

LAND USE

Existing land use is the guiding factor in determining the future development pattern of a city. The location and relationship of one land use to another affects many facets of the city's development, including:

- Land Value - Monetary value usually increases when the use of land changes from rural to urban; or within an urban area, when the use changes to commercial along a highway, for example.
- Traffic Patterns - The number of automobile trips generated by a single-family dwelling is normally six to eight per day, whereas the number of automobile trips generated by businesses may be hundreds per day.
- Public Services - While agricultural land may require few community services, once converted to urban use, it requires the full range of services. The amount of service required, however, also varies greatly according to type of land use. For example, residential uses require public services on a moderate scale, whereas a business or industry may place high demands on the city's water and sewerage systems.

While all communities have many of the same types of land uses, patterns and amounts vary widely. Within communities, changes are constantly taking place in order to meet new needs and conditions. As a community grows, new living and working space must be added, through redevelopment of the older, obsolete areas or through peripheral expansion. Growth has traditionally been accommodated through the latter method, by expanding into the surrounding agricultural areas.

Some cities may be faced with curbing outward expansion due to, among other things, increasing costs. The costs of providing utility services to new areas are skyrocketing to be sure; but the costs of maintaining utilities and fire and police protection over larger and larger areas must also be considered. Often, the obsolete or even vacant areas within the city have had access to city services for decades, but have been underutilized. With the cost differential continually increasing, many cities may find it difficult to justify the high cost of peripheral expansion over the lower costs of developing the vacant or obsolete areas within the existing city limits.

EXISTING LAND USE

A land use survey was made for the city of Butler and the surrounding Mount Pleasant Township in November 1979. The uses of land which were observed are shown on two maps which accompany this study:

Community Land Use -- This map shows the general urban classes of land in Mount Pleasant Township, outside the city limits of Butler. Land use categories are general in nature, consisting of residential, commercial, industrial and public uses.

City Land Use -- This map shows land uses within the present city limits of Butler, consisting of detailed residential, and general commercial, industrial and public uses.

After mapping, each use area was calculated and is presented in the *City Land Use* and *Community Land Use* tables by number of acres, percent of developed area, and the number of acres per 100 population. The "typical city" as used in this study is not an ideal city, but is an average of the land uses in 13 middle-western cities with populations ranging from 1,253 to 38,219. The typical city averages are included only for comparison purposes.

City Land Use

Residential

Butler exceeds the typical city average in both percent of developed area and acres per 100 persons. Residential development in Butler is low density, averaging 9.6 acres for every 100 persons. This reflects the type of residential development which has occurred in the city, primarily single-family homes located on fairly large individual lots. The amount of multiple family and mobile home development (four percent) has been small by comparison.

Commercial

Butler exceeds the typical city in both percent of developed area and acres per 100 persons of commercial land for two reasons:

1. Butler serves as a retail trade center for a significant trade area which increases commercial land usage above the typical city.
2. Butler has a large amount of strip commercial development along Business Route 71, and is spreading along Missouri Highway 52 near the interchange with U.S. 71.

Industrial

Industrial development has been concentrated along the railroad and Business Route 71. Some spotty industrial uses have also occurred in the downtown and northeastern residential areas. Only three percent of the total developed area of the city is used for industrial purposes in Butler; less than half the amount in the typical city.

Public, Semi-Public

Butler has developed quite an extensive assortment of public and semi-public land uses. The largest acreages are consumed by the airport, country club and cemetery, which account for 60% of the total amount of public land in the city. Public land uses account for 24% of the total developed area of the city, considerably higher than the typical city average of 15%.

Travelways

The percentage of developed land used for streets, highways and railroads in Butler is considerably lower than in the typical city, but the number of acres per 100 persons is higher. The percentage of land in streets to the total developed area may be due to the large blocks of public and semi-public land in the city, which contain no streets. The number of persons per acre of streets is higher than the typical city average because of the many

CITY LAND USE
BUTLER, MISSOURI

Use	Butler			Typical City	
	Area (Acres)	Percent of Developed Area	Acres Per 100 Population	Percent of Developed Area	Acres Per 100 Population
Residential	416.2	42.0	9.6	39.0	5.8
Single-Family	378.6	38.2			
Multi-Family	20.8	2.1			
Mobile Homes	16.8	1.7			
Commercial	64.4	6.5	1.5	4.5	0.6
Industrial	25.8	2.6	0.6	8.5	1.2
Public, Semi-Public	237.0	23.9	5.4	15.0	2.2
Schools	30.4	3.0			
Parks/Open Space	59.8	6.0			
Airport	51.6	5.2			
Other	95.2	9.6			
Travelways	247.3	25.0	5.7	33.0	5.1
Highways	33.3	3.3			
City Streets	194.2	19.6			
Railroads	19.8	2.0			

