3. Place

3. Place

Overview

This chapter describes Columbia's physical landscape, including the natural and built environment. It highlights how land is being used, and provides insight into recent trends related to the community's development. Following this overview, the chapter is divided into the following sections:

Key Findings – offers a brief, bulleted list of some of the main points found in this chapter.

Detailed Information – is divided into three parts:

- Part A: Green Infrastructure looks at natural resources, open space, parks, and recreational facilities.
- Part B: Built Environment discusses issues of zoning, land use, and recent development trends.
- Part C: Housing describes Columbia's existing housing stock and housing development trends.

Resources – lists the information sources that were used in preparing this chapter. It also suggests some additional resources that may be helpful for further investigation into particular topics.

Key Findings

A. Green Infrastructure

1. Columbia's natural landscape features a significant amount of forests, waterways, floodplains, and steep slopes.
2. Columbia's Metro Greenbelt / Trail Plan provides a framework for conserving open space and facilitating trail development throughout the community.
3. The City's Department of Parks and Recreation oversees over 2,400 acres of parkland and plans for the community's future park needs.
4. In addition to City parks and recreation facilities, Columbia residents have access to numerous county, state, and federal parklands, as well as a variety of facilities associated with local educational institutions.

B. Built Environment

5. A map of Columbia's existing land uses shows the distribution of residential, commercial, institutional, agricultural, and other types of land uses.
6. Columbia's zoning map provides a regulatory framework to direct development.
7. The Metro 2020 Plan supports heterogeneous, yet compatible land uses within five basic districts. It covers the entire metro planning area.
8. Columbia's recent building permit data show a steady increase in the annual estimated valuation of non-residential development, from $38 million in 2000 to $74.5 million in 2005.
9. Recent building permit data show a substantial increase in the number of residential permits issued. In 2005, single-family permits accounted for 87 percent of all residential permits issued.
10. In 2005, single-family units accounted for 64 percent of all units permitted.

C. Housing

11. Between 1990 and 2000, the number of housing units increased by 30.5 percent, outpacing Columbia's population growth.
12. The proportion of single-family homes has increased since 1990, and now accounts for over half of Columbia's housing stock.
13. As of 2000, 47 percent of Columbia residents own the home in which they reside. Homeownership rates among all racial groups have increased since 1990.
14. In 2000, Columbia's housing vacancy rate was 6.1 percent.
15. Median housing values increased by 25 percent between 1990 and 2000. Home values tend to be lowest in the central city.
16. The vast majority (93.6%) of newly built single-family homes have an appraised value of $100,000 or more.
17. While the majority of households continue to rent, the proportion has decreased, from 56.2 percent in 1990 to 52.8 percent in 2000. The

median gross rent increased by 37.4 percent during the same time period.

18. Columbia's housing stock is relatively new. Over 67 percent of all homes are less than 30 years old.
19. Twenty-two percent of homeowners with a mortgage are cost burdened, meaning 30 percent or more of their household income is spent on housing costs.
20. A significant percentage (44%) of renters are also considered cost-burdened, but the presence of a large student population impacts this figure.
21. Median income increases outpaced median rent increases between 1990 and 2000.
22. Columbia has a relatively even distribution of renters in different income groups, suggesting the need for rental units that meet various price points and preferences.
23. Approximately six percent of the housing units in Columbia are subsidized for low-income households, but no additional units have been constructed since 1999.

Detailed Information

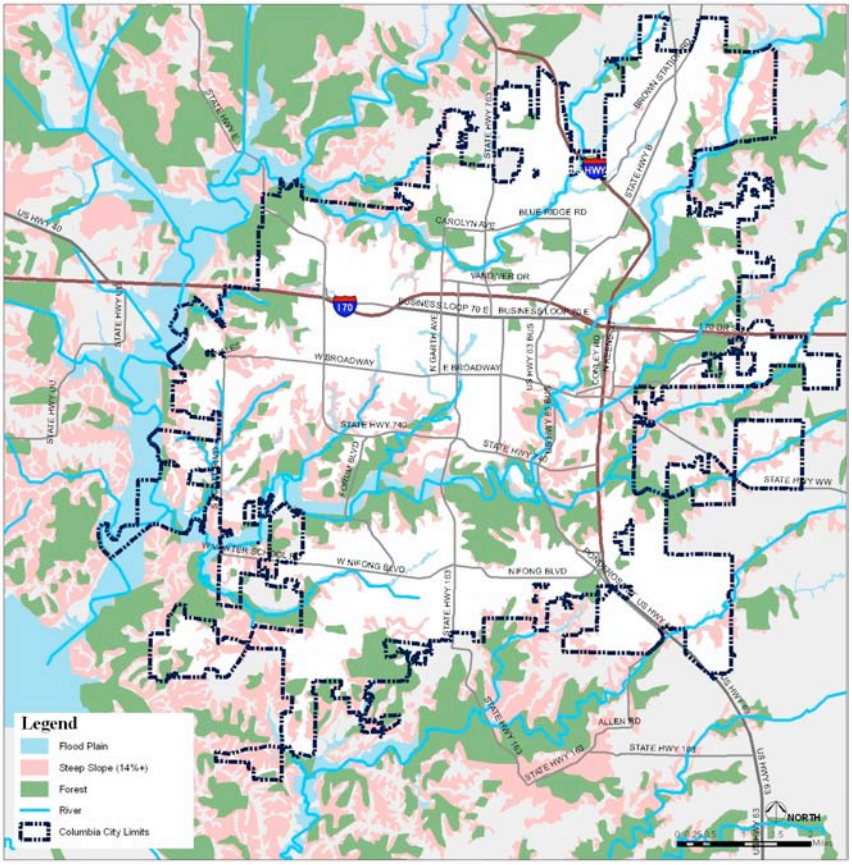
A. Green Infrastructure

Green infrastructure refers to the natural qualities that define a community, including natural features, open spaces, greenways, and parks, among others. This section provides a brief overview of Columbia's green infrastructure amenities.

1. Columbia's natural landscape features a significant amount of forests, waterways, floodplains, and steep slopes.

Map 3.1 below depicts some of the natural features that define the physical landscape in and around Columbia. It gives an overall picture of the waterways, floodplains, forests, and steep slopes found in the region. Columbia has approximately 3,900 acres of floodplains and 6,800 acres of forest. It also has a varied topography, as approximately 9,200 acres of land have steep slopes. Stewardship of natural features can help to maintain overall environmental quality in Columbia.

MAP 3.1: NATURAL FEATURES



Source: City of Columbia, ACP

2. Columbia's Metro Greenbelt / Trail Plan provides a framework for conserving open space and facilitating trail development throughout the community.

The Metro Greenbelt / Trail Plan defines a greenbelt as "a linear park following creek corridors and including some defined space on each side of the creek" (p.4). This "defined space" can include 100-year floodplains, non-floodplain lands, and public or private parklands. The Metro Greenbelt plan seeks to protect the major stream corridors in the Columbia area for the purpose of scenic value, flood control, and various other community benefits – including the development of additional trail facilities.

