PLANNING/CAPACITY/BUILDING PROJECT

FOR

THE CITY OF BARTLETT, TEXAS

2004 TCDP Planning

Housing
Population
Land Use
Economic Development
Street System
Water System
Wastewater System
Storm Drainage System
Recreation and Open Space

Prepared by PUBLIC MANAGEMENT, INC.

207 South Bonham
P. O. Box 1827
Cleveland, Texas 77328-1827
281 592-0439
(210) 342-3621 (San Antonio)

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FOREWORD

This is a study for the City of Bartlett financed through the Office of Rural Community Affairs Texas Community Development Program. The study is a planning document that will assist the City in improving the living conditions of its citizens. Information, analysis, and recommendations are given in the areas of base mapping, housing, population, land use, economic development, streets, water, wastewater, storm drainage, and recreation and open space. This document is intended to give the citizens of Bartlett a guide for making decisions in the development of the community.

Previously published socio-economic, and physical planning studies that served as background for this document were: (1) 1990 and 2000 United States Census (2) Natural Resource Conservation Service Williamson County Soil Survey and (3) Williamson and Bell Counties Central Appraisal District. Other studies that provided specific information are cited throughout the report. Many thanks are extended to the Mayor, the City Council, the City Staff, and citizens of Bartlett for their assistance in this endeavor. Hopefully, this document will help to make Bartlett a better place to work, play and live.

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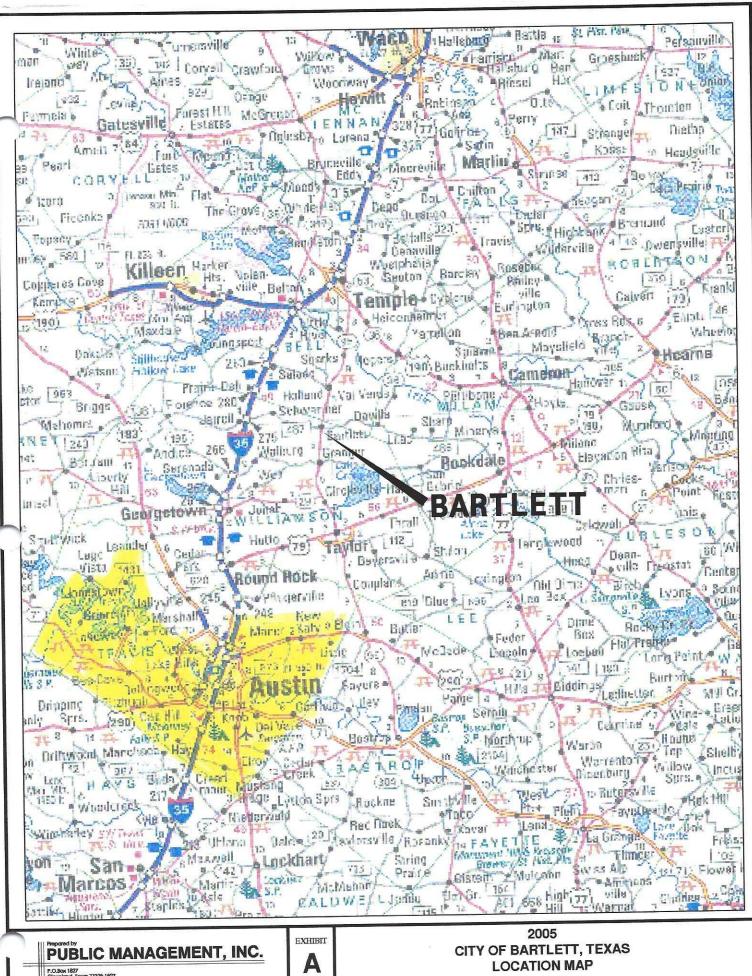
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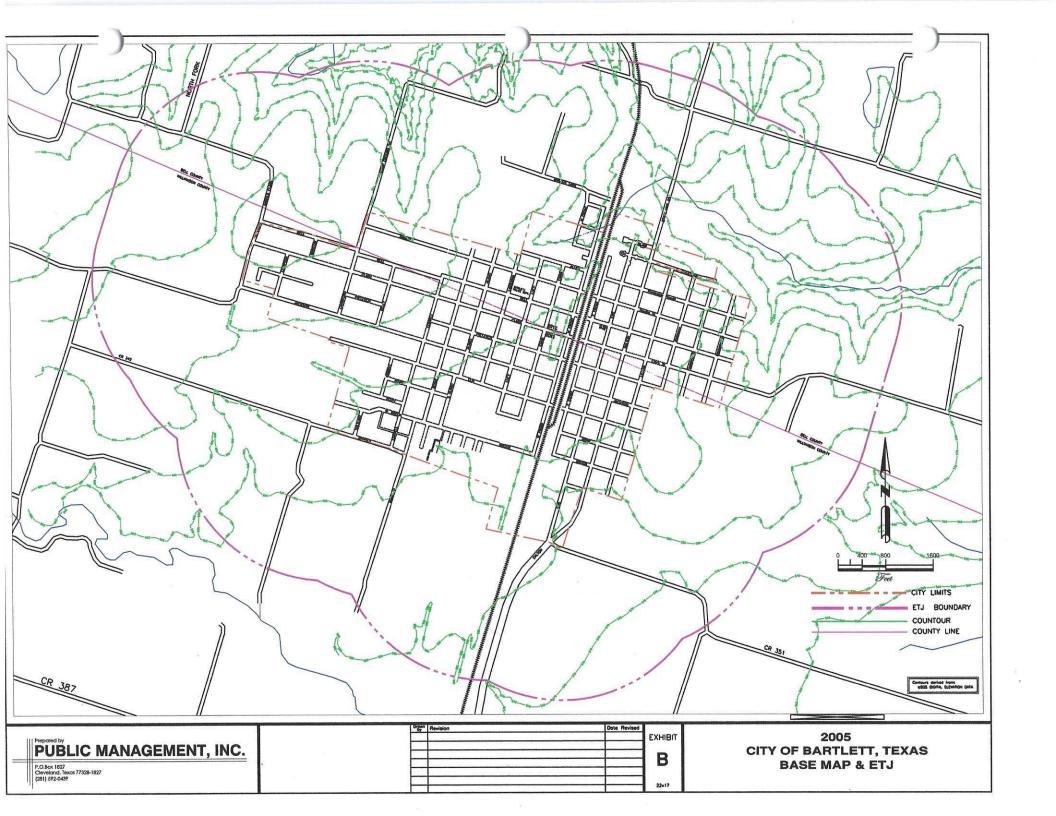
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LOCATION MAP



HOUSING

INVENTORY

During the months of April through May 2005 Public Management, Inc made a survey of all the housing units and the land use in Bartlett. On October 27, 2005, the City was presented the results of the housing inventory survey. Exhibit C shows the location and classification of all the buildings in Bartlett. The following definitions explain the meanings of classifications. The following tables show the stock of buildings and the classification given to each structure:

a. Definitions

Single-Family Structure--a permanent structure which is used by individuals and/or families for living purposes. It is detached from other housing units.

Multi-Family Unit--a permanent structure which is used by individuals and/or families for living purposes. It is attached to other housing units in single level or multiple level structures.

Mobile Home (Manufactured Home, HUD Code)--means a structure constructed on or after June 15, 1976, according to the rules of the United States Department of Housing and Urban Development, transportable in one or more sections, which, in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or, when erected on site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning and electrical systems.

Commercial Structure--a permanent structure that is used for purposes other than living such as the conduct of business, government, and education activities.

Church--a permanent structure that is used for the conduct of religious activities.

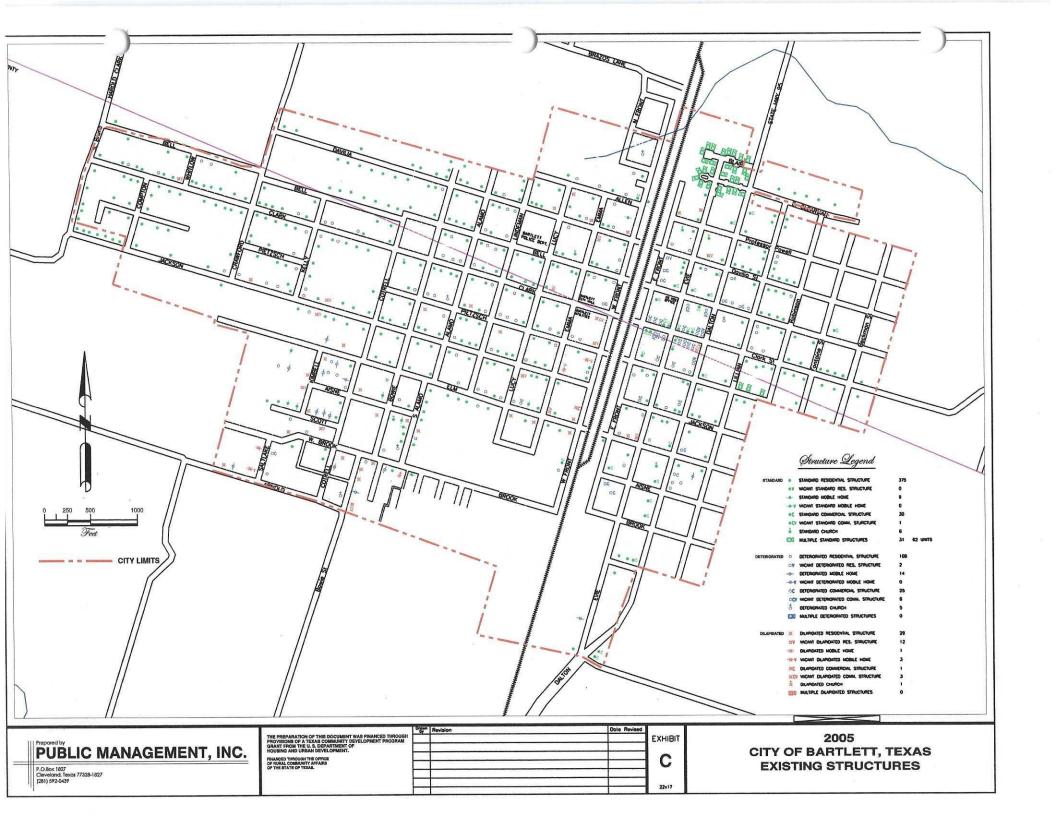
Standard--a structure that has deteriorated less than ten percent (10%) of it highest value. An observation of such a structure may reveal no physical problems or minor items of needed repair such as flaking paint.

Deteriorated--a structure that has deteriorated from ten percent (10%) to fifty percent (50%) of its highest value. An observation of such a structure may reveal physical problems ranging from rotted siding and roof deterioration to foundation problems and limited structural damage.

Dilapidated--a structure that has deteriorated more than fifty percent of its highest value. An observation of such a structure may reveal a number of physical problems consisting of severe foundation problems, extensive structural damage, roof deterioration, rotted siding, electrical problems, and plumbing problems.

b. Historic Preservation

The City of Bartlett is recognized as a rich location for Texas culture and history. There are more than twenty historic sites (houses, churches, businesses, markers) located in or near Bartlett. Through this plan, the City will be able to implement policies, through the Zoning Ordinance and Subdivision Regulations, that will assist the City in its endeavor to preserve the great Texas Heritage that exists in Bartlett.



 ${\bf Table~1^1} \\ {\bf Inventory~and~Classification~of~Housing~Stock}$

Classification	Total	Percentage
Standard Single-Family Structure	375	56.9
Deteriorated Single-Family Structure	108	13.6
Dilapidated Single-Family Structure	29	3.4
Standard Manufactured Home	9	3.5
Deteriorated Manufactured Home	14	6.2
Dilapidated Manufactured Home	1	1.1
Standard Multi-Family Unit	62	8.5
Deteriorated Multi-Family Unit	0	3.6
Dilapidated Multi-Family Unit	0	0.0
Vacant Standard Residential Structure	0	0.0
Vacant Deteriorated Residential Structure	2	0.9
Vacant Dilapidated Residential Structure	12	2.1
Vacant Standard Manufactured Home	0	0.0
Vacant Deteriorated Manufactured Home	0	0.0
Vacant Dilapidated Manufactured Home	_2	0.2
Total Residential And Manufactured Home	824	100.0

¹ Source: 2004 Housing Unit Survey, Public Management, Inc.

Table 2²
Inventory and Classification of Commercial Buildings and Churches

Classification	Total	Percentage
Standard Commercial Structure	30	38.5
Deteriorated Commercial Structure	25	32.1
Dilapidated Commercial Structure	1	1.2
Vacant Standard Commercial Structure	1	1.2
Vacant Deteriorated Commercial Structure	6	7.7
Vacant Dilapidated Commercial Structure	3	3.9
Standard Church	6	7.7
Deteriorated or Dilapidated Church	6	<u>_7.7</u>
Total Commercial And Churches	78	100.0

Table 3³
Occupied Housing Unit Types

Туре	Number (Bartlett)	% of Total	Number (Williamson County)	% of Total	Number (Bell County)	% of Total
Owner Occupied	386	67.6%	64,380	74.2%	47,622	55.7%
Renter Occupied	185	32.4%	22,386	25.8%	37,885	44.3%
Total	571	100%	86,766	100%	85,507	100%

² Source: 2004 Housing Unit Survey, Public Management, Inc.

³ Source: 2000 United States Census

Table 4⁴ Occupancy Status 1990

Туре	Number (Bartlett)	% of Total	Number (Williamson County)	% of Total	Number (Bell County)	% of Total
Occupied Housing Units	527	86.1%	48,792	89.6%	67,240	88.5%
Vacant Housing Units	85	13.9%	5,674	10.4%	8,717	11.5%
Total	612	100%	54,466	100%	75,957	100%

Table 5⁵ Occupancy Status 2000

Туре	Number (Bartlett)	% of Total	Number (Williamson County)	% of Total	Number (Bell County)	% of Total
Occupied Housing Units	571	89.5%	86,766	96.1%	85,507	92.2%
Vacant Housing Units	67	10.5%	3,559	3.9%	7,275	7.8%
Total	638	100%	90,325	100%	92,782	100%

ANALYSIS

a. Census Data

According to the Census data, approximately 68% of the City's occupied housing units are owner occupied, compared with 74% for Williamson County and 56% for Bell County. In general terms, one would expect to find that a densely populated County, such as Williamson, would have a lower owner-occupied percentage of housing units than a city such as Bartlett, due to apartment living in places such as

⁴ Source: 1990 United States Census

⁵ Source: 2000 United States Census

Round Rock. The City does have one significant rental complex, which probably explains the City's high percentage of renter-occupied units.

According to Census data, approximately 10.5% of the City's housing units are vacant, compared to 3.9% for Williamson County and 7.8% for Bell County. There has been a slight change between 1990 and 2000 for the City, as the percentage of vacant units has decreased by about 3.5%, according to the U.S. Census. For the counties, however, the percentage decreases were greater for the same period. Given the fact that the City is located in a high growth region, this indicates that much of the new single-family development is occurring outside the City limits. The location of Bartlett should be attractive to developers and residential growth is likely to occur during the planning period. For this reason, it is imperative that the City enforce the new subdivision ordinance, and seek ways to expand the current ETJ.

b. Extent of Problems and Identified Needs

Residential housing units (includes residential structures, manufactured homes and rental units) fall primarily in the categories of standard (72.6%) and deteriorated (20.2%). These two categories make up a substantial amount (92.8%) of the residential units in the City. However, there are forty-four (44) units in the City that are dilapidated and constitute the remainder of the housing stock (7.2%).

There are some significant concentrations of dilapidated and deteriorated units within the corporate limits of Bartlett, specifically as follows:

- * South of Elm, between S. Alamo and the City limits (approximately 17 units).
- * Along Elm on both sides between W. Front and Lucy (approximately 5 units).
- * Along Pietzsch on both sides between W. Front and Bowie (approximately 5 units).
- * Along Davilia on both sides between W. Front and Lindeman (approximately 5 units).

