# LARIMER COUNTY MASTER PLAN

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# LARIMER COUNTY MASTER PLAN

Adopted by the Larimer County Planning Commission

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### CREDITS

Special thanks to all the citizen volunteers, officials, staff and specialists who have participated so far in the Partnership Land Use Plan and development of this Draft Larimer County Master Plan. Without you, it would not have been possible.

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### **EXECUTIVE SUMMARY**

The Larimer County Master Plan is a policy document that establishes a long-range framework for decision making for the unincorporated area of the County. It includes criteria for development decisions, decisions on public services and capital facilities and decisions on environmental resource protection through its Guiding Principles and Implementing Strategies.

The Master Plan is also intended to be a living document. Implementation will be monitored and the Plan reviewed periodically and amended as necessary, to reflect changed conditions and current values.

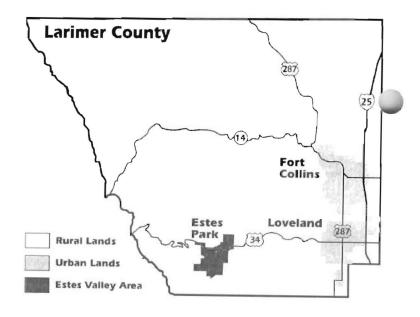
The Master Plan applies to all Larimer County land located outside city and town boundaries, except for the Estes Valley which is part of a separate County/Town planning process. The Master Plan Location Map shows Larimer County, city and town boundaries and the Estes Valley Plan Area.

The Master Plan outlines a Growth Management system with four components. **Key concepts are printed in bold** to highlight the major elements of the Master Plan.

· Consistency: The Land Use Code and other implementation documents will be consistent with the Master Plan. In the past, County plans and regulations have often not been "in sync." The Master Plan includes strategies to be included in the new Land Use Code to implement Plan Principles. Consistency will not require changes in zoning. Rather, performance standards and innovative development patterns like the Rural Land Development Process and Rural Conservation Development (a clustered subdivision) will be used to implement the Plan. Evaluation and monitoring of the implementation process will support achievement of Plan

Principles. Annual review by the Planning Commission will enact changes to keep planning current and proactive.

• Concurrency: An Adequate Public Facilities regulation will be developed to ensure that facilities and services are available to new development, without compromising existing service levels and burdening existing residents with the costs of growth. Adequate levels of service for essential facilities will be clearly defined in the Land Use Code, based on Plan Principles. Capital improvement programming to maintain and upgrade existing services and a revised system of capital expansion fees applied to new development will provide funding.

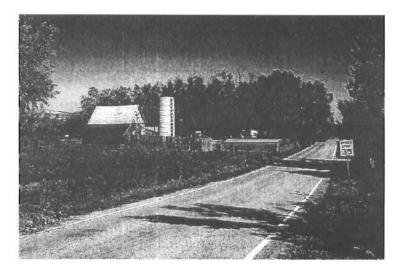


• Cooperation: Intergovernmental Agreements with cities and towns will provide the framework for future urban land use. The Plan provides a hierarchy of the city/County planning areas to facilitate a regional approach to planning through agreements with the municipalities of the County. Growth Management Areas will define future urban areas based on a community plan. New urban zoning will

#### be allowed only in defined urban areas

where services are available. Cooperative Planning Areas allow for special study beyond current projected urban land use needs, where land use decisions now can impact present and future city growth patterns. These areas will also allow for joint planning of areas for community separation. Community Influence Areas describe areas where coordination with the County development review process is desired by cities and towns.

Compatibility: New development will be compatible with natural systems and existing uses through environmental review and performance standards incorporated into the development review process. Information on wetlands, wildlife habitat and other sensitive environmental areas will be included throughout the development design process. Required clustering of new subdivisions creating up to 80 percent open space (depending on existing zoning) will allow room for both new rural residential areas and maintenance of agriculture and natural areas. Performance standards will help quantify buffer areas to maintain compatibility.



To implement the Master Plan, several actions are required. These include adopting a unified Land Use Code, capital expansion fees and revisions to Intergovernmental Agreements with cities and towns in the County. Throughout the implementation process, citizen participation will play a key role. The Master Plan Implementation process is described in Chapter 7, including an Action Plan for the next several years.

### **1. INTRODUCTION**

# 1.1 The Partnership Land Use System

In 1994, the Larimer County Commissioners initiated a project to examine and revise the County's land use planning system. It has evolved to be known as the Partnership Land Use System or PLUS. The Mission of PLUS is described by the Larimer County Commissioners in the following way:

Larimer County is developing the Partnership Land Use System to maintain and enhance our county's quality of life and to be fundamentally fair to all our citizens and to respect their individual rights.

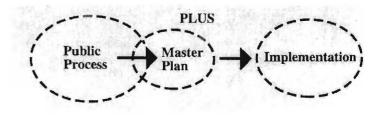
Early in the PLUS project, the County Commissioners conducted a series of land use symposia and community forums to begin to frame the issues surrounding land use, development and growth. At these meetings, citizens expressed concern about two types of development issues.

The first set of issues relates to land use, growth and environmental protection. Principles and strategies for dealing with these concerns make up the majority of this document, the Larimer County Master Plan.

The second set of issues deals with the development process and the difficulties both applicants and concerned community members have in understanding and interacting with the existing land use regulations and development review process. Many citizens stated the concern that the regulations were not clearly tied to the adopted Plan and because standards are often unclear or even contradictory, land use decisions sometimes appear arbitrary or inconsistent. Another concern is to provide adequate neighborhood and community input in the development review process. The next phase of the PLUS process – development of a Land Use Code – will deal with the issues of the development process. Chapter 2 of the Master Plan, Growth Management, states principles for developing the Land Use Code in a manner that is consistent with the citizen input received in the PLUS process.

These two elements, the Master Plan and the Land Use Code, are essential to each other and together comprise the written part of the Partnership Land Use System. The Master Plan states the policy direction for land use decisions in the County and the Land Use Code provides the rules and processes to carry out the Plan policies.

The third element of PLUS is harder to describe but is also an essential element. This component makes up the Partnership part of PLUS. It is really a new way of looking at the planning process and understanding that planning is not only a compilation of policies and rules. Planning is, at its base, a community of individuals finding common goals and working on strategies to achieve them that are fair both to the individuals and to the community. This third element of PLUS must be an on-going process and will continue long beyond the adoption of the Master Plan and the Land Use Code. Examples of this ongoing process include, but are not limited to, education and recommendations from advisory committees.

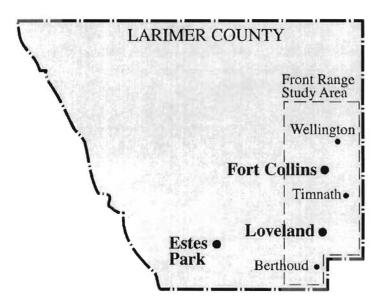


#### **1.2 Fairness Principles**

Developing a land use system that is "fundamentally fair" has been a consistent goal of the Partnership Land Use System, as stated in the project's Mission above. Statements from the citizen input portion of the project indicate that the current land use planning process is considered to be unfair by people on all sides of the issue. References to fairness are repeated throughout citizen comments concerning the new Partnership Land Use System. (See the Larimer County Partnership Land Use System Symposia Summary Report, 1994-1996 available in the Planning Department.) In order to guide PLUS and to provide a means of judging whether the Master Plan and implementing actions meet this goal, the County Commissioners asked the citizen advisory group of PLUS to develop Fairness Principles. The following principles represent a consensus statement from the PLUS Advisory Council (PAC).

A Fair Process:

- is timely;
- has an open process to the public for information, input, etc.;
- has open communication including neighborhood meetings;



Larimer County Master Plan Location Map

- has educational components on the process for affected parties;
- respects individual property rights;
- respects the values of the individuals in the community;
- considers the cumulative impacts and future generations;
- has application of fundamental due process in all administrative deliberations;
- has an appeal process;
- has consistent requirements that contain flexibility within the written criteria;
- has incentives for exceeding the written criteria;
- makes it easy to do the right and responsible thing.

# **1.3 Scope and Purpose of the Master Plan**

Significant changes have occurred in Larimer County since the 1988 Larimer County Land Use Plan was adopted. These changes, most attributable to the 25 percent increase in County population, involve factors such as transportation and boundaries of the municipalities. Additionally, the 1988 land use plan was never implemented by changes in the County land use regulations. These factors make review and revision of County land use policies necessary. Upon adoption by the Larimer County Planning Commission, this Master Plan will replace the 1988 Larimer County Land Use Plan. The Master Plan applies to the whole of unincorporated Larimer County, i.e., all the area outside the corporate boundaries of cities and towns in the County except the Estes Valley area. The Estes Valley area is part of a separate county/town planning process, as described more fully in Section 2.4.2.

The Master Plan Location Map shows the County and its municipalities; it also identifies the Front Range Study Area. This area of Larimer County includes all of the urban and urbanizing part of the County, except the Estes Valley, and about 94% of the total County population. In order to save costs and time, some data elements were collected only for the Front Range Study Area.

The purpose of a county Master Plan is to serve as a policy document for development decisions in the unincorporated area of Larimer County. The Master Plan can be considered the "constitution" for development in the County. It establishes Guiding Principles that should be achieved by all development. For each Guiding Principle the Master Plan outlines Implementation Strategies which provide the framework for staff work programs and for developing rules and regulations that govern land use decisions.

Master planning by county government is authorized in Colorado State Statutes. Section 30-28-106 (1) states: It is the duty of a county planning commission to make and adopt a master plan for the physical development of the unincorporated territory of the county.

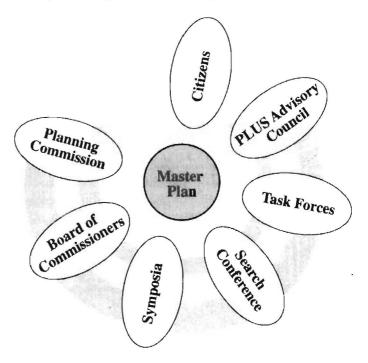
The Larimer County Master Plan has several purposes:

- To communicate the land use policy of Larimer County to citizens, landowners, developers and other governmental entities.
- To provide a policy basis for developing the Land Use Code and other land use regulations and procedures and to determine whether they are in harmony with the community's vision and implementation strategy.
- To provide a basis for intergovernmental agreements with the cities and towns of Larimer County, neighboring jurisdictions and the many public and quasi-public agencies that provide services to Larimer County residents.

- To encourage County departments, other agencies and private developers to design projects in harmony with the natural characteristics of the land and the capabilities of public service and facilities.
- To provide a basis for setting priorities and funding mechanisms for public capital improvements in Larimer County.

#### **1.4 Public Participation**

The Partnership Land Use System planning project began with a public participation process. Citizen input has been a significant part of PLUS throughout the development of the Master Plan. In October 1994, the County Commissioners organized a land use planning symposium to explore issues surrounding growth, specifically for the northeast area of the County. The symposium brought together approximately 60 citizens and public officials for a series of two weekend sessions. Participants were selected by a citizen committee with the intent of bringing together a wide variety of backgrounds and viewpoints.



The results of the symposium were impressive. The group began with considerable polarization between those who believed development should be encouraged and those who believed development should be discouraged. By the end of the session most participants expressed a feeling of having found common ground and a basis for proceeding to correct problems with the current planning system. For example, much discussion focused on the need for alternatives to division of large properties into 35-acre tracts. State law currently exempts this type of land division from local subdivision regulations. This discussion led directly to the formation of a 35-acre Task Force and eventual adoption of a new, flexible approach to rural development called the Rural Land Use Process (see Section 3.2).

Three more symposia followed, with the last held early in 1996. Each symposium included a public reporting of results by citizen participants at community forums held around the County. In all, more than 200 citizens participated in this symposium process. The expression of concerns about the existing situation and the common vision for a planning process that could protect the quality of life of County residents are expressed in the following Themes and throughout the Master Plan.

Other important components of the citizen input process are the PLUS Advisory Council (PAC), the Agricultural Task Force, the 35-Acre Task Force, the Environmental Advisory Board (EAB) and the PLUS Steering Committee which consists of the Larimer County Planning Commission and the Board of County Commissioners.

#### 1.5 Master Plan Themes

The following planning themes emerged from the public participation process described above. These themes provide key policy direction for developing the Master Plan's principles and strategies and are reflected throughout the Plan. Strategies form the basis for the Action Plan (see Section 7.3)

TH-1. The planning process shall be based on natural patterns of the landscape. Land use shall be suitable for and compatible with the environmental characteristics of the site. The planning process shall recognize distinctions in the land, establish performance standards based on natural systems, and develop incentive-based programs to help landowners keep lands open that are desired for their open space values.

TH-2. Natural and cultural resources shall be identified, conserved and protected. Environmental quality and impacts shall be considered when evaluating changes in land use. Long-term cumulative impacts of land use policies and decisions on environmental resources shall be monitored and used to evaluate the performance of the planning process.

TH-3. Agriculture will remain a viable long-term segment of Larimer County's economic, cultural and social fabric. The planning process shall promote the continued health of agriculture through voluntary, incentive-based programs and strategies.

TH-4. The Master Plan shall support logical settlement patterns that reflect the character of the Open West, i.e. the existing character of Larimer County, and protect existing neighborhoods. Proposed uses shall be compatible with adjacent uses and help create sustainable communities. Performance standards shall be used to protect existing uses from adverse impacts to ensure that new uses are "good neighbors." Also, development design performance standards for cluster development will help achieve an open feeling in developed areas.

### TH-5. Urban land use shall ultimately be in cities and towns.

Becoming an urban service provider is not a goal of Larimer County. However, in Urban Growth Areas and LaPorte, in order to support community plans, urban land uses will be required. Also, the County may encourage urban development in certain areas suitable for such uses in return for preservation of open lands elsewhere in the County.

# TH-6. Open lands shall continue to be a defining feature of the landscape of Larimer County.

The mission of the Larimer County Open Lands Program of the Parks Department is to preserve and provide significant open space, natural areas, wildlife habitat, parks and trails for present and future generations. Other planning initiatives will also help maintain large areas of undeveloped land in the County. Programs include clustered development in rural areas, the Rural Land Use Process as an alternative to 35-acre development, and voluntary programs to strengthen agricultural viability. Important open lands, natural areas, parks and trails are defined in the Help Preserve Open Spaces Initiative, the Larimer County Parks Master Plan, the Plan for the Region between Loveland and Fort Collins, and other adopted plans.

#### TH-7. Buffers shall be provided between cities and towns to maintain community separation.

Property rights within these buffer areas must be respected, as in all situations. Implementation strategies will include acquisition of land or development rights and transfer of development rights (TDRs) from otherwise developable land, as well as programs to help landowners maintain agricultural uses.

#### TH-8. Adequate public facilities and services shall be provided concurrent with

#### development.

Level of service standards included in the Master Plan shall be performance-based and shall reflect differences between urban and rural areas. If adequate facilities and services are not available at the time of development, the developer will have several options: wait for facilities and services to be improved, finance needed improvements or select a different site. In rural areas, reducing the density of the project may also be an option. Capital expansion fees tied to actual costs of new development shall also be used to fund needed improvements in urban and rural areas.

- TH-9. The Master Plan shall encourage a balanced, economically feasible multimodal transportation system for safe and efficient travel in the County. The Transportation Plan shall support and encourage the land use patterns and policies established by the Master Plan. The Master Plan shall provide and protect the mobility/transportation corridors designated in the Transportation Plan.
- TH-10. The planning process shall support a sustainable, balanced economy with equal access to housing opportunity, employment and upward mobility. Larimer County will continue to encourage diverse, viable companies, industries and organizations that provide high-quality employment opportunities and that benefit all citizens and businesses. The County will seek partnerships with other jurisdictions and the private sector to provide a regional approach to economic growth and sustainability, including provision of affordable housing.

#### TH-11. Intergovernmental cooperation will be critical for Plan implementation. The Master Plan shall integrate land use policies and implementing strategies that complement and support the goals and

objectives of the cities and towns and of the region. Amendments to the current Intergovernmental Agreements will need to be implemented, where feasible, concurrent with the Master Plan.

#### TH-12. The Master Plan and the implementing rules and regulations shall be consistent.

This consistency concept does not require that the Zoning Map be amended to strictly conform to the Plan's designations or that zoning be changed to implement the plan. Rather, it is intended to ensure that Plan concepts are carried out through the County's land use regulations, so that the Master Plan can serve as the County's policy basis for development and conservation of resources.

TH-13. The planning and development review process shall be fair, open and predictable, and meet the needs and interests of the community without infringing on the rights of individuals. The process shall seek innovative solutions to accomplish guiding principles. The process shall also address the needs of landowners who are seeking alternatives to full-scale development, by encouraging voluntary agricultural districts, the Rural Land Use Center (RLUC) program and programs coordinated with the Open Lands Board and area land trusts.

### TH-14. Planning is viewed as a proactive process.

The Master Plan and supporting implementation documents shall be defined, followed and periodically reviewed and refined. Monitoring and evaluation criteria shall be established for all appropriate implementation strategies to determine if they are achieving the Master Plan themes and guiding principles; and, if not, strategies shall be modified as necessary.

#### 1.6 Plan Organization

The remainder of the Master Plan is organized into the following chapters:

#### Chapter 2. Growth Management:

provides an overview of the Growth Management System and principles for urban and rural development, agricultural lands, economic development and affordable housing.

#### Chapter 3. Land Use:

describes County land use patterns for urban, rural, and special plan areas and includes the Land Use Framework Map. Principles for urban and rural land use, the Airport Influence Area and requirements for all development are included.

#### Chapter 4. Public Facilities and Services:

includes a description of public facilities and services and an approach to providing and funding facilities. Principles include adequate public facilities, coordinated planning and funding mechanisms.

#### Chapter 5. Transportation:

describes existing transportation facilities and deficiencies, and sets out principles for a future transportation plan and improvements program.

# Chapter 6. Environmental Resources and Hazards:

outlines an approach for identifying and protecting resources, and provides principles for environmental review and protection of specific resource types.

#### Chapter 7. Implementation:

provides a framework for developing consistent, fair and user-friendly land use regulations and other implementation programs and outlines an evaluation and monitoring program for implementing actions. An Action Plan for specific implementing actions is included. Throughout the Master Plan, plans, reports and studies are referenced which were used as background material. These documents provide the basis for many principles and strategies in the Plan. In many cases, the documents are the result of countless hours of citizen and staff work. This tremendous effort on the part of individuals and groups has helped to give the Master Plan much greater depth than would have been possible otherwise. The documents are listed at the end of the Master Plan in *Reference Materials*. The many individuals who were part of this process are hereby acknowledged and thanked. Your contribution is invaluable.

### 2. GROWTH MANAGEMENT

The heart of the new Master Plan for the Partnership Land Use System (PLUS) is a growth management process designed to ensure that the County operates within its resources, protects the environment and enhances the lives of its residents. For this system to be successful, it will require close cooperation with the cities, towns, special districts and State and Federal agencies that are involved in land use and environmental protection within the County. This chapter provides an overview of the system and the roles and responsibilities that the County and others will assume for implementing it.

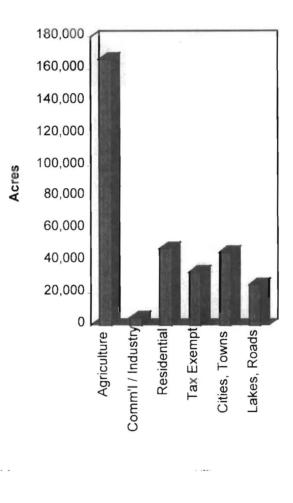
The growth management process established in this Plan will shape urban and rural development patterns in the unincorporated areas of the County and guide what happens in the foothills, mountains and agricultural areas, as well as in the community separator areas. More specifically, the growth management strategy in this Plan is intended to reflect six factors that will guide decision-making:

- Need to conserve and enhance sensitive biological resources, protect viable agricultural lands and conserve rural lands.
- Need to protect public investment in infrastructure.
- Need to balance land use with availability of services and provide alternatives to auto-dependent uses.
- Need to work in partnership with municipalities and special districts.
- Need to set priorities to provide clear direction for both public and private land use investments.
- Need to be fundamentally fair.

As background for the guiding principles, a perspective on development trends is offered.

# 2.1 Existing Land Use and Development Trends

Within the Front Range area and outside town limits, just over 10% of the land is in the "residential improved" category, that is, land developed with housing units. Most of the remainder of the area outside cities and towns is currently used for agriculture. (See chart below, and Table 2.1, next page.)



#### Land Use in Front Range Study Area

Larimer County Master Plan

	Acres		
	By	By Type	Percent Of
Land Use	Category		Total
Agriculture	166,282		51.5%
Dry Land		25,083	
Grazing		64,153	
Irrigated		74,607	
Other		2,439	
Commercial & Industrial	4,663		1.4%
Commercial		2,811	
Industrial		799	
Mineral-Mining		1,053	
Residential	48,017		14.9%
Residential Improved		34,761	
Residential Unimproved		10,700	
New Subdivision		1,481	
Home Owners Association		583	
Mobile Home		492	
Tax Exempt	33,052	33,052	10.2%
Cities and Towns	45,408	45,408	14.1%
Incomplete Data, Lakes, or	25,372	25,372	7.9%
Road ROW			
Total	322,794	322,794	100%
Source: Larimer County Plannin	ng Division, Ma	rch 1996.	

#### Table 2.1 Existing Predominant Land Use - Front Range Study Area

Table 2.1 describes the existing land uses in the Front Range Study Area. The recently approved residential projects show a trend toward relatively large lots. In the urban growth areas (UGA's) residential densities are averaging about one unit per acre. This is a significantly lower density than the commonly accepted urban density of two to six units per acre. Lots outside the UGA but within the Front Range Study Area are averaging about 3.3 acres.

The average lot size for minor residential developments (MRDs) is significantly higher, almost 15 acres per lot. While these minor residential developments make up 10 percent of the new acreage, they create only three percent of the new lots. Outside the Front Range Study Area lots tend to be much larger on average because many parcels are being divided into 35 acre lots.

This trend toward large lots will have two effects. It will lead to scattered development, which increases the cost of services, and it will require that more agricultural land be taken out of production to accommodate residential development.

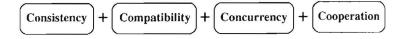
#### 2.2 Growth Management System

The Larimer County growth management approach builds on, and refines, the themes that have been identified to guide the County in its planning and implementation efforts. This approach has four key dimensions: Consistency: The implementation documents, particularly the Land Use Code that will include zoning and subdivision regulations, performance standards and incentive programs, will be consistent with Master Plan principles and policies.

**Concurrency**: Adequate public facilities and services are provided concurrent with new development and they must either be in place, or adequate funding mechanisms established, prior to completion of any project, so new residents are not left without required facilities and services. Level of service standards will be established for urban areas and rural areas consistent with the County's capital improvement program and fees collected to offset the costs of growth.

