



**NOTICE OF A REGULAR MEETING  
CAPITAL IMPROVEMENTS ADVISORY COMMITTEE  
TUESDAY, SEPTEMBER 12, 2023, AT 11:30 AM  
SECOND FLOOR CITY HALL BUILDING  
CONFERENCE ROOM 2A  
200 W. VULCAN STREET  
BRENHAM, TEXAS**

**1. Call Meeting to Order**

**2. Public Comments**

*[At this time, anyone will be allowed to speak on any matter other than personnel matters or matters under litigation, for length of time not to exceed three minutes. No Board discussion or action may take place on a matter until such matter has been placed on an agenda and posted in accordance with law.]*

**CONSENT AGENDA**

**3. Statutory Consent Agenda**

The Statutory Consent Agenda includes non-controversial and routine items that the Commission may act on with one single vote. A Commissioner may pull any item from the Consent Agenda in order that the Commission discuss and act upon it individually as part of the Regular Agenda.

**3-a. Minutes from the July 24, 2023 Capital Improvements Advisory Committee (CIAC) meeting.**

**REGULAR AGENDA**

**4. Presentation and Discussion by Strand Associates, Inc. Concerning the Impact Fee Development Process, Updated Land Use Assumptions, and Draft Roadway Capital Improvement Plan Projects.**

**5. Adjourn**

***CERTIFICATION***

I certify that a copy of the September 12, 2023 agenda of items to be considered by the Capital Improvements Advisory Committee was posted to the City Hall bulletin board at 200 W. Vulcan, Brenham, Texas on September 8, 2023 at 11:30 a.m.

*Kim Hodde*

\_\_\_\_\_  
Kim Hodde, Planning Technician

**Disability Access Statement:** This meeting is wheelchair accessible. The accessible entrance is located at the Vulcan Street entrance to the City Administration Building. Accessible parking spaces are located adjoining the entrance. Auxiliary aids and services are available upon request (interpreters for the deaf must be requested twenty-four (24) hours before the meeting) by calling (979) 337-7567 for assistance.

I certify that the attached notice and agenda of items to be considered by the Capital Improvements Advisory Committee was removed by me from the City Hall bulletin board on the \_\_\_\_\_ day of \_\_\_\_\_, 2023 at \_\_\_\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**CITY OF BRENHAM**  
**CAPITAL IMPROVEMENT ADVISORY COMMITTEE**  
**July 24, 2023**

*The meeting minutes herein are a summarization of meeting procedures, not a verbatim transcription.*

The first regular meeting of the Capital Improvements Advisory Committee (CIAC) was held on July 24, 2023, at 3:30 pm in the Brenham Municipal Building, Conference Room 2A, at 200 West Vulcan Street, Brenham, Texas.

Committee Members present:

M. Keith Behrens, Chairman  
Darren Heine, Vice-Chairman  
Blake Brannon  
Chris Cangelosi  
Calvin Kossie  
Cayte Neil  
Dr. Paul LaRoche

Committee Members absent:

Deanna Alfred  
Artis Edwards, Jr.  
Randy Hodde  
Lindi Braddock

Staff present:

Stephanie Doland  
Shauna Laauwe  
Debbie Gaffey  
Tim McRoberts  
Daniel McCracken

Strand Associates:

Ryan Tinsley  
Jared Engelke  
Molly Goff  
Kelly Hajek  
Dwayne Gajewski

Citizens / Media present:

None

**1. Call Meeting to Order**

The meeting was called to order at 3:30 pm with a quorum of seven (7) Commissioners present.

**2. Public Comments**

There were no public comments.

## REGULAR SESSION

### 3. Election of a Chair and Vice Chair to Serve for the 2023 – 2024 Calendar Years.

A motion was made and seconded to appoint M. Keith Behrens and Darren Heine as Chair and Vice-Chair, respectively, for the 2023-2024 Calendar years. The motion carried unanimously.

### 4. Presentation and Discussion by Strand Associates, Inc. Concerning the Impact Fee Development Process, Capital Improvements Advisory Committee Roles and Responsibilities, and Draft Land Use Assumptions, Including Service Area Definitions, Land Use Changes, and Population Densities and Projections.

