CHAPTER 3 – NEIGHBORHOOD HOUSING SURVEY

RECOMMENDATION - NEIGHBORHOOD STABILIZATION AND REDEVELOPMENT AUDITS

Residential and Mixed-Use Opportunity Areas

A periodic "Stabilization and Redevelopment Audit" should be conducted in the Residential and Mixed-Use Opportunity Areas to determine where a preponderance of conditions exists to warrant establishing a formal redevelopment program. The higher the number of factors present, the more immediate and aggressive a redevelopment strategy is warranted. Some of these factors are quantifiable while others are subjective. However, almost all of them can be applied to either commercial or residential portions of the Opportunity Areas in the City of Joplin, with the exception of retail sales.

In order for City officials to ascertain when conditions for redevelopment exist, a combination of the following 15 factors needs to be present in the area under evaluation. These conditions, or factors, may be categorized into three major areas:

- Ownership Factors,
- Economic Factors, and
- Community Factors.

More specifically, these factors include:

	Applicable Factor	Impact on Commercial	Impact on Residential
A.	Ownership Factors:		
1)	High Vacancy Rate	Yes	Yes
2)	Extended Vacancy Period	Yes	Yes
3)	Deed Restrictions	Yes	Yes
4)	Ownership Changes	Yes	Yes
5)	Non-owner Occupied Housing	-	Yes

B.	Economic Factors:			
	6)	Retail Sales Decline	Yes	-
	7)	Property Value Decline	Yes	Yes
	8)	Lack of Renovation/ Remodeling Activity	Yes	Yes
	9)	Economic Obsolescence	Yes	Yes
	10)	Tax Delinquency/Bankruptcy	Yes	Yes
C.	Community Factors:			
	11)	Lack of Property Maintenance	Yes	Yes
	12)	Land Use Obsolescence	Yes	Yes
	13)	Physical Obsolescence	Yes	Yes
	14)	Environmental Concerns	Yes	-
	15)	Safety Concerns	Yes	Yes

The factors are inventoried initially to set a "benchmark" of conditions in each neighborhood. The factors are then updated periodically, such as semi-annually, to "track" changes in conditions.

RECOMMENDATION - HOUSING PROGRAMS

The City of Joplin should offer the following programs to Joplin residents to encourage residential infill and implement the strategies of the neighborhood surveys and audits.

Housing Rehab Deferred Loan Program:
Homeowners living within the Joplin Residential Opportunity Areas who need to make major repairs to their homes may apply for an interest free home improvement loan. The loan is deferred until the property is sold or title transfers. Applicants must have an income less than 80 percent of median income to qualify.

Subsidized Loan Program:
Homeowners living within the Joplin Residential Opportunity Areas who need to make major repairs to their homes may apply for a below market rate home improvement loan. Principal payments on the loan are deferred until the property is sold or title transfers. Applicants must have an income no greater than the median income to apply.

Exterior Paint Give-Away Program:
The city will provide free exterior paint and primer to homeowners within the Joplin Residential Opportunity Areas. Homeowners are required to have their homes painted within 90 days of receiving the paint. Applicants must have an income of less than 80 percent of median income to qualify.

Exterior Maintenance Program:
The city will provide assistance for exterior home repairs to homeowners within the Joplin Residential Opportunity Areas. This program is intended to assist income eligible homeowners who have been cited through the city's Property Maintenance Division.

Emergency Repair Program:
The city will provide assistance for emergency home repairs to income eligible homeowners within the Joplin Residential Opportunity Areas. This program will assist applicants on the Housing Rehab Deferred Loan waiting list or homeowners who have a serious health or safety violation. Items to be considered may include collapsed sewer lines, termite treatment and roof repairs or replacement.

Driveway Improvement Program:
Income eligible homeowners who reside within the Joplin Residential Opportunity Areas may apply for assistance with the cost of the installation or replacement of a hard-surfaced driveway.

Barrier Removal Program:
Residents with physical limitations who reside within the Joplin Residential Opportunity Areas may apply for a grant to remove structural barriers within their home or apartment. Items might include widening of doorways, or installing ramps, grab bars, lever type doorknobs, or raised toilets. Homeowners may receive a grant up to $5,000 for repairs to their homes while tenants may receive up to $2,500 on their units. Persons applying must have an income of less than 80 percent of the median income for this area.

Visual Smoke Alarm Program:
The city of Joplin will purchase and install visual smoke alarms for income eligible homeowners and tenants within the Joplin Residential Opportunity Areas who are deaf or have a loss of hearing. Tenants are limited to assistance not more than once every three years. Persons applying must have an income of less than 80 percent of median income and live within the Joplin Residential Opportunity Areas.

Weatherization Program:
Residents within the Joplin Residential Opportunity Areas needing assistance with making energy efficient repairs to their homes may receive a weatherization grant. Persons applying must have an income of less than 80 percent of median income.

Building Codes and Interior Property Maintenance

Primary duties include inspecting all residential and commercial structures that have obtained a building permit. This would include new construction, remodeling, tenant finish and miscellaneous inspections such as new electric upgrades, plumbing and HVAC installations. They will inspect through completion and then issue a Certificate of Occupancy.

The city should adopt the following codes:

- 2000 International Residential Code
- 2000 International Building Code
- 2000 Electrical Code Administrative Provisions
- 2000 National Electrical Code
- 2000 International Mechanical Code
- 2000 International Fire Code
- 2000 Life Safety Code (NFPA) 101

With addition of a code enforcement official, building inspection services can be provided in the area targeted for improvement without causing a burden. Training and Certification programs are on going and require all inspectors to continually train and accomplish certifications through ICBO or other organizations.

Information about the application process can be obtained by calling the Code Enforcement Division office at: 624-0820 and/or by visiting the office on 4th Street.

Plan Review Process

Plan review is mandatory on all residential and commercial plans being submitted for building permit. Residential permit applications are submitted with two copies of construction plans, two copies of sealed plot plans and a plan review fee that is based on the square footage of the structure. Turnaround time is approximately three (3) working days on residential and 20 workings days on commercial applications. All commercial plans must have architectural/engineering seals on designs.

There is a Senior Plans Examiner and two other plans examiners within Development Services/Codes Division. When commercial submittal is received (six copies), the plans examiner forwards five copies to other approving departments for approval/disapproval. They respond back to the plans examiner with comments and results.

Permit Services

Joplin offers permitting for all new residential and commercial projects. This includes remodel, tenant finishes, miscellaneous repairs/upgrades, deck, swimming pool, cross-connection (backflow devices) and fire repairs.

The Staff consists of three plan examiners, and 3.5 clerical staff members.
Miscellaneous permits (electrical/plumbing/mechanical) take 1-2 working days, residential 3 working days and commercial comments are made in 20 working days.

Funding Mechanism for the Department

Primary source of funds is disbursed from General Fund and all permit fees collected from this office are allocated back into the General Fund.

It is anticipated that current budgeted staff is adequate for plan review, permit services, and inspections to provide for compliance with the adopted building safety codes of the City of Joplin. The cost of building safety services is funded by the City's General Fund through various permit fees, plan review and inspection fees.

NEIGHBORHOOD HOUSING SURVEY RESULTS

The neighborhood from 7th to Junge Boulevard, between Main Street and Maiden Lane was inventoried for the condition of public and private improvements:

- The principle residence;
- The curb and gutter;
- Sidewalks—condition and completion of network; and
- Alleys.

The inventory score on the following map is scored as follows:

A.	Excellent	0
B.	Good	1
C.	Questionable	2
D.	Substandard	3
E.	Unsound	4 or more

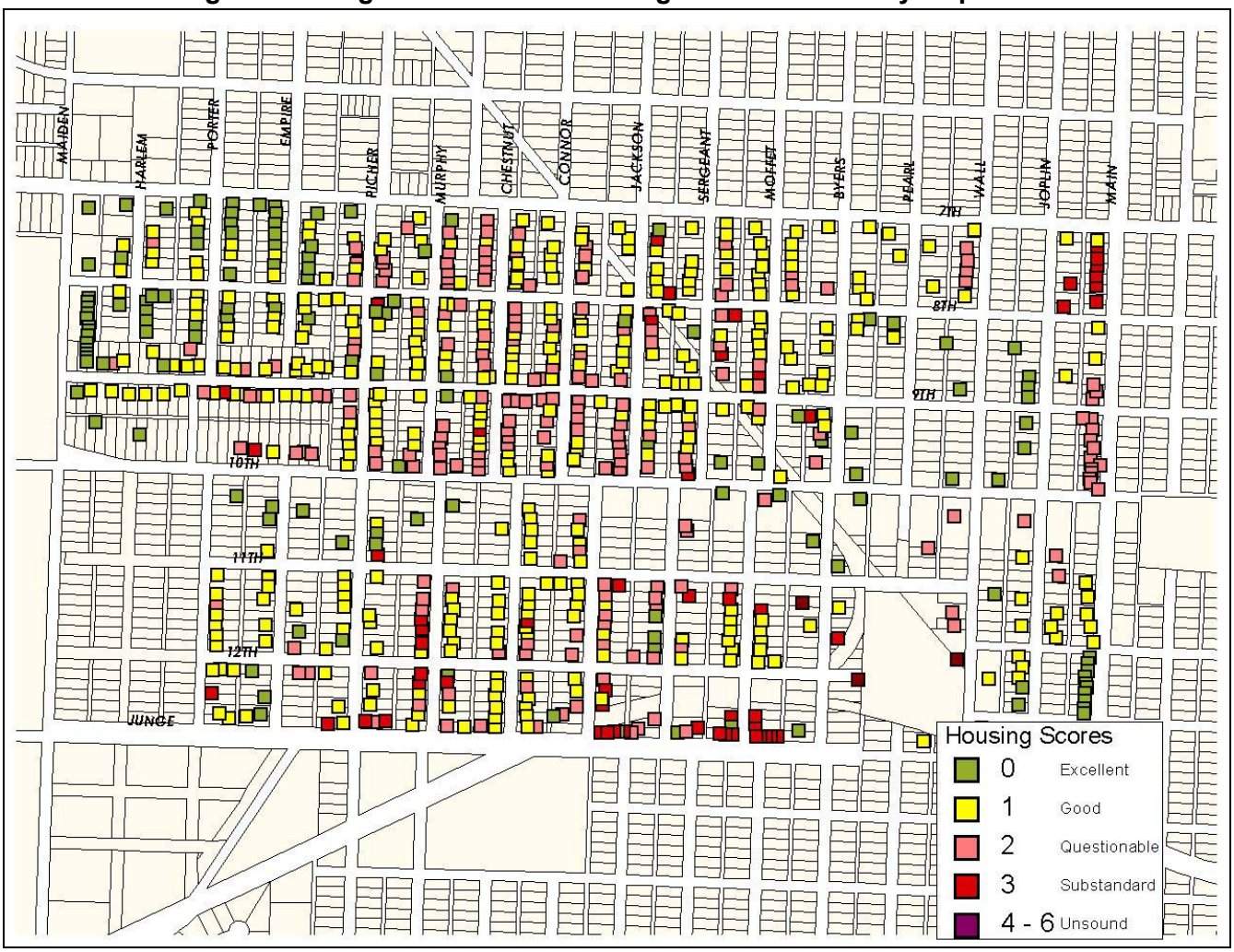
The scores are being used as a basis to target the housing and neighborhood improvement projects in this Chapter. Based on the initial acceptance of the evaluation and program, the same method will be replicated in other area neighborhoods.

The following table summarizes the results of the survey.

Table 3.1: Survey Summary

Points	Quality	House		Curb		Sidewalk		Yard	
0	**Excellent**	130	17%	217	29%	162	21%	369	49%
1	**Good**	370	49%	399	53%	369	49%	330	44%
2	**Questionable**	198	26%	89	12%	115	15%	37	5%
3-4	**Substandard**	55	7%	19	3%	54	7%	19	3%
5-6	**Unsound**	3	0%	32	4%	56	7%	1	0%

Figure 3.1 Neighborhood and Housing Evaluation Survey Map



The following graphs summarize each evaluation criteria.