The City has the following building codes and related ordinances:

- * Substandard Buildings
- * Animal Control
- * Health and Sanitation
- Zoning Ordinance
- * Historic Preservation
- * Fire Prevention and Protection
- * Flood Damage Prevention

The problems facing the City are:

- * Lack of Subdivision Regulations
- Lack of effective code enforcement program
- Deteriorated and dilapidated owner-occupied units owned by low to moderate income persons with little or no resources available for home repair

c. Previous Implementation Actions

In regards to new housing, The Bartlett Housing Authority has previously received funding for the construction of housing units for disadvantaged residents within the City of Bartlett. With regards to existing units, however, the City has not had much activity in the way of rehabilitation programs. Through this plan, the City hopes to find ways to help those in need of housing related assistance.

d. Office of Rural Community Affairs (ORCA)

In recent years, the City has not utilized CDBG funds for housing related projects.

e. Local Administrative and Legal Capacity Available to Overcome Housing Related Problems

The City's main administrative and legal obstacle is the lack of subdivision regulations. Without these regulations, the City cannot effectively control the quality of development that occurs in newly constructed subdivisions, both within the City

limits and inside the City's extraterritorial jurisdiction (ETJ). The City's other housing related obstacle is the need to repair, or remove dilapidated structures. A majority of the City's housing related problems originate from owner-occupied units (77% of the total units). The City does not have the ability to offer assistance to those in need because funds are limited. Given this scenario, it is recommended that the City seek assistance from the **Texas Department of Housing and Community Affairs' HOME Program**.

HOUSING PLAN (GOALS AND OBJECTIVES)

The following goals and objectives were formulated by gathering information obtained during meetings with local officials between October 3 and November 7, 2004. The sessions were informal and designed to solicit ideas from local Community members.

Goal 1: Improve the quality of living for Bartlett residents by upgrading the quality of the housing stock.

2006-2009

Objective 1: Consider the use of the **HOME** program (administered through the Texas Department of Housing and Community Affairs TDHCA) http://www.tdhca.state.tx.us/ in an effort to repair dilapidated housing units throughout the community and/or provide affordable housing for low to moderate-income families.

(Probable Costs: \$125,000-25% match)

- Objective 2: Continue efforts to rid the City of vacant dilapidated structures that are not historically significant.
 - A. Aggressively acquire properties that are in tax trust or have delinquent taxes;
 - B. Sell these properties for minimal cost to redevelopers, with the stipulation that affordable new housing be constructed on the lot within a certain time period. This project would require the involvement of Williamson and Bell Counties and the School District.

Objective 3: Adopt and enforce the **Zoning Ordinance** that is a part of this plan (ongoing).

Goal 2: Assist residents in the procurement of safe, affordable housing in a fair and equitable manner, and encourage reputable developers to provide that housing.

2005-2008

Objective 1: Continue to further fair housing opportunities in Bartlett by encouraging reputable developers to offer a variety of residential housing in mixed-use developments (ongoing).

Objective 2: Give incentives to developers for developing "infill" projects i.e. constructing single-family residential structures on vacant lots or lot that have abandoned dilapidated structures.

Incentives could include waivers of building permit and tap fees as well as providing tax trust properties at a minimum cost to the developer

Goal 3: Assure quality development of new subdivisions both inside the corporate limits and in the City's Extra Territorial Jurisdiction (ETJ) 2006-2025

Objective 1: Enforce the City's newly adopted subdivision ordinance.

Objective 2: Expand the current ETJ through techniques discussed in the land use portion of this plan.

Long-Term Initiatives (2009 and Beyond)

- Continue to enforce all housing related codes and ordinances.
- Continue efforts to secure funding for housing related projects.
- Continue to further fair housing opportunities by encouraging developers to offer residents a variety of housing options.

POPULATION

1. CENSUS DATA

The following table shows the population composition of Bartlett from 1990 to 2000 according to census data.

Table 6⁶
Census Data Groups of Persons and Total Population

Group	1990	% Total	2000	% Total	% Change
White, not Hispanic	743	51.6	809	48.3	-3.3%
Black, not Hispanic	310	21.5	283	16.9	-4.6%
Hispanic	383	26.6	554	33.1	+6.5%
American Indian	0	0.0	2	0.1	+0.1%
Asian/Pacific Islander	2	0.2	1	0.1	-0.1%
Other	1	0.1	1	0.1	0.0%
Two or more races	0	0.0	25	1.4	+1.4%
TOTAL	1,439	100.0	1,675	100.0	0.0%
Total disabilities (ages 5+)	N/A		369	22.0	
Female Heads of Households	N/A		83	14.5	

As shown in the table above, the population grew by 236 persons between the years 1990 and 2000. What is interesting to note, is that the Hispanic population showed a 6.5% increase while most of the other groups experienced decline, or stayed flat for the same period. This trend is being seen in many other Texas communities as well. Some of it can be attributed to the new census form that gives people the opportunity to classify themselves as being of a particular race, but of Hispanic origin. The rest of the increase

⁶ Source: 1990 and 2000 United States Census

can be explained by the fact that a great number of Hispanics are migrating to Texas each year. The following table shows general, social, and economic characteristics of the City of Bartlett according to 2000 census data.

Table 7⁷
2000 Census Demographic Profiles

General Characteristic	Number	Percent
Male	799	47.7
Female	876	52.3
Median Age (years)	35.9	
Under 5 years	127	7.6
18 years and over	1,184	70.7
65 years and over	317	18.9
Average household size	2.78	
Social Characteristics		
Civilian veterans (civilian pop >18)	115	9.5
High school Graduate or higher (pop 25 and >)	642	59.8
Bachelor's degree or higher (pop 25 and >)	143	13.3
Disability status (pop 21-64)	204	25.3
Economic Characteristics		
Median household income	\$26,094.00	
Per Capita income	\$12,649.00	
Families below poverty level	88	21.1
Individuals below poverty level	406	25.6

⁷ Source: 2000 United States Census

The most significant factors in the table above are the percentage of individuals and families below poverty level. These factors showed a 2.3% increase for individuals and a 5.2% increase for families between 1990 and 2000. Since the City's percentage increase in families for the period 1999 to 2000 was only 7%, roughly 74% of those families that moved into the City were at income levels below the poverty level. This indicates that the families moving into the area are having trouble finding work, or are taking jobs with lower pay.

Table 8⁸
Population Change (1990-2000)

Place	1990 Population	2000 Population	Percent Change	
Bartlett	1,439	1,675	+16.4%	
Holland	1,118	1,102	-1.4%	
Granger	1,190	1,299	+9.2%	
Taylor	11,472	13,575	+18.3%	
Bell County	191,088	239,974	+24.5%	
Williamson County	139,551	249,967	+79.1%	

As can be seen in the table above, the region is experiencing significant population increases. It is important that cities like Bartlett search for innovative ways to attract new businesses, help existing businesses expand, and cultivate the heritage tourism industry. Without significant job growth, families in the Bartlett area will be forced to take lower paying jobs or commute long distances in order to find work.

2. EXISTING POPULATION

During the months of April through May 2005 Public Management, Inc made a survey of all the housing units and the land use in Bartlett. The City of Bartlett presently has 598 occupied dwelling units. There are a total of 614 dwelling units in the City.

⁸ Source: 2000 United States Census

The 2000 Census states that there were 638 housing units in the City. This represents a 24-unit difference between the 2000 U.S. Census count and the 2005 survey. In 2000, there were 571 occupied units compared with 598 in 2005. Using the figure of 2.78 persons per household in the 2000 census and multiplying it by 598 occupied dwelling units reveals the current population of Bartlett.

598----occupied dwelling units

X 2.78--persons per household

1,662

+ 87-in Group Quarters

=1,749-2005 population of Bartlett

3. FUTURE POPULATION

The future population projections of Bartlett are shown on the graph in Exhibit D. Bartlett has outside population growth potential on all sides of its current Extraterritorial Jurisdiction (ETJ), however, the City has not annexed new territory in quite some time and it is not likely that this policy will change during the planning period.

Bartlett had solid growth in the 1990s and the early part of the current decade. This growth was probably due to the small town atmosphere and the fact that the City is strategically located near the metropolitan statistical area of Austin. Bartlett does have good potential for economic development due to its location along SH 95 and its proximity to one of the state's largest population centers. The City's future growth will eventually be determined based on the City's ability to attract industry and commercial development. It is likely that residential expansion will be accelerated in and around the City within the next ten years. Without the expansion of commercial growth, the City will find it difficult to fund utility improvements necessary to support the accelerated rate of growth.

Future population was determined by two methods. The first method was a linear progression of the population growth rate in the years 1990-2005. This rate was used year by year through the year 2025 to determine the minimum population growth for the City of Bartlett as shown on Exhibit D.

The second method of determining future population was projection of total buildout of future land uses as shown on the Future Land Use Map. Assuming the existing population density i.e.number of residential acres per person (app) will remain the same in the future, the following app is calculated for reasons of future population growth.

app = 212.8 existing residential acres 1,749---2005 Population app = 0.1217

Residential expansion can occur in one of two ways; either by converting existing vacant or agricultural land use to residential, or by developing the remaining acres within the ETJ. Development potential will be defined as thirty percent (30%) of the City's ETJ divided by 2. It is unlikely that the entire ETJ will be built out a by the end os the planning period. The aforementioned development potential will be considered the maximum build-out growth for the year 2025. The development potential is then added to the current population figure.

Using the aforementioned assumptions, the population for the year 2025 is calculated below:

Current vacant and agricultural land uses 2,046 x .30=613.8/2=306.9

306.90 acres for development = 2,522 persons

0.1217 app

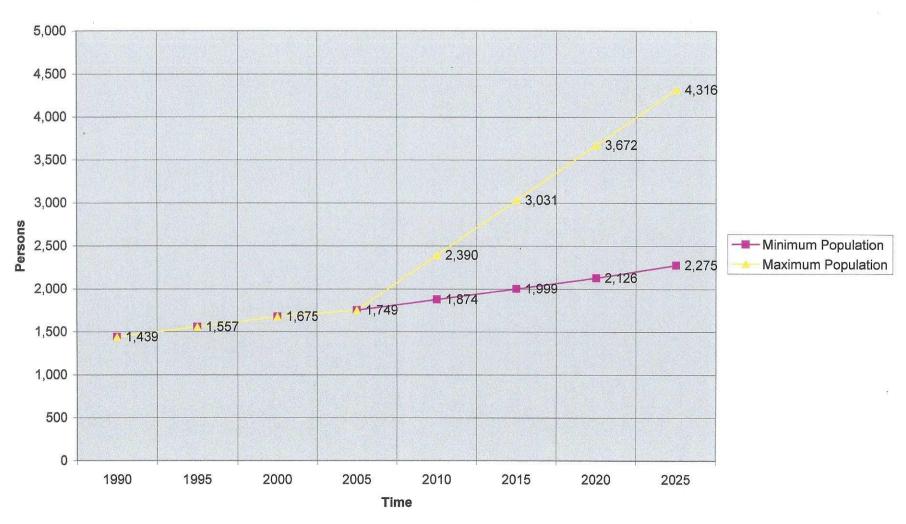
2,522

+ 1,794 (2004 Population)

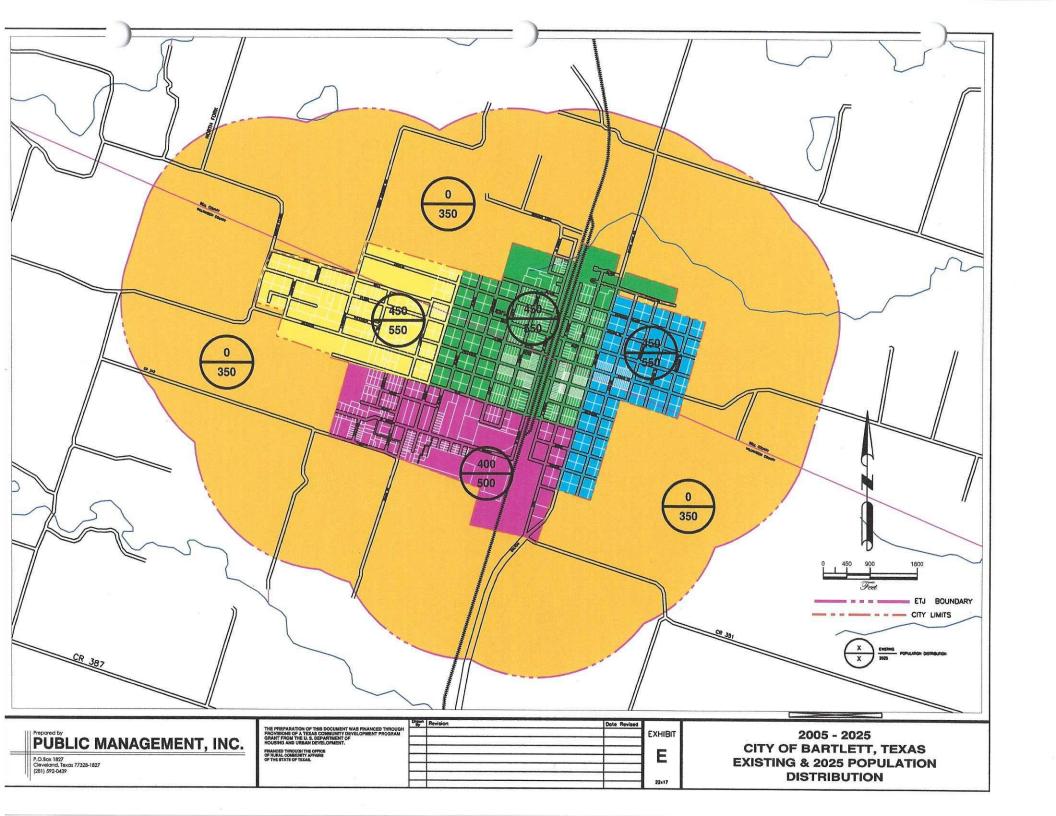
4,316 (2025 Population)

The population projection derived by this method is shown as the maximum population growth line. Realistically, the population for Bartlett will probably fall somewhere between these two scales. This population projection method does not recognize an anomaly of a major subdivision development, or apartment complex with high density housing which would skew the population curve upward. These anomalies may be expected but the intensity is not known and cannot be used in a solid population projection.

Exhibit D
City of Bartlett 2005-2025
Population Projections



Data Source: 1990, 2000 United States Census Texas A M University, Department of Rural Sociology 2004 Occupied Housing Inventory



Land Use

LAND USE

INVENTORY

a. Tabulation

The following table shows the existing land use in Bartlett by category of use. The project area does not include the City's Extra Territorial Jurisdiction (ETJ), because significant development has not occurred there as of the time of this report. The location of each category is given on the attached existing land use Exhibit F.

Table 99
Existing Land Use

Land Use	Acres	Percentage of Total Acres	Acres per 100 persons
VACANT	448.1	64.3	25.6
SINGLE FAMILY RESIDENTIAL	197.9	28.4	11.3
MULTI-FAMILY RESIDENTIAL	7.3	1.0	0.5
MANUFACTURED HOMES	7.6	1.1	0.5
COMMERCIAL	25.3	3.6	1.4
INDUSTRIAL	0.0	0.0	0.0
PUBLIC/SEMI-PUBLIC	11.2	1.6	0.6
TOTAL	697.4	100.0	39.9
UNDEVELOPED	448.1	64.3	
DEVELOPED	249.3	35.7	

The acres per 100 persons figure would seem to indicate that the City has room for growth within the current corporate limits. There is significant undeveloped acreage.

⁹ Source: 2004 Housing Unit Survey, Public Management, Inc.

There is also significant room for expansion within the City's current Extraterritorial Jurisdiction (ETJ).

