

## **CHAPTER 8**

### **EXISTING LAND USE ANALYSIS, DEVELOPMENT ALTERNATIVES, AND THE FUTURE LAND USE PLAN**

#### **PURPOSE**

The analysis of existing land uses both countywide and for Taylorsville and its surrounding environs is a factual and graphic depiction of how the land and structures on the land are currently used for particular purposes. It is a calculation of acreage devoted to specific land uses and the existing land use problems associated with those land uses such as conflicting or inefficient uses as well as the parameters placed by the physical environment and community infrastructure on the evolving land use of the city and county. The analysis also determines the use capabilities of vacant, open, and renewal land as these areas hold the greatest opportunities for accommodating anticipated growth.

Following the summaries of existing land use characteristics and the use capabilities of vacant, open, and renewal land is the summary of future land use requirements. This describes requirements of both a qualitative and quantitative nature.

The qualitative statement describes the relationships to be observed in setting aside areas for various land uses, or the relationships in the broad patterns of use areas, and the location criteria for each specific class of use. The quantitative statement describes the space (acreage or lot size) of each class of use.

The summary of the land use planning requirements is followed by the development of plan alternatives. In accord with the adopted goals and objectives, the limitations of the existing patterns of uses, and the location principles and space requirements previously established, the basic features and qualities of alternative sketch plans, and their policy implications are set forth. The alternatives provide the decision-maker with a range of choices to aid in the determination of a future land use scheme that will maximize the compatibility of developable land with the natural environment and community infrastructure in terms of service capacities, extension costs and overall efficiency, and that will maximize the economic, social and aesthetic desirability of the developed environment as described in the adopted goals and objectives.

Fundamentally, the single concept chosen from among the alternatives will embody a proposal as to how expansion should proceed in the future recognizing local objectives and generally accepted principles of health, safety, convenience, economy and the general amenities required for a decent standard of living.

## **EXISTING LAND USE – SPENCER COUNTY AND TAYLORSVILLE AREA**

Estimated 2000 use acreage for Spencer County by planning unit has been calculated. In estimating 2000 residential acreage, the number of housing units per planning unit were derived from 2000 Census, and building permit information, and assumed that residential densities (family/acre) are the same as they were in 2000. These densities were estimated for all new residential construction for each planning unit, historical trends, physiographic characteristics and developable land. Residential densities, acreage, and total dwelling units per planning unit are as follows:

**TABLE 8-1**  
**RESIDENTIAL LAND USE**  
**2000**

| <b><u>Planning Unit</u></b> | <b><u>Housing Units</u></b> | <b><u>Acreage</u></b> | <b><u>Density</u></b><br><b><u>(Families/Acre)</u></b> |
|-----------------------------|-----------------------------|-----------------------|--|
| P-1                         | 495                         | 129                   | 3.84   |
| P-2                         | 616                         | 450                   | 1.37   |
| P-3                         | 793                         | 365                   | 2.17   |
| P-4                         | 2006                        | 651                   | 3.08   |
| P-5                         | 645                         | 397                   | 1.67   |
| Total                       | 4555                        | 1,992                 | 2.29   |

Source: U.S. Census Bureau, 2000.

Existing commercial land use was determined from aerial photography and KIPDA's 2000 land use survey, as well as the 2000 survey of Taylorsville and its surrounding area.

Aerial photographs and the 2000 land use survey were also used to determine current industrial land use acreage.

Public and semi-public land uses were estimated from aerial photographs, KIPDA's 2000 land use survey, and known acreage taken by the Taylorsville Lake project. All land not considered to be in an urban use was listed in the vacant/agriculture category minus the agricultural land taken for Taylorsville Lake.

Table 8-2 summarizes current land use acreage by planning unit for all of Spencer County.

