MONT BELVIEU MAIN
LIVABLE CENTERS STUDY

PREPARED FOR H-GAC AND THE CITY OF MONT BELVIEU
NOVEMBER 2018

"DOWNTOWN LIVING, HOMETOWN LIFE"

PREPARED BY
DESIGNWORKSHOP
918 CONGRESS STREET
HOUSTON, TEXAS 77002
713.227.0862

ACKNOWLEDGEMENTS

CITY OF MONT BELVIEU

NATHAN WATKINS - *CITY MANAGER*

KENNETH BARNADYN - *CITY PLANNER*

RICARDO VILLAGRAND - *CITY ENGINEER*

SCOTT SWIGERT - *ASSISTANT CITY MANAGER*

BRIAN LIGON - *MARKETING COORDINATOR*

HOUSTON - GALVESTON AREA COUNCIL

CHERYL MERGO - *MANAGER*

ANITA HOLLMANN - *PLANNER*

CLINT MCMANUS - *PLANNER*

CONSULTANTS

DESIGN WORKSHOP

CLAIRE HEMPEL - *MANAGING PRINCIPAL*

JASON FICHT - *URBAN DESIGN LEAD*

TARANA HAFIZ - *PROJECT MANAGER /URBAN DESIGNER*

ALEX HILL - *PROJECT LANDSCAPE DESIGNER*

AMY HARBERT - *DESIGNER*

CDS MARKET RESEARCH

STEVE SPILLETTE - *URBAN DEVELOPMENT STRATEGIST*

BRENDA CRENSHAW - *MARKET ASSESSMENT SPECIALIST*

MIKE PRATS - *MARKET DEMAND ANALYST*

ENGLISH + ASSOCIATES

KATHLEEN ENGLISH - *LEAD ARCHITECT, PRINCIPAL*

TZIVAN VASQUEZ - *DESIGN ARCHITECT*

THE LENTZ GROUP

RUTH HENSHALL - *PUBLIC OUTREACH SPECIALIST*

KATIE HIRSCHHEIM - *PUBLIC OUTREACH SPECIALIST*

SHERWOOD DESIGN ENGINEERS

STEVE ALBERT - *STORMWATER DESIGN ENGINEER*

IDALIA GUERRA - *STORMWATER DESIGN ENGINEER*

PAGE INTENTIONALLY LEFT BLANK

CONTENTS

FIGURES AND TABLES

EXECUTIVE SUMMARY

The City of Mont Belvieu is rapidly growing and currently lacks a commercial and retail node, and with change on the horizon such as new development in the region, the construction of the Grand Parkway and new development coming on-line, now is an opportune time to forge a plan for a new main street and town center - Mont Belvieu Main.

The purpose of this document is to provide a vision for strengthening the community's mobility, housing and commercial infrastructure in an economically and environmentally responsible manner. The Land Use Framework Plan provides a healthy, sustainable, context-sensitive plan that offers diverse housing choices and multi-modal connectivity.

The recommendations herein provide a roadmap to implementation including projects, policies and programs that highlight step-by-step actions, strategies, partners and funding mechanisms to realize each component of the town center and its surrounding environs.

An interconnected and implementable public realm network of sidewalks, trails and well-designed streetscapes increases safety, mobility and quality of life.

VISION + GOALS

VISION

"DOWNTOWN LIVING, HOMETOWN LIFE."

The study recommendations work to create a new main street and city center that will serve as a destination within the community. Mont Belvieu Main will have a mix of uses and contribute to a high quality of life. The project is characterized by vital amenities such as open space and year-round activities, housing choices for all and environmental sensitivity. Varied employment choices and thriving business will be well-connected to the greater community through well-designed sidewalks, trails and streetscapes.

PROJECT HIGHLIGHTS:

- A community supported vision that was developed through public forums such as workshops, online surveys and social media. The project gained over 1,000 impressions, or nearly 15% of the population through the process.
- A mobility framework that encourages multimodal transportation through the integration of Complete Streets
- A public realm framework and guidelines that establish walkable blocks and placemaking principles
- A downtown land use plan that encourages a mix of uses and housing types
- A comprehensive open space network and stormwater Best Management Practices to guide Low Impact Design
- Recommended changes to land use and zoning to allow for mixed use and greater density in the Study Area

GOALS

COMPONENTS OF A FRAMEWORK

Develop a framework that is innovative with place-based recommendations that are economically sound, community supported, environmentally responsible and artfully integrated into the context of Mont Belvieu.

1

PUBLIC REALM: Create vital amenities that address lighting, wayfinding, connectivity, human comfort, parks and cultural venues.

2

MOBILITY: Develop greater mobility through trail connectivity, parking strategies, on-street bike networks and transit options for all.

3

SUSTAINABLE GROWTH + ECONOMY: Guide future development that generates return on investment and creates a localized economy where residents may age in place.

4

FUNDING: Generate funding mechanisms for a catalyst project(s) that will guide the City towards an implementable 5-year plan.

5

INFRASTRUCTURE: Build for resiliency and capacity by integrating infrastructural systems and stormwater management with anticipated population growth.

CATALYST PROJECTS

INFRASTRUCTURE IN SUPPORT OF DEVELOPMENT

The following projects were identified as ways to "kick-start" the development of a Town Center in Mont Belvieu. These are predominantly public projects that provide the City and its civic partners a way to entice development, minimize risk and increase mobility.

1

ARTERIAL ROAD RECONSTRUCTION: Expand FM 565 and Eagle Drive North to accommodate traffic, incentivize retail development and increase mobility options.

2

GREENWAY FRAMEWORK: Implement greenways along easements to develop the mobility framework of the Study Area, leading to an increase in property values and access.

3

MAIN STREET AXIS: Implement Main Street from Eagle Drive to FM 565, including the perpendicular "Mixed-Use Boulevard" that leads to green space and housing.

4

PARKS: Build the drainage park and secure open space to attract development, increase resiliency through stormwater management and incentivize low impact design.

5

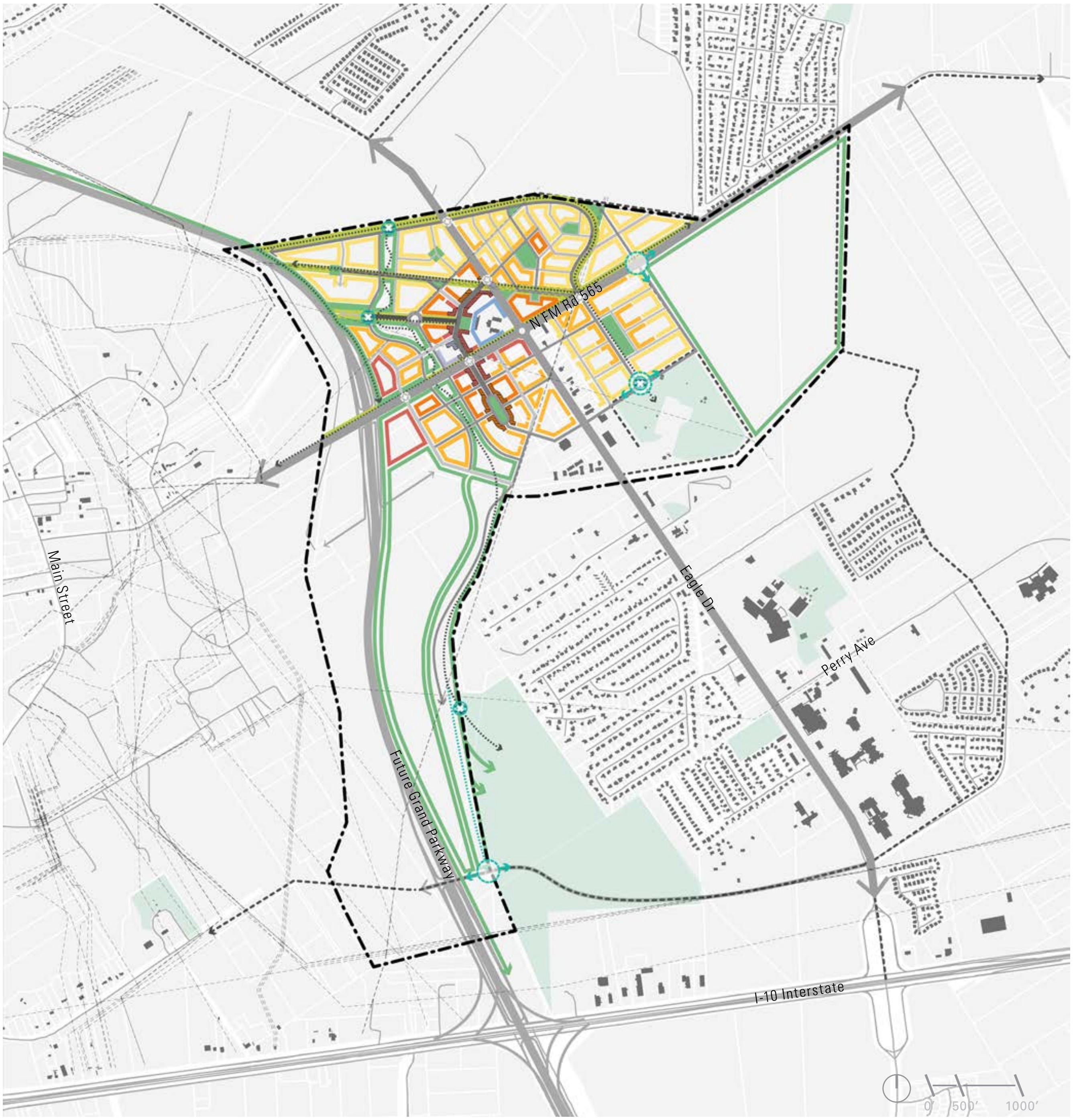
CITY HALL: Renovate/expand City Hall outward towards the town center park. Expansion will accommodate more public services in response to population growth.

STUDY AREA DEVELOPMENT FRAMEWORK

LAND USE SUMMARY

The project proposes a mix of uses with multiple and interconnected mobility options. A more dense and intensely active core is surrounded by less dense land uses. This comprehensive approach to development within the City provides the necessary population support for a thriving town center.

Figure 1: Regulating Plan | Study Area



Study Area
Existing Roadways
Existing Pipelines
Freeways
Proposed Trails (on/off-street)
Proposed Roadways
Proposed Traffic Signals
Trailheads/Connections
Proposed Greenways
Proposed Parks/Open Space
Civic/Institutional
Hospitality/Entertainment
Retail
Main Street Retail
Mixed-use
Multi-family
Single-family

MARKET DEMAND

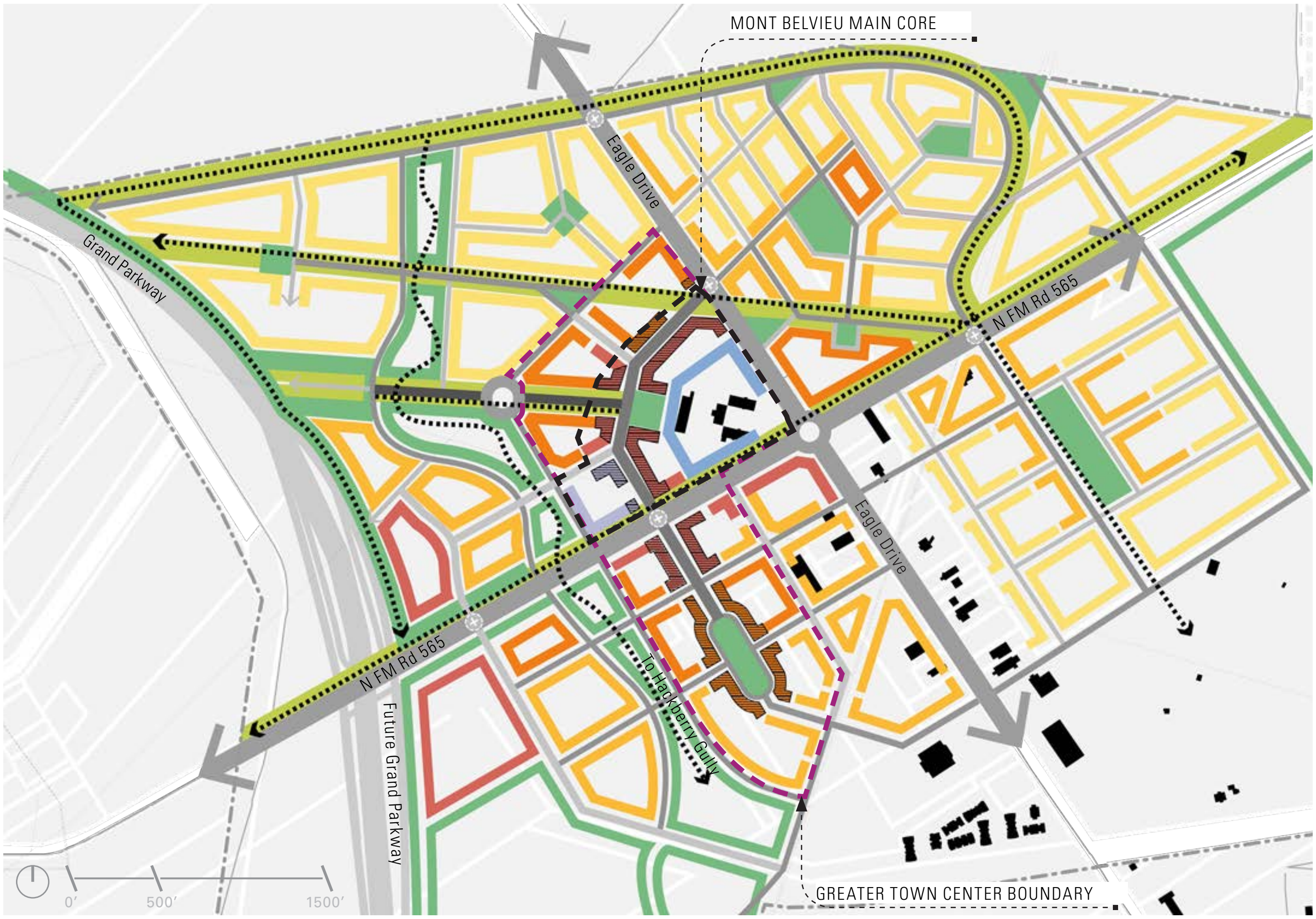
The Market Assessment illustrates that additional retail space marketed to neighborhood level restaurants, bars, entertainment and health/fitness venues would be expected thrive in the Study Area, related in part to the relatively fast growth in residential development and employment in the Study Area. Below is a summary of the demand within the Competitive Market Area (CMA) and the capture rate for the Study Area and the Mont Belvieu Main Town Center. The capture rate is conservative given several factors that make this area more competitive within the CMA.

- The presence of Barbers Hill School District: regarded as one of the best school districts in the state of Texas
- A positive job market in the industrial sector
- Development incentives such as the local STAR Program (Supplemental Detention Criteria)
- Higher than average home values and income ranges relative to the rest of the CMA (see Market Assessment)

LAND USE	POTENTIAL CAPTURE RATE	CMA DEMAND 2020-2030	KEY FACTS
Retail	**17%**	**VARIES**	RETAIL: » Current absorption is positive » Retail Leakage = $22,676,255
Office	**>1%**	**522,288** SQUARE FEET	OFFICE: » Current absorption is negative but expected to grow » Class B and C Market
Industrial	**5%**	**2,192,751** SQUARE FEET	INDUSTRIAL » Study Area is a prime location for additional light industrial such as distribution
Single Family Housing	**4%**	**9,696** UNITS	SINGLE FAMILY » The average home value in Mont Belvieu is 50% higher than the average of the CMA
Multi-Family Housing	**2.5%**	**3,676** UNITS	MULTIFAMILY » Current absorption is positive » Townhomes are a key product for this growing market
Senior Housing	**100%**	**1,467** UNITS	SENIOR HOUSING » As of 2018 only one market rate senior housing complex exists in the CMA » 23% growth rate

TOWN CENTER REGULATING PLAN

Figure 2: Regulating Plan | Town Center



Study Area	Proposed Traffic Signals	Hospitality/Entertainment
Existing Roadways	Mont Belvieu Main Core	Retail
Existing Pipelines	Greater Town Center Area	Main Street Retail
Freeways	Proposed Parks/Open Space	Mixed-use
Proposed Trails (on/off-street)	Proposed Greenways	Multi-family
Proposed Roadways	Civic/Institutional	Single-family

MONT BELVIEU MAIN

The proposal for a new town center, Mont Belvieu Main, within the rapidly growing heart of Mont Belvieu offers a rich opportunity to solidify the identity of Mont Belvieu as a close-knit community that is facing pressures from rapid growth within the region. The regulating plan for the Town Center and the supportive framework plans, proposed development and associated infrastructure will ensure that the small town feel of Mont Belvieu is maintained while providing housing and retail options for a growing population. Within Mont Belvieu Main, City Hall will act as the anchor to the retail and commercial core. The project emphasizes the integration of a town center park at the core of the site to promote activity, extend the public commons and provide a new backyard to the City's nexus of civic life. Additionally, constraints such as pipeline easements and existing drainage areas were considered and helped to drive the layout of the land use plan, ensuring that recommendations are realistic and achievable.

City Hall will act as the anchor to Mont Belvieu Main. The project emphasizes the integration of a town center park at the core of the site to promote activity, extend the public commons and provide a new backyard to the City's nexus of civic life.

1

INTRODUCTION

The goal of the Mont Belvieu Livable Centers study is to create a framework for the implementation of a town center or downtown core that will act as the heart of the City and foster new activity and amenities for a growing population. Currently, many of the residents travel outside of the city limits for basic retail needs and public space. Filling this gap will sustain and supply a growing population with a vital public realm, walkable neighborhoods, diversity in employment and housing options. This chapter will outline a common vision derived from the engagement process, goals needed to achieve a livable community and the study process.

Vision | To create a new main street and city center that will serve as a destination within the community, Mont Belvieu Main will have a mix of uses and contribute to a high quality of life.

WHAT IS A LIVABLE CENTERS STUDY + WHY IS THE CITY CONDUCTING THE STUDY?

Houston-Galveston Area Council (H-GAC) is partnering with the City of Mont Belvieu to conduct this livable centers study. H-GAC works with local communities to identify specific goals and recommendations related to mobility, open spaces, infrastructure, market trends/land use and development. In addition, it encompasses a process by which the community derives a common vision, focuses on places where people can live, work, and play without the reliance on automobiles with an implementation strategy to fulfill a near-term and/or long-term vision. The City is conducting the study to:

- Improve multimodal access to and within City.
- Envision a framework for investment in a town center.
- Generate economic development through market opportunities.
- Create quality, walkable and mixed-use places.
- Leverage private investment from public improvements.
- Plan for important public realm components (streets, sidewalks, trails).
- Brand the town center through architectural and site planning strategies.
- Improve infrastructure and promote use of Low Impact Design (LID) and Stormwater Best Practices.

PARTS OF THE STUDY

The overall purpose of this study is to derive a conceptual design framework of the City's new town center to address the components mentioned above. Parts of the study include urban design strategies for the town center particularly as it relates to streetscapes, block size and configuration, open space and relationship of building to the public realm. Market analysis is a component that is important to assess land uses that are in demand in the region, any leakage being lost to neighboring towns and analyzing future growth trends in terms of square footage appropriate for the town center and its surrounding context. Site planning principles and form will then inform physical characteristics of the town center. Infrastructure and best practices associated with managing stormwater will be vital for a growing City like Mont Belvieu. Lastly, recommendations made for each of these components will be presented and tested with the public and stakeholders in several meetings with accompanying online surveys to gain consensus and arrive at a common vision.

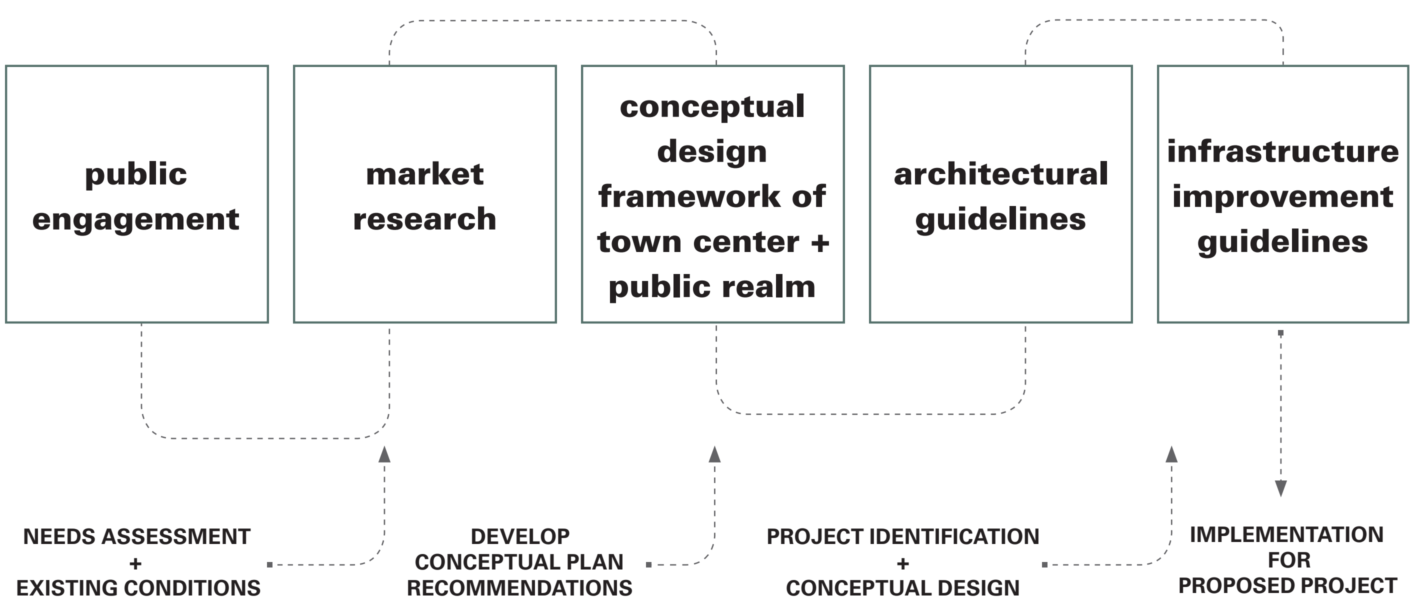


Figure 3: Parts of the Study

Varied employment choices and thriving business will be well-connected to the greater community through well-designed sidewalks, trails and streetscapes.

OVERVIEW

Mont Belvieu, as a growing area of east Texas, retains many of the charms of a smaller town where the community is tight-knit, and consists of many who wish to age-in-place. However, it lacks a downtown or main street core. As further expansion and increase in density occurs with the potential for a downtown core, it will be vital to capture and maintain the sense of place for the City of Mont Belvieu as a location for "downtown living, hometown life."

VISION

The Design Workshop team developed a concept for a new downtown in Mont Belvieu, which will create a new main street and city center that will serve as a destination within the community, which will have a mix of uses and contribute to a high quality of life. The project will be characterized by vital amenities such as open space and year-round activities, housing choices for all, and environmental sensitivity. Varied employment choices and thriving business will be well-connected to the greater community through well-designed sidewalks, trails and streetscapes. The study develop a critical vision that is situated within the context of existing and planned corridors, particularly the development of the Grand Parkway.

PROJECT TIMELINE

The timeline of this livable centers study lasted a period of eleven months, encompassing a number of public workshops, several online surveys post workshop and a concluding presentation to the City where the final concept and implementation steps were delivered. The summary memorandum herein documents the project process and includes a final concept recommendation plan.

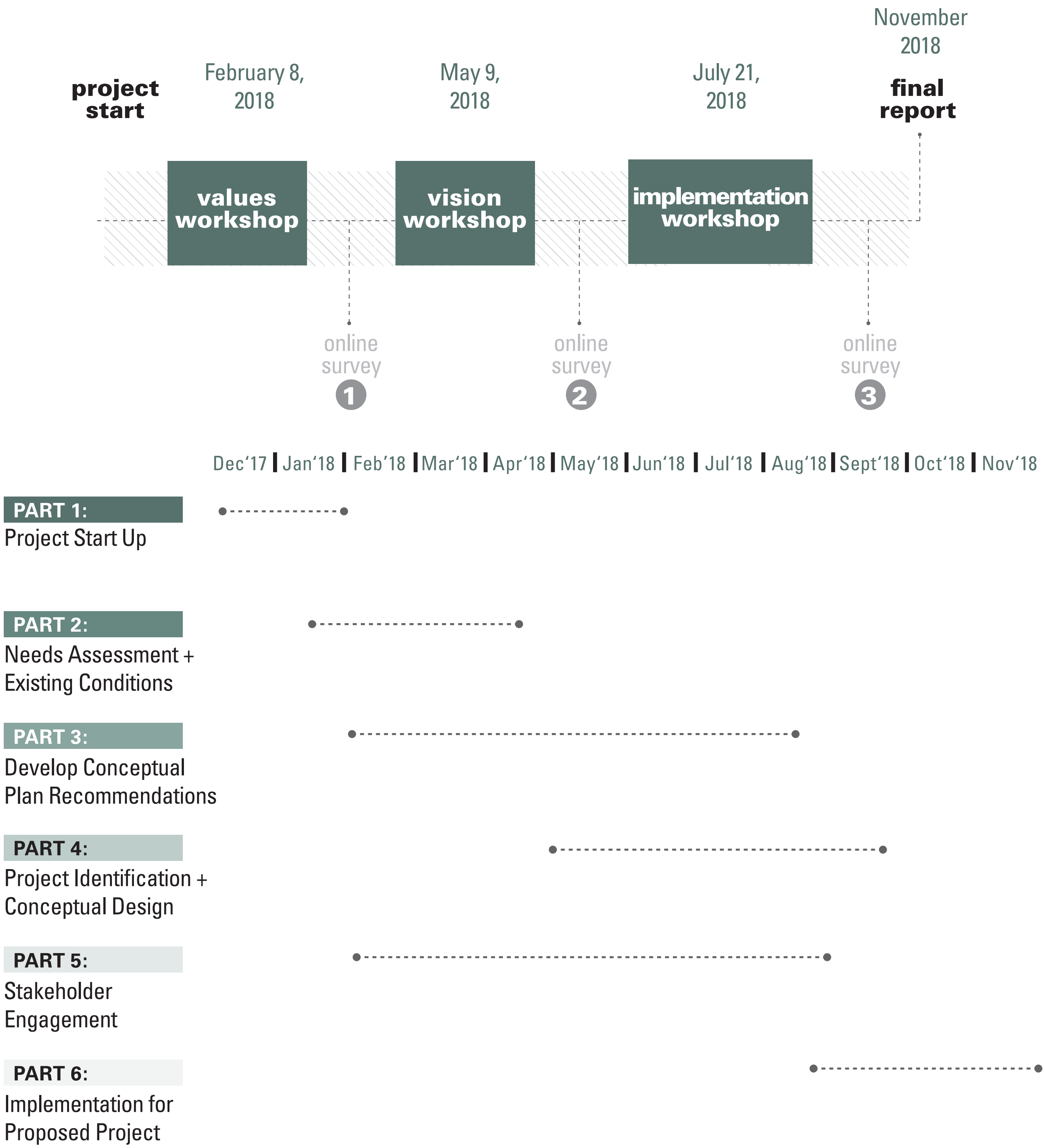


Figure 4: Project Timeline

PROJECT APPROACH

PROJECT CHALLENGE

Mont Belvieu is growing rapidly and demands a strong, feasible and implementable vision for a future downtown in the City, at the intersection of Eagle Drive and FM 565. This new vision includes strategies for the corridors leading into the City, including the intersection at the future Grand Parkway, as well as the surrounding environs within the Study Area. How do we ensure that recommendations strengthen the area's existing best characteristics while providing achievable strategies and a road map for attracting development and implementing improvements over time? How do we ensure the plan is adaptable, ensures retail development is place-based and value added, while preventing the City from developing reactively rather than proactively in response to the Grand Parkway? How do we engage property owners, businesses, schools, as well as residents? How do we create a plan that builds for resiliency and incorporates existing drainage canals as part of a larger open space network?

APPROACH

The project will develop recommendations for amenities and a mix of uses that attract both residents and visitors, provide a secure and safe place to live, raise a family, start a business and grow old. Recommendations will include specific and prioritized action steps to achieve the vision and will be based on market research analysis. Recommended projects and/or strategies will include implementation steps, which will identify proposed implementation timing and funding opportunities.

This will be achieved through:

- Establishing the City Hall Complex as the nexus of downtown development and activity.
- Promoting destination and service oriented land uses.
- Planning for a street block framework that provides a contextually dense and walkable urban core, utilizing innovative planning and urban design practices.
- Encouraging vertical and lateral mixed use, while increasing diversity of economic and development opportunities.
- Developing Site Planning Principles.
- Benchmarking and provision of recommendations for Stormwater Best Management Practices.
- Addressing barriers to increased pedestrian and bicycle connectivity by linking to trail connections and safety for pedestrians and cyclists.
- Attracting development by creating a flexible plan that allows for growth over time.
- Developing funding mechanisms such as public-private partnerships, management districts, public improvement districts, grants and other investment opportunities.
- Expansion and growth of public partnerships and incentives to create an economic hub for Mont Belvieu.
- Analyzing and potentially recommending changes to zoning and/or city codes and ordinances.
- Analyzing and provisioning recommendations for access to public parks and open spaces for recreation.
- Inclusionary planning that develops housing options for people at all stages of life.
- Community input that guides the recommendations for a new downtown core.

The project will be characterized by vital amenities such as open space and year-round activities, housing choices for all, and environmental sensitivity.

LIVABILITY PRINCIPLES - UNIVERSAL TRUTHS THAT ARE COMMONLY ACCEPTED

COMMUNITY

- Creation of quality, walkable and mixed-use places that improve the lives of existing populace.
- Development of multi-modal transportation choices, including connectivity within the area as well as to destinations outside of the area.

ART

- Planning and conceptual design of street, sidewalk, trail, signage and lighting improvements, including developing benefits estimates.

ENVIRONMENT

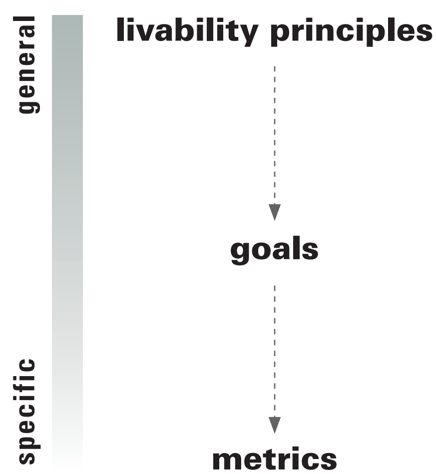
- Improvement of health and environmental quality.
- Sustainable growth and capacity over a period of time.
- Estimation of potential for private investment to be leveraged from public improvements.

ECONOMY

- Promotion of investment in downtown areas.
- Promotion of economic development, with emphasis on both the tools to promote entrepreneurship and small business growth, as well as expansion or location of large scale businesses.

GOALS + METRICS

Through a thorough outreach process, the community and the project team identified and weighed five common goals that provide a framework for future recommendations and bolster the City's sense of place. These goals are related to livability principles by specifying objectives that are particularly important for the City of Mont Belvieu to achieve. The community expressed a desire to focus on public realm amenities, mobility and walkability, sustainable growth and economic vitality, implementable steps towards funding pilot projects and infrastructural capacity for a growing population. A set of metrics are then keyed to each goal to ensure recommendations are measurable and, in essence, fulfill the goals. These metrics should be monitored throughout the Town Center implementation process to track change and progress.



Sources:
1. Garden Inspiration. 2017. "Beautiful Collection Community Vegetable Garden Project." Accessed June 1, 2018. https://gardendecor.us/community-vegetable-garden-project.
2. The Matthews Opera House & Arts Center. 2017. "BHSU Students Persevere Through Snow While Creating #LinkingFences." Accessed June 1, 2018 www/matthewsopera.com/community-lf/.
3. Urban Land Institute. 2015. "ULI Case Studies." Accessed June 1, 2018. http://casestudies.uli.org/citycentre-houston/.

GOALS + METRICS

1

PUBLIC REALM: Create vital amenities that address lighting, wayfinding, connectivity, human comfort, parks and cultural venues.

METRICS

1. Number of streets with amenities.
2. Park distribution and connectivity in the City.
3. Acres of parks city-wide
4. Diversity of park programming for all ages.
5. Number of cultural/architectural offerings in the City.
6. Percent of population within a 10-minute walk of amenities

2

MOBILITY: Develop greater mobility through trail connectivity, parking strategies, on-street networks bike transit options for all.

METRICS

1. Number of streets that are ADA-accessible.
2. Number of streets that accommodate bicyclists.
3. Number of streets with sidewalks.
4. Number of capital improvement projects.
5. Projected average daily traffic (ADT) along Grand Parkway alignment.
6. Number of entry roads into Mont Belvieu's downtown core.

3

SUSTAINABLE GROWTH + ECONOMY: Guide future development that generates return on investment and creates a localized economy where residents may age in place.

METRICS

1. Number of local and regional investments.
2. Supply and demand of commercial to residential ratio (leakage included).
3. City population density (H-GAC current vs. projected).
4. Capital improvement dollars available vs. capital improvement dollars needed.
5. Percentage of public service housing units to market rate. Percentage of land uses and diversity of housing products.

4

FUNDING: Generate funding mechanisms for a catalyst project(s) that will guide the City towards an implementable 5-year plan.

METRICS

1. Number of City grants and funds/380 agreements (5-10 year, 10-20 year).
2. Number of PID and/or management districts created (5-10 year, 10-20 year).
3. Number of public-private partnerships (5-10 year, 10-20 year).
4. Number of TIP/BUILD grants (5-10 year, 10-20 year).
5. Percent of City funds used directly towards project(s) implementation

5

INFRASTRUCTURE: Build for resiliency and capacity by integrating infrastructural systems and stormwater management with anticipated population growth.

METRICS

1. Sustainbility ratings (LEED - ND, SITES)
2. Number of low impact development strategies utilized from City development standards and this document.
3. Area(s) in acres that implement Low Impact Design

REGIONAL AND MOBILITY PLAN SUMMARIES

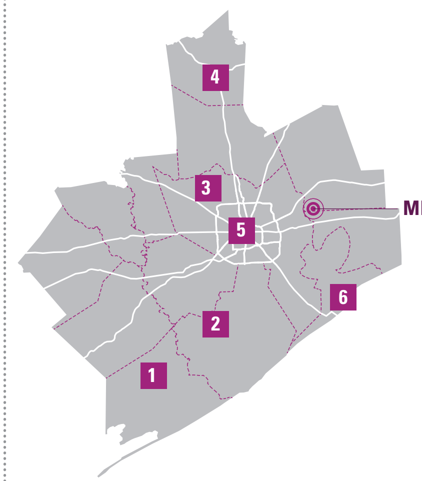
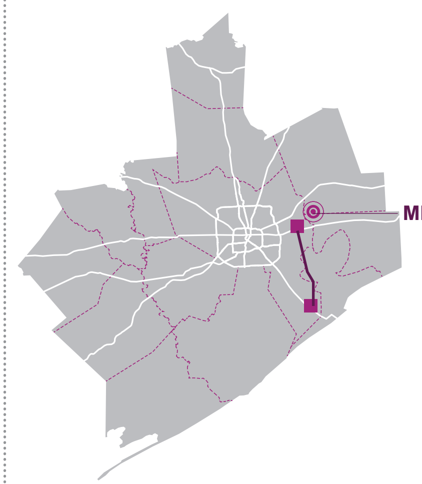
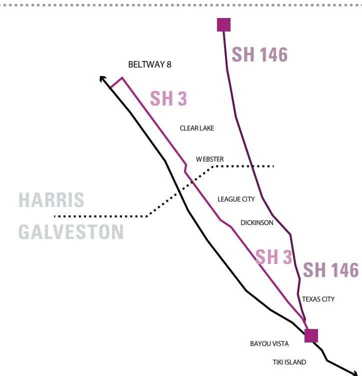
PLAN	SUMMARY	SYNTHESIS MAP
H-GAC Our Great Region 2040 Plan 	Our Great Region 2040 is a high-level plan whose aim is to create rich places to live, work, and succeed, as defined by measurable goals. Recommendations build on local initiatives and six topics of focus: Economic Development, Environment, Healthy Communities, Housing, Transportation and Resiliency. Several case studies were selected from a variety of entities and examined based on each topic. They provide a toolbox of action and practices that can be used by other communities in the region as they respond to similar challenges and opportunities.	
H-GAC SH146 Corridor Mobility Study 	The H-GAC SH 146 Corridor Major Investment Study (MIS) was initiated in late 1999 to evaluate the transportation needs of SH 146. The primary goal of the study was to identify the transportation needs of the corridor within a 20-year timeframe, its area extending along SH 146 and serving communities of Houston, Bayou Vista, Clear Lake Shores, Galveston, Pasadena, Seabrook Shoreacres, Baytown and Dear Park (24-miles long; 0.5miles east of SH 146 to 0.5 miles west of SH 146).	 

Table 1: *Summary of Mobility Plans*

KEY FINDINGS / NEEDS	OPPORTUNITIES / RECOMMENDATIONS

1. **Bay City North Downtown Plan (ECONOMIC DEVELOPMENT)** - Improve opportunities for life-long learning; Expand programs to improve job and financial skills; Promote business attractions and retention efforts through financial and multi-jurisdictional coordination; Institute a "buy local, make local, grow local" campaign.
2. **Brazoria County Plan for Public Parks and Sustainable Development (ENVIRONMENT)** - Watershed protection plans; Increase water storage and distribution capacity; Increase awareness of economic benefits of environmental systems; Use low-impact development best practices; Promote efficient resource management.
3. **Cypress Creek Greenway (HEALTHY COMMUNITIES) -** Establish regional infrastructure and distribution networks for local agriculture; Increase access to sidewalks, bikeways, and park space; Expand availability of health and public services.
4. **Huntsville (HOUSING) -** Develop local housing plans; Provide financial incentives for developers to build diverse housing types near economic/transit centers; Identify gaps in quality and supply of regional housing stock; Enforce local housing codes and standards to maintain safe and healthy housing.
5. **City of Houston Urban Development Framework (TRANSPORTATION)** - Improve efficiency of freight movement; Optimize existing transportation network for efficiency and capacity; Implement policies to improve multimodal network to economic centers.
6. **City of Galveston Sustainable Return on Investment (RESILIENCY) -** Develop integrated storm defense systems; Develop rapid recovery plan to help residences and businesses; Enhance coordination of evacuation planning; Improve regional air quality and reduce regional greenhouse gas emissions; Support innovative adaptation strategies to help communities prepare for natural disasters; Create educational programs for natural disasters.

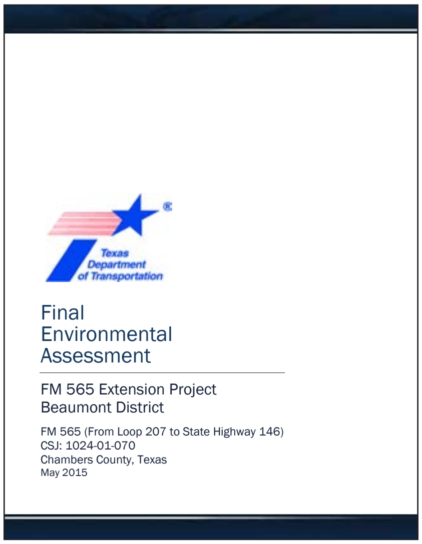
1. **Traffic Congestion -** On the north and mid section of corridor (particularly near Mont Belvieu), demand exceeds capacity during both a.m. and p.m. daily commute periods.
2. **Facility Improvement Needs -** Many sections need major pavement maintenance or overlay construction.
3. **Parallel Route and Evacuation -** Additional modes of transportation along with alternative evacuation options are safety concerns that need to be addressed; Roadway flooding contributes to reduced capacity/congestion.
4. **Community/ Environmental -** Portions do not meet requirements for truck turning access; Number of trains traveling in and out of the ports, requiring crossings with slower train speeds, in turn, creating bottlenecks; A number of attractions/ businesses are important to the economy of the corridor.

Utilizing a "mix-n-match" process, combination of planning concepts were defined, resulting in the following alternatives:

- No-build Alternative
- Transportation System Management Alternative
- Arterial Alternative
- Arterial with grade separation at major intersections Alternative
- Arterial with access road Alternative
- Arterial with Express Lanes grade separated at major intersections Alternative
- Freeway with Frontage Roads + potential future HOV lanes Alternative
- Alignment option Alternative
- Truck Lanes Alternative
- Transit Alternative
- HOV Lanes Alternative

<table>
<tr><th>PLAN</th><th>SUMMARY</th><th>SYNTHESIS MAP</th></tr>
<tr>
<td>

FM 565 Alignment Study



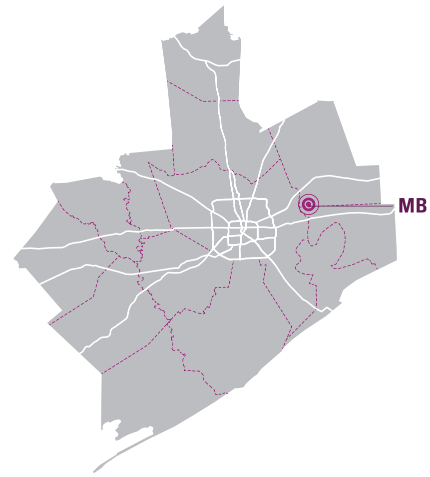
Texas Department of Transportation

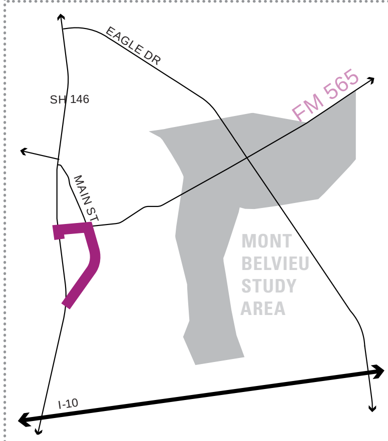
Final Environmental Assessment

FM 565 Extension Project
Beaumont District

FM 565 (From Loop 207 to State Highway 146)
CSJ: 1024-01-070
Chambers County, Texas
May 2015

</td>
<td>Enterprise Products Operating LLC and TxDOT conducted an alignment study for the proposed extension of FM 565 from Loop 207 to SH 146 in Mont Belvieu to enhance mobility and improve safety in the area.</td>
<td>





</td>
</tr>
<tr>
<td>

Grand Parkway Alignment Study

VOLUME I: FINAL ENVIRONMENTAL IMPACT STATEMENT AND EXHIBITS

THE GRAND PARKWAY
SEGMENTS H AND I-1

SH 99: US 59 (N)/I-69 to I-10 (E)
MONTGOMERY, HARRIS, LIBERTY, AND CHAMBERS COUNTIES, TEXAS

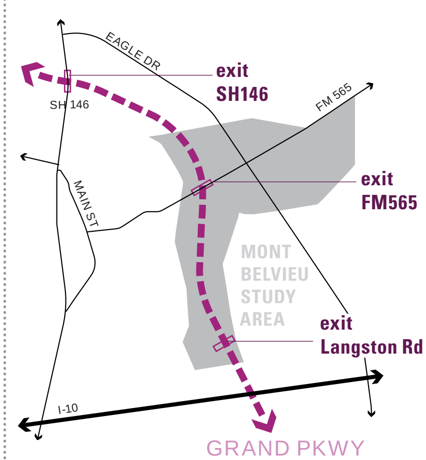
CSJs: 3510-07-003, 3510-08-001, 3510-09-001, 3510-09-002, 3510-10-001

APRIL 2014

US Army Corps of Engineers

THE GRAND PARKWAY

</td>
<td>The Grand Parkway segments H and I-1 are part of a planned 180+ miles circumferential loop around the greater Houston metropolitan area. Of the 11 segments, Segments H and I-1 are two segments located on the northeast side of the greater Houston metropolitan area. The study area is generally bound by FM 2090 in the north, I-10E on the south, US59/I-69N and FM 2100 on the west and SH 146 on the east (Montgomery, Harris, Liberty and Chambers counties).</td>
<td>



</td>
</tr>
</table>

Table 2: *Summary of Mobility Plans*

KEY FINDINGS / NEEDS	OPPORTUNITIES / RECOMMENDATIONS
Currently, the west end of FM 565 terminates at the intersection with Loop 207 and individuals must travel north or south on Loop 207 to reach SH 146. SH 146 serves as the route into and out of Mont Belvieu from I-10. The existing FM 565, east of the Loop 207 intersection, consists of two 11-foot wide travel lanes with 2-foot wide berm-like shoulders. Improvements and extensions to FM 565 are necessary because the intersections of Loop 207 and FM 565 with SH 146 have long been a public safety concern for the City of Mont Belvieu. Accident data from the City Police Department shows that there were a total of 62 accidents between 2009 and 2013 at the two intersections, significant for the size and population of the area. • Existing FM 565 main lanes do not currently include bike or pedestrian facilities (not TxDOT required). • The 10-foot wide paved shoulders may be utilized by bicycles or pedestrians in emergencies. • Current proposal does not prevent designated accommodations for pedestrians and cyclists as part of future development.	Proposed improvements include: • Constructing a new roadway that meets TxDOT standards to extend FM 565. • Install a traffic signal at FM 565/SH 146 intersection. • Provide turn lanes on FM 565 + SH 146. • Close portion of the south end of Loop 207 between FM 565 and SH 146, leaving Higgins St. and Williams St. open for public access. • Traffic signals at SH 146/Loop 207 will be removed.
The Segments H and I-1 need to address a discontinuous system linkage, decreased mobility, compromised safety, and the lack of infrastructure to support population growth. • Lack of connections to major radial roadways, suburban communities, local ports and industries. • Existing and future transportation demand of the study area exceeds the capacity of the local roadways. • The study area's roadways have high crash rates. • Population growth within the study area is expected to place an even greater strain on the existing transportation infrastructure.	Proposed improvements include: • Two outer 128-foot buffer zones within 400' right of way • Two outer 10-foot shoulder lanes • Two 12-foot lanes in either direction • Two inner 6-foot shoulder lanes • 64-foot median Three important exits will be provided to the City of Mont Belvieu including Langston Road, FM 565, and SH 146.

MONT BELVIEU PLAN SUMMARIES

PLAN

[2035 Comprehensive Plan]

Mont Belvieu Home Rule Charter - Established in 2013, this provides the City the authority to annex land, govern density and determine public realm infrastructure improvements to best meet the needs of its citizens.

Tools for Influencing Growth Identified in Comprehensive Plan:

- Long-range planning
- Annexation
- Non-Annexation Agreements
- Subdivision regulations
- Development agreements
- Impact fee assessment
- Multi-year capital improvements programming
- Joint Powers Agreements
- Public Improvement Districts
- City/County coordination

SUMMARY

The City of Mont Belvieu Comprehensive Plan (Comp. Plan, the Plan) is a long-range vision that will guide private and public development of the City and its surrounding environs within the Extraterritorial Jurisdiction (ETJ) through 2035. A key recommendation of the Comp. Plan, and impetus for this study, was the need for planning and implementation of a retail and commercial core within the City. As such, a Town Center that allows community members to live, work and shop within the City is a guiding principal set forth from the Plan and will continue the legacy of Mont Belvieu as a net job producer.

Historic population trends and projected fast-paced growth with population increase of nearly 25,000 people by 2035 could have potentially adverse consequences if growth and development is not managed. Core issues outlined within the Plan include erosion of community character and demarcation of a clear city edge, environmental degradation, overburdened infrastructure, potentially uncoordinated planning and lack of essential public services. These potential consequences were addressed through the recommendation of:

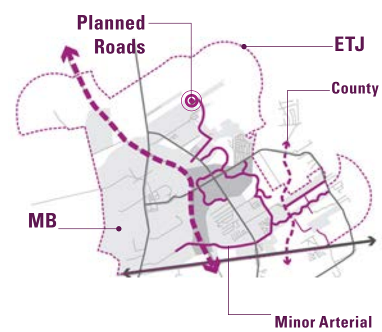
- Smart growth planning including targeted annexation, thoroughfare planning, subdivision regulations, minimizing peripheral growth and economic development
- Provisioning of public services such as facilities, personnel and infrastructure that match the pace of growth
- Greenfield development to provide retail, commercial and housing
- Use of public-private partnerships and tax increment reinvestment zones (TIRZ)

SYNTHESIS MAP

FUTURE LAND USE

PROPOSED INCREASED DEVELOPMENT

THOROUGHFARE PLANS



HOUSING

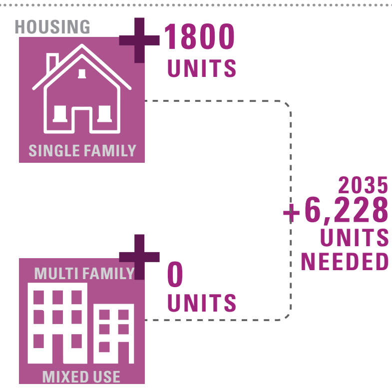


Table 3: *Summary of Mont Belvieu Previous Plans*

KEY FINDINGS / NEEDS

Findings:

1. **Demographics -** Mont Belvieu is rapidly changing, growing by 65 percent in just under two decades, with a projected population of over 30,000 by 2035. The majority of jobs are held by individuals in the manufacturing and eduction sectors, with a median household income that is $18,000 higher than the Houston MSA. The projected demographic makeup of the City will be composed of majority white individuals around 40 years of age or older. An aging population demands alternative modes of development to allow for aging-in-place, as well as attracting young professionals to the city.
2. **Need for a Town Center -** A lack of a downtown core coupled with strong residential growth in the past as well as growing pressures in the future illustrate the need for a commercial and retail core that will increase revenue, develop a sense of place and attract businesses while diversifying the job market.
3. **Lack of Continuous Sidewalks-** A need for connected, continuous pedestrian realm infrastructure including sidewalks, trails and bike lanes is necessary for balancing all mobility needs.

Needs:

1. **Housing -** The Comp. Plan lacks clarity and direction on the need for mixed-use, mixed-income housing relative to projected demographic trends and the development of retail, commercial and business park land uses that will require housing a demographic (public service employees, young professionals and workforce) that is not currently met with Mont Belvieu's housing stock. The Comp. Plan recommends only single-family detached housing.
2. **Transportation Infrastructure -** proposed roads should be conducive to moving traffic while creating a pedestrian friendly environment, developing nodes of activity and connecting into existing roads or a legible grid. Standards for thoroughfare street design:
    - Major Arterial = 120 foot Right of Way
    - Minor Arterial = 100 foot Right of Way
    - Collector (with median) = 80 foot Right of Way
    - Collector = 60 foot Right of Way

OPPORTUNITIES / RECOMMENDATIONS

Proposed improvements include:

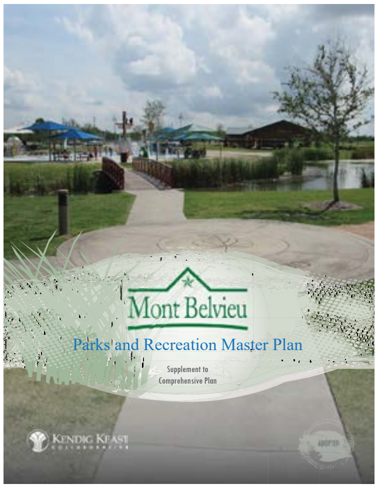
- Development of a new Town Center with already planned adjacent housing developments.
- Ability for the Livable Centers Study to supplement the Comp. Plan by recommending more diverse housing choices that truly respond to demographics and future needs of the City.
- Brand Recognition.
- Development of a primary gateway off of the planned Grand Parkway.
- Develop a continuous pedestrian network within the Study Area, while providing trail connections that supplement existing and proposed systems.
- Reduce greenfield development for housing through right-sized, more dense housing development around the core of the Town Center.
- Address the gap in the Comp. Plan recommendations for housing:
    - 1,800 Proposed - 11,866 future residents served.
    - 6,228 more housing units needed - 18,249 residents not served
- Provide diverse housing choices that feature the same strong identity and higher-end stock in-line with what currently exists within Mont Belvieu. The Comp. Plan highlights an increase in trends towards "Life-Cycle Housing" that provides the ability to age-in-place. The need for smaller, lower maintenance homes for young professionals and elderly citizens presents an opportunity to integrate thoughtful single-family attached and multifamily housing choices within the Study Area of the new Town Center, while maintaining the character of the community.

Develop Public-Private Partnerships

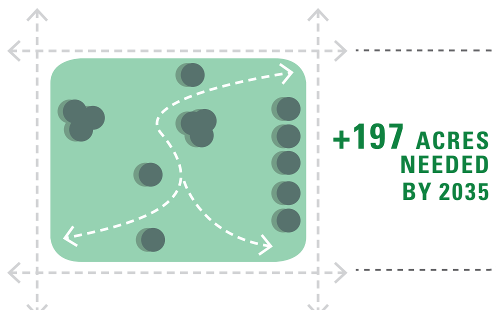
- The Town Center will be able to act as a catalyst for public-private investment partnerships to ensure the public demand for more commercial space and support services are met.

PLAN	SUMMARY	SYNTHESIS MAP

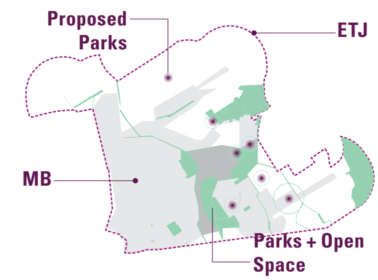
Parks and Recreation Master Plan

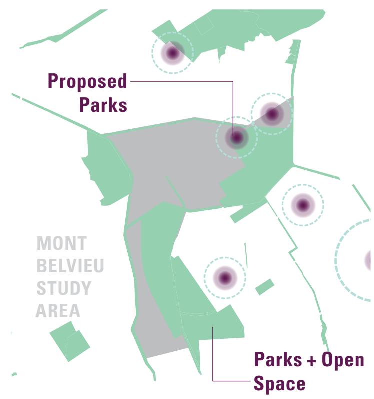


The Parks and Recreation Master Plan provides a comprehensive inventory and series of recommendations for the interrelated open space systems in Mont Belvieu and the larger ETJ area. The purpose is to ensure any future deficits are understood and met with proper planning and implementation as a means to stay a competitive place to live, work and recreate.



PROPOSED PARK LOCATIONS





Trails Master Plan

The Mont Belvieu Trails Master Plan acts as a supplemental document to the Comprehensive Plan and provides series of recommendations that focus on enhancement of pedestrian networks through regional trails, on/off street bike networks and continuous sidewalks within the public realm.

A key component of the Trails Master Plan is to ensure that capital resources are earmarked for implementation of new trails and maintenance of the system.

The plan for future pedestrian networks provides connections throughout the ETJ, connecting to the larger area of Chambers County, which is growing at an accelerated pace relative to the region, similar to Mont Belvieu.

PROPOSED TRAIL NETWORK

Planned:

- On-street Network
- Primary Trail
- Secondary Trail
- Bayou Trail

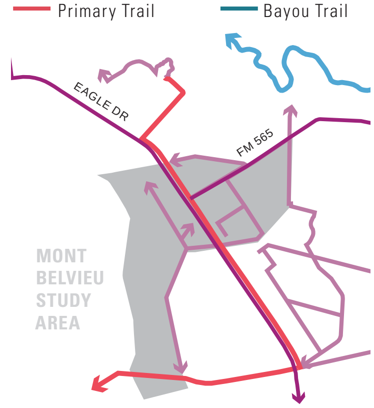


Table 4: *Summary of Mont Belvieu Previous Plans*

KEY FINDINGS / NEEDS	OPPORTUNITIES / RECOMMENDATIONS
Findings: 1. **Increase Open Space -** To meet the growing demand of a population in excess of 30,000 by 2035 there will need to be 197.5 additional acres of Neighborhood and Community Parks. 2. **2035 Facility Deficit -** Given growth projections, the Comp. Plan identified deficits in park and recreational facilities such as sports fields and park structures Current capacity is unable to support future demand. 3. **Integration of Facility Standards:** Sets forth requirements needed based on size and programming of a park. This will be instrumental in upgrading current parks as well as "right sizing" future planned parks. 4. **Increase Programming Opportunities:** Maintain current focus on recreational fields and education while increasing parks and open space programming through skills development, family outings, outdoor recreation (hiking, biking, kayaking) and urban recreation.	• Improvement of park facilities. Of particular relevance to the Town Center is the future need for three more neighborhood centers, a community center and a swimming pool. All of these elements create nodes of activity and often flourish with the support of adjacent residential, commercial and retail land uses that define complete communities. • Open space within the Town Center Area should work in concert to provide neighborhood scale amenities such as playgrounds and benches, while also meeting the recommendations and demand for an increase in diversity of programming such as wellness focused activity, markets, events and urban recreation. • Develop private-public partnerships to provision open space as part of future commercial, retail and residential development. This will lower the burden on the City for provisioning and maintenance of new open space amenities.
Findings: 1. **Increase Network Diversity -** The plan offers several modes of pedestrian mobility options including off-street trails (shared use paths), on-steet and off-street bikeways, separated bike lanes, sidewalks and blueways which address transportation and recreation needs alike. 2. **Plan for Future Growth -** Future growth will demand pedestrian facilities that act as connective tissue throughout the City. Coordination with other studies and proposals for mobility such as the City of Mont Belvieu Comp. Plan, City of Mont Belvieu Parks Master Plan and H-GAC Regional Bikeway Plans (2035 and 2045) provides a comprehensive approach while reducing redundancies or conflicts in planning redeterminations. 3. **Establish Guidelines for Trail Design -** A hierarchy of trail typologies and integration of trailheads is the driving factor for location and design of the system.	• Development of a Complete Street network along FM 565, Eagle Drive and any new streets within the Study Area (integrate additional pedestrian mobility options within the Town Center and Study Area.) • Utilize the drainage networks and easements as areas for trail locations to connect to the broader region. • Provide outdoor programming within trail network design. • Ensure the Study Area and Town Center follow the guidelines set forth within the Trails Master Plan: » Residential Sidewalk: 5'-8' wide concrete » Nonresidential Sidewalk: 5'-10' wide concrete » Off-street Trail: 10'-12' wide concrete » Soft -Surface Trail: 8' wide decomposed granite » On-street Bike Lane: 5' wide, separated from pedestrian travel lane

2

NEEDS ASSESSMENT

In order to plan for a community's future, it is first necessary to understand a community's past and present. The first task of the Mont Belvieu Main Town Center project consisted of collecting, consolidating and assessing data from a number of sources, conducting field research to fill in gaps in knowledge and beginning a listening process to understand the needs and desires of residents, stakeholders, landowners and the City.