Figure 3.2: Summary Results for the Main Residential Structure

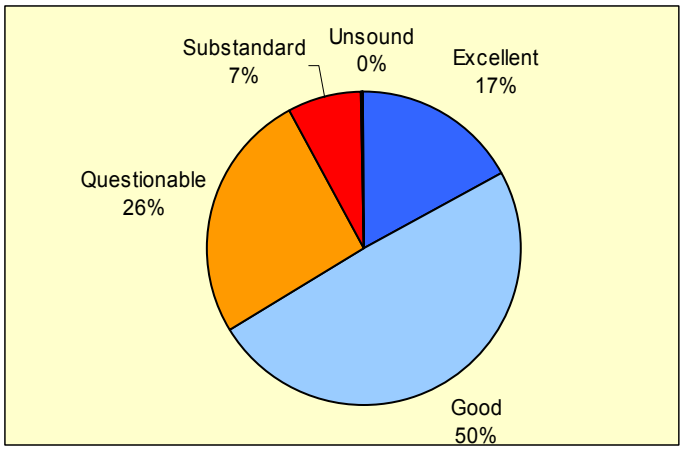


Figure 3.3: Summary Results from the Curb

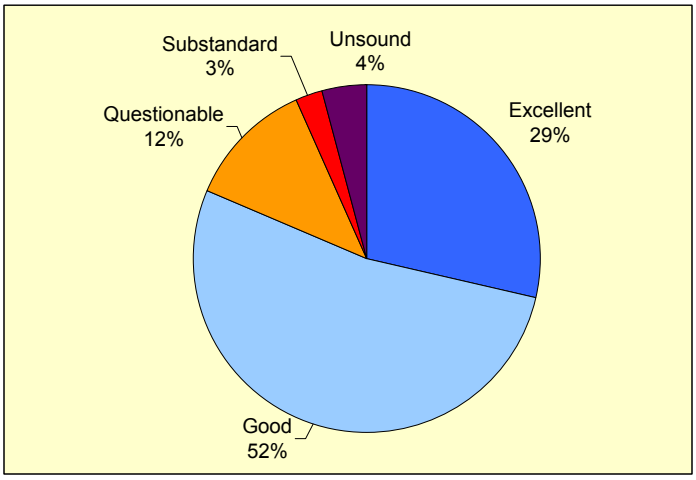


Figure 3.4: Summary Results for the Sidewalks

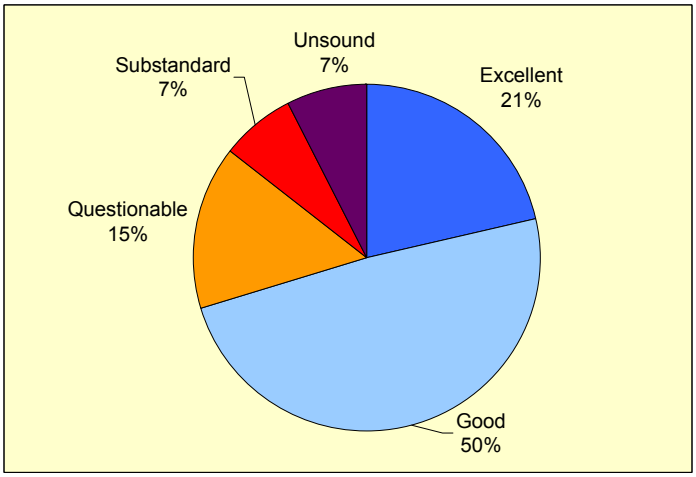
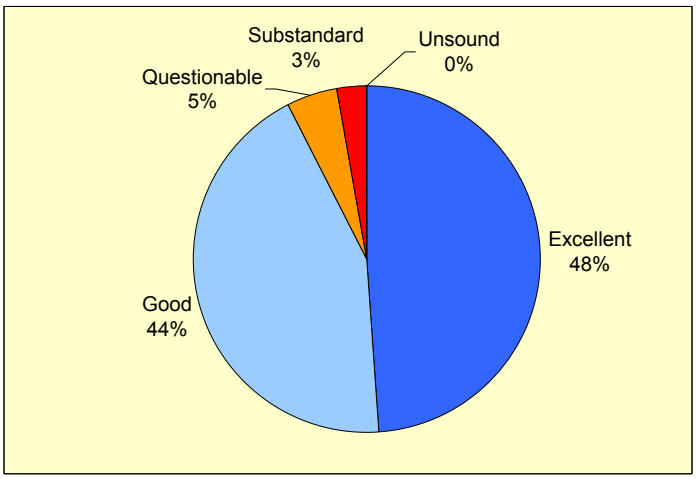


Figure 3.5: Summary Results for the Yard



(This page left blank intentionally)

CHAPTER 4 – DOWNTOWN REVITALIZATION PLAN OVERVIEW

DOWNTOWN PLAN INTENT

Downtown Joplin has historically been a center of trade, business, government and entertainment. It has the City's most recognizable buildings that not only give a sense of identity to the community, they also embody the heritage of a community. Like many other downtowns throughout America, Joplin's image of a bustling downtown with a multitude of commercial activities, people on the street and perception of safety has declined as people and activities have dispersed outward. This has resulted in business owners' and developers' lack of confidence to invest in downtown.

The Downtown Revitalization Plan for Joplin was adopted in 2002 to reestablish the City's hold on the center by building on the Downtown's existing strengths and addressing critical concerns. Presented here a summary overview of the Plan. Refer to the separate plan document for details.

The Downtown economy needs a shift from a retail center to perhaps more office, residential and entertainment uses. Key downtown anchors that are advertised and promoted can attract more people to visit Downtown and help build that critical mass essential to bringing more investment.

PLAN OVERVIEW

The Revitalization Plan provides strategies for creating confidence in a better investment climate through a multi-phase process:

- Assess the Downtown's existing strengths and weaknesses;
- Mobilize Downtown allies and leadership to define objectives;
- Define "Planning Districts" that segment Downtown so that plans can be more strategic;
- Draw from the expertise of those involved to set action steps; and
- Propose implementation steps, including financing, for such an undertaking.

The Plan identifies future development opportunities, design guidelines, Downtown anchors, parking and linkages opportunities. The Joplin Downtown Plan recommends that the City:

- Adopt strategies for addressing issues in specific Districts by type of activity:
    - Connection Issues—How the Downtown is accessed and used.
    - Animation Issues—What brings Downtown Joplin "to life"
    - Renewal Issues—Where Downtown can be revitalized with specific projects.
- Implement a multifaceted program within the various Districts of the Downtown that emphasizes residential redevelopment along with retail-commercial and office/institutional uses.

- Implement strategies through a "Revitalization Action Plan" that includes housing design standards, streetscape improvements, non-residential design standards, public/private financing of improvements, marketing strategies and "quick victory" development projects.
- Appoint an ongoing central coordinating authority called "Downtown Joplin Task Force" comprised of:
    - The chair of the "Vision20/20 Downtown Revitalization Task Force;"
    - A representative of Joplin Main Street program;
    - A representative of the Downtown Development Corporation;
    - A representative of the City of Joplin; and
    - A property owner-at-large from Downtown.

The Downtown Joplin Task Force (or "the Task Force") would meet quarterly to coordinate common interests and oversee implementation of the Plan. The task force has been assigned the following tasks for the future.

- Assign a Task Force "Subcommittee" responsible for the implementation of the Plan in each Planning District.
- Receive quarterly reports from the Subcommittee to the Task Force outlining their progress.
- Develop a set of Task Force "milestones" that would track the progress of the Downtown Plan.

The Subcommittee would be responsible for coordinating with existing groups in and around the Downtown, such as the Neighborhood Association for the Sergeant Avenue Historic District, the Historic Preservation Commission, and related groups.

Other recommended strategies of the plan call for a periodic "Stabilization and Redevelopment Audit" to be conducted by the Task Force. Results of the audit could trigger a redevelopment intervention in Downtown when, say, office lease rates plummeted or vacancy rates increased dramatically. The audits will support the rationale for public and private actions and help the participant groups—whether the Task Force, the City, the Main Street Program or other group—be more strategic and timely. Finally, to be more effective, the Task Force should examine the options for incorporating as a 501.c.3 not-for-profit organization.

PLANNING PROCESS

The Downtown Revitalization Planning process started with establishing a working committee that consisted of City Staff, members of the Chamber of Commerce, the Vision 20/20 Downtown Revitalization Task Force and the Joplin Downtown Development Corporation. The committee identified major issues and concerns under three categories: **Connection**, **Animation** and **Renewal**.

1. The **Connection** theme focuses on how automobile, public transit and pedestrian modes of transportation link Downtown to the surrounding neighborhoods, how they create circulation and movement within Downtown and how these connections can be improved.

2. The **Animation** theme involves all of the elements that bring life to downtown. These elements include retail, downtown living, institutions, recreation, arts, civic events and other activities.

3. **Renewal** or reinvestment is the third element necessary for rebuilding a downtown. Renewal and reinvestment of the built environment is necessary, as is redevelopment of human and civic capital stock. This element includes economic development strategies, funding alternatives, capital improvements and other private and public investments in Downtown.

The next step was to identify redevelopment themes and define goals, objectives and policies for the Downtown plan. The action steps are statements that reflect the community's aspirations for the future of Downtown Joplin.

DOWNTOWN STUDY AREA

The study area boundaries have been defined as the 150 square block area from approximately A Street on the north to 15th Street on the south, and from Sergeant Avenue on the west to Grand Avenue on the east, including all of the Union Depot area **(Ref. "Downtown Joplin Study Area: Planning District Map" on next page.)** The study area is generally identified as the Downtown and contains a mix of commercial, industrial, institutional and residential uses. These uses includes the Jefferson Bus Lines, the George A. Spiva Center for the Arts and Convention & Visitors Bureau, Spiva Park, Main Street Joplin, the Post Memorial Art & Reference Library, Memorial Hall, Jack Lawton Webb Convention Center, Joplin Jr. High & gymnasium, George Washington Carver national monument, City Hall, Police Department & Fire Department, Chamber of Commerce, the post office, the Joplin Globe, and several other "anchor" developments.

(This page left blank intentionally)

CHAPTER 5 –PARKS AND RECREATION

The City of Joplin developed the Citizens Park System Master Plan in 2001, with subsequent voter support for a ¼ cent sales tax for stormwater and park system improvements identified in the Plan. Joplin officials worked with citizens to develop a positive relationship after attempts to plan for a proposed water park at Schifferdecker Park. The City worked hard to identify and employ a variety of citizen involvement venues.

The Plan's success can be attributed to the fact that citizens felt they were involved in the planning process and that they saw themselves in the Plan's recommendations. The variety of venues offered included: a) direction and advice from a citizens steering committee; b) individual interviews with key opinion leaders in the community, especially from those who were outspoken in the previous water park project which failed; c) planning charrettes held on Saturday mornings when citizens could attend; d) public meetings held during evening hours when citizens felt they were most available; e) interviews with organized user groups of the city's facilities; and, f) the completion of a statistically valid citizen survey which was crucial to the study team's understanding of the needs and preferences of the silent majority.

Recommendations from the Plan included the following:

- the commitment to offering more recreation programs;
- increase of user fees at Memorial Hall;
- continued working relationship with the Sports Authority and the Convention and Visitor's Bureau;
- continued improvement in key facility areas such as athletic fields, trails and park improvements;
- improving the opportunities for citizen involvement in the planning of parks and programs;
- increases in user fees;
- improved integrated management systems;
- work to improve and increase the number of partnerships; and,
- improve marketing of programs and services.

PARK AND RECREATION FACILITIES AND NEEDS

Park Land Inventory

Table 4.1: Parks and Open Space Guidelines

Park Category	Function	Service Area	Desirable Size	Acres / 1,000 Pop.	Desirable Site Characteristics
Mini-Park	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens.	Less than ¼-mile radius.	1 acre or less	0.25 to 0.5A	Within neighborhoods and in close proximity to apartment complexes townhouse development or housing for elderly.
Neighborhood Park/Playground	Area for intense recreational activities, such as field games, court games, crafts, playground apparatus area, skating, picnicking, wading pools, etc.	¼ to ½-mile radius to serve a population up to 5,000 (a neigh-borhood)	15+ acres	1.0 to 2.0A	Suited for intense development. Easily accessible to neighborhood population-geographically centered with safe walking and bike access. May be developed as a school-park facility.
Community Park	Area of diverse environmental quality. May include areas suited for intense recreational facilities, such as athletic complexes, large swimming pools. May be an area of natural quality for outdoor recreation, such as walking, viewing, sitting, picnicking. May be any combination of the above, depending upon site suitability and community need.	Several neigh-borhoods. 1 to 2 mile radius	25+ acres	5.0 to 8.0A	May include natural features, such as water bodies, and areas suited for intense development. Easily accessible to neighborhood served.
Regional/Metro-politan Park	Area of natural or ornamental quality for outdoor recreation, such as picnicking, boating, fishing, swimming, camping and trail uses; may include play areas[3].	Several communities 1 hour driving time.	200+ acres	12.0 to 18.0A	Contiguous to or encompassing natural resources.

[3] * National Recreation and Park Association, Colorado Springs, Colorado

Park Category	Function	Service Area	Desirable Size	Acres / 1,000 Pop.	Desirable Site Characteristics
Regional Park Reserve	Area of natural quality for nature-oriented outdoor recreation, such as viewing, and studying nature, wildlife habitat, conservation, swimming, picnicking, hiking, fishing, boating, camping and trail uses. May include active play areas. Generally, 80% of the land is reserved for conservation and natural resource management, with less than 20% used for recreation development.	Several communities 1 hour driving time.	1,000+ acres; sufficient area to encompass the resource to be preserved and managed.	Variable	Diverse or unique natural resources, such as lakes, streams, marshes, flora, fauna, topography.
Linear Park	Area developed for one or more varying modes of recreational travel, such as hiking, biking, snowmobiling, horseback riding, cross-country skiing, canoeing and pleasure driving. May include active play areas.	No applicable standard.	Sufficient width to protect the resource and provide maximum use.	Variable	Built or natural corridors, such as utility rights-of-way, bluff liens, vegetation patterns, and roads that link other components of the recreation system or community facilities, such as school, libraries, commercial areas, and other park areas.
Special Use	Areas for specialized or single purpose recreational activities, such as golf courses, nature centers, marinas, zoos, conservatories, arboreta, display gardens, arenas, outdoor theaters, gun ranges, or downhill ski areas, or areas that preserve, maintain, and interpret buildings, sites, and objects of archeological significance. Also plazas or squares in or near commercial centers, boulevards, parkways.	No applicable standard[4].	Variable depending on desired size.	Variable	Within communities.
Conservancy	Protection and management of the natural/cultural environment with recreation use as a secondary objective.	No applicable standard.	Sufficient to protect the resource.	Variable	Variable, depending on the resource being protected.