**TABLE 8-2**

**2000 LAND USE ACREAGE  
BY PLANNING UNIT**

| <u>Planning Unit</u> | <u>Single Family Residential</u> | <u>Multi-Family Residential</u> | <u>Commercial</u> | <u>Industrial</u> |
|----------------------|----------------------------------|---------------------------------|-------------------|-------------------|
| P-1                  | 379                              | 9                               | 12                | 6                 |
| P-2                  | 646                              | 2                               | 3                 | 0                 |
| P-3                  | 645                              | 1                               | 1                 | 5                 |
| P-4                  | 1,151                            | 0                               | 4                 | 0                 |
| P-5                  | 701                              | 0                               | 2                 | 0                 |
| Total                | 3,522                            | 12                              | 22                | 11                |

  

| <u>Planning Unit</u> | <u>Public/Semi-Public</u> | <u>Parks/Cemeteries</u> | <u>Agriculture Vacant</u> | <u>Total</u> |
|----------------------|---------------------------|-------------------------|---------------------------|--------------|
| P-1                  | 17                        | 1                       | 15                        | 439          |
| P-2                  | 3,317                     | 5                       | 24,157                    | 28,130       |
| P-3                  | 11,099                    | 0                       | 21,035                    | 32,786       |
| P-4                  | 1                         | 10                      | 31,391                    | 32,557       |
| P-5                  | 1                         | 0                       | 28,904                    | 29,608       |
| Total                | 14,435                    | 16                      | 105,502                   | 123,520      |

Table 8-3 summarizes current land use acreage for Taylorsville and its surrounding area. Total acreage for this area was determined by Auto Cadd calculations and the 2000 land use survey.

The calculations of Table 8-2 and 8-3 indicate that there are approximately 105,502 acres countywide that are vacant/agricultural lands. This land constitutes that acreage assumed to have the most opportunities for accommodating future growth. Within the City of Taylorsville and its surrounding environs, and estimated 8,642 acres are currently devoted to agriculture/vacant uses. Map 11 graphically depict the current land uses of Spencer County and the City of Taylorsville and its surrounding area.

**FUTURE LAND USE REQUIREMENTS**

Land use requirements for Spencer County to the year 2020 estimate how much land will be needed for each land previously described. This is a basis for scaling the land area needed to accommodate anticipated growth in the 20 year planning period. Once these estimates are available, it is then possible to firm up the alternative for the preliminary land use plan, testing out the various locations for land capacities; and eventually arriving at the best possible plan for balanced land utilization.

In projecting future residential land use needs, the projected number of housing units was derived from the population projections. Total residential land

use projections were then determined by multiplying the projected change in housing units by their respective planning unit densities.

Table 8-3 estimates future residential acreage needs by planning unit for Spencer County to the year 2020. (Dwelling units include vacant units).

**TABLE 8-3**  
**RESIDENTIAL LAND USE NEEDS**  
**2020**

| <u>Planning Unit</u> | <u>Dwelling Units</u>         | <u>Acreage</u><br><u>Single Family</u> | <u>Multi</u> | <u>Density</u>        |
|----------------------|-------------------------------|--|--------------|-----------------------|
| P-1                  | 379+222=601<br>646+1,362=2,00 | 439+110=549                            | 10           | 1.09<br>Families/Acre |
| P-2                  | 8<br>645+1,090=1,73           | 632+868=1,500                          | 4            | 1.33<br>Families/Acre |
| P-3                  | 5<br>1151+1,972 =             | 632+368=1,000                          | 2            | 1.73<br>Families/Acre |
| P-4                  | 3,123<br>701+1,201=1,90       | 779+721=1,500                          | 4            | 2.08<br>Families/Acre |
| P-5                  | 2                             | 483+517=1,000                          | 1            | 1.90<br>Families/Acre |

From the preceding calculations, it is estimated that an additional 2,584 acres (added to 2000 estimates) will be required for residential use to the year 2020. If, as predicted by the Corps of Engineers, as many as 300 single family homes are built around the Taylorsville Lake area then additional residential acreage requirements would increase by an additional 694 acres over 2020 estimates.

These calculations assumed that residential densities would be the same as in 2020 with the exception of Planning Unit 1 which would increase slightly to 3 families per acre (currently 1.09/acre). This would be the average density according to locally adopted density standards for areas with public sewers.

The other planning unit densities were kept at current levels as they are not expected to be served by the public sewage system during the planning period.

The current vacancy rates of each planning unit were also assumed to remain constant during the planning period, and were used to calculate total housing units expected in each planning unit.

The following Table 8-4 shows estimated land use requirements for each type of land use to the year 2020 for Spencer County in comparison to estimated 2000 acreage. It includes acreage for vacation and second home construction.

