



A LAND USE PROFILE OF MARYVILLE

Land use is the central element of a comprehensive plan because it establishes the overall physical configuration of the city – the mix and location of uses and the nature of community systems that support them.

The land use plan is a statement of policy, public and private decision makers depend on to guide individual actions such as land purchases, project design, and review and approval processes. This chapter reviews existing patterns of development, potential market needs, and the character of the natural environment.

LAND USE PATTERNS IN MARYVILLE

Maryville's early development grew out of its founding as the county seat for the newly formed Nodaway County in 1845. As the county seat, Maryville developed a strong central business district surrounding the Nodaway County Courthouse. The early development of the district was also influenced by the construction of the Wabash Railroad. With connections to St. Joseph, Missouri and Council Bluffs, Iowa the city quickly became a primary point of departure for residents in the region. The central business district was surrounded by dense residential neighborhoods that allowed the majority of residents, quick and easy access to downtown businesses. In 1905, Maryville became home to the state funded Normal School, today known as Northwest Missouri State University. The university was located on the site of a former Catholic Seminary, which was donated by the city for the campus.

Development patterns have become far more dispersed as highway oriented commercial developments cropped up along US Highway 71's original alignment. With the age of the automobile it also became less critical for one to live within close proximity to where they worked. This led to the development of residential subdivisions and acreages outside of the city limits. In

addition, the expansion of Northwest Missouri State University created a need for additional rental housing in the neighborhoods surrounding the University. Map 2.1 illustrates Maryville's current development patterns.

