

Comprehensive
Master Plan

for the

City of
Black Jack
Missouri

HBA

Harland Bartholomew & Associates, Inc.

Adopted
2/1/96

COMPREHENSIVE MASTER PLAN
City of Black Jack, Missouri

Prepared for
City of Black Jack

Prepared by
Harland Bartholomew & Associate, Inc.

Adopted by City Council
City of Black Jack
February 1, 1996

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INTRODUCTION

The comprehensive plan for Black Jack serves as a guide for future growth of the city. It is a policy document for use by public officials in guiding private development and accompanying community improvements such as streets and parks. The zoning ordinance and subdivision regulations, which are the legal mechanism for controlling land use, are based upon the comprehensive plan.

This plan begins with an evaluation of existing population, land use, environmental factors, transportation, and other information pertinent to the city. Problems inherent to the existing community are identified, and development potential is evaluated based upon population projections and economic trends. The action plan concept is a compilation of community goals for the next 20 years, based on the assumption that the community can determine its future.

The Comprehensive Master Plan is comprised of a Land Use Plan, a Transportation Plan, and a Community Facilities Plan. The suggested pattern of development will best serve the general welfare of the community by minimizing land use incompatibilities, recognizing the limitations of hilly terrain, and providing appropriate and efficient relationships with public facilities and infrastructures. The Capital Improvements Program (CIP) and the Implementation section feature additional information on how the city, in conjunction with the citizenry, can carry out the plans. The Comprehensive Plan, thus, provides a framework for the future development of both public and private facilities within the city of Black Jack.

EXISTING CONDITIONS

Data concerning the existing conditions within the city of Black Jack have been collected and thoroughly analyzed. (See Existing Conditions Analysis Technical Memorandum, September, 1990.) In this Comprehensive Master Plan, 1980 census data and preliminary 1990 census data are reviewed as part of the population analysis. The existing land uses, as determined during a field survey, are then analyzed along with environmental factors, such as floodplain, steep slopes, and scenic qualities. The transportation analysis covers the characteristics of major area roadways, Black Jack's arterial and collector streets, and public transportation. Existing park and recreational facilities are compared to national park standards in order to develop facility needs, while other community facilities such as the city hall and the maintenance service area are described.

Population Analysis

Insight into the population characteristics of the city of Black Jack can be attained by comparing similar communities within St. Louis County and by determining trends over a significant period of time. Topics of analysis by community includes population, social, and employment characteristics. Major data sources include the U.S. Bureau of Census for 1980, as well as preliminary census data for 1990 which is limited to total population, total housing units, and total racial composition. This scarcity of 1990 census data significantly restrict comparisons between 1980 and 1990.

1990 Census Data

The preliminary data from the 1990 census of population shows Black Jack as a growing community. (See Table 1.) The population increased by 831 persons, or 15.7 percent, during the 1980s on its way to a total population in 1990 of 6,124 persons. During the decade, 384 housing units were added to the community, for a total of 2,074 units in 1990. The 22.7 percent increase in housing units outpaced the population's 15.7

percent increase. Thus, the population per housing unit in the city of Black Jack fell from 3.13 in 1980 to 2.95 in 1990.

Table 1
COMPARISON OF 1980 and 1990 CENSUS DATA
City of Black Jack, Missouri

	1980	1990	Trend	Percent Change
Population	5,293	6,124	+831	+15.7
Housing Units	1,690 ⁽¹⁾	2,074	+384	+22.7
Population/Housing Unit	3.13	2.95	-0.18	-5.75

⁽¹⁾ Household increased by 3.3 percent (Black Jack Area vacancy rate) to obtain housing units.

Sources: U.S. Census of Population, 1980. U.S. Bureau of the Census, Preliminary Census Results, 1990.

The preliminary racial composition data from the 1990 census of population indicates that 54.9 percent of the total population are white, 44.0 percent are black, and 1.1 percent are other races. The white population decreased by 920 persons, while the black population increased by 1,739 persons and other races grew by 16 persons. The percentage increase of Black Jack's population within the city during the 1980s is similar to other North St. Louis County communities. The lack of availability of detailed 1990 census data by race limits the description of the black and white portions of the population (such as education, labor force, income, and occupation).

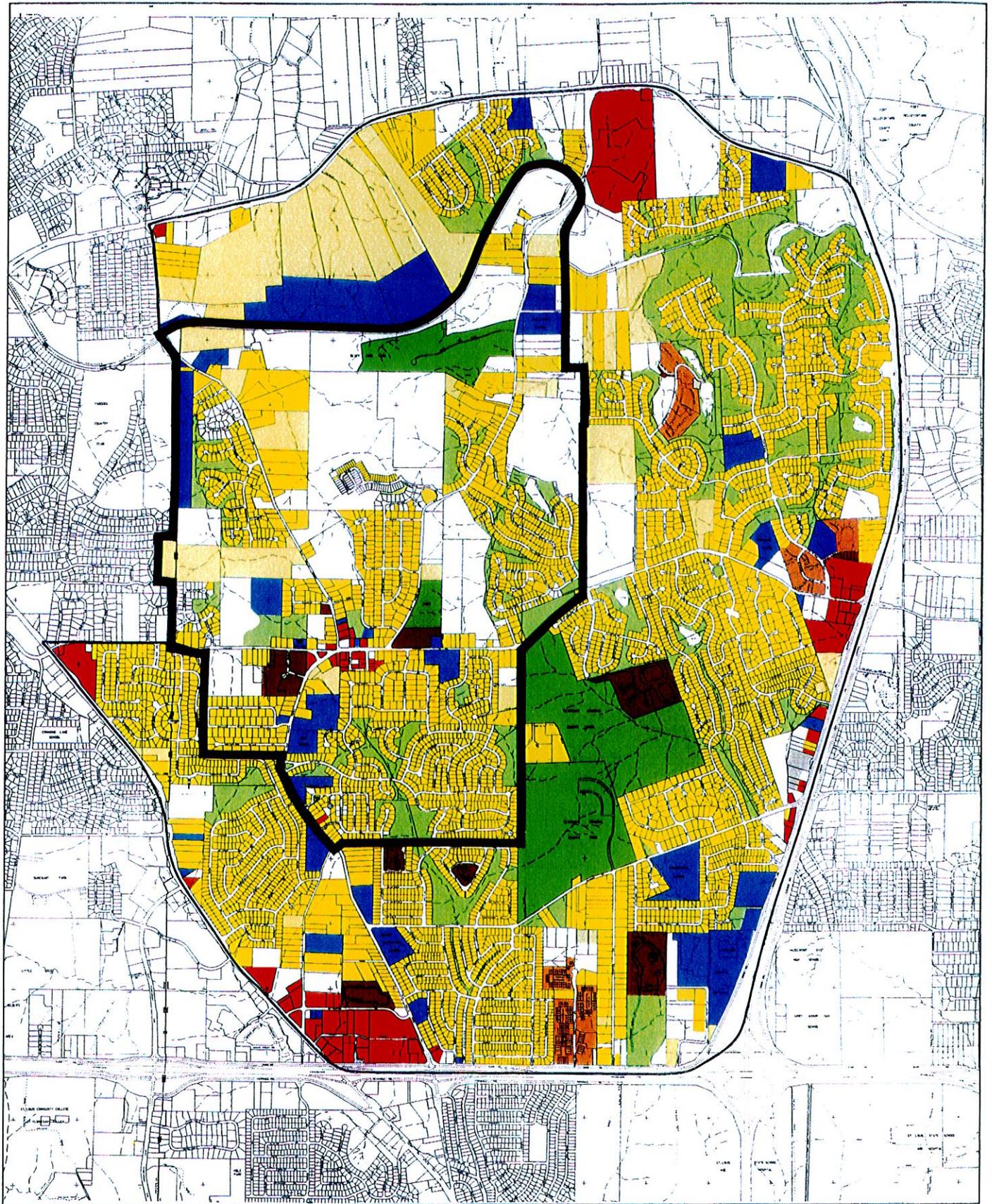
7. Black Jack has a significantly greater number of residents in managerial positions (15.5%) and in professional/technical occupations (25.7%) than does St. Louis County in general.

Analysis of the 1980 census data in the Black Jack area by race produced the following findings:

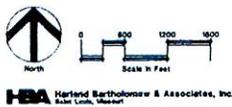
1. The black and white populations are similar for age groups other than under 15 years of age (more blacks) and over 55 years of age (more whites).
2. Black residents have a higher percentage of high school and college graduates than do white residents.
3. Mean household income is higher in black households, and the percentage of black families in poverty is lower than for white families.
4. White and black residents have similar size residences, but black residents tend to have a higher number of persons per household.
5. The mean value of homes owned by white residents are somewhat higher, and rents paid by black residents are slightly higher.

Land Use Analysis

The following analysis identifies the existing land use pattern within the city of Black Jack, as shown in Figure 1. Acreage of the various land uses are tabulated and percentages of each are shown in Table 2. In general, the city of Black Jack is a residential community with very little nonresidential land use.



City of
Black Jack
 Missouri



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 St. Louis, Missouri

EXISTING LAND USE

LEGEND

- | | | |
|--------------------------------------|--------------------|--------------------------------|
| SINGLE FAMILY RESIDENTIAL (DETACHED) | COMMERCIAL | INDUSTRIAL |
| SINGLE FAMILY RESIDENTIAL (ATTACHED) | PARKS | AGRICULTURAL/RURAL RESIDENTIAL |
| MULTI-FAMILY RESIDENTIAL | OPEN SPACE | VACANT |
| OFFICE | PUBLIC/SEMI-PUBLIC | EXISTING CITY LIMITS |
| | | POTENTIAL ANNEXATION |

FIGURE 1

Table 2
EXISTING LAND USE
 (in Acres)
 City of Black Jack, Missouri

	Existing Land Use	
	Acres	Percent
Single-Family		
Detached	629	36.1
Attached	0	0
Multi-Family	23	1.3
Subtotal	652	37.4
Commercial	9	0.5
Office	2	0.1
Industrial/Warehouse	0	0
Parks (Formal)	66	3.8
Open Space	198	11.3
Public/Semi-Public	80	4.6
Agricultural/Rural Residential	108	6.2
Roadways	119	6.8
Vacant	511	29.3
Total	1,745	100.0

Source: Harland Bartholomew & Associates, Inc. field survey, July, 1990.

Residential

Residential land use in the area is divided into three categories: single-family detached, single-family attached, and multi-family. The differences between the single-family attached and multi-family categories is that attached units all have their entrances on the ground floor, directly into the unit and that no unit is above another unit. Multi-family units can have their entrance on floors above the ground floor and on hallways, and units can be above or below one another.

Within the city of Black Jack, slightly over 36 percent of the land area, the greatest single percentage, is devoted to detached single-family units. Virtually all of the city south of Parker Road is developed as single-family detached units. North of Parker Road, the single-family development is concentrated south of Black Jack Park along Old Jamestown Road and along the west side of Old Halls Ferry Road south of Coldwater Creek. There are no single-family attached units in the city.

Within Black Jack, there are two large concentrations of multi-family units; one in the southwest corner of Parker and Old Halls Ferry Road, and a second in the northeast corner of Parker and Old Jamestown Road. A small multi-family development is located in the southwest corner of Old Halls Ferry Road and Thadene Lane. This use constitutes only 1.3 percent of the total land area of the city. Overall, residential land use constitutes 37.4 percent of the land of the city.

Commercial and Office

Commercial land use makes up a very small percentage of the total land in the city of Black Jack (0.5 percent). The commercial uses are concentrated in the center of the city along Parker Road between Old Halls Ferry and Old Jamestown Roads. No major commercial activity is present such as a large drug or grocery store. Two small strip centers constitute the majority of the commercial use.