	Acres	Percent of Total City Area	Acres Per 100 Persons
Developed Area	990.7	47.6	22.8
Vacant	<u>1,091.5</u>	<u>52.4</u>	<u>25.1</u>
Total	2,082.2	100%	47.9

Source: Kaysinger Basin Regional Planning Commission Survey, November 1979.

closely-spaced streets. Of the 23% of the total developed area consumed by streets, approximately three percent are federal, state or county highways. Approximately 31 miles of streets are maintained by the city. Railroad land accounts for only two percent of the total developed area of the city.

Fringe Development

Residential

The total land area used for residential purposes in Mount Pleasant Township outside the city of Butler is indicative of the large lots utilized

by farm and suburban dwellers. The fringe residential development is for the most part scattered, with most occurring alongside paved roadways. A few concentrations of housing occur west of Butler and southeast (most notably, the resort-type development which contains a mixture of seasonal and year-round conventional as well as mobile homes). Of the total amount of urban land uses, only 21.3% is utilized for residential purposes.

The 1960s appears to have been a period of substantial growth for Mount Pleasant Township. The number of housing units increased by 17% from 1968 to 1970, based on information obtained from the Census and a Bates County Highway map. Since 1970 to 1980, however, growth had slowed to 14.2%. The 1980 U.S. Census revealed a total of 272 houses in Mount Pleasant Township. Twelve vacant houses (some of fairly recent construction) and only 22 mobile homes were noted in a 1979 KBRPC Field Survey.

COMMUNITY LAND USE

-RURAL MOUNT PLEASANT TOWNSHIP-

<u>USE</u>	<u>ACRES</u>	<u>PERCENT OF DEVELOPED AREA</u>	<u>NUMBER OF ACRES PER 100 POPULATION</u>
Residential	168.8	21.3	22.2
Public	54.1	6.8	7.1
Commercial	15.6	2	2.1
Industrial	62.6	7.9	8.2
Travelways	484.1	61	63.8
U.S. Highways	125.5	15.8	16.5
Other Highways and Roads	301.2	37.9	39.7
Railroads	57.4	7.2	7.6
Developed Area	794.2	99	104.6
Vacant/Agricultural	20,070.8		2,644
Underwater	130		
Total	20,986 acres (32.8 square miles)		

	<u>1970¹</u>	<u>1972²</u>	<u>1980³</u>	<u>Percent Increase 1970-1980</u>
Total Housing Units	231	228	272	17.7
Population	663	654	759	14.5

Source: ¹U.S. Census of Population, 1970
²Bates County, Missouri Highway map, 1972
³U.S. Census of Housing, 1980 (Advance Report)

Commercial

The use of land for commercial purposes outside the Butler city limits is not prevalent, as the table indicates. There exists approximately 16 acres of commercial land in Mount Pleasant Township, only two percent of the total urban-developed area. Most of this commercial activity is located adjacent to or within a short distance from the city limits. The types of businesses present would appear to cater to residents of the area rather than to the passing-through highway traffic, and includes restaurants, a car dealership, farm implement company and plant nursery.

Industrial

Industrial uses in the Butler area actually consume more acreage outside the city limits than within, primarily because a few of the operations are users of large amounts of land. Types of industrial land uses in Mount Pleasant Township include quarries, salvage yards, and stock yards, as well as smaller operations such as machine or welding shops and a slaughtering plant. The 63 acres of industrial land accounts for approximately eight percent of the total urban-developed land area of Mount Pleasant Township.

Public

Public land uses in Mount Pleasant Township consume seven percent of the total amount of land developed for urban purposes. The city's sewage and water treatment facilities, a roadside park and cemetery comprise the majority of the 54 acres of public and semi-public land.

Travelways

The largest single urban category of land use in Mount Pleasant Township is comprised of travelways. There are approximately 68 linear miles of highways and roads in the township, which consume 54% of the total urban-developed area. The five miles of railroad which traverse the township, consume approximately seven percent of the total urban developed area. All totaled, there are 64 acres of rail and roadway land for every 100 persons in the township, a figure exceeding all other categories of urban land use, both within and outside Butler.