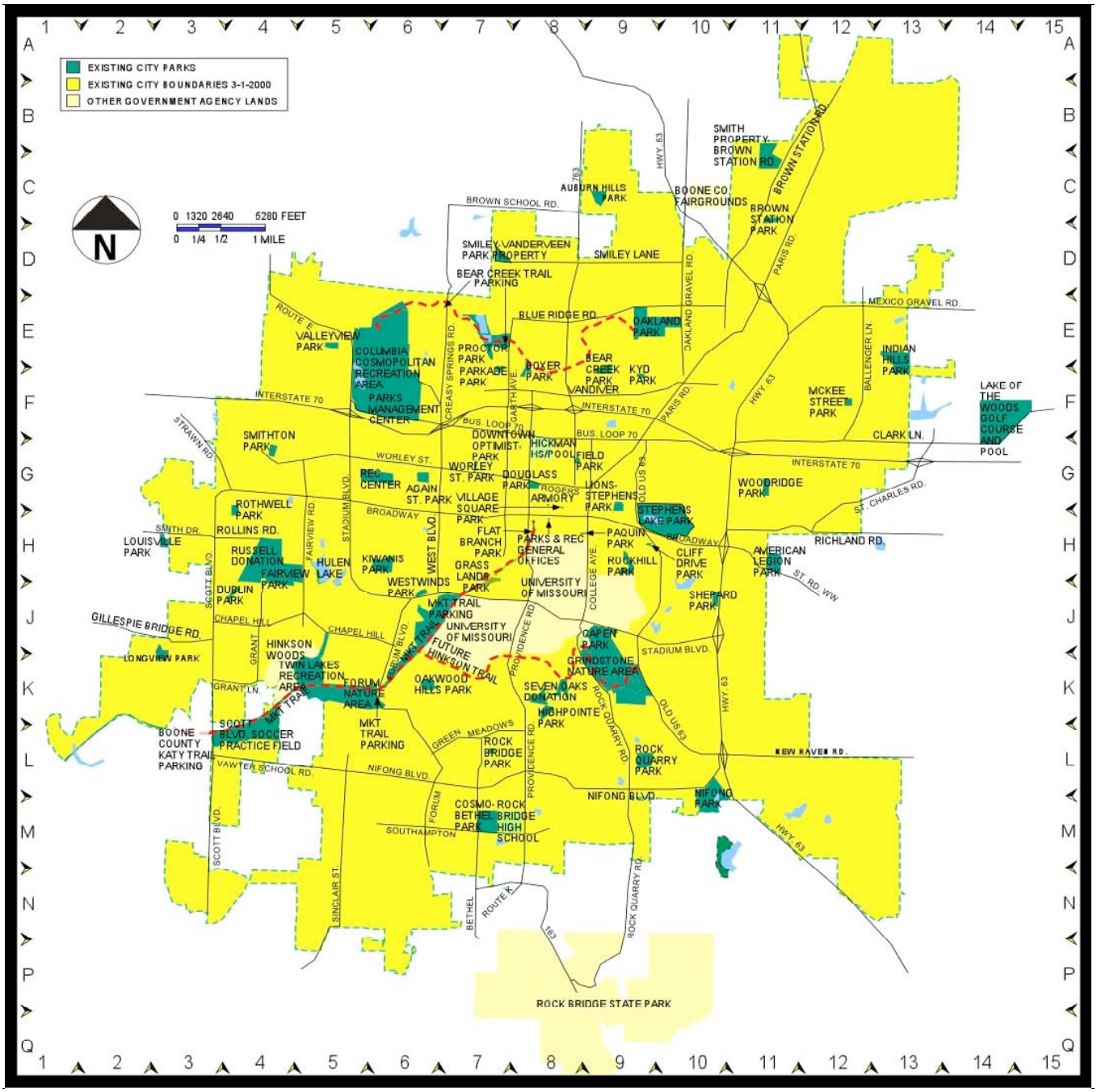
Development pressures create an ongoing threat for the greenbelt. The City is pursuing a variety of strategies to protect the greenbelt, including conservation easements, acquisition, and annexation of critical greenbelt areas. The Parks and Recreation Department prepares a ranking of targeted acquisition areas, based on criteria such as development pressure, the role the section would play within Columbia's overall trail system, the need to serve areas with expanding residential populations, and the feasibility of acquisition. As of 2002, the primary acquisition targets for Columbia's trail system include key segments of the Hinkson Creek Trail, the Bear Creek Trail, and the Scotts Branch Trail. More details can be found in the *Metro Greenbelt / Trail Plan* itself.

3. The City's Department of Parks and Recreation oversees over 2,400 acres of parkland and plans for the community's future park needs.

Parks, open space, and recreational facilities play an important role in contributing to quality of life in the Columbia community. Map 3.2 below shows Columbia's park directory. An interactive version of this directory is available online at http://www.gocolumbiamo.com/ParksandRec/Parks/.

The Columbia Department of Parks and Recreation oversees over 2,400 acres of parkland. It is responsible for maintaining a total of 72 different parks, green spaces, and indoor and outdoor recreation facilities. A full inventory of the City's parks and recreational facilities can be found on the Department's website at www.gocolumbiamo.com.

MAP 3.2: PARK DIRECTORY



Source: City of Columbia, Department of Parks and Recreation, http://www.gocolumbiamo.com/ParksandRec/Parks/

The Department of Parks and Recreation is also responsible for planning for Columbia's future park needs. The *Parks, Recreation & Open Space Master Plan* produced by the Department provides very detailed information about existing park resources, as well as park financing, acquisition strategies, and recommended capital improvements to existing parks. The Parks Department has established five categories of parks using guidelines established by the National Recreation and Park Association and the Missouri Department of Natural Resources, among others. These categories

help them identify the role that particular types of parks play in a community, in order to better plan for Columbia's park and recreation needs. The five categories are: Neighborhood Parks (1/2 mile service radius), Community Parks (3 mile service radius), Regional Parks (5 mile service radius), Special Purpose Parks (city-wide service radius), and Greenbelts/Greenways/Trails (city-wide service radius). The Master Plan provides needs analyses and acquisition plans for each of the five park types.

4. In addition to City parks and recreation facilities, Columbia residents have access to numerous county, state, and federal parklands, as well as a variety of facilities associated with local educational institutions.

In addition to parks run by the City's Department of Parks and Recreation, Columbia residents have access to a number of county, state, and federal parks, and state conservation areas. Table 3.3 below lists these facilities.

