

INTRODUCTION

The purpose of the existing land use analysis is to provide both statistical and graphic information concerning the various types, amount and intensity of land use within the city and to identify problems which have arisen as a result of conflicting land use patterns or from inappropriate land uses. A future land use plan can then be development which will enable the City to better guide land development in a manner which reflects local goals and objectives.

The total corporate limits of Lucas comprise some 7,505.84 acres of land while the actual developed area of the City covers 5,410.09 acres. The extraterritorial jurisdiction (ETJ) covers an additional 4,098.13 acres.

EXISTING LAND USE COMPOSITION AND ANALYSIS

Land Use Inventory

Data concerning existing land uses in Lucas was compiled by means of a field survey taken in March 2004. Land uses on individual parcels were classified as being one of nine major types as detailed on Table 4.1.

TABLE 4.1
LAND USE CLASSIFICATIONS

CLASSIFICATION	EXAMPLES
Singe-family Residential	singe-family homes and mobile homes
Multifamily Residential	duplexes, apartments, condominiums
Commercial	stores, shops, restaurants, offices
Industrial	factories, warehouses/grain storage
Parks and Recreation	developed parks and open spaces
Public/Semi-Public	schools, post office, government offices, hospitals
Streets and Rights-of-Way	streets, alleys, easements
Vacant	vacant land
Agriculture	farms, feed lots

Within the total developed area of Lucas, some 62.04 percent of all land is utilized for residential purposes, 1.76 percent for commercial purposes, 0.79 percent for industrial uses, 15.95 percent for streets/alleys/railroads, 1.36 percent for public/semi-public and 18.01 percent for vacant. Table 4.2 and Figure 4.1 give a tabular and graphic presentation of existing land use patterns in Lucas.

TABLE 4.2
CITY OF LUCAS

ALLOCATION OF EXISTING LAND USE

LAND USE	ACRES	% OF GROSS	% OF TOTAL DEVELOPED	ACRES PER 100 PERSONS
Residential	3,356.62	44.72	62.04	78.61
Single-Family	3,296.32	43.92	60.93	77.20
Multi-Family	0.00	0.00	0.00	0.00
Mobile Homes	60.30	0.80	1.11	1.41
Commercial	95.13	1.27	1.76	2.23
Industrial	42.64	0.57	0.79	1.00
Parks	5.00	0.07	0.09	0.12
Public/Semi-Public	73.48	0.98	1.36	1.72
Streets/Alleys	862.79	11.49	15.95	20.21
Vacant	974.43	12.98	18.01	22.82
Agriculture	2,095.75	27.92		49.08
TOTAL	7,505.84	100.0	100.0	

Source: March 2003 land use survey conducted by TFGA, Inc.

Analysis of Existing Land Use

Residential Land Use

Single-family land use comprises over 62 percent of the total developed land area of Lucas and is the single most important land use classification. Most single-family development lies in the central portions of Lucas, taking advantage of gentle topography which is out of floodplain areas. Although there are some scattered commercial uses intermingled with single-family uses, most neighborhoods contend only with vacant lots as the only other use present. Mobile homes

account for 1.11 percent with 41 units.

Commercial Land Use

Commercial land use covers a total of 95.13 acres or 1.76 percent of the total developed area of Lucas. Most commercial land uses within the city are in on or in close proximity to the major roadway system. At present, there appears to be minimal conflict between commercial land uses and adjacent land uses.

Industrial Land Use

Industrial land use covers 42.64 acres or 0.79 percent of the total developed area of the City and consists of a rock quarry along the northside of Blondy Jhune Road. This industrial use is in an area which has the potential for conflict with adjacent land uses.

Streets and Rights-of-Way

Land which is being utilized for streets, alleys and utilities purposes comprises a total of 862.79 acres, or 15.95 percent of the total developed area of Lucas. Streets and alley facilities do not appear to pose any conflicts with other land uses in Lucas as these uses tend to be compatible.