Office land use is extremely limited within Black Jack, with only two areas, or 0.1 percent of the land, devoted to office use. The office use is mixed in with the commercial land use and is composed of small insurance and service-type facilities. There are no industrial/warehouse uses in Black Jack.

Parks and Open Space

The city of Black Jack has two park areas: Black Jack Park along the south side of Coldwater Creek west of Old Jamestown Road and the Heritage Park site along the east side of Old Jamestown Road north of Parker Road. Black Jack Park is developed with a variety of recreational facilities while the Heritage Park site is presently undeveloped, except for a small area at the north end of the park devoted to the city's maintenance activities. Parks use accounts for 3.8 percent or 66 acres of land in the city. Outside the city, the major park facility is the almost 250 acre Veteran's Memorial County Park along the east city limits of Black Jack extending from Redman Road north to Parker Road. This park is actually considered a regional facility and contains a full complement of recreational activities.

Because of the rolling and, in some places, very step terrain in the area, open space constitutes a relatively larger percentage of the city than might normally be found. Within Black Jack almost 200 acres or 11.3 percent of the land is devoted to open space. For this analysis, open space is considered to be any common ground within a subdivision that is in either passive or active use. The passive use includes woods, creek beds, and steep hillsides. The active uses include ballfields, swimming pools, and subdivision clubhouses. Usually, only property owners within the subdivision have access to the recreation facilities located in these open space common ground areas.

Public/Semipublic

The land use includes such activities as schools, churches, retirement homes, public and private utilities, and government facilities other than parks. Within Black Jack,

a total of 80 acres or 4.6 percent of the land is devoted to public/semipublic use. A large part of that land is found in retirement communities and schools.

Agricultural/Rural Residential

These two uses were combined because they are similar in that they could be considered "holding " uses for land until such time as the market allows for more intense development. Within Black Jack, their use constitutes 6.2 percent of the land. Virtually all of this land is north of Parker Road and east of Old Halls Ferry Road.

Roadways

A total of 6.8 percent of Black Jack's land is used by roadways for access to property. This percentage is somewhat below the normal 10 to 15 percent found in fully developed communities. The percentage of roadways will undoubtedly increase as more land is developed.

Vacant

Vacant land is considered to be that on which no active use is present. Within Black Jack 29.3 percent of the land is considered vacant, the second largest percent of any land use category. This "use" of land in Black Jack will change as more development takes place. The large amount of undeveloped land is a tremendous resource for the city, and guiding the future development of land is a primary focus of this Comprehensive Master Plan.

Environmental Factors

Physical Environment

The physical environment of the Black Jack area has greatly affected the type and density of urban development. In particular, the heavily wooded ravines and steep slopes found throughout the community have resulted in attractive residential areas interspersed with woods and lakes. Residential roads tend to wind parallel to or on top of ridges so as to avoid overly steep grades (i.e., 10 percent or greater slopes). Cul-de-sacs of various lengths are placed on buildable areas along these residential streets. In many Black Jack subdivisions, natural corridors along creeks and ravines are left wooded or are used as a site for a lake.

The Environmental Factors, shown in Figure 2, indicate that approximately one-half of the land is subject to some limitations for urban development. The wide, 100-year floodplain of Coldwater Creek should not be developed for buildings; however, this area can provide good sites for woods, lakes, or other open space in parks or subdivision common space. The manner in which subdivisions are laid out northeast of Black Jack provides good examples for the large undeveloped areas further west along Coldwater Creek.

Steep slopes and the soil found on and near these slopes generally limit the types of practical development to either residential or open space and the density of that development to low and moderate uses. Care should be taken to site homes on relatively flat terrain, while leaving steeper slopes in a natural state.

The general areas shown on the Environmental Factors figure, with limitations on residential or commercial development, occupy significant portions of the northeast, northwest and southern portions of the city. Slopes exceeding 10 percent and even 20 percent are common in these areas. Smaller areas of the study area are readily



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 Missouri



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ENVIRONMENTAL FACTORS

FIGURE 2

LEGEND

-  100 YEAR FLOOD PLAIN
-  STEEP SLOPES/SOIL LIMITATION FOR COMMERCIAL DEVELOPMENT
-  STEEP SLOPES/SOIL LIMITATION FOR RESIDENTIAL OR COMMERCIAL DEVELOPMENT

acceptable for residential development, but the steepness and soils pose limitations for larger commercial buildings (i.e., increased costs for building footings and earth work).

Early development of the Black Jack area relied on roads such as Old Halls Ferry, Old Jamestown, and Parker, which tend to follow ridge tops. Relatively flat areas of the community which do not have environmental limitations occur south of Parker Road and south of Black Jack Park. With the exception of the Jamestowne subdivision, currently under development south of Black Jack Park, most flat areas have been developed.

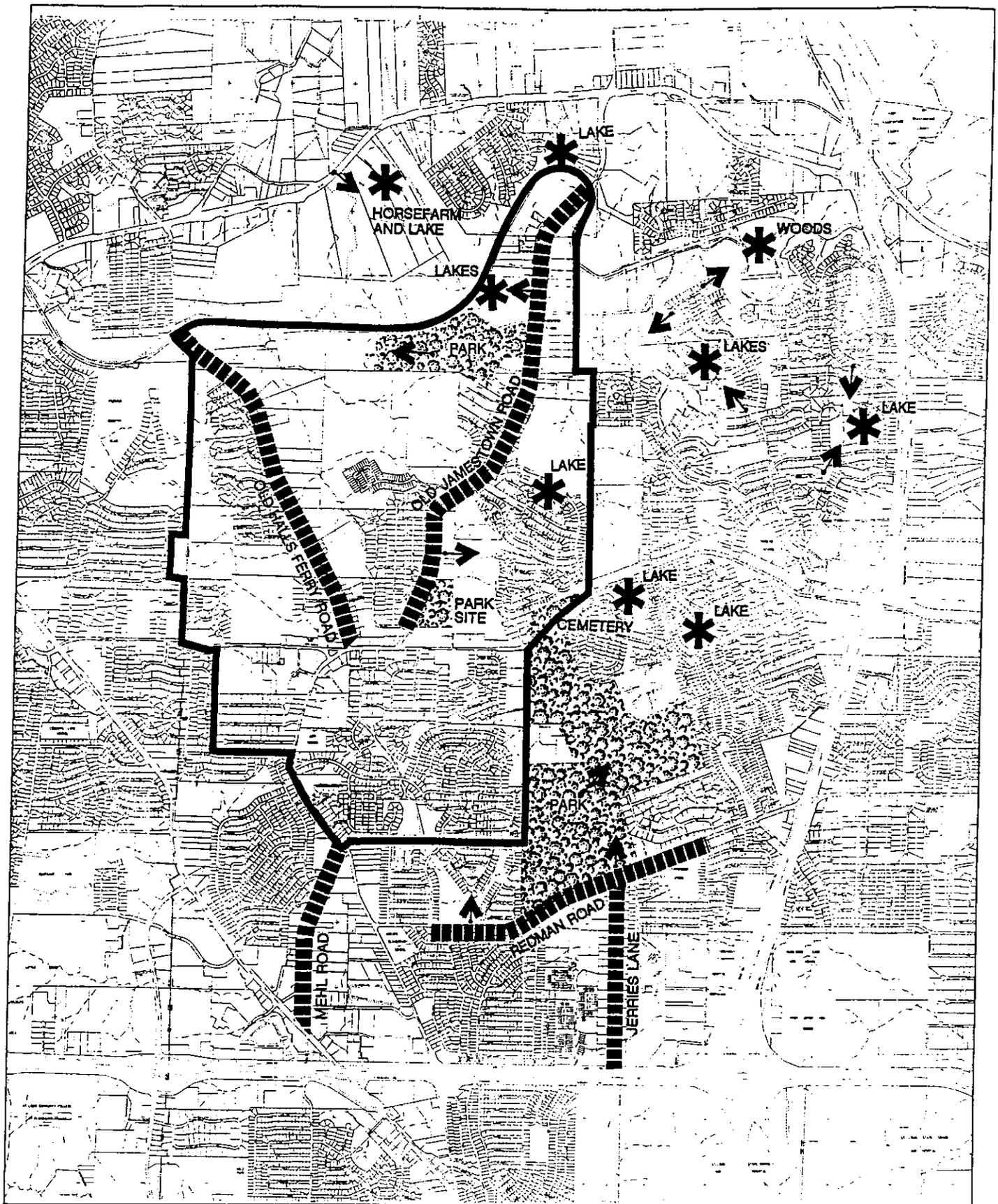
The nonresidential area of the community is found at the junction of Parker Road and Old Halls Ferry Road. While this site is relatively flat, slope and soil limitations do exist at the northwest corner of Parker and Old Halls Ferry Roads. Care should be taken to properly develop these sites to avoid building settling problems or excessive water runoff.

Visual Factors

The physical factors that limit urban development also tend to provide opportunities for parks, open spaces, and man-made lakes. The visual quality of Black Jack is some of the most scenic in the St. Louis region. This scenic quality is summarized in Figure 3, Visual Factors Map.

Scenic or historic areas include Black Jack Park, the Heritage Park site, and the cemetery on Parker Road. Other scenic resources are privately owned, but form special scenic values for nearby or transient neighbors. Positive visual factors include scenic stretches of roads, scenic focal points that can be enjoyed by adjacent uses, and vistas where a scenic feature can be viewed from a distance.

Scenic stretches of road include Old Jamestown Road and Old Halls Ferry Road (north of Parker Road). Maintenance and enhancement of the scenic beauty of these roads not only benefits residents along the roadways, but also everyone who drives along



City of
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 Planning and Design Services

VISUAL FACTORS

LEGEND

SCENIC OR HISTORIC AREAS

SCENIC ROAD

SCENIC FOCAL POINT

SCENIC VISTA

FIGURE 3

them. Two lakes in the northeast portion of the city serve as scenic focal points for residential areas. One of these focal points can also be seen from an adjacent road, thereby providing a scenic vista for passersby. Any development of the open space area north of Heritage Park site, should take into account the value of the present scenic vista from Old Jamestown Road.

The community of Black Jack was settled at the crossroads of Old Halls Ferry and Parker Roads. Over the years, commercial and office buildings of modern construction have replaced the older residential dwellings. Thus, the existing commercial/office node at Old Halls Ferry and Parker Roads does not constitute an historic area.

Transportation Analysis

Within Black Jack, the movement of people, goods, and services is accomplished mainly by private vehicles on public and private roadways. A small portion of the population uses public transportation to gain access to jobs, shopping, and other destinations.

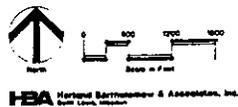
The existing main roadway system in Black Jack is well established and dates back to the time when trails were the main "roadways" in the area. In fact, two of the older roadways, Old Halls Ferry Road and Old Jamestown Road, basically follow the alignment of old trails in the area.

Major Roadways

The principal roadways within the Greater Black Jack area include expressways such as I-270 and Lewis & Clark Boulevard, and arterials such as Lindbergh Boulevard and New Halls Ferry Road. Roadways in the city feed traffic to these four major facilities. Figure 4 presents the existing roadway system; its classification; and 1989 daily traffic volumes, the most recent available.



City of
Black Jack
 Missouri



EXISTING ROADWAY SYSTEM

LEGEND

- EXPRESSWAY
 - MAJOR ARTERIAL
 - MINOR ARTERIAL
 - COLLECTOR
 - LOCAL
- 6,210 1989 AVERAGE DAILY TRAFFIC (2-WAY)

FIGURE 4

SOURCE: MISSOURI HIGHWAY & TRANSPORTATION DEPARTMENT
 ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS & TRAFFIC

I-270. I-270 is part of the belt freeway that surrounds the St. Louis metropolitan area. This facility has three travel lanes in each direction with an auxiliary lane in each direction between each interchange to ease merging movements of entering and existing vehicles. Daily two-way traffic volumes range from 135,000 vehicles west of West Florissant Road to about 95,000 vehicles west of Lewis & Clark Boulevard.