[4] * National Recreation and Park Association, Colorado Springs, Colorado

Table 4.2 Park Land Inventory - 2000

Park	Acreage	Amenities
Mini Parks		
McKinley	4	Whirl, slide, swing set
Garvin	2	Playground, gazebo, picnic tables
Mohaska	1	Table, whirl, swing set, slide
Iron Gates	2	Basketball court, swing set, park table, P.D. training building
Roanoke	.3	Tennis court, whirl, slide, swing set, tables & benches
Spiva	.3	Sculpture, Fountain, 11 benches, stage
T O T A L	**9.6**	
Neighborhood		
Parr Hill	17	Basketball court, playground, shelter, tables, restrooms, grills, 3 ponds, trail
Ewert	14	Pool, ball field, shelter, playground, 2 tennis court, restroom, storage shed, volleyball court
Leonard	11	Playground, tennis court, shelter, restroom, backstop, grills, horseshoe pits
Humphrey	8	Playground, tennis court, shelter, grills, restroom, backstop
Cunningham	8	Basketball court, horseshoe pits, playground, 1 tennis court, pool, shelter, restrooms, grills
T O T A L	**58**	
Community		
Schifferdecker	160	Pool, golf course, basketball courts, horseshoe pits, playground, 12 tennis courts, tables, shelters, grills, museum, maintenance building, park and recreation office
T O T A L	**160**	
Special Use		
Landreth: Bassman Field, Ozark Little League Fields, YMCA Field and the old Mineral Park	160	2 tennis courts, 4 sand volleyball courts, 3 ball fields, 1 t-ball field, soccer field, 2 swing sets, whirl, 2 tables, 2 grills, sand volleyball court
Wildcat – Metropolitan Little League Area	20	2 fields, basketball court, swing set, softball backstop
Dover Park Soccer Complex	30	9 fields
Joe Becker Stadium	2.5	1 field
Redden	1	1 field
4th & Murphy Blvd. Field	1	1 field
Gabby Street	1	1 field
T O T A L	**215.5**	

Park	Acreage	Amenities
Special Use Owned by Others		
Gabby Street	-	4 fields
West of Redden Field	-	3 fields
Sunny Jim	-	3 fields
T O T A L	**-**	
Undeveloped		
McClelland	166	Restroom, disc golf, shelter, playground, picnic tables, grills
Dover Hill	30	No amenities
T O T A L	**196**	
Green Space Maintained by the Parks and Recreation Department		
Spring	2.5	No amenities
Crestwood	2	No amenities
Triangle	.3	No amenities
7th & Main	.1	No amenities
Goose Egg	.3	No amenities
T O T A L	**5.2**	
Cemeteries		
Fairview	61.7	
Parkway	18.7	
Forest Park	20	
Osborne	58.5	
T O T A L	**158.9**	
Natural Resource & Greenway Corridors		
Wildcat Park	120	Fishing, picnic tables, boat ramp
Campbell Parkway	50	Trail & benches
McIndoe	24	Picnic tables, grills, fishing
Ozark	50	Wooded area
T O T A L	**264**	

Recreation Facilities Inventory

Table 4.3: Relationship of City Recreation Facilities to National Standards

Activity/Facility	City	NRPA Standards	Current Population - 44,133 = Current System Deficiency/Surplus	2002 Population Projection - 46,446 = Projected System Deficiency/Surplus
Baseball/Softball Fields	20	2 @ 5,000	2	2
18 Hole Golf Course	1	1 @ 20,000	-1	-1
Outdoor Basketball Courts	4	1@ 5,000	-5	-5
Trails	2	1 system per region	n/a	n/a
Football Fields	0	1 @ 20,000	n/a	n/a
Soccer Fields	10	1 @ 10,000	6	6
Shelter Houses	11	Level of Service	n/a	n/a
Racquetball Courts	0	1 @ 5,000	provided by private sector	provided by private sector
Swimming Pools	3	1 @ 20,000	ok	ok
Ice Rink	0	1 @ 50,000	n/a	n/a
Tennis Courts	19	1 @ 2,000	-3	-4
Volleyball Courts (outside)	2	1 @ 5,000	-7	-7
Mini Parks	9.6	.25 - .50 @1,000	(-1.4)(-12.4)	(-5)(-13.65)
Neighborhood Parks	58	1.0 - 2.0 @1,000	(+14)(-30)	(+11.5)(-35)
Community Parks	160	5.0 - 8.0 @1,000	(-60)(-192)	(-72.5)(-212)
Linear Parks	264	Varies	Varies	Varies
Special Use Parks	222	Varies	Varies	Varies
Undeveloped Acres	171.3	Varies	Varies	Varies
Developed Acres	443	10-12 @ 1,000	ok	ok
Natural Resource	264	Varies	Varies	Varies

Table 4.4 Observations from the Facility Inventory

Facilities	Observations
Parks	Equitable access to the park system can be improved by the acquisition of land in the east, south, north and northwest. The City should consider a large special use park to accommodate an athletic complex of approximately 100 acres; land to accommodate a golf course expansion when needed of 100 to 200 acres; neighborhood parks in those areas which are deficient; and a trail system to link as many parks, and points of interest, as possible.
Pools	The three swimming pools provide sufficient square footage of space to meet standards (3% of the population x 15 to 25 sq. ft. per person). When calculated, this formula calls for a range between 20,250 sq. ft. to 33,750 sq. ft. Currently, Ewert Pool has 10,280 sq. ft.; Cunningham has 8,787 sq. ft.; and Schifferdecker has 13,592 for a total of 32,659 sq. ft. One can see from this calculation that Joplin is on the upper end of its provision of water space for citizens.
Golf Course	The golf course averages 40,412 rounds of golf per year. Maximum number of rounds the facility can accommodate annually is approximately 52,000, thus the City needs to monitor this number and plan accordingly. Because there is not sufficient land at the current site for expansion, new land will need to be acquired.
Athletic Facilities	The number of athletic facilities for soccer and baseball/softball seems to meet the current demand.
Shelters	There is a need for additional shelters at McClelland, Ewert, Landreth, Garvin, Leonard, Humphrey, Schifferdecker and Iron Gates; shelter repair is needed at Ewert on the existing shelter.
Playgrounds	There is a need for new playgrounds at McClelland, Landreth (2), Leonard, Humphrey, Schifferdecker, McKinley, Iron Gates and Roanoke. ADA accessible playgrounds need to be provided in each zone of the City.
Parks	The condition of the park system is below average. There is a significant need for new playgrounds, shelters, tennis court improvements, lighting, drinking fountains, restrooms and parking areas, in many cases.
Pools	The condition of existing pools is below average. Renovation of Ewert and Cunningham Pools is possible; Schifferdecker needs to be replaced in its current location.
Golf Course	The condition of the golf course was not evaluated as a part of this report.
Athletic Facilities	Citizens have indicated their support for improved facilities. Other communities have enjoyed great success by removing old facilities and constructing new ones in a central location.
Shelters	A recommendation is being made for new shelters at McClelland, Ewert, Landreth, Garvin, Leonard, Humphrey, Schifferdecker and Iron Gates; shelter repair is needed at Ewert on the existing shelter.
Playgrounds	There is a need for new playgrounds at McClelland, Landreth (2), Leonard, Humphrey, Schifferdecker, McKinley, Iron Gates and Roanoke. ADA accessible playgrounds need to be provided in each zone of the City.

(This page left blank intentionally)

CHAPTER 6 – FUTURE LAND USE

LAND USE DEVELOPMENT PATTERN

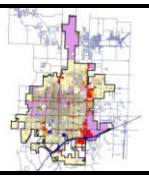
OPPORTUNITY AREAS

In addition to general recommendations of this Chapter, this Plan identifies unique areas where opportunities exist to create quality development. These "Opportunity Areas" allow the City to apply unique planning strategies to residential, commercial, industrial and park development and target unique capital improvements. The "Opportunity Areas," shown on the "Opportunity Areas Map" **(Ref. map on the next page,)** and described in detail on the following pages present existing conditions and an "opportunity agenda" for the following areas:

- Mixed-Use Area 1 – East Broadway from Murphy to Buchanan
- Residential Area 1 - west of downtown to Schifferdecker Avenue.
- Residential Area 2 – 20th Street west of Main Street.
- Residential Area 3 – East 15th Street and east 20th Street west of Rangeline Road.
- Commercial Area 1 – I-44 and U.S. 71 Bypass.
- Commercial Area 2 – 3rd Street east of Range Line Road.
- Commercial Area 3 – East of Main Street, north of the Armory.
- Commercial Area 4 – Downtown Joplin.
- Commercial Area 5 – Southwest corner of Newman Road and Rangeline Road.
- Industrial Area 1 – West of St. Louis and Euclid Roads north of Tamko Plant site.
- Park Area 1 – Wildcat Park.
- Capital Improvement Area 1 – Rangeline Road and Ten Pin Street.
- Capital Improvement Area 2 – Rangeline Road and 20th Street.
- Capital Improvement Area 3 – Rangeline Road and 24th Street.
- Capital Improvement Area 4 – Schifferdecker Avenue south to 32nd Street.
- Capital Improvement Area 5 – 26th Street and Picher Street.
- Capital Improvement Area 6 – Campbell Boulevard at Park Street.
- Capital Improvement Area 7 – Murphy Boulevard at Delaware Street.

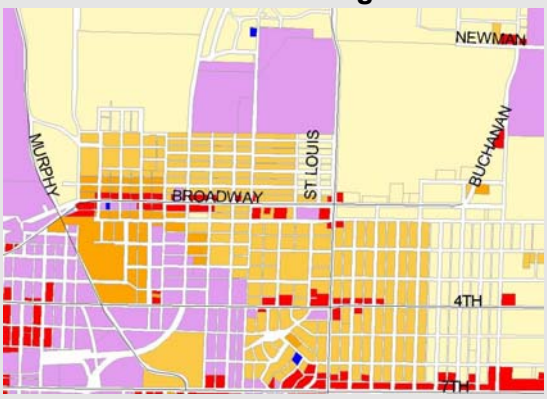
Application of the opportunity agendas and specified policies are intended to ensure that high quality development occurs through the realization of unique opportunities. As such, the opportunity agendas and future land use policies of each "Opportunity Area" must be considered when making land use changes, and reviewing private sector initiatives for rezoning and site development proposals.

Opportunity Areas Map



OPPORTUNITY AREA
Mixed-use Area - 1

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- East Broadway from Murphy to Buchanan.

CURRENT ZONING/ EXISTING DEVELOPMENT

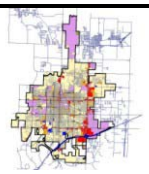
- C-1, C-3, M-1, and R-3.
- Mixed-use Residential and Neighborhood Commercial Uses.

FUTURE LAND USE

- Expanded commercial uses compatible with residential areas.

OPPORTUNITY AGENDA

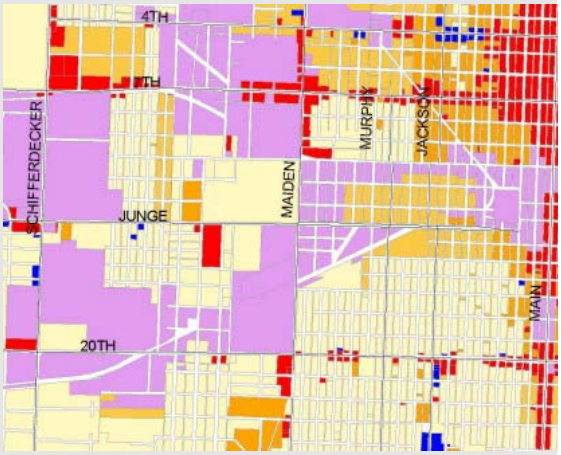
- Economic Development Plan prepared in conjunction with two neighborhood associations. Infill development of low-density residential and expansion of neighborhood commercial businesses.



OPPORTUNITY AREA

Residential Area - 1

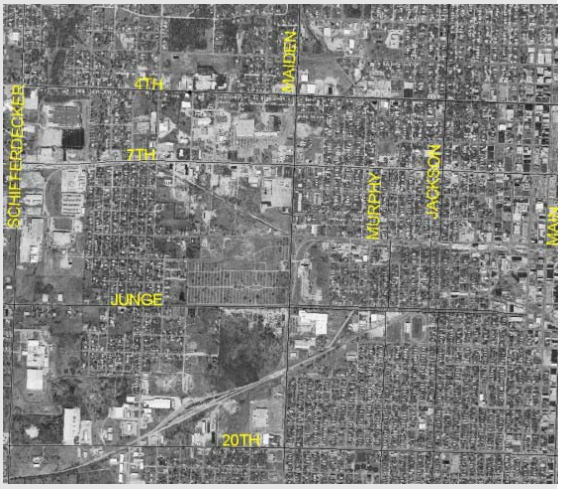
Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- West of downtown to Schifferdecker Avenue.

CURRENT ZONING/ EXISTING DEVELOPMENT

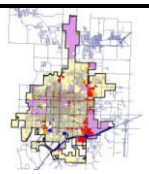
- R-2 and R-3, and Industrial.

FUTURE LAND USE

- Moderate-density Residential.