**Cooperation**: An intergovernmental growth management approach is more effective than having individual jurisdictions act independently on growth management policies. The County will continue to work with cities and towns to plan for future urban areas adjacent to communities and help the municipalities implement community separators. The County will also continue to coordinate with the State and Federal land management agencies that have planning and management responsibilities in the County.

**Compatibility**: New development needs to be compatible with existing uses and with the environment. The idea is to be a good neighbor and a good steward of the land. Compatibility will be enhanced through neighborhood meetings, buffering requirements, performance standards and environmental review.



These four key dimensions are addressed throughout the Master Plan and in the Land Use Code.

The growth management system includes strong commitments to environmental resource protection and provision of adequate public facilities. The system uses level of service standards and performance standards to protect resources, while at the same time offering creative options for site planning. The performance-oriented approach allows more flexibility than traditional zoning and it will allow development to reflect the rural character of disparate parts of the county.

This growth management system affects the timing, location and quality of new development with the overall objective of enhancing livability within the County for existing and future residents. Because this will be a major new step, it will be important to monitor progress of Plan implementation and the effects of these measures on existing resources. The County will identify those resources and indicators to be used to monitor the impacts of new development and identify where potential problems may be occurring so remedial measures or mitigation can be put in place to avoid adverse effects.

#### 2.3 Adequate Public Facilities and Capital Expansion Fees

One of the major growth management challenges in Larimer County is to ensure that development does not cause a deterioration in the level of service provided to existing residents. The County's growth management system does not include any attempt to control the rate of growth through building permit caps, limits on lots created or similar mechanisms. Instead, it relies on a combination of regulatory and financial mechanisms – adequate public facility regulations, capital expansion fees and capital improvements planning – to ensure that facilities are in place to serve new development as it occurs.



The County's growth management approach emphasizes a regional, multi-jurisdictional approach to ensuring adequate public facilities. A regional approach is necessary because the systems of facilities and services required to serve new development cross jurisdictional boundaries. On the one hand, many of the public facilities that serve development in unincorporated areas, including water, wastewater and fire protection, are provided by municipalities or special districts. On the other hand, many of the facilities and services provided by the County, including detention facilities, open space and County roads that function as regional transportation corridors, benefit residents of both incorporated and unincorporated areas.

Recognizing the need for multi-jurisdictional solutions, the County's growth management system includes adequate public facility standards that are coordinated with municipal and special district service providers and regional capital expansion fees that may be assessed on new development in both cities and unincorporated areas, where appropriate. Implementing such a regional approach will require close cooperation between the County, municipalities and special districts.

#### 2.3.1 Adequate Public Facilities

A key feature of the growth management system is the requirement that adequate public facilities be available in order for new development to occur. The adequate public facilities (APF) regulations will require detailed review of development applications in relation to adopted level of service standards for specific public facilities. APF requirements are a means of preventing premature development in remote areas where major system facilities are inadequate or of controlling the pace of development in areas where facilities are congested. If existing public facilities are not adequate to accommodate the development, the developer will have several options: wait for facilities to be improved, finance the needed improvements or select a different site. For certain facilities, reducing density or intensity might also be an option but not within Urban Growth Areas where both urban densities and urban facilities are required.

Adequate Public Facility (APF) regulations are most defensible in the context of a longrange plan for providing major public facilities. They are not designed to be a means of preventing growth or of requiring developers to construct major system facilities having community-wide benefit. In the event that a developer offers to construct or contribute a portion of the cost of such a facility in order to have it in place earlier than would be possible with existing funding sources, reimbursement agreements, pro rata agreements or other mechanisms will be encouraged to ensure that the developer is not forced to contribute a disproportionate share of the cost.

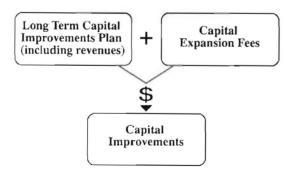
The County's approach to ensuring adequate public facilities is based on quantifiable

standards that can be measured, mapped and monitored. In many cases, these standards are different for urban and rural areas, in recognition of the different levels of service that are appropriate in very different environments. For example, the traffic threshold triggering the need for dust mitigation or paving of gravel roads is more stringent in urban areas due to the higher population densities that characterize urban areas.

In some cases, it is appropriate to establish different standards within urban or rural areas. For example, water storage requirements for fire fighting purposes are higher in wildfire hazard areas. Similarly, different standards may be appropriate when the affected facility is an existing facility that is more difficult to upgrade (e.g., an existing road with narrow right-of-way) than a brand new facility.

#### 2.3.2 Capital Expansion Fees

The County's growth management system is grounded on the principle that new development should pay its fair share of the cost of the capital facilities needed to keep up with growth. Capital expansion fees, which are one-time charges assessed on new development, are designed to address this need. Colorado State Statutes specifically authorize statutory counties such as Larimer County to collect certain narrowly defined capital expansion fees, such as fees-in-lieu of school and park land dedication.



In order to implement its principle of growth paying its own way, the County will continue to use the capital expansion fees which are specifically authorized, proceed cautiously on an expanded capital expansion fee program and work with other jurisdictions to clarify the role of capital expansion fees in growth management systems, through the legislative and judicial processes.

Capital expansion fees must be clearly tied to the impacts of development on public facilities, and must be used to provide or improve facilities that benefit the development in question. In order to meet these legal requirements, the County must perform a careful analysis of existing conditions and the public facility needs which are attributable to new development. The County will begin with a study of the County road system, to determine the feasibility of using capital expansion fees to finance improvements made necessary by growth and development. The County will also review other fees. dedications and fees-in-lieu to ensure that the methodologies for calculating land and fee requirements are consistent with current case law and are fair.

Wherever possible, the County will seek to establish partnerships with other entities providing similar public services, i.e. transportation, to share capital expansion fee revenues and coordinate improvement projects.

While capital expansion fees can be used to finance some growth-related improvements, the County also has a number of existing capital needs, such as obsolete bridges, that cannot be attributed to future growth. Consequently, the County's capital needs will be addressed through a long-range capital improvements plan that is funded with a variety of revenue sources in addition to fees. This two-pronged financing approach will result in an equitable sharing of the capital costs attributable to growth and pre-existing capital deficiencies.

#### 2.4 Intergovernmental Agreements and Cooperative Planning

Comprehensive planning in Larimer County implies coordination with a number of entities and jurisdictions that are responsible for planning and growth management within their areas. The County's system for coordinated planning and growth management builds on successes from the past: Intergovernmental Agreements, jointly-defined urban areas, and cooperative planning efforts such as the Northern Regional Planning Study.

### 2.4.1 Intergovernmental Agreements and Growth Management Areas

In the mid-1970's Larimer County joined with the Cities of Loveland and Fort Collins to establish future urban service areas in a coordinated manner. This effort ultimately resulted in the adoption of Intergovernmental Agreements (IGAs) between the jurisdictions and designation of Urban Growth Area (UGA) overlay zoning districts around the two cities. These Agreements and UGA boundaries have been amended several times but the basic purpose and structure have remained the same.

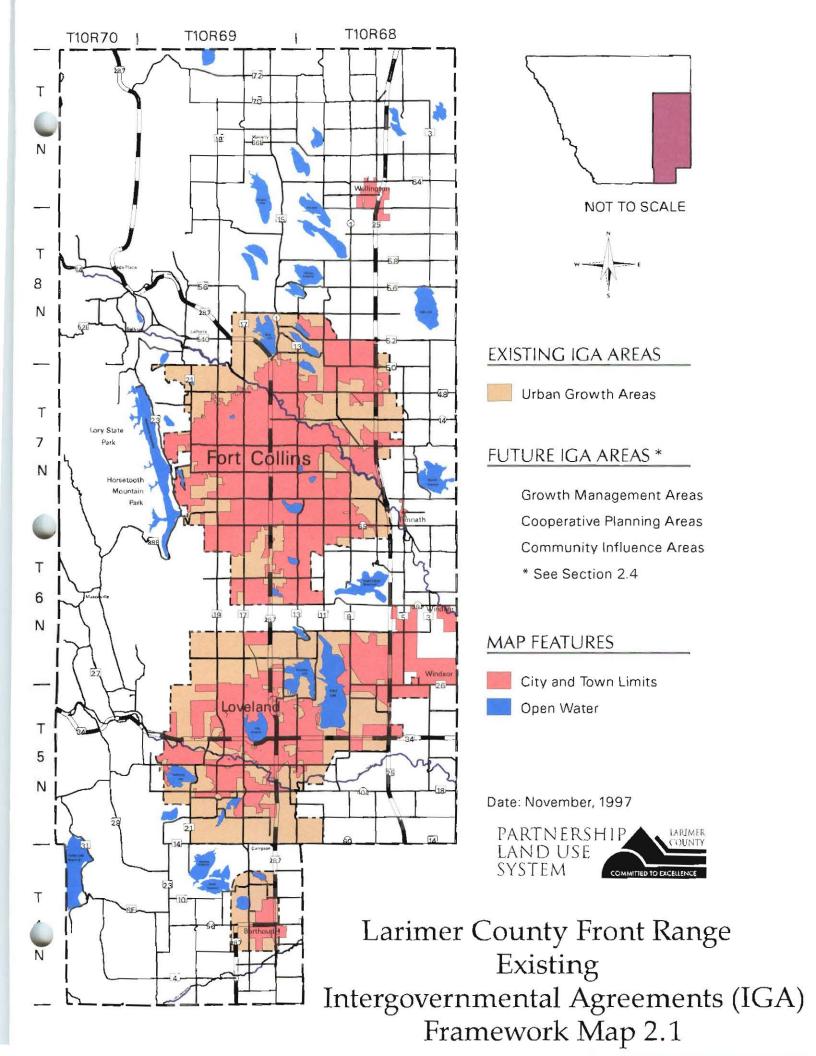
Since 1980, Urban Growth Areas have been used as a tool to encourage urban development to locate in cities and towns or adjacent to these areas with the expectation that the developed areas would soon be annexed. The first UGAs were established around the cities of Fort Collins and Loveland via Intergovernmental Agreements (IGAs). In 1994, the Town of Berthoud and Larimer County entered into an IGA that established an urban growth management area surrounding the Town.

In 1994-95, Larimer and Weld Counties, and many of the municipalities within these Counties, with assistance from the State of Colorado Department of Local Affairs, funded a regional planning study. This study made numerous recommendations pertaining to the desired form and pattern of the region and identified opportunities for coordination and collaboration on land use issues. One set of recommendations suggested the criteria upon which urban growth boundaries should be based and another suggested that there be some degree of consistency among the various Intergovernmental Agreements in the region. In later meetings held to work on implementation of the above recommendations, it was thought that additional geographical boundaries should be considered for the purpose of long-term planning and coordination among jurisdictions. Also, it was noted that at least one municipality did not care for the use of the word "growth" in the term "urban growth boundaries."

Accordingly, the Master Plan uses the term "Growth Management Area"(GMA) to refer to what current IGAs with the cities of Fort Collins and Loveland refer to as Urban Growth Areas. In addition, the Master Plan calls for the establishment of two additional geographical boundaries that could be established beyond a municipality's growth management area: the "Cooperative Planning Area" (CPA) and the "Community Influence Area" (CIA).

Map 2.1 shows existing adopted Intergovernmental Agreement areas. The map is intended to be dynamic and flexible and inform users of the Plan of the current status of City/ County IGAs. The three principal terms – GMA, CPA and CIA – are intended to provide a consistent framework for this Plan and future City/ County IGAs. These terms are defined below.

*Growth Management Area (GMA)* boundaries should be based on a plan for providing urban-level services to the area within a 20year time frame. The area does not necessarily need to be served exclusively by the municipality for all services, but the designated area should be serviceable by an existing urban service provider. For example,



the GMA may include areas currently served by a water or sanitation district, with which the municipality has established a service area agreement. The municipality should, however, intend to annex the Growth Management Area within the 20-year time frame, and to provide the GMA with a full range of urban services in the future.

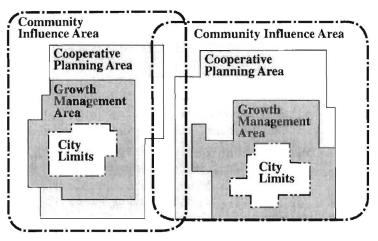
Within Growth Management Areas, the County would agree to approve only urbanlevel development according to the city's adopted plan, and the cities would agree to annex all properties when they become eligible. Policies and regulations in the Intergovernmental Agreements should specify required facilities, design standards and phasing criteria for new development. The County would agree that urban development will not be approved outside the GMAs except in specifically named areas and according to the adopted County Plan.

The intent of the County is to reinforce Growth Management Areas as the only location of future urban-level development in the County (except for the unincorporated community of LaPorte). The County will work with each of the cities and towns in Larimer County to reach mutually-beneficial Intergovernmental Agreements which address the principles of the Master Plan and the growth management concerns of each jurisdiction.

The various municipalities in Larimer County have differing definitions of "urban development" and "urban services." To provide a policy basis for working with municipalities to define and establish GMA boundaries, the County will define these terms to mean an average density of at least 2 housing units per acre and existing or planned availability of public water and public sewer.

The County will also work with jurisdictions on approaches for areas which are not planned for urban development and/or urban services within the city plan's time frame (i.e., 20 years) but where development may have an impact on present and future city growth patterns. These areas are termed *Cooperative Planning Areas (CPAs)*. The CPA is a cooperative strategic planning area for the residents and landowners, the municipality, and the County. It may include areas that could eventually be annexed and provided urban services based on topography or other service provision factors. It may also include areas that because of existing development patterns, service-delivery constraints or other factors, are not planned for urban development or services (as defined above).





Municipalities that could someday "grow together" could jointly identify their respective cooperative planning areas so they do not overlap, and therefore avoid having future disputed annexation areas. This arrangement could be used to avoid future "annexation wars," and to plan for community buffers or separators.

*Community Influence Areas (CIAs)* will also be addressed in Intergovernmental Agreements. Development applications within these areas will be referred to the adjacent jurisdiction(s) for close coordination during the development review process. Community Influence Areas may overlap those of other municipalities.

The schematic above illustrates the conceptual relationship of Growth Management Areas, Cooperative Planning Areas and Community Influence Areas.

#### 2.4.2 Estes Valley Comprehensive Plan

The Larimer County Master Plan includes the entire unincorporated portion of Larimer County, except the Estes Valley. Larimer County and the Town of Estes Park have been working together on a joint planning concept for the Estes Valley for about two years. The first phase of this project was completed in December 1996, when a Comprehensive Plan entitled *Estes Park Directions: Gateway to the Future* was adopted by the Larimer County Planning Commission and the Town of Estes Park.

The second phase of the Estes Valley Planning Project includes appointment of a Joint Town-County Planning Commission and development of a single zoning and land use code for the Plan area, which will apply both inside and outside Town limits. This approach is unique to the Estes Valley and required special State legislation to authorize the Joint Planning Commission. The Estes Valley Comprehensive Plan is referred to in the County Master Plan for information and clarity, but it is a "stand-alone" document which will be implemented through a separate set of land use regulations and procedures.

#### 2.4.3 Regional Framework

As noted above, the municipalities and counties in the I-25 Corridor of Northern Colorado joined together in 1994-95 to assess opportunities for coordination and collaboration on land use issues for the area. The *Northern Colorado Regional Planning Study*, completed in March 1995, presents a regional framework for "addressing resource protection, resource and community linkages, separation of communities and maintenance of the region's open and rural character mixed with urban and suburban areas." The framework consists of regional resource areas, regional corridors, community separators, critical linkages and gateways. The Regional Study outlines ideas that may be incorporated into each jurisdiction's plans and policies to effect cooperative growth management. Each of the proposed key elements is included in the Larimer County Master Plan growth management system:

- Urban Growth Boundaries (Growth Management Areas)
- Annexation Policies (through Intergovernmental Agreements)
- Fiscal Impact Analysis and Policies (Adequate Public Facilities and Capital Improvement Programming)
- Open Space / Sensitive Lands Protection and Linkages (Rural Conservation Development, Open Lands Program and Transfer of Development Rights Program)
- Agricultural Land Protection (Voluntary Agricultural District and Right-to-Farm Resolution)
- Rural character preservation (Rural Conservation Development)

### 2.5 Urban and Rural Form

The preceding sections address the approaches Larimer County will use to guide the timing and the location of new development. The remaining elements of a growth management system concern the *quality* of development; i.e., protecting environmental resources, rural character, agriculture and economic viability.

Early in the PLUS process, the County Commissioners and Planning Commission members decided that an incentive and performance-based approach to land use development was preferable to a traditional rezoning approach. Besides being more acceptable to many landowners, the performance-based approach allows more flexibility in addressing the disparate parts of the County. Three new growth management tools addressing resource protection through incentives and performance standards are proposed to be included in the Land Use Code:

- Clustered Development
- Transfer of Development Rights (TDRs)
- Voluntary Agricultural Districts

In addition, several initiatives are underway to develop strategies and programs concerning agricultural protection, economic development and affordable housing. All these issues impact quality of life for the citizens of Larimer County. The relation of these initiatives to growth management is reported below.

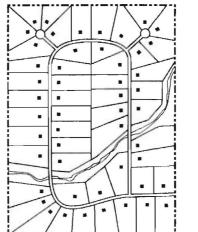
#### 2.5.1 Clustered Development

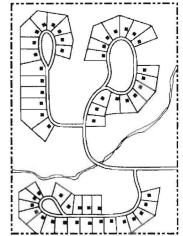
A new rural development pattern of clustered development is a major tool for protection of environmental resources and rural character. Clustered development is a type of development design that locates building lots on specific portions of the site to allow the remainder of the site to be used for agriculture, private open space, natural resource protection and similar open, undeveloped uses. Resource mapping will occur early in the design process so the undeveloped areas can be used to protect the most critical parts of the development site. Two types of clustered development are detailed in the next chapter in section 3.2.

### 2.5.2 Transfer of Development Rights (TDRs)

The basis of a transfer of development rights program begins with the concept that each piece of property has a specific number of development rights or allowed housing units which can be defined and quantified. Rather than developing the units on the first site, the allowed units can be transferred to another site, creating a higher number of units on the second site than would otherwise be allowed and removing the possibility of future development on the first site.

TDR programs have been used in several areas of the country, and in Colorado, as an incentive-based method of protecting important resource areas and other lands that public policy would like to remain undeveloped. For several years, Larimer County has been exploring the possibility of using this type of approach, but the details of an appropriate program have not yet been developed.





Left is a subdivision typical in Larimer County. Right is a clustered plan with the same number of lots and preserved open space.

The *Plan for the Region between Fort Collins and Loveland* (see Section 3.3) recommends TDRs as a possible implementation tool for that area to protect important resources between the two cities.

A transfer of development rights program has the potential to assist in the protection of critical resource areas using a tool that appears to be attractive to many landowners. Implementation of a TDR program will probably require close coordination with one or more of the municipalities in the County to enable the areas of increased density to be located where appropriate services are available. Many details of this approach remain to be worked out and the County will continue to pursue its options.

### 2.5.3 Agricultural Districts and Related Programs

In Larimer County a variety of part-time and full-time agricultural activities take place on both irrigated and non-irrigated land. Grazing lands provide needed forage and support livestock operations. Many specialized types of agricultural production exist, including horse breeding and boarding, dairies, horticulture, fish production, tree and sod farms and others. The PLUS process has revealed that most people wish to maintain agricultural land and water in production whenever possible. Among agricultural producers there is consensus that a non-regulatory or incentive-based approach should be used to accomplish this. Those who wish to continue farming or ranching need assurance that incompatible uses that might disrupt their operations could be kept out of agricultural areas. Rural residents near agricultural operations must understand the rights and responsibilities of producers and the norms and responsibilities incumbent on them if they wish to live near agricultural operations.

The Board of County Commissioners appointed an Agricultural Task Force in 1996 to propose principles and strategies to protect the future of agriculture in Larimer County. The Task Force returned a report to the Commissioners in January 1997, which includes a wide range of principles and strategies, some of which extend beyond the purpose of a County Master Plan. The concepts which relate most closely to the physical development of the County have been incorporated here and in the following chapter (see Section 3.2).

The major growth management strategy proposed which pertains to agriculture is the creation of a voluntary Agricultural District. An agricultural district is envisioned as working with a package of incentives (for example, tax incentives, priority lands for transferring or purchasing development rights, limited development options, etc.) to producers who volunteer to participate. In turn, for example, producers might agree to withhold their land from development for a specified period of time and to offer first right of refusal to area land and water banks should they later decide to develop.

Four other programs are recommended by the Task Force which will require additional work to more fully develop and implement. These programs are included in the Action Plan (Section 7.4). These future programs include:

- Adoption of a Right to Farm Resolution;
- Creation of Agricultural Enterprise Zones;
- Creation of a regional land and water bank, in cooperation with other jurisdictions;
- Purchase of development rights on agricultural land.

In addition, the Task Force recommended that the County Commissioners appoint a permanent Agricultural Advisory Board and outlined tasks and responsibilities for such an Advisory Board, including taking an active and aggressive role in promoting the interests of agriculture through public policy and public education. The Agricultural Advisory Board was appointed early in 1997.

# 2.6 Economic Development and Affordable Housing

Economic development and affordable housing are important to the quality of life of the citizens of Larimer County. They also transcend political boundaries and, while related to growth management, go beyond typical land use goals and policies. Larimer County has historically worked on both issues in partnership with other public and private entities in the region. The following sections describe the status of these programs. Principles developed from these programs that relate to growth management are stated at the end of the chapter.

#### 2.6.1 Economic Development

Larimer County has been actively involved in economic development programs since 1988, when a citizen committee, appointed by the Larimer County Commissioners, developed a report called *The Larimer County Overall Economic Development Program* (November 1988). The OEDP Committee, as they came to be called, represented business and governmental interests from throughout the County. The *Larimer County Overall Economic Development Program* document includes an analysis of the area economy, an analysis of potential for economic development, a proposed approach and an implementation plan.

The OEDP Committee continued to meet and recommend economic development strategies to the County Commissioners and other government entities until early in 1996. At that time, the Committee completed drafting an Economic Development Policy for Larimer County, which was adopted by the County Commissioners. In mid-1996, the County Commissioners appointed an Economic Development Advisory Board, including some former OEDP Committee members. The charge of the Economic Development Advisory Board is to advise the Commissioners regarding economic development issues and assist the County Commissioners in developing an economic development plan for Larimer County.

#### 2.6.2 Affordable Housing

Affordable housing is defined as housing which has a sales price or rent within the means of a low or moderate income household as defined by local, state or federal legislation. This type of housing is generally not provided by the private housing market without some type of subsidy.