ANALYSIS

a. Occupied Dwelling Units

Currently, the City of Bartlett has 598 occupied dwelling units, which constitutes a 97% occupancy rate. Many of the vacant units are dilapidated residential structures. These units should be demolished, or rehabilitated if possible, because these units could lead to fire and health hazards. In the event a structure is removed on a lot that is in trust due to back tax problems, the City should negotiate with the School District and County and offer the lot to a local developer that would agree to build another house on the lot. This would help all taxing entities because the lot would be converted from a negative cash flow item to an improved lot.

b. Existing land use

The existing land use pattern for the City of Bartlett is typical for this size community. The commercial and industrial land uses are generally adjacent to the major highways. Residential, light commercial, and public land uses are near the central city, in traditional downtown Bartlett. Agricultural uses and rural residential uses extend beyond the City's corporate limits and into the ETJ. The most significant changes that will occur is the emergence of more commercial uses along S.H. 95 and the emergence of additional residential subdivisions in traditional agricultural areas, especially in the City's outer corporate limits and current ETJ.

c. Thoroughfares

The major thoroughfares affecting the land use within the community are S.H. 95 and F.M. 487. Traditional commercial and industrial corridors are emerging along S.H. 95 and it is anticipated that this growth pattern will continue. F.M. 487, on the other hand, serves as the main Central Business area for the City. City Hall and the utility department are located along this road, along with local shops and restaurants. This area serves as the City's cultural center and this businesses located here are unique to

Bartlett. In light of these circumstances, it is recommended that the City continue to upgrade the infrastructure in order to provide the highest quality service to these areas so that economic growth will continue.

d. Existing and anticipated population

The population study that is a part of this plan utilizes the land use data for population projections. The existing population is 1,749 according to the 2005 Occupied Housing count. The maximum anticipated population for 2025 is 4,316. The population in Bartlett has been steadily increasing and this growth should continue, or intensify.

e. Soils characteristics as related to development 10

According to the Soil Survey of Williamson and Bell Counties by the Natural Resources Conservation Service, soils in the Bartlett area are moderately well-drained Branson and Houston Black clays. These soils have very slow infiltration rates, high runoff potential, high shrink-swell potential and a high water table. The soils in this area do present potential problems for development; however, these problems can be overcome through proper site preparation.

f. Adequacy of public utilities

For existing developed land, utilities are available. Some capital improvements to City utilities will need to be made, as shown in the street, storm drainage, water and wastewater elements of this plan, in the next five years to meet local demands. Historically, the City has been able to use **Office of Rural Community Affairs, Community Development** grant funds to help offset the costs of these improvements. It is anticipated that these funds will be available to the City in the future.

¹⁰ http://websoilsurvey.nrcs.usda.gov/app/

g. Adequacy of public facilities

The following public facilities are located in the City of Bartlett:

Governmental

City Hall, Police Department, Fire Department, Post Office, Library, Bartlett Independent School District (BISD), Bartlett Public Works Warehouse, Bartlett Housing Authority.

Educational—B.I.S.D.

Bartlett Elementary, Bartlett Middle School, and Bartlett High School

At present, the City's public facilities are adequate to handle the existing population and the maximum anticipated population for the year 2025.

h. Storm drainage problem areas

Please see the Storm Drainage System element of this plan for further discussion and representation of these problem areas.

i. Natural and man-made constraints

The following features are considered natural constraints to development in the Bartlett area: Town Branch, a tributary to the San Gabriel River, is located just north of the City.

LAND USE PLAN

The population and development in Bartlett has been slowly increasing over the last ten (10) years. It is expected that this growth rate will continue in the future.

The city of Bartlett has the following land use controls:

- Substandard Buildings, Animal Control, Health and Sanitation
- * Historic Preservation, Fire Prevention and Protection
- Flood Damage Prevention, Zoning Ordinance

Goal 1: Improve infrastructure to accommodate the current corporate limits, and extra territorial jurisdiction (ETJ).

Objective 1: Follow the recommendations in the water, wastewater, storm drainage, and streets elements of this comprehensive plan.

Timeline for completion: (1-10 years)

Objective 2: Pursue methods of financing these infrastructure improvements.

Timeline for completion: (1-10 years)

A. Texas Community Development Program (TCDP)-This provides funding for infrastructure development.

Source: (www.orca.state.tx.us)

B. Texas Water Development Board-The Texas Water Development Fund is used to provide loans to eligible applicants for the construction of local or regional water supply, wastewater treatment, flood control, and municipal solid waste management projects. This includes such facilities as water wells, transmission mains, storage tanks, and water and sewage treatment plants.

Source (www.twdb.state.tx.us)

C. General obligation Bond Sales

Goal 2: Promote an aesthetically pleasing, durable and safe living environment for present and future residents.

Objective 1: Continue to strictly enforce building codes. Follow the objectives stated in the housing plan.

Timeline for completion: (ongoing)

Objective 2: Adopt and enforce the **zoning ordinance** that is a part of this plan.

Timeline for completion: (1-2 years)

Objective 3: Adopt and enforce the **subdivision regulations** that are a part of this plan.

Timeline for completion: (1-2 years)

Objective 4: Clear unsightly and dilapidated buildings and/or cluttered lots that are fire hazards and eyesores, and encourage the restoration and rehabilitation of older buildings and houses that are in good condition.

Timeline for completion: (2-5 years)

Goal 3: Expand the current extraterritorial jurisdiction.

Objective 1: Encourage landowners outside the current ETJ to request voluntary addition into the City's ETJ. This technique prevents the landowner from being annexed, at some future date, by a larger City. This also provides the City with a larger "buffer" Timeline for completion: (ongoing)

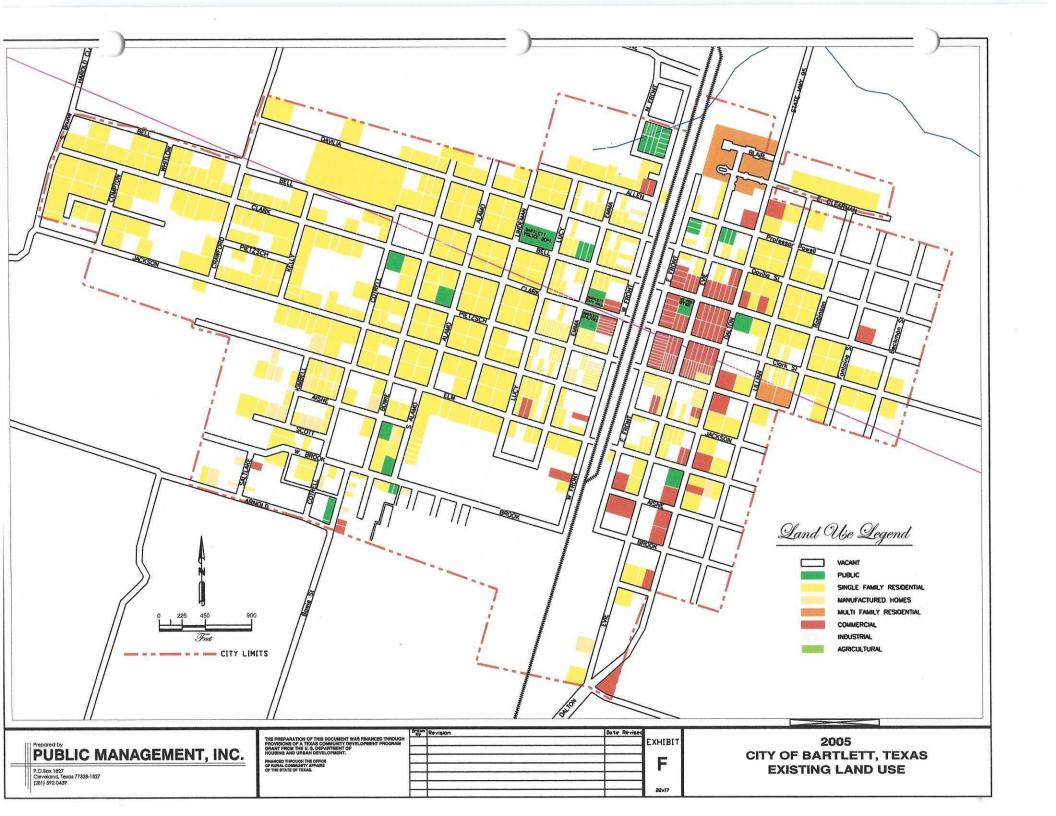
Goal 4: Preserve open spaces within the current corporate limits and the existing extraterritorial jurisdiction.

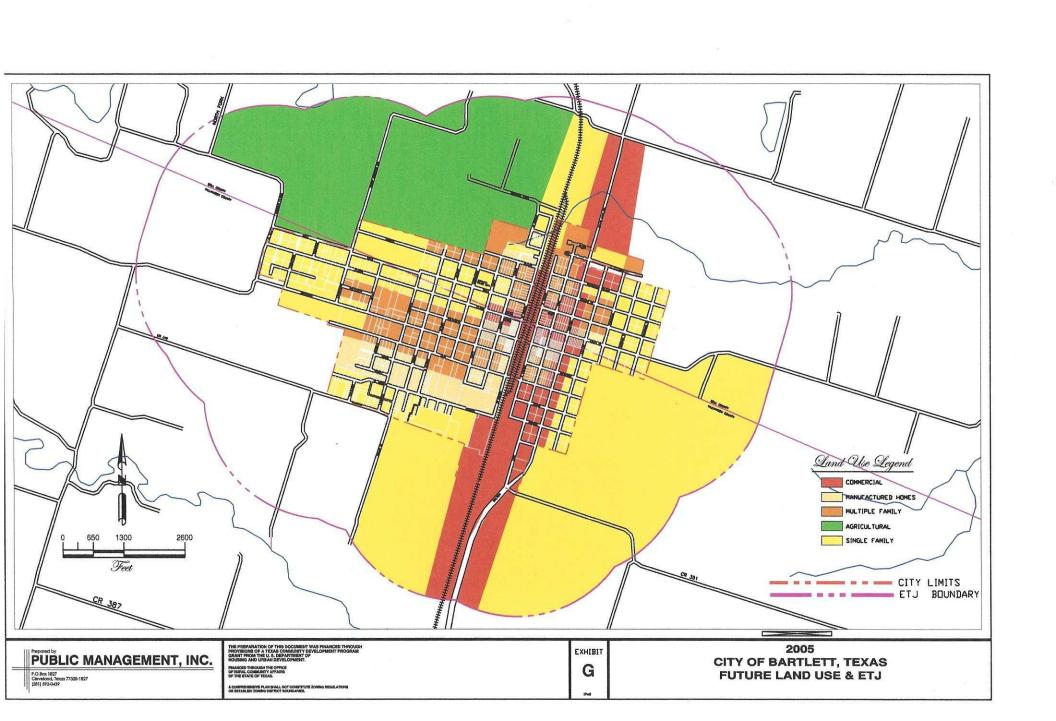
Objective 1: Continue to enforce the City's subdivision ordinance and ensure that future developments provide provisions for public spaces.

Timeline for completion: (ongoing)

Objective 2: Follow the recommendations outlined in the recreation and open space plan.

Timeline for completion: (ongoing)





Economic Development

ECONOMIC DEVELOPMENT

HISTORIC DEVELOPMENT AND GENERAL CHARACTERISTIC ANALYSIS

Coordination with Other State and Regional Plans

Texas Comptroller's Office: For this planning element, the following studies were used:

Tax Allocation Historical Summary

Texas Workforce Commission: For this planning element, the following studies were used:

2003 BLS Occupational Employment Statistics Survey

United States Census Bureau-2002 County and Zip Code Business Patterns

Factors Contributing to the Present Development

Development of the economy

The City of Bartlett was incorporated in 1900. Bartlett has a history of agriculture as its main economic base. In recent years however, the City's focus has shifted toward the service industries and tourism as the main economic activity. As can be seen in Table 9, approximately 48% of the area's commercial facilities in 2001 were in service industries. This is typical for cities that have such cultural and historical significance for the state of Texas. Tourists are looking for places to visit on the weekends, and vacation during the summer.

Physical growth of the community

Bartlett has physically grown at the intersection of F.M. 487 and State Highway 95, which runs north and south. SH 95 serves as the main thoroughfare, not only for Bartlett, but also for the entire region. Bartlett's future growth inevitably will be along S.H. 95.

The relationship of the community to the region

The city of Bartlett is strategically located in the center of two metropolitan statistical areas: Austin and Killen-Temple-Fort Hood. The regional economy is becoming diversified and moving away from natural resources and agriculture, and moving toward tourism and service industries. Table 10 shows the breakdown of commercial and industrial facilities in and around the city of Bartlett, Williamson County, and Bell County. As noted in Table 10, a good number of the City and County's commercial facilities are in the service and retail sectors.

Table 10¹¹
Commercial and Industrial Facilities

Type of Facility	Number (Bartlett)	Percentage of Total	Number (Williamson County)	Percentage of Total	Number (Bell County)	Percentage of Total
Agriculture, Forestry, Fishing, Mining	0	0.0%	33	0.6%	10	0.2%
Retail	6	22.3%	838	15.8%	866	20.4%
Wholesale	1	3.7%	254	4.8%	143	3.4%
Manufacturing	1	3.7%	250	4.7%	137	3.2%
Services	7	25.9%	1,019	19.2%	757	17.8%
Construction	1	3.7%	723	13.6%	349	8.2%
Transportation and Warehousing	1	3.7%	97	1.8%	116	2.7%
Educational Services	1	3.7%	54	1.0%	34	0.9%
Health Care and Social Services	3	11.1%	468	8.8%	390	9.2%
Administration	1	3.7%	266	5.0%	169	4.0%
Utilities	1	3.7%	23	0.4%	23	0.6%
Finance, Insurance, Real Estate	3	11.1%	573	10.8%	565	13.3%
Information	1	3.7%	93	1.8%	68	1.6%
Other	0	0.0%	623	11.7%	617	14.5%
TOTAL	27	100%	5,314	100%	4,244	100%

¹¹ Source: United States Census Bureau, 2002 County and Zip Code Business Patterns

Table 11¹² Area Employers

EMPLOYER	PRODUCT
Bartlett ISD	School district
Bartlett Electric Co-Op	Electricty
City of Bartlett	Municipal
Corrections Corporation of America	Prison
Will-O-Bell Nursing Home	Health Care

Vision for the new economy

The City should strive to attract new industries and business to Bartlett to help increase the local tax base and labor force, to pursue new quality housing developments and Our mission is to further the economic growth and promote Heritage Tourism. development of Bartlett while preserving the integrity of our rich heritage. The main purpose of economic development planning in this region is to provide guidance in assisting local businesses and recruiting new businesses that create jobs. In that regard, the City has many attractive elements for economic development, such as rich natural and cultural resources, location near a major market, rail access and convenient highway access. Within the City, there exist three distinct areas for development. These three areas have contrasting characteristics and therefore have different potential for development. The first area will be referred to as the downtown central business district, The CBD houses many of the historic sites, public facilities and local businesses. Therefore, the types of businesses that should be targeted for this region include professional offices for attorneys, insurance agents and others, antique shops, dress shops and similar boutiques, local restaurants and cafés, and local ice cream and sandwich shops. These businesses should not necessarily compete against businesses that locate along the commercial corridor of S.H. 95 not the light industrial district.

The second development area will be referred to as the commercial corridor. This area includes lands adjacent to the major thoroughfare, S.H. 95. The types of businesses that

¹² Source: United States Census Bureau, 2001 County, State and Zip Code Business Patterns

should be targeted for this region include service companies, grocery stores, gasoline stations and other types of businesses that provide everyday services to Bartlett residents.

The third development area will be referred to as the light industrial district. This area includes lands adjacent to the railway, south of Brook St. The types of businesses that should be targeted for this region include light manufacturing, warehousing, and service companies.

Implementing the plan and recognizing the vision

How should Bartlett compete for industrial and commercial prospects? Bartlett must compete with surrounding communities for commercial and industrial prospects, recognizing Bartlett's limited availability of developed industrial and commercial sites and facilities. Bartlett must use the same steps that are used by economic development organizations around the state for growing industry and recruiting businesses – developing a retention and expansion program for existing industry; devoting adequate funds, resources and effort to economic development; marketing to prospects; having available commercial and industrial sites, including assisting developers with developing sites; putting together attractive incentive packages and closing on prospects.

Bartlett has neither advantages over surrounding communities nor any distinguishing characteristics that allow it to cater to the needs of any company whose needs cannot be met by other communities. However, with adequate resources and effort, Bartlett can effectively compete by targeting small manufacturers, warehouse/distribution firms and service firms, particularly suppliers to area manufacturers, and by assisting existing local businesses with expansions. Bartlett can compete with similar sized area cities and cities with similar resources by being aggressive in providing developed industrial sites, marketing and offering attractive incentive packages.

ECONOMIC BASE STUDY AND "BARRIER ANALYSIS"

Inventory

Many public facilities are located in the city of Bartlett. Some of these facilities include the following:

Governmental Facilities

Bartlett City Hall, Public Library, Post Office, Police Station

Educational Facilities

Bartlett High School, Bartlett Middle School, Bartlett Elementary School, Williamson County JJAEP.

The following tables and narrative give an inventory of the social, economic, governmental, and industrial elements in and around the City of Bartlett.