REGIONAL CONTEXT + STUDY AREA

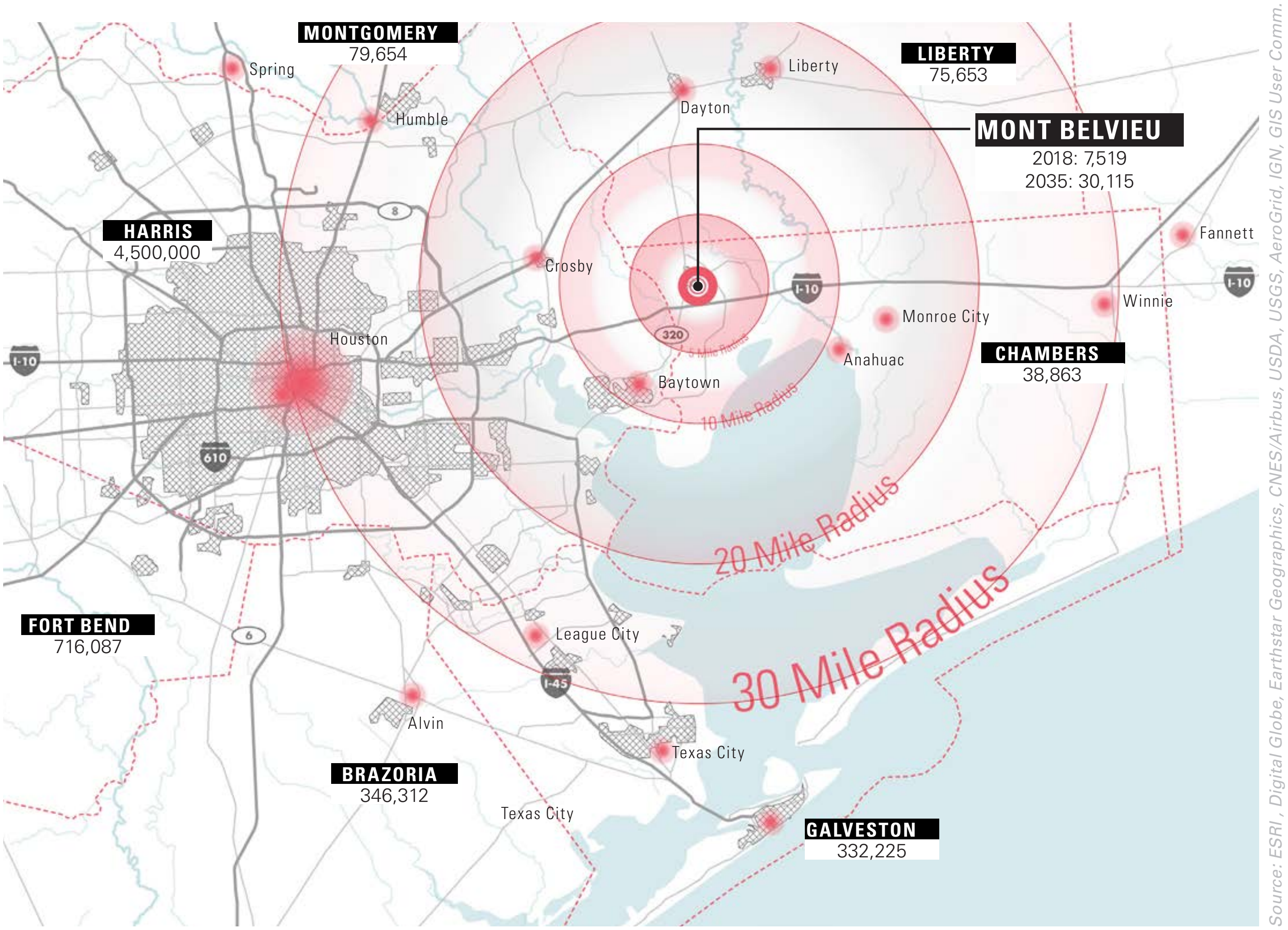
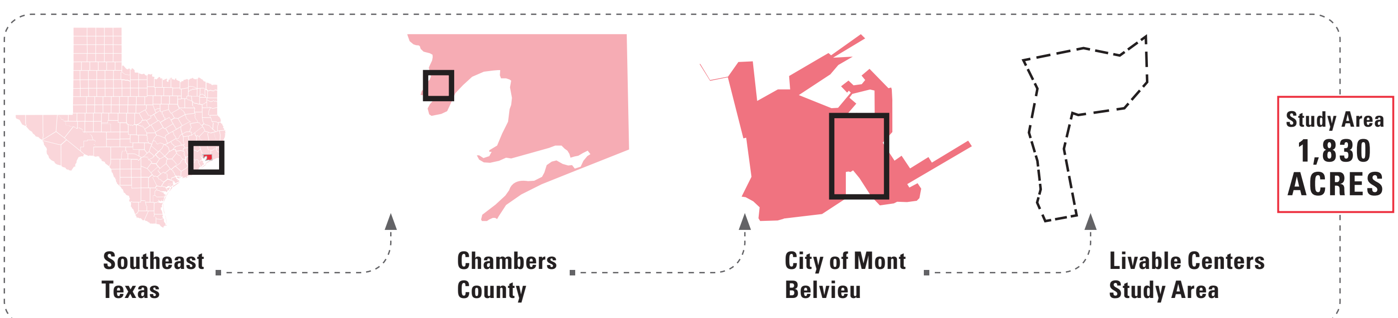


Figure 5: Regional Context

REGIONAL LOCATION OF SITE

Located in both Chambers and Liberty Counties; north of Interstate 10, Mont Belvieu is approximately 30 miles east of downtown Houston. With a population of over 7,519 as of 2018, the population has doubled in a ten-year period. Mont Belvieu has established itself as a desirable place to live with a strong job market and a world class school district that attracts families from around the region. The City's growth is consistently outpacing the national average and as such, demands increased local retail, commercial and mobility options.



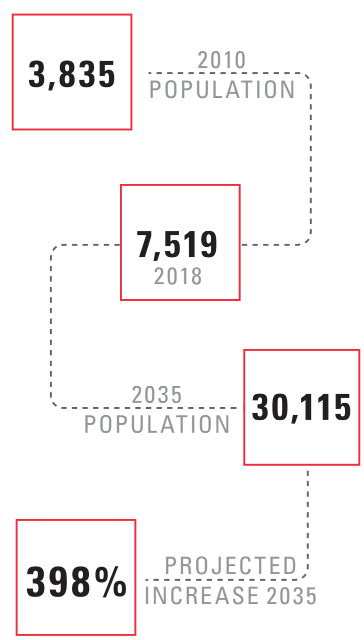
Source: ESRI , Digital Globe, Earthstar Geographics, CNES/Airbus, USDA, USGS, AeroGrid, IGN, GIS User Comm.

Figure 6: City Context and Study Area

CITY OF MONT BELVIEU AND SITE CONTEXT

The Study Area is bounded by the future Grand Parkway to the west, Interstate 10 to the south, the city limits of Mont Belvieu to the east and is bisected by FM 565 and Eagle Drive. The Study Area for the project, at 1,830 acres, is very large for the development of a Town Center. However, to ensure that the larger context of the City of Mont Belvieu's socio-economic, environmental and development patterns support the implementation of Mont Belvieu Main, the broader context must be considered vis-a-vis market leakage, absorption rate, commercial development and housing.

While an achievable size for the core of the project is much smaller than the entirety of the Study Area, it is imperative that connections to existing and planned infrastructure and development are made. Of particular importance are the arterial and connector roads that will tie into the future Grand Parkway (FM 565 and Langston Boulevard).

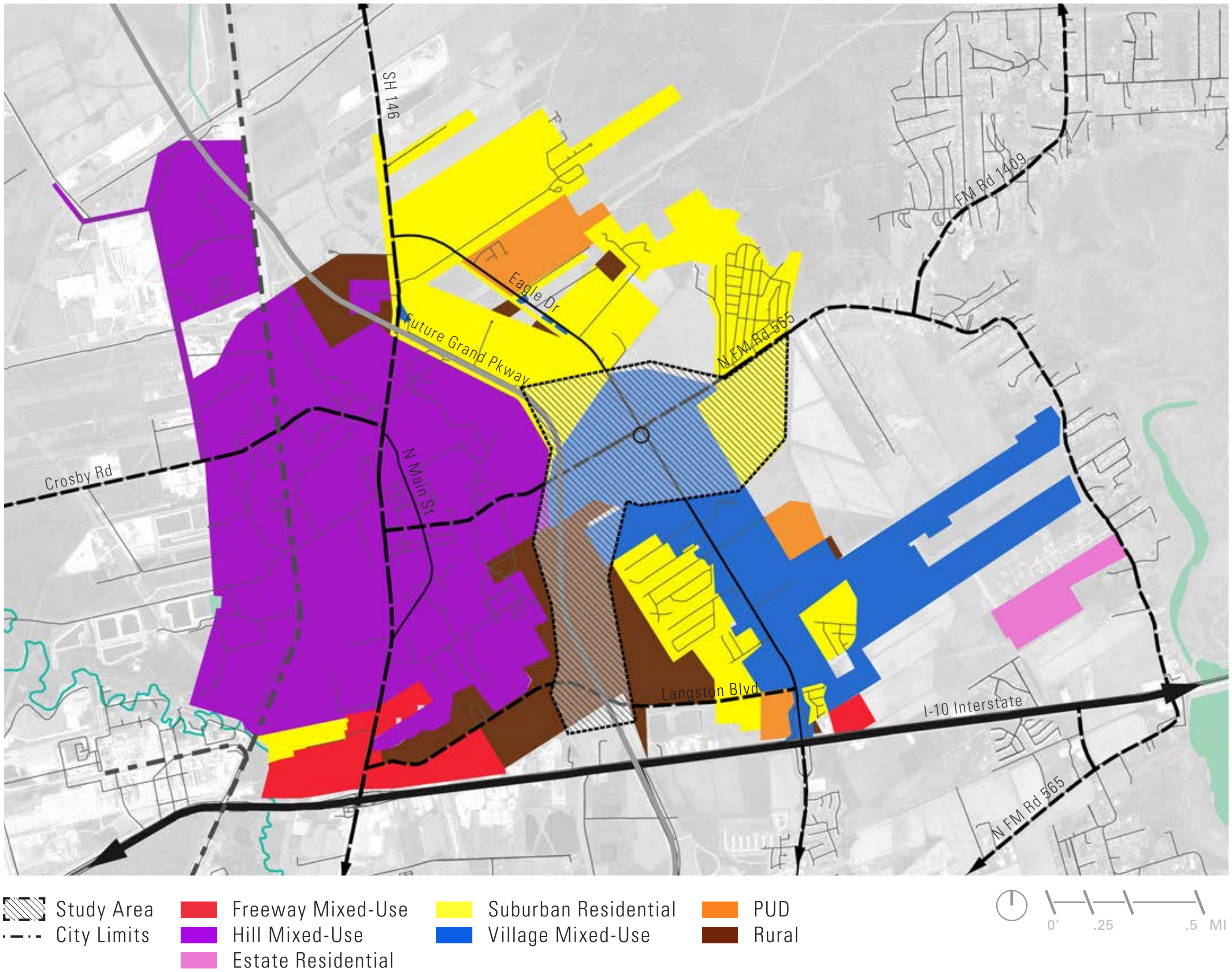


Source: Mont Belvieu Comprehensive Plan 2035

Figure 7: Population Change and Projected Increase

ZONING

Figure 8: Zoning Map, 2017



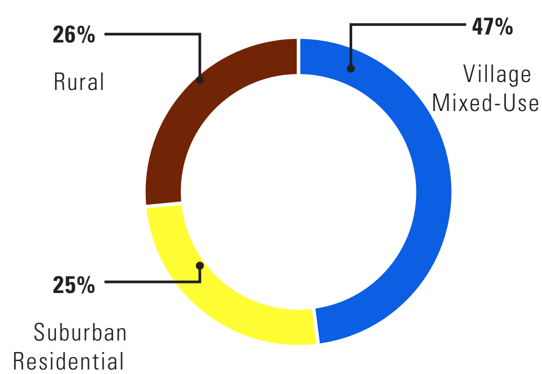
Source: Zoning Map Mont Belvieu

EXISTING ZONING REGULATIONS

Current zoning regulations, adopted by the City in July 2017, support the implementation of a mixed use development at the intersection of FM 565 and Eagle Drive established as Village Mixed-Use per [Mont Belvieu, Texas - Code of Ordinances Chapter 42 - Zoning, Ord. No. 2008-021, § 2(25-7), 10-13-2008.]

However, as future development comes online adjacent to Mont Belvieu Main, portions of the Rural and Suburban Residential zones may need amendments as outlined in Section 42-279 to support growing needs of the community such as multifamily housing, commercial development along the future Grand Parkway and planned communities.

ZONING BREAKDOWN | STUDY AREA



OPEN SPACE + TRAILS

Figure 9: Open Space and Trails

Source: Mont Belvieu Comprehensive Plan), Mont Belvieu Parks and Recreation Master Plan, Mont Belvieu Trails Master Plan (See Appendix for Park Classifications chart and glossary).

PARKS AND TRAILS NETWORKS

Currently, Mont Belvieu is adequately served by open space, and nearly all existing residential subdivisions are within a five-minute walk to a park, with City Park, Eagle Pointe and the future Hackberry Gully Regional Park serving as the primary park resources within the community. However, only about half of the Study Area is within a five-minute walk of a park, with the northwestern area underserved by park space. This provides the opportunity to integrate open space and park programming into the Mont Belvieu Main development.

Community Parks [16-150 acres]	**3**
Neighborhood Parks [1-15 acres]	**6**
Pocket Parks [Less than 1 acre]	**0**
Spark Parks (shared school playgrounds for public use after school hours) [1-15 acres]	**0**

53% OF STUDY AREA IS WITHIN A 5-MINUTE WALKING RADIUS OF PARKS

47% OF STUDY AREA IS NOT WITHIN A 5-MINUTE WALKING RADIUS OF PARKS

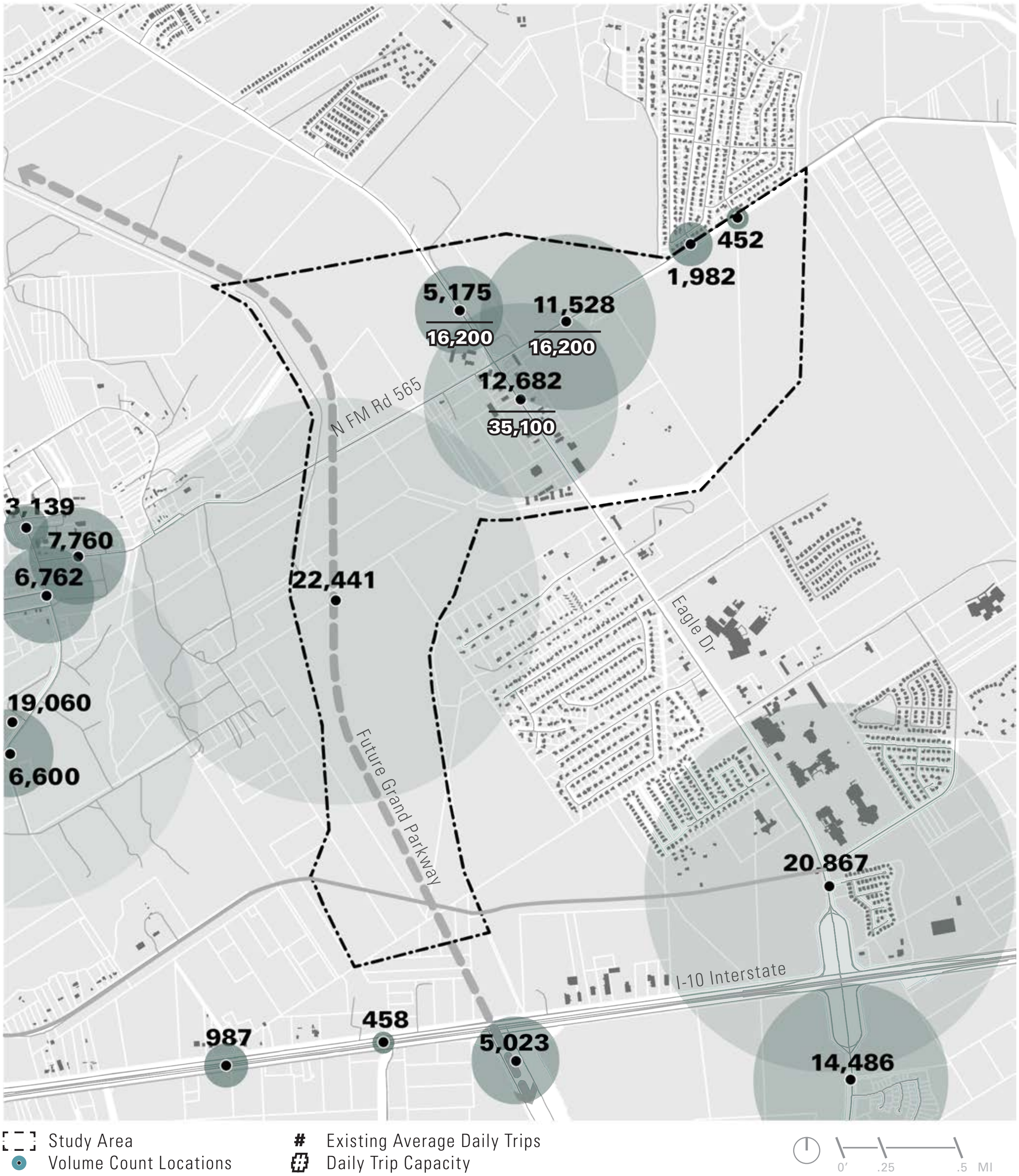
2 PARKS ADJACENT TO OR WITHIN STUDY AREA

TRAFFIC AND CIRCULATION

EXISTING AND PROJECTED TRAFFIC VOLUMES

Examining the traffic counts and understanding capacity of Mont Belvieu's streetscapes is essential to future thoroughfare improvements. The figure below provides information on existing road capacity and daily trip capacity along each particular thoroughfare. Traffic volumes are measured via average annual daily traffic (AADT). The future Grand Parkway and I-10 will likely bring an additional 15,000-22,000 vehicles daily. It is important to keep this in mind to determine capacity of the proposed town center (FM565 and Eagle Drive).

Figure 10: Traffic Volumes



Source: TxDOT, 2017; Volume I Final Environmental Impact Statement, 2014.

FUTURE GRAND PARKWAY | ALIGNMENT AND TIMING

The alignment of the new Grand Parkway will provide increased traffic through the middle of Mont Belvieu's industrial and commercial corridor. There is an opportunity to capitalize on potential development investment and capture revenue for the City by locating Mont Belvieu Main to the immediate east of the proposed project. As part of the I-1 and I-2 segments, slated to start construction in 2019, attention to roadway and intersection design at FM 565 and Eagle Drive will be necessary to provide the foundation for future growth of the downtown and ensure that the area does not become solely strip development and big box retail that is commonly found in these environments.

The implementation of the Grand Parkway will inevitably put pressure on adjacent arterial roads' capacity. Current analysis shows that FM 565 can handle a 30 percent increase in Average Daily Trips from its current traffic volume of 11,528 vehicles. Overall, impacts show that:

- ADT between the Grand Parkway and I-10 are expected to be around 22,441.
- The exit point off of the I-10 carries ADT of nearly 20,867.
- Study Area positioned to impact Eagle Drive from I-10 and FM 565 from Future Grand Parkway.

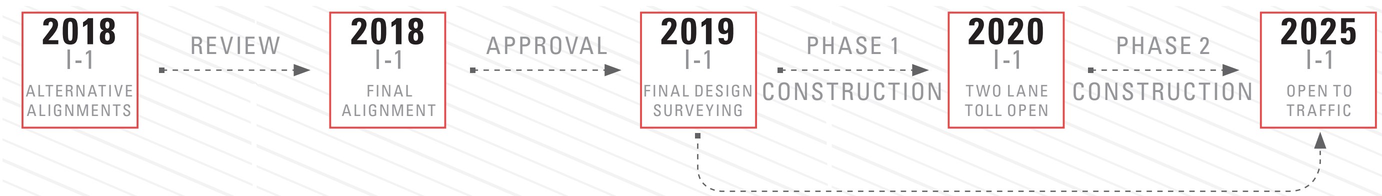
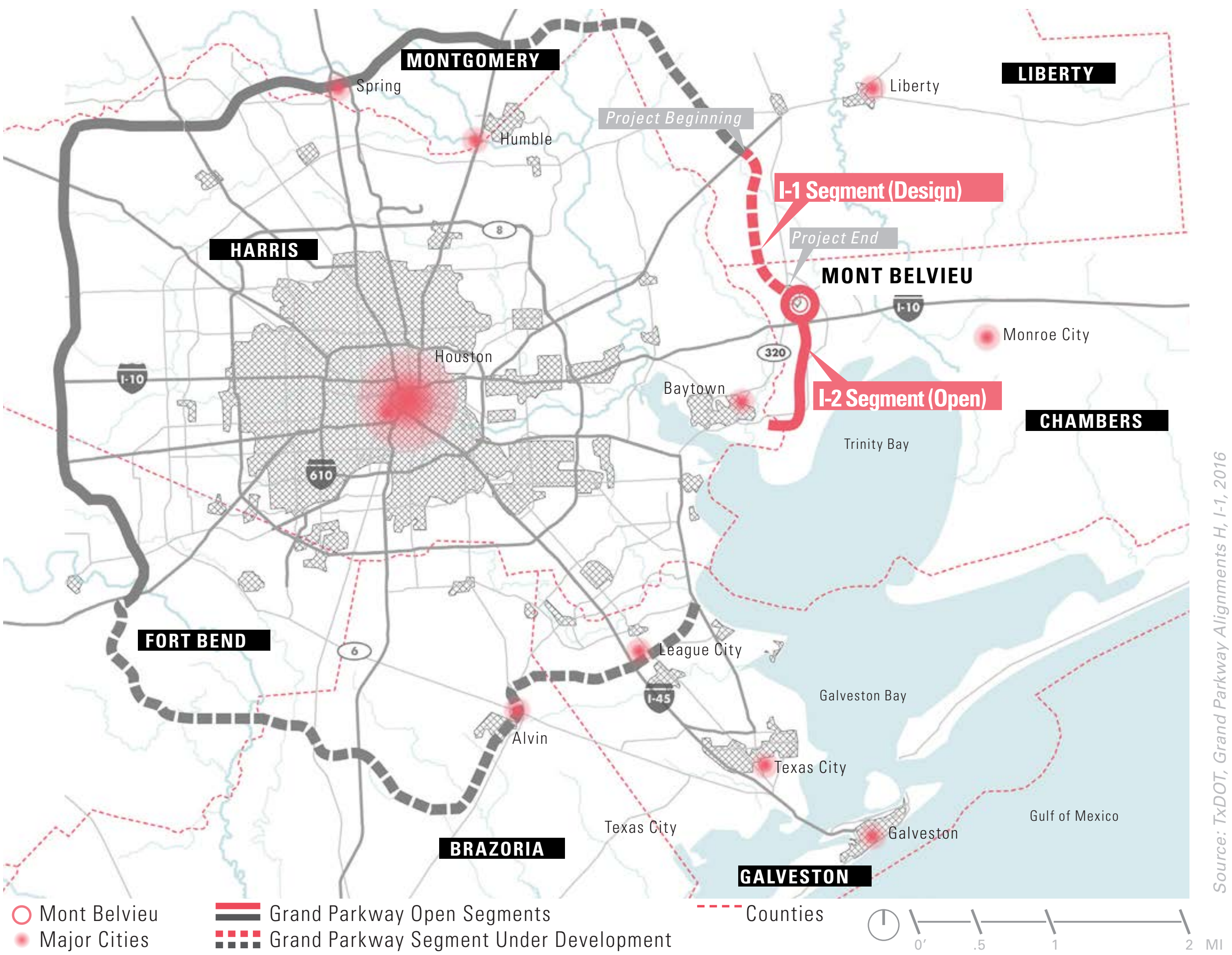


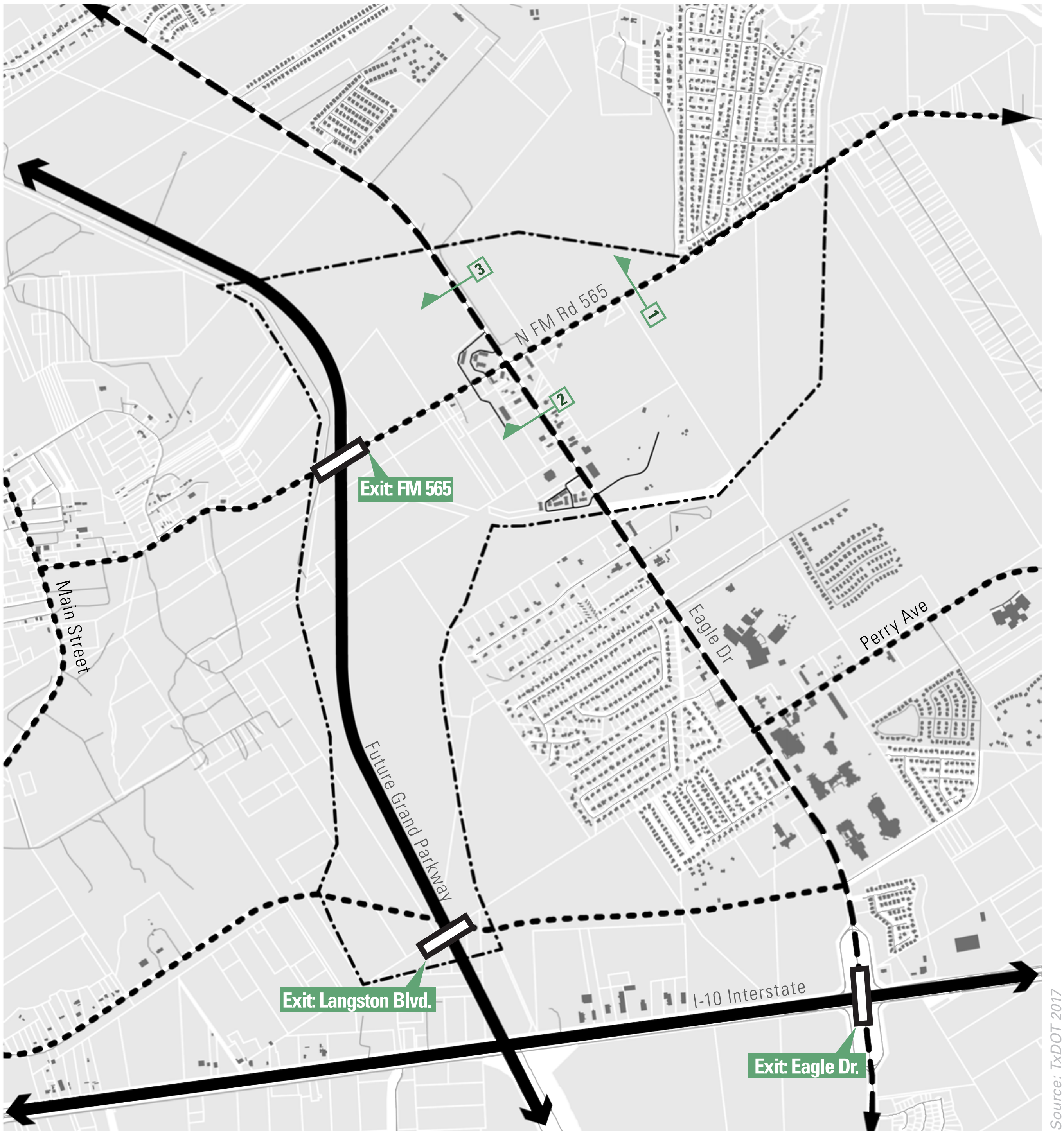
Figure 11: Future Grand Parkway



ROADWAY HIERARCHY + EXISTING MAJOR ROADWAY TRANSECTS

There are a number of vital roadways that run through the Study Area and acts as major connectors to the neighborhoods within, with exits from the Interstate 10 and the future Grand Parkway. FM 565 and Langston Blvd. (currently under construction) provide exits from the Grand Parkway while Eagle Drive consists of an exit from Interstate 10. The junction of Eagle Drive and FM 565 poses the greatest opportunity for redevelopment. In essence, future capacity for vehicles, bikes and pedestrians along these roads will need to be considered.

Figure 12: Roadway Hierarchy



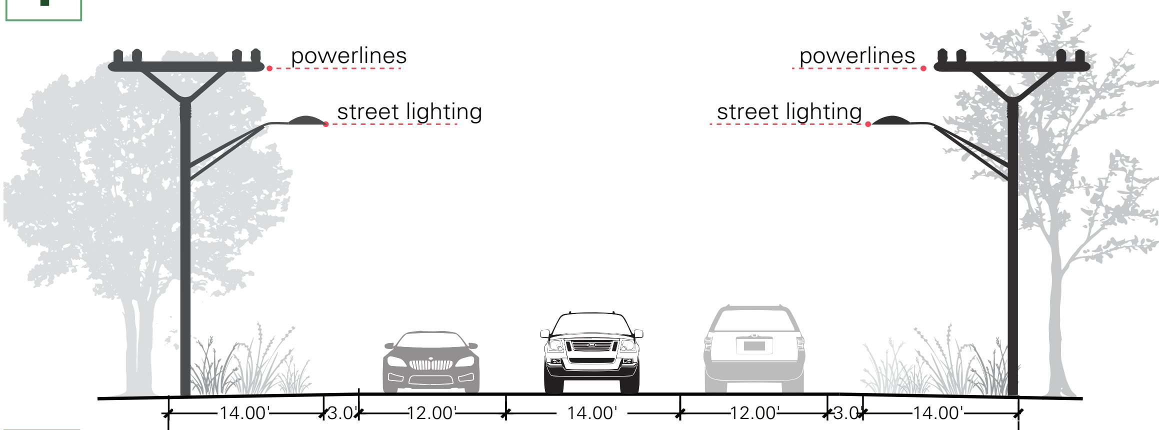
Study Area
Freeways (Overpass)
Minor Arterial
Major Collectors
Minor Collectors
Key Intersections
0' .25 .5 MI

FM 565
- 3 Travel lanes
- Left turn lane
- Shoulder paving
- Utility power lines + little street lighting
- No sidewalk or curbs for drainage

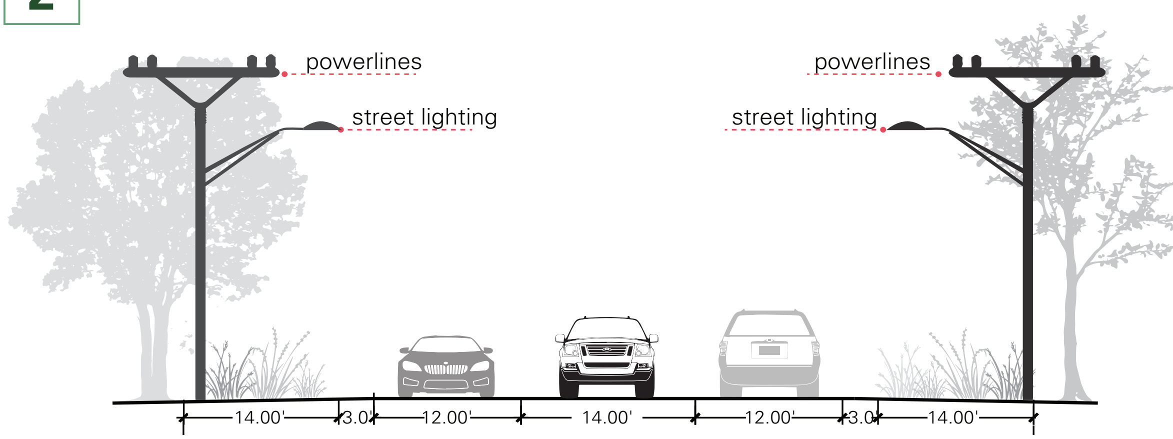
EAGLE DR. | SOUTH OF FM 565
- 5 Travel lanes
- Left turn lane (median)
- Newly planted trees in median with roadway lighting
- Varied sidewalk widths between both sides
- Utility power lines + little sidewalk lighting

EAGLE DR. | NORTH OF FM 565
- 2 Travel lanes
- 4'-0" shoulders
- Little to no sidewalks or lighting
- Utility power lines on one side

1 FM 565



2 EAGLE DRIVE SOUTH



3 EAGLE DRIVE NORTH

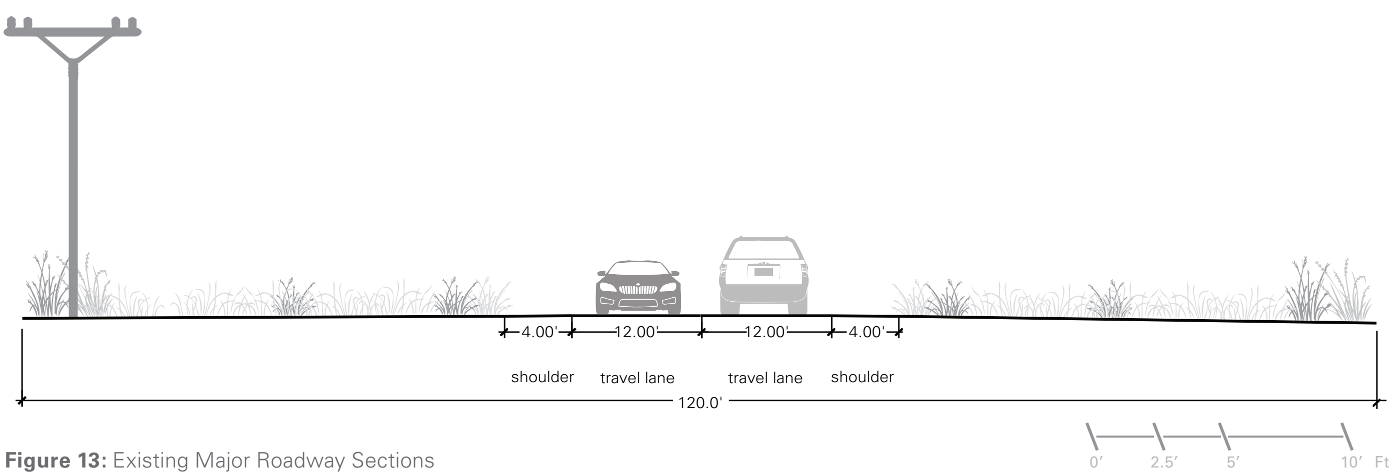


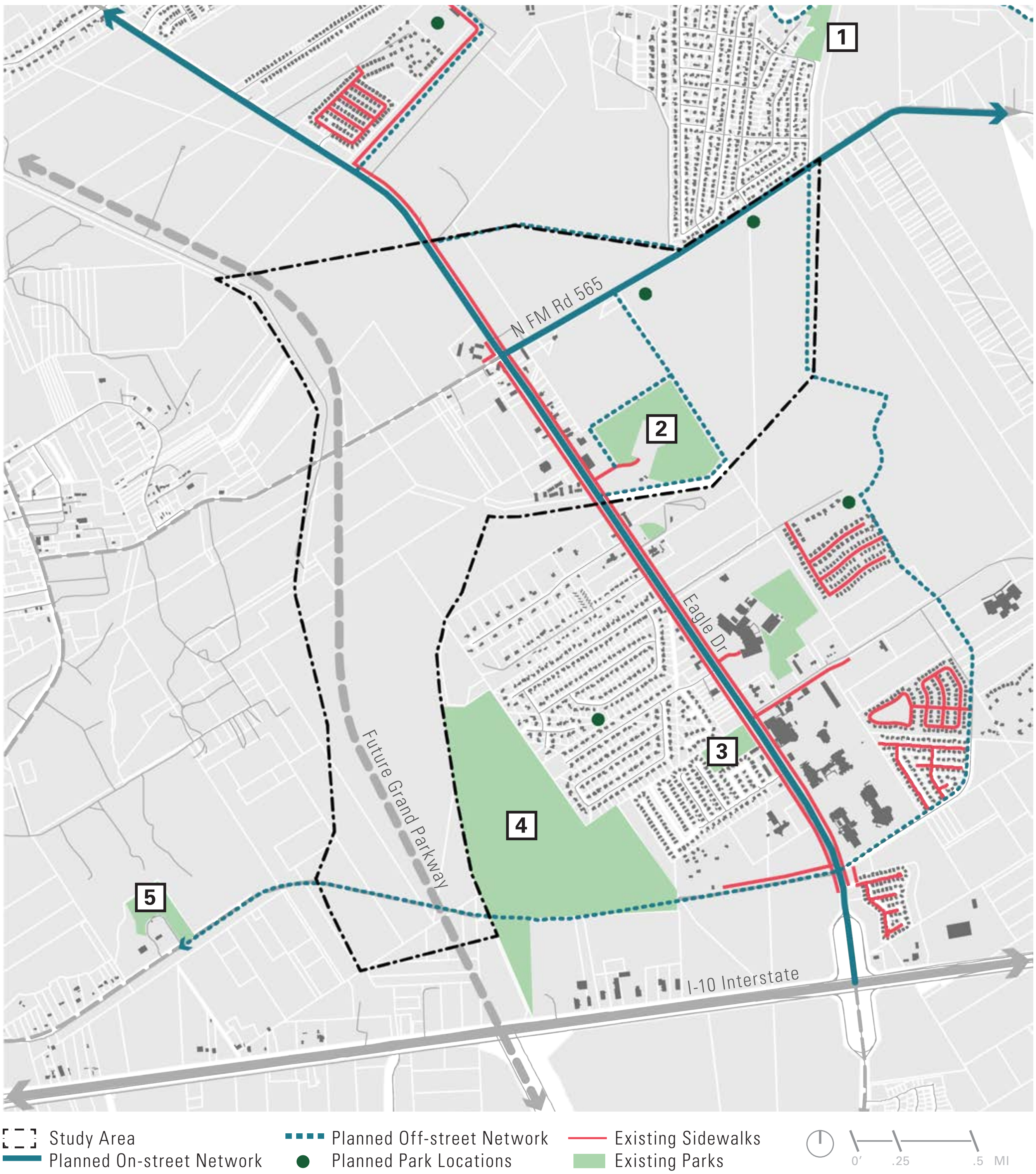
Figure 13: Existing Major Roadway Sections

PARKS AND PEDESTRIAN CONNECTIVITY

EXISTING PARKS AND OPEN SPACE

Parks and open spaces are essential to providing public space amenities for neighborhoods in Mont Belvieu. The City Parks and Recreation Department is responsible for the operation and maintenance of parks such as the City Park, Joe Matthews Park, McLeod Park and the future Hackberry Gully Regional Park. Existing and planned trails are also identified from the City of Mont Belvieu Trails Master Plan. Building upon multiuse trails, access to sidewalks and park destinations will be a key objective of ensuring these connect to the future Mont Belvieu town center.

Figure 14: Existing Parks and Open Space



Source: City of Mont Belvieu Trails Master Plan, 2015; Google Earth, 2017

1. JOE MATTHEWS PARK

COMMUNITY PARK

Joe Matthews Park, located northeast of the Mont Belvieu Study Area and adjacent to the Eagle Pointe Golf course, is a 9.5-acre park that is leased from the Coastal Water Authority (owner). The park consists of playscapes or open play areas, sports courts (basketball) and passive recreational areas.

2. CITY PARK

REGIONAL PARK

The City Park is a 70-acre park that is located along Eagle Drive adjacent to Barbers Hill High School. This park is operated and maintained by the City. The park consists of splashpads, fountains, play areas, natural wetlands and a recreational center.

Source: City of Mont Belvieu, Texas. n.d. "City Park." Accessed on June 1, 2018. https://www.montbelvieu.net/Facilities/Facility/Details/City-Park-3.

3. LITTLE EAGLE PARK

COMMUNITY PARK

Located along Eagle Drive, Little Eagle Park, owned by Barbers Hill ISD and maintained by Chambers County is approximately 10 acres. The community park consists of only sports courts and fields (baseball and tennis).

4. FUTURE HACKBERRY GULLY PARK

REGIONAL PARK

The City of Mont Belvieu is currently planning and constructing the phased development of the new, 200-acre Hackberry Gully Regional Park, which will inhabit a number of vital passive recreational activities. It will simultaneously respond to the region's stormwater detention needs in an ecologically focused way.

5. MCLEOD PARK

COMMUNITY PARK

Located just outside of the Mont Belvieu Livable Centers Study Area, this 30-acre park is managed and owned by Chambers County and consists of several sports courts, a small recreation center and trails, as well as an area for passive recreational activities.

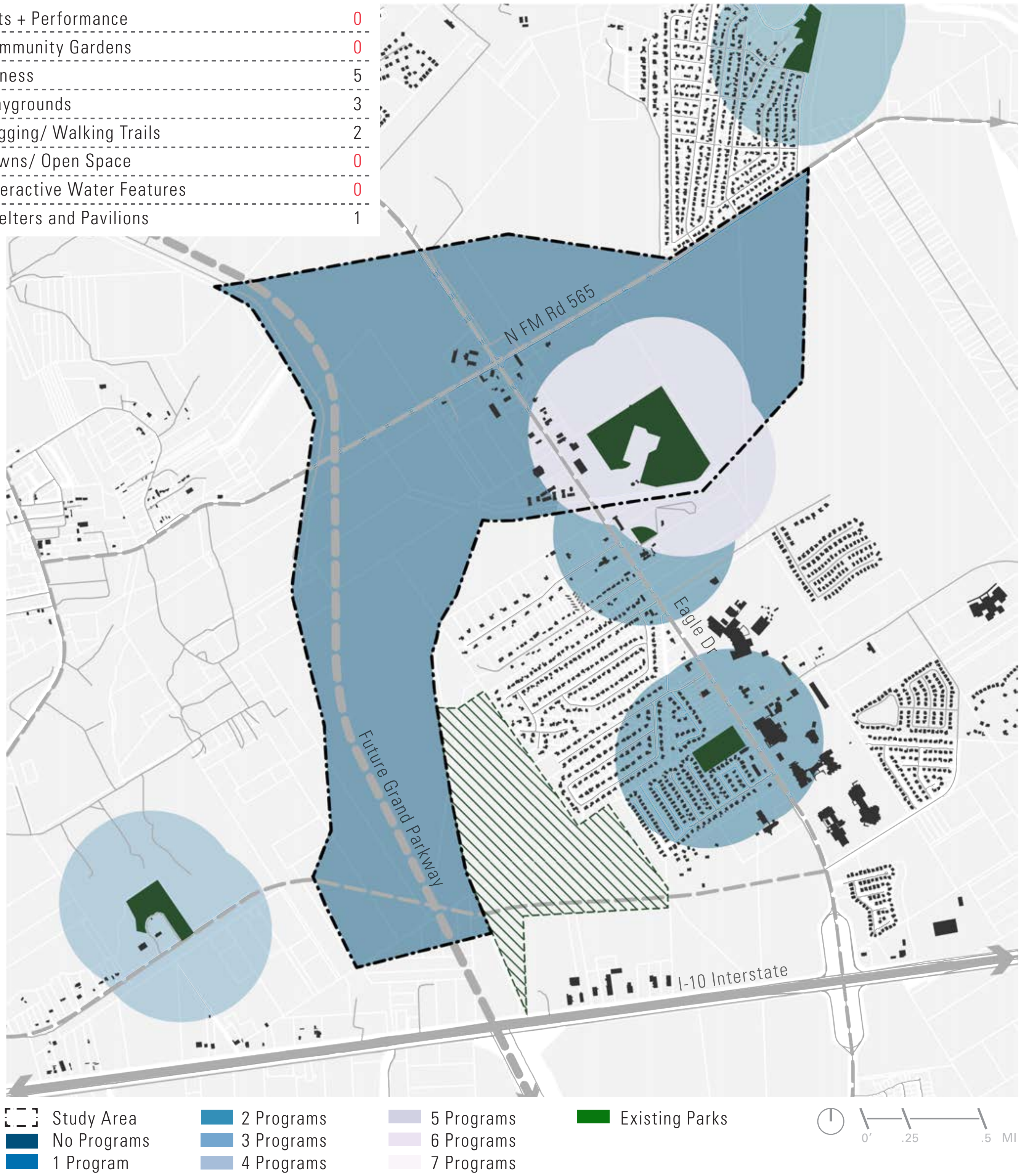
PARK PROGRAMMING

PARK PROGRAM DIVERSITY

Defining parks according to their respective uses and programs can help establish the need for gathering spaces that otherwise do not meet the requirements of constituents with varying age groups. A number of parks across the District carry vital flex spaces such as lawns and open spaces. Developing parks for families and the elderly will balance the park programs that currently cater to young professionals.

Figure 15: Park Programming Diversity Index

PARK PROGRAMS	# EXISTING OF PARKS
Arts + Performance	0
Community Gardens	0
Fitness	5
Playgrounds	3
Jogging/ Walking Trails	2
Lawns/ Open Space	0
Interactive Water Features	0
Shelters and Pavilions	1



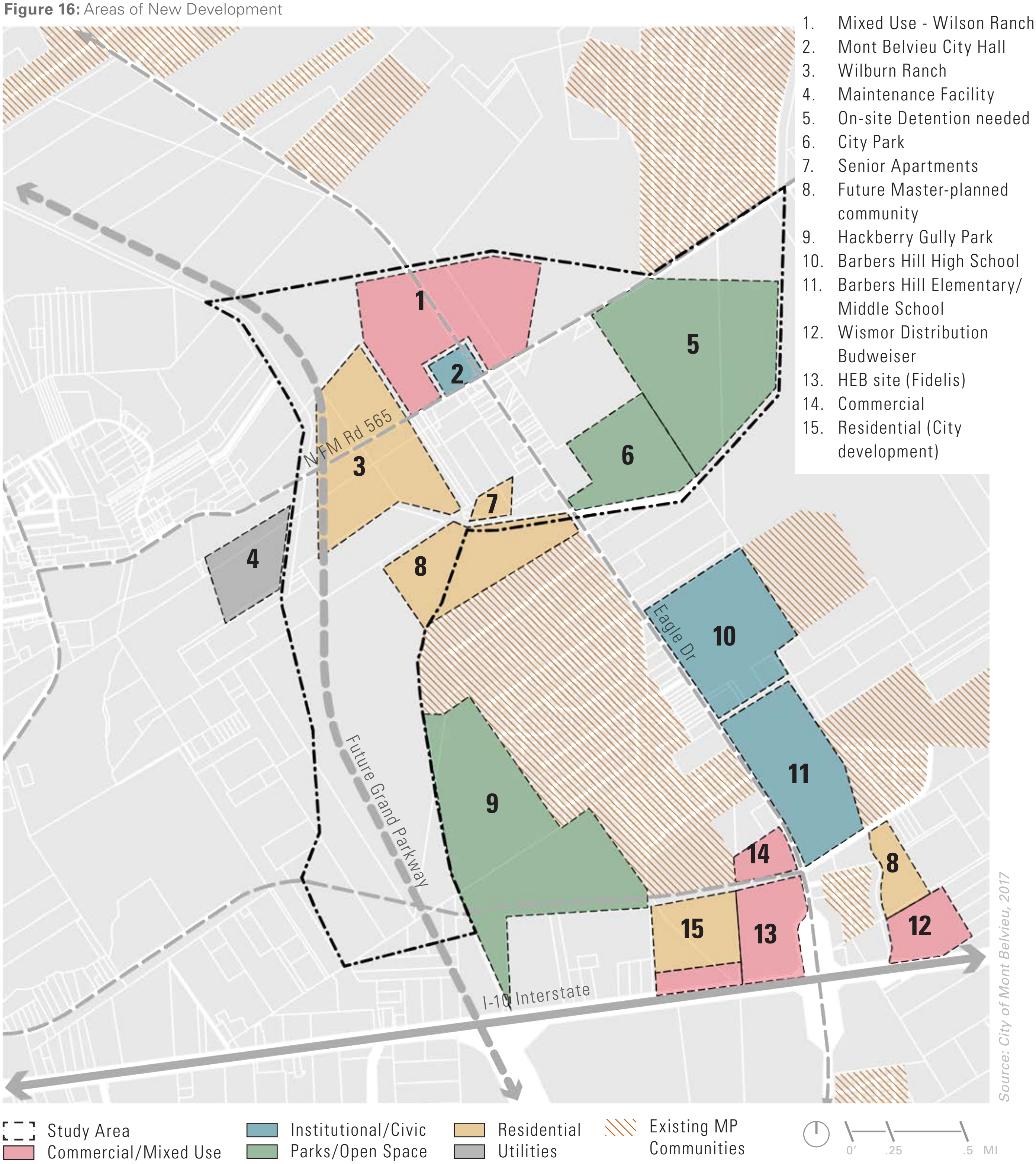
Source: City of Mont Belvieu, 2017

DEVELOPMENT TRENDS

AREAS OF NEW DEVELOPMENT + CITY DESTINATIONS

There are a number of new developments and existing city destinations that are essential to locate and they affect the location of the proposed town center. Several single-family tracts, for example, surround the Study Area. The majority of the eastern quadrant of the Study Area are open spaces. The City Hall is positioned at the intersection of Eagle Drive and FM 565. New developments include the future Hackberry Gully Regional Park, the Wismor distribution center and the Fidelis retail development at the intersection of I-10 and Eagle Drive.

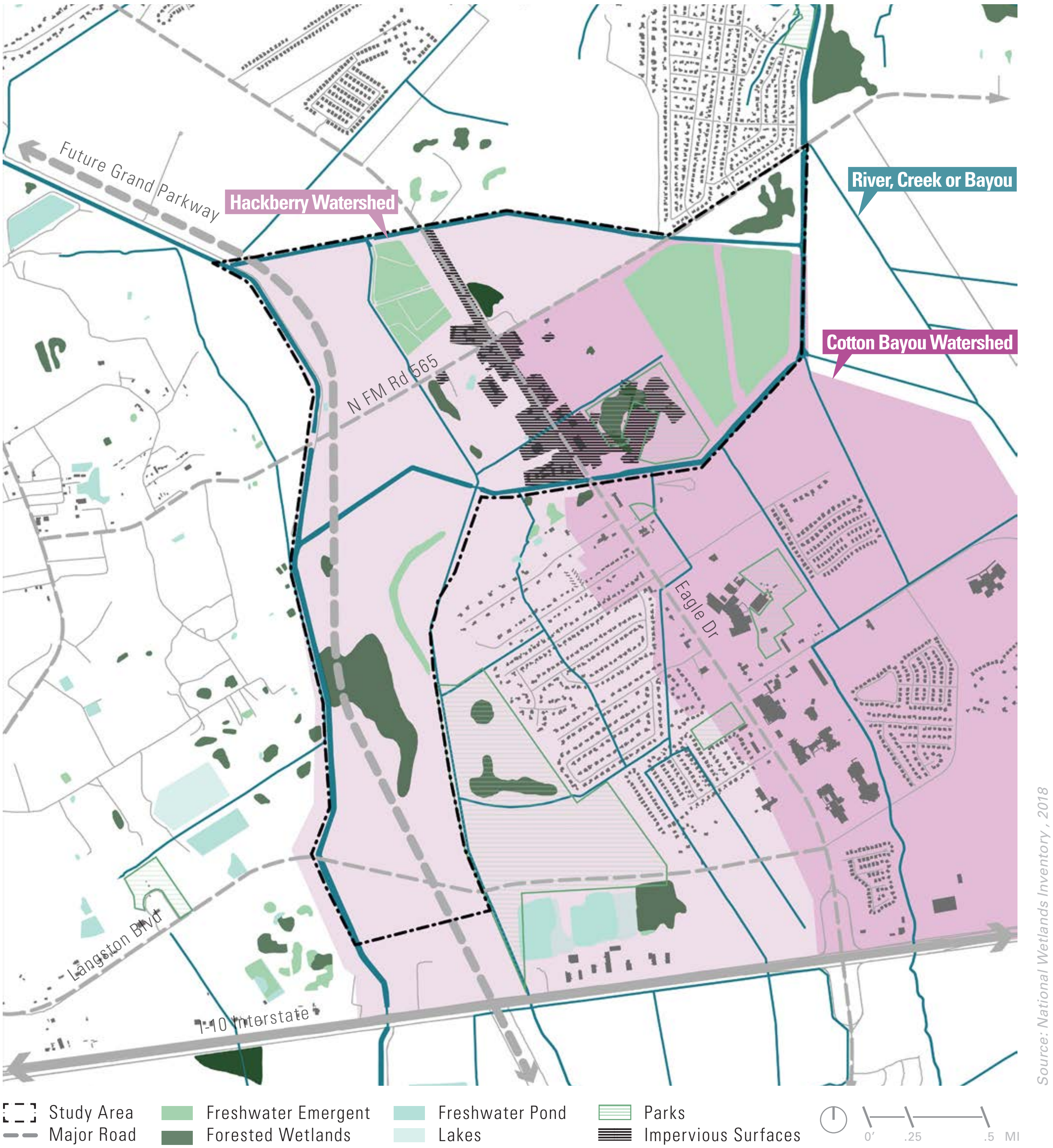
Figure 16: Areas of New Development



DRAINAGE EASEMENTS + DRAINAGE ISSUES

The natural assets of a community are vital in identifying strategies to harvest stormwater and promote drainage capabilities, stormwater best management practices and ecological assets alike. These assets are also essential to the character of Mont Belvieu's public realm. The below figure illustrates a number of wetlands, forested areas and water bodies that may require protection to respond to stormwater impacts. Consequently, a large part of the study area along Eagle Drive is made up of impervious surfaces. It is critical then to ensure impervious areas are offset by pervious surfaces and proper drainage capabilities.

