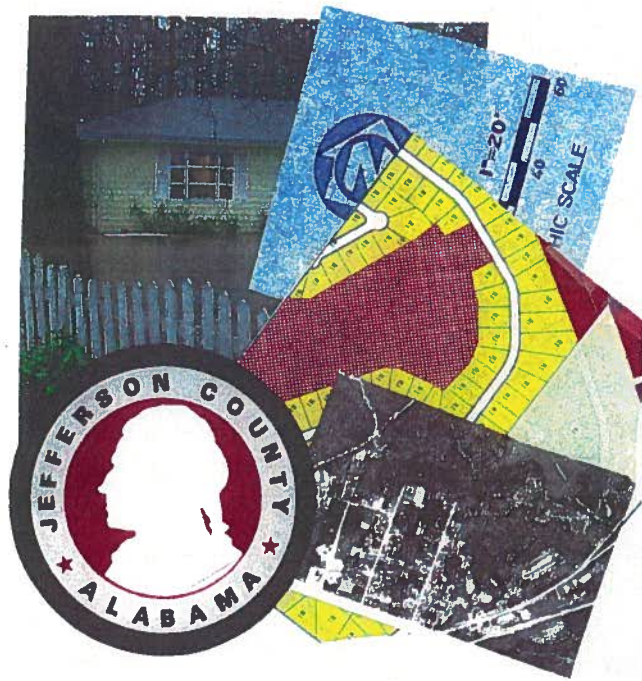


JEFFERSON COUNTY, ALABAMA

GENERAL LAND USE PLAN POLICIES FOR JEFFERSON COUNTY



**Prepared by the Jefferson County Land Development Department
for the Jefferson County Planning and Zoning Commission**

**Public Hearing and Adoption
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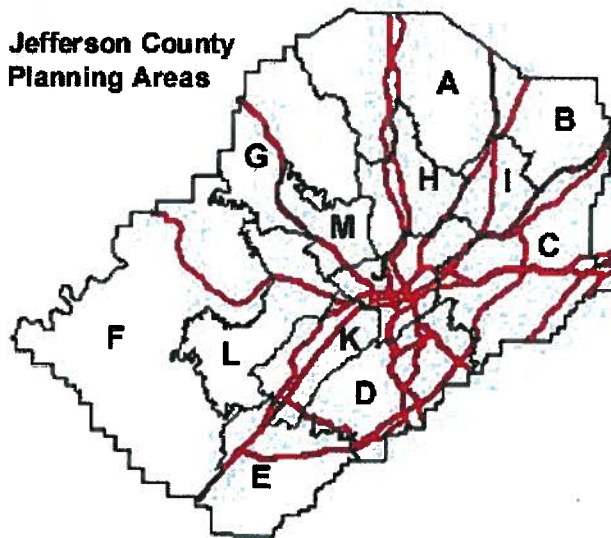
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INTRODUCTION

In 1997, Jefferson County began a process of creating a general land use plan for the unincorporated areas of the county. The County has had zoning since the late 1940s, and the zoning map had served as the official 'plan' for future land development. By the 1980s development had accelerated in Jefferson County to the point that it became clear that the old system of considering every rezoning case as an individual decision that did not affect other decisions—or would not be affected by other decisions—was not working any more. What was needed was an overall look at the County and where it was going. Rezoning of property could no longer be viewed in isolation and detached from long-term development trends and goals.

The legislation that enabled the County to have zoning in the first place also allowed for the Planning and Zoning Commission—a citizens body appointed by the County Commission—to develop a plan for the future of the area. With the leadership of the County Commission, the Planning and Zoning Commission began the process of creating a future land use plan for all of unincorporated Jefferson County.

The intent of this plan was initially limited. Its primary purpose was to serve as a guide for rezoning decisions as they are brought to the County. That is still the primary goal of this plan; however, it now includes some recommendations for things that *influence* zoning decisions, including water quality, open space, slopes, road construction, and utility expansion.



The Planning and Zoning Commission, working with the staff of the Land Development Department, divided the county into 13 working Planning Areas (see attached map). Each Area has distinct planning and land use challenges, and each Area is handled differently. In highly developed or developing Areas, detailed future land use plans and policies have been proposed. In more rural Areas, general development policies govern land use decisions. Individual plan and

policy documents have been prepared for individual Planning Areas, and this—the General Policy document—is to be used as a basis for decision making for the Area Plans and for those places where specific land uses are not covered or specified.

The Planning and Zoning Commission evaluated each Area and made preliminary recommendations for future land use where more detailed plans and/or policies were deemed appropriate. An Open House was held in each Planning Area for public review

and to receive citizen's comments. After the Open House, revisions to the preliminary recommendations were made and then, after a formal public hearing, sent to citizens of the area. Area Plans were adopted by the Jefferson County Planning and Zoning Commission. This plan is a work in progress. Area recommendations are constantly being revised, adjusted, and refined as circumstances change and as new information becomes available.

THE COUNTY

Until the 1870s, Jefferson County was a rural county characterized by small-scale farms and plantations in the bottomlands of Jones and Shades Valleys. The rough topography—actually the southern-most extreme of the Appalachian chain—made for somewhat poorer farming than in the more prosperous Black Belt of Alabama.

The discovery of coal, iron ore, and limestone all within the same geographic area began the transformation of Jefferson County from a rural backwater to one of the nation's major producers of steel and iron. Vast forested lands and farmland became steel and iron mills, mines, and planned industrial villages. The cities of Birmingham and Bessemer were established and began to grow, along with numerous small industrial and mining company towns named Irondale, Fairfield, Mulga, Morris, Brookside, and many others. The county's industries boomed through the First World War and the 1920s. Like the rest of the country, industries shut down and development came to a virtual standstill in the 1930s, but boomed again during World War II and in the prosperous years immediately following the war. In the 1960s, the old industrial plants began to decline, there was less mining, and the economic base began to shift. By the recession of the early 1980s, most of the old iron and steel industry was shut down and the region had turned to medical services, banking, and financial services, and the many area colleges and universities for its economic base.

The completion of Interstates 65 and 20/59 reinforced the Jefferson County region's position as the geographic and economic hub of Alabama. Economic strength and a growing population began to spread development beyond the central areas of Birmingham and Bessemer. The completion of the Red Mountain Expressway and I-459 moved major development south of Red Mountain—the traditional barrier to development—and created a booming urbanized area from Birmingham south into Shelby County.

Much of this development was in the newer cities of Homewood, Vestavia Hills, and Hoover. However, the unincorporated areas of Jefferson and Shelby Counties received their share too. As more and more subdivisions and commercial developments began to spring up in unincorporated Jefferson County, the County found that the old system of zoning and land use controls for rural areas was going to be inadequate as urbanized areas sprang up and remained unincorporated. The County began to change from reactive planning to a more pro-active approach for managing a rapidly urbanizing county. Sewer development, road development, and urban development standards

were all adapted and adopted to deal with the new reality. This Plan is a part of the County's strategy for managing this new world.

In addition, the County now regularly engages in cooperative planning efforts with the areas cities and other counties. New jointly developed regulations have been adopted for the US 280 corridor and plans prepared for other corridors extending into Shelby, Tuscaloosa, Blount, and St. Clair Counties.

RESOURCES

Coal, iron ore, and limestone were considered the region's primary resources in the 19th, and much of the 20th, centuries. As the iron and steel industries became less important to the economy, the issue of quality of life became a major consideration for future economic development. Quality of life came to include clean air, water, recreational opportunities, educational opportunities, and cultural resources such as museums, music, arts festivals, and historic properties and preservation. Museums such as the Birmingham Museum of Art have been expanded, the Civil Rights Institute created, the McWane Center was developed from an older and less ambitious science museum. There is symphony, opera, ballet, the Alabama School of Fine Arts, a high school with an International Baccalaureate program, and major sporting events and local teams. There is also the land—the foothills of the Appalachians, the streams, the rock-outcroppings, and the forests.

This Plan does not address all of the significant social resources of the region, but it does attempt to address the resource of the land, as development seems to be rapidly eroding this resource. For example, the beautiful hills that characterize the region are being removed to create flat land to accommodate one more shopping center; huge gashes are cut in the toe of many slopes to accommodate one more strip commercial use; parking lots pour pollutants into streams and rivers, and erosion and sedimentation threaten water life. The Mountaintops of Jefferson County are among the County's most identifiable features, and they are among the area's most important wildlife habitat areas.

The Karst geology of the region, that is the folded, faulted carbonate rocks of limestone and dolomite has created a region 40 miles long and 6 miles wide that is particularly known for its natural springs. Many of these springs have been used as water sources in the past, but now many have been abandoned. Many of these springs serve as habitat for wildlife, including Federally protected species, and these unique areas merit protection.

Rivers are some of the most important resources in Jefferson County. The Cahaba River is nationally recognized as a habitat for numerous plants, fish and wildlife—including several endangered species. The Cahaba is also one of the major suppliers of drinking water for the metropolitan area. The Locust Fork of the Black Warrior River is a significant scenic and recreational resource, as well as a habitat for wildlife. Turkey Creek, though much of its watershed is urbanized, is home to at least one endangered

species and provides a significant scenic resource. The Black Warrior River is a recreational resource, a major transport route connecting with the Tennessee-Tombigbee waterway, and a source of water for Bessemer and much of the western and northern portions of the county. Shades Creek is a significant scenic resource running through Mountain Brook, Homewood, and western Jefferson County; but it is also a tributary of the Cahaba, whose water quality greatly affects the biological resources of the Cahaba basin. Valley and Village Creeks are tributaries of the Warrior River basin that have been severely impacted by past industrial development. Efforts are currently underway to improve the channel and banks of portions of these streams; to improve water quality; and to begin to use these streams as recreational and scenic resources. Gurley Creek is a significant scenic and biological resource that is currently threatened by direct pollution, illegal garbage disposal, and development in general moving into its watershed.

In this Plan, policies are proposed that attempt to reduce unnecessary alteration of topography, to balance development, and to not overload streams with pollutants. Policies address issues of overbuilding and attempt to preserve some of those qualities that made the area attractive in the first place. Protection of these resources is central to land use planning in Jefferson County. Economic and residential development needs and conservation are not mutually exclusive, but are actually mutually dependent. The Policies of the General Plan attempt to balance these needs.

PLAN DOCUMENTS

The primary intent of the General Land Use Plan for Jefferson County is to assist both the Planning and Zoning Commission and the Jefferson County Commission in making decisions about when and how to rezone property and to guide the appropriate subdivision of property in the unincorporated areas of Jefferson County and for those cities that rely on Jefferson County for zoning and land use controls. The Land Use Plan consists of a section of General Policies and individual Area Plans. These Plans and Policies are intended to set general policy for land use decisions.