Table 12¹³
Rates for Utilities

ELECTRICITY (City of Bartlett)		
Type of Service	Customer Charge	Rate per KW
Residential	\$10.00	10-1,010=\$0.139482 1,010 and up=\$0.119482
Commercial	\$0.00	\$0.104482 + demand load charge

¹³ Source: City of Bartlett

Table 12¹⁴ (cont.) Rates for Utilities

GAS (TXU Energy)		
Type of Service	Minimum Charge	Rate per 100 cubic feet
Residential Residential	\$12.69 + .84139 per 100 cubic feet	\$0.56639
Commercial	\$13.19 + .84139 per 100 cubic feet	GCA Gas Cost Adjustment
TELEPHONE (SBC)		
Rates and Charges	Residential	Commercial
Basic Line Rate	\$11.85	\$26.85
Extended Line Rate	\$11.85	\$4.00
Touch tone	\$0.18	\$1.30
Installation	\$38.35	\$74.25
WATER (City of Bartlett)		
	Residential	Commercial
Minimum Charge up to 3,000 gallons	\$20.00	
each additional 1,000 gallons	\$1.50	
up to 50,000 gallons		\$50.00
SEWER (City of Bartlett)	Residential	Commercia
Minimum Charge	\$17.00	\$17.00

¹⁴ Source: City of Bartlett

Table 13¹⁵
Tax Rates for State and Local Governments

Ad Valorem Taxes	
City of Bartlett	\$0.3129
Bartlett .I.S.D.	\$1.5507
Bell County	\$0.3351
Williamson County	\$0.4818
Total	\$2.1987
Sales Tax	
State, City, County Combined	7.75%
Total	7.75%

The allocation historical summaries show the total dollars returned to a local sales taxing city, county, special purpose district or transit authority by the Comptroller's office for their local sales tax collection.

Table 14¹⁶
Tax Allocation Historical Summary

Year	City	Dollar Amount
2004	Bartlett	\$46,785.69
2003	Bartlett	\$45,203.22
2002	Bartlett	\$44,353.37
2001	Bartlett	\$44,218.74
2000	Bartlett	\$38,651.99

¹⁵ Source: Bartlett County Central Appraisal District

¹⁶ Source: Office of the Comptroller of Public Accounts

Table 15¹⁷
Transportation Facilities

Thoroughfare	Significance	Direction
S.H. 95	Connects to Temple and U.S. 79	North-South
F.M. 487	Connects to I.H. 35 and U.S. 79	East-West

Table 16¹⁸
City of Bartlett
Employed Persons 16 years and Over By Occupation
2000 Census

Occupation	Number	Percentage of Total	
Employed persons 16 years and over	650	100%	
	Male 323 Female 327	49.7% 50.3%	
Management, professional, and related occupations	161	24.8%	
Service occupations	128	19.7%	
Sales and office occupations	117	18.0%	
Construction, extraction and maintenance	75	11.5%	
Farming, forestry, and fishing occupations	10	1.5%	
Precision production, craft, and repair occupations	0	0.0%	
Production, transportation and material moving occupations	159	24.5%	

¹⁷ Source: Texas Department of Transportation

¹⁸ Source: 2000 United States Census

The following barrier analysis is used to compare the City of Bartlett with surrounding communities. A positive factor means that the City compares favorably with, or has an advantage over, the compared City, whereas a neutral factor represents no significant differences and a negative factor means the compared City has an advantage.

Barrier Analysis

+-Positive Factor (-)-Negative Factor 0-Neutral Factor

Table 17
City of Bartlett
Business Development Cost Factors

Cost Factor	Holland	Granger	Taylor
Wage Levels ¹⁹	+	0	(-)
Electricity Costs	0	0	0
Fuel Costs	0	0	0
Water Costs (50,000 gals) ²⁰	+	+	+
\$50.00	\$242.79	\$91.33	\$127.50
Sewer Costs (50,000 gals) ²¹	+	+	+
\$17.00	\$61.50	\$20.25	\$145.44
Building Costs	0	0	0
Land/site Costs	0	+	+
Local Property Taxes ²²	+	+	+
Bartlett (\$0.313)	\$0.411	\$0.500	\$0.749
Financing	0	0	0
State Costs	0	0	0

^{19 2003} BLS Occupational Employment Statistics Survey

²⁰ Texas Town and City (May 2000) Water and Wastewater Survey Results (Texas Municipal League)-Commercial Fee

²¹ Texas Town and City (May 2000) Water and Wastewater Survey Results (Texas Municipal League)-Commercial Fee

²² Texas Comptroller of Public Accounts (2003)

Table 18
City of Bartlett
Operating Condition Factors

Operating Factor	Holland	Granger	Taylor
Unskilled and Skilled Labor Supply ²³	0	0	(-)
Productivity	0	0	0
Unionization	0	0	0
Labor-Management Relations	0	0	0
Electric Power Availability	0	0	0
Water and Sewer Availability	0	(-)	(-)
Gas Availability	0	0	0
Common Motor Carrier Service	0	0	(-)
Rail/Freight Service	+	0	0
Availability of Air Service	0	0	(-)
Vocational Education Facilities	0	0	(-)
Site Availability	0	0	0
School Facilities	0	0	(-)
Medical Services	0	0	(-)
Natural Features	+	+	+

²³ United States Census (2000)

In general, the costs factors for the City of Bartlett compared favorably to surrounding communities. The City has significant resources to offer potential businesses and the cost of doing business with the City is not a barrier to economic expansion. The main barrier the City faces is the capacity of the wastewater system, which the City is addressing through this plan. The City has available frontage along S.H. 95, a positive selling point for the City.

In terms of operating condition factors, the city of Bartlett fares favorably to the surrounding communities, with the exception of Taylor. The labor force in Bartlett is not as large as the city of Taylor, which is to be expected. The city must strive to market the quality of life for residents of Bartlett. Potential area employers will need to find housing opportunities for their employees and Bartlett has that benefit to offer. Through the subdivision ordinance, the city can manage growth by increasing the minimum required acreage per home. The City is in need of addition revenue sources and the two most viable options are increased sales tax revenues and increased ad-valorem revenues. Sales tax revenues increase when new businesses locate to Bartlett, or when existing businesses experience growth. The City has the ability to adopt ½ cent sales tax for the purpose of economic and community development. It is recommended that the City do this and use the funds to promote economic development within the community.

PLAN

Goal 1: Adopt, by ordinance, a 4b sales tax and consider the use of this tax for economic development as well as other community development projects.

Estimated Revenues: (\$30,000.00 annually)

Goal 2: Identify public funding options and private investment opportunities in order to implement the objectives set forth in this plan.

Objective 1: Identify individuals that will be active recruiters for private investment in Bartlett. Recruit individuals that have done well in markets such as Holland, Taylor, and Granger and invite them to Bartlett.

Timeline: 2005-2006

Objective 2: Create a downtown Property Owner's Association to serve as a perpetual advocate for downtown revitalization and preservation.

Timeline: 2005-2006

Objective 3: Offer incentives to owners who are willing to follow this plan, or sell their property to someone who is willing to follow this plan.

Goal 3: Assist the expansion of local businesses

Objective 1: Establish an aggressive business retention and expansion program.

Timeline: 2005--2006

Objective 2: Conduct a written survey of local businesses or visit all local businesses — identifying their potential for expansion and seeking the names of suppliers that may be contacted for relocation to Bartlett.

Timeline: 2005-2006

Objective 3: Provide direct assistance to local businesses in such areas as business management, technology innovations, improved production processes, financing, increasing sales and access to new markets.

Timeline: ongoing

Objective 4: Improve infrastructure for existing businesses by following the recommendations in the water, wastewater, storm drainage and street system plans.

(Timeline: 5-10 years)

Objective 5: Provide economic incentives for businesses including tax abatements, tax increment financing and enterprise zone projects.

(Timeline: 5-10 years)

Goal 4: Assemble and maintain a marketing package for the Bartlett area.

Objective 1: Assimilate data, from this plan and other sources, that provides potential employers with information necessary to make location decisions i.e. demographics, history and community resources. Then place it in a community profile binder for dissemination

(Timeline: 2005)

(Probable Costs: \$5,000.00)

Goal 5: Actively recruit new businesses by marketing to Target Industries.

The City should establish an aggressive external marketing campaign to develop contacts with companies in the target industries. This marketing campaign should be coordinated with regional marketing efforts.

Objective 1: Identify sites for commercial and industrial locations along U.S. 95. Illustrate the sites on a map with specific site information and broker contacts.

Objective 2: Develop a list of at least 500 companies in target industries and suppliers of area manufacturing firms.

To do this, the City should hold discussions with local companies and ask the companies to provide a list of suppliers that may be contacted and that may be recruited to locate in Bartlett. Ask officials of the local companies to make introductions with suppliers. Mail information on available industrial sites, incentives and other available assistance to these suppliers, particularly those suppliers located some distance from the firm and whose business depends heavily on supplying the local manufacturer. Identify other area manufacturers, through the Texas Directory of Manufacturers or other directories or resources. Mail a marketing letter to these manufacturers, stating that

Bartlett may be an appropriate site for the firm or for suppliers of the manufacturer.

Objective 3:

Place advertising in business journals, trade journals and other media appropriate to specific target industry sectors or to selected companies in the San Antonio, Austin, and Houston areas. Time the advertising to coincide with direct mailings to companies, as discussed in Objective 4 below.

Objective 4:

Initiate and follow-up direct mailings to the target companies in an effort to attract a facility to Bartlett. These steps should include the following:

- A. Writing and mailing a series of letters.
- B. Developing a flyer for the initial mailing.
- C. Developing a brochure or package for the response to inquiries.
- D. Following up by telephone.
- E. Establishing contact files.

Objective 5:

Contact local and area commercial and industrial real estate agents and firms and have them list Bartlett property and recruit tenants for local industrial sites.

Objective 6:

Provide tours, information and proposals for those target companies visiting or contacting Bartlett.

Other financing sources and incentives

Economic Development Administration 903 San Jacinto, Suite 121 Austin, Texas 78701 (512) 916-5824

Web Site: http://www.doc.gov./agencies/eda/index.html

The Economic Development Administration (EDA) provides various economic development programs for various governmental entities and other organizations. The primary program that assists small cities such as Bartlett is the public works program where EDA will assist with approximately fifty percent (50%) funding in the development of infrastructure needed for businesses to locate in a community. These funds can be matched with many of the programs mentioned above through the Texas Department of Economic Development.

Other incentives that the City may consider include the various ad valorem tax programs. One concept abates taxes to businesses for a certain period of time in return for their location in the community. Another concept is increment financing where property values are frozen in a designated district at a certain point in time. All taxes on added value after that time are placed in an escrow account that retires debt used to build infrastructure in the district.

The Texas Capital Fund (TCF) is a funding source that provides monies for infrastructure improvements to an existing or new qualified business. In exchange, the business is required to create so many jobs per dollar spent. This is a very helpful tool for recruiting business or helping expanding businesses.

Recommended Changes in City Policies to Improve the Economic Climate

- 1. Adopt, by ordinance, a 4b sales tax and consider the use of this tax for economic development as well as other community development projects.
- 2. Provide economic incentives for businesses including tax abatements, tax increment financing, cash incentives, and enterprise zones.
- 3. Enforce the zoning ordinance and subdivision regulations that are a part of this plan. The enforcement of these ordinances will have the long-term effect of improving the aesthetics of the community, and eliminating costly repairs to poorly installed utilities in new subdivisions. These elements are important to business leaders as they search for new sites.

Street System

STREET SYSTEM

INTRODUCTION

One of the principal daily activities of life and progress in any City is the transportation of people and goods in all forms. The residents of Bartlett should be able to reach their desired destinations with ease and comfort and should not be exposed to delay caused by inadequate facilities.

Streets are one of the most important physical parts of any city and, if adequate facilities are constructed, will represent the largest single required expenditure of the City. Thoroughfare right-of-ways occupy a significant amount of Bartlett's total developed area and allow for circulation between all areas within the City. In addition to the movement of traffic, streets provide access to and drainage for abutting properties, open space between buildings, and right-of-way for various utilities. A street system plan is an essential guide to ensure that the future growth and development of Bartlett will be accomplished in a uniform, orderly manner.

STREET SYSTEM SURVEY

An inventory of the street system has been collected and a summary prepared for analysis in this study. The inventory includes information for each street including the right-of-way width, pavement width, roadway type and roadway condition. It is shown in Exhibit "H". The conditions of the Texas Department of Transportation (TxDOT) roadways within the City of Bartlett (F.M. 487 and S.H. 95) were found to be in "fair" and "good" condition, respectively.

The City of Bartlett has had limited studies conducted regarding the street system. The studies that have been prepared are as follows:

 Texas Department of Transportation Bell County 2003 and 2004 Average Daily Traffic Count. During this time period, S.H 95 showed a decrease in daily car counts from 6,000 to 5,800.

ANALYSIS

Local thoroughfares within the Bartlett corporate limits do not vary greatly in width and condition. Most of the local streets have a pavement width of 20-25'. The paved City streets are asphalt with dirt shoulders or bar ditches, except along Dalton and Clark where curb and minimal gutter can be found. As illustrated by the "Average Daily Traffic Count" studies conducted by the Texas Department of Transportation, traffic circulation has remained steady during the last couple of years. This indicates that street capacities are not being stretched to the point of causing premature deterioration. In the case of Bartlett, premature deterioration could be attributed to severe weather. In general the street system is in fair condition. The system is adequate in its ability to meet the City's current needs.

The system's ability to meet future needs, however, is not so clear. The City recently began a paving program that is ongoing. This program has left many important roadways unpaved, with only a limestone topping. It is important that the City complete these projects before the newly laid base begins to wear away. On the streets that were recently repaved, Jackson, Elm and Bell, in particular, the City should consider seal-coating these streets beginning in 2010. The seal-coating program will protect the new overlay and extend the life of the roadway. The City should also consider the adoption of a minimum standard of 1 ½ inches of overlay. Roadways that do not meet this standard would be recommended for overlay. Recommended overlay streets that can not be funded for the current fiscal year could be placed at the top of overlay lists for subsequent years. The overall objective would be that every street would be completed over a long-term period, and then the process would begin anew. This process would prevent the accumulation of a number of streets needing serious repair in any one given fiscal year. The Goals and Objectives portion of this plan outlines a suggested five-year plan for the City to follow.

A list and ranking of street system problems are as follows:

- A. Unfinished roads that need repaving
- B. Poor riding surface on numerous roadways
- C. Limited budget for repairs and maintenance

Exhibit "N" along with its accompanying table shows all of the streets within the Bartlett Corporate Limits together with the width of traveled surface, type of surface, and general condition. The above-mentioned thoroughfare and street condition classifications can generally be defined as follows:

"Good" relatively smooth surface, without major potholes, well maintained, well drained.

"Fair" rough surface, potholes patched during periodic maintenance, less stable subgrade associated with poorer drainage, but can be traveled comfortably at a reasonable speed.

"Poor" very rough or unpaved surface, open potholes, unstable subgrade associated with poor drainage or lack of maintenance, and cannot be traveled comfortably.

The majority of traffic utilizes Dalton and Clark. These serve as the arterial thoroughfares within the City. Other streets in the City are able to serve the highest anticipated traffic volumes. In general, Bartlett has limited traffic circulation during weekday hours due to the commuter habits of the local workforce.

Table 19
City of Bartlett
Residential Street Priorities

Priority	Name	Location	Length (LF)	Area (SY)	Cost (Overlay)	Cost (Seal Coat)
	D 111	Constant W. Frant	2.051	8,777	\$43,885.00	\$6,582.75
1	Davilia	Crawford-W. Front	3,951	2000 March 200 M	\$31,690.00	\$4,753.50
2	Pietzsch	Cotrell-W. Front	2,852	6,338	(3)	
3	W. Brook	City limits-W. Front	3,490	7,755	\$38,775.00	\$5,816.25
4	W. Front	Brook-City limits	4,000	8,888	\$44,440.00	\$6,666.00
5	Emma	Elm-Davilia	2,030	4,511	\$22,555.00	\$3,383.25
6	Lucy	Elm-Davilia	2,030	4,511	\$22,555.00	\$3,383.25
7	Lindeman	Elm-Davilia	2,030	4,511	\$22,555.00	\$3,383.25
8	Alamo	Elm-Davilia	2,030	4,511	\$22,555.00	\$3,383.25
9	Bowie	Elm-Davilia	2,030	4,511	\$22,555.00	\$3,383.25
10	Jackson	All	7,290	16,200	NA	\$12,150.00
		All	5,703	12,673	NA	\$9,504.75
11	Elm		D-000 PR-0 1000 PR-0			\$9,504.75
12	Bell	Alll	5,703	12,673	NA	\$7,304.73

STREET SYSTEM PLAN

Goal 1: Provide for the safe movement of traffic, to provide a smooth and comfortable driving surface and to provide roadways that will require little or no maintenance costs.

