

Frayser

A Turning Point



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I. INTRODUCTION

Purpose and Scope. The following report addresses transportation in Frayser. The transportation system affects a variety of issues, such as housing, commercial development, imageability, and social connections. The purpose of this report is to identify issues, opportunities, desires, and possible solutions that are related to Frayser's transportation system. The scope of the report includes identifying and analyzing conditions and trends in Frayser's demographic and land use patterns as they relate to safety, accessibility, connectivity, and imageability within the community and the region. Frayser's transportation systems and their effects on social cohesion, housing, commercial and industrial areas, and aesthetics will be considered. Specifically, this report will focus on Frayser's major streets and commercial areas, the Rugby Hills neighborhood, the Ridge Grove neighborhood, and the area directly south of Ridge Grove. (Collectively, the Ridge Grove neighborhood and the area south of it will be referred to in this report as "Range Line.")

Impact of Transportation on Neighborhoods. Transportation planning is often interrelated with many different disciplines and programs. According to Sandra Rosenbloom and Alan Black in their chapter on transportation planning in, *The Practice of Local Governmental Planning*, "land use, housing, social services, and economic development programs often have significant transportation components or depend on transportation services to succeed." Since other aspects of planning are directly related to transportation, it is important for transportation to be a significant component of any planning process.

The relationship between transportation and other planning disciplines is not one way. Often transportation is seen to be interconnected to other disciplines. The classic example is the effect of land use on transportation and vice versa. Dense land use patterns will affect the transportation

network. Similarly, transportation can help to create dense land use patterns, particularly with the use of public transportation systems such as subways and light rail systems.

Study Area. Frayser is six miles due north of downtown Memphis (Map1). The geographic and physical layout of Frayser isolates it from the rest of the Memphis metropolitan area. This is largely due to the fact that Frayser is bounded by three rivers; the Mississippi to the west, the Wolf to the south and the Loosahatchie to the north. The eastern border of Frayser is the ICRR rail line which also acts as a barrier to Frayser. The lack of connectivity across its different borders isolates Frayser (Map 2).

Organization of the Report. This section focuses on the existing state of the Frayser community. First, an overview of transportation systems and their relationship to communities is reviewed to provide a national perspective on this issue. Next, history of Frayser and previous plans for the area are discussed.

Two visual surveys were performed to gauge the overall health of the community. Visual survey One focused on the condition of the community's transportation system, and the findings of this survey are further reviewed. The next survey, Visual survey Two, analyzed the land uses and conditions of two smaller areas within Frayser. The methodology used in the second survey and its findings are reviewed, as well.

The current conditions of the community along with a detailed view of its transportation system from social, housing, imageability, and regional perspectives give further insight into the strengths and weaknesses of the community. Frayser trends will be identified and issues that were recognized during this evaluation process will be addressed in terms of safety, accessibility, connectivity, and imageability.

Once conditions, trends, issues, and opportunities are identified, scenarios that are aimed at improving the transportation network are developed. These future scenarios consist of projections, a continuation of trends over the next 20 years, and alternate scenarios.

After the state of the community was fully studied, citizen input was collected in order to gain consensus on the community concerns and the community vision. The knowledge gained and the prioritized concerns that were developed from citizen meetings have been applied to create goals and objectives for the future of the Frayser community.

Once the Frayser vision was complete, implementation strategies aimed at achieving the community goals and addressing the prioritized concerns are outlined. The outline of these strategies not only includes ways to remedy existing concerns, but it also provides funding sources that can make implementation of these strategies more feasible.

II. BACKGROUND

Frayser is an important component of the Memphis area, and it is necessary to study its character and past development. This section will provide background information on Frayser through a glance at its history, demographic composition, economic shifts, and housing tenure. A number of plans have been developed in previous years that relate to Frayser. These plans cover a range of topics and give a variety of recommended strategies for the area. In addition to a brief history and census overview, each of these previous plans will be highlighted.

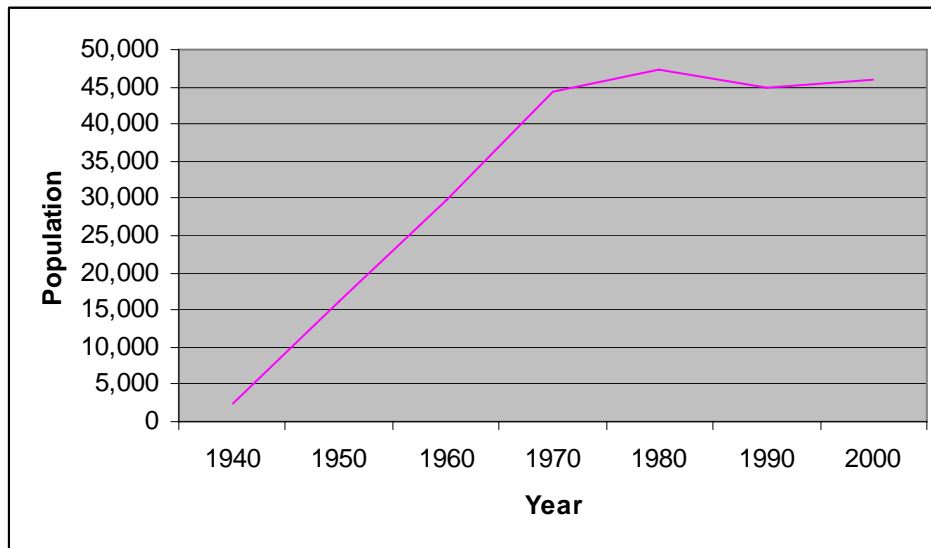
Frayser History. Frayser initially began as a suburban town built around the Illinois Central railroad in the mid-19th century (*Frayser Futures*, 2003). By the late 1870s, the area had a post office and a general store, as well as a name. The town was named *Frayser* in honor of a Memphis doctor who often visited the area.

Rugby Hills, the first subdivision in Frayser, consisted of 900 parcels and was platted in the late 1890s (*Frayser Futures*, 2003). Around the same time, Overton Crossing was developed as Rugby Hills' primary arterial. Other major roads that were developed or expanded in the late 19th and early 20th centuries included Watkins, Frayser-Raleigh, Hindman Ferry, Second, and Thomas. Development in West Frayser began with Jefferson Park in the early 1930s and Shirley Park in the early 1940s.

Commercial and industrial development in the 1940s caused Frayser to begin growing significantly (*Frayser Futures*, 2003). Both West Frayser and Rugby Hills had shopping centers to serve their populations. By 1950, the new International Harvester plant in West Frayser near the Mississippi River had more than 2,600 employees; the nearby Firestone plant and other industries brought thousands of additional jobs to North Memphis and Frayser. The area became part of the City of Memphis in 1958. Throughout the 1950s and 1960s, Frayser continued to grow, largely in response to the need for an industrial workforce in North Memphis and Frayser. Even into the 1970s, Frayser continued growing. New schools and shopping centers were built

to accommodate the growing population. Chart 1 shows the dramatic population increase experienced by Frayser between 1940 and 1970.

Chart 1. Population, Frayser, 1940-2000



Source: *Frayser Futures*, U.S. Census Bureau

Frayser experienced a population decline throughout the 1980s due to difficult economic times that began in 1980 after International Harvester eliminated 640 jobs, or 20 percent of its workforce (*Frayser Futures*, 2003). Another 850 jobs were lost at International Harvester in 1982, leaving the factory with half the workforce it had at its peak. In 1985, International Harvester discharged the rest of its employees and closed permanently. The loss of Firestone around this same time caused further damage to Frayser. Throughout the 1980s and 1990s, Frayser transitioned from a white, middle-class area to a more racially diverse, economically struggling area.

Demographics. Frayser has been marked as a community in transition. A study of Frayser's demographics reveals a community whose numerical population has been stable for the last two decades. However, Frayser's racial composition, age makeup, and educational attainment level have changed significantly. The numbers of African-Americans, younger people, and people with at least a high school diploma have increased since 1990.

(Population). From 1990 to 2000, Frayser grew by 2.26 percent, considerably lower than Shelby County's 8.61 percent growth during that same period. The Rugby Hills neighborhood remained virtually unchanged, while the Range Line neighborhood grew by more than 11 percent. Table A shows population changes for Rugby Hills, Range Line, Frayser, and Shelby County. (Note: Throughout the demographics and economics sections, "Frayser" will refer to the 38127 ZIP Code, which includes both the Frayser community and the small Northaven community, which is located northwest of Frayser. See Map 3.)

Table A. Population

	1990	2000	Change 1990-2000	Percent Change 1990-2000
Rugby Hills	7,899	7,925	26	0.32
Range Line	3,870	4,299	429	11.09
Frayser	44,933	45,950	1,017	2.26
Shelby County	826,330	897,472	71,142	8.61

Source: Demographics Now, U.S. Census

(Households). Though Frayser gained population between 1990 and 2000, it lost households. This is typically due to larger families and/or an increase in the number of people sharing common quarters. Rugby Hills experienced a similar decrease in households. Meanwhile, the growth rate in the number of households exceeded the population growth rate in Range Line; the Range Line neighborhood's number of households grew at a faster rate than that of Shelby County. Table B shows household changes for the four geographic areas.

Table B. Households

	1990	2000	Change 1990-2000	Percent Change 1990-2000
Rugby Hills	2,743	2,727	-16	-0.58
Range Line	1,097	1,304	207	18.86
Frayser	15,768	15,688	-80	-0.51
Shelby County	303,571	338,366	34,795	11.46

Source: Demographics Now, U.S. Census

(Race). In 1990, the overall racial composition of Frayser closely resembled that of Shelby County. Whites made up 52.3 percent of Frayser's population in 1990, compared to 55.1 percent of Shelby County's population. Rugby Hills reflected the racial demographics of Frayser and

Shelby County; Range Line, however, was 80.8 percent black in 1990. The percentage of people of Hispanic ethnicity in Frayser was similar to that in Shelby County in 1990. Table C shows race for the four geographic areas in 1990.

Table C. Race, 1990

	White	Black	Hispanic Ethnicity
Rugby Hills	54.0	45.5	0.6
Range Line	18.2	80.8	0.9
Frayser	52.3	46.7	0.7
Shelby County	55.1	43.6	0.9

Source: Demographics Now, U.S. Census

Frayser experienced a dramatic racial shift between 1990 and 2000. The 2000 Census showed that the white population of Frayser decreased from 52.3 percent to 23.9 percent. Again, changes in the Rugby Hills neighborhood reflected the changes that occurred in the larger Frayser area. The white population continued its numerical decrease in Range Line. Growth among the Hispanic community was slower in Frayser than in Shelby County. Table D shows race for the four geographic areas in 2000.

Table D. Race, 2000

	White	Black	Hispanic Ethnicity
Rugby Hills	25.8	72.2	1.0
Range Line	7.1	91.1	1.2
Frayser	23.9	74.2	1.2
Shelby County	47.3	48.6	2.6

Source: Demographics Now, U.S. Census

(Age). While Shelby County aged between 1990 and 2000, Frayser became younger. The median age in Frayser went from just under 30 in 1990 to just under 28 in 2000. Both Rugby Hills and Range Line decreased in age during that time, though Rugby Hills' change was more dramatic. Table E shows median age for the four geographic areas.

Table E. Median Age

	1990	2000	Change 1990-2000
Rugby Hills	30.6	28.8	-1.8
Range Line	26.8	26.2	-0.4
Frayser	29.9	27.8	-2.1
Shelby County	31.3	33.0	2.7

Source: Demographics Now, U.S. Census

(Educational Attainment). Rugby Hills lost seven percent of its age 25-and-older population between 1990 and 2000. The number of high school dropouts increased by 18 percent; during that same period, the number of people with some college, no degree decreased by 14 percent, and the number of people with bachelors degrees decreased by nearly 34 percent. Interestingly, the number of people with associates degrees increased by 17 percent. A satellite campus of Memphis' community college in Frayser may be responsible in part for that increase. Table F shows educational attainment for Rugby Hills.

Table F. Educational Attainment for Population Aged 25+, Rugby Hills

	1990	2000	Change 1990-2000	Percent Change 1990-2000
Age 25+ Population	4,681	4,343	-338	-7.2
Grade K-8	481 10.3%	224 5.2%	-257	-53.4
Grade 9-12	830 17.7%	981 22.6%	151	18.2
High School Grad	1,736 37.1%	1,685 38.8%	-51	-2.9
Some College, No Degree	1,020 21.8%	875 20.1%	-145	-14.2
Associates Degree	170 3.6%	199 4.6%	29	17.1
Bachelors Degree	326 7.0%	216 5.0%	-110	-33.7
Graduate Degree	119 2.5%	92 2.1%	-27	-22.7
No Schooling	*	73 1.7%	*	*

Source: Demographics Now, U.S. Census

Range Line saw considerable increases in the number of high school graduates, two-year college graduates, and four-year college graduates. Range Line experienced only a nominal gain in high school dropouts. Table G shows educational attainment for Range Line.

Table G. Educational Attainment for Population Aged 25+, Range Line

	1990	2000	Change 1990-2000	Percent Change 1990-2000
Age 25+ Population	2,023	2,217	194	9.6
Grade K-8	314 <i>15.5%</i>	126 <i>5.7%</i>	-188	-59.9
Grade 9-12	552 <i>27.3%</i>	558 <i>25.2%</i>	6	1.1
High School Grad	646 <i>31.9%</i>	784 <i>35.4%</i>	138	21.4
Some College, No Degree	379 <i>18.8%</i>	457 <i>20.6%</i>	78	20.6
Associates Degree	66 <i>3.3%</i>	125 <i>5.7%</i>	59	89.4
Bachelors Degree	49 <i>2.4%</i>	125 <i>5.7%</i>	76	155.1
Graduate Degree	18 <i>0.9%</i>	29 <i>1.3%</i>	9	0.5
No Schooling	*	12 <i>0.5%</i>	*	*

Source: Demographics Now, U.S. Census

Range Line was a bright spot for Frayser with regard to educational attainment between 1990 and 2000. During that time, Frayser experienced decreases in two-year, four-year, and graduate degree-holders. Frayser's decreases resemble those of Rugby Hills. Notably, Frayser's high school dropout rate decreased by 2.1 percent between 1990 and 2000. Table H shows educational attainment for Frayser.

Table H. Educational Attainment for Population Aged 25+, Frayser

	1990	2000	Change 1990-2000	Percent Change 1990-2000
Age 25+ Population	26,199	24,718	-1,481	-5.7
Grade K-8	2,649 10.1%	1,321 5.3%	-1,328	-50.1
Grade 9-12	5,688 21.7%	5,567 22.5%	-121	-2.1
High School Grad	9,492 36.2%	9,585 38.8%	93	1.0
Some College, No Degree	5,237 20.0%	5,169 20.9%	-68	-1.3
Associates Degree	1,144 4.4%	977 4.0%	-167	-14.6
Bachelors Degree	1,400 5.3%	1,202 4.9%	-198	-14.1
Graduate Degree	596 2.3%	575 2.3%	-21	-3.5
No Schooling	*	322 1.3%	*	*

Source: Demographics Now, U.S. Census

In 2000, Frayser and the two target neighborhoods lagged behind Shelby County in educational attainment. Those holding at least a bachelor's degree made up 25.3 percent of Shelby County's population in 2000, while making up only 7.2 percent of Frayser's population. Rubgy Hills and Range Line had lower college graduation rates, 7.1 percent and 7 percent, respectively. Range Line's college graduation rate, however, grew at a faster pace than Shelby County's rate. Table I shows educational attainment for Shelby County.

Table I. Educational Attainment for Population Aged 25+, Shelby County

	1990	2000	Change 1990-2000	Percent Change 1990-2000
Age 25+ Population	506,785	556,930	50,145	10.0
Grade K-8	45,489 9.0%	26,426 4.7%	-19,063	-41.9
Grade 9-12	80,553 15.9%	74,025 13.3%	-6,528	-8.1
High School Grad	137,524 27.1%	145,765 26.2%	8,241	6.0
Some College, No Degree	113,654 22.4%	134,165 24.1%	20,511	18.0
Associates Degree	24,048 4.8%	29,201 5.2%	5,153	21.4
Bachelors Degree	69,266 13.7%	91,268 16.4%	22,002	31.8
Graduate Degree	36,248 7.2%	49,493 8.9%	13,245	50.5
No Schooling	*	6,590 1.2%	*	*

Source: Demographics Now, U.S. Census

(Travel Time). In 2000, Frayser had a working age population (age 16+) of 18,661, nearly 60 percent of whom traveled less than 30 minutes to their places of employment. Nearly one-quarter of Frayser's working population traveled 30 to 34 minutes to get to work. Only 1.2 percent of Frayser's workers worked at home in 2000. Table J shows travel time to work for employed people age 16 and older in Frayser.

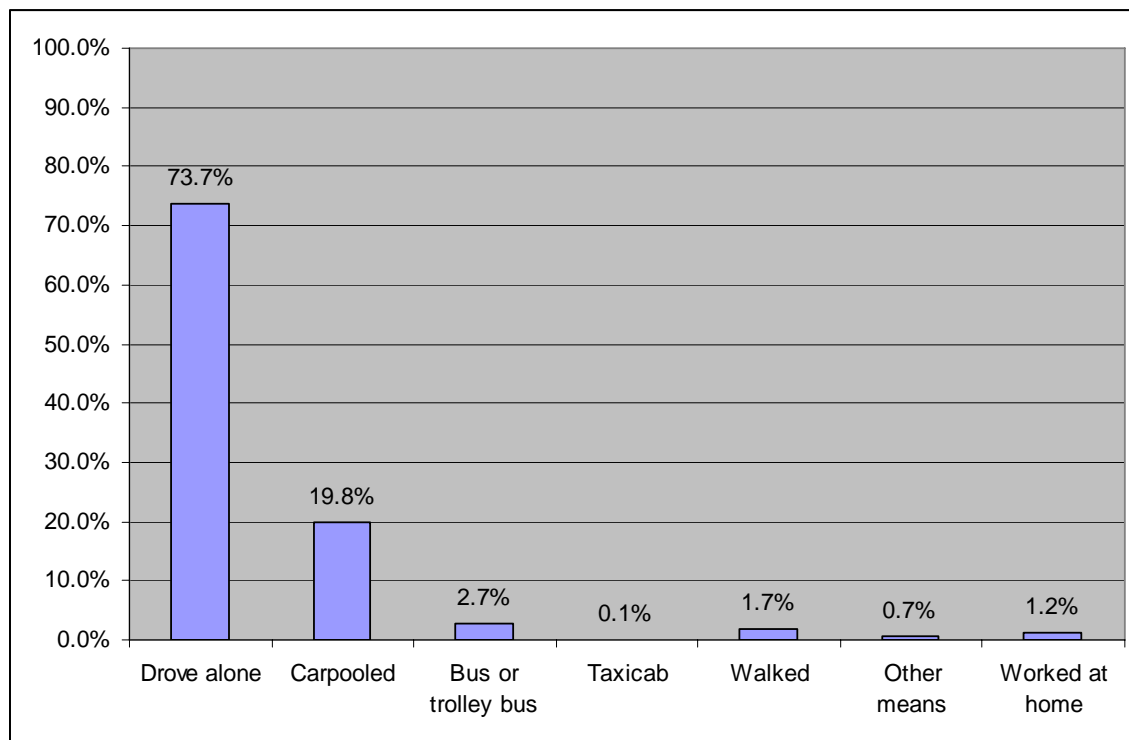
Table J. Travel Time to Work for Frayser Workers Age 16 and Older, 2000

Total Employed Persons Age 16 and Older:	18,661	
Travel time less than 5 minutes	269	1.4%
5 to 9 minutes	854	4.6%
10 to 14 minutes	1,643	8.8%
15 to 19 minutes	3,174	17.0%
20 to 24 minutes	3,706	19.9%
25 to 29 minutes	1,436	7.7%
30 to 34 minutes	4,302	23.1%
35 to 39 minutes	516	2.8%
40 to 44 minutes	377	2.0%
45 to 59 minutes	1,172	6.3%
60 to 89 minutes	462	2.5%
90 or more minutes	519	2.8%
Worked at home	231	1.2%

Source: Demographics Now, U.S. Census

In 2000, nearly 74 percent of Frayser's working population over age 16 drove to work alone. Carpooling accounted for nearly 20 percent of the remaining workers' means of transportation to work. Only 2.7 percent of Frayser's workers relied on public transportation, while 1.7 percent walked to work. According to census data, no one in Frayser relied on bicycling as a means of getting to work. Chart 2 shows means of transportation to work in 2000 for employed people age 16 and older in Frayser.

Chart 2. Means of Transportation to Work for Frayser Workers Age 16 and Older, 2000



Source: *Demographics Now, U.S. Census*

Economy. Frayser's economic situation declined between 1990 and 2000. Overall, the community showed losses in median income and per capita income, while showing increases in unemployment and poverty rates. Rugby Hills reflects the changes within the larger Frayser community, while Range Line has improved its economic characteristics.

(Income). Between 1990 and 2000, Frayser experienced a 7.9 percent decrease in median household income when adjusted for inflation. Rugby Hills' median household income decreased nearly 29 percent. Range Line, on the other hand, saw a modest gain. However, both neighborhoods and the larger Frayser area lagged far behind the growth in median household income experienced by Shelby County between 1990 and 2000. Table K shows median household income with inflation adjustment.

Table K. Median Household Income with Inflation Adjustment (in Dollars)

	1990	2000	Inflation Adjusted 2000 (1990 \$s)	Change (Inflation Adjusted) 1990-2000	Percent Change (Inflation Adjusted) 1990-2000
Rugby Hills	25,561	24,388	18,210	-7,351	-28.8
Range Line	19,978	27,247	20,344	366	1.8
Frayser	22,358	27,578	20,591	-1,767	-7.9
Shelby County	27,141	39,593	29,562	2,421	8.9

Source: Demographics Now, U.S. Census

Both Rugby Hills and the larger Frayser area experienced decreases in per capita income (when inflation adjusted) between 1990 and 2000. Range Line, however, experienced a significant increase. Shelby County's per capita income grew by 17 percent from 1990 to 2000. Table L shows per capita income with inflation adjustment.

Table L. Per Capita Income with Inflation Adjustment (in Dollars)

	1990	2000	Inflation Adjusted 2000 (1990 \$s)	Change (Inflation Adjusted) 1990-2000	Percent Change (Inflation Adjusted) 1990-2000
Rugby Hills	9,844	11,044	8,246	-1,598	-16.2
Range Line	6,835	10,244	7,649	814	11.9
Frayser	9,146	11,577	8,644	-502	-5.5
Shelby County	13,304	20,856	15,572	2,268	17.0

Source: Demographics Now, U.S. Census

(Employment). Unemployment became a growing concern in Frayser between 1990 and 2000. While Shelby County's unemployment rate decreased from 7.1 percent to 6.8 percent, Frayser saw a jump from 8.7 percent to 11.7 percent in unemployment. Rugby Hills saw an increase from 7.6 percent to 9.5 percent. Range Line, however, decreased from 16.4 percent to 14 percent. Table M shows unemployment rates for the four geographic areas.

Table M. Unemployment Rates

	1990	2000	Change 1990-2000
Rugby Hills	7.6	9.5	1.9
Range Line	16.4	14.0	-2.4
Frayser	8.7	11.7	3.0
Shelby County	7.1	6.8	-0.3

Source: Demographics Now, U.S. Census

(Poverty). Poverty is a major concern in Frayser. Between 1990 and 2000, poverty rates increased in Frayser as a whole, as well as the individual neighborhoods of Rugby Hills and Range Line; the poverty rate in the Rugby Hills area jumped from 12.5 percent to 29.4 percent during that time. In 2000, 16 percent of Shelby County's population lived below the poverty level, while nearly 26 percent of Frayser's population lived below the poverty level. Range Line's poverty rate resembled that of Frayser as a whole.

Table N. Poverty Rates

	1990	2000	Change 1990-2000
Rugby Hills	12.5	29.4	16.9
Range Line	25.7	26.1	0.4
Frayser	23.0	25.9	2.9
Shelby County	18.3	16.0	-2.3

Source: Demographics Now, U.S. Census

Housing. The home ownership rate in Shelby County increased between 1990 and 2000 from 55.1 percent to 58.8 percent. During that same time, the ownership rate in Frayser decreased from 60.5 percent to 59.3 percent. Renter-occupied units in Frayser increased numerically from 1990 to 2000, though an increased vacancy rate caused a slight percentage decline in renter-occupied units. The home ownership decline in Rugby Hills resembled that of the larger Frayser area. Range Line was the bright spot in Frayser; the number of owner-occupied units increased by 155 between 1990 and 2000. The number of renter-occupied housing units increased in Rugby Hills, Range Line, Frayser, and Shelby County. Table O shows tenure across the four geographic areas.

Table O. Tenure

	1990				2000			
	Total Units	Own	Rent	Vacant	Total Units	Own	Rent	Vacant
Rugby Hills	2,945	1,760 59.8%	983 33.4%	202 6.8%	2,931	1723 58.8%	1,004 34.3%	204 6.9%
Range Line	1,162	785 67.5%	313 26.9%	64 5.6%	1,387	940 67.7%	364 26.3%	83 6.0%
Frayser	16,865	10,200 60.5%	5,568 33.0%	1,097 6.5%	17,000	10,087 59.3%	5,601 32.9%	1,312 7.8%
Shelby Co.	327,796	180,490 55.1%	123,081 37.5%	24,225 7.4%	362,954	213,360 58.8%	125,006 34.4%	24,588 6.8%

Source: *Demographics Now*, U.S. Census

Previous Plans. This section will discuss the components of previous plans conducted in the Memphis metropolitan area and their relationship to Frayser. The plans that will be outlined include *Frayser Futures* (2001), Frayser Foreclosure Report (2005), City of Memphis Capital Improvement Program (2007-2011), MPO 2026 Long Range Transportation Plan, Memphis and Shelby County Zoning Ordinance, Memphis and Shelby County Unified Development Code, and Frayser Retail Study (1998). These plans will help in identifying issues and opportunities that currently exist in Frayser

Frayser Futures. Upon request by the office of Housing and Community Development in Memphis, *Frayser Futures* was written between 2001 and 2003 by the City and Regional Planning program at the University of Memphis in conjunction with the Division of Planning and Development. The document was the result of several meetings with key leaders in the area. Community meetings with Frayser residents also took place. The main points of *Frayser Futures* can be divided into 5 groups: The Players, the Purpose, the Problems, the Possibilities, and the Priorities.