Lewis and Clark Boulevard (U.S. Route 67, Missouri Route 367). Lewis and Clark Boulevard is a four-lane divided roadway from I-270 to Lindbergh Boulevard with at-grade, signalized intersections at major cross streets. Daily two-way traffic volumes range from 20,440 vehicles north of Lindbergh Boulevard to 41,080 vehicles immediately north of I-270.

Lindbergh Boulevard (U.S. Route 67). Lindbergh Boulevard is a major arterial roadway that was part of the original belt roadway built around the St. Louis area in the 1930s. Since that time, it has been widened to provide four lanes of continuous travel and a fifth center lane used for left turns from either direction of travel. Major intersections are signalized and the daily, two-way traffic volumes range from 28,090 vehicles west of Old Halls Ferry Road to 16,270 vehicles west of Lewis and Clark Boulevard.

New Halls Ferry Road (Missouri Route AC). New Halls Ferry Road is a five-lane arterial facility providing four lanes of through traffic movement and a center, reversible left-turn lane. Major intersections are signalized and have auxiliary lanes for right and left-turning vehicles. Daily two-way traffic volumes range from almost 39,000 vehicles between Parker Road and West Florissant Avenue to 23,030 between I-270 and West Florissant Avenue.

All four of these major roadway facilities, as well as the service roadways along both I-270 and Lewis and Clark Boulevard, are maintained by the Missouri Highway and Transportation Department (MHTD).

Minor Arterials

Old Halls Ferry Road. Old Halls Ferry Road follows an old trail and dirt roadway alignment leading from the City of St. Louis on the south to the site of Hall's Ferry at the Missouri River on the north. The roadway generally follows ridge lines or higher ground. Presently it is a two-lane roadway functioning as a minor arterial road providing north-south circulation through Black Jack. Daily traffic volumes range from almost 18,000 vehicles north of I-270 to 12,560 north of Redman Road. Major cross street intersections are signalized. North of Parker Road daily traffic volumes drop significantly to 6,500 vehicles immediately north of Parker Road and to 5,500 vehicles just south of Lindbergh Boulevard.

Old Jamestown Road. Old Jamestown Road provides two-lane access from the center of Black Jack at Parker Road north to the developing area north of Lindbergh Boulevard, including the Jamestown Mall regional shopping center at the Lindbergh Boulevard intersection. Traffic volume data indicates the roadway carries approximately 4,900 vehicles in a 24-hour period immediately north of Parker Road, and almost 3,900 vehicles just south of Coldwater Creek. The influence of Jamestown Mall is seen by a daily traffic volume count of 7,150 vehicles just south of Lindbergh Boulevard.

Parker Road. Parker Road is a two- to five-lane minor arterial facility providing east-west access through Black Jack from the city of Florissant on the west to the Spanish Lake area on the east. The five-lane section of the roadway is located in the heart of Black Jack where Parker, Old Halls Ferry and Old Jamestown Roads all intersect. Daily two-way traffic volumes range from 16,820 vehicles between Old Halls Ferry and Old Jamestown Road to 11,240 vehicles west of Old Halls Ferry Road near City Hall.

All three of the minor arterials through Black Jack are maintained by the St. Louis County Department of Highways and Traffic.

Collector Streets

Collector streets provide access to residential and commercial property and funnel traffic from those areas to the major and minor arterial roadways in the area. In general, two-way daily traffic volumes can be expected to be less than 5,000 vehicles on these two-lane facilities. Trailbend Drive/Jerries Lane, the only collector street within Black Jack, is maintained by the city.

Local Streets

The remaining roadways within the city can be considered local streets, either public or private, providing access to individual property. Because of the curvilinear design of these streets, few, if any, provide direct access from the individual properties to the collector and/or arterial roadways. Such a situation can cause problems with response times of emergency vehicles and maintenance equipment.

Public Transportation

The city of Black Jack is served by the region's public transit provider, Bi-State Transit, with both express fixed routes and a call-a-ride program which will transport anyone to any destination within its north St. Louis County service area. Black Jack is only served by two fixed express routes, both of which operate to downtown St. Louis. Local fixed-route service is not provided to the city.

Parks and Recreation

In order to establish the park land and recreational facility needs for the city of Black Jack, an inventory of existing parks and facilities was completed. These existing conditions were then compared to recreational standards from various sources including the Missouri Statewide Comprehensive Outdoor Recreation Plan (SCORP), the Land and Water Conservation Fund (LWCF), and the St. Louis County Department of Parks and

Recreation. These standards serve as guides in determining other appropriate park land and recreational facility requirements for a given population.

Park Land Standards

A description of park classifications based on both size and service area is shown in Table 3. Three park areas exist within or directly adjacent to the city and represent three of the four classifications. These three park areas include Heritage Park site (approximately 10 acres), Black Jack Park (approximately 56 acres), and Veterans Park which encompasses approximately 245 acres and contains the North County Recreational Complex.

Table 3

PARK CLASSIFICATION, SIZE, AND SERVICE AREA

Park Classification	Approximate Size	Service Area
Mini Parks	1-3 acres	1/2 mile
Neighborhood Parks	5-10 acres	1 mile
District Parks	20-60 acres	3 miles
Metro Parks	80-175 acres	5 miles

Table 4 represents an analysis of current park land acreage versus the amount of land recommended by national, state, and county standards. It should be noted that these figures reflect only those parcels of land which are designated as public park areas. An abundance of privately-owned open space does exist with the city, and these parcels provide a variety of recreational facilities. For the purposes of this study, however, only facilities located on public park lands will be examined.

The park land available for use by the residents of the city of Black Jack is sufficient in terms of overall acreage. There is, however, a deficit in the availability of smaller mini-parks and neighborhood parks. To some extent the role played by these smaller-sized parks is being filled by privately-owned open space.

Table 4

PROPOSED STANDARD FOR PARK LANDS

City of Black Jack, Missouri

Park Classification	Acres			Park Land Surplus (S) or Deficit (D)
	Proposed Standard Per 1,000 Population	1990 Park Land Need	City Park Inventory	
Mini-Parks	1.0	6	0	6 (D)
Neighborhood Park	1.5	9	10	1 (S)
District Park	2.5	15	56	41 (S)
Metro Park	4	24	0	24 (D)
Total	9.0	54	66	10 (S)

Parks and Recreational Facility Needs

Table 5 represents an inventory of existing recreational facilities as they compare to recreational standards based on a given population within the city of Black Jack. The need for additional facilities has been estimated by subtracting the current supply of facilities from the total demand. A slight increase in active use facilities such as baseball and football fields, children's playgrounds, handball/racquetball, basketball and volleyball courts, and horseshoe pits is needed to meet national, state, and county standards. The number of passive recreational opportunities should also be expanded to meet these standards. Such passive use facilities would include picnic sites, trails and fishing areas.

Other Community Facilities

Community facilities operated by the city include most of the parks discussed in the preceding section, the city hall, and the Maintenance Service Center, which is located in Heritage Park. (See Figure 5.) Additional community facilities serving Black Jack are

Table 5
PARKS AND RECREATION FACILITY NEEDS ASSESSMENT
 City of Black Jack, Missouri

Facility	Unit	Standard Need	Total Demand	Current Supply	Additional Need
Group Picnic Shelter	Each	.8	5	2	3
Picnic Tables	Table	8	49	35	14
Baseball/Softball	Field	.75	5	2	3
Soccer	Field	.25	2	2	0
Football	Field	.25	2	0	2
Children's Playground	Each	1.0	6	3	3
Tennis Courts	Court	.6	4	4	0
Handball/Racquetball	Court	.2	1	0	1
Basketball	Court	.33	2	1	1
Volleyball	Court	.33	2	0	2
Swimming	Sq.Ft.	800	4,900	0	4,900
Walking/Exercise Trails	Mile	.25	1.53	.8	.73
Golf Course	Hole	.6	4	0	0
Nature Trail	Mile	.25	1.53	.17	1.36
Bicycle Trail	Mile	.5	3.06	0	3.06
Rollerskating	Rink	.05	.31	0	0
Ice Skating	Rink	.05	.31	0	0
Horseshoes	Court	1	6	2	4
Fishing Pond	Acre	2	12.25	0	12.25
Outdoor Concert	Stage	N/A		1	0
Day Camp Programs	--	N/A		Yes	--
Senior Citizen Programs	--	N/A		No	--

¹Per 1000 population.

²Based on 6,124 population service area.

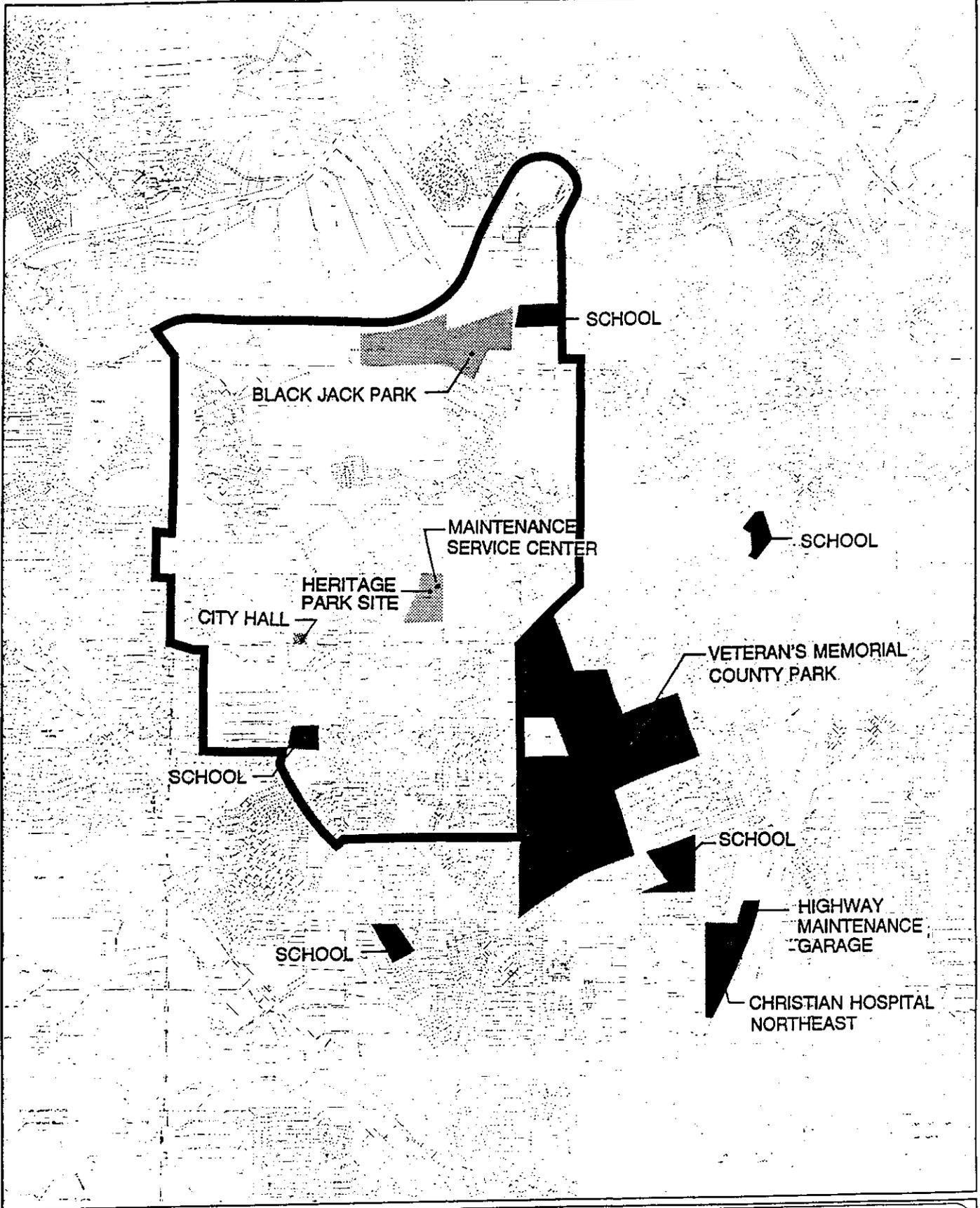
operated by other government entities. Examples include the fire house on Old Halls Ferry Road north of Parker Road which is operated by the Black Jack Fire District, and the Hazelwood School District which has two schools within Black Jack (Jamestown and Jury).