Table 3.3: County, State, and Federal Park Inventory

State Parks	
Finger Lakes State Park	1,131 acres
Katy Trail State Park	225 miles
Rock Bridge State Park	2,273 acres
County Parks	
Fairgrounds	134 acres
El Chaparral	4 acres
MKT Trail - County Extension	4.2 miles
Dept of Conservation Areas	
Eagle Bluff Wildlife Area	4,269 acres
Hartsburg Access	30 acres
Hartsburg Conservation Area	655 acres
Hinkson Woods	70 acres
Providence Access	5.3 acres
Rocky Fork Lakes Wildlife Area	2,189 acres
Three Creeks State Forest	1,479 acres
Tri-City Community Lake	102 acres
Waters & C.B. Moss Wildlife Area	104 acres
National Forests	
Cedar Creek District, Mark Twain National Forest	16,300 acres

Source: Parks, Recreation & Open Space Master Plan – 2002 Update

Residents of Columbia also have access to numerous recreational facilities that are affiliated with Columbia Public Schools, the University of Missouri, Stephens College, Columbia College and various non-profit recreation providers. A full inventory can be found in the *Parks, Recreation & Open Space Master Plan*.

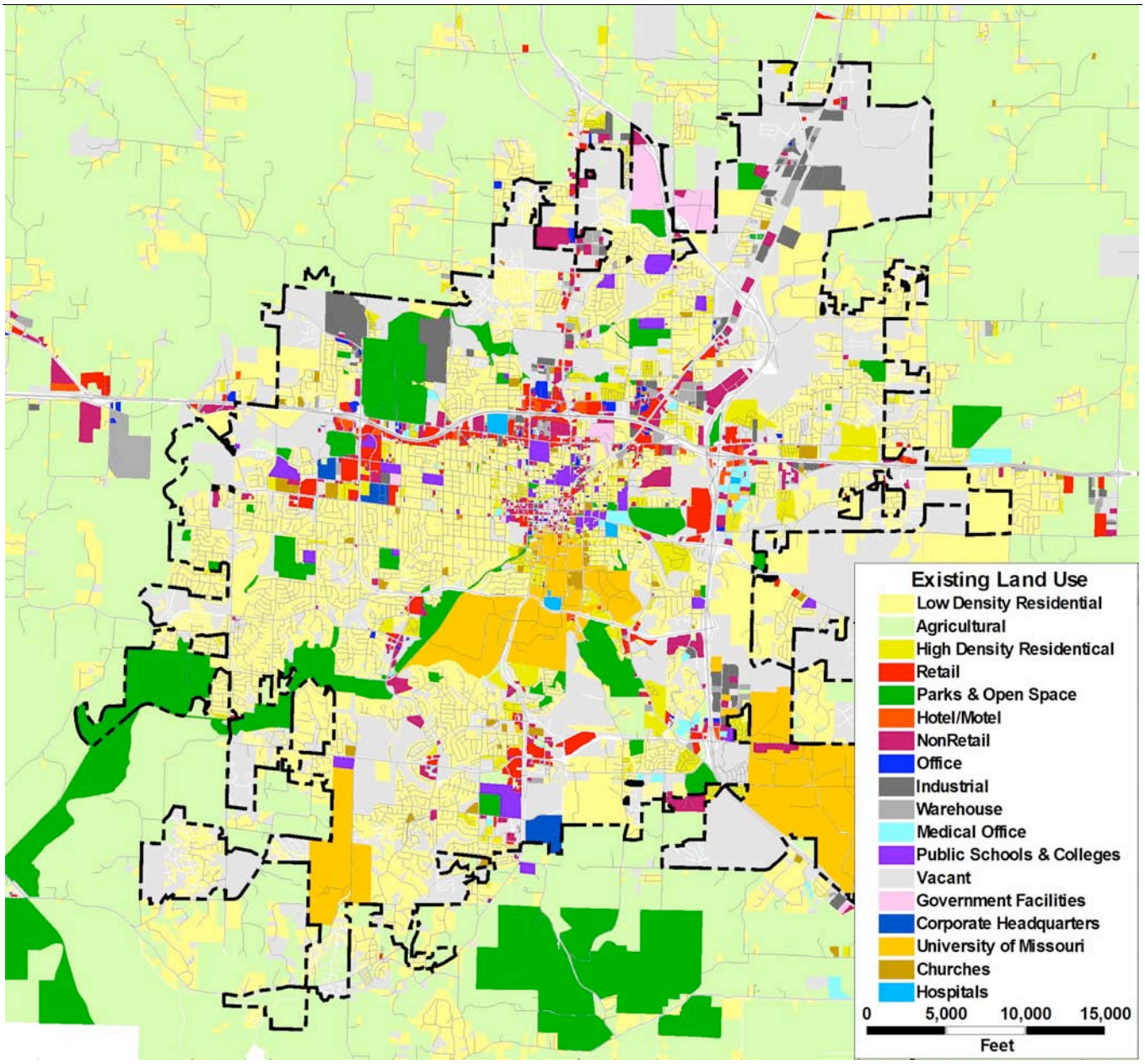
B. The Built Environment

Columbia's physical landscape has changed dramatically over the last fifty years, as additional lands have been annexed and new development has occurred. Chapter 1 – Perspective depicts Columbia's history of growth and development. This chapter provides a more detailed look at today's built environment, including existing land uses, zoning, planning initiatives that will guide Columbia's future development, and recent building permit trends.

5. A map of Columbia's existing land uses shows the distribution of residential, commercial, institutional, agricultural, and other types of land uses.

On the following page, Map 3.4 shows Columbia's existing land uses. Commercial uses tend to be concentrated along major transportation corridors, particularly Interstate 70. Single-family residences comprise a substantial portion of the southwestern area of the community. The most nuanced land uses can be found close to the city center, which features a mix of commercial and institutional uses and a variety of residential types, among other uses. Institutional land uses take up substantial tracts of land in Columbia, and school-related uses are well distributed throughout the community. The map also indicates the presence of a substantial amount of agricultural land outside the city boundaries.