The players involved in the development of *Frayser Futures* included Frayser residents, property owners, business owners, government officials, civic leaders, religious leaders, community organizations, the Frayser Community Development Corporation, and the Frayser Neighborhood Association. The purpose of the document was to provide a guide for those citizen leaders and public officials who allocate resources for improving the Frayser community.

The problems identified in *Frayser Futures* fall into 6 categories: economic, housing, community facilities, transportation, infrastructure, and zoning. Economic problems included population decline, a median household income well below Shelby County's, and the loss of K-mart. The largest economic problems stemmed from the loss of major employers, including Firestone and International Harvester. At its peak in 1985, International Harvester had 3250 employees. Housing problems ranged from a decline in owner-occupied housing units to the Shelby County Growth Plan (1999) that did not discourage harmful sprawl. Dilapidated housing in certain parts of Frayser, increases in housing vacancies, and shabby multi-family housing at the Overton Crossing/Frayser Boulevard intersection have also contributed to the area's housing problems.

Problems with community facilities arose from the following conditions: there are no regional parks; there are no regional shopping centers; there are no regional hospitals; 7 of 10 elementary schools are overcrowded; 10 of 15 schools are "on notice;" the public library facility is inadequate; and, there is no community civic center. Transportation problems included some narrow roads and missing sidewalks. Curbs, gutters, street maintenance, litter, and dead end streets contributed to infrastructure problems in the area. Another infrastructure problem identified by *Frayser Futures* is that there were no gateways present. Two conflicts between land use and zoning were identified. Some floodplain areas were zoned for multi-family residential or heavy industrial. Also, two residential neighborhoods were inappropriately zoned for heavy industrial use.

Frayser Futures also pointed out the good aspects of the community and opportunities for improvement. The possibilities included: historic value, housing tenure that mirrors Shelby County, good transportation network (Regional - port and airport; Local - roads and MATA), 9 parks and 2 community centers, 3 fire stations, 15 public schools, Southwest Tennessee Community College campus, rolling hills and scenic woodlands, 10 compact commercial areas, and many well-built homes.

Priorities for improvements to the area included: expanding Davy Crockett Park into a regional park; offering extended courses through University of Memphis; a MATA Transit Center; a light rail along US 51 corridor (passes along west side of Frayser on way to Millington); the Mississippi River bike trail; park improvements and upgrades; a new elementary school to ease crowding; a larger, centrally-located library; zoning improvements to correct incompatible uses; road upgrades to Overton Crossing, Hawkins Mill, and Range Line; road extensions on McLean, St. Elmo, Frayser Boulevard, Overton Crossing, and Range Line; gateways; a greenbelt; neighborhood improvements through rehabilitation, redevelopment, and infill; increased housing funding (HCD, CDBG, HOME, THDA); utilization of Community Redevelopment Authority (CRA) to condemn where needed; utilization of Industrial Development Board (IDB) to grant tax freezes where needed; a community civic center; traffic islands, improved curbs, and landscaping; the opportunity areas of Rugby Hills, Range Line, and Westside; and strong community organizations and networks.

Frayser Foreclosure Report. The Frayser Foreclosure report was written in 2005 by the Frayser Community Development Corporation to document the number of foreclosures in the area, how the foreclosures affect the community, and the steps the CDC is taking to change the rate of foreclosures. There were 477 foreclosures in 2005, which is up from 267 in 2004. The foreclosure rate in 2005 was 4.8%. Factors contributing to the rise in foreclosures included predatory lending, subprime loans, and declining home values. Abandoned houses resulted, and entire streets and neighborhoods were harmed. On the other hand, 82 homeowners participated in foreclosure counseling in 2005. The percentage of HUD homes foreclosed declined to 23% in 2005 from 40% in 2004. Furthermore, good housing stock was still available.

City of Memphis Capital Improvement Program. In the 2007-2011 Capital Improvement Program, the Department of Planning and Development targeted Frayser for a commercial revitalization project. However, a date has not been announced, and no money has been allocated to the project. \$1.1 million has been allocated for the construction of a 28,000 square foot library to serve Frayser. The current library in Frayser is 6400 square feet; it is estimated that 3-5 acres are needed. Funds have been designated to design and repave Firestone Park main road in FY 2010 and 2011, and maintenance facility improvements are to occur at Frayser Park. Funds have

also been allocated toward the light rail transit project. The north corridor will go through Frayser. General improvements for the Memphis Police Department, the Memphis Fire Department, and Public Works should benefit Frayser, as well.

MPO Long Range Transportation Plan. The MPO 2026 Long Range Transportation Plan outlined transportation funding sources that could be utilized in Memphis. These sources included the National Highway System (which is funding I-69 construction), Congestion Mitigation Air Quality, Surface Transportation Projects, Federal Lands, Scenic Byways, and Recreational Trail. The LRTP also included transit, freight, bicycle, pedestrian, and road improvement projects.

The fixed guideway component of the transit plan included the expansion of the downtown rail system (Main Street, Riverfront, and Medical Center lines) to provide high capacity transit service in three regional corridors, the Southeast Corridor, the South Corridor, and the North Corridor. The North Corridor will serve the Frayser area. Interstate-69 will be a new principal freight corridor which will provide both the Memphis region and the nation with new capacity to efficiently ship commodities from Canada to Mexico while reducing travel times and cost. I-69 and I-269 will greatly affect freight traffic in Frayser since the interstate will be located just outside the western boundary of the area. The table below shows the different types of projects described in the LRTP that will be located in or near Frayser.

Table P. Existing and Proposed Transportation in/near Frayser

Freight	Walking Trails	Bike Paths	Bus	Light Rail
Highway 51	Proposed Wolf River Greenbelt	Mississippi River Trail	Proposed Suburban Transit Center	North Corridor
Planned Interstate-69 (and I-269)		Memphis City Bike Path	New Fixed Route Bus Service	

Source: MPO 2026 Long Range Transportation Plan

Memphis / Shelby County Zoning Ordinances. The majority of the land in Frayser is zoned R-S6, R-S8, R-S10, and agricultural. Small zones are designated for townhouses, multiple-family dwellings, and duplexes. Light industrial, heavy industrial, local commercial, and highway commercial uses are located there, as well. However, much of the industrial and agricultural zones are in the floodway district.

Memphis / Shelby County Unified Development Code. The part of the Unified Development Code that is highly important to Frayser is the section titled, Developing Rules Specific to Older Areas. This section encourages the blending of new projects with existing development. The UDC also encourages balancing pedestrian and vehicular activity, promoting adaptive reuse, establishing alternative parking plans for infill and redevelopment projects that are mixed use or near transit facilities, and allowing parking only to the side and rear of buildings. The UDC also supports a focus on infill through fast-tracking infill projects and through creating an infill density bonus. A primary goal of the UDC is to make it easier to mix land uses. Urban/suburban tiers such as Frayser should include mixed use districts such as Office-General (OG), Commercial-Neighborhood (CN), Commercial-Community (CC), and Commercial-Regional (CR).

Frayser Retail Study. The Frayser Retail Study identified specific areas of retail trade and services that are not being fulfilled by current businesses. The study found that Frayser is underserved by retail trade and services. In 1998, Frayser had over 200 retail establishments with total annual sales of \$215 million. Over 80% of these establishments were located along Highway 51, Watkins, and Frayser Boulevard. The area was adequately served by grocery and drug stores. In fact, these stores bring people in from surrounding areas. However, Frayser was underserved by garden supply stores, large general merchandise stores, apparel and accessory stores, jewelry stores, book stores, furniture stores, electronics stores, and home furnishings stores. While Frayser was adequately served by restaurants, most of them are fast-food establishments, and the study points out that Frayser needed more traditional sit-down restaurants.

III. CURRENT CONDITIONS

This section provides an overview of the current conditions found in the Frayser. This information is used to obtain a better understanding of what is happening on the ground level in Frayser. The items covered are: community facilities, crime, information from the Shelby County Assessor Office, information gathered during two visual surveys, and community organizations found in Frayser. The following section, in conjunction with the background section of this report, identifies issues in Frayser that warrant attention.

Community Facilities. Community services are limited in Frayser, but the residents living there are making the best of what they have. There are currently no major hospitals serving the Frayser neighborhood; yet, there are three mental health facilities within the community. There are 10 elementary schools, one junior high school, and 4 high schools (Map 4). The ten elementary schools can hold a combined total capacity of 5,330 students, while junior school can hold up to 625, and the four high schools can hold up to 3,700 students.

The community also has access to two community centers operated by the City of Memphis: the Ed Rice and North Frayser Community Centers. Each community center has an adjacent park, Frayser Park next to Ed Rice and Pickett Park next to North Frayser Community Center. Ed Rice Community Center is considered the hub or the center of the neighborhood. This is place where community meetings are held, basketball games area played, people walk their pets, and where families gather to have a good time. The walking path in Frayser Park is one of the most widely used paths in the city. The community center is used so much by neighboring residents that the city added a crosswalk from the front of the building to the other side of Watkins. North Frayser Community Center is not as widely used, mainly because of its schedule and staffing shortages.

There are approximately 870 total acres of parkland spread out among 16 parks (Map 5). The largest is Firestone Park, located on Millington Road, just east of Thomas. It features a walking path, baseball diamonds, and picnic area within 310 acres.

Memphis Fire Department operates three fire stations in the area. Stations 26, 27, and 31 serve Frayser with four other stations ready to assist if needed. The city also operates the Frayser Branch Library located on Argonne Street. The library is quite small and not only serves Frayser but other parts of North Memphis and Northaven. The library offers reading programs, career information, and free computer usage.

Crime. Crime is a concern for many Frayser residents. According to sources within the neighborhood, several “drug houses” exist in the neighborhood, there is speeding along residential streets, and criminal activity is present near vacant lots and houses. Media attention highlighting selected crimes in the area has contributed to Frayser’s negative image. According to Crimemapper, an online service of the Memphis Police Department, in the last 30 days there have been no homicides, 40 cases of larceny and burglary, and 2 rapes within one mile of the Frayser Community Development Corporation in the last 30 days. While these statistics appear uninviting, they are actually similar in character to other areas of the city. Crime is a problem in Memphis that reaches individual communities in the metropolitan area, such as Frayser.

Assessor’s Data. Land uses within Frayser were identified using the Shelby County Assessor’s parcel data for 2006. This information was mapped to show the location and relationship of the different land uses within Frayser (Map 6). A more detailed analysis of residential parcels was completed since residential is the dominant land use in Frayser (Table Q). The type of unit, year built, appraised value, and other characteristics were studied for the residential parcels.

Land Use. The primary land use in Frayser is residential. Map 6 illustrates the dominant land use in Frayser, which is residential and can be seen in yellow. Table Q shows that residential parcels make up over 90 percent of the total parcels and nearly 50 percent of the total area. Commercial land uses are located primarily along the major corridors such as Frayser, Watkins, Thomas, and Range Line. Commercial use is the second most abundant land use in Frayser,

according to number of parcels. Public and institutional land uses are the next largest land use in Frayser and are spread evenly throughout the community. There are only a handful of parcels with industrial and farming land uses. These land uses tend to be located on the edges of Frayser.

Table Q. Land Use by Type

	Total Number of Parcels	% of Total Parcels	Average Parcel Size (Acres)	Sum of Acres	% of Total Acres
COMMERCIAL	671	4.66%	1.10	740	7%
PUBLIC/INSTITUTIONAL	396	2.75%	6.93	2745	26%
FARM/AGRICULTURAL	48	0.33%	32.50	1560	15%
INDUSTRIAL	69	0.48%	6.72	464	4%
RESIDENTIAL	13209	91.77%	0.39	5091	48%

Source: Shelby County Assessor 2006

Residential Land Uses. According to the US Census, housing has remained stable in Frayser despite other major demographic changes over the last 20 years. The percent of homeownership and renters has remained around the same level (Table O). There has been a large increase in the number of vacant lots during last 20 years. This is more than likely due to the closing of several large apartment complexes over the last 20 years.

The majority of the residential parcels in Frayser are single family. Ninety-seven percent of the residential parcels and 76% of the residential living units are single family (Table R). Apartment complexes are the next largest in residential units (19%) in Frayser despite there being fewer parcels designated apartment complex than duplex and condo. Apartment complexes are spread throughout Frayser and do not seem to be clustered in any one area.

Table R. Housing Parcels

Housing Parcels / Units and Average Year Built by Type of Housing					
Type of Housing	Number of Parcels	% of total residential parcels	Number of Living Units	% of total residential living units	Average Year Built
Single Family	12377	96.94%	12372	76.07%	1960
Duplex	207	1.62%	415	2.55%	1965
Triplex	1	0.01%	3	0.02%	1953
Garden Apartment	4	0.03%	117	0.72%	N/A
Apartment Complex	38	0.30%	3219	19.79%	N/A
Condo Units	134	1.05%	134	0.82%	1973
Mobile Home Unit	1	0.01%	1	0.01%	N/A
Mobile Home Park	4	0.03%	0	0.00%	N/A
Boarding House	2	0.02%	2	0.01%	N/A

Source: Shelby County Assessor 2006

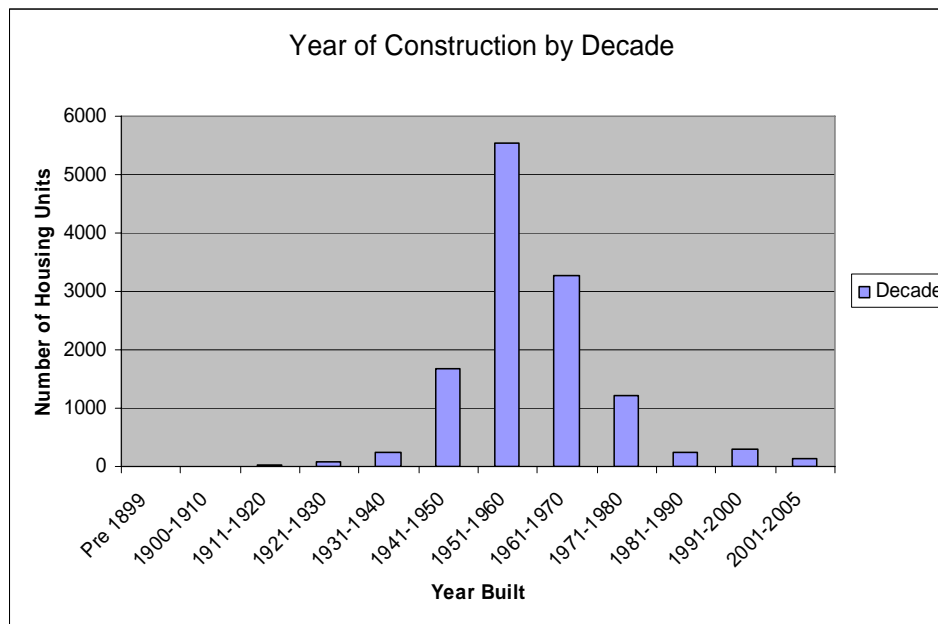
Year Built. The average year built for all residential properties in Frayser is 1960 (Table S). The earliest structure still standing was built in 1885 and the most recent built residential unit was 2005. The average year built for single family houses (Table R) is the same as average year built of all properties. This is expected since the single family residential unit is widely dominant in Frayser. The period of peak building construction, coincides with the suburbanization occurring after WWII. Chart 3 shows the number of housing units built by decade. There is a clear peak during the 1950's, which is when most of Frayser housing was built. In many ways, Frayser is a typical post war suburb. Map 7 shows when the different sections of Frayser were built. In general, the area west of Watkins is older than the area to the east of Watkins. Most of the subdivisions west of Watkins were created in the 1940's and 50's, while most of the subdivisions east of Watkins were created in the 1960's (Map 7).

Table S. Housing Year Built

Year Built	
Earliest	1885
Newest	2005
Average Year Built	1960

Source: Shelby County Assessor 2006

Chart 3. Year of Construction



Source: Shelby County Assessor 2006

Implications of Residential Land Uses. What does the typical residential housing unit in Frayser look like? Single family housing units are the main type of residential land use in Frayser. The average age of a single family house is 46 years old and built in 1960. The typical single family housing unit is a one-story, three-bedroom 1,265 square foot house (Table T). This means that the housing stock in Frayser is well suited for small families, as the size of the house and number of bedrooms makes these units affordable but also large enough for a family with 2-3 children. The age of the housing stock means that many of the housing units in Frayser may need additional maintenance and extra work.

Table T. Housing Characteristics of the Dominate Housing Type

Housing Characteristics of Single Family Units				
Type of Housing	Average Number of Bedrooms	Average SF of Living Area	Total Living Area SF	Average Number of Stories
Single Family	3	1,265	5,646,386	1

Source: Shelby County Assessor 2006

One implication of the single family housing produced during post WWII suburbanization is that the streets are not connected in the urban grid that typifies older development. Frayser was built as a residential suburban community. As a result, there is a lack of connection between the different residential neighborhoods. Many streets dead end into other streets. This T-pattern of street design makes it difficult to get around by limiting widely useable roads for drivers, cyclists, and pedestrians. Another problem is that there are also a lot of dead end streets and cul-de-sac that further disrupts connectivity in Frayser.

Survey Information. Two surveys were conducted by the Comprehensive Planning Studio with assistance from Dr. Susan Roakes and the Frayser Community Development Corporation. The first survey occurred on September 30, 2006. The second survey took place on October 22, 2006. Students enrolled in Land Use Planning at the University of Memphis assisted with the second survey. These surveys were useful in identifying various issues and opportunities in Frayser.

Survey One. Survey One covered transportation elements of Frayser. These transportation elements ranged from sidewalk availability to street width. The areas surveyed included main roads, the Range Line community, and the Rugby Hills neighborhood.

(Overview of Methods). We first decided the transportation elements that would be observed in our visual survey. As a group, the transportation items agreed upon were structural condition of the street, comfort of street width, presence and condition of on-street striping, presence of on-street parking, visibility and condition of traffic signs, presence of sidewalks, and presence of crosswalks.

Next, we mapped all of the street blocks located in Frayser using the Memphis Light, Gas, and Water street file. We divided areas of blocks among the members of our studio class. We, then, prioritized blocks of streets within each member's area in case time constraints limited the amount of blocks that each of us could survey. Our basis for prioritization was provided by the Frayser Community Development Corporation, which recommended starting in the Ridge Grove and Rugby Hills neighborhoods. Logistics became our secondary basis of prioritization. Since

there were limits on time, we prioritized smaller areas within each neighborhood in a logical fashion to avoid jumping around within the greater survey area. In the end, the priority areas were major roads, the northern Range Line area, and the Rugby Hills neighborhood.

Map 8 shows the prioritized areas for each member of the studio. Each class member was matched with a driver from the community on the morning of the survey to provide a first-hand account of the Frayser transportation system and to allow the surveyor to focus fully on the survey.

(Results). Of the seven attributes surveyed, on-street striping was one characteristic that was found to be consistently good throughout Frayser. On-street parking appeared to be available on the majority of streets, but it was rarely used. Most houses had driveways for parking, and commercial establishments had parking lots. Crosswalks were present at key places; but, there are not enough crosswalks to support an active pedestrian neighborhood or community. Traffic signs were present throughout the streets surveyed. They were nearly all in good condition, and most could be clearly viewed by oncoming traffic. In one area in the southwest part of Frayser, approximately half of the traffic signs were present and in good condition, but the other half were present and in poor condition. This means that the signs were faded, too small, or their visibility was obstructed. Map 9 shows the traffic sign survey results for this southwestern portion of Frayser.

Streets that had poor structural condition such as large potholes tend to be located in the northeastern part of Frayser. Map 10 shows the structural condition results for all areas surveyed. Most of the roads surveyed were in good condition or had minor cracks and bumps. The street width portion of the survey showed that most of the streets in the Rugby Hills neighborhood are uncomfortably narrow. On the other hand, some of the streets in the western and northeastern part of Frayser were uncomfortably wide. The transportation survey results also showed that several streets in the Ridge Grove neighborhood, such as Hawkins Mill, change drastically in width as you drive along them. Map 11 shows the transportation survey results regarding street width.

Frayser has a higher percentage of residents without a car, when compared to other parts of the Memphis metropolitan area (U.S. Census Bureau, 2006). Residents are limited to other means of transportation, and, thus, sidewalks are an important issue in Frayser. Our transportation survey yielded results showing that many neighborhoods in Frayser have no sidewalks at all. The red streets in Map 12 represent the street segments that have no sidewalk alongside. As you can see, there are no sidewalks present in most of the single-family residential neighborhoods that were surveyed. Rugby Hills and Ridge Grove are two such neighborhoods. The orange segments on the map represent street segments where there is only a portion of a sidewalk. While the majority of the main roads have sidewalks on both sides, there are a few segments of main roads with only a portion of a sidewalk along them.

In a final analysis of our survey, we formulated a total score for each street segment based on all factors gathered in the survey by summing the individual scores of each factor. The score includes the structural condition of the streets, street width, on-street striping, street lighting, condition and view of traffic signs, availability of sidewalks, availability of crosswalks, and presence of on-street parking. Map 13 illustrates the street score of each block. The green segments are the streets that are good in all aspects. The yellow street segments are average, but will continue to decline if no preventative action is taken. The red streets segments have the worst street score and need immediate attention. The transportation system in Rugby Hills is by far the worst within the Frayser Community. The map shows that immediate improvements are needed in Rugby Hills. The Ridge Grove neighborhood follows. Most of the street scores in Ridge Grove show that the transportation system is beginning to deteriorate or that the transportation system is in poor condition.

The transportation survey shows the particular neighborhoods that should be priority areas for infrastructure improvements. Rugby Hills and Ridge Grove are neighborhoods that need serious improvements in their transportation systems. These neighborhoods were well below average in nearly all aspects of transportation that were surveyed.

Survey Two. Survey two provided a more detailed study of the condition of the neighborhood. This survey focused on structural and environmental conditions.

(Overview of Methods). In Visual Survey 2, observations were taken while traveling, either on foot or in a car, through the study area. Visual survey 2 surveyed land use, the condition of the structure and lot, occupancy, the condition of the sidewalk, and the condition of curbs and gutters. Guidelines were set on how to categorize or rank each item surveyed. Survey parcel maps and corresponding survey spreadsheet were used to record the results of the visual survey. The results were then put into electronic form to be mapped using geographic information systems (GIS) software. Maps were then created showing the results from the survey.

The study area for Visual Survey 2 was very similar to Visual Survey 1. This survey, being more detailed than the first, required for the study area to be smaller than Visual Survey 1. In total there were three main areas studied with two survey groups dividing each area into two sections, making for a total of 6 survey areas. The three main areas surveyed were: the major roads, the Rugby area, and the Range Line area (Map 14). These areas were chosen with the guidance of Steve Lockwood, the executive director of Frayser CDC. All areas were identified as having transportation and infrastructure issues. Each of the areas studied had one member from the University of Memphis Comprehensive Planning class present, as well as, two students from University of Memphis Land Use Planning class and one community member.

It should be noted that the two residential neighborhoods chosen, Rugby and Range Line, were done so due to their infrastructure problems. These problems were often found with other problems as well such as deteriorating housing stock and poor conditions of the lots where the housing was located. As a result, the findings from visual survey 2 could be interpreted as being representative of all residential neighborhoods in Frayser.

(Results). The land use survey found most of the retail and commercial uses located along the major roads (Map 15). There were some smaller retail commercial areas within the residential neighborhoods studied. Rugby did have a small commercial node in the northeast corner that served the neighborhood, and the Ridge Grove neighborhood had one small convenience store, as well. Rugby was found to have the most vacant lots out of the three areas surveyed.

The buildings along the major roads tended to be in good condition (Map 16). Both Rugby and the Ridge Grove neighborhood in the Range Line area had a mix of housing conditions. In those two areas, the majority of the housing was in fair condition with a few houses spread throughout the neighborhood that were in poor and deteriorated condition (Map 16). The neighborhood just south of Ridge Grove was in good condition (Map 16). This should not be surprising since the housing stock in that neighborhood is less than 10 years old.

The lot conditions tended to mirror the building conditions. Once again, the lots along major roads were found to be in good condition, whereas, Rugby and Ridge Grove were in fair to poor condition (Map 17). One difference is that there seemed to be a greater number of lots in poor and deteriorated condition than structures in poor and deteriorated condition (Map 17). It is too difficult to say if there is any causation between the lot and building condition based on initial analysis.

Sidewalks tended to be in good condition along the major roads. In the Range Line area, the main problem was that sidewalks were often absent along larger collectors, such as, Range Line and Hawkins Mill (Map 18). Another problem found in this area was the lack of a complete sidewalk system. In many locations, sidewalks started and stopped in the middle of the block, making it impossible to use the sidewalk system throughout the neighborhood.

Community Organizations. Residents of Frayser are represented by 13 neighborhood organizations that give them the opportunity to voice their concerns and come together as a cohesive neighborhood. The largest is the Frayser Community Association (FCA). This group holds monthly meetings, has a board of directors, and includes members that are involved in several other smaller associations around Frayser. Communication of neighborhood events and meetings is accomplished through a community newsletter, a website—www.fraysercommunityassociation.com and by word of mouth.