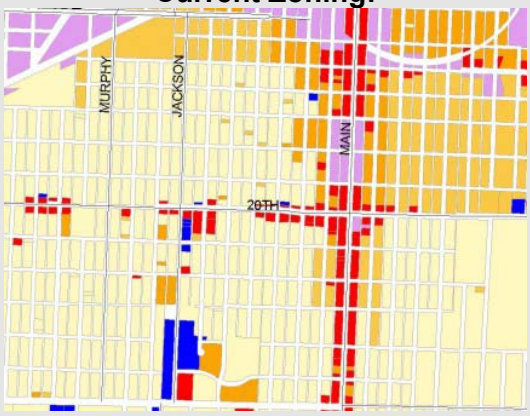
OPPORTUNITY AGENDA

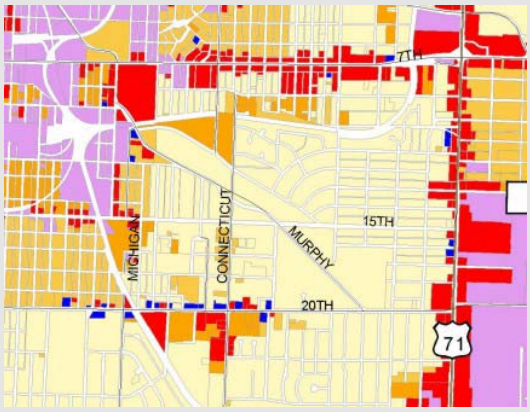
- Neighborhood Stabilization. The reconstruction of the High School stadium with surrounding site improvements. Redesign of 13th Street to accommodate expansion of the stadium, and introduce screening and buffering standards to protect residential from industrial uses.



OPPORTUNITY AREA
Residential Area – 2 and 3

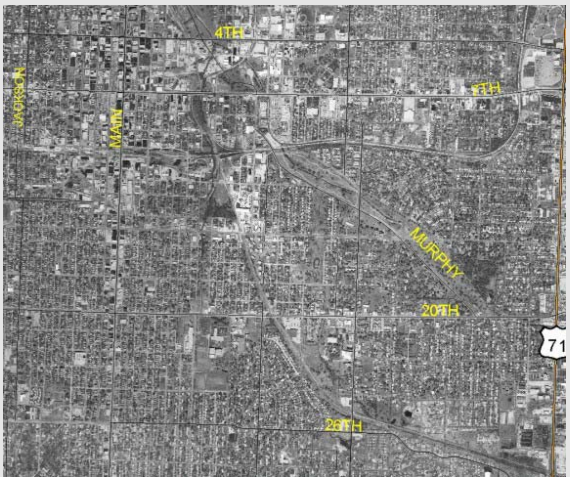
Current Zoning:





Existing Streetscape

Aerial Photo



LOCATION:

- 20th Street west of Main Street (Area 2.
- East 15th Street and east 20th Street west of Rangeline Road (Area 3.

CURRENT ZONING/ EXISTING DEVELOPMENT

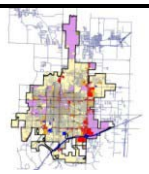
- R-1, R-2 and C-3.
- The areas are improved with moderate-density residential. There is neighborhood commercial on the south side of 20th Street.

FUTURE LAND USE

- Moderate-density residential.

OPPORTUNITY AGENDA

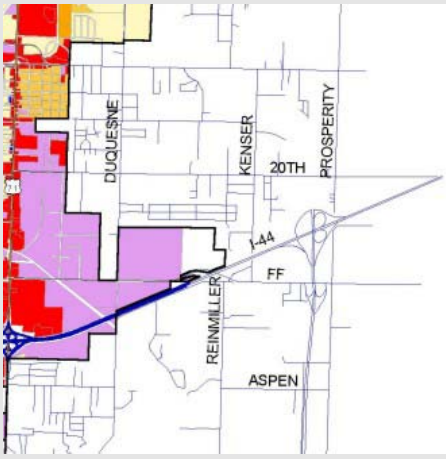
- Develop site design standards to create better compatibility with neighboring commercial uses.
- Stabilize the areas as residential neighborhoods.
- Limit expansion of retail-commercial uses.



OPPORTUNITY AREA

Commercial Area - 1

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- I-44 U.S. 71 bypass.

CURRENT ZONING/ EXISTING DEVELOPMENT

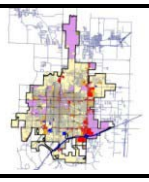
- C-3.
- Development and light industrial and commercial uses, including regional highway service businesses.

FUTURE LAND USE

- Commercial.

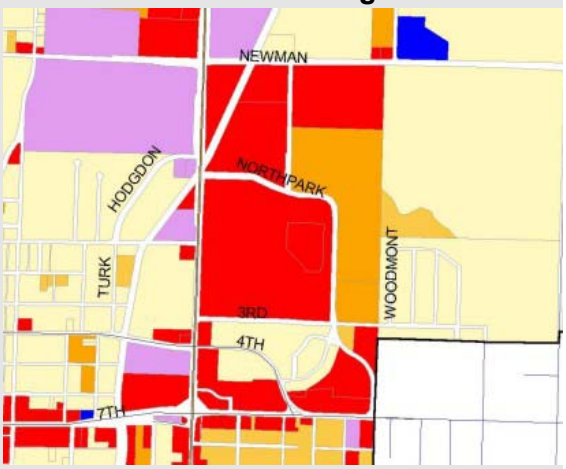
OPPORTUNITY AGENDA

- Sewer extensions that parallel sewer along Turkey Creek. New outfall to industrial park east. Shoal Creek Main Sanitary Sewer brought from the south. New hotel and convention center development.



OPPORTUNITY AREA
Commercial Area - 2

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- 3rd Street east of Range Line Road

CURRENT ZONING/ EXISTING DEVELOPMENT

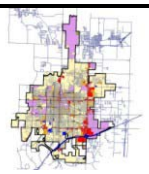
- Mixed-use Commercial.

FUTURE LAND USE

- Commercial.

OPPORTUNITY AGENDA

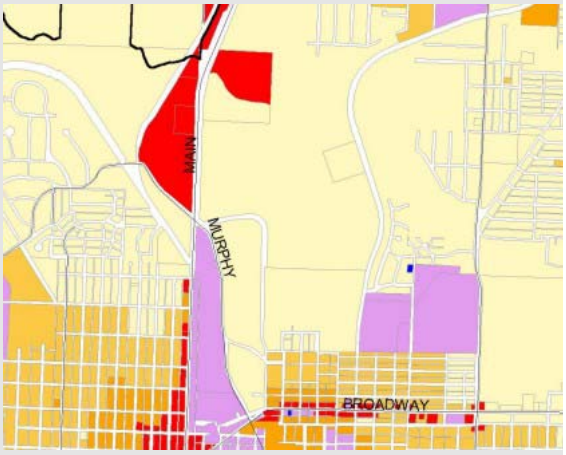
- Zone to commercial. Extend road from Third Street to Fourth Street and eliminate traffic signals for better traffic flow on Third Street



OPPORTUNITY AREA

Commercial Area - 3

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- East of Main Street, north of the Armory.

CURRENT ZONING/ EXISTING DEVELOPMENT

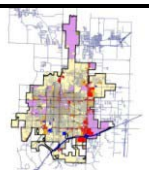
- Low-density Residential.
- Mixed-use Institutional.

FUTURE LAND USE

- Institutional.

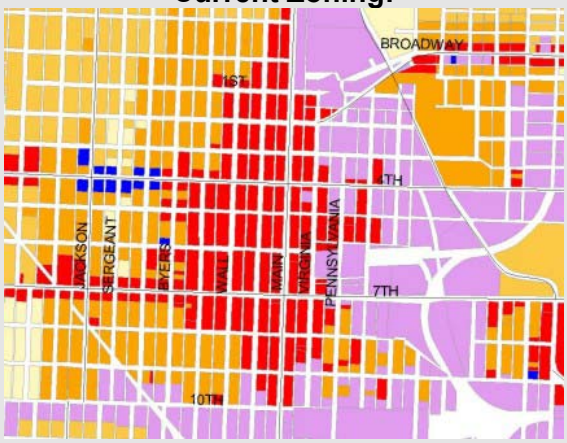
OPPORTUNITY AGENDA

- To improve access roads for the College and to correct access improvements to Landreth Road.

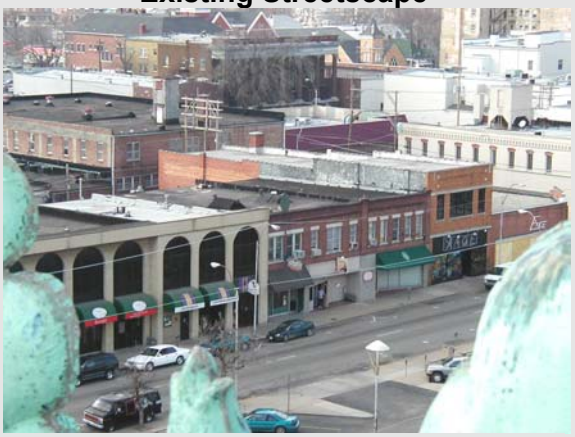


OPPORTUNITY AREA
Commercial Area - 4

Current Zoning:



Existing Streetscape



Aerial Photo



LOCATION:

- Downtown Joplin.

CURRENT ZONING/ EXISTING DEVELOPMENT

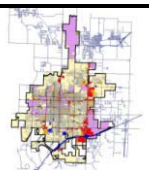
- Mixed commercial and high-density residential.

FUTURE LAND USE

- Mixed-use Development.

OPPORTUNITY AGENDA

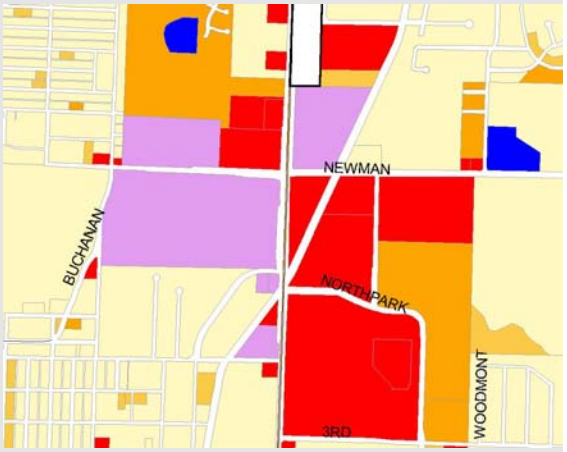
- Implementation of the newly adopted Downtown Joplin Plan.
- Consult the Plan for implementation of the Downtown Action Agenda



OPPORTUNITY AREA

Commercial Area – 5

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- Southwest corner of Newman Road and Range line Road.

CURRENT ZONING/ EXISTING DEVELOPMENT

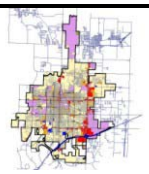
- Light Industrial.
- Industrial

FUTURE LAND USE

- Commercial.

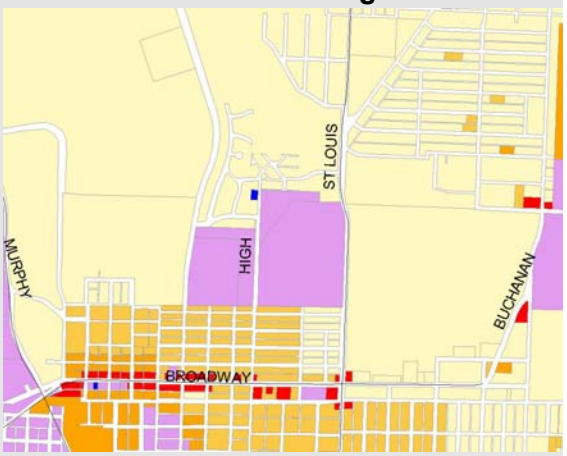
OPPORTUNITY AGENDA

- Redevelopment of the old stockyards west of Range line Road into a Commercial Planned Development District.



OPPORTUNITY AREA
Industrial Area - 1

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- West of St. Louis and Euclid Roads north of the Tamko Plant site.

CURRENT ZONING/ EXISTING DEVELOPMENT

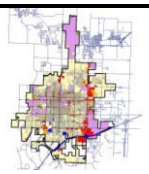
- Industrial and low-density residential.

FUTURE LAND USE

- Industrial

OPPORTUNITY AGENDA

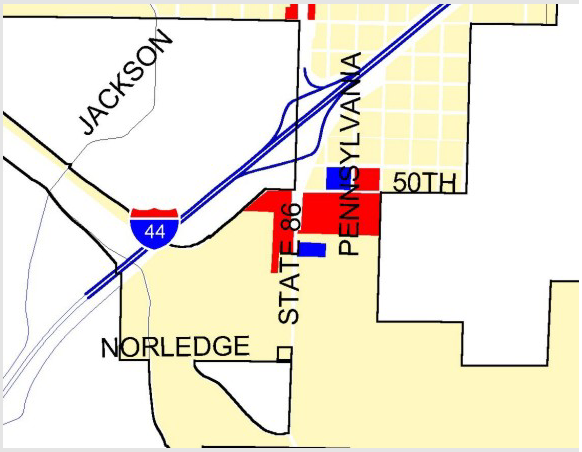
- Redevelopment of the Tamko Plant site for light-industrial uses.



OPPORTUNITY AREA

Park Area - 1

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- Wildcat Park.

CURRENT ZONING/ EXISTING DEVELOPMENT

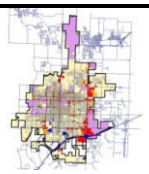
- Low-density Residential.
- Park.

FUTURE LAND USE

- Park.