**TABLE 8-4**

**SPENCER COUNTY  
2000-2020 LAND USE REQUIREMENTS**

| <b><u>Land Use</u></b>    | <b><u>2000</u></b>           | <b><u>2020</u></b>           |
|---------------------------|------------------------------|------------------------------|
| Single Family Residential | 3,522                        | 9,558                        |
| Multi-Family Residential  | 20                           | 40                           |
| Commercial                | 40                           | 80                           |
| Industrial                | 20                           | 30                           |
| Public/Semi-Public        | 14,435                       | 14,435                       |
| Parks/Cemeteries          | 25                           | 100                          |
| Agriculture/Vacant        | 107,034                      | 99,322                       |
| <b>TOTAL</b>              | <b>123,520 (approximate)</b> | <b>123,520 (approximate)</b> |

In projecting commercial land use, a ratio of commercial acres per 100 residents was derived for the county. The ratio was multiplied by the population projection of 26,126 people to yield total commercial acres for the year 2020.

A projected ratio of 0.30 acres per 100 residents was determined for industrial acres, and applied to population and employment projections to derive the need for additional acres of industrial land.

A ratio of one acre of public/semi-public land for every 150 persons was utilized to derive future acreage needs for this category. To this was added the known acreage of federally owned land which is expected to remain constant through the planning period.

Fifteen acres of parks and cemetery land for each 1000 residents was assumed in order to derive estimated acreage needs for this category. (Note that the federal park lands were not included).

The agriculture/vacant land use requirement was determined by subtracting the projected acreage of all other uses from the 2000 estimated agricultural/vacant acreage.

An additional 1,000 acres is expected to be required for development purposes in Spencer County by the year 2020.

**TABLE 8-5**

**2006 SPENCER COUNTY ZONING BY ACREAGE (See Map 11)**

| <b>Zoning Code</b>             | <b>Frequency</b> | <b>Acres</b> |
|--------------------------------|------------------|--------------|
| AG1 – Large Lot Agriculture    | 23               | 102,370.13   |
| AG2 – Small Lot Agriculture    | 128              | 2,881.94     |
| B1 – Commercial Low            | 19               | 61.82        |
| B2 – Commercial Medium         | 47               | 429.47       |
| B3 – Commercial High           | 4                | 15.77        |
| CO1 – Conservation             | 4                | 88.91        |
| I1 – Low Use Industrial        | 10               | 81.96        |
| I2 – High Use Industrial       | 9                | 98.34        |
| R1 – Single Family Residential | 475              | 14,573.38    |
| R2 – Duplex Residential        | 23               | 1,145.72     |
| R3 – Multi Family Residential  | 115              | 1,409        |

The establishment of approximate net “holding capacities” of the various planning districts helped determine a tentative distribution of the required future acreage throughout the county. Essentially, the total vacant/agricultural acreage is assumed to comprise holding capacities or that land that is capable of accommodating anticipated dwelling units and other uses in each planning unit. It does not, however, take into account the unavailability of certain lands due to reluctant to sell, legal entanglements, etc.

Holding capacities also take into account established patterns of existing densities, location requirements previously developed (such as proximity to utilities) and use capabilities of the agricultural vacant land (such as environmental limitations for urban uses), and locally adopted density standards for residential dwelling units. Because of the relatively low density of current development in the county, as well as consideration for anticipated growth, each planning unit is perceived to have a holding capacity in excess of future acreage requirements.

As mentioned above, certain limiting factors should be considered in the allocation or distribution of the estimated required acreage. For example, some planning units falling in general areas that cannot be economically served by water, sewer, and other utility lines should be de-emphasized. Similarly, it is important to recognize unfavorable soil conditions in areas likely to remain beyond the public sewer service area, and which therefore would probably depend upon septic tanks for sewage disposal. The accepted land use plan must recognize these and other similar factors, and through its implementing recommendations, it can exert control to ensure that these limiting factors are respected.