Objective 1: Gradually increase budgeted street funds a minimum of 5% annually each year through the year 2010.

Estimated Cost: (\$11,050.00)

Objective 2: Complete the street maintenance schedule as outlined in Table 19 below.

(Timeline: 2006-2010)

Goal 2: Establish the uniform standard of a minimum 1.5" overlay for all streets within the city of Bartlett.

Objective 1: Complete the City's newly adopted street maintenance program and overlay the streets that currently do not meet this standard. Streets that do not make the list during any one fiscal year can be carried over to the next fiscal year.

(Timeline: 2005-2025)

Goal 3: Establish the uniform standard of 50 feet right-of-way and 28 feet pavement width for all newly constructed residential streets within the city of Bartlett.

Objective 1: Strictly enforce the City's Subdivision Ordinance for all new subdivisions both within the corporate limits and the Extraterritorial Jurisdiction.

(Timeline: 2005-2025)

Table 20 Street System Capital Improvements (2005-2009)

2006 (Phase I) Provide overlay or seal coating to the following roadways:

P	P Name	,	Cost Estimate	
0.00 por 600	we will state an object the second	Coat		
1	Davilia	Overlay	\$43,885.00	
	TOTAL		\$43,885.00	

2007 (Phase II) Provide overlay or seal coating to the following roadways:

P	Name	Overlay or Seal Coat	Cost Estimate	
2	Pietzsch	Overlay	\$31,690.00	
	TOTAL		\$31,690.00	

2008 (Phase III) Provide overlay or seal coating to the following roadways:

P	Name	Overlay or Seal Coat	Cost Estimate
3	W. Brook	Overlay	\$38,775.00
	TOTAL		\$38,775.00

2009 (Phase IV) Provide overlay or seal coating to the following roadways:

P	Name	Overlay or Seal Coat	Cost Estimate
4	W. Front	Overlay	\$44,440.00
	TOTAL		\$44,440.00

Table 20(cont.) Street System Capital Improvements (2005-2009)

2010 (Phase V) Provide overlay or seal coating to the following roadways:

*	P	Name	Overlay or Seal Coat	Cost Estimate
5 Emma Overlay \$22,355.00 10 Jackson Seal Coat \$12,150.00	5	and the special section in	Overlay	\$22,555.00 \$12,150.00
	-15-11/25	TOTAL		\$34,705.00

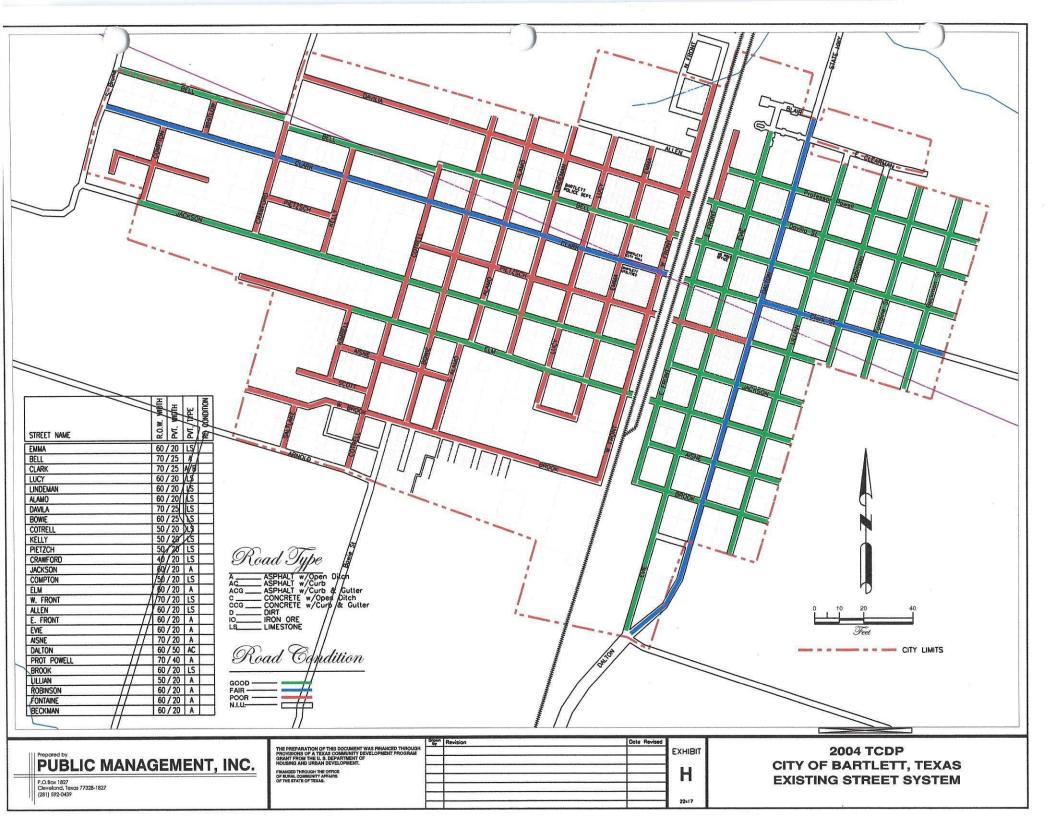
Long Term Initiatives (2010 and Beyond)

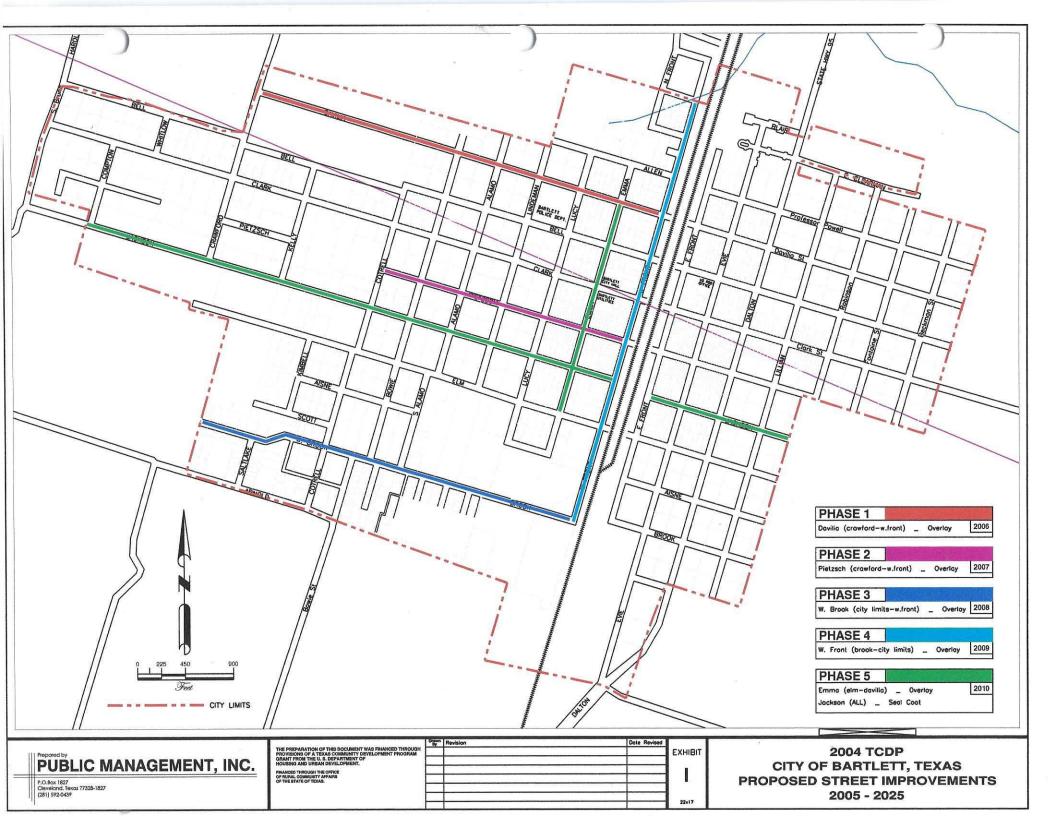
- Update the City's "Existing Street Conditions" map in 2010.
- Prepare a new street system capital improvements plan for the years 2010-2014.

FUNDING SOURCES

The sources of funding for street improvements may come from the following:

- A. City general fund revenues,
- B. Certificates of obligation,
- C. Bond sales,
- D. The State of Texas (TxDOT) or Williamson/Bell County when highway or county road improvements are constructed in the immediate Bartlett area,
- E. The extension of certain roadways may come from private developers for future development.





WATER SYSTEM

INVENTORY

Introduction

The City of Bartlett is a member of the "Brazos G" Regional Water Planning Group (RWPG), appointed by the Texas Water Development Board (TWDB), as part of the State water planning process required by Senate Bill 1. The RWPG designated the Brazos River Authority (BRA) as the administrative agency and principal contractor to receive a grant from the TWDB to develop the water plan. The "Brazos G" RWPG consists of 18 individuals who represent the following 11 interests: the public, counties, municipalities, industries, agriculture, the environment, small businesses, electricgenerating utilities, river authorities, water districts, and water utilities. Total water use for the region is projected to increase from 725,766 acft in 2000 to 1,034,262 acft in 2050, a 42.5 percent increase. According to the Executive Summary for Region "G", the water management strategies identified for meeting needs during the planning period include Advanced Water Conservation, Wastewater Reuse, Brush Management, Weather Modification, Rainwater Harvesting, Voluntary Redistribution, Enhancement of Reservoir Yields, Aquifer Storage and Recovery, New Reservoirs, Water Trades in the Brazor River Basin, and Interconnection of Regional and Community Water Systems.²⁴. It is the purpose of this plan to evaluate the City of Bartlett's water system's ability to meet water demands throughout the identified planning period of 2005-2025.

Regulation

Municipal water systems are influenced by rules of the Texas Commission on Environmental Quality (TCEQ), the Texas Fire Insurance Commission, and the Texas Public Utility Commission. The TCEQ and Texas Fire Insurance Commission each exert a strong influence on municipal water systems.

²⁴ 2002 State Water Plan, Region "G" Executive Summary

Prior Studies

There were no known studies available at the time of this report.

Location Map

Exhibit "J" illustrates the location of lines, valves, fire hydrants, storage facilities and meters.

Existing Facilities

Water service is supplied by the City of Bartlett. The boundaries are common with the city limits and extraterritorial jurisdiction (ETJ) of the City of Bartlett. The City currently contracts with BRA to operate the following waterworks facilities:

Table 21²⁵
City of Bartlett
Existing Water Well Capacities

Water Well Number	Location	Status	Year Drilled	Capacity (gpm)
2	Jackson @ Emma	Active	1982	600
1	Jackson @ Pietzsch	Active	1986	400
OTAL WATER W	ELL CAPACITY	I	L	1,000

Table 22²⁶
City of Bartlett
Existing Water Storage Capacity

Description	Capacity (gallons)	
Elevated Storage Tank Jackson @ W. Front	100,000	
Elevated Storage Tank Jackson @ Kelley	100,000	
Ground Storage Tank Jackson @ W. Front	400,000	
TOTAL STORAGE CAPACITY	600,000	

²⁵ Source: City of Bartlett Public Works Department

²⁶ Source: City of Bartlett Public Works Department

ANALYSIS

Water Consumption

Water consumption records for early 2005 are shown in Table 23. Daily per capita consumption is high for communities the size of Bartlett. The consumption amount is based upon the amount of water pumped during the respective year.

Table 23²⁷ City of Bartlett Water Consumption

YEAR	POPULATION	TOTAL ANNUAL CONSUMED (MG)	DAILY AVERAGE DEMAND (MG)	AVERAGE DAILY PER CAPITA (GAL)
2005	1,809	121.952	0.334	184.696

Water Wells-Availability of Water

The principal requirement for a municipal well system is that the wells furnish ample quantities of water during periods of maximum demand, which may continue for several consecutive days, or even weeks. The Texas Commission on Environmental Quality (TCEQ) requires that the City's total well capacity be at least 0.6 gallons per minute per connection. For a city of 2,000 persons, this requirement amounts to about 400 gallons per minute with one well out of service for repairs. At present, Bartlett's dependable yield, with the largest existing well inoperable, meets the requirement of the State. Considering the age of both wells, it is likely that the City will need to seek additional water supplies before the end of the planning period.

Water Supply Requirements

Projected water supply requirements are presented in Table 24. Future requirements were developed using projected population figures, an average daily demand of 180 gallons per capita, and a peak day demand factor of 250%.

²⁷ Source: City of Bartlett Public Works Department

Table 24²⁸
City of Bartlett
Projected Water Supply Requirements

YEAR	POPULATION	TOTAL ANNUAL DEMAND (MG)	DAILY AVERAGE DEMAND (MG)	PEAK DAY DEMAND (MG)	AVERAGE DAILY PER CAPITA
2005	1,809	118.851	0.326	0.823	180 GAL
2010	1,943	127.655	0.350	0.886	180 GAL
2015	2,098	137.839	0.378	0.956	180 GAL
2020	2,253	148.022	0.406	1.026	180 GAL
2025	2,433	159.848	0.438	1.106	180 GAL

Ground Storage

The purpose of ground storage is to provide a large supply of water that the high service pumps may draw upon during periods of heavy demand or during a serious fire. Fire protection criteria are the most important factors in evaluating the need for ground storage facilities. The major requirement is that the City provides 130 gallons of storage per person served. In Bartlett's case, this requirement amounts to a necessity for approximately 316,290 gallons. Thus, the present tank is more than adequate for the present population, and the future population projected for the planning period.

Elevated Storage

The function of elevated storage is to provide a pressurized water supply during power failures and to provide for short-term surges of demand. Fire insurance rates are increased for cities that do not provide at least 54 gallons of elevated storage for each person served. The TCEQ has a somewhat less stringent requirement. To meet the fire insurance criteria for its present population, Bartlett needs approximately 131,869 gallons in elevated storage. The City has enough elevated storage capacity for its present population, and the future population projected for the planning period.

²⁸ Source: Public Management, Inc.

Table 25²⁹
City of Bartlett
Water Storage Requirements

YEAR	POPULATION ¹	CONNECTION ²	TOTAL REQUIRED STORAGE (GAL) ³	TOTAL REQUIRED ELEVATED STORAGE (GAL) ⁴	SUGGESTED TOTAL GROUND STORAGE (GAL) ⁵	SUGGESTED TOTAL ELEVATED STORAGE (GAL) ⁶
2005	1,809	651	130,200	65,100	235,170	98,048
2010	1,943	699	139,800	69,900	252,590	105,311
2015	2,098	755	151,000	75,500	272,740	113,712
2020	2,253	810	162,000	81,000	292,890	122,113
2025	2,433	875	175,000	87,500	316,290	131,869

- 1. From Exhibit "D" Population Projections TCDP 2004 Planning Project
- 2. Based upon 2.78 people per connection
- 3. Based upon TCEQ required 200 gallons/connection
- Based upon TCEQ required 100 gallons/connection
- Based upon suggested 130 gallons per person
- Based upon suggested 54.2 gallons per person

Distribution Lines

The City's existing pipe system is generally adequate, although many of the lines are corrugated metal and should be systematically replaced. It consists of a grid of six-inch and eight-inch pipes throughout the City. The water distribution network must deliver adequate amounts of water at sufficient pressure to serve both peak consumer usage and fire fighting requirements. Long dead-end mains are undesirable, because of stagnation problems and because of the danger of a pipe rupture or valve failure that would leave an area without fire protection; thus grids and loops are recommended wherever feasible. For fire purposes, dead-end mains should be no longer than 1,800 feet in length, and sixinch loops should not exceed 3,500 feet in total length.

Fire Hydrants

Bartlett's fire hydrant inventory generally meets the basic criteria for insurance purposes. All hydrants are served from six or eight-inch mains and are full-size, standard units.