The City of Brenham hired Strand Associates to evaluate and implement impact fees for water, wastewater, and roadways. Strand Associates gave a work session presentation that included the following items:

- What is an impact fee?
- Impact fee development process
- Capital Improvements Advisory Committee (CIAC) roles and responsibilities
- Land use assumptions (LUA's)
- Schedule and Next steps

What is an impact fee? An impact fee is a charge or assessment imposed by a City to generate revenue to fund or recoup costs of capital improvements or facility expansions associated with new development. Impact fees are governed by Chapter 395 of the Texas Local Government Code.

The Impact Fee Development Process provides multiple opportunities for input and comment. The proposed steps are as follows:

1. Form CIAC
2. Prepare draft Land Use Assumptions with City Staff.
3. Present draft Land Use Assumptions to CIAC. [This is the current step]
4. Incorporate CIAC comments into updated Land Use Assumptions and prepare draft CIP's.
5. Present updated Land Use Assumptions and draft CIP's to CIAC.
6. Incorporate CIAC comments into updated CIP's. \*
7. Public Hearing for Approval of Land Use Assumptions and CIP's.
8. Prepare draft Impact Fees.
9. Present draft Impact Fees to CIAC.
10. CIAC to make a formal recommendation to City Council.
11. Public Hearing for Approval of Impact Fees.
12. Adoption of Impact Fee Ordinance.

CIAC Responsibilities:

- Recommend LUA's, CIP's, and impact fees to City Council.
- Review CIP's and file written comments.
- Monitor implementation of the CIP.
- File semi-annual progress reports.
- Make recommendations and advise the City Council of the need to update or revise the LUA's, CIP's, and impact fees.

Appropriate development of LUA's deliver a strong foundation for the Impact Fee process:

- LUA's: description of the service area and the projections of changes in land uses, densities, and population in the service area over a 10-year period.
- This process includes working with City Staff throughout the process, integration of known and anticipated future developments, incorporation of population trends and density projections from state planning entities and other available data.
- Present draft LUA's to CIAC and incorporate feedback.

Systemwide LUA map defines the Service Area for Water and Wastewater Improvements:

- The 2019 Comprehensive Plan maps, both existing and future, were used as a foundation.
- The City limits and ETJ boundaries were updated to account for recent annexations.
- Future development was shown using hatching for residential, commercial, and industrial land uses.

Population Density Assumptions:

- Initial density assumptions:
  - 52% acreage usable for residences
  - 48% usable for streets, drainage, and open spaces
  - Single-family residential = 6 units per acre
  - Multi-family residential = 20 units per acre
  - Estate residential = 3 units per acre
  - U.S. Census Bureau = 2.36 people per household
- Population density example:
  - 100-acre single family residential development
  - 52-acres available for residential use
  - 312 single family residences assumed
  - Population increase = 736 people

Comprehensive Plan Methodology:

- Four methodologies are used to project population growth and are tied closely to the Texas Water Development Board and historical growth trends.
- The current population of 18,549 was not anticipated to be achieved until between 2027 and 2034, depending on methodology use.
- Higher population projection may be needed based on known and anticipated future developments.

Water Study considered as basis for LUA population projections

- Water study's population projections:
  - +4.0% annually for the first 8-years
  - 0.25% annual growth rate reduction for years 9-20 (i.e., 3.75%, 3.50%, ...)
  - Results in a 20-year population of 32,660
- Systemwide LUA's population projections:
  - Full build-out yields a population growth of 14,514
  - Results in a 20-year population of 33,063
  - 57% within City limits; 43% in ETJ boundary area.

Smaller Service Areas improve likelihood that Roadway Impact Fees are spent on nearby improvements.

- Service areas are limited to City limits and cannot exceed 6-miles in length. Given that the City limits of the City of Brenham are not greater than 6-miles across one service area could be adopted to allow for a single uniform Roadway Impact Fee. This would likely increase the timeline associated with completing an improvement project based on fees assessed.
- Roadway CIP projects are required to:
  - Be on an approved Thoroughfare Plan
  - Be classified as a collector or arterial
  - Increase roadway capacity by adding lanes
- 18 potential projects have been identified that meet the criteria.