USE OF THE PLAN DOCUMENTS

Jefferson County is divided into 13 Planning Areas. Each Area has unique characteristics and development patterns, and changed or new land uses should be carefully considered in terms of the development patterns and dynamics of a particular Area. The Land Use Plan includes this document—the General Land Use Plan—which contains land development policies that apply countywide, and Area Plans, which include Proposed Future Land Use Maps. These are used as supplements to the General Land Use Plan.

This, the General Policies section of the Plan, spells out in detail the policies and procedures that are to be applied generally to all development in all unincorporated areas of Jefferson County and in cities where the County enforces zoning. The General

Policies section of the Land Use Plan is divided into General Policies that apply county-wide and Policies that apply to either Urbanized or Rural areas.

It is the intent of the Land Use Plan to establish a general framework for guiding future development in Jefferson County. Future Land Use Maps are intended as a guide to development, rather than an absolutely fixed future development plan. All decisions on zoning and land use changes will be made on a case-by-case basis and should consider the projected impacts of proposed development on the surrounding area and on the county as a whole. Proposed land uses indicate levels of intensity and appropriateness that should be observed in land use decisions.

Furthermore, in those Areas where specific future land uses are outlined in the Area Plans, the additional policies and development guidelines set forth in the Area Plans shall be applied as additional guidance to be used in conjunction with—not in lieu of—the General Policies of this document.

Areas Where Proposed Land Uses Are Not Specified. In general, where a Proposed Land Use Map does not specify a particular land use are those with less intense levels of development, and they are more rural in character or the areas or areas that are largely surrounded by municipalities. The Policies in this document are meant to guide development in general in the County and as to provide a context for making decisions in the areas that are not mapped. The Policies are meant to be somewhat flexible in the light of changing conditions, and not fixed, and are intended to guide rezoning decisions based upon sound planning principles.

JEFFERSON COUNTY LAND USE PLAN

COUNTYWIDE GOALS AND OBJECTIVES

GOALS

The intent of the Land Use Plan is to provide a rational basis for land use decisions in Jefferson County. The Goals of the Plan are as follows:

- I. To provide a Land Use Plan for the future development of Jefferson County that will provide for proper protection and appropriate expansion of residential, commercial, industrial, recreational, and institutional land uses to meet the needs of the citizens of Jefferson County.
- II. To preserve and promote the county's natural resources and environmental integrity.
- III. To provide for the development of land uses in appropriate locations, and to limit the encroachment of non-compatible land uses on existing development.
- IV. To encourage sustainable growth of the county economy.

OBJECTIVES

1. To promote residential development in a wide variety of types and styles that will attract prospective homeowners and residents from every market segment.
2. To prevent the sprawl of non-residential land uses along major roadways, and any intrusion of such development into established residential areas.
3. To protect the county's natural areas, including its wildlife, its topographic character, and its water resources.
4. To promote the reservation of open space in new development and to facilitate an integrated park and open space system throughout the county.
5. To encourage the development of infrastructure to support appropriate existing and future land uses.
6. To develop and implement policies that discourage inappropriate development where support infrastructure is not available; where development of a specific

use or density would be premature; or where development would adversely impact the public or established land uses.

7. To develop and implement policies that appropriately integrate different land uses in order to minimize unnecessary vehicular travel.
8. To work with municipalities and other counties to encourage and direct development that is transit supportive and reduces automobile dependency and roadway congestion.
9. To develop and implement policies to preclude or prevent additional development that is unreachable by public roads, services, or emergency services.
10. To protect incompatible land uses from one another; to protect property values; and to promote public health, safety, and welfare.
11. To provide for an appropriate aesthetic environment that will help keep the county an attractive place to live and work.

POLICIES AND POLICY ISSUES

GENERAL POLICIES THAT APPLY COUNTY-WIDE

RESIDENTIAL LAND USES

Residential development is the single largest category of land use in Jefferson County. In the unincorporated areas and in the cities where this Plan applies, residential development is the driving force for all types of development; it creates the market for commercial and industrial uses and the demand for schools, services, and infrastructure. The unincorporated portion of the county includes all types of residential development from apartments and condominiums to townhouses, garden homes, standard single-family homes, large estates, and mobile homes. There is a continuing need for all types of housing in the county, and it is a Policy of this Plan that residential development in Jefferson County will accommodate all sectors of the housing market by promoting a variety or broad range of housing types and styles while weighing appropriateness in terms of such things as infrastructure and the character of existing development.

Location Criteria

Residential development in Jefferson County shall be appropriately located, that is:

Access. It shall have adequate access to the County road system, and it shall not unduly burden the existing road system;

It shall be located to take advantage to all appropriate infrastructure for the type of development, including municipal water, sewer, power, gas, and telecommunications;

Hazards. It shall not be located so as to be subject to natural hazards such as flooding;

Development shall not be such as to cause hazards to other properties in terms of increased stormwater runoff, mud slides, or soil instability;

Impacts. Its development shall not be such as it will negatively affect existing development in an area;

Services. It shall not unduly burden services such as schools, fire, or police protection;

Orderly development. Development shall be in an orderly progression of land uses and not leap-frog—that is, intense development shall not occur in predominantly rural areas, but shall occur near developments of similar intensity.

INSTITUTIONAL LAND USES

Institutional land uses can include a wide variety of use types and intensities, including schools, churches, public parks, nursing homes, hospitals, group homes, and senior housing. General institutional policies are:

Access. All institutional uses shall have access adequate for their use type and scale. Large institutions with 5 day or 7 day activity schedules should not primarily access local or residential streets;

Compatibility. Institutional uses should be compatible with surrounding land uses in terms of scale;

Elementary schools are considered to be compatible with single-family residential development, if properly located. Middle and High schools are to locate in appropriate locations with adequate access and utilities.

Impacts. Institutional uses should not negatively affect residential areas with high traffic, noise, light, or activity schedules incompatible with residential uses.

Planning. Potential school sites should be identified in advance for large-scale development projects. The Planning Staff can assist the Board of Education in this by not only coordinating the site selection process with the County's planning effort, but also by providing demographic and other statistical analyses with which the Board can better evaluate its facility needs.

COMMERCIAL LAND USES

Commercial development shall be appropriately sized and located to serve residential areas and the region as a whole. All commercial development in Jefferson County:

Scale and access. Shall be located appropriately—that is, it shall be located on major roads appropriate to its scale;

Shall be clustered so as to limit direct access to main roads and to share access points;

Sprawl. Shall not be stretched out in a narrow strip along main thoroughfares, but be developed in concentrated nodes appropriate to the scale of development;

Infrastructure. Shall be of a scale appropriate to the available infrastructure, and no major commercial development shall be approved without sewer service;

Impacts. Shall not have a negative impact on surrounding development, particularly residential, in terms of traffic, noise, lights, or inappropriate land uses.

INDUSTRIAL LAND USES

Industrial land uses in Jefferson County range from large scale mining and manufacturing operations to small auto repair shops. An area that may be appropriate for one type of industrial operation may not be appropriate for another. Industrial land uses must be appropriate to a given area and have minimal impacts on other land uses of a different type. Policies on the appropriateness of particular uses include:

Mining and Extraction

Mining and extraction industries shall have adequate road access with roads of a type that will support the weight of trucks associated with the use;

All mining shall be buffered from other types of land uses;

Mining shall not be allowed where sensitive water resources would be endangered;

All practical measures, including known conservation techniques or Best Management Practices (BMPs) shall be used to protect surface and groundwater resources;

No blasting shall occur near residential land uses;

Large-scale Manufacturing and Warehousing

Large-scale industrial uses shall occur in concentrations of other like uses, and not as an isolated use surrounded by unlike uses;

Industrial uses shall have adequate road access with roads of a type that will support the weight of trucks associated with the use;

Industrial uses shall not be located so as to negatively affect nearby residential, institutional, or commercial land uses;

No industrial use shall access local or residential streets.

Smaller-scale Manufacturing and Repair

All small scale industrial uses shall have adequate access, and not access local or residential streets;

Small-scale industrial uses may locate in predominantly commercial areas if there is no outside storage or screened storage and the use is compatible with the adjacent uses;

Small-scale industrial uses shall be located so as to have no negative impact on nearby unlike uses.

Waste Disposal and Odor Producing Uses

All uses of this type shall have adequate road access and shall not access local or residential streets;

All uses of this type shall be in isolation, with no unlike land uses nearby;

No odor or pollutant producing industry shall be located where any odor reaches residential, institutional, or commercial land uses

Uses of this type shall be located so as to have no negative impact on ground or surface water resources.

Junk and Equipment Storage—Outside

All uses of this type shall have adequate road access and shall not access local or residential streets;

All uses of this type shall be isolated from unlike or incompatible land uses;

Uses of this type shall be located so as to have no negative impact on ground or surface water resources;

All outside storage shall be completely screened from public roads and adjacent land uses.

ZONING

Zoning is the most effective tool available for implementing the policies in this Plan. And, the use of site plans as a tool to determine appropriateness of a prospective land use, and what the impacts on the surrounding neighborhood might be, is the most effective means of using zoning for Plan implementation. Zoning Policies include:

Compatibility. A "Site Plan Approval" approach to zoning that allows appropriate land uses when and where any external impacts of the development can be sufficiently mitigated. Developers should be bound by their rezoning to build substantially what they show the County they are going to build, such rezoning being considered preliminary approval of development plans.

Infrastructure. Property in Jefferson County will be considered for rezoning only if all appropriate utilities, roads, sewer, and other necessary infrastructure already exist or will be complete prior to, or in conjunction with, construction of the new use.

Reasons for Denial. In addition to other zoning concerns, improper location, site problems, over-development, and regulatory problems can all be causes for denial of rezoning of property.

Incentives. Yard, lot, set-backs, and other dimensional requirements within the zoning and subdivision regulations will be utilized to provide incentives for developers to come up with innovative design concepts that achieve their desired densities, but that still meet County standards for open space, natural areas, flood-prone areas, and steep slopes. For example, if overall density goals are met through the provision of open space, a more dense zoning classification can be approved that would permit more dense development and less expense in infrastructure development (See Appendix).

Inappropriate zoning. The County Commission should consider initiating the rezoning of small, isolated, and inappropriately zoned properties, in accordance with this Plan, wherever a certain level of urgency can be identified in conjunction with protecting the use and integrity of adjoining properties, or in promoting the general health, safety, and welfare of the area, community, or county as a whole.