Public/Semi-Public Land Uses

Public and semi-public land use within Lucas covers 73.48 acres, or 1.36 percent of the total developed land area. Most of this is utilized for churches, schools and public utilities.

Vacant and Agriculture Land Uses

The remaining land use types, including vacant, are located randomly in the city. Vacant land covers 18.01 percent of the total developed land area and includes those areas which are usually subdivided into lots with access to potable water facilities and paved streets or where surrounding development densities make agriculture or ranching less practical and where residential and other development is most likely to occur or, longer term, may eventually develop into a more urban type use. Agriculture uses comprise 2,095.75 acres or 38.74 percent of the total land area within Lucas and is used for pasture and/or livestock purposes.

Socio-Economic and Manmade Influences Affecting Land Use

An analysis of the existing development activity in Lucas should examine the following basic influences: population growth, housing availability, public utilities and facilities, transportation, and development constraints posed by both the natural and man-made environment. This can then be used to better determine the influences which will define future land development in the City.

Housing

Lucas currently offers two types of housing opportunities - single-family units on permanent foundations and mobile homes. Of Lucas's present 1,424 total housing units, 1,383 are single-family and 41 are mobile homes. There are presently no multi-family units in Lucas. With respect to the condition of housing, 1,334 units are in standard condition, 56 are in some form of minor deterioration, 12 are in major deterioration and 22 are dilapidated.

According to the housing survey, over 99 percent of Lucas's housing units were occupied. With a steady growth in population anticipated, the demand for well maintained housing of various types will continue to increase. Unless more units are built and existing units are properly maintained, adequate and safe housing in Lucas will not be available. This is confirmed by the fact that there were only 6 vacant housing unit in standard condition at the time of the housing survey was completed. The long-term results will be very detrimental to Lucas through a decline in potential tax revenues if housing is not made readily available. For the City to maintain its stability, adequate and safe housing must be made available to meet the demands of the future. As the City grows, new housing must be planned for and constructed, along with the refurbishment of the existing housing stock.

Infrastructure

Various elements of Lucas' water, streets and drainage systems will need some improvements during the planning period. These improvements have been analyzed, reviewed and are detailed in the water, street and drainage sections of the Community Development Plan. Attraction of future growth and appropriate levels of service depends upon having the City's water supply and distribution system, street system and the drainage system all at suitable capacity and operational level to meet expected demands.

Public/Semi-Public Facilities

Public facilities in Lucas include a City Hall, volunteer fire station, parks, schools, churches and utility sites. As the future population increases, there will be a corresponding increase in the demand for these public facilities.

Other Services

As the population size increases, there will also be a proportional increase in the locally generated demand for retail/services. The City has about 2.23 acres of commercial land use per 100 population which is slightly below the norm of approximately 2.50 to 5.0 acres of commercial land use per 100 persons based on consultant observations. Population growth will offer good opportunities for some growth in quality retail/service uses. To avoid conflict with adjacent residential uses and minimize negative traffic impacts, future commercial uses should generally be confined to peripheral areas of the city.

Transportation Facilities

The City of Lucas is served by a system of FM road, county roads and local streets. These roadways all serve as important links for residents accessing work and other destinations outside the city. With some intersection improvements, controlled access in some locations and proper maintenance, the transportation facilities generally appear to be capable of accommodating anticipated increases in traffic flow resulting from population growth and land use demands for the foreseeable future. In the long term, as new areas are developed, additional “point” improvements to the existing thoroughfare system may be needed to effectively accommodate future traffic volumes.

ETJ and Future Annexations

Because of the proximity of adjacent cities, the extraterritorial jurisdiction of Lucas extends varying distances beyond the current city limits. It is within this area that a substantial amount of future city development will occur. The composition of the ETJ area is presented in Table 4.3 Presently this ETJ area has some low density residential, commercial and agricultural uses. Any future large-scale residential development in the ETJ area will most probably occur to the south and east, especially adjacent to Lake Lavon. As opportunities arise, the city should favorably consider annexing those “out areas” currently within the city limits.