The Larimer County Department of Community Services has been active in housing programs for many years. Programs have included a very successful Weatherization Program which provides home improvements to promote energy efficiency to low income households. The Department coordinates a Housing Rehabilitation program and Housing Vouchers and Certificates, which qualified renters can use to buy-down housing costs. The Department also developed the Affordable Housing Information System (AHIS), which examines and reports on current and projected housing demand, housing stock, and development patterns. A report, Affordable Housing Demand in Larimer County 1996 -2000, which was derived from the information system, is available from the Department of Community Services.

The County is a participant in the Larimer County Affordable Housing Task Force, a consortium of public, not-for-profit and private agencies and individuals whose mission is to educate and encourage development of affordable housing throughout the County. Larimer County is also a member of Funding Partners, which seeks to provide funding sources for affordable housing. The primary role of the County is to support municipal and private efforts to create affordable housing.

Beyond the policies and programs which provide or encourage affordable housing as defined above, there is great concern with the impact of planning policies and regulations on the cost, or affordability, of housing in general. Rapid and sustained growth has pushed housing costs to new highs throughout the region. The drafters of the PLUS Master Plan believe that its principles and strategies are generally neutral on the issue of housing affordability. The primary reason for this belief is that residential densities will not change under this Plan; that is, downzoning to larger residential lot sizes will not be required. In some cases, however, requirements for Adequate Public Facilities will increase development costs which will be passed on to new home buyers. This strategy is viewed as preferable to the alternatives of having taxpayers subsidize public facilities made necessary by new development, or allowing service levels to deteriorate.

The dual issues of affordable housing and housing affordability will remain priorities. The Action Plan (Section 7.3.1) recommends an on-going work program to develop strategies for affordable housing, including possible provisions in the Land Use Code and Building Code to eliminate barriers to private sector affordable housing.

#### 2.7 Guiding Principles and Implementation Strategies For Growth Management

The Master Plan establishes the following guiding principles for growth management. These provide the policy basis for the implementation programs that will carry out the Plan. The primary vehicles for the Master Plan implementation are the Land Use Code which incorporates zoning and subdivision regulations and consolidates other requirements for development into a single document, capital expansion fees and capital improvement programming, and Intergovernmental Agreements with cities, towns and special districts.

In the shaded section below, each primary paragraph (in bold type) is a statement of principle. The subparagraphs are strategies for implementing the principle.

### URBAN AND RURAL DEVELOPMENT

GM-1 Larimer County shall plan for longterm growth and physical expansion based on environmental, land use,

### community design and infrastructure considerations.

- **GM-1-s1** The Land Use Code shall be designed to implement the principles of the Master Plan and shall include provisions for environmental review and protection, consideration of compatibility issues and site design, and adequate public facilities.
- GM-2 Service demands of new development shall not exceed the capacities of existing roads and streets, utilities or public services.
- GM-2-s1 The Land Use Code shall define level of service standards and require that all new development meet or exceed the adopted standards. Level of service standards shall be geared to the needs of urban areas and rural areas and the County's financial resources.
- GM-3 Larimer County will use transfer of development rights as a tool to protect important County resources, where appropriate.
- **GM-3-s1** Larimer County shall continue to develop a transfer of development rights program in cooperation with the municipalities of the County.
- **GM-3-s2** The transfer of development rights program shall include a means to identify or define areas where transfer of development rights will be used to protect important resources, called "sending areas.".
- **GM-3-s3** "Receiving areas" shall be consistent with growth management and land use principles of the Master Plan and shall have adequate public services and facilities.

GM-4 Larimer County shall continue to allow for urban development within cities and designated urban areas.

GM-4-s1 Urban development areas will be designated only where public water and

sewer are available or planned, and where projected densities are at least 2 units per acre.

GM-4-s2 Intergovernmental Agreements shall clearly define an annexation policy that is consistent with city and County growth management principles. In development not eligible for immediate annexation, the County will require applicants to meet city criteria, standards and fee structures adopted by the County, so that the areas may eventually be annexed as they become eligible without extensive capital improvements or costs. The County also will encourage annexation of land that is to be developed with urban uses or at urban densities so provision of urban level services by Larimer County is minimized. Binding annexation agreements also will continue to be required.

GM-5 Larimer County, in cooperation with municipalities and after consultation with residents, landowners and other affected interests, shall establish Cooperative Planning Areas (CPAs) and Community Influence Areas (CIAs) adjacent to Growth Management Areas (GMAs), where appropriate, to provide for protection of future City or Town interests.

- **GM-5-s1** Strategies for growth management in Cooperative Planning Areas will be detailed in planning studies and included in Intergovernmental Agreements.
- **GM-5-s2** Larimer County shall send referrals to all municipalities within their respective Community Influence Area.

#### GM-6 Larimer County shall cooperate with municipalities to maintain distinct and separate urban areas.

**GM-6-s1** Responsibility for defining and providing buffers between communities shall be shared between the adjacent municipalities and the County and shall be defined in Intergovernmental Agreements.

- **GM-6-s2** Cities and the County may jointly pursue acquisition strategies including transfer of development rights programs to implement protection of community buffers.
- GM-7 To protect rural character, the County shall maintain current zoning and provide new standards and performance requirements for Adequate Public Facilities, Rural Conservation (cluster) Development, neighborhood compatibility, protection of environmental resources and restrictions in hazardous areas.
- GM-7-s1 Existing zoning uses and minimum lot sizes will be the basis for new development in rural areas. Purpose statements will be established for all zoning districts to clarify how they will be applied. Additional site development standards, buffering requirements and performance standards also will be incorporated into the Land Use Code to implement this principle.
- **GM-7-s2** New rural development will be clustered, using new requirements for Rural Conservation Development. The character of rural development will vary, based on the natural characteristics of the site, distance from public facilities and accessibility. (See the cluster development description in section 3.2).
- **GM-7-s3** The Rural Land Use Process will be encouraged in rural areas as an alternative to 35 acre rural development.

#### AGRICULTURAL LANDS

- GM-8 Agriculture shall be recognized as an important economic, cultural and environmental resource value-provider for the County.
- **GM-8-s1** The Land Use Code may provide a mechanism for creating a voluntary

agricultural district. An agricultural district is envisioned as working with a package of incentives (for example, tax incentives, priority lands for transferring or purchasing development rights, limited development options, etc.) to producers who volunteer to participate. In turn, for example, producers might agree to withhold their land from development for a specified period of time and to offer first right of refusal to area land and water banks should they later decide to develop.

#### GM-9 Permanent and on-going communication between agriculture and the County is essential.

- **GM-9-s1** The County shall establish a permanent Agricultural Advisory Board made up primarily of full-time farmers to keep it informed on agricultural issues and to assist in keeping agriculture important and viable in Larimer County.
- GM-10 The protection of agricultural land and water in Larimer County shall be based on a combination of incentives, voluntary participation and measures to strengthen the viability of agriculture.
- **GM-10-s1** The Agricultural Advisory Board shall develop implementation strategies to protect agricultural land and water in Larimer County.
- GM-11 To retain agriculture and the resulting open space, environmental quality, wildlife habitat, etc., afforded by it, it is necessary to adopt programs that will help agriculture be economically viable and reasonably competitive with other potential uses of agricultural land.
- **GM-11-s1** Larimer County shall continue to study and implement programs which assist the business of agriculture. Agricultural Enterprise Zones and creation of a regional land and water bank shall be con-

sidered and a Right-to-Farm Resolution shall be adopted.

**GM-11-s2** Regulation of farm improvement projects and routine agricultural operations shall be required only to the extent to protect health, safety and welfare.

#### GM-12 Respect for private property is essential to the maintenance of agriculture.

**GM-12-s1** Agricultural landowners must be able to exclude public access in order to protect crops, livestock and conservation practices and to limit liability, littering, pollution, disruption of agricultural activities and other problems.

#### ECONOMIC DEVELOPMENT

- GM-13 Larimer County supports the development of a local economy which is increasingly self-reliant and that meets the needs of the present without compromising the needs of future generations.
- **GM-13-s1** County-sponsored economic development activities shall be supportive of existing businesses and retain existing employment, as well as fostering new employment opportunities which create a positive impact on the County.
- GM-14 The role of Larimer County government in economic development is to support and facilitate other public and private economic development efforts which are consistent with the adopted Economic Development Policy for the County.
- **GM-14-s1** The Economic Development Advisory Board shall continue to coordinate with other economic development agencies in the region and provide recommendations to the County regarding requests for County support of economic development activities and projects.

**GM-14-s2** Larimer County shall consider incentives and/or otherwise support economic development projects and programs which are consistent with growth management, land use and other principles and strategies of the Master Plan.

#### **AFFORDABLE HOUSING**

- GM-15 Larimer County government shall encourage the development of affordable housing as needed through support and incentives to other public, nonprofit and private sector developers, rather than developing, owning and operating housing units.
- **GM-15-s1** Larimer County will continue to work with affordable housing advocates to propose modifications to the Land Use Code and Building Code that will encourage development of affordable housing without compromising principles of the Master Plan or building safety.
- **GM-15-s2** The County shall adopt a uniform definition of "affordable housing" to provide clarity and uniformity when considering issues and requests related to affordable housing.
- GM-16 Affordable housing in Larimer County shall include efforts to provide an appropriate mix of housing types and opportunities to meet the needs of all persons in need of housing.
- GM-17 As much as possible, new affordable housing development shall be located close to relevant services.
- **GM-17-s1** Development of affordable housing is seen as a regional issue and the County will partner with other government entities to address the problem.

### 3. LAND USE

Future land use issues are central to the purpose of the Partnership Land Use System (PLUS) project and comprise the core of the Master Plan. This chapter sets out the basic framework for land use in unincorporated Larimer County. The land use concept draws on the themes established in the early stages of the PLUS planning process and detailed in Chapter 1. The Master Plan also incorporates goals from the *Northern Colorado Regional Planning Study*<sup>1</sup>. Cooperative planning studies and their relation to the Master Plan are discussed in more detail in Sec. 2.4.

The Land Use Framework Maps indicate two distinct land use types, *Urban* and *Rural* (see maps 3.1 and 3.2). Future urban areas are located adjacent to existing municipalities where urban level services are planned, or in the case of LaPorte, in an existing unincorporated community where some urban services are already available. Rural areas comprise the remainder of the County. In designated urban areas, future land use is based on adopted community plans. In rural areas, land use and densities are based on existing County zoning.

The chapter discusses Growth Management Areas (GMAs) and coordinated land use planning efforts between the County and the municipalities in the County. It introduces the concept of Rural Conservation Development to achieve significant open space in developed parts of the rural area. It outlines the concepts of the Rural Land Use Process, which is designed to provide an alternative to development in 35-acre lots, and principles and strategies for agricultural lands. It explains the land use classifications shown on the Land Use Framework Maps and it references existing Special Area Plans and their policies. It establishes principles for patterns of new development and implementation strategies that will be used to achieve the planned settlement patterns.

#### 3.1 Urban Land Use

Larimer County will not provide the range of services necessary to support a quality urban environment. Since 1980, when the first Urban Growth Areas were established around the cities of Fort Collins and Loveland, the County's urban policy has been to encourage urban development to locate in cities and towns or adjacent to these areas with the expectation that the developed areas would soon be annexed. The urban land use principles stated in this Master Plan are intended to strengthen the link between urban land use and eventual annexation by a city or town.

#### 3.1.1 Growth Management Areas

Principles for urban land use reinforce the concept that the most appropriate location for urban development is within municipal boundaries. Urban development should be within municipalities rather than the unincorporated portion of the County. Within Growth Management Areas (GMAs) development can occur if it meets basic service levels and is designed to be compatible with the policy or land use plan for the adjacent city or town. These requirements are intended to make future annexation possible without costly improvements to streets and utilities and to ensure that development approved in the County can be integrated into the fabric of the community when it is annexed.



<sup>&</sup>lt;sup>1</sup> The Northern Colorado Regional Planning Study, May 1995, was conducted by Larimer and Weld Counties and nine municipalities in the I-25 corridor, to identify opportunities for coordination and collaboration on land use issues among the communities in Northern Colorado. The Study is available for review in the Planning Department.

Section 2.2 discusses recent development trends for new lots created in the unincorporated portions of the existing Fort Collins and Loveland Urban Growth Areas. Average lot sizes are much larger than those generally associated with urban development, at about 0.9 acre per unit. Some types of development, including Minor Residential Development (MRD), are currently exempt from the urban service standards adopted in the Intergovernmental Agreements that govern development in the existing Urban Growth Areas. MRD lots in Urban Growth Areas are often much larger than typical urban lots and often lack basic services such as public sewer. The resulting development patterns create enclaves of rural-type development within the Urban Areas, creating problems for future annexation and extension of utilities and roads. This Plan contains principles for strengthening requirements for all new development within the Growth Management Areas, which should be consistent with urban standards developed and jointly adopted by cities and the County.

The urban land use principles also state that new commercial and industrial zoning should be limited to Growth Management Areas (GMAs) and specifically designated areas in adopted Area Plans, unless the specific uses need to be located away from urban areas for some supportable reason. In the past, scattered development of this type has sometimes been approved in order to encourage economic development. More recently, the importance of quality of life issues to economic development decisions has supported reinforcing urban development standards for all new commercial and industrial uses.

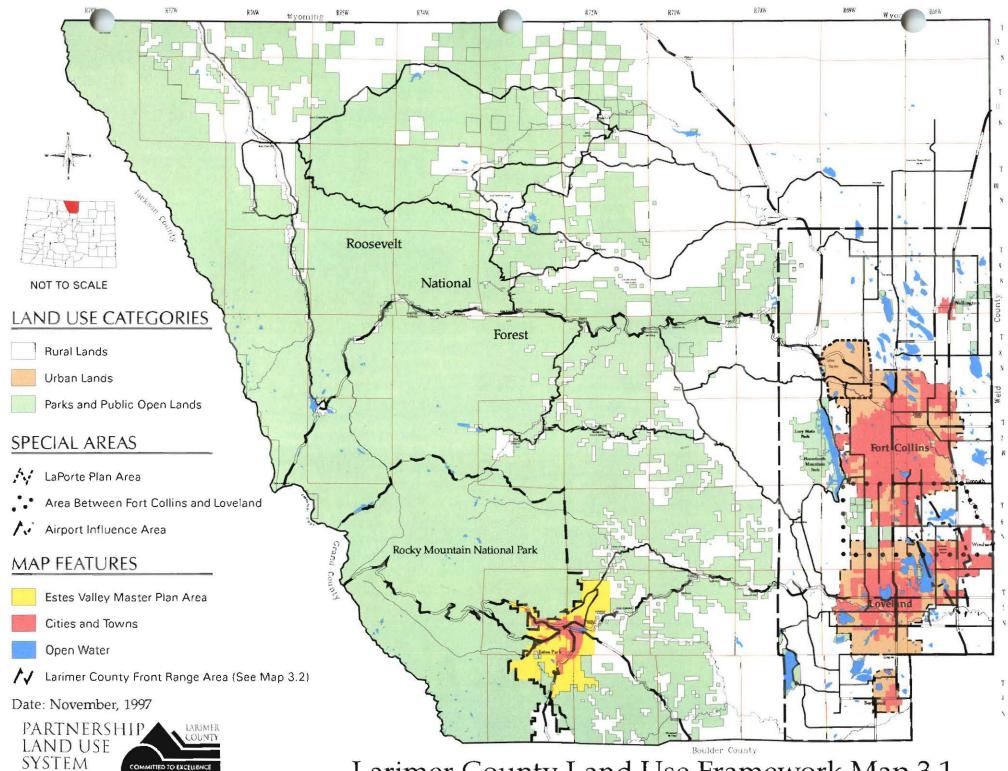
#### 3.2 Rural Land Use

Most of the development applications that are received by the County Planning Division are for non-urban residential uses. Existing zoning in the unincorporated area supports a pattern of large-lot (2.29- to 10-acre) subdivisions, which consume large amounts of land that might otherwise be in productive use. They are costly to serve with public facilities, and present issues of compatibility with adjacent residential and agricultural uses.

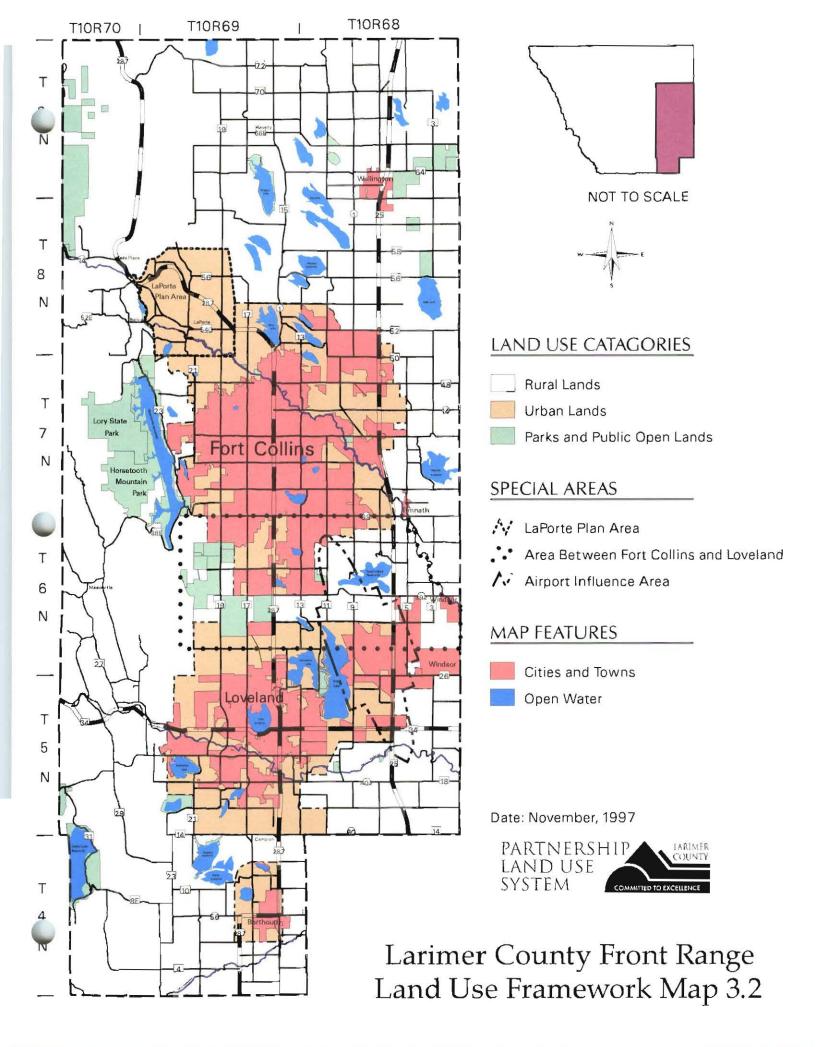
State law allows division of property into lots with a minimum of 35 acres without County review. The resulting developing pattern from "35-acre" development creates even greater concerns with land consumption, cost of facilities and compatibility. *The Code of the West* details the lifestyle and level of service that residents can expect in rural areas. The publication is available in the Office of the County Commissioners.

The PLUS process has largely focused on finding alternatives to these large-lot patterns of development, while still allowing a comparable return to landowners who have relied on historic zoning and land use regulations to estimate the value of their property. Two new development concepts have been developed as alternatives: Rural Conservation Development and the Rural Land Use Process. Both generally rely on "clustering" to achieve a future land use pattern more consistent with the vision of maintaining the existing open character of rural areas. Cluster development is a type of development design that locates the same number of houses on smaller lots to allow the remainder of the site to be used for agriculture, private open space, natural resource protection and similar open, undeveloped uses. Location of the developed and open areas is based on the characteristics of the specific site.

In addition, the Agricultural Task Force has proposed voluntary programs and incentives designed to help farmers and ranchers who wish to remain in agriculture.



Larimer County Land Use Framework Map 3.1



#### 3.2.1 Rural Conservation Development

The basic concept of Rural Conservation Development (RCD) is to require that all new subdivisions outside designated urban areas be clustered and designed based on the characteristics of the specific site. RCD subdivisions are designed to preserve significant open space areas, without changing the maximum residential density as determined by the existing zoning of the property.

Rural Conservation Development will generally include a minimum of 80% open space, and maximum allowed housing units will be determined by dividing the gross developable land area by the minimum lot size of the existing zoning district. Open space is achieved by allowing housing to be clustered on lots smaller than would otherwise be allowed by the existing zoning. The amount of required open space may be reduced in certain cases, if the number of housing units is also reduced, and/or there is community benefit. The proposed design must be consistent with applicable principles of the Master Plan including preservation of open character, protection of sensitive natural areas, neighborhood compatibility and efficient provision of utilities and services.

The open space portion of the development will remain undeveloped in perpetuity, except where this provision is explicitly changed by a special area plan adopted by the County. An example of an area where perpetual open space might not be appropriate is a defined area within a Cooperative Planning Area designated for future urban expansion in the CPA area plan. The ownership and management of the open space area will be determined by a management plan which will be reviewed and approved with each RCD application.

Site design principles emphasize considering the natural patterns of the landscape first, to

ensure that sensitive natural areas are not considered as building sites. Ability to maintain the open area in agriculture may also be a prime consideration on appropriate sites. Compatibility with adjacent uses, including residential neighborhoods and agricultural uses, will also be considered. Generally, the cluster design concept will reduce infrastructure development costs because utility line and road lengths are minimized. In many cases, clustered development has also been found to increase the value of the building sites, due to the proximity to permanent open space.

The RCD subdivision process will not change the ability of landowners to divide property into lots with a minimum of 35 acres without County review, or to use the Rural Land Use Process (Sec. 3.2.2.below).

#### 3.2.2 Rural Land Use Process

Current State law allows 35-acre or larger parcels to be created without any county land use review. This law has been in effect since 1972. In Larimer County in 1996, there were 4,633 parcels of private, taxable land greater than 35 acres, for a total of 522,042 acres. In some cases, 35-acre development works well. However, in the majority of cases, there are more desirable alternatives.

In July 1995, the Board of County Commissioners organized a citizen Task Force to study 35-acre development problems and to recommend solutions. The Task Force recommended new policies and procedures to invite landowners wishing to develop their lands to consider alternatives to traditional 35acre parcels. The Task Force recommendations were incorporated into a land use regulation called the Rural Land Use Process, which was adopted by the Larimer County Commissioners on December 16, 1996. The Rural Land Use Process received a Governor's Award for Smart Growth and Development<sup>2</sup> in 1997.

The Rural Land Use Process is intended to be voluntary, user-friendly and flexible, and to permit and encourage development patterns tailored to the characteristics of a specific property. The new process does not include a change in zoning for these lands nor does it propose to take away the ability to do 35-acre development. Instead, the Rural Land Use Process uses incentives to encourage alternative developments to help retain the rural and agricultural lands of Larimer County.



## 3.3 Area Plans and Studies

Special area land use plans and studies are appropriate where conditions present unique land use issues and opportunities. These conditions require more detailed investigation than is possible for the majority of the County area, usually including a great deal of public input. The outcome of the studies may be adoption of special land use principles and implementation strategies, which are tailored to the specific issues of the area. Area plans are particularly envisioned for Cooperative Planning Areas where the plans will be developed in partnership with the affected municipalities, landowners and residents (see Sec. 2.4.1.).