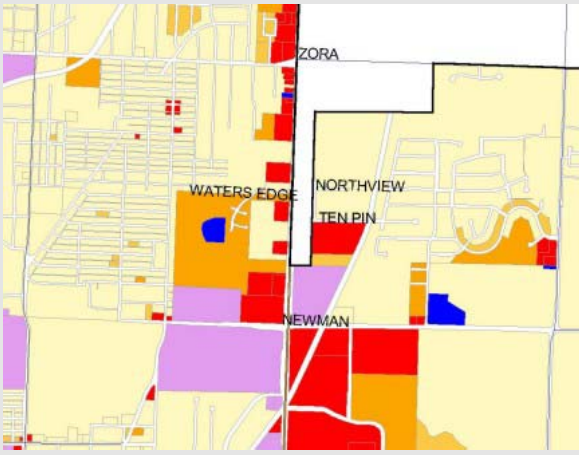
OPPORTUNITY AGENDA

- Development of a nature center. Coordination with state funding and Audubon Society funding. Expansion of bike plan improvements.



OPPORTUNITY AREA
Capital Improvement Area - 1

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- Range line Road and Ten Pin Street.

CURRENT ZONING/ EXISTING DEVELOPMENT

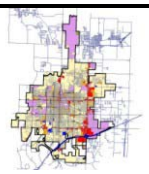
- Commercial.
- Mixed commercial and residential.

FUTURE LAND USE

- Commercial.

OPPORTUNITY AGENDA

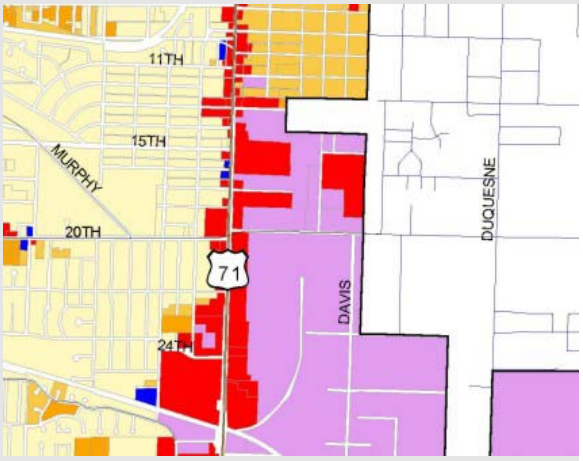
- Stormwater improvements and the construction of a Reverse Frontage Road.



OPPORTUNITY AREA

Capital Improvement Area - 2

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- Range line Road and 20th Street.

CURRENT ZONING/ EXISTING DEVELOPMENT

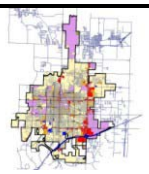
- Commercial

FUTURE LAND USE

- Commercial

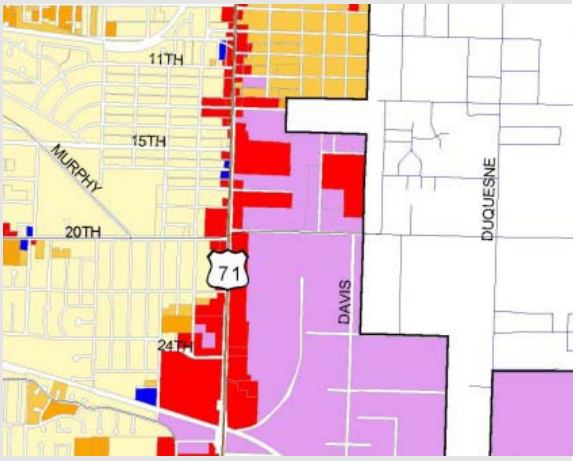
OPPORTUNITY AGENDA

- Realignment of streets and intersections.



OPPORTUNITY AREA
Capital Improvement Area - 3

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- Range line Road and 24th Street.

CURRENT ZONING/ EXISTING DEVELOPMENT

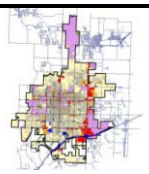
- Commercial.

FUTURE LAND USE

- Commercial.

OPPORTUNITY AGENDA

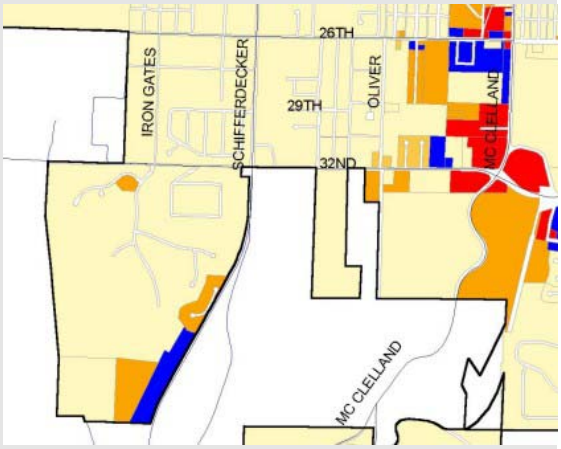
- Improved signalized intersection, access control with median improvement and new Frontage Road improvement.



OPPORTUNITY AREA

Capital Improvement Area - 4

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- Schifferdecker Avenue south to 32nd Street.

CURRENT ZONING/ EXISTING DEVELOPMENT

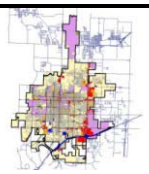
- Residential.

FUTURE LAND USE

- Residential

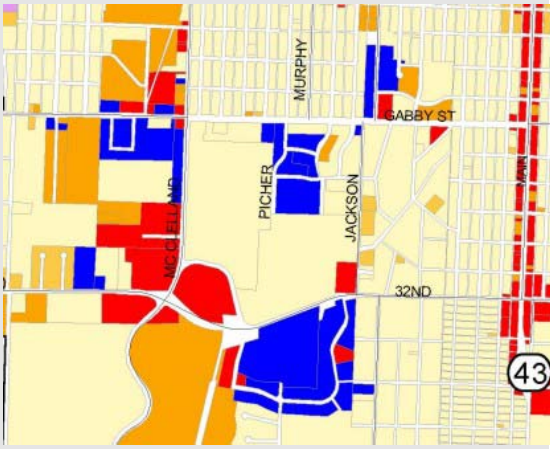
OPPORTUNITY AGENDA

- Expand Schifferdecker Avenue to four lanes.



OPPORTUNITY AREA
Capital Improvement Area - 5

Current Zoning:



Existing Streetscape

A photo of the site

Aerial Photo



LOCATION:

- 26th Street and Picher Street.

CURRENT ZONING/ EXISTING DEVELOPMENT

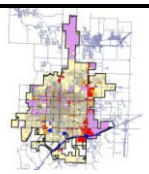
- Residential and Office Institutional.

FUTURE LAND USE

- Office Institutional.

OPPORTUNITY AGENDA

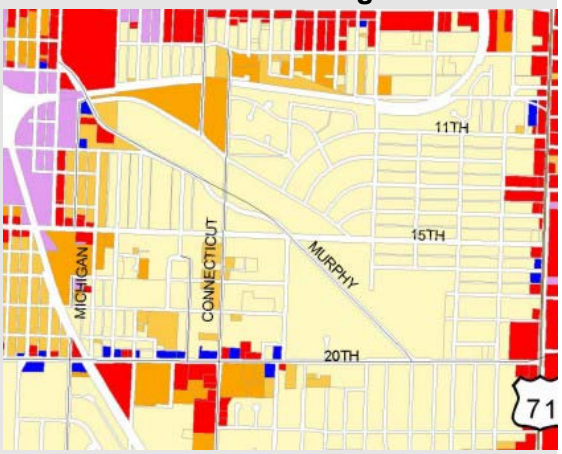
- Extension of Picher Street south to St. John's Boulevard. Signalization at McIntosh Street.



OPPORTUNITY AREA

Capital Improvement Area - 6 and 7

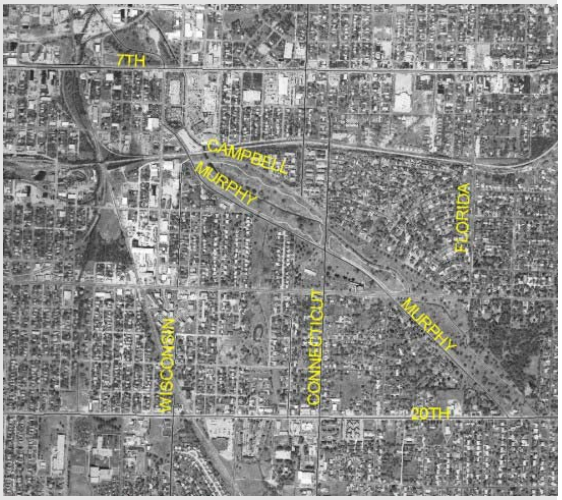
Current Zoning:



Example of Roundabouts (Proposed)



Aerial Photo



LOCATION:

- Campbell Boulevard at Park Avenue. (Area 6).
- Murphy Boulevard at Delaware Avenue (Area 7).

CURRENT ZONING/ EXISTING DEVELOPMENT

- Residential and parkland.

FUTURE LAND USE

- Residential and parkland.

OPPORTUNITY AGENDA

- Improvement of two traffic circles or roundabouts at the intersection for improved traffic flow.

FUTURE LAND USE PLAN MAP UPDATE

The "Future Land Use" Map **(Ref. Map Next Page)** shows development patterns as updated from the 1994 Comprehensive Plan for the City of Joplin. These future land uses are based on

- the existing zoning as of today in most cases; or
- preferred future land use planning principles and development patterns identified in the study.

The "Future Land Use Categories" of the map legend correspond generally to zoning district classifications of the City of Joplin Zoning Ordinance. However, new land use categories, such as *the Screen/Buffer Overlay* have been introduced to reflect the proposed pattern of development in the City's infill growth areas where residential and non-residential development must coexist.

The High-Density Residential should accommodate and encourage development at higher densities in order to help pay for extension of services. Clearly, there is a market for large-lot development (1- to 3-acre lots), such as at the City's fringe growth areas (whether or not served by municipal sewer). However, to pay for extension of sanitary sewers there is only a limited market for that one-acre development. In order to make the sewer extensions affordable, the City must have a blend of moderate and high density development. Therefore, in areas such as the east- and west-7th Street Corridors, the City should accommodate such a mix of densities by accepting zoning changes that allow densities other than single-family development.

In addition high-density residential provides a transition between non-residential and residential development. In this indirect way, high-density development supports retail and other types of commercial development, which in turn bring in additional revenue to the City in the form of sales tax and new jobs.

The "Future Land Use" map is developed based on the following legend:



FUTURE LAND USE MAP

Residential

Low-Density Residential	Development at densities of 1.0 to 4.0 units per acre; neighborhood compatible institutional uses.
Moderate-Density Residential	More than 4.0 units and up to 8.0 units per acre.
High-Density Residential	More than 8.0 units per acre; including multifamily and manufactured home parks subject to conditional use permit approval.
Long-Term Residential	Long-term low-density residential in unincorporated areas. Development at densities of 1.0 to 4.0 units per acre; neighborhood compatible institutional uses.

Mixed-Use

Central Business District	Downtown Joplin and commercial/high density residential infill development in existing business districts adjacent to Downtown as designated on the Downtown Plan.
Office/Institutional	Larger tracts or parcels that combine to support a mixed-use commercial and/or office land use also, institutional high-density residential as a buffer between non-residential and residential uses.
Public/Semi-Public	Office-commercial, institutional uses for government, educational purposes and semi-public institutional uses, such as medical office complex.

Commercial

Retail Commercial	Retail business uses, including small-scale strip shopping centers and isolated retail establishments.
Industrial	Industrial assembly and warehousing, with limited manufacturing uses as defined in the unified development code regulations.

Other Land Uses

Parks/Open Space	Public parkland; semi-public and private
Conservation Areas	Public open space, such as along Shoal Creek
Water Bodies/Riparian Areas	Public and private lakes and floodplains.
Overlay Districts	Development areas where site plan review standards may be imposed as a condition of regulatory approval, such as in the Screen/Buffer Overlay District

Opportunity Areas	Future Land Use Opportunity in unincorporated areas.
Screen/Buffer Overlay	Adopt screen and buffer overlay standards as shown later in this chapter.

MAJOR THOROUGHFARE PLAN UPDATE

The Major Thoroughfare Plan identifies the projected major street network including various highways and major roadways within the city. The completion of local and regional connections within and throughout the City is critical to the future success of Joplin. Individual roads and streets do not serve trips independently; rather, most trips involve movement through a network of roadways. A functional classification system of roadways provides a method for channeling traffic in a logical, efficient and safe manner.

Joplin Functional Street Classification

The existing road and highway network is classified by function. Roads and highways are grouped into classes or systems according to the service they provide. Streets are considered local, as distinct from regional roadways and highways. The factors that identify roadway classifications include:

- the level of through-traffic movement; and
- access to adjacent land or individual properties.

A functional street classification system is adopted for the City of Joplin to help different levels of the City government, planning professionals, engineers, and the street department in their planning, design, management and maintenance of the transportation facilities. The system identifies four major categories of roadways: Expressways, Arterial Streets, Collector Streets, and Local Streets. Collector Streets are further classified into major collectors with bikeway, major collectors without bikeway and minor collectors.

Expressways

Expressways are divided, multi-lane facilities that serve large volumes of through traffic at high speed and are primarily intended to serve long trips. Access to these facilities is strictly limited and intersections are normally not allowed at grade.