TABLE 4.3

ALLOCATION OF EXISTING ETJ LAND USES

LAND USE	ACRES	% OF GROSS
Residential	248.24	6.10
Single-Family	242.88	5.93
Multi-Family	0.00	0.00
Mobile Homes	5.36	0.13
Commercial	1.91	0.04
Industrial	0.00	0.00
Parks	106.36	2.60
Public/Semi-Public	50.98	1.24
Streets/Alleys	269.54	6.58
Vacant	265.56	6.48
Agriculture	2,955.11	72.11
TOTAL	4,098.13	100.0

Source: March 2003 land use survey conducted by TFGA, Inc.

Zoning and Subdivision Regulations

Lucas has previously adopted zoning and subdivision ordinances. The update of these ordinances is important to help ensure that future development activities are consistent with local development objectives. The subdivision ordinance provides the City with control over development practices within both the City and the ETJ. The zoning ordinance is used to regulate the type of land uses that can occur within the city limits.

Natural Influences Affecting Land Use

Drainage

A flood hazard area consists of two sections. The center of the flood hazard area is known as the floodway. This area, which includes the actual water channel, is the area which cannot be filled without causing increased flooding elsewhere during a 100-year storm. The area extending from the floodway to the outer edge of the flood hazard area is known as the flooding fringe. This higher area can be developed after appropriate study. However, habitable structures must be built one-foot above the 100-year flood elevation.

There are several drainage ways in Lucas which can impact future development, all of which feed

into Lake Lavon. Development in these affected areas will require special consideration during the design and construction of any building. Overlaying these affected areas on city land use and zoning maps will help ensure that these conditions are considered for future development activities.

LAND USE GOALS AND OBJECTIVES

Lucas' goals regarding land use are to avoid traffic congestion, inadequate or obsolete utilities or services and the location of incompatible land uses adjacent to one another. Although these problems will probably not become acute in Lucas, the proper planning and use of land, if initiated early, will result in well-ordered land uses and development patterns as the City progresses through the planning period. The objectives that have been identified will help to guide development within the context of the Future Land Use Plan.

LOCAL GOALS AND OBJECTIVES AFFECTING DEVELOPMENT

GOALS	<i>OBJECTIVES</i>
Develop the community in a manner which preserves and maintains property values and is consistent with the City's ability to serve existing and future development	<i>Plan for reasonable demand with regard to water, street circulation and thoroughfares</i>
	<i>Maintain the present rural atmosphere with a majority of large-lot residential development</i>
	<i>Offer some moderate density residential development in peripheral areas to ensure a housing market for all age groups.</i>

Maintain community infrastructure and promote efficiency in delivery of community services

Avoid “sprawl” development by making better use of the existing infrastructure and economize on the extension of city services

Maximize capacity of existing thoroughfares through intersection modifications to enhance traffic flow

Ensure that commercial and other “high activity” uses are adjacent to designated thoroughfares to maintain acceptable fire/emergency response times.

Preserve the residential and small-town atmosphere of the community while encouraging some small-scale economic development

Encourage very low density development on lots and tracts in the central and eastern portions of the city and preserve peripheral areas to the south and west for future limited commercial and moderate density residential development

Promote the general health and safety of the residents of the community

Regularly review, update (if necessary) and enforce the zoning and subdivision ordinances to minimize the intrusion of incompatible land uses

It is important to understand that the Land Use Plan for Lucas is intended to serve as a **general guide** for the future development of the city. It should be considered flexible in nature, rather than a rigid blueprint for future land use. The population, housing, infrastructure and land use data contained in sections of this Comprehensive Plan serve to establish the determinants for land use projections.