#### 3.3.1 LaPorte Area Plan

LaPorte is an unincorporated community of about 2600 people, located northwest of Fort Collins at the edge of the foothills in Larimer County. After more than a year of study by the LaPorte Area Planning Advisory Committee (LAPAC) and numerous public meetings, the *LaPorte Area Land Use Plan* was adopted by the Larimer County Planning Commission in September 1992.

The LaPorte community is unique in Larimer County. Its size and character are comparable to that of many incorporated towns in the area. The community has many facilities and services associated with an incorporated town, including an elementary and a middle school, a community park, a fire station and public water and sewer. LaPorte has developed with a compact urban form and a good mix of commercial and service uses in its community center. The Land Use Map and the goals and policies of the LaPorte Plan show a pattern of land use that maintains the existing character of the LaPorte community and also allows for the various types of land use and development that are projected to be needed by the community as it grows.

The *LaPorte Area Land Use Plan* is hereby made part of the Larimer County Master Plan as a specific area plan for an urban area. Its land use map and plan objectives and policies will continue to be used as a guide to land use decisions by the County.

# **3.3.2** Plan for the Region Between Fort Collins and Loveland

A Plan for the Region Between Fort Collins and Loveland was prepared by a multi-disciplinary team of consultants and staff from Larimer County, the City of Fort Collins and

<sup>&</sup>lt;sup>2</sup> The Governor's Smart Growth program recognizes innovative growth management projects from around the State each year.

the City of Loveland, with assistance from a citizens task force. It was adopted by the Larimer County Planning Commission in April 1995, and was also adopted by the Cities of Fort Collins and Loveland. The Plan received a Governor's Award for Smart Growth and Development in 1995.

The purpose of the Plan is to determine the future character and vision for the area between Fort Collins and Loveland. Beginning with the goal of maintaining separation between the two communities, the Plan studies existing land use and natural resources and identifies opportunities and strategies for creating open space and buffers. The plan area includes the unincorporated rural area between the two communities as well as future urban areas for the two cities.

The Plan addresses a range of implementation options from development design guidelines to fee-simple acquisition of key properties. Several of the proposed strategies are currently being acted upon. The County Open Lands Program, which began in 1996, has used the Plan as a guide to identifying sensitive natural areas and visually significant lands for protection. *The Plan for the Region* recommends clustered development. This Master Plan has taken the concept of cluster development forward as a major tool to protect rural character throughout the County. A detailed area plan is underway for the Fossil Creek Sub-area, as recommended in the Plan.

The *Plan for the Region Between Fort Collins and Loveland* is hereby made part of the Larimer County Master Plan as a specific area plan, and its goals, sub-area descriptions and implementation strategies will continue to be used as a guide to land use decisions by the County for the area.

#### 3.3.3 Airport Influence Area

The purpose of an Airport Influence Area is to recognize benefits and potentially adverse im-

pacts that may occur within certain distances from public aviation facilities and to provide a policy framework to minimize these impacts as well as protect the safety and efficiency of aircraft operations. The Airport Influence Area is based on a technical analysis of the Fort Collins-Loveland Municipal Airport and extends 400 yards beyond the outer boundary of the critical zones, 55-decibel noise contour and/or the flight pattern boundary lines depicted in the Airport Master Plan.

The potential adverse impacts of airport operations are generally of two types. Within the critical zones that surround and extend beyond the runways, safety for persons and property is of concern. Within the noise contours surrounding the airport and under the flight paths, complaints from property owners, particularly residents of the area, can eventually change or even curtail aircraft operations. At the same time, there are unique locational advantages to some types of land use for being in proximity to a public airport.

The AP Airport Zoning District was adopted in June 1977, following an initial study of the Fort Collins-Loveland Airport. It addresses many of the potential land use impacts around the airport. The AP District allows a variety of uses, including residential, commercial and industrial uses, with more intensive uses requiring special review. The area zoned AP does not exactly coincide with noise, critical area and flight paths of the most recent Airport Master Plan. In particular, the area west of Fossil Creek Reservoir, which is not zoned AP, is identified as a potential impact area in the Airport Master Plan. Future work effort will focus on improved alignment between the new Airport Master Plan and zoning in the area.

#### 3.4 Land Use Framework Maps

The Land Use Framework Maps are intended to be a graphic depiction of the principles and implementation strategies contained in the Master Plan. They set forth a simplified diagram of how the County should evolve and develop in the future. Because the PLUS Master Plan is not tied to any specific time frame, target population or land needs analysis, the timing of future development will depend on a number of factors including choices made by individual landowners and future availability of facilities and services.

Within urban areas, more detailed future land use information is contained in adopted community plans. As these plans are accepted by the County and incorporated into Intergovernmental Agreements, the more detailed land use categories and policies of the community plans will take precedence over the generalized Land Use Framework Maps. The Land Use Framework Maps note where these detailed community plans exist.

The following land use categories are shown on the Land Use Framework Maps:

#### 3.4.1 Land Use Categories

**Rural Lands.** This designation applies to all unincorporated areas outside the Growth Management Areas that are not publicly owned parks and open space. Allowed uses and densities are determined by existing zoning.

**Urban Lands.** This land use category includes Growth Management Areas and other urban areas designated by the County and identified on the Land Use Framework Maps. In urban areas, specific land use categories are determined by an adopted community plan.

*Parks and Public Open Lands.* This designation applies to existing, publicly-owned parks and open lands.

#### 3.4.2 Special Areas

LaPorte Plan Area. This is the area where specific land use policies are provided by the LaPorte Area Land Use Plan.

Area between Fort Collins and Loveland. This designation shows the area covered by the Plan for the Region Between Fort Collins and Loveland, where policies from the document provide land use guidance.

Airport Influence Area. This area indicates the land around the Fort Collins-Loveland Airport affected by airport operations.

# **3.5 Guiding Principles and Implementation Strategies** For Land Use

In the shaded section below, each primary paragraph (in bold type) is a statement of principle. The subparagraphs are strategies for implementing the principle.

#### **URBAN LAND USE**

- LU-1 The preferred location of urban land use is within municipal boundaries where urban levels of service are available. The County will not provide urban services.
- LU-1-s1 Larimer County will work with developers and with municipalities to encourage location of new urban development within city and town boundaries.
- LU-1-s2 The County will work with cities and towns to encourage annexation of existing development that is within Growth Management Areas but currently outside city limits.
- LU-1-s3 The County will ensure that its revised Intergovernmental Agreements and Land Use Code do not create disincentives for annexation of land within Growth Management Areas, either before or after development.
- LU-2 New urban-density residential uses shall locate only in areas specifically designated for urban development, i.e., Growth Management Areas and in LaPorte. Commercial and industrial

uses shall also locate only in urban areas except where uses have specific requirements which justify their location in rural areas (see LU-4-s4).

- LU-2-s1 Larimer County will work with municipalities to designate Growth Management Areas consistent with municipal plans and which can be expected to be incorporated into the municipality within a reasonable time.
- LU-2-s2 The County will approve zoning requests for increased residential density and urban-intensity commercial and industrial uses only in Growth Management Areas and in areas specifically designated for urban development in an adopted Area Plan, i.e., LaPorte. All zoning changes must be consistent with an adopted land use or policy plan.
- LU-2-s3 Outside Growth Management Areas the County may designate "receiving areas" for a transfer of development rights program as appropriate for higher density development, after considering compatibility, impact on sensitive natural areas and availability of facilities and services. Location of higher densities in these areas shall be consistent with the principles of the Master Plan.
- LU-3 New urban development within unincorporated Larimer County will be designed to be consistent with and to support adopted community plans.
- LU-3-s1 Within the limits of existing County land use regulations, all new development in Growth Management Areas will be compatible with the municipality's adopted land use or policy plan. The County will rely on review comments from the municipality to help determine if requests for zoning or other development approvals are consistent with the intent of the community plan.

- LU-3-s2 Revised Intergovernmental Agreements shall limit the types of development applications which allow exceptions from the land use and development standards contained in the Agreements. Minor Residential Development and Special Review applications which generate low traffic are currently excepted from some standards. These exceptions should be eliminated and the process of considering variances and waivers to standards for all development within Growth Management Areas should be designed to ensure that City and County policies are not compromised.
- LU-3-s3 New development in other designated urban areas, i.e., LaPorte, shall be consistent with an adopted area plan.

#### RURAL LAND USE

#### LU-4 In rural areas, allowed uses and residential densities shall be based on the current zoning of the property.

- LU-4-s1 The maximum number of allowed dwelling units in new rural subdivisions shall be determined by the minimum lot size of the zoning district of the developable portions of the property.
- LU-4-s2 Changes in existing zoning shall be approved only when the change supports rural uses and maintains the open character of the rural area.
- LU-4-s3 Up-zoning to increase residential density in rural areas shall not be approved. Extension of higher density development patterns approved prior to adoption of this Master Plan shall not be used as justification for approval of new rezoning or lot size variance requests which result in higher density. (See also strategy LU-2-s3 above.)
- LU-4-s4 Requests for commercial and industrial zoning and special reviews which

have specific requirements preventing location within Growth Management Areas may be approved in rural areas, if the uses are consistent with principles of the Master Plan. Examples of uses that may be appropriate outside Growth Management Areas are tourist-related businesses adjacent to major highways or tourist routes, agribusiness, utilities and mining operations.

- LU-5 All new rural residential development shall be designed to maintain the open character of rural areas and to protect and maintain agricultural uses and sensitive environmental areas.
- LU-5-s1 New subdivisions outside Growth Management Areas shall be designed as Rural Conservation Development (RCD) with at least 80% open space in zoning districts with a minimum lot size of 100,000 square feet or greater, and 50% open space in other districts, for agricultural operations, natural areas or other undeveloped open uses.
- LU-5-s2 Clustered housing shall be located in accordance with principles for protecting sensitive environmental areas, agriculture and efficiency of service provision. The Land Use Code shall include design standards for Rural Conservation Development.

LU-5-s3 The Land Use Code shall include standards for consideration of exceptions to the percentage of required open space, whereby decreases in housing units and/or provisions for community benefit may result in decreases in required open space. The standards shall be based on applicable principles of the Master Plan, including LU-5 above.

LU-5-s4 The ownership and management of open space created through Rural Conservation Development shall be set forth in a management plan which will be reviewed and approved with each RCD application. Open space shall remain undeveloped in perpetuity except where this provision is explicitly changed by a special area plan adopted by the County.

- LU-5-s5 The Land Use Code shall address exceptions which will be made to the requirement for clustered subdivisions, including undeveloped parcels of less than 20 acres and in-fill development.
- LU-5-s6 New rural subdivisions shall be designed to locate structures away from highly visible areas. To the extent possible, considering site limitations and hazard areas, design should avoid building sites on ridge lines and in open fields. Housing sites should be located on the least fertile soils for agricultural and forestry uses.
- LU-6 Clustered development shall be designed to avoid creation of development patterns such as villages or small towns that require urban level facilities and services.
- LU-6-s1 Rural Conservation Development shall be designed to limit the number of dwelling units in individual clustered areas, considering both the proposed development and existing adjacent uses and undeveloped lots. Proposed development which adds sufficient dwelling units that an area approaches the character of a village or small town shall be avoided.
- LU-6-s2 If a development plan for a large clustered area is proposed, review shall include the need for urban-level facilities and services, including neighborhood parks and schools, fire stations, arterial roads and provisions for supporting enhanced law enforcement patrol capabilities. Development of this scope shall be reviewed as an Area Plan amendment to the Master Plan.

- LU-6-s3 The Land Use Code shall require the "Code of the West" to be referenced in the protective covenants for development outside Growth Management Areas.
- LU-7 The Rural Land Use Process shall be encouraged and supported as an alternative to creation of 35-acre tracts.
- LU-7-s1 The provisions of the Rural Land Use Process shall be incorporated into the Land Use Code.

#### **AIRPORT INFLUENCE AREA**

- LU-8 Land use decisions for property surrounding the Fort Collins-Loveland Airport shall reflect the need to protect the safety of persons and property and prevent interference with the present and planned operations of the airport.
- LU-8-s1 The County shall work with the Cities of Loveland and Fort Collins to develop consistent land use regulations or other implementation strategies for the Airport Influence Area to protect persons and property, as well as the public investment in the airport, in a manner that is fair to property owners.

#### **REQUIREMENTS FOR ALL DEVELOPMENT**

- LU-9 Land included in the Floodway (FW) zone district and land below the high water mark of existing bodies of water shall not be used in calculating the allowable number of dwelling units on a given parcel.
- LU-10 All new development shall be located and designed for compatibility with sensitive natural areas.
- LU-10-s1 The Land Use Code shall include the provision that mapping of natural hazard areas, wetlands, ridgelines and other natural and cultural resource area infor-

mation available from the Planning Division, be included on initial development submittals and considered in development design. Additional natural resource information that becomes available through the development review process should be incorporated in the design. (See also Sec. 6.1.).

- LU-10-s2 Building envelopes shall not occur in wetlands and natural hazard areas. Natural hazard areas include all slopes greater than 30%, geologic hazard areas classed categories 5, 6 or 7 in mapping available in the Planning Division and 100-year flood plains.
- LU-10-s3 The Land Use Code shall establish standards to control erosion and prevent infestation of noxious weeds during construction of new development.
- LU-11 Compatibility with adjacent land use shall be considered in the design of all new development.
- LU-11-s1 Neighborhood meetings shall be required where compatibility with existing residential uses is an issue.
- LU-11-s2 Development adjacent to agricultural uses shall provide adequate buffers to minimize conflicts and complaints concerning standard agricultural practices.
- LU-11-s3 The Land Use Code shall include guidelines for the use of design elements such as landscaping and buffer areas to help achieve compatibility.
- LU-11-s4 Landscaping plans shall be required as part of all major development applications and all multi-family, commercial and industrial building permits. Existing vegetation shall be maintained wherever possible, except in wildfire hazard areas where thinning to achieve defensible space is necessary. Native plants, existing drainage patterns and natural designs should be used to

increase the sustainability of the landscaping.

- LU-12 Site design of commercial and industrial uses shall enhance and protect the aesthetic quality of community gateways and other high visibility corridors, including I-25, US Highways 34 and 287, and Colorado Highway 14.
- LU-12-s1 The Land Use Code shall establish aesthetic standards and guidelines for commercial and industrial development addressing landscaping, screening of outdoor storage and operations, orientation of buildings (so that businesses do not back onto high visibility corridors), parking lot design and similar design considerations.
- LU-12-s2 Intergovernmental Agreements shall address implementation of road corridor and entryway plans adopted by the municipality.
- LU-13 New development in wildfire hazard areas shall be designed to allow defensible space around structures and otherwise mitigate potential hazards to life and property.
- LU-13-s1 Recommendations for site design contained in the *Recommendations for Im*proving Wildfire Safety in Larimer County - Final Report, should be used as a guide for establishing standards in the Land Use Code.
- LU-14 Energy-efficient design, including the potential for solar access, shall be considered in subdivision design and in the orientation of individual building sites.
- LU-14-s1 The Land Use Code shall include performance standards for solar access.
- LU-15 New roadways, including Larimer County roads, shall be designed and constructed in a manner that minimizes the impact on water quality and

# sensitive environmental areas and considers aesthetics.

LU-15-s1 The Land Use Code shall establish road design and construction standards which consider protecting scenic vistas by minimizing road scars, protect water quality by minimizing erosion and protect native plant communities by minimizing disturbed areas and requiring revegetation with native plants and control of noxious weeds.

# 4. PUBLIC FACILITIES AND SERVICES

The question of public facilities and services is particularly complex in Larimer County because there are so many entities involved in providing services.. For some services, the County is responsible for part of a system of facilities, such as transportation and the regional park and open space systems. Lastly, many services and facilities that are essential to County residents are provided by municipalities, special districts and even private associations, including schools, fire protection and central water and sewer.

Chapter 2, Growth Management, sets out a strategy to ensure that adequate facilities and services are clearly defined for different types of development and are required as part of the development process. This type of strategy is usually called a requirement for Adequate Public Facilities (APF), or Concurrency, which means that facilities must be in place concurrent to, or at the same time as, development. The growth management strategy for facilities and services also recommends that the cumulative impacts of growth on facilities be mitigated through the use of capital expansion or impact fees. The chapter also explains the need for a long-term plan for providing major facilities.

This chapter provides more detailed information about existing facilities and services and known present and future needs. It establishes principles that can be used to determine levels of service in the Land Use Code. It recommends a coordinated long-term planning approach for public facilities, including those that are not directly provided by Larimer County. Lastly, it provides principles for developing a system of capital expansion fees.

# **4.1 Description of Existing** Facilities

This section provides background information on service providers, current levels of service and issues related to growth and development for the following facilities and services:

- Water
- Wastewater
- Fire Protection and Emergency Response
- Regional Parks, Trails and Open Space
- Schools
- Stormwater Management
- Solid Waste and Recycling



Horsetooth Mountain Park, Larimer County.

#### 4.1.1 Water Facilities

Water service in Larimer County is provided by municipalities, water districts, private water associations and individual wells. Water quality in



public supplies is regulated under the Colorado Primary Drinking Water Regulations which are administered by the Colorado Department of Public Health and Environment. Two classifications of public supplies are recognized. The larger supplies, known as public *community* water systems, provide service to most of the Front Range study area. The other type of public supplies are termed *non-community* systems. There are 95 of these smaller systems in Larimer County. They include facilities open to the public that are connected to individual wells. Examples include schools, motels, guest ranches, camps and restaurants.

Private water wells must be approved by the Colorado Division of Water Resources before they are drilled. In 1995 the Division made a change in their procedures for making comments to Counties regarding the availability of water for new developments. They no longer make comments for development proposals that do not involve subdivision of land. Included in this category are zone changes, special use reviews and division by exemption, including the Minor Residential Development (MRD) process. In those cases where wells are proposed as the water source, this change results in a gap in information about water availability during the planning process.

Potable water is available from a community water system in most of the Front Range study area. Not all areas with domestic service are able to meet requirements for fire protection. Domestic water can often be provided through a distribution system of smaller lines, but fire hydrants usually require at least a 6-inch line diameter to ensure adequate fire flow.

The following issues are specific to water facilities and service in unincorporated Larimer County:

1. Coordination of the planning process with water providers is important for insuring that investments in infrastructure are made where they are most needed. The County should examine mechanisms for increasing levels of interaction and cooperation. The potential for intergovernmental agreements should be considered.

- 2. As part of the PLUS planning process, Larimer County is reviewing and revising existing development standards and procedures. The Adequate Public Facilities section sets forth principles and strategies for determining standards and continuing to monitor and review standards as needs change over time. Service providers should be an integral part of this process.
- 3. In the case of development proposals where wells are to be the source of water and where the Colorado Division of Water Resources no longer makes referral comments, provisions should be made for addressing potential water availability. Options include requiring applicants to obtain opinions either from independent water experts or directly from the Division, or considering conditional approval in cases where water availability is uncertain.
- 4. Some areas within the Front Range Study Area have community water distribution systems that cannot meet current and/or proposed standards for rural residential use. The County should work with service providers to improve existing systems where possible, to provide a uniform minimum level of service to County residents. At the same time, the County should not approve new development in areas where adequate services are not available.

#### 4.1.2 Wastewater Facilities

Wastewater treatment in unincorporated Larimer County is provided by public central sewer, operated by municipali-



ties and sanitation districts; by community systems, operated by homeowners associations; and by individual on-site septic systems.

The operation and treatment efficiency of sewage treatment facilities are regulated by State statutes and regulations administered by the Colorado Department of Public Health and Environment's Water Quality Control Division. These regulations apply to both public sewer providers and homeowners associations operating community systems. Discharge permits are issued with requirements regarding volume and quality of effluent, and planning and construction for new capacity as plants approach their design capacities. New or expanded sewage treatment facilities are required to comply with the North Front Range Water Quality Association's Water Quality Management Plan (also known as the 208 Plan). The North Front Range Water Quality Association (NFRWQA) is a group of sewer service providers in Weld and Larimer Counties and includes representatives from the respective Health Departments of those counties. The NFRWQA employs a permanent staff person and periodically retains consultants to update and revise the Water Quality Management Plan, as required by state and federal law. The planning process and document are the principle means of coordinating planned land use patterns and expansion of treatment facilities and service areas in the County.

The diverse management arrangements for sewer service can result in inefficient service, poor treatment levels and high frustration on the part of homeowners. Experience has shown that, in general, special districts, cities and towns provide the highest level of service. Sewer systems operated by homeowners associations experience the most difficulty. Discussions with public sewer providers indicate that extension of sewer lines within municipal or district service areas is almost always a more economical solution than developing small treatment plants, and provides the best long-term service to homeowners. For development outside current sewer service areas, individual on-lot septic systems on large lots also provide adequate service.

Intergovernmental agreements for the urban growth areas of Fort Collins and Loveland re-

quire the use of public sewer for development within their boundaries. Timing development for properties within the urban growth areas where sewer service is not available is important to fully implement the County's urban land use strategies. In the past there were several categories of exceptions to the standard of required public sewer, including Minor Residential Developments and small commercial uses requiring special reviews, in addition to sewer waiver requests on all kinds of development. In some cases the result of allowing areas of development without public sewer has been to create obstacles to future expansion of public sewer systems.

On-site sewage treatment systems are regulated by the County Department of Health and Environment. Soil test data is required prior to the issuance of permits. Inspections are made during the construction phase to insure that new systems meet design standards. Approximately 15,000 on-site sewer systems are in use in the County. A discussion of the land use implication of these systems is contained in a paper written by the County Department of Health and Environment titled Technical Report and Recommendations for the Partnership Land Use System (PLUS) - On-Site Sewage Treatment Systems (December 1995). County policy and regulations specify that individual on-lot septic systems require a minimum lot size of 100,000 square feet (2.29 acres).

The following issues relate to wastewater treatment in Larimer County:

- Decisions made by sanitation districts concerning service area and line capacities have major impacts on land use patterns. A mechanism needs to be developed to coordinate the visions of land use development in the County, the cities and towns, and the sanitation districts.
- 2. Current standards for public sewer provision within urban growth areas leave some

gaps and loopholes. Exceptions to the public sewer standard create problems in costeffective expansion of service within the urban area, and thus potential roadblocks to annexation, as well as levels of development that are not consistent with the urban area.