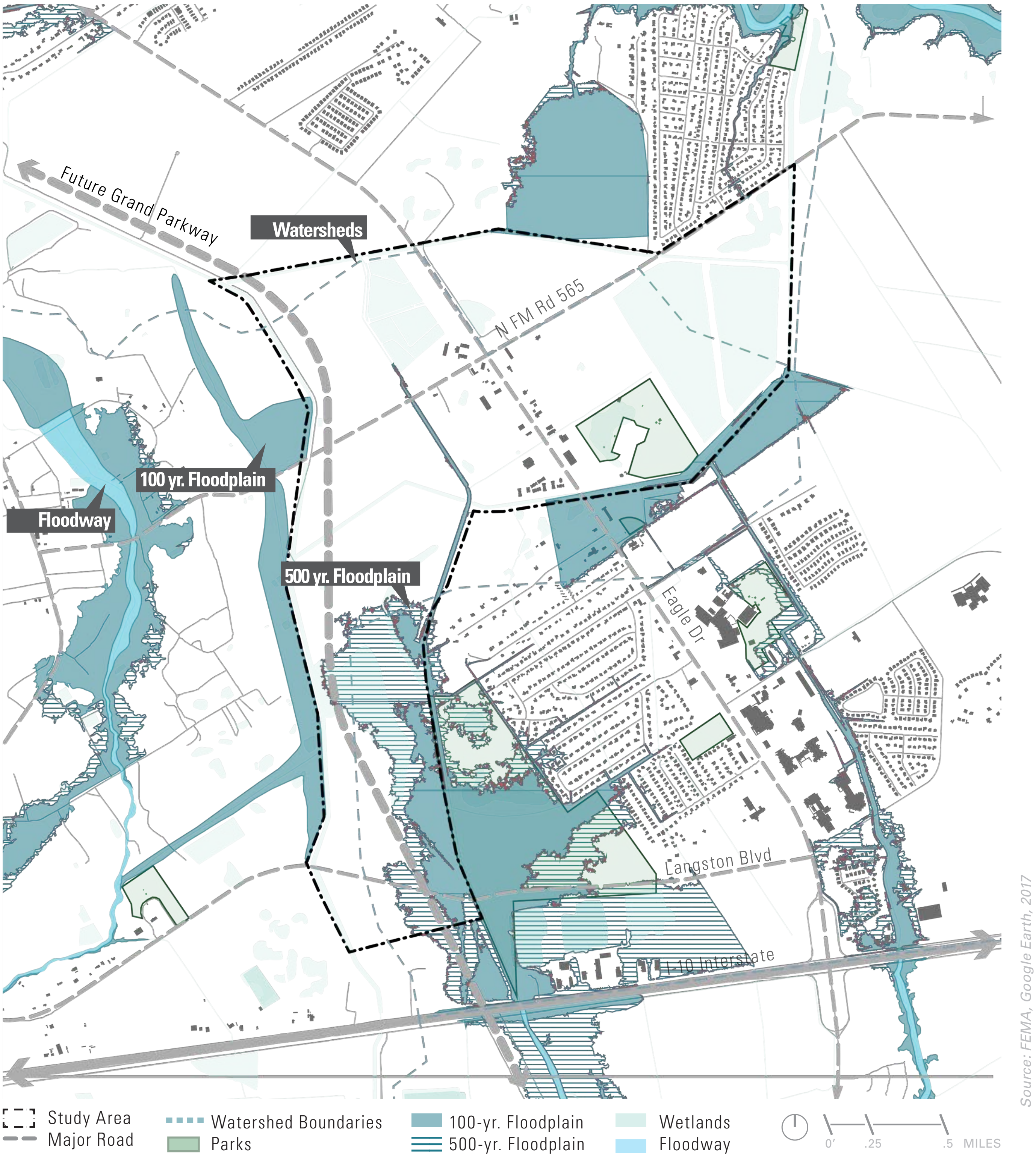
Figure 17: Existing Drainage



HYDROLOGY

Stormwater management is a critical criteria to consider when developing recommendations for built environments, particularly for the future of the town center development and adjacent neighborhoods. The figure below has identified areas that fall within the 100-year and 500-year floodplain. Developing recommendations that protect future development in Mont Belvieu will be essential to innovatively managing stormwater while protecting existing and future development from floods.

Figure 18: Existing Hydrology

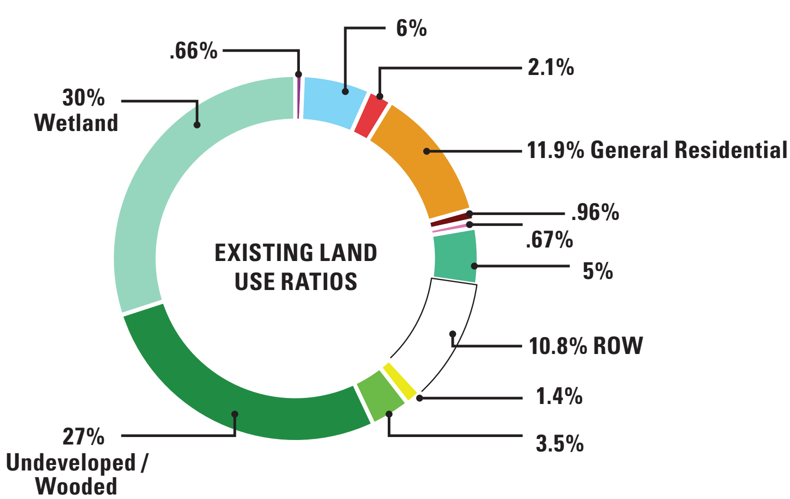


LAND USE

CURRENT LAND USE

The existing land uses within the Study Area are characterized by a majority of greenfield, parks and agricultural land offering prime opportunity for the integration of a "right-sized" mixed-use downtown, providing a walkable extension to the existing retail and commercial development along Eagle Drive and FM 565. Additionally, the undeveloped land provides significant opportunity to create park-like amenities and connect to the surrounding environs with interconnected, high quality development.

Figure 19: Existing Land Use (Comp. Plan)



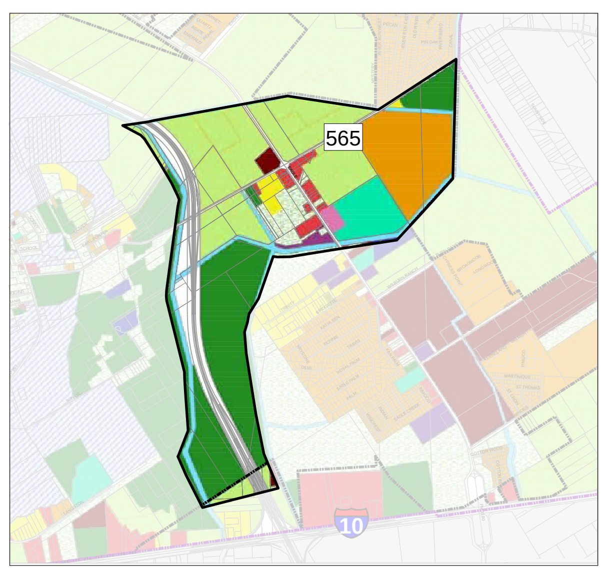
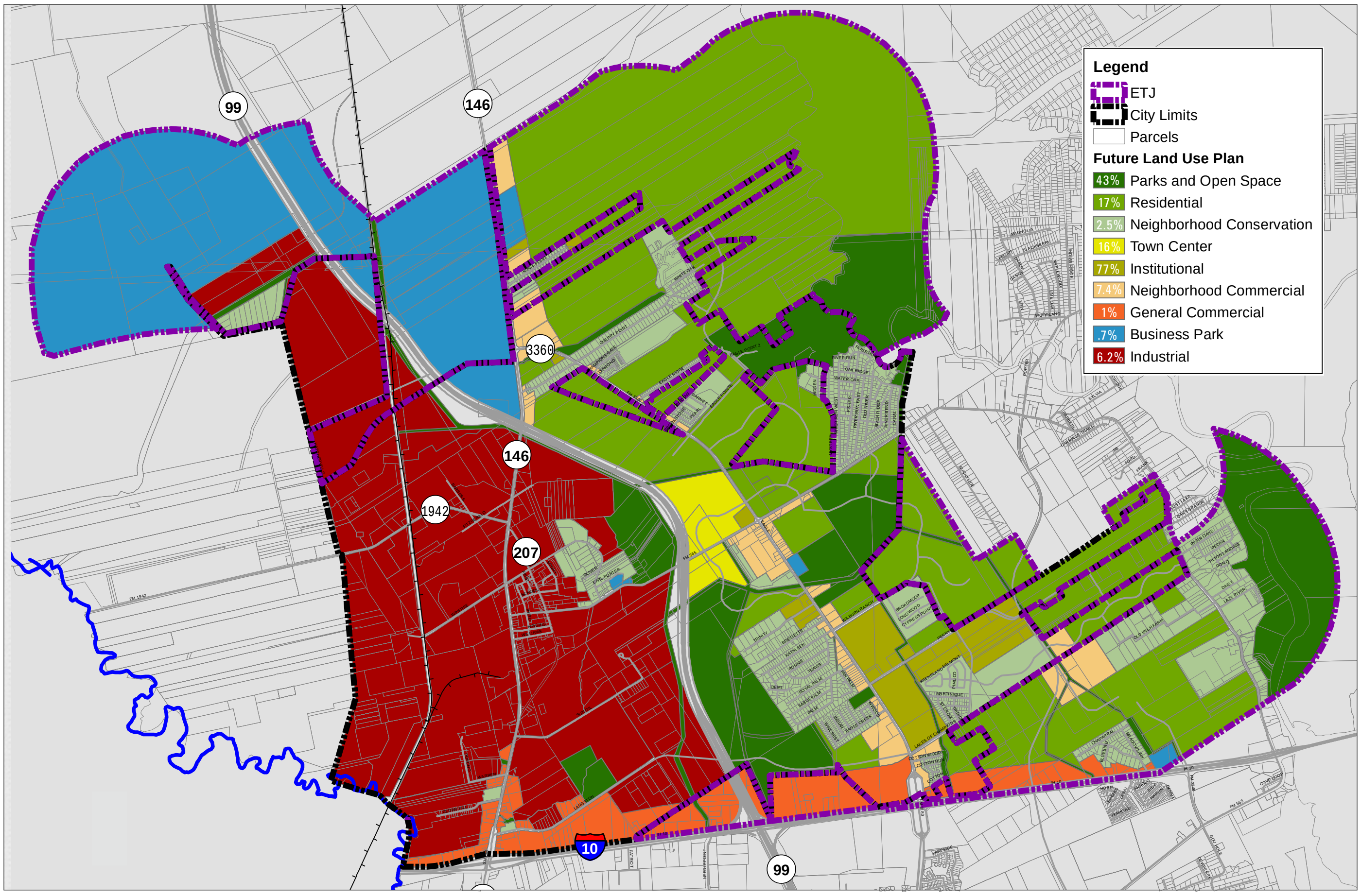


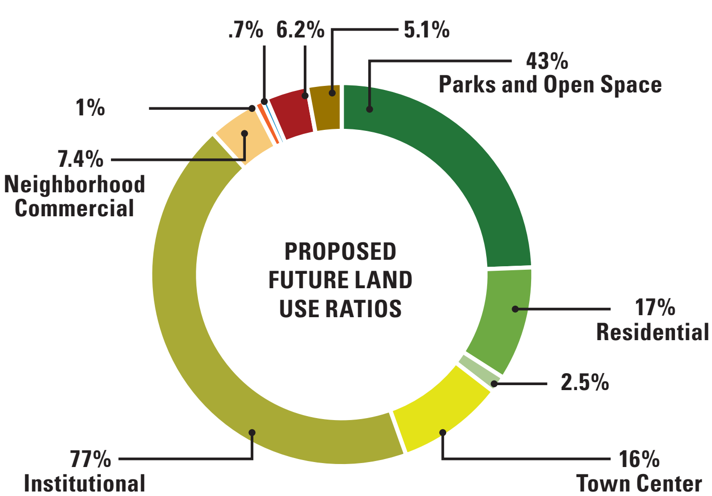
Figure 20: Study Area Existing Land Use (Comp. Plan)

FUTURE LAND USE | COMPREHENSIVE PLAN 2035

Planned future development, including significant residential land uses within and adjacent to the Study Area will help to support commercial and retail development in the core areas along Eagle Drive and FM 565. A nearly equal split in size between residential, parks and commercial/mixed use have been proposed by the 2035 Comp. Plan, with 31 percent commercial/mixed use, 35 percent parks and 30 percent residential within the Study Area make up nearly all the parcels, with the remaining 3 percent being civic/institutional and industrial.

Figure 21: Proposed Future Land Use (Comp Plan)





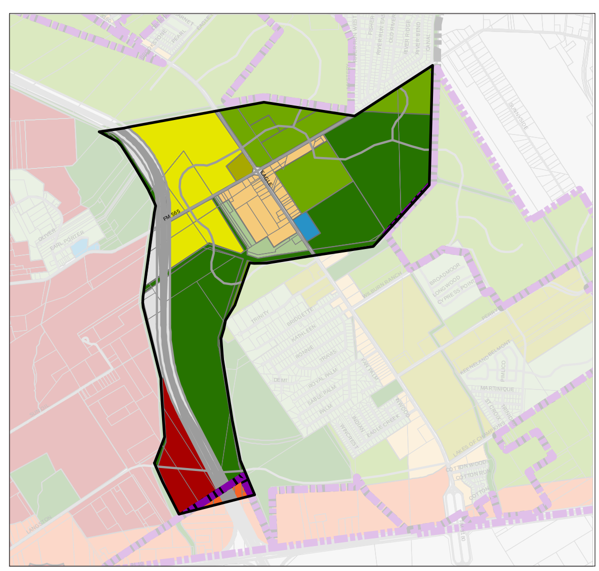
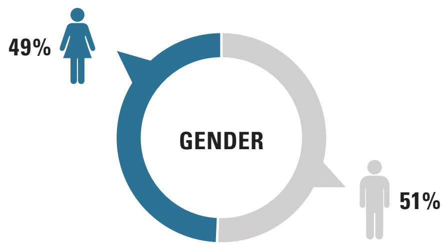


Figure 22: Study Area Future Land Use (Comp. Plan)

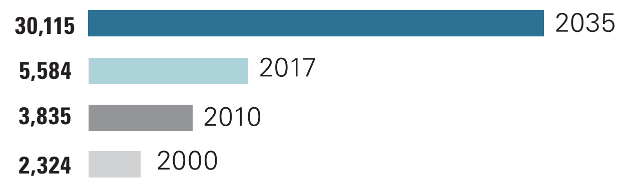
DEMOGRAPHIC ASSESSMENT

KEY FACTS



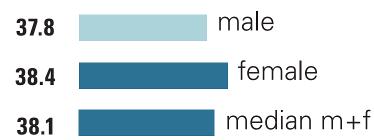
Population

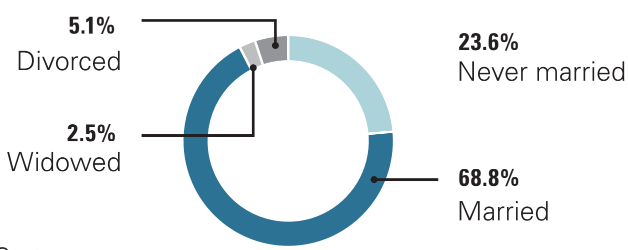
POPULATION OF MONT BELVIEU



Age

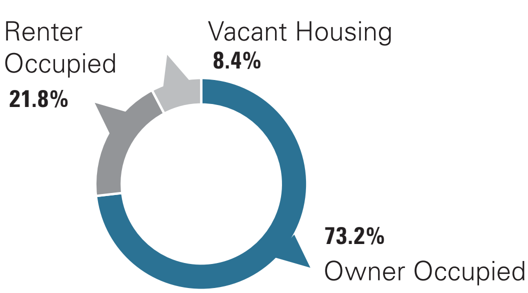
MEDIAN AGE



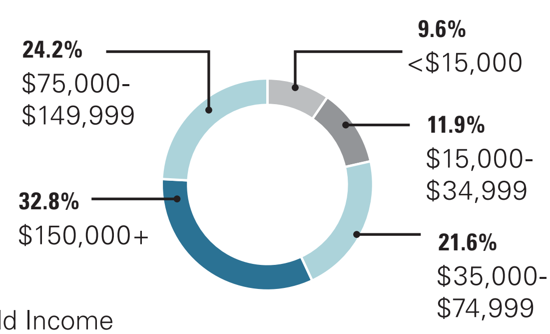


Marital Status

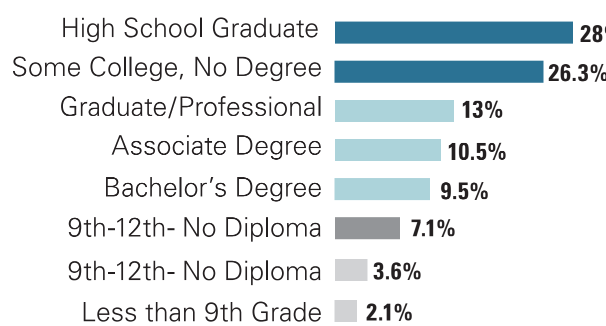
2017
Average
Household
Size:
2.89
1,739



Household Size and Unit Type



Household Income



Education Level (Population 25 Years and Over)

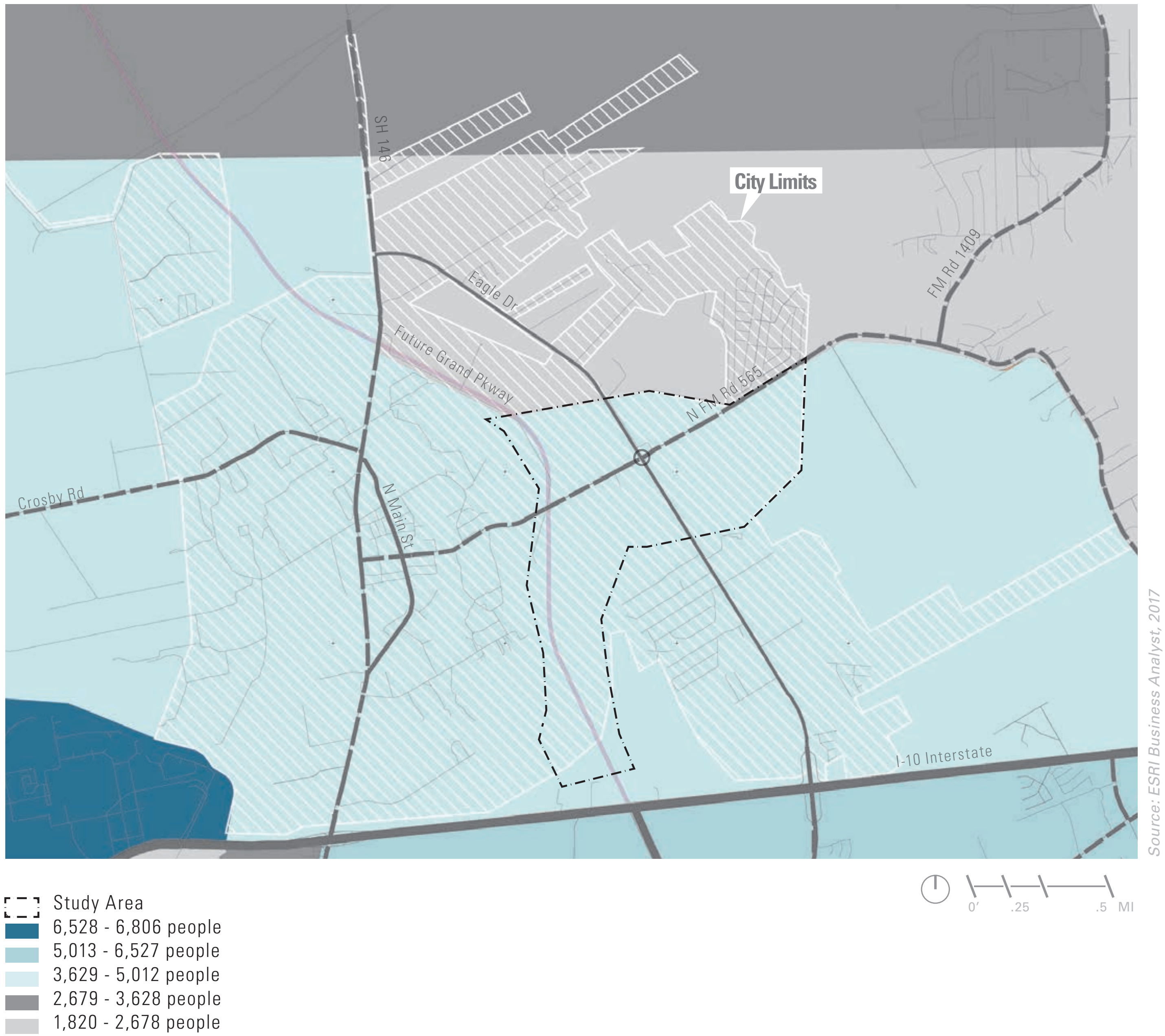
Figure 25: Demographic Breakdown

Source: ESRI Business Analyst, 2017

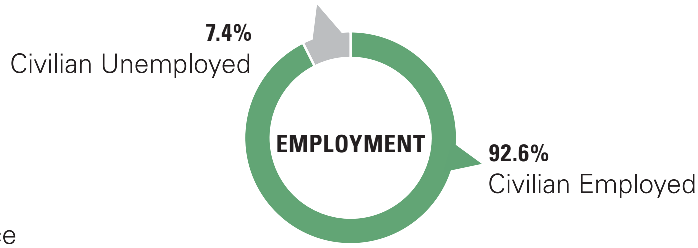
POPULATION DENSITY | EXISTING

The total population density as of 2017 is represented by census block with an overall density of 3,629-5,012 people. With the population expected to quadruple by 2035, it is significant to identify today's condition as per the location of current residents in Mont Belvieu. According to the census, much of the population resides just west of the SH 146 and north of Interstate 10. A growing number of people are aggregated in and around new master planned communities that are being built along Eagle Drive, south of FM 565 and I-10. With this new shift in community locale, it will be critical to establish amenities and infrastructure near future growth areas.

Figure 26: Total Population Density, 2017



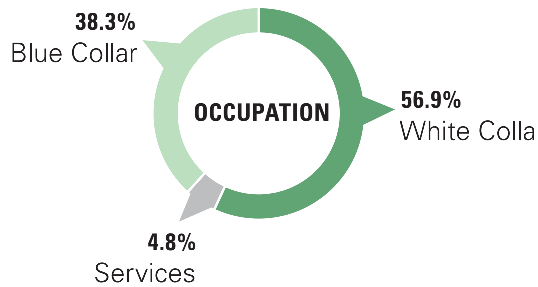
EMPLOYMENT FACTS

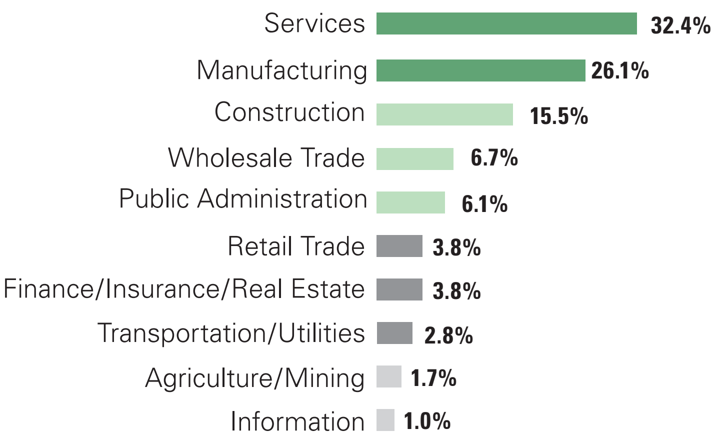


Employment Labor Force

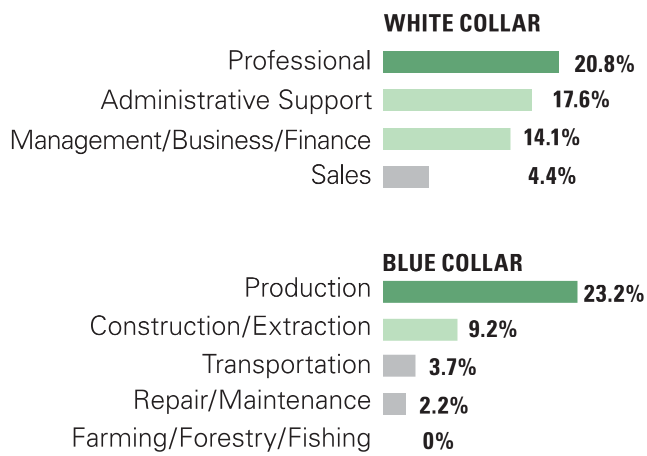
219
Total Businesses

8,356
Total Employees

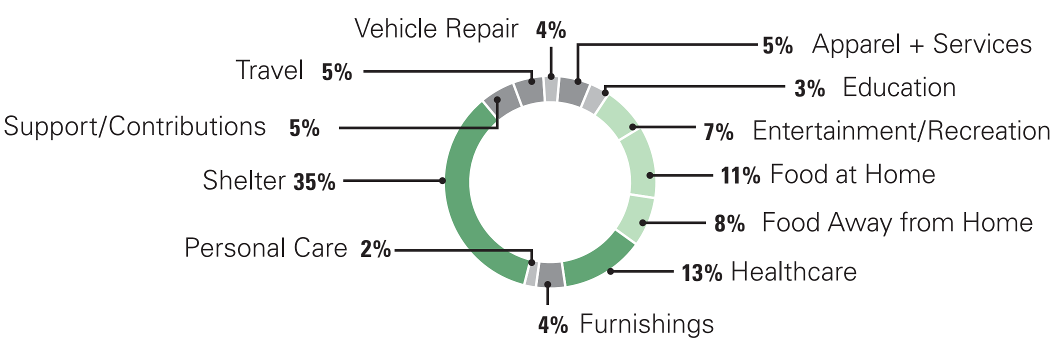




Employed Population 16+ by Industry



Employed Population 16+ by Occupation

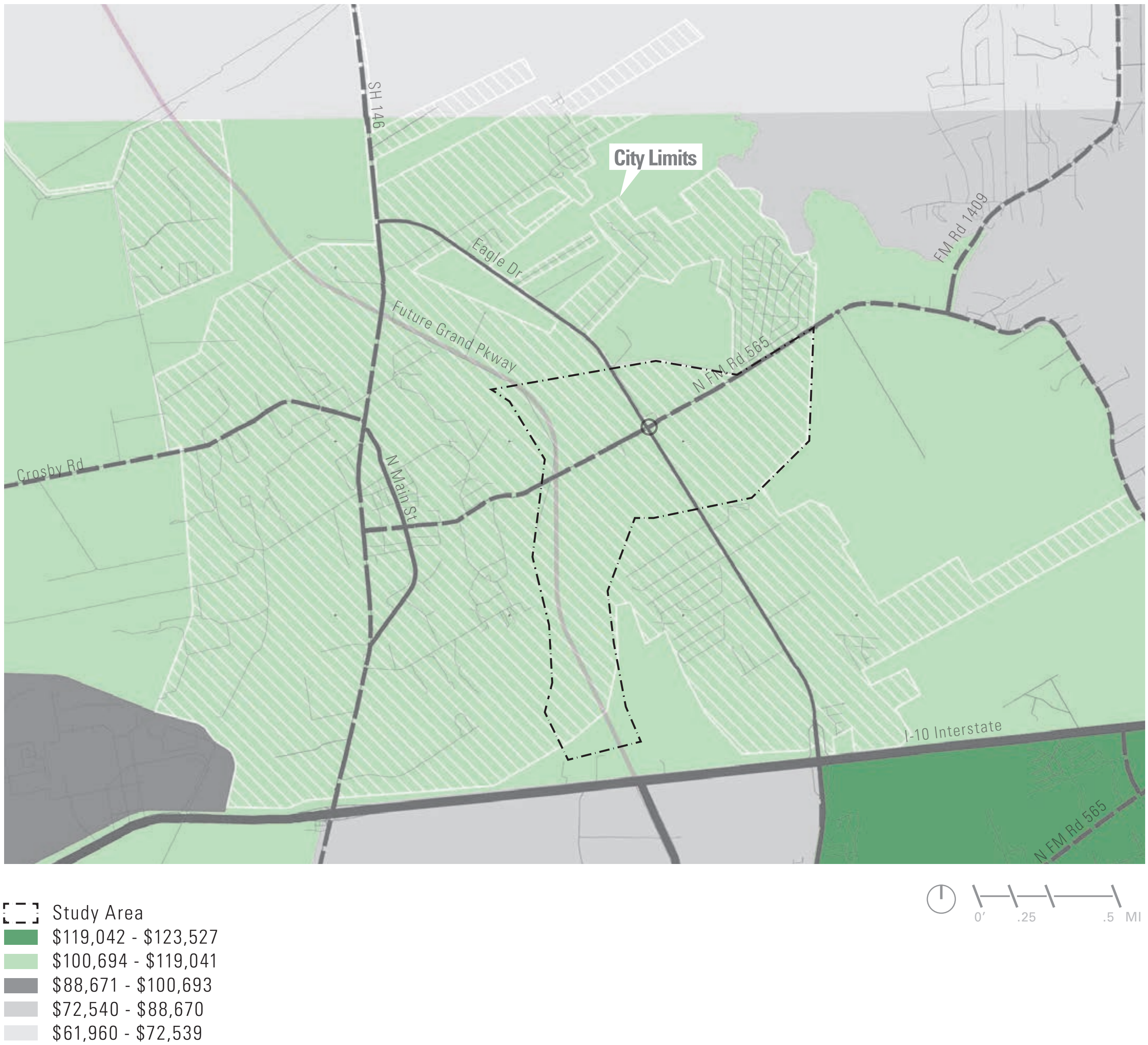


2017 Consumer Spending

INCOME BLOCKS | EXISTING

For the most part, the City of Mont Belvieu consists of healthy household incomes. The Study Area saw an increase in higher incomes over $125,000, a significantly higher average income than all other areas north of Interstate 10. There is a block, however, just south of I-10, east of Eagle Drive that carries a concentration of households with the highest average income at $119,042-$123,527 according to the figure below. Growth patterns are expected to change as development north of I-10 increases.

Figure 27: Household Income by Block Groups (2017)



Source: ESRI Business Analyst, 2017

COMPETITIVE MARKET AREA

The economic and development opportunities within the Livable Center Study Area are ultimately determined by the overall nature and volume of market demand in the region that the Study Area is located in. The team considered a Competitive Market Area (CMA), encompassing an area that is roughly bounded by the following landmarks: Highway 90 to the north, FM 563/562 to the east, Trinity Bay to the south, and Scott Bay/Crosby-Lynchburg Rd. to the west. The term "market area", competitive market area and CMA are used interchangeably in this report.

Figure 28: Competitive Market Area

Source: City of Mont Belvieu, 2017. ESRI , Digital Globe, Earthstar Geographics, CNES/Airbus, USDA, USGS, AeroGrid, IGN, GIS User Comm.

SUMMARY OF ECONOMIC CONDITIONS

DEMOGRAPHICS AND POPULATION

- The Competitive Market Area (CMA) includes 25 zip codes and has a population of 215,829, with an increase in population growth of 14.6% since 2010
- The CMA saw increases in age groups of people 55 and older and a slight increase of people 25 to 34 from 2010 to 2018; the largest increase was in ages 65 to 74. The highest percentage of growth in the Study Area took place in the age groups of 21 to 24, followed by 65 to 74. The largest percentage decrease was in ages 10 to 14 and 35 to 44 in the Study Area.
- Average Household size is about 2.9 in both the Study Area and the CMA.
- Educational attainment in the Study Area and CMA shows a higher portion of residents with an Advanced Degree, yet at the same time shows a lower portion of residents with Bachelor's Degrees compared to Chambers and Harris Counties. The Study Area shows a lower portion of residents with lower educational attainment (less than 9th grade and some high school no diploma) than compared to Chambers and Harris Counties.
- The average household income in the Study Area is $114,891; in the CMA, $80,177.
- According to 2017 estimates, the Study Area has a lower percentage of families in poverty (7.42%) and the CMA has a just slightly higher percentage (12.1%) when compared to Harris County (20.9%).
- The 2025 projections from H-GAC and CDS estimate that the population in the CMA will increase by roughly 6.5%.

HOUSING

- The CMA includes 74,346 housing units of which 72.53% are owner occupied.
- Approximately 15.7% of the housing units are multifamily (12,989 units)
- The median housing value of owner occupied homes is $133,493.
- There were 2,125 sales in 2017. The average price was $191,875.
- The average price was $191,875 and the median price was $180,000. Prices rose 6.5% from 2016 to 2017.
- There are 540 current active listings ranging from $15,000 to $1,650,000.
- There were 2,005 homes sold in the CMA in 2016. The average sales price was $180,228 and the median was $169,000.
- There were 392 new construction homes sold in 2017.
- With 72.53% of households owning in the CMA (2017 estimate) there is a potential demand to support 2,150 new homes through 2020 based on current lot supplies.

RETAIL

- There are 818 retail buildings including 10,653,156 sf in the CMA.
- The average rental rate is $13.24/sf (NNN) with a vacancy rate of 4.4%.
- There is 300,000 sf currently under construction.
- In the past 12 months, 291,474 square feet have been absorbed in the CMA.
- Net absorption has been relatively positive in the market despite a negative in 2015. The leasing outlook over the next 60 months is for continued absorption.

HOSPITALITY

- Historical hotel performance statistics for the CMA resemble the same trends for the MSA overall.
- Performance figures were steady and increasing from 2010 to 2014 but dropped off in 2015 when effects of the oil prices hit Houston and affected both business and leisure travel.
- At the same time, the market was supported by large construction crews creating demand and occupancy in the CMA due to local and regional expansions in the petrochemical industry.

- The CMA contains 2,040 hotel rooms that vary in type, quality, and size. The most recent occupancy figures for the CMA show 66.2% in 2017 for an average of 65.2% since 2011. REVPAR on average is $53.75.
- The number of hotels in the CMA has remained flat since 2011 when there were 24 hotels in the CMA to 2016 which shows 29 hotels in the CMA.
- The number of rooms has increased since 2011 by 22.6% from 1,664 total rooms to a total of 2,040 in 2017.
- Hotel revenues have increased significantly in the CMA by 143% rising from $15,088,248 in 2011 to $36,689,260 in 2017.
- Occupancy from the low in 2011, increased 66.2% in 2017.
- REVPAR has increased by 115% from 2011 ($24.98) to 2016 ($53.75).
- As petrochemical facility construction dwindles, hotel room occupancy will follow accordingly with decreased occupancy.
- It is important to note that 2018 hotel data was not available at the time of this report, therefore any new hotels finished in 2018 are not listed in the hotel data in this section for the CMA.
- Occupancy is higher and REVPAR is lower in the CMA compared to the MSA due to the bulk of hotels in the CMA being moderate to lower rate establishments.

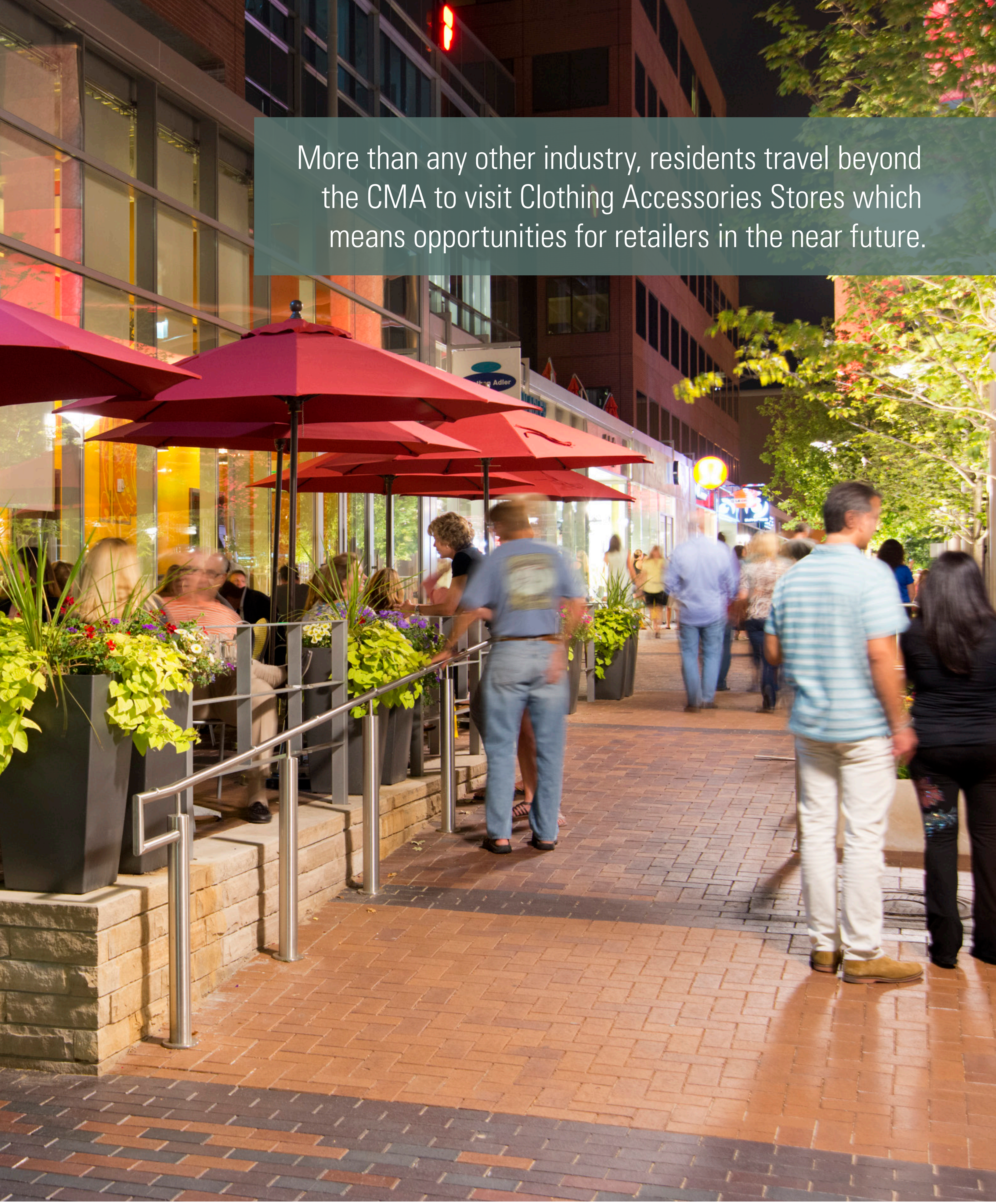
OFFICE

- There are 230 office buildings totaling 2,245,466 square feet in the CMA.
- The vacancy rate is 6.2% and gross rents are at $21.48 psf.
- The average year built is 1978.
- Throughout the entire CMA there are no existing Class A buildings.
- The lack of Class A office space may create a small opportunity for a one-off type office project, perhaps a component of the Mont Belvieu downtown project.

INDUSTRIAL

Based on the region's competitive advantage in petrochemical manufacturing and Port Houston's 2017 record setting container volume expected to continue, industrial is projected to continue moving in a steady or slightly upward trend entering 2018.

- Total direct vacant space and total availability decreased in 2017 and Hurricane Harvey's impact had perceptible repercussions, yet Houston's key economic sectors still provided strong support of industrial expansion.
- Both the CMA and Study Area are in the Northeast sub-market, which includes 32,654,962 square feet with a vacancy rate of 2.9% and asking rents at $0.53 psf (gross).
- Net occupier demand was strong in 2017. However, pre-leased completions have begun to flatten, signaling potential tightening in the overall market in 2018, with the North submarket experiencing the greatest tightening (1.2%) in 3Q2017.
- The Northwest and Southeast submarkets saw the greatest expansion in speculative projects geared toward Port and West Houston distribution and logistics.
- The two sectors of the regional economy most closely tied to industrial performance in the region, Port and petrochemical are predicted to continue to remain strong through 2018.



More than any other industry, residents travel beyond the CMA to visit Clothing Accessories Stores which means opportunities for retailers in the near future.

SUMMARY OF ECONOMIC DEMAND

SINGLE FAMILY HOUSING

At 2018, based on past trend data for the Study Area, Mont Belvieu has an estimated 4% capture of the overall CMA owner-occupied housing units (2,151/53,921). Application of the capture rate to the CMA single family forecasted demand results in 86 new homes by 2020, an additional 343 homes by 2025 and 388 homes by 2030 based on projected demand and the 4% capture rate. This would be a total demand of 817 single family units by 2030, which is just slightly more than half of the current amount of homes currently planned for the Study Area.

MULTI-FAMILY HOUSING

There is a potential demand to support 441 new units through 2020 based on current units under construction and proposed. By 2030 there will be additional demand for 3,676 units. At 2018, Mont Belvieu has an estimated 2.5% capture of the overall CMA multifamily units based on percentage of renters (502/20,425). However, as with the actual single family capture rate for the demand calculation used previously, the same method will apply here to the increased multifamily capture rate for the Study Area. A more accurate capture rate is representative of the planned and expected real estate and infrastructure development in the CMA and Study Area. Application of the adjusted capture rate to the CMA multifamily forecasted demand results in a total of 346 units through 2030 based on projected demand by CDS. In some cases, traditional multifamily development is not popular, thus alternative housing types can be produced deliberately as rental units such as single family patio homes, townhomes or small scale condo developments. These may be a more attractive rental product for this market.

SENIOR HOUSING

The team estimated that the Study Area could capture 100% of the estimated market growth based on the percentage of households age 55+ currently renting in the Study Area. The total future Study Area household growth results in 36 additional renters in the next five years (by 2022) age 55+.

Source: Apartment Finder. 2018. "Birchwood at Elkton (62+ Community)." Accessed June 1, 2018. https://www.apartmentfinder.com/Maryland/Elkton-Apartments/Birchwood-At-Elkton-62-Community-Apartments-lpmfl2f.

RETAIL

The phenomenon of pioneering local businesses such as bars or restaurants investing in the Study Area is more likely to occur with incentives or additional middle-income population in the area. The top lifestyle segments, correlated to likes, dislikes and purchase behavior relative to retail goods and services shows the largest household segment in the Study Area is Township Travelers (8.54% or 4,275 households) followed by Second City Generations (5.68% or 2,840 households). Consideration to the following is important:

- Independent local businesses serving the area's moderate-income population will generally prefer the lower-rent existing retail space in the area over more expensive newer space.
- Increasing population growth will help mitigate this situation over time as associated retail demand increases, along with the ability of local businesses to pay higher rents.
- In some cases, an independent entrepreneur will have enough access to capital to allow for new construction or substantial renovation of existing buildings.

There is a consumer base oriented towards upscale incomes and small-town environment, enjoying outdoor activities, watching college sports and shopping at wholesale clubs and gourmet groceries. These are often multi-generational households with parents or grandparents and new babies and young children under one roof, often bilingual, and are entertained by a wide variety of media channels and programs. The retail business categories mentioned above are supportable at the neighborhood level and could be successful in Mont Belvieu Main as long as mechanisms and tools recommended for Mont Belvieu Main are incorporated.

New retail space should be focused on facilitating local businesses in three main categories or types;

- Food and Drink (wine bar, beer garden, coffee shop, café, grill)
- Personal Services (local real estate agents, boutique healthcare, dentist, chiropractor, local tax service, hair salon/barber shop
- Fitness, Health and Wellness Businesses, (local cross fit, yoga, pilates - activity based businesses)

The aggregate expenditure estimates for the CMA are higher in every category except Clothing Accessories Stores. This indicates that residents are shopping outside the CMA for these items. The category representing the highest leakage is Clothing Accessories Stores which could mean opportunities for clothing retailers in the future, especially if household and employment continue to grow. However, Mont Belvieu Crossing will address this leakage to some extent with the newly constructed TJ Maxx and likely at least one additional large clothing retailer.

Study Area and CMA could support a modest community/neighborhood level retail as a component of Mont Belvieu Main, but only if a close eye is kept on the type and scale of business and space provided for businesses with regards to CDS recommendations on the types of businesses.

HOSPITALITY

The CMA is oriented to the petrochemical manufacturing industry, and this fact must be recognized when considering performance trend data and future demand. With petrochemical facility construction in the CMA and region as a whole dwindling, this makes it difficult to predict with precision the near and long term with respect to occupancy and demand of hospitality. Based on what is currently supported by the market, the hospitality market demand summary below and potential uncertainty of future construction-related demand from petrochemical plant expansions, CDS has determined that additional hotel rooms at this time are not optimal.

- The CMA is currently faring identical to the Houston MSA comparison area at 66.18% occupancy.
- Rooms were added in 2016 and 2017 which inherently impacts occupancy due to an increase in supply, even if demand does not decrease.
- The hospitality market in the CMA is moderate to low priced, with half of the establishments offering nightly rates at or below $50, reflected by the average REVPAR of $53.75.
- In 2017 new, higher end brand hotels were constructed in Baytown at I-10 and Garth Road which will offer higher rates, in the $70-$100 a night range bringing average REVPAR in the market up slightly.

OFFICE

- Using 200 square feet per employee, the estimated office space needed in the CMA by 2020 is 459,747 sf for employment growth based on HGAC/CDS projections or 91,949 sf annually.
- Absorption in the CMA overall has been -11,793 sf annually over the past five years.
- By 2020, the CMA will have demand for 459,747 square feet of office space
- Based on the current supply of office space in the sub market (2,519,420 sf), 89% (2,245,466 sf) is located in the CMA and 1.3% (32,683sf) is located in Mont Belvieu.
- The CMA can expect to absorb 459,747 square feet from 2016 to 2020 or 91,949 sf annually based on employment projections.
- Mont Belvieu can expect only about 240-300 square feet of office demand per year to 2020, with future office space attached to petrochemical manufacturing facilities and entirely Class C space.
- This market is not suited for a traditional Class A spec, multi-tenant office building.
- Financial management businesses and other personal services like law, specialty boutique or altertantive health businesses could provide demand for a small to moderate scale of speculative office space.

INDUSTRIAL

- As with the demand for the development of office space in the CMA, the demand for industrial development will be heavily dictated by the level of future petrochemical and related business development.
- If competitive advantages in the CMA can be exploited in the future for the logistics and distribution industry, this will boost industrial development in the market.
- The extent to which two of the CMA's most important economic development assets, the I-10 corridor and Cedar Port Industrial Park, are capitalized will have a significant impact on future development demand in the CMA and Study Area.
- Currently most indicators signal that future projections for growth in the CMA are very positive.


nine salon
NOW OPEN

EXISTING CHARACTER

RESIDENTIAL

Residential structures in Mont Belvieu are predominantly new, single-unit, detached homes with little variety in architectural character and fall within a narrow price range. Development of a more diverse housing stock that follows architectural guidelines will ensure that the area caters to differing needs, ages and income ranges while maintaining a cohesive design language.

COMMERCIAL/RETAIL

Commercial structures are, for the most part, located on large tracts with an inconsistent array of architectural styles and materiality. These structures are scattered throughout the Study Area, particularly at the intersection of Eagle Drive and FM565 and at the Eagle Drive exit off of the Interstate 10. Many of these facilities are single-story structures with large setbacks for parking. Development of a compact retail experience with a mix of uses will ensure walkability and diversity of economic potential.

CIVIC

There are a number of civic uses in the study area. Although faith congregational facilities are varied in architectural character, the City Hall, Barbers Hill ISD schools and the police/courts are cohesive in character with brick facades. These facilities, however, will need to be cohesive with other uses in the area particularly as it relates to the City's future town center.

OPEN SPACE

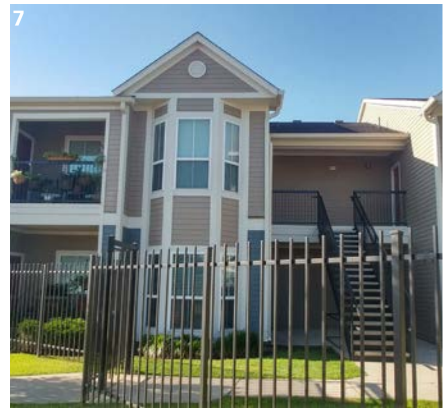
Parks consist of signage elements that may differ between park types. The City Park carries signage and placemaking elements that illustrate the City's small town and natural features. Carrying this criteria along with directional signage consistently throughout open space elements such as at trailheads, park entrances and nodes will provide the residents and visitors with a clear sense of place.

Sources:
1. HAR.com. 2108. "14034 Belmost Cir." Accessed on June 1, 2018. https://www.har.com/9510-white-landing/sold_52860044.
2-3, 5-12. English Associates.
4, 14. City of Mont Belvieu, Texas. n.d. "City Park." Accessed on June 1, 2018. https://www.montbelvieu.net/Facilities/Facility/Details/City-Park-3.
13. City of Mont Belvieu, Texas. n.d. Accessed on June 1, 2018. http://www.montbelvieu.net/.

5

6

7



8

9

10

11

12

13

14

EXISTING BRAND + IDENTITY

Existing brands and identities of the City of Mont Belvieu range from a variety of styles and materials. The distinct 'star' and color palettes suggest some consistency in signage. However, a family of signage needs to be established that vary in size where gateway elements, large and small scale monuments and signage elements are provided to distinguish different locations throughout Mont Belvieu.

Source: Eagle Pointe. 2018. "Recreation Complex." Accesssed June 1, 2018. http://www.eaglepointe online.com/recreation-complex/

Source: Malechek, Mg. 2017. "Google Maps: Midstream Business Park." Accessed June 1, 2018.https://tinyurl.com/y786ve54.

3

APPROACH

The Approach chapter specifies strategies by which Mont Belvieu's new town center may be formulated. There are a number of ways to develop a downtown framework plan. The key is to construct one that is contextually appropriate for Mont Belvieu's growing population, retains the small-town charm, envelops important circulation, creates development patterns that will sustain the area over time and provides the City with important public realm assets. Strategies include streetscape layouts, town center urban forms and overall density approaches that manifest appropriate metrics in developing the new town center. Benchmark projects in this chapter also provide targeted specifications (block size, intersection density, arterial street interface type) that have assisted the City and community in understanding the built form of planned town centers through case study and precedents.

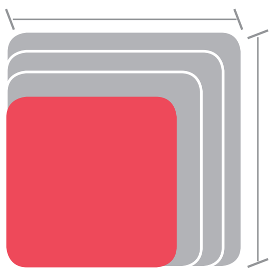
Aging-in-place and ensuring the City is attractive to a younger population is a key focus to how the framework is developed. A focus of the Approach is placed on walkabilty, accessibility and ensuring a standard for safe streetscapes and interconnectivity .

STUDY APPROACHES

PRECEDENT PROJECTS WITH APPROACH MEASURES

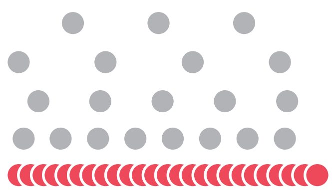
While no two communities are alike, the lessons learned in one place can be instructive in another. In particular, the form and configuration of a community's built environment can promote (or undermine) its efforts to enhance cultural, economic and ecological vitality. The following downtown and town center developments from throughout Texas represent six differing approaches to promoting active public and private realms, the lessons from which will help drive recommendations in Mont Belvieu. In these case studies, analysis focused on five key indicators, or metrics, for urban design.

BLOCK LENGTH



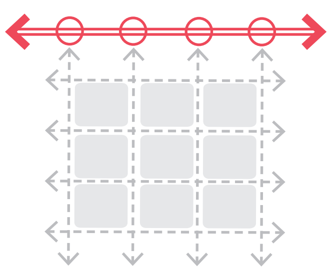
Block length determines the urban grid. A long block can discourage pedestrians from walking to their intended destination. Block length can vary tremendously between communities, and can also be a major determinant of pedestrian usage, commercial activity, and adaptability for future development.

INTERSECTION DENSITY



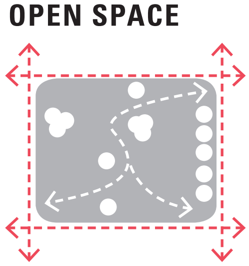
Intersection density indicates the amount of roadway intersections per one half square mile within an area. Typically, high densities of intersections can correspond to decreased traffic speeds and increased pedestrian activity, but can also indicate increased vehicular accessibility.

ARTERIAL-SHOPPING INTERFACE



The spatial relationship between a shopping street and its associated primary arterial road has a direct effect on the success of a commercial street. Commercial areas that are visibly and physically accessible from arterial roads are more likely to thrive than those that are not. However, large arterials that run directly through a shopping district can bisect the area, making it less likely for people to cross from one side of the street to the other, and therefore less walkable.

OPEN SPACE



Parks and plazas in town centers and downtowns offer respite from urban living and provide a node of activity throughout the day. Open space for gathering and flexible events such as annual festivals, open air markets and concerts offers a platform for bringing communities together while providing both direct revenue through memberships and ticket sales as well as indirect revenue by bringing people to downtown areas at off-peak times, often driving retail sales.

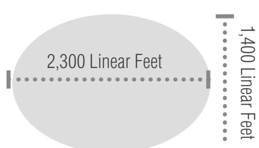
Figure 29: Benchmarks

IDEAL RETAIL STREET LAYOUT

An ideal retail street layout is important to consider for Mont Belvieu Main (future town center). The team analyzed ideal benchmarks (block, site size and density) that took into account walkabillity, access, mobility for multiple users, diversity of program and economic benefits. Below are standards that were noted.

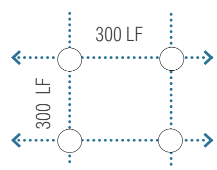
IDEAL DEVELOPABLE SITE SIZE

- Amount of square footage + percentage of development that is commercial, office, hotel, civic, open space and residential.
- Diverse mix promotes continuous activity and attracts different users.



IDEAL BLOCK LENGTH

- Determines a development urban grid.
- Long blocks can discourage pedestrians from walking.
- Size can vary between communities.
- Determinant of pedestrian usage, commercial activity and adaptability for future development.



IDEAL INTERSECTION DENSITY

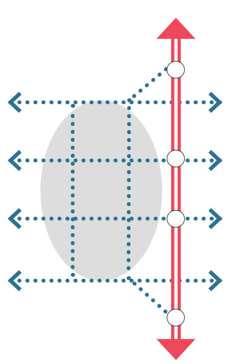
- Indicated amount of roadway intersections per acre within area.
- High densities of intersections can correspond to decreased traffic speeds, increased pedestrian activity and increased vehicular accessibility.

.25 INTERSECTIONS PER ACRE

TOWN CENTER STREET APPROACHES

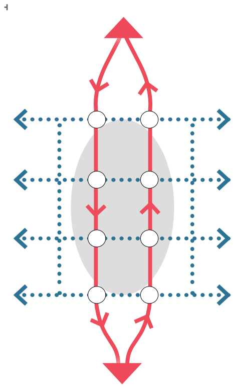
The design team analyzed benefits of the town center node and its positioning among arterial roadways (particularly in relation to FM 565), and how that will affect mobility, economic, traffic and development patterns.

PARALLEL TOWN CENTER STREET



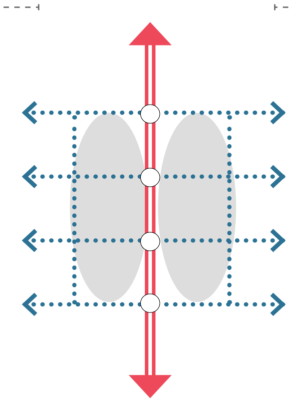
STRENGTHS	WEAKNESSES
generates the highest return on investment	initially disruptive to existing businesses
high degree of vehicular mobility	potential for excessive traffic noise
encourages safe pedestrian activity	high up-front costs

COUPLET CASING TOWN CENTER



STRENGTHS	WEAKNESSES
conducive to business activity	fractured development pattern
contributes to traffic calming measures	does not promote vehicular mobility
generally pedestrian friendly	poor cost-to-value ratio

ARTERIAL SEPARATING TOWN CENTER



STRENGTHS	WEAKNESSES
quick and easily implementable	does not promote pedestrian activity
familiar for current residents	results in a disparate development pattern
minimal construction-related inconvenience	too similar to existing character

COMPLETE STREETS

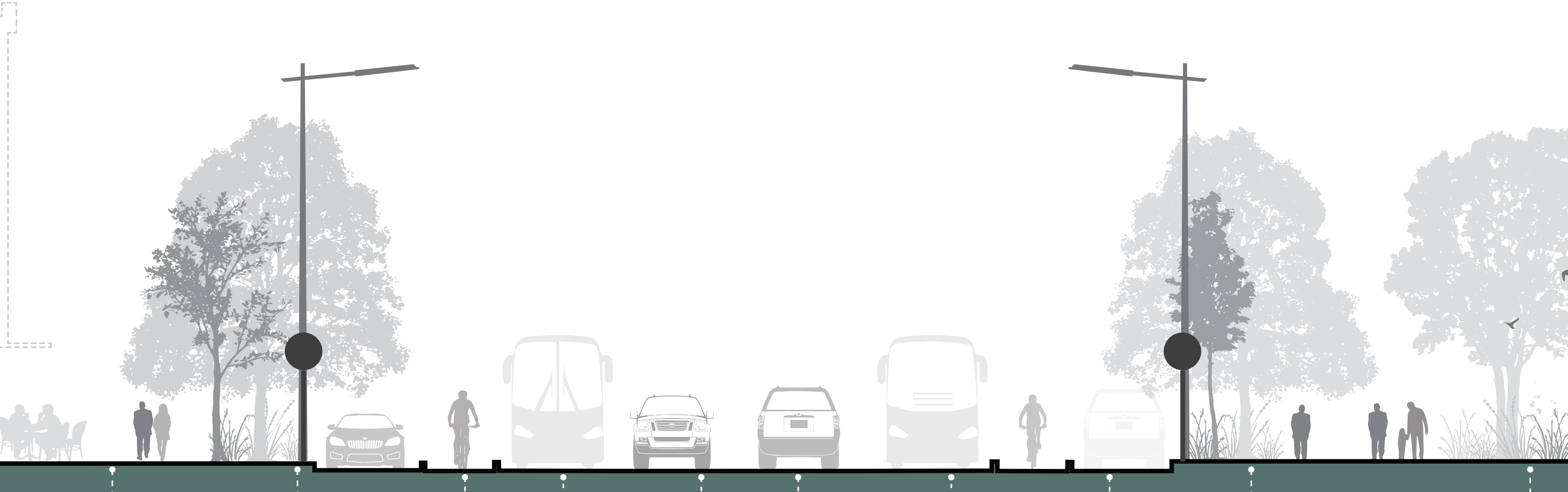
Complete Streets are streets typically designed for multiple users. They enable safe access for pedestrians, cyclists, motorists and commuters of all ages and abilities. Other benefits include reduced vehicular congestion with proper traffic calming techniques (connected streets), enabling smart growth to meet residents' desires for choices in housing, shopping, recreation and transportation and ensuring streets are accessible for all. Streets in the proposed town center and surrounding Study Area will benefit significantly if designed to such standards. Below are parts of what denotes a Complete Street.