Reversion. Generally, to ensure compliance with development standards at the time of rezoning, zoning changes shall revert to the original zoning on the land if there is no development on a given property within 1 year after the rezoning. Zoning will not revert where the zoning itself is a clear upgrade and there are no potential negative impacts of the rezoning on development in the area.

Conformance with Municipality. Development in unincorporated 'islands' within municipalities should harmonize with the surrounding zoning and land uses of the city or town in question, as should development of land in the County on the outskirts of municipal boundaries.

AESTHETIC STANDARDS

Aesthetic standards for development can greatly improve the quality of life for residents of Jefferson County. Open Space and natural areas have already been cited as one such amenity development can use in this regard, but, sign regulations, protections of historic properties, and scenic view preservation can, and should, also be employed to make the County more attractive to both residents and businesses. Therefore, aesthetic impacts of a prospective development shall henceforth be considered in all proposed rezoning and development in Jefferson County.

Billboards and views. The County should consider placing stricter controls on billboards, including, but not necessarily limited to, restrictions on the number and location of such signs in order to help preserve the scenic vistas and overall rural character of the area.

Scale of signs. A sign ordinance shall be developed that limits large-scale signs to major roadways, and encourages ground-mounted signs or building-mounted signs on other roads and assures that all signs are compatible in size and scale with the development it is for, and with surrounding development.

Portable signs. Stricter controls shall be placed on portable signs, and consideration given to eliminating them all together.

SURFACE WATER, EROSION, SEDIMENTATION, AND GRADING

Any request for a zoning change for new development in Jefferson County shall include an evaluation of the development's potential impact on surface water quality and quantity, and the potential for erosion and sedimentation. In addition, developments will not be approved that require excessive or inappropriate grading, or that significantly alter the landscape and potentially create off-site adverse impacts in terms of drainage, erosion, and aesthetics.

The Land Use Plan takes into account appropriate densities of development to minimize long-term negative impacts on surface water quality and quantity. All potential development should be reviewed by assessing its specific impact on surface water, and then that assessment be compared against overall development densities the Plan sets out for given watersheds. These densities, in turn should not be violated without specific steps to minimize surface water impacts.

Stormwater Management

The County has an erosion and sedimentation control ordinance that addresses primarily new construction but does not address post-development storm water management. Post-development storm water management, which addresses storm water control for the life of a project, is essential for protecting water resources and is required for NPDES Phase II communities. Currently the county's Stormwater Management Authority only enforces these regulations for properties less than one acre. The County should comprehensively restructure its storm water ordinance and create an enforcement mechanism for construction and post-development runoff that will apply to all property in the county.

Jefferson County is currently involved in a comprehensive flood mitigation program as rising flood levels have placed many areas at risk. The county also has many biologically unique and valuable streams which require protection. Because of this, the

County has an interest in controlling not only the quantity of storm water runoff from developing and developed sites, but also in the quality of that water.

The Preliminary Recommendations of the Upper Cahaba Study identify a number of strategies for dealing with these issues, and it is recommended that the County revise its development ordinances to include them. They include:

Detention. Detention and retention systems should be used as a part of the overall stormwater management strategy, but should not be a favored approach unless specific circumstances make other choices unviable.

Detention alternative. Where feasible, constructed wetlands should be used as an alternative to detention ponds to manage stormwater. These wetlands not only control runoff quantity, improve infiltration, and remove pollutants, but then provide wildlife habitat and, from a public safety standpoint, are safer than detention ponds.

Infiltration. Infiltration practices should be a part of a variety of strategies to manage stormwater. Areas conducive to infiltration and areas where infiltration should be avoided should be identified through soil types and slope and vegetation analysis.

Filtration. Filtration practices should be implemented in combination with other stormwater management practices in the county. Particular attention should be paid to infiltration in areas where certain pollutants in the river or creeks are a concern, as opposed to overall stormwater volume problems.

BMPs. Best Management Practices (BMPs) should be used in a variety of combinations. These combinations should result from considerations of available space, local soil conditions, and pollutants of concern in nearby reaches of creeks and streams.

Runoff limits. Pre-development runoff and time of concentration should be maintained after development.

The Principles of Better Site Design developed by the Center for Watershed Protection should be considered for all development, and ordinances that prohibit these Principles should be changed. These Principles are included in the Appendix of this document.

Floodplains

Jefferson County is currently implementing a Flood Mitigation program that includes the purchase and removal of structures in floodplains and other flood mitigation efforts. In the past structures were located in floodplain areas where they were both subject to flooding and displaced flood waters and caused obstructions to water flow, thereby increasing flood damages both up and downstream of the structures.

Floodplains provide natural buffers that mitigate pollutants and slow flood waters. In order to protect the citizens of the County from the dangers of flooding and to protect natural riverine systems, the following policies shall govern floodplain development:

Protection of floodplain. No development shall be permitted within the designated 100-year floodplain (as designated in existing or approved revised FIRM maps) or, where floodplain is not designated, within the buffers designated in the Greenways and Conservation section of this Plan. Any disturbance of these areas shall be limited to necessary roadways and utilities, but parks and open space in these areas shall be encouraged.

Floodplain impediments. Any structures in floodplains should either be open structures (i.e. no sides or walls) so as not to impede floodwaters, or should be constructed on stilts.

Hazard prevention. Developers should be required to work with the natural topography of the land in order to prevent surface water degradation, hazards such as landslides, and other undesirable off-site impacts such as excessive erosion, sedimentation, and increased storm water run-off.

Grading. Developments should not be approved that require extensive earth removal or fill, or that completely alter the topographic character of a site. Cut or fill that alters an original grade by more than 20' should be considered excessive. Preservation of views should also be a consideration in minimizing alteration of existing topography.

Greenways. The County should take the lead, and work with municipalities to establish greenway systems along all major rivers and streams.

RECREATION AND NATURAL RESOURCES

The County should capitalize on its natural areas, its wildlife, and its water resources by:

Protection. Protecting them through policies such as those previously set forth in the Open Space, Aesthetic Standards, and Surface Water, Erosion, Sedimentation and Grading sections of this document.

Parks. Promoting development of parks and other passive or low-impact recreational facilities (e.g., bicycle and hiking trails, neighborhood parks, etc.) that take advantage of those natural resources by incorporating them rather than encroaching on them or eliminating them.

Redevelopment as open space. Design programs to convert outdated land uses to recreational purposes wherever possible.

ROADS

Road development is an issue critical to the future viability of development within Jefferson County. Any new roads and road expansions should be consistent with the Land Use Plan. No new development will be considered for approval if the appropriate road access does not exist or will not be provided by the developer.

Master Road Plan. All proposed developments will be evaluated by the Department of Roads and Transportation so that the development does not preclude or conflict with preferred routes for new roads or other planned improvements.

Traffic and future land use conflicts. Curb cuts should be minimized along present or future collector roads and arterial roads. Parallel access roads and shared driveways are to be encouraged for commercial development to minimize curb cuts. Residential lots facing collector or arterial roads constitute a safety hazard due to driveway access and cause potential future land use conflicts as increasingly busy roads make property non-viable for residential purposes. Residences in subdivisions must access internal local streets and shall not be oriented to present or planned collector or arterial roads except where the original parcel is too small to have any other viable orientation or where property is zoned A-1 and houses are setback 50 feet or more, driveways are separated by more than 150', and the depth of the property does not reasonably allow for the construction of internal roads.

Clustering. To encourage clustering of more intense types of development, and to protect the integrity of residential development, curb cuts should be discouraged on all arterial roads. Proposed development should front on local roads within clusters of development, limiting access points to major roads to approved intersections.

Appropriate scale. Roads shall not be overdeveloped, that is: that is, constructed to be overly wide and capable of handling too much traffic in areas where the Plan indicates low-intensity land uses.

Alternative routes. In the more rapidly developing areas, consideration should be given to the development of new service roads parallel to major collector streets to minimize access congestion and prevent overloading; and, to encourage development of more concentric commercial "core" areas instead of sprawling commercial strips.

Special corridors. The County has established, and will establish, highway corridors where special regulations help enhance the roadway's visual integrity and traffic flow, and that help establish community "core" areas. Such practices may include:

- overlay districts that restrict signs and billboards, and impose other specific highway development standards
- defining specific boundaries for commercial development
- limiting the number of access points to the Highway itself
- promoting off-road development with single points of access for multiple developments

Stub streets. In subdivisions, a new subdivision shall be required to connect to stub streets in adjacent subdivisions in order to create multiple access points and alternative routes for the purposes of public safety and circulation. This shall be required unless there is no practicable alternative.

In new subdivisions stub streets shall be provided to adjacent undeveloped areas in order to provide better circulation and provide for public safety.

Multiple access points. Subdivisions or other large scale developments should have multiple access points to external roads, and single cul-de-sac subdivisions with no outlet should be discouraged.

URBAN SERVICE AREA

The Urban Service Area shall be defined as those areas that are served with all basic infrastructure, including municipal water, power, sanitary sewer, and an adequate road network. Any area within the Urban Service Area may be considered for any type of development permitted by the Proposed Land Use Plan Map or, where the map does not specify use, for any use permitted by the other General Policies of the Land Use Plan.

Any area that is not within the Urban Service Area cannot be considered for any intense commercial, industrial, or residential development. Residential development outside this area shall in no case have a density greater than that permitted in E-2, and generally should have a lower density more in keeping with a rural area.

Sewer and Water Services

Appropriate sanitary services and water service shall be required for all development in Jefferson County.

Residential sewer. Sewer service shall be required in any residential development with a density greater than that permitted in an E-2 (Estate) zoning district, except under conditions provided for in the zoning ordinance.

Commercial sewer. All large-scale commercial development shall be required to be connected to live sewer. Only limited, neighborhood oriented commercial development (such as that characterized by the C-N zoning district) should be considered for permitting without live sanitary sewer.

Industrial sewer. No extensive or intensive industrial development shall be approved without live sanitary sewer and public water service sufficient for adequate fire protection.

Sewer extension. Sewer extension policy should reflect the goals of the Land Use Plan and should not extend major sewer lines into areas where the preservation of low-intensity or rural land uses are a priority.

Public water. No new residential subdivision will be approved without access to a public water system.

Certification of Fire Protection. All new subdivisions, and any other new development for which fire protection is determined to be a concern, should be required to submit certification of coverage from the local fire district/department. Such certification should also include an evaluation of fire hydrant locations, water line sizes, available pressure, etc., and may result in certain additional requirements (such as shorter distances between hydrants and residents).