FUTURE LAND USE

Developing a land use plan involves predicting land needs for the community of the future. The shape of the future community is influenced by existing land use, traffic circulation patterns, natural features and the accepted policies of community leaders. It is realistic to assume that the community's future land use pattern and area needs will be similar to existing development trends; thus the existing land use pattern is a base from which realistic policies can be made for future development. The Land Use Plan is a guide for determining the scale of the future community and the relationship of land uses. When the plan is followed:

- Conflicting land uses can be avoided.
- Traffic circulation patterns can be predetermined.
- Residential neighborhoods can be preserved by protecting them from incompatible land uses.
- Utility and public service extensions can be developed before urban growth occurs.

Density of land uses or number of developed acres per 100 persons is a useful means for projecting land area needs. The *Future Land Use* table shows the projected land area needs for Butler to the end of the planning period.

Residential areas are expected to increase in direct proportion to the population of the community. Since most future housing in Butler will probably be conventional single-family detached units and manufactured homes, the present intensity of residential land use, 9.6 acres per 100 persons, was used to estimate the amount of residential acreage needed by year 2000. For a population of 5,000 by year 2000, 480 acres of residential land will be needed, an increase of 64 acres. For the high projection of 9,300 persons, 893 acres of residential land will be needed. This is an increase of 477 acres or more than twice the present size.

While housing is the first use which comes to mind when dealing with residential areas, other uses do have their place, if conducive to the overall neighborhood ideal. Other uses compatible with residential development include churches, schools and parks. When residential areas are adjacent to commercial or industrial businesses, the housing should side, or preferably, back onto the businesses rather than front onto them. Commercial side and back yards should be increased in size and contain trees and shrubs to serve as buffers to screen the homes from businesses. Both heavy-volume and passing-through vehicular traffic should be discouraged from using residential streets.

Commercial land use needs should not vary greatly from the present amount (64 acres) during the planning period if using the low projection. Since Butler already has a significant portion of the developed area in commercial uses, the present amount should easily accommodate any increase in commercial activity. Some currently vacant or underutilized commercial area may be redeveloped or used more intensively in response to the city's growth or increase in the size of Butler's trade area. However, if using the high figure, it is reasonable to estimate an additional 30 acres would be needed.

Industrial land needs for the planning period depends much on the activities of the city through its economic development efforts. If Butler retains its present economic position, additional land required for new or expanding industries should range between four to thirty acres. Should the city develop a more concerted effort toward economic self-sufficiency, however, the reservation of several hundred acres for industrial purposes is in order. In any case, industries should have direct access to major streets, water and sanitary sewer facilities. Ample area must also be provided in order to allow for future expansion of individual industries so that they will not encroach upon residential areas.

Public land needs ordinarily increase as the population grows in a community. In Butler's case however, a large amount of public and semi-public land already exists. While most of the individual uses within this land use category should not require additional space during the planning period, using the conservative trend, an additional 20 acres of recreational areas should be planned by the future community. However, using the accelerated population trend, it is conceivable that a total of 140 acres would be needed, an increase of 80 acres.

A large proportion of the total amount of recreational land is consumed by the country club, while city park land is lacking. So that Butler may

more adequately serve its entire citizenry with recreation areas, city park land was increased to 1.5 acres per 100 persons for the planning period. The additional park lands acquired for future development should be adjacent to the existing park and/or developed adjacent to or in conjunction with schools. A large amount of neighborhood-type parks may not be needed by the community since a significant amount of vacant open space and large residential lots offset this need. However, a sizeable community park with sufficient facilities for both active and passive recreation is needed.

Travelways should increase by approximately 5 acres in the street category only, in direct proportion to the projected population of 5,000 by the end of the planning period. However, using the accelerated growth figure, approximately 206 additional acres of streets will be needed. No significant changes are foreseen in either railroad or highway land areas during the planning period.