Next Steps with anticipated dates:

- CIAC Presentation No. 1 – draft Land Use Assumptions – July 24, 2023
- CIAC Presentation No. 2 – updated Land Use Assumptions and draft CIP’s – September 25, 2023
- City Council – Public Hearing for Approval of Land Use Assumptions and CIP’s – November 2, 2023
- CIAC Presentation No. 3 – Draft Impact Fees – November 27, 2023
- City Council – Public Hearing for Approval of Impact Fees – January 4, 2024
- City Council – Adopt Impact Fee Ordinance (First Reading) – January 18, 2024

As a work session item, no formal action was taken.

**5. Adjourn.**

A motion was made to adjourn the meeting at 5:35 pm. The motion carried unanimously.

*The City of Brenham appreciates the participation of our citizens, and the role of the Capital Improvements Advisory Committee (CIAC) in this decision-making process.*

*Certification of Meeting Minutes:*

\_\_\_\_\_  
Capital Improvements Advisory Committee

M. Keith Behrens  
Chair

September 12, 2023  
Meeting Date

\_\_\_\_\_  
Attest

Kim Hodde  
Staff Secretary

September 12, 2023  
Meeting Date



Strand Associates, Inc.®

1906 Niebuhr Street

Brenham, TX 77833

(P) 979.836.7937

www.strand.com

August 18, 2023

Ms. Stephanie Doland, Director of Development Services  
City of Brenham  
200 West Vulcan Street  
Brenham, TX 77833

Re: Service Areas, Land Use Assumptions, and Population Projections Technical Memorandum  
City of Brenham, Texas

Dear Ms. Doland:

Enclosed is the final Service Areas, Land Use Assumptions, and Population Projections Technical Memorandum.

Please call me at 979-836-7937 should you have any questions.

Sincerely,

STRAND ASSOCIATES, INC.®

Ryan D. Tinsley, P.E., ENV SP

Enclosure: Report

TBPE No. F-8405  
TBPLS No. 10030000

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# Technical Memorandum for City of Brenham, Texas

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Service Areas, Land Use Assumptions, and  
Population Projections



Prepared by:

STRAND ASSOCIATES, INC.®  
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August 2023





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### *APPENDICES*

- APPENDIX A—FUTURE LAND USE MAP
- APPENDIX B—ROADWAY IMPACT FEE SERVICE AREA

## INTRODUCTION

This Technical Memorandum (Memorandum) evaluates the City of Brenham, Texas (City) water, wastewater, and roadway facility service areas, existing and future land use assumptions, and population projections to accommodate future development.

Strand Associates, Inc.<sup>®</sup> (Strand) appreciates the opportunity to assist the City in establishing water, wastewater, and roadway facility service areas, prepare population projections, and evaluate existing and future land use assumptions as part of the 2023 Impact Fee Study. Texas Local Government Code Chapter 395 (Chapter 395) authorizes the assessment of impact fees in Texas for water, wastewater, and roadway-related capital improvement plan (CIP) projects. The requirements of Chapter 395 will be followed to develop impact fees for the 2023 Impact Fee Study.

## WATER AND WASTEWATER SERVICE AREAS

Existing water and wastewater service areas can generally be determined from the location of the respective mains. Chapter 395 allows the City limits as well as the City's extraterritorial jurisdiction (ETJ) to be considered the service area for water and wastewater facilities. Strand understands that the City prefers to include the City's ETJ within the water and wastewater service area. The dashed outer boundary in the Future Land Use map in Appendix A shows the City's ETJ and the limits of the water and wastewater service area. The service units for water and wastewater improvements will be assessed in terms of residential equivalent connections (REC), or the volume of water used by a standard 5/8-inch water meter during a 1-day period. Single-family residential units are equivalent to one REC. Multifamily residential, commercial, and industrial units will be adjusted to reflect their respective demand on the water and wastewater distribution and collection systems and in accordance with the ratio to 5/8-inch meter as established by the American Water Works Association (AWWA).

## ROADWAY FACILITY SERVICE AREAS

Chapter 395 defines roadway service areas differently than water and wastewater service areas. Roadway service areas can be no more than 6 miles and are confined to the existing City limits. The Roadway Impact Fee Service Area Map in Appendix B shows that one roadway service area encompassing the entirety of the City limits is being evaluated for the 2023 Impact Fee Study.