EXISTING FM ROAD (EXAMPLE)

Condition around FM roads when poorly planned to accommodate multiple modes of mobility (ie: walking, biking, driving) and encompassed by large tract development and strip malls.

PROPOSED FM ROAD (EXAMPLE)

Condition around FM roads when adequately planned for multiple modes of mobility (ie: walking, biking, driving) and allowing buildings to be set closer to the streetfront with human-scale qualities.



ACTIVE SIDEWALKS
- Wide, smooth, sidewalks, active retail and dining front, ADA accessibility

SAFE CROSSWALKS
- Clear markings, wayfinding and signalization create safe conditions for pedestrians

DEDICATED BIKE LANES
- Simple pavement markings for predictable and safe journeys

ACTIVE ROADWAY
- Dedicated transit lanes provide alternative means of transport
- Turn lanes reduce crashes

ON-STREET PARKING
- On-street parking and reduced size roadways help control speed

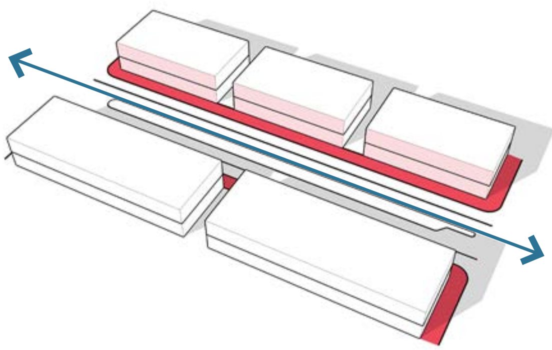
PLANTING STRIP
- Street trees and landscaping provide shade and slow speeding traffic

GREEN SPACE
- Green spaces create rich destinations

Figure 30: Components of Complete Streets

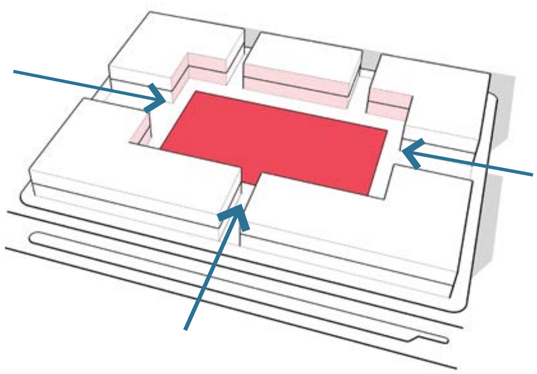
TOWN CENTER URBAN FORM

In addition to streetscape strategies and where a town center may be located in relation to arterial roads, the design team analyzed how a town center may be formed based on benchmark projects. Urban form is the configuration of the combined physical components of the town center. The components of the town center form include circulation, open or public spaces and development. It is the relationship of these components that determine urban form and the spatial success of a town center. A healthy and vibrant town center as the primary activity center is an essential aspect of a diverse and attractive city. The design team looked at several urban form types to inform the framework for the town center and promote walkability and livability.



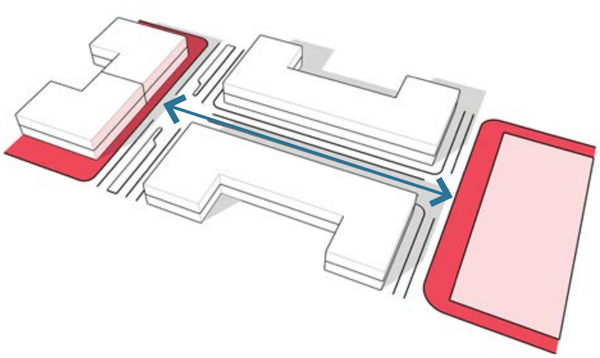
MAIN STREET MODEL

The Main Street model focuses town center activities, pedestrian flow and movement along a minor arterial or collector road, often a "Main Street". Retail development faces the corridor with minimal setbacks. The street is considered highly walkable and intimate for outdoor cafe spaces, wide sidewalks and vibrant retail activities.



TOWN SQUARE MODEL

The town square model puts town center activities and pedestrian flow primarily around a public space and off of roadways. In addition, retail development and activities face inward toward the square. Entries may occur off of main arterial roads or smaller collector roads.



DUMBBELL/ ANCHOR MODEL

The dumbbell/anchor model aligns town center activities along a minor collector street with retail development facing the corridor. Two public spaces or civic programs bookend the corridor. The corridor can act as the main walkable thoroughfare shared between pedestrians, cyclists and motorists.

Sources:
1. Smithsonian Institution. 2016. "Museum on Main Street." Accessed June 1, 2018. https://museumonmainstreet.org/content/our-history.
2. Storrs Center. n.d. "Welcome to Storrs Center." Accessed June 1, 2018. www.ct.gov/ecd/lib/ecd/capital_projects/Storrs_Center.pdf.
3. Agee-Aldridge, Jenny. 2014. "Sugar Land manufacturer plans major expansion." Houston Business Journal. Accessed on June 1, 2018. https://www.bizjournals.com/houston/blog/breaking-ground/2014/09/sugar-and-manufacturer-plans-major-expansion.html.

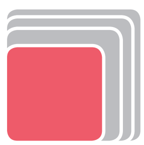
BENCHMARK PROJECTS

DOWNTOWN/TOWN SQUARE - GEORGETOWN, TEXAS

Adhering to strict guidelines for historic preservation, multiple developers worked to enhance this town center 25 miles north of Austin. An advisory board continuously works with the City Council to promote ongoing downtown economic development.

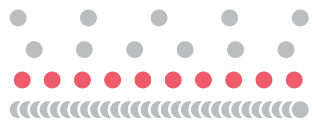
BLOCK SIZE

250'x 250'

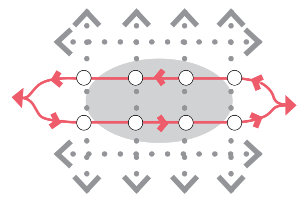


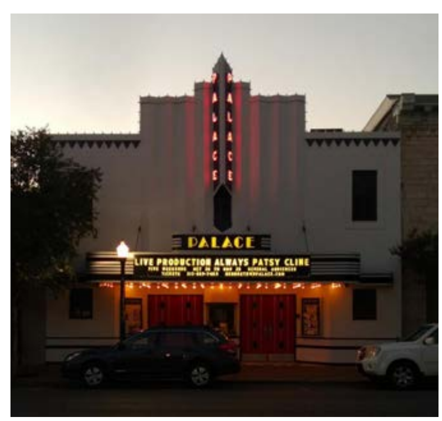
INTERSECTION DENSITY

0.37
intersections / acre



ARTERIAL-SHOPPING STREET INTERFACE





Sources:
1.Austex. 2010. "Georgetown Downtown." English Wikipedia. Accessed June 1, 2018. https://commons.wikimedia.org/w/index.php?curid=13420689.
2. Sault, Spring. 2016. "5 Charming Texas Hill Country Towns." Texas Hill Country. Accessed June 1, 2018. https://tinyurl.com/yc4xupv5.
3. Sheraton. 2018. "Sheraton Austin Georgetown Hotel & Conference Center." Accessed on June 1, 2018. https://tinyurl.com/y7saf4kn4. Burkland Frisk House. 2002.
4. Burkland Frisk House. Wikimedia Commons. Accessed on June 1, 2018. https://commons.wikimedia.org/wiki/File:Burkland_Frisk_House.jpg.
5. Sherman, Christopher. 2015. "Christopher Sherman's Over Austin: Georgetown." Accessed June 1, 2018. https://tinyurl.com/ycyq8txv.

DOWNTOWN - ROUND ROCK, TEXAS

Downtown Round Rock is the historic center of retail, civic and residential land uses that have continued to drive the identity of the city. Located along an arterial road and anchored by a park on the west side of Main Street, development is primarily low-slung one and two story bars, cafes, restaurants and retail.

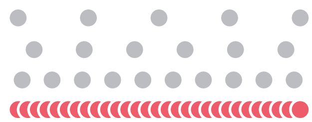

1

BLOCK SIZE

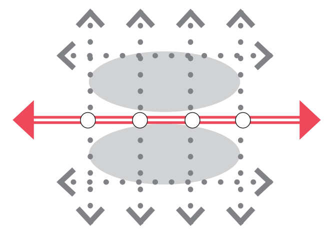
325'x 325'

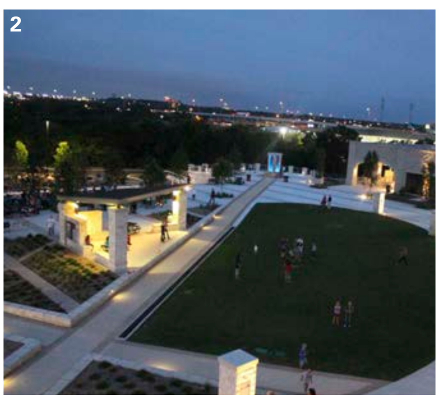
INTERSECTION DENSITY

0.4
intersections / acre



ARTERIAL-SHOPPING STREET INTERFACE




2


3


4


5

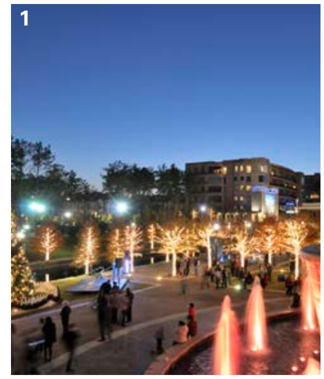

6


7

Sources:
1, 4, 5. WC Life. 2018. "Round Rock." Accessed June 1, 2018. https://wclife.org/cities/round-rock.
2, 6. Round Rock Texas: Parks and Recreation. 2018. "Centennial Plaza." Accessed June 1, 2018. https://roundrockrecreation.com.
3. Round Rock Texas. n.d. "Arts and Culture." Accessed June 1, 2018. https://www.roundrocktexas.gov/residents/arts-culture/.
7. Downtown Round Rock. 2018. "Make yourself right at home in Downtown Round Rock." Accessed June 1, 2018. https://downtownroundrocktexas.com/.

MARKET STREET - THE WOODLANDS, TEXAS

This town center is aimed at servicing both the high-income neighborhoods in The Woodlands and attracting visitors. In addition to offering a range of housing options including lofts, townhomes and condos, the development is knitted together by a 1.5-mile waterway.

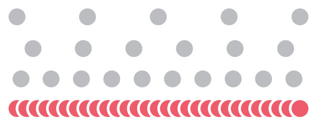


BLOCK SIZE

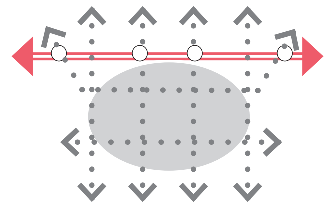
300'x400'

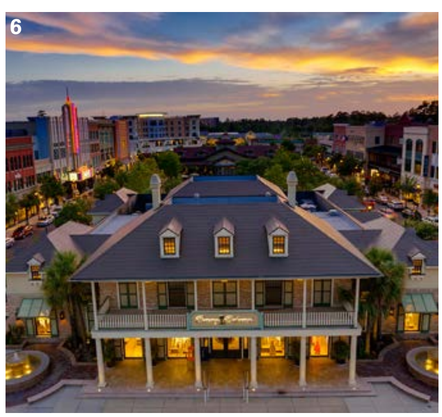
INTERSECTION DENSITY

0.43
intersections / acre



ARTERIAL-SHOPPING STREET INTERFACE





Sources:
1. The Woodlands Today. 2013. "Holiday Songs at Waterway Square, Town Green Park Lights Draw Families to the Woodlands." Accessed June 1, 2018. https://thewoodlandstoday.wordpress.com/category/the-woodlands-news/page/6/.
2. The Woodlands Township. n.d. "Spraygrounds. Accessed June 1, 2018. https://www.thewoodlandstownship-tx.gov/780/Spraygrounds
3. Experts Live - United States. 2018. "2019 Venue." Accessed June 1, 2018. http://www.expertslive.us/venue-and-hotels/.
4. The Cynthia Woods Mitchell Pavilion. n.d. "Home." Accessed June 1, 2018. https://www.woodlandscenter.org/.
5, 6, 7. Market Street: Luxury in the Woodlands. n.d. "Home." Accessed June 1, 2018. https://www.marketstreet-thewoodlands.com/.

MUELLER TOWN CENTER - AUSTIN, TEXAS

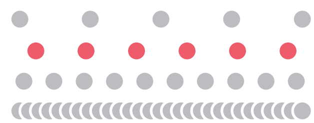
Mueller Town Center is located within a larger mixed-use redevelopment of the Robert Mueller Municipal Airport in Austin, Texas. This transit-oriented development is focused on provisioning retail, office and open space for the greater mixed-income community of Mueller.

BLOCK SIZE

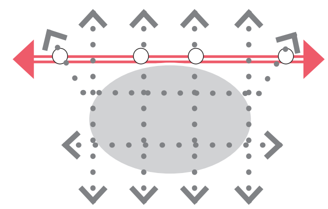
350'x500'

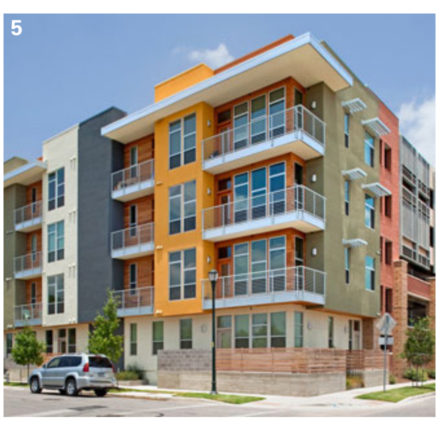
INTERSECTION DENSITY

0.26
intersections / acre



ARTERIAL-SHOPPING STREET INTERFACE





Sources:
1, 5. Mueller. 2018. "Homes." Accessed June 1, 2018. http://www.muelleraustin.com/homes/home-types/.
2. Rusin, Jamie and Sean Slater. 2013. "New Suburbanism: Reinventing Inner-Ring Suburbs." Accessed June 1, 2018. UrbanLand. https://tinyurl.com/y9l3jobk.
3, 6. Mueller. 2018. "Commercial." Accessed June 1, 2018. http://www.muelleraustin.com/commercial/featured-opportunities/.
4. Mueller. 2018. "Retail." Accessed June 1, 2018. http://www.muelleraustin.com/retail/town-center/.

THE DOMAIN - AUSTIN, TEXAS

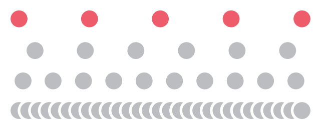
The Domain is a high-density office, retail, and residential quarter located in the high-tech corridor of northwest Austin. It was created as a public-private partnership between the City of Austin, Travis County and private developers.

BLOCK SIZE

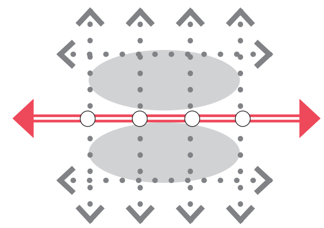
750'x1000'

INTERSECTION DENSITY

0.17
intersections / acre



ARTERIAL-SHOPPING STREET INTERFACE



SUGAR LAND TOWN SQUARE - SUGAR LAND, TEXAS

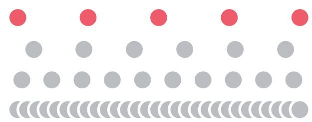
Sugar Land Town Square is a mixed-use development that locates retail, hospitality and office space development at the commercial core of Sugar Land, offering a different user and shopping experience to the adjacent mall. The center square is anchored by an open plaza and the Sugar Land City Hall, and was developed through a public/private partnership. As a singular development, the town square adheres to extremely strict architecture guidelines that promote a cohesive yet homogenous urban fabric.

BLOCK SIZE

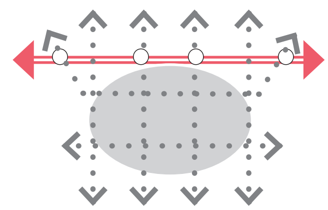
450'x450'

INTERSECTION DENSITY

0.18
intersections / acre



ARTERIAL-SHOPPING STREET INTERFACE



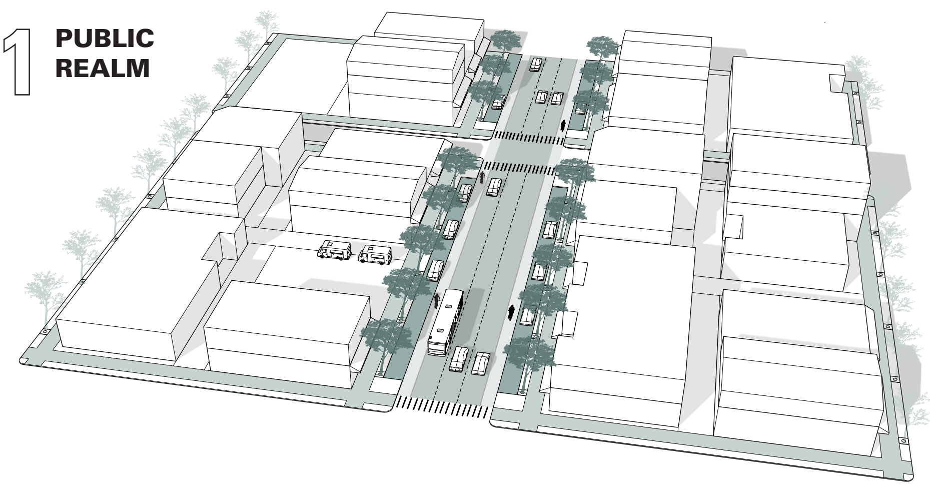
Sources:
1. Chron. 2015. "Title company to lease at Sugar Land Town Square." Accessed on June 1, 2018. https://tinyurl.com/yaj52z7e.
2. Sugar Land Town Square. 2018. Accessed on June 1, 2018. https://www.sugarlandtownsquare.com/.
3. Stormont Hospitality Group. 2018. "Sugar Land Marriot Town Square." Accessed on June 1, 2018. https://tinyurl.com/y9pv4x5y.
4. Indo American News. 2017. "Yoga for Health, Health for Humanity Yogathon." Accessed June 1, 2018. https://tinyurl.com/yagpcmuo.
5. City of Sugar Land - Economic Development. n.d. Accessed on June 1, 2018. http://www.sugarlandecodev.com/home.aspx.
6. Starner, Ron. 2014. "Home Sweet Home." Site Selection Magazine. Accessed on June, 1, 2018. https://tinyurl.com/ya8njx78.

COMPONENTS OF A TOWN CENTER

REALIZING A VISION

Smart, appropriately-scaled development is an important criteria to realizing a well executed town center because it can enhance the economic, physical and environmental vitality of a city within specified project areas. These efforts can improve the community's image and economic and social values while ensuring the assets of the community are not lost. The implementation of key public and private realm amenities improves the appearance, functionality and circulation of an area, which benefits the community and encourages future investment.

1 PUBLIC REALM

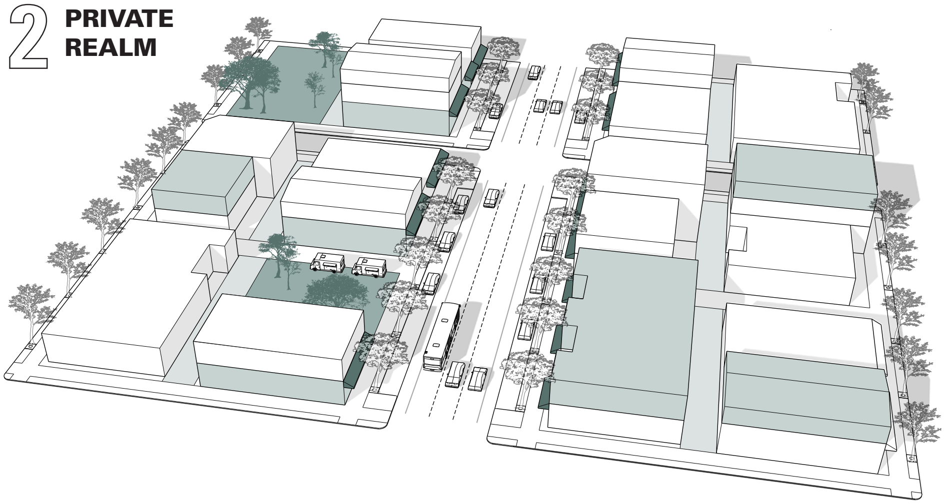


Public realm amenities include:

- STREETSCAPE AMENITIES (LIGHTING, SIGNAGE)
- PUBLIC PLAZAS + PARKS
- ROADWAY HIERARCHY
- PARKING
- CONTINUOUS SIDEWALKS
- BIKE LANES
- TRANSIT ROUTES
- STREET TREES AND VEGETATION

Public realm investments typically use government resources to provide basic services such as utilities, sidewalks and roads. However, this can be expanded to include amenities within the right of way or public realm, such as bike lanes, trails, street trees and parks. Public realm improvements are essential for attracting new development and ensuring that safety, human comfort and emergency access are provided.

2 PRIVATE REALM

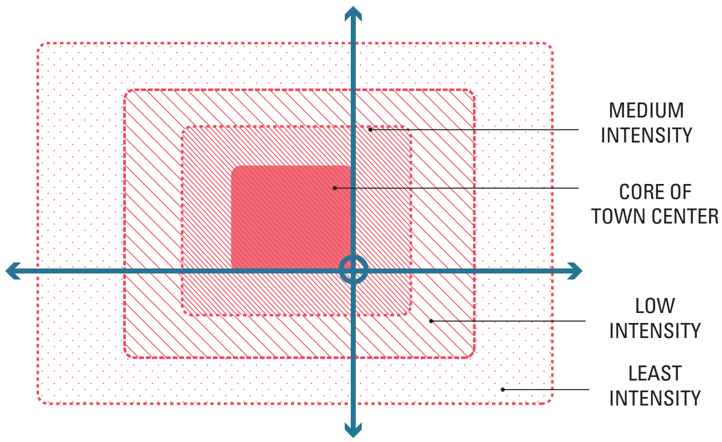


Private realm amenities include:

- DEVELOPMENT (MULTI-USE, MIXED)
- ARCHITECTURE TYPOLOGIES
- RESIDENTIAL (MULTIFAMILY, SINGLE-FAMILY)
- PRIVATE PARKS
- AFFORDABLE HOUSING
- COMMERCIAL, CIVIC, RETAIL HOSPITALITY, OFFICE, ETC
- MARKET ABSORPTION RATES

The private realm is often characterized by retail, commercial and residential land uses, and is paid for through private funds. This development generates jobs and bolsters economic activity in new developments. Without a framework plan, appropriate growth that responds to population needs may not be achieved. A private realm framework will assist future development on private land and ensure developers follow a community-vetted vision for an area.

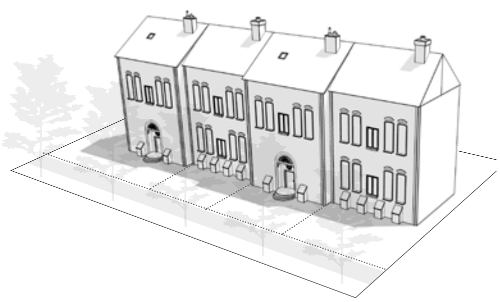
OVERALL PLANNING APPROACH



The overall planning strategy for the town center and its surrounding land uses is to propose levels of intense development in the core near town center retail, and maintain low intensity (less dense) housing development moving out from the core. For example, stacked flats with retail below would be located in or just around the town center, followed by attached single-family, garden-style detached homes and finally, larger single-family lots on the outer perimeter of the town center complex. In order to achieve this, there will need to be prescribed regulations in place (ie: zoning overlays, overlay districts, form-based code). In addition, providing a variety of housing types will be critical for the aging-in-place of Mont Belvieu residents.

CORE OF TOWN CENTER

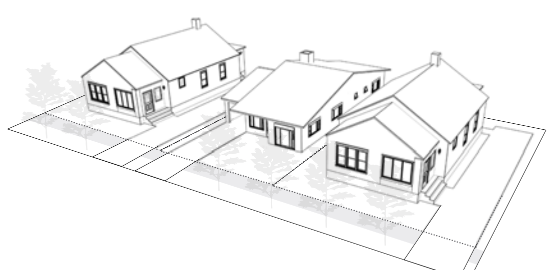
24 du/ac
min. lot size: varies
stacked flats



16 du/ac
min. lot size: 1,300 sqft
single-family attached

10-12 du/ac
min. lot size: 4,500 sqft
detached garden homes

LEAST INTENSITY



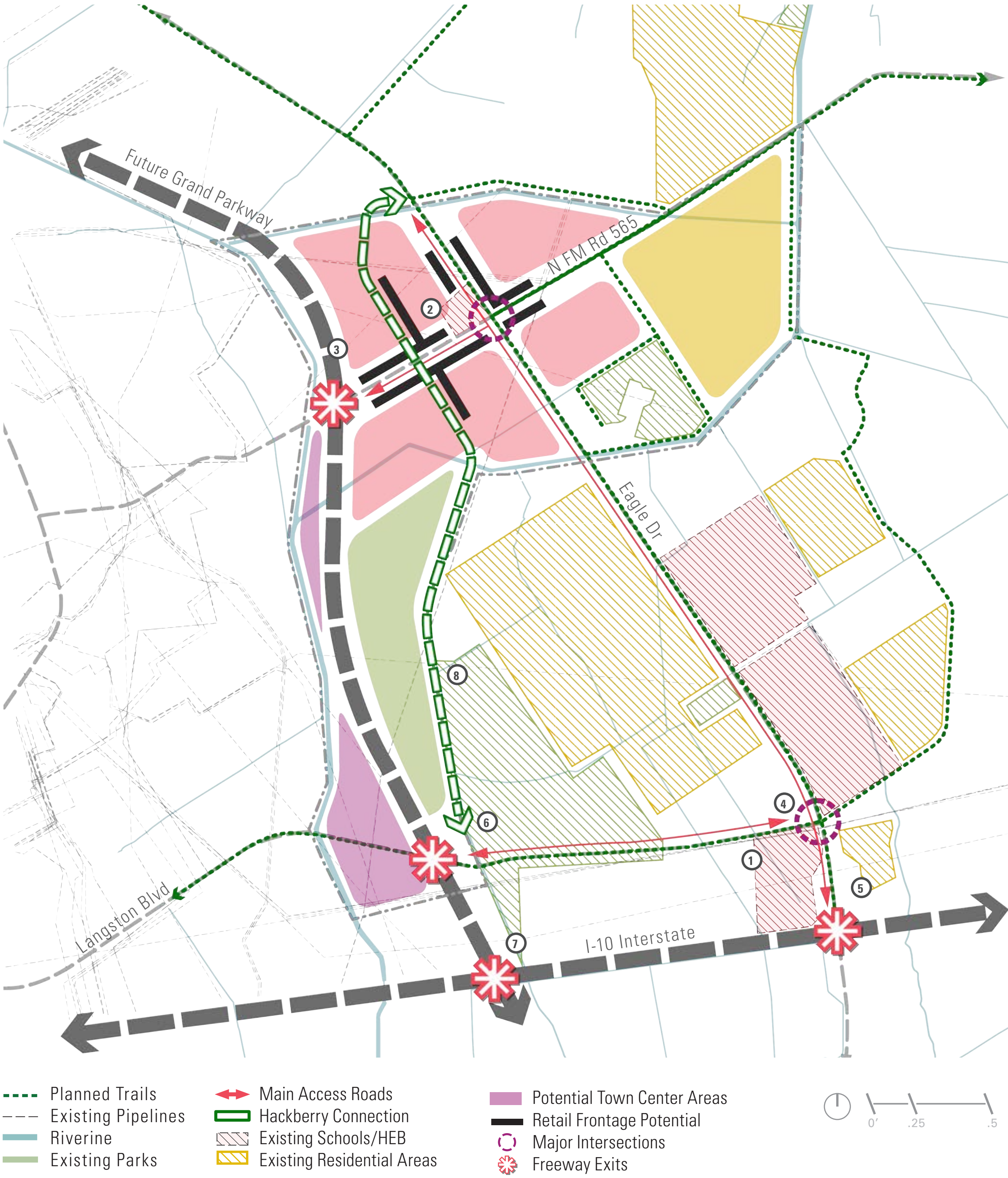
5 du/ac (dwelling units/acre)
min. lot size: 6,000 sqft
single-family

Sources:
1. Nann Eye Institute and Laser Center. n.d. "Woodlands Custom Vision is Now Mann Eye Institute." Accessed on June 1, 2018. http://woodlandscustomvision.com/.
2. Doug Shorter Property Management. 2018. "Rental Investment 101: Townhouses VS Condos." Accessed on June 1, 2018. https://tinyurl.com/yc7aplvy.
3. Austin Relocation Guide. 2018. "Top 10 Popular Austin Neighborhoods." Accessed on June 1, 2018. https://tinyurl.com/y7qq3436.
4. HAR.com. 2108. "14034 Belmost Cir." Accessed on June 1, 2018. https://www.har.com/9510-white-landing/sold_52860044.

OPPORTUNITIES AND CONSTRAINTS

1. HEB/Fidelis Development
2. Existing City Hall
3. FM 565 exit off Grand Parkway
4. Langston/Eagle Intersection
5. Eagle Dr. exit off I-10
6. Langston Dr. exit off Grand Parkway
7. I-10/Grand Parkway Interchange
8. Future Hackberry Gully Regional Park

Figure 31: Opportunities/Constraints



OPPORTUNITIES

The design team has outlined a number of assets throughout the Study Area that will need to be considered as part of the town center framework. Connections to these assets or areas that divert problems are important to exemplify. A summary of contributions helps to identify the best location for the new town center development, Mont Belvieu Main. The following is a list of opportunities for the study area:

- FM 565 exit off Grand Parkway: Important point of entry to town center.
- Langston exit off Grand Parkway: Diversion of excess traffic onto FM 565.
- Future Hackberry Gully Park connection: Easement connection from town center location to park.
- Intersection of FM 565/Eagle Drive: Highest potential for new town center location.
- On-street trail connections on Eagle Drive: Direct on-street trail connections from I-10, schools and City Park to existing City Hall.


FM 565 / Eagle Drive


Hackberry Gully Regional Park

CONSTRAINTS

Identifying trade-offs, competing interests and limitations are critical to understand parameters for the new town center development. This may include existing utilities on-site, existing development that may not be removed, present infrastructure (roads/pipelines), traffic flow and competing land uses. The following is a list of constraints for the area:

- Existing HEB/Fidelis Development: Retail may compete with future town center retail.
- Existing Pipelines: Future town center development will need to consider pipelines running through the four potential quadrants at the intersection of FM 565 and Eagle Drive.
- Future Grand Parkway: FM 565 exit off Grand Parkway will likely increase the flow of traffic near future town center location. Appropriate thoroughfares will need to be designed to divert vehicular traffic away from town center to maintain pedestrian activities.

1

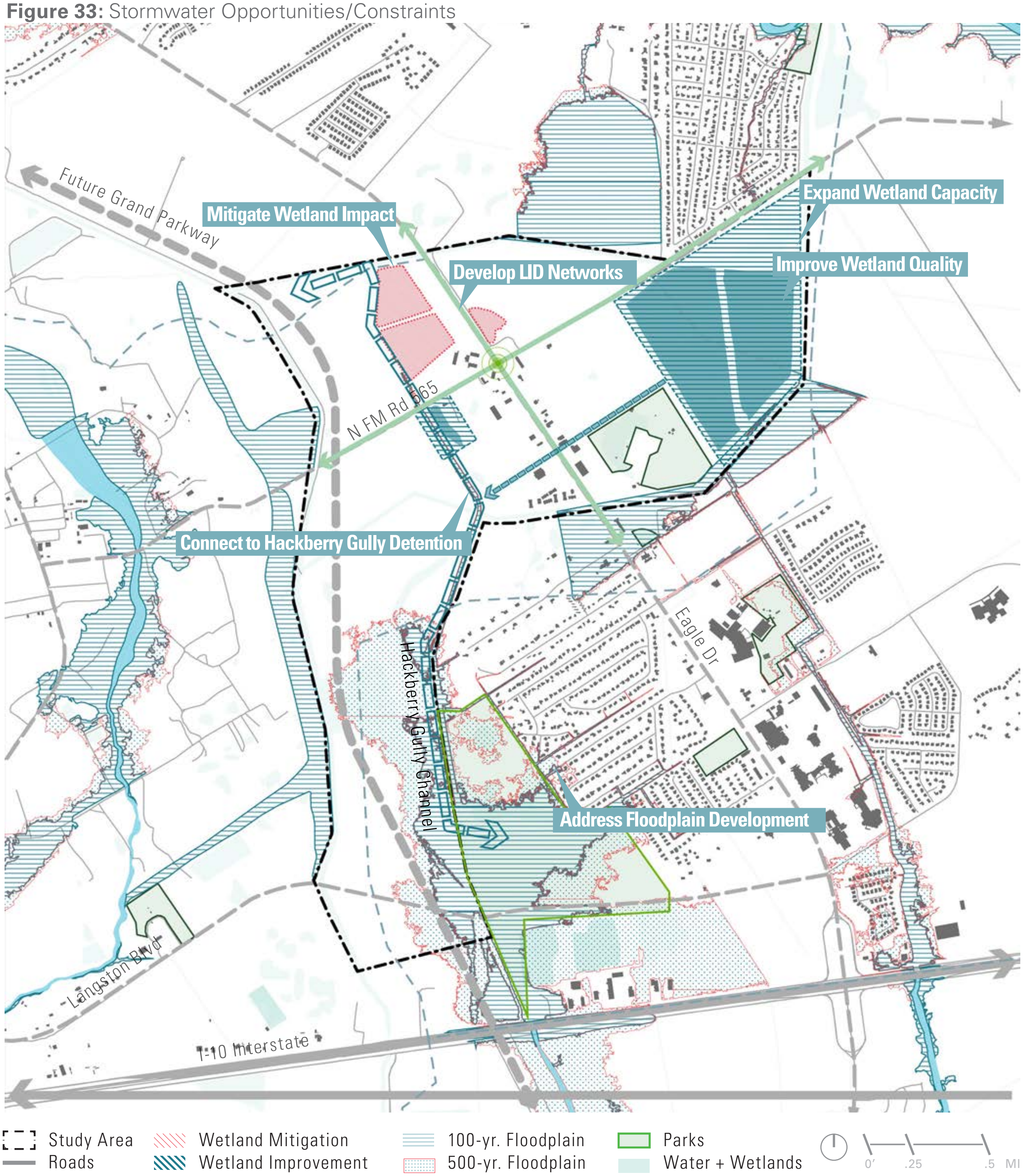

2


Sources:
1. Pulsinelli, Olivia. 2018. "H-E-B opens Mont Belvieu store in new shopping center." Houston Business Journal. Accessed June 1, 2018. https://www.bizjournals.com/houston/news/2018/05/02/h-e-b-opens-mont-belvieu-store-in-new-shopping.html.
2. Processing: Solutions for the Process Industries. 2016. "Enterprise Completes Ethane Pipeline, LPG Export Terminal Expansion." Accessed on June 1, 2018. https://www.processingmagazine.com/enterprise-completes-ethane-pipeline-lpg-export-terminal-expansion/.

STORMWATER OPPORTUNITIES AND CONSTRAINTS

New development within the Study Area provides the opportunity to develop a comprehensive approach to stormwater infrastructure through Low Impact Development and the creation, expansion and improvement of wetlands and detention areas.

Figure 33: Stormwater Opportunities/Constraints



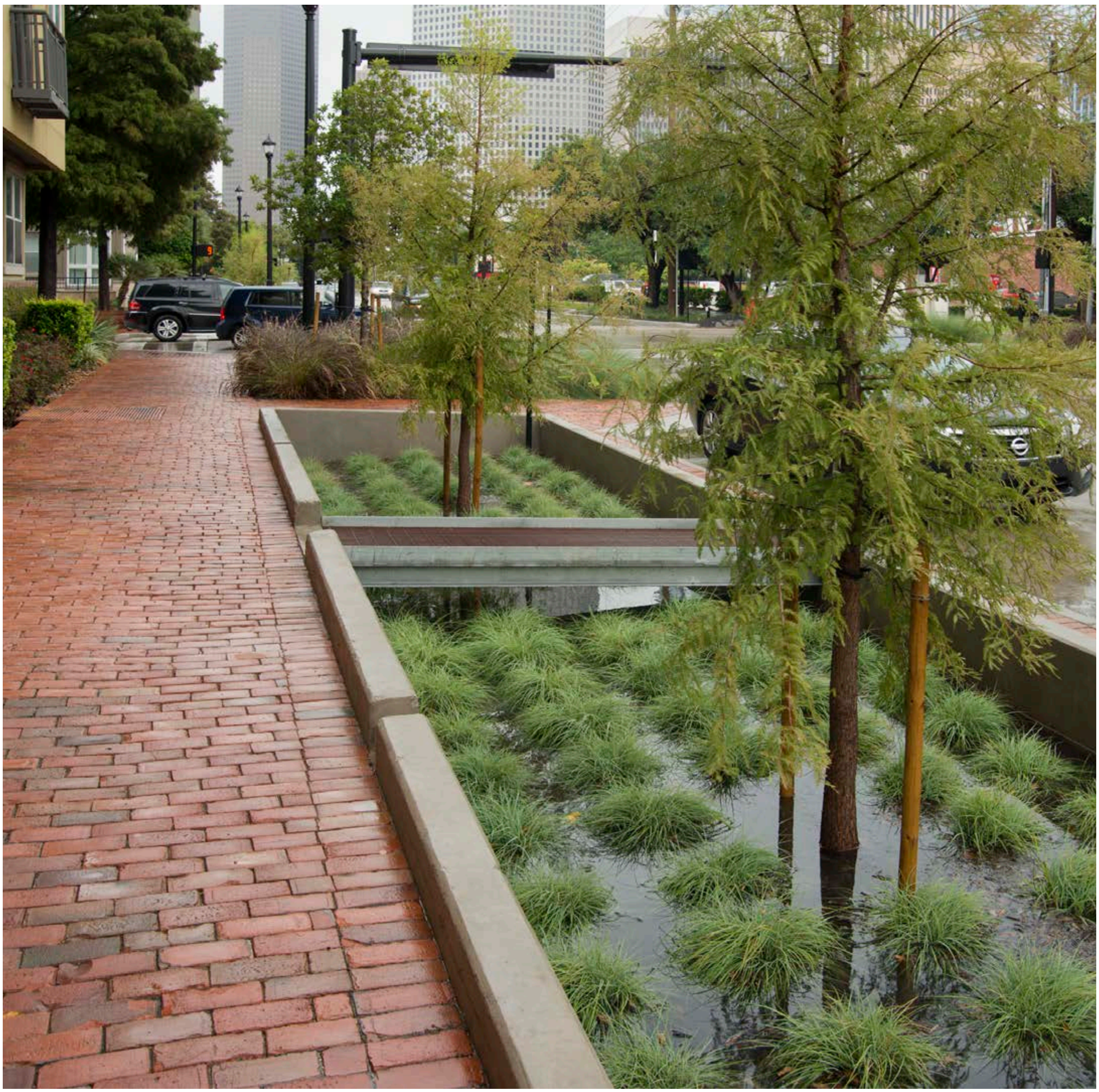
Source: National Wetlands Inventory , 2018

OPPORTUNITIES

- Naturalize and incorporate wetland elements and vegetated strips along edge of Hackberry Gully.
- Create bioswales using existing open channels along roadway.
- Restore and/or expand the size/quality of existing wetlands.
- Develop innovative ways to mitigate development in/ adjacent to the 500-year floodplain.

CONSTRAINTS

- Existing low quality wetlands will need to be cleared and drained to accommodate development.
- Drainage easements and existing detention present land uses that limit development potential or continuity.
- Wetland specialists will need to identify US Army Corps of Engineers jurisdictional wetlands and waters of the US.
- Wetland mitigation may be required based on further study.
- Much of the study area lies adjacent to or within the 100-year and 500-year floodplains.



4

CONCEPTUAL DESIGN

The Conceptual Design chapter presents community and City supported Regulating and Framework plans for the Study Area and Mont Belvieu Main Town Center. The first section documents the alternatives and the final vision that came from the measured strengths of each alternative. These are supported by individual Framework Plans that outline a visions for:

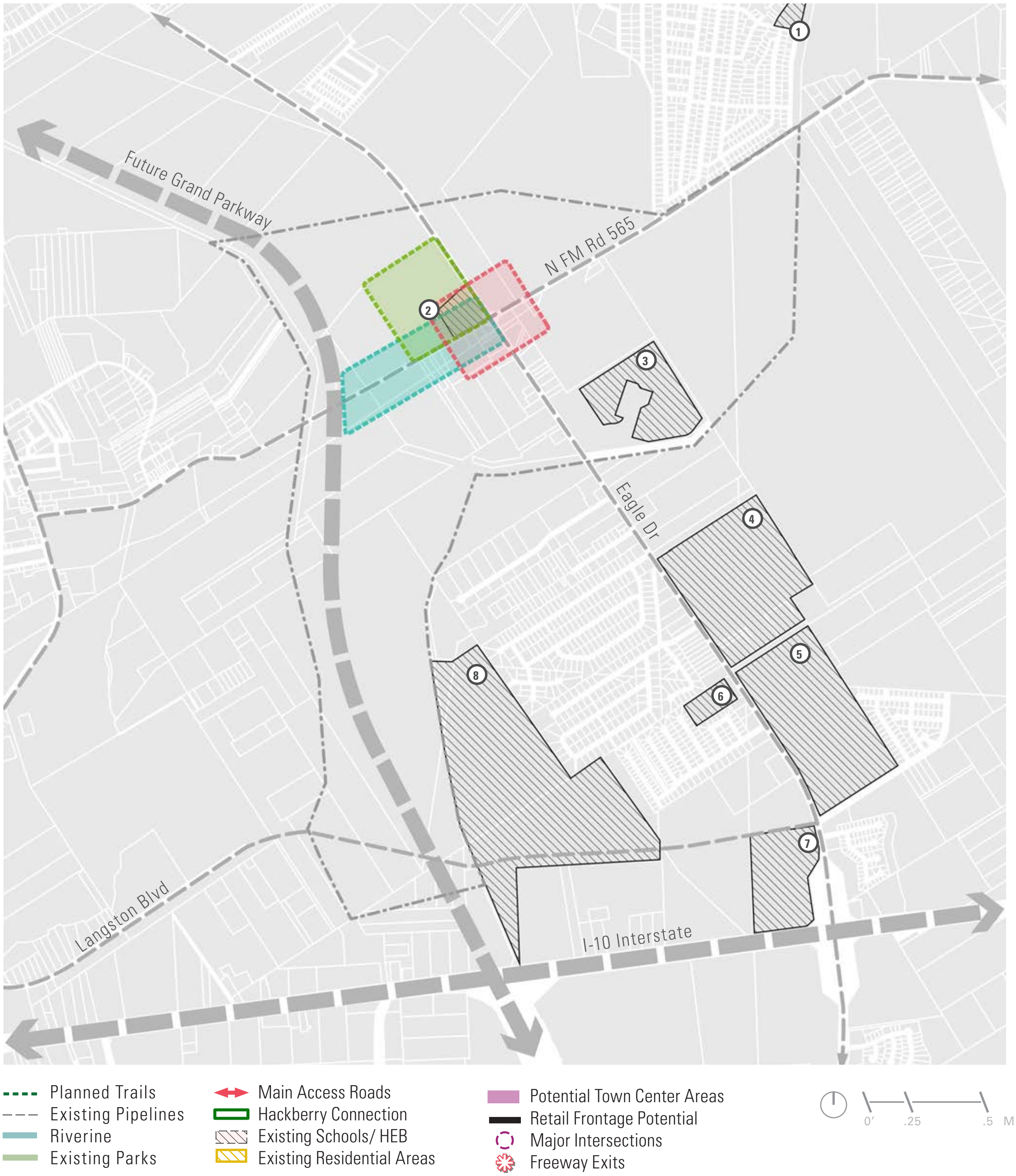
- Multi-modal Circulation and Connectivity
- Open Space and Parks
- Sustainablity through Low Impact Design
- Economics and Community Health Improvements.

Additionally there is a suggested phasing plan for city investment on public projects that serve as both near-term catalyst projects to jump-start development, as well as longer-term investments that will support future development and a growing population.

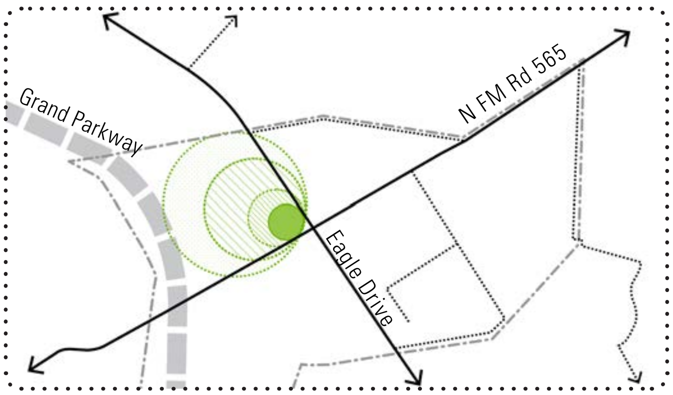
LOCATION PLAN

1. Joe Matthews Park
2. Mont Belvieu City Hall
3. Mont Belvieu City Park
4. Barbers Hill High School
5. Barbers Hill Middle School
6. Little Eagle Park
7. HEB - Fidelis Development
8. Future Hackberry Gully Regional Park

Figure 34: Locations Plan



A number of areas were analyzed by the team to determine the initial phase development of the new Mont Belvieu town center, Mont Belvieu Main. In particular was the significance of the City Hall and how its positioning would affect the form of development (similar to the Sugar Land Town Center). Because of the competing retail market from the Fidelis development, this town center would draw visitors, not solely for the retail experience, but for the public amenities and civic qualities it will possess (City Hall as an anchor).



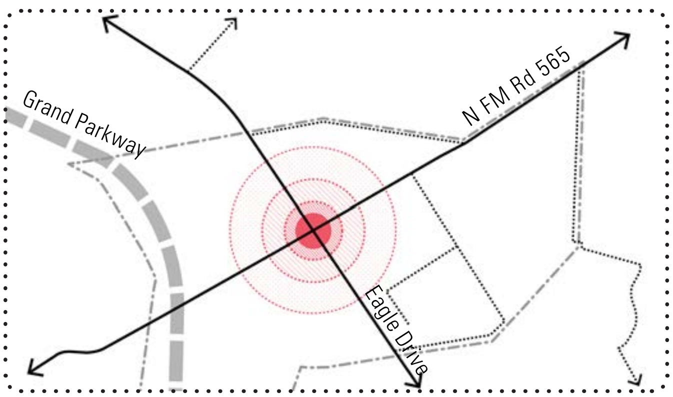
LOCATION 1 - SQUARE

PROS:

- Places significance on the existing City Hall.
- Internalizes configuration of town center on one quadrant.
- Area closer to drainage easements and potential trail connections.

CONS:

- Limited to two retail frontages.
- Limited retail visibility from Grand Parkway.
- Competes with HEB/Fidelis retail.



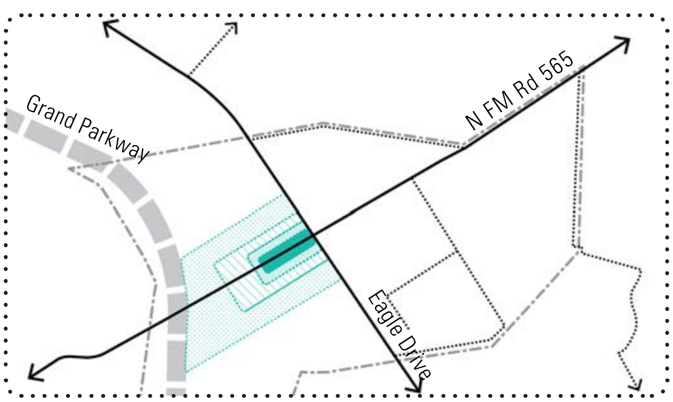
LOCATION 2 - INTERSECTION

PROS:

- Potential for several retail fronts.
- High retail visibility.
- Maintains some significance of the existing City Hall.
- Highly accessible via FM 565 and Eagle Drive.
- Less pipeline easement disruption.
- Compatible existing land uses.

CONS:

- Limited visibility from Grand Parkway.
- Several different ownership patterns and multiple existing developments.
- Too much through-traffic.
- Competes with HEB/Fidelis retail.
- The least walkable if designed to existing roadways.



LOCATION 3 - CORRIDOR

PROS:

- Greater visibility and access from Grand Parkway exit.
- Linear retail access along FM565.
- Prominence of exit from Grand Parkway.
- Would act as a “gateway” to Mont Belvieu from Grand Parkway.

CONS:

- Segregates development potential on two sides.
- Does not necessarily prioritize City Hall as the anchor.
- Heavy traffic from FM 565 exit off of Grand Parkway could affect pedestrian activity along FM 565 corridor, if not designed to accommodate multiple roadway users.

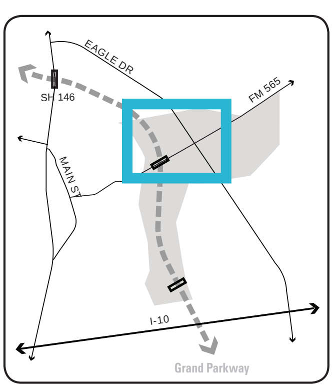
‘DEVELOPING AS IS’ FRAMEWORK

WHAT IF THERE WAS NOT A PLAN?

The design team sought to develop an alternative scenario in which future development was not guided by a long-term vision. This was done to highlight to the public the importance of this project, as well as understand the resultant spatial framework that occurs in a typical, market and developer driven model. This scenario would cater to the least common denominator and the overall land pattern would be a collection of uncoordinated neighborhoods with extremely long block lengths, dead end cul-de-sacs and big box retail development with parking fronting arterial roads and major intersections.

Figure 35: ‘Developing As Is’ Framework Plan

Note: Land Use patterns are kept along street edges and not entire parcels to emphasize relationship between streetscape and building frontage (building setbacks, sidewalks, etc).



- Study area
- Existing Roadways
- Freeways
- Existing Trails (on/off-street)
- Existing Roadway
- Park Space
- Existing Commercial
- Retail
- Apartment Complexes
- Garden Townhomes
- Single-family

CORE INTENSITY
LEAST INTENSITY

0' 500' 1000' 2000'

WHAT WILL HAPPEN IF DEVELOPMENT OCCURS AS IT HAS IN THE PAST?

- Results in large setbacks off of major thoroughfares such as FM565 and Eagle Drive.
- Large-scale retail centers will be located at the FM 565 and Grand Parkway exit (service road).
- Vehicle-oriented retail (drive-thrus, etc) with large areas of surface parking.
- Private, less connected and ad-hoc single-family subdivisions will result in less walkable neighborhoods.
- Multifamily needs will result in poorly-planned and overly scaled apartment communities.
- Increased traffic on FM 565 and Eagle Drive due to the lack of connections along the roadway network.
- Lack of diverse mobility options with no framework for greenways or cohesive pedestrian connectivity.

GOALS + METRICS ACHIEVED

PUBLIC REALM:

- NONE

SUSTAINABLE GROWTH + ECONOMY

- Faster speed of development, but with ad-hoc results.
- Development will occur as there are needs in the community.

MOBILITY

- VEHICULAR ONLY

INFRASTRUCTURE

- Detention/retention ponds are developed around residential subdivision to maintain stormwater needs.

FUNDING

- Funding for new construction of roadway and development will rely mainly on builders and developers.
- Funding for City Hall renovation will be independent of surroundings.

LAND USE REGULATING PLAN

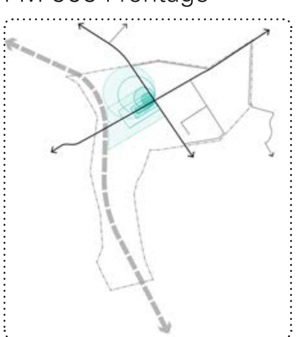
TOWN CENTER REGULATING PLAN

The Mont Belvieu Main town center Regulating Plan seeks to develop a cohesive vision for a truly walkable commercial and retail node within Mont Belvieu. Greenways act as the spatial framework of the Town Center and overall Study Area, integrating multimodal streets that work within the constraints of existing pipeline and drainage networks. Parks buttress the proposed development, with a Town Center Park acting as the nexus point of development activity.

Figure 36: Regulating Plan | Town Center

LOCATION PLAN

Northwest Quadrant + FM 565 Frontage



- Study Area
- Existing Roadways
- Existing Pipelines
- Freeways
- Proposed Trails (on/off-street)
- Proposed Roadways
- Proposed Traffic Signals
- Mont Belvieu Main Core
- Greater Town Center Area

- Proposed Parks/Open Space
- Proposed Greenways
- Civic/Institutional
- Hospitality/Entertainment

- Retail
- Main Street Retail
- Mixed-use
- Multi-family
- Single-family

CORE INTENSITY

LEAST INTENSITY

GOALS ACHIEVED

PUBLIC REALM:

- Greenway connections from town center to the future Hackberry Gully Regional Park.
- Development fronting neighborhood park plazas.
- Greenway buffer from Grand Parkway.

SUSTAINABLE GROWTH + ECONOMY

- Anchor tenants bookending town center.
- More consistent and comprehensive development approach.
- Ability to strategically phase based on market demands and environmental considerations.
- Retail fronts off of FM 565 along pedestrian-friendly collectors.
- Existing town hall location is kept with room for future expansion.
- Housing distributed from high to low density as needed.

MOBILITY

- Vehicular traffic coming off of Grand Parkway is maintained.
- Drainage and pipeline easements are utilized for potential trail connections.
- Housing placed in northeast and northwest quadrant away from traffic off of Grand Parkway and FM 565.

INFRASTRUCTURE

- Detention/retention needs are comprehensive and are developed in tandem with open space as amenities.
- Additional LID strategies met with greenway connections to future Hackberry Gully watershed.
- Smaller parks have detention capabilities that do not burden larger stormwater systems.

FUNDING

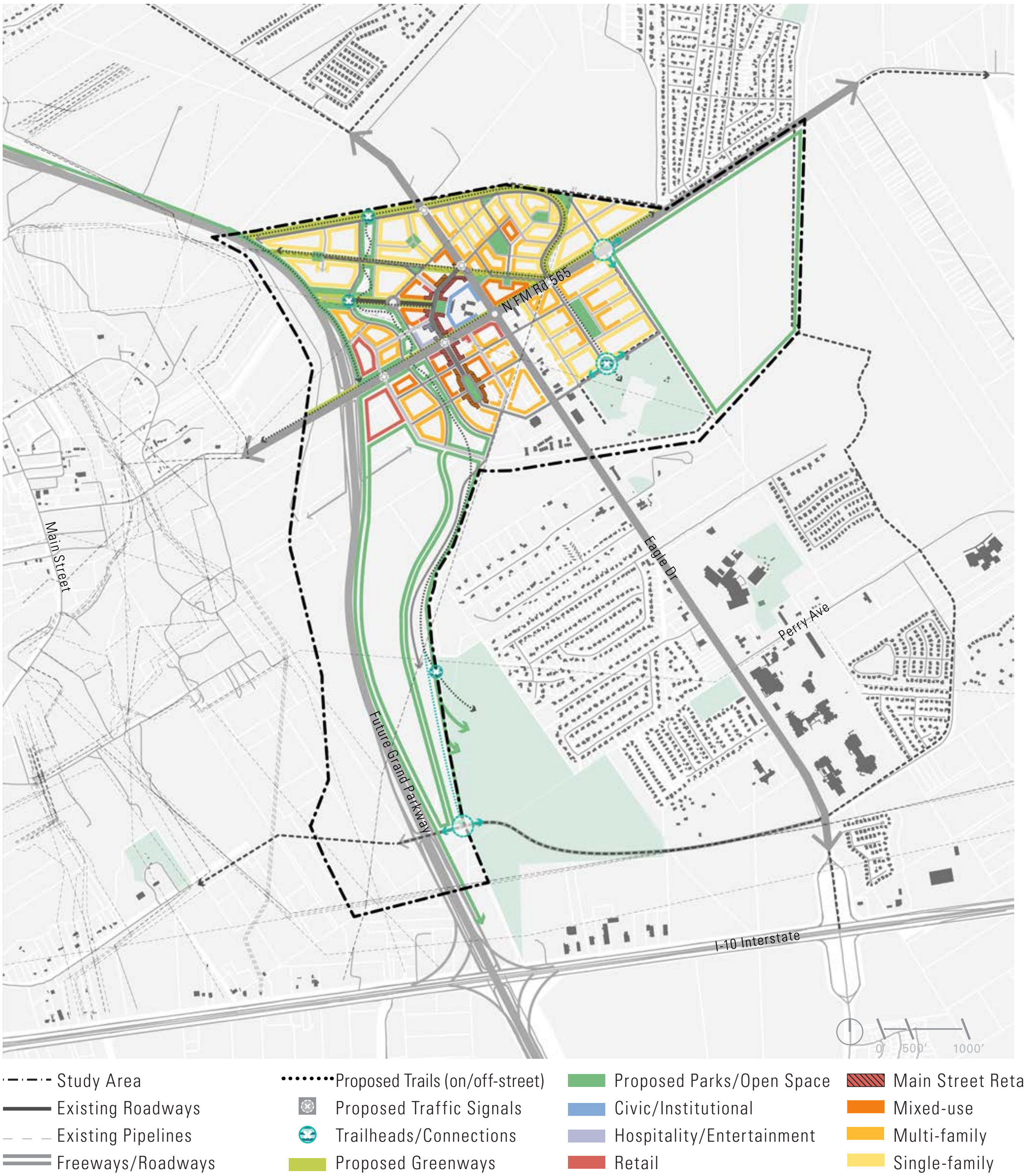
- TxDOT and City funding of FM565 will be a key priority to support development.
- Funding of town center does not rely on existing City Hall status.
- Proposed development will only rely primarily on one or two property owners (most of development is on one quadrant).
- Funding for City Hall will be independent of its surroundings.

