in Fitchburg is characterized by features which make building costly and difficult. Northern Fitchburg contains several reservoirs, and much of the land in the watersheds of these reservoirs is owned by the state and city for the purpose of protecting water quality. Numerous streams and wetlands cross

the surface of the land. Besides being physical barriers to development, wetlands resource areas are protected by the Wetlands Protection Act, creating a permitting burden for the development of these sites. The rural areas of northern and western Fitchburg have rugged geology, with steep slopes and large areas of ledge being the dominant features. Water resources and geology also constrain development in the south-central area of the city, though to a lesser degree. There are several streams in this part of the city, and ledge is common. Despite these constraints, however, these areas have seen substantial residential development in recent years. The low cost of land in Fitchburg has sometimes made building on difficult sites economically viable.

The presence of the Nashua River constrains development and redevelopment in the areas on and near its banks. Due to historical development patterns, the areas adjacent to the Nashua contain most of Fitchburg's industrial land. While the city's historic mill complexes are exempt from the Rivers Protection Act, the presence of the flood plain and the permitting burden involved in working near a river makes these areas unattractive to businesses and developers. The city's largest retail area, the John Fitch Highway, was constructed in the flood plain of Baker Brook. Work in this area is therefore subject to the Wetlands Protection Act and Rivers Protection Act, and flooding of businesses and parking lots is common during wet weather.

### **THE BUILD-OUT ANALYSIS**

This component of the planning process considers city growth

potential based on the current zoning regulations and planning policy. This was accomplished by conducting a residential build-out analysis. The analysis utilized the city's physical constraints to development and current land uses. Maximum land use densities were projected under current residential zoning district regulations to provide an order of magnitude estimate of the number of additional housing units that can be accommodated in the city.

In summary, the build-out analysis provides one perspective of how the city might develop given continued residential growth over the next several decades. The build-out analysis can be a useful tool to consider the long-term implications of current land use policy and regulations. This can be considered and evaluated with the goals and objectives set forth in this plan.

### **Methodology**

The build-out was completed using the Fitchburg Geographic Information System. First, vacant parcels were selected in the residential zoning districts. Vacant parcels were identified by querying the assessors data base to identify those parcels with a total gross floor area of zero. The selection set was then multiplied by the constraint factor of 48%. The constraint factor was calculated based on an analysis of densities of past development projects over the last fifteen years.

The second step in the process was to determine the build-out for those parcels that are partially developed and have additional development capacity (ie. one house on a 50 acre lot). This was

done by selecting parcels that have an area greater than twice the lot area requirement for each residential zoning district. The minimum lot area requirement was subtracted to determine the amount of net vacant land. The resulting amount of net vacant land for each parcel was then multiplied by the constraint factor of 48%.

The last step in the process was to determine the build-out for parcels that are vacant but do not comply with the minimum lot area requirement of the zoning ordinance. Although these parcels are noncomplying, section five of the Zoning Act grandfathers residential lots from minimum lot area requirements (certain restrictions apply). To select vacant non-complying lots, vacant residential lots were selected that have a minimum lot area greater than one third of the minimum lot area requirement for each residential zoning district. After the vacant non-conforming lots are selected, they are multiplied by the constraint factor of 48%.

The following assumptions were made in calculating the Build-Out analysis.

1. 52% discounted for roads and utilities, steep slopes, wetlands and water ways, and inefficient lot configurations.
2. Sewer services will be available as needed.

3. Permanently protected open space was omitted from the build-out. This category of land includes land under Agricultural Conservation Restrictions, Conservation Commission land, parks, land with conservation easements, watershed land, and Audubon Society land.
4. All other current zoning ordinance requirements would remain, such as height limits and parking requirements, where applicable. Zoning districts would remain the same. Land area available for development excludes floodways and wetlands (State and locally-regulated), as per the zoning ordinance.

**Estimated Build-Out for City of Fitchburg**

Census Tract	Approximate Location of Census Tract	Current Lots	Additional Lots	Total Lots at Buildout	% Built Out
7101	South-east Fitchburg, east of the River, to Lunenburg Street	932	84	1016	91.7%
7102	South-Central Fitchburg	1919	1792	3711	51.7%
7103	West Fitchburg	968	1657	2625	36.9%
7104	Upper Cleghorn	697	108	805	86.6%
7105	Lower Cleghorn	632	119	751	84.2%
7106	The South Side	1689	517	2206	76.6%
7107	Downtown, from Lower Main Street to Academy Street	200	38	238	84.0%
7108	The College Neighborhood, Intown north of Academy Street	1067	586	1653	64.5%
7109	Fitchburg State College	5	11	16	31.3%
7110	South of Pearl Street, North of Lunenburg Street	752	151	903	83.3%
7111	Northern Fitchburg	1382	3895	5277	26.2%
Total		10,243	8958	19,201	53.3%

The Estimated Build-out table provides information on the number of homes which have been built in each Census Tract, and compares that to the total number of homes which could be constructed in that area. The figures under the heading “Current

Lots” represent the number of existing homes in each zoning district. The column “Additional Lots” represents the number of new house lots which could be created in each tract, given current zoning requirements and environmental constraints.

The column “Total Lots at Buildout” was calculated by adding the number of existing homes to the number of additional lots. “Percent Built Out” represents the percentage of the total which has been built. A higher figure represents a more built up area, while a lower percentage denotes a more rural area with large amounts of open space which could be converted to housing. These figures become important for generating other growth related parameters.

### **THE FITCHBURG GEOGRAPHIC INFORMATION SYSTEM**

Since 1989 the Fitchburg Office of the Planning Coordinator has been developing a Geographical Information System (GIS).