Arterials

The main function of an arterial street is to move large volumes of traffic from one place to another at a high speed, provide continuous linkages between major traffic generators, and serve as a transition roadway between major collector streets and expressways. Planned access is its secondary function. Due to its nature, an arterial street should be planned to have no residential lots fronting on it. Non-residential uses may access an arterial street through frontage road or strictly controlled entrance.

Major Collectors
The primary function of a major collector street is to move moderate volumes of traffic it' "collects" from local streets or other collectors at a slower speed than arterials to arterial streets or expressways at controlled intersections. A major collector street should be more than one mile long and have a minimum number of residential lots fronting on it. It is ideal to limit frontage development along collectors wherever possible to ensure safe and uninterrupted traffic flow on these streets. Major collectors may be designed and constructed with different standards depending on whether they are intended to include bikeways.

Minor Collectors
The main function of a minor collector is to provide a transition between local streets and major collectors. It is normally about a mile or less in length and carries small volumes of traffic at low speeds. Direct access to abutting residential properties should be limited.

Local Streets
The main function of a local street is to provide direct access to abutting properties and low speed circulation within the immediate neighborhood.

Joplin Functional Street Classification Update

The following Streets are added to the current Major Street Plan:

- 249 – East Bypass
- West Bypass – Phases I and II
- Zora Bypass to Schifferdecker Avenue
- 7th Street- Duquene to 249- Upgrade to 4-lane
- 32nd Street – 249 to County Road 190 – Upgrade to 4-lane
- I-44 and County Road 190 – New Interchange

Access Management Standards

Just as the design of a roadway helps to move traffic efficiently, controlling access to the roadway system can help do the same. The City of Joplin is applying access management along Range Line Road; and should consider similar improvements along other major arterial streets. The lack of an adequate access control policy or plan increases the probability of having traffic hazards and increased traffic congestion. Traffic hazards and traffic congestion reduce the capacity of the roadway to accommodate the traffic volumes for which it is designed. Traffic congestion and traffic hazards increase the pressure to widen roadways which requires additional public funds.

Roadway capacity can be increased or decreased in a number of ways. The method utilized most frequently to increase capacity is to widen a road to provide additional travel lanes. In

some instances, however, it is not feasible to add additional travel lanes due to abutting land uses on either side of existing roadways. In these instances, other methods of increasing roadway capacity may be more appropriate. Other methods include constructing intersection improvements, turn bays, medians, restricting road and driveway access or providing traffic signal timing improvements. Conversely, road capacity can be decreased by adding cross roads, driveways, traffic signals, or other traffic control devices. By developing an access control policy, road capacity can be maintained to accommodate future development.

Specific design characteristics associated with each functional classification depend on factors such as projected traffic volumes and local access control policies. Higher traffic volumes, for example, those exceeding 20,000 vehicles per day, warrant construction of a four or five lane arterial road. Traffic volumes of 10,000 or 15,000 vehicles per day can be accommodated by a four-lane arterial road or by a two-lane arterial road which includes turn bays, good signal and intersection spacing, and private driveway access control. In many cases, a well-built two-lane arterial road can function as well as a four-lane road at approximately half the cost.

Acceptable traffic volumes on a major arterial roadway can range between 25,000 and 35,000 vehicles per day. This capacity, however, can be reduced by excessive curb cuts and mid-block turning movements. The center turn lane is appropriate because of frequent entrances into higher traffic generation land uses such as business parks and retail centers. A median can be constructed in locations where left-turns should be prohibited and on-street parking should not be allowed. For design speeds greater than 35 mph, or for peak hour right turn-in traffic volumes exceeding 100 vehicles, it is recommended that a right turn lane be constructed along the arterial roadway approaching the curb cut.

Local Arterial Streets: Access Control. Range Line Road provides regional access as well as access to abutting properties. Therefore, it is critical that a sound access control policy continue to be implemented as development occurs on property directly abutting this key north-south arterial street.

Intersection Spacing. Adequate distance between intersections is essential for the safe and efficient flow of traffic. Appropriately spaced intersections provide through-motorists an opportunity to respond to traffic entering the street from a side street. **Table 6.1** shows the minimum standards for spacing intersections, determined by through-traffic speed.

Table 6.1 - Minimum Intersection Spacing Standards

Through-Traffic Speed	Minimum Intersection Spacing
30 mph	210 feet
35 mph	300 feet
40 mph	420 feet
45+ mph	550 feet

Source: Institute of Transportation Engineers

Driveway Spacing. Like a street, private driveways create an intersection with a public street. Conflicts and potential congestion occur at all intersections - public and private. Methods to reduce conflict include:

- Separating the conflicts by reducing the number of driveways and intersections;
- Limiting certain maneuvers such as left turns; and
- Separating conflicts by providing turn lanes.

No access drives should be located within the operations area of an intersection. Driver conflicts need to be spaced in order to eliminate overlaps between through traffic and right turns.

It is recommended that driveway locations, at a minimum, should comply with the corner clearance criteria indicated in **Figure 6.1** on the following page. Proper spacing of driveways permits adequate storage and stacking of automobiles on the public street. This distance may have to be increased in cases with high volumes to ensure that driveways do not interfere with the operation of turning lanes at intersections.

The number of driveways accessing undivided arterial roadways should be minimized. The following standards are based on AASHTO standards and the Institute of Transportation Engineers (ITE) Manual. The City of Joplin should adopt its own standards by using the guidelines listed in **Table 6.2.**

Table 6.3 - Suggested Maximum Driveway Guidelines

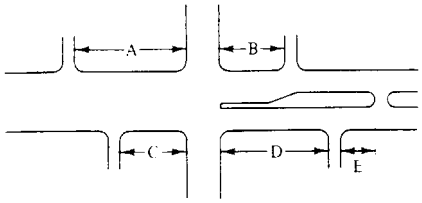
Maximum Number of Driveways	Driveway Spacing	
	Undivided Arterial Streets Length of Lot Frontage	Divided Arterial Streets Length of Lot Frontage
1	0-399 feet	0-529 feet
2	400 - 899 feet	530 - 1199 feet
3	900-1,399 feet	1200 - 1859 feet
4	1,400-1,899 feet [1]	1860 - 2525 feet [2]

Source: Institute of Transportation Engineers (ITE) Manual

Corner Clearance

Minimum corner clearance guidelines are listed in **Figure 6.1**. These guidelines can be used to regulate new commercial developments located along arterial or collector streets.

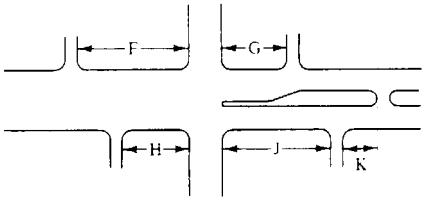
Figure 6.1: Corner Clearance Guidelines



Minimum Corner Clearances*

Item	Functional Classification of Road		
	Arterial	Collector	Local
A	230	175	50
B	115	85	50
C	230	175	50
D	230	175	50
E	75	0	0

(a) Signalized intersection control



Minimum Corner Clearances*

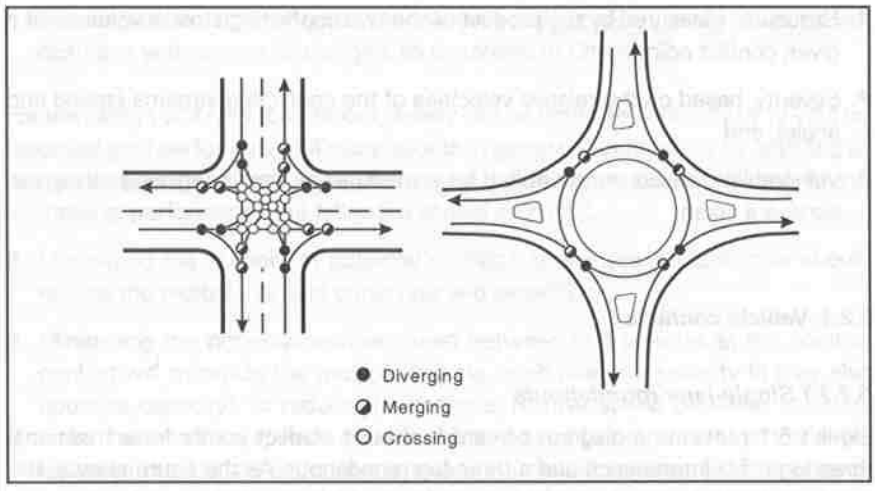
Item	Functional Classification of Road		
	Arterial	Collector	Local
F	115	75	50
G	115	85	50
H	85	85	50
J	115	75	50
K	75	0	0

(b) Non-signalized intersection control

Access Control and Traffic Calming Criteria

The MoDOT Access Management Manual in **Appendix 3** should be referenced when implementing access control and traffic calming standards. One such recommendation could be for improvement of traffic "roundabouts."

Figure 6.2: Traffic Roundabout Flow



A traffic Roundabout diminishes turning conflicts, while allowing traffic to proceed without coming to a stop

Bypass Planning

Because of budget cuts by the Missouri Department of Transportation (MoDOT), it may be some time until certain regional improvements are funded. Detailed study of any existing traffic deficiencies and recommendations to mitigate those deficiencies should be done on major thoroughfares. Further, by coordinating the proposed traffic study with the land use study, local development opportunities and constraints can be evaluated in the context of both studies and new land use polices formulated comprehensively.

To accomplish the objective of studying alternative traffic-way improvements, the City should evaluate the arterials in terms of three traffic components:

- mobility,
- access, and
- safety.

Mobility relates to traffic flow, vehicle delay and congestion. Access relates to the number and adequacy of driveways (and public streets) to provide essential access to abutting properties. Safety relates to accident experience and accident potential. These three traffic components are inter-related and should be studied together as a total system.

A study of the mobility element would include commuter peak hour traffic counts at existing major intersections. That information would be used to evaluate the quality of traffic operation at those key intersections, i.e. the level of service (LOS). A poor level of service would be an indication that improvements are needed, such as construction of dedicated turn lanes or signalization—added where there should be a new signal, or adjusted where an existing signal is inadequate. Travel times through the corridor can also be measured as an indication of the level of service. The LOS can also be determined for estimated future traffic growth.

Access to the abutting properties is essential to maintain the vitality of existing businesses. Uncontrolled access, however, can be detrimental to business in that it contributes to accidents and traffic congestion. A study of access includes an inventory of driveway width and spacing. Recommendations to improve access might include the construction of dedicated turn lanes, better defining the width of a driveway, or grouping duplicate driveways into a single driveway built to a higher standard. This is an example where the traffic and land use recommendations need to be coordinated.

A study of safety includes a review of three years of accident experience. Where the same predominate accident pattern has occurred, a probable cause can be identified and appropriate remedies recommended.

The entire improvement program can be developed as individual projects, and cost estimates for the construction of each project prepared. This would allow the City to plan for the projects, and coordinate the plans with MoDOT in years to come.

CHAPTER 7– IMPLEMENTATION STRATEGIES

INTRODUCTION

In order for the Joplin Comprehensive Plan to be successful, the Plan must be implemented. **Chapter 1**, Goals, and Action Steps summarize what the City identifies as the most important planning issues. **Chapter 7** presents implementation strategies based upon the goals, objectives and polices as well as policies in **Chapter 7,** Future Land Use and Major Thoroughfare Plan. Development guidelines provide details for implementing the zoning regulations according to zoning Overlay Districts for moderate-density residential, industrial, commercial and related development.

FUTURE LAND USE IMPLEMENTATION

Zoning

The primary means of implementing the Future Land Use Map is the zoning ordinance. Over time, the City should seek to achieve consistency between the Zoning District Map and Future Land Use Map and between the Zoning Districts and the Future Land Use Categories. In this Plan, several methods are proposed for accomplishing this:

- Proactive rezonings on the part of the City;
- Creation and adoption of "overlay" regulations for specific areas;
- Development-specific Planned Developments or Conditional Use proposals; and
- Landowner proposed rezonings.

Proactive Rezoning

In several planning districts, proactive rezonings are recommended. In most instances, these are areas where the current zoning is inconsistent with actual existing uses. Examples of this include areas along Range Line Road where "under zoning" can create inappropriate non-commercial space. Applying overlay district standards and amending zoning in certain areas will help allay problems with land use incompatibility, traffic conflicts and code violations. To bring about stability and encourage additional homeownership and homeowner investment, proactive zoning by the City should be considered on an area-wide basis for upscale, higher-density residential land uses.

Overlay Districts

In several areas, overlay regulations are recommended. Most of these areas are in commercial districts where the overlay provisions would address unique use, signage, landscaping, setbacks, buffering, parking and, possibly, architectural design requirements to preserve and enhance the character of the areas. Once these are in place, the higher intensity uses shown on the Future Land Use Map should be implemented with a proactive increase in the intensity of

underlying zone. Prior to adoption of the overlay districts, however, increases in intensity should take place only on a development-specific basis either through the Planned Development or Conditional Use processes to best meet the objectives of the particular area.

Development-Specific Rezonings

In some of the planning districts, significant land use/zoning changes are recommended that would greatly increase the density/intensity of development. Most of these are in "transitional" areas where changes in surrounding development have created isolated pockets of incompatible and/or marginal uses. However, an inappropriate conversion of these uses to a higher density/intensity would have an even greater negative impact on the surrounding area. Since most of these areas aren't large enough to support unique overlay standards, the best means of achieving the proposed land uses is through development-specific Planned Unit Developments and Conditional Uses.