MAP 3.4: EXISTING LAND USES

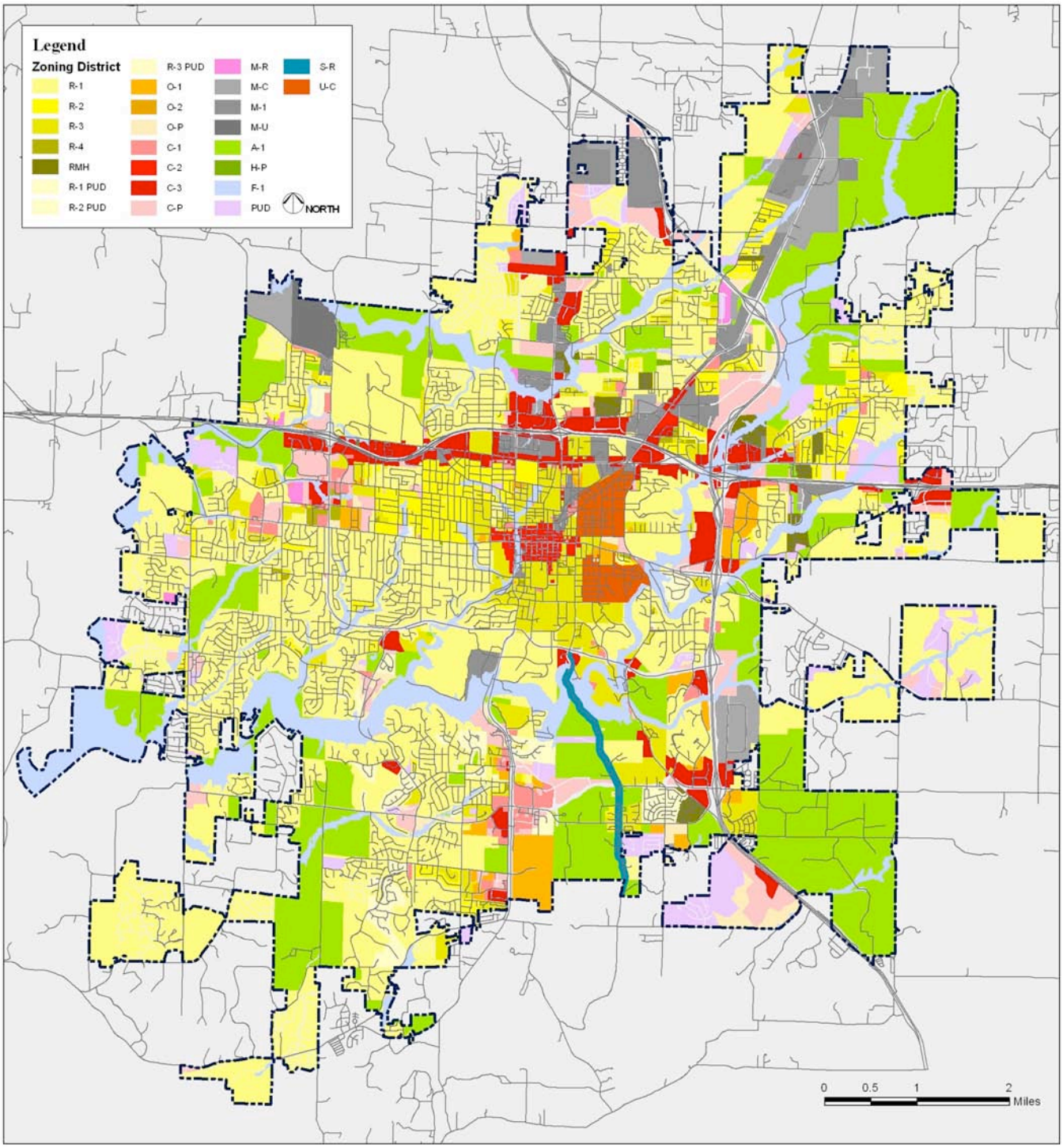


Source: City of Columbia, ACP

6. Columbia's zoning map provides a regulatory framework to direct development.

Zoning is the public regulation of land uses and building types throughout various parts of a community. Zoning provides a regulatory framework to direct development in Columbia. Map 3.5 shows Columbia's current zoning districts.

MAP 3.5: ZONING DISTRICTS



Source: City of Columbia, ACP

Detailed Legend

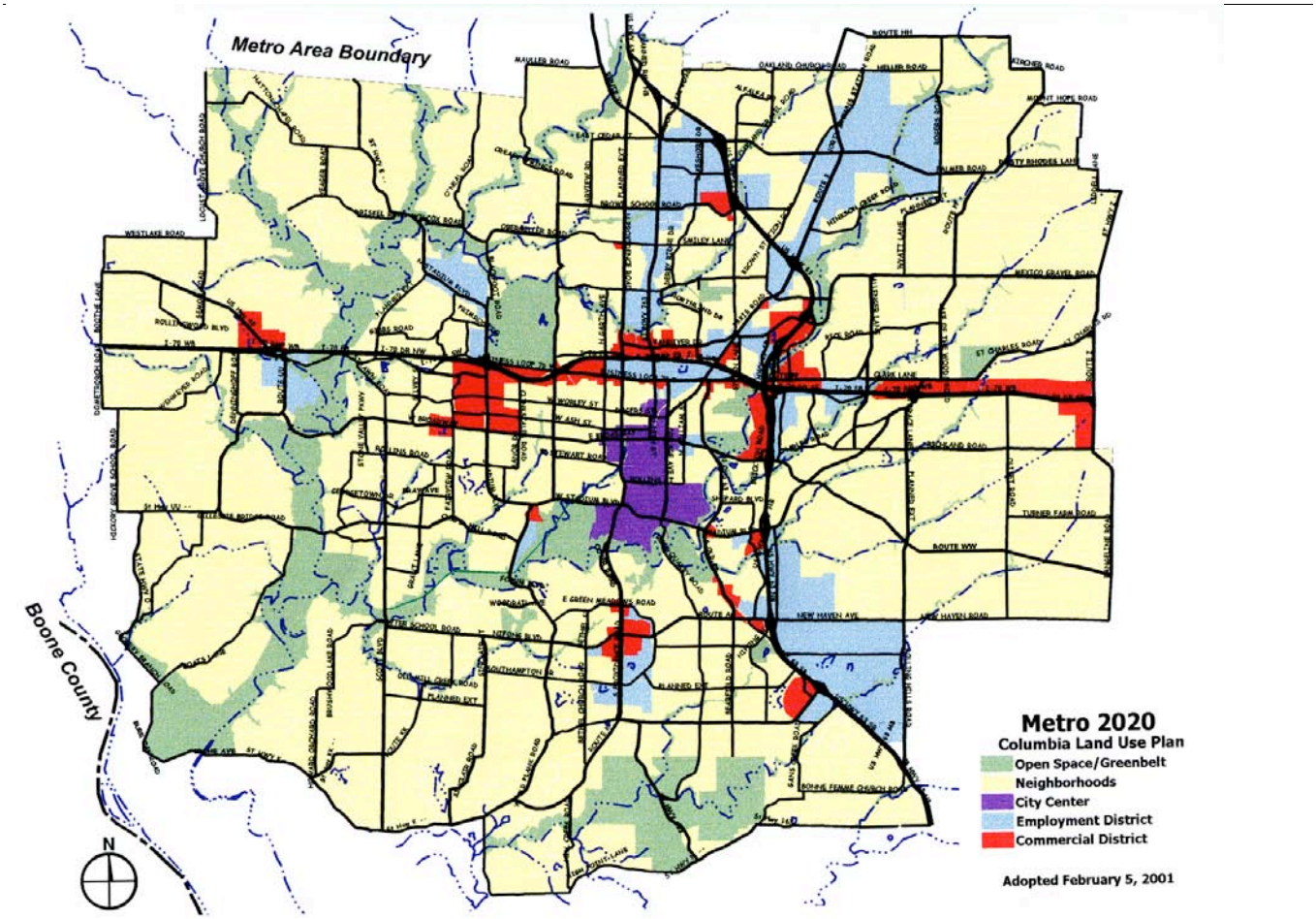
R-1	One-Family Dwelling	O-1	Office	M-R	Research Development & Office Park	S-R	Scenic Roadway Overlay District
R-2	Two-Family Dwelling	O-2	Special Office	M-C	Controlled Industrial	U-C	Urban Conservation Overlay District
R-3	Medium-Density Multi-Family Dwelling	O-P	Planned Office	M-1	General Industrial		
R-4	High-Density Multi-Family Dwelling	C-1	Intermediate Business	M-U	Underground Space		
RMH	Residential Manufactured Home	C-2	Central Business	A-1	Agricultural		
PUD	Planned Unit Development	C-3	General Business	H-P	Historic Preservation Overlay District		
		C-P	Planned Business	F-1	Floodplain Overlay		

7. The Metro 2020 Plan supports heterogeneous, yet compatible land uses within five basic districts. It covers the entire metro planning area.