## **LAND USE ALTERNATIVES**

In accord with the adopted goals and objectives of the comprehensive plan, and with consideration of the above analysis, three proposals or land use schemes were developed as alternatives or possibilities for guiding anticipated growth in Spencer County for the duration of the planning period. These are as follows:

1. Dispersed of Satellite Development: Allow new development to occur in the smaller communities in the county which would become satellite centers for the core area of Taylorsville. This alternative reflects the type of development anticipated by the 1969 comprehensive plan that allowed for small industrial and commercial developments at Wilsonville and Elk Creek, as well as new industrial development just north of Taylorsville on Highway 55. Residential development would continue to occur along major access routes and around the lake area at low densities.
2. Confinement: Confine new development primarily to Taylorsville and the immediate surrounding areas, and encourage location of new development in accord with similar and compatible land uses. Promote the strategic location of development through the provision of public facilities and services to the extent feasible. Reflects the position of creating a stronger economic base for Taylorsville through the encouragement given to business and industry to locate in this area. Also encourages the location of residential dwelling units of moderate density in an area with potential for public water and sewer service, and convenience to shopping and employment.
3. Corridor Development: Allow development to occur in a guided, controlled fashion primarily along Highway 44 east of Taylorsville bordering the northern edge of the lake, along Highway 55 north of Taylorsville, and in the vicinity of the 44 by-pass. This type of development would provide convenience to lake visitors and would promote commercial service oriented establishments along these routes. Extension of public facilities and utilities along these corridors would encourage residential development of low to moderate densities, and would possibly create a separate somewhat independent community at Little Mount.

The proposed alternatives are intended to illustrate potential for development on a general basis. They do not provide specific location analysis of limitations to development or of individual development needs. Instead, the alternatives promote the concept of orderly growth in terms of providing a range of choices that will foster an efficient and compatible pattern of development. The pattern or combination of patterns that is found to be the most realistic provides the foundation of the recommended land use plan.

## **RECOMMENDED LAND USE PLAN**

The choice of the most appropriate land use alternative for development of the formalized land use plan involves several areas of decision-making by the community and the planning commission. This decision-making process was divided into two essential categories that are described as follows. The first category is the determination of location and space requirements of the future land use delineated earlier in this chapter that is a progressive process beginning with the goals and objectives formulation of growth projections to the horizon year 2020.

The secondary category involves the subjective analysis of the alternative sketch plans (See Map 14) while recognizing the necessity of certain planning principles and policy assumptions that are reflected in the design of the sketch plans. The alternatives should exhibit the best fit for activity patterns, livability concepts, and cost considerations, as well as land value, physiographic and visual factors. The general designs should also reflect the resolve of the allowable range of policy assumptions, especially as they relate to focal points of activity, transportation elements and the intensity of development.

That is, a dominant focal point and sub – focal points of land use activity should be established for the planning area. Assumptions regarding the transportation elements of future land use should reinforce the prominence of the focal points of activity and adequately interconnect the existing and proposed land uses. The intensity of development must also be determined by finalizing the degree of spread or concentration to be sought in the aggregated systems of use areas. The degree of intensity is dependent upon the extension of water and sewer facilities and their levels of service, proposed school locations, and local adopted policies concerning density in zoning and subdivision regulations.

The land use development pattern preferred by the Spencer County Planning Commission is actually a combination of the various alternatives proposed. It provides a guide for development that encourages intermingling of divergent land use activity while recognizing the limitations as well as the potential of both the environment and infrastructure facilities for accommodating anticipated land development. The elements of the land use plan are described below.

## **RESIDENTIAL DEVELOPMENT**

The residential development portion of the proposed land use plan reflects both the dispersed or satellite development and the corridor development alternatives. Low density residential use is recommended for the conservation district surrounding Taylorsville Lake at a minimum lot size of five acres. The conservation district is bounded by Route 44 on the north, Route 55 on the west and the major connector routes on the east and south, and extends inward to the fee acquisition line which defines the boundaries of federal property. Medium density residential development is also recommended for the outlying areas



bordering the principal arterial routes 155/55 and 44, as well as the connector routes 48, 623, 1169, 1795, and 636, and south of 44 to the Salt River bridge, recommended minimum size is 43,560 square feet (1 acre) for these areas.

High density residential development will be encouraged in Taylorsville and its surrounding area's where sewer is available, creating a focal point of activity in the county. Minimum lot sizes advocated for high density residential uses are 7,200 square feet for sewerred lots, and 43,560 square feet (1 acre) for unsewered lots. Medium density (1-5 acres tracts) residential use will extend out from these centers of activity along arterial routes 155/55 and the north side of S.R. 44 east of Taylorsville, and the major collector routes, especially 1319 and 1060 in the northwest sector of the county, gradually reducing to low density (larger than 5 acre tracts) residential in the outlying areas bordering the transportation routes. These recommended lot sizes are compatible with locally adopted zoning regulations.