Landowner Proposed Rezonings

One of the difficulties currently facing the City in managing the quality and compatibility of development is an incomplete set of zoning and development regulations. Because the current Zoning Ordinance contains very few "performance" standards (such as screening, buffering, landscaping, building mass and scale, building orientation, etc.), the City has been greatly reluctant to rezone properties, including lowering the intensity/density, without the benefit of a specific plan. A strong recommendation of this Plan is to adopt a more modern code that includes a range of performance standards that help to differentiate the zoning districts as much by character, look and feel as by use. With such a code in place, the City should have more security and assurance of the ultimate development potential of sites within each of the zoning districts. Accordingly, "straight" rezoning applications should be much easier to evaluate and, where found consistent with this Plan, approve.

Development Review

The Future Land Use Plan has been designed for use in evaluating proposed development projects in addition to guiding the general growth and development of the City. Accordingly, the new zoning ordinance and "*Procedures Manual"* have been drafted to be consistent with the Plan objectives to require that they be part of the criteria for evaluating and deciding all significant development applications, such as zoning map amendments, subdivisions, planned developments and conditional uses.

In determining consistency, the various portions of this Comprehensive Plan must be considered individually so that the Plan can be interpreted and applied in its totality, including:

- the Goals, Objectives, and Policies chapter;
- the Future Land Use chapter;
- the Future Land Use map;

- the implementation strategies of this chapter; and
- Appendix 3, "Access Management."

RECOMMENDATION - DESIGN GUIDELINES

For Moderate-density (R-2, Two-family Residential) and Multifamily (R-3, Apartment House) development the following design guidelines are recommended. During Site Plan review of moderate-density and multifamily development proposals in the Opportunity Areas, the City should implement the following residential design guidelines.

Site Planning

1. Respect the street and locate buildings on the site so that they reinforce street frontages.
2. Respond to existing and planned adjacent uses.
3. Respond to traffic, parking, circulation, and safety issues, light and glare, noise, odors, dust control and security.
4. Provide as many private, ground level entries to individual units as possible.
5. Ensure that all building entries are prominent and visible.
6. Provide each unit with its own visual identity and individual address whenever possible.
7. Maintain existing setback patterns. Projects should not be located in front or behind the average setback line of the neighborhood.
8. Provide pedestrian accessibility to adjacent uses with gates, pedestrian walkways, crossings, etc.
9. Locate common facilities — such as community rooms and laundries — centrally and link them to common outdoor space.
10. Locate buildings and landscaping to maximize solar access during cooler months and to control it during warmer months. Maximize natural ventilation, sunlight and views for each unit.
11. Adopt lot coverage limitations:
    - Limit lot coverage for Moderate-density developments to no more than 50 percent for principal and accessory structures, and 60 percent including off-street parking.
    - Limit lot coverage for multifamily developments to no more than 60 percent for principal and accessory structures, and 70 percent including off-street parking.

Parking

1. Don't let parking dominate the site, the building or the street.
2. Place parking lots at rear or side of the site to allow a majority of dwelling units to front on the street.
3. Build multiple small parking lots in lieu of one large lot.
4. Plant trees and shrubs to soften the overall impact of parking areas and to provide shade and noise reduction.
5. Avoid blank walls facing the street on buildings with parking garages.

6. If blank walls are unavoidable, decorate with artwork, display cases, vines, and good quality durable materials.
7. Place parking lot in proximity to dwelling units to allow for casual surveillance and to minimize walking distance.
8. Separate bicycle and pedestrian paths from vehicular traffic.
9. Designate "vehicle free areas" for bicycle and pedestrian safety and enjoyment.

Public Open Space—Multifamily

1. Design outdoor open space as "outdoor rooms" and avoid undifferentiated, empty spaces.
2. Provide public open space for social or cultural activities.
3. Provide direct access to open space for each dwelling unit while controlling nonresident access.
4. Locate public open spaces so that they can be viewed from individual units, preferably from the kitchen, living room or dining room.
5. Locate play area(s) centrally and to allow for adult supervision from dwelling units and/or from a central facility such as a laundry.
6. Provide lighting from a variety of sources at appropriate intensities and qualities for safety.
7. Provide energy-efficient lighting.

Private Open Space

1. Provide each household with some form of private open space, including patio, porch, deck, balcony, yard, or shared entry porches or balconies.
2. Private open space should be easily accessible — physically and visually — from individual units.
3. Screen balconies for privacy but avoid solid walls that prevent residents, particularly small children, from looking out.
4. Provide fencing to insure privacy and to help define boundaries between public and private open space.
5. Limit lot coverage as provided above.

Landscaping

1. Design landscaping as an integral part of the project.
2. Provide a variety of hardy, native plant species — trees, shrubs, groundcover — that are easy to water and maintain.
3. Avoid large, empty paved areas.
4. Provide a variety of seating in landscaped areas.
5. Include paths to accommodate children, adults, bicycles, skate boards, shopping carts, walkers, pets, furniture moving, etc.
6. Provide appropriate lighting to insure that paths are safe.

Architecture

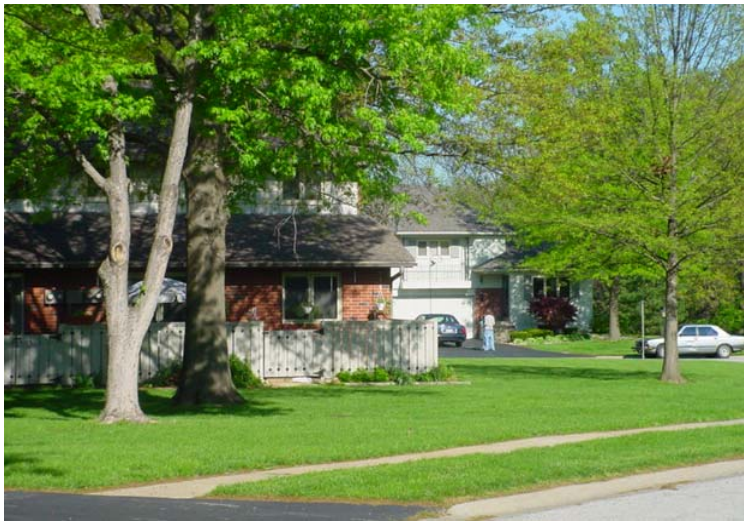
1. Maintain overall height of structure(s) to that of other buildings in the neighborhood except where the local plan calls for redeveloping the area at much greater height and density.
2. Relate first floor to the street and insure that it is consistent with the first floors in neighboring buildings.
3. Relate size and bulk of project so that it is consistent with buildings in the immediate neighborhood.
4. Eliminate box-like forms with large, unvaried roofs by using a variety of building forms and roof shapes (This may be accomplished by creating clusters of units, variations in height, setback, and roof shape).
5. Give the building visual and architectural complexity by varying the height, color, setback, materials, texture, landscaping, trim and roof shape.
6. Enhance views and make spaces feel larger by maximizing the number of windows.
7. Screen ground floor windows from walkways to provide privacy.
8. Respect the placement and quality of front doors in neighboring homes.
9. Break up the façade of horizontal buildings into smaller components by utilizing vertical adjacent structures.
10. Ensure that rhythm, size and proportion of openings (windows, doors) are similar to good quality buildings in the neighborhood.
11. Use porches, stairs, railings, fascia boards, and trim to enhance buildings' character.
12. Select building materials and color that are complementary to the surrounding area and have high levels of recycled content whenever possible.

Moderate-Density Examples

Recommended

The design creates visual relief from concrete and driveways in duplex and fourplex site plan. Also, interest through the use of varying roof planes, materials.





Recommended

Landscaping softens the density. Public and private open space adds to the residential feel.



Recommended

Grass and landscaped areas provided separation between drives, and soften the main entrances. These additional pervious surfaces define private space and help create a residential character. Combined with the side yards and rear private areas, density is controlled.

Multifamily Examples

Recommended

The design of multifamily housing can make high density development more acceptable, such as use of brick and similar materials. Private access to the outdoors makes the housing livable. Undulating facades and use of a variety of architectural details create interest.



Recommended—Elderly

Design standards for elderly housing can allow for greater density while protect-ting appearance and use values, such as private open space.



Not Recommended

The main entrances are varied, but grass areas are not sufficient. Extensive concrete areas compromise the livability—unless softened by greater side yards and rear yards.



RECOMMENDATION - NON-RESIDENTIAL DEVELOPMENT STANDARDS

Planning Issues

1. **Plan Development:** The Development Standards presented in this report offer options for development review and approval along Range Line Road in the "Opportunity Areas" on the accompanying sheets. The premise of the approach is that the Range Line Road corridor is the most high profile region of the City of Joplin. Therefore, appropriate standards are needed for infill development

   The standards may be applied throughout the city as needed, and not just along Range Line Road.

2. **Assumptions:** The standards are prepared with the following assumptions:

   a. The designated Opportunity Areas will be subject to the standards herein which are intended to be adopted as part of an overlay district. These standards would supersede any lesser requirements of the City of Joplin ordinances and regulations.

   b. The designated commercial areas will be subject to the guidelines developed by the City of Joplin for the corridor, in addition to other city regulations.

   c. Rangeline Road will continue to be improved in the future to comply with the City of Joplin's standards for an arterial street and these development standards are needed to ensure proper access control and related factors.

3. **Land Uses:** The land uses will change as initiated by the private sector, with support of the city, subject to rezoning.

4. **Access:** Primary vehicular access to the sites will be taken from Rangeline Road, subject to:
   - existing traffic speeds;
   - distances from the lighted intersection; and
   - conflicts with merging traffic.

   If direct access were to be provided in the future, the proposed access would need to be approved by the City of Joplin and the Missouri Department of Transportation. Access approval would require improvements, most likely including:
   - widening to accommodate acceleration/deceleration lanes; and
   - a median to limit left turn movements into the site.

5. **Focal Points:** The City should maximize positive focal points along the corridor.

   Buffering: Because of the intensity of the proposed developments, and the largely built-up nature of the corridor, buffering should be carefully considered.

RECOMMENDATION - COMMERCIAL AND INDUSTRIAL DEVELOPMENT STANDARDS

Site and Building Design

1. **Compatibility with Other Development:**

   a. The form and proportion of buildings shall be consistent or compatible with the scale, form and proportion of other development within the industrial park.

   b. The rhythm of structural mass to voids, such as windows and glass doors, of a front facade should relate to the rhythms established in adjacent buildings.

   c. Care shall be exercised to coordinate final grades and site arrangement with those of adjoining properties and streets.

2. **Location:** Buildings shall be located to ensure the provision of adequate open space for outdoor gathering areas, facilities, services and amenities and to provide natural indoor light, air and privacy to the extent possible. All buildings, parking lots and other structures shall be located to integrate with the natural topography and to avoid deep cuts and fills, excessive foundation wall depth, unnecessary steps and steep access gradients.

3. **Lot Coverage:** The maximum lot coverage shall be 70 percent. Lot coverage includes those portions of the net site area covered by the ground floor of any structure, parking lots, and private streets and drives. Lot coverage does not include sidewalks or plazas.

4. **Design Focus:** The front facade of a building as well as the main entrance(s) shall be designed as focal points to the building. The main entrances should incorporate devices such as canopies, overhangs, arcades, raised parapets over the door, larger door openings, display windows, accent colors, and other architectural details such as moldings. The remaining portions of the building should be designed in a way that complements and is consistent with the building's street facade.

5. **Visual Interest:**

   a. Architectural design should create visual interest through the use of different textures, complementary colors, shadow lines and contrasting shapes. Monotonous design shall be avoided. Variation of detail, form, and siting shall be

used to provide visual interest. Facades shall be articulated with variations in the building plane and parapet height, materials and colors, entrance canopies, and landscaping.

At a minimum, facades facing a public or private street shall incorporate at least two of the following features along each applicable façade. These standards shall be applied to each façade individually:

(1) Recesses and projections along at least 20 percent of the length of the building façade.

(2) Windows, awnings, arcades or other significant architectural feature used along at least 60 percent of the front building façade length or 30 percent of the side or rear building façade length.

(3) Brick, natural or fabricated all weather stone covering at least 50 percent of the area when applied to the front building façade or 25 percent of the area when applied to a side or rear building façade.

(4) Landscaping islands or planting against the building, covering at least 30 percent of the length of the building facade.

b. Loading docks, trash enclosures, outdoor storage and similar facilities and functions shall be incorporated into the overall design of the building and the landscaping so that the visual and acoustic impacts of these functions are reduced to as great an extent as possible and are out of view from adjacent properties and public street.

c. Long expanses of overhead doors should be relieved by matching their color to the wall or trim, recessing the doors, or adding architectural details to diminish the dominance of the doors.

d. The use of unusual shapes, color and other characteristics that cause new buildings to call excessive attention to themselves and create disharmony shall not be allowed.

6. **Materials:**

a. The use of high-quality materials such as brick, glass, stucco, natural and fabricated stone, treated wood or similar durable and visually pleasing material should be used on the front facade and main entrances to the building. The remaining portions of the building should be designed to be compatible with the

front facade and building entrance features. The following construction materials shall be permitted:

(1) Reinforced Concrete and Masonry– A concrete finish or pre-cast concrete panel (tilt-wall) must have an exposed aggregate, be hammered or sandblasted, or be covered with a cement-based acrylic coating to add visual interest. Masonry includes solid cavity faced or veneered-wall construction or materials. Brick material used for masonry shall be composed of hard fire (kiln fired) all-weather common brick or other all weather facing brick.