City Hall

The approximately one-acre city hall site contains a two-story former school building and a parking lot. The city hall building at 4655 Parker Road contains 4,300 square feet, of which approximately 2,000 square feet per floor is usable space. The upper level is accessible from the south entrance, while the lower level is accessible from the north entrance via a service drive. The upper level is used for the city council room and city clerk offices. The lower level contains the offices of the public works director and police service office, a meeting room/emergency operations center, storage areas, and restrooms.

The existing city hall building and the adjacent 29 space parking lot are adequate for the present community size and service level. There is sufficient space on the site for expansion of the building with a 2,000 square foot addition, and as many as 16 additional parking spaces, if retaining walls are used on the hilly site. Such construction would tend to increase crowding and reduce the aesthetics of the site.

While existing city hall facilities are adequate to serve the present city population of 6,124 and the present level of services, the internal layout of the city hall is inadequate to provide the local government services at a higher level. The amount of space required should be determined prior to any decision on expanding or replacing existing facilities. The establishment of a police department for the present population would not be cost effective. (See September, 1990 Technical Memorandum on existing conditions.)



City of
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COMMUNITY FACILITIES

LEGEND

- CITY OF BLACK JACK
- OTHER GOVERNMENT ENTITIES

FIGURE 5

Maintenance Service Center

The maintenance service area occupies approximately one acre in the northeast corner of the otherwise undeveloped 12 acre city-owned Heritage Park site on Old Jamestown Road, north of Parker Road. A four-bay maintenance building is utilized for streets and parks vehicles/equipment. There also is a salt storage shed in the maintenance service area. Such public works facilities are often located at a separate location from administrative functions.

The Heritage Park site is a great resource for the city of Black Jack. The five acre woods in the eastern half of the site would be a beautiful backdrop for a municipal building along Old Jamestown Road, or as part of a neighborhood park. The site's central location near the city's major road junction is easily accessible, and there is ample room for off-street parking. The location of the maintenance service area is partially hidden by the woods, and the city's current plans to plant evergreens in line with the timberline of the woods is a worthwhile start in landscaping the site.

ACTION PLAN CONCEPT

The Comprehensive Master Plan Task Force is composed of community leaders (elected officials, Planning and Zoning Commission members, other committee representatives, and city staff) along with urban planners from Harland Bartholomew & Associates, Inc. In the fall of 1990 and the winter of 1991, the task force met several times to discuss:

1. "Existing Conditions" in Black Jack (population, land use survey, environmental conditions, existing roadways, parks and other community facilities).
2. "Community Survey" of Black Jack area residents (questionnaire, sampling, data analysis, and results).
3. "Issues and Goals" for the community (people, land use, environmental, transportation, park, and community facilities issues).

The city of Black Jack is at a turning point, with nearly 40 percent of the city's land still undeveloped. The actions of the community (city government, citizens, and business people) during the next two decades will, to a large extent, determine what type of city Black Jack becomes. In contrast, lack of a purposeful direction is a recipe for haphazard development, poor roads, and less aesthetic surroundings.

In the process of developing goals for the community, several task force members requested a concise list of actions that will point the city toward meeting its goals. Therefore, the task force's goals have been organized into seven "action items," which combine to form the "action plan concept," a guide for the more detailed Comprehensive Master Plan.

Action Item A: Single-Family Residential Development

- A-1: Continue dominance of single-family residential uses as vacant land is developed.
- A-2: Promote steady, well-planned growth in population and housing units.
- A-3: Plan for a diverse, multicultural population.
- A-4: Provide for a variety of family sizes, while keeping the single-family character of the city.
- A-5: Continue attracting young families with good schools, recreation facilities, and quality housing.
- A-6: Meet housing needs of elderly (single-family dwellings, multiple-family units, retirement communities, and nursing homes).
- A-7: Retain the open, scenic character of the area as residential development occurs.
- A-8: Continue practice of planned subdivision development that sets aside open space with steep slopes, wooded areas, and lakes.
- A-9: Encourage residential development that takes into account the physical limitations of each site.
- A-10: Plan for low-density, single-family orientation for the far northern portion of Black Jack near Coldwater Creek.

Action Item B: Town Center Program

- B-1: Limit commercial and office uses to the town center (Parker Road between Old Halls Ferry Road and Old Jamestown Road).**
- B-2: Work with local businesses to landscape the town center (public right-of-way and private business sites).**
- B-3: Coordinate the landscaping of the town center with the landscaping of approaching arterial roads.**
- B-4: Encourage the town center's potential for commercial and office development/redevelopment.**
- B-5: Promote building enhancement in order to improve the image of the town center.**
- B-6: Encourage creation of jobs in the North County area, with special emphasis on the town center.**
- B-7: Promote the advantages of residing in Black Jack, the primary customer base of local retail and service businesses.**
- B-8: Support the development of a neighborhood park between city hall and the town center since it is a good buffer use.**
- B-9: Encourage the bike path/walking trail's focus on city hall and the town center.**
- B-10: Recognize the benefits of having city hall and possibly a postal service substation adjacent to the town center.**

Action Item C: Landscaping Program

- C-1: Develop multiple-year landscaping program that makes specific design and care recommendations for street trees and other landscaping.
- C-2: Plant and/or retain trees and other landscaping along city streets, in city parks, and near bike path/walking trail routes.
- C-3: Promote landscape enhancement of the town center.
- C-4: Coordinate the landscaping of arterial roads (Parker Road, Old Halls Ferry Road, and Old Jamestown Road) with the town center program.
- C-5: Landscape designs should acknowledge scenic roads (Old Halls Ferry and Old Jamestown Roads), scenic vistas and focal points.
- C-6: Establish city program to make appropriate street trees available at reasonable prices and in a convenient manner.
- C-7: Encourage private donations to landscaping programs as memorials or in recognition of service to the community.
- C-8: Landscape enhancement of the Heritage Park site, Black Jack Park and proposed City Hall Park.
- C-9: Preserve woods in the proposed "City Hall Park" site.
- C-10: As development occurs, preserve wooded areas especially in the common area of residential subdivisions and near bike path/walking trails.

Action Item D: Park and Community Facilities

- D-1: Tailor park improvements and recreational programs to the diverse needs of Black Jack residents.
- D-2: Encourage connection of city parks with residential areas via a bike path/walking trail system.
- D-3: Utilize the large amount of private open space (mostly subdivision common space) to meet small park needs.
- D-4: Further develop existing and proposed parks to serve the community's active recreation needs.
- D-5: Acquire and develop a neighborhood park adjacent to city hall, consider acquisition of lakes north of Black Jack Park for future park expansion.
- D-6: Establish a recycling operation in the Heritage Park site adjacent to the maintenance service area.
- D-7; Construct a community center for recreation and civic activities, either adjacent to city hall or in the Heritage Park site.
- D-8: Encourage day care centers, latch key programs, and evening recreation programs.
- D-9: Investigate city involvement in an existing golf course with easy access to residents (no vacant site in the city is large enough).
- D-10: Utilize a variety of means to fund recreational facilities including user fees.

Action Item E: Bike Path/Walking Trail System

- E-1: Use the bike path/walking trail system to unify a scattered, diverse community.
- E-2: Path/trail system should connect city parks, Veteran's Memorial County Park, local schools, and open space throughout the community.
- E-3: Develop multi-year program to study feasibility, design, construct, and maintain a bike path/walking trail system.
- E-4: Implement the bike path/walking trail system in segments that connect residential areas to a major destination, such as Black Jack Park.
- E-5: Investigate construction materials for the bike path/walking trail including asphalt, crushed rock, and wood chips.
- E-6: Work with police and subdivision trustees to insure the safety and security of bike path/walking trail segments.
- E-7: Coordinate bike path/walking trail system with the development of residential subdivisions.
- E-8: Special emphasis on location of path/trail through or near scenic areas, vistas, or focal points such as lakes.
- E-9: Convince institutions including churches and nursing homes of the benefit of being located along a path/trail.
- E-10: Urge sidewalk development along all St. Louis County arterials as well as paths/trails along short stretches of the shoulders of county arterials.

Action Item F: Arterial and Collector Road System

- F-1: The major regional transportation grid of highway and major arterials should remain outside of Black Jack.**
- F-2: Parker Road, a minor arterial, should be widened to five lanes throughout the city.**
- F-3: Improvements to two other minor arterials, Old Halls Ferry Road and Old Jamestown Road, should be limited to turn bays and signalized intersections with collector streets.**
- F-4: A collector road system is an effective way to unify a scattered, diverse community.**
- F-5: Develop related segments of the collector road system as property is subdivided.**
- F-6: Coordinate collector improvements such as completing missing segments, so that traffic does not overwhelm a particular residential street.**
- F-7: Implement a system of minor collectors that provides at least two through routes between arterials, for the benefit of local residents and emergency vehicles.**
- F-8: Plan should, when feasible, increase collector road access to potential annexation areas.**
- F-9: Extension of Jerries Lane north to Old Jamestown Road is needed to relieve through traffic on Trailbend Drive.**

Action Item G: Coordination with Other Government Units

- G-1: Encourage educational programs in line with the employment desires of residents.
- G-2: Encourage creation of jobs in the North County area.
- G-3: Continue to attract young families with good schools, recreation facilities, and quality housing.
- G-4: Coordinate stormwater problems with the Metropolitan Sewer District.
- G-5: Work with St. Louis County Department of Highways and Traffic to control development of their minor arterials.
- G-6: Involve the St. Louis County Department of Highways and Traffic in landscaping decisions within the right-of-ways of the town center.
- G-7: Work with St. Louis County Department of Highways and Traffic in extending the city's bike path/walking trail system along shoulders of arterials.
- G-8: Coordinate police service for the city with St. Louis County Police and/or other police departments.

COMPREHENSIVE MASTER PLAN

The Comprehensive Master Plan builds upon the analysis of existing conditions and the community's action plan concept. The plan is functionally divided into a land use plan, a transportation plan, and a community facilities plan. Then, individual projects recommended in the three plans are prioritized in the Capital Improvements Program. Finally, the Capital Improvements Program is related to funding sources in the revenue generation section.

Land Use Plan

The proposed land use within the city of Black Jack is based upon existing land use (nearly two-thirds of land is already developed) and the goals outlined in the preceding Action Plan Concept. The proposed land use pattern is compared with existing land uses in Table 6. Under the proposed land use plan, Black Jack remains a residential community with very little nonresidential land use.

Residential

The proposed land use plan recommends different approaches to the three categories of residential land use: single-family detached, single-family attached, and multi-family. With the proposed addition of 324 acres of single-family detached subdivisions, the dominance of such residential uses will rise from a little over 36 percent to well over 54 percent. In contrast, no new residential use areas are recommended for single-family attached or multi-family residential land uses. Thus, no single-family attached dwellings are proposed in Black Jack, and multiple-family dwellings are limited to the existing area near the town center (23 acres).