These recommended locales for residential development offer variety in terrain, both fairly level and rolling and hillside sites; and are in close proximity to the major transportation routes of the county with direct connections to work and recreational areas. They also have the best potential for the extension of utilities due to their location along major transportation routes.

### **COMMERCIAL DEVELOPMENT**

Commercial land use activity proposed for the future land use plan is actually a combination of all three alternative sketch plans, allowing Taylorsville to evolve into a strong central business district as it accepts peak flow traffic and provides retail, professional, financial, and related services for the county. Taylorsville can easily accommodate commercial activity with accessible and adequate parking and acreage for new development. The proposed land use plan extends the commercial district of Taylorsville to include that area bounded on the west by S.R. 44 City Limits, on the south by Garrard Street, on the east by Industrial Business Park, and north by Industry Drive and City Limits on S.R. 55.

Proposed commercial activity also allows for corridor development by promoting highway service centers on the periphery of Taylorsville and the satellite centers, especially on the 55/155 approach to Taylorsville both south of and across from the high school site. These highway oriented centers will be allowed where sites are adequate for integrated design of drive-in services, and proper consideration is given to highway safety and the general compatibility of adjoining uses.

Mixed use development should be encouraged in the areas shown on Map 14. This is the commercial, light industry, business section of the county.

Local shopping facilities follow the dispersed or satellite development alternative, advocating community and neighborhood serving store groups within convenient walking distance of families served (or convenient driving range in

low density areas). Ideal locations for this type of commercial activity are intersections of major radial and circumferential streets, and located with due consideration for integrated design of center and compatibility with adjoining areas.

### **INDUSTRIAL DEVELOPMENT**

The stated objective of encouraging the development of light industrial activity in Spencer County is reflected in the proposed land use plan. Direct access to commercial transportation (truck routes) is within easy commuting time of the residential areas.

These areas are also within reasonable distance for the extension of utilities such as power, water and waste disposal facilities. These locales take into consideration the compatibility of surrounding uses with the possibility of protective “belts” of open space to cushion or screen the industrial activity from adjacent uses.

The other potential sites for small industrial areas exist near the intersection of Route 55 and Route 155 providing good access to I-64 in the northwest sector of the county. Another area to consider is S.R. 44 and S.R.248 heading east towards to the county line. The new highway from the Bluegrass Parkway should help this area. Also an area at S.R. 55 and S.R. 2239 south of Taylorsville has potential for light industry.

### **CONSERVATION DISTRICT AND STREAM VALLEY RESERVES**

The preservation of natural resources of Spencer County are advocated by the creation of a conservation district and stream valley reserves that protect and promote normal surface water flow, and provide a buffer between developed areas, encouraging concentrated rather than scattered growth patterns.

The conservation district surrounds Taylorsville Lake, and is bounded on the west by Route 55, on the north by Route 44, on the south by Route 1066 and on the east by Tenmile Road, and Route 636. By limiting residential densities in this area, the above objectives will be realized; and the provision of an area of great scenic and recreational value to county residents will be ensured.

Additionally, a stream valley reserve that runs the length of Brashears Creek and the downstream reaches of the Salt River support the above objectives as well as avoid the pollution of these streams by discouraging development to take place in the valleys following the course of the stream.

The Plum Creek Water Shed area in Spencer County, are flood control dams located in the north western part of the county. Built in the 1950s, these areas were designated by the Corp of Engineers and built for the protection of homes and flash flooding. Refer to Map 6 for the watershed and dam locations.

## **PRESERVATION OF AGRICULTURAL LAND**

The protection of the dwindling acreage devoted to agricultural purposes should be encouraged wherever possible.

### **SUMMARY**

Finally, it should once again be emphasized that the evolution of the recommended land use plan; that is, its realization, must be timed to coordinate with the development and improvement of vital transportation links, and the logical and economically feasible extension of utilities. The generalized depiction of the recommended land use plans for Spencer County and for Taylorsville and its surrounding area are illustrated by the following Map 14.