(2) Corrugated Metal or Aluminum Panels – The use of panels on front building facades or side building facades when abutting a public or private street is prohibited. Corrugated metal or aluminum facades shall be complemented with the use of masonry, whether brick, stone, stucco, split-face block, or broken up with the use of landscaping. Panels shall have a depth of one (1) inch or greater and/or a thickness greater than U.S. Standard 26 gauge.

(3) Stucco or Gypsum Concrete/Plaster – These materials shall be complemented with the use of masonry, whether brick, stone, stucco, split-face block, or broken up with the use of landscaping.

(4) Treated Wood – The use of wood paneling or plywood on the front building façade or side building facades when abutting a public or private street is prohibited.

(5) Structural Steel or Structural Aluminum

(6) Glass

b. All elevations of the building shall be designed in a consistent and coherent architectural manner.

c. Where a change in material, color, or texture along the exterior side of a building is proposed, the demarcation of the change shall occur a minimum of twenty (20) feet on both adjacent sides of the building or to the natural dividing point established by the physical plan of the building.

d. Building materials and design shall be subject to the approval of the appropriate local reviewing agency.

7. **Building Color:** Building color shall be limited to light, medium, and dark shades of earth tone gold and brown colors. Approximately 90 percent of each building wall surface shall be light and medium colors. The remaining surfaces shall be restricted to a darker color. The use of walls in a single color, with little detailing or completely blank, not permitted.

8. **Roofs:** Careful consideration of durable materials, proportions, and shapes, emphasizing the importance of roofs as integral and embracing elements of the over-all design, is particularly important. Building roof tops shall have at least two of the following features:

    a. Parapets concealing flat roofs and roof top equipment;

    b. Overhanging eaves;

    c. Sloped roofs;

    d. Three or more roof slope planes.

9. **Parking:**

    a. Parking shall be designed in a ways that do not overpower the character of the development nor appear as a dominant feature of the site.

    b. b. With the exception of customer/visitor parking, parking shall be located to the rear and interior side of the building. Customer/visitor parking stalls shall be located to the front or street side of the building are permitted provided that screening and bonus landscaping and is designed as follows:

        (1) The parking area shall not exceed 30 percent of the overall parking area developed;

        (2) Parking shall not span more than 50 percent of the lot width or depth;

        (3) Parking shall not be located closer than 20 feet to the front or street-side property or lease line;

        (4) Parking shall be screened with as required for parking visible from residential development (see Section C.13); and

(5) Planting islands shall cover a minimum of 10 percent of the parking area located to the front or street side of the building. Parking islands shall be planted with a minimum of one Ornamental Tree and shrubbery and/or ground cover.

c. On-street parking or loading is prohibited.

d. Off-street parking and loading shall be provided on the same lot as the use served except as otherwise approved as part of a shared parking concept.

Site and Building Design Examples

Recommended

The design creates visual interest through the use of varying roof planes, materials, window and the entrance design. The facade is broken up with projections and landscaping.



Recommended

The use of different roof planes and textures create visual interest.

Although overhead doors are used, they are designed as an integral part of the overall design.



Recommended

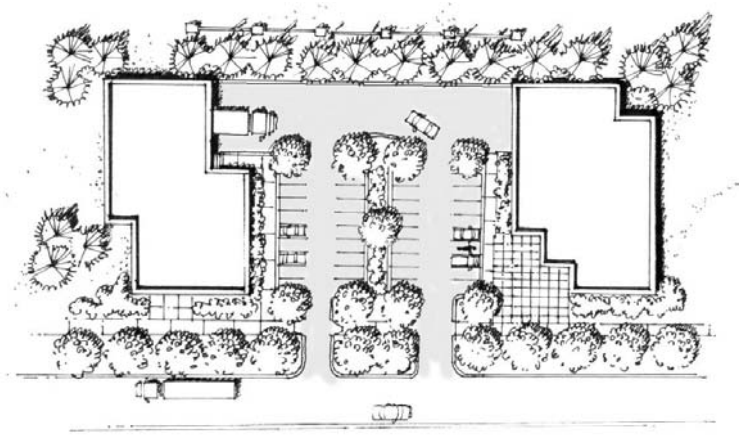
The main entrance is the focus of the building. Contrasting colors and high-quality materials create visual interest.



Recommended

Parking is designed to be shared by both sites. This layout maximizes usable space and provides additional circulation.

The building on the left is incorporates a recession in the facade to screen loading. The building on the right uses a variation in materials and recession to create focus at the main entrance.



Not Recommended

The building coloring does not enhance the building design and calls excessive attention to the building. The front entrance is not designed as a focal point to the building. Loading has been poorly incorporated into the overall design.



Not Recommended

The building design is monotonous and has no focus. Little consideration has been given to creating visual interest.



Pedestrian Access and Circulation

1. **Access:** Pedestrian access shall be an integral part of the overall design of the development. The pedestrian access shall provide not only safe and convenient access to and from off-street parking areas but should also connect with abutting properties and developments so as to accommodate an alternative means of transportation such as walking or biking to and from work and surrounding activities. Access to site or park amenities should also be provided.

2. **Sidewalks:**

    a. Sidewalks at least 5 feet in width shall be provided along all sides of a lot that abut a dedicated public or private street. A continuous internal pedestrian sidewalk shall be provided from the perimeter public sidewalk to the principal building entrance(s).

    b. Sidewalks shall be provided along the full length of any facade featuring a customer entrance and along any facade abutting a public parking area. Such sidewalks shall be located at least ten feet away from the building facade to provide planting areas for landscaping along the foundation of the building.

3. **ADA Compliance:** All sidewalks, crosswalks, parking lots, or other areas of pedestrian circulation shall comply with ADA accessibility guidelines and standards.

RECOMMENDATION - SCREEN AND BUFFER OVERLAY

Landscaping and Screening

The City should adopt an Overlay District that applies to infill development, in particular where existing residential land uses abut redeveloping non-residential areas. The Future Land Use Plan Map identifies those areas where the following standards should be applies.

1. **Landscaping Plan:** Every site on which a building will be placed shall be landscaped in accordance with plans and specifications submitted to and approved the appropriate local reviewing agency. An on-site grading plan will be part of this landscape plan. The landscape plan must be submitted for review along with the building plans.

2. **Installation:** Required landscaping or screening shall be installed at the time of building construction as the season permits. All other materials shall be installed during the next planting season.

3. **Maintenance:** The plan shall include provision for ground maintenance such as an adequate supply of hose bibs. After completion, such landscaping shall be maintained in a sightly and well-kept condition.

4. **Grass Sod and Seed, and Ground Cover:** The required front and street side yards shall be entirely graded and sodded or seeded from the existing or proposed street curb back to the building excepting only such areas used for plantings, drives, parking, or walks. Rear yards and interior side yards shall be seeded or sodded except areas used for plantings, storage, parking, drives, or walks. Other types of ground cover in limited areas may be approved. All existing trees shall be saved when possible.

5. **Street Trees:** One street tree shall be required for every 40 feet of street frontage. Street trees shall be located in the street yard setback, and shall not be located in the right-of-way.

6. **Landscape Materials:** Landscape materials used for required landscaping and screening shall be from the "Permitted Plant Materials" list (**see Appendix A**), unless otherwise approved by the appropriate local reviewing agency. Evergreen trees and shrubs shall be used as the primary landscape materials when required for screening.

7. **Roof Mounted Equipment:** Roof mounted equipment, including ventilators and satellite dishes greater than 30" shall be screened from view (100% opacity) or isolated so as not to be visible from ground level of any adjacent public thoroughfare or residentially-zoned area, up to a maximum of three hundred feet (300') away. Screening shall completely obscure from ground level all surfaces of the equipment. The appearance of roof screens shall be coordinated with and integral to the building design to maintain a unified

appearance, not merely a separately designed afterthought. It is not the intent of this requirement to increase the height of the screening significantly above that of the equipment in order to screen it from view from tall buildings or from higher ground.

8. **Utilities:** All telephone and cable television lines, electrical services and distribution lines shall be placed underground, except that this provision shall not include meters, electric and telephone service pedestals, transformers, three-phase feeder lines, sub transmission and transmission lines, electrical substations and such other facilities as the utility may deem necessary to install utilizing "overhead" type construction. These aboveground utilities shall be located as close to the building as permitted by the utility company and screened from view of public streets to the extent possible through the use of landscaping or screening walls that are integrated into the overall site design.

9. **Mechanical Equipment:** All electrical and mechanical equipment located adjacent to the building and visible from any adjacent public thoroughfare or residentially-zoned area shall be screened from view (100% opacity), up to a maximum of three hundred feet (300') away. Screening shall completely obscure from ground level all surfaces of the equipment. Such screens and enclosures shall be treated as integral elements of the building's appearance.

10. **Trash:** All trash, refuse, debris or garbage shall be contained within an enclosed building or container designed for such purposes. Outdoor containers or dumpsters shall be shielded on all sides by a wall or decorative fence constructed of the same or complementary materials to those used on the primary building. The use of landscaping to further decrease the visual impact of the trash enclosures is encouraged.

11. **Loading Docks:**
    a. Loading areas shall not be located at the front of the building, and where visible from the front of the building, shall be screened from view from the street and neighboring properties.

    b. Where visible from a public street or residential-zoned property, the visual impact of loading docks shall be minimized to the greatest extent possible through the use of landscaping, fences and berms.

    c. Where possible the screening shall be an integral part of the building structure and be used in conjunction with landscaping, ground cover, trees and shrubbery. If the screening is not an integral part of the building, then landscaping ground cover, trees and shrubbery shall be used to screen the loading area.

12. **Exterior Storage:** Except during permitted construction periods, all exterior storage of equipment, raw materials or finished products shall be fully screened from the view of adjacent parcels and streets by a visual barrier such as a solid screen fence. Such

exterior storage shall not exceed the height of the barrier. The barrier shall be a minimum of 6 feet in height. Additional height or screening such as landscaping may be required based upon the height of the items to be screened. Chain-link fence with vertical slats shall not be permitted.

13. **Parking:** Parking lots shall be screened from view from surround residential development. Such screening shall be effective to a height of 42 inches for vehicles under 6 feet in height. For vehicles over 6 feet in height, the screen shall be effective to a height of 6 foot. If landscaping is utilized to provide screening, the effective height shall be reached upon maturity, but in no case shall the initial effectiveness be less than 50% of the required effectiveness.

14. **Signs:** Landscaping shall be included in the design of all ground signs at the entrance to the sight. The use of ornamental trees, flowering or ornamental shrubs and ground covers are encouraged.

Landscaping and Screening Examples

Recommended

Aboveground utilities are screened from view and incorporated into the site design with landscaping.



Recommended

The parking and loading areas are screened by the use of berms and landscaping.



Recommended

Parking is oriented away from the street to the interior of the lot. Landscaping is used to further minimize the visual impact of parking.



Recommended

Parking is screened from view of the street and surrounding development with the use landscaping.



Not Recommended

Trash and dumpsters are not enclosed and distract from the site design creating a negative visual impact on surrounding development.



Not Recommended

Outdoor storage of raw materials is screen for security purposes only and has a negative visual impact on development. Outdoor storage must be enclosed.



Lighting

1. **Light Mitigation:** Cut-offs and lighting shields shall be used to prevent spill over and glare onto adjoining streets and residential properties. Exposed lighting sources such as unshielded wall packs shall not be permitted.

2. **Color:** Lighting shall predominantly consist of lights that have a "warm" appearance. Parking lot lighting shall be of a type that provides sufficient lighting for safety and security without distorting the perception of color. Low-pressure sodium lights may not be used in parking areas or at main entrances.

3. **Coverage:** Light coverage shall be localized as part of an overall lighting plan. Light fixtures that broadcast light over large areas or that are a source of glare, sky-glow or other light pollution shall not be permitted.

4. **Height:**

   a. Building mounted lighting shall not extend above the roof line of the building on which it is mounted.

   b. Pole lighting heights shall be as shown on the lighting standard illustrations on the following pages.

Lighting Examples

Not Recommended

The lighting does not utilize cut-offs or shields to prevent spill over and glare.



Signs

1. **Types of Signs Permitted:**

   a. On-Site Ground Sign - a sign on one or more supports erected parallel with (one-sided) or at right angles to (two-sided) the street frontage. The ground sign shall not exceed 4 feet in height from ground elevation, and shall not exceed 50 square feet in area (see the ground sign illustrations on the following pages).

   b. Wall Sign – a sign at the main entrance to the building displaying the company name and address only. Wall signs shall be limited to 10 square feet in area. Wall signs shall be constructed of raised lettering of a single color complementary to that of the building, and shall not project more than one foot from the face of the building. The sign shall be placed no more that six feet from the ground elevation.

   c. On-Site Temporary Sign - ground or wall – a sign for the purposes of describing a construction or improvement project or advertising the lease of a site or

buildings. The sign shall be limited to 32 square feet and shall not remain longer than completion of construction.

2. **Message:** Signs shall be limited to advertising only the names of the firms, companies or corporations operating the use conducted on the site or the products produced or sold thereon.

3. **Movement:** Signs shall not rotate, gyrate, blink or move in any animated fashion.

4. **Illumination:** Illumination of the signs shall be limited to 40 percent of the surface of the sign for non-neon lighting and 10 percent for neon lighting. In all instances, illumination shall not be a nuisance to surrounding property nor conflict with aircraft operations. All lighting shall be shielded and confined within property lines. Internal illumination brightness level shall be from 100-200 ft. lam.