During the last part of the 20th century, the FCA created a non-profit development agency that would facilitate the revitalization of their neighborhood. This agency is called the Frayser Community Development Corporation (FCDC). The primary objectives of the FCDC are to be a

voice for the neighborhood on certain issues, to improve the housing stock of the neighborhood, to revive the commercial nodes, and to encourage reinvestment in Frayser (Frayser Community Development Corporation, 2004, Section 3). The association has successfully collaborated with many city agencies to redevelop the empty K-Mart building into a commercial center and to reconstruct Overton Crossing. They have also completed a comprehensive study of the foreclosures plaguing the neighborhood, as well as, contributed to this study of the neighborhood.

Frayser Community Environmental Court also plays an active role in redeveloping the image of the community. The court was established as an alternative for people who commit environmental violations against the city and county code of ordinances. The court is a partnership between the district attorney's office, the criminal courts, various social agencies, and the citizens of Frayser.

There are 10 other community associations that serve the Frayser community. Among them is a Booster Club for the Ed Rice Community Center, an Interfaith Association, and an Exchange Club. There are also smaller community associations that serve the Range Line, Rugby, and Alta Vista neighborhoods. The needs of these organizations are communicated and represented at the larger FCA meetings held once a month.

IV. ISSUES AND ANALYSIS

After assessing the existing conditions in Frayser, several transportation related issues that the community faces were highlighted. These issues, which are categorized under the areas of safety, accessibility, connectivity, and imageability, are discussed in detail to provide a clear understanding of the current assets and liabilities within the community of Frayser.

Understanding these strengths and weaknesses gives a strong foundation for suggesting solutions and action plans to help strengthen the positive aspects of Frayser and combat community hindrances.

Safety. Safety of Frayser's transportation system is extremely important for Frayser residents, Memphians, and visitors. This section discusses safety issues that presently exist in Frayser. Safety applies to drivers, passengers, pedestrians, cyclists, and residents. Safety in relation to each of these stakeholders will be discussed.

Drivers and Passengers. Frayser is home to many streets that are categorized as having inadequate street widths. Inadequate street widths, which are seen as streets that are uncomfortably wide or narrow, present many dangers for those traveling on and around these roads. Drivers tend to drive significantly faster along roads that are extremely wide. This abundance of width tends to make the driver feel more comfortable speeding. The driver's tendency to speed along these overly wide roads is a safety concern. While pedestrians and cyclists are in a significant amount of danger due to the speeding of motor vehicles, drivers and passengers are also at great risk. Speeding along these overly wide roads increases the likelihood of accidents, and this puts the driver as well as the passenger at risk for mild, serious, or even life-threatening injury.

Uncomfortably narrow roads pose an equal amount of danger for the driver and the pedestrian. The design and condition of many of the overly narrow roads are not conducive to any level of

transportation. They are extremely dangerous for the cyclist, pedestrian, and motorist. Not only are several roads within Frayser too narrow, some are excessively curvy. For example, the comprehensive planning studio was visiting the Frayser area to get a feel for the community, and personally witnessed a motorist take a curve along Hawkins Mill Road too fast. The motorist spun into a ditch, and was fortunately uninjured. These road conditions present a tremendous danger to all of those that use them, and the drivers and passengers traveling these types of roads are at great risk for injury.

Pedestrians. Attendees at the first Frayser Community Meeting indicated that inadequate sidewalks were among their top concerns. Participants shared anecdotal stories about unsafe sidewalks; the sidewalks that link neighborhoods to elementary schools were of particular concern to many of those who attended the meeting. The safety of children walking to and from school is a primary concern in Frayser, especially in the Hawkins Mill area. Safety is also a major concern of pedestrians who walk for other reasons including: recreation, visiting friends and neighbors, shopping, and getting to bus stops. Problems that pedestrians face include broken or missing sidewalk segments, a lack of sidewalks, and sidewalks that are not sufficiently buffered from the street. Repairing broken sidewalks, installing new sidewalks where needed, and creating sidewalk systems where feasible are among the solutions to the problems cited.

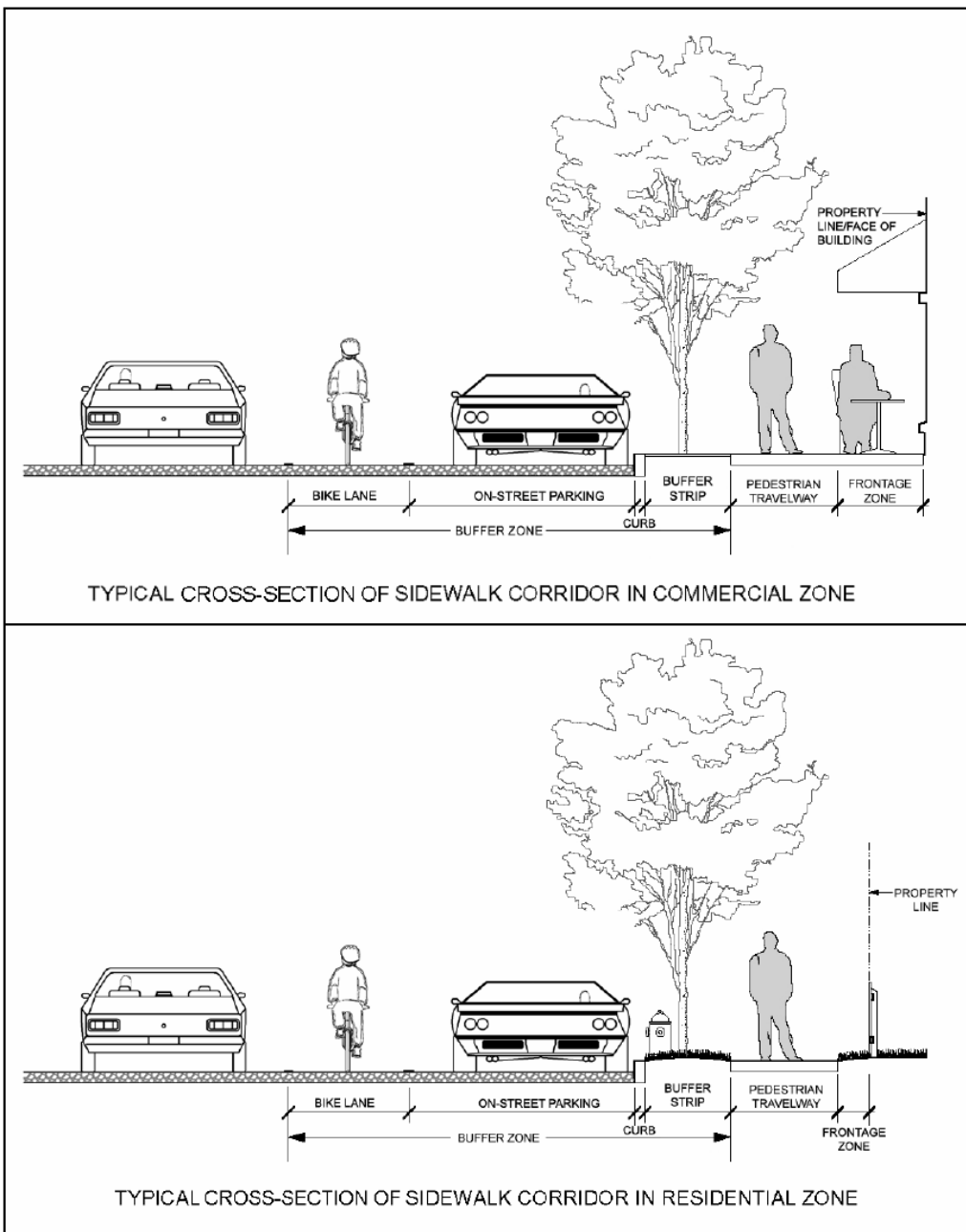
Broken sidewalks—such as those present along Frayser Boulevard, and Thomas St.—are dangerous to pedestrians, especially those in wheelchairs. People in such circumstances may find broken sidewalks difficult to navigate. Pedestrians who use the sidewalks for recreational purposes may also have difficulties running or jogging along broken sidewalks. Broken sidewalks are most noticeable along major streets where the sidewalks are crossed by vehicles entering and exiting businesses. Business owners whose parcels front these sidewalks are responsible for maintaining the sidewalks and keeping them safe for pedestrians. Citizens and community organizations could work with the business owners to obtain funds to fix sidewalks where needed; in some cases, Code Enforcement may be needed in order to cite businesses that violate safety codes.

Sidewalks are mostly absent from the local streets in the Rugby Hills neighborhood. The narrow, winding streets that characterize Rugby Hills are not safe for pedestrians. A sidewalk on only one side of the typical Rugby Hills street would be beneficial to pedestrians. The low speed and low volume of traffic, coupled with the narrowness of the streets in that area, warrant a sidewalk on one side of the street with a moderate buffer; the Memphis MPO suggests a minimum four-foot buffer on neighborhood streets (*Memphis MPO Regional Bicycle and Pedestrian Plan*, 2005). In the Ridge Grove area, sidewalks are often incomplete, missing large segments.

A final concern is the buffer zone between the sidewalk and the street. The buffer zone is an essential component of a viable sidewalk system. A sidewalk system consists of three parts: a frontage zone, a pedestrian travelway, and a buffer zone (Image 1). In Frayser, the frontage zone usually consists of a parking lot or a front yard. The pedestrian travelway is the sidewalk itself; Frayser has an extensive sidewalk system on its major streets, but lacks sidewalks in some neighborhoods. Most Frayser streets completely lack buffers. A buffer zone may consist of a buffer strip, on-street parking, and/or a bike lane. The buffer zone separates pedestrians from vehicular traffic, making walking safer. Image 1 shows an example of buffer zones for low-to-moderate speed streets with high volume.

Most of Frayser's sidewalks are separated from the street by a curb only. However, on the major streets, even the curb is frequently missing due to business entrances cutting through the curb and sidewalk. In some cases (portions of Range Line and Thomas St.), a narrow grass strip separates the sidewalk from the street; these strips are of inconsistent width, and often disappear then reappear. Other buffers, such as bike lanes and parallel parking lanes, are not present along Frayser's streets. With speeding being another concern of many Frayser residents, the addition of buffers would help protect pedestrians from speeding vehicular traffic.

Image 1. Sidewalk System Cross Sections



Source: Memphis MPO Bicycle-Pedestrian Plan

Cyclists. Safety for bicyclist is a major concern in Frayser. Lack of adequate biking facilities makes it dangerous to bike along the major transportation corridors.

The MPO surveyed the streets in Frayser and created a bicycle compatibility index to rank the streets (Image 2). The map below shows that only one street in the Frayser can be considered extremely high in terms of bicycle compatibility. The majority of the streets are moderately high or moderately low in their compatibility. This suggests that most of the streets in Frayser are currently not as compatible with bicycle traffic as desired.

Image 2. Bicycle Suitability



Source: MPO Bicycle and Pedestrian Plan

Accessibility. Accessibility is about being able to easily access local attractors such businesses, parks, schools, and mass transit. Accessibility is a concern for Frayser’s transportation system because an accessible community tends to be vital and marketable.

Businesses. Assessor’s data and visual surveys revealed that Frayser has a fair mix of commercial businesses. Community meeting participants generally agreed that Frayser has some retail necessities, though the area lacks many of the conveniences that are prominent throughout other parts of the city, such as apparel retail stores. There are several grocery stores located

throughout the community, ranging from moderately-priced chains, such as Kroger, to discount groceries such as Superlo and Save-a-Lot.

Driving access to these locations is generally good, though there are impediments to walking and riding the bus. Most of the grocery stores are located along Frayser's major streets, where sidewalks are readily available. However, motorists often speed along these streets, and the streets are often uncomfortably wide, making walking or biking across them dangerous. Crosswalks are generally found only at major intersections, giving pedestrians limited opportunities to cross the busy streets. Bus routes in Frayser run only along the major streets; residents of the smaller neighborhoods off the major streets have limited access to buses. Map 19 shows accessibility to major retail centers based on quarter-mile and half-mile distances to Frayser neighborhoods. Each retail center consists of at least five parcels currently being used for retail purposes.

A retail study conducted in 1998 by the Regional Economic Development Center (REDC) at the University of Memphis revealed that Frayser's lack of department stores and automobile dealerships had a significant negative economic impact on the community. The authors noted that African-Americans tend to spend higher portions of their incomes on clothes; with the growing black population in Frayser having few department store options, many people go to neighboring areas, such as Millington, Raleigh, and Germantown, to purchase clothes. The closing of the K-Mart store at Frayser Boulevard and Overton Crossing left Frayser without a major department store. The REDC estimated that Frayser lost as much as \$26 million annually due to its lack of department stores; another \$43 million was lost due to the lack of automobile dealers (Table U). Notably, the building that once housed K-Mart is being revamped as a supercenter of sorts; the owners promise a grocery store, a discount general merchandise store, and kiosks operated by local entrepreneurs and offering an array of goods.

Frayser also lacks adequate entertainment and recreation options; there are no movie theaters, bowling alleys, or physical fitness facilities in Frayser. Residents of Frayser must go to other communities to find these kinds of businesses. Table U shows the retail and service industries in which Frayser is losing its market. Capture rate is the percentage of expenditures by Frayser

residents that stays in Frayser. Leakage is the dollar amount of business lost by Frayser residents seeking goods and services outside the Frayser area.

Table U. Frayser Market Losses, Capture Rates, and Leakages

**Capture rate <50% and leakage >\$1 million*

Retail or Service Category	Capture Rate	Leakage (in dollars)
Retail nurseries and Garden supply stores	0	459,424
Department stores	11.3	26,001,037
Variety and Discount General Mdse. Stores	35.9	5,526,960
Meat and Seafood Markets	0	433,900
Retail bakeries	26.1	282,853
New and Used Car dealers	16.8	43,112,810
Women's clothing and specialty	47.4	3,329,841
Family clothing stores	0	3,011,779
Shoe stores	19.4	2,488,350
Children & Infants	0	331,806
Furniture stores	13.7	4,404,710
Homefurnishing stores	18.8	2,590,444
Electronics	32.6	1,856,544
Sporting goods	24.5	925,130
Book stores	25.7	1,156,937
Jewelry stores	5.2	1,814,266
Hobby, Toy, and game shops	23.5	976,178
Gift, novelty, and souvenir shops	46.1	467,801
Sewing, needlework, and piece goods	0	484,947
Optical goods	0	510,471
Dry cleaners	38.5	1,303,465
Photographic studios	31.7	105,635
Shoe repair shops	0	85,578
Funeral homes	0	1,212,054
Auto glass replacement	0	533,791
Car washes	19.8	454,542
Watch, clock, and jewelry repair	0	39,361
Movie theaters and drive-ins	0	555,296
Bowling centers	0	293,629
Physical fitness centers	0	443,576
Amusements	0	1,550,026

Source: REDC, 1998

Besides the loss of approximately \$120 million annually in retail sales and services, the lack of diversity in Frayser businesses leads to access problems. The nonexistence of these goods and

services in Frayser does not necessarily lessen the need for them. Thus, Frayser residents, many of whom do not have cars and rely on public transportation or walking, must travel outside of Frayser to find goods and services that are readily available in other parts of Memphis and Shelby County (REDC, 1998). Those without automobiles must rely on other means of transportation. Because of the sprawling nature of Memphis suburbs, walking is usually impractical. Because of the limitations of the bus system, riding a bus to complete a simple task is often an all-day affair.

At present, Frayser has no major operating industrial facilities. The International Harvester complex on Frayser's west side sits empty, though the parking lot is used for holding storage containers. The site's location near the juncture of the Mississippi River, Interstate 240, U.S. Highway 51, and the proposed Interstate 69 make it ideal for future development. However, access to the site is limited. Narrow streets lead visitors to the facility; no bus routes run near the site. In order to make the facility a viable industrial redevelopment, streets would need to be widened to accommodate tractor trailers, and an increase in modes of transportation to and from the facility would need to be created. At present, the facility is largely disconnected from all but the small West Frayser/ Benjestown neighborhood located directly to its north.

Parks. GIS was used to determine the number of parcels within walking distance, defined as a quarter to half mile, of parks. Walking distances were determined by using the street network since this is the most accessible route to the parks. Initial analysis found that only 14% of the single family units were within a quarter miles of parks within Frayser. In contrast 20% of the apartment units and 42% of the condo units were within a quarter mile walk of a park. When the walking distance was increased to half a mile there were many more single family units within walking distance. In total 43 % of the single family housing units were with in a half mile walk of the parks in Frayser.

While the percentage of single family housing within a half mile walk of a park is much greater than the percentage of single family housing within a quarter mile there is still more than half of the single family units in Frayser can not easily walk to a public park. Once again, apartment units (66%) and condo units (67%) had a higher percentage than single family of their respective

units within a half mile walk of a local park. Table V illustrates housing types within a half mile distance of parks, and Table W shows the types of housing that are closest (1/4 mile) to parks. Similar analysis on other attractors will give a better picture of the connectivity of residential units in Frayser.

Table V. Type of Housing Within Quarter Mile of Parks

Housing within .25 miles (real distance) of Parks by Type				
Housing Type	Number of Parcels	% of Total	Number of Units	% of Total
Apartment Complex	8	21%	636	20%
Condo Units	56	42%	56	42%
Single Family	1745	14%	1742	14%

Source: Shelby County Assessor 2006

Table W. Type of Housing Within Half Mile of Parks

Housing within .50 miles (real distance) of Parks by Type				
Housing Type	Number of Parcels	% of Total	Number of Units	% of Total
Apartment Complex	23	61%	2135	66%
Condo Units	90	67%	90	67%
Single Family	5358	43%	5354	43%

Source: Shelby County Assessor 2006

Schools. Frayser schools are not very accessible for residents. Approximately 40 percent of housing units are within a half mile walking distance of an elementary school. Only 11% of housing units are within a quarter mile distance of an elementary school. It is unlikely that a child will walk half of a mile to school each day, and, in Frayser, nearly 60% of homes are farther than half of a mile from an elementary school. Map 20 shows the areas of Frayser that are within walking distance of elementary schools.

Middle schools and high schools in Frayser are even less accessible than elementary schools. Maps 21 and 22 highlight the areas within ½ mile and ¼ mile walking distance of middle schools and high schools. About 18% of housing units in Frayser are within a half mile walking distance

of a middle school, and only 3.5% of housing units are within a quarter mile walking distance. High school accessibility is lower than middle school accessibility. Approximately 14% of housing units are within a half mile of a Frayser high school; only 2.7% are within a quarter mile. Having schools that are not accessible for most children in the area puts a strain on school busing systems because more children are forced to seek transportation modes other than walking or biking. Creating more accessible schools removes much of the burden from school busing systems.

People. Gross population density in Frayser was 963.6 people per square mile in 2000, which was much lower than that of the county, 2205.5 people per square mile (DemographicsNow). While, residents of Frayser consider the low density an asset, it poses problems for accessibility to people. Neighbors must make larger efforts to get together because their homes are not physically near each other. Low accessibility to people is not necessarily a bad characteristic of a community like Frayser, as long as residents prefer the low density character of the area and can afford the extra costs of living in a low density area. Families living in low density areas are often socially and physically removed from their neighbors. However, strong neighborhood associations benefit the neighborhoods in Frayser because they bring people together at frequent scheduled events, offsetting the negative social aspects of low density development.

Mass Transit. Map 23 shows accessibility to bus routes in Frayser. Nearly all Frayser residents (97.6%) are within a half mile distance of at least one MATA bus line. Approximately 98.4% of commercial units are also within ½ mile of a MATA bus route. Table X shows the percent of residential and commercial units within walking distance of bus lines and scheduled stops. However, a few neighborhoods in Rugby Hills, Westside, and central Frayser are not within a quarter mile of these bus lines. It is unlikely that people will walk half a mile to the bus stop.

Furthermore, the green areas on the map represent the locations that are within walking distance of scheduled MATA stops. There are intermittent stops along the bus routes that are not scheduled. The scheduled stops shown on the map are the stops where a bus will be at a previously-stated, specific time. It is clear that there are very few locations (7% of residential units and 23% of commercial units) served by these stops. Most of the locations are within a

half mile walking distance, rather than a quarter mile walking distance. Also, these scheduled stops primarily serve commercial areas in Frayser instead of residential areas.

Table X. Percent of Residential and Commercial Units near Bus System

Distance and Type	Residential Units	Commercial Units
Within 1/2 Mile of Scheduled Stop	28.97%	37.85%
Within 1/4 Mile of Scheduled Stop	7.02%	22.95%
Within 1/2 Mile of Bus Route	97.62%	98.36%
Within 1/4 Mile of Bus Route	74.45%	89.42%

Source: Assessor's Office and MATA

The fixed guideway component of Frayser's transportation system does not yet exist. Light rail transit is proposed for the following corridors: the Medical Center Extension, the Downtown Airport Corridor, the South Corridor, the Southeast Corridor, and the North Corridor. However, a feasibility study is planned for the north corridor of the fixed guideway transit system, and this corridor is likely to be the final portion constructed, if at all. If the north corridor is not completed, Frayser will suffer. Other parts of the Memphis region will be connected to the city by light rail, and Frayser would not. It is very important that Frayser's transportation system remain vital. A light rail connection to the city would help Frayser remain on an even playing field with the faster-growing parts of the Memphis MSA.

Connectivity. This section addresses internal and external connectivity issues in Frayser. Internal connectivity will be discussed in terms of businesses, services, schools, and people. External connections include streets that serve as major connectors to the greater region and the availability of mass transit options that allow residents to connect to the City of Memphis.

Internal. Currently, there is a lack of connectivity in parts of the Frayser community. Many neighborhoods are isolated from each other and the commercial areas due a lack of through streets and major thoroughfares. Within residential communities, such as Ridge Grove and Range Line, there are only one or two roads that allow for entering and exiting the neighborhood. Commercial areas are disconnected from residential area due not only to lack of through streets but also lack of sidewalks and narrow streets in some areas.

(Businesses). Businesses in Frayser suffer to due lack of connectivity. Customers living in the northern most neighborhoods cannot reach the commercial areas unless they drive a car or use public transportation. Pedestrians in the Ridge Grove and Range Line neighborhoods needing to grocery shop have to walk south along Range Line without an accessible sidewalk and cars speeding by, often dangerously close.

Pedestrians trying to access the commercial areas on Highway 51 have sidewalks and a few crosswalks available to them to access local businesses. Although the sidewalks may be in some disrepair, they are still available and widely used by those walking to their destinations. For people traveling in automobiles, the businesses on Thomas are easily and safely accessible. The street widths along that section of Thomas are appropriate for those particular land uses and there is plenty of parking surrounding the retail establishments.

Residents utilizing public transportation to get around in Frayser and to other parts of the city have two options: the Thomas/Hodge and the Frayser-Germantown-Winchester lines of Memphis Area Transit Authority (MATA). These buses have pick-up and drop off points along Thomas, Frayser Boulevard, and Hollywood/Range Line roads. Buses can easily get around in Frayser as most roads are wide enough to accommodate them and other vehicles. However, Hawkins Mill and Range Line roads along the Frayser-Germantown-Winchester route are too narrow for buses and cars to use at the same time. This limits connectivity to businesses because often buses are competing with other vehicles for use of the roadways in these areas causing them to be late or be involved in an accident.

(Services). Limited access to services in Frayser is an issue that needed to be addressed several years ago by city leadership. Currently there is one library that serves the area, two community centers, no hospitals, and no police precincts.

According to Frayser Futures, the library is one of the oldest and most used of 19 libraries in the city. Outside of its limited space, the location of the library is the biggest issue facing the community. It is located on Argonne, one block east of the intersection of Watkins and Burnham.

It is difficult to reach from every neighborhood in Frayser except the neighborhood in which it is located. Residents living in the Rugby Hills, Range Line, and Ridge Grove nearly have to have a car to go to the library (Map 24). Those who choose to take the bus must be able to catch it along Thomas or on Frayser Boulevard. Everyone else must transfer at the North Terminal or Downtown to be dropped off near the library. The library is accessible by bicycle as Argonne intersects with Overton Crossing from the north, Thomas intersects from the west, and Frayser Boulevard crosses Watkins from the south. Bicycles are an excellent mode of transportation to use along these streets.

As previously mentioned, there are currently two community centers and 16 parks that serve the Frayser area. The North Frayser Community Center is located at 2555 Saint Elmo Avenue near the Range Line neighborhood. Getting to this community center from outside of the surrounding neighborhood would be difficult by car, on foot, or on bicycle. The adjacent intersection is a four-way stop dominated by automobiles and buses. There are no sidewalks in this intersection, and the roads are too narrow to allow for simultaneous use of bicycles, cars, and buses.

The Ed Rice Community Center is more centrally located on Watkins near James Road. This community center is surrounded by three neighborhoods and has a pedestrian crossing directly in front of it. Residents who do not live in the three neighborhoods bordering the center have to get there by bus, automobile, or bicycle. The center is more than one quarter mile from other neighborhoods and walkers would need to take precautions in high traffic areas that don't have sidewalks.

(Schools). Community members in Frayser have expressed concerns about the ability of children getting to school safely and as quickly as possible. Many school children live in the neighborhood where they attend school have no sidewalks or paths leading to those schools. Since school children cannot drive or use bicycles in the midst of automobile traffic, walking and carpooling are their only other alternative to get to neighborhood schools. On the way to and from school, children have been seen walking along ditches, in the streets, and in overgrown lots. Local government did make an effort to build a walking path along Hawkins Mill Road. It lead

to schools west of the Ridge Grove and Range Line neighborhoods, but the path has since been taken over by weeds. The path is no longer accessible.