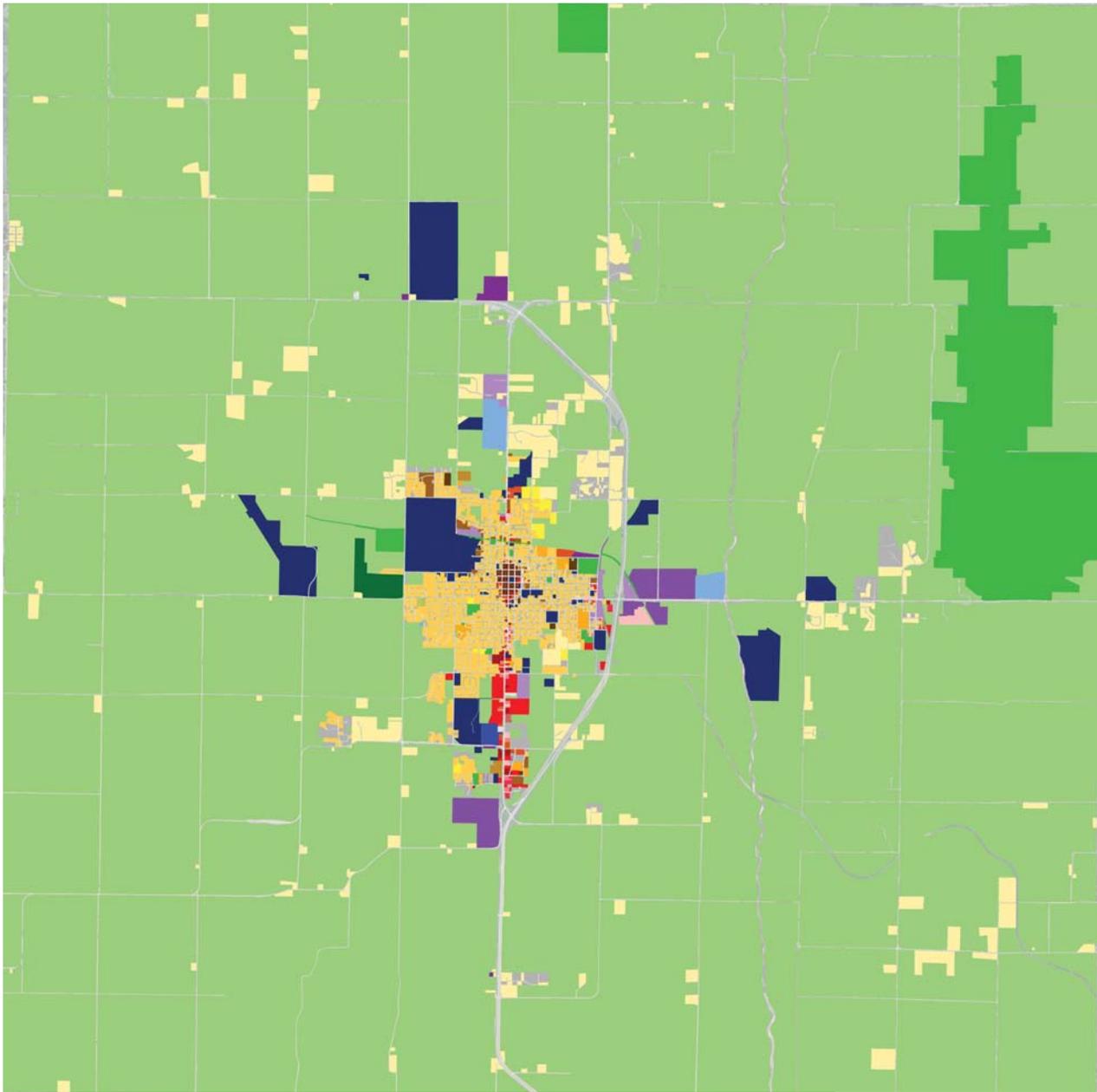
LAND USE CHARACTERISTICS

Figure 2.1 shows how land is used in Maryville, while Figure 2.2 compares land use in Maryville to peer communities.

Residential Uses

Like many rural communities, residential uses account for a significant portion of the developed land within Maryville. In Maryville this land use is overshadowed by Maryville's parkland, on account of the sheer size of Moberly Lake Park.

- While Maryville offers a range of housing choices, ranging from single-family houses to townhomes and apartments, the majority of residential land (78%) is developed at lower-density styles.
- Looking at the area beyond the immediate city limits of Maryville, the dominant residential land use, perhaps predictably, becomes Rural Residential. The city will need to continue to work closely with Polk Township on density and design standards in these areas.



Map 2.1: Maryville Existing Land Use

Agriculture/Open Space	Automotive	Public Facility
Parkland	Agricultural Retail	Hospital
Golf Course	Restaurant/Entertainment	Civic
Rural Residential	Service	Light Industrial
Large Lot Estate	Commercial Recreation	Industrial
Low Density Residential	Hospitality	Agricultural Industry
Medium Density Residential	Retail	Vacant Building
Mobile Homes	Storage	Vacant Lot
High Density Residential	Office/Financial	Transportation
Assisted Living	Mixed Use/Downtown	

Figure 2.1: Land Use in Maryville, 2011

Land Use Category	City Of Maryville Limits		City & Polk Township	
	Acres	Acres per 100 People	Acres	Acres per 100 People
Residential	1,088	9.09	2,805	17.78
Rural Residential	52	0.44	1,680	10.65
Large Lot Estate	55	0.46	59	0.37
Low Density Residential	850	7.10	911	5.77
Medium Density Residential	76	0.63	78	0.50
High Density Residential	44	0.37	58	0.37
Mobile Homes	11	0.09	19	0.12
Commercial	232	1.94	243	1.54
Office	23	0.19	23	0.15
Downtown	21	0.17	21	0.13
Restaurant/Entertainment	11	0.10	11	0.07
Retail and General Commercial	138	1.15	149	0.95
Auto Services	39	0.32	39	0.25
Commercial Recreation	3	0.03	3	0.02
Industrial	236	1.97	450	2.85
General Industrial	157	2.28	289	1.83
Lt. Industrial/Warehousing	71	1.27	109	0.69
Agricultural Industrial	8	0.03	52	0.33
Civic	800	12.6	1,381	8.75
Civic	639	5.33	639	4.05
Hospital	24	0.20	24	0.15
Assisted Living	15	0.12	15	0.09
Public Facility	122	1.02	703	4.45
Parks and Recreation	3,207	26.8	3,353	21.25
Mozingo Lake Park	3,105	-	3,105	19.68
Transportation	780	6.52	3,511	22.25
Total Developed Land	6,343	52.98	11,743	74.43
Agriculture and Open Space	462	3.86	65,792	417.01
Vacant Urban Land	125	1.04	372	2.36
Total Area	6,930	57.89	77,906	493.80
Total Area w/o Mozingo Lake	3,825	31.95		