GREENWAYS AND CONSERVATION AREAS

The conservation of streams and rivers and the protection of water quality is a high priority for Jefferson County. The first Proposed Land Use maps of the Land Use Plan included greenway areas and encouraged the conservation of these greenways through the use of zoning incentives. However, there was no other mechanism for the preservation of these lands. As a part of a settlement with the U.S. Environmental Protection Agency, Jefferson County began a program of preservation of greenways along rivers and streams. A Land Trust was established and a plan establishing priorities for greenway acquisition was prepared. The Trust, through purchase and through donations, has begun the acquisition of property and of conservation easements in these priority Greenways.

A Greenprint Plan that identifies particularly sensitive lands for conservation within riverine greenways and in other areas is being produced as a part of the Upper Cahaba Study. The intent of this plan is to protect these key lands in order to preserve wildlife habitat and water quality.

Both the Acquisition Plan of the Black Warrior and Cahaba Rivers Land Trust and the Upper Cahaba Greenprint Plan are to be considered a part of this Land Use Plan.

The Proposed Land Use maps identify conservation areas, but do not necessarily include all of the areas included in these Plans. The maps accompanying these plans area adopted as a part of this Plan.

Conservation Area Policies

Where conservation areas are not defined on any conservation map, all perennial streams and all rivers within the county will have designated buffers as follows:

The following streams shall have a designated stream buffer 100 feet from the top of the bank or the designated 100 year floodplain, whichever is greater:

Cahaba River
Warrior river
Locust Fork
Five Mile Creek
Shades Creek
Little Cahaba
Gurley Creek
Turkey Creek
Village Creek

On all other streams not identified above, but designated on County Hydrology maps, stream buffers shall be considered to be a minimum of 50 feet from the top of the bank or the designated 100 floodplain, whichever is greater.

All stream buffers shall remain undisturbed vegetation except for the necessary roads and utilities.

Zoning and density incentives may be used to encourage the permanent conservation of stream buffers, as appropriate.

Conservation subdivisions shall be used to allow clustering of development in order to preserve stream buffers and steep slopes.

Required Open Space

The need to preserve open natural areas and to protect water resources; to provide for the recreational needs of the citizens of the County; and, to enhance the aesthetic/visual desirability/quality of life of appeal of new developments, shall be considered in the approval process for all new development. The County should require open space in new residential development in order to preserve important land and water resources and, where appropriate, to provide for recreational areas. Floodplain areas and steep slopes can fulfill open space requirements in order to protect not only the on-site development, but also the surrounding area, from flood, drainage, and slope movement hazards.

Incentives. Flexible zoning regulation incentives should be used to encourage developers to set aside open space, protect floodplains, create non-vehicular linkages to other developments, establish greenways, etc.

Natural resources. Open space requirements and incentives should also be used to preserve natural drainage ways and particularly valuable natural or scenic resources, including natural springs within the County's Karst geology region.

System. Open spaces provided should be utilized to create a coherent system of open space that will provide recreational amenities and promote habitat and water quality preservation in the area of the development, and for the entire community.

Steep Slope Areas

Jefferson County is located at the southern edge of the Appalachian Ridge and much of the county is steeply sloped. Given the substantial rains and high clay soils, steep slopes tend to be unstable when their natural vegetation is removed. There are many instances of slope failure in the County after slopes have been cut or vegetation removed. This constitutes a hazard to life and property, as well as increasing flooding potential and impacting water quality through siltation. In addition the hills of the county are one of its signature assets, and the continued removal of hills for development creates visual blight.

Any areas in the County with natural slopes in excess of 25% are to be considered Steep Slope Areas, and are subject to the following policies:

Development discouraged. Development of steep slopes shall be discouraged. No development shall be permitted which destabilizes a steep slope or which removes vegetation from a steep slope unless it is demonstrated that there will be no adverse impact on the stability of the slope or on water quality or storm water runoff quantity.

Incentives. Development incentives and conservation subdivisions shall be used to preserve steep slopes as protected open space.

Grading limits. Excessive cut of steep slopes shall be discouraged and excessive grading (cut or fill in excess of 20 feet) shall be discouraged.

Retaining walls. The use of retaining walls should be limited. No retaining walls higher than 12 feet should be permitted without an engineer's certification of stability.

Stability. No slope of greater than 15% after grading should be permitted without certification by an engineer that the slope is stable.

WATERSHED PLANNING

In order to protect and preserve the County's vital water resources while allowing appropriate development, it is the intent of this Plan to encourage the following:

Appropriate development types. Provide a variety of built forms in appropriate places within the County landscape to help protect watershed resources by making clear distinctions between urban, suburban, and rural areas.

Encourage density. Discourage commercial and residential sprawl by creating intense, identifiable development nodes that include mixed development, and encouraging redevelopment of less dense commercial areas into more dense mixed use areas.

Compact development. Use Traditional Neighborhood Development (TND) to promote a wide variety of new housing types, retail, and services in a compact and highly accessible setting and limiting impervious surfaces.

Rural pattern. Plan for rural villages and neighborhoods to preserve open space along rural roadways, and create Rural Corridor Protection areas.

Identify resources. Identify sensitive and vulnerable land resources and provide incentives to protect those resources. Require the preservation of identified critical areas.

Incentives. Work with the Black Warrior-Cahaba Rivers Land Trust to preserve sensitive lands, and allow the donation of land or conservation easements to meet open space requirements.

Buffers. Require riparian buffers along identified rivers and streams.

Water management. Acquire or set aside floodplain areas to manage stormwater impacts and to protect water quality.

Map slopes. Identify steep slope protection areas and develop incentives and requirements to protect them.

TDR. Implement a program for inter-jurisdictional transfer of development rights to protect sensitive lands and to direct development to areas suited to more intense development, particularly areas to be served by transit.

Conservation development. Conservation districts shall be used in the land use plan to protect sensitive areas and to reduce impervious surfaces. Significant should be required along with a limitation on densities, but maximum densities shall only be allowed where open space is provided.

BMPs. Improved Best Management Practices shall be required for all new development and shall be encouraged in older developments.

Regulatory enforcement. Improve stormwater ordinances and their enforcement.

Low impact development. Wherever feasible, the principles of Better Site Design and Low Impact Development should be incorporated into the zoning ordinance. These efforts should target the reduction of impervious surface area, the increase of natural vegetation, and greater stormwater infiltration in new developments.

Target Watershed Strategies

The following strategies should be considered for implementation in target watersheds through the zoning ordinance in order to reduce impervious surfaces and automobile dependent development that encourages the development of impervious surfaces.

Auto dependence. Prohibit automobile-dependent uses, such as drive-up facilities, car sales lots, warehousing, distribution and storage.

Pedestrian-oriented design. Modify requirements for streets (narrow width requirements, lessen required turning radius) to allow for a more walkable design.

Require wide sidewalks with an adjacent street furnishing zone that includes trees, outdoor seating, ornamental lighting, and trash receptacles.

Orient buildings to the street rather than a parking lot.

Place parking to the rear or side of buildings, not between buildings and the sidewalk.

Promote the use of structured (deck) parking, rather than scattered surface lots.

Require the use of shared vehicular access points to maintain safer pedestrian zones.

Require pedestrian walkways and marked crossings that connect parking, buildings, sidewalks and streets.

Encourage shared parking, parking reductions (e.g., for available on-street parking and transit access) and measures to reduce parking demand.

Reconnect and refine the existing street network to offer more route choices.

Eliminate minimum front setback requirements and set a maximum front setback of 10 to 15 feet so that commercial and residential uses line the street.

Require commercial and multi-family developments to incorporate elements for visual interest, such as a minimum percentage of ground floor transparency, balconies, overhangs, and awnings.

Identify and inventory vacant or underused parcels for infill development opportunities.

Require taller buildings to "step down" at the street level to create a human scale environment.

Require multi-story construction that combines ground floor retail, service or office space with upper level residential units.

Allow individual developers to bank some of their required open space on an offsite parcel to create larger, more usable public spaces.

Grant density bonuses for provision of public parks, greenways, or other community-oriented facilities.

In urban areas with transit-oriented development allow smaller-scale commercial land uses generally consistent with C-N within residential areas.

Impervious Surfaces

Studies by the University of Georgia and others have shown that there is a direct relationship between the impervious surfaces in a given watershed and water quality and stream health. Impervious surfaces are those surfaces that do not allow for the infiltration of stormwater—that is, paved areas, roofs, and heavily compacted non-vegetated soils.

Impervious surfaces can be expressed as a percent of a given site or of a watershed. For example, total impervious surfaces for a watershed of under 10% generally mean that a stream is going to be in a near pristine state, pollutant levels would be low and stream channels would be stable. Percentages of 15 to 19% result in some degradation in water quality and some channel destabilization. At this level mitigation measures can be used to lessen the impacts of the development to maintain a healthy stream system.

When the impervious surfaces reach the 20% range the stream health becomes threatened. Pollutant levels rise and stream bank erosion becomes a significant problem. Bank erosion results in siltation which threatens wildlife habitat and water quality. Impervious surface levels above 25% are characteristic of an urbanized watershed, where streams can be expected to be little more than drainage channels which can support little wildlife. In fact, in urbanized areas with these conditions most of

the tributaries, and even some of the main streams, may be piped or be channelized with concrete or other man-made surfaces.

Development in Jefferson County has varied over time in terms of what percentages of impervious surfaces result from which type of development. For example, at one time development in R-1 zoning might have resulted in impervious surfaces for a given development being 20% or less. However, in recent years houses tend to be considerably larger, and where there was once a carport or a one car garage, there is not a 3 or 4 car garage with a concrete apron that would hold that many more cars. The impervious surface percentage would be considerably higher than the 20%.

Below are estimates of the impervious surfaces that result from some of the County's zoning classifications if they are fully developed in a conventional manner, that is, with no mitigating open space and with conventional modes of development.

<u>Zoning Classification</u>	<u>Percentage Impervious</u>
I-1	85%
C-1	85%
R-4	60%
R-G	40%
R-T	35%
R-1	23%
R-2	30%
E-2	18%
A-1 (1 acre residential)	10%

These percentages can be reduced due to terrain, the character of a particular development, open space, and road layout. The effect of these types of development can also be mitigated somewhat by the use of on-site systems such as stormwater detention and infiltration and through the use of vegetation to filter runoff.

The effects of impervious surfaces on streams also depend upon the location of the land use. For example, a land use with 85% impervious surfaces will have a significant negative impact on the stream immediately adjacent to it. However, if the use is surrounded by open space the overall effect on the watershed could be minimal.