(People). Social connections in Frayser seem to center around the community associations and various events at the two community centers. Utilization of those community centers and events is mainly contingent upon the use of a car or a bicycle within Frayser. Even though Frayser is considered a “walking community,” there are only so many places that a pedestrian in Frayser can safely go. Twelve percent of Frayser residents do not have automobiles and do not use bikes or buses to get around. These residents are either walking to get to their destinations or, perhaps, they are not even bothering to leave their neighborhoods. Limited modes of transportation not only inhibit the ability of residents to create personal relationships with one another, but also eliminate the opportunity to network and share ideas within the community. These non-existent relationships are partially the result of narrow roads, lack of sidewalks, and limited use of bike routes.

External. Frayser is located in an ideal area within the greater Memphis metropolitan area. It is a few short minutes in driving time from Downtown, Midtown, Millington, and Bartlett. Frayser sits directly north of Interstate-40 and directly east of the future Interstate-69 corridor. Frayser is a strategic location for any business that involves freight. Its connection to the region is, perhaps, Frayser’s greatest asset. The major roads that serve as regional connections from Frayser to Memphis are illustrated on Map 1. However, there is a lack of external connections to the Memphis metro area.

Freight and automobile traffic enter Frayser through two main corridors: Highway 51 and Interstate-40. The future Interstate- 69 corridor will serve the community in a manner similar to these two thoroughfares. Hollywood (Range Line), Watkins, and McLean are three arterials that carry local traffic into the community, as well. However, McLean currently dead ends at James Road. If McLean is extended through Frayser, as plans indicate, all three of these arterials will serve as strong connections to the south of Frayser. St. Elmo, Frayser Boulevard, and James Road connect Frayser to municipalities to the east. Run-down commercial establishments

weaken the entrances to the community at Highway 51/Whitney, Highway 51/Watkins, and Hollywood/James Road.

Another concern is that there is no connection from Range Line (Hollywood) to the north. Currently, Frayser only has two connections to the north—Watkins and Highway 51. Both of these corridors bisect the western portion of Frayser. There is no road connecting the eastern part of Frayser to the north. As development in Millington continues, it is increasingly important that Frayser make a new northern connection, and extending Range Line to Highway 51 is a logical option. Furthermore, the lack of a traffic signal at the St. Elmo/Range Line intersection is problematic for people entering the Frayser community from the east or for people heading eastward out of Frayser. All of these nodes and intersections represent the character of the Frayser community, and they must be appealing to residents and visitors.

The quality of the transportation system in Frayser is influenced by the utilization of the MATA bus system and the potential rideshare of the future light rail north corridor. These transit systems can tremendously strengthen Frayser's external connection to Memphis and the greater region. There are five MATA bus routes that travel through Frayser. While residents can connect to any point of interest in the region that MATA buses reach, the five Frayser routes directly connect to Downtown, Midtown, Raleigh, and Germantown. Additionally, a suburban transit center has been planned in Frayser. The transit center will serve as a hub for transfers among fixed bus routes. These centers would be smaller than inter-modal terminals and typically include canopy-covered bus bays, indoor passenger waiting area, customer service area and parking for park-and-ride users.

Imageability. Imageability refers to the visual appearance of a community and the elements within it. Frayser possesses many positive aspects of imageability, and these aspects are in the form of eye-catching scenic views, a mature and lush natural landscape, a well-rounded housing stock, and an existing sense of place. Conversely, Frayser is also home to a number of visual hindrances. These hindrances include views of expansive commercial parking lots, areas of deteriorating and dilapidated housing stock, and a visual impression that promotes a lack of

community pride. The positive and negative aspects of Frayser's imageability are further reviewed.

Addressing and capitalizing on current strengths while finding ways to remedy the existing visual weaknesses can aid in the reinvestment of Frayser by attracting new businesses and increase the community's sense of place and sense of pride.

Views. There are an abundance of both positive and negative views within Frayser. Frayser has rolling topography, and this makes it unique when compared to many communities within the City of Memphis and Shelby County. According to Frayser Futures, there are prime opportunities for scenic overlooks to be designated and created within Frayser (Memphis and Shelby Division of Planning and Development, 2003). These overlooks could provide residents as well as visitors with access to seeing wooded, scenic areas within the Frayser community.

Although Frayser has many positive and natural views, there are views within the community that are visually displeasing and exude a lack of community pride. Many of the homes surveyed during Visual Survey 2 displayed a need for repair, and this was especially prevalent in the Rugby Hills neighborhood. A significant amount of homes were in disrepair and burned. While some of the needed repairs were classified as minor, the neighborhoods that exhibit a stronger need for building repair provide significantly negative views for citizens and visitors.

In addition, some of the commercial areas along major thoroughfares contain massive parking lots that diminish storefront appeal and the overall appearance of the street network (Image 3). Areas like the one shown in Image 3 along major roads are not inviting to residents and visitors, and they are solely conducive to the automobile. This lack of visual appeal prohibits a sense of community because it is uninviting.

Image 3. Expansive Parking Lot Along Thomas Street (US 51)



Landscapes. The area's naturally rolling topography combined with a large amount of mature trees gives Frayser the unique appeal of an urban community within a rural setting. These natural assets give Frayser a character that is not readily found within the Memphis area, and this distinctive characteristic can be marketed as an asset in the community's attempts to draw reinvestment. The community's water boundaries, which are the Loosahatchie, Mississippi, and Wolf rivers, give a definite natural edge to the city's boundaries, and provide aesthetic appeal.

The Frayser community is fortunate to have many parks within its boundaries (Map 5). These public amenities provide wonderful opportunities for Frayser to maintain its green landscape in the future. If reinvestment and development occurs within the Frayser community in the future, allowing these areas that are currently parks to remain provides an added green space to a community that may lose a lot of its natural landscape to development.

Conditions. The overall visual condition of Frayser is a mixture of positive and negative. While the positive visual aspects of Frayser are many, the negative imageability has a strong impact on visitors and residents. This strong impact tends to outweigh the positive, and the need to remedy the imageability is great. Imageability plays a strong role in the community's investment appeal.

(Housing Stock). Frayser has a unique housing stock that adds to the character of the community, but there is a high vacancy rate. A disproportionate amount of empty homes helps to visually create a lack of safety and desirability. These vacant homes also perpetuate

vandalism. As mentioned previously, many homes within the Rugby Hills neighborhood have fallen victim to fire, and these homes have predominantly been vacant. This vandalism also furthers visually negative images.

(Community Identity). Community identity is seen as how citizens and visitors identify an area. Communities have specific features that make them identifiable to outsiders as well as residents. Frayser's rolling hills, lush landscapes, and boundaries of water are signature characteristics of the community. These features evoke optimistic responses, and place a strongly positive sense of community identity.

(Retail Areas). The overall condition and visual appeal of the commercial/retail areas within Frayser are not visually appealing for a number of reasons. The expansive parking lots placed in front of the retail facilities take away from street appeal, lower the desirability of the retail establishments, and decrease the visibility of human activity within and around commercial areas. If local residents and visitors are unable to see activity within these commercial areas, they are left with the impression that there is no activity. This leads observers to deduce that the area is static and lack of activity lessens an area's desirability.

In addition, many commercial buildings, like the residential structures within Frayser, could use some minor repairs. These needed repairs are insignificant in comparison to many of the housing repair needs, but the lack of maintenance on these buildings evokes a sense of neglect that resonates throughout the community. Residents and passers-by see these neglected structures and form a negative impression about the community.

(Transportation Network). From the information gathered in our first visual survey, the Frayser main streets are in good physical condition, but many major roads were found to be uncomfortably wide. Many of the residential roads surveyed are found to be in need of widening, straightening, and adding/repairing curbs and gutters because the widths were found to be uncomfortably narrow. The sidewalks surveyed were found to be most consistent along major roads, but were overall disjointed and often not present within the residential areas surveyed.

This lack of comfort level for the major and minor roads is not only a physical concern, it also promotes negative imageability and is unsafe. A road that is viewed as too narrow or too wide and has disjointed sidewalks has a negative effect on drivers, passengers, pedestrians, and cyclists. This negative imageability gives the impression of neglect and that the community lacks a sense of pride. It also diminishes Frayser's sense of place.

Sense of Place. Sense of place can be defined as the uniqueness of an area, and sense of place often promotes a strong sense of attachment for residents and visitors. Sense of place is also described as "a precondition for personal and community well being" (Eisikovits, 2005). It must be recognized that Frayser currently has a strong sense of place due to its lush and heavy tree coverage, water boundaries, and rolling topography. These natural features set Frayser apart from other communities within Memphis and Shelby County.

Unfortunately, many of the natural elements that help to foster a strong sense of place for Frayser are diminished by the large amount of negative imageability within the community. Rising vacancy rates, home deterioration and vandalism, unkempt vacant lots, and areas lacking basic transportation elements, such as sidewalks contribute to a weakened sense of place for the community.

Pride of Place. Pride of place can be defined as the affection one has for a place. Residents and visitors alike can exhibit pride or lack of pride for a place. From the interaction the class has had with a select group of Frayser citizens, they seem to have a tremendous level of pride for their community. Unfortunately, it seems that many visitors or outsiders to the Frayser community do not have that same pride of place that has been found in these Frayser residents. This lack of pride of place can be partially attributed to the negative imageability that is present within Frayser.

V. FUTURE SCENARIOS

Frayser is presently characterized by rolling hills, a strategic location, and strong social capital, as well as, foreclosures, deteriorating housing, and dangerous transportation conditions. What will happen if Frayser's trends continue? This section addresses problems that may arise if trends in Frayser continue and discusses the option of changing those trends.

Continuation of Trends. If the Frayser trends continue for the next twenty years, the community will be presented with increased hardships and disinvestment. The planned widening of Overton Crossing Road will exacerbate the current community hindrances of uncomfortably wide streets and a decreased sense of safety for the community. The escalating Frayser foreclosure rates and deteriorating housing stock, left unattended, will undoubtedly intensify the neighborhood's crumbling visual appeal and climbing crime rate. The rising prices in fuel and overall transportation costs places the automobile dependent community at risk for increased poverty. The continuation of existing trends for the next 20 years gives way to a bleak future for the Frayser community.

Widening of Overton Crossing. As emphasized throughout this report, the width of major and minor streets throughout Frayser is a definite cause for concern. The overly wide and narrow roads present a number of disadvantages such as lack of visual appeal, underutilization of alternate modes of transportation (i.e. bicycles and pedestrians), and decreased safety and sense of safety. Once Overton Crossing is widened, these existing ailments will only intensify. Automobiles travel at high speeds along Overton Crossing as well as other major roads; this speeding reduces the safety for pedestrians and other transportation modes. These overly wide streets also create a visual and social divide within the community. Widening Overton Crossing will only magnify the existing separation created by this major road.

Foreclosure Rates and Deteriorating Housing. Frayser's foreclosure rate was an astounding 4.8% for the year 2005, and Frayser has had the highest number of foreclosures within the Memphis area for several years now (Lockwood, 2005). This negative trend has detrimental effects on neighborhood blocks and overall communities. These detrimental effects often take the form of increased crime, plummeting housing values, and decreases in home equity values. It is also noteworthy to mention that these homes that have experienced foreclosure are often left to deteriorate, which adversely affects the streets and neighborhoods of these specific homes. These foreclosures and vacant homes often fall prey to vandalism which perpetuates crime.

The foreclosures and vacancies within Frayser have had a tremendously negative effect on the community's visual appeal, social capital, and economic potential. If these skyrocketing foreclosure rates continue without any level of intervention, the Frayser community faces a grave situation. Disinvestment, falling housing and equity values, and rising crime will most certainly continue as the foreclosures increase. This continuance will likely leave Frayser crippled beyond repair.

Rising Transportation/ Fuel Costs. As established in the demographics section of this report, Frayser citizens spend a large amount of their income on transportation costs. These costs are primarily related to the automobile, which includes routine maintenance, repairs, and rising gasoline prices. As also established in the demographics section, Frayser currently has a high poverty rate when compared to the City of Memphis and Shelby County. This higher poverty rate translates into Frayser citizens spending a larger portion of their income on transportation. This happening makes the Frayser community more vulnerable to rising gas prices as well as automobile associated costs.

If the price of gasoline continues to rise, Frayser citizens will experience great financial difficulties that may be impossible to overcome. Finding ways to decrease automobile dependence and increase the value of Frayser is critical. Implementing some of the transportation/accessibility mechanisms mentioned throughout this report, such as making the community more pedestrian and bicycle friendly and providing more local shopping and service options, are essential to the community's ability to fight rising transportation and fuel costs.

Alternative Scenarios. Many of the issues and trends discussed above do not have to be part of Frayser's future. Problems arising from rising transportation and fuel costs, street widenings, and deteriorating housing can be mitigated if Frayser chooses to implement alternative growth actions in the community. Frayser has the ability to address these issues and create a bright future for the community. The following section will outline one possible vision for the future of Frayser.

VI. VISION

In spring of 2003, Frayser Futures, a comprehensive plan for growth and development in Frayser, was created. The foundation of that report was the vision and values expressed by community leaders and community residents early in the planning process. The vision laid out by Frayser residents provides a good guiding light for future plans. The following section relates the vision expressed in Frayser future to this transportation plan.

Frayser Futures Vision. Frayser Futures envisions the future of Frayser as follows:

“Frayser in the 21st century will continue its traditions and values while becoming a premier destination community and first choice for living, learning, working, shopping, and recreation” (2003, pg. v).

Many of the transportation issues identified can be related to the vision laid out in Frayser Futures. Frayser cannot become a destination community if safety issues are not properly addressed. Dangerous roads for automobiles, pedestrians, and bicycles will discourage people from visiting and moving to Frayser. Accessibility is also important as people must be able to access the living, learning, working, shopping, and recreational facilities within Frayser. Connectivity is also important for realizing the vision laid out in Frayser Futures. Frayser residents and visitors must be able to easily access Frayser and the neighboring areas. The final issue identified, imageability, is also important for Frayser to become a destination community. Frayser’s natural amenities and the beautiful setting helps to makes it a destination community. All the issues if properly addressed can help to realize the vision laid out in Frayser Futures.

Goals and Objectives. The issues identified earlier in the report led to the development of the following goals and objectives for Frayser. The priorities identified by the Frayser residents at the first community meeting also influenced the overall vision, and thus, the following goals.

Accessibility, connectivity, safety, identity, and sustainability are all important aspects for Frayser. The strategies recommended later in this report were gathered based on the promotion of these goals and objectives.

Goal 1: Accessibility

Objective 1-A: Increase in pedestrian activity.

Objective 1-B: Increase in children walking to school.

Objective 1-C: Neighborhood retail within .25 mile walking distance of each residence.

Goal 2: Connectivity

Objective 2-A: New road connecting Ridge Grove neighborhood to Hwy 51 by 2017.

Objective 2-B: Increase in use of bicycles.

Goal 3: Safety

Objective 3-A: Reduction in vehicular traffic accidents.

Objective 3-B: Decrease in crime.

Objective 3-C: Reduction in pedestrian traffic accidents.

Goal 4: Identity

Objective 4-A: Creation of unique community identity.

Objective 4-B: Increase in community-wide events.

Objective 4-C: Improvement in public perception of Frayser within Memphis.

Goal 5: Sustainability

Objective 5-A: Preservation and improvement of existing housing stock.

Objective 5-B: 75% market capture rate.

Objective 5-C: Preservation of all existing floodplains.

Objective 5-D: Increase in energy efficiency.

Priorities from Community Meeting One. On November 8th, a community meeting was held at the Ed Rice Community Center in Frayser to present the findings of the visual surveys and gain feedback from the community members. Groups of three to four individuals were asked about their main transportation concerns. These transportation concerns were then listed and prioritized by community members. Through this process, five top priorities were identified in order of ranking: 1) lack of sidewalks; 2) no bicycle lanes along mapped routes; 3) inadequate street width; 4) no measures to stop speeding; and, 5) no enough employment opportunities.

VII. PLANS FOR ACTION

After prioritizing the community's concerns, several plans for action were developed. These action plans were chosen based on what was found to be most suitable for the Frayser community. The described action plans have been chosen as solutions for the overriding citizens' concerns of no measures to stop speeding and inadequate street widths, lack of sidewalks, no bicycle routes along mapped routes, and not enough employment opportunities. The recommended strategies further the Frayser vision, goals, and objectives. Funding for the implementation of these strategies is detailed, as well.

Measures to Stop Speeding and Inadequate Street Width. Two of the top concerns voiced in the first Frayser community meeting were that there were no measures to stop speeding and street widths were uncomfortable and inadequate. Based on these concerns, solutions were found that promoted the overall vision for Frayser and emphasized safety, accessibility, connectivity, identity, and sustainability.

Plans for Action. There are two options available for Frayser. First, nothing can be done to fix the problems of speeding and uncomfortable street width. However, if nothing is done, the problems will remain and lead to other traffic problems. Second, funding can be obtained to implement measures that will discourage speeding and make street widths more comfortable for residents and visitors. The following sections discuss these options more specifically and offer various alternatives for Frayser.

(Do Nothing). Speeding and inadequate street width lead to a number of problems. Wide streets encourage speeding and decrease a community's sense of place. On the other hand, narrow streets discourage speeding, but also decrease pedestrian and automobile safety when sidewalks are not present. Speeding creates many transportation problems, too.

Speeding impacts the safety of a transportation system by increasing frequency and severity of accidents involving drivers, passengers, pedestrians, and cyclists. In places where there are a large number of pedestrians, cyclists, and elderly drivers, speeding discourages walking, bicycling, and even driving.

(Add Alleviating Measures for Road Safety and Street Widths). The following section discusses various strategies to prevent speeding and create more appropriate street width. These solutions include raised pedestrian crosswalks, speed sensitive signals, bulbouts, and landscaping. Speeding and comfortable street width go hand in hand. Having comfortable street width encourages road safety and lower speeds. Therefore, all of the solutions discussed below are measures that can alleviate both speeding and uncomfortable street widths.

Speed sensitive signals are one measure that can be implemented in Frayser to stop speeding. Speed sensitive signals used pavement loops or video detection to detect the speed of an oncoming vehicle. If the speed exceeds the preset speed limit, the traffic signal will display a red light. Often signs are displayed before the signal stating that the signal is set at a particular speed to alert drivers of the Speed sensitive signal. The following photo is a typical road that features a speed sensitive signal. Drivers learn that speeding will not get them to their destination more quickly and are given an incentive to drive at appropriate speeds (Pedestrian and Bicycle, 2006).

Image 4. Speed Sensitive Signal



Source: http://www.saferoutesinfo.org/guide/engineering/speed_sensitive_signals.cfm

Benefits of Speed sensitive signals include that they are self-enforcing. This measure of preventing speeding is best for arterial and collector streets. There are many intersections in Frayser that could benefit from Speed sensitive signals. They would be ideal at intersections along Frayser Boulevard, Watkins, Highway 51, Overton Crossing, Range Line, and James Road.

Raised pedestrian crosswalks are another measure to prevent speeding. Raised pedestrian crosswalks are flat-topped road humps built as a pedestrian crosswalk. They help create pedestrian crossing designation through special paving or textures. Positive aspects of this measure to discourage speeding are that they slow traffic, increase pedestrian visibility along the crosswalk, require minimal maintenance, discourage cut-through traffic, and are self-enforcing. Negative aspects include that they may increase emergency response times, may damage emergency response vehicles if not carefully designed, may increase traffic noise in the vicinity of the crosswalk, may create drainage issues where raised crossing extends from the curb, and may require extensive warning signs to be effective (City of San Jose, 2001). The following images are examples of raised pedestrian crosswalks.

Images 5 and 6. Raised Pedestrian Crosswalks



Sources: *City of San Jose, 2001 and Pedestrian and Bicycle Information Center, 2006*

Raised pedestrian crosswalks are most effective near schools and recreation facilities. In Frayser, places that would be suited for raised pedestrian crosswalks are Mountain Terrace at Hawkins Mill, near the Georgian Hills School, and Watkins at Pinedale, across from the Ed Rice Community Center.

Minor bulbouts address uncomfortable street width and speeding. They narrow the street width at intersections and create a shorter and safer pedestrian crossing, encouraging drivers to slow down. Bulbouts may be striped or may be curbed islands that have special paving or landscaping. Positive aspects of bulbouts are that pedestrian crossing distance is reduced, the narrowed roadway contributes to lower speeds, and they create an opportunity for landscaping. Negative aspects are that they are hazardous for bicyclists, require removal of parking, increased maintenance costs, and signage is often needed to warn motorists of bulbout (City of San Jose, 2001). The following photos depict different types of bulbouts.

Images 7 and 8. Bulbouts



Sources: City of San Jose, 2001 and http://safety.transportation.org/htmlguides/peds/ex_images/ex_V-47.jpg

Minor bulbouts are best suited for intersections that bridge commercial and residential areas. Some ideal places for bulbouts in Frayser are Range Line at St. Elmo and University at Frayser Boulevard.

The comprehensive planning studio class found that narrowing roads by implementing widened sidewalks and planted median strips was another solution that was suited for the Frayser community and its current conditions. There are many roads within the Frayser community that are in need of narrowing; North Watkins, James Road, and Whitney Avenue are a few examples of some of the roads that could benefit from this narrowing approach.

Often pedestrians are discouraged to walk because they do not feel safe walking and/or interacting along extremely wide roads. Extremely wide roads are primarily designed for and conducive to the automobile. Motorists often travel at high speeds because the wide widths of roads tend to encourage this phenomenon. Widening existing sidewalks and implementing new widened sidewalks along uncomfortably wide streets is a means to increasing the distance between vehicular traffic and the pedestrian. Increasing this distance aids in the pedestrian's sense of safety; if those using the sidewalks feel that there is a larger buffer between them and the fast moving traffic, their comfort level is more likely to increase, and the use of sidewalks may increase as well (Project for Public Spaces, 2006).

While implementing wider sidewalks is a component of making the road “feel” smaller, converting turning lanes or narrowing and re-striping overly wide streets are a means of actually decreasing the width of roads (Project for Public Spaces, 2006). Placing planted medians along some of the roads within Frayser is needed. As found in our visual survey one, many of the overly wide streets within Frayser have an excessive amount of center turning lanes. For example, Frayser Boulevard had a continuous center turning lane with no places to turn into (there were no businesses or homes along the street that would benefit from this continuous turning lane). Converting these lanes into a planted median strip would aid in traffic speed and narrowing these roads (Image 9). Traffic speed can be decreased with the use of planted median strips because it actually reduces the width of roads. It also frames the street, which makes the driver feel more enclosed and at less liberty to speed.

Image 9. Example of widened sidewalks and planted medians



Source: www.pps.org

Implementing street trees along overly wide thoroughfares helps to frame the street; specific roads within Frayser that could benefit from this solution are Thomas (U.S. 51), Whitney Avenue, and portions of Range Line Road. Trees also help to create a friendlier environment for the pedestrian, cyclist, and others using alternative modes of transportation (Image 10).

“Vertical elements like trees or bollards further reduce the ‘optical width’ of a narrowed street, thereby discouraging speeding” (Project for Public Spaces, 2006). Street trees and other forms of landscaping not only frame the street and discourage speeding, they also incorporate natural elements into the street network, and this helps to soften the harsh appearance of any transportation network.

Image 10. Street lined with trees and landscaping



Source: www.pps.org

While there are several solutions available for the narrowing of streets, the main solution associated with widening roads is just that. The comprehensive planning studio class found that widening is greatly needed along some of the overly narrow roads. A prime example of needed widening is Hawkins Mill Road. This road is extremely narrow as well as curvy. While it is recognized that the widening of roads is very costly and that Frayser does not have the means to accomplish this task, as well as the others mentioned throughout this report, possible funding sources are given.

Funding Sources Available. The strategies previously discussed need not be funded only by the City of Memphis. There are numerous funding sources available for these type of transportation improvements. The Tennessee Department of Transportation provides funding through the Transportation Enhancement Program and the Roadscapes Program. The Transportation and Community and System Preservation Pilot Program and Safe Routes to Schools are other programs that provide funding for strategies that discourage speeding and promote comfortable streets. While there are other possible funding sources available, the comprehensive planning studio class found these sources to be the most applicable and the most effective for the issues of speeding and inadequate street width.

(TDOT Transportation Enhancement Program). Surface Transportation Program funds are provided by the federal government and are divided among states annually. Ten percent of Tennessee's STP funds are set aside for the TDOT Transportation Enhancement Program each year. The Enhancement Program funds projects that add community and environmental value to a local transportation system. Raised Pedestrian Crosswalks, bulbouts, and comfortable streets would be funded through this program. This program requires that the local jurisdiction provide 20% of the project's cost. This 20% match could be provided by the MPO or other entities. Grant applications for this program are available each spring from the Tennessee Department of Transportation (TDOT Enhancement, 2006).

(Safe Routes to School). The State of Tennessee has been given \$10.7 million through 2009 to promote child safety and alternate forms of transportation (walking, biking, etc.) while traveling to school. The maximum amount that can be awarded for each school each year is \$250,000, and the grant pays 100% of the project cost. Under this program, transportation facilities within a two mile radius of a school are applicable for this funding. Awarded projects must be a demonstration of actual needs, safety hazards, and a proposal to encouraging walking and biking to school among other things (TDOT SRTS, 2006).

While this funding is specifically allocated to aid in the safety of school age children and their ability to get to school, all citizens within Frayser can benefit from the funding. Funding can be used to implement new sidewalks, repair damaged and cracked sidewalks, implement curbs and gutters, crosswalks, and implement bicycle lanes (TDOT SRTS, 2006). Safe Routes to Schools is a new program; therefore, the competition associated with it may be less than some of the other funding sources listed throughout this report. For this reason, it would be in Frayser's best interest to apply for the funding this year, if at all possible. There is a good chance that funding may be awarded to the community.