²⁹ Source: Texas Commission on Environmental Quality

Present criteria require that the distance between fire hydrants be no greater than 600 feet and that every residence be within 500 feet of a hydrant.

Water Quality

There are no water quality issues at this time.

Water Pressure

The City of Bartlett's water system does not experience pressure problems associated with this system.

Water Costs to the City of Bartlett³⁰

The cost for the city of Bartlett to produce 1,000 gallons is approximately \$1.59 and the City collects approximately \$2.89 from its customers. Revenues are used for operation, maintenance and repairs (see Table 26).

Table 26³¹
City Of Bartlett
Fiscal Year 2003 Water Costs And Revenues

Total Water Pumped (gallons)	121,952,000
Estimated Water Loss (percentage)	35%
Total Annual Water Consumed (gallons)	79,719,219
Annual Water Cost to Bartlett (excluding depreciation) (dollars)	\$193.527
Average Annual Cost Per 1,000 Gallons (dollars)	\$1.59
Annual Water Revenues (dollars)	\$353,042
Approximate Revenue for 1,000 Gallons (dollars)	\$2.89

³⁰ Source: City of Bartlett Public Works Department

³¹ Source: City of Bartlett Public Works Department

Operation Procedures

The City of Bartlett should continue to operate the system in compliance with requirements of TCEQ. This suggests operators having at least "C" Certificates. In addition, operation and maintenance manuals should be followed and effective maintenance records should be maintained. Routine lubrication, electrical checks for hot spots, replacement of bearings and similar parts in accordance with manufacturer's recommendations are all required in order to obtain full equipment life expectancy.

The City of Bartlett adopted a drought contingency plan in the Fall of 2000, as required by TCEQ. The Drought Contingency Plan evaluates the system's ability to provide water under drought conditions.

Adequacy of the System to Meet Existing and Forecasted Needs

As stated above in the analysis, the system's ability to produce water is slightly above that which is required by the State. However, additional customers added during the planning period would put the City below what is required by the State.

Standards and Criteria:

Water storage reservoirs in a water system provide water for three principal purposes: (1) to meet hourly demands which are in excess of water supply facilities; (2) to meet the increase in demand created during fire event; and (3) to meet the system demands during short interruptions of water supply. The Texas Commission of Fire Protection (TCFP) recommends 54.2 gallons of elevated water storage per capita, in addition to required ground level water storage of 130 gallons per person served by the water system. These standards are found in the Standards Manual for the TCFP at (www.tcfp.state.tx.us). A penalty is charged for the deficiency in a lesser storage capacity. Also, the City of Bartlett is in compliance with current per service connection requirement of the Texas Commission on Environmental Quality (TCEQ) of 100 gallons per connection for elevated storage and 200 gallons per connection for total storage capacity. These standards can be found at the official web site for the TCEQ.

The Texas Commission on Environmental Quality (TCEQ) has set forth guidelines for the location, installation, and operation of water lines and all other water works utilities. These are the standards used for analysis of the City's water system and for recommended improvements in this plan.

Water Costs to Customers and Review of Current and Future Needs

WATER		
	In City Limits	Out City Limits
Minimum Charge 0 to 3,000 gallons	\$20.00	\$20.00
Each 1000 gallons thereafter	\$1.50	\$1.50

As stated above in earlier analysis, the City's average annual cost per 1,000 gallons is \$1.59, while the City's average annual return per customer for 1,000 gallons is \$2.89. Although current revenues are exceeding costs, the City should consider rate hikes every couple of years, in accordance with the consumer price index, approximately 3% yearly.

List And Rank Of Problems Related To The System:

- A. System water loss above 20%;
- B. Current wells are aged;
- C. Numerous small and/or metal lines throughout the System:
- D. Operation procedures for Well #1 (Early Warning and Monitor system).

PLAN

Goal Statement

The goal is for the City to have a dependable water supply that will provide for all water demands, including domestic, industrial, and commercial, as well as an allowance of about 10-15 percent for distribution system leakage, fire fighting, and other unmetered uses.

Objective 1:

Systematically replace older water meters in an effort to reduce water

loss below 20%.

(Timeline 2005-2010)

Probable Costs: \$100.00 per unit

Objective 2:

Rehabilitate existing wells as needed.

(Timeline 2010-2020)

Probable Costs: \$400,000.00

Objective 3:

Systematically replace all galvanized metal lines and small lines that are carrying heavier loads than allowed by TCEQ with PVC, by using the Office of Rural Community Affairs TCDP grant funds or the Texas

Water Development Board loan funds.

(Timeline 2005-2025)

Probable Costs: \$1,250,000.00

Objective 4:

Provide services to certain unserved areas both in the City and the City's

ETJ.

(Timeline 2020-2025)

Probable Costs: \$500,000.00

Objective 5:

Consider water rate increases in accordance with the consumer price

index, or approximately 3% yearly.

(Timeline 2005-2025)

Probable Revenues: \$17,500.00 annually

Objective 6:

Upgrade the well pump and Chlorinator @ Well #1 to include an early

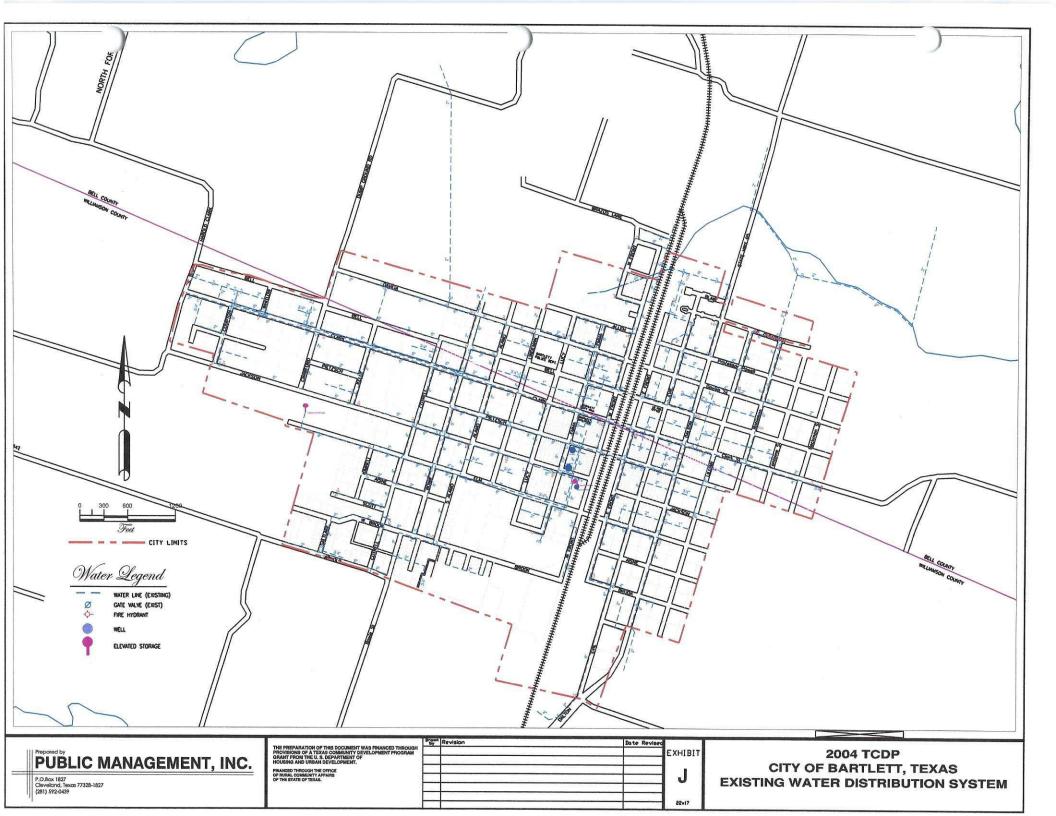
warning and monitoring system and an auto dialer.

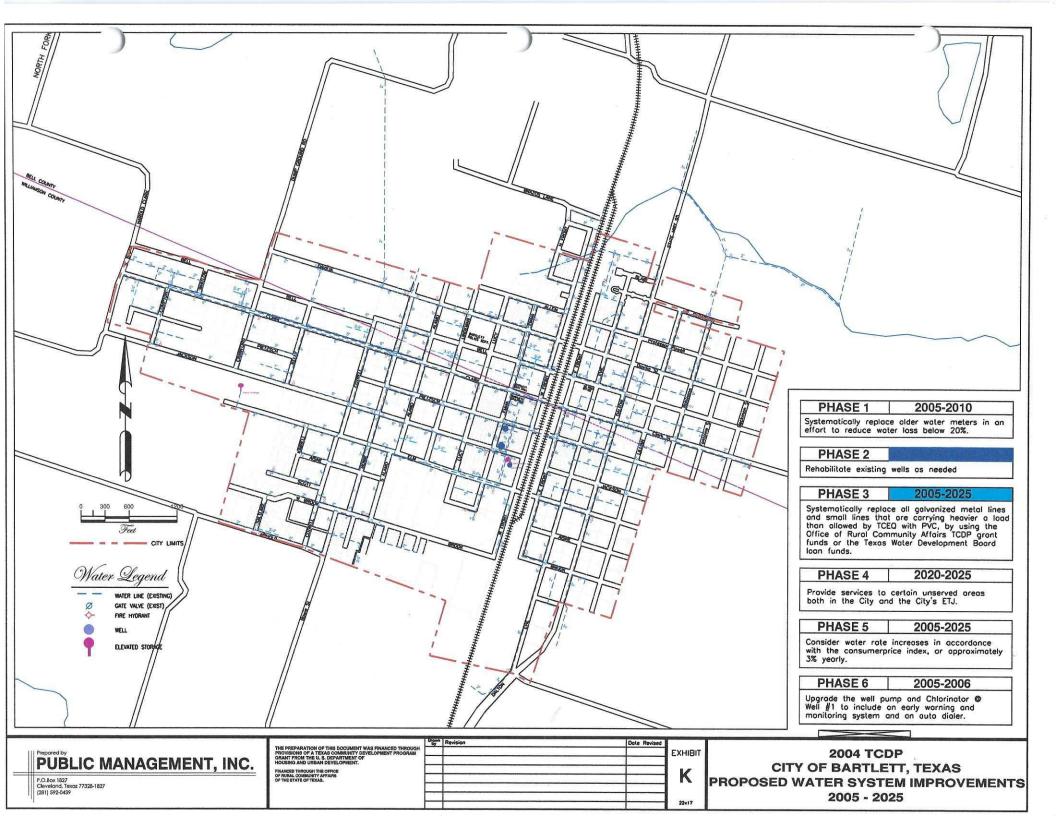
(Timeline 2005-2006)

Probable Costs: \$11,000.00

SOURCES OF FUNDING:

Possible funding sources for proposed improvements to the water system would include Grant funds as might be available through the Office of Rural Community Affairs (ORCA) based on a priority rating system conducted annually. Other sources to be considered by the City of Bartlett are as follows: Texas State Bonds issued through the Water Development Board (TWDB), Loans from various banks and, Loan and/or grant money from the Department of Agriculture.





Wastewater System

WASTEWATER SYSTEM

INVENTORY

Prior Studies

There were no known studies available at the time of this report.

Location Map

Exhibit "L" illustrates the existing wastewater system in Bartlett, including the location of lines (sizes); lift stations with capacities, manholes and cleanouts.

Type of Treatment Facility and Operation Agreement

The City owns and operates a 0.325 MGD pond system wastewater treatment facility. The facility is owned by the City, but operated in conjunction with the Brazos River Authority. The goal of this plan is to address the ability of the system to provide service, in the most cost effective manner, throughout the planning period of 2005-2025, to areas both within the current corporate limits and the Extraterritorial Jurisdiction (ETJ).

Standards and Criteria

The criteria used to determine wastewater system needs are based upon the standards as established by the Texas Commission on Environmental Quality (TCEQ). These standards along with projected population estimates and future land use determine the size and location of sanitary sewer facilities to adequately service the planning area. These standards can be found at the official web site for the TCEQ under the official rules for TCEQ (www.tceq.state.tx.us/RuleS).

Additional Standards

No sanitary sewer lines should be less than six (6) inches in diameter. All sewers should have sufficient slopes to maintain a velocity when flowing full of not less than two (2.0) feet per second. Polyvinyl Chloride (PVC) sewer pipe is the common medium used for sanitary sewer systems today and most likely to be used throughout the planning period. All new construction has utilized PVC pipe. Special provisions should be made for all

collection lines located near reservoirs and streams. Septic tanks should be avoided within two thousand (2000) feet of any surface water.

Manholes should be spaced approximately five hundred (500) feet apart but may be increased depending on the City's available maintenance equipment. Brick manholes are not allowed.

Sanitary sewer force mains should maintain velocities in the range of two (2) to five (5) feet per second, include air relief valves and provisions to allow lines to be flushed. The City has standardized on submersible, guide rail mounted pumps

All commercial services should be connected to a manhole and be a minimum of six (6) inches in diameter. Single-family structures should be served with at least four (4) inch line and multi-family services should be a minimum of six (6) inches in diameter.

Sanitary sewer lift station sites should give consideration to accessibility, potential nuisance aspects, and flooding. Stations should be located as remotely as possible from populated areas. All pumps should be of the non-clog design, be capable of passing 3 inch diameter spheres and have not less than 3 inch suction and discharge. The pump capacity should be capable of handling the peak flow with the largest pump out of service. System curves should be developed to illustrate the performance of pumps operating alone or in combination. Elapsed time meters should be required for all new stations and installed in old stations to aid in operation. The system uses, and will continue to use, grinder pump lift stations in accordance with TECQ regulations where the flows are less than 100 gpm.

Table 27 illustrates parameters generally accepted for the design of sewer systems.

Table 27³²
Wastewater System Design Parameters

SOURCE	TYPE OF USE	DAILY SEWAGE FLOW GALLONS PER PERSON	SEWAGE STRENGTH mg/l BOD ⁵
Municipality	Residential	100	200
Subdivision	Residential	100	200
Trailer Park Transient	2½ persons per trailer	50	300
Mobile Home Park	3 persons per trailer	75	200
School with Cafeteria	With Showers	20	300
	Without Showers	15	300
Recreational Parks	Overnight User	30	200
	Day User	5	100
Restaurant	Per Meal	5	600
Hospital	Per Bed	200	300
Nursing Home	Per Bed	100	300

ANALYSIS

Infiltration/Inflow

Infiltration is that part of the sewage flow that comes from ground water and inflow is the part that comes from storm water runoff. This water enters the sewage collection system by leakage through faulty pipe joints, manholes, cracked pipe and any connections that may not be watertight. All sewage collection systems have some infiltration because it has not been found economically feasible to build and maintain a watertight sewer system, except in areas where the sewer mains are below the ground water table. The system has infiltration problems throughout the City. It is believed that the infiltration problems are the result of one or two main trunk lines, and many smaller individual service lines to residences.

³² Source: Texas Commission on Environmental Quality

Industrial Waste and Special Treatment Facilities

This area of wastewater treatment is not applicable to the City of Bartlett system at this time.

Operational Procedures

TCEQ standards state that a municipality must begin planning for treatment plant expansion when 75% permitted flow is exceeded during three consecutive months. At 90%, the City must begin the financial planning and construction phase of treatment expansion. The City's numbers show that the system is exceeding the 75% threshold. However, due to the significant amount of infiltration, these numbers are not completely accurate. It is recommended that the system be smoke-tested and damaged main trunk lines be replaced before assessing the timing for plant expansion. It is still anticipated that the need for plant expansion will occur at sometime during the planning period.

Unserved Areas

At this time, approximately two percent (2%) of the area within the corporate limits of the City is unserved. At the same time, zero percent (0%) of the area within the City's ETJ is served.

Characteristics of the Soil and Terrain Affecting Collection and Treatment

The characteristics of the terrain are such that three (3) lift stations are needed, as illustrated on "Exhibit J", at various locations throughout the system because there is not enough variance in elevations to solely rely on gravity. The soils, on the other hand, do not pose specific problems to collection and treatment.

List and Rank of Problems Related To The System:

- 1. Infiltration throughout the system.
- 2. Collection lines need replacement in various parts of the City
- 3. Treatment Plant is approaching 75% capacity.