Under the proposed plan, single-family detached housing dominates the use of land in every portion of the community. Lower density, single-family and rural residential

Table 6

EXISTING AND PROPOSED LAND USE
(in Acres)

City of Black Jack, Missouri

Land Use Category	Land Use					
	Existing Land Use		Proposed Land Use		Net Change in Land Use	
	Acres	Percent	Acres	Percent	Acres	Percent
Single-Family						
Detached	629	36.1	953	54.6	+324	+18.5
Attached	0	0	0	0	0	0
Multi-Family	23	1.3	23	1.3	0	0
Subtotal	652	37.4	976	55.9	+324	+18.5
Commercial	9	0.5	9	0.5	0	0
Office	2	0.1	2	0.1	0	0
Industrial/Warehouse	0	0	0	0	0	0
Parks (Formal)	66	3.8	77	4.4	+11	+0.6
Open Space	198	11.3	377	21.7	+179	+10.4
Public/Semi-Public	80	4.6	101	5.8	+21	+1.2
Agricultural/Rural Residential	108	6.2	0	0	-108	-6.2
Roadways	119	6.8	203	11.6	+84	+4.8
Vacant	511	29.3	0	0	-511	-29.3
Total	1,745	100.0	1,745	100.0	0	0

Source: Harland Bartholomew & Associates, Inc. field survey, July, 1990 and proposed Land Use Plan, March, 1991.

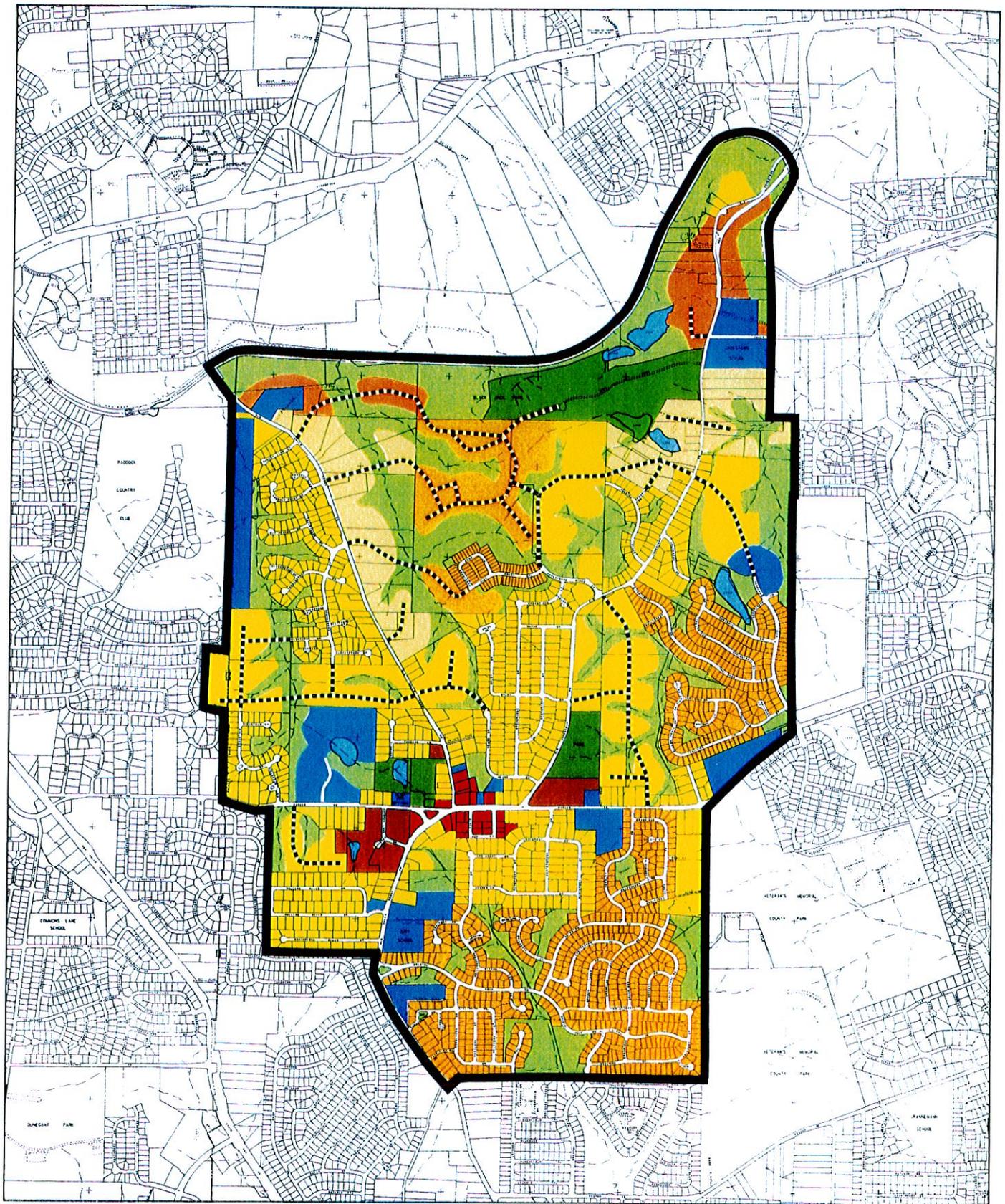
areas (2 and 1 dwelling units per acre) are concentrated near Coldwater Creek and along Old Halls Ferry and Old Jamestown Roads in the northernmost portion of Black Jack. (See Figure 6.) Medium density single-family residential areas (about three dwelling units per acre) cover most of central Black Jack. Higher density single-family land uses of four dwelling units per acre are proposed in three clusters (one south, one east, and one north). However, reduction of density to three dwelling units per acre is desirable in the Jamestowne Subdivision, especially adjacent to low-density single-family areas.

Action Item A, concerning single-family residential development, guided the preparation of the land use plan in residential areas. The variety of residential densities is intended to provide for a diverse population with a variety of family sizes, ranging from young families to elderly residents. The proposed, well-planned development of residential areas not only reflects the density of adjacent residential areas, but also the physical attributes and limitation of individual sites. Therefore, areas with a high portion of floodplain, steep slopes, woods, or special scenic beauty, such as the far northern portion of the city near Coldwater Creek, will tend to have a lower density residential use. Black Jack is fortunate to have vacant or underutilized areas that have physical features desired by many single-family residents.

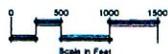
Projected Dwelling Units and Population

In the preceding section, the proposed land use for single-family residential areas is categorized by approximate densities (1, 2, 3, or 4 dwelling units per acre). Based on the approved concept plan for Jamestowne Subdivision and the proposed development densities of the land use plan, approximately 1,538 dwelling units can be built on undeveloped land totaling about 682 acres. (See Table 7.)

Given Black Jack's 2,074 dwelling units as of 1990, the total number of dwelling units when the city is built out according to the land use plan is estimated at 3,612 dwelling units. During the 1980s, Black Jack's number of dwelling units increased by 384.



City of
Black Jack
 Missouri



HBA Harland Bartholomew & Associates, Inc.
 St. Louis, Missouri

PROPOSED LAND USE

LEGEND

- | | |
|---|--------------------|
| RURAL RESIDENTIAL
(1 D.U. per Acre) | COMMERCIAL/OFFICE |
| LOW DENSITY SINGLE FAMILY
(2 D.U. per Acre) | PUBLIC/SEMI-PUBLIC |
| MEDIUM DENSITY SINGLE FAMILY
(3 D.U. per Acre) | PARKS |
| HIGH DENSITY SINGLE FAMILY
(4 D.U. per Acre) | OPEN SPACE |
| MULTI-FAMILY RESIDENTIAL | PROPOSED ROADS |

FIGURE 6

Table 7

POTENTIAL DWELLING UNITS IN UNDEVELOPED LAND

City of Black Jack, Missouri

	Rural Residential (1 DU/acre)	Low Density S.F. (2 DU/acre)	Medium Density S.F. (3 DU/acre)	High Density S.F. (4 DU/acre)	Total
Jamestowne Subdivision					
Proposed Dwelling Units	0	0	100	350	450
Acres of S.F.	0	0	60	108	168
Other Undeveloped Land					
Proposed Dwelling Units	151	317	620	0	1,088
Acres of S.F.	150.3	158.3	205.8	0	514.4
Black Jack Total					
Proposed Dwelling Units	151	317	720	350	1,538
Acres of S.F.	150.3	158.3	265.8	108	682.4

Note: Acreage in this table is the total for sites. In Table 6, the site acreage is divided into single-family use, open space use, and roadway use.

If the present rate of growth continues (i.e., a straight line projection), the city's total dwelling units will reach 3,612 in approximately the year 2030. (See Figure 7.)

The relationship of the total number of dwelling units to population is based on the community's average population per housing unit. At the 1990 rate of 2.95, the build out population would be approximately 10,655 persons. However, the rate of population per housing unit is likely to decrease in future decades, and rarely does a community actually reach complete build out because someone is likely to choose not to sell their property for subdivision. Therefore, a more realistic population goal for build out is 10,000 persons.

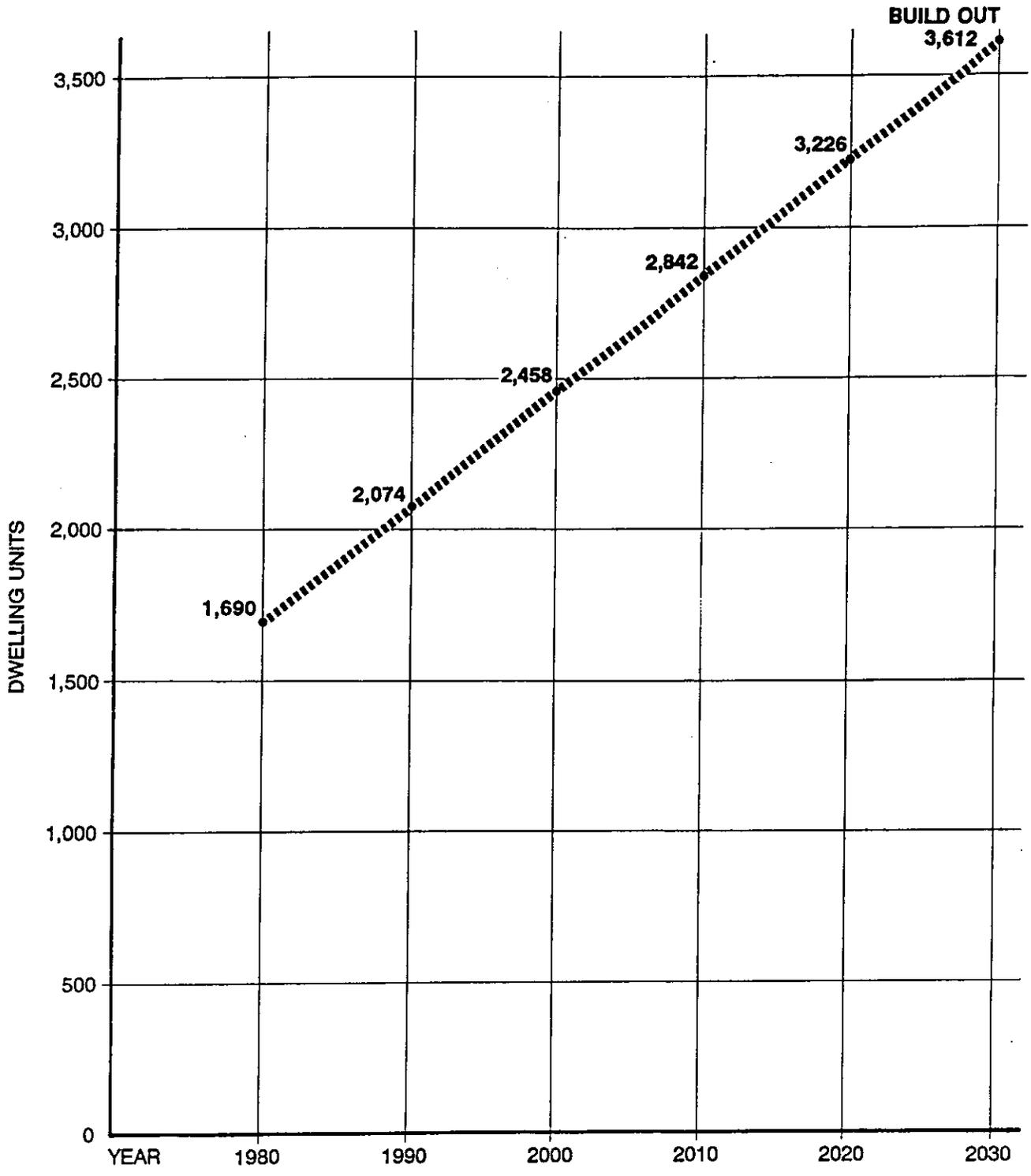
Commercial and Office

The amount of land dedicated to commercial uses (nine acres) and office uses (two acres) remains unchanged under the proposed land use plan. Thus, the percentage of the city proposed for commercial/office remains at 0.6 percent. The plan recommends development of vacant lots in the town center, and redevelopment of underdeveloped sites. While the commercial/office node is located on the first site of this crossroads community known as Black Jack, the present buildings are of more modern construction and thus cannot be considered an historic district.