(Transportation and Community and System Preservation Pilot Program). This program funds projects or planning studies that address the relationship between transportation and community and system preservation. Eligible projects must improve the efficiency of the local

transportation system, reduce environmental impacts of transportation, reduce the need for costly future public infrastructure investments, ensure efficient access to jobs, and identify strategies to encourage private sector development patterns which achieve these goals. Typical projects funded by this program are pedestrian generators and land use and streetscape improvements. The TCSP is a nationwide grant that is awarded yearly by Congress. It would fund all strategies listed in the previous section (FHA, 2006).

(TDOT Roadscapes Grant). The TDOT Roadscapes grant is designed specifically for highways and road right-of-ways that are federally-maintained or state-maintained. Since Thomas (U.S. 51) bisects Frayser, the Frayser community is eligible for this grant. This grant is primarily geared towards landscaping enhancements and improvements, but the funding can be applied towards gateways and entry corridors, scenic vistas and overlooks, historic sites, interstate and highway interchanges, and highway crossroads. The minimum amount that is awarded to selected grantees is \$10,000, and the maximum amount that can be awarded is 20% of the year's total awarded funds. This grant will fund 80% of project costs; it requires a 20% match. It must be noted that this match can come from other grants (TDOT Roadscapes, 2006).

Like the Safe Routes to School program, the Roadscapes grant is new. Its first year of available funding was 2006, thus, the 2007 award year will be the second year for this program. The competitiveness of this grant is likely to be less intense than many of the other funding sources that are mentioned in this report. It would be advantageous for Frayser to apply for this grant in 2007.

Lack of Sidewalks. There is a lack of adequate infrastructure for walking and biking in Frayser. These problems are found throughout Frayser, with concentrations in the Rugby and Ridge Grove areas. This section will look at the problems associated with this priority in more detail and outline some possible implementation strategies to fix these problems.

Problems Caused by Lack of Sidewalks. Frayser's lack of sidewalks has negative impacts on pedestrian safety, accessibility, connectivity, and community imageability. Pedestrian safety is affected by the lack of sidewalks, existing sidewalks that are broken, and a lack of buffers to

separate pedestrians from vehicular traffic. Accessibility and connectivity are significant aspects of a sidewalk system. The lack of sidewalk connections between neighborhoods and schools raises safety concerns and causes fewer children to walk to school. The community's image is harmed by missing/broken sidewalks and sidewalk systems that are not welcoming to pedestrians. The lack of adequate sidewalk systems, which include buffer zones, causes unsafe pedestrian conditions and discourages pedestrianism.

Alternative Plans for Action. Three action plans can be undertaken in Frayser: 1) do nothing; 2) organizational action; and 3) government-assisted action.

(Do Nothing). The first plan, do nothing, is simple. If nothing is done to remedy the sidewalk problems in Frayser, pedestrianism will continue to be an option primarily for those who do not have automobiles. People with automobiles will continue to make short trips in their cars, instead of by foot. Schoolchildren will continue to face unsafe conditions when walking to and from school. Neighborhoods that lack sidewalks will be disconnected both internally and externally.

(Organizational Action). Organizational action is a second plan. Since individual property owners are responsible for the creation and maintenance of sidewalks, the community can take action by raising funds to build new sidewalks or repair broken sidewalks. Community members can contact Code Enforcement to report problems with sidewalks on residential and major streets. Community members can also work with the Memphis and Shelby County Division of Planning and Development to ensure that future developments are built with adequate sidewalk systems. Organizations such as the Frayser CDC and the Frayser Community Association can dedicate portions of their budgets to repairing or building new sidewalks.

(Governmentally Assisted Action). Finally, the community can seek government assistance in order to provide funding for sidewalk projects. The Transportation Enhancement Program and Safe Routes to Schools are two programs that may assist communities with safety projects. Funding for sidewalk construction and rehabilitation is available from both sources.

The Transportation Enhancement Program is a federally-funded program that is administered by the Tennessee Department of Transportation (*TDOT FY 2006 Transportation Enhancement Program*, 2006). The program will provide funds to pedestrian projects that are not part of a transportation construction project. In order to be eligible for funds, the sidewalk project must be transportation-focused (getting people to work or school, for example), rather than recreation-focused. Landscaping and scenic beautification along transportation corridors are also eligible for funding; decorative and ornamental pedestrian lighting are also among the projects that may be funded.

Using the Transportation Enhancement Program would allow Frayser could build new sidewalks in the Rugby Hills and Range Line areas, where sidewalks do not currently exist. Frayser could also use Enhancement Program funds to build viable sidewalk systems along its major streets. Frayser Boulevard. and Thomas St. would be good locations for sidewalk systems that include buffer zones; such a project might be eligible for funding based on both safety concerns and landscaping and scenic beautification. The Transportation Enhancement Program provides 80 percent of the project's cost to selected projects; applications must be submitted by local governments, commissions established by local governments, or state agencies.

Like the Transportation Enhancement Program, the Safe Routes to Schools (SRTS) program is a federally-funded program that is administered by the Tennessee Department of Transportation (*TDOT Safe Routes to Schools Program*, 2006). The purpose of the SRTS program is threefold: to encourage children to walk or ride bicycles to school; to make walking and biking safer and more appealing alternatives, therefore promoting a healthy lifestyle; and, to improve safety and reduce traffic and air pollution near schools. A total of \$7.5 million has been allotted to TDOT by the federal government to fund SRTS projects between 2005 and 2009.

Areas that are within two miles of an elementary or middle school are eligible for funding by SRTS. Projects that may be funded include new sidewalks, sidewalk repairs, widening sidewalks, adding missing sidewalk segments, crosswalks, and pathways that are separate from the roadway. In Frayser, the Rugby Hills and Range Line areas would be good candidates for such funding for new sidewalks. Additionally, the portion of Frayser Boulevard that is close to

Denver Elementary could benefit from crosswalks and sidewalk repairs. Selected projects are funded at 100 percent of cost up to \$250,000; local governments, commissions established by local governments, regional agencies, and state agencies may apply for funding.

Both the Transportation Enhancement Program and the Safe Routes to School program may provide funding for much-needed sidewalk projects in Frayser. Both of these projects have a specific focus. The Transportation Enhancement Program focuses on means of transportation; thus, sidewalks are viewed primarily as a means to get place to place, rather than a means of recreation. The Safe Routes to School program is designed primarily as a means of safe transportation for school children. While both programs have a specific focus, after program funds are used to construct or rehabilitate a sidewalk, that sidewalk is available to all Frayser residents and visitors for multiple purposes. After a sidewalk is constructed, it will be a means of transportation, as well as a means for recreation and social walking. All Frayser residents can benefit from new and rehabilitated sidewalks.

No Bicycle Lanes Along Mapped Routes. There is a lack of adequate infrastructure for biking in Frayser. These problems are found throughout Frayser, although they seem to be concentrated in Rugby and Ridge Grove areas. This section will look at the problems associated with this priority in more detail and outline some possible implementation strategies to fix these problems.

Problems Caused by Lack of Bike Routes. One of the main concerns associated with the lack bike routes in Frayser is that of safety. The lack of bike lanes puts the bicyclist in danger by putting them in the same realm as the car without protection. This is of particular concern in those areas where the lack of bike lanes puts school children at risk of injury.

Another problem with the lack of bike routes is that it makes getting around Frayser much more difficult. The lack of adequate facilities discourages individuals from taking other forms of transportation even when biking may be just as convenient as taking a car. This is of particular concern in Frayser where a large population of the community does not have a car and must use other forms of transportation to get to their desired destination.

Alternative Plans for Action. There are several options for dealing with the problem of the lack of bike paths in Frayser. This section will discuss options for solving this problem in detail.

(Do Nothing). One option is to do nothing. This would mean that Frayser would continue to be served by inadequate bicycling infrastructure. Safety would continue to be a major concern, and the area would continue to be disconnected.

(Organizational Action). Organizational actions are those that the local residents and organization, such as the Frayser Community Association and Frayser Development Corporation, can take without help from the government. These actions may be somewhat limited due to the expensive nature of transportation infrastructure projects. The lack of governmental aid can also be a positive element as it allows community to take action faster than if they were working with government.

One possible organizational action would be to partner with like-minded organizations. This would include such organizations as the local bicycle club, the sierra club, and other smart growth organizations and safe routes to schools organizations. Together, these individuals can use their combined political power to pressure local governments to make bike lanes a funding priority.

(Governmentally Assisted Action). One other option is to obtain governmental funding for the creation of bike lanes in Frayser. There are a variety of funding sources that can be used to create bike lanes and other bicycling facilities. Two such sources are the Transportation and Community System Preservation Pilot Program and the TDOT Traffic Enhancement Fund. These funding sources are likely to fund bicycle storage projects, bicycling promotional programs, and traffic calming programs.

Not Enough Employment Opportunities. Employment opportunities in Frayser are scarce due the lack of transportation options to meet the needs of the underemployed and the unemployed. There are few employment opportunities within the neighborhood, forcing the available

workforce to look jobs in other parts of Memphis. This section will discuss possible solutions to the employment problem, what will happen if nothing is done, and how to implement possible solutions.

Problems Associated with Lack of Employment. Lack of employment in Frayser has caused many problems in their transportation system. Fourteen percent of the residents in Frayser do not have automobiles. This limits their connection to the Memphis region as a whole and makes it difficult for them to find employment outside of the community. Employment opportunities within the neighborhood are also difficult to reach due to the inadequacy of the sidewalk system that was previously mentioned and almost nonexistent connections between the residential areas and the commercial nodes. Rising gas prices have also had an impact on the ability of residents to get around inside and outside of Frayser. MATA has raised their prices due to rising gas costs, and motorists are spending more money on transportation costs.

Alternative Solutions. Possible solutions to improve the quality and quantity of employment in Frayser are to increase the number of available bike routes, sidewalks, and alternative modes of transportation inside the neighborhood and to the Memphis region. Another solution is to encourage businesses to open in Frayser by giving them incentives to move into the area. Some of these alternatives include implementation of the MPO bike routes along major streets only and the addition or replacement of non-existent and broken sidewalks. Improving bike routes in Frayser will generate more business in the commercial areas and also give residents a new way to travel to work.

Currently, less than two percent of Frayser's population rides bikes as a means of transportation. The number would increase if there were designated areas along streets, allowing cyclists to ride comfortably and safely. Sidewalks would also be utilized more if they were cleaned and actually led to a foreseeable destination. Employees living in neighborhoods near commercial areas could get to work quickly and safely without having to walk in ditches or in the street.

Small and large businesses generally open in areas where there is a large customer base that will generate a profit. Businesses would be more likely to relocate to Frayser and stay if they had

financial incentives to motivate them. These same businesses would also be more likely to hire qualifying local residents if they had reliable and safe transportation alternatives to get to work.

(Do Nothing). If Frayser continues to have transportation issues and limitations, their economy will also continue to suffer. Eventually, businesses will move out of Frayser and into neighborhoods that can easily access the goods and services they have to offer. The unemployment rate within the neighborhood will continue to rise, and residents will eventually have move out to avoid increased crime or find homes closer to employment opportunities in other parts of Memphis. This out-migration could eventually lead to the deterioration of Frayser's self-sustaining neighborhoods. The poorly accessible streets and sidewalk networks will become so far beyond repair that the local government will have no choice but to focus on reinvestment in Frayser neighborhoods, balancing the amount spent on the area with amount generated by Frayser tax revenue.

(Organizational Action). In January 2000, the Frayser Community Development Corporation (FCDC) was formed as an economic development entity by the Frayser Community Association. The role of the FCDC is simply to revitalize the Frayser community. Part of the revitalization plan of the FCDC to improve the quality of transportation network within Frayser. The non-profit can appeal to city leaders to apply for TDOT funding that will improve their streets and sidewalks. They can also apply for donations and grants that will fund neighborhood clean-up programs, workforce development, financial planning and budgeting workshops, and youth mentoring programs. These programs are essential to providing economic development through community initiatives.

Neighborhood Clean-Up Programs is one way of taking organizational action in the community. The Division of Housing and Community Development provides grants to non-profit community-based organizations to improve the quality of life within their neighborhoods. These programs range from clean-up initiatives, workforce programs, financial workshops, and youth development programs. Money from the grant can be used to clean up litter on streets and overgrown weeds from sidewalks. It can also be used to clean up vacant lots and houses, curbing crime and improving safety within Frayser neighborhoods. Residents can also benefit from

financial education classes that teach how to repair their credit, balance checking accounts, and stick to budgets.

Workforce Development and Financial Planning Workshops are another way community organizations can aid in developing more employment opportunities. Money management skills can lead to employment or entrepreneurial opportunities for residents within Frayser. Workforce development programs can also give after school jobs to neighborhood children. Together, workforce development and money management programs will lead to stronger economy at the neighborhood level and will also lead to reinvestment in the community.

Mentoring Programs allow organizations to take an active role in improving economic conditions in a community, as well. Youth mentoring programs can include teaching kids to keep their neighborhoods clean and watch over smaller children walking to and from school in high traffic residential areas. These programs can also show teenagers the value of riding public transportation, using bicycles, and walking versus owning an automobile.

These community development programs can be designed to improve the transportation network of the Frayser community. The Frayser Community Development Corporation needs to decide what their priorities are and focus their efforts to make those priorities into solutions.

Governmentally Assisted Action. One of the programs available through the United States Department of Housing and Urban Development helps neighborhoods revive local economic development. This program is called Renewable Communities and is available to census tracts designated the Census Bureau and the Bureau of Economic Analysis as having economically disadvantaged residents.

(Renewal Community). In Frayser, Census Tracts 101.20 and 102.20 were added as renewal communities in December of 2005. These census tracts include all of the Rugby Hills area and the surrounding neighborhoods. This program provides funding to businesses located within these renewable communities who hire employees that also live in the neighborhood. Businesses are eligible to receive a \$1,500 tax credit per employee as long as both are established in the

renewal community. Lastly, businesses can receive a \$2,400 tax credit per employee residing in the renewal community who are between ages 18 and 24. This program is only available through December 31, 2009 and employers must show proof of address to an income tax preparation agent or agency.

The program offers more employment opportunities not only to the residents within designated census tracts, but also offer employment opportunities to residents who live in surrounding neighborhoods. The Renewal Communities program spurs both private and public reinvestment by improving the community with increasing local tax revenue.

VIII. NEXT STEPS

This report has addressed issues and opportunities present in Frayser and has provided various strategies that promote accessibility, connectivity, sustainability, identity, and safety. Organizations in Frayser have the opportunity to make their community exactly what they want. It is now up to local organizations and government to implement strategic actions in Frayser.

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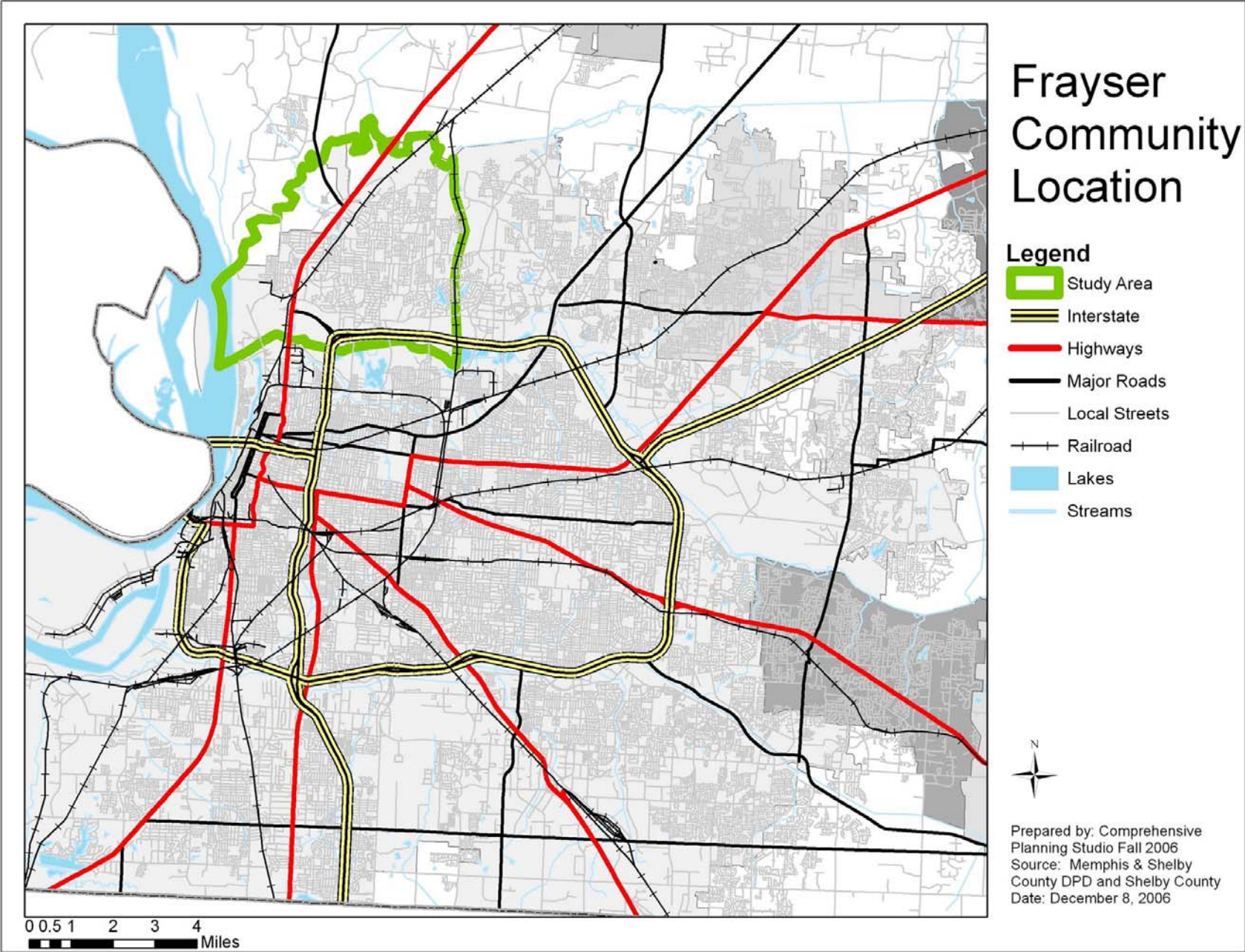
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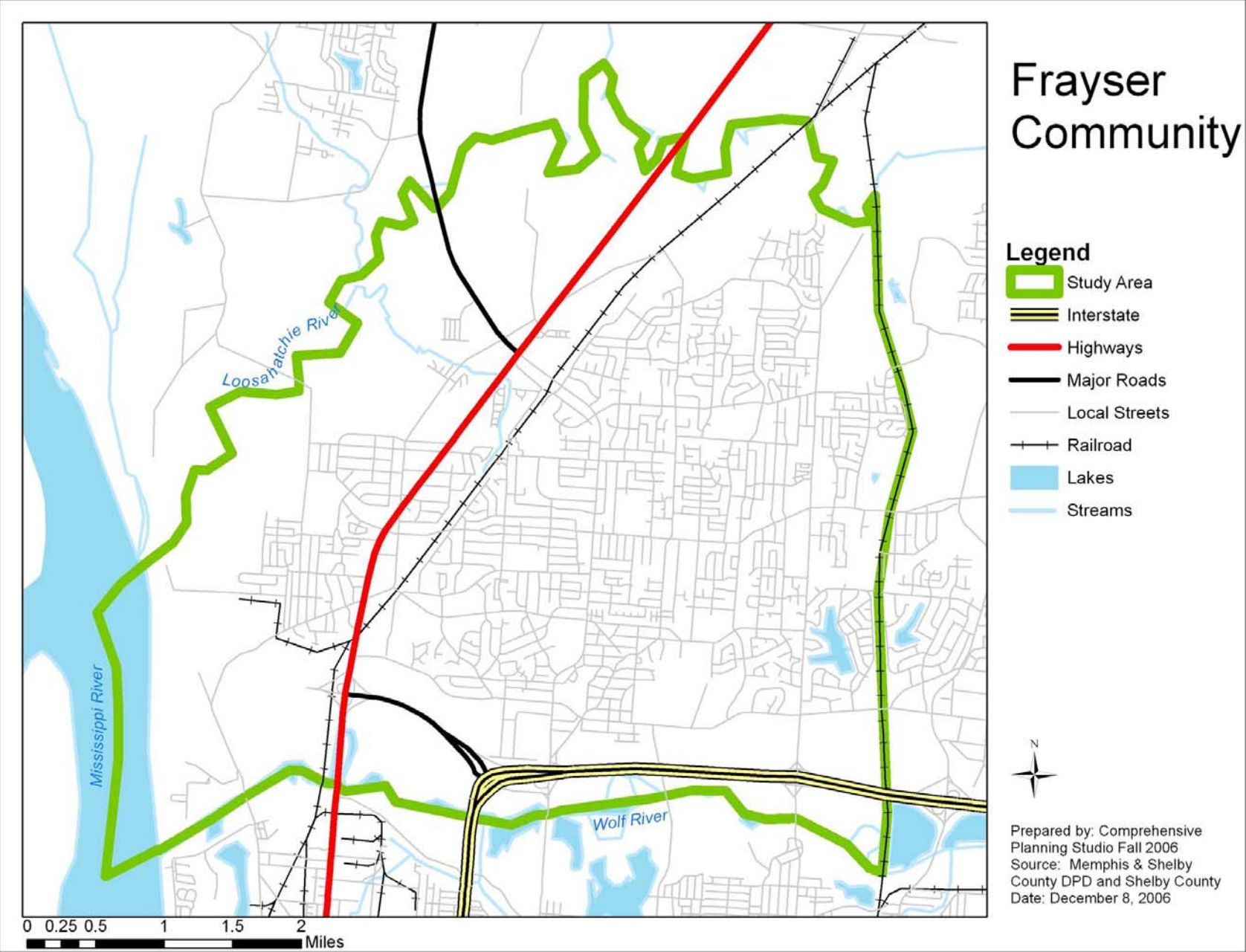
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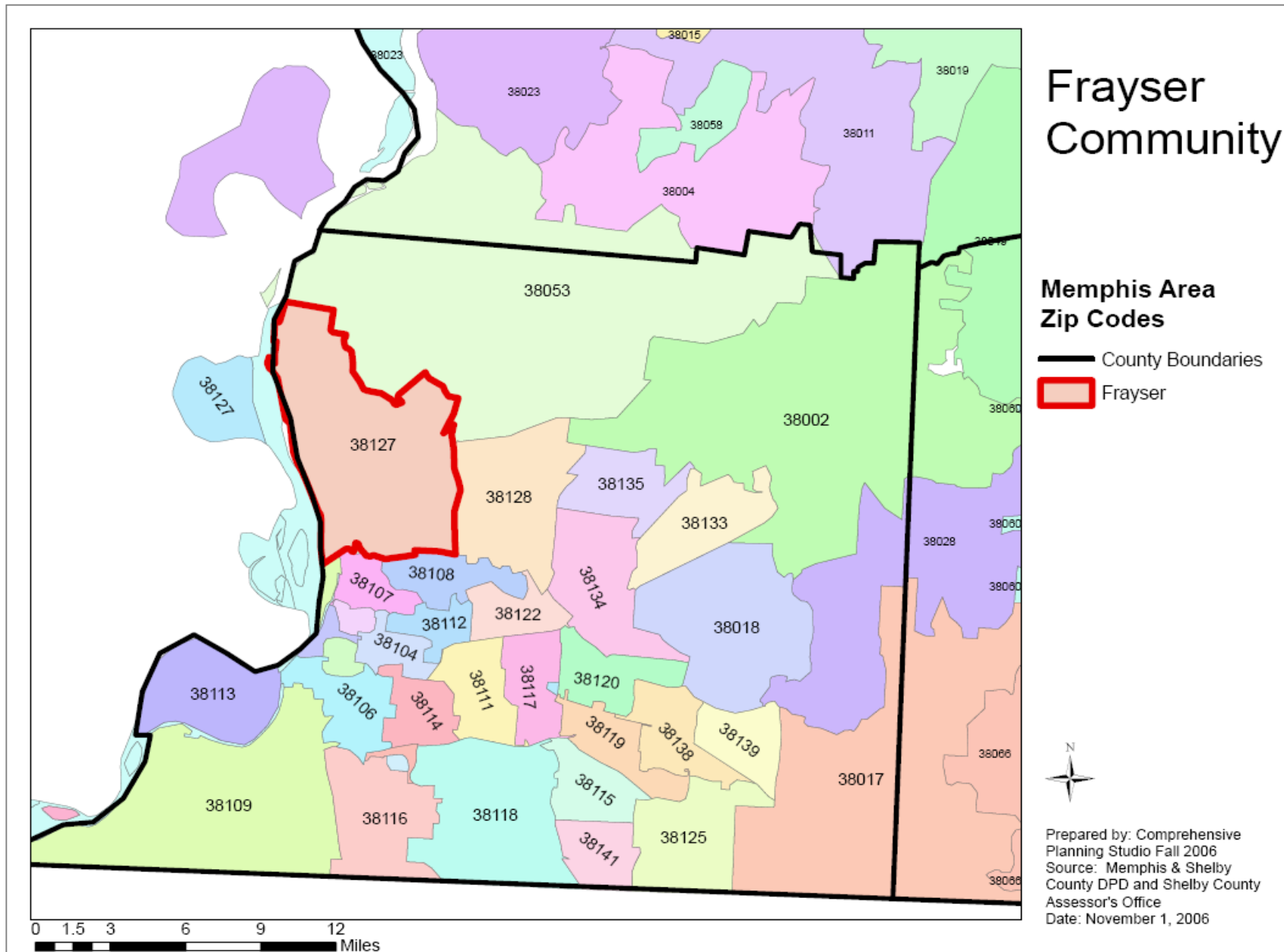
Map 1. Memphis Region