The Columbia Metro 2020 Community Guide Plan serves as a generalized land use plan for the City of Columbia as well as areas of Boone County within the Columbia Metropolitan Planning Area. The Metro 2020 Plan was adopted in 2001. It builds upon previous land use plans, and addresses three major elements: land use, transportation, and community facilities. Rather than focusing on the separation of uses, Metro 2020 promotes "master planned" communities that have neighborhood centers and a variety of public amenities.

The Metro 2020 plan aggregates existing land use classifications into five basic districts: the Neighborhood District, Employment District, Commercial District, City Center, and the Open Space/Greenbelt District. (See Map 3.6 below). The plan supports heterogeneous, yet compatible uses within each district, and provides policies and principles to ensure land use compatibility. Since the plan encompasses lands beyond the existing city boundary, it also promotes compatibility of uses at a broader regional scale.

MAP 3.6: METRO 2020 LAND USE PLAN



Source: Columbia Metro 2020, http://www.gocolumbiamo.com/Planning/Plans/Land_Use/met-plan.php

8. Columbia's recent building permit data show a steady increase in the annual estimated valuation of non-residential development, from $38 million in 2000 to $74.5 million in 2005.

Property owners in Columbia must obtain a permit before a building can be erected, altered, or demolished. Building permits offer a good indication of development trends in a community. This section looks at Columbia's recent building permit trends.

Non-residential building permits cover a variety of uses, including offices, retail stores, recreational facilities, hotels, parking garages, institutional facilities, churches, industrial buildings, and gas stations, among others. Between 2000 and 2005 the City issued an average of 74 non-residential building permits each year. However, the annual estimated valuation of the buildings intended for development increased dramatically over the same time period, from $38 million in 2000 to $74.5 million in 2005.

9. Recent building permit data show a substantial increase in the number of residential permits issued. In 2005, single-family permits accounted for 87 percent of all residential permits issued.

Between 2000 and 2005, there was a steady increase in the number of residential building permits issued annually by the City of Columbia. As shown below in the Table 3.7, single-family residences clearly dominated, accounting for 87 percent of all residential permits issued in 2005. The 1,239 single-family permits issued in 2005 amounts to a 134 percent increase from the 530 single-family permits issued in 2000.

Table 3.7: Number of Residential Permits Issued Annually, by Permit Type

	Number of permits					
Type of Permit	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Single-family	530	635	743	919	1,126	1,239
Two-family	37	18	38	125	166	145
Three or four-family	0	4	13	1	1	6
Five or more family	17	7	50	47	40	36
Total Permits	584	664	844	1,092	1,333	1,426

Source: City of Columbia Department of Public Works, ACP

10. In 2005, single-family units accounted for 64 percent of all units permitted.

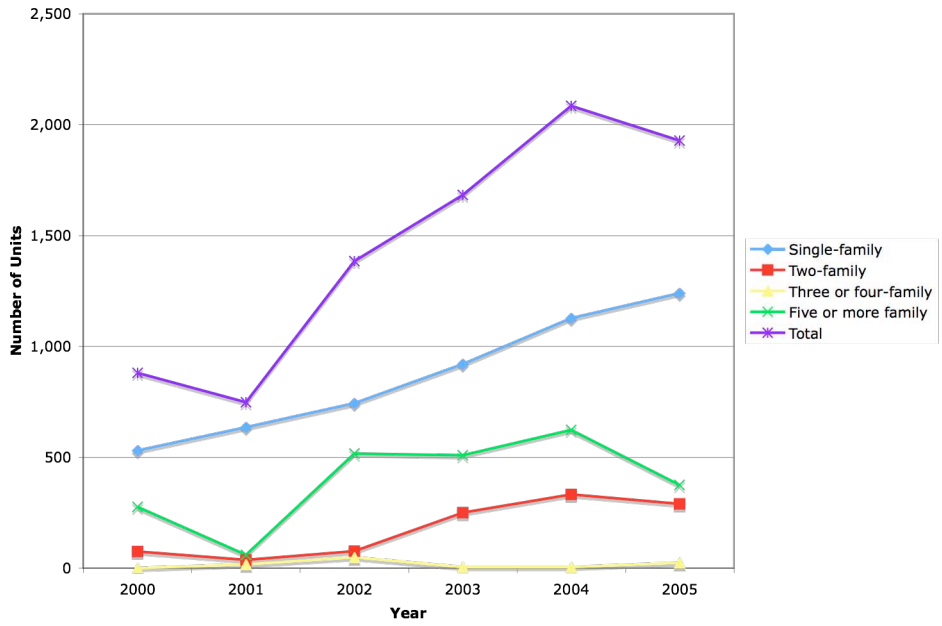
Looking at the actual number of residential *units* permitted each year, single-family residential units still dominate, although to a lesser extent. The number of single-family units permitted steadily increased between 2000 and 2005, while the other types or residential units showed varying degrees of fluctuation. In 2005, single-family units accounted for 64 percent of all units permitted. Table 3.8 and Chart 3.9 below show the annual number of units permitted from 2000 to 2005.