Source: RDG Planning & Design, 2011

Commercial Uses

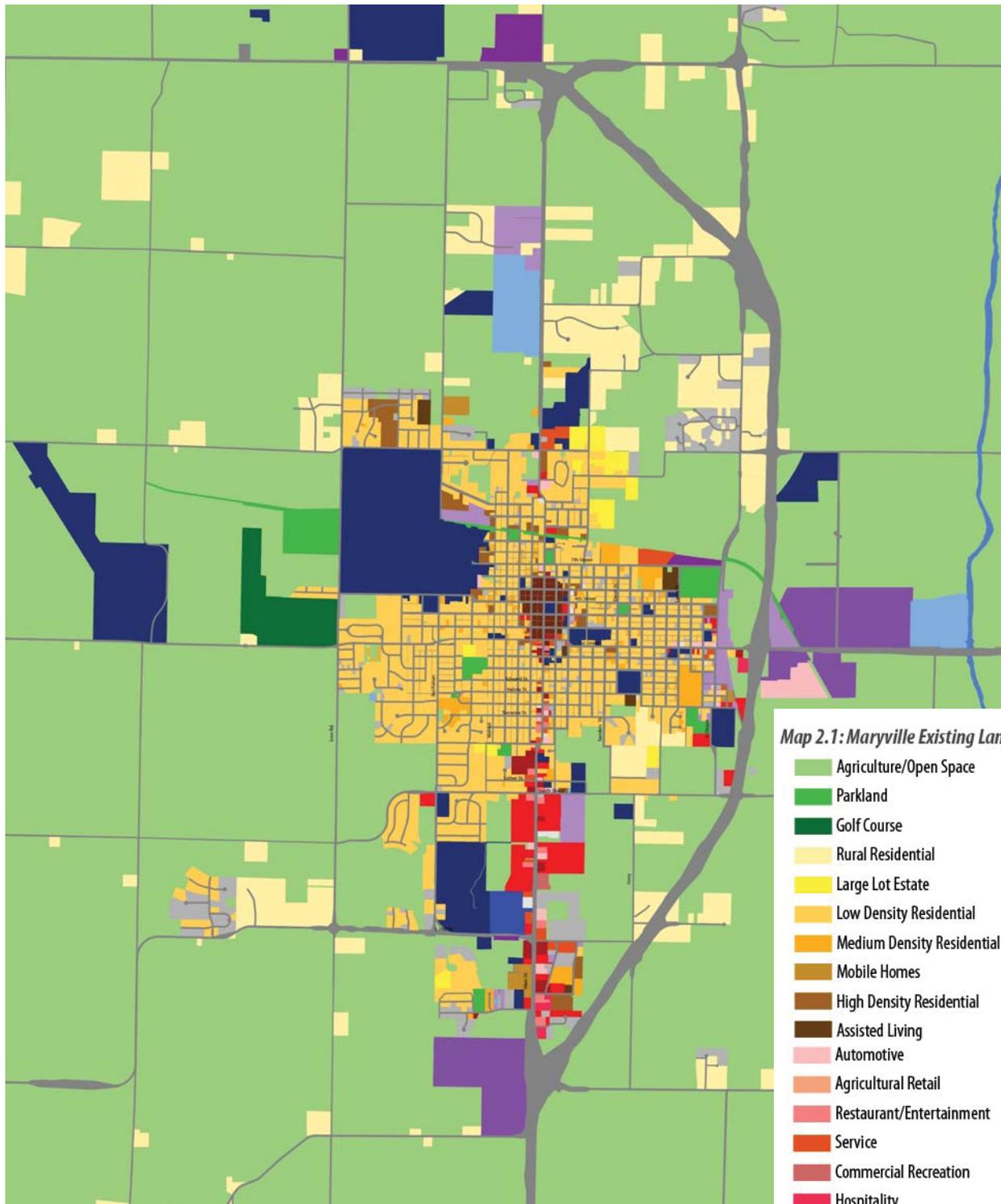
- Compared with similar communities, Maryville has a roughly equivalent amount of developed area dedicated to commercial uses.
- Over 59% of the land devoted to Maryville's commercial market is used for retail and general commercial. Broadly speaking, these are the kinds of establishments that have concentrated in the automotive-oriented landscape on South Main Street. This

land use represents more than half of all commercial properties in Maryville.

- Despite the amount of land area devoted to retail development in Maryville, the proximity of the St. Joe market results in an export of retail dollars as illustrated in Figure 1.9.