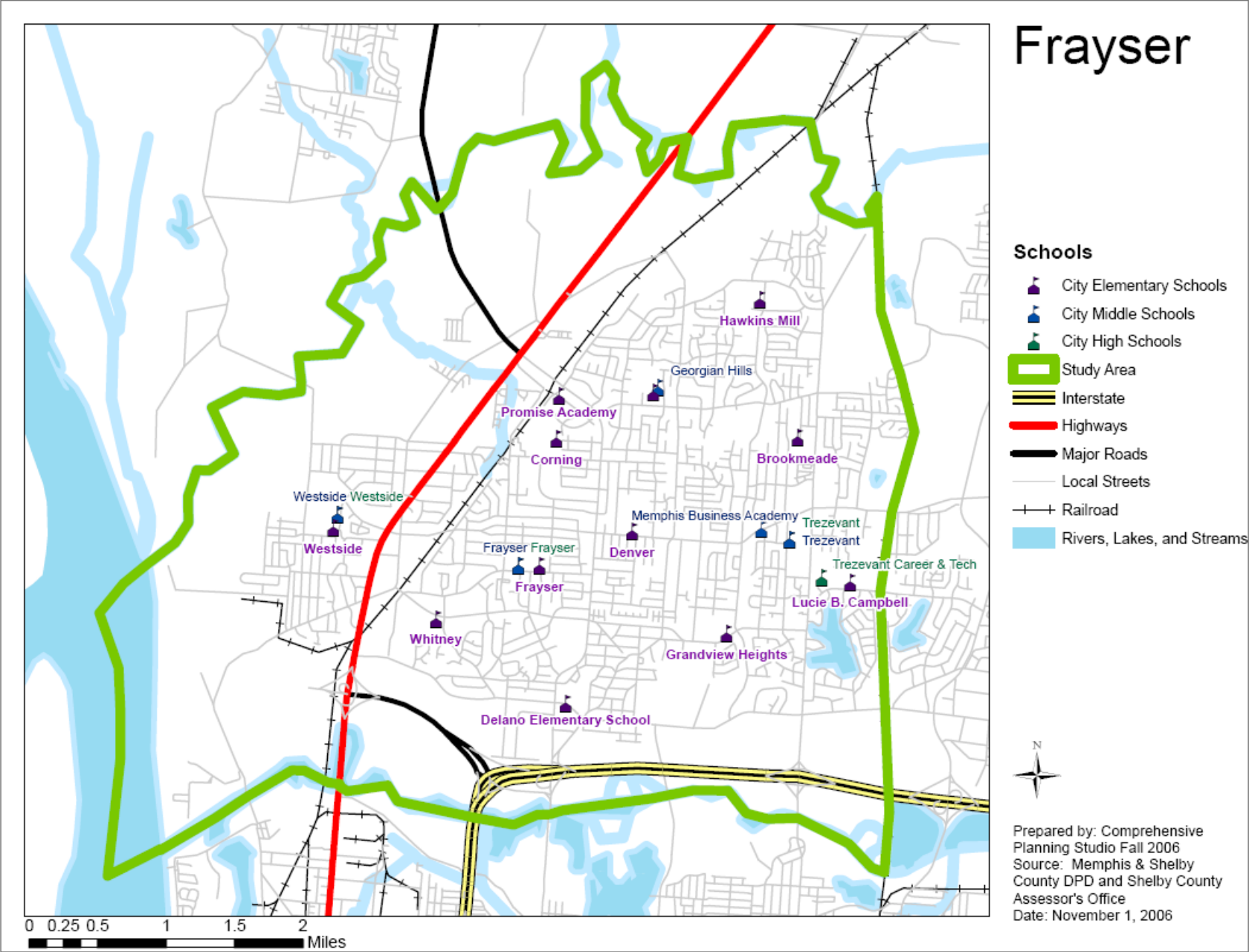
Map 2. Frayser



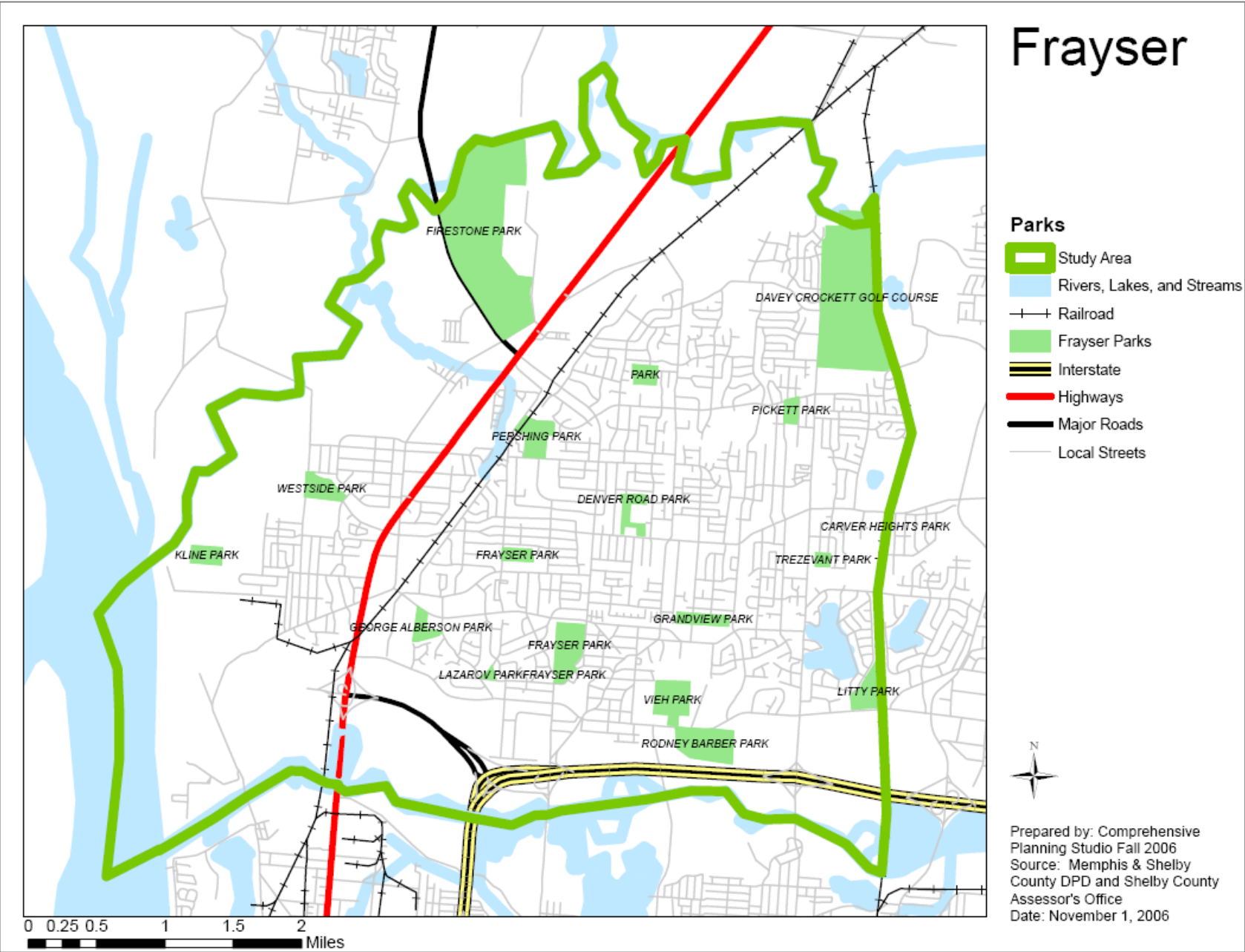
Map 3. Zip Code, 38127 Frayser



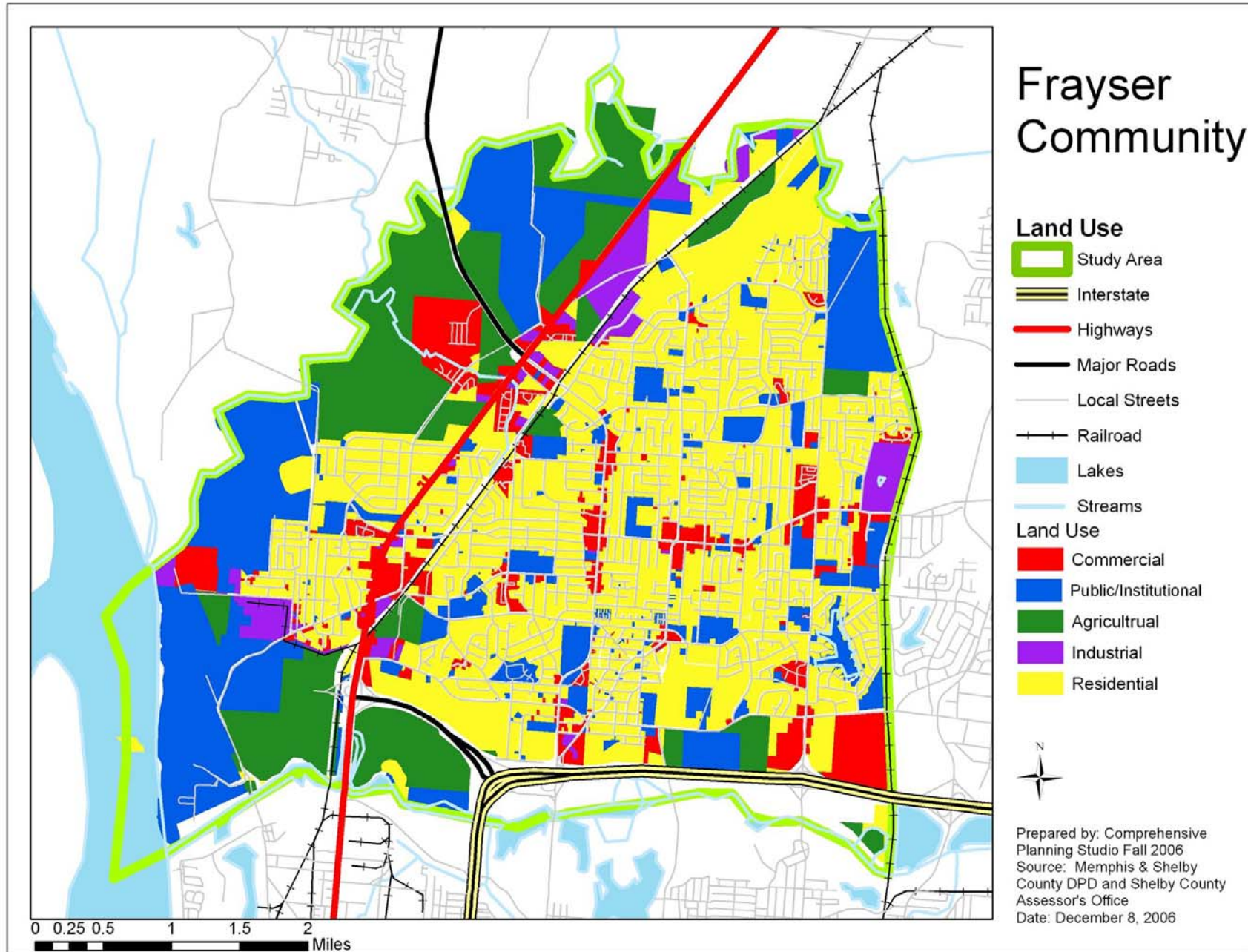
Map 4. Frayser Schools



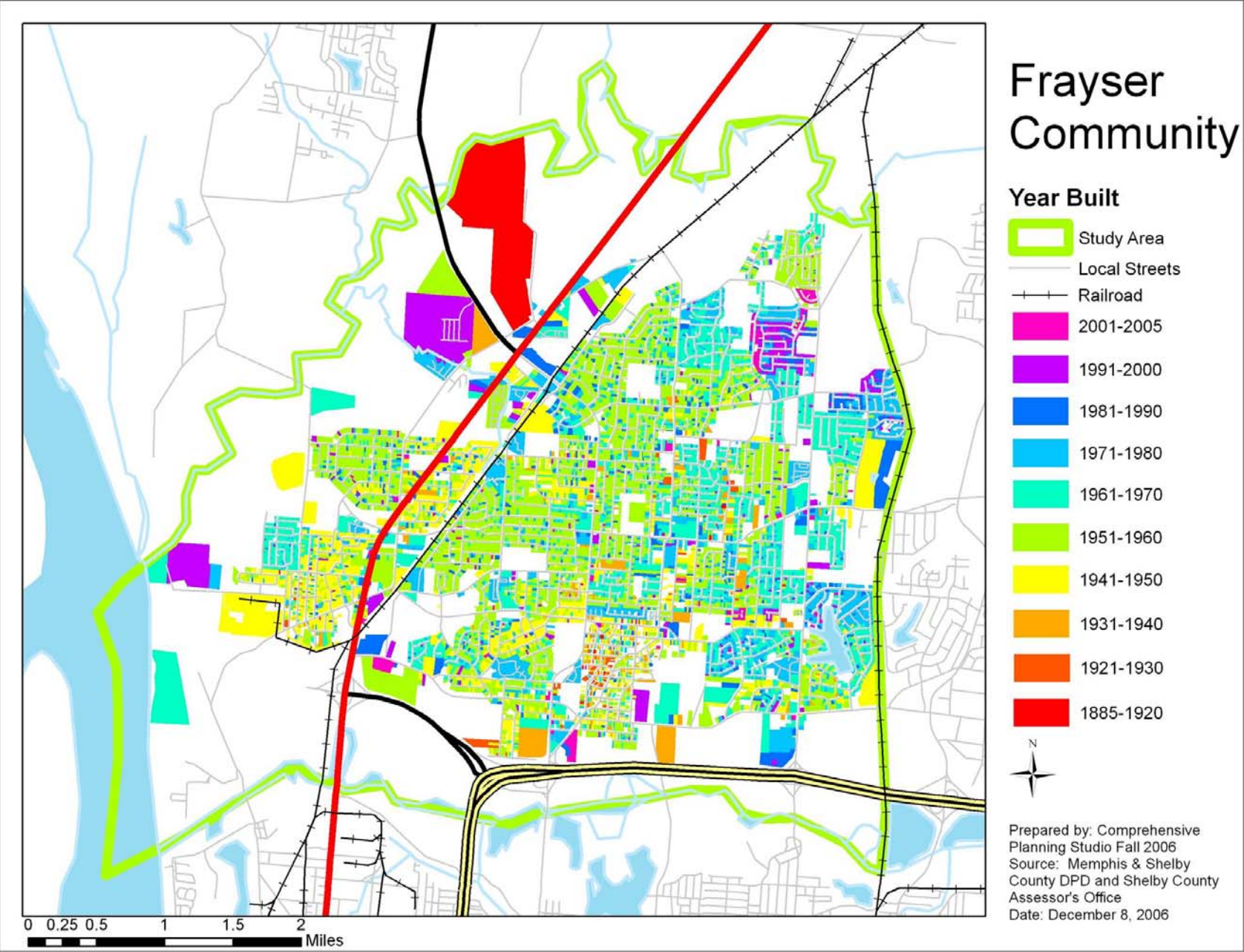
Map 5. Frayser Parks



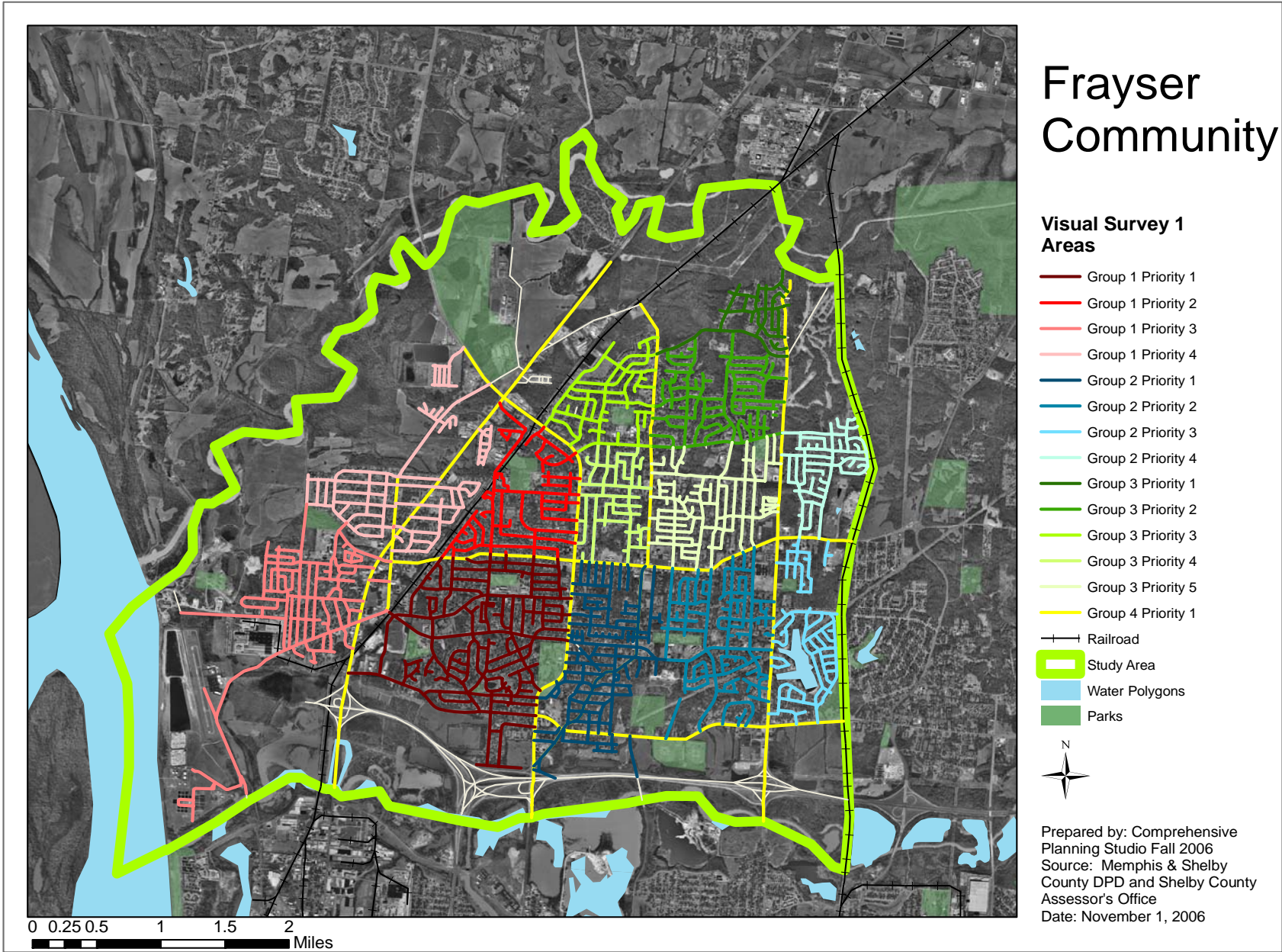
Map 6. Land Use



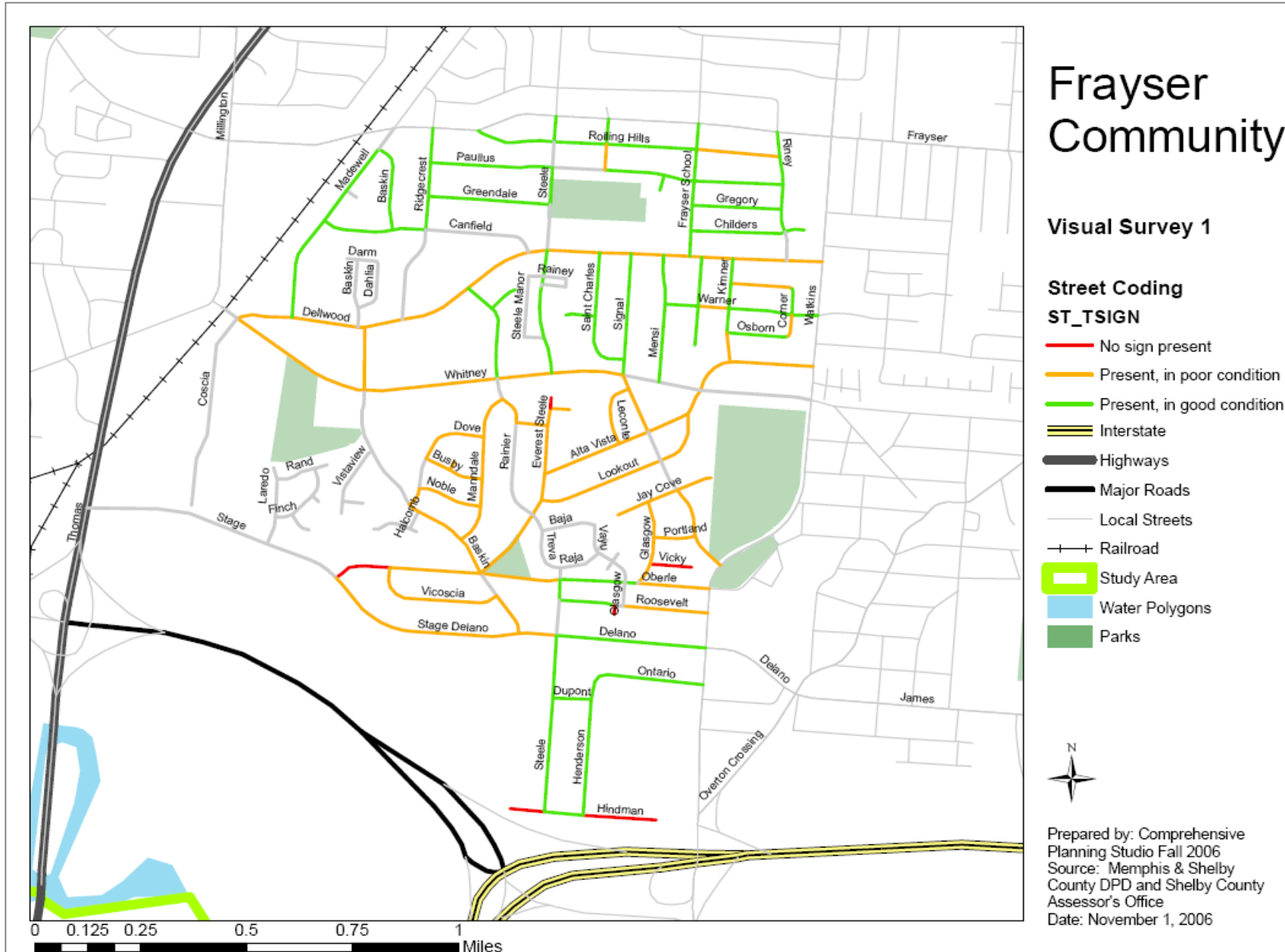
Map 7. Year Built