STUDY AREA DEVELOPMENT PLAN

STUDY AREA REGULATING PLAN

The Study Area Development Plan ensures that the Town Center is connected to the greater areas of Mont Belvieu including City Halll, City Park, the Barbers Hills School District and the job center to the west through multimodal transportation options. Greenways connect the proposed land use development and the commercial node around City Hall, which is supported through diverse housing that will offer multifamily and multigenerational housing options.

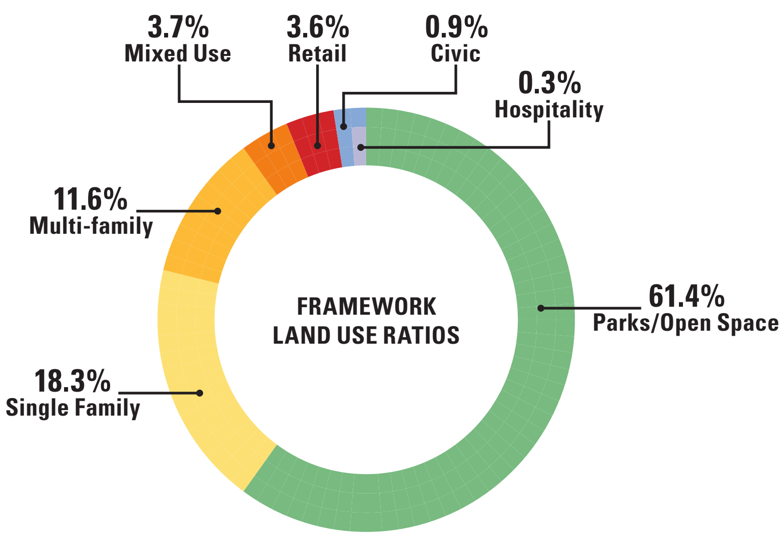
Figure 37: Regulating Plan | Study Area



LAND USE + KEY METRICS

The Study Area Development Plan balances land uses, with a focus on ensuring current open space is protected and a hierarchy of parks are provisioned throughout the commercial and residential neighborhoods within and around the town center. The aggregate land uses represented in the below figure are a result of combining the expressed desires of Mont Belvieu, the components needed to make a successful town center and overall urban form and the realities of potential capture and carrying capacity found within the "Market Assessment".

LAND USE BREAKDOWN | STUDY AREA



METRICS IN SUPPORT OF GOALS

LAND USE	KEY METRICS	
Parks/Open Space	4 PARK TYPOLOGIES	469 ACRES
Greenways	3 PEDESTRIAN BRIDGES	8 MILES GREENWAYS
LID Components	11 LID STRATEGIES	647 ACRES PROTECTED WETLAND
Housing	3 HOUSING TYPOLOGIES	4 DEVELOPMENT DENSITIES

KEY FACTS

OPEN SPACE:

» Town Square Park anchors Mont Belvieu Main

» Drainage Park will reduce flooding and act as the spine of development

MOBILITY:

» Entire development connected through greenways and bike lanes

LOW IMPACT DESIGN:

» Will reduce burden and cost for conventional stormwater systems

HOUSING:

» Varied housing types and densities are achieved (with 5 du/acre to 24 du/acre)

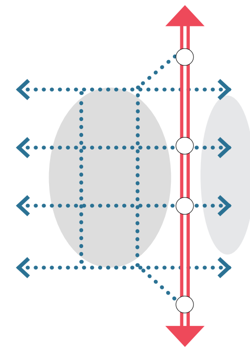
PUBLIC REALM RECOMMENDATIONS

WHY THE PARALLEL STREET STRATEGY?

Placing the core of Mont Belvieu Main area parallel to FM 565 with a perpendicular Main Street offers the greatest concentration of retail and civic uses combined in one uninterrupted development pattern. The arterial shopping interface strategy provides benefits of maintaining vehicular mobility from Grand Parkway through the City while encouraging safe pedestrian connections within the Town Center and across FM 565.

Additionally, this strategy allows the Town Center to evolve over time and cross FM 565 as market demand supports increased commercial and retail development. Siting the core of the Mont Belvieu Main at the intersection of FM565 and the proposed Main Street would have negative consequences for near-term development potential and return on investment as it would require greater market support for property acquisition across several privately owned parcels of land and also demand larger infrastructural changes. Additionally, the parallel interface encourages a critical mass of development around City Hall, thereby enhancing the community's civic fabric and the interconnectivity of residential, commercial and institutional spaces.

PARALLEL TOWN CENTER STREET



STRENGTHS	WEAKNESSES
generates the highest return on investment	initially disruptive to existing businesses
high degree of vehicular mobility	potential for excessive traffic noise
encourages safe pedestrian activity	high up-front costs

STUDY AREA METRICS

TOWN CENTER

BLOCK SIZE

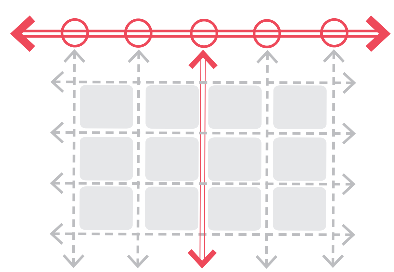
200'x 450'

INTERSECTION DENSITY

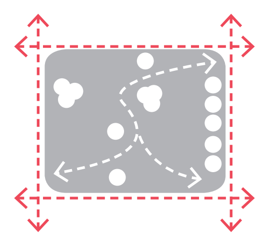
.31

intersections / acre

ARTERIAL-SHOPPING INTERFACE



OPEN SPACE



13

acres

RESIDENTIAL

BLOCK SIZE

400'x 450'

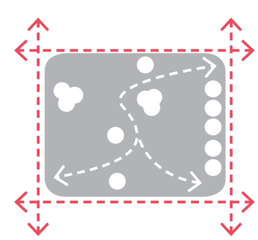
INTERSECTION DENSITY

.22

intersections / acre

RESIDENTIAL STREET HIERARCHY

OPEN SPACE

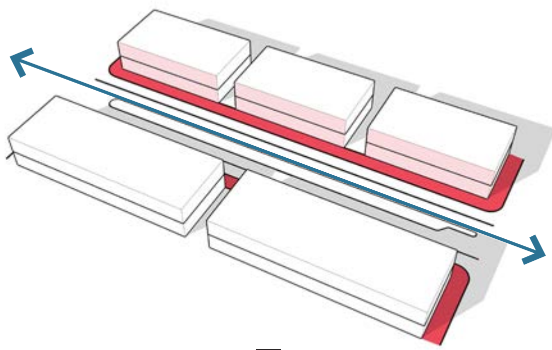


27

acres

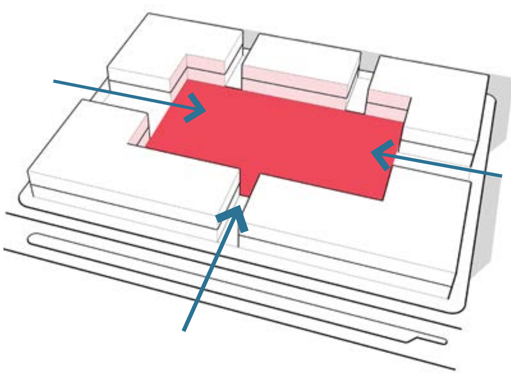
URBAN FRAMEWORK | A COMPREHENSIVE MODEL

The overall urban development framework for Mont Belvieu Main and its surrounding environs is based on the models developed in the Team's approach and synthesized through the public engagement process and the constraints of the site. The use of a "high street" or main retail street perpendicular to Eagle Drive and FM 565, in conjunction with anchoring the core of Mont Belvieu Main at City Hall and stringing development around an open commons provides the character of a historic Main Street while focusing activity inward and allowing parking to be placed at the junction of commercial and mixed-use buildings . This hybrid model of urban design resonated most with the community, as respondents to surveys and in-person workshops all agreed that Main Street models such as Georgetown, Texas and Round Rock, Texas, and the Town Square model used at the Woodlands Market Street and Town Center were the most desirable.



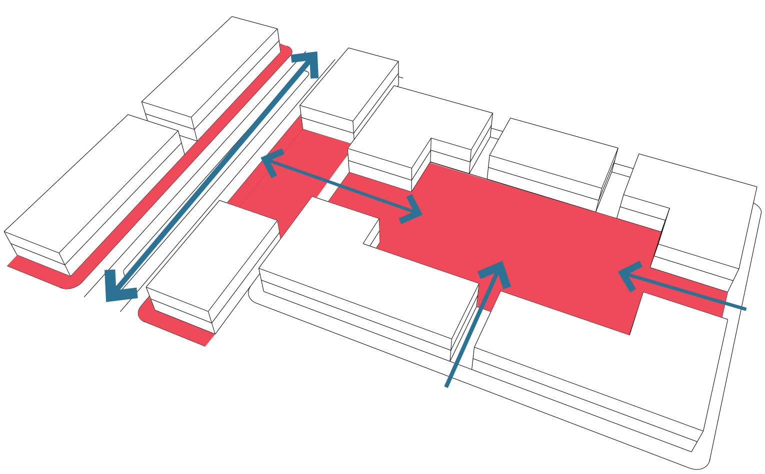
MAIN STREET MODEL

The Main Street model focuses town center activities, pedestrian flow and movement along a minor arterial or collector road. Retail development faces the corridor with minimal setbacks. The street is considered highly walkable and intimate for outdoor cafe spaces, wide sidewalks and vibrant retail activities.



TOWN SQUARE MODEL

The town square model puts town center activities and pedestrian flow primarily around a public space and off of roadways. In addition, retail development and activities face inward toward the square. Entries may occur off of main arterial roads or smaller collector roads.



MONT BELVIEU MAIN

The combined models of a Town Square as the node of activity connected to the adjacent Main Street pulls pedestrians to the public space via sidewalks and bike lanes, while development fronts open space and streetscapes, with parking at the rear off of arterial roads. Entries face multiple directions to capitalize on vehicular traffic, parking and pedestrian movement.

INTEGRATION OF SUCCESSFUL PUBLIC REALM DESIGN

The public realm includes the entire area from back of curb to the building facade and also any open space or parks that are owned by the government. There are discrete, yet interrelated zones that constitute the public realm: the Building Transition Zone, the Sidewalk Zone, the Street Furnishings Zone and the Planting Zone. Sidewalks are paved linear areas where pedestrians travel and congregate in a district. They provide a mainly functional purpose and are regulated by federal, state and local ADA compliance standards. New development within the Mont Belvieu Main Town Center should consider the following:

- Ensure that the Street Furnishing and Planting Zone share the same right-of-way and are at least 5-feet wide.
- Connect all new sidewalks to the existing sidewalks.
- Construct the Sidewalk Zone out of a continuous surface.
- Implement sidewalk bulbouts at intersections to shorten pedestrian crossing time in areas of high pedestrian traffic or high pedestrian vehicular conflict.
- Utilize trees and planting to enhance user experience and comfort.
- Provide “mews” or mid-block pedestrian alleyways that connect from street frontages to rear or structure parking and open spaces.
- Utilize Low Impact Design and Stormwater Best Management Practices when integrating infrastructure and streets.

BLOCK SIZE:

Block size is a critical determinant of a community’s potential for commercial activity walkability, pedestrian accessibility, and adaptability for future development. This plan achieves an average block length **450-500 feet** and a depth of of 200-250 in the retail/commercial core of the town center- notable amongst the benchmark and precedent projects the framework has been measured against. The framework nearly met the intersection density and block size goal of 300-feet by 300-feet. However, block lengths in one direction were increased from the initial goal to enable future structured parking such as podium and wrap parking. Additionally, the framework has varied block lengths on residential streets - with an average of **400-500 feet**. This will provide legible, walkable connections from street to street in housing areas and contribute to a genuine feeling of smaller town life.

STREETSCAPE AND INTERSECTION DENSITY:

Integrate “Complete Streets” as “streets for everyone” as described in the “Approach” and develop a clear “Street Hierarchy”. As outlined, these should be designed to balance all uses, operated to ensure safe access and accessibility, make it easy to cross the street, walk to shops and restaurants and easier to ride a bicycle.

Narrower and more frequently occurring internal streets provide safe vehicular traffic conditions and foster pedestrian activity, while promoting alternative means of transit such as biking and ride-share. Pedestrian areas make up 35-67 percent of every new street within Mont Belvieu Main and the intersection density achieved is **.22 intersections / acre.** Shorter blocks with more frequent intersections create safe crossing by slowing traffic and provide increased retail frontage at corners.

OPEN SPACE:

It is recommended that parks are interspersed throughout the Study Area to ensure that all development and residents are within a 5-minute walking distance to a shared open space. The integration of a Town Center Park will make leasable space more attractive as it provides a node of regular activity throughout the day and seasons.

PROGRAMMING:

Regular, frequent and year-round programming should occur around the Town Center, and specifically along the Main Street axis and within the Town Center Park. Activities such as farmer’s markets, art festivals, performances/ concerts and holiday events will drive revenue, increase community interaction and ensure that the street and public realm is active.

1

SITE DEVELOPMENT STANDARDS

Site development within the Mont Belvieu Main Town Center should ensure that the placement of buildings are at the right of way, orientation of entrances are legible and along sidewalks/pedestrian routes, all spaces are accessible and connections and transitions between interior and exterior spaces are related and seamless. In areas of mixed uses, there should be a clear demarcation between public or private space and access points should be separated unless a need for common access points is demonstrated.

SETBACKS:

- 0'-0" | Build to the right of way line in all cases unless a specific use requires additional setback, the Building Transition Zone should not encroach on sidewalk width.
- Housing = Varies by product and street typology

APPROVED VARIANCE BASED ON USE*:

- Parklets
- Pedestrian Alley Connections or "Mews"
- Dining Terraces
- Low Impact Design (LID) or Green Infrastructure

ALLOWABLE USES:

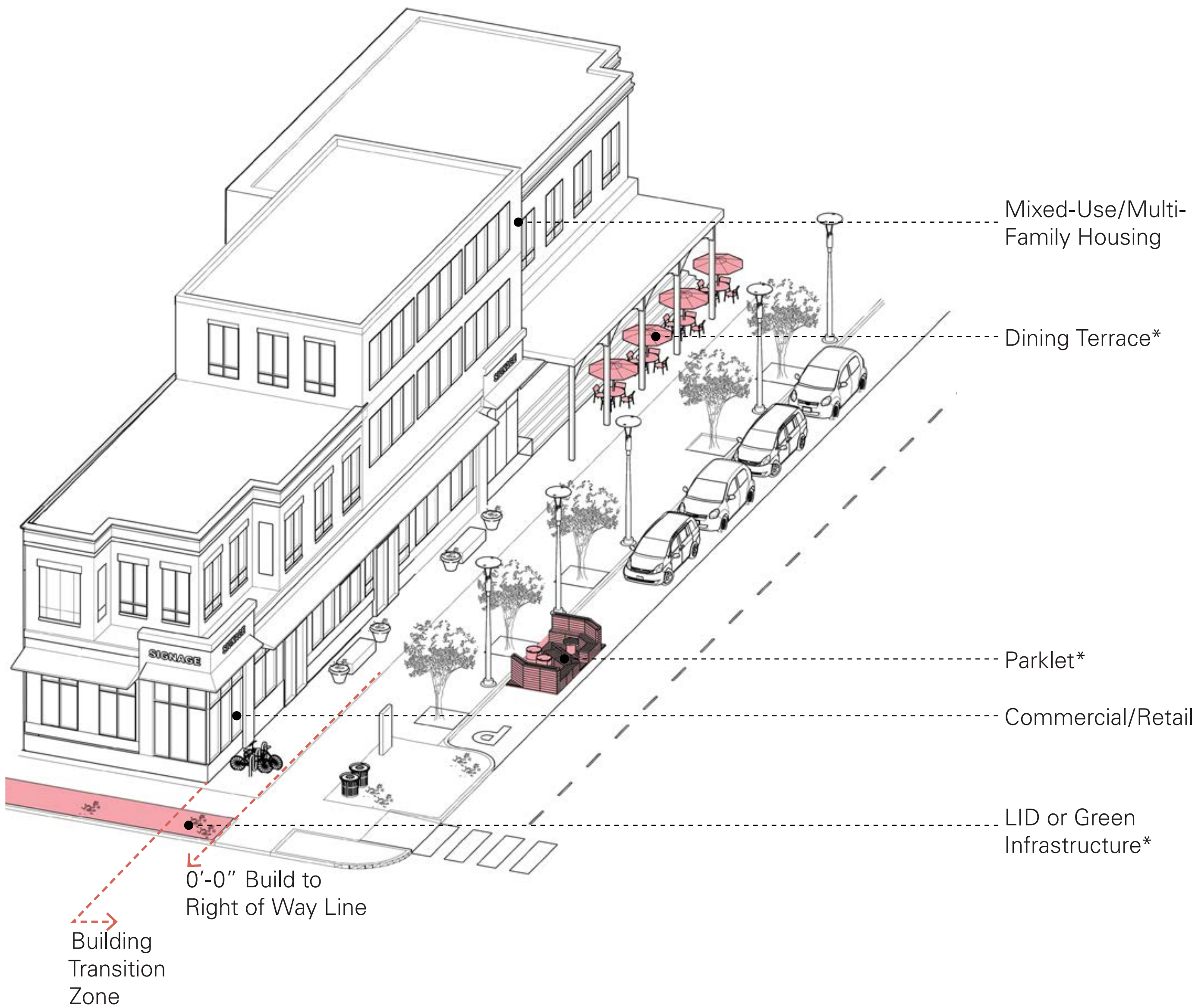
- Retail
- Commercial
- Civic
- Mixed-Use/Multi-family housing
- Limited Light Industrial or Industrial Office Spaces (Daily Use Products Sector and Special Use Services only)
    - » Including but not limited to: warehouses, distributions, dry cleaning, autobody/auto mechanic shops, beauty/personal care products, advertising and packaging, wholesale bakery/sundries.

PROHIBITED USES:

- Heavy Industrial
- Light Industrial - any industrial activity that itself creates undue amounts of pollutants such as soot/ excessive particulate matter, odors, smoke, gas, light or noise.
    - » Including but not limited to: electronics manufacturing, plastics production, leather manufacturing, chemical production)
- Sexually Oriented Businesses/Adult Entertainment
- Gas Stations
- Additional or "Overflow" Parking

TYPICAL STREET CHARACTER ("STREET HIERARCHY"):

- Major Arterial
- A Street – Main Street: Retail/Commercial
- B Street – Retail/Mixed Use (Delivery and Parking)
- C Street – Mixed-Use Boulevard
- D Street – Residential 1
- E Street – Residential 2



* Denotes an approved setback variance based on use

Figure 38: Site Development Principles

2

GROUND FLOOR + PUBLIC REALM

The public realm includes the entire area from back of curb to the building facade. It is made up of four zones: the Building Transition Zone, The Sidewalk Zone, The Street Furnishing Zone and the Planting Zone. Public Realm guidelines describe the proportion of each of these zones in the right of way.

BUILDING TRANSITION ZONE | GROUND FLOOR

- 3-0" - 4'-0" | building transition zone should not encroach on sidewalk width
- Provide accessible and clear points of access from building to sidewalk and street
- Café/outdoor dining, planting areas or planters and retail displays are optimal amenities to be included within the building transition area. A setback variance may be necessary to accommodate outdoor dining areas.
- Provide shading through awnings and canopy such as umbrellas.
- Corner lots must maintain site distance triangles and no shade structures or vertical elements may block this critical zone.

SIDEWALK ZONE:

- Sidewalks shall be continuous, accessible and uninterrupted. Vertical and horizontal obstructions should be kept to a minimum and be placed within the planting zone when possible.
- Expand sidewalks into plazas and larger pedestrian areas when conditions permit. These should be strategically located to encourage gathering, outdoor markets or vendors and clustering of street furniture.
- The minimum width should be no less than 5 feet.
- Construct sidewalks out of durable materials like concrete, brick and/or stone. This applies to standard, permeable and decoratively paved sidewalks.
- Sidewalk grade shall not exceed 2 percent cross slope and 5 percent longitudinal slope per the Texas Accessibility Standards.

FURNISHINGS AND LIGHTING:

- Locate street furnishings in the Furnishing and/or Planting Zone
- Bike racks should be located near intersections, building entries, trails, and parks and open space.
- Locate pedestrian-oriented trash/recycling receptacles near street crossings, intersections, parking areas, trailheads and other high-traffic areas.
- Strategically locate benches and other seating/gathering areas near places that are shaded throughout the day (specifically midday-afternoon).
- Utilize furnishings fabricated of durable materials, including stone, finished wood and steel.
- Establish a coordinated and consistent vocabulary of street furnishings throughout Mont Belvieu Main.

UTILITIES AND SIGNAGE:

- Utilities should not be visible above ground and all meters, utility banks and transformers should be located at the rear of buildings.
- Retail and commercial signage should be minimal to reduce street clutter and must occur outside the public right of way.
- Wayfinding and interpretive signage should be integrated into streetscapes and be located at critical junctures such as intersections, trail connections, parking areas and parks.
- Design of signage should follow any signage guidelines established within Mont Belvieu.

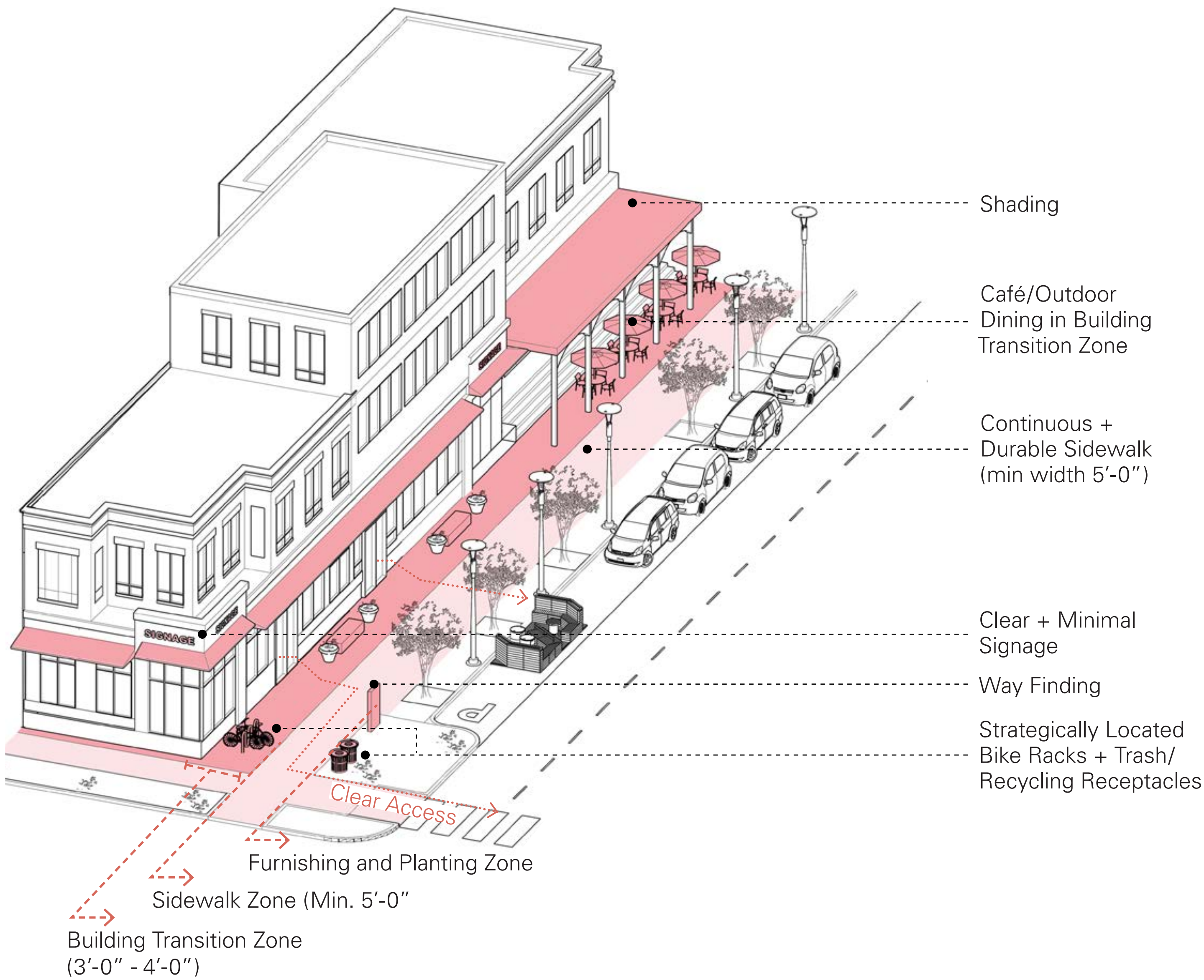


Figure 39: Public Realm Guidelines

3

LANDSCAPE | PLANTING ZONE

Landscape areas within Mont Belvieu Main including parks, streetscapes, parking lots and gateway or buffer areas should be used to enhance the experience, aesthetics and function of the area. There should be repetition in planting and cohesion amongst site materials and furnishings to establish a brand, enhance the feeling of an overall district and knit the different areas within Mont Belvieu Main together.

OVERVIEW AND GUIDELINES :

- Use plant material that is native for, or adapted to, Mont Belvieu.
- Plant trees in the Planting Zone of the Pedestrian Zone.
- Install green stormwater infrastructure and Low-Impact Design strategies when feasible.
- Use water harvesting when applicable to irrigate planting areas.
- Plantings should not interfere with sight lines to traffic, intersections and signs when placed near roadways.
- Emphasize variety in site-wide planting strategies
- Include a groundcover layer in all planted areas to help with long-term maintenance and water conservation.
- No more than 50 percent of the planting area of a streetscape corridor shall be dedicated to turf as an understory.
- Prioritize species that are low maintenance, can withstand periods of drought and inundation, and that when combined into an overall matrix, provide a high-quality habitat for native insects and animals.
- Plant trees that are no less than 3½-inch caliper or a minimum of one 2-inch lane if multi trunk.
- Provide a minimum of 300 cubic yards of soil for each tree, assuming a soil depth of 36-inches.
- Space trees based on their size. Large shade trees should be planted every 30-50 feet on center. All trees adjacent to parallel parking should be planted every 22 feet on center, (align trees to the middle of the parking space, one (1) tree per space).
- Engineer soil profiles to support the specific needs of the proposed planting design. If adjacent hardscape restricts the amount of soil volume for the planting strategy (minimum of 300 cubic feet for trees), employ techniques such as engineered structural soil or Silva Cells (or equivalent) to achieve the soil volume needed for long-term plant health.
- In high traffic areas, install physical measures to protect the Planting Zone. These measures could include architectural elements such as walls, seatwalls, curbs, steel railing, etc.
- Open tree planters without tree grates are preferred except in narrow areas or areas that require large amounts of hardscape such as drop off areas and plazas. If installing tree grates, ensure that the tree opening can accommodate trees with large trunk diameters.
- Separate pedestrian areas and sidewalks from vehicular areas with planting areas and buffers.
- Provide combinations of drainage strategies and technologies, such as green roofs, below-grade vaults, water features, pervious paving materials, etc. This is encouraged on all private and public open spaces (reference the section on “Lid Components”).

ADDITIONAL CONSIDERATIONS

- Lighting should be used to highlight gateways and also provide illumination for safety and wayfinding
- Pedestrian alley connections/mews and any at-grade crossings that have regular vehicular traffic should incorporate bollards or planters to protect pedestrians from traffic.
- Dining terraces should also provide landscape features and work with streetscape plantings to provide a holistic experience through continuity of materials, planting or furnishings.

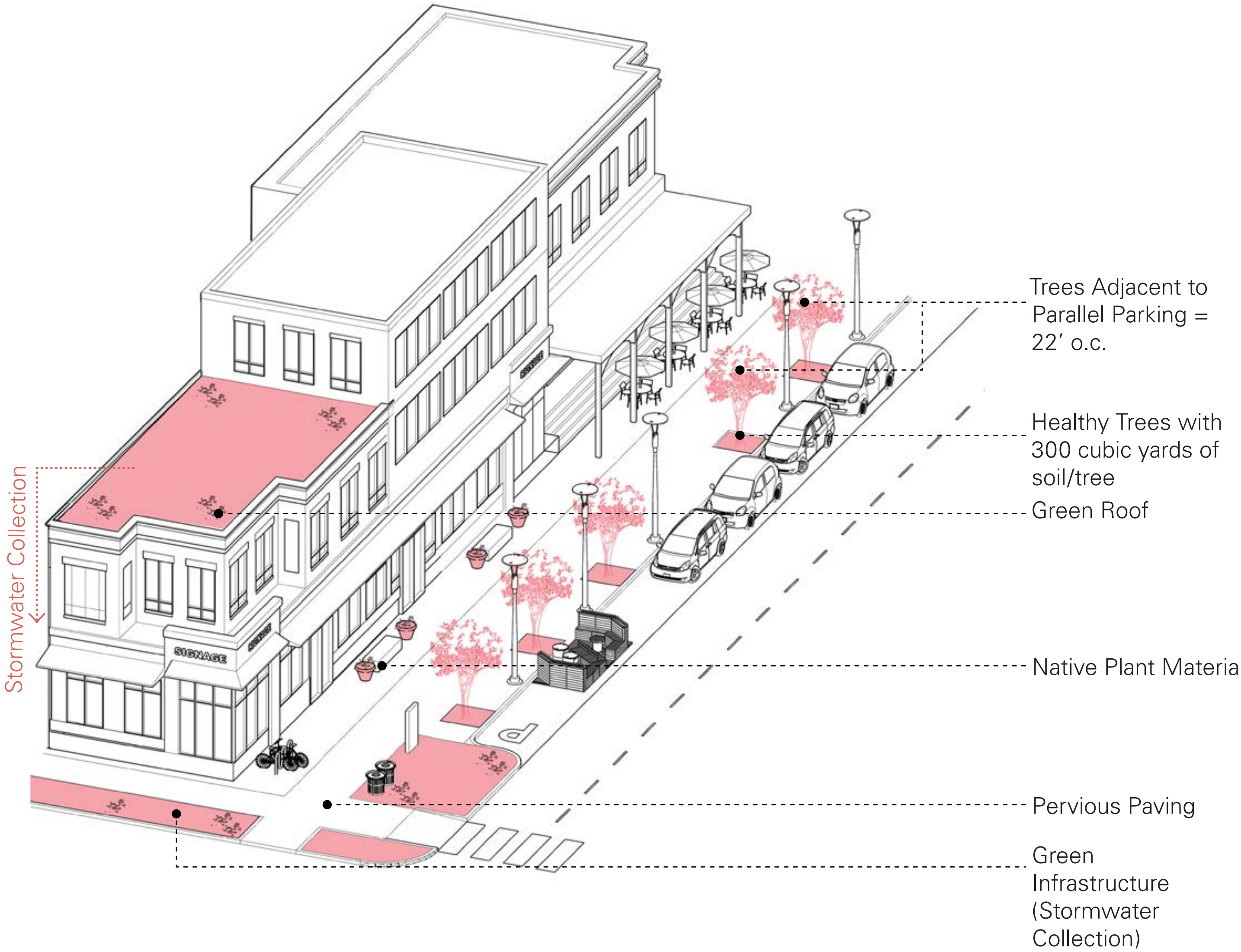


Figure 40: Landscape Zone and Planting Guidelines

4

PARKING

Parking should work within a site specific context for each development parcel and not exceed minimum parking requirements based on use per the City of Mont Belvieu or next regulating agency(ies) guidelines. Parking lots should never be detrimental to the intended course of pedestrian movement or activity within the public realm or transition zones between public/private lands.

LOCATIONS:

- Locate all parking on-street and behind building frontages/massing to reinforce the feeling of a main street or town center.
- Locate vehicular access to minimize conflicts with pedestrian circulation.
- Provide access from an alley when feasible. If an alley access is not feasible, then use the street with the least pedestrian usage.
- Install, if necessary, a service drive located away from intersections and other areas with high levels of pedestrian traffic.
- Corner lots shall never have street facing parking nor parking along the frontage of a building. All parking lots or structures on any corners must be located behind a building and buffered from the street with walls and/or planting.

SURFACE PARKING:

- Surface parking should generally be located to the rear or side of the building and away from the street or street intersections, while providing direct pedestrian access to the buildings.
- Any one parking lot should not dominate the building site.
- Curb cuts, driveways and intersections should be consolidated
- "Lid Components" and Green Infrastructure should be used to provide stormwater management, increase water quality, increase urban wildlife habitat and provide shade within/around parking lots.
- Pedestrian alley connections or "mews" should be used to connect from streets and retail frontages to rear parking areas.

STRUCTURED PARKING:

- Any one parking structure should not dominate a street and shall be limited to twenty five percent of the lineal frontage of the street.
- Lot depths should allow for parking structures to be wrapped by other uses such as retail, commercial, housing or entertainment.
- Access points shall be consolidated and clear (when possible entry and exits from the structure shall be grouped to reduce curb cuts and car/pedestrian conflict zones). Vehicular access locations shall be at mid-block to reduce traffic congestion or spillover into intersections or other driveways and turn points.

DESIGN CONSIDERATIONS:

- Ample, even lighting (+/- .5 foot candles) should be provided in and around parking areas; light "spillover" and glare onto other properties should be minimized.
- LED fixtures, efficient assemblies and smart technologies should be used to reduce energy use and light pollution.
    - » Strategies include: luminaire cutoffs, area/path lighting, optical controls, dimming and sensors
- Landscape elements such as planting, walls and berms shall work in unison to screen adjacent properties from parking lots
- Signage should be used to indicate entrances and pedestrian routes as well as major roads, buildings and key destinations around the parking area

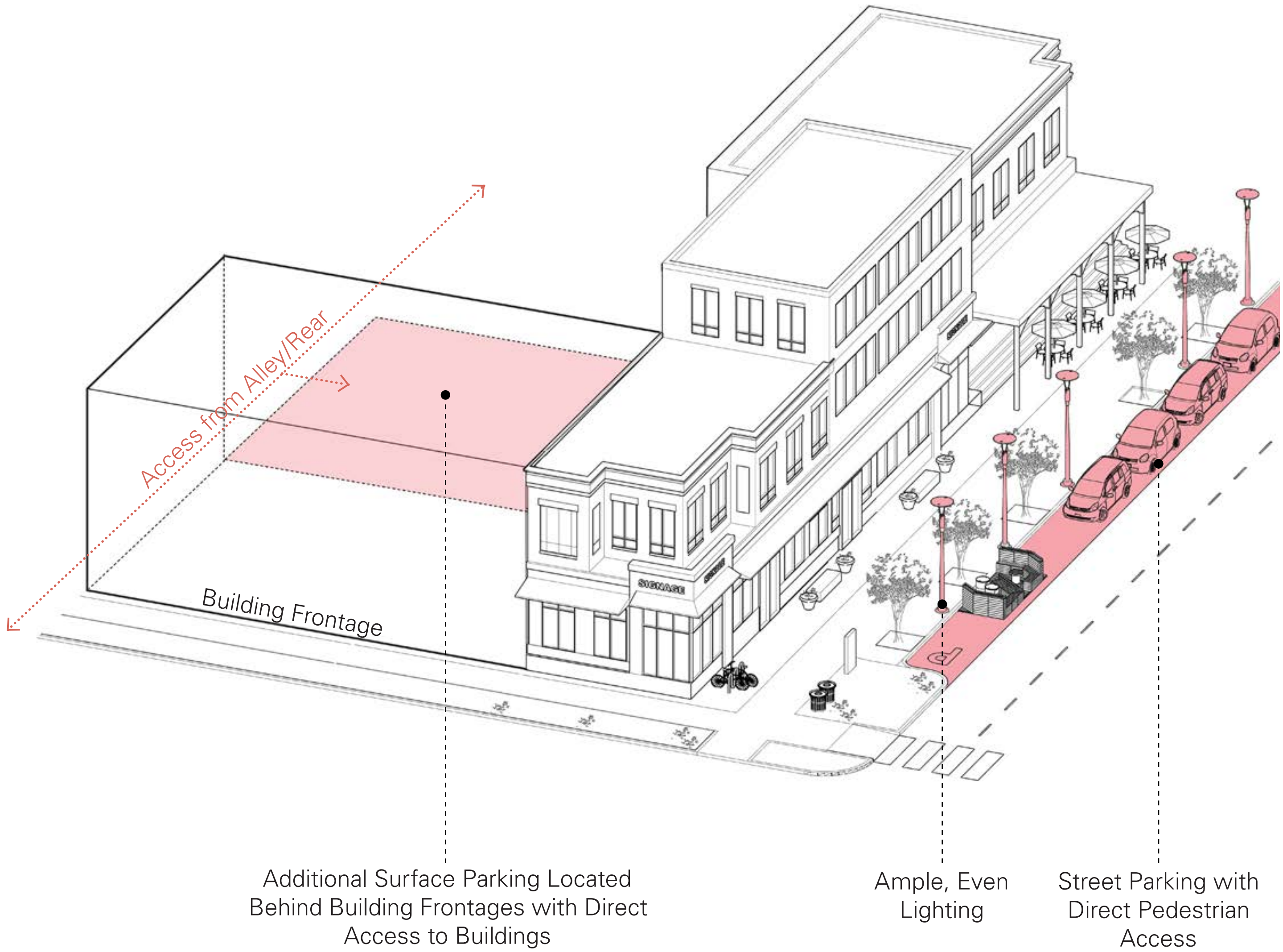


Figure 41: Parking Guidelines

5

BUILDING MASSING, GLAZING AND ARTICULATION

A building's mass, scale, form, floor-to-floor height and horizontal alignment should not be in stark contrast to its surrounding context. Surrounding context should include all buildings located within two blocks of a building. Ensure there is transition between taller buildings towards lower scale buildings on adjacent properties. Buildings should be massed both horizontally and vertically appropriate to the context of a small town with narrower streets to ensure a pedestrian scale is maintained throughout the development.

ALLOWABLE HEIGHTS:

- Main Street Retail Zone = 1 - 4 stories or 1/2 the width of the street right of way. Commercial, hospitality and entertainment uses should employ story and a half or two story ground floors. Corner lots should be the most prominent in terms of mass and height.
- Mixed-Use Zone = 1-4 stories
- Multi-family Zone = 1-3 stories
- Residential Zone = 1-2 stories

ARTICULATION AND TRANSPARENCY:

- Use horizontal and vertical articulation that is human in scale and provides diversity that would be expected in traditional architectural style relative to form, balance, presence of recesses and overhangs.
- To maintain a traditional town center feel and also reduce energy consumption, glazing should not exceed 75% of the building facade. There should be a clear balance between transparent and nontransparent components of facades.

ENTRY AND PLACEMENT:

- Align building frontage along the sidewalk edge per site development standards.
- Locate public areas such as lobbies, reception, retail and dining along building walls that face the street, park or pedestrian cut-through so that they are highly visible and accessible.
- Encourage alternative modes of transportation by installing bicycle racks along streets and greenways and place well-lit convenient entrances that cater to the sightlines and activities of these users.
- Locate entrances at corners and active locations that have sightlines along streets and from parking areas to promote pedestrian activity.
    - » For buildings on corner lots, locate entrances at/near the corner to anchor the intersection and create a seamless transition that captures pedestrian activity from both street frontages.
- For retail and specialty commercial building uses, recess or cover entrances to provide shelter and articulate the point of entry.

LARGE PARCELS:

- Divide larger buildings and their façades into smaller modules, units or separate buildings so that the form and massing of the buildings can better relate to the scale and proportion of the surrounding area. Large parcels will be ideal for wrapping habitable development around structured parking. Vary building heights and facade setbacks to create a more visually interesting rhythm.

GATEWAYS AND CIVIC PLACES:

- Prominent massing and height that announces entry into the town center area is more appropriate at gateway sites and civic institutions
- Civic buildings and public gathering spaces such as libraries, city hall and public services should have distinctive form and materiality to reinforce their importance as nodes of activity and important role within the community.

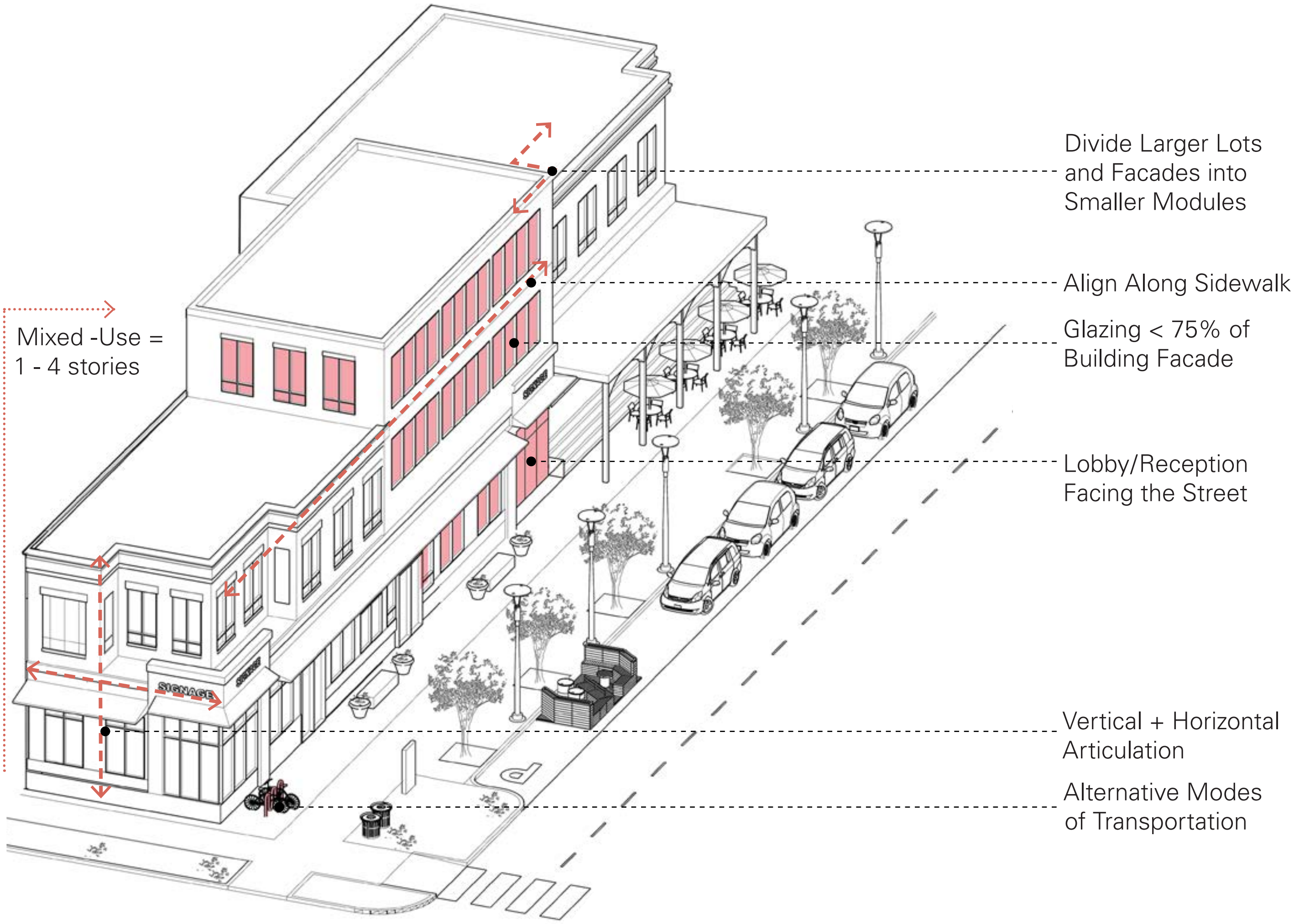


Figure 42: Architectural Principles

6

ARCHITECTURAL CHARACTER

Thoughtful and well designed architecture will contribute to long-lasting infrastructure within the town center that is revered by the community for generations to come. The below character descriptions should be utilized as an outline to develop more expansive and in-depth series of Architectural Guidelines that will accompany a future master plan of the area. The elements below and to the right are a result of community supported character imagery of what the citizenry of Mont Belvieu wants Mont Belvieu Main to look and feel like.

STYLE:

- Eclectic, traditional with larger windows with minimal glazing than what is seen in contemporary commercial and retail architecture
- Regionally appropriate to the Gulf Coast vernacular and climate

MATERIALITY:

- Facades should employ the use of brick or stone and be built utilizing low impact design principles that consider thermal mass and passive heating/cooling technology.
- Excessive uniformity and monotony are discouraged, however, variations in materials and colors must be composed and balanced to create a unified whole.
- Materials should be regionally sourced, durable and high quality.
- Glazing should be energy-efficient, low emissive and at a minimum double-glazed.
- Rooftops should have a high albedo or employ green roof technology or solar technology.
- H-VAC and other utilities rooftop utilities should be consolidated.

LIGHTING:

- Lighting should be LED, energy efficient and a warmer color temperature in the 2,500K - 3,500K range.
- Accent lighting should be used to highlight architectural character and monumentation. Use shielded fixture housings to direct light distribution to pedestrian areas and to prevent trespass onto adjacent properties .

SHADING:

- Entries should provide shade and protection from weather through the use of building awnings or second story overhangs.

HIERARCHY:

- There should be a clear and distinguishable hierarchy between building types and appropriate to the use.
- Corner buildings and destinations such as hospitality, entertainment or civic venues should employ additional architectural features that accentuate the unique location or use that actively engage the public realm and create a visual presence at the corner, such as:
    - » Chamfered or rounded corners,
    - » Projecting and recessed balconies and entrances,
    - » Accentuating features such as embellished doorways and volumetric manipulations,
    - » Enhanced window designs that may include floor-to-ceiling windows, display windows, clerestory windows, or distinctive glass design or colors.


Building Placement


Timeless Architecture


Natural-Looking Setbacks


Lighting


Sidewalk Furniture


Mixed-Use Housing Styles


Mid-Density Multi-Family Housing Styles


Low Density Multi-Family Housing Styles

SMART/RESILIENT TECHNOLOGIES

SMART TECHNOLOGY RECOMMENDATIONS

Development within the Study Area should integrate smart systems to achieve greater resilience and efficiency relative to energy use, natural disaster recovery and traffic flow. This section highlights different elements of these technologies that should be included in development plans where applicable and can be designed, funded, installed and maintained through public/private partnerships with technology manufactures or utilities such as CenterPoint Energy. The technologies explained in greater depth below are those that were the most important to the community of Mont Belvieu, and as such, should take prominence in development funding.

- Integrate free, public WiFi within public spaces such as plazas, parks and civic buildings
- Utilize alternative energy, specifically solar power into projects to reduce dependence on conventional fuel sources
- Develop a micro-grid that powers the entirety of the greater town center and residential areas of Mont Belvieu Main

PUBLIC WIFI

LOCATION | PARKS/OPEN SPACES, SHELTERS, STREETSCAPES

Public, free WiFi allows users to connect to the internet for free and should be incentivised throughout Mont Belvieu Main.

BENEFITS:

- Will attract a more diverse user base to open spaces and civic areas
- Allows individuals to work remotely and "on-demand", which will likely attract a younger demographic to work and live within Mont Belvieu Main
- Can be used for promotional purposes on social media that would benefit the City and surrounding retailers
- Increases safety as users can access the internet when cell phone coverage is lacking

SOLAR POWER TECHNOLOGY

LOCATION | ROOFTOPS, SHADE STRUCTURES, LIGHTS

Solar power converts sunlight into energy, the most suitable application within Mont Belvieu Main would be through the use of photovoltaic panels.

BENEFITS:

- Provides long-term return on investment to the community or developer in the form of buy-back credits or low cost, local energy sources
- Can provide electricity to areas that are not on the grid or are cost prohibitive to provide power to such as park pavilions, trail signage and shelters
- Lowers burden on conventional power sources and can be stored at the generation point or in a larger micro-grid system

MICRO-GRID

LOCATION | WITHIN STUDY AREA, ELEVATED FROM FLOODS

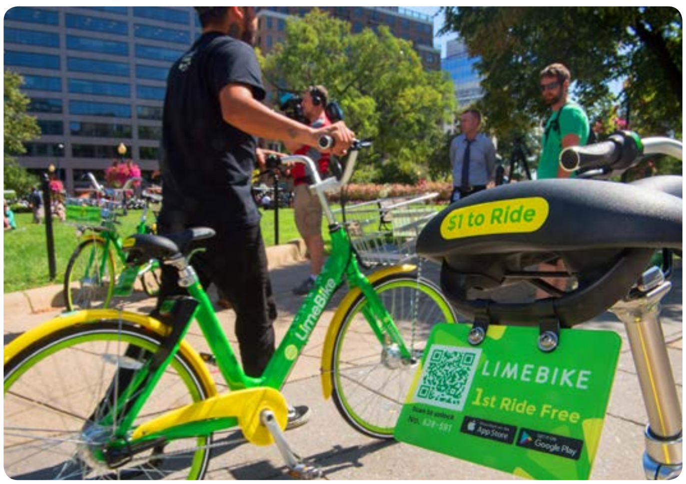
A micro-grid or district energy provides a small scale energy source to communities at the scale of the proposed development within Mont Belvieu Main.

BENEFITS:

- Will work synchronously with a connected, conventional macro-grid while providing the benefit of operating independently during power outage events that occur during natural disasters or overloaded grids
- Reduces burden on conventional systems and can integrate easily with nearby alternative energy sources such as solar power

Traffic Sensors To Monitor Traffic Flow

Smart Lighting For Efficient Use Of Energy



Bike Sharing Programs/Parking Sensors

Electric Charging Stations For Vehicles

Grounded Utilities

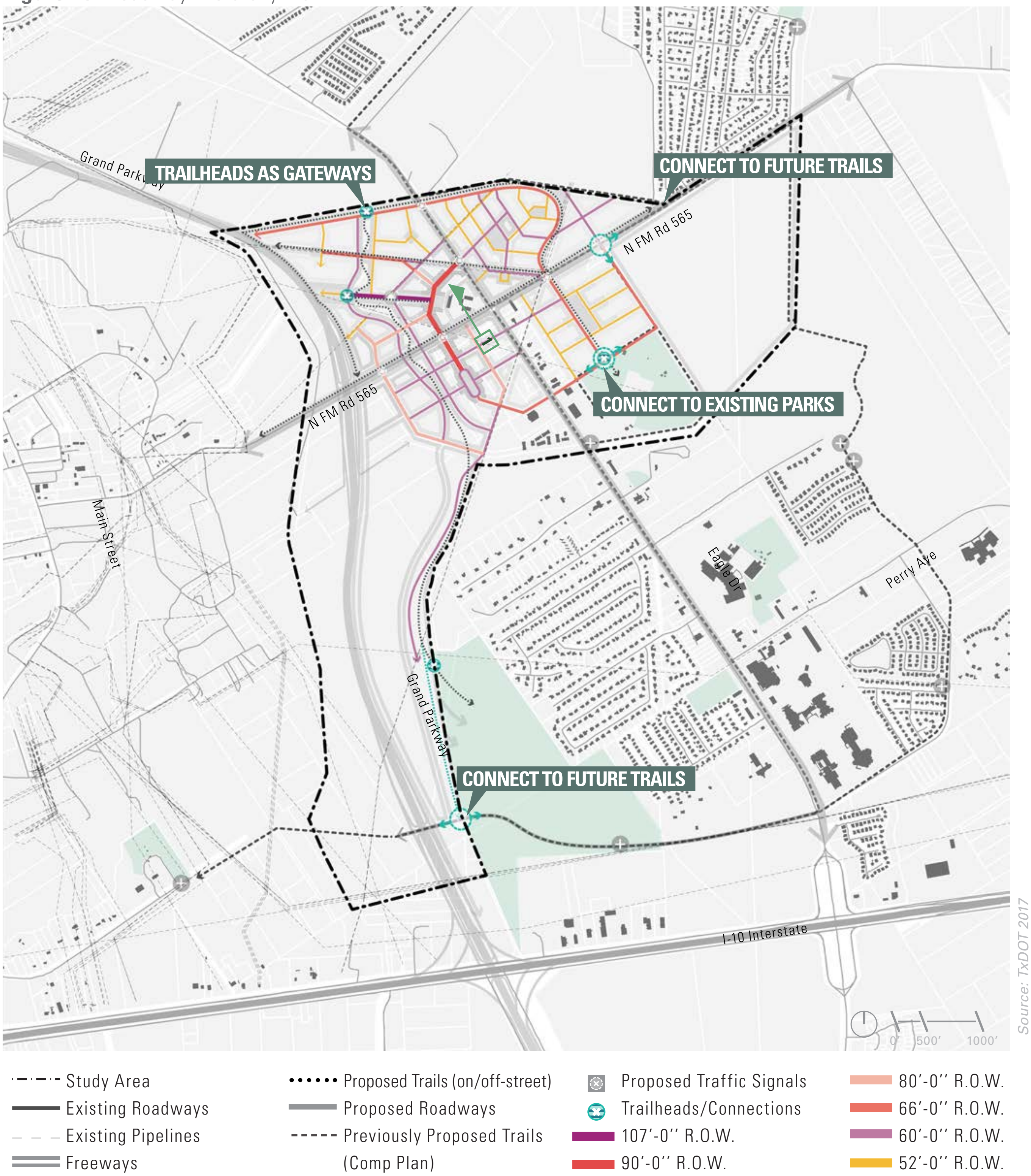
Sensors To Monitor Weather Patterns + Pollution

MOBILITY FRAMEWORK

CIRCULATION AND MOBILITY FRAMEWORK

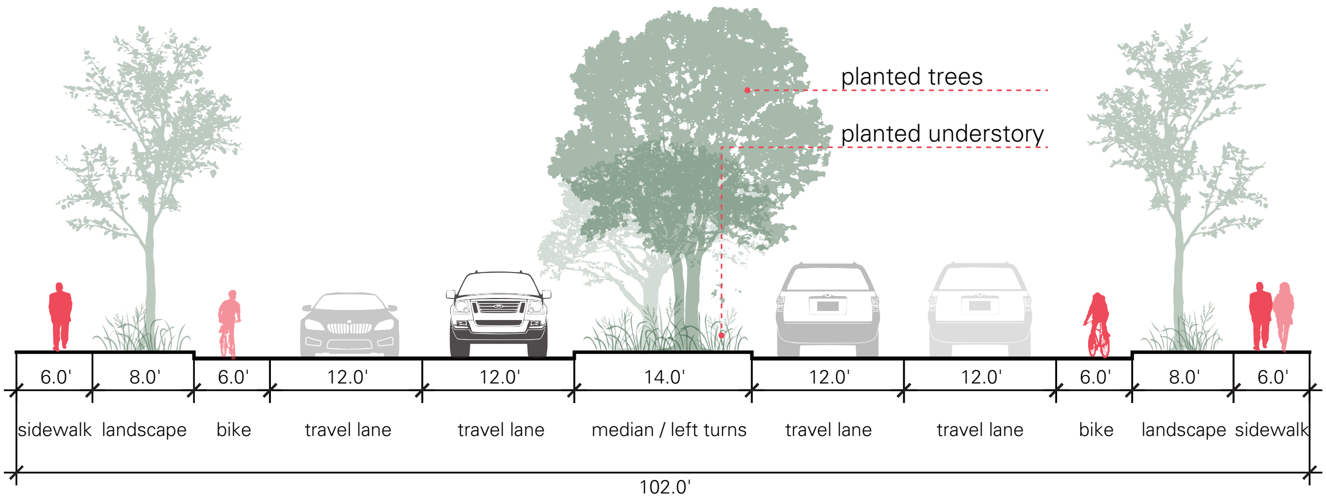
Future infrastructure should ensure a legible hierarchy of streetscapes that are extremely interconnected with walkable block lengths. Signalized intersections should be integrated to control traffic, with bike lanes and wide sidewalks within the retail, mixed-use and multi-family areas to allow people to move easily throughout the town center. It will be key that traffic calming devices and well-designed intersections are implemented to increase safety and rectify non-perpendicular roadway intersections that are resultant of the existing pipelines.