The service units for roadway improvements will be assessed as the number of vehicle-miles. A vehicle-mile is the capacity consumed in a single lane in the PM peak hour by a vehicle making a trip 1 mile in length. The PM peak hour is used as a basis for transportation planning and the estimation of trips caused by new development.

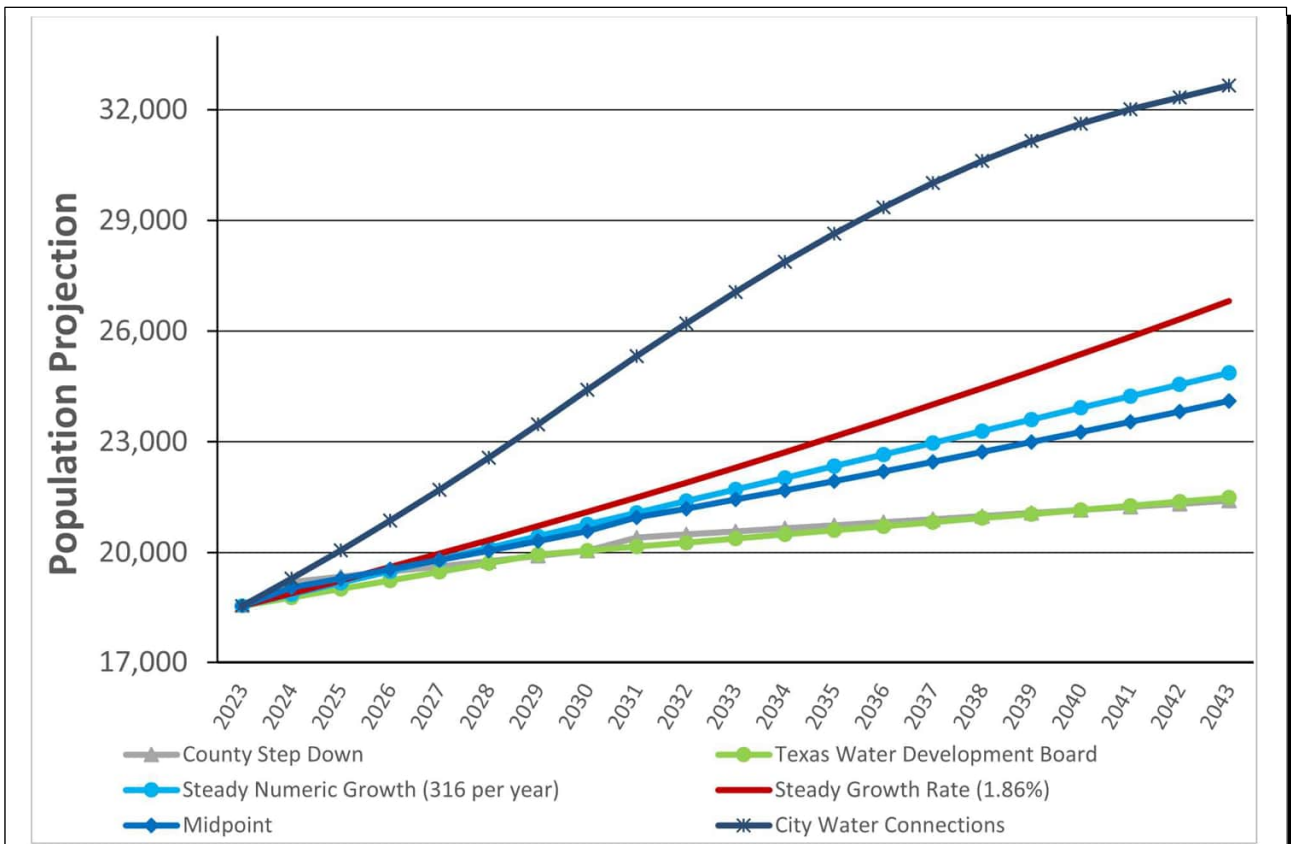
## EXISTING AND FUTURE LAND USE ASSUMPTIONS

The Future Land Use map in Appendix A was created using the City's Existing and Future Land Use maps from the 2019 Comprehensive Plan as a foundation. Before updating the land uses to match what has been developed since 2019, the current City limits and ETJ were updated to reflect tracts of land that have been annexed since the 2019 land use maps were created. The parcels in the 2019 Future Land Use map were reviewed and updated based on their current land uses as of

June 2023. Parcels that were found to be developed as of June 2023, had their land use updated to be consistent with their use. The properties that are undeveloped or currently being developed are hatched to show the future land use (residential, commercial, or industrial). See Appendix A for the Future Land Use map.