The direct impacts of development can also be mitigated by the use of buffers on streams. Significant vegetated buffers, with natural or planted vegetation, can significantly reduce the speed of stormwater runoff and improve water quality. In order to do this runoff should be sheet flow through the vegetation rather than piping stormwater past the buffer directly into the stream.

Conservation subdivisions can be used to mitigate the effects of development. A conservation subdivision will allow a site to be developed to an increased density in

return for clustering structures to limit impervious surfaces and by requiring significant open space within the development.

Watershed Policies

Target. It is the intent of this Plan to limit the overall impact of impervious surfaces in watersheds. Generally the overall impervious surfaces for a given watershed should not exceed 16%, but in watersheds of particular concern it may be lower. That does not mean that a particular development must meet that standard, but that the Proposed Land Use Maps take these targets into consideration, and, on balance, the watershed should meet this standard.

Balanced development. In order to meet this criteria more dense development types need to be balanced with less dense development or open space within the same watershed.

Vegetation. In order to further reduce stream impacts, on site systems such as detention, infiltration, and filtering through natural vegetation are to be used whenever practicable.

Buffers. For all new development all streams should have a 100 foot vegetated buffer from the top of the bank or the 100-year flood plain shall remain undisturbed, whichever is greater, except where no flood plain is designated, then a 50 foot buffer shall be required.

Proposed Land Use Maps

The following chart shows the zoning and impervious surface targets for each classification on the Proposed Land Use Maps.

LAND USE CLASSIFICATION CHART

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Rural	0%	N/A	Any zoning as per policy	11%
Rural Village	0%	N/A	Any zoning as per policy	15%
Agriculture	0%	.9	A-1, E-1	11%
	0%	.4	EM-F	7%
Rural Residential	0%	1.3	R-R	16%
	0%	.9	A-1, E-1	11%
Conservation-Single Family	0%	.9	E-1	18%
	0%	1.6	E-2	18%
	0-20%	2.2	R-1	18%
	25%	2.3	R-2	18%
	35%	2.9	R-3 Single	18%
	35%	3.6	R-3 Double	18%
	50%	2.4	R-G	18%
	60%	4.1	R-T	18%
Single-Family-No Sewer	0%	1.9	E-2	21%
	0%	1.9	R-1	19%
Single-Family-Sewer	0%	2.9	R-1	24%
	0-20%	3.0	R-1-S	24%
	0-20%	3.0	R-2	24%
	50%	3.4	R-G	24%
	60%	5.6	R-T	24%
Multi-Family-Suburban	0%	3.7	R-2	29%
	0%	4.7	R-3 Single	29%
	20%	6.0	R-3 Double	29%
	30%	4.2	R-G	30%
	50%	6.1	R-T	30%
	Variable	Variable	R-4	30%
Transit Overlay	Variable	Variable	R-3, R-G, R-T, R-4	45%

Mobile Home Subdivision	0% 40%	4.9 5.9	R-5(A) R-5(B)	32% 32%
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POLICIES AND POLICY ISSUES FOR URBANIZED AREAS

RESIDENTIAL DEVELOPMENT

Many areas of unincorporated Jefferson County are becoming increasingly urbanized. And, as this occurs, there is greater need and demand for amenities such as open space and recreation; but there are also greater problems in terms of erosion, sedimentation, and traffic.

Density. The Proposed Land Use Maps indicate appropriate future levels of residential density. In many areas, the proposed future density is only possible when sewer and other infrastructure have been developed to serve those areas. In order to rezone property to allow for densities indicated on the Land Use Maps it must be demonstrated that all necessary and appropriate infrastructure is either in place, or will be in place prior to construction of the development.

In areas where sewer, public water, adequate streets, or other infrastructure do not yet exist, only lower density residential development will be permitted. Generally, rezoning property to R-1 or any higher density residential zoning will require sewer. Where sewer does not exist, or where appropriate road access is not available, the maximum residential density allowed will be the equivalent of E-2. R-1 or other zoning categories may be allowed, where appropriate, to gain greater design flexibility through lesser setback requirements and clustering of development to preserve open space, but the overall density of the development cannot exceed that allowed in an E-2 zoning district (See Land Use Chart in the previous section).

Where infrastructure allows, urban densities should be encouraged in order to promote transit-oriented development and to lessen dependence on the automobile. Development should allow for and encourage pedestrian and bicycle circulation and urban development should encourage a mixture of uses to limit the number of automobile trips. Pedestrian connections to other types of development should be encouraged, and the use of Traditional Neighborhood Development types (TND) should be encouraged.

Amenities. It is the intent of the County to decrease vehicle trips and to encourage the long-term viability of neighborhoods. To do this, connections,

other than *vehicular connections*, need to be established between neighborhoods. The County shall encourage developers to provide and/or allow for certain amenities in—and between—their developments. Such amenities can include such things as sidewalks, bicycle paths, walking trails, open space, and natural areas, where appropriate.

Access. In new subdivisions, no lots shall front on arterial or collector roads. All private driveways shall access local roads internal to the subdivision. New subdivisions will be required to connect to adjacent subdivisions where there are stubbed streets. In addition, new subdivisions adjacent to undeveloped property shall provide stubbed streets for future access. Where possible, developments should provide for in case of temporary blockage of main roads.

Compatibility. Developers should provide information about the general appearance of any proposed new development so that its compatibility with existing development, in terms of size, scale, and character, can be determined.

Where any residential development of R-G or higher density abuts established lower-density residential zoning, a buffer shall be provided between the developments.

Access. All residential subdivisions with R-1 or more dense zoning shall be required to have sidewalks on both sides of the road to promote exercise and to reduce automobile dependency, unless the overall rural character of the development and the area make it impractical. Sidewalks may be on one side only where there is a topographic or safety reason to do so. In addition, these sidewalks shall provide a connection to sidewalks or potential sidewalks on adjoining main roads and in adjacent residential or commercial development.

INSTITUTIONAL DEVELOPMENT

Given the scale of the Area Land Use Plans, not all potential land uses are specified on Proposed Land Use Maps. Uses which are not specified, but are not considered to be precluded, are generally institutional uses which occur only in isolated locations; which cannot always be predicted in advance; and which are small in scope and scale.

Institutional uses can be considered compatible with, and therefore approvable in, other categories of land use under the Plan as follows:

Small uses. Small to medium-sized churches, schools, and fire stations do not have locations designated in the Plan. These uses should be considered in any Rural, Residential, Commercial or Industrial area on a case-by-case basis, with approval dependent upon the potential impacts on the surrounding area, and the adequacy and appropriateness of the site plan.

Large uses. Larger institutions, such as very large churches, retirement homes, nursing homes, and hospitals, can be placed in areas designated for Medium to High Density Residential, Commercial, or Industrial areas. Acceptability will depend upon the scope and scale of the institution; the impact on surrounding land uses; and, upon an evaluation of the site plan and support infrastructure.

General compatibility. Institutional uses may also be located in General or Residential Transition Zones depending upon their compatibility with adjoining land uses and the individual property's appropriateness in terms of the transition from more intense to less intense land uses.

COMMERCIAL DEVELOPMENT

Commercial developments typically fall into two types: 1) Large-scale developments that have substantial impacts on surrounding land uses, roads systems and utilities; and, 2) Smaller-scale developments that are more neighborhood-oriented, and have primarily only local impacts.

Buffers. Adequate physical buffers shall be provided between commercial developments and any adjacent residential, institutional, or less intense commercial use.

Location and access. More intensive types of development shall be restricted to land fronting highways and major collector streets, and/or to property near interstate interchanges. In addition, all major developments shall have adequate vehicular and pedestrian access and circulation; adequate utilities and fire protection; and, be served by sewer. Vehicular and pedestrian connections should be provided between adjacent commercial developments, and pedestrian access should be provided to any adjacent residential areas.

Smaller-scale or neighborhood-oriented commercial developments shall be restricted to land fronting collector or arterial roads; should be placed near major intersections of those roads, and should have adequate access and utility service.

Sprawl. Commercial "strip development" along existing major roadways shall be discouraged, and the *clustering* of intense land uses *encouraged*. The County will promote development of larger-scale commercial 'villages' to reduce vehicle travel between the various commercial uses in the development; to encourage pedestrian travel; and to reduce access points onto major roadways.

INDUSTRIAL DEVELOPMENT

There are many types of land uses which fall into the industrial classification. They vary in their intensity and in their overall impact on adjacent land uses, residential neighborhoods, and on the county as a whole.

High-impact Industrial Uses. Uses permitted under the I-2, I-2-A, I-3, I-3-S, I-5, I-5-A, I-O, and HW-1 zoning classifications, all are high impact land uses with substantial external impacts. These land uses should only be sited where any of these impacts, such as noise, odor, traffic, etc., have a minimal effect on residential or commercial land uses, and where there are minimal adverse visual impacts. Where access by large trucks or substantial truck traffic is involved, all developments shall either have direct access to major arterial roads, or adequate private roads should be constructed to obtain such access. Truck traffic shall not be routed through residential areas. Water quality impacts will also be considered for all developments of this type, and appropriate measures, including stream buffers, shall be required.

Moderate-impact Industrial Uses. Uses permitted under the I-1 and I-4 zoning classifications can generally be considered to have more moderate impacts than those listed above. Impacts on adjacent properties can still be fairly substantial, but the impacts on neighborhoods and on the county as a whole will be relatively less substantial. Any uses in this category should generally be located on arterial roads, and shall have adequate access for trucks and automobiles. All appropriate utilities must be available. These uses shall be located to minimize impacts on both residential and commercial land uses in the surrounding area. Appropriate buffers shall be required to protect adjacent and neighborhood land uses of a different character. Residential areas are not suitable for these types of land uses, and many commercial areas may be unsuitable as well. Industrial uses should be located so as to minimize or eliminate truck traffic passing through residential areas. Appropriate environmental protections shall be also be required, including requiring "zero" noise and odor impacts on any nearby residential properties; visual screening for any outside storage or unsightly areas; and stream protections and buffers.

TRANSIT ORIENTED DEVELOPMENT

It is in the interests of the County and of the region as a whole to support cooperative transit-oriented development. The County should work with municipalities and other counties to establish transit corridors and development nodes that improve mobility by providing for pedestrian and transit-friendly development through a mix of residential, commercial and employment opportunities that focus and concentrate appropriate diverse uses, densities, and design characteristics within existing and planned transit corridors.

The Zoning Ordinance of the County should be revised to include Transit Oriented Development Districts (TOD) in locations to be served by transit (Express Bus, Bus Rapid Transit and Light Rail Transit). Such TODs shall encompass all or part of an area surrounding transit stations or along transit lines as designated by the MPO.