Industrial Uses

During the 1970s Maryville made great strides in diversifying its economy and attracting several large industries



Map 2.1: Maryville Existing Land Use

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> Industrial Vacant Building Vacant Lot Transportation | <ul style="list-style-type: none"> Public Facility Hospital Civic Light Industrial | <ul style="list-style-type: none"> Retail Storage Office/Financial Mixed Use/Downtown |
|---|--|---|

to the community. The development of the industrial park on the east side of the city was a significant part of this effort. Easy access to Highway 71 bypass made these attractive sites. Significant industrial parcels have developed on the east and south sides of Maryville, and all have a strong relationship to this highway. Other, smaller, industrial areas developed around Maryville's now defunct rail lines. Major industrial employers include Kawasaki, Energizer, Federal-Mogul, a global supplier of parts and equipment to vehicle manufacturers, and Nucor, a manufacturer of steel bars, wire, and culvert accessories. These are the types of businesses that occupy the sites zoned as 'General Industrial', which account for the majority of Maryville's industrial lots.

As Maryville continues to develop its industries, special attention should be given to the location of new facilities, with special preference being given to the re-use of currently vacant properties. Additionally, close consideration should be given to the site design and layout of new industries. These facilities are often visible from heavily traveled roads and will make an important statement about the community and the level of value it places on creating a quality built environment for its residents.

Public and Semi-Public Uses

Maryville features a significant public institution, Northwest Missouri State University (NWMSU), a robust urban park system, and a significant outlying natural recreation area, Mozingo Lake. Typically, a public institution the size of NWMSU would dominate the lands used for public and semi-public uses. However, given the massive scale of Mozingo Lake, land used for parks and recreation dwarf all other public lands in Maryville.

- **Mozingo Lake Park:** Mozingo Lake Park is a 3,000 acre natural recreation area approximately 6 miles east of Downtown Maryville. The lake is a man-made reservoir created by the damming of the Mozingo Creek Branch of the One Hundred and Two River, and serves as the water supply for the City of Maryville. The 1,000 acre lake sits inside a 2,000 acre park, which offers horse trails, camping, boat launches, RV sites, a youth camp, and an 18-hole golf course. The park is owned and operated by the City of Maryville.
- **Donaldson-Westside Park:** Donaldson-Westside Park is a large community park and sports complex on the western side of Maryville, near Northwest Missouri State University. It features four baseball and softball fields, five soccer fields, one football field, and a skate park as well as picnic shelters with grills.
- **Northwest Missouri State University:** Northwest Missouri State is a public university serving approximately 6,000 undergraduates and 1,000 graduate students every year across a diverse range of academic programs. The 240 acre campus is located on the northwest side of Maryville and also serves as the official Missouri State Arboretum.
- **Maryville Schools:** The local school district holds land for its 4 main units on two sites in Maryville. The district's one elementary school, Eugene Field Elementary, is located near Downtown Maryville. The middle school, high school, and technical college are all located on two large sites on the south side of Maryville, approximately 0.5 mile west of South Main Street.

Figure 2.2: Comparative Land Use by Acres per 100 Residents

	Maryville, MO	Hays, KS	Wayne, NE	Excelsior Springs, MO
Residential	9.1	7.5	6.8	14.7
Commercial	1.9	1.9	1.1	1.8
Industrial	2.0	1.7	1.1	1.9
Civic	6.7	3.8	4.8	6.4
Parks and Recreation	0.9*	0.8	2.8	4.1
Transportation	6.5	6.4	5.0	6.4
Total Developed Area	27.0*	22.4	21.5	31.2

*Exclusive of Mozingo Lake

Source: RDG Planning & Design, 2011



Map 2.2: Maryville Topography

- 100 Year Flood Zone
- 10 Foot Contours
- HUC-12 Watersheds

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PHYSICAL CHARACTER OF MARYVILLE

Each community has distinctive assets and features that can strengthen it if used to their greatest advantage. A comprehensive plan should consider the underlying structure and order of the community as well as its basic systems, such as land use and infrastructure. This environmental structure helps define the town's sense of place and inner harmony, and can build a vision for the future that grows from intrinsic character. In addition to satisfying population forecasts and land needs, the Maryville land use plan is also designed to respond to the city and surrounding area's physical character.

Maryville's physical characteristics are defined by the rolling farm ground, drainage corridors and corresponding floodplains. The drainage corridors and floodplains should be identified for preservation as both greenways and links in the city's park and recreation system. Map 2.2 identifies the elevation changes that surround Maryville and the floodplains. Efforts should also be made to preserve larger stands of trees. These stands have tended to develop along in creek corridors that could not practically be farmed or developed.

Topography is less of an inhibitor to development for the city, but the city does sit directly on a ridge line. This ridge line runs north and south dividing the city in two. This means that all sanitary sewer lines in the western portion of the city must be pumped over the ridge line and to the treatment facility on the eastern half of the city. Historically this has not been a significant deterrent to development in the western portion of the city but could impact development costs.