**POPULATION PROJECTIONS**

From 1970 through 2020, the City averaged a modest population growth rate of approximately 1.35 percent according to the United States Census Bureau and the City’s 2019 Comprehensive Plan. From 2020 to 2023, the City saw a growth rate of 2.22 percent and, for the next 10 years, the City is anticipating growth between 3.25 and 4.00 percent. Growth rates between 1.00 and 3.00 percent are anticipated for the 10-year period from 2033 to 2043. These growth rates were used to develop the population projections shown in Figure 1.



**Figure 1 Population Projections**

The five lower 20-year population projections in Figure 1 were modeled using the same methodologies that were used in the City’s 2019 Comprehensive Plan population projections. The 2019 Comprehensive Plan models were recalculated to reflect more recent rates and were updated appropriately.

- County Step Down—This method assumed the population of the City reflects a percentage of the projected population of Washington County, Texas (County) in a given year. The graph in Figure 1 assumes that the City accounts for approximately 52.5 percent of the total population of the County. This percentage comes from the Texas Water Development Board (TWDB) projections for the City and County.
- TWDB—This government organization creates its own projections for cities at the beginning of every decade (i.e., 2020, 2030, 2040, and continuing) based on the number of projected water connections across the state of Texas. TWDB projections have been updated since the development of the 2019 Comprehensive Plan and updates are reflected in Figure 1.
- Steady Numeric Growth—This linear model assumes that the population will increase by approximately 316 people each year. This was the average growth per year from 2018 to 2023.
- Steady Growth Rate—This exponential model is based on the 1.86 percent compound annual growth rate (CAGR) the City had from 2018 to 2023.
- Midpoint—This model takes the average population from the lower County Step Down projection and the higher Steady Growth Rate projection.

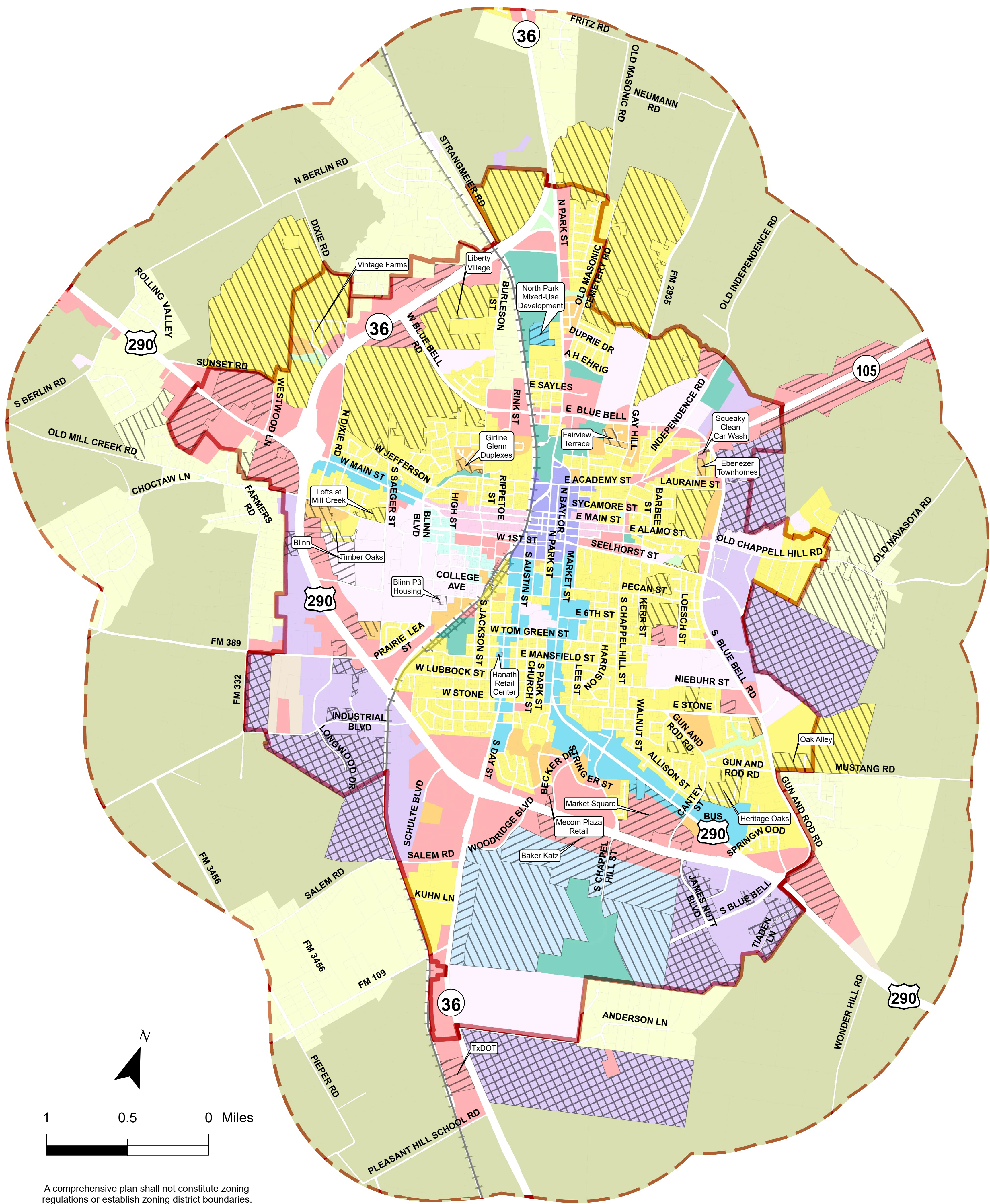
Strand has recently worked with the City to evaluate its water system and, in doing so, has prepared an additional population projection based on the number of projected water connections that the City anticipates adding to the water distribution system over the next 20 years. The City has reviewed these new projections and has accepted them for the purposes of planning for future growth as it relates to its water expansion study and the 2023 Impact Fee Study.