Table 3.8: Number of Residential Units Permitted Annually, by Permit Type

	Number of units					
Type of Permit	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Single-family	530	635	743	919	1,126	1,239
Two-family	74	36	76	250	332	290
Three or four-family	0	16	49	4	4	24
Five or more family	276	60	516	509	623	374
Total	880	747	1,384	1,682	2,085	1,927

Source: City of Columbia Department of Public Works, ACP

CHART 3.9: RESIDENTIAL UNITS PERMITTED, 2000-2005

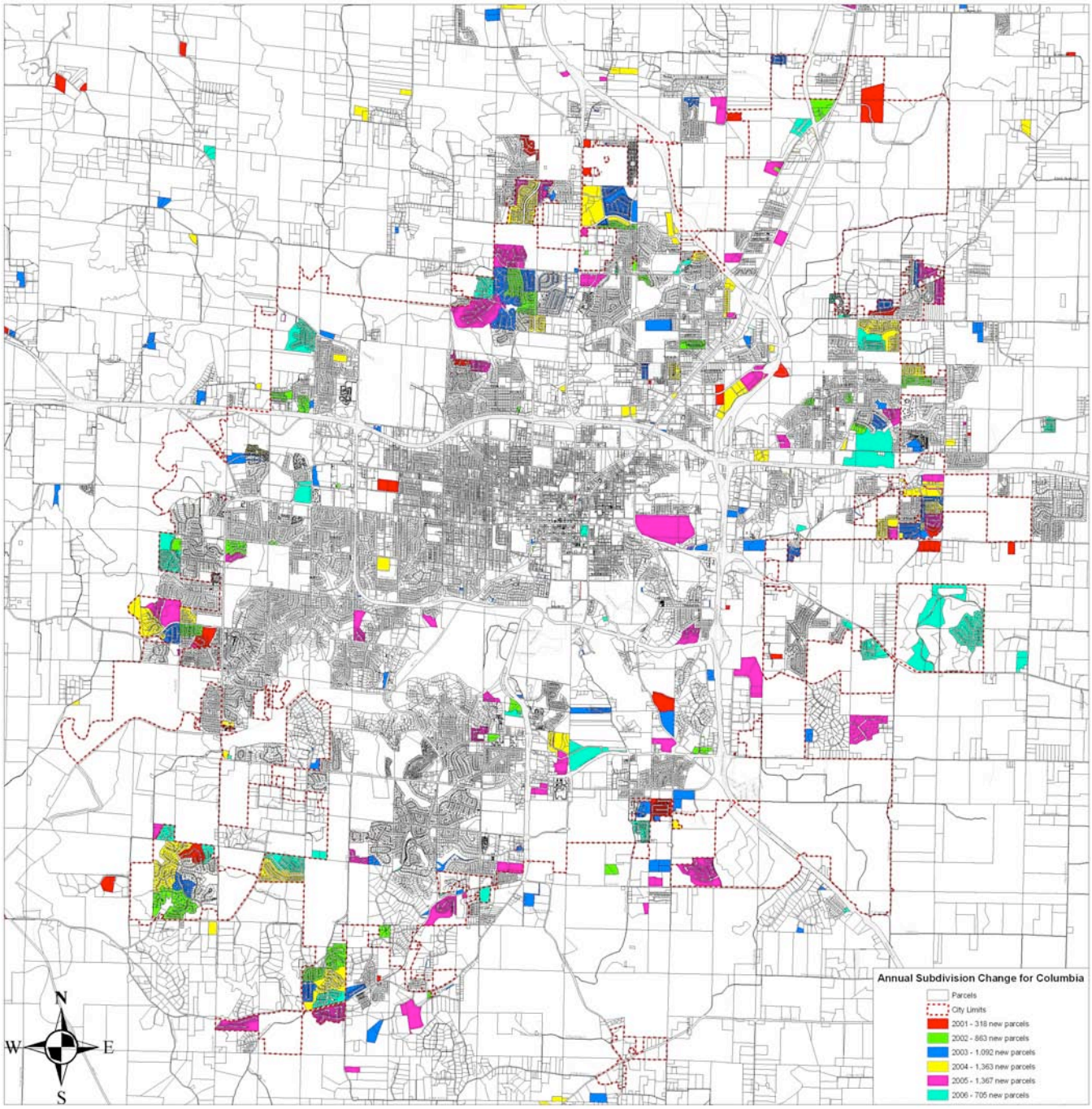


Source: City of Columbia Department of Public Works, ACP

In accordance with the increases in units permitted, the total estimated valuation of permitted residential units increased substantially over the same time period, from $74 million in 2000 to $226 million in 2005.

Map 3.10 on the following page shows the locations of new subdivisions that were platted in the Columbia area between 2001 and 2006.

MAP 3.10: ANNUAL SUBDIVISION CHANGE, 2001-2006



Source: Parcel Lines and Subdivision Information, Boone County Assessor

ATTENTION!! These maps were prepared for the inventory of real property based on the utilization of deeds, plans, and/or supportive data. In addition, map files are frequently changed to reflect changes in boundaries, lot lines and other geographic features resulting from changes in ownership, development, and other causes. The existence, dimension, and location of features, as well as other information, should not be relied upon for any purpose without actual field verification. The County of Boone makes no warranty of any kind concerning the completeness or accuracy of information contained on these maps and assumes no liability or responsibility for the use or reuse of these maps by persons not affiliated with Boone County. Use of these maps by any person not affiliated with Boone County constitutes agreement by the user to assume full liability and responsibility for the verification of the accuracy of information shown on these maps.

C. Housing

This section provides a snapshot of the housing trends in Columbia. Information outlined in this section of the chapter has been obtained from the City of Columbia Consolidated Housing and Community Development Plan 2005 – 2009 (referred to as the Consolidated Plan), US Census data from 1990 and 2000, and 2005 US Census Estimates.

11. Between 1990 and 2000, the number of housing units increased by 30.5 percent, outpacing Columbia's population growth.

New subdivision on Thornbrook Ridge Road
Source: www.realestate-columbia-mo.com

According to the Census, the housing units in Columbia increased from 27,551 units in 1990 to 35,963 units in 2000. This was a 30.5 percent increase during the ten-year period, while the population only grew by about 22 percent.

12. The proportion of single-family homes has increased since 1990, and now accounts for over half of Columbia's housing stock.

Table 3.11 comes from the Consolidated Plan. It summarizes the change in Columbia's housing stock between 1990 and 2003, in terms of specific housing types. Estimates for 2003 are based upon building permit data, which accounts for demolitions and new construction.

Table 3.11: Housing Types, 1990-2003

Units in Structure	1990	Percent	2000	Percent	2003*	Percent
1, detached	12,296	44.6%	17,238	47.9%	19,274	49.3%
1, attached	1,049	3.8%	1,787	5.0%	1,787	4.6%
2	2,372	8.6%	3,724	10.4%	3,969	10.1%
3 or 4	2,335	8.4%	3,061	8.5%	3,128	8.0%
5 to 9	3,233	11.7%	3,776	10.5%		
10 to 19	2,309	8.3%	2,237	6.2%	9,338	23.8%
20 to 49	908	3.3%	864	2.4%		
50 or more	1,044	3.7%	1,533	4.3%		
Mobile home	1,825	6.6%	1,737	4.8%	1,737	4.4%
Boat, RV, van, etc.	180	0.6%	6	0.0%	6	0.0%
Total:	27,551	100.00%	35,963	100.00%	39,239	100%

Source: 1990 and 2000 US Census, 2003 includes building permit and demolition data

In 1990, 48.4 percent of the city's housing units were single-family homes (compared to 67 percent at the national level). The proportion of single-family homes increased to 52.9 percent by 2000, and 53.9 percent by 2003.