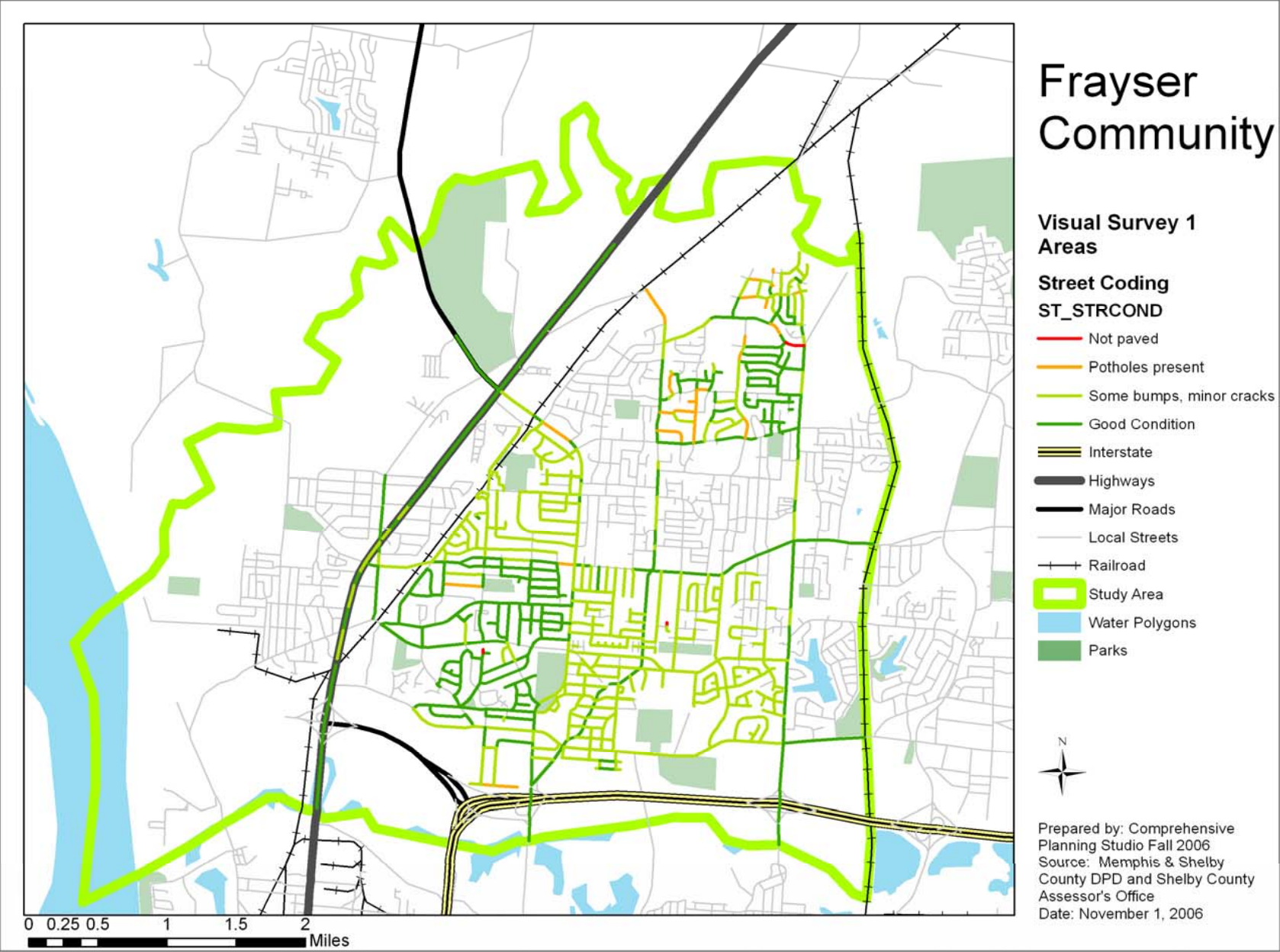
Map 8. Visual Survey 1 Routes



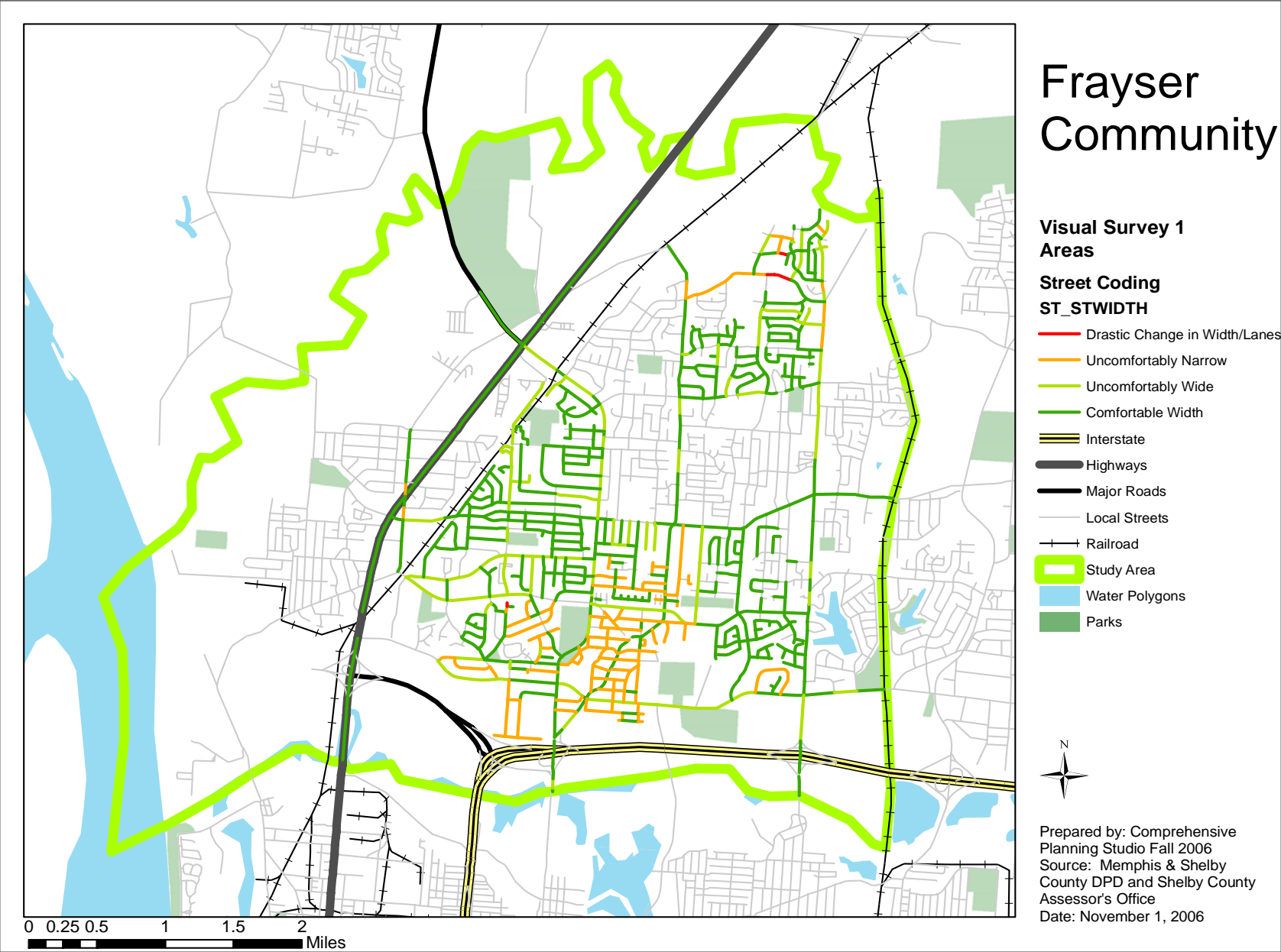
Map 9. Visual Survey 1 Traffic Signs



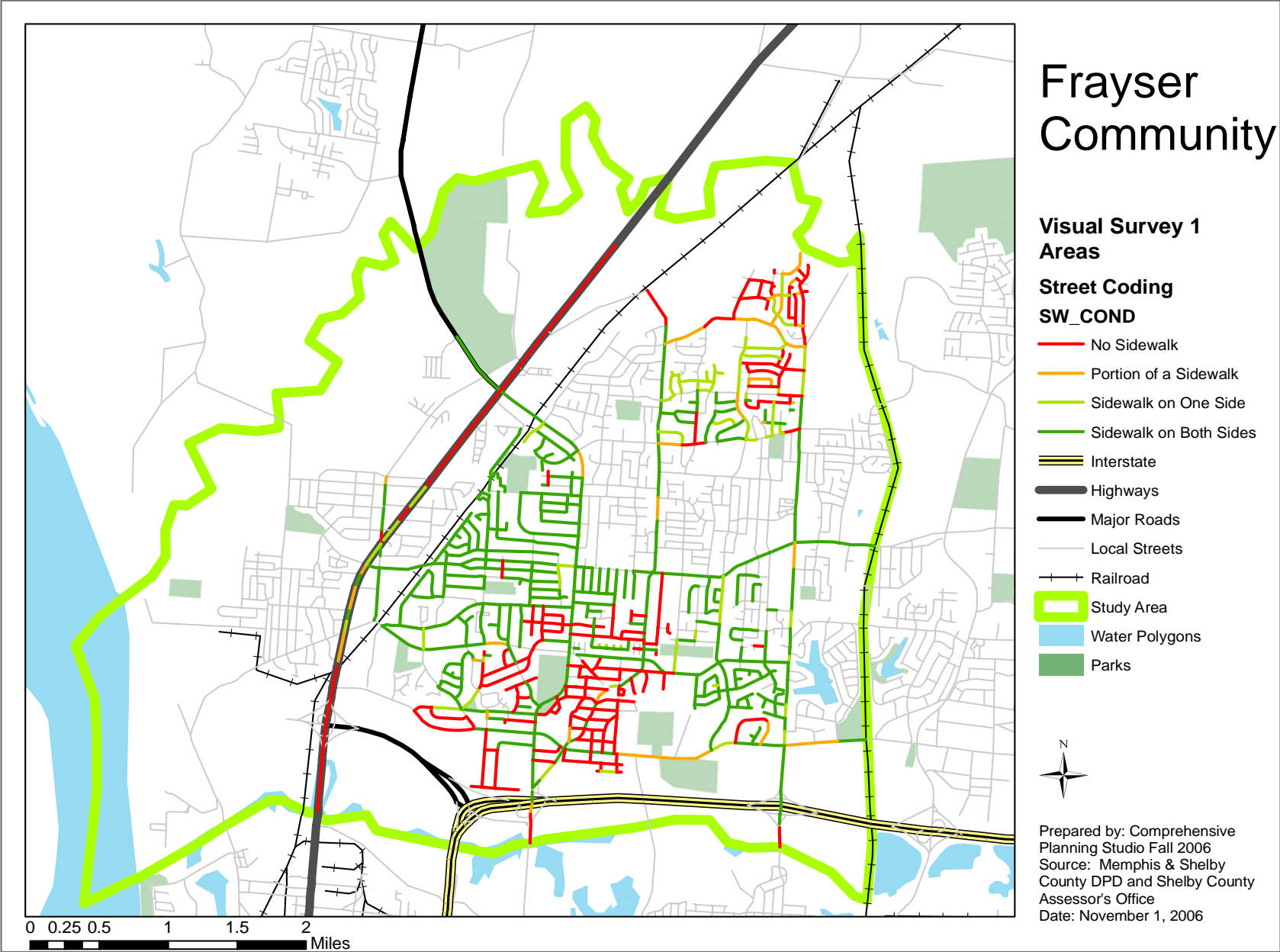
Map 10. Visual Survey 1 Street Structural Condition



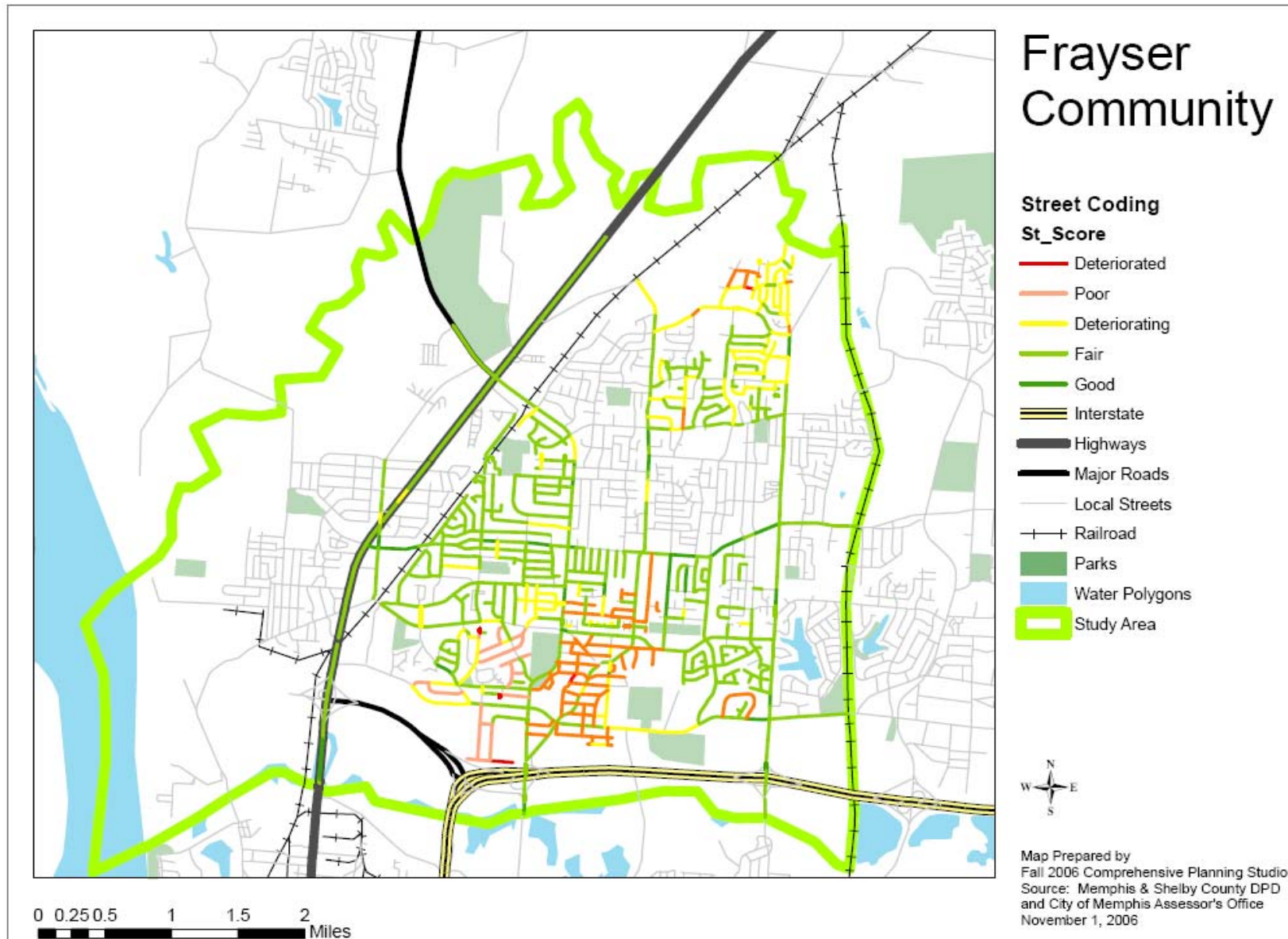
Map 11. Visual Survey 1 Street Width



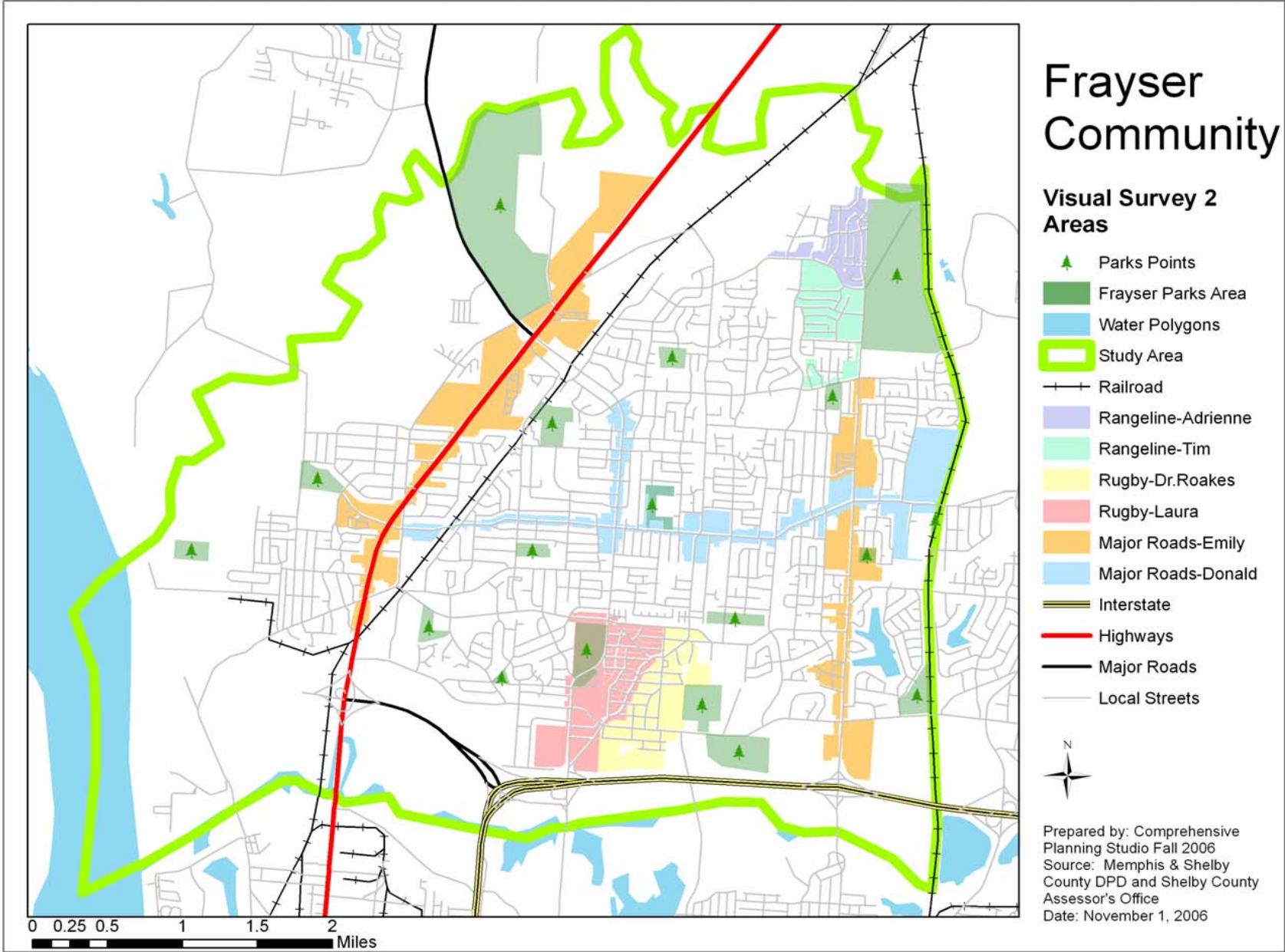
Map 12. Visual Survey 1 Presence of Sidewalks