Figure 43: Roadway Hierarchy Plan

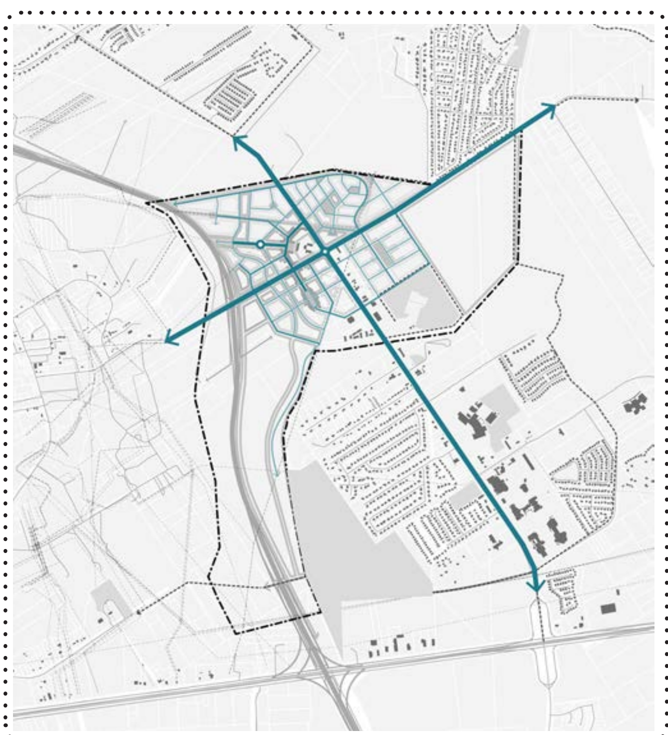


PROPOSED FM 565 SECTION CONSIDERATIONS

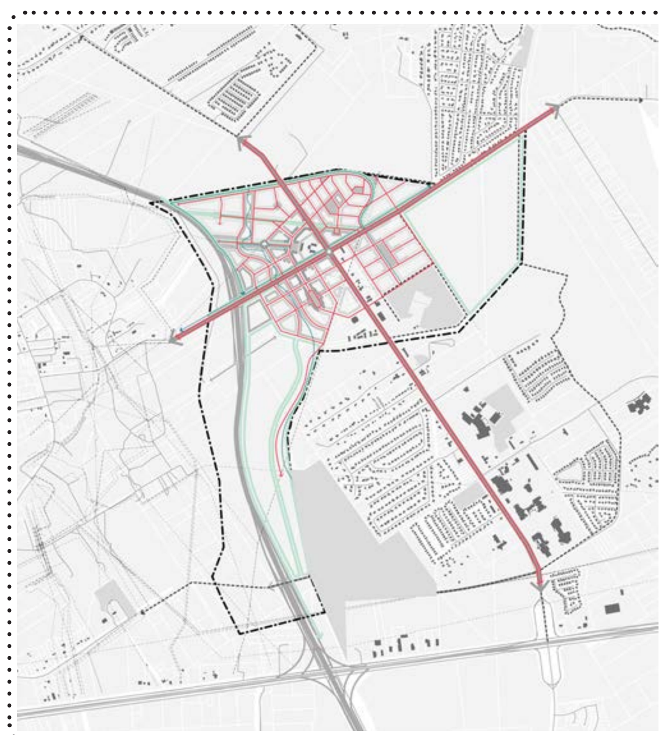
- Ensure there are enough lanes to handle future traffic volume relative to anticipated needs and service due to the Grand Parkway construction.
- Provide ample, safe and comfortable pedestrian connections along the length of FM 565 including shade, medians, bike lanes and sidewalks.



AUTOMOBILE CIRCULATION

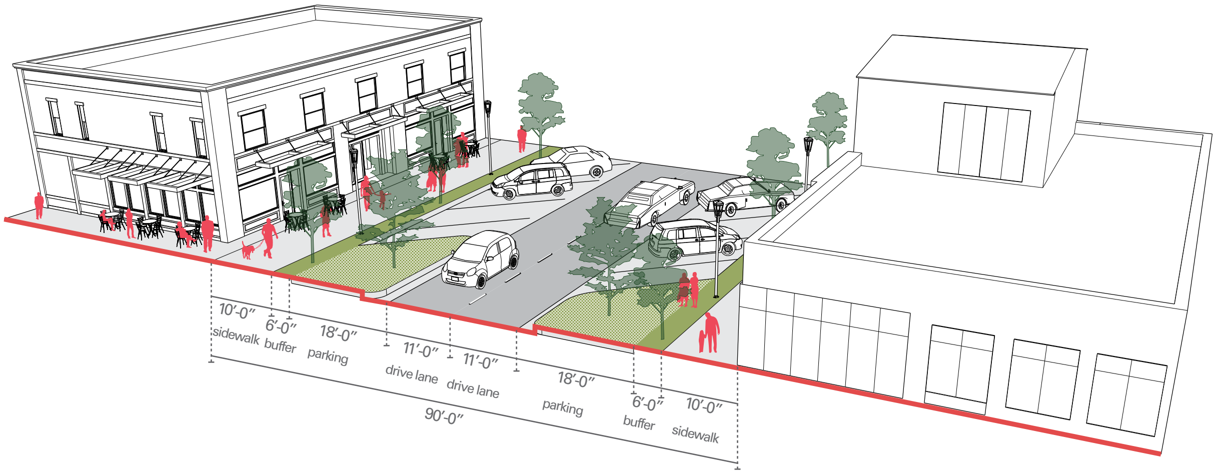


PEDESTRIAN CIRCULATION

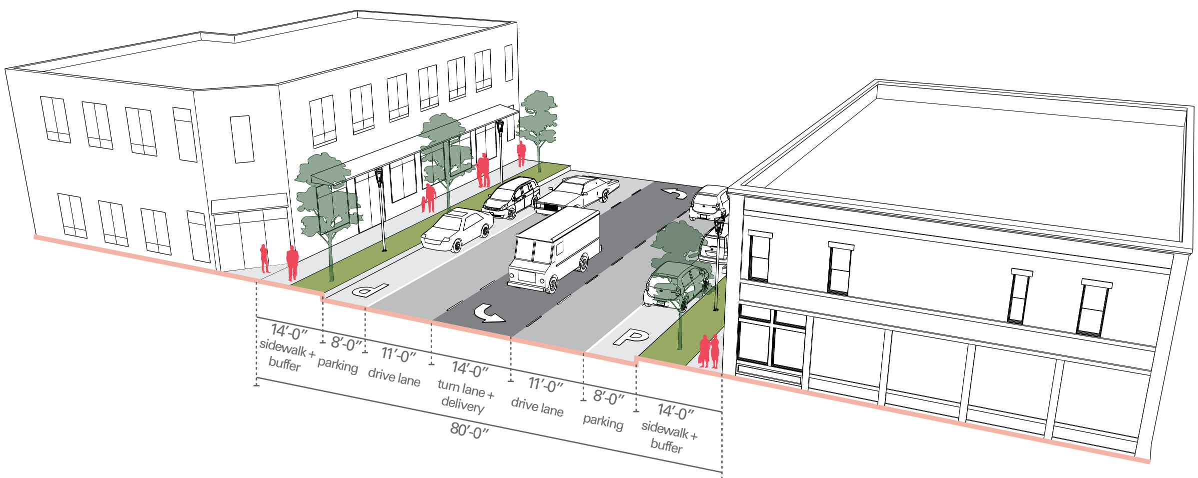


STREET HIERARCHY

A
MAIN STREET



B
RETAIL STREET



C
MIXED USE BLVD

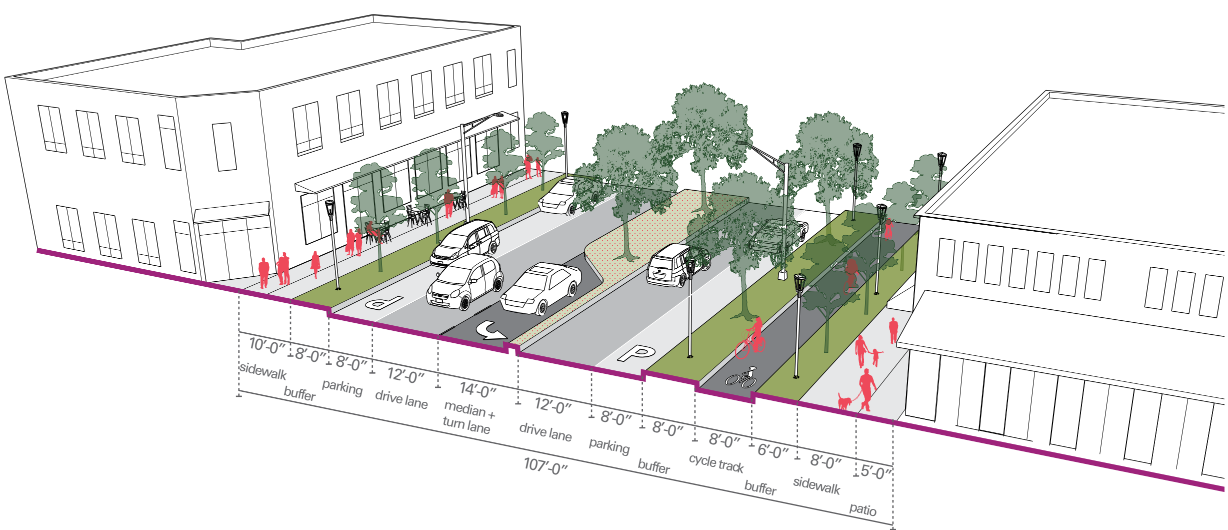


Figure 44: Streetscape Typologies | Town Center

MAIN STREET | 90'-0" RIGHT OF WAY

The Main Street within the town center should be characterized by wide sidewalks and on-street parking that will attract foot traffic to the area. Setbacks should be limited and trees should be planted in all buffer strips to increase shade and pedestrian comfort.

KEY COMPONENTS:

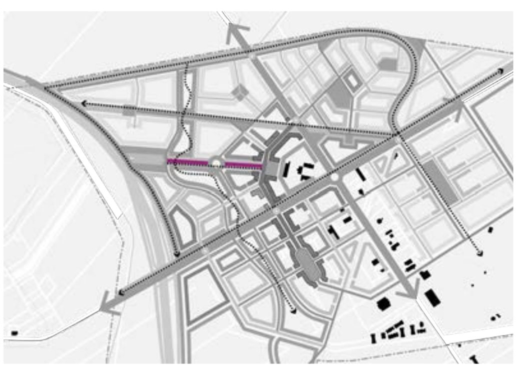
- 10'-0" sidewalks and a minimum of 6'-0" planting buffer along the roadway and with head-in parking that makes for ease of access and increases the number of parking spaces accommodated on retail frontages
- Large curb bulb outs with planting shall occur at intersections and any mid-block curb cuts
- Zero building setbacks from right of way (with the exception of special uses)

SECONDARY RETAIL STREET | 80'-0" RIGHT OF WAY

The secondary retail street occurs within mixed-use areas with easy access, acting as "back-of-house" to the main retail and commercial corridor. The street is characterized by a center shared turning lane that should also be used for deliveries and additional parking during high volume events.

KEY COMPONENTS:

- 14'-0" combined pedestrian and planting zone
- On-street parking with planting buffer and trees
- Zero building setbacks from right of way (with the exception of special uses)
- Access points for dirveways into parking areas and apartment entries



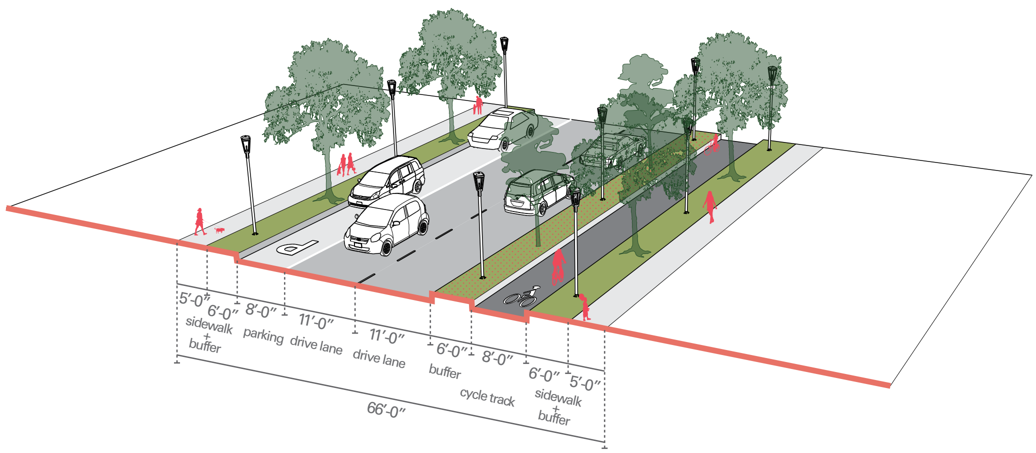
MIXED-USE BOULEVARD | 107'-0"RIGHT OF WAY

The mixed-use boulvard is designed as a higher volume street that connects the town center to the central drainage park and surrounding residential areas. It is characterized by a wide median that has been envisioned as accommodating stormwater. Additionally a cycle track connects to the greater greenway network.

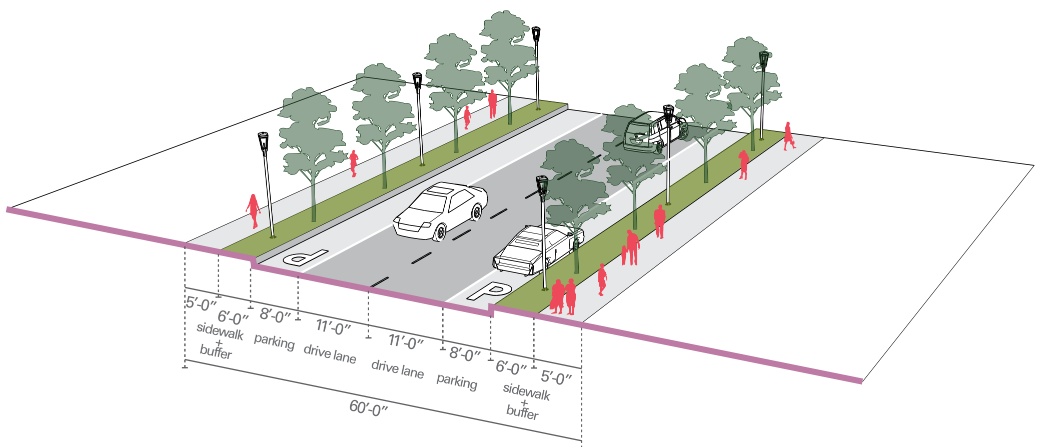
KEY COMPONENTS:

- 8'-0" - 10'-0" sidewalks and ample building transition zones
- A wide stormwater median with native plantings and trees
- A combined pedestrian and planting zone to allow for varying widths and flexibility
- A cycle track that is protected by an 8'-0" planted buffer
- Staggered street trees along buffers and within the median that provide shade and urban habitat

D
RESIDENTIAL THOROUGHFARE



E
RESIDENTIAL STREET TYPE 1



F
RESIDENTIAL STREET TYPE 2

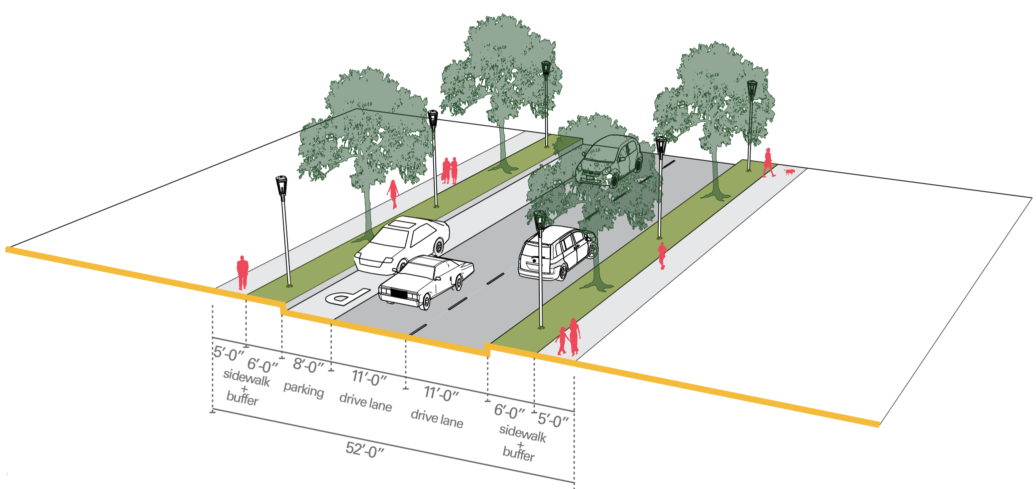
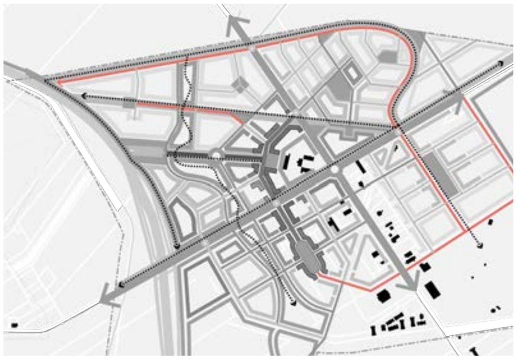


Figure 45: Streetscape Typologies | Residential



RESIDENTIAL THOROUGHFARE | 66’-0” RIGHT OF WAY

The residential thoroughfare accommodates multiple modes of transportation and is situated as the framework around the residential land uses within the Study Area. This street typology would act as a collector to the other two residential streets.

KEY COMPONENTS:

- Accommodates larger traffic volumes to collect vehicular traffic from internal residential streets
- Ample pedestrian lighting for illumination of the cycle track and sidewalk areas
- 5’-0” sidewalks and a 6’-0” planting buffer
- A cycle track that is protected by an 6’-0” planted buffer

RESIDENTIAL STREET A | 60’-0” RIGHT OF WAY

The larger residential street has an internal network that connects to the residential thoroughfares and is situated around multi-family and mixed-use housing where higher traffic volumes would be expected and on-street parking needs are greater. Dedicated on-street parking could evolve into a bike lane as demand for multi-modal transit options increases.

KEY COMPONENTS:

- Shade trees at 30’0”-50’-0” on center
- 5’-0” sidewalks and a 6’-0” planting buffer
- Dedicated on-street parking on both sides of the street

RESIDENTIAL STREET B | 52’-0” RIGHT OF WAY

The smaller residential street has the lowest volume, narrowest street typology and would fill-in the internal network, connecting to arterial roads and other residential streets. Dedicated on-street parking could evolve into a bike lane as demand for multi-modal transit options increase and the blend of transit typologies shifts to non-vehicle focused users.

KEY COMPONENTS:

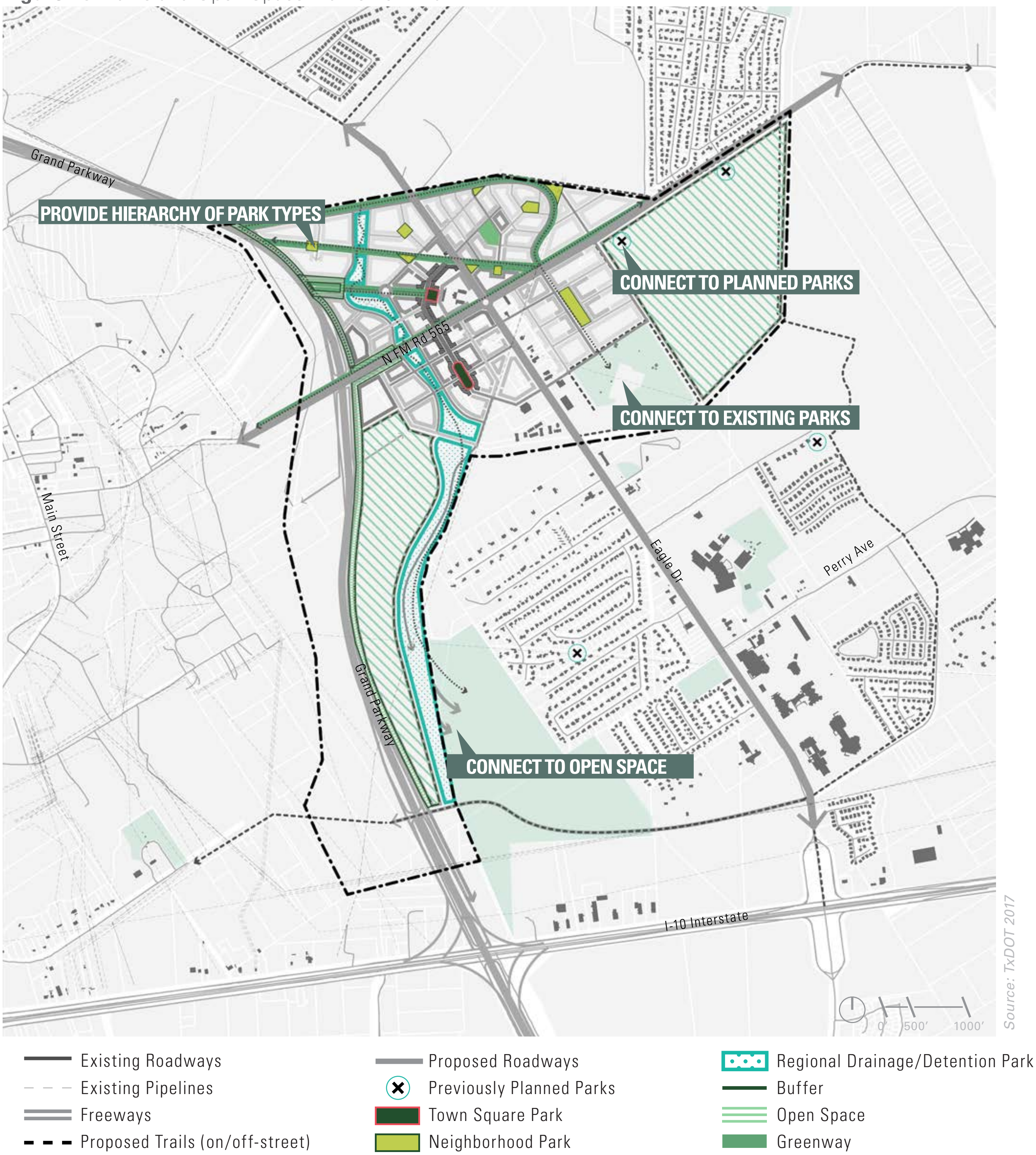
- Shade trees at 30’0”-50’-0” on center
- 5’-0” sidewalks and a 6’-0” planting buffer
- Dedicated on-street parking on one side of the street
- Flexibility to accommodate a future bike lane

OPEN SPACE FRAMEWORK

OPEN SPACE AND PARKS | A TYPOLOGICAL APPROACH

Parks and open space are a crucial component to the success of the town center and the development of the overall Study Area. Each park should be multi-functional and be able to not only provide typical park functions but also act as ecological infrastructure to provide stormwater management and urban habitat, act as a destination to attract programming that generates revenue, and as a gateway and buffer that mitigates the impact of the traffic from the future Grand Parkway and communicates Mont Belvieu's commitment to open space.

Figure 46: Parks and Open Space Framework Plan



PARK TYPOLOGIES

TOWN SQUARE PARK

LOCATION | AT CITY HALL AND COUPLET SOUTH OF FM 565

The Town Square Park provides an anchor to the retail and commercial corridor, attracting users day and night. It is both park and plaza focused, with the ability to host events.

COMPONENTS:

- Space for active programming such as interactive fountains, playgrounds and food/beverage
- Flexible space for concerts, markets and events with regular and frequent programming throughout the year
- Balance of hard and soft surfacing, ample lighting, shelters, gardens, walkways, plazas and lawns

NEIGHBORHOOD PARK

LOCATION | THROUGHOUT RESIDENTIAL NEIGHBORHOODS

Neighborhood parks should be located to provide open space at the center of each residential area shown in the Regulating Plan. This park typology is highly variable depending on size and concentration of user.

COMPONENTS:

- Space for active programming such as flexible fields, playgrounds and pick-up sports
- Flexible areas for gardens and neighborhood stormwater detention

REGIONAL GREENWAYS

LOCATION | ALONG EASEMENTS, DRAINAGEWAYS, OPEN SPACE AND STREETS

Greenways act as a linear park that provides options for alternative transportation and passive recreation.

COMPONENTS:

- Separated or shared-use trails, minimum of 10'-0" if shared
- Integration of native planting, conservation areas and LID components such as swales and biofiltration mechanisms
- Connected regionally with safety lighting, shelters, wayfinding, gateways and safe crossings such as pedestrian bridges and traffic signals

DRAINAGE PARK

LOCATION | ALONG THE EXISTING DRAINAGE CORRIDOR

The Drainage Park acts as the natural and recreational spine of the Open Space Framework. It should be designed in such a way that it provides increased stormwater capacity and conveyance from its current condition while creating greater ecological benefit.

COMPONENTS:

- Dedicated pedestrian and bicycle networks that are paved and follow the minimum guidelines set forth by AASHTO
- Large setbacks from development, with varied topography and a focus on hydrological and ecological systems

PARK CONNECTIVITY AND OPEN SPACE DEVELOPMENT

The entire development of commercial and residential uses within the Study Area are within a minimum of a 1/4 mile of a park or open space. Future development should follow this framework to ensure that all residents are within a 5 minute walk of open space. This open space supplements the deficit found in the analysis of "Open Space + Trails" presented in "Needs Assessment", as well as the deficit within the Comprehensive Plan presented in the summary of the "Parks and Recreation Master Plan" in the "Introduction".

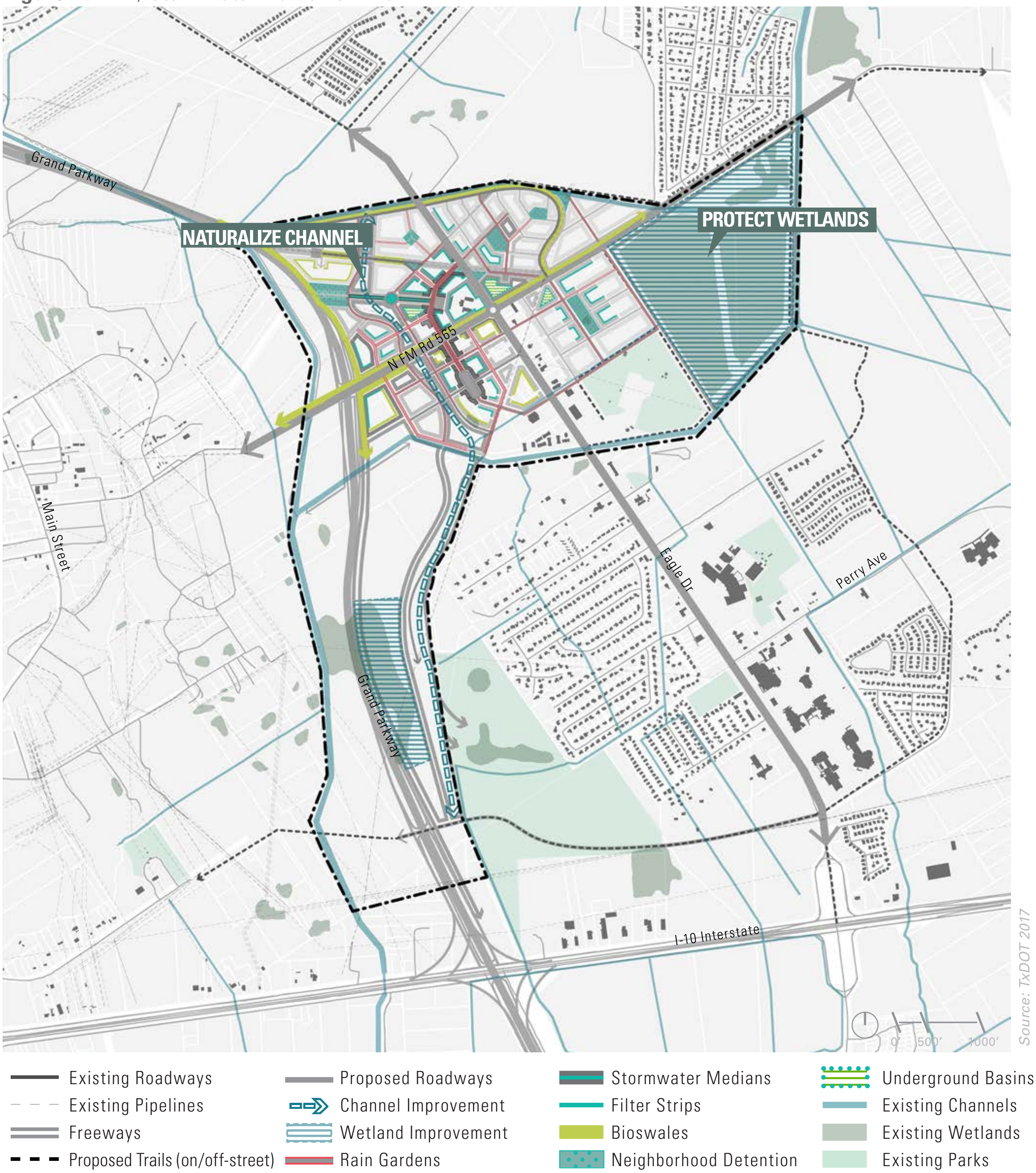
Figure 47: Parks and Open Space Development

Study Area
Existing Roadways
Existing Pipelines
Freeways
Proposed Trails (on/off-street)
Proposed Roadways
Proposed Parks and Open Space
5 minute walk radius (1/4 mile)
Greenway
Existing Parks/Planned Parks

LOW IMPACT DESIGN FRAMEWORK

The low impact design strategies for the Study Area area are comprehensive and diverse relative to stormwater management and will increase water quality, reduce flooding and alleviate pressure on conventional infrastructure. Development should rely on a host of strategies outlined within this section to retain, detain and filter as much water on-site as possible. Naturalizing and improving the current Hackberry Gully channel will be a large undertaking, but will have several positive outcomes such as increased habitat value, water quality, capacity and reduced erosion.

Figure 48: LID/ Stormwater Framework Plan



LID COMPONENTS

BMP RECOMMENDATIONS

- Provide water quality treatment and storage at the source of generation.
- Use high performance modular biofiltration system when depth is available, to existing or proposed open channels, swales and ponds. This will cleanse stormwater runoff before entering storm sewer systems.
- Incorporate bioswales in proposed areas such as retail parking lots. This can help meet detention requirements.
- Develop bioswales, rain gardens and/or vegetated filter strips. This will give developers an opportunity to receive points from Mont Belvieu's Standard for Aesthetics and Recreation (STAR) Program.
- Utilize proposed park spaces as a multi-use area to include stormwater detention and water quality enhancing strategies. These can be integrated as open water or underground basins and can be designed within a park for detention.
- Follow Mont Belvieu's Standard for Aesthetics and Recreation (STAR) Program as a baseline for stomwater management relative to land use and land area developed.

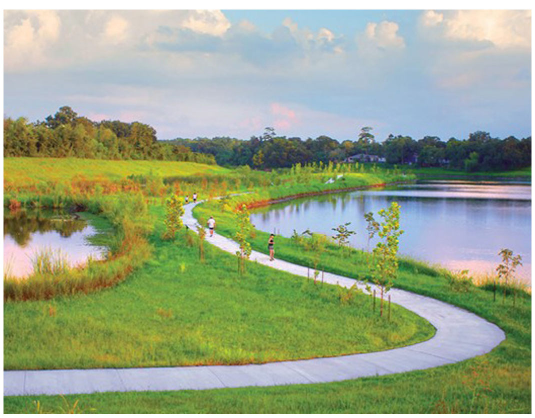
RETENTION BASINS (WET BOTTOM)

LOCATION | PARKS AND OPEN SPACES

Retention basins collect and retain stormwater in a basin/pond. The pond is surrounded by native vegetation which naturally treats runoff and removes pollutants.

BENEFITS:

- Prevents erosion and flooding downstream
- The natural cleaning process of the pond improves water quality and requires no additional additives
- Can be used for recreational purposes



DETENTION BASINS (DRY BOTTOM)

LOCATION | PARKS AND OPEN SPACES

Detention basins are a large area where stormwater is collected and temporarily held. The stormwater slowly drains through an outlet located at the bottom of the basin. Structures such as concrete blocks can be used to collect debris and slow the flow of water entering and leaving the basin.

BENEFITS:

- Removes debris, cleanses water
- Prevents flooding downstream
- Can be used for recreational purposes

BIOFILTRATION

LOCATION | PARKING LOTS, PARKS, STREETSCAPES

Biofiltration is a pollution control technique using engineered soil to capture pollutants at a flow rate specific to the drainage area.

BENEFITS:

- Allows for detention by controlling the stormwater release flow rate
- Removes pollutants from stormwater
- Reduces burden on conventional stormwater systems during peak rain events

BIOSWALE

LOCATION | PARKING LOTS, PARKS, STREETSCAPES, RESIDENTIAL AREAS

A bioswale is a vegetated channel designed to clean and filter stormwater runoff through planted vegetation while conveying water through the channel.

BENEFITS:

- Reduces the velocity of stormwater runoff
- Reduces erosion in the swale and filters sediments
- If soils are conducive, then a vegetated swale can provide infiltration

RAIN GARDENS

LOCATION | PARKING LOTS, PARKS, STREETSCAPES, RESIDENTIAL AREAS

A rain garden is a vegetated depression with engineered soil used for water quality and quantity control.

BENEFITS:

- Removes pollutants from stormwater runoff
- Increases time of concentration
- Provides detention and reduces surface ponding

FILTER STRIPS

LOCATION | PARKING LOTS, PARKS, STREETSCAPES, RESIDENTIAL AREAS

A filter strip is a portion of land either vegetated or filled with rocks that act as a filter. Located before the receiving section of a conveyance system.

BENEFITS:

- Reduces the velocity of runoff
- Provides storm water management by capturing sediments and pollutants
- If soils are conducive, then a vegetated section can provide infiltration for runoff

STORMWATER MEDIAN

LOCATION | STREETSCAPES WITH WIDE MEDIANS

Depressed medians that separate traffic on larger roadways that provide stormwater conveyance and detention.

BENEFITS:

- Cleanses stormwater runoff and also help to reduce erosion of the channel
- Structures that lay across the swale reduce the speed of stormwater going through the medians
- Provides detention which helps to reduce the stormwater flow entering the main storm drain system

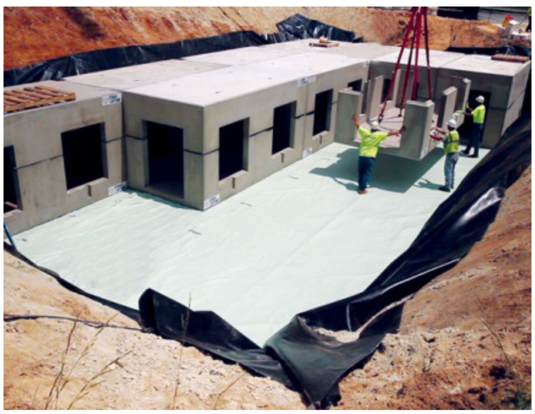
CISTERNS AND RAIN BARRELS

LOCATION | ADJACENT TO ANY ROOFTOP - COMMERCIAL AND RESIDENTIAL BUILDINGS

Cisterns and rain barrels provide above ground water storage that capture runoff produced by the roof of a building. Water is collected through a gutter and downspout system.

BENEFITS:

- Directs stormwater runoff away from the building
- Stormwater can be used for gardens or lawns
- Reduces water and sewer bills



UNDERGROUND BASINS

LOCATION | BENEATH PARKING LOTS, IN CONSTRAINED AREAS WHERE ABOVE-GROUND METHODS WILL NOT FIT

Underground basins are structures below ground that capture and temporarily store stormwater from surrounding impervious surfaces. Stormwater is released to a main storm sewer system or natural waters.

BENEFITS:

- Reduces peak water flows
- If soils are suitable, can provide infiltration to recharge ground water
- Reduces pressure on precious open space above ground

PLANTERS

LOCATION | ALONG BUILDING FACES, SIDEWALKS, STREETS

A hard edged container with plants that treats water by allowing stormwater runoff to flow and soak through its soil and into an underdrain system.

BENEFITS:

- Treats stormwater
- Reduces the flow of runoff into the drainage system

STREET TREES/URBAN FOREST COVER

LOCATION | PARKS, OPEN SPACE, PARKING LOTS, STREETSCAPES

Trees planted extensively in areas where air pollution is elevated and in communal areas such as streets, sidewalks and community parks to provide an "urban forest".

BENEFITS:

- Air quality improvement
- Provide shade for homes and office buildings
- Increases infiltration and stores water
- Disperses and reduces the velocity of water and erosion

HOUSING FRAMEWORK

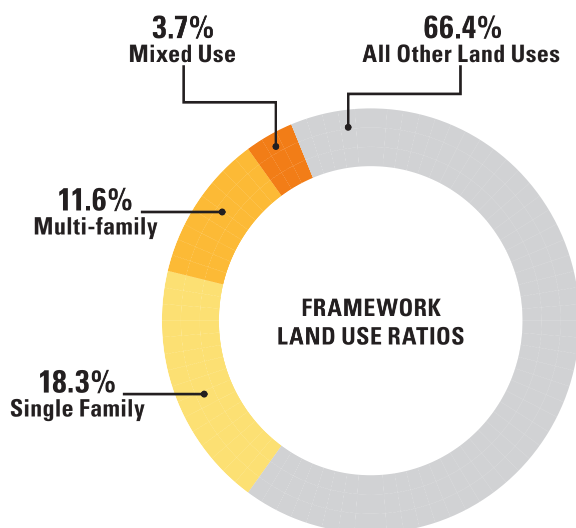
HOUSING OVERVIEW

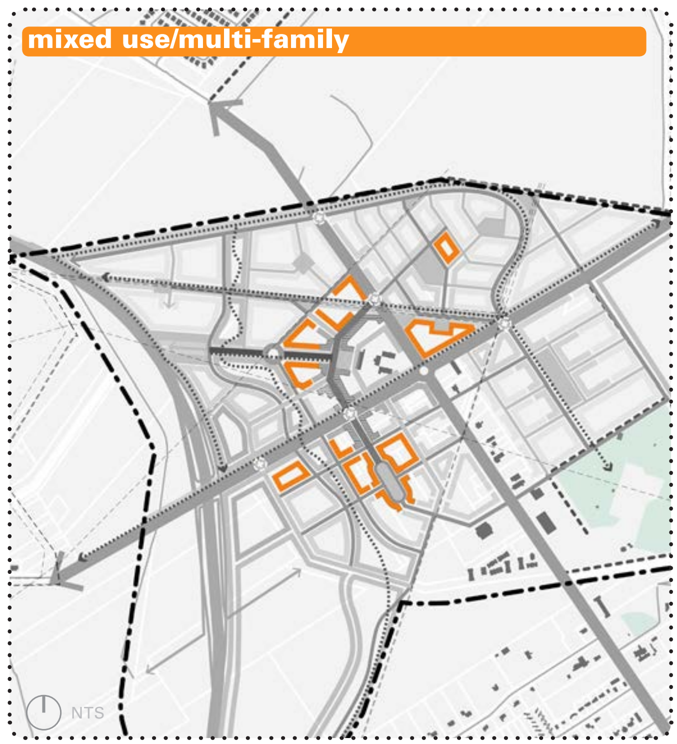
The Study Area Housing Framework provides diverse housing choices that will encourage individuals to age-in-place, from early career where one might rent an apartment in a walkable neighborhood near the town center, all the way to retirement where individuals will have the option to live in a range of senior communities. The framework seeks to close the current gap in the "2035 Comprehensive Plan" in which there is a deficit of 6,228 housing units to support the projected 2030 population of 30,115. The Housing Framework follows the planning strategy, placing high density housing at the core of the Town Center, while the mid-density, multi-family homes occur throughout the center of the development and low density, or single family occurs at the periphery.

HIGHER DENSITY HOUSING

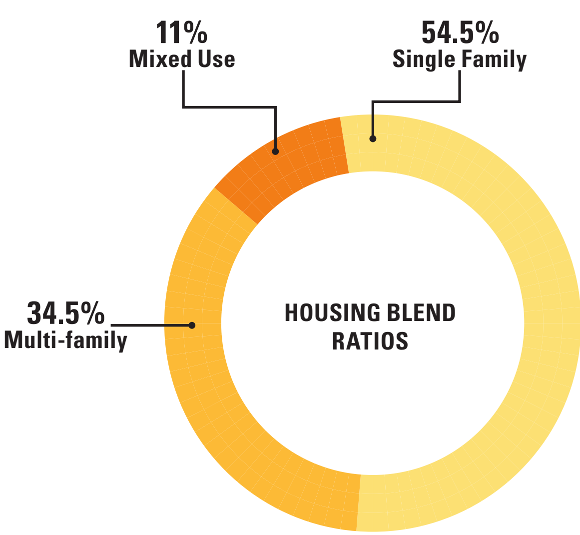
The higher density housing will be characterized by stacked apartments or condominiums often above retail or commercial land uses or with garden level housing units. These should be a density that is appropriate for Mont Belvieu, are a pedestrian scale and encourage walkable neighborhoods. The main entries should be along non-arterial roads. This will reduce curb cuts and driveways along the main retail street and busier streets of Eagle Drive and FM 565, increasing pedestrian safety and traffic flow. Parking should not occur at the front of the properties and therefore structured parking/interior lot parking may be required.

HOUSING LAND USE RATIOS | STUDY AREA





HOUSING TYPE RATIOS | HOUSING ONLY

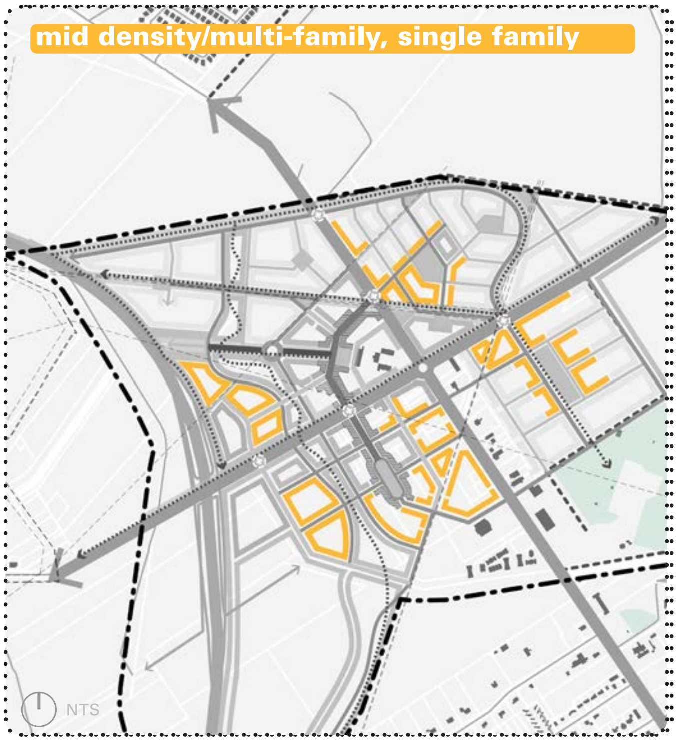


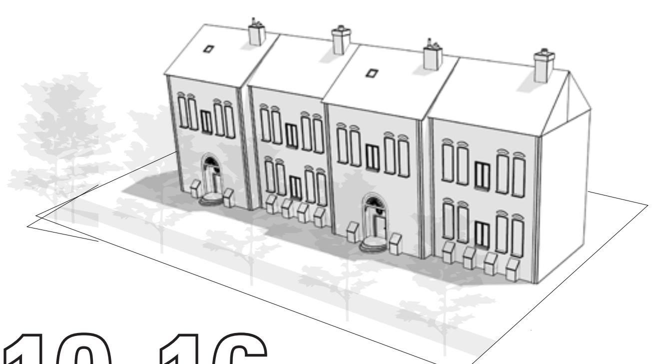
16-20 dwelling units/acre

MINIMUM LOT SIZE: VARIES

MID-DENSITY HOUSING

The mid-density housing should be characterized by single family attached, detached garden homes and small multi-family units such as fourplexes, townhouses and rowhouses. These may be alley-loaded to reduce the need for frequent driveways and reduce the burden on street parking needs. In the case of mid-density housing typologies sharing lot lines, parcels or block frontage with low denstiy or single family typologies, "chiclets"or interior drives may be necessary. Lot sizes should be much smaller than what currently exists within the majority of Mont Belvieu's housing stock and setbacks should be minimal to encourage an active street life and ensure space for alleyways, rear driveways and garages.



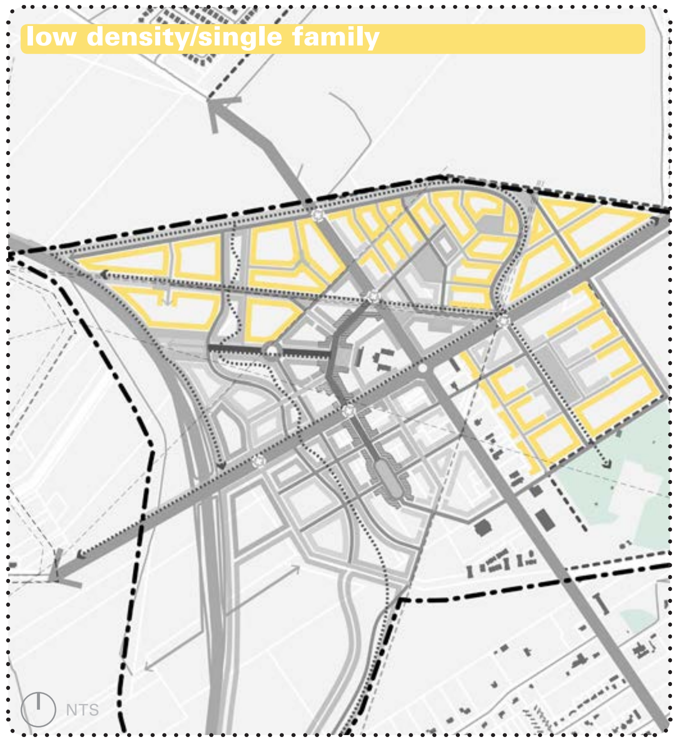


10-16 dwelling units/acre

MINIMUM LOT SIZE: 4,500 SF

LOW DENSITY HOUSING

The low density housing component will be characterized by a majority of single family housing with larger lot sizes. This land use pattern exists on the periphery of the town center and will act as a transition between the existing single family neighborhoods to the north and northeast. A defining component of these neighborhoods will be that they are all interconnected through greenways and streets with bike lanes ("Residential street type 1").



05-10 dwelling units/acre

MINIMUM LOT SIZE: 6,000 SF

SUSTAINABLE GROWTH + ECONOMY FRAMEWORK

PUBLIC REALM PHASING

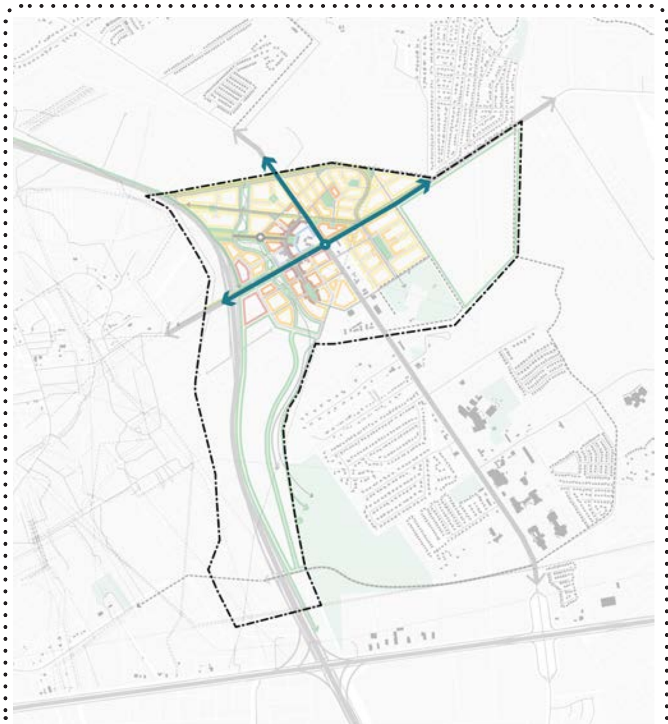
It is critical that the City and its civic and governmental partners work ahead of, and concurrently with, on-going and future development to ensure that a quality public realm is built alongside commercial and residential areas. The phased recommendations below identify specific actions the City should take to provide the necessary infrastructure and public amenities to incentivize development and a general time frame at which these may occur.

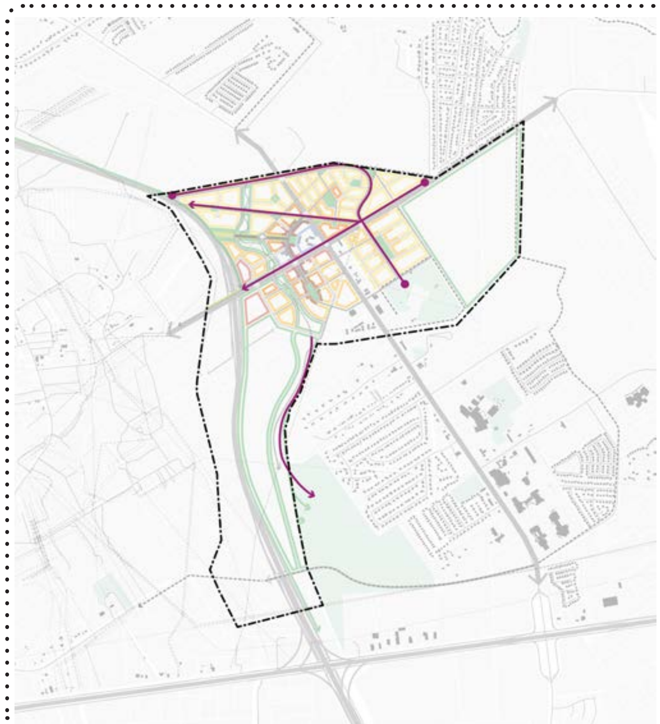
PHASE 1 | STREETSCAPE IMPROVEMENTS

Nearly 75% of stakeholders cited that improving traffic circulation and capacity in the Study Area was "very important". The first step in developing the town center is addressing current traffic congestion issues and future traffic volume pressures that will come from the implementation of the Grand Parkway and the exit off of FM 565.

PHASE 2 | GREENWAY NETWORK

The greenway network should be integrated before or along with future development within the Study Area. These mobility corridors provide the framework and interconnectivity necessary for a walkable, bikeable district. Greenways should follow, at a minimum, the required dimensions, amenities and setbacks established by the 2035 Comprehensive Plan.





PHASE 1
2019-2023

PHASE 2
2019-2023

PUBLIC REALM PHASING

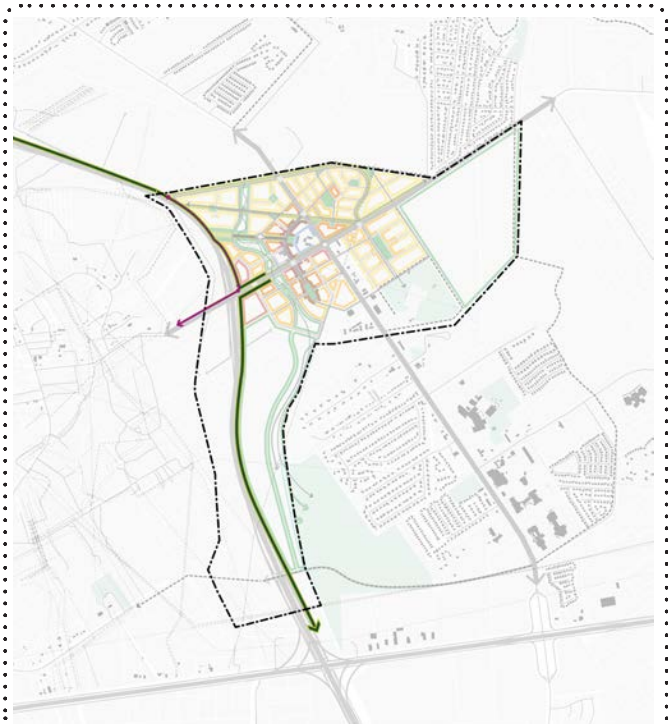
This is an overview snapshot of the City's baseline role in public realm improvements and development. More specific action steps, magnitude of cost and potential partners can be found in the "Implementation Recommendations" chapter. Although categorized as discrete projects, phases may overlap to ensure infrastructure accommodates development and projects that catalyze growth. The time ranges shown are approximate and highly dependant on market forces.

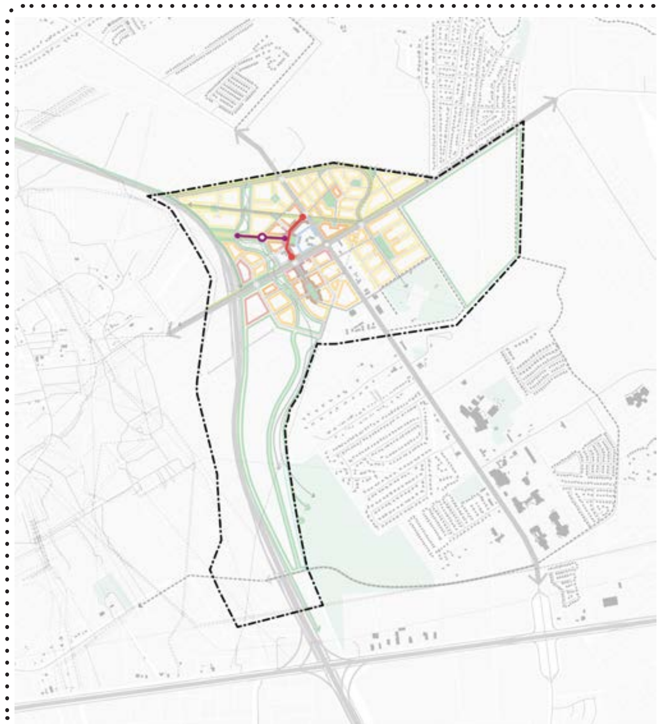
PHASE 3 | GRAND PARKWAY BUFFER

Acquiring right of way, whether in partnership with TxDOT or singularly as the City is crucial to provide a buffer from the Grand Parkway and provide a beautiful gateway at the intersection of FM 565 and the Grand Parkway leading into Mont Bevlieu Main. The buffer should be a minimum of 100' wide. Greenways should be included in some of these areas and built as part of this phase.

PHASE 4 | MAIN STREET AXIS

The "Main Street Axis", or build out of Street Types A and C will help to catalyze development of the core part of Mont Belvieu Main and could occur in tandem with the renovation of City Hall and implementation of the Town Square Park.





PHASE 3
2020-2025

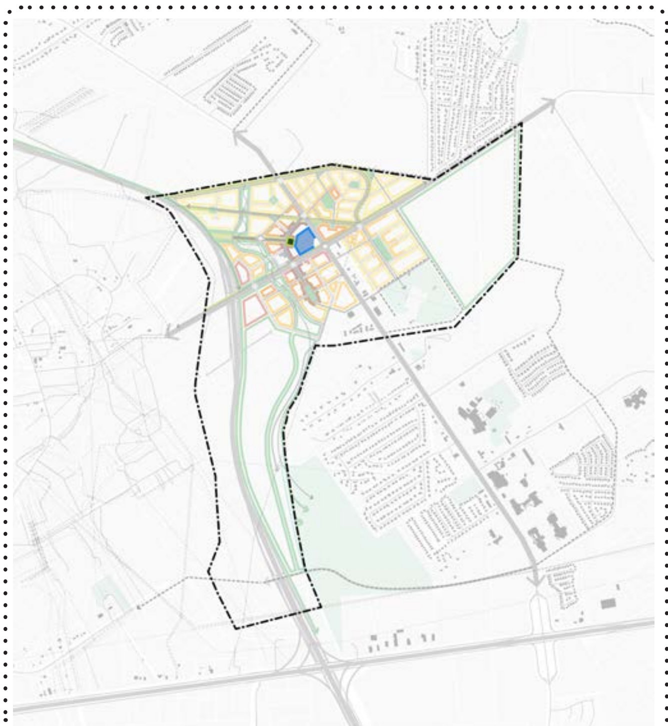
PHASE 4
2022-2027

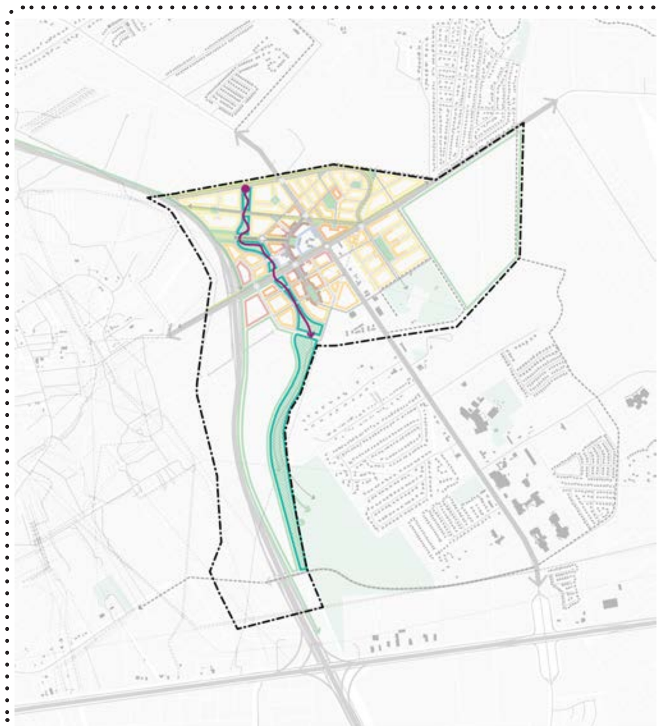
PHASE 5 | CITY HALL EXPANSION + TOWN SQUARE PARK

The City Hall expansion will provide the necessary space for increasing civic and administrative needs within the context of an ever growing population and city fabric. City Hall would then have “two front doors” with the grand expansion facing the Town Square Park.