Stormwater management should continue to be closely monitored. Over the years local, state, and federal agencies have become more aware of the impact that development can have on stormwater erosion and water quality. Development that increases both the volume and velocity of water runoff can create significant erosion and flood issue downstream. New developments will need to effectively address storm water to protect the drainage corridors within developments and downstream.

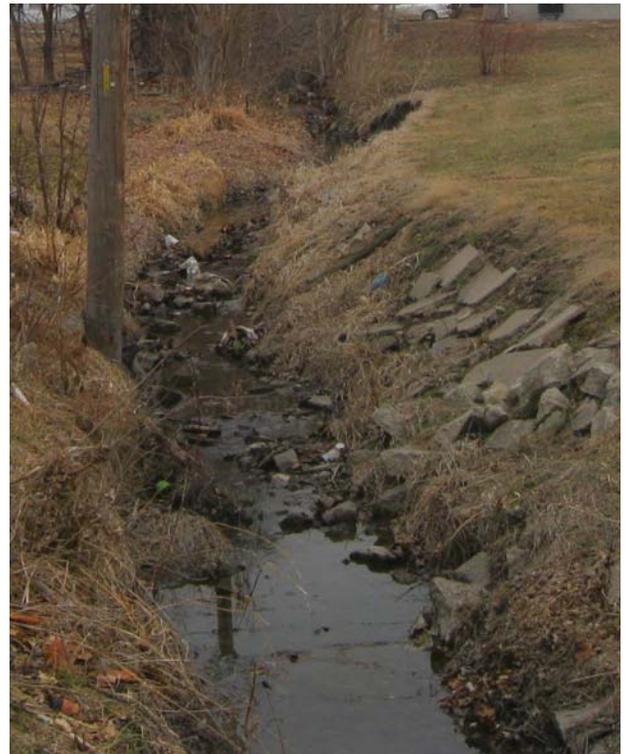


Figure 2.3: Projected Housing Development Demand

	2010	2015	2020	2025	2030	Total
Population at the End of Period	15,777	16,370	17,038	17,747	18,497	
Household Population at End of Period	12,379	12,844	13,368	13,924	14,513	
Average People/Household	2.25	2.25	2.25	2.25	2.25	
Household demand at End of Period	5,502	5,708	5,942	6,189	6,450	
Projected Vacancy Rate	7.05%	7.05%	7.05%	7.05%	7.05%	
Unit Needs at End of Period	5,919	6,141	6,392	6,658	6,939	
Replacement Need		25	25	25	25	100
Cumulative Need		274	276	291	306	1,120
Average Annual Construction		49	55	58	61	56

Source: RDG Planning & Design, 2011

POPULATION AND GROWTH CONTEXT

HOUSING PROJECTION

Population and development projections help to guide forecasts of land consumption needs during the planning period. Figure 2.3 builds a 20 year housing demand model based on a projected population of 18,497 in 2030 and the following assumptions:

- The average rate of people per household is expected to remain constant at 2.25 over the next twenty years.
- Unit demand at the end of the period is calculated by dividing household population by the number of people per household. This equals the number of occupied housing units.
- The vacancy rate over the next twenty years will remain stable at 7.05%. This is a reasonable assumption based on the ongoing growth in student population at Northwest Missouri State University and the pressure this places on housing demand. A manageable housing vacancy rate provides housing choices for new residents moving to a community and controls housing costs.
- Unit needs at the end of each period are based on the actual household demand plus the number of projected vacant units.
- Replacement need is the number of housing units demolished or converted to other uses. Homes in poor condition or that are obsolete should gradually be replaced in the city’s housing supply.

- Cumulative need shows the number of total units needed between the base year of 2010 and the year indicated at the end of the period.

The projections in Figure 2.3 indicate a cumulative need for 1,120 housing units in Maryville between 2010 and 2030.



Figure 2.4: Estimated Residential Land Requirements 2010-2030

2010-2020	% of Demand	Units	Gross Density (du/A)	Land Needs (acres)	Designated Land (acres)
Single Family Detached	55%	288	3	95.9	192
Single Family Attached	15%	78	6	13.1	26
Multi-family	30%	157	12	13.1	26
Total	100%	523		122.1	244
2020-2030					
Single Family Detached	55%	328	3	109.5	219
Single Family Attached	15%	90	6	14.9	30
30%	30%	179	12	14.9	30
Total	100%	597		139.3	279
Total 2010-2030		1,120		261.4	523

Source: RDG Planning & Design, 2011

Residential Land Needs

Sustainable community development will involve ongoing housing improvement (including replacement of substandard housing) and moderate, managed growth. Current construction rates are relatively low and will eventually produce unmet demand. However, the end of subprime mortgage instruments, tighter underwriting standards, and greater consumer conservatism are likely to increase the demand for both rental housing and smaller and more efficient ownership alternatives.