- 3. Recommendations outlined in the County Department of Health and Environment's *Technical Report and Recommendations for the Partnership Land Use System (PLUS)*, December 1995, regarding On-Site Sewage Treatment Systems (OSTS) should be evaluated as possible implementation strategies for the plan.
- 4. The strategy for requiring clustered development throughout the rural area of Larimer County (see Rural Land Use, Chapter 3) raises issues of appropriate levels of service for sewer. A proliferation of private package sewage treatment plants operated by homeowners associations can lead to inadequate financial planning, poor treatment levels, and potentially, a future bailout at the expense of County taxpayers. Within public sewer service areas (as defined by the North Front Range Water **Quality Planning Association's Water** Quality Management Plan) privately-owned and managed treatment plants may also present obstacles to the logical extension of public sewer service. Discussions with public sewer providers indicate that extending sewer lines within municipal or district service areas is almost always a more economical solution than developing small treatment plants, and provides the best long-term service to homeowners. New community sewer systems should only be located within defined public sewer service areas if the sewer system will be owned or managed by the applicable sewer district or municipality.
- Community sewer systems proposed outside public sewer service areas should demonstrate through an economic analysis that the cost of extending and connecting to

public central sewer exceeds the cost of design and construction of the community package plant. A plan for operation and maintenance of the community sewer system should also be considered as part of the community system approval.

6. For development outside current sewer service areas, individual on-lot septic systems on large lots can also provide adequate service and allow for future re-development when public sewer becomes available to the area.

### 4.1.3 Fire Protection and Emergency Response

Fire protection and emergency response in Larimer County are provided by fire protection districts, volunteer fire depart-



ments and, in areas not otherwise covered, by the Larimer County Sheriff's Department. In addition, the US Forest Service, Colorado State Forest Service and Rocky Mountain National Park have responsibility for fire fighting on public lands. The Sheriff's Department maintains a Mutual Aid Agreement with the districts, departments and agencies engaged in fire suppression to facilitate voluntary sharing of manpower, equipment and expertise.

In just the Front Range Study Area, four districts and authorities have fire stations (Berthoud, Loveland, Poudre and Wellington) and two have service areas with facilities located outside the mapped area (Windsor-Severence and Livermore). Emergency medical response is an important part of the service provided by fire protection districts and authorities. All the service providers in the Front Range Study Area are trained to provide this type of service. In both the Poudre Fire Authority and the Loveland Fire and Rescue Departments, more than 60% of all calls are for medical services, compared with about 10% for fire. Wildfire is an important issue in the foothill and mountain areas which comprise much of the County land area. In studies completed in 1992 and 1993, Larimer County was ranked the most hazardous county in Colorado with respect to wildfire hazards. According to statistics compiled by the County Wildfire Mitigation Coordinator, an average of 161 wildfires occur annually in Larimer County, burning an average of 2,209 acres each year. In 1996, an estimated 50 to 60 homes were threatened by wildfire in Larimer County.

The primary responsibility for wildfire protection within Larimer County government is with the Emergency Services Unit (ESU) of the Larimer County Sheriff's Department. The ESU provides initial attack response and coordination with twelve rural Fire Protection Districts, five rural Volunteer Fire Departments, the municipal Fire Authorities of Fort Collins and Loveland, the US Forest Service, the National Park Service and the Colorado State Forest Service. Costs of wildfire suppression continue to increase. In Colorado, counties are responsible for fire suppression costs on private and state lands.

Larimer County, the Colorado State Forest Service and the Arapaho-Roosevelt National Forest have jointly created and funded a Wildfire Mitigation Coordinator position within the Emergency Services Unit. The Coordinator has prepared a report, Recommendations for Improving Wildfire Safety in Larimer County, which is available in the Planning Department. The report analyzes past wildland / urban interface fires and notes common factors among structures destroyed or damaged by wildfire. Some deal with construction materials and location in hazardous areas. However, some relate directly to fire protection facilities: limited water supply, resources and personnel arriving too late, and poor access to structures.

Whether in urban, flatland rural or mountain areas, successful fire fighting requires bring-

ing together fire fighters, equipment and water supply in adequate amounts and in a timely manner. For this reason, coordination between fire service providers and water providers is essential to developing standards for fire protection. The key elements to consider are the water supply (measured in gallons per minute) available at the site and the response time of fire fighters. In more rural areas, on-site water storage can be used. Where response time is longer than the preferred alternative, structural sprinkler systems can be an option.

On-site fire protection facilities can provide a reasonable alternative to public facilities in locations where public facilities are not available. However, regulations need to identify options clearly and ensure that at least one of the viable options is available to all new development. In the past, for example, where a subdivision was approved in an area remote from a fire station with a condition requiring interior sprinklers, individual home builders would sometimes request a building variance to waive the sprinkler requirement. This type of variance could lead to a potentially dangerous situation not only for that homeowner but for other adjacent property.

The following issues pertain to fire protection and emergency response:

 As part of the PLUS planning process, Larimer County is reviewing and revising existing development standards and procedures. In the past, development standards for fire protection have considered primarily water supply. A more comprehensive approach is to develop standards based on coordination with both water and fire protection service providers. Standards will be developed for fire response, either using time, distance or a combination of both. The standards should also consider the increasing importance of emergency medical response as part of the role of fire protection service providers. 2. Wildfire will increase as an issue in Larimer County as development moves into more remote mountainous terrain. The recommendations contained in the report, *Recommendations for Improving Wildfire Safety in Larimer County*, should be considered in facility standards for fire protection.

#### 4.1.4 Parks and Open Space

The abundance of outdoor recreational opportunities in Larimer County is a key element of the area's quality of



life. Open spaces help define the character of

the County and provide a welcome contrast to the compact urban form of our communities. Large parts of the County are owned by Federal land management agencies – Rocky Mountain National Park (9%) and Roosevelt National Forest (40%) – but this land is located in the western two-thirds of the County away from the majority of the population.

Larimer County owns and/or manages several large regional parks and open space areas in the eastern part of the County (see Table 4.1).

Facility	Owned by	Managed by	Acres	Improvements
Horsetooth Reservoir	Bureau of Reclamation	Larimer County	3,900	1,2,3,4,5,7
Horsetooth Mtn Park	Larimer County	Larimer County	2,100	1,2,6,7
Carter Lake	Bureau of Reclamation	Larimer County	2,100	1,2,4,5
Coyote Ridge	Fort Collins	Fort Collins	757	acq'd 1995
Viestenz-Smith Park	Loveland	Loveland	340	1,2,5,7
Campeau/Res. Ridge	Fort Collins	Fort Collins	260	7
Pinewood Lake	Bureau of Reclamation	Larimer County	250	
Flatiron Reservoir	Bureau of Reclamation	Larimer County	250	1,2,5
Shooting Range	Larimer County	Larimer County	110	1,2
McMurray Park	Larimer County	Larimer County	25	1,2,5,7
Lions Park	Larimer County	Larimer County	20	1,2,5
Sports Cycle Park	Larimer County	Larimer County	16	1,2
Big Thompson Parks	Larimer County	Larimer County	12	1,2,5
Bingham Hill	Larimer County	Larimer County	3	1
Strauss Cabin	Larimer County	Larimer County	2	8
Total, Managed by Lo	10,145			
Subtotal, Managed by County				
Subtotal, Owned and/or Managed by Local Government				
Subtotal, Owned and Managed by County				
* Improvement codes:	l=picnic facilities, 2=toilets,	3=campground, 4=bo	at ramp, 5=f	shing access,

Table 4.1 E	Existing Regional	Park/Open	Space Facilities,	Larimer County
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\* Improvement codes: 1=picnic facilities, 2=toilets, 3=campground, 4=boat ramp, 5=fishing access. 6=backcountry camping, 7=trails, 8=historic sites.

Source: Larimer County Parks Plan; Larimer County Planning Department, March 1996.

In addition, similar facilities in the area are provided by the City of Fort Collins Natural Areas program and the Loveland Parks Department. These facilities are also shown on Table 4.3, categorized by type of facility. Larimer County also owns a handful of small natural areas, one historic site and two special-use recreation areas in the Front Range Study Area.

Larimer County adopted a Comprehensive Parks Master Plan in 1993. The Plan outlines four major objectives: upgrading existing facilities, extension of the regional trail system, establishment of new open space areas and provision of water-based recreation at less developed sites. Improvement of existing parks was estimated to require about half of the projected ten-year budget of \$5 million. In 1995, Larimer County voters approved an eight year \$0.0025 sales tax dedicated to implementing the Parks Master Plan, specifically acquisition and development of new regional parks, open space and trail sites.

State law governing county subdivisions requires the dedication of land for parks or fees in lieu thereof. Larimer County has used this provision for many years, currently collecting a fee-in-lieu of \$320 for each new residential building permit in new subdivisions where the County Commissioners have attached the fee as a condition of subdivision approval. Within the Urban Growth Areas of Loveland, Fort Collins and Berthoud, the County collects a park fee equal to that collected in the adjacent city or town. Most of this UGA park fee is returned to the adjacent municipality for use in developing urban parks in the area of the approved subdivision. A portion is retained by the County for regional park facilities.

An alternative to this fee system is a capital expansion fee for regional parks, trails and open space. These fees could be applied to all new residential building permits, not only to those in some County subdivisions. Potentially, they could also be collected on residential permits issued within city and town boundaries, through Intergovernmental Agreements. County regional park facilities are used by all County residents and are also funded by all residents through property tax and the dedicated sales tax for open space. Another potential future for financing acquisition of open space is to use an open space fee as a "fee-in-lieu" of acquiring transferred development rights (TDRs). (See section 2.5 for information about TDRs.)

Larimer County has a popular and successful regional parks and open space program. The primary issue regarding the program relates to maintaining the program's quality in light of increasing demands resulting from new growth and development.

#### 4.1.5 Schools

Public schools in Larimer County are provided primarily by three districts: Poudre School District (headquartered in Fort Collins), Thompson



R2-J (Loveland-Berthoud area), and Park R-3 (Estes Park). Two additional districts, Johnstown and St. Vrain (Longmont-Lyons area), serve small areas of the County.

Growth and development throughout the County has a direct impact on public school facility needs, personnel and operating costs. New school facilities can also impact the County, for example, by increasing demand on the County transportation system. Larimer County is currently negotiating Intergovernmental Agreements with the Poudre, Thompson, Park and St. Vrain Districts to address these issues.

State law governing county subdivisions requires the dedication of land for schools, or fees in lieu thereof, as part of the subdivision process. For many years the County collected a fee of \$8.00 per new residential building permit in subdivisions where this condition was required by the County Commissioners. Recently the Poudre, Thompson and St. Vrain Districts proposed new fees-in-lieu of land dedication, based on calculations of impacts of residential development on school land needs specific to their districts. The new fees were adopted in August 1996, and now range from \$332 to \$483.90 per new residential unit. Park School District is expected to request an adjusted fee-in-lieu as soon as the necessary studies are completed. These fees will be reviewed periodically by the Districts, and the County Commissioners will be requested to adjust them as necessary.

#### 4.1.6 Stormwater Management



Stormwater management facilities generally include a means of conveying excess

stormwater runoff from individual lots and streets downstream to an acceptable point of discharge. In some cases runoff is routed through a detention pond to slow the rate of discharge before being released into downstream facilities. In other cases, runoff may be discharged into a lake or other body of water. The latter may require some type of treatment to ensure that water quality is not degraded. The issue of stormwater management is also related to flood plain management (see Sec. 6.3) and water quality and quantity issues (see Sec. 6.6).

In urban areas, the high percentage of impervious surfaces greatly increases the amount of stormwater runoff from individual lots. The provision of urban stormwater management services requires highly technical information and analysis to be effective. As with other urban-level services, municipal governments are better able to provide the more technical level of service required for effective stormwater management in urban areas. The staffing and available resources of the County are more geared toward rural areas. Larimer County will look to its respective municipalities for assistance and collaboration in the area of urban stormwater management. Also, the paths of stormwater flow do not follow jurisdictional boundaries, and thus multijurisdictional solutions may be needed.

Even in rural areas, the County is not able to provide more than a basic level of service. Generally, stormwater management in rural subdivisions includes conveyance via roadside ditches into a detention pond located within the development. The detention pond is designed to discharge runoff at a rate no greater than the historic rate from the property. In most cases the County does not maintain rural stormwater drainage systems. The County expects rural residents to be active in the maintenance of their stormwater systems. The County may act as a facilitator to provide assistance to rural residents wishing to form stormwater districts to retrofit stormwater facilities and provide a higher level of maintenance in rural areas.

Stormwater management facilities are also an essential part of new development. Any new development seeking the approval of the County in either urban or rural areas will be expected to provide adequate facilities for disposition of stormwater. New developments will also be expected to provide for maintenance of those facilities.

#### 4.1.7 Solid Waste and Recycling

The Larimer County Natural Resource Department operates the joint municipal/ County



sanitary landfill and recycling center, located between Loveland and Fort Collins west of County Road 19. The Cities of Loveland and Fort Collins participated in the initial purchase of the site but the County is responsible for funding and operating the facility. The County also operates transfer stations in the communities of Berthoud, Wellington and Red Feather Lakes and owns a transfer station in Estes Park, operated by a private contractor.

The County Recycling Center accepts cardboard, newsprint, office paper products, glossy magazine paper, aluminum cans and foil, other metal cans, glass containers and plastic type 1 and 2 containers. Some automotive products including used motor oil, transmission and brake fluid and batteries are also accepted. Larimer County also operates a household hazardous waste collection facility at the landfill for most of the common household materials which cannot be either disposed of at the landfill or recycled. This service is provided at no cost to all Larimer County residents. The County is also accepting small amounts of hazardous materials from small businesses.

The Natural Resource Department estimates current solid waste generation rates at between 6.5 and 7.2 pounds per person per day for all Larimer County residents. Although recent growth and new construction has resulted in increased demand on the landfill, it appears that per-person trash generation may be decreasing slightly, perhaps due to recycling.

The landfill has initiated a vertical expansion program for the sanitary landfill. This expansion will raise the existing site elevation approximately 20 feet and will extend the estimated life of the current landfill about 10 years. The Solid Waste Task Force is currently assessing the solid waste options for Larimer County. Policies are pending the outcome of the Task Force recommendations.

# 4.2 Approach for Public Facilities and Services

The County's principle strategy for linking development and provision of facilities and services is adoption of an Adequate Public Facilities regulation. The concept of an Adequate Public Facilities (APF) regulation as a growth management tool was introduced in Chapter 2. The APF regulation would require a detailed review of new development proposals for consistency with adopted level of service standards. There are three components to this strategy:

- 1. Establishing minimum service levels that consider differences between different densities and intensities of development and also the realistic ability of service providers to meet the service levels.
- 2. Strengthening the coordination of land use planning and capital improvement programming, both within the County and with municipalities and special districts.
- 3. Developing and refining fees that relate growth and development to expansion of public facilities.

Each of these components must be coordinated with the various service providers.

# 4.3 Guiding Principles and Implementation Strategies For Public Facilities and Services

In the shaded section below, each primary paragraph (in bold type) is a statement of principle. The subparagraphs are strategies for implementing the principle.

## ADEQUATE PUBLIC FACILITIES

- PF-1 New development shall be approved only when adequate public facilities and services are available, or when necessary improvements will be made as part of the development project.
- **PF-1-s1.** Adequate facilities and service levels shall be clearly defined in the Land Use Code and shall include standards for water, sewer, fire protection, stormwater management and transportation at a minimum. In Growth Management Areas, service level standards shall be compatible with those of the adjacent

municipality, as specified in an Intergovernmental Agreement with the municipality. In other areas, standards shall be based on the density and intensity of the use.

- **PF-1-s2.** The facilities need either to be in place or to have funding commitments made prior to completion of any project, to ensure that new residents are not left without required facilities and services. For facilities that will be the responsibility of individual property owners to develop, i.e., wells and septic systems, the Land Use Code should include provisions to ensure that the facilities can actually be provided as proposed in a development application.
- PF-2 On-site alternatives for the provision of public facilities shall only be allowed where they do not potentially conflict with planned expansions of public systems.
- **PF-2-s1.** Within designated urban areas, public sewer shall be a requirement for all types and levels of development.
- PF-2-s2. Public sewer is the preferred alternative within sewer service areas as identified in the North Front Range Water Quality Management Plan (208 Plan).
  For Rural Conservation Development where public sewer service is not available, individual on-lot septic systems may be considered on lots of at least 2.29 acres, while maintaining minimum open space requirements. New community sewer systems will be considered only outside sewer service areas. (See Rural Land Use Guiding Principles, Chapter 3.)
- **PF-2-s3.** Stormwater management services in rural areas will be provided by property owners through the establishment of self help programs, such as the voluntary formation of a drainage improvement district.

- **PF-2-s4.** Larimer County shall encourage development of fire departments and fire protection districts in rural areas, where adequate services are not currently available.
- **PF-2-s5.** The County may, where possible, expedite any land use review process for proposed fire stations and waive or reduce fees associated with the land use review process and building permits for constructing fire stations. During the land use review process, the County may look for opportunities to designate land for future fire stations and other appropriate assistance.

#### **COORDINATED PLANNING**

- PF-3 The North Front Range Water Quality Management Association (NFRWQA) with its water quality planning process shall continue as the lead agency to facilitate coordination of land use planning and sewer system capital improvement programming.
- **PF-3-s1.** The Planning Department shall seek increased participation in the NFRWQA planning process in order to facilitate coordination.
- PF-4 Larimer County water service providers and fire protection districts shall coordinate domestic water service standards and fire protection standards for water supply to ensure that all County residents have adequate water supplies for domestic use and for fire protection.
- **PF-4-s1.** Level of service standards in the Land Use Code shall be coordinated with service providers.
- PF-5 Larimer County will continue to use the Parks Master Plan, the Plan for the Region between Loveland and Fort Collins and other adopted plans as a guide

#### to acquiring and developing parks, trails and open space.

- **PF-5-s1.** Guidelines for defining, acquiring and maintaining open lands are contained in the Help Preserve Open Space Initiative and in the Mission Statement for the Larimer County Open Lands Program, adopted by the Board of County Commissioners in July 1996.
- **PF-5-s2.** All Larimer County acquisition of open space shall require a willing seller-willing buyer condition.
- PF-6 In Growth Management Areas and Cooperative Planning Areas, the County shall collaborate with adjacent municipalities to develop and implement basin-wide stormwater management plans.
- **PF-6-s1.** The County will work with its respective municipalities to develop urbanlevel stormwater management standards that are mutually acceptable to the jurisdictions.
- PF-7 Larimer County shall encourage the School Districts that serve the County to coordinate land use planning and school facility expansions in order to allow cost effective services to be provided while minimizing negative impacts on the existing facilities of each jurisdiction.
- **PF-7-s1.** Larimer County shall work with School Districts to establish Intergovernmental Agreements to facilitate coordination of land use planning, development review and provision of new school facilities.
- PF-8 The location and design of new public facilities shall be consistent with the Master Plan.
- **PF-8-s1.** Larimer County shall consider establishing Intergovernmental Agreements with service providers.

- PF-9 Larimer County will encourage private landowners and local, state and federal governments to develop and implement cooperative strategies to minimize critical wildfire hazards potentially affecting life and property.
- **PF-9-s1.** The County shall encourage cooperative planning efforts to address wildfire prevention, hazard mitigation and wildfire suppression costs as well as public and firefighter safety.
- **PF-9-s2.** Larimer County shall address wildfire management on County owned and/or managed lands where appropriate.

#### FUNDING MECHANISMS

- PF-10 To the extent legally possible and practical, the County shall use capital expansion fees to help fund facilities.
- **PF-10-s1.** A public participation process will be instituted to determine the feasibility, legality and fairness of increasing existing fees where necessary, and enacting new fees where/when needed.
- PF-10-s2. Incentive programs shall not include waivers of required capital expansion fees or facility improvements. Rather, funding mechanisms shall be created to pay required fees so that the cost of incentives is equitably shared and not directed only to adjacent properties.
- **PF-10-s3.** Maintenance of internal subdivision roads shall be the responsibility of residents of that subdivision. Improvement districts for subdivision road maintenance will be formed in new subdivisions as a condition of approval of the development, in order to provide a predictable and secure source of funding for on-going maintenance and future replacement of subdivision roads. Residents of existing subdivisions will also be encouraged to form improvement districts

to obtain more timely maintenance of their internal subdivision road system.

- PF-11 The County will act as a facilitator to the construction of retrofit stormwater facilities for existing developments and it will provide stormwater management services within Growth Management Areas in cases where property owners have voluntarily formed improvement districts to pay for these facilities and services.
- **PF-11-s1.** The County will collaborate with the respective municipality to provide stormwater management services, provided that benefited property owners have created an improvement district or other mechanism to pay for these services. The County will act as a facilitator to assist in the voluntary establishment of improvement districts or stormwater utilities.
- PF-12 Larimer County shall develop a capital improvement program to address the needs of County facilities that are currently deficient.
- **PF-12-s1.** Larimer County departments will utilize capital expansion fees to help pay for facilities that are needed as a result of growth, and will develop Capital Improvement Plans and funding mechanisms to pay for current deficiencies in those facilities.

# 5. TRANSPORTATION

The transportation system plays a key role in determining land use patterns. On the other hand, land use is an important factor in determining roadway functions and designs. Consequently, land use planning and transportation planning must be coordinated to achieve the objectives of each.

The primary purpose of a transportation system is to move people and goods in a safe and efficient manner. A variety of different travel demands needs to be considered to fulfill this purpose, as in the case of traffic passing through the County versus traffic from rural parts of the County with a city destination. The movement of people and goods also involves various transportation modes – vehicular, transit, pedestrian and bicycle – to provide for a high degree of mobility to all segments of the population.

The County roadway system is currently the key element of the transportation system in accommodating the majority of travel needs outside municipal limits. This is likely to remain the case into the foreseeable future as some form of private automobile remains the primary mode of transportation. Therefore, it is important to develop a transportation plan that will enable the County to identify a system to satisfy the travel needs of County residents.

In the past, the County roadway network was designed to serve rural and regional needs. Arterial and local roads were constructed in conjunction with low-density development patterns. Recent growth and development in the County have created an increase in traffic demands on this roadway network that are not easily accommodated.

The County's ability to construct new roads and improve existing roads is severely limited due to lack of funding. A majority of the County's road and bridge budget is currently used for maintenance and repair of existing roads. These maintenance costs are directly attributable to a high number of road miles serving a large geographic area of somewhat low density and scattered development.

# 5.1 Assessment of Existing System and Its Deficiencies

In an effort to understand how transportation is currently provided within the County, an inventory of the existing system's elements was conducted for the Front Range Study Area (see Map 3.1 for Front Range Study Area location). The existing transportation system was inventoried through a variety of sources, including the County roadway database, Colorado Department of Transportation (CDOT) bridge inventories, Larimer County Transportation Plan Technical Advisory Group, public meetings and citizens' comments. This inventory focused primarily on the roadway network but also included the transit system, bicycle facilities and rail transportation system.

#### 5.1.1 Existing County Roadway Network

Along with the state highway system which serves as a backbone within the Front Range Study Area, the County roadway system provides the dominant transportation network in the region.