The following tables show the historical wastewater flow for the City of Bartlett:

Table 28 City of Bartlett Wastewater Flow

YEAR	POPULATION	AVERAGE DAILY FLOW (MGD)	AVERAGE PEAK FLOW (MGD)	AVERAGE DAILY FLOW PER CAPITA (Gal)
2002	1,728	0.230	0.450	133.100
2003	1,755	0.300	0.690	170.940
2004	1,782	0.250	0.350	140.292

Table 28 (continued) City of Bartlett Wastewater Flow

YEAR	NO. MONTHS >75% FLOW ¹	NO. MONTHS >90% FLOW ²
2002	3	. 1
2003	5	3
2004	3	2

 $^{^{1\,}Permitted}$ treatment plant capacity = 0.325 MGD, 75% of this permitted flow = 0.2438 MGD $^{2\,Permitted}$ treatment plant capacity = 0.325 MGD, 90% of this permitted flow = 0.2925 MGD

Table 29 shows future wastewater flow for the City of Bartlett.

Table 29
City of Bartlett
Future Wastewater Flow

YEAR	POPULATION ³³	TOTAL ANNUAL VOLUME (M.G.)	AVERAGE DAILY VOLUME (M.G.)
2005	1,809	97.722	0.267
2010	1,943	104.961	0.288
2015	2,098	113.334	0.311
2020	2,253	121.707	0.333
2025	2,433	131.431	0.360

PLAN

The goal of the Bartlett sanitary sewer system plan is to address the ability of the treatment plant and system components to provide quality service both within the current corporate limits and the Extraterritorial Jurisdiction (ETJ) throughout the planning period.

Objective 1:

Perform smoke test on entire system.

(Timeline 2006-2007)

Probable Costs: \$100.00 per hour

Objective 2:

Systematically replace identified mains and individual yard lines

that are contributing to infiltration, utilizing the TCDP grant

program during the years 2005-2025.

(Timeline 2005-2025)

Probable Costs: \$1,350,000.00

^{33 &}quot;Exhibit D"-Minimum Population Projections

Objective 3:

Expand the plant capacity to 0.700 MGD by the year 2025.

(Timeline 2015-2025)

Probable Costs: \$1,250,000.00

Objective 4:

Provide new service to certain unserved areas both in the City and

the City's ETJ.

(Timeline 2020-2025)

Probable Costs: \$1,000,000.00

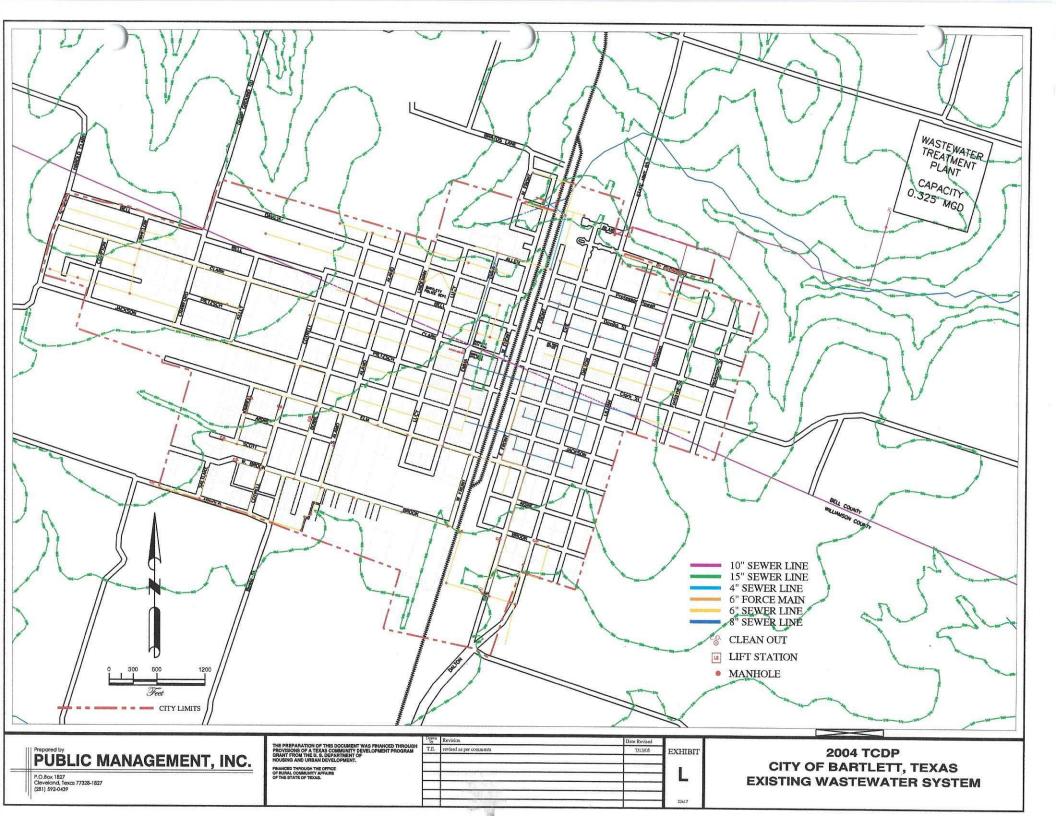
SOURCES OF FUNDING:

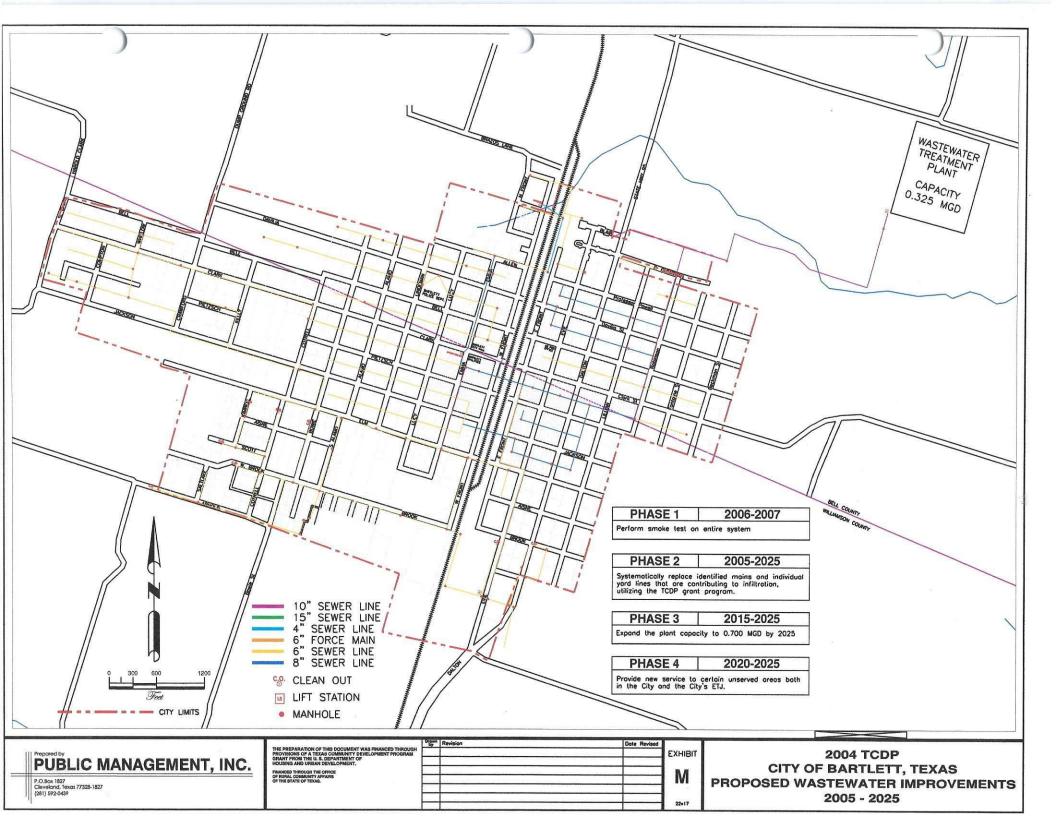
Possible funding sources for proposed improvements to the water system would include Grant funds as might be available through the **Office of Rural Community Affairs** (ORCA) based on a priority rating system conducted annually.

Other sources to be considered by the City of Bartlett are as follows:

Texas State Bonds issued through the Water Development Board (TWDB), Loans from various banks and, Loan and/or grant money from the Department of Agriculture.

The preceding recommendations have been illustrated on Exhibit M.





Storm Drainage System

DRAINAGE SYSTEM

INVENTORY

Introduction

The protection of the City's population from the hazards and inconvenience associated with storm water runoff, both present and future, depends upon the provision of adequate drainage facilities. The public has come to expect that no damage will result to property from storm drainage or high water, and gives no thought to the location of neighborhoods in relation to ground elevation drainage flows, etc., all of which directly affect the surface storm drainage immediately adjacent to homes or business structures. Storm drainage facilities for the City of Bartlett include culverts, bridges, natural drainage channels, and creeks.

It should be noted that any plan is subject to change with changing economic and growth conditions and frequent evaluations should be made in order to prevent the plan from being outdated. Revisions, additions, and deletions should be made as conditions warrant. The following storm frequencies used as the basis of design in this report have been arrived at for the City of Bartlett:

b'to seems	Drainage	a Linns	111100
	LHAIHAU		IIIIES

Design Frequency

Channel improvements and drainage structures for primary Creeks

100 year

Channel improvements and drainage structures for secondary tributaries

25-50 year with emergency 100 year overflow

Relevant climatologic data³⁴

The average annual rainfall is 34.30 inches. Approximately twenty-five percent (25%) of the annual rainfall occurs in May and June. The remaining seventy-five percent (75%) is in small amounts, most of which will be utilized by vegetation or evaporated. Using the yearly average of 34.30 inches, 75% of rainfall equals 26 inches. Since most of this 26" inches occurs during large rainstorms, much of this rain fall is lost as surface water runoff to ditches, ravines, creeks, and rivers. The net result is that annually only a few net inches of rainfall actually can be applied as aquifer recharge. During drought periods, a significant negative recharge can occur.

Previous studies

At present, the only known studies conducted on the storm drainage system are the FIRM Flood Insurance Rate Maps. As mentioned in the Land Use portion of this plan, part of the area has not been mapped by Flood Insurance Rate Maps. This problem makes it difficult for the City to enforce any kind of floodplain restrictions because there is no mapped boundary. It is recommended that the City continue to work diligently with the Federal Emergency Management Agency (FEMA) in an effort to get this resolved.

Project area survey

The project area survey, illustrated on Exhibit "N", shows the location of drainage ways, location of the 100-year flood hazard area, and the identification of areas where localized flooding has occurred.

Existing Drainage Facilities

The City's drainage system is comprised of culverts, bridges, natural drainage channels, creeks, rivers, and lakes.

³⁴ Source: 2005 www.city-data.com

LOCAL STANDARDS

Any drainage project should be the subject of detailed design analysis, working within the framework of the City's engineering design criteria and subdivision ordinance. Some of these criteria include the following:

A drainage plan for each subdivision shall be prepared by the Developer and approved by the City Engineer. Such plan shall adequately provide and assume both upstream and downstream buildout within the watershed in which the property is located. The plan and improvements shall include improved drainage channels and systems, culverts, retention and detention ponds, as are reasonably necessary to prevent flooding within the subdivision and, to the extent consistent with good engineering practices to not increase the volume or flow of water from the subdivision onto adjoining property, during a 100 year storm event.

Open Channels

Except where intolerable flooding conditions are anticipated, it would be desirable, from an aesthetic standpoint to allow the streams to use their natural channels. The City of Bartlett's drainage system is comprised of open channels. Improvement would be limited to clearing out underbrush and sediment, minor corrective work where channel restrictions or irregularities occur, and drainage structures required at channel crossings. The scenic beauty of a properly cleared and maintained natural watercourse is a civic asset.

Storm Water Storage

Storage of excess urban storm runoff is one of the most promising methods available in preventing urban flood damage. With the use of storm water storage, the time of concentration for some areas can be increased over one hundred percent. Storm runoff storage with reduced release rates can hold downstream flood flows to within the safe conveyance capacity of the storm sewer and stream system. In most cases, it can be shown that storage is more economical than increasing downstream conveyance capacity.

Storage facilities should be planned and designed to assure an effective and efficient operation and maintenance program.

Retention and detention are two generalized types of storm runoff storage used to control flooding. Retention storage refers to storm runoff collected and stored for a significant period and released or used after the storm runoff has ended. Retention storage usually consists of "wet reservoirs" which often have agricultural, recreational, and/or aesthetic value. Detention storage consists of reducing the rate of runoff for a short period of time to reduce peak flows by controlling the discharge through an outlet structure and by extending the period of runoff. There are other types of storm drainage systems available, but the City's needs are being met with the current open ditch system. This drainage plan will focus on improving the City' current system through land management techniques and existing open channels maintenance.

ANALYSIS

List and ranking of existing drainage system problems areas

- 1. The City lacks proper enforcement tools to limit debris in drainage channels;
- 2. The City lacks a proper subdivision ordinance;
- 3. The City lacks a proper maintenance program to keep drainage channels clear.

It is not economically feasible for the City to build expensive flood control facilities, such as dams, so the City's policy should be geared toward mitigation. Mitigation techniques include floodplain restrictions for development, such as the City's new zoning ordinance, retention ponds, detention ponds, and voluntary property buyout programs. It is prudent for the City to steer land intensive development away from flood prone areas. There are other uses for property in flood-prone areas, which includes park land, nature preserve areas and recreational uses. Further development in the City's flood hazard areas could result in increased impervious cover, which increases runoff, and affects the natural ability of the floodplain to function properly. Further development could also endanger the lives of those who choose to live in these areas.

As discussed in the Land Use portion of the Plan, soils in the Bartlett area are moderately well-drained Branson and Houston Black clays. These soils have very slow infiltration rates, high runoff potential, high shrink-swell potential and a high water table. The soils in this area do present potential problems for development; however, these problems can be overcome through proper site preparation.

Historical Drainage Problem Areas

The historical problem areas are noted on Exhibit "N". The problem areas are a result of excessive runoff from storm events.

STORM DRAINAGE PLAN

The goal of the Bartlett storm drainage system plan is to provide a guide for flood control and the improvement of drainage facilities in an economical manner.

Objective 1: Restrict or prohibit subdivision of lands for uses which are dangerous to health, safety or property in times of flood or which, with reasonably anticipated improvements, will cause excessive increases in flood heights or velocities. Pass and enforce the City's Subdivision ordinance.

Timetable (2006-2025)

Objective 2: Pass and enforce the stream-dumping ordinance contained in this plan (Figure 1) by 2006.

Timetable (2006)

Objective 3: Complete the improvements to existing drainage channels illustrated in Exhibit "O".

Timetable (2006-2010)

Probable Costs: \$15,000.00 per channel

SOURCES OF FUNDING

To the extent that limited funds are available, specific improvements could be financed with local General Obligation (Tax) Bonds through the City and public support. In some cases, it may also be possible to obtain some assistance from the Texas Department of Transportation for drainage improvements in conjunction with their major thoroughfares inside the Corporate Limits. Federal funds might be available through the (FEMA) Flood Mitigation Assistance program. Eligible work includes: Acquisition of insured structures and real property; Relocation or demolition of insured structures; Dry flood proofing of insured structures; Elevation of insured structures; Minor, localized structural projects that are not fundable by State or other Federal programs.

FIGURE 1 Sample Stream Dumping Ordinance

AN ORDINANCE PROHIBITING DUMPING AND DEPOSITING MATERIAL IN THE RIVERS, CREEKS, AND DITCHES OF THE CITY OF WATERTOWN.

WHEREAS, the City of Watertown has previously adopted an ordinance prohibiting the throwing of litter and other materials on streets, sidewalks, and other public places; and

WHEREAS, the City of Watertown wants to further prohibit littering or dumping of garbage, refuse, or other materials within its rivers, creeks, and ditches to further protect its drainage system.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WATERTOWN, THAT:

Section 1: Chapter 12- Health and Sanitation of the Watertown City Code is hereby amended by adding a new Section 12-10 to read as follows:

"Sec. 12-10. No person shall throw or place any refuse, paper, trash, glass, nails, tacks, wire, bottles, cans, grass clippings, brush, yard trash, concrete, earthen fill, garbage, containers, or litter or other debris in any ditch, stream, river, or retention basin that regularly or periodically carries surface water runoff. Any persons who deposits any of the above shall remove it or shall cause it to be removed there from immediately."