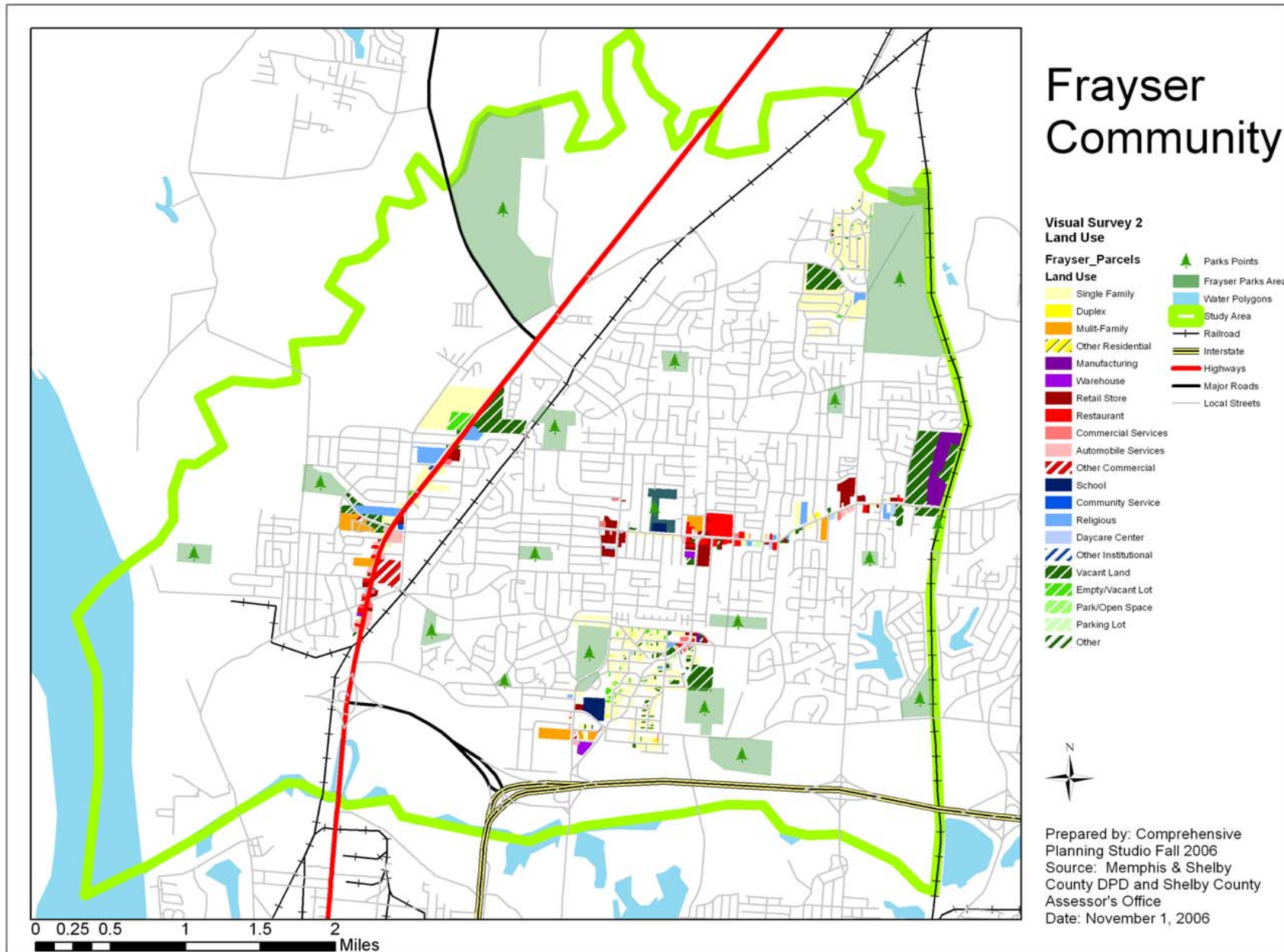
Map 13. Visual Survey 1 Street Score



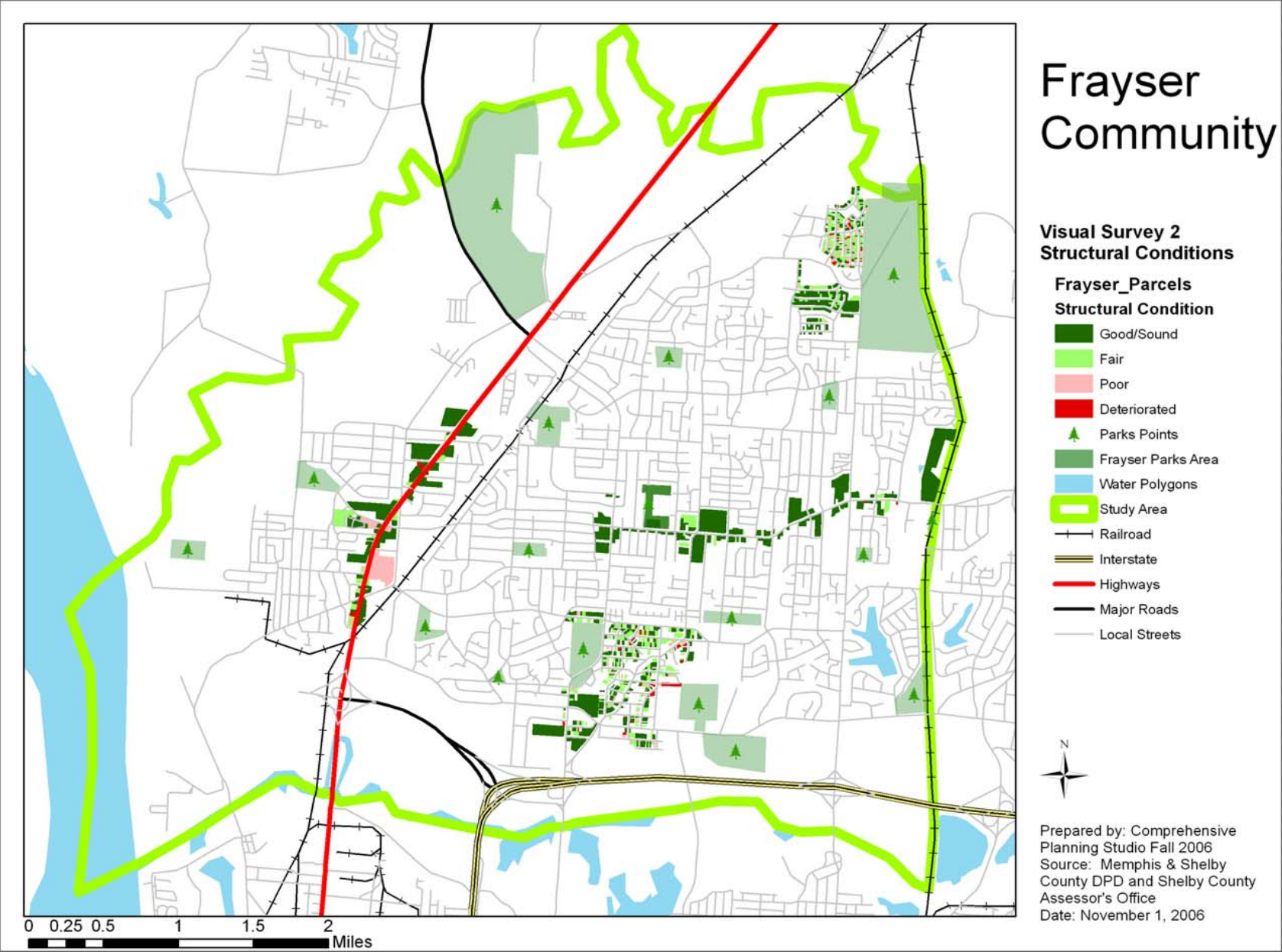
Map 14. Visual Survey 2 Districts



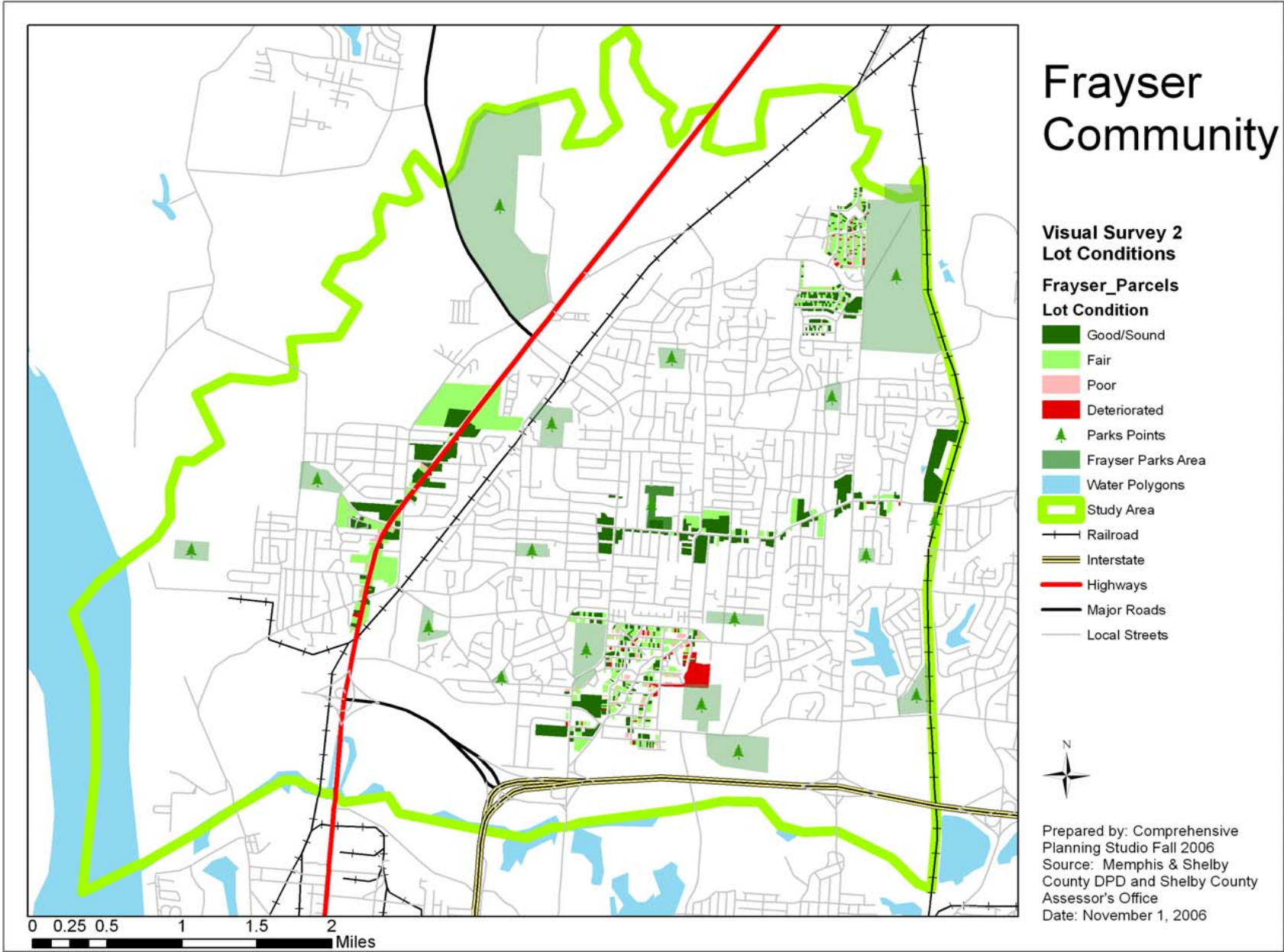
Map 15. Land Use Surveyed



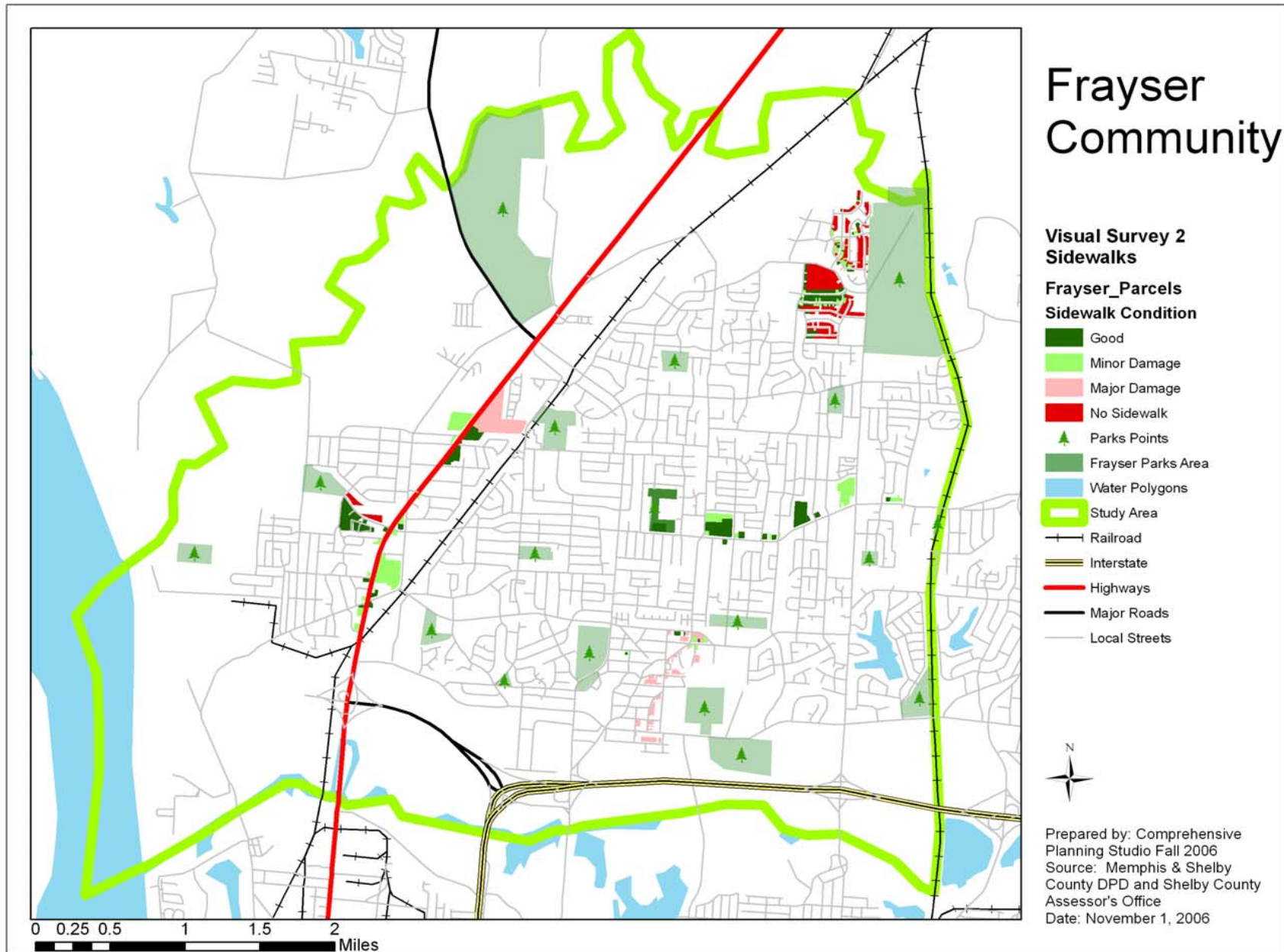
Map 16. Frayser Structural Conditions



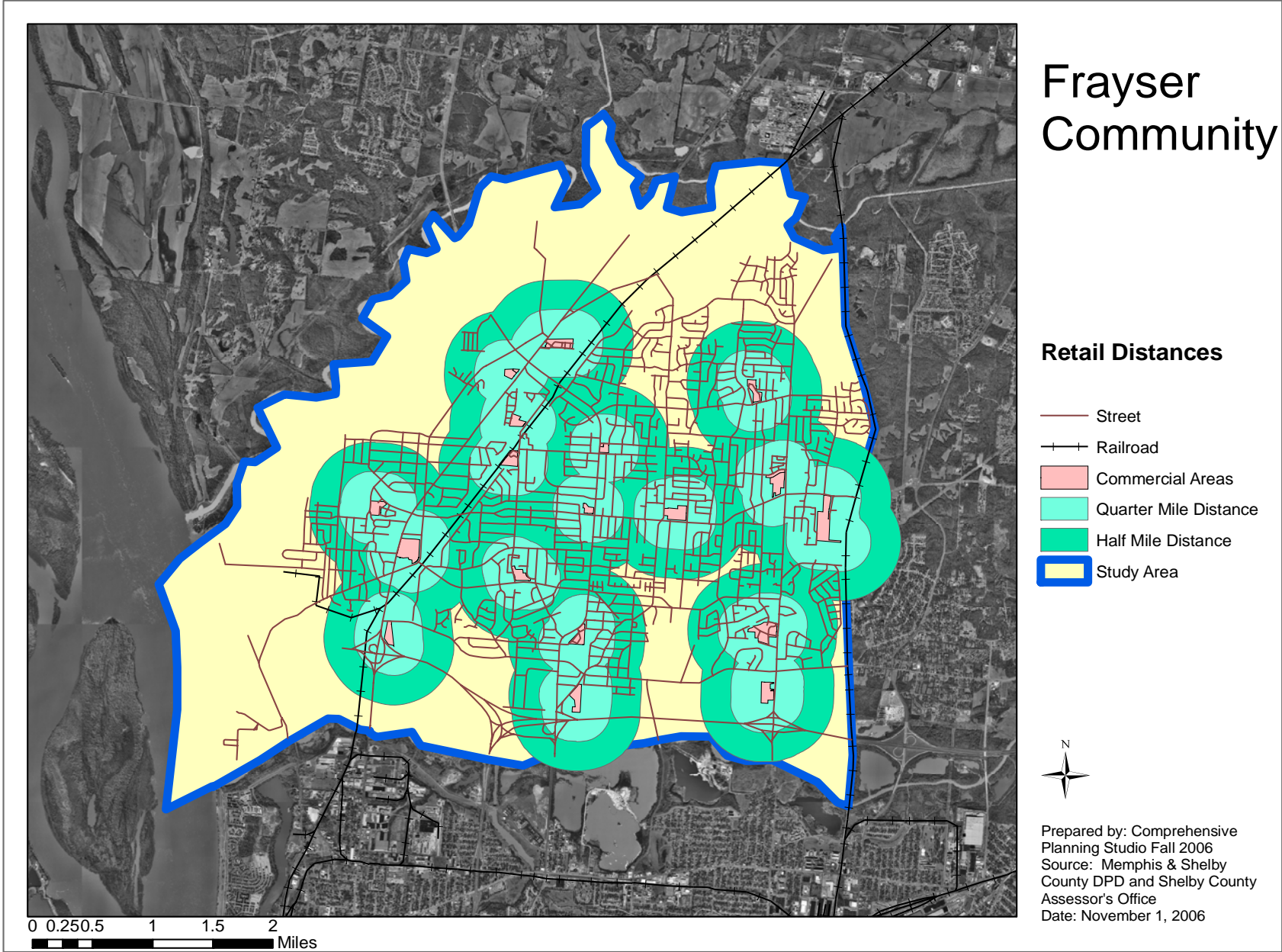
Map 17. Frayser Lot Conditions



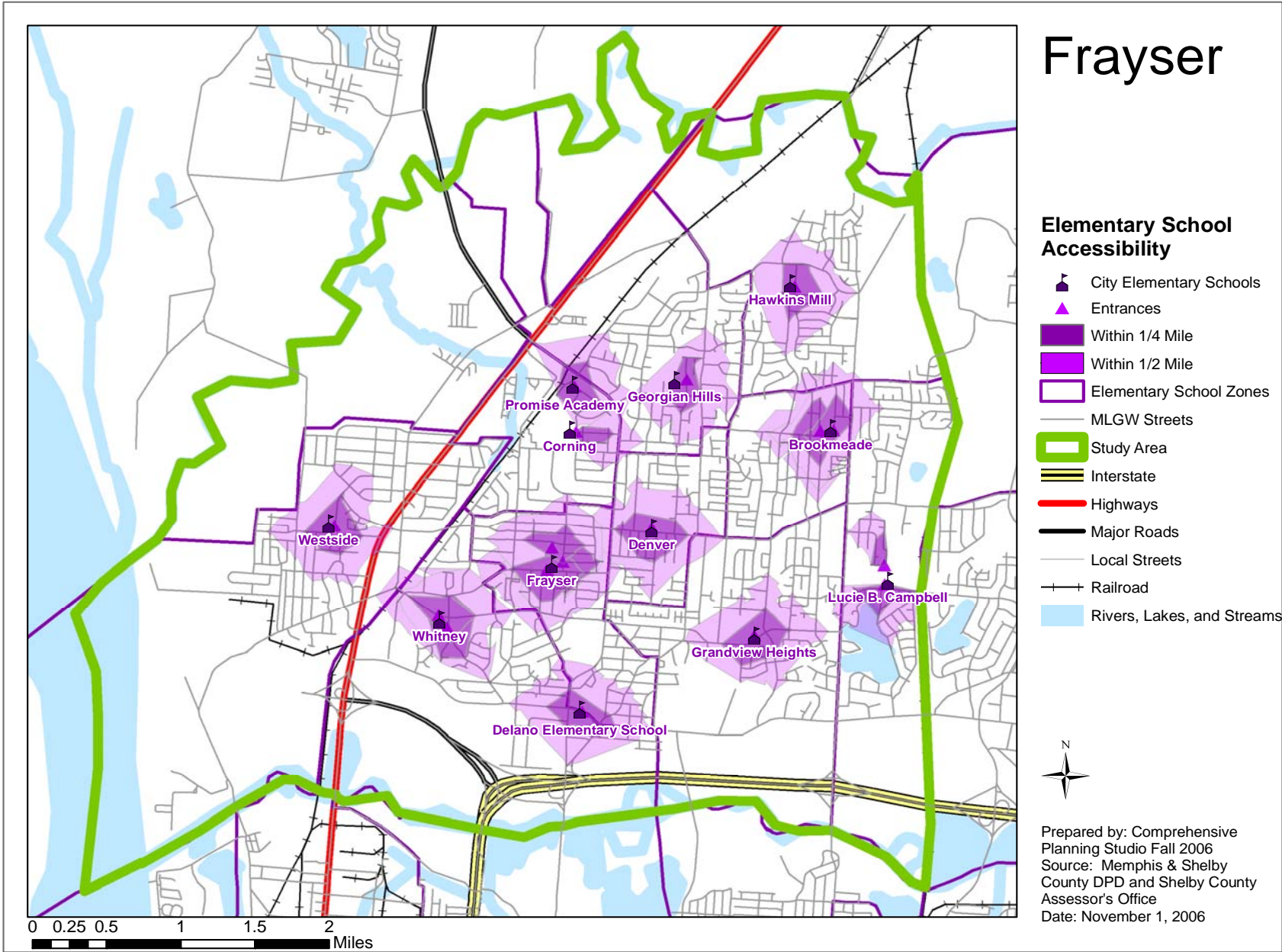
Map 18. Frayser Sidewalk Conditions



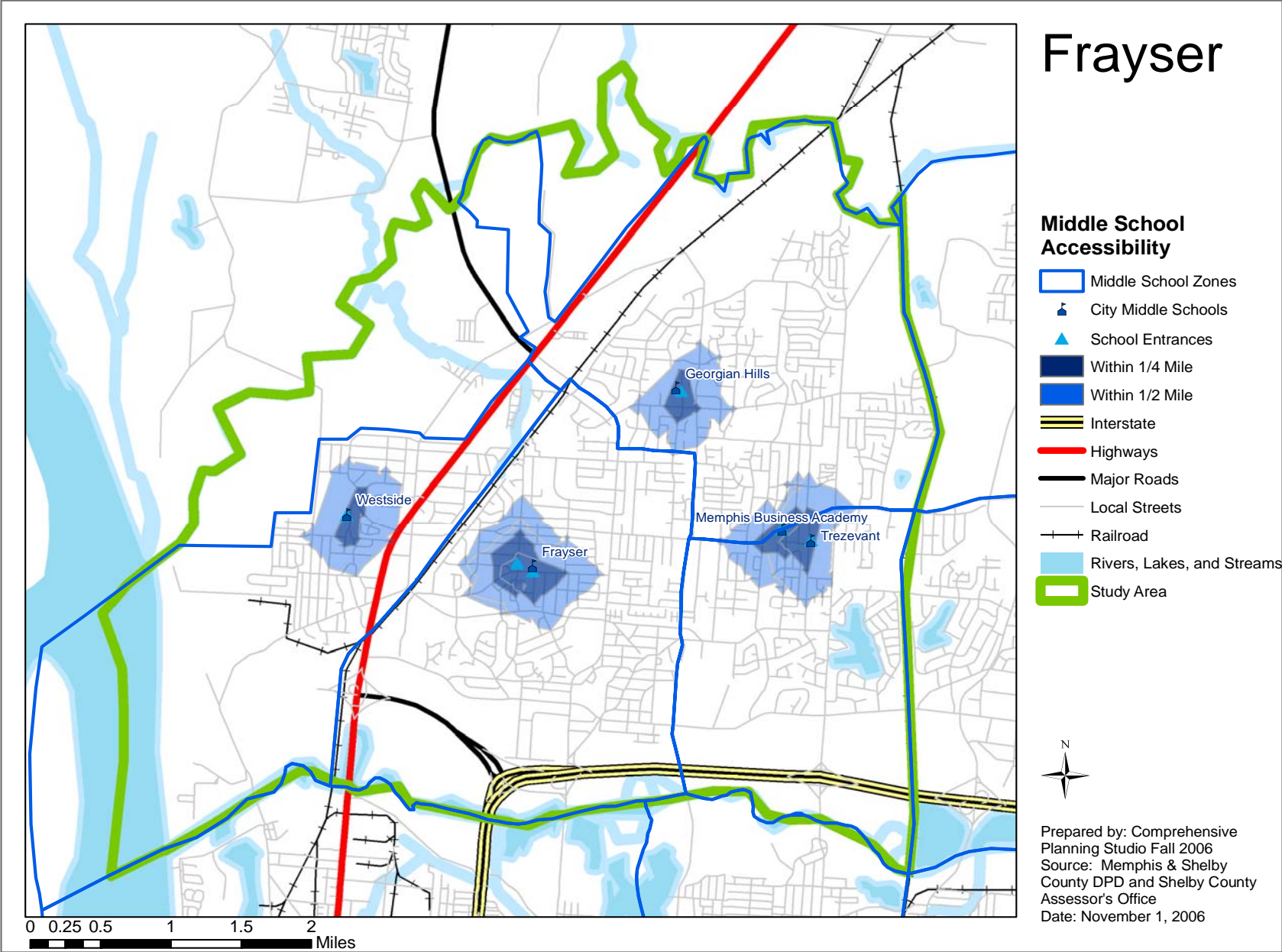
Map 19. Accessibility to Businesses



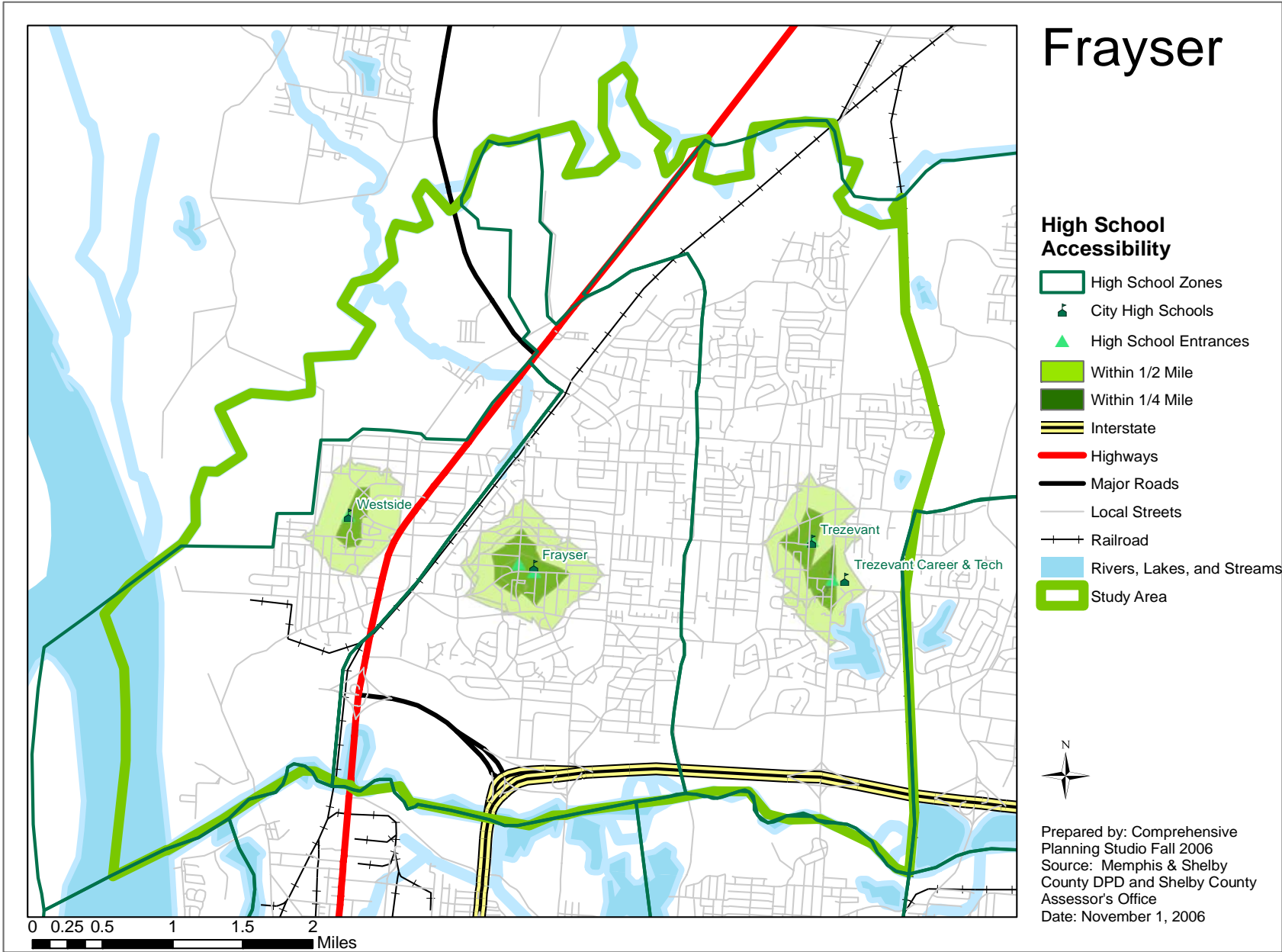
Map 20. Accessibility to Elementary Schools



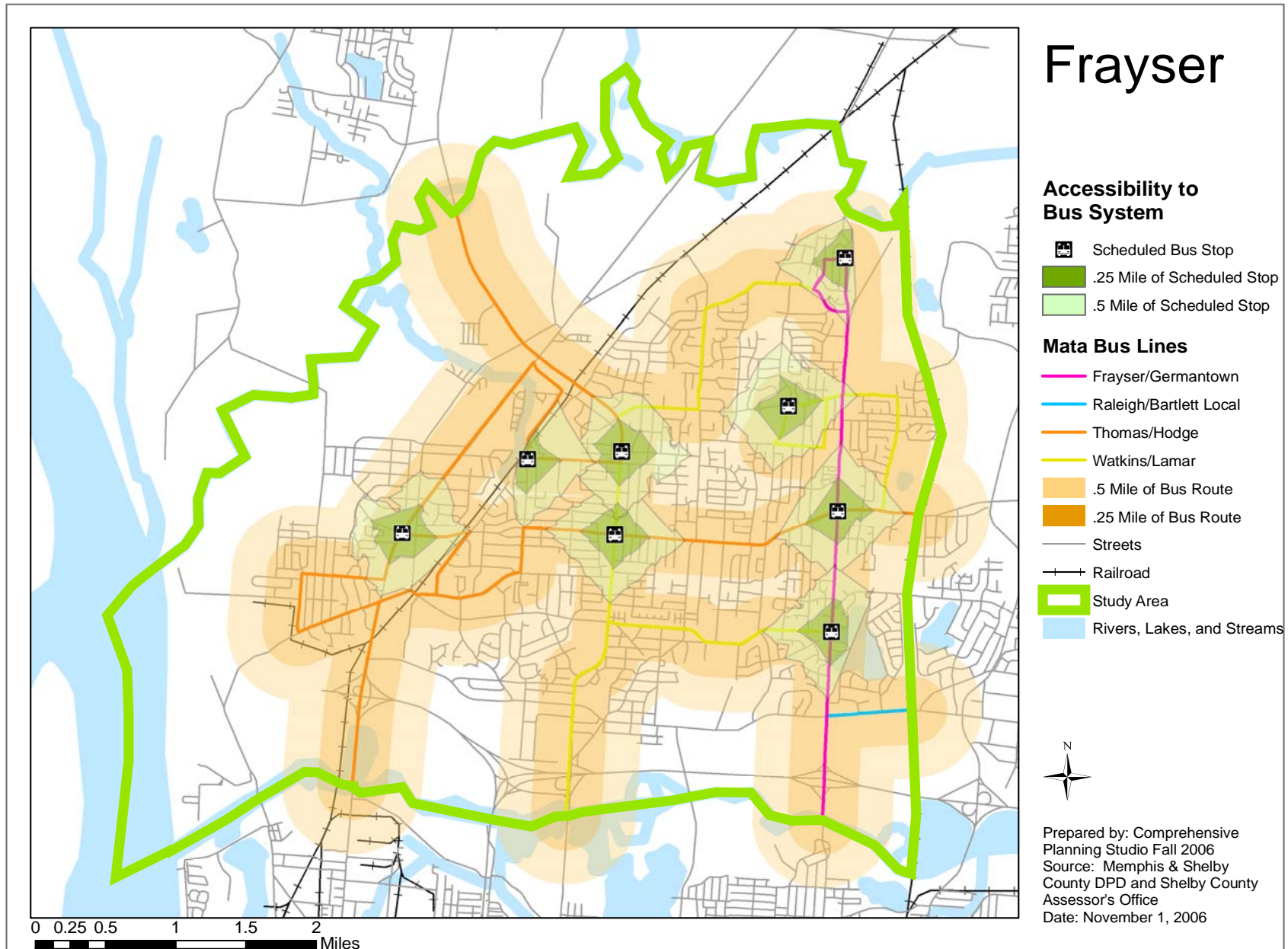
Map 21. Accessibility to Middle Schools



Map 22. Accessibility to High Schools



Map 23. Accessibility to MATA Buses



Map 24. Accessibility to Library