A roadway network is typically comprised of a hierarchy of road types. In general, roads serve two functions: access and mobility. The degree to which a road serves these functions defines the *functional classification* of the road. Local roads and collector roads principally provide access to businesses, residential developments, schools, etc. Arterial roads primarily provide mobility by connecting major destinations.

Identifying the functional classification of existing and proposed roads is important for day-to-day planning and engineering activities in at least two ways: (1) it defines the rightof-way that needs to be acquired or reserved for future roadway improvements and (2) it determines the spacing of access points onto the roadway. The functional classification, in combination with design standards for each of the roadway classes, also determines the improvements that are necessary to existing roads and how new roads should be designed and constructed. Table 5.1 summarizes the mileage of existing County roads.

*Minor Arterials:* Arterial streets provide for direct traffic movement from one central area to another. They frequently form boundaries for developments and provide access to abutting developments.

*Major/Minor Collectors:* Collector streets are the main interior streets within and between the development areas. Their main functions are to collect and distribute traffic from the local streets. Generally, collector streets do not provide access to adjacent developments. Collector street traffic typically has an origin or destination nearby.

*Local Roads:* The primary function of a local road is to provide access to adjacent land uses in the area. Local roads typically have lower travel speeds and through traffic is highly discouraged. However, this is not necessarily the

Table 5.1 Roadway Miles By Functional Classification

case in some rural areas of the County where local roads provide inter-city travel with higher speeds.

#### 5.1.2 County Roadway Deficiencies

Vehicular travel, transit systems and the majority of bicycle travel in this area rely heavily on a well maintained and complete roadway system and network. Overall the County roadway system in the Front Range Study Area is in good physical condition. Deficiencies are noted in congestion (traffic volume exceeding capacity), structurally deficient and functionally obsolete bridges, unpaved roadways where traffic exceeds County average daily trip (ADT) standards, needed road improvements based on projected roadway needs, re-alignment and roadway widening (increasing from two to four lanes), and locations with high accident/hazard levels. This list of deficiencies does not include improvements needed on existing roads where travel lanes and shoulders need widening, as new design standards for each road functional classification have not yet been developed (see Section 5.2).

#### **Existing Traffic Volumes**

Traffic volumes indicate the relative importance of a roadway in an area. When compared to roadway capacity estimates, traffic volumes also reveal, in a general way, how a

Functional Classification (Existing)	Total County Roads (Miles)	Percentage of Total County Miles	Front Range Study Area Roads (Miles)	Percentage of Front Range Study Area Miles
Minor Arterial	60	6%	30	7%
Major Collector	70	7%	65	15%
Minor Collector	425	43%	165	38%
Local Road	435	44%	170	40%
Total	990	100%	430	100%

Source: Draft Transportation Element, Felsburg Holt & Ullevig, October 1996 (Does not include Schedule A Forest Service Roads which are maintained by the County).

road is functioning (level of service) and if improvements are necessary to increase capacity.

The most commonly used measurement of traffic volume is Average Daily Traffic (ADT). ADT is defined as the total number of vehicles passing a certain point in both directions in a 24-hour period. Existing traffic volume data were compiled from two main sources, Larimer County Department of Public Works and Larimer County Planning Department. The data provided were collected over the last five years

Corridor levels of service were determined using the existing ADT volumes for various roadway segments. The County roads performing below a level of service C are County Road 17 within and between the Ft. Collins and Loveland Urban Growth Areas and between Loveland and Berthoud, and County Road 19 in the Ft. Collins Urban Growth Area.

#### **Bridge Structures**

Bridges are an important element of the roadway system. Deterioration of bridges is becoming a serious problem throughout Larimer County. Bridges are inspected and evaluated by the Colorado Department of Transportation (CDOT) on a regular basis. Through this inspection program, structurally deficient and functionally obsolete bridges are defined as follows:

- Structurally Deficient: Those bridges in advanced stages of deterioration or in marginal structural condition but still functioning at a minimal level. This category also includes bridges that do not have desired load-carrying capacities.
- Functionally Obsolete: Those bridges that have acceptable load carrying capacity but that impose unacceptable physical restrictions such as narrow width, restricted vertical clearance, limited sight

distances, speed-reducing curves or insufficient waterway capacity.

Bridges are routinely inspected and rated based on a sufficiency rating from zero to 100. Any bridge rated below 80 is a potential candidate for rehabilitation or replacement. Currently, 216 bridges within Larimer County are included in CDOT's bridge inspection program, which includes all structures that are 20 feet wide or more. CDOT has identified 58 bridges eligible for rehabilitation or replacement projects. Of these, 54 of the bridges are within the Front Range Study Area.

#### Unpaved Roadways

The inventory indicates that about 660 miles of roadways in the County are currently unpaved. State air pollution regulations require owners and operators of unpaved roads with vehicle traffic exceeding 200 vehicles per day to use all available, practical, reasonable methods to minimize particulate emissions. Paving is the most effective available control method. Using these criteria, approximately 100 miles of the existing roadway system have been identified as requiring paving for all of Larimer County. Approximately 60 miles of the 100 total miles are located within the Front Range Study Area.

#### Paved Roadways

Roadway deficiencies were identified based on projected roadway needs, re-alignment and roadway widening (increasing from two to four lanes). Approximately 42 miles of roadway in the County were considered for improvements based on these needs, of which 37 miles are located within the Front Range Study Area.

#### Safety And Intersection Deficiencies

A review of reported accidents over the last four years and calculated accident rates within the County identified numerous high accident locations. Perceived high accident/hazard locations were also identified by the Larimer County Transportation Plan Technical Advisory Group and the general public. This process identified 21 projects, of which 16 are located within the Front Range Area.

#### 5.1.3 Bicycle Facilities

The Larimer County Parks Department has been implementing a bikeway system over the last ten years. These bikeways include designated bike routes, on-street striped bike lanes and off-road multi-purpose trails. Each bike facility has very specific definitions, as follows:

*Bicycle Trail:* A trail, path or segment of a bikeway completely separated from the roadway and used exclusively for bicycles and pedestrians (i.e., off-street recreation trails and sidewalk trails).

*Bicycle Lane:* A portion of a roadway designed for bicycles, distinguished by a paint stripe, curb or similar device.

*Bicycle Route:* A system of bikeways which interacts with motorized traffic, does not have a separate lane and is designated by route markers. Bicyclists must share the same roadway with motor vehicles.

The Cities of Fort Collins and Loveland are also developing a bikeway and trail system. Coordination between jurisdictions is essential to provide linkages between city and County facilities and among the communities within the County.

## 5.1.4 Transit System

The existing transit system serving County residents includes public and specialized providers, commercial providers and inter-city providers.

TransFort currently provides fixed-route public transit in Fort Collins, oriented towards Colorado State University students and persons who are transit-dependent. Commuter Pool provides carpool matching and vanpool services in Larimer and Weld Counties.

Paratransit services are oriented to the needs of persons who are elderly or who have disabilities. Providers include Dial-A-Ride and Senior Alternatives in Transportation provided in Fort Collins and Loveland, Extra Special People Transportation in Loveland and Berthoud Area Transit. Foothills-Gateway also provides a significant level of services for its clients, generally in the communities of Fort Collins, Loveland and Berthoud. Other areas of Larimer County have little or no service.

Inter-city bus service (TNM&O and Greyhound) is available in Larimer County. In addition to regular inter-city services, there is currently regular service to the Denver International Airport through Airport Express and Shamrock Taxi.

Larimer County participated in the 1996-2002 Transit Development Plan in 1995-96, which identifies improvements to transit services in Fort Collins, Loveland and Larimer County to help provide effective transit services in the region. The plan was developed through the North Front Range Regional Air Quality and Planning Council, the regional transportation planning organization for the Fort Collins-Loveland-Greeley urban area. The Transit Development Plan identifies how transit services can be improved to provide a viable alternative to automobile travel. Because each area is starting with a very different level of transit services and has different needs, the steps to improve services in each area are different.

In rural Larimer County, the mission is "To work together to provide public and specialized transit services which contribute to a balanced multi-modal transportation system in the county, which foster the economical social and environmental wellbeing of the area, and which are financially feasible."

#### 5.1.5 Rail System

The rail transportation system in Larimer County serves the primary purpose of moving freight. Although passenger rail service in Larimer County is not available at this time, the concept of commuter rail to serve this area is beginning to develop. CDOT has initiated a feasibility study that will evaluate 15 potential commuter rail corridors in the state. The three existing rail corridors in the County are included in this study.

# 5.2 Future Transportation Plan

Larimer County is in the process of developing a Transportation Plan based on existing conditions, projected land uses and expected growth and development in the region, and the principles and strategies of this Master Plan. The Transportation Plan will contain several parts, including:

- a revised functional classification for the County roadway system, and
- a bikeway plan that addresses the needs of both commuters and recreational users.

When the Transportation Plan is complete, it will be adopted as an element of the Larimer County Master Plan. Additionally, the County will develop design standards for roads and bikeways, which will be incorporated into the Land Use Code and a methodology for developing the capital improvement program for transportation facilities.

## 5.2.1 Potential Mobility Corridors

The concept of a mobility corridor is to provide/accommodate future transportation technologies including light rail or other passenger rail systems. It is anticipated that mobility corridors will be a key in the future transportation system serving development centers identified by the land use plan.

The purpose of identifying potential mobility corridors is to reserve right-of-way in the development of land use planning for future roadway extensions and expansions to accommodate this concept. Therefore, as part of the future roadway network, it is essential that various mobility corridors be identified for future transportation needs. The following roadways have been identified by the PLUS Steering Committee and the Technical Advisory Group as potential mobility corridors:

- Interstate 25
- US 287, College Avenue, Lincoln Avenue
- US 34, Eisenhower Boulevard
- State Highway 1
- State Highway 14, Mulberry Street
- State Highway 56
- State Highway 392, County Road 32



# 5.3 Guiding Principles and Implementation Strategies for Transportation

In the shaded section below, each primary paragraph (in bold type) is a statement of principle. The subparagraphs are strategies for implementing the principle.

- TR-1 The Larimer County transportation planning process shall complement the development patterns and principles of the Master Plan.
- **TR-1-s1** The Functional Road Classification Map shall be used as the official future roadway plan for the County.
- TR-1-s2 The Land Use Code shall establish roadway standards that enhance capacity and safety, improve air quality and aesthetics and implement the development patterns of the Land Use Framework Map.
- **TR-1-s3** County road projects shall be designed and constructed in a manner that minimizes the impact on water quality and sensitive environmental areas and considers aesthetics.
- TR-2 New development shall occur only where existing transportation facilities are adequate or where necessary improvements will be made as part of the development project.
- TR-2-s1 Adequate facilities and service levels for transportation shall be clearly defined in the Land Use Code. In Growth Management Areas, service level standards shall reflect those of the adjacent municipality. In other areas, standards shall be based on the density and intensity of the use.
- **TR-2-s2** The Land Use Code shall establish traffic impact requirements to identify the need for improvements created by future development in order to meet adopted level of service standards.

- TR-3 New development shall pay its equitable share for necessary improvements to the County transportation system.
- **TR-3-s1** The Land Use Code shall require construction of improvements identified through a traffic impact study.
- **TR-3-s2** The Land Use Code shall include a traffic improvement fee to support other future improvements to the County transportation system made necessary by the impact of the development, including cumulative impacts.
- **TR-3-s3** The Land Use Code shall establish a mechanism to allow a party who initially funds an improvement to be reimbursed by future developments that also impact that facility.
- TR-4 Larimer County shall encourage the development and use of alternative modes of transportation.
- **TR-4-s1** Larimer County will continue to participate in cooperative efforts with cities and counties in the region to develop a preferred transit system within Growth Management Areas and between cities and towns, consistent with the adopted Transit Development Plan.
- **TR-4-s2** Larimer County shall establish a bicycle plan that recognizes the need to serve both commuters and recreational users and that coordinates with the plans of adjoining cities and counties.
- **TR-4-s3** Larimer County shall support the regional Travel Demand Management (TDM) program by encouraging all major employers to adopt a TDM program and by adopting incentives for promoting use of alternative modes of transportation and for implementing telecommuting programs.
- **TR-4-s4** Larimer County shall continue to support the study and development of

commuter rail service in the Northern Front Range.

### TR-5 Larimer County shall establish a Capital Improvement Program for County transportation facilities.

- **TR-5-s1** The Capital Improvement Program shall identify a methodology for prioritizing projects which emphasizes the importance of maintaining the existing roadway system.
- **TR-5-s2** The Capital Improvement Plan for roadway maintenance and improvement shall consider consistency with the Master Plan as an element of project prioritization.
- **TR-5-s3** The Capital Improvement Program shall identify methods to share costs with adjacent cities and other governmental entities.
- **TR-5-s4** The Capital Improvement Program shall consider funding for alternative transportation mode projects including facilities for bicycles and transit.

# 6. ENVIRONMENTAL RESOURCES AND HAZARDS

Concern for protecting environmental resources has been expressed throughout the citizen participation portion of the PLUS project. In the past, County resource protection has been accomplished on a case-by-case basis, as part of the development review process. The County has lacked detailed mapping of sensitive environmental resources and explicit policies and standards to ensure protection of the resources judged to be most important.

The Environmental Advisory Board (EAB), a citizen board appointed by the County Commissioners, is responsible for identifying gaps and opportunities in County actions involving environmental issues. As part of its contribution to the PLUS process, the EAB prepared recommendations concerning protection of natural and cultural resources to be incorporated in the Master Plan and the Land Use Code. The EAB recommended a six-step strategy for resource protection:

- 1. Define resources.
- 2. Inventory resources.
- 3. Analyze impacts.
- 4. Define tools for protection and mitigation.
- 5. Consider cumulative impacts.
- 6. Monitor the impact of development.

The EAB also identified several categories of resources that the County should identify, conserve and protect because of their importance to the quality of life of Larimer County residents and their value in protecting public health and safety. The full recommendation of the Environmental Advisory Board is available in the Planning Department.

In keeping with the EAB report, the Master Plan pulls together new and existing information on environmental resources and provides definitions and principles for identifying priorities for protection.

A framework for environmental review at the initial stage of development applications is proposed as a strategy to link environmental principles to development design and approval. Principles to aid in the development of explicit performance standards for resource protection and mitigation in the Land Use Code are also included.

# 6.1 Resource Inventory and Environmental Review

In the words of the Environmental Advisory Board report, "landowners, developers and the County share in the responsibility to protect the environment." To this end, it is important to identify resources and conditions that are potentially impacted by proposed development in the initial stages of the project. This process provides the best resource protection and is also fair to the developer. Early identification of possible adverse impacts helps avoid costly redesign of the project later in the review process. This environmental review will be a formal process, based on standards contained in the Land Use Code, to ensure that the environmental review is fairly and equitably applied to all development projects.

#### 6.1.1 Environmental Checklist

The environmental review will include resources and conditions mapped and/or identified or defined by the County, and for which local, State or Federal standards exist. Other environmental resources and values identified by the EAB and others may become subject to this process in the future through Land Use Code amendments as additional information becomes available. The following resources will be included on an environmental checklist and mapped on the sketch plan as part of the initial development review application. Maps of these resources are available at the County Planning Department. The type and source of information is described in more detail in the following sections.

#### **Resources for Environmental Checklist:**

- 100-Year Flood Plains
- Geologic Hazards and Topography
- Wildfire Hazards
- Cultural Resources and Geologic Features
- Wetlands
- Important Wildlife Habitat and Corridors
- Rare and Endangered Plants and Animals (Colorado Natural Heritage Program Inventory)
- Commercial Mineral Resources

Other important environmental resources, such as visual resources, exist and may be amended to the database once approved.

It should be noted that the mapped resource information available through and adopted by the County is generally at a scale and level of accuracy to indicate the need for additional study but not to delineate precise resource area boundaries at the development project level. Resource information will be used as a "red flag" during the initial environmental review process.

## 6.1.2 Rare and Endangered Species

The development review process will support State and Federal standards and regulations regarding rare and endangered species, including vegetative communities. The data base established through the Colorado Natural Heritage Program of Wildlife and Plant Communities of State and National Importance will be the initial indication of the existence of a protected species (see Section 6.2, Ecosystems and Habitat Conservation). All new development projects will be referred to the Division of Wildlife at the initial stage of application. Any subsequent indication that a protected species is present on the site will require further investigation and referral to the U.S. Fish and Wildlife Service. If a protected species is present on the site, a mitigation plan will be required.

#### 6.1.3 Cumulative Impacts

In addition to considering the resources existing on a potential development site and the impacts that development might have on them, it is important to address cumulative impacts on resources. One subdivision in an area may have a negligible impact on wildlife habitat. Yet as subdivisions accumulate on nearby parcels, the habitat may become so fragmented that it no longer supports some species.

In general, there are two aspects of cumulative impacts: temporal and spatial. Temporal cumulative impacts are those that accumulate over time. Spatial cumulative impacts, in this context, consider impacts beyond a given development site. In most cases, both types of cumulative impacts are present.

The PLUS planning process addresses these two aspects of cumulative impacts differently. The spatial aspects of cumulative impacts generally require considering an area larger than the individual development parcel. For some resource types (see Section 6.2, Air Quality) the necessary area is so large that a regional planning approach is needed to assess cumulative impacts. For many resources, however, such as habitat and wetlands, knowledge of the system off-site can lead to better resource protection through site design. The strategy for addressing spatial cumulative impacts has five parts:

- 1. Continue to improve maps of County resources, to better understand the connections between individual ownership parcels.
- 2. Use resource protection as the primary criterion for designing clustered development, to protect resources both on- and off-site.

- 3. Define management practices for resource protection that consider both on- and off-site impacts.
- 4. Initiate and participate in regional studies and implementation strategies concerned with resource protection.
- 5. Where feasible and appropriate, identify specific high-priority resources and long-term plans for managing and protecting them.

To address temporal cumulative impacts, the primary strategy is monitoring and evaluating the generalized impact of development on the natural and cultural environment. The results over time can be used to adjust standards and management practices to continually improve the protection system. Monitoring must occur in two separate contexts:

- 1. Examining the status of indicators for natural and cultural resources as they exist and function in the County.
- Ensuring that new development is constructed and maintained so that it complies with performance standards and conditions of approval designed to protect the resources.

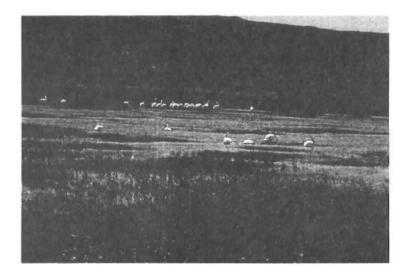
The Environmental Advisory Board suggests that "monitoring the status of the natural and cultural environment can best be accomplished through a partnership with government and private organizations and a commitment to perform specific monitoring where data are not available" (see 7.2, Monitoring and Evaluation).

Designing a meaningful monitoring system will require additional research and input from several fields of expertise. This process should have a high priority, so data can begin to accumulate after adoption of the new Land Use Code. Monitoring the development process for compliance with conditions of approval will require adequate commitments of budget and staffing. One possible source of funding for project monitoring is a dedicated fee collected at the time of final project approval.

# 6.2 Ecosystems and Habitat Conservation

#### 6.2.1 Wetlands

Within the Front Range Study Area, priority has been given to inventorying wetlands. These environmental resources are among the most environmentally important ecosystems in the area and also the most vulnerable to development pressures. Ecological consultants were retained to inventory and map wetland resources in the Front Range Study Area and recommend a strategy for protection. The resulting map and report, *Proposed Wetland Classification and Protection Program*, David J. Cooper, Ph.D., and David M. Merritt, M.S., March 29, 1996, are available in the Planning Department.



The classification system used in the wetlands mapping incorporates both the Clean Water Act (CWA) and U.S. Fish and Wildlife (FWS) wetland definitions, as well as a local classification system designed to quantify the importance and function of each wetland. CWA wetlands are defined by the U.S. Army Corps of Engineers as those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soil conditions. These wetlands generally include swamps, marshes, bogs and similar areas. CWA wetlands are regulated by the Clean Water Act, and activities which might result in disturbance of these resources activate a permit process through the U.S. Corps of Engineers.

The U.S. Fish and Wildlife Service (FWS) defines wetlands as land transitions between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. FWS wetlands must have one or more of the following three attributes:

- 1. At least periodically, the land supports predominantly hydrophytes.
- 2. The substrate is predominantly undrained hydric soil.
- 3. The substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

The FWS definition was used in addition to the CWA definition to include riparian areas, salt flats, vernal pools and farmed and other disturbed wetlands in the survey.

The wetlands study also evaluates the wetlands using three factors:

- wetland importance,
- · wetland quality and
- · wetland sensitivity.

"Importance" rates wetland functionality in terms of sediment trapping and nutrient retention, flood storage, bank stability, food chain support, wildlife habitat and recreation. "Quality" ranks disturbance state and restoration potential. "Sensitivity" relates to sensitivity to human use.

Using these three factors, all identified wetlands received a rating of I (lowest) to IV (highest). Of 294 wetlands identified and rated, 34 received the highest rating (IV) and 127 received the second highest overall rating (III). Nearly all of the Class IV wetlands were CWA wetlands. Most of the wetlands receiving the lowest rating were gravel quarries, irrigation ditches or plowed vernal pools.

The principal method of protecting wetlands and riparian areas is to require a Wetland Mitigation Plan for any development which impacts an identified wetland area. Requirements and performance standards for Wetland Mitigation Plans will be included in the Land Use Code. They will address the possibility of off-site mitigation of wetland loss through replacement or restoration of degraded wetlands.

#### 6.2.2 Important Wildlife Habitat

For many years, Larimer County has endeavored to protect wildlife through the development review process. New development requests have been reviewed by the Division of Wildlife, and project design has been used to mitigate negative impact on known species using the site. This approach has had many successes but is limited in its ability to deal with cumulative impacts of development, both beyond the project site and over time. The Master Plan recommends two changes to enhance wildlife protection:

- The new pattern of clustered development, using the Rural Conservation Development model, is expected to significantly reduce the area of habitat disturbance from development.
- 2. Mapping high priority habitat, including corridors where applicable, will assist the County in using a wide range of resource

protection tools to protect the County's most important habitat areas.

In the future, a third step will be to develop specific standards for habitat and species protection, based on the priorities established in the habitat mapping project.

Setting priorities for habitat conservation requires making decisions about which types of habitat are most important. Larimer County has had the assistance of a cooperative County / Division of Wildlife project, known as the System for Conservation Planning (SCoP), in developing maps of important habitat. Four criteria have been selected as the basis for determining habitat priorities:

- 1. *Rare vegetation types.* Rather than attempting to design conservation plans for the more than 400 species of vertebrates in Larimer County, important habitat maps focus on the species' associated vegetation communities. Highest priority goes to protecting vegetative communities that are rare and stand in the path of development.
- 2. Areas known to contain rare and threatened species. There are areas of the County where populations of rare and imperiled species are known to live. Loss of these areas of habitat will threaten the existence of these species within the County, the region or even globally. The Colorado Natural Heritage Program has conducted an inventory of rare plants and animals in the County. This inventory provides maps of conservation sites ranked according to urgency of protection (see 6.2.3).
- 3. Areas supporting an unusually large number of species. Some areas of Larimer County support many different species of wildlife – that is, they have high species diversity. Protecting these areas will achieve greater conservation than areas of low diversity.