Section 2: A violation of the foregoing shall be a second degree misdemeanor and punishable per the provisions of State Revised Statutes Ch. 47, para. 12-082 and 12-083.

Section 3: In the event that the City of Watertown deems it necessary to bring civil action to enforce the terms of this Ordinance, the violator shall be responsible for all court costs and attorney fees incurred by the City.

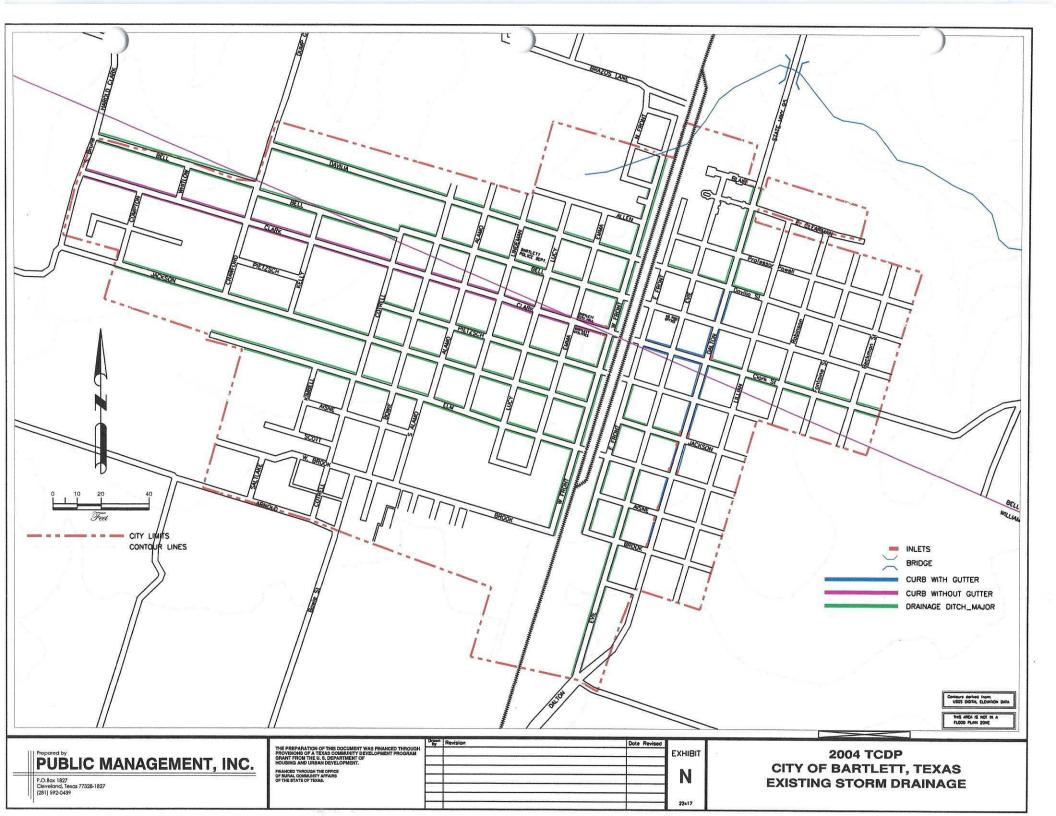
PASSED by the City Council of the City of Watertown, this <u>17th</u> day of <u>October</u>, 20__.

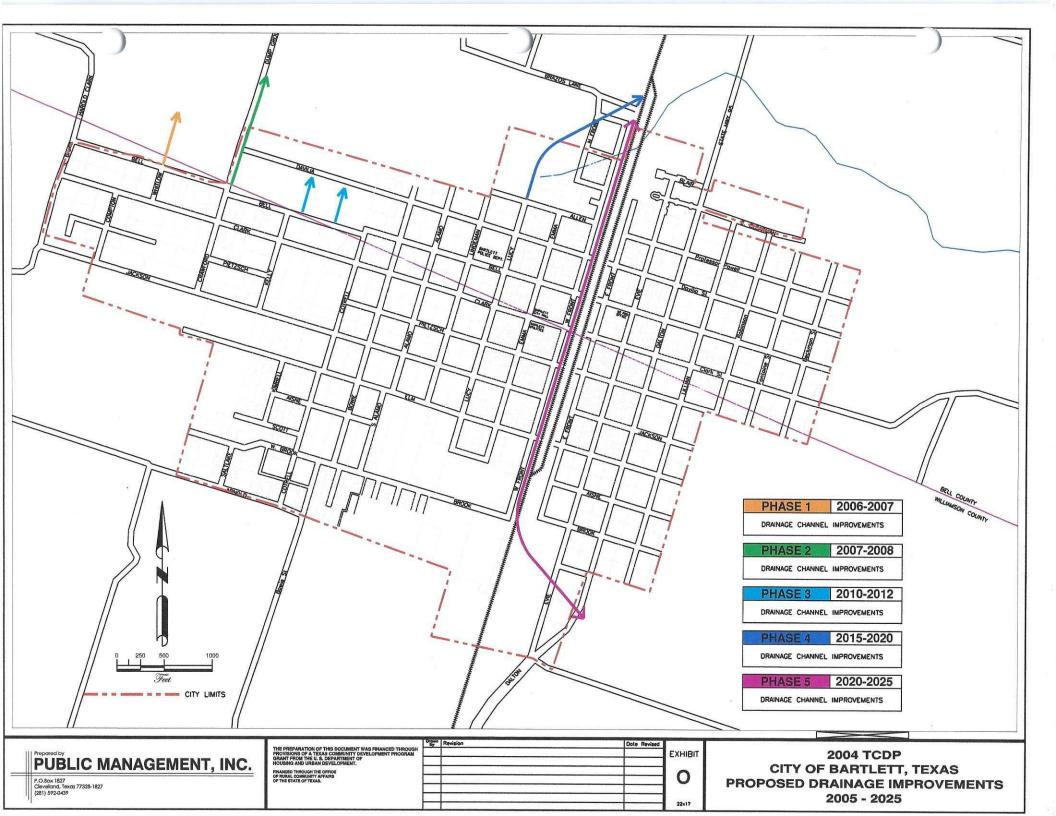
<u>Ronnie Ivall</u>.

Clerk

APPROVED by me this 17th day of October, 20 ~. Richard O'Dell Mayor

ATTESTED and FILED in my office this <u>17th</u> day <u>of October</u>, 20 ~. <u>Ronnie Ivall</u>. Clerk





Recreation & Open Space

RECREATION AND OPEN SPACE

INTRODUCTION

The City of Bartlett was incorporated in 1900. The city has physically grown at the intersection of F.M. 487 and State Highway 95, which runs north and south. SH 95 serves as the main thoroughfare, not only for Bartlett, but also for the entire region. The city is strategically located in the center of two metropolitan statistical areas: Austin and Killen-Temple-Fort Hood.

Table 30³⁵
City of Bartlett
2000 U.S. Census Characteristics

Characteristic	Number	Percent
Male	799	47.7
Female	876	52.3
Median Age (years)	35.9	
Under 5 years	127	7.6
18 years and over	1,184	70.7
65 years and over	317	18.9
Average household size	2.78	
Occupied housing units	571	89.5
Owner occupied	386	67.6
Renter occupied	185	32.4
Remei occupica	165	34.4
High school Graduate or higher	642	59.8
Bachelor's degree or higher	143	13.3
Median household income	\$26,094	
Per Capita income	\$12,649	
White	742	51.6
	743	51.6
Black	310	21.5
Hispanic	383	26.6
American Indian	0	0.0
Asian	2	0.2
Other	1	0.1

³⁵ Source: 2000 United States Census

As mentioned in the population study, the City had solid growth in the 1990s and the early part of the current decade. This growth was probably due to the small town atmosphere and the fact that the City is strategically located near the metropolitan statistical area of Austin. The City's future growth will eventually be determined based on the City's ability to attract industry and commercial development. It is likely that the residential expansion will be accelerated in and around the City within the next ten years.

RECREATION AND OPEN SPACE INVENTORY

The City currently has one (1) Neighborhood Park (City Pool) that services the entire community, one (1) Sports Complex (City of Bartlett Baseball Complex) and one (1) School Park (High School football and baseball fields). The following tables show these facilities:

Table 31³⁶
Public
Inventory of Recreation and Open Space Facilities

Name and Location	Туре	Facilities and Use
Bartlett City Park	Outdoor Park	 Picnic Tables-2 Swimming Pool-1 ½ Basketball Court-1
Bartlett Library	Educational	• ½ Basketball Court-1

Table 32³⁷
Bartlett I.S.D.
Inventory of Recreation and Open Space Facilities

Name and Location	Туре	Facilities and Use
Bartlett High School	Educational	Football Stadium-1Baseball Field-1

³⁶ Source: 2004 Public Management field survey

³⁷ Source: 2004 Public Management field survey

Table 33³⁸

Private

Inventory of Recreation and Open Space Facilities

	Name	e and Loca	tion	Туре		Facilities and Use
City Comp		Bartlett	Baseball	Sports Complex	•	Baseball Fields-3 Concession stands-1 Playscapes-2 Parking area-1

Just outside the City's current corporate limits, there are a number of facilities that serve the community. These facilities include Dell Diamond, home of the Round Rock Express minor league baseball team, Bell County Exposition Center, and Granger Lake.

ANALYSIS

Level of Service Standards and Criteria

The needs for this plan were determined based on standards set forth by the National Recreation and Park Association (NRPA), the resources currently owned by the City, and the knowledge and experience of community leaders. The needs were conceptualized into goals and objectives, and presented in this plan. The City of Bartlett defined the following concepts and standards for open space and recreation:

- a. There should be at least one acre of public open space and recreation for each one hundred persons within the City limits of Bartlett.
- b. There should be natural areas designated, for use as nature parks and greenbelts, throughout the City and current ETJ.

Standard "a" was developed by the National Parks and Recreation Association (NRPA) and is generally accepted. The following park classification system follows the standards set forth by the NRPA. The general standards set forth by the NRPA are generally viewed as a guide and address minimum, not maximum goals to be achieved.

³⁸ Source: 2004 Public Management field survey

Table 34³⁹
Park Classification System

Туре	Description			
Mini-Park	Addresses limited, isolated or unique recreational needs. May be either active or passive, but speak to a specific need rather than a population density.			
Neighborhood Park				
Community Park	Larger than neighborhood parks and serve several neighborhoods. May include areas for intense recreation activity, such as competitive sports. Should also be areas for passive recreation, such as walking.			
Sports Complex	Consolidates heavily programmed athletic fields and associated facilities to larger and fewer sites located strategically throughout the community.			
Special Use areas	Specialized or single use facilities			
Greenways/Linear Parks	Can be built along creek corridors, easements, public rights-of-way and floodplains to effectively tie all of the parks together to form a system.			
Natural Resource Areas	Environmentally sensitive lands set aside for the preservation significant natural resources, and open space.			
School-Park	Combination park and school site. Combines resources of two public agencies.			

Table 35⁴⁰
Park Acreage Standards

Туре	Size/Acres	Service Area	Acres/1000 Population	
Mini-Park	2,500 sf-1 ac.	Less than ¼ mile from neighborhood	0.25-0.5 ac.	
Neighborhood Park	5-10 ac.	One neighborhood ¼ to ½ mile radius	1.25-1.5 ac.	
Community Park	As needed for desired uses, usually between 30-50 ac.	Several neighborhoods ½ mile to 3 mile radius	5.0-8.0 ac.	
Sports Complex	Minimum of 25 ac., with an optimal size of 40-80 ac.	1 hour driving time	Variable	

 $^{^{\}rm 39}$ Source: -National Recreation and Park Association (NRPA) standards

 $^{40\,}$ Source: -National Recreation and Park Association (NRPA) standards

Table 35⁴¹ cont. Park Acreage Standards

Special Use Areas	Varies	No applicable standard	Variable
Greenways/Linear Park	Sufficient width to protect the natural resource and provided maximum use	No applicable standard	Variable
Natural Resource Area	Resource availability and opportunity	Variable	Variable
School Park	Variable-depends on function	Variable	Variable

Needs Assessment and Identification

The City currently has one (1) Neighborhood Park (City Pool) that services the entire community, one (1) Sports Complex (City of Bartlett Baseball Complex) and one (1) School Park (High School football and baseball fields). Through this plan, the City hopes to provide for pocket parks and natural areas throughout the community. The City's current park system is adequate for the population size of the City. The needs assessment for this particular plan was based on accepted standards, as stated above, and the resources currently owned by the City. The two approaches used by the City, standard-based and resource-based, are accepted by Texas Parks and Wildlife as legitimate needs assessment techniques. The resources available to the City include property and natural features.

PLAN DEVELOPMENT PROCESS

In 2004, the City employed the firm of Public Management from Bartlett, Texas, to do some comprehensive planning for the City in which one of the planning elements was for parks, open space and recreation. The City held public meetings and workshops during the contract period, including a public hearing on April 24, 2006. Other meeting dates included 3/27/06 and 4/10/06. The purpose of these meetings was to facilitate public participation in the planning process.

⁴¹ Source: -National Recreation and Park Association (NRPA) standards

The following is a prioritized parks, recreation and open space needs assessment and identification, and the approaches used to determine them:

- a. Establish pocket parks within developed subdivisions throughout the community. (standard-based)
- Designate natural areas for use as nature parks and greenbelts, throughout the City. (resource-based)
- c. Establish pocket parks within new subdivisions. (standard-based)

GOALS AND OBJECTIVES

Goal 1: Provide for neighborhood pocket parks in developed subdivisions throughout the City.

Time period for meeting goal: (2005-2025)

Objectives

- 1. Identify vacant lots in developed subdivisions.
- 2. Build and keep an inventory of these available lots.
- Acquire vacant lots in developed subdivisions through donations or purchasing tax trust properties.
- 4. Utilize funding options, such as the Texas Recreation Parks Account Program Small Communities Grant, from the Texas Parks and Wildlife Department. This program provides matching funds in the amount of 50% of the project up to \$50,000. Therefore, the project maximum would be \$100,000.00. The City could use the acquisition of the land as matching funds.

Goal 2: Designate natural areas for use as nature parks and greenbelts, throughout the City.

Time period for meeting goal: (2005-2025)

Objectives

1. Identify available properties. Sources should include tax trust properties,

current City inventory, and lots with dilapidated structures.

2. Develop these vacant lots as passive parks. The parks could include

interpretive trails, butterfly gardens, xeriscape displays, and wildlife

lookouts.

Goal 3: Provide for future neighborhood pocket parks in Bartlett and the

surrounding ETJ.

Time period for meeting goal: (2005-2025)

Objectives

1. Enforce the City subdivision ordinance, which requires developers to set aside

land for use as open space and recreation.

2. Utilize funding options, such as the Texas Recreation Parks Account Program

Small Communities Grant, from the Texas Parks and Wildlife Department.

This program provides matching funds in the amount of 50% of the project up

to \$50,000. Therefore, the project maximum would be \$100,000.00. The City

could use the acquisition of the land as matching funds.

PLAN IMPLEMENTATION & PRIORITIZATION OF NEEDS

The City intends to meet its parks, recreation and open space goals and objectives

through budgetary responsiveness of the City Council to this plan. The following

prioritizes the needs previously delineated with a specific plan of action and timetable:

Priority 1: Provide for neighborhood pocket parks in developed subdivisions throughout

the City.

Timetable: 2005-2025

Estimated Costs: \$50,000.00-\$100,000.00

Financial Resources: Texas Parks & Wildlife Small Communities grant, City

in-kind services, funds, donated land, labor, material and equipment.

Priority 2: Designate natural areas for use as nature parks and greenbelts, throughout the City.

Timetable: 2005-2025

Estimated Costs: \$25,000.00-\$50,000.00

Financial Resources: Texas Parks & Wildlife Small Communities grant, City

in-kind services, funds, donated land, labor, material and equipment.

Priority 3: Provide for future neighborhood pocket parks in Bartlett and the surrounding ETJ.

Timetable: 2005-2025

Estimated Costs: \$50,000.00-\$100,000.00 per park

Financial Resources: Texas Parks & Wildlife Small Communities grant, City in-kind services, funds, donated land, labor, material and equipment.

All of the above facilities would be operated and maintained by the City of Bartlett.