The Land Use Plan shall:

Encourage and direct development that is transit supportive.

Encourage infill and reinvestment in transit corridors.

Encourage safe, attractive and convenient access for transit users, pedestrians and bicyclists through appropriate building and site design.

Provide an alternative to traditional development by emphasizing mixed-use development that is pedestrian oriented.

Allow densities that encourage mixed-use development

Provide uses and densities that support multi-modal transportation and support facilities.

Reduce automobile dependency and roadway congestion by combining trips and locating destinations within walking and biking distances—all interconnected with transit.

Reduce conflicts between pedestrian, bicycles and vehicles.

Discourage auto-oriented uses and encourage alternative modes of transportation.

Promote livability, commerce and neighborhood vitality.

Enhance neighborhood identity by creating more choices such as walking, biking and shopping to residents that promote safety, friendliness and livability.

Reinforce the use of public transportation by locating higher density mixed use development, including employment oriented business and higher density residential uses, adjacent to transit stops.

Transit Corridors

The Metropolitan Planning Organization has established transit corridors on its long-term improvement plan, and these corridors are hereby adopted as a part of this Land Use Plan.

Transit Nodes

Transit nodes of development shall be established at transit stop locations. These nodes shall include mixed use development and shall be designed to encourage pedestrian and bicycle circulation.

POLICY AND POLICY ISSUES FOR RURAL AREAS

Most rural areas of the county have a large number of individual, isolated land uses, largely due to the lack of any kind of well-defined land use pattern. In some cases, these uses are not appropriate and have adverse impacts on the surrounding area. On the other hand, the irregular occurrence of certain uses, such as churches, cemeteries, convenience stores, etc., tend to be an inherent part of a given area's "rural character"; thus, it is difficult to treat such cases the same way in a rural area as they would be treated in a more extensively developed area of the county.

Rural areas—as designated on the Proposed Land Use Maps, or in areas that have not been mapped—require a somewhat different set of criteria for the evaluation of rezoning proposals and land uses. For example, it may be appropriate to locate a smaller-scale commercial land use in a very low-density residential area. Some industrial uses that serve a "local" population may also be appropriate. Large-scale industrial uses such as mining and landfills, are generally be located away from urbanized areas. Conversely, the impacts on land of active agriculture must also be considered in siting residential development. And the condition and classification of area roadways will again be considered in evaluating any type of proposed development.

RESIDENTIAL DEVELOPMENT AND AGRICULTURAL USES

In these kinds of areas the traditional land use pattern includes residential and commercial development in close proximity and these patterns can continue with due care given to reduction of land use and traffic conflicts and to the safety of residents.

The Proposed Land Use Map designates some areas as being "Rural". This designation is for rural areas where no dominant development pattern has been established. Any zoning classification can be considered in these areas but the General Policies of the Plan for location of any given use apply.

The "Rural Village" designation is used in rural areas of Jefferson County where there are small concentrated settlements or villages that in many cases date back more than a century. Typically these consist of smaller residential lots with small-scale locally oriented commercial and industrial land uses. Future development in these designated villages will be permitted to continue in a similar manner. Zoning decisions will be made on a case by case basis based upon traffic and land use impacts on existing properties. Redevelopment of smaller lots will be permitted and new residential zoning consistent with E-2 density can be considered. Concentrations of commercial zoning can be permitted near major intersections as long as residential properties are adequately buffered.

In these kinds of areas the traditional land use pattern includes residential and commercial development in close proximity and these patterns can continue with due care given to reduction of land use and traffic conflicts and to the safety of residents.

In areas designated on Proposed Land Use Maps as being "Rural Residential/Agriculture, no density of greater than that permitted in an R-R (Rural Residential) zoning classification will be allowed. In rural areas where there is no Proposed Land Use Map, the same general criteria apply (i.e., 30,000 sq ft per lot, or a density of 1.34 dwelling units per acre). Under no circumstances will a density greater than that permitted in E-2 (1.9 units per acre) be allowed where the development is not on sewer.

Scale of agriculture. All agriculture in Jefferson County should be limited to a livestock density of 1 horse or cow per acre, or 2.5 smaller animals or fowls per acre and the zoning ordinance should be modified to require this.

Rural residential. Residential Development will be low density (R-R, EMF, E-1) and comply with all subdivision regulations and zoning requirements. Within the context of all Plan documents, "subdivision" of land is defined as all divisions made for the purpose of residential or any other development.

Single-family district. Agricultural zoning (A-1) is intended for agricultural purposes with incidental residential uses. Therefore, one parcel should only have one dwelling unit (house or mobile home). Zoning regulations should be amended to allow only one mobile home or house per lot in A-1 agricultural districts, and all other districts.

A-1 subdivision. Subdivision of property in A-1 will only be allowed along existing County roads (if prescriptive Rights-of Way, then additional dedication of Right-of-Way will be required). Further subdivision will require compliance with all Subdivision Regulations, including platting requirements. Improvements may be required on existing County roads as determined by Traffic Engineering.

Subdivision required. Existing or new private roads will not be extended, and no further subdivision along these roads will be allowed until a plat is submitted and properly executed. Plats for subdivisions with private roads will include statements concerning maintenance in perpetuity.

Permits. No permits for residential development will be allowed where the property does not have frontage to a County road.

INSTITUTIONAL DEVELOPMENT

Given the scale of the Area Land Use Plans, not all potential land uses are specified on Proposed Land Use Maps. Uses which are not specified, but are considered to be

included, are generally institutional uses which occur only in isolated locations; which cannot always be predicted in advance; and which are small in scope and scale.

Institutional uses can be considered for approval under other categories of land use. For example:

Small to medium-sized churches, schools, and fire stations do not have locations designated in the Plan. These uses should be considered in any Agricultural, Residential, Commercial or Industrial area on a case-by-case basis, with approval dependent upon the potential impacts on the surrounding area, and the adequacy and appropriateness of the site plan.

Larger institutions, such as very large churches, retirement homes, nursing homes, and hospitals, can be placed in areas designated for Medium to High Density Residential, Commercial, or Industrial areas. In rural areas such designations may not exist. Larger institutions can be considered in rural areas, but acceptability will depend upon the scope and scale of the institution, the impact on surrounding land uses, the adequacy of the site plan, sufficient infrastructure in place, adequate access roads, adequate police and fire protections, and adequate sewage disposal facilities.

Institutional uses may also be located in General or Residential Transition Zones depending upon their scale and their compatibility with adjoining properties.

COMMERCIAL DEVELOPMENT

Commercial development in rural areas should be of a scope and scale that serves primarily the immediate area, and not the entire region. For example, major shopping malls would not be appropriate, but small shopping centers serving nearby residential development would be. Where there is no Proposed Future Land Use Map, or in areas designated for residential or agricultural purposes "small-scale" individually sited commercial uses may be appropriate when they will serve primarily the immediate neighborhood. Such uses should be designed to have minimal impacts on traffic and surrounding properties.

Access. All more intensive types of development should be restricted to land fronting highways or major collector streets, or to property near interstate interchanges.

Concentric development. Commercial "strip development" along existing major roadways in the county in general, and in rural areas in particular, should be discouraged. Where appropriate, commercial land uses should be clustered and should have common access points. And where such larger-scale commercial development is appropriate, the development of commercial 'villages' should be

encouraged to reduce vehicle travel between the various commercial uses in the development; to encourage pedestrian travel; and to reduce access points onto major roadways.

New pattern. Any commercial use proposed for a rural area where there has been no such precedent or commercial pattern established should be evaluated with regard to the following criteria (as well as with due consideration to any other or additional regulations or requirements that may be pertinent):

- (1) it should be relatively small in terms of its size and scale;
- (2) it should be accessible directly from a collector road;
- (3) it should not be located actually inside a subdivision;
- (4) it should be intended to operate primarily, if not solely, as a convenience to the residential development in its immediate surrounding area.

INDUSTRIAL DEVELOPMENT

In rural areas, industrial development will generally be of one of two types—the small scale industry that is family run or just has a few employees, or the very large scale use such as a landfill or a strip mine with significant external impacts. Generally, the criteria for location of industry in a rural area is the same as for an urbanized area, but, as with small scale commercial development, some small scale and locally oriented industrial uses may be appropriate. However, greater care must be taken to limit impacts on residential and commercial land uses.

High impact Industrial Uses. Land Uses permitted under I-2, I-2-A, I-3, I-3-S, I-5, I-5-A, I-O, and HW-1, all are high impact land uses with substantial impacts to any adjacent properties and potential impacts to the neighborhood and the county as a whole. These land uses should only be sited where any external impacts such as noise or odor have a minimal effect on residential or commercial land uses and where there are minimal visual impacts. Where access by large trucks or substantial truck traffic is required, all developments shall have access to major arterial roads or adequate private roads should be constructed to access those roads. Truck traffic shall not be routed through residential areas. Water quality impacts should be considered for all developments of this type and appropriate measures, including stream buffers, shall be taken.

Moderate impact industrial uses. Land Uses permitted under I-1 and I-4 can generally be considered to be moderate impact uses. Impacts on adjacent properties can be substantial, but the impacts on neighborhoods and on the county as a whole will be less substantial. Any uses in this category should generally be located on arterial roads and shall have adequate access for trucks and automobiles. All appropriate utilities shall be available. These uses shall be located to minimize impacts on area residential land uses and commercial land uses. Appropriate buffers shall be required to protect adjacent and neighborhood

land uses of a different character. Residential areas are not suitable for these type of land uses. Industrial uses should be located so as to minimize or eliminate truck traffic passing through primarily residential areas. Appropriate environmental protections shall be observed, including requiring zero noise and odor impacts in any nearby residential properties, visual screening for any outside storage or unsightly areas, and stream protections and buffers.

APPENDIX

PRINCIPLES FOR APPLYING THE PLAN TO REQUESTS FOR REZONING

No plan dealing with future development could ever hope to be able to totally anticipate and account for every conceivable circumstance that might possibly affect a particular piece of property at any given point in the future. Furthermore, there are inherent limitations of the Land Use Plan during this particular phase of the project – i.e., a *General Land Use Plan*. This Plan does *not* fully consider or explore *all* possible alternatives for land use for each parcel of land in the County. There are going to be cases where there are circumstances unique to a specific parcel (or group of parcels) such that an alternative proposal may not *precisely* meet the land use definitions, but *does* fulfill the *intent* of the Plan.