Overall, Columbia has a significantly higher percentage of multi-family dwellings than the national average. This may be in part due to the significant role of higher education institutions in the area. In general, the increase in single-family homes has led to a corresponding decrease in the proportion of multi-family units that comprise Columbia's housing stock. For example, the proportion of multi-family apartments with 5 or more units has decreased slightly, from 27 percent in 1990 to 23.4 percent in 2000 and 23.8 percent in 2003.

13. As of 2000, 47 percent of Columbia residents own the home in which they reside. Homeownership rates among all racial groups have increased since 1990.

The 2000 US Census shows that 47 percent of Columbia residents own the home in which they reside. This figure increased from 43.8 percent in 1990. Between 1990 and 2000, homeownership rates increased for all racial groups. The White homeownership rate increased from 47.3 to 51.5 percent. African-American homeownership increased from 24 to 27.6 percent, and the rate of Asian homeownership increased from 16.5 to 24.1 percent during this time period.

14. In 2000, Columbia's housing vacancy rate was 6.1 percent.

According to the Consolidated Housing and Community Development Plan, 6.1 percent of all housing units were vacant in 2000. Estimates from 2003 indicate that owner-occupied units have a 7.5 percent vacancy rate, while only 3.4 percent of rental units are vacant.

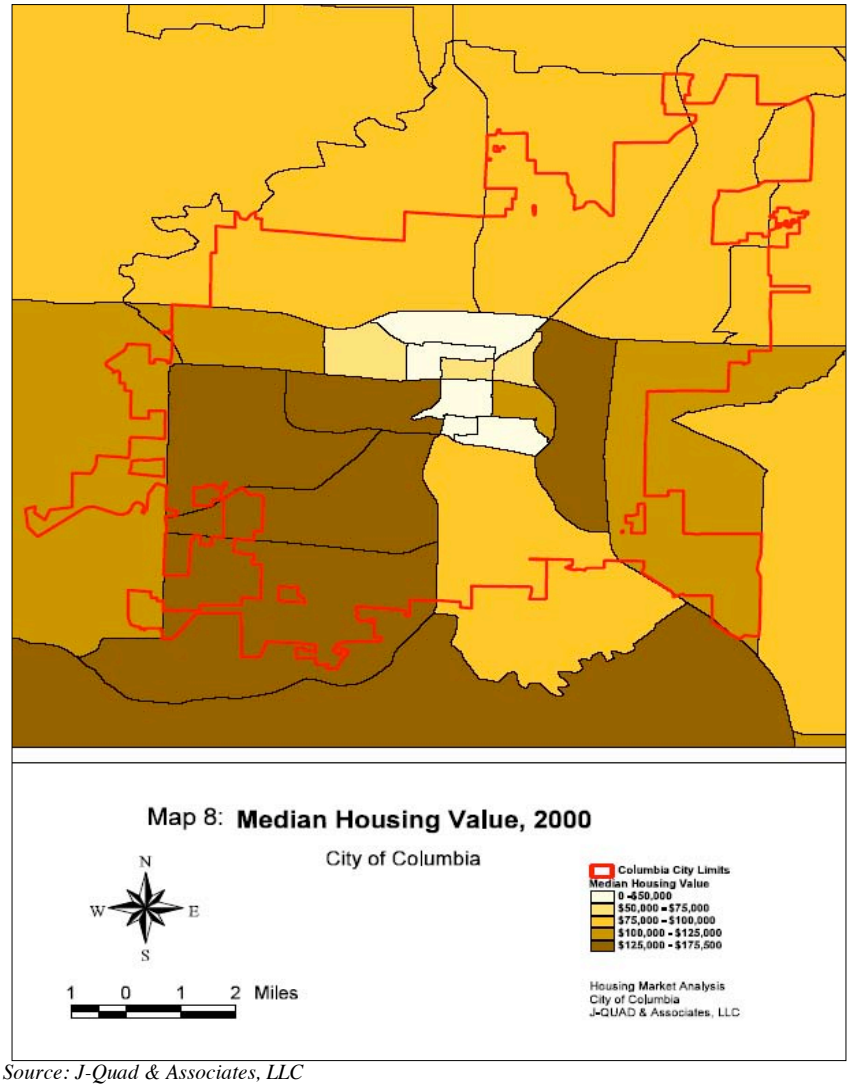
15. Median housing values increased by 25 percent between 1990 and 2000. Home values tend to be lowest in the central city.

The median housing value increased from $94,587 in 1990 to $118,500 in 2000 (an increase of 25.3%). In 1990, 75 percent of all housing units were valued at less than $100,000. By 2000, homes valued under $100,000 had decreased to 37 percent. Home values are lowest in the central city, while the more expensive homes are to the east and southwest. Map 3.12 is taken from the Consolidated Housing and Community Development Plan. It shows home values by geographic area of the city.

16. The vast majority (93.6%) of newly built single-family homes have an appraised value of $100,000 or more.

According to the Boone County Appraiser's Office, only 6.4 percent of single-family homes being built in newly developing subdivisions have an average appraised value of less than $100,000. The majority of these new homes (57.2 percent) have an appraised value of $150,000 or higher. The average value of 2,827 new single-family homes constructed between 2000 and 2003 is approximately $133,000.

MAP 3.12



Source: J-Quad & Associates, LLC

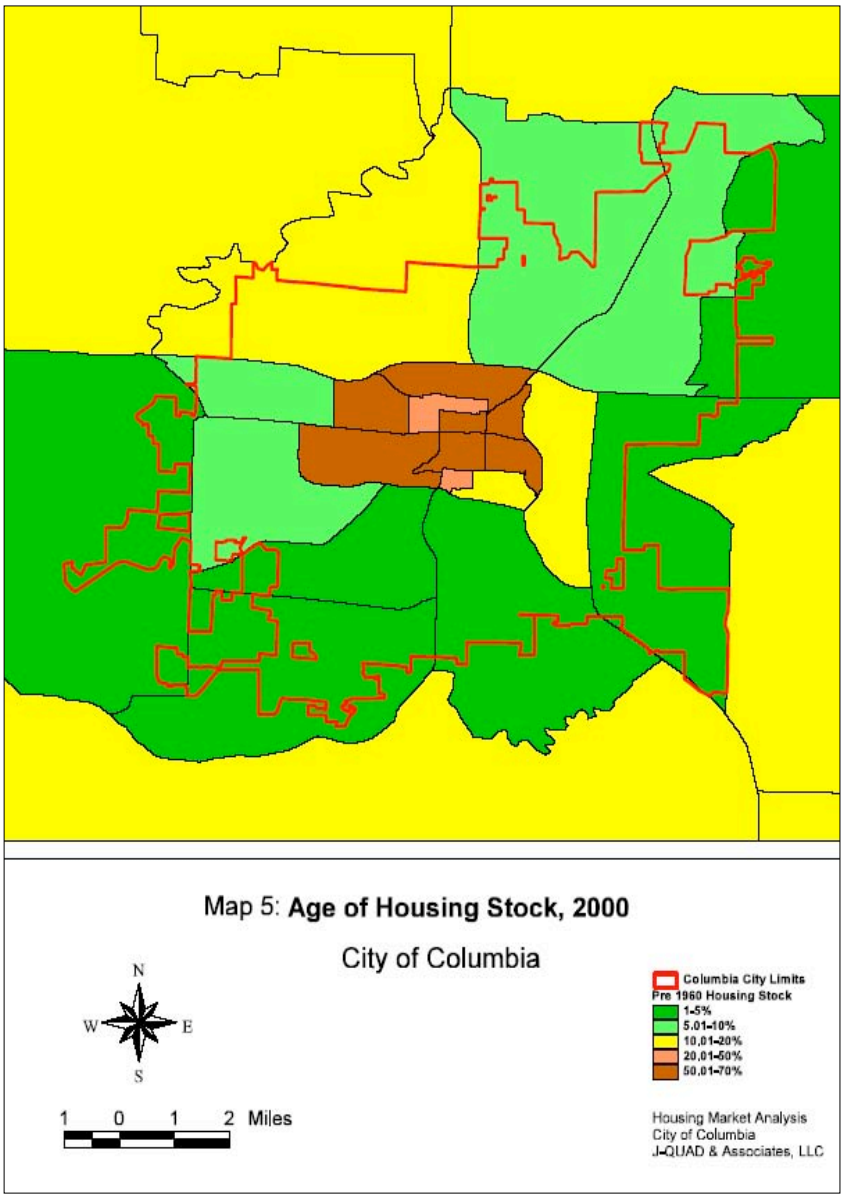
17. While the majority of households continue to rent, the proportion has decreased, from 56.2 percent in 1990 to 52.8 percent in 2000. The median gross rent increased by 37.4 percent during the same time period.