PHASE 6 | DRAINAGE PARK

The improvement of the existing channel leading to Hackberry Gully and the overall “Linear Drainage Park” should be constructed prior to the west side development coming on-line. The greenways within the Park and adjacent parkways running along the Park should be built at the same time.



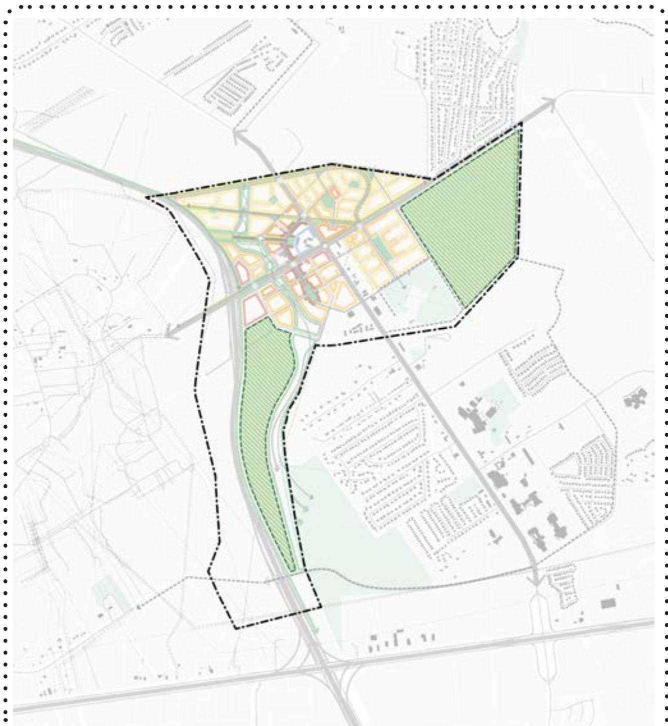


PHASE 5
2022-2030

PHASE 6
2030-2045

PHASE 7 | LAND BANKING OPEN SPACE

Land banking open space that is currently forested or wetlands will protect the City's sensitive natural resources and ensure that the current character of Mont Belvieu is maintained. This character is defined by ample open space and protection of critical habitat zones.



PHASE 7
2040-2050

5

STAKEHOLDER ENGAGEMENT

The Team, along with H-GAC and the City of Mont Belvieu, conducted an extensive public outreach effort that included workshops, online surveys and social media engagement. The outreach was used to understand community desires and build consensus which ultimately led to a community vision that is accountable to measurable criteria, and broadly supported by stakeholders.

A Stakeholder Engagement Strategy (SES) determined how to ensure stakeholders were informed, consulted, involved, collaborated with and empowered. The goal with this process was to gain an understanding of the existing character of the City, market conditions, perceived issues and desired changes.

VALUES WORKSHOP

OVERVIEW

In what ways do you use the study area? (Select all that apply)

Live	**66%**
Work	32%
Own a Home In	57%
Own A Business In	9%
Own Property In	14%
Commute Through	48%
Volunteer In	20%
Recreate In	40%
Go to School In	24%
Other	2%

Which zip code do you live in?

77521	2%
77523	**73.5%**
77535	18.5%
77580	1.5%
Other	4.5%

Where do you work ?

Mont Belvieu	**33%**
Old River-Winfree	2%
Baytown	20%
Beaumont	0%
Deer Park	8%
Channelview	2%
Pasadena	5%
Other.	30%

Key take-away: The framework will accommodate amenities and connections that cater to a wider audience.

How did you hear about this meeting? (Select all that apply)

Email	2%
Flyer/Poster	1%
Social Media	**73%**
Digital Bulletin	0%
Gov't Website	16%
Billboard	0%
Other.	8%

Key take-away: The team worked with the City to ensure public announcements reached the wider internet audience.

FEBRUARY 2018 VALUES WORKSHOP | GAINING AN UNDERSTANDING

At the Values Workshop, the project team presented existing conditions, stakeholder findings and benchmarks of mixed-use/town center developments across Texas. The workshop drew feedback from participants through interactive polling and supplemented outreach with an online survey for those that could not attend in-person. Approximately 270 workshop attendees and survey responders voiced their top priorities for Mont Belvieu Main, such as refining the vision and goals, promoting local businesses and adding new retail and commercial space and expanding public programming opportunities. A large emphasis was put on understanding community desires based on the use of case study projects including The Woodlands Town Center, Sugar Land Town Center, City Centre, Georgetown Downtown, Round Rock Downtown, The Domain and Mueller Town Center. All multiple choice, multiple response questions are a percentage of the total answers and therefore add up to be greater than 100.

EXISTING CONDITIONS

Do you think the existing sidewalks in the study area are adequate?

Definitely	19%
Somewhat	**51%**
Not Really	19%
Definitely No	10%
Other suggestions.	1%

Key take-away: Town Center recommendations will reference all existing sidewalks to be connected to future ones to ensure pedestrians have safe walking opportunities.

How often do you travel outside Mont Belvieu for shopping or recreation?

Once per day	39%
Once per week	**54%**
Three (3) or less times per month	5%
Once (1) per year	1%
Never	1%

Key take-away: The design team will need to consider recommendations that provide local retail and public space amenities within the City of Mont Belvieu.

How important is improving traffic circulation and capacity in the Study Area?

Very Important	**79%**
Somewhat Important	16%
Neutral	3%
Somewhat Unimportant	1%
Not at All Important	1%

Key take-away: The design team will provide a town center framework plan that will maximize traffic capacity while maintaining walkability and bikability.

What types of parks do you want more of?

Passive	18%
Active	12%
Nature Focused	29%
Program Focused	**38%**
Other,	3%

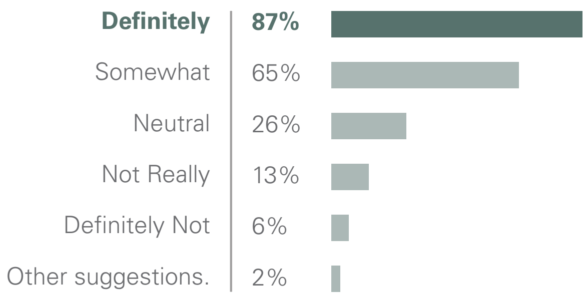
Key take-away: The design team will plan for parks that will have frequent activities and year-round events such as concerts and holiday performances.

OUTREACH SUMMARY

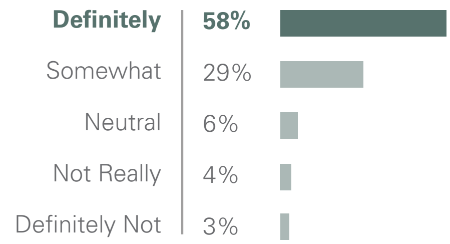
The best outreach method for getting feedback via the online survey was social media, with nearly two-thirds of respondents stating they heard about the survey and workshop through social media. This was also one of the best methods for getting individuals to attend the workshop in-person, with word of mouth and a last minute advertisement in the newspaper also helping bolster numbers.

VISION

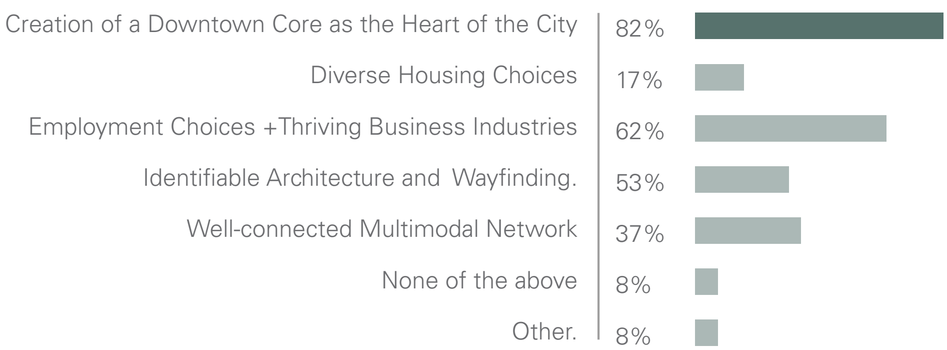
Do you agree with the vision?



Do you like the idea of Mont Belvieu having a downtown?

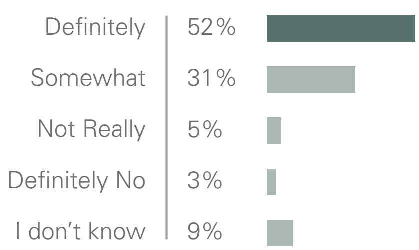


What part(s) of the vision resonate most with you? (Top 3) (multiple choice, multiple response)

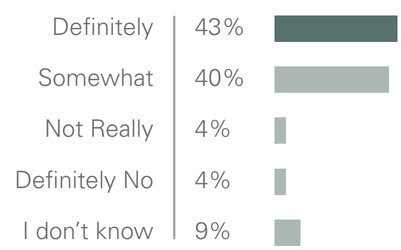


Key take-away: The design team will ensure that recommendations follow the vision statement that has been vetted by the community. The creation of a vital downtown core will be central to the study with emphasis that surrounding uses be able to grow with it over time. **Note:** Multiple answer question; values will add up to more than 100%

Do you like the idea of smart cities + resiliency?



Is this project on the right track?



OUTCOMES SUMMARY

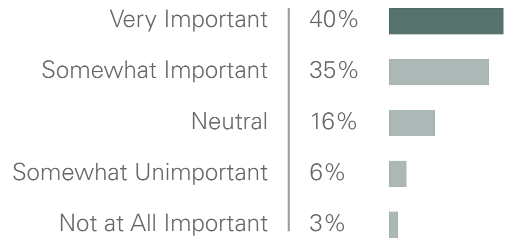
Although most respondents definitely agreed with the notion of Mont Belvieu having a downtown and the vision guiding that process, it was key to continue to build consensus for the project throughout the stakeholder engagement process. The Team addressed key obstacles such as "affordable housing" by refining the vision based on feedback and ensuring that the community understood that affordable housing was relative and did not mean "low income housing"; rather it is the ability to provide diverse housing choices to individuals that do not have the desire or means to own what is the majority of housing stock in Mont Belvieu (large-single family detached homes).

The Team addressed key obstacles such as "affordable housing" by emphasizing the importance of aging-in-place and the ability to provide diverse housing choices.

What land uses do you think are ideal for the Study Area? (Select all that apply)

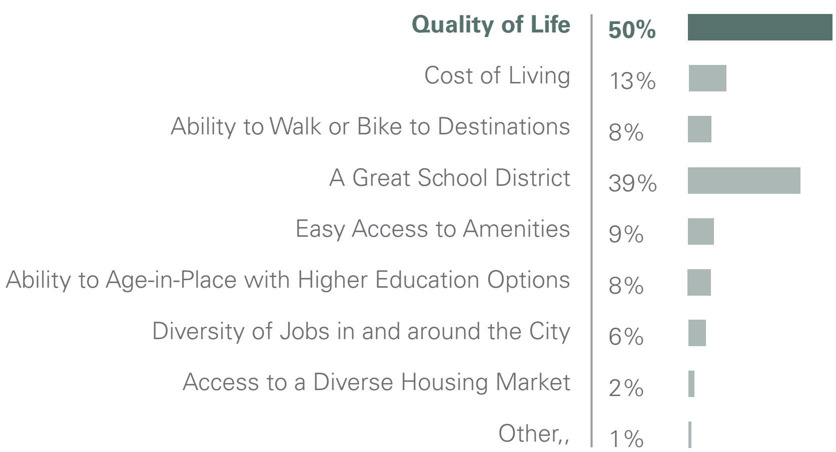
Key take-away: Mont Belvieu's downtown plan will host a range of activities that prioritize civic spaces, public amenities, retail and local shopping.. **Note:** Multiple answer question; values will be more than 100%

How important is job growth for Mont Belvieu?



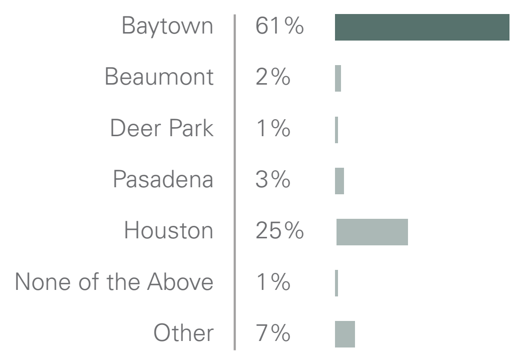
Key take-away: The design team will look to develop recommendations that prioritize diversity in job growth.

Which aspect(s) of living in Mont Belvieu are most important to you? (Select all that apply)



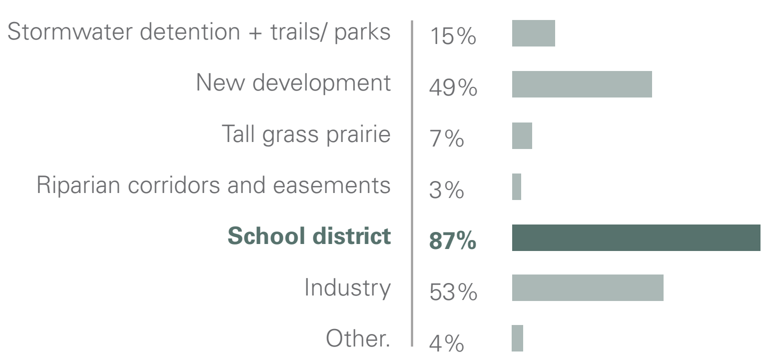
Key take-away: The design team will ensure any and all recommendations reflect a rich quality of life for residents/visitors of Mont Belvieu. **Note:** Multiple answer question; values will be more than 100%

Where do you travel outside Mont Belvieu for shopping or recreation?



Key take-away: Recommendations will look to provide a variety of retail, civic and public space programs within Mont Belvieu.

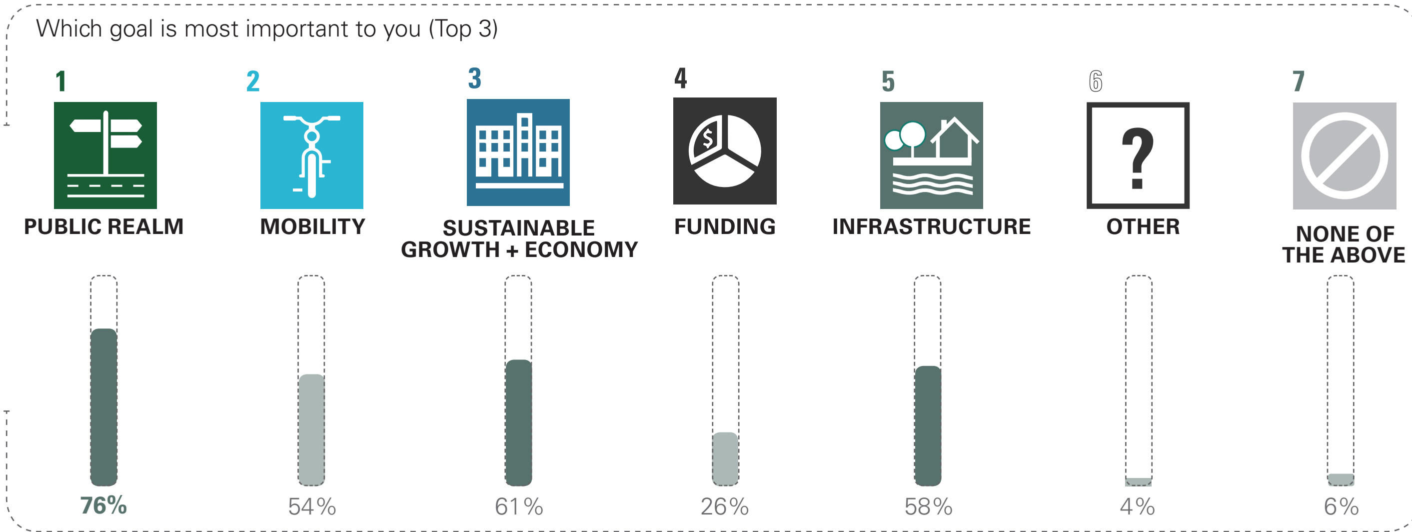
What do you think defines Mont Belvieu? (Select all that apply)

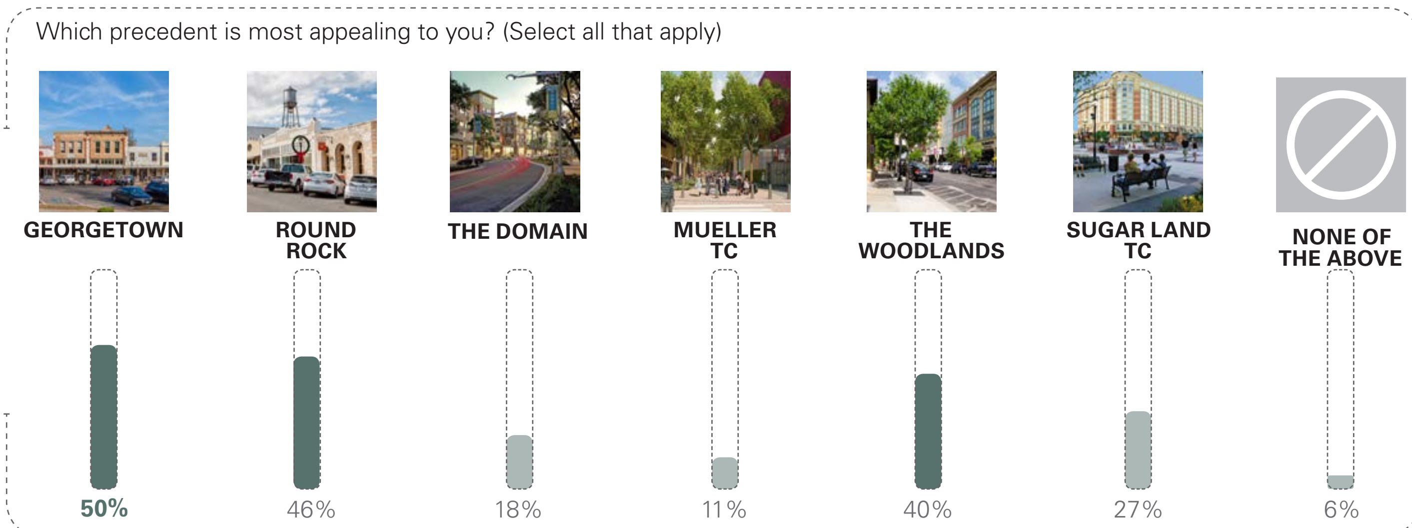


Note: Multiple answer question; values will be more than 100%

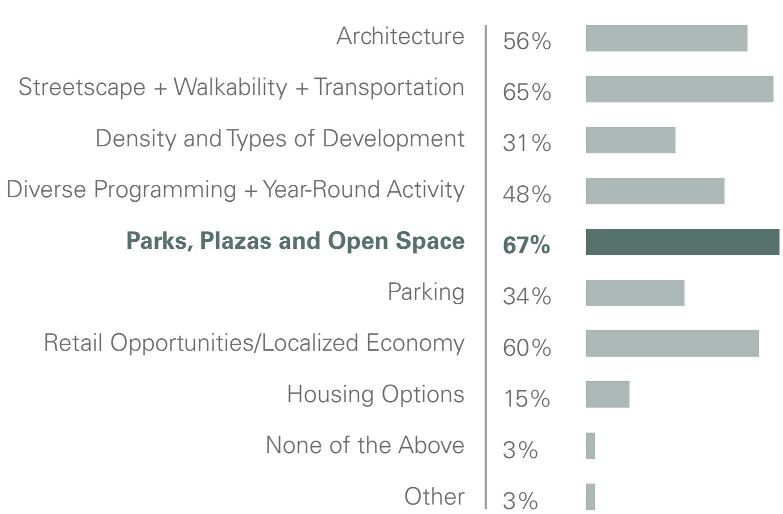
Key take-away: The design team will equip the City with recommendations that build upon Mont Belvieu's excellent school system such that students will be able to age-in-place.

GOALS





Which aspect(s) of the precedents are most important to you? (Select all that apply)



Note: Multiple answer question; values will be more than 100%

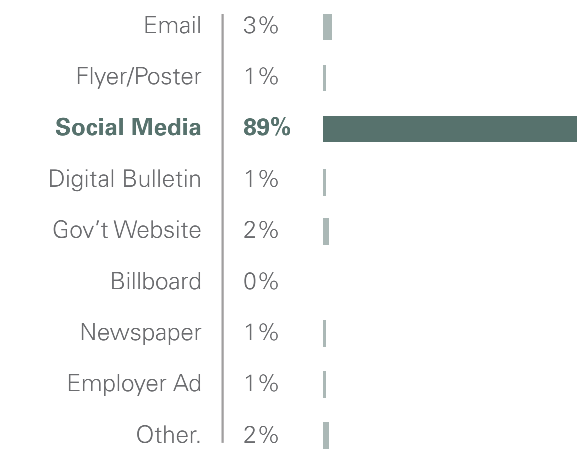
Key take-away: The design team will focus on providing vital open space amenities that cater to all ages. These include parks, trails, plazas, forested areas and other programmed spaces (ie: amphitheaters, farmers markets, dog parks, etc).

Figure 49: Values Workshop Results

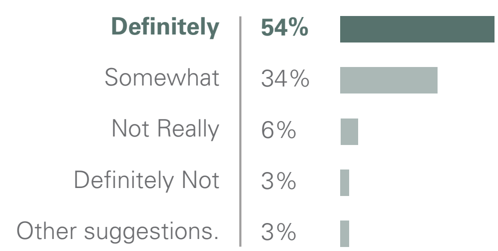
ALTERNATIVES WORKSHOP

OVERVIEW

How did you hear about this workshop?



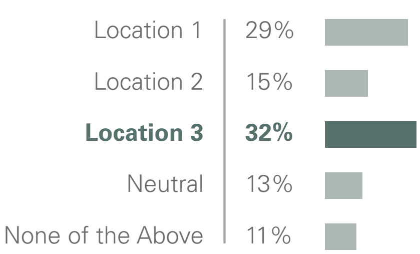
Do you agree with the refined vision statement?



Key Take-away: The vision for Mont Belvieu Main is supported by the majority of workshop and survey participants. Consensus on the vision will help to guide future development.

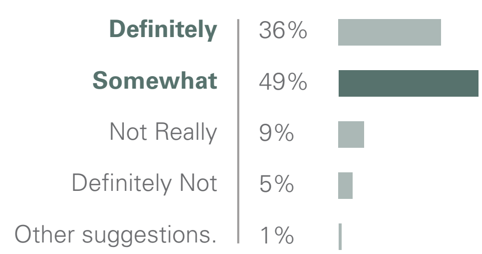
VISION

Where do you think your town center, Mont Belvieu Main should be located?



Key Take-away: Individuals agree with the strengths of Location 1 and Location 3, while recognizing some of the weaknesses of Location 2 (dividing up the Town Center around the FM 565/Eagle Drive intersection). A combination of Location 1 and Location 3 will be used to site Mont Belvieu Main.

Do you agree with the overall planning strategy wherein the core of the site has the most activity?



Key Take-away: Overall people agree with the planning strategy and want to focus "right-sized" density at the core of the retail area.

MAY 2018 ALTERNATIVES WORKSHOP | DEVELOPING A SHARED VISION

At the Alternatives Workshop, the project team presented a summary of the Values Workshop survey results and stakeholder findings, opportunities and constraints, town center location options, four alternative land use frameworks and programming opportunities. The workshop drew feedback from participants through interactive polling and supplemented outreach with an online survey for those that could not attend in-person. The online survey for this portion of the project received 162 responses.

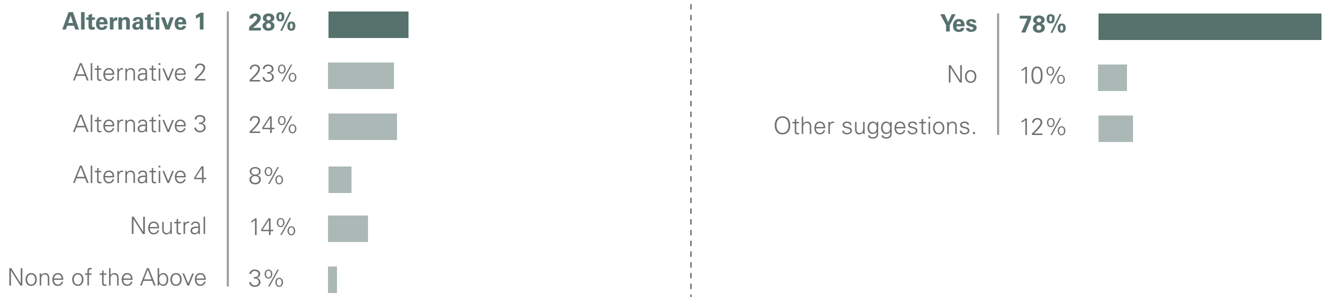

OVERALL PLANNING STRATEGY
LEAST INTENSITY
MEDIUM INTENSITY
CORE TC
LOW INTENSITY
The overall planning strategy for the town center and its surrounding land uses is to propose levels of intense development in the core near town center retail, and maintain low intensity (less dense) housing development moving out from the core. For example, stacked flats would be located in or just around the town center, followed by attached single-family, garden-style detached homes and finally, larger single-family lots on the outer perimeter of the town center complex. In order to achieve this, there will need to be prescribed regulations in place (ie: zoning overlays, overlay districts, form-based code).
WHAT ARE YOUR THOUGHTS?
housing
single-family
detached garden homes
single-family attached
stacked flats
5 du/ac (dwelling units/acre)
min. lot size: 6,000 sqft
10-12 du/ac
min. lot size: 4,500 sqft
16 du/ac
min. lot size: 1,300 sqft
24 du/ac
min. lot size: varies
LEAST INTENSITY
CORE OF TOWN CENTER
Alternatives Workshop
MONT BELVIEU MAIN - PROGRAM DENSITY
H-GAC MONT BELVIEU LIVABLE CENTERS STUDY
MONT BELVIEU, TX • H-GAC/ CITY OF MONT BELVIEU • 05-09-2018

"As long the town center has a unique theme and uniform building code to make it feel special from other cities any business would be welcomed."

ALTERNATIVES

Which land use framework alternative do you prefer?

Is this project on the right track?



Key Take-away: Respondents show preference for a strong plan over "Doing Nothing" (Alternative 4).

Figure 50: Alternatives Workshop Results

Other comments the team heard on the Alternatives:

"The third alternative seems the most appealing; visually pleasing, inviting and feels safe for pedestrians."

"Definitely the public Wi-Fi. Love the integrated traffic sensors. Misting areas or public fans, multiple trash receptacles. Take notes from theme parks here. They know how to keep people in the area and spending money."

"Provide lots of greenery and landscaping. We don't need to make everything pavement and buildings. That's why I moved my family out of the city."

"Keep the home town feel. Not full of strip malls with the same retailers that are in every town. Afraid we will already have this with the property around HEB."

"This will add unwanted traffic"

As long the town center has a unique theme and uniform building code to make it feel special from other cities any business would be welcomed.

"Space and funding may be constraints for the new Town Center"

"Include traffic sensors extended sidewalks and water management"

"I want to see a movie theater, tavern and farmers/traders market!"

"More townhomes and less apartments. I'd like to see more permanent residents who can contribute financially to our community and economy!"

"We love trails! And travel far to visit them in other areas to kayak or canoe, this could be possible revenue). Let's keep it as natural as possible. Always enjoy shopping. I'd love to see more specialty restaurants, boutique / high end shopping! Similar to Memorial City shopping area - jewelry, home furnishings. Would love to see all utilities buried."

"I would like to also see organic food and restaurant options, a botanical garden "and farmers markets."

"Maybe we could build something that people can buy for less than $300,000. There are a lot of good people that could move here and want to move here, but they can't afford the prices."

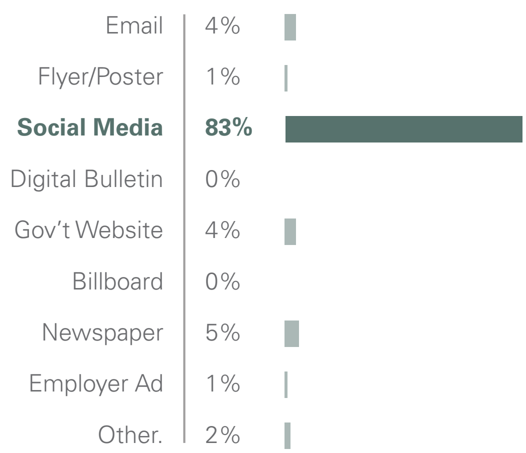
"I'd like to see higher end single family and detached garden homes. No apartments."

Growth seems inevitable so adding a Town Center will give the area retail and restaurant options like other small towns that have become big towns (Tomball, Katy, etc). Teens will have safe places to work in the Mont Belvieu Town Center and MB and other nearby residents can spend their money in their hometown instead of contributing to Baytown, Pasadena, Clear Lake, etc. communities' tax bases!

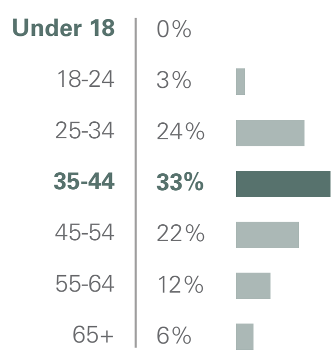
IMPLEMENTATION WORKSHOP

OVERVIEW

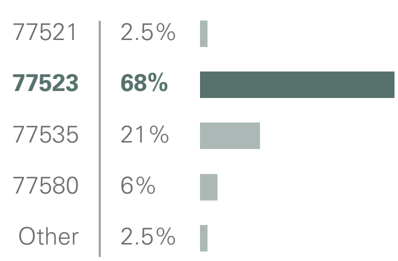
How did you hear about this workshop?



What is your age range?



What is your zip code?



JULY 2018 IMPLEMENTATION WORKSHOP | ADVANCING A FRAMEWORK

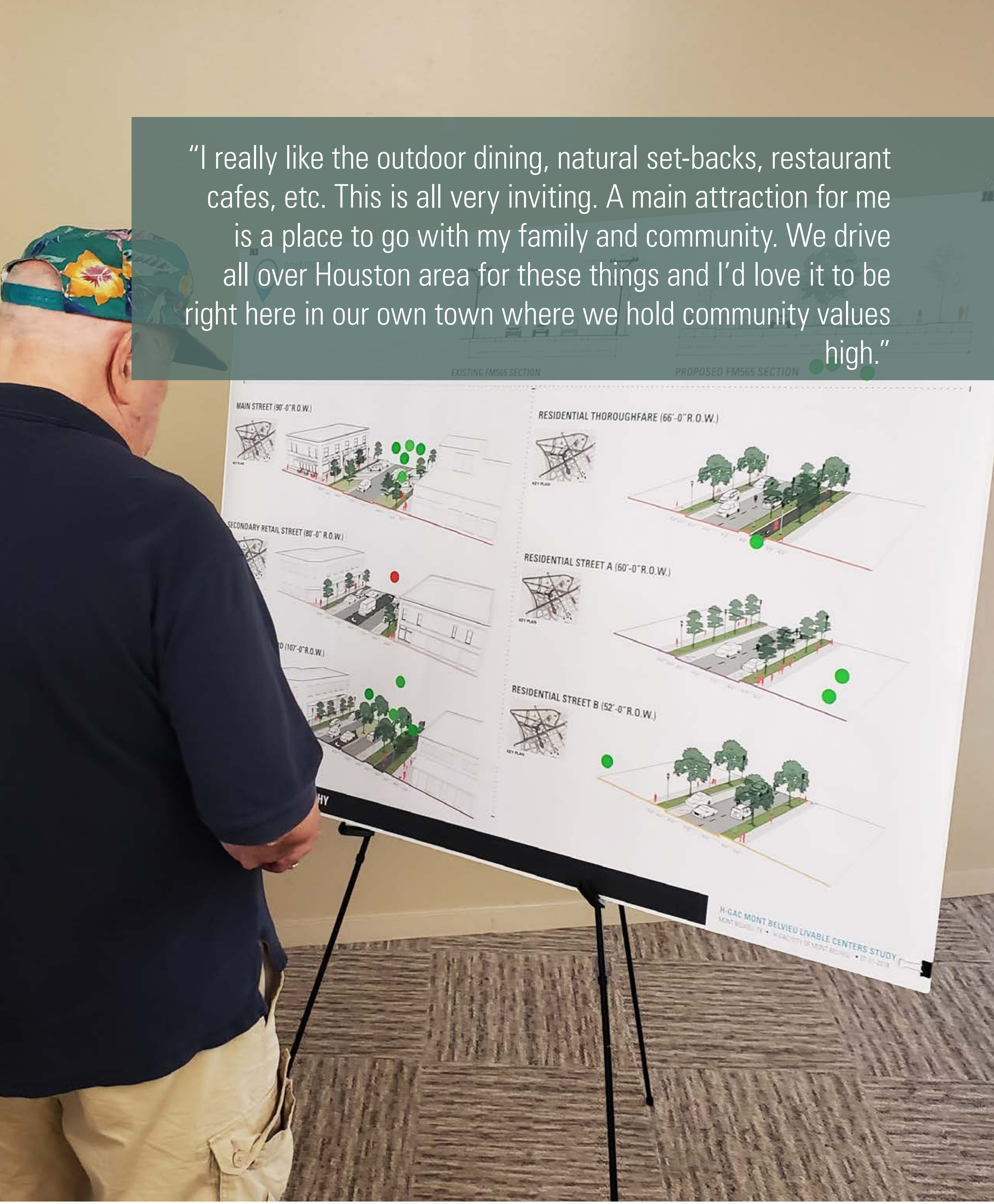
The Implementation Workshop on July 31, 2018, and the associated online survey, were publicized on the City of Mont Belvieu's Facebook page and website; e-blasts to elected officials, target stakeholders and past meeting attendees; and in an article in the Baytown Sun. A total of 28 residents, business owners, local employees and city staff and elected officials signed in at the workshop. Asked to respond with green (I love it!) and red (I don't like it!) dots on boards illustrating different characteristics of a town center, attendees gave the following projects the highest priority: greenways, pedestrian bridges, the Town Square Park, Main Street and City Hall expansion.

OUTCOMES SUMMARY

The priorities align similarly to the online survey respondents' desires, showing a similar interest in greenways, parks and the integration of a Main Street. The notable difference between online respondents was age range observed or indicated. Most workshop participants were 55+, while the majority of online respondents were ages 25-54. The shared support of public open space and a focus on transportation helped the Team determine priority in phasing, particularly on public realm projects.

Concerns about the proposed Regulating Plan were focused around existing traffic issues and the potential for ever increasing traffic volumes, the amount of multi-family housing proposed within the Study Area and the desire to control of the types of retail/commercial that would be present within the Town Center. Residents expressed that they want local businesses, higher-end dining options, family and child oriented places and natural grocers. Moreover, residents wanted assurance that this area will not develop into fast-food strip commercial space or something that does not fit the character of smaller town living in Mont Belvieu.

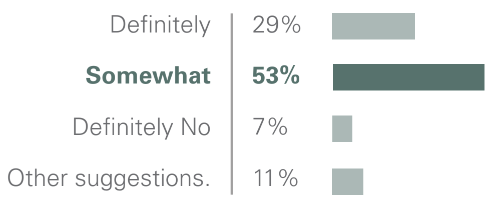
“I really like the outdoor dining, natural set-backs, restaurant cafes, etc. This is all very inviting. A main attraction for me is a place to go with my family and community. We drive all over Houston area for these things and I’d love it to be right here in our own town where we hold community values high.”




OTHER THOUGHTS?
TOWN SQUARE PARKS
NEIGHBORHOOD PARKS
REGIONAL GREENWAYS
DRAINAGE PARK
Implementation Workshop
OPEN SPACE + PARKS FRAMEWORK

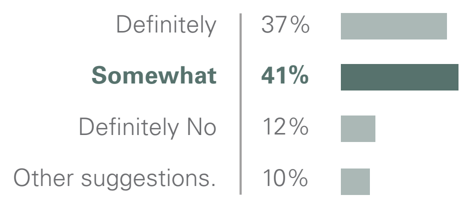
FRAMEWORK

Do you agree with the Land Use Framework Vision for the Mont Belvieu Main Town Center and surrounding areas?



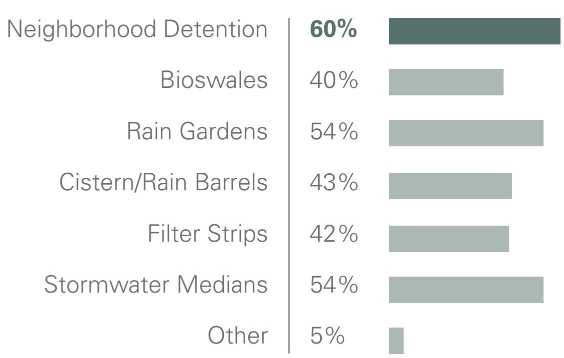
Key take-away: Overall support for the Land Use Plan is strong. Most respondents expressed concern over traffic and this will help to inform recommendations and near-term projects.

Do you agree with the vision for the Growth Framework of the Mont Belvieu Main Town Center and housing areas?



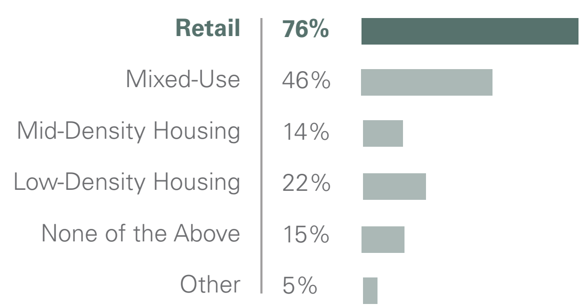
Key take-away: There is genuine support for growth "done right" and increasing housing. However, residents noted concerns about the amount of multi-family proposed in the plan. Recommendations will ensure that the subsequent Master Plan for this development includes architectural guidelines to enable density around retail while maintaining the character of the town that residents already enjoy.

What components of the Infrastructure and LID Framework would you like to see in the Study Area (multiple answer)



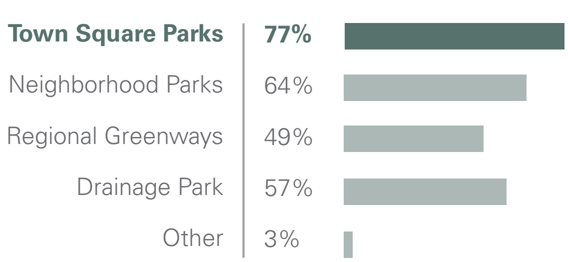
Note: Multiple answer question; values will be more than 100%

What components of the Growth Framework for Mont Belvieu are you most excited about? (multiple answer)

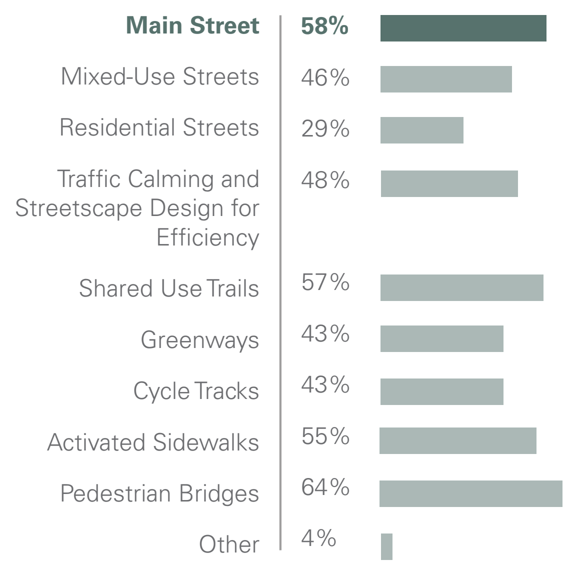


Note: Multiple answer question; values will be more than 100%

What components of the Open Space and Parks Framework would you like to see in the Study Area (multiple answer)

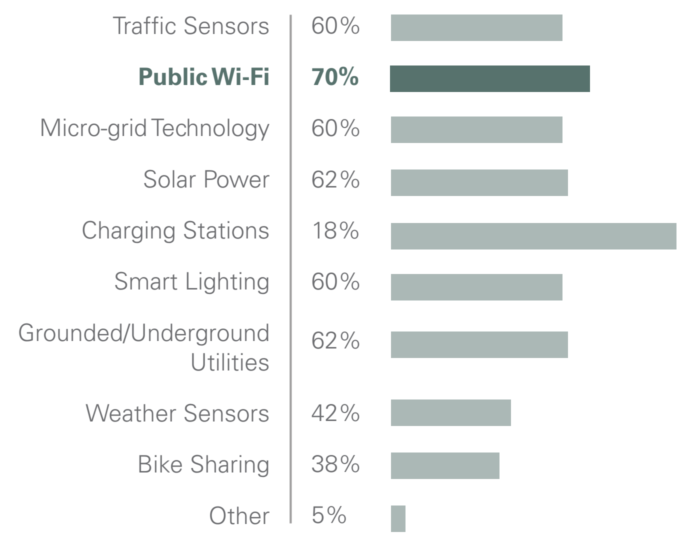


What components of the Circulation and Mobility Framework would you like to see in the Study Area (multiple answer)



Note: Multiple answer question; values will be more than 100%

What types of "Smart Systems" and Resilient Technologies would you like to see in the Study Area (multiple answer)



Note: Multiple answer question; values will be more than 100%

PRIORITIES

The team asked participants to prioritize projects that they would like to see first in the Mont Belvieu Main Town Center and throughout the Study Area. Projects were grouped according to an overall magnitude of cost from least to most, and then ranked by the community. The below statistics are results of that process and will help to inform project phasing and recommendations.

What project is to you? (Select one in each category))

Figure 51: Implementation Workshop Results

Other comments the team heard on the Land Use Framework:

"I believe that too much space has been devoted to multi-family structures. I would like to see more space devoted to retail."

"We looking forward to a better looking city."

"Limit "cookie cutter" small neighborhoods. Why is there limited hospitality?"

"Concerned about the amount of multi-family and the traffic that brings to the area."

To some degree. Is highway infrastructure expansion going to be a priority as we can already see the congestion due to fast expansion in other areas?

"A lot of multifamily, are these apartments? I want some, just not that much"

"The idea of having the city center and surrounding areas expanding North, towards the golf course and recreation city would potentially increase the use of both facilities minimizing unnecessary write-off amounts and further increasing property value for those surrounding sub-divisions. Other than the sidewalks it appears the city center is relatively cut-off from the sub-divisions North of FM565. With poor sidewalk lighting and drainage these sub-divisions would have to resort to driving creating unnecessary traffic issues."

Other comments the team heard on the Street Typologies:

"I love the "Mont Belvieu" brick road like at the HEB entrance, currently. Could be a great addition to this plan too."

"Eagle Drive floods that is the only concern I have about the streets"

"I like it, and I hope that the trees are not just for illustration and will actually be planted similar to what is shown."

"You have great options listed."

"Center median is a great idea. Bike paths off the main road is a great idea. 107' ROW is good to go."

"Do not install parking meters. Allocate land for retail parking & civic area. Separate bike lane and car lane with slotted curb. Paint bike lane?"

"Address the current traffic issues before adding more congestion."

"I like the medians and protected pedestrian right of ways."

"Major groans in the office when we saw all of the parallel parking. This is such an industry area & half the traffic on the roads in MB is trucks."

"No this looks reasonable. But what about flooding issues, is that taken into consideration with this road plan?"

Other comments the team heard on the Architectural Character Imagery:

"I really like the outdoor dining, natural set-backs, restaurant cafes, etc. this is all very inviting. A main attraction for me is a place to go with my family and community. We drive all over Houston area for these things and I'd love it to be right here in our own town where we hold community values high."

"I love the growth but let's keep the old town feel and PLEASE require that trees and greenery are planted and maintained!"

"In the residential areas, I would like to see cul de sacs incorporate trees and landscape that is in the circle of it for aesthetics."

"Do it like Fredericksburg. Use limestone and pines to tie it all together. Classic facades all the way. That is what draws people to places like Fredericksberg, Old Town Spring and Breckenridge."

"Shaded entrances, sidewalks, outdoor dining. Keep it quaint. Keep it family friendly. Old town feel. Local businesses instead of chains. I would like to see a cafe where you can get a cup of coffee and breakfast and home style cooking. Like an old fashioned diner."

6

*Note: All costs presented herein are based on 2018 observed costs and are on an order of magnitude and represent **construction only**. The costs do not represent any additional funding that may be needed related to land purchasing, right of way acquisition, inflation, delays, permitting, mitigation or excess site work that may occur due to unknowns such as the presence of utilities or hazardous sub-grade conditions, the extent or knowledge of which are outside the scope of this study.

IMPLEMENTATION RECOMMENDATIONS

This chapter breaks down the components of the Regulating Plan recommendations and provides detailed steps that the City of Mont Belvieu can take towards realizing the vision and concretely achieving the goals of the project. The approach herein serves as actionable steps that provide strategies towards implementing projects, policies and programs that work alone and in unison as a roadmap for successful implementation. With an emphasis on the planning and regulatory framework, incentives and financial tools and capital improvements, they provide the necessary actions that will advance the long-term vision of the Regulating Plan.

Each strategy includes a detailed list of next steps, estimated costs, potential funding sources and leading entities. The recommendations will be useful in guiding the City in defining programs, setting priorities, allocating finances and assessing achievements. Over time, this should be revisited and updated to ensure that the strategies remain relevant and current as Mont Belvieu Main and surrounding development evolves.

Additionally, there is a section in this chapter on next steps recommendations. As this framework situates itself at a higher level than a master plan or design document, there are necessary next steps to achieving more detail on the recommendations, as well as studies and projects that will need to be advanced given the impact this project will make on the City of Mont Belvieu in the near and long-term.

CATALYST PROJECTS

PRIORITY CATALYST PROJECTS

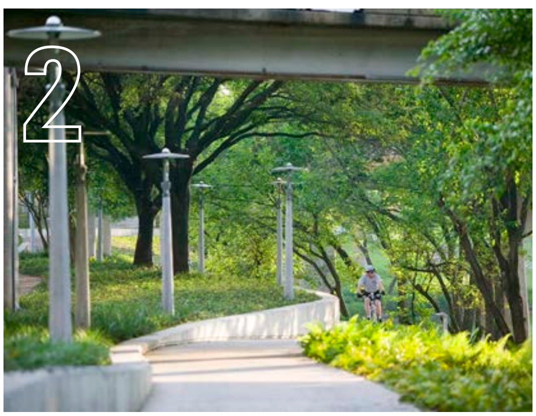
The following Catalyst Projects have been identified as discrete steps the City can take to jump start development and ensure that a strong mobility framework exists prior to future infill, increases in population and additional traffic. The priority projects take into consideration the anticipation of future development in the area, as well as the desires and feedback the community provided throughout the project process. These near-term projects sit on the 5-year horizon and the design and engineering portion of these should begin on the heels of the Livable Center Study. Each project is detailed further in the Implementation Chapter with associated action steps, costs and potential partners.

STREETSCAPE RECONSTRUCTION

LOCATION | FM 565 AND EAGLE DRIVE NORTH

BENEFITS + OUTCOMES:

- Improve traffic circulation
- Reduce congestion
- Increase capacity for future Grand Parkway
- Integrate additional mobility options such as wide sidewalks and bike lanes
- Attract development along frontages
- Reduce dependance on existing stormwater systems by integrating LID strategies



GREENWAYS + PEDESTRIAN BRIDGES

LOCATION | ALONG EASEMENTS AND DRAINAGEWAYS, BRIDGES ACROSS ARTERIAL ROADS

BENEFITS + OUTCOMES:

- Provide increased mobility options in the Study Area
- Provide greater connectivity to existing and proposed trails within Mont Bevlieu
- Increase ecological services along pipeline easements and drainage corridors

MAIN STREET AXIS

LOCATION | PERPENDICULAR AND PARALLEL TO CITY HALL

BENEFITS + OUTCOMES:

- Attract development along retail proposed corridor
- Improve the pedestrian realm of Mont Belvieu by integrating a retail focused "Complete Street"
- Provide a venue for "pop-up" retail such as farmer's markets and art festivals

SECONDARY CATALYST PROJECTS

The secondary catalyst projects are longer term, yet achievable projects the City can implement to continue the momentum that will occur in the first phases of the Town Center implementation and development of the Study Area. The below projects were heavily supported by the community and ranked highest after the Priority Catalyst Projects in terms of the number of individuals that voted in workshops and online surveys.

CITY HALL RENOVATION

LOCATION | AT THE FM 565/EAGLE DRIVE INTERSECTION

BENEFITS + OUTCOMES:

- Improve civic and administrative capacity with the growing population
- Act as an iconic anchor to the retail street and park
- Could occur in tandem with the development of the Town Square Park

TOWN SQUARE PARK

LOCATION | ADJACENT TO CITY HALL

BENEFITS + OUTCOMES:

- Attract development to the peripheries of the Park
- Provide a dedicated space for year round revenue generating events and programming
- Provide a park typology that does not currently exist in Mont Belvieu
- Increase open space in Mont Belvieu
- Encourage community interaction

LINEAR DRAINAGE PARK

LOCATION | ALONG THE HACKBERRY GULLY DRAINAGEWAY

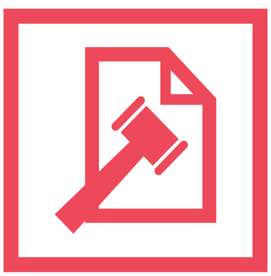
BENEFITS + OUTCOMES:

- Improve ecological function of the existing drainageway
- Increase capacity of the existing drainageway
- Provide an attractive corridor to recreate and live/work
- Ensure a strong ecological and active pedestrian connection from the Mont Belvieu Main to Hackberry Gully Regional Park
- Improve water quality
- Attract residential and commercial development along a great open space amenity

STRATEGIES

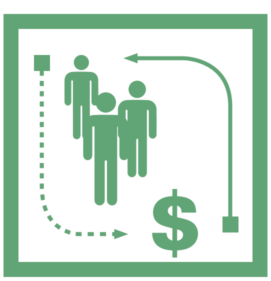
PROJECTS

Projects are undertakings that result in permanent physical changes. These are often seen as a catalyst to, or result of development that affects the built environment.



POLICIES

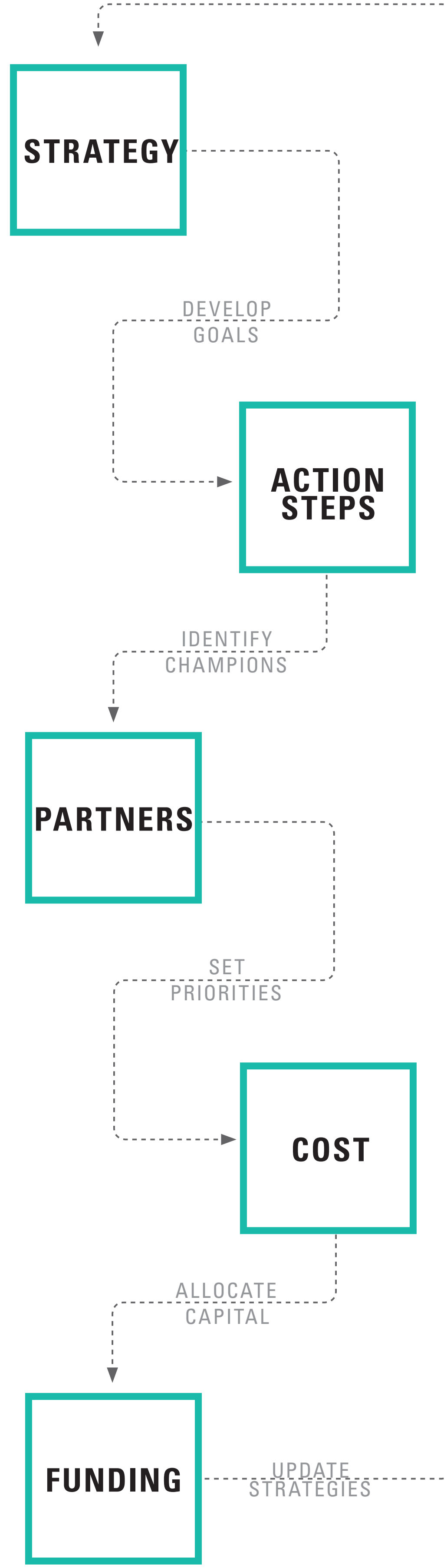
Policies define requirements and incentive programs to control and influence future changes. They are physically immaterial but affect real-world change.



PROGRAMS

Programs are actions taken to control and influence elements of the Study Area but do not require permanent physical changes. These are tools that can help to generate revenue and maintain investments.

ROADMAP



wabisabi

1

MONT BELVIEU MAIN | DOWNTOWN MASTER PLAN

A downtown master plan for Mont Belvieu Main is one of the next steps towards realizing the vision of the "Land Use Regulating Plan" and "Study Area Development Plan". A master plan should be more detailed and focused, utilizing the recommendations within this document to develop parcels, right of way lines, lot layout, site specific design proposals, parking layout, building massing and park concept designs. The master plan should include architecture and landscape design guidelines and a monumentation and signage design guidelines package.

STRATEGIES + ACTION STEPS

- Work with a private developer to engage current land owners
- Partner with private developers to acquire the private land necessary for the Town Center to be implemented.
- Develop a phased, implementable master plan
- Secure public funds for any necessary public parcel or right of way improvements
- Enter into an agreement with a Master Developer to provide incentives for smart development (i.e. tax cuts, reimbursement for right of way or public land improvements, land swaps, etc.)
- Ensure that the project meets or exceeds the "goals + metrics" set forth in this document

PROJECT CHAMPIONS + PARTNERS

- Private Developers
    - » In a public private partnership, a developer will likely commission the master plan for the area and work will be closely overseen by the City of Mont Belvieu
- The City of Mont Belvieu

MAGNITUDE OF COST

- Consulting Services: $425,000
- Full Build Out: Highly variable depending on phasing, construction sequencing, financial incentives and design/materials used (most of the cost burden would be held by a private developer).

POTENTIAL FUNDING SOURCES

- Private Developers
- Private Property Owners
- City of Mont Belvieu
- Grants

Figure 52: Town Center Master Plan Location

KEY FOCUS AREAS

- Ensure that phasing is targeted towards CMA capture and meeting demand while not oversaturating the Study Area per the "Market Assessment".
- Ensure that the suggested retail/commercial mixes meet market demand with a focus on local businesses
    - Food and Beverage such as bars, higher-end restaurants and cafés
    - Personal Services (local real estate agents, boutique healthcare, dentist, chiropractor, local tax service, hair salon/barber shop)
    - Fitness, Health and Wellness Businesses, (local cross fit, yoga, pilates - activity based businesses)
    - Retail such as clothing accessories and shoes

2

CATALYST PROJECT

FM 565 + EAGLE DRIVE NORTH MASTER PLAN AND RECONSTRUCTION

FM 565 and Eagle Drive north of the FM 565 intersection may not have the carrying capacity needed once the Grand Parkway is constructed and future development of the Mont Belvieu Main Town Center and surrounding areas fill in. Additionally, traffic flow and s``afety at the intersection of FM 565 and Eagle Drive are of particular concern relative to current demands and increased volume from future development. The studies for these roadways should analyze the benefits and feasibility of a roundabout intersection being implemented as a way to calm traffic while increasing capacity and safety.