- 4. Areas providing habitat for species of importance to the people of Larimer County. This criteria includes areas that are moderately to highly impacted by development and known migration corridors. The following specific areas are included:
  - Pronghorn concentration areas
  - Mule deer winter concentration areas
  - Elk severe winter range
  - Duck winter range
  - Bighorn sheep lambing areas
  - Mule deer migration corridors
  - Elk migration corridors

#### 6.2.3 Colorado Natural Heritage Program

The Colorado Natural Heritage Program has mapped plant and animal communities of State and National Importance within Larimer County. This mapping project included preliminary identification of sites from existing data and interpretation from aerial photographs. At least one site visit was conducted on identified sites where permission was obtained from private property owners (the majority of properties). The information from this program includes recommendations for resource management/stewardship plans to protect resources of the area. The data from the SCoP Project and the Heritage Program will be used together to identify important natural resources on and adjacent to development sites and to assist in development design to best protect the wildlife and their habitat.

#### 6.2.4 Human-Wildlife Interaction

An important component of identifying habitat and developing management plans for development is human/wildlife interactions: As the urban-wildland interface continues to be developed, encounters with wildlife occupying those areas are increasing. The result has been predation on and by human pets, damage to vegetation and property by feeding animals, concerns about disease transmission, and increasing calls by the community for the removal or destruction of wildlife. For development proposals on the urban-wildland interface, management plans should specifically address these concerns and reduce detrimental human-wildlife interaction.

# 6.3 Hazard Areas

Hazard areas, or areas prone to natural disturbance, occur throughout Larimer County. These natural disturbances include wildfire, flooding, avalanche, landslide, rockfall, mud flow and debris fans, unstable or potentially unstable slopes, seismic effects, radioactivity, ground subsidence and expansive soils and rock.

The classification of hazard areas generally depends on the consequences of the natural disturbance upon life and property. "Severe" hazard areas are where the natural disturbance poses a significant threat to health, life, limb or property. "Moderate" hazard areas occur where there is not a significant threat to life or limb but where there can be intolerable damage to property. In addition, there are areas where natural conditions may cause significant harm to health or property but where mitigation efforts can successfully eliminate the potential impact. These areas are classified as "Constraint" areas. The following definitions are used in the Master Plan and the Land Use Code:

- Severe Hazard Areas: Flood Way (FW) zoning districts as adopted on official zoning maps; areas classified as 5, 6, or 7 on the official Geologic Hazards Maps adopted by the Board of County Commissioners; slopes greater than 30 percent.
- *Moderate Hazard Areas:* Flood Fringe (FF) zoning districts as adopted on official zoning maps; areas classified as 3 or 4 on the official Geologic Hazards Maps adopted by the Board of County Commissioners; slopes 20 - 30 percent, dam breach areas.

• *Constraint Areas*: Areas of expansive soil and rock, radon areas.

Many of the hazard areas in Larimer County have been mapped and the severity of the potential natural disturbance classified. The Board of County Commissioners has previously adopted official Geologic Hazard Maps and Wildfire Hazard Maps (Resolution Adopting Hazard Area Regulation, June 21, 1976), as well as Zoning Resolutions delineating the 100-year flood plain at various dates. In areas where hazard mapping is not complete and for hazard types which have not been mapped, such as dam breach areas, the applicant will be required to provide additional information when a County referral agency (e.g., State Geologist or State Engineer) indicates that a hazard is located on the project site.

With the exception of the 100-Year Flood Maps prepared under direction of the Federal **Emergency Management Administration** (FEMA), the hazard area mapping currently adopted by Larimer County is at a scale and level of detail that makes it a "red flag" for further investigation. It is not sufficient to delineate precise hazard areas at the site level. Where the adopted mapping indicates that a hazard or constraint area exists on a site under consideration for development, the applicant is responsible for providing sufficient information as part of the development application to locate and classify the extent of the hazard area on the property and to demonstrate that the potential natural disturbance for that area has been successfully avoided or mitigated.

## 6.3.1 Wildfire Hazard Mitigation Areas

The potential for loss of life and property due to wildfire has increased dramatically along the Front Range of Colorado, as more and more residents choose to live in the foothill and mountain areas. Using historical wildfire occurrence as a reference, Larimer County can expect approximately 20 wildfires greater than 100 acres in size every ten years. Wildfire location, potential loss of life and property, and suppression costs are only speculation. However, more and more homes are threatened by wildfire each year in Larimer County. Pingree Park, Colorado State University's mountain campus, lost 13 buildings to the Hourglass Fire in 1994. In 1996, a relatively "wet" year, an estimated 50 to 60 rural homes were threatened by wildfire.

The wildland / urban interface is defined as an area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Larimer County has an estimated 148,000 acres of wildland / urban interface. Fifty-seven percent of the over 200 subdivisions in this area have a high fire-loss potential.

Colorado State statutes designate the county sheriff as "fire warden" on state and private lands. Therefore Larimer County is responsible for wildfire suppression and associated costs. Large wildfires often cause the County to rely on contingency funds.

Wildfire hazard areas have been mapped and used in Larimer County's development review process since the early 1970s. However, increased public concern and rising costs have led the County to adopt a more comprehensive approach to wildfire hazards than for other hazard types. Although certain areas can be identified with a high risk for wildfire, wildfire mitigation is important even in "low-hazard" areas. For example, high winds during wildfire episodes can carry embers for long distances and ultimately threaten lives and property.

In 1995, the Larimer County Building Code was amended to define a "wildfire roofing area" where fire-resistant roofing materials are required on new structures. The County Wildfire Mitigation Coordinator and a citizen task force recommend using this wildfire roofing area as a Wildfire Hazard Mitigation Area. Development in this area would require wildfire-sensitive subdivision design, creation of defensible space around structures and use of fire-resistant construction materials. Improvement of fire protection services is encouraged. (See also 4.1, Fire Protection and Emergency Response.)

# 6.4 Mineral Resources

The General Assembly of Colorado states in C.R.S. 34-1-301 that commercial mineral deposits are essential to the state's economy, and these deposits should be extracted according to a rational plan that avoids waste of the minerals and causes the least practicable disruption of the ecology and quality of life of the citizens of the areas affected. Section 34-1-304 requires counties to develop a master plan for the extraction of commercial mineral deposits. This section and the following Guiding Principles are intended to fulfill that statutory obligation.

The mineral extraction plan is to facilitate preservation and protection of the County's commercial mineral deposits from encroachment by incompatible land uses that would limit the options of future decision makers in considering the demand for aggregate resources. At the same time, applicants for an extractive use in an aggregate resource area must address all environmental and compatibility issues to be assured of approval. Also, nothing in the designation of aggregate resource areas is intended to preclude approval of applications for extractive uses outside the designated areas which meet all County requirements.

Beyond protecting areas of known mineral resources for eventual extraction, Larimer County is critically interested in the reclamation of sites after the resources are removed. The State Mined Land Reclamation Board has developed standards and procedures for reclamation plans. Within its authority, the County will work with mining permit applicants to identify appropriate uses and landscape forms for the reclamation plan. Preferred uses are those consistent with an adopted land use plan or providing quality recreation or open space and wildlife habitat opportunities.

In defining "commercial mineral deposits," the following factors are considered:

- Aggregate resources as mapped by Schwochow et al., Colorado Geological Survey, 1974.
- 2. Wetlands and critical riparian areas and wildlife habitat (see Section 6.2 above).
- 3. Size of the potential area.
- 4. Existing development that effectively precludes extraction.
- 5. Other site-specific factors rendering extraction inappropriate in light of the countervailing factors listed in C.R.S. 34-1-304(1), including the quality of life of the residents in and around areas which contain commercial mineral deposits and the ability to reclaim the area.

State statutes emphasize aggregate resources for protection and have required mapping of these mineral resources by the Colorado Geological Survey. Other important mineral resources exist in Larimer County that have not yet been inventoried in the same manner. All applications for extractive activities will be considered according to the Guiding Principles below.

# 6.5 Air Quality

In 1994, the Board of County Commissioners asked the Environmental Advisory Board's Air Quality Task Force to provide ideas for development of a Countywide Air Quality Policy. The Commissioners also asked the Task Force to examine the issue of air flow patterns as a means of defining potential areas sensitive to development pressures. The Air Quality Task Force presented its findings in the 1994 Annual Report of the Environmental Advisory Board. The recommendations most relevant to growth management and land use issues are summarized below.

The Task Force noted that rapid growth is having a significant impact on air quality, with most impacts associated with the increase in the number of vehicles used. Other than transportation-related sources, there are concerns with stationary sources of air toxins, including light industrial uses such as cabinet making and industries which manufacture and support high technology. Another source is emissions from fireplaces and wood-burning stoves.

The EAB determined that the complex science of airshed definition, including the fact that sources and resultant affected areas can be great distances apart, make this approach impractical as a land use planning tool. However, "while the state of the science does not exist to reasonably and cost-effectively evaluate air quality impacts of individual proposed developments, the causes of air pollution are well defined. Criteria on developments can be imposed through the current planning review process. Paving streets, prohibiting wood burning stoves and fireplaces, dust control during construction, etc., can be required in new developments." (1994 Annual Report, Environmental Advisory Board).

In its recommendations concerning natural and cultural resources for PLUS, the EAB suggested a number of techniques directly related to the land use and development process. Those techniques include: requiring applicants to evaluate their proposal for conformance with existing air pollution standards, and, controlling dust emissions during the construction phase. The EAB also recommended using site design, area planning and travel demand management practices to reduce or eliminate sources of air emissions (such as average daily vehicle trips) for largescale developments such as may occur in 0

urban areas or in large clustered areas which are reviewed as area plans..

# 6.6 Water Quality and Quantity

Water quality is essential to the health, welfare and quality of life of Larimer County residents. Local, State and Federal standards exist for water quality and the development review process will insure compliance with these standards. Polluted runoff has the potential to impact both surface and groundwater supplies. Existing County requirements for erosion and drainage control will be augmented in the Land Use Code with a requirement that applicants show they have obtained a Colorado Stormwater Permit for construction activities, industrial uses and mining activities that meet thresholds under State law. Colorado Stormwater permits require applicants to identify and carry out appropriate best management practices to minimize polluted runoff from their sites.

Because of their relationship to public health and safety, drinking water sources should be provided the highest achievable levels of environmental protection. The County will support municipal authority to maintain the quality of domestic water supplies. The Land Use Code will provide regulations concerning the discharge of stormwater into a water supply reservoir. Water quality management plans will be required to address water chemistry, as well as sediment transport and control.

Water quantity impacts will be addressed in the Land Use Code through administration of the Flood Plain Resolution and the Stormwater Management Manual, both of which will be incorporated into the Code. The hydrologic charts in the Stormwater Management Manual are scheduled for review as part of the development of the Code. The issue of stormwater management facilities is addressed in Sec. 4.1.6. In addition, uses with the potential to negatively affect groundwater levels, such as mining operations, will be required to provide evidence acceptable to the State's Division of Water Resources that impacts will be acceptable. Larimer County is also very interested in maintaining the historic amount of water – both for agricultural and other uses – in the basins serving the County. A Task Force has been convened to explore the issue of potential future water diversions.

# 6.7 Noise, Glare and Odor Conditions

Noise, glare and odor conditions are an important component of the health, safety and quality of life of Larimer County residents. As new development occurs, existing residents should be protected from unreasonable changes in conditions beyond the property boundaries of the development site. Performance standards will define permissible levels of noise, glare and odors which apply to all zoning districts and all use classifications.

# 6.8 Special Places: Archaeological, Cultural and Aesthetic Resources

Larimer County contains a wealth of geologic historic, archaeological and paleontologic resources, some of which are included on the State and Federal Registers of Historic Places. These Registers are voluntary, incentivebased programs which may offer tax breaks or grants to help protect the integrity of historic structures and sites. The majority of Rocky Mountain National Park is located in Larimer County. The Larimer County Comprehensive Parks Master Plan, October 1993, also identifies Landmarks (Map 3), Colorado Natural Areas Program Sites (Map 6) and Historic/Cultural Resources (Map7). The Environmental Review checklist (see 6.2 above) will include identification of any mapped or registered sites or structures on or within 1200

feet of the proposed development site, as well as other known landmarks of local interest.

Every effort will be made to maintain the integrity of the identified landmark. In the case of those on State or Federal Registers, the developer will be encouraged to maintain the structure or site in a manner consistent with program guidelines. Wherever possible, landmarks will be considered amenities to the development site. Issues of ownership, access and maintenance will be considered as appropriate for each individual development. In the case of geologic features, the applicant and staff will work together on a site-specific basis to maintain these unique features in recognition of their irreplaceable character and importance to the quality of life in the County. These features provide amenities to the development site as well as to the County as a whole.



In the future, Larimer County may wish to develop a local register of historic, archaeological and palentological sites and, if warranted, create a voluntary overlay Historic District zone. The Historic District zone could be tied to an incentive program to assist landowners in maintaining cultural resources. The County may also wish to consider further identification of other special features of the landscape including unique geologic features and viewscapes. A specific and important feature in this category is ridgelines. The identification process shall include guidelines for protecting the features. The process would require amendments to the Master Plan and the Land Use Code, after appropriate public review.

A number of citizens have expressed a strong interest in protecting ridgelines from development and the Master Plan supports ridgeline protection as a goal. This issue is very complex and involves subjects such as quality of life, private property rights, fairness and compensation. A detailed citizen process is necessary to move this process forward and fully consider the subjects noted above. As one part of the ridge line protection strategy, Larimer County has joined with four other counties in a planning project, called the Mountain Backdrop Study, to identify key preservation elements of the foothills landscape in a broad, conceptual manner. These are called Critical Preservation Candidate Lands. The second phase of the Mountain Backdrop Study, which is just beginning, is designed to involve individual landowners in a process to develop recommendations and strategies for appropriate tools and opportunities for protection of Candidate Lands on a willing landowner basis.

# 6.9 Guiding Principles and Implementing Strategies For Environmental Resources and Hazards

In the shaded section below, each primary paragraph (in bold type) is a statement of principle. The subparagraphs are strategies for implementing the principle.

# ENVIRONMENTAL REVIEW PROCESS

ER-1 Resources and environmental conditions potentially impacted by proposed development shall be identified in the initial stages of the project, to best design a development that protects the environment.

- **ER-1-s1** Environmental review shall be a formal required process beginning at the concept stage of all new development projects. Applicants will submit a checklist indicating which environmental resources and conditions will have significant, mitigable or no significant impact. In addition, resource information available from the Planning Department, pertaining to the project site and the area at least 1200 feet beyond project boundaries, shall be included on the concept plan submitted with the application.
- ER-1-s2 Resources and conditions to be included in the Environmental Review shall be identified in the Land Use Code. Performance standards for these resources shall also be included in the Code. As additional information becomes available, new maps, principles and standards will be developed for the Master Plan and Land Use Code.

ER-2 Monitoring of environmental conditions is a critical part of the environmental protection strategy.

**ER-2-s1** A process for identifying and monitoring key environmental factors shall be established to validate the success of environmental performance standards. The results of the monitoring process shall be used as the basis for subsequent amendments to the Master Plan and Land Use Code.

**ER-2-s2** Monitoring during the development process is necessary to ensure compliance with performance standards. The Planning Department will incorporate this function into its proposed work plan and budget. Adequate staffing will benefit both the developer and citizenry by providing a level playing field and consistency of monitoring and enforcement.

# WETLAND PROTECTION

- ER-3 Larimer County shall endeavor to protect all identified wetland areas of the County, in recognition of their importance in maintaining water quality, wildlife habitat, flood protection and other critical environmental functions.
- ER-3-s1 Larimer County wetlands shall be defined to include both Clean Water Act (CWA) and U.S. Fish and Wildlife Service (FWS) wetland areas. Wetlands shall include swamps, marshes, bogs, riparian areas, salt flats, vernal pools and farmed and other disturbed wetland areas, as more specifically described in the *Proposed Wetland Classification and Protection Program*, March 1996, prepared by David J. Cooper, Ph.D. and David M. Merritt, M.S.
- ER-3-s2 The Wetland Map, adopted by reference as part of the Master Plan, shall be the basis for the initial Environmental Review process, which is required for all new development projects. County staff and the landowner will work together on a case-by-case basis to identify and prioritize those other wetlands that do not appear on the Wetland Map due to scale and size limitations, and in areas not yet inventoried.
- **ER-3-s3** A Wetland Mitigation Plan shall be developed for any development project which impacts a wetland. Requirements and performance standards for the mitigation plan shall be clearly established in the Land Use Code, and shall be the basis for approval of that plan.

## WILDLIFE HABITAT PROTECTION

ER-4 Larimer County shall endeavor to protect all areas identified as highest priority on the Important Wildlife Habitat Map, which is adopted by reference as part of the Master Plan.

- **ER-4-s1** The County will use a wide variety of tools available, including clustering and the Rural Land Use Process, in a manner that is fair to property owners.
- **ER-4-s2** The adopted Important Wildlife Habitat Map, available in the Planning Department, shall be the basis for the initial Environmental Review process, required for all new development projects.
- **ER-4-s3** A Wildlife Impact Mitigation Plan shall be developed for any development project which impacts an Important Habitat, or which presents concerns of detrimental human-wildlife interaction. Requirements and performance standards for the mitigation plan shall be clearly established in the Land Use Code and shall be the basis for approval of the plan.

# **HAZARD AREAS**

- ER-5 Approval of development in hazard areas shall require a finding that the proposed development is compatible with the potential hazards and that future owners or the County shall not be subject to safety hazards or economic costs associated with development related to the natural disturbance.
- ER-5-s1 Structures for human use or occupation shall not locate in severe hazard areas. These areas shall be avoided in development plans. In Rural Conservation Development and Rural Land Use Process applications, open space areas shall be located where severe hazard areas exist. In addition, restrictions shall be placed on activities that might increase the potential for natural disturbance.
- ER-5-s2 Moderate hazard areas shall be avoided wherever possible or the potential disturbance adequately mitigated. The Land Use Code shall establish guidelines for mitigation plans and require that the plans be reviewed by professionals having

demonstrated expertise in the appropriate field, i.e., geology or wildfire management.

- **ER-5-s3** Potential disturbances shall be eliminated in constraint areas as part of the development design process. Approval of development in constraint areas shall be conditional, based on adequate mitigation of the potential natural disturbance. Strategies for follow-up monitoring to ensure that mitigation has occurred shall be incorporated when appropriate.
- ER-6 New development in wildfire hazard areas shall be designed to create communities less susceptible to loss of life and property from wildfire.
- **ER-6-s1** All new development in designated wildfire hazard areas shall complete and implement a wildfire mitigation plan specific to that development. Mitigation plan standards and guidelines shall be clearly established in the Land Use Code and shall be the basis for plan approval. Standards shall include provisions for emergency equipment access and year-round water supply.
- ER-7 Structures in wildfire hazard areas shall be designed to minimize the potential for loss of life and property from wildfire.
- **ER-7-s1** Building codes shall be modified to include site planning and construction materials appropriate to reduce wildfire hazards. Homes built in wildfire hazard areas shall be designed to include defensible space and fire-resistant construction materials. Standards and guidelines for defensible space and fire-resistant construction materials shall be established.

## MINERAL RESOURCES

ER-8 Larimer County shall protect its commercial mineral resources, pursuant to 34-1-302(1) C.R.S.

- ER-8-s1 "Commercial mineral resources" are defined as areas delineated as "F1" and "T1"deposits, pursuant to 34-1-302(1) C.R.S., on the Aggregate Resource Maps, Schwochow et al., Colorado Geological Survey, 1974.
- **ER-8-s2** Aggregate Resource Areas shall be those underlain by "commercial mineral resources." Aggregate Resource Areas shall not include the following lands:
- 1) Wetlands identified and mapped as Class III or IV on adopted Wetland Maps, and their required buffer areas.
- 2) Critical wildlife habitat areas, as identified and adopted in the Master Plan or on a site specific basis.
- 3) Public open space areas.
- Areas where existing development effectively precludes extraction or where extraction has been completed.
- 5) Areas within Growth Management Areas where existing or previous capital improvement commitments effectively preclude mineral resource development.
- 6) Areas or parcels remaining after the exclusions contained in 1 through 5 above, where the contiguous surface area underlain by a commercial mineral deposit is 20 acres or less.
- Any specific site where the mineral extraction of a commercial mineral deposit would not be appropriate in light of the countervailing factors listed in 34-1-304(1), C.R.S.
- ER-9 Intensive land uses shall be strongly discouraged in Aggregate Resource Areas, including residential subdivision of land into lots of less than 35 acres.
- **ER-9-s1** Aggregate Resource Areas may be included in required open space areas for Rural Conservation Development and Rural Land Use Process applications after

extraction and reclamation is complete, but extraction activities shall be complete prior to approval of a subdivision request.

- ER-10 All applications for an extractive use, whether within a designated Aggregate Resource Area or not, shall be subject to County regulation including Special Review.
- **ER-10-s1** The requirement for special review shall include sub-surface and open mining for any mineral or earthen material and mining of any mineral by means of in situ leaching, as well as all accessory activities related thereto.
- **ER-10-s2** Special review for an extractive use will consider both on- and off-site impacts to natural resources, adjacent uses and public facilities.
- ER-11 In cooperation with the Colorado Mined Land Reclamation Board and its staff, the County shall require that all "affected land" as defined by Colorado Statute, be reclaimed whether the mining activity is open or subsurface mining.
- **ER-11-s1** Within its authority, the County will work with special review applicants to establish appropriate uses and landscapes for reclamation sites. The goal of the reclamation plan shall be to return the site to a use that is a benefit to the community and the landowner.

# **AIR QUALITY**

- ER-12 Larimer County shall use cooperative efforts, development standards and incentive programs to protect air quality.
- **ER-12-s1** Larimer County shall continue to participate in regional air quality and transportation planning efforts and to implement recommendations agreed to by the regional councils.

- **ER-12-s2** All new development shall comply with local, State and Federal air quality standards. No new development expected to create particulate levels above State standards on unpaved roads shall be approved. Commercial and industrial uses shall meet all applicable permitting requirements prior to final approval of uses. See also Section 5.3, Transportation Improvements Program, regarding road paving to reduce particulate levels.
- ER-13 Development proposals shall minimize negative air quality impacts to the maximum extent possible.
- **ER-13-s1** The Land Use Code shall require applicants to address mitigation of potential air quality impacts for large-scale developments and to implement management practices to reduce or eliminate sources of air emissions. Incentives to encourage use of alternative modes of transportation shall be incorporated into all new development design to the maximum extent possible. The County shall identify design and management practices appropriate for reducing air emissions for large-scale developments.
- **ER-13-s2** Development applicants shall comply with State requirements for controlling dust emissions during the construction phase of development. The Land Use Code shall reference performance standards for dust control.