One of the primary purposes of this Plan is to serve as a tool for the Planning & Zoning Commission and the County Commission to use in evaluating rezoning requests and making decisions that affect the development and use of property in the unincorporated area of Jefferson County. But because of the limited scope of the Plan in its present form, not every zoning case will be clearly addressable strictly by applying the Proposed Land Use Map (where there is one). Thus, it is necessary that the Commissions have a mechanism for **(a)** relating each rezoning case back to the Plan, and **(b)** exercising appropriate discretionary judgment in those cases where unique circumstances may fulfill the intent, though not necessarily the letter, of the Plan.

Below are three basic principles that the Jefferson County Planning & Zoning Commission will use in evaluating all rezoning cases against the proposals and recommendations set forth in the General Land Use Plan. For every case to be heard henceforth by the Commission, in the course of its evaluation of each case, one of these principles should be found applicable, and used for decision-making.

Principle #1: Proposal is consistent with the Plan.

Is the requested zoning and proposed use/development consistent with the Proposed Land Use Map, and do they conform to the development Policies set forth in the Plan?

If so, then the Planning & Zoning Commission would recommend approval. However, it may also be appropriate for the Board to make certain modifications, or to include certain conditions or stipulations in cases where such additional measures are warranted in consideration of the Goals and Objectives of the Plan.

Principle #2: Proposal is compatible with the Plan.

If not completely consistent with the Plan, is the requested zoning and proposed use/development at least compatible with the Proposed Land Use Map, and/or do they still conform at least to the spirit and intent of the development Policies set forth in the Plan?

In this situation, the Planning & Zoning Commission shall further evaluate a case in relation to the larger overall purposes of the Plan, at both the Area and at the countywide level. Emphasis here is on the words "at least," meaning that every effort should be made to allow only the minimal amount of divergence possible from the Plan as written.

The primary basis for the Commission's action on these kinds of cases shall be formed by weighing the case against the Plan's stated Goals and Objectives for the Area, *and* for the County in general.

If the Commission should determine that granting the requested rezoning for the proposed use or development, though a departure from the strict application of the Plan (or a Proposed Land Use Map), would still be in harmony with the overall Goals and Objectives of the Plan, then a subsequent recommendation to approve the case would not be considered contrary to, or in violation of, said Plan. However, it should also be expected that most, if not all such cases will carry conditions, stipulations, and/or otherwise be modified so as to maximize the compatibility of the resulting zoning and development with the Goals, Objectives, Policies, and Proposed Land Uses as set forth in the Plan.

If, on the other hand, the Commission were to find that the requested rezoning and/or proposed use might, in *any* way, compromise the County's efforts or ability to achieve any Goal or Objective of the Plan, then the Commission will consider this sufficient grounds to recommend denial of the case. However, in lieu of outright rejection of the case, the Commission should also explore the possibilities of recommending any alternative zoning classification that *would* be supported by the Plan.

Principle #3: Proposal is in conflict with the Plan.

If the requested zoning and proposed use/development is not consistent with the Plan's Proposed Land Use Map or its associated Policies, and it is further determined to not even be compatible with said Map and Policies, then it must necessarily be in conflict with the Plan.

The Planning & Zoning Commission will not recommend any action that it believes to be contradictory to, or otherwise in conflict with, the Goals and Objectives as set forth in the General Land Use Plan. Thus, any case determined to be in conflict with the Plan will be recommended for denial. However, in lieu of outright rejection, and where such action is supported by, and based on, the Plan, the Commission shall have the authority to recommend a zoning classification other than what was requested in cases where such action is reasonable, warranted and appropriate.

ZONING DISTRICT EQUIVALENTS OF PROPOSED LAND USE CATEGORIES

The following chart outlines Proposed Land Use Categories as outlined on the Proposed Land Use Maps. Each Category indicates the type of land uses that *can* be considered for a particular parcel, but not necessarily all of the zoning types listed will be considered necessarily *appropriate* to a particular piece of property. Appropriateness is determined on site specific factors, including, but not limited to, the character of the area, access, and potential conflicts with existing or proposed land uses. The OPEN SPACE REQUIRED column indicates the minimum amount of undeveloped, pervious surface open space that is required if the property is developed in that particular zoning classification. The UNITS/ACRE Column indicates the *maximum* residential density allowed if the property is developed in that zoning classification. The ZONING ALLOWED column indicates those zoning classifications that can be considered. The NET IMPERVIOUS column is a guideline for target levels of allowable impervious surfaces on a site. This is primarily intended to be used as a maximum level of impervious cover for developments when R-7 PUD zoning is to be used.

It is also important to note that **future land uses are not spelled out in detail, and land use boundaries on Plan Maps are not to be viewed as absolutely fixed, but, instead, as being somewhat flexible and responsive to changing future conditions.** All decisions on zoning and land use changes will be made on a case-by-case basis and should consider the projected impacts of proposed development on the surrounding area and on the county as a whole Proposed land uses indicate levels of intensity and appropriateness that should be observed in land use decisions.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Rural	0%	N/A	Any zoning as per policy	11%

This designation is for rural areas where no dominant development pattern has been established. Any zoning classification can be considered in these areas but the General Policies of the Plan for location of any given use apply.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Rural Village	0%	N/A	Any zoning as per policy	15%

Throughout the rural areas of Jefferson County there are small concentrated settlements or villages that in many cases date back more than a century. Typically

these consist of smaller residential lots with small-scale locally oriented commercial and industrial land uses. Future development in these designated villages will be permitted to continue in a similar manner. Zoning decisions will be made on a case by case basis based upon traffic and land use impacts on existing properties. Redevelopment of smaller lots will be permitted and new residential zoning consistent with E-2 density can be considered. Concentrations of commercial zoning can be permitted near major intersections as long as residential properties are adequately buffered.

In these kinds of areas the traditional land use pattern includes residential and commercial development in close proximity and these patterns can continue with due care given to reduction of land use and traffic conflicts and to the safety of residents.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Agriculture	0%	.9	A-1, E-1	11%
	0%	.4	EM-F	7%

Land uses in this category are primarily intended to be rural, low-density residential development, agriculture, or open space. Primary development would include large-lot estates, farms and mini-farms as well as scattered residences/mobile homes and rural communities. In addition to the zoning classifications listed above, certain secondary uses can also be considered under the Agriculture land use designation. These would include uses that are typically incidental to the residential development, such as convenience stores serving the surrounding local neighborhood, churches, schools, public parks, and certain smaller-scale utilities (such as power sub-stations, water tanks and communication towers).

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Rural Residential	0%	1.3	R-R	16%
	0%	.9	A-1, E-1	11%

Land uses in this category are primarily intended to be rural residential subdivisions that are residential in nature rather than agricultural. Primary development would include large-lot estates, mini-farms, R-R subdivisions, as well as residences, including single-site mobile homes in the A-1 zoning classification. In addition to the zoning classifications listed above, certain secondary uses can also be considered under the Agriculture land use designation. These would include uses that are typically incidental to the residential development, such as convenience stores serving the surrounding

local neighborhood, churches, schools, public parks, and certain smaller-scale utilities (such as power sub-stations, water tanks and communication towers).

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Conservation/Single-Family	0%	.9	E-1	18%
	0%	1.6	E-2	18%
	0-20%	2.2	R-1	18%
	25%	2.3	R-2	18%
	35%	2.9	R-3 Single	18%
	35%	3.6	R-3 Double	18%
	50%	2.4	R-G	18%
	60%	4.1	R-T	18%

The Conservation/Single-Family Classification applies to areas of particular concern in terms of water quality. These areas may or may not have sewer, and residential units should be clustered in order to minimize unnecessary development of impervious surfaces.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Single-Family-No Sewer	0%	1.9	E-2	21%
	0%	1.9	R-1	19%
Single-Family-Sewer	0%	2.9	R-1	24%
	0-20%	3.0	R-1-S	24%
	0-20%	3.0	R-2	24%
	50%	3.4	R-G	24%
	60%	5.6	R-T	24%

Land uses in this category are primarily intended to be more of a "standard," or typical single-family residential nature, like the traditional suburban subdivision or cluster subdivisions with open space. Any other development in these areas should be incidental to residential development as the primary use, and would be limited to churches, schools, public utilities, and neighborhood convenience stores reviewed for individual appropriateness on a case-by-case basis. R-7 (PUD) would be permissible as a primarily residential zoning district development with an allowance for integrated commercial, institutional, and other uses, but also with an emphasis on open space and recreational amenities.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Multi-Family-Suburban	0%	3.7	R-2	29%
	0%	4.7	R-3 Single	29%
	20%	6.0	R-3 Double	29%
	30%	4.2	R-G	30%
	50%	6.1	R-T	30%
	Variable	Variable	R-4	30%

The development in this category could range from medium-density residential uses – such as duplexes, townhouses, garden homes, and other small-lot single-family residences -- to the higher density of apartments and condominiums. Churches, schools, utilities, and neighborhood commercial zoning (for small-scale commercial businesses) serving surrounding residential areas would be reviewed on a case-by-case basis, but should generally be found to be more acceptable in this category than those previously listed. Developments under this Classification should be pedestrian and transit oriented.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Transit Oriented/Mixed Use	Variable	Variable	R-3, R-G, R-T, R-4	45%
	Variable	Variable	R-7, C-P, C-1	45%

The development in this category is primarily pedestrian and transit oriented and encourages mixed uses. Churches, schools, utilities, offices, neighborhood oriented commercial uses, in addition to single-family and multi-family residential developments can be considered under this Classification.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Mobile Home Subdivision	0%	4.9	R-5(A)	32%
	40%	5.9	R-5(B)	32%

This land use Classification is primarily intended for concentrations of mobile homes, either in mobile homes parks or communities, or grouped together in a subdivision. (Mobile homes that are more widely scattered on individual lots will generally fall under

the Agricultural/Rural Residential land use category). Limited commercial uses, such as convenience stores or clubhouse facilities for larger parks, may also be appropriate in certain cases, as would certain utility uses.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Cultural/Recreational	Variable	N/A	CEM-1, PC-1 CC-1, C-2, Inst-1, Inst-2,	15%

The primary purpose of this category is to allow for low-intensity public land uses, most of which tend to include significant amounts of open space or natural area. Included in this category would be cemeteries, outdoor recreation (parks, golf driving ranges, conservation areas, etc.), country clubs, and golf courses. Other uses included in this category would be the relatively smaller neighborhood/community churches, elementary schools and other small- to medium-scale cultural facilities (e.g., libraries, museums, etc.). Limited use of C-N or C-1 for restaurants, small shops, or neighborhood stores operating in conjunction with the permitted primary uses may also be acceptable.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Major Institutional	Variable	N/A	Inst-1, Inst-2, Inst-3, CEM-1	30%

This category is intended to provide for institutional land uses that are larger in scope and scale, many of which tend to have proportionally less open space/natural area than uses in the Cultural/Recreational category. This category would include large schools, larger church complexes, and other more intense public facilities that have more of a "regional" than local clientele. Jails, mental institutions, rehab facilities, and other similar uses would be reviewed and evaluated for appropriateness on a case-by-case basis.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Office	Variable	N/A	C-P	45%
			(C-N, Inst-1, Inst-2, U-1)	45%

Professional offices – specifically, offices with *no* retail sales activities – are the uses prescribed in this category. Certain institutional uses, such as schools and churches, may also be appropriate in these areas as well, however, as may some smaller-scale retail shops or stores (such as restaurants catering to the occupants of existing offices).