Business and property owners in the town center must be an integral part of development activities, if the area is to meet its full potential. Development of vacant sites on Black Jack Court would present a unified front along this "U"-shaped street south of Parker Road, instead of the somewhat gap-toothed look of vacant lots interspersed with buildings.

The best redevelopment opportunity is found at the vacant service station site on the northeast corner of Parker and Old Halls Ferry Roads. Upgrading of existing properties by way of attractive paint schemes, business signs, and landscaping is another way to maintain and enhance the town center's friendly, small-scale presence. Such

FIGURE 7
DWELLING UNIT PROJECTIONS
BLACK JACK, MISSOURI



..... STRAIGHT LINE PROJECTION (384 D.U. per decade)

improvement to the area's aesthetics must be compatible with business signs and facades so that commerce is enhanced rather than discouraged.

Parks and Open Space

When combined, the proposed parkland (77 acres) and proposed open space (377 acres) accounts for over one-quarter (26.1 percent) of the city's land use. This unique and very positive aspect of Black Jack's development builds upon existing parks (66 acres) and open space (198 acres), by proposing an 11 acre neighborhood park north and east of city hall, and nearly doubling the amount of open space.

The size and beauty of the city's open spaces and parks are key components of the proposed land use plan. Parks and open space also serve as transition areas between different densities of residential uses, and between the town center commercial area and adjacent residential uses.

To varying degrees, action Items C, D, and E are associated with enhancement of parks and open spaces. The addition of landscaping and recreational facilities to existing parks and the proposed "city hall park" will help serve the eventual build out population of 10,000 persons. The proposed bike path/walking trail system will also serve to unite the widely scattered parks and open space with residential and other land uses.

Public/Semipublic

This wide ranging land use includes activities as diverse as schools, churches, retirement homes, utilities, and government facilities. The land use plan proposes a one-quarter increase in public/semipublic uses from 80 acres to 101 acres. The growing use categories are retirement homes (Delmar Gardens North) and a new church on Jerries Lane.

Roadways

In conjunction with the major growth in detached single-family residential uses and moderate growth in other uses, roadway use of land will increase by 70 percent from 119 acres to 203 acres under the land use plan. The Arterial and Collector Road System, Action Item F, guides the provision of roads within the city of Black Jack.

Vacant/Agriculture

The land use plan is based on all vacant and agricultural land being developed for other uses. The plan represents a build out scenario under which the vast majority of vacant and agricultural land becomes sites for single-family residences.

Transportation Plan

The plan assumes that the vast majority of people and goods will continue via private vehicles on public and private roadways. The portion of the population using the region's public transit, Bi-State Transit, will remain small.

Arterials

The purpose of the arterials in Black Jack (Parker, Old Halls Ferry, and Old Jamestown Roads) is to provide for crosstown traffic, and to feed the major regional transportation grid outside of the city (I-270, Lewis and Clark Boulevard, Lindbergh Boulevard, and New Halls Ferry Road).

Parker Road, a minor arterial, is the primary east-west route for the portion of North County between I-270 and Lindbergh Boulevard. Because of the relatively gentle terrain of the roadway route and the many wide road segments, the transportation plan recommends widening Parker Road to five lanes throughout the city (four driving lanes and a continuous left-turn lane). Care should be given to include street trees along the

widened county road and to install a traffic signal when warranted by traffic at the proposed north-south collector.

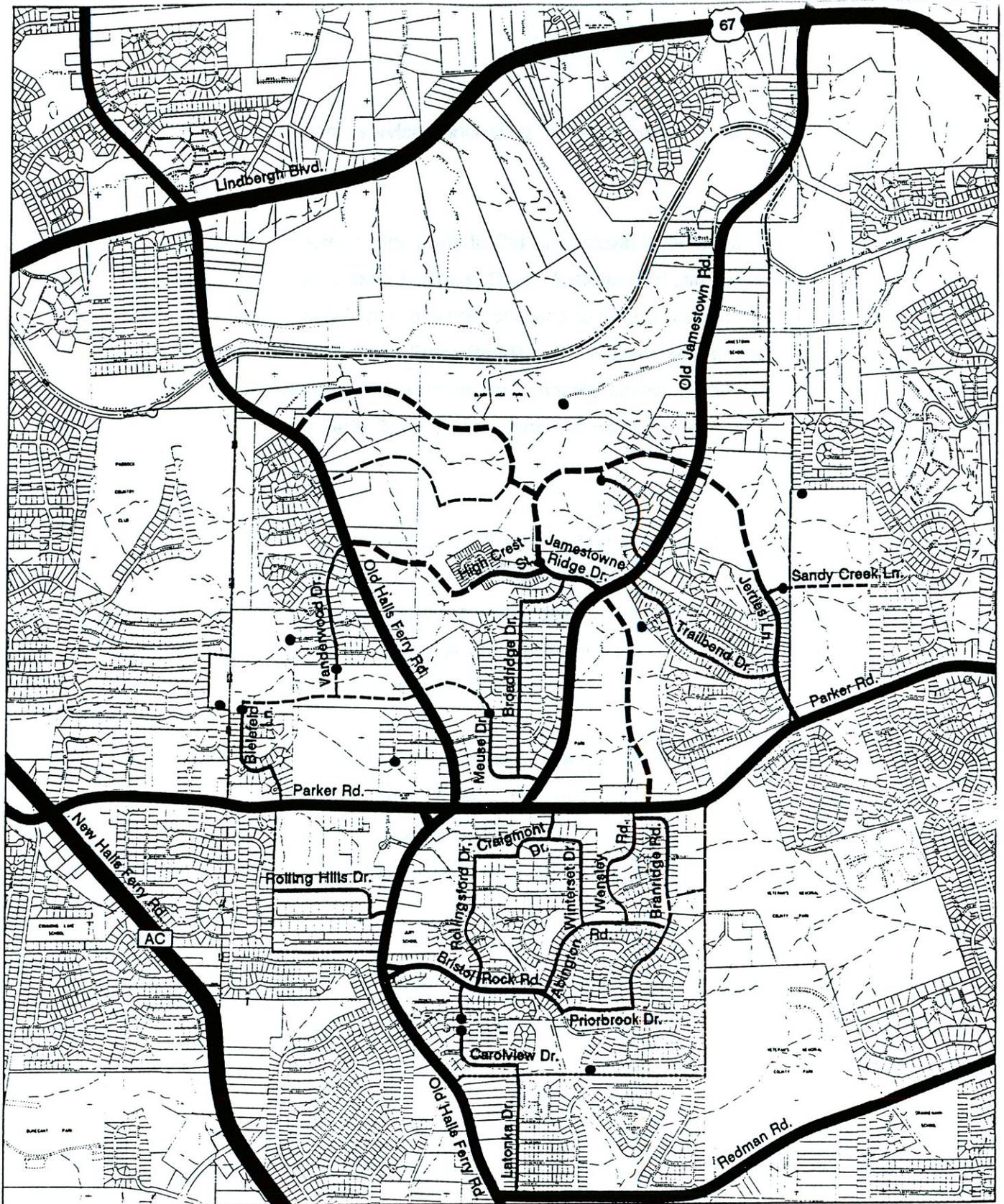
Old Halls Ferry Road and Old Jamestown Road are the other minor arterials in Black Jack under St. Louis County's jurisdiction. These north-south arterials are scenic, ridge-runner routes that are critical to the community's natural beauty and character. The transportation plan recommends maintaining the two lane configuration of both roads, with improvement limited to left-turn lanes and traffic signals at collector street intersections.

Intersection improvements should be made on Old Halls Ferry Road at Vanderwood/High Crest, at Country Club Court, and at Bielefield/Meuse, and on Old Jamestown Road at Jamestowne Ridge Road, and at Jerries Lane. (See Figure 8.) The left-turn lanes on the arterials should be built when intersecting streets are upgraded or constructed. The installation of traffic signals will depend on the traffic volumes of intersecting streets.

Collectors

With the proposed growth of residential uses within the city, there is a major need for an expanded collector road network to support existing and proposed subdivisions. Because there is a scarcity of existing collector streets with adequate pavement widths, the Transportation Plan distinguishes between "major collectors" with adequate physical characteristics and "minor collectors" which act as collectors even though they are narrow residential roads. New collector roads should meet the city's design criteria of a 60 foot wide right-of-way and a 38 foot wide pavement.

Bristol Rock Road will continue to provide major collector access between Old Halls Ferry Road and the southern portion of Black Jack. Numerous minor collectors provide north-south access to Bristol Rock Road. Such collectors are critical to the



City of
Black Jack
 Missouri



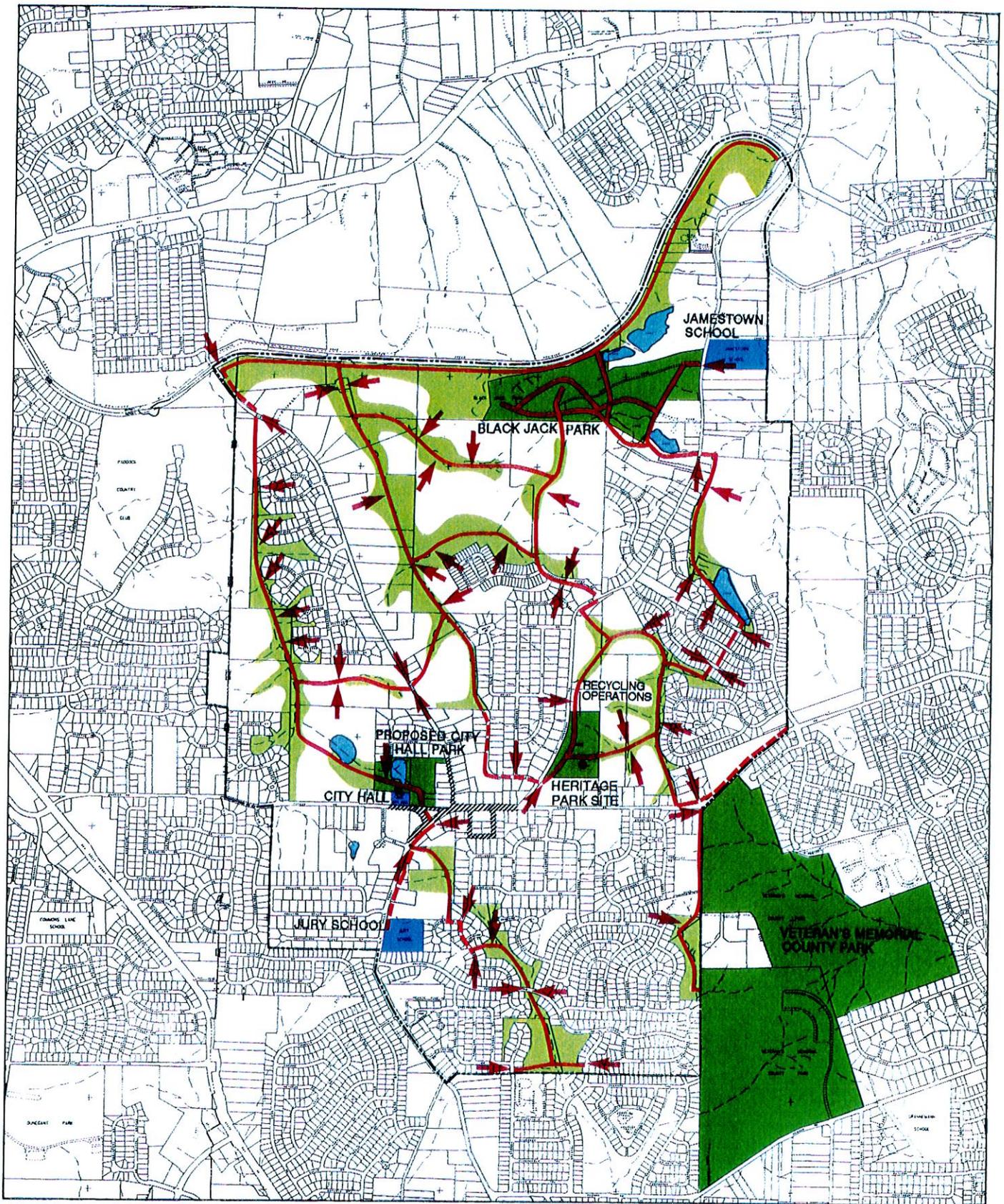
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 Saint Louis, Missouri