The GIS is a computer system that is used for mapping and for spatial analysis. Property lines, roadways, wetlands, railroad tracks, water bodies, and building footprints are just some of the coverages or map layers that are contained on the GIS. The parcel coverage, which shows property lines in the city, is linked to the city assessor’s database, allowing otherwise complex queries to be made about land use, ownership, property dimensions, land value, and any other data contained in the Assessor’s database.

The GIS, which was used extensively for the development of this master plan and other strategic plans done in the city, is an invaluable tool. It has proven to be extremely useful in assisting city planners and other city officials in the development of land use policy. Fitchburg, which was one of the first communities in the state to start a GIS program, is now recognized as one of the leaders in municipal GIS.

### LAND USE GOALS AND OBJECTIVES

Promote land uses which maintain and enhance the essential historic and neighborhood character of the City of Fitchburg, particularly the strong downtown and neighborhood centers, stable residential neighborhoods, watershed lands, woodlots and other important open spaces. This includes new construction and historic preservation and adaptive reuse of buildings and sites that complements Fitchburg's historic patterns and natural landscape and creation of new economic opportunities that "fit" Fitchburg.

#### Objectives:

- Support the downtown as the center for governmental and cultural activity for the city and as the location for community economic activity that focuses on retailing, personal services, restaurants and office uses.
- Preserve regional and local historic features by identifying adaptive uses that maintain or enhance their character and place in Fitchburg's history .
- Identify, manage and protect significant environmental resources using imaginative, cost effective, equitable and multi-sector approaches.
- Accommodate new housing stock in areas of the city where site character, access and infrastructure can accommodate such uses while preserving natural resources.
- Strengthen the economic vitality of potential neighborhood service centers. Include provisions for neighborhood gatherings which foster a sense of place.
- Identify infill opportunities in the city to improve commercial/neighborhood corridors.
- Provide options for land resource management including mixed-use developments and open space preservation.
- Develop specific guidelines to analyze the fiscal impact of land use conversion on municipal services and education costs.
- Evaluate the compliance of proposed land use changes with the goals of the master plan and with their contribution to long-term fiscal goals.
- Consider the development of design guidelines to ensure commercial development contributes to the city- and avoids the creation of commercial blight.

**City Character Goal**

Maintain and enhance the existing character of the City of Fitchburg. Protect existing land uses, historic structures, landscapes and environmental features which define this character. Promote carefully planned new construction that adds to the existing character of the city.

**Objectives:**

- Understand and assess the visual and cultural resources that are critical to the character of the city.
- Tailor innovative techniques for implementing the land use policies of the master plan to preserve the visual character of Fitchburg and preserve its key cultural resources while accommodating the growth of economic land uses.
- Promote economic development that is visually compatible with the residential character of the neighborhoods.
- Provide community decision-makers with innovative zoning and site planning tools that facilitate economic use of key parcels while maintaining the essential character of the community.
- Coordinate efforts among all city departments, boards and committees that deal with growth, redevelopment management, and visual character issues. Articulate design review standards relating to the current

community character which can be consistently and equitably administered.

- Appropriately manage historic areas to provide flexibility in reuse that encourages sensitive site improvements and appropriate economic development.
- Agriculture, identified as active farmlands, prime and significant agricultural soils and agribusiness, and important large tract of forest lands should be preserved using creative land management opportunities available under state enabling legislation related to transfer and purchase of development rights, incentive zoning and agricultural real estate tax benefits.
- Encourage the use of non-governmental approaches, such as historic preservation trusts, to preserve the historic character of Fitchburg.
- Preserve the city's key resources based on the development and use of an inventory and analysis of the physical and cultural features of the town.
- Implement a coordinated, comprehensive plan of development and conservation to achieve a vibrant 21<sup>st</sup> Century city with a mutually supportive balance of land uses - neighborhoods, business, civic facilities, natural and cultural resources.
- Administer the land use plan in a fashion that is user friendly and accessible to the public.

- Ensure that new development is designed in a manner which is safe, visually appealing, and environmentally sound.
- Take advantage of Fitchburg's natural resources for a sustainable future.
- Preserve and enhance the special and unique character of Fitchburg's neighborhoods.

### LAND USE RECOMMENDATIONS

- Allow for Childcare uses by right in all districts in accordance with amendment made to M.G.L., Chapter 40A.
- Adopt a reasonable site plan review provision to ensure that new development is designed in a manner which is safe, visually appealing, and environmentally sound.
- Create mandatory design guidelines for:
  - a. commercial development,
  - b. development in historic areas,
  - c. development in rural areas.
- Form a committee to review zoning to ensure compatibility with existing uses and the goals and objectives of the city. This committee should consider both the location of different zoning districts, and the uses permitted in each district.
- Establish standards for drive-up windows and other uses which require special permits to give guidance to special permit granting authorities. Standards would also bolster special permit decisions if appealed.
- Review zoning of Fitchburg State College, Burbank Hospital, Coolidge Park and Fitchburg Municipal Airport for appropriateness.
- Amend the landscape requirements for parking lots to achieve better results. Restrict the amount of impervious surface on a lot.
- Investigate allowing limited commercial development along the southern end of South Street.
- Require fencing around residential swimming pools.
- Adopt an adult entertainment ordinance to regulate adult entertainment uses in the city.
- Increase the maximum height of structures that may be allowed in industrial districts.
- Reduce the setback requirements for structures not used for human habitation (includes decks, sheds, and carports).



- Relax the dimensional standards in the RB and RC zoning districts to eliminate the high number of nonconforming lots.
- Eliminate the special permit requirement for timber harvesting in the Rural Residential zoning district.
- Move zoning boundaries so that they correspond to lot lines.
- Specify minimum dimensional standards in the Cluster Development Overlay District.
- Eliminate research and testing as an allowed use in a NBD zoning district.