FUTURE LAND USE

Land Use Planning Principles and Process

For most cities, recent residential and commercial growth have been haphazard, often in the form of suburban clusters of residences and shopping centers spread out over a wide area on the fringes of existing older urban centers. Such development has placed a tremendous burden on transportation systems and taxes a community's ability to provide adequate public utilities such as water and sewer facilities. "Urban Sprawl", the term used to describe this development, is undesirable for other reasons also. All too often, uncontrolled growth spreads out over land that is better suited to other land uses, overtakes valuable open space and sometimes lowers the value of a large developed area.

If proper planning is initiated, the city of Lucas should not experience the kind of growth that will result in urban sprawl. Nevertheless, the growth that is expected or that results from expansion of the economic base, if left uncontrolled, could be just as unattractive and expensive to the smaller community as it is to the larger cities. Haphazard residential and commercial growth should be avoided by adherence to a plan of carefully selected areas in order to develop the proper growth of these land uses. The following principles are considered applicable to the proper designation of land for residential use:

1. Residential land should be well drained and free from danger of floods.
2. Residential land should be readily accessible from, but not necessarily facing, arterial streets.
3. Residential land should be free from the danger of encroaching incompatible land uses.
4. Residences should be within easy reach of such community facilities as parks, schools, playgrounds and commercial facilities serving everyday needs.

Factors relating to the designation of land for commercial land uses include:

1. Commercial areas must be located to maximize the use of major roadways while minimizing excessive traffic impacts on residential areas.
2. Commercial areas should be limited and compact.
3. Commercial areas must allow for safe automobile/pedestrian circulation.
4. Commercial areas must be designed to avoid the blighting effects on adjacent residential land uses and must be kept from encroaching on other land uses.

Commercial land uses on the periphery of the city generally are better related to highway oriented transportation activities. To induce significant commercial activities in the central areas of Lucas would be unwise, as it would create undue stress on residential areas and create traffic congestion, as well as pedestrian safety hazards. A location for commercial activities on the periphery of the community is acceptable both in terms of decreasing traffic stresses on central area roadways while providing accessibility to area customers. Commercial areas, if properly developed with landscaping programs and a developed access route to remove consumer traffic from through traffic, can be an asset to a community. It is with these factors in mind that the following principles were established for the planning of commercial areas:

1. Commercial land uses should be formed into compact developments, avoiding “strip commercial” growth.
2. Avoid the occurrence of scattered commercial development along major highways. Commercial activities should be consolidated into a few well organized areas to take maximum advantage of utilities and services and to promote the economic well being of the total business community.
3. Adequate off-street parking and access should be utilized for highway commercial areas to decrease potential congestion and safety hazards.
4. Avoid commercial growth on both sides of heavily traveled highways unless traffic control can be provided.

Land use principles for public and semi-public uses, such as education and public buildings are similar to those developed for residential land use.

In order to formulate, adopt and implement a plan that accomplishes the foregoing overall goals and objectives, it is important to incorporate certain basic planning principles and processes into the local future land use planning effort. The Future Land Use Plan expresses projections that are based on sound planning principles, recognizing and supporting existing land uses, community facilities and physical features. Existing land uses, existing structures, surrounding market areas, transportation patterns and natural or physical limitations all combine to affect the planned and actual direction and extent of the City's growth. The needs addressed by the Future Land Use Plan reflect an evaluation of past needs and current trends, as well as the assumption that the City

will grow in patterns predicated on those needs and trends. It must be emphasized, that the Future Land Use Plan is intended as a guide to organize the future growth of the City, but does not suggest a strict mandatory compliance. Rather, as circumstances arise in the future, the City should examine its plan to determine if development goals and objectives are being effectively met or whether these goals and objectives still reflect the desires of the community.