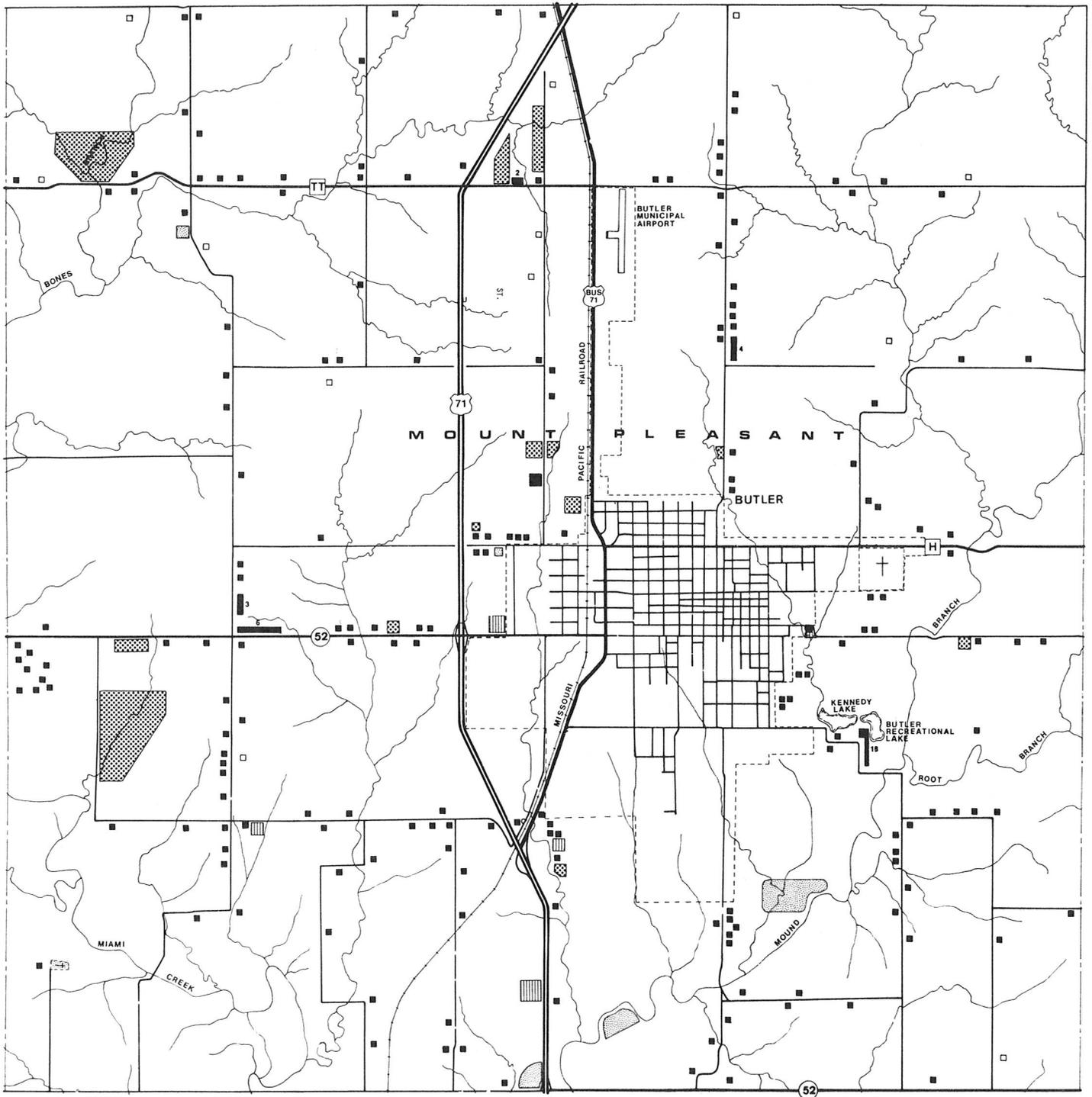
FUTURE LAND USE

BUTLER, MISSOURI

	EXISTING: 1980		FUTURE: 2000			
	4,107		5,000		9,300	
LAND USE	ACRES	ACRES PER 100 PERSONS	ACRES	ACRES PER 100 PERSONS	ACRES	ACRES PER 100 PERSONS
Population						
Residential	416.2	9.6	480	9.6	893	9.6
Commercial	64.4	1.5	70	1.4	95	1.0
Industrial	25.8	0.6	32	0.6	56	0.6
Public	237.0	5.4	265	5.3	483	5.2
Schools	30.4	0.7	30.4	0.6	56	0.6
Parks/Open Space	59.8	1.4	80	1.6	140	1.5
Airport	51.6	1.2	55	1.1	93	1.0
Other	95.2	2.2	100	2.0	194	2.1
Travelways	247.3	5.7	252	5.0	465	5.0
Streets	194.2	4.5	200	4.0	409	4.4
Highways	33.3	0.8	33.3	0.6	37	0.4
Railroads	19.8	0.4	19.8	0.4	19	0.2
Developed Land	990.7	22.8	1,095	21.9	1,992	21.4

Source: Kaysinger Basin Regional Planning Commission.

COMMUNITY LAND USE



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-  Residential Occupied/No.
-  Vacant
-  Commercial
-  Industrial
-  Public