Figure 2.4 calculates residential land demand based on the following factors:

- New construction will be based on the following distribution: 55% single-family detached; 15% single-family attached or townhome; 30% multi-family
- Average gross residential densities will be 3 units/acre for single-family detached; 6 units/acre for single-family attached or townhomes; and 12 units/acre for multi-family.
- Land designated for residential development during the planning period will be twice the area needed for actual construction to provide market choice and prevent artificial inflation of land cost.

This projection indicates a need for about 261 acres of residential land between 2010 and 2030. To ensure that the future land use plan identifies enough land to accommodate potential growth and to allow for alternatives in the market the hard demand is doubled. Therefore, the plan should designate approximately 523 acres for residential development over the next 20 years. The development concept presented in this document identifies areas where this potential development should occur.

Commercial and Industrial Land Needs

A growing population needs additional commercial services, a key part of Maryville's economic development strategy. While this plan does not include a retail market analysis, adequate commercial space should be identified to meet market demands. However, designating too much commercial land can produce inefficient land patterns, further scattering urban development, and requiring customers to travel excessive distances, usually by private automobile. In contrast, sustainable land development patterns should locate commercial development closer to customers and be designed to encourage active transportation modes such as pedestrian, bicycle, and potentially public transportation.

The demand for future industrial land is linked to opportunity and recruitment, rather than exclusively to population growth. A single major corporate decision can dramatically increase (or decrease) the projected industrial demand in a community. In addition, a decision by the city to pursue industrial development aggressively can affect industrial land needs. Despite these differences, similar projection methods are used to predict future commercial and industrial land needs. For Maryville, the two methods used are:

Population proportion. This method relates land needs to population projections. It assumes that the absolute amount of commercial or industrial land per 100 people will remain relatively constant and that new development will grow in proportion to population growth.

Residential use proportion. This assumes a constant relationship between the amount of land used for residential and commercial purposes, thereby relating commercial and industrial growth rates to residential development rates.

Figure 2.5 compares the results of these methods for commercial uses and suggests a hard demand for 19 to 28 acres of commercial land during the next 20 years. Common land use planning practice is to designate 1.5 times the “hard demand” for commercial land. Thus, for planning purposes the city should designate between 29 and 41 acres of land for future commercial development.

Figure 2.6 calculates additional industrial land needs for Maryville. Based on increasing population and residential use proportion methods described above, Maryville should be able to absorb between 36 and 51 acres of new industrial land over the coming 20 years. In order to provide maximum flexibility, the land use plan should designate about 3 times this demand or 108 to 153 acres for industrial and business park uses. Presently, there are 236 acres of land zoned for various industrial uses in Maryville.



Figure 2.5: Estimated Commercial Land Requirements, 2010-2030

	2010	2020	2030	Conversion Need (acres)	Designated Land (acres)
Population Proportion Method					
Projected Population	15,777	16,370	17,038		
Commercial Use/100 res.	1.54	1.54	1.54		
Projected Commercial Use (acres)	243.44	252.58	262.90	19.46	29.20
Residential Use Proportion Method					
Residential Land (acres)	2,304.37	2,426.47	2,565.79		
Commercial/Residential Ratio	0.11	0.11	0.11		
Projected Commercial Use (acres)	243.44	256.34	271.05	27.62	41.42

Source: RDG Planning & Design, 2011

Figure 2.6: Estimated Industrial/Business Park Land Requirements, 2010-2030

	2010	2020	2030	Conversion Need (acres)	Designated Land (acres)
Population Proportion Method					
Projected Population	15,777	16,370	17,038		
Industrial Use/100 res.	2.85	2.85	2.85		
Projected Industrial Use (acres)	449.67	466.56	485.62	35.95	107.86
Residential Use Proportion Method					
Residential Land (acres)	2,304.37	2,426.47	2,565.79		
Industrial/Residential Ratio	0.20	0.20	0.20		
Projected Industrial Use (acres)	449.67	473.49	500.68	51.01	153.04

Source: RDG Planning & Design, 2011