PROPOSED ROADWAY SYSTEM

FIGURE 8

LEGEND

EXISTING		PROPOSED
	MAJOR ARTERIAL	
	MINOR ARTERIAL	
	MAJOR COLLECTOR	
	MINOR COLLECTOR	
	EXISTING ROAD STUB	



City of
Black Jack
 Missouri



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PROPOSED COMMUNITY FACILITIES

FIGURE 9

LEGEND

- BIKE PATH/WALKING TRAIL
- PATH ON ROADWAY OR SHOULDER
- OPEN SPACE ALONG PATH
- PARKS
- ENTRANCE/EXIT TO PATH
- PUBLIC FACILITIES
- POSSIBLE COMMUNITY CENTER/CITY HALL SITES
- TOWN CENTER LANDSCAPING
- LAKES

Landscaping Program

Landscaping of the town center (Action Item B) is the top priority of the overall landscaping program. The goal of town center landscaping is to stimulate growth of Black Jack's commercial and office uses, while improving the aesthetics of the existing town center. A cooperative effort of local businesses, property owners, and municipal government can make large strides in a short number of years.

The previous road reconstruction of the Parker/Old Halls Ferry intersection replaced the small town atmosphere with a sterile, just-finished roadway look. Landscaping of the town center will not only beautify the area, but also give a boost to Black Jack's overall image. Many visitors and neighbors probably think of the town center when they first develop an impression of Black Jack. By coordinating the landscaping of the town center with the approaching arterial roads, the city can greatly enhance the pleasant, semi-rural attractiveness of the community.

The landscape program for the town center should include street trees within the road right-of-way, a special landscape feature perhaps involving the community identification sign, and landscaping of private parking areas and building facades with shrubs, trees and flower beds. Specific design of landscape features on private property must be directly negotiated with business and property owners. The town center program may encourage construction of new commercial or office buildings, and facade renovations of existing buildings.

A citywide program of street trees within road right-of-ways (Action Item C) is the second facet of the landscaping program. Tree planting, trimming, and removal should be implemented first along minor arterials (Parker Road, Old Halls Ferry Road, Old Jamestown Road). Later the street tree program should be expanded to major collectors (Bristol Rock Road, High Crest Street, Jamestowne Ridge Drive, and Jerries Lane), to

minor collectors, and other residential streets. The city should encourage homeowners to participate in the residential street tree program, which would be on a volunteer basis.

The third portion of the landscaping program involves parks and open spaces through the city (also Action Item C). Large portions of the Heritage Park site, Black Jack Park, and the proposed park are in need of enhanced landscaping. In the case of the Heritage Park site, landscaping of the Old Jamestown Road frontage, and definition of general areas should precede major park facilities. The city should also encourage and/or participate in landscaping along proposed bike path/walking trails in private open spaces such as subdivision common space.

Park and Recreational Facilities

Park facilities (Action Item D) should be coordinated to meet the outdoor recreational needs of the build-out population of 10,000 persons. (See Table 8.)

Mini-park needs of 10 acres can be handled by the abundance of open space within residential subdivisions. A neighborhood park is recommended north and east of city hall because of the absence of parks west of Old Halls Ferry Road. The proposed 11 acre neighborhood park site for "city hall park" contains 4.4 acres of open space, 5.2 acres of woods, and a 1.4 acre lake. The five acre deficit in neighborhood parks per Table 8 will be provided primarily in the open space portion of the proposed "city hall park." Major access to the proposed park should be via an entrance on Parker Road, perhaps in conjunction with the city hall.

Black Jack has a surplus of district parkland (31 acres) due to the presence of Black Jack Park. The deficit of 40 acres in metro parkland is not found within the municipal boundaries. However, the metro park needs are fully met at St. Louis County parks including nearby Veteran's Memorial County Park.

Table 8

PROPOSED BUILD-OUT STANDARD FOR PARK LANDS

City of Black Jack, Missouri

Park Classification	Acres			Park Land Surplus (S) or Deficit (D)
	Proposed Standard Per 1,000 Population	Build-Out Park Land Need ¹	City Park Inventory	
Mini-Parks	1.0	10	0	10 (D)
Neighborhood Park	1.5	15	10	5 (D)
District Park	2.5	25	56	31 (S)
Metro Park	4	40	0	40 (D)
Total	9.0	90	66	24 (D)

¹Based on 10,000 person build-out population.

Additional park and recreation facilities for a build-out population of 10,000 persons are compiled in Table 9. These proposed active and passive recreation facilities should be constructed at Black Jack Park, the Heritage Park site, or at the new "city hall park." The Community Facilities Plan also recommends a long-range park plan that:

1. Investigates specific site and use areas at the proposed city hall park.
2. Sites needed park facilities per Table 9 at the existing and proposed parks.
3. Provides a detailed landscape guide for the three park sites.
4. Performs a detailed comparison of the features and cost of the two options for a Community Center/City Hall.

Table 9

PARKS AND RECREATION FACILITY NEEDS
City of Black Jack, Missouri

Facility	Total Demand ¹	Current Supply	Additional Need	Cost of Facilities ²
Group Picnic Shelter	8	2	6	\$330,000
Picnic Tables	80	35	45	34,000
Baseball/Softball	8	2	6	300,000
Soccer	3	2	1	60,000
Football	3	0	3 ³	--
Children's Playground	10	3	7	175,000
Tennis Courts	6	4	2	60,000
Handball/Racquetball	2	0	2	30,000
Basketball	3	1	2	30,000
Volleyball	3	0	3	9,000
Swimming (SF of Pool)	8,000	0	8,000	--
Walking/Exercise Trails (Mile)	2.50	.8	1.70	--
Golf Course (Holes)	6	0	0 ⁴	--
Nature Trail (Miles)	2.50	.17	2.33	--
Bicycle Trail (Miles)	5.00	0	5.00	--
Rollerskating (Rink)	.5	0	0	--
Ice Skating (Rink)	.5	0	0	--
Horseshoes	10	2	8	4,000
Fishing Pond (Acres)	20	0	20	Lake
Outdoor Concert Facility	--	1	0	--
Day Camp Programs	--	Yes	--	--
Senior Citizen Programs	--	No	--	--

¹Based on 10,000 population service area.

²All cost estimates calculated by HBA in 1991 dollars. The figures do not include design costs or any construction contingency.

³Combine football fields with other fields.

⁴City participation in a golf course outside the city should be investigated.

5. Examines potential bike path/walking trail routes.

Another proposed municipal facility in a park is a citywide recycling operation suggested for the maintenance service area at the northern end of Heritage Park. Care should be taken to properly screen storage areas from the public view along Old Jamestown Road.

In reaction to community requests for golf facilities, the city should investigate participation in a golf course, possibly an existing course in a location convenient to Black Jack residents. No vacant, open space or park land within the city's boundaries is available in a large enough site for an 18-hole golf course. Municipally-owned 9-hole courses are not recommended since they are generally not economically viable for the city.

A citywide bike path/walking trail system (Action Item E) is the final component of implementing the park and recreation component of the Community Facilities Plan. The path/trail system should be built in segments through available open space. Residents of neighboring subdivisions, and officials of affected institutions should have significant input into the design and the routes of bike path/walking trail segments. During the planning and design stages for the bike path/walking trail, any neighborhood concerns about safety and security of specific segments should be reviewed with law enforcement representatives.

The plan recommends initiating the path/trail system with a segment that connects a residential area to a major destination such as Black Jack Park. If the initial segment is successful, then gaining permission to place the path/trail system through subdivision open space and institutional grounds may be more easily obtained. The system can unite scattered residential subdivisions with parks, schools and the town center. Completion of the entire 12 mile bike path/walking trail system will not occur until the city reaches full build-out, and if all affected subdivision and institutions approve.

Due to the pattern of existing development and resulting gaps in the available open space suitable for the path/trail system, small stretches are on the pavement of collector streets (Meuse Drive, Rollingsford Drive) or the shoulder of arterials (Old Halls Ferry Road, Parker Road). Also, provision of sidewalks along all arterials will alleviate conflict between pedestrians and adjacent vehicular and bicycle traffic.

Community Center/City Hall

A community center/city hall should contain indoor recreation space, a gymnasium, meeting space for civic activities, and municipal administrative offices totaling slightly more than 25,000 square feet. (See Table 10.) A host of daytime and evening recreational and community programs could occur at such a versatile municipal facility. A police station does not make fiscal sense for a community of 6,000 to 10,000 people, and thus is not recommended as part of the community center/city hall. (See Existing Conditions Technical Memorandum.) The size of a Recycling Center at the Heritage Park site depends on evaluating the city's proper role given other government's efforts to reduce landfill materials. Black Jack's Recycling Center will likely be of modest size and cost.

A central location close to the town center is the most convenient and desirable selection for a community center/city hall. The Community Facilities Plan recommends either of two excellent sites for the community center/city hall: a 1,500 square foot expansion of the existing city hall coupled with a new 20,000 square foot community center surrounded by the proposed "city hall park," or a completely new facility of 25,500 square feet built in phases or modules at the Heritage Park site, fronting on Old Jamestown Road. A community center/city hall will range in cost from \$1,580,000 for expanding the existing city hall, to about \$1,790,000 for a totally new facility in the Heritage Park site.

Table 10

COMMUNITY CENTER/CITY HALL

City of Black Jack, Missouri

	City Hall Site Option	Heritage Park Site Option
Community Center	Construct 20,000 S.F. addition to City Hall in two phases	Construct 20,000 S.F. facility in two phases
City Hall	Renovate 4,300 S.F. building and construct 1,500 S.F. addition	Construct 5,500 S.F. addition to community center
Total Facility	25,800 S.F. building (renovated building with three additions)	25,500 S.F. building (demolish existing city hall for park)
TOTAL COST ¹	\$1,580,000	\$1,790,000

¹All cost estimates calculated by HBA in 1991 dollars using 1991 Means Building Construction Cost Data for community centers, gymnasiums, and town halls in the St. Louis area. The figures do not include design costs or any construction contingency.