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
General Transition/Mixed Use	Variable	Variable	R-3, R-G, R-T, R-4 R-7, C-P, C-N, C-1, U-1, U-2, C-2, I-1, I-4	45%

This Category is also intended to “step down” land uses from the most intense to the least intense. The difference with this category is that commercial uses are included so as to facilitate a transition from industrial uses and/or very heavy commercial areas (truck stops, large shopping centers, etc.) down to single-family residential development. Within this category, the appropriateness of a zoning district or use will be determined by its relationship to the zoning and uses – whether proposed or existing – on either side. Utility, commercial and industrial uses listed as Secondary possibilities may be determined to be appropriate, but only on an individual basis and as may be based on the circumstances surrounding a given site and/or area. *Every* prospective use will be individually evaluated for its appropriateness within the transition.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Commercial	Variable	N/A	C-P, C-N, C-1, C-2, U-1, U-2, C-3, C-5, Inst-1, Inst-2, Inst-3	50%

Virtually every commercial use permitted in Jefferson County – department stores, restaurants and all other retail businesses, but also including office buildings – would be included in this category. However, recognizing that some commercial uses are inherently more intense, create more specialized circumstances or require a higher level of study and analysis, *all* uses in any given zoning district listed may *not* necessarily be appropriate for a given site. Therefore, some of the uses listed in the Primary Zone column may well be subjected to the case-by-case analysis applied (as a general rule)

to the Secondary Zone uses in order to ensure their appropriateness. All Secondary Zone uses in this Land Use Category will receive substantial individual review in order to ensure their compatibility within the immediate surrounding area, as well as within the context of the larger surrounding area.

One additional note of distinction regarding this Use Classification is that, within the context of the Zoning Regulations of Jefferson County, commercial districts are often characterized and distinguished from industrial uses by the prohibition of outside storage.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Light Industry	Variable	N/A	I-1, I-4, C-P, C-1, C-2, C-5, U-1, U-2	45%

This category is intended to promote light industrial operations in relatively well-controlled situations. Uses typically found in this category might include warehousing, manufacturing, bottling, and distribution plants, assembly facilities, etc., with or without outside storage, but with limited air and water emissions. Industrial parks (controlled industries with no outside storage), along with offices and some limited retail businesses (as allowed in I-4) would be also be an appropriate development in this category. Secondly, this Classification includes automobile dismantling and helistops, which would be subject to further review and, quite likely, additional restrictions and requirements before being permitted. Retail shops (such as restaurants) incidental to the industries, and utility facilities would also be Secondary uses that could be appropriate in this category.

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
General Industry	Variable	N/A	I-1, I-2, I-4, C-P, C-1, C-2, C-5, U-1, U-2, Air-1	45%

Development Classification	Open Space Required	Units/Acre	Zoning Allowed	Net Impervious
Heavy Industry/Hazardous Industry	Variable	N/A	I-2, I-2(A), I-3, I-3(S), I-5, I-5(A), I-O, HW-1, A-1	45%

This category is intended to include heavy industrial uses, such as salvage yards; mining and quarrying; logging and sawmills; and sanitary sewage disposal and wastewater treatment plants and agriculture operations that include large-scale livestock operations. The Secondary uses listed involve an even more heightened awareness of such issues as odor, noise, fumes and other potentially serious externalities than do the Primary uses; however, because of the sensitive nature of all of the uses listed in this category, any change of zoning or use will be reviewed closely for its consistency with the goals and objectives of the General and Area Plans.

It is also the intent of this Land Use Category to distinguish these uses from those that are distinctly less intense and less obtrusive to surrounding areas by intentionally distinguishing this Category from those listed in the Industrial land use category.

OVERLAY ZONES:

PRIMARY ZONES SECONDARY ZONES

Greenways: R-7 (open space)
 A-1, Inst-1 (public parks & playgrounds)

This is an overlay category where the primary land uses would be agricultural, park land or open space, but where there will also be additional protective restrictions to guard against unnecessary adverse impacts on the County's water resources. Greenways can be narrow corridors surrounded by other land uses, and are intended to protect stream channels, prevent flooding and to overall help enhance water quality. Greenways would include all floodways and floodplains as defined by FEMA and by the County.

PRIMARY ZONES SECONDARY ZONES

Slope Protection: E-MF, A-1, E-1, R-7, U-2
 Inst-1 (public parks)

This is an overlay category that will impose additional stabilization and sedimentation requirements on the development and use of steeper slopes. The Primary uses proposed for these areas include agriculture, low-density residential and public parks, and even the Secondary uses would be preferred to be similar in character to the Primary uses proposed. The intent of this overlay category is to prevent erosion and sedimentation into streams; protect down-slope properties from uncontrolled and/or unnecessary storm run-off, mud slides, etc.; protect water quality; preserve vegetation on steep slopes; and protect property from down-slope movement. Generally these areas have greater than 25% slope. Maximum exposed (developed) slopes should not

exceed 45%. Impervious surfaces should be very limited, and total impervious surfaces generally should not exceed 11%.

DEFINITIONS

Arterial Street: A through street that not only serves the surrounding area but is a means of travel through an area from and to other areas.

Collector Street: A street that 'collects' the traffic from a number of Local Streets and usually connects to an Arterial Street.

Flexible Zoning Incentives: Zoning regulations that require compliance with a set of specific standards but that allow certain flexibility if the developer meets other goals of the County. For example, a certain residential density would be required of a developer, but if certain sensitive lands, slopes, or floodplains are protected the developer may receive additional density, reduced setbacks, or road right-of-way incentives.

Goal: A generalized statement about the end state or direction of the Land Use Plan.

Local Street: A street that serves only local traffic--that is--only uses on that street or within a limited area of a development.

Objective: A general statement--more specific than a goal--that sets forth actions to be taken in support of the goals of the Land Use Plan.

Open Space: Dedicated space in a development that may not be built upon. Its use may be recreational or serve to protect slopes, floodplains, natural drainage ways, or animal habitat.

Policy: Specific actions to be taken by the County or others in support of stated Objectives of the Land Use Plan.

Spot Zone: Technically, any small parcel or portion of a parcel that is zoned differently than surrounding property. Generally the term is used to indicate small parcels or portions of parcels that are zoned in a way where the land use or potential land use would be incompatible with surrounding zoning and land uses.

**PRINCIPLES OF BETTER SITE DESIGN
(Center for Watershed Protection, 1998)**

Residential Streets and Parking Lots

1. Design residential streets for the minimum required pavement width needed to support travel lanes; on-street parking; and emergency, maintenance, and service vehicle access. These widths should be based on traffic volume.
2. Reduce the total length of residential streets by examining alternative street layouts to determine the best option for increasing the number of homes per unit length.
3. Wherever possible, residential street right-of-way widths should reflect the minimum required to accommodate the travel-way, the sidewalk, and vegetated open channels. Utilities and storm drains should be located within the pavement section of the right-of-way wherever feasible.
4. Minimize the number of residential street cul-de-sacs and incorporate landscaped areas to reduce their impervious cover. The radius of cul-de-sacs should be the minimum required to accommodate emergency and maintenance vehicles. Alternative turnarounds should be considered.
5. Where density, topography, soils, and slopes permit, vegetated open channels should be used in the street right-of-way to convey and treat stormwater runoff.
6. The required parking ration governing a particular land use or activity should be enforced as both a maximum and a minimum in order to curb excess parking space construction. Existing parking ratios should be reviewed for conformance taking into account local and national experience to see if lower ratios are warranted and feasible.
7. Parking codes should be revised to lower parking requirements where mass transit is available or enforceable shared parking arrangements are made.
8. Reduce the overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas where possible.
9. Provide meaningful incentives to encourage structured and shared parking to make it more economically viable.
10. Wherever possible, provide stormwater treatment for parking lot runoff using bioretention areas, filter strips, and/or other practices that can be integrated into required landscaping areas and traffic islands.

Lot Development

11. Advocate open space design development incorporating smaller lot sizes to minimize total impervious area, reduce total construction costs, conserve natural areas, provide community recreational space, and promote watershed protection.
12. Relax side yard setbacks and allow narrower frontages to reduce total road length in the community and overall site imperviousness. Relax front setback requirements to minimize driveway lengths and reduce overall lot imperviousness.
13. Promote more flexible design standards for residential subdivision sidewalks. Where practical, consider locating sidewalks on only one side of the street and providing common walkways linking pedestrian areas.
14. Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together.
15. Clearly specify how community open space will be managed and designate sustainable legal entity responsible for managing both natural and recreational open space.
16. Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas and avoid routing rooftop runoff to the roadway and the stormwater conveyance system.

Conservation of Natural Areas

17. Create a variable width, naturally vegetated buffer system along all perennial streams that also encompasses critical environmental features such as the 100-year floodplain, steep slopes, Karst Springs and their runs, and freshwater wetlands.
18. The riparian stream buffer should be preserved or restored with native vegetation. The buffer system should be maintained through the plan review delineation, construction, and post-development stages.
19. Clearing and grading of forests and native vegetation at a site should be limited to the minimum amount needed to build lots, allow access, and provide fire protection. A fixed portion of any community open space should be managed as protected green space in a consolidated manner.
20. Conserve trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native plants.

Wherever practical, manage community open space, street rights-of-way, parking lot islands, and other landscaped areas.

21. Incentives and flexibility in the form of density compensation, buffer averaging, property tax reduction, stormwater credits, and by-right open space development should be encouraged to promote conservation of stream buffers, forests, meadows, and other areas of environmental value. In addition, off-site mitigation consistent with locally adopted watershed plans should be encouraged.
22. New stormwater outfalls should not discharge unmanaged stormwater into jurisdictional wetlands, sole-source aquifers, or sensitive areas.