The plan for Lucas suggests that certain areas be reserved and developed for various land uses. Selecting the pattern and distribution of future land use is best accomplished through:

1. The analysis of existing land use characteristics;
2. The affects of existing infrastructure
3. The location of existing thoroughfares
4. The application of recognized planning principles

These characteristics and principles, then, establish a process by which to judge the most optimum and best land use base on local, community-wide standards. There are two advantages of going through such a process. First, it results in a land use plan for the City as represented by the Future Land Use Map. This map is a generalized guide to help keep the long-range plans for the community in perspective. Although the Future Land Use Map cannot be used exclusively to identify the proper use for each lot and parcel, it can be used to assure that individual decisions follow a comprehensive pattern. It also helps in the sensitive but necessary evaluation of change with respect to public and private benefits.

Second, and perhaps even more important, the establishment of this planning process provides the City with a method of logically making subsequent land use decisions. Existing conditions, accepted principles and current policies should be used in the evaluation of proposed changes. For example, these determinants should be used in considering a rezoning application, selecting the location for a utility line extension, or drafting new development regulations.

It is important to reiterate that ***the Future Land Use Plan does not attempt to set the specific use for each and every parcel in the planning area. A specific lot-by-lot assignment would both remove the competitive element from the market and suggest overly restrictive limitations to the different uses of a given piece of land; rather, the Future Land Use Plan***

should be used to establish the general character and needs of an area. When the Plan is implemented through rezoning, platting and ultimately development, each parcel should be evaluated by the application of the current policies and recognized planning principles.

Recommended Assignment of Land Uses

Residential Land Use Requirements

The recommendations for future requirements are computed from the projected housing requirements which were developed in the Housing Section of the Community Development Plan. The assignment of these land uses is then based upon the goals, objectives and planning principles previously stated.

With respect to the location of future residential development, convenient access to major streets, commercial areas and community facilities must be considered. For Lucas, it is anticipated that new residential uses will be built as (1) in-fill development/redevelopment, (2) new subdivisions close to or within current city limits, and (3) as larger lot development in sparsely populated areas adjacent to Lake Lavon. As one moves further west and south, residential densities will transition from larger lots of two or more acres, to lots of one and one-half acres, one acre and finally, in very limited peripheral areas adjacent to major roadways, moderate density developments of approximately one-third acre. By establishing this hierarchy of development density, any negative effect of higher traffic volumes and through traffic movement on lower density residential neighborhoods, will essentially be eliminated.

Commercial Land Use Requirements

In making projections for future commercial land use requirements, it is generally assumed that the need for such land is primarily determined by the population of the community and the service area in which it is located. Future commercial land use allocations in Lucas should focus on peripheral locations of the city to minimize traffic impacts on residential areas and reduce the potential for incompatibility of land uses and subsequent blighting effects. Business development generally along portions of Country Club Road, Dillehay Road and Southview Drive will accomplish this goal while serving local needs and commuter and passerby highway traffic.

Industrial Land Use Requirements

No provision is made for future industrial development in Lucas. There are no perceived benefits for the City in preserving areas for future industrial development. Lucas will never become a major employment center and its limited land areas will be better used primarily for quality, low density residential development.

Park and Open Space Requirements

With respect to parks and open space, some local opportunities for residents exist in Lucas. Expanded recreation options can be a benefit if operating and maintenance costs are held to manageable levels. Because of its limited tax base, Lucas should only expand park and open space facilities where and to what extent they are deemed needed. Parks and Open Space Plan details options available to the city.

RECOMMENDED LAND USE PLAN

The future land use plan which has been developed for Lucas is indicated on Figure 4.2. It should be emphasized that the value of the plan to the decision-making process is good only as long as it is kept current and continues to reflect the goals and objectives of the community. The inventory of both manmade and natural characteristics must reflect all changes occurring in the community. A current delineation of existing conditions in both graphic and tabular form will not only allow for an up-to-date analysis of needs but will also allow for a measurement of success at achieving the Plan. Further, the Future Land Use Map should be used as a guide only to keep incremental changes of the community in perspective. The individual decisions which actually shape the community, however, should be evaluated with respect to the characteristics and principles discussed throughout this document.