# WATER QUALITY AND QUANTITY

- ER-14 Water quality shall be protected by analyzing potential impacts of development proposals, the application of best management practices to reduce or control sources of contamination, and a demonstration of compliance with local, State and Federal requirements.
- ER-14-s1 Applicants for new development shall address potential water quality im-

pacts for properties that contain surface water or have the potential to impact surface or groundwater quality. A water quality management plan shall be included as part of the stormwater report in the development review process.

- ER-14-s2 Drinking water sources shall be provided the highest achievable levels of environmental protection. Stormwater from new developments must not be discharged into a drinking water supply reservoir unless it can be demonstrated that water quality will not be impaired. Water quality management plans shall address water chemistry, as well as sediment transport and control.
- ER-14-s3 Local and State requirements for individual on-site sewage disposal systems shall be considered in the initial stages of the development review process. All new lots to be served with individual septic systems shall be at least 2.29 acres and shall demonstrate the ability to meet local standards prior to preliminary subdivision approval.
- ER-14-s4 Applicants for construction activities, industrial uses and mining activities which meet thresholds under State law shall demonstrate that they have obtained a Colorado Stormwater Permit. Colorado Stormwater permits require applicants to identify and carry out appropriate best management practices to minimize polluted runoff from their sites.
- ER-15 All new development shall be required to adequately provide for stormwater management in a manner which reflects current engineering practice and which takes into account up-to-date hydrologic standards.
- ER-15-s1 The Stormwater Management Manual shall form the basis of review of new development. It will be updated periodically to reflect the most accurate scientific data possible for defining the

relationship between the magnitude and frequency of rainfall events. Requirements for construction of stormwater facilities will be those that provide a costeffective level of service based on up-todate scientific data on flood frequencies.

- ER-16 Larimer County will explore options to protect and provide adequate water resources for present and future uses in the County, in partnership with other affected interests.
- **ER-16-s1** Larimer County will not support future transfers of existing water resources out of the County without consideration of the impacts on present and future land uses including agriculture.
- ER-16-s2 Water conservation will be an important component of the strategy to maintain adequate water resources.

## NOISE, GLARE AND ODORS

- ER-17 Larimer County shall develop noise and glare performance standards and enforce State odor condition standards to protect the health, safety and welfare of County residents.
- **ER-17-s1** Noise standards from the County Noise Ordinance shall be used in the development review process to ensure that new development does not create unacceptable noise conditions beyond its property boundaries. The Land Use Code shall reference maximum permissible noise levels consistent with the existing County Noise Ordinance. If the County has reason to believe that a proposed use may cause noise which would be objectionable or otherwise cause a nuisance, a noise mitigation plan may be required as part of a development application.
- ER-17-s2 Performance standards for glare shall be addressed in the development review process to limit off-site impacts associated with glare and light level distur-

bance. The Land Use Code shall specifically address outdoor lighting standards and provide a review process for outdoor lighting activities and uses such as lighted playing fields and outdoor arenas.

ER-17-s3 State standards for odor conditions shall be referenced to limit odors permissible beyond the property boundaries of the use, process or activity that causes odors. Residential and business uses, schools and churches shall be protected from odor conditions of new development. Certain agricultural operations are exempt from these standards. If the County has reason to believe that a proposed use may cause odors which would be objectionable or otherwise cause a nuisance, an odor mitigation plan may be required as part of a development application.

# SPECIAL PLACES

- ER-18 The development review process shall assist in the protection of the special places of Larimer County.
- ER-18-s1 Sites and structures listed on State and National Registers of Historic Places and in the Larimer County Parks Comprehensive Master Plan shall be included on the environmental checklist at the initial stages of a development project. Other landmarks of local interest shall also be included on the checklist. The development review process shall consider options for preserving and protecting these features and sites.
- ER-18-s2 Preservation of unique or distinctive natural features shall be considered in the design of the development. As with other resources, open space areas shall be used to protect and preserve the special places of the County.
- ER-18-s3 Ridge lines shall be protected from development using a variety of tools

which are fair to landowners. The County shall work with landowners on techniques and strategies to address ridge line protection in a fair manner. One tool already identified to help achieve the goal of ridge line protection is clustering development below ridge lines.

# 7. IMPLEMENTATION

The Master Plan provides the policy foundation for decisions about the County's future development. The purpose of this chapter is to establish the policy connection between the principles of the Master Plan, the Land Use Code and other actions that will carry out those principles. Strategies outlining specific provisions to be included in the Land Use Code appear throughout the Master Plan. Other types of strategies are also in the Master Plan, such as appointing an Agricultural Advisory Board and establishing Intergovernmental Agreements with service providers.

This chapter provides guidance for developing the Land Use Code as it relates to its usability for applicants, the community and neighbors in the development review process.

This chapter also establishes principles for a monitoring plan, review process and future revisions to the Master Plan. For County planning to remain proactive, it is important for principles and strategies to be reviewed on a regular schedule and amended as necessary.

Finally, it sets forth an Action Plan for implementing the Master Plan, including priorities and a schedule. Implementation is the process that gives meaning to the Master Plan. The implementation strategy should be considered as important as the Master Plan itself.

# 7.1 Development Framework

In the initial stages of the Partnership Land Use System (PLUS) process, during the symposia and community forums, citizens expressed concern about two types of development issues. The first set of issues relates to land use, growth and environmental protection. Principles and strategies for dealing with these concerns make up the majority of the Master Plan. The second set of issues deals with the development process. Both applicants and concerned community members have difficulties in understanding and interacting with the existing land use regulations and development review process. Many citizens stated the concern that regulations were not clearly tied to the adopted Land Use Plan. Because standards were often unclear or even contradictory, land use decisions sometimes appeared arbitrary or inconsistent.

As part of the evaluation of existing review procedures, the PLUS consultant team conducted both group and individual interviews with appointed officials, members of the private sector who are long-time "Code users" (business people, developers, planners, engineers and lawyers), citizens and County staff members responsible for administering the County's land use regulations. The interview results are reported in the Working Paper, Issues and Options: Land Use, Public Facilities, Zoning and Development Administration, April 1996, which is on file in the Planning Department. All those interviewed supported the idea that the County's land use regulations were in need of procedural reform and streamlining.





## 7.1.1 The Land Use Code

In the past, much of the problem regarding certainty and consistency of land use decisions has come from basic inconsistencies between the adopted Plan and the land use regulations – particularly the zoning map. This Master Plan changes the traditional pattern of land use, but without changing the gross densities of development established by current zoning. The County will use performance standards, design criteria, required levels of service and similar tools, as well as several incentive-driven alternative development patterns, to produce new development to achieve Plan goals. This makes it imperative that the Guiding Principles of the Master Plan be clearly translated into standards and criteria in a new Land Use Code.

A Land Use Code is proposed to consolidate the many documents that currently contain land use regulations and procedures. The Land Use Code needs to have a clear organizational structure and presentation that make it easy to understand and use. Graphics, diagrams and tables should be used to make the document user-friendly. The standards and criteria that will be used in reviewing a development application should be specific, understandable and consistent with the principles established in the Master Plan.

# 7.2 Monitoring and Evaluation

The County Master Plan provides principles for achieving a future that is perceived as being better than the future that would happen without planning – and a set of strategies that will hopefully move the County toward that future.

The concepts of monitoring progress towards the desired future and evaluating tools for implementation are integral to the Master Plan process. A well-designed monitoring and evaluation program can help the Planning Commission and County Commissioners understand both progress and setbacks in achieving the Plan principles. More importantly, the program can direct staff and decision makers towards revisions for more effective strategies. Most important, the monitoring program can provide County citizens with the means to hold the government accountable for the actions it is taking to achieve the Master Plan future.

Developing a meaningful monitoring and evaluation program is an important Plan implementation tool in itself and should have high priority among the many action items necessary to implement the Plan. Because of the potential importance of the program to the public, its development should include a high degree of public input.

The program should initially focus on key indicators and expand over time. The program should include appropriate indicators from each of the main Plan areas: Growth Management, Land Use, Facilities and Services, Transportation, Environmental Protection and Implementation. Each indicator should have the following characteristics:

- use readily available data;
- be measurable over time, i.e., annually;
- provide meaningful information relating to a Plan principle;
- be sensitive to change;
- be easily interpreted.

The results of the monitoring and evaluation program should be presented annually in a public report to the Planning Commission for action. The report should include proposed revisions to the Master Plan, including Action Items, to promote the viability of the Master Plan and the County planning process. The Monitoring and Evaluation Report should be prepared in accordance with the County annual budget cycle, so proposed work items can be included in budget requests.

#### 7.2.1 Master Plan Amendment Process

Three general types of Plan amendments are necessary to maintain the Master Plan as an effective guide to development. Over time, additional area land use plans and plans for Growth Management Areas and Cooperative Planning Areas will be adopted. Adoption of area land use plans, including amendments to Growth Management Area boundaries, should include extensive community input and be considered by the Planning Commission as amendments to the Master Plan at any time throughout the year.

The annual Monitoring and Evaluation Report may include proposed changes to Plan principles and implementation strategies. Review of the Report and consideration of proposed Plan amendments should also include opportunities for citizen input. These changes to Plan policy should be considered annually as part of an annual Plan Review process by the Planning Commission. Periodically, the Planning Department should conduct a major review of Plan themes, principles and strategies. The timing of this major review effort is dependent upon the rapidity of change in the community and continued public support of the adopted Plan. Generally, a County Master Plan should receive major review every five to seven years. This major review process should be grounded in a broadbased citizen input process.

# 7.3 Action Plan

Implementation of the Master Plan depends on many specific actions on the part of County officials, city and town governments and private citizens over the years. The following chart describes the actions that the County should take to achieve the principles of the Plan. The list of proposed actions is not all-inclusive. Rather, it is intended to set out a realistic, achievable plan of action to begin (and continue) to implement the Master Plan systematically.



# 7.3.1 Action Plan

Item #	Action Items	Plan Reference	Start Year	Lead Agency	Partners
		al Elements			
1	Develop and adopt a Land Use Code which is designed to imple- ment the Master Plan and which is streamlined, user friendly and comprehensive. The new Land Use Code will include, among others, an Environmental Review Process, Adequate Public Facili- ties requirements, standards for Rural Conservation Development Subdivisions, and stormwater/ water quality and performance standards for compatibility, buff- ering and site design.	7.1	1997	Planning	Public Works Health
2	Develop a capital expansion fees (CEFs) program for public facili- ties impacted by growth and de- velopment, including considera- tion of CEFs for non-County fa- cilities established via Intergov- ernmental Agreements, and also including a public process.	2.3 4.2	1997	Public Works	Planning Building Other entities
3	Develop capital improvement programs for County-owned pub- lic facilities.	2.3 4.2	1997	Budget Office	Public Works
4	Develop/amend/revise Intergovernmental Agreements with Municipalities including a clear annexation policy and defined Growth Management Areas (GMAs), and other planning areas as appropriate, and also including agreed-upon urban standards for GMAs compatible with those of the municipalities.	2.4	1997	Planning	Cities/Towns Commissioners (BCC)

Item #	Action Items	Plan Reference	Start Year	Lead Agency	Partners
5	Develop a transfer of develop- ment rights program using the Fossil Creek Study Area as a model. Include criteria for send- ing and receiving areas, consis-	2.5	1997	Planning	Cities/Towns Other Affected Interests
	tent with Master Plan principles. Important Imple	ementation P	rograms	/Projects	
6	Establish a process for monitor- ing and evaluating Master Plan performance including indicators for Growth Management, Land Use, Public Facilities, Environ- mental Protection and Implemen- tation, and an annual report to the Planning Commission.	7.2	1998	Planning	Environmental Health Public Works
7	Adopt a Right to Farm Resolu- tion; determine appropriate im- plementation and staffing.	2.5	1997	Extension	Agricultural Advisory Boar
8	Consider creating a voluntary Agricultural District Overlay Zone to provide incentives for continued agricultural use.	2.5	1998	Planning	Agricultural Advisory Boar
9	Develop land use regulations or other mechanisms to protect per- sons, property and public invest- ment in the Airport Influence Area.	3.3	1998	Planning	Airport Loveland Ft. Collins
10a	Develop Phase 1 of an Environ- mental Protection System focus- ing on wetlands, wildlife, air quality and water quality, including development of performance standards to be included in the Land Use Code, and on-going monitoring and evaluation during and after development. This project will require assistance from outside experts.	6.1, 6.2	1998	Planning	Environmenta Health Environmenta Review Board (EAB) Agricultural Advisory Boar

Item		Plan	Start	Lead	
#	Action Items	Reference	Year	Agency	Partners
10b	Develop Phase 2 of an Environ- mental Protection System focus- ing on identifying and developing appropriate protection strategies for archaeological, cultural and aesthetic resources, including ridge lines.	6.1, 6.8	1999	Planning	Parks and Open Space Environmental Review Board (EAB) Citizens
10c	Develop Phase 3 of an Environ- mental Protection System focus- ing on review of the System, ad- ditional mapping and data needs, performance standards and other Code issues and results of moni- toring.	6.1	2000	Planning	Environmental Health Environmental Review Board (EAB) Agricultural Advisory Board
11	Develop a transportation plan that includes revised functional classi- fication for the County roadway system and a bikeway plan that serves both recreational users and commuters.	5.3	1997	Public Works	Planning Municipalities Bicycle Users
12	Develop an approach to protect- ing water in Larimer County, in- cluding consideration of a land and water bank.	6.6 2.5	1998	TBD	Agricultural Advisory Board
13	Consider adoption of the Code of the West, and if adopted, require it to be referenced in the cove- nants of new rural subdivisions.	3.2	1997	BCC	Planning

ltem #	Action Items	Plan Reference	Start Year	Lead Agency	Partners
	Other Important Progr	ams/Project	s and Or	igoing Activit	ies
14	Develop recommendations for Master Plan amendments, based on the Annual Evaluation Report and other new information.	7.2	Annual	Planning	Citizens Planning Commission
15	Develop/revise area plans for un- incorporated communities, and cooperatively plan for Commu- nity Planning Areas and other special areas.	2.4	On- going	Planning	Citizens Cities/Towns Planning Commission
16	Develop a program including in- centives to reduce use of non-cer- tified wood stoves and fireplaces.	6.5	1998	Building	
17	Further develop concept of mobility corridors to accommodate future transportation technology, as part of County Transportation Plan.	5.2	1998	Public Works	
18	Coordinate with community based affordable housing groups to recommend strategies and in- centives to provide private-sector affordable housing and changes to the Land Use Code and Build- ing Code to eliminate barriers to providing private sector afford- able housing.	2.6	On- going	Community Services	Planning Building
19	Work with the Agricultural Advi- sory group to consider options for providing housing for seasonal farm workers.	2.5	On- going	Community Services	Planning Building
20	Work with districts that provide service in unincorporated Larimer County to coordinate land use planning and new facilities. Con- sider adopting inter-governmental agreements to formalize coordination.		On- going	Planning	Public Work Health

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Item		Plan	Start	Lead	
#	Action Items	Reference	Year	Agency	Partners
21	Continue to coordinate with re- gional transportation groups to support regional transit and travel demand management programs and other regional transportation	5.3	On- going	Public Works	Cities/Towns Counties
22	planning programs. Coordinate with the Economic Development Advisory Board to develop guidelines for economic development incentives consis- tent with the Master Plan.	2.6	On- going	Employment Training Service (ETS)	Planning
23	Larimer County will participate in the proposed study of the costs and benefits of growth, to be coordinated by the Northern Colorado Regional Cities and Counties.	4.3	1998	County Manager	Planning
24	Larimer County will continue to be an active participant in regional planning organizations dealing with land use, open space protection, transportation and air and water quality.	2.4	On- going	County Manager	Planning Public Works Health

# **GLOSSARY OF PLANNING TERMS** as used in the Larimer County Master Plan

Adequate public facilities (APF):	Facilities and services (including water and sewer systems, fire protection and roads) that are available and have the capacity to serve new development without reducing levels of service below established minimum standards.
ADT:	Average daily trips; used as a measure of impact on the transportation system.
Affordable housing:	Housing which has a sales price or rent within the means of a low or moderate income household as defined by local, state or federal legislation.
Capital expansion fees (CEFs):	Fees paid by new development for the impact of that development on public facilities; also known as impact fees or exactions.
Capital facilities:	Land and structures used by the public including fire stations, parks and schools; also called public facilities.
Capital improvement program:	A schedule and budget for future capital improvements (building or acquisition projects) for roads, utilities and other capital facilities, to be carried out over a specified time period.
Cluster; cluster development:	A development design which concentrates buildings on a portion or portions of the site to leave the remainder undeveloped and used for agriculture, open space and/or natural resource protection.
Community Influence Area (CIA):	An area designated in an Intergovernmental Agreement within which County development applications will be sent to the adjacent municipality for comment and review.
Concurrency:	Adequate public facilities are available when the impacts of development occur.
Cooperative Planning Area (CPA):	An area beyond a municipality's immediate urban planning area (Urban Growth Area or Growth Management Area) where urban level development is not appropriate within the municipal plan's time frame but where development may have an impact on present and future municipal growth patterns. CPAs will be defined in Intergovernmental Agreements and development standards in these areas will be based on jointly developed plans.

Cultural resource:	A site or structure which is part of the area's cultural heritage; that is, which typifies a particular stage of man's activity in the area. Cultural resources include archeological sites, historic buildings and sites, and undisturbed natural sites that have historic or prehistoric associations including those with paleontological (fossil) specimens.
Density:	The number of housing units per unit of land, e.g. per acre.
Design standard:	A standard contained in a land use regulation which relates to design of a subdivision, site plan or structure; for example, the requirement for 80% open space in a Rural Conservation Development subdivision.
Development right:	The right to develop property. This right may be purchased or transferred (see Transfer of development rights below).
Fee-in-lieu:	A fee paid instead of making a land dedication, capital improvement or other requirement, and equivalent to that requirement. An example is a fee-in-lieu of a school site dedication as part of a subdivision approval.
Growth management:	A system of land use regulations designed to influence the location, timing and character of development, instead of controlling the amount or rate of growth.
Growth Management Area (GMA):	An area adjacent to a city or town and identified for future urban development according to a community plan in an Intergovernmental Agreement with the County; same as Urban Growth Area (see below).
Guiding principle:	A statement of policy or intended direction.
Impact:	The potential direct or indirect effects of a proposed development on activities, utilities, traffic, surrounding land uses, the environment and other factors.
Impact fees:	Same as capital expansion fees (see above).
Intergovernmental Agreement (IGA):	A contractual agreement between the County and another governmental entity. IGAs with municipalities are the County's primary means of achieving coordinated planning for the areas adjacent to town limits. The agreements define appropriate future urban areas (see Growth Management Areas above) and establish standards and procedures for development in these areas. They may also define Cooperative Planning Areas and Community Influence Areas (defined above).
Land use:	A description of how land is used or occupied.

Land Use Code:	A document containing or referencing all of Larimer County's land use regulations, including zoning district provisions and subdivision requirements. The document is also described as the unified Land Use Code because it brings together all the regulations under a single administrative procedure, with uniform definitions and other common elements to achieve a more understandable, user-friendly regulation.
Level of service:	An established minimum capacity of public facilities or services that must be provided per unit of demand, e.g., per new housing unit.
Master plan:	A document adopted by the Planning Commission to provide policy direction on the physical development of the County.
Mobility corridor:	A corridor designated for future multi-modal transportation facilities.
Multi-modal transportation:	A transportation system that includes several types (modes) of conveyances such as automobile, rail, bus, pedestrian and bicycle.
Paratransit:	Specialized transit service to meet the needs of disabled persons.
Performance standards:	Criteria that must be met by development to limit a particular defined impact.
Principle:	See Guiding Principle above.
Quality of life:	The personal perception of the physical, economic and emotional well-being that exists in the community.
Receiving areas:	See transfer of development rights below.
Rural Conservation Development:	The name for the required rural cluster subdivision; see cluster above.
Rural Land Use Process:	Larimer County's voluntary procedure for development of properties that are 70 acres or larger; designed to provide an attractive alternative to division into 35-acre tracts.
Sending areas:	See transfer of development rights below.
Strategy:	A plan of action intended to accomplish a specific principle.
Sustainable economy:	A system which maintains or enhances current economic opportunity and community well-being without compromising the ability of future generations to meet their own needs.

Transfer of development rights (TDR):	Removal of the right to develop or build (usually described in number of dwelling units per acre) from one property (the sending area) and transfer of the right to a suitable property (the receiving area), in order to preserve open space, agriculture and/or natural resources on the first property.
Transit:	A public transportation system, e.g., a public bus or light rail system.
Travel demand management program (TDM):	A plan to alleviate traffic congestion through improved management of vehicle trip demand, often including strategies to reduce single-occupancy vehicles and encouraging travel at times of lower congestion.
Unified Land Use Code:	See Land Use Code above.
Urban Growth Area (UGA):	An area defined for urban development surrounding Loveland and Fort Collins and established by Intergovernmental Agreements in 1980 with those Cities; the term Growth Management Area is used in the Master Plan as a generic name for the same concept.
Wetland:	The land transition between water and land systems where the water table is usually at or near the surface or the land is covered by shallow water, including swamps, marshes, bogs, riparian areas, salt flats and vernal pools.

# **REFERENCE MATERIALS**

# All documents are available in the Larimer County Planning Department unless otherwise noted.

Affordable Housing Demand in Larimer County 1996-2000 (Community Service Dept.) Agricultural Task Force Recommendations, 1997 Code of the West (County Commissioners Office) Colorado Natural Heritage Program Report, 1996 Comprehensive Parks Master Plan, 1993 Economic Development Policy for Larimer County, 1996 Environmental Advisory Board 1994 Annual Report (Environmental Health Dept.) Environmental Advisory Board Recommendations, 1996 Estes Park Directions: Gateway to the Future, 1996 Fort Collins- Loveland Airport Master Plan, 1993 (Airport Manager's Office) Issues & Options: Land Use, Public Facilities, Zoning and Development Administration, 1996 LaPorte Area Plan, 1992 Larimer County Land Use Plan, 1988 Larimer County Overall Economic Development Program Larimer County Partnership Land Use Systems Symposia Summary Report, 1994-1996 Northern Colorado Regional Planning Study, 1995 Plan for the Region Between Fort Collins and Loveland, 1995 Proposed Wetland Classification and Protection Program, 1996 Recommendation for Improving Wildfire Safety in Larimer County, 1997 System for Conservation Planning (SCoP) Important Wildlife Habitat Maps, 1997 Technical Report and Recommendation for the PLUS - On Site Sewage Treatment System, 1995 Transit Development Plan, 1996 - 2002 (Community Service Dept.)