## CONCLUSION

This Memorandum has presented information for the City's water, wastewater, and roadway service areas, existing and future land use assumptions, and revised 20-year population projections to accommodate future growth and development as it pertains to the 2023 Impact Fee Study.

**APPENDIX A  
FUTURE LAND USE MAP**

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## Brenham, TX Future Land Use

### Legend

#### Future Land Use Plan

- Rural
- Open Space
- Park
- Estate Residential
- Single Family Residential
- Manufactured Homes
- Multi-Family Residential

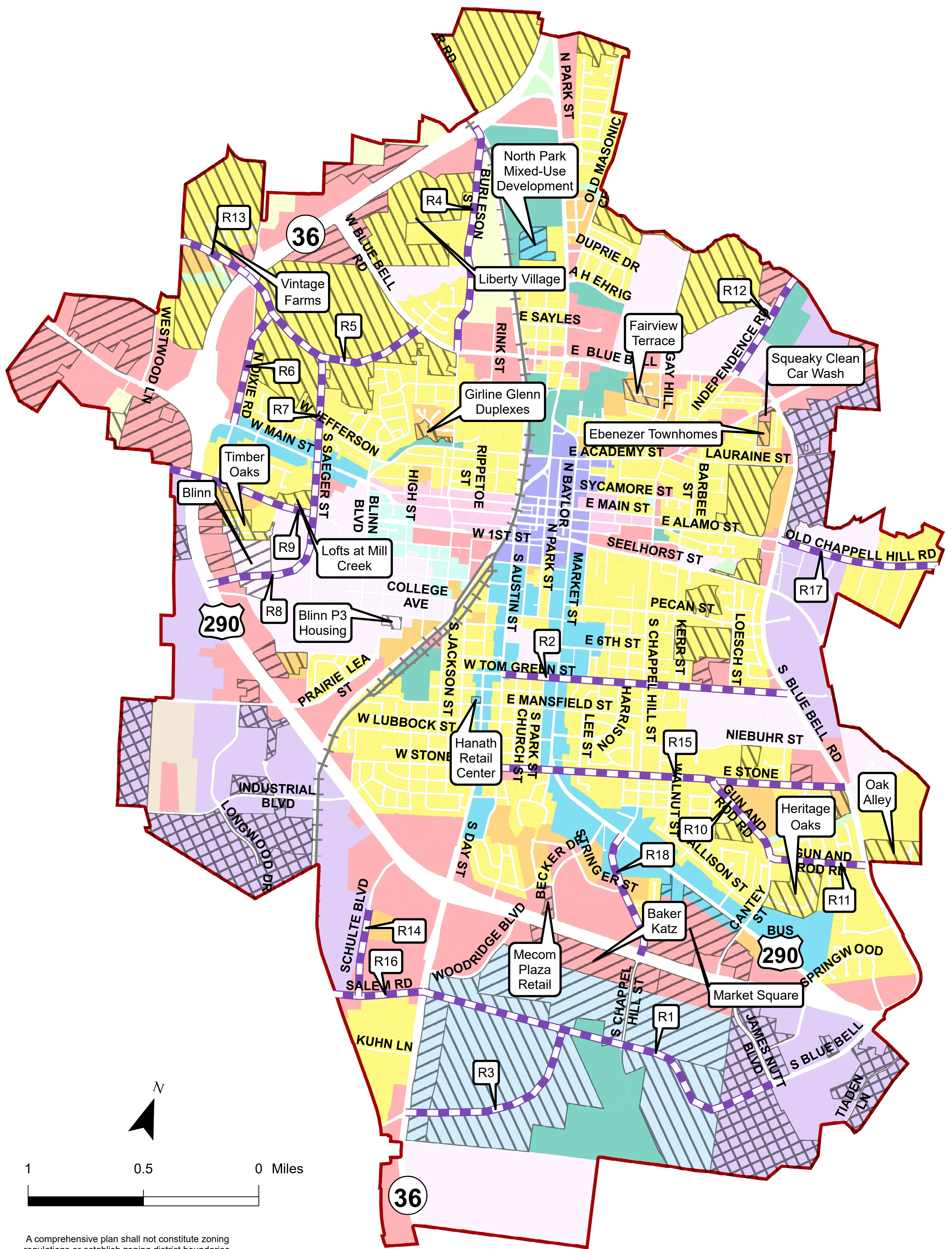
- Mixed Use Blinn Adjacent
- Mixed Use Downtown Adjacent
- Corridor Mixed Use
- Planned Development
- Downtown
- Local Public Facilities
- Commercial
- Industrial

#### City Limits

- ETJ
- Railroad
- Future Commercial
- Future Industrial
- Future Residential

**APPENDIX B**  
**ROADWAY IMPACT FEE SERVICE AREA**

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A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

## Brenham, TX Roadway Impact Fee Service Area

### Legend

- |  |                             |  |
|--|-----------------------------|--|
| <b>Future Land Use Plan</b>  | Mixed Use Blinn Adjacent    | <span style="border: 1px solid red; padding: 2px;"> </span> <b>City Limits</b>   |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #d4edda; border: 1px solid #c3e6cb; margin-right: 5px;"></span> Rural                     | Mixed Use Downtown Adjacent | <span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></span> <b>Railroad</b>            |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #d1ecf1; border: 1px solid #bee5eb; margin-right: 5px;"></span> Open Space                | Corridor Mixed Use          | <span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></span> <b>Future Commercial</b>  |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #d1ecf1; border: 1px solid #bee5eb; margin-right: 5px;"></span> Park                      | Planned Development         | <span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></span> <b>Future Industrial</b>   |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #fff3cd; border: 1px solid #ffeeba; margin-right: 5px;"></span> Estate Residential        | Downtown                    | <span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></span> <b>Future Residential</b> |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #fff3cd; border: 1px solid #ffeeba; margin-right: 5px;"></span> Single Family Residential | Local Public Facilities     | <span style="display: inline-block; width: 15px; height: 10px; border-bottom: 2px dashed purple; margin-right: 5px;"></span> <b>Roadway CIP Projects</b>   |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #fff3cd; border: 1px solid #ffeeba; margin-right: 5px;"></span> Manufactured Homes        | Commercial                  |  |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #fff3cd; border: 1px solid #ffeeba; margin-right: 5px;"></span> Multi-Family Residential  | Industrial                  |  |