Capital Improvements Program

The Capital Improvement Program (CIP) for Black Jack coordinates and prioritizes municipal-related projects and programs such as landscaping of town center, construction of City Hall Park, and the extension of Jerries Lane north to Old Jamestown Road. (See Table 11.) Individual projects are developed based on the preceding Land Use, Transportation and Community Facilities Plans. While the city sets the policies for developing all Capital Improvements Program projects, funding varies from completely municipal to completely private.

Table 11

CAPITAL IMPROVEMENTS PROGRAM

City of Black Jack, Missouri

Phase I: 1991-1995

<u>Landscaping Program</u>	<u>Cost¹</u>
1. Town Center Landscaping	
• Parker Rd., Old Halls Ferry Rd., Black Jack Ct. (200 trees)	\$60,000
• Major landscape feature (trees, shrubs, flowers, benches)	20,000
• Landscaping of parking lots and front facades of businesses (trees, shrubs, planters)	55,000
2. Street Trees	
• Minor Arterials - Parker Rd., Old Halls Ferry Rd., Old Jamestown Rd. (520 trees)	156,000
3. Park Landscaping	
• Heritage Park - define 5 acre general area for neighborhood park facilities, maintenance service area, and possible community center	<u>29,000</u>
Subtotal	320,000

Park and Recreation Facilities

1. Long Range Park Plan	
• Facility plans for specific sites in two existing park sites and proposed "city hall park," Community Center/City Hall alternatives, and potential bike path/walking trail segments.	40,000
2. Construct Recommended Facilities	
• Black Jack Park per Long-Range Park Plan (picnic area, athletic fields and courts, playground)	460,000
3. Bike Path/Walking Trail System	
• Obtain easement for "test" segment	6,000

¹All cost estimates calculated by HBA in 1991 dollars. Funding will vary from completely municipal to completely private. The figures do not include design costs or any construction contingency, since these costs are provided in the CIP Summary, Table 13.

- Construct "test" segment (2,000 L.F.) 24,000
- Subtotal 530,000

Roadway Improvements

1. Minor Arterial
 - Intersection improvement on Old Jamestown Rd. at Jamestowne Ridge Rd. (turn bays, traffic signal) 75,000
2. Major Collector
 - Jerries Ln. construction from church north to Old Jamestown Rd. (2,000 L.F.) 250,000
 - Intersection improvement on Old Jamestown Rd. at Jerries Ln. (turn bays, traffic signal) 75,000
 - Subtotal 400,000

Phase II: 1996-2000

Landscaping Program

1. Street Trees
 - Major Collectors - Jerries Ln., Bristol Rock Rd., Jamestowne Ridge Dr., High Crest St., etc. (200 trees) 60,000
 - Minor Collectors - Abington Rd., Bielefield Ln., Broadridge Dr., Branridge Rd., Rolling Hills Dr., etc. (567 trees) 170,000
2. Park Landscaping
 - Black Jack Park - landscape approximately six acres of active recreation park 75,000
 - Subtotal 305,000

Park and Recreation Facilities

1. Construct Recommended Facilities
 - Heritage Park site developed per Long-Range Park Plan (picnic area, athletic fields and courts, playground) 380,000
2. Bike Path/Walking Trail System
 - Continue obtaining easement for system (based on test segment success) 20,000
 - Construct bike path/walking trail segments with focus on Black Jack Park (25,000 L.F.) 300,000
3. Community Center (1st phase)
 - Construct 8,000 SF Recreation

Phase of Community Center	<u>600,000</u>
Subtotal	1,300,000

Roadway Improvements

- | | | |
|--|--|----------------|
| 1. Major Collector | | |
| • Complete loop road of Jamestowne Ridge Rd. to meet Jerries Ln. at Old Jamestown Rd. (3,000 L.F.) | | 375,000 |
| 2. Minor Collector | | |
| • Complete road segments of Branridge Rd. and Carolview Dr. (350 L.F.) | | 60,000 |
| 3. Minor Arterial (St. Louis County) | | |
| • Widen Parker Rd. to 5 lanes west of Old Halls Ferry Rd. and east of Old Jamestown Rd. (3,200 LF) | | <u>335,000</u> |
| Subtotal | | 770,000 |

Phase III: 2001-2005

Landscaping Program

- | | | |
|--|--|----------------|
| 1. Street Trees | | |
| • Establish a residential street tree program, citywide on local streets (1,250 trees) | | 375,000 |
| 2. Park Landscaping | | |
| • Proposed "City Hall Park" | | <u>160,000</u> |
| Subtotal | | 535,000 |

Park and Recreation Facilities

- | | | |
|--|--|---------|
| 1. Acquire "City Hall Park" | | |
| • Site of 11 acre with lakes and woods located north and east of city hall | | 250,000 |
| 2. Construction Recommended Facilities | | |
| • City Hall Park - neighborhood park per Long-Range Park Plan (picnic area, athletic courts, and playground) | | 300,000 |
| 3. Bike Path/Walking Trail System | | |
| • Continue obtaining easements for system | | 10,000 |
| • Construct bike path/walking trail segments with focus on Heritage Park site (20,000 L.F.) | | 240,000 |

4. Community Center (1st Phase)	
• Construct 12,000 SF gymnasium addition to Community Center	<u>775,000</u>
Subtotal	1,575,000

Roadway Improvements

1. Major Collector	
• High Crest St. from Jamestowne Subdivision to Old Halls Ferry Rd. at Vanderwood Dr. (1,900 L.F.)	240,000
• Intersection improvement on Old Halls Ferry Rd. at High Crest/Vanderwood (turn bays, traffic signal)	75,000
• Unnamed Major Collector from Jamestowne Subdivision to Old Halls Ferry Rd. at Country Club Ct. (4,000 L.F.)	500,000
• Intersection improvement on Old Halls Ferry at Country Club Ct. (turn bays, traffic signals)	75,000
2. Minor Collector	
• Unnamed Minor Collector from Jamestowne Subdivision to Old Halls Ferry Rd. at Paddock Point Dr. (1,500 L.F.)	<u>150,000</u>
Subtotal	1,040,000

Phase IV: 2006-2010

Landscaping Program

1. Street Trees	
• Continue residential street tree program (1,250 trees)	375,000
2. Park Landscaping	
• Landscaping in parks and open space related to bike path/walking trail system, and on city hall site	<u>50,000</u>
Subtotal	425,000

Park and Recreation Facilities

1. Bike Path/Walking Trail System	
• Complete obtaining of easements for system	12,000
• Construct bike path/walking trail segments with focus on City Hall Park and the town center (17,500 L.F.)	210,000

2. City Hall Alternatives

- Renovate 4,300 SF existing city hall and construct an 1,500 SF addition for city hall; or use 333,000
- Construct 5,500 SF city hall, in the southwest corner of the Heritage Park site 413,000
- Subtotal 555,000

Roadway Improvements

1. Major Collector

- Unnamed Major Collector from Old Jamestown Rd. at Jamestowne Ridge Dr. south to Parker Rd. (3,000 SF) 400,000
- Intersection improvement on Parker Road at Major Collector (traffic signal) 75,000

2. Minor Collector

- Bielefield Ln. to Meuse Dr. (4,000 SF) 400,000
- Intersection Improvement on Old Halls Ferry Rd. at Bielefield/Meuse (turn bays, traffic signal) 75,000
- Subtotal 950,000

The CIP projects are divided into several categories and phases for the convenience of users. Implementation of projects will take considerable effort on the part of many people, over a long period to time. All proposed projects are assumed to be completed within a 20 year time frame. The phasing of a particular project is an indication of the city's priority for the project and/or when a project is likely to occur. The more distant the phase in the CIP list the less accurate estimates of time are likely to be.

CIP projects are also categorized by general type: (1) Landscaping Program, (2) Park and Recreational Facilities, and (3) Roadway Improvements. Within these categories for a particular phase, the order of projects is in general order of priority for that particular category's five year phase. The placement of the three general types is in alphabetical order, and does not indicate a preference for landscaping over park or road improvements.

Table 12 provides a summary of CIP projects by phase and functional category (landscape program, park and recreation facilities, roadway improvements). The landscaping program costs range from \$300,000 to \$550,000 per phase. Park and recreational facilities, which includes the \$1.7 to \$1.8 million Community Center/City Hall, range in cost per phase from \$500,000 to \$1,600,000. Like the other functional categories, roadway improvements begin at a relatively low level in Phase I (\$400,000) before rapid rising in later phases (slightly over \$1,000,000 per phase).

Design costs for projects are calculated at 15 percent of construction costs and a contingency amount of 25 percent is included for CIP projects. The total cost of CIP projects are \$1,750,000 in Phase I, \$3,325,000 in Phase II, \$4,410,000 in Phase III, and \$2,700,000 in Phase IV. For the 20 year study period, slightly over \$12 million of public and private funds are necessary to provide landscaping, park, recreation, and roadway improvements for the buildout population of 10,000. If the buildout population is not reached until later years, then some Phase III and IV projects will not occur prior to 2010, the time period utilized in the Capital Improvement Program (CIP).

Table 12

CIP SUMMARY BY PHASE AND CATEGORY

City of Black Jack, Missouri

<u>Phase</u>	<u>Function</u>	<u>Cost</u> ¹
I	Landscape Program	\$320,000
	Park and Recreation Facilities	530,000
	Roadway Improvements	<u>400,000</u>
	Subtotal	1,250,000
	Design (15%)	188,000
	Contingency (25%)	<u>312,000</u>
	Total - Phase I	1,750,000
II	Landscape Program	305,000
	Park and Recreation Facilities	1,300,000
	Roadway Improvements	<u>770,000</u>
	Subtotal	2,375,000
	Design (15%)	356,000
	Contingency (25%)	<u>594,000</u>
	Total - Phase II	3,325,000
III	Landscape Program	535,000
	Park and Recreation Facilities	1,575,000
	Roadway Improvements	<u>1,040,000</u>
	Subtotal	3,150,000
	Design (15%)	473,000
	Contingency (25%)	<u>787,000</u>
	Total - Phase III	4,410,000
IV	Landscape Program	425,000
	Park and Recreation Facilities	555,000 ²
	Roadway Improvements	<u>950,000</u>
	Subtotal	1,930,000
	Design (15%)	290,000
	Contingency (25%)	<u>480,000</u>
	Total - Phase IV	2,700,000
TOTAL COST		\$12,185,000

¹All cost estimates calculated by HBA in 1991 dollars. Funding will vary on a project basis from completely municipal to completely private.

²Includes City Hall expanded at present location. Similar building at Heritage Park site would cost another \$80,000.

IMPLEMENTATION

Carrying out the city's comprehensive master plan involves the coordination of day-to-day administration actions with the city's program and project activities. This coordination includes such steps as administration of the applicable building, health and safety codes, zoning, subdivision regulations, as well as on-going planning, construction and maintenance of parks and other community facilities. It is also important that the city of Black Jack include a capital improvements program in the adopted comprehensive master plan.

In the city's annual budget process, political leaders, with advise from city staff and various committees, judge what items will be funded. The comprehensive master plan in general and the capital improvements program in particular should be helpful in the council's determination of the content of budget items, and in establishment of spending priorities.

The scale of improvements proposed in the comprehensive master plan are realistic, but also challenging. During the next 20 years, city leaders will make many important decisions, which affect the type of city that develops. Finding the millions of dollars in revenues required to fund the city government's portion of the community's growth is a related challenge. Major sources of revenue beyond the current dependence on the sales tax may well be required. Such potential sources of revenue may include a gross utility tax or small property tax.

In order for the plan to legally represent the policy direction of the city, it should be adopted by the city Council, following recommendation by the Planning and Zoning Commission. The zoning ordinance and subdivision regulations are the major legal mechanism for implementing the plan. For the comprehensive master plan to be effective, it should be periodically updated to reflect the policies of the city's leadership. From time to time, the Planning and Zoning Commission, usually at the request of the City Council, should study changing conditions that may affect the comprehensive plan or ordinances used to implement community objectives.