Renters represented 52.8 percent of all households in 2000, down from 56.2 percent in 1990. The median gross rent increased from $382 in 1990 to $525 in 2000 (an increase of 37.4%). The Consolidated Housing Plan provides detailed information on the range of rents in Columbia, accounting for varying apartment sizes.

18. Columbia's housing stock is relatively new. Over 67 percent of all homes are less than 30 years old.

Columbia's housing stock is relatively new. Over 67 percent of Columbia's housing stock is less than 30 years old. Less than 18 percent of homes were built before 1960. In general, older housing stock in Columbia is more apt to be in poor condition, and have lower values, particularly rental units. Older homes can also be costlier to maintain. Map 3.13, drawn from the Consolidated Plan, shows that the housing stock built prior to 1960 tends to be concentrated in the center of the city.

MAP 3.13



Source: J-Quad & Associates, LLC

19. Twenty-two percent of homeowners with a mortgage are cost burdened, meaning 30 percent or more of their household income is spent on housing costs.

An important indicator of housing affordability is the cost burden of housing. A household is considered cost burdened if 30 percent or more of the household income is spent on housing. Table 3.14, drawn from the Consolidated Plan, shows owner costs of a unit as a percentage of household income. The data reveals that a significant number of residents (22%) who own a home with a mortgage are paying more than 30 percent of their income towards housing costs.

Table 3.14:

Owner Costs As A Percentage of Household Income	
Housing unit with a mortgage	14,592
Less than 20.0 percent	7,321
20.0 to 24.9 percent	2,596
25.0 to 29.9 percent	1,361
30.0 to 34.9 percent	906
35.0 percent or more	2,245
Not computed	163
Housing unit without a mortgage	4,891
Less than 10.0 percent	1,981
10.0 to 14.9 percent	1,526
15.0 to 19.9 percent	457
20.0 to 24.9 percent	451
25.0 to 29.9 percent	0
30.0 to 34.9 percent	157
35.0 percent or more	319
Not computed	0

Source: 2005 US Census Estimates

20. A significant percentage (44%) of renters are also considered cost-burdened, but the presence of a large student population impacts this figure.

According to the 2000 Census, over 44 percent of all households in rental units paid more than 30 percent of their income for housing and, of that group, over 56 percent paid more than 50 percent of their income. Lower income groups are particularly affected. These levels reflect the high number of students in Columbia who are more likely to be shown as rent burdened because their household income is low even though they may be receiving support from other sources. It is not possible to calculate the percentage of non-student rental households that are cost-burdened.

21. Median income increases outpaced median rent increases between 1990 and 2000.

The median rent for the Columbia area has increased from $382 in 1990 to $525 in 2000, an increase of 37 percent. During the same time period median income increased by 53 percent. This may indicate that the average renter can afford the increased rental costs. However, those at the lower end of the income scale tend to realize smaller income gains and therefore may spend more of their income on rent.

22. Columbia has a relatively even distribution of renters in different income groups, suggesting the need for rental units that meet various price points and preferences.

There appears to be a relatively even distribution of renters across various income groups. This may create an increased demand for higher end units from higher income groups and college students sharing apartments. This demand for higher end units can raise market rents, resulting in reduced affordability for low-income households. The strong presence of higher income groups in Columbia's rental market points to the need for rental units that meet a wide range of price points and preferences, from very low-income to very high-income households.

23. Approximately six percent of the housing units in Columbia are subsidized for low-income households, but no additional units have been constructed since 1999.

Just over 2,350 subsidized housing units currently exist in Columbia to serve low-income households, representing approximately six percent of all existing housing units. These housing units are owned and operated by both public and private entities. The Columbia Housing Authority (CHA), which owns 720 units, administers public housing in Columbia. Based on the information reviewed, no additional subsidized units have been constructed since 1999.

Resources

This section lists the information sources that were used in preparing this chapter. It also suggests some additional resources that may be helpful for further investigation into particular topics.

A. Green Infrastructure

- City of Columbia (www.gocolumbiamo.com)
  - Metro Greenbelt / Trail Plan
  - Parks, Recreation & Open Space Master Plan – 2002 Facility Needs Update

Suggested additional green infrastructure resources:

- Columbia Parks & Recreation Trail Guide (brochure)
- Columbia Parks and Facilities Guide (brochure)
- Leisure Times – your guide to Columbia's recreational opportunities (periodical)
- MKT Nature and Fitness Trail (brochure)

B. Built Environment

- Boone County (www.showmeboone.com)
  - Assessor's Office
  - Geographic Information System Department
- City of Columbia
  - Columbia Metro 2020 – a planning guide for Columbia's future
  - Department of Public Works – Reports of the Building Inspector, 2000-2005

C. Housing

- City of Columbia
  - Consolidated Housing and Community Development Plan, 2005-2009
- US Census (www.census.gov)

Suggested additional housing resources:

- City of Columbia
  - Analysis of Impediments to Fair Housing Choice (report)
  - City of Columbia Housing Development Programs (brochure)
  - City of Columbia, Missouri Community Development Action Plan
  - Columbia Housing Authority Revitalization Plan
  - Homeownership Assistance Program (brochure)
  - Owner-Occupied Housing Rehabilitation Program (brochure)