STRATEGIES + ACTION STEPS

- Conduct a traffic impact study and master plan with accompanying Preliminary Engineering Report for:
    - FM 565 from FM 1409 to SH 146, with particular focus on the critical intersections of SH 146, Main Street/SH207, the Grand Parkway, Eagle Drive, FM 1409 and the proposed Main Street of the Mont Belvieu Main Town Center
    - Eagle Drive North (FM 3360) from the FM 565 intersection to SH 146
- Include signal timing improvements from I-10 to SH 146 along Eagle Drive
- Study strategies for optimizing traffic flow through roundabout placement/design

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers and Liberty counties
- TxDOT (potential project(s) lead)
- Private Interest groups such as developers that will have a vested interest in circulation and connectivity along retail and residential frontages

MAGNITUDE OF COST

- Studies: $850,000
- Reconstruction:
    - FM 565 = $27.00/sf (Eagle Drive to Grand Parkway), $20.00/sf (remaining roadway)
    - Eagle Drive North = $18.00/sf

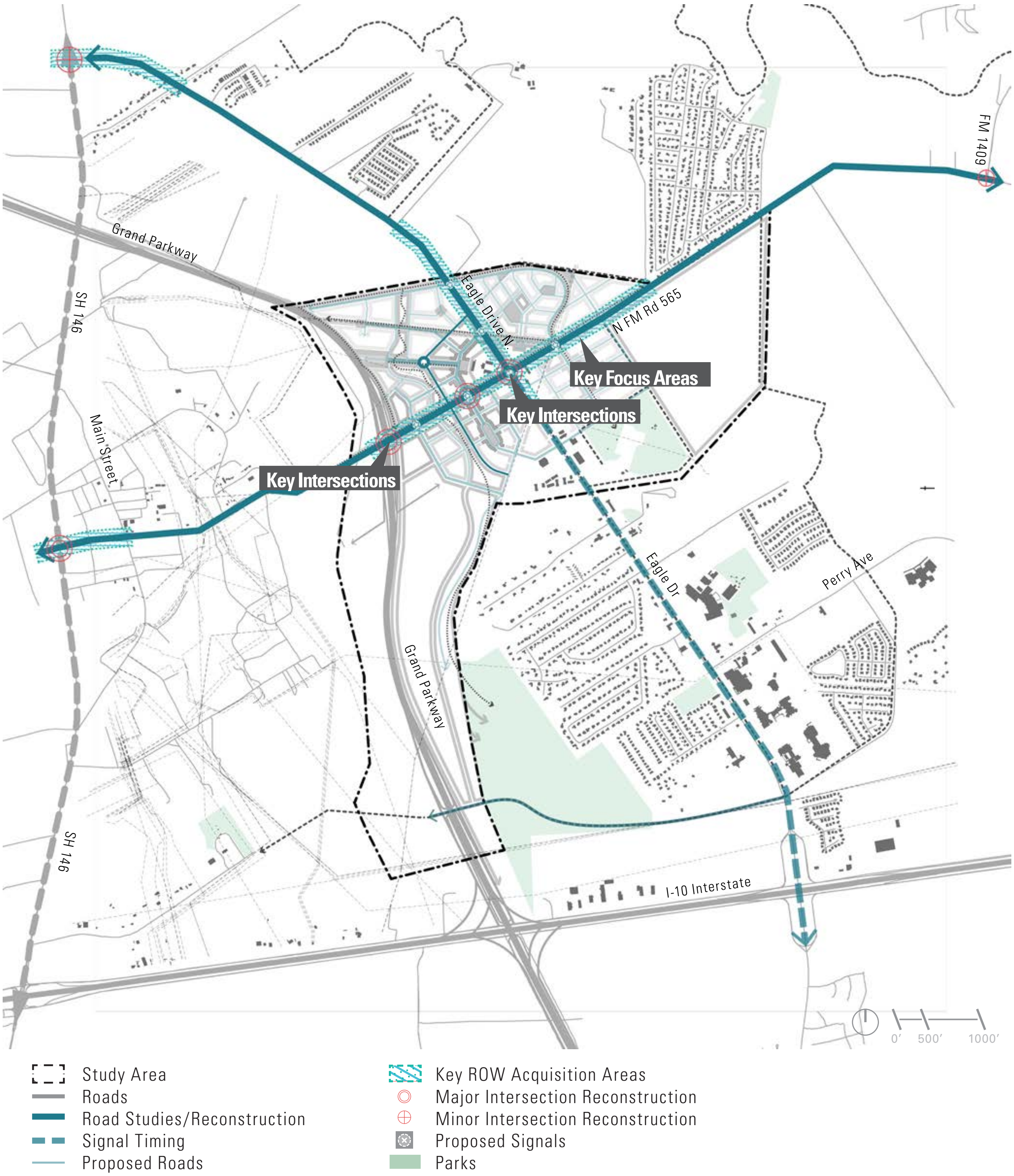
POTENTIAL FUNDING SOURCES

- TxDOT
- City of Mont Belvieu
- Grants

FUTURE ROADWAY CONSIDERATIONS

- Traffic studies may happen concurrently or as separate projects based on funding. It will be imperative that there is coordination and cohesion amongst studies and construction.
- SH 1409 occurs outside of the city limits of Mont Belvieu but within the ETJ area. This may require cooperative efforts between city, county and TxDOT.
- Intersection design and signal timing will be critical to keeping the small town feel community members currently enjoy while new development comes on-line.

Figure 53: Streetscape and Intersection Projects



3

CATALYST PROJECT

GREENWAYS MASTER PLAN(S), DESIGN AND CONSTRUCTION

As the greenways and trails, particularly along drainage and pipeline easements, act as the spatial framework for the Town Center and Study Area Development Plan, a crucial first step is integrating the proposed recommendations into the existing Mont Belvieu Trails Master Plan. An individual master plan and schematic design of each greenway and trail segment will need to occur, and each master plan will likely happen at different times. Therefore it will be important that the overall vision is maintained throughout each process.

Trails will vary in cost due to difficulty of construction as well as the level to which they are amenitized. A highly amenitized trail will be characterized by bridge connections, tree canopy cover, shade structures, seating, signature planting, gateways/monuments, pedestrian lighting and accent lighting at key nodes. Basic trails will be less of a linear park and focus more on connections and mobility, with a 10 to 12 foot concrete path and include safety lighting, minimal tree canopy cover and basic wayfinding/signage.

STRATEGIES + ACTION STEPS

- Integrate the greenways and trails from the Mobility Framework into the Trails Master Plan through a supplemental addendum
- Secure funding for each master plan/design effort
- Develop a detailed master plan for each greenway, trail and trailhead design
    - Trailhead design should follow Signage, Wayfinding and Monumentation Guidelines
- Work with land owners and government entities to gain right of way access along private land and easements
- Partner with private developers to ensure that greenways and trails are a part of the fabric of future development and connect to bike lanes per the "Street Hierarchy"Guidelines and "Mobility Framework"
- Secure public funds for constructing each trail segment
- Phase trail segment construction logically with existing/future trails

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- H-GAC
- Army Corp of Engineers
- Utility, Drainage and Gas/Oil Easement holders

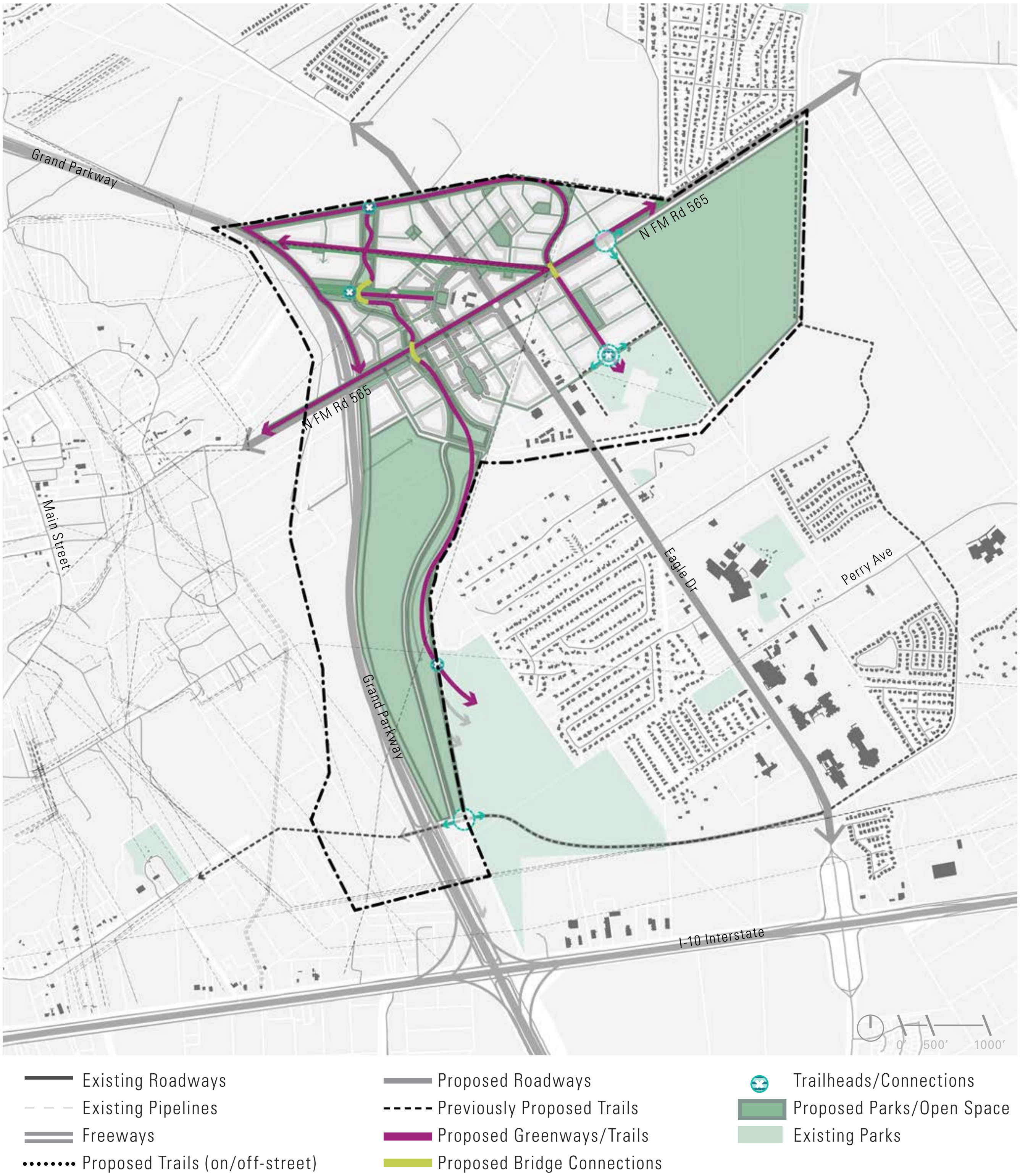
MAGNITUDE OF COST

- Consulting Services: $50,000-200,000 per mile
- Construction:
    - Highly Amenitized: $2,500,000 per mile
    - Basic Trail: $550,000 per mile

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Regional and State Grants
- Public Private Partnerships
- TxDOT/ Federal Funding (BUILD Grants)

Figure 54: Greenways and Trails Projects



4

CATALYST PROJECT

CITY PARKS MASTER PLAN(S), DESIGN AND CONSTRUCTION

An important next step to realizing the parks and open space vision within the Study Area is the integration of the proposed recommendations into the existing Mont Belvieu Parks and Recreation Master Plan.

An individual master plan and schematic design of each park will need to occur, similar to the process of the Hackberry Gully Regional Park Master Plan. This will ensure an appropriate amount of detail and site design is present after each study. Each park master plan will likely happen at different times and therefore it will be important that the overall vision is maintained throughout each process. Additionally, public input on each project that will occur in the community will be vital in ensuring stakeholder support for allocating public funds at each site.

STRATEGIES + ACTION STEPS

- Integrate the "Open Space Framework" into the Trails, Parks and Recreation Master Plan through a supplemental addendum
- Secure funding for each master plan/design effort
- Develop a detailed master plan for each park
- Work with a private developer(s) to ensure that all neighborhood parks meet the City of Mont Belvieu regulations
- Partner with a private developer and set open space requirements to achieve the recommended Neighborhood Parks
- Secure public funds for constructing each park and acquiring any privately held parcels or right of way improvements

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Private Developers
- H-GAC

MAGNITUDE OF COST

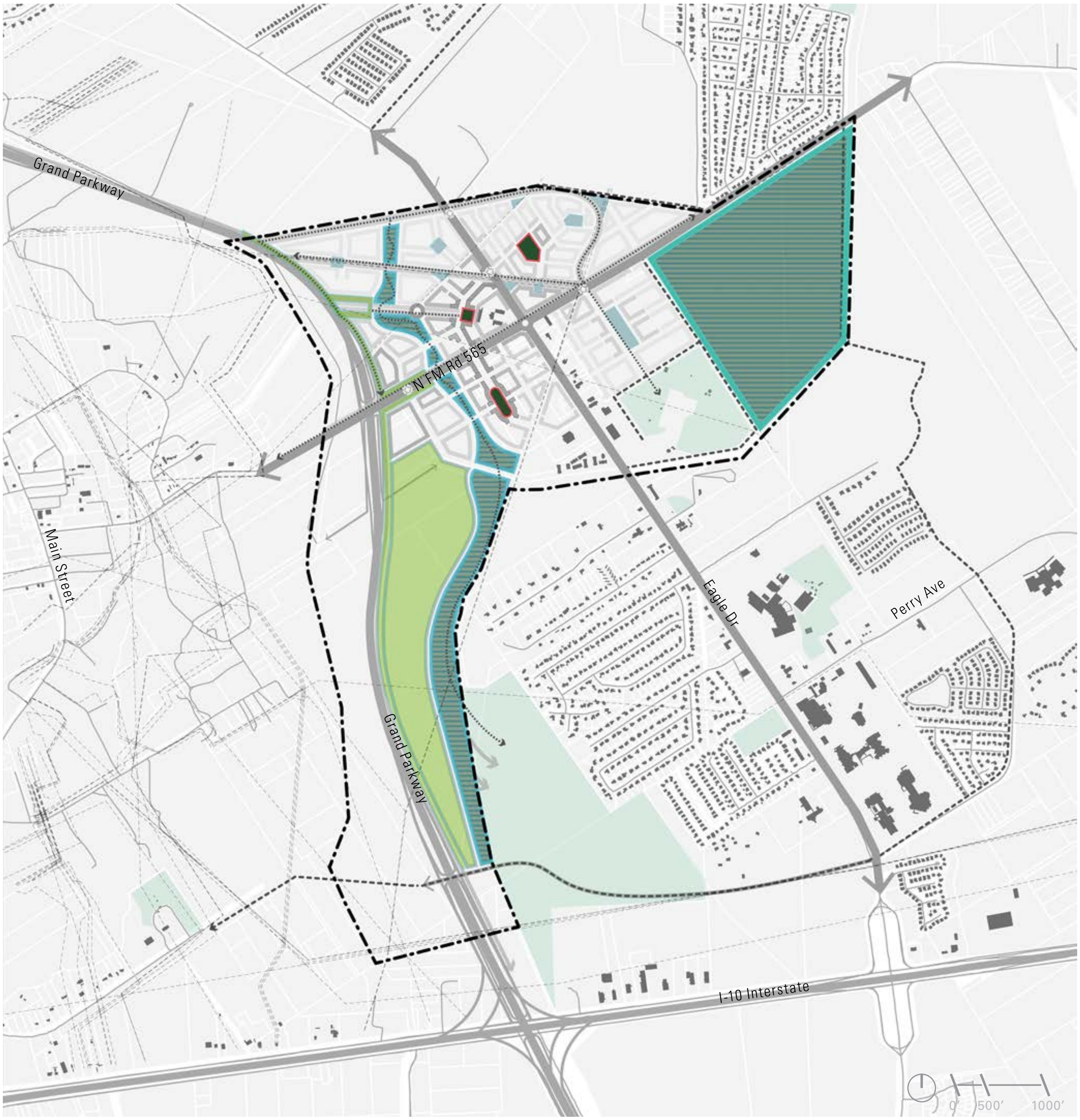
- Consulting Services:
  - City Parks: $950,000 each
  - City Open Space: $375,000 each
  - Protected Open Space: $295,000 each
- Construction:
  - City Parks: $75-150/sf
  - City Open Space: $35/sf
  - Protected Open Space: $9/sf

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Grants
- Tax Increment Finance
- Public Private Partnerships
- City Bonds

PROJECTS

Figure 55: Parks and Open Space Projects



Existing Roadways
Existing Pipelines
Freeways
Proposed Trails (on/off-street)
Proposed Roadways
Previously Proposed Trails
City Parks
City Open Space
Protected Open Space
Neighborhood Parks
Existing Parks

5

CATALYST PROJECT

MAIN STREET AXIS, DESIGN AND CONSTRUCTION

The "Main Street Axis" will provide a necessary circulation route and public realm infrastructure in the heart of Mont Belvieu Main. These streets will help to catalyze development of the retail and commercial core of Mont Belvieu Main and could be implemented solely at the discretion of the City, or in partnership with a private developer. The master plan phase of this project should analyze the benefits and feasibility of a roundabout intersection being implemented as a way to calm traffic, increase capacity and safety and rectify the non-perpendicular intersections that are resultant from pipeline easements and drainage networks.

STRATEGIES + ACTION STEPS

- Conduct a traffic impact study and master plan with accompanying Preliminary Engineering Report for:
  - Main Street (Street Type A | 90' ROW)
  - Mixed Use Boulevard (Street Type C | 107' ROW)
- Coordinate signal timing with FM 565 and Eagle Drive
- Study strategies for optimizing traffic flow through roundabout placement/design at the terminus of the Mixed Use Boulevard Street Typology

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers County
- TxDOT
- Private Interest groups such as developers that will have a vested interest in circulation and connectivity along retail and residential frontages

MAGNITUDE OF COST

- Master Plan: $1,525,000
- Reconstruction:
  - Main Street = $32.00/sf
  - Mixed Use Boulevard = $28.00/sf

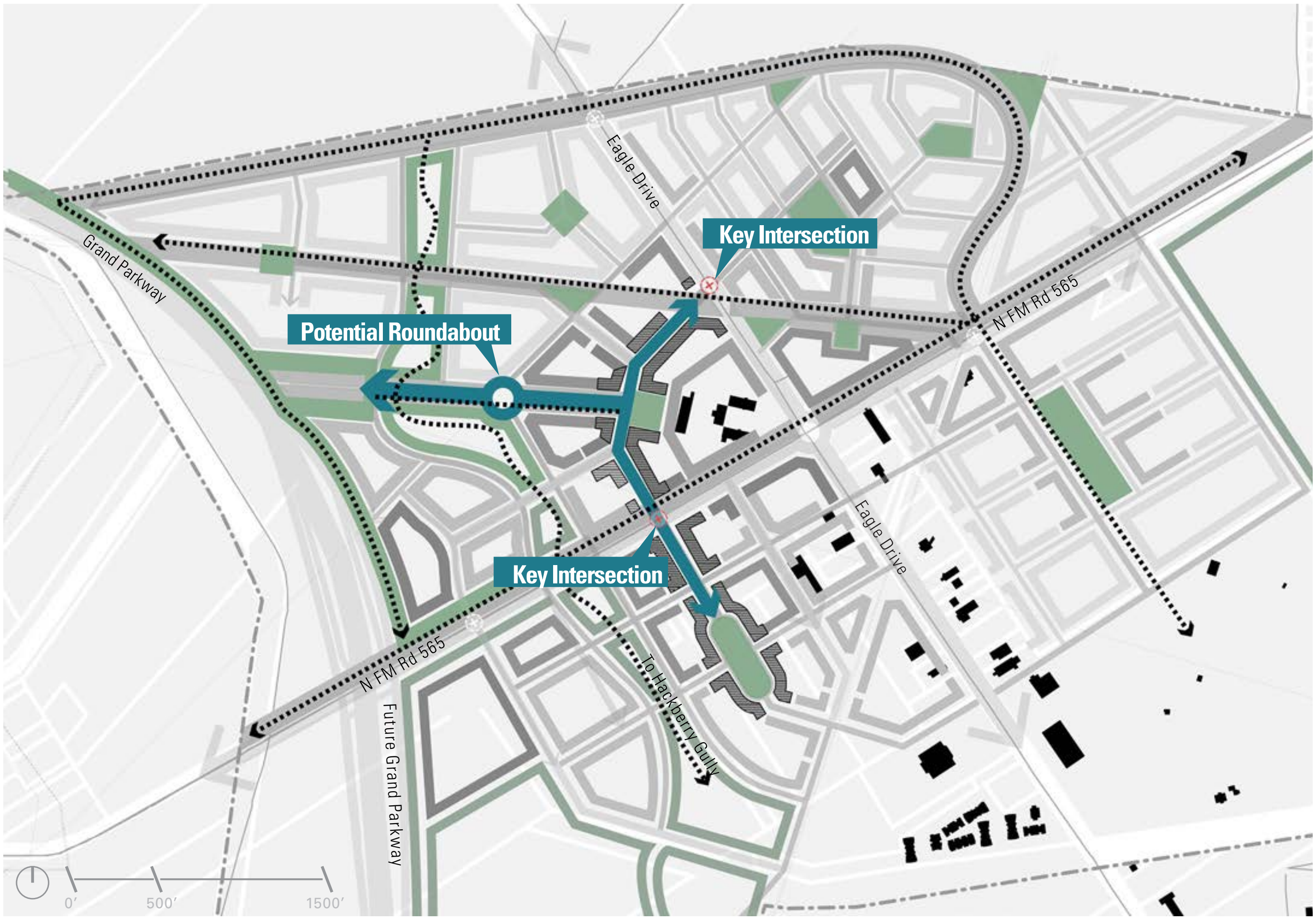
POTENTIAL FUNDING SOURCES

- TxDOT
- City of Mont Belvieu
- Private Developers
- Grants

FUTURE ROADWAY CONSIDERATIONS

- Traffic studies should take into account additional pressure from future development
- The two roadways should be designed and implemented in such a way that any future roads that intersect with the streets do not create a need for significant demolition and reconstruction of the Main Street or Mixed Use Boulevard

Figure 56: Main Street Axis Project



Study Area
Existing Roadways
Existing Pipelines
Freeways
Proposed Trails (on/off-street)
Proposed Roadways
Roadway Projects
Key Traffic Signals
Proposed Traffic Signals
Parks
Mont Belvieu Main Mixed Use
Mont Belvieu Main Residential

6
CATALYST PROJECT

CITY HALL EXPANSION

City Hall will be the perfect civic anchor to the new town center, Mont Belvieu Main, and as population increases, city administrative spaces and civic capacity will need to grow.

STRATEGIES + ACTION STEPS

- Develop a plan for growth that ensures the space requirements necessary for the life of the new building expansion will accommodate an ever-growing city
- Assess what civic functions in ancillary structures can be consolidated to City Hall, allowing for a larger, more iconic civic building to be implemented
- Secure funding for the design effort
- Secure public funds for construction
- Establish a funding stream for operations and on-going maintenance

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers County

MAGNITUDE OF COST

- Consulting Services: $425,000
- Construction: $4,025,000

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Special Revenue Funds
- Public Improvement District
- State Grants/Funding

7

ADDITIONAL FACILITIES + EMERGENCY MANAGEMENT STUDY

Emergency Management and additional city facilities will be necessary with the integration of the ongoing and future development within the Study Area and the city.

STRATEGIES + ACTION STEPS

- Secure funding for the study
- Develop a plan for growth that ensures the space requirements necessary for each facility will meet the needs of future development
- Establish a funding stream for construction, operations and ongoing maintenance

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers County

MAGNITUDE OF COST

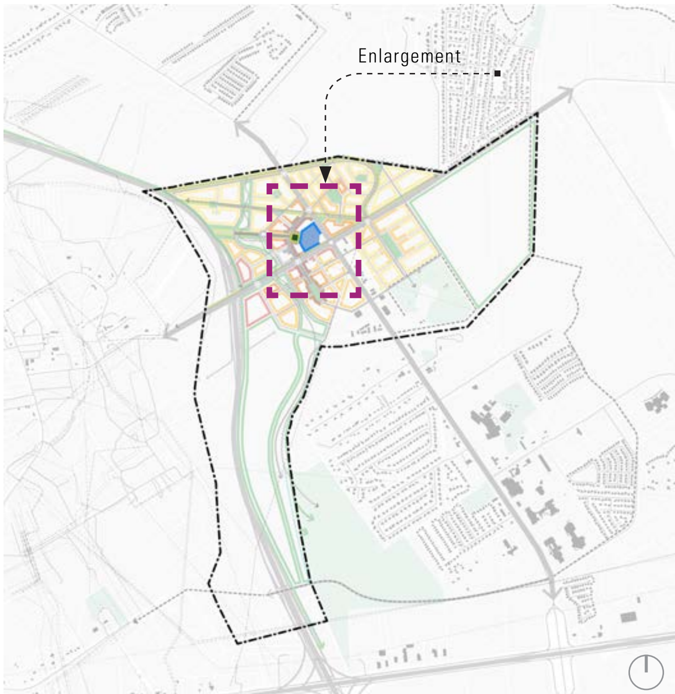
- Consulting Services: $125,000

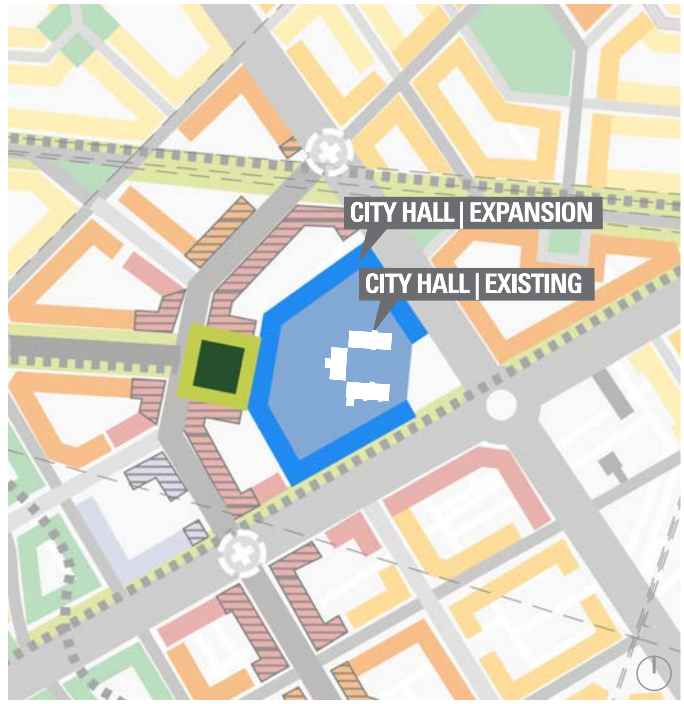
POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Federal Funding (FEMA Grants), State Grants/Funding

PROJECTS

Figure 57: City Hall Expansion





8

HOUSING DENSITY + HOUSING TYPE STUDY

A housing density and housing type study is crucial to fostering change and ensuring that an increasing population is accommodated through smart growth, with diverse housing choices.

STRATEGIES + ACTION STEPS

- Develop a plan for growth that ensures that housing density will meet future demand within the limits of the city and ETJ
- Provide minimum and maximum lot sizes to regulate development and achieve the mix of neighborhoods desirable for aging-in-place
- Assess existing subdivision regulations and institute new regulation based on desired outcomes
- Develop a toolkit of housing types to ensure future demand is met diversely and equitably
- Secure public funds for incentivising development
- Codify any new regulation and design guidelines

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers and Liberty Counties

MAGNITUDE OF COST

- Consulting Services: $185,000

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu

9

GRAND PARKWAY + TOWN CENTER TRAFFIC STUDY

Increased traffic within the Town Center and off of Grand Parkway will require additional study as development comes on-line. This may require adapting the proposed street typologies to ensure greater mobility and traffic flow.

STRATEGIES + ACTION STEPS

- Secure funding for the study effort(s)
- Conduct a traffic impact study and master plan with accompanying Preliminary Engineering Report for the area
- Include signal timing improvements to time new signals existing roadways

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- TxDOT

MAGNITUDE OF COST

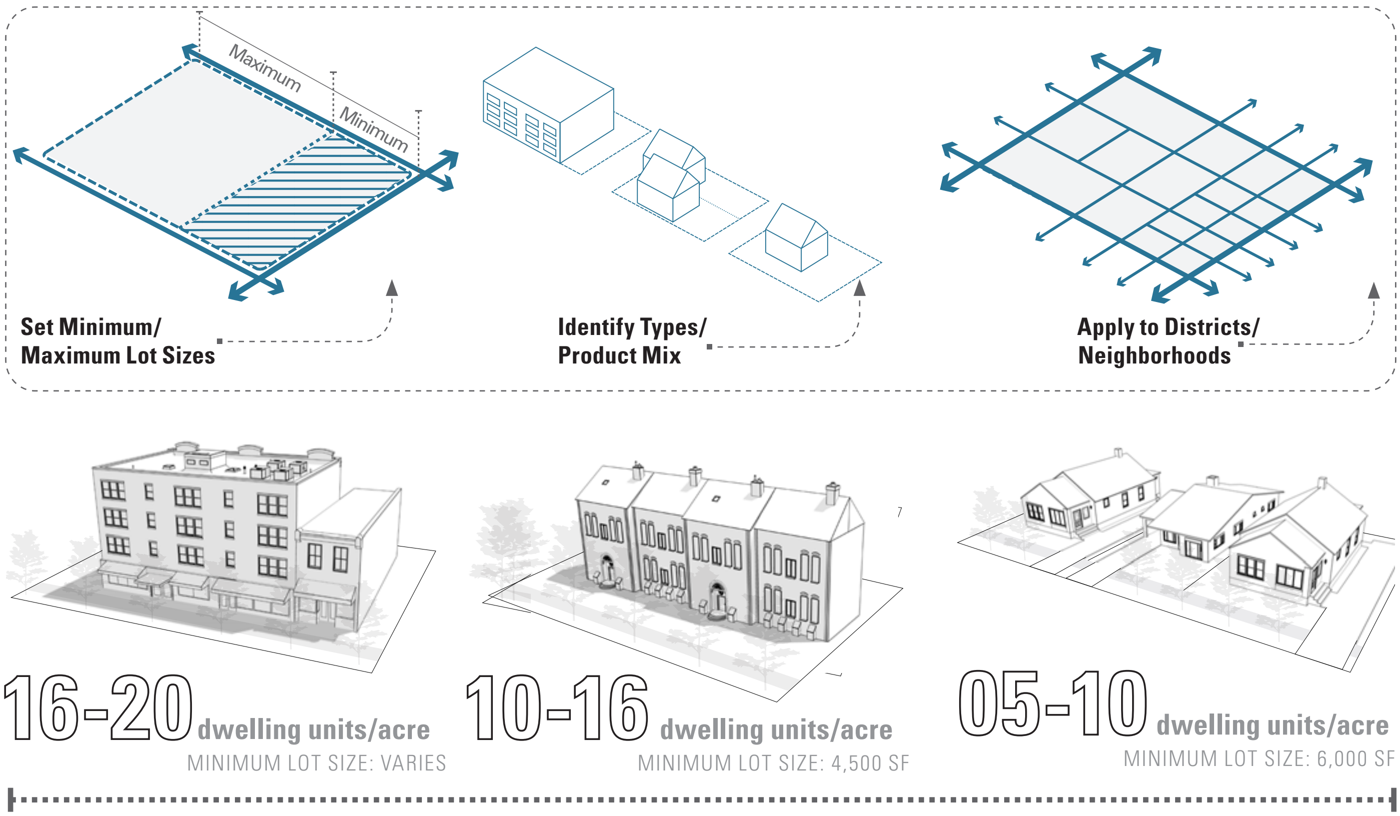
- Consulting Services: $115,000 - $385,000 (will vary depending on scope)

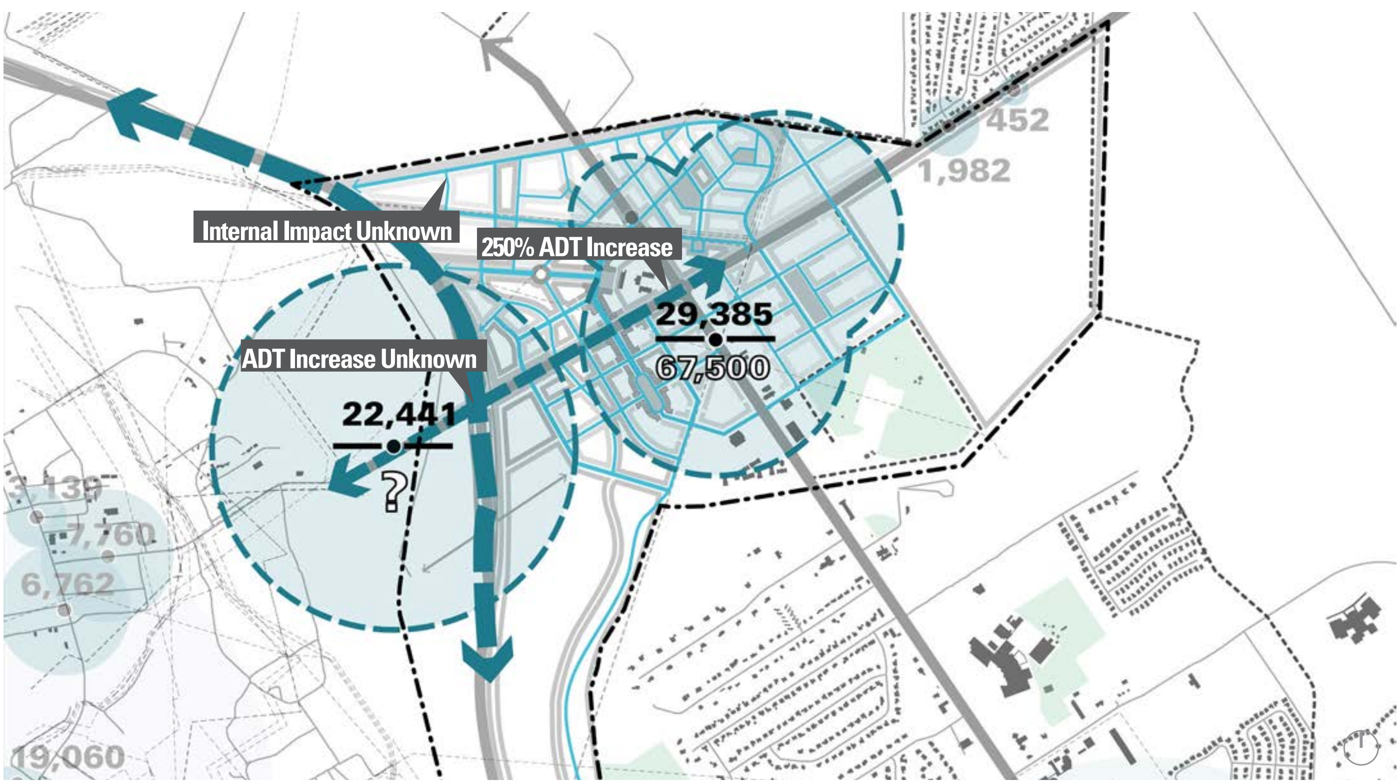
POTENTIAL FUNDING SOURCES

- TxDOT, State/Regional Grants
- City of Mont Belvieu
- PID Funds for segments along Mont Belvieu Main

PROJECTS

Figure 58: Housing Density Study





1

ZONING UPDATE + MIXED USE ZONING

Amendments to the 2018 City of Mont Belvieu Zoning code will be necessary to achieve the enhanced mix of uses and densities recommended for Mont Belvieu Main. Any future recommendations that come out of the proposed Projects and Programs, such as the Housing Density Study may require additional amendments.

STRATEGIES + ACTION STEPS

- Review current zoning and allowable uses and densities
- Develop and implement Form-Based-Code
- Add new zoning types if necessary and update any existing zoning codes that conflict with recommendations within the Comprehensive Plan, Livable Centers Study, Housing Density and Housing Types Study, Facilities/Emergency Management Study, et al.

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers and Liberty Counties

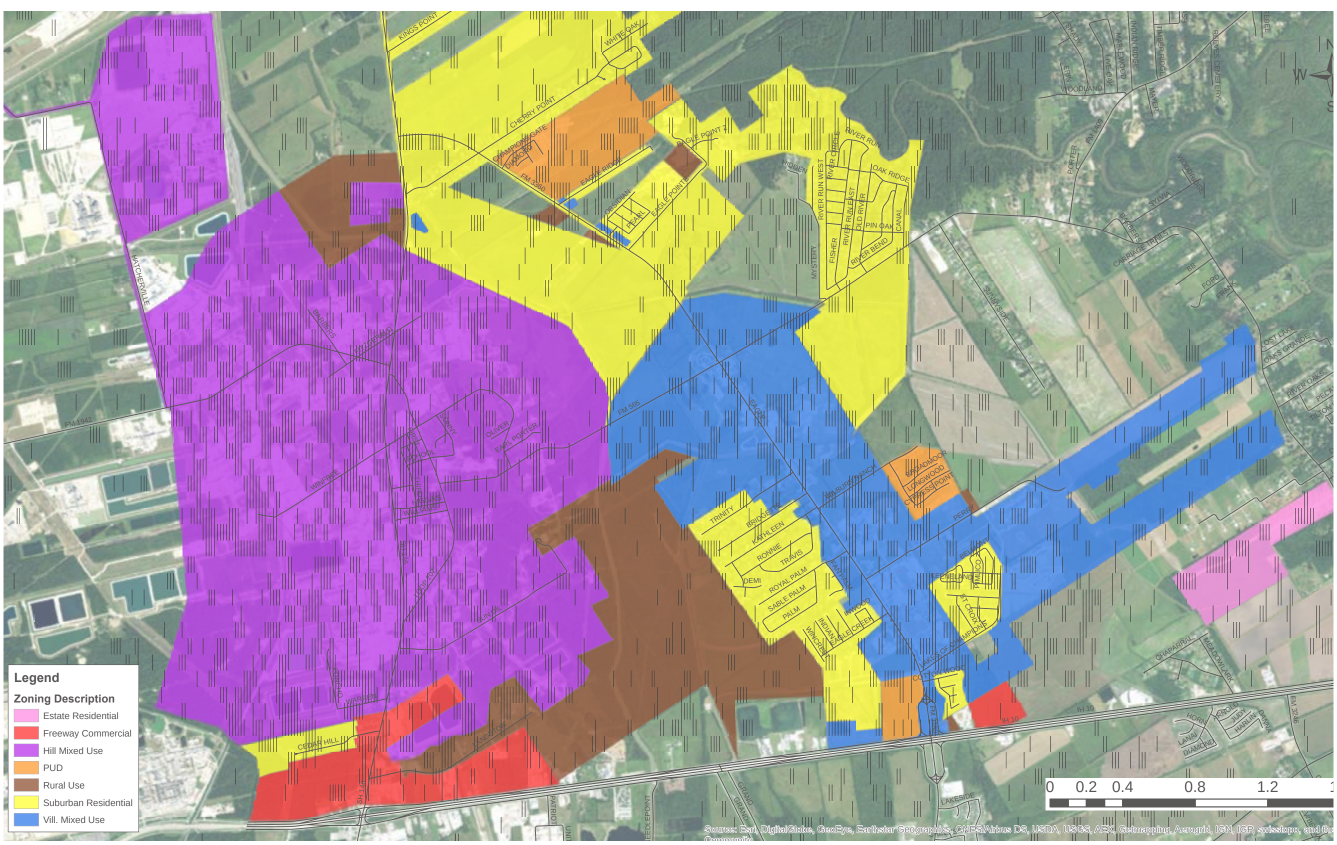
MAGNITUDE OF COST

- Consulting/Administrative Cost: $65,000

POTENTIAL FUNDING SOURCES

- The City of Mont Belvieu

Figure 59: Mont Belvieu 2017 Zoning



2

POLICIES

PUBLIC UTILITY DISTRICT FOR TOWN CENTER

A new Public Utility District, authorized under Sec. 40.279. - Use of other financing mechanisms of the Local Code may be established for the Mont Belvieu Town Center. This Public Utility District will provide electric, water, and wastewater public utility as well as telecommunication services, at cost without profit, to those living and operating within the Town Center. This will help to implement and maintain a potential microgrid, as recommended in "Smart/Resilient Technologies" section of Chapter 4.

STRATEGIES + ACTION STEPS

- Establish Town Center as a Public Utility District
- Elect a Board of Commissioners to be the policy-makers for the utility. This board will also set the rates and charges for various services.
- Secure public funds for construction
- Establish a funding stream for operations and on-going maintenance

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Utility, Drainage and Gas/Oil Easement holders
- Texas Commission of Environmental Quality

MAGNITUDE OF COST

- Staff Time (variable)

POTENTIAL FUNDING SOURCES

- The City of Mont Belvieu
- PUD/PID Funds
- Utility Companies (Grants, Incentives, Buyback of alternative energy)

3

PLANNED UNIT DEVELOPMENT

The entire Study Area shall be subject to special use regulation Sec. 42-227. - Planned Unit Developments (PUD) of the Local Code which requires coordinated site development and ensures that the recommended open space within the Study Area, particularly neighborhood parks, are considered as minimum requirements for development.

STRATEGIES + ACTION STEPS

- Ensure that the current PUD code allows for the zoning amendments necessary within the mixed-use, multifamily and retail areas within the Study Area (see 1-Zoning Update)
- Obtain City Council Approval

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Private Developers

MAGNITUDE OF COST

- Staff Time: Variable

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu

4

FLOODPLAIN + SENSITIVE WETLAND DEVELOPMENT REGULATIONS

Development within the floodplains of the Study Area should be limited within the 500-year and prohibited within the 100-year with only special case provisions.

STRATEGIES + ACTION STEPS

- Ensure floodplain information is regularly up-to-date and limit development according to the proposed regulations on the right
- Secure funds for incentives or any buyouts necessary

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers County
- FEMA

MAGNITUDE OF COST

- Staff Time (impact to construction costs variable)

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Special Revenue Funds
- Grants (EPA GI Grants. - Section 319, CWSRF), (Texas - TCEQ)

5

LOW IMPACT DEVELOPMENT (LID) OVERLAY

A Low Impact Design Overlay shall occur within the entire Study Area and be supplemental to the existing STAR Program. The LID overlay shall require protection of the identifed wetlands within this document and also require wetland mitigation (even for non-jurisdictional wetlands). All development shall be required to utilize stormwater BMPs and LID design strategies.

STRATEGIES + ACTION STEPS

- Codify all regulations necessary to meet the cirtieria outlined on the right and within the "Lid + Infrastructure Framework" in Chapter 4, Conceptual Design

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Chambers County
- Private Developers

MAGNITUDE OF COST

- Staff Time (impact to construction costs variable)

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu

POLICIES

Figure 60: Floodplain Regulations

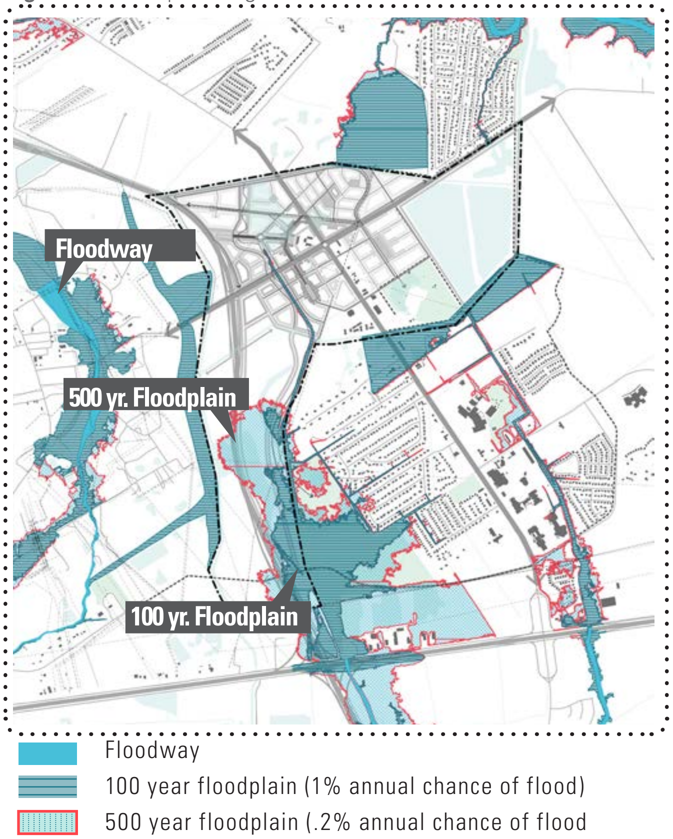
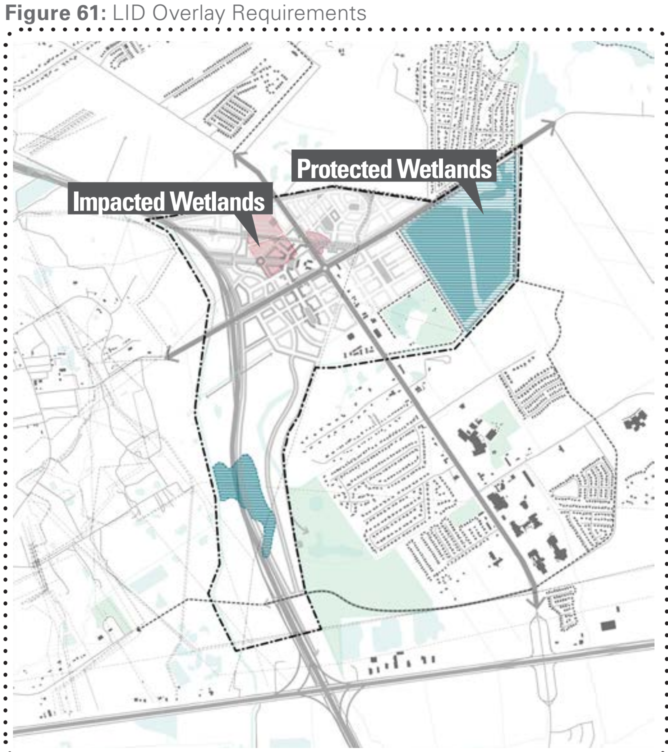


Figure 61: LID Overlay Requirements



100-YEAR FLOODPLAIN

REGULATIONS:

- Prohibit all development in the floodway and all residential development in 100-year floodplain
- Limit other development in 100-year floodplain (special case provisions)
- All occupied building elevations set 3-feet above the 100-year floodplain elevation
- No fill may be used to elevate structures in the 100-year floodplain
- All structures shall be designed to withstand a three second gust basic wind speed of 120 miles per hour

500-YEAR FLOODPLAIN

REGULATIONS:

- Proposed building elevation set 2 feet above the 500-year floodplain elevation (this also applies to additions and substantial improvements)
- The top of the sub-floor of the lowest habitable floor must be elevated to whichever is higher, 24 inches above the 500-year flood elevation or 12 inches above the level of the crown of the nearest public street

PROTECT AND ENHANCE

REGULATIONS:

- Protect large wetlands at northeast corner of Study Area

MITIGATE WETLAND IMPACTS

REGULATIONS:

- Mitigate any wetlands impacted during development

INTEGRATE LID AND BEST MANAGEMENT PRACTICES IN ALL NEW DEVELOPMENT

REGULATIONS:

- Require all new development in the Study Area to adhere to the existing STAR Program
- Capture, treat and slow stormwater at the point-source when possible through the LID strategies outlined in Chapter 4 - Concept Design
- Ensure that any runoff not captured is responsibly delivered to the detention ponds at Hackberry Gully Regional Park

1

PUBLIC IMPROVEMENT DISTRICT (PID)

A PID is a special tax assessment zone that is authorized under Chapter 372 of the Local Government Code and is created and overseen by the City to fund services and improvements beyond what is typically provided by the City or County. The PID shall have its own work program, and consist of activities such as marketing the area, providing additional security, landscaping and lighting, street cleaning, and cultural or recreational improvements. A market assessment will help to understand whether or not property owners have the financial means to pay the special assessments that will go toward the public services. This structure allows the generation of revenue funds that will go directly back into maintaining and improving the area in which the assessment occurs.

STRATEGIES + ACTION STEPS

- Update the Local Government Code to authorize the establishment of a Public Improvement District
- Conduct a market assessment and economic impact analysis to fully understand outcomes
- Implement, oversee and enforce the legal agreement

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Private Developers
- Property Owners

MAGNITUDE OF COST

- Economic Impact Analysis: $17,500

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Private Property Owners and Developers

2

CHAPTER 380 AGREEMENTS

Chapter 380 of the Local Government Code authorizes municipalities to offer incentives designed to promote economic development. Specifically, it allows loans and grants of city funds/services at little or no cost to stimulate business and commercial activity. This will assist in development of the Town Center and implementation of other policies.

STRATEGIES + ACTION STEPS

- Update the City regulations to authorize the establishment of Chapter 380 Incentive Agreements
- Implement, oversee and enforce the legal agreement

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu

MAGNITUDE OF COST

- Economic Impact Analysis: $12,500

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu

PROGRAMS

3

DEVELOPMENT INCENTIVES | NEIGHBORHOOD EMPOWERMENT ZONE - ENTIRE STUDY AREA

A Neighborhood Empowerment Zone (NEZ) is authorized through Chapter 378 of the Local Government Code that allows cities to provide financial incentives, waive fees, or portions thereof, to encourage equitable housing and economic development, and to improve the public safety of residents in the empowerment zone, as well as quality of social services. Providing this waiver would make mixed-use project types more viable and attractive to community investors, particularly senior housing and diverse accessible housing types.

STRATEGIES + ACTION STEPS

- Identify the creation zone
- City Council must pass a resolution to allow the reinvestment zone to occur
- Oversee the management of the zone

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Business Owners
- Private Developers

MAGNITUDE OF COST

- Staff Time: Variable

POTENTIAL FUNDING SOURCES

- The City of Mont Belvieu

4

SMART CITIES INITIATIVE WITH A UTILITY PROVIDER - ENTIRE STUDY AREA

Smart cities use and act upon data collection to manage resources effectively. Additionally they implement technology to increase efficiency, resiliency and crime prevention.

STRATEGIES + ACTION STEPS

- Identify and partner with a utility to form agreement on a Smart Cities program
- Conduct an economic assessment to understand cost/benefits
- Implement and oversee the program and associated technologies

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Utility Providers

MAGNITUDE OF COST

- Economic Impact Analysis: $8,500

POTENTIAL FUNDING SOURCES

- City of Mont Belvieu
- Utility Provider (Grants, Incentives, Buyback of alternative energy)

5

DOWNTOWN BUSINESS ASSOCIATION

A Downtown Business Association within the town center of Mont Belvieu Main will be ideal to incubate new business ventures and encourage growth in sales tax revenue. Downtown Business Associations are nonprofit entities that promote, revitalize and increase business activity in downtown areas through cultural programming. Membership assistance may include trainings or communication that connects retail and commercial tenants and promotes the safety of downtown customers.

STRATEGIES + ACTION STEPS

- Identify businesses within Mont Belvieu Main that are interested in a Downtown Business Association
- Establish a nonprofit entity
- Oversee the management of the nonprofit

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Business Owners
- Private Developers

MAGNITUDE OF COST

- Establish a 501(c)(3): $3,500
- Staff Time: Variable

POTENTIAL FUNDING SOURCES

- The City of Mont Belvieu
- PID Funds

6

PROGRAMMING, ENTERTAINMENT AND EVENT COORDINATION

Hosting a variety of events throughout the year will drive consumers to the town center, increase revenue directly through attendance (ticket and vendor sales) and indirectly through shopping and dining in the area. Programming will draw people from around the region and bring activity to Mont Belvieu throughout the seasons and times of the day.

STRATEGIES + ACTION STEPS

- Hire an Events and Program Coordinator
- Develop a year-round programming calendar

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Downtown Business Association, Private Developers

MAGNITUDE OF COST

- Annual Event Budget: $95,000
- Coordinator Salary: $75,000 (less benefits)

POTENTIAL FUNDING SOURCES

- Mont Belvieu
- Special Revenue Funds (PID) and self-imposed taxes

7

PROGRAMS

STRUCTURED PARKING INCENTIVES

Structure parking incentives, authorized through Chapter 380 of the Local Government Code offer assistance to developers to provide an above-grade or below-ground, ramp-accessible parking structure. These incentives will be important as the town center develops and parking is in higher demand with little undeveloped land to accommodate surface lots. The City can utilize the proposed 380 Agreement as a means to provide funds for assisting in the cost of structured parking. Although parking structures are significantly more expensive than surface lots, they will help to promote the walkable, main street that the community desires and this document recommends. Ideal candidate locations would be around future hospitality, entertainment venues such as movie theaters and anchor developments near FM 565 or Eagle Drive.

STRATEGIES + ACTION STEPS

- Identify private developers or tenants that will have higher parking demands
- Study and define parking strategies based on existing and future need
- Perform an economic impact study to understand cost/benefits
- Allocate capital for funding the City's portion of cost
- Execute and oversee the parking agreement

PROJECT CHAMPIONS + PARTNERS

- The City of Mont Belvieu
- Business Owners
- Private Developers
- Downtown Business Association

MAGNITUDE OF COST

- Parking Strategy Study: $5,000
- Economic Impact Analysis: $7,500
- Parking Structure Cost:
  - » Above-ground: $23,000 per space
  - » Below-ground: $32,000 per space
- Staff Time: Variable

POTENTIAL FUNDING SOURCES

- The City of Mont Belvieu
- Special Revenue Fund (380 Agreement, PID)
- Private Developers

REALIZING A VISION THROUGH COMPREHENSIVE PLANNING

As the City moves forward, it is important to keep in mind the following overarching planning recommendations, especially while advancing individual projects, implementing policy and developing initiatives concurrently:

UTILIZE THE MONT BELVIEU MAIN LIVABLE CENTER STUDY AS A ROADMAP FOR FUTURE GROWTH IN MONT BELVIEU

This project seeks to ensure a town center is implemnentable, feasible and well-connected by open space and trails. However, this development will need to be supported by a larger population and a much greater, diverse and equitable housing mix. These recommendations build upon, enhance and supplement the Mont Belvieu Comprehensive Plan including a mixed use retail core and additional housing recommendations that were a clear gap in the Comprehensive Plan. While the programs, projects, and policies recommended in this document have been tailored to Mont Belvieu Main's particular context, this process can be adapted and reapplied to promote similarly walkable neighborhoods, diversity of open space and mixed housing options elsewhere in Mont Belvieu.

BE PROACTIVE IN ANTICIPATING GROWTH IN MOBILITY INFRASTRUCTURE

Transit focused and well-connected development considers the needs and impacts of future transit investment. Utilizing the Mobility Framework and Street Hierarchy will allow Mont Belvieu to meet its immediate goals, while remaining adaptable to and suitable for the vibrant, environmentally sustainable possibilities of future development. By establishing an active, walkable mixed-use community along an existing transportation corridor (FM 565), Mont Beliveu Main will be poised to expand into a main street destination within the region.

CONSIDER MONT BELVIEU MAIN DURING THE ANNUAL BUDGET AND CIP PROCESS

Ensure that the creation of Mont Belvieu's operating budget and Capital Improvement Plan includes priorities established within the Concept Design and Implementation Recommendations. Aligning the operating budget and CIP plan will ensure that public improvement and infrastructure projects are a priority. These projects should include primarily large-scale construction projects including road improvement and enhancements, expanded water and wastewater utility projects, construction of city parks, and city facility buildings.

PROVIDE GUIDANCE ON A BALANCED COMMERCIAL/RETAIL MIX

Cities must be proactive in promoting balanced uses, resolve key zoning, parking, land use and policy decisions in order to adapt to changing population and development pressures. Tools such as this document, form-based code and subsequent master plans will assist developers in understanding they may mix uses vertically, meaning from one floor to another in a building, as well as mix horizontally, meaning side-by-side in the same building and within a neighborhood. Mixed-use developers anticipate a greater level of discretionary scrutiny than they would if they built within a traditional zoning district (e.g., commercial or single-family). Developers avoid what they see as the risk in trying new types of projects, because it makes it challenging for them to verify that their development rights have "vested," which is an important legal and financial concept. Incentivize commercial/retail mix by making sure that the projects, policies, programs or design standards that City officials and community stakeholders would like to see enforced are in place.

CONDUCT ANNUAL FINANCIAL FORECASTING

A key characteristic of local real estate markets is that they are not static, and have a substantial potential for change. Areas that are seen as marginally desirable can become more attractive to residents and businesses as a result of a range of actions, including public improvements; increased availability of sites for development; the provision of new types of development products not available elsewhere, and spillover effects when available real estate in desirable nearby areas becomes limited or expensive. Future market analyses to project revenue from improvements will help to align financial capacity with long-term service objectives within Mont Belvieu Main. Long-term growth along the in the town center will likely have positive impacts on the City's fiscal sustainability and return on investment.

i

GLOSSARY OF TERMS

The glossary is meant to provide users with definitions of terms that the reader may not be familiar with or are specific to the planning and design industry.

TERMS AND DEFINITIONS

- **Average Daily Traffic (ADT):** The average daily traffic on a roadway. ADT is one of the criteria used by Roadway Designers in the determining the dimensions and function of proposed roadways.
- **Baseline:** A minimum or starting point used for comparisons.
- **Benchmarking:** To evaluate or check something by comparison with a standard.
- **Bioswales:** A linear stormwater runoff conveyance system that is used as an alternative to storm sewers to partially treat water quality, attenuate flooding potential, and convey stormwater away from critical infrastructure.
- **Blueway:** Connectivity through an inclusive interconnected network of greenways, trails and waterways.
- **Better Utilizing Investments to Leverage Development Grants (BUILD):** Funding for road, rail, transit and port projects that promise to achieve national objectives. Previously known as Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants, Congress has dedicated nearly $5.6 billion for nine rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact. BUILD can provide capital funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others in contrast to traditional Federal programs which provide funding to very specific groups of applicants (mostly State DOTs and transit agencies).
- **Combined Statistical Area (CSA):** Two or more adjacent metropolitan and micropolitan statistical areas that demonstrate economic or social linkage. The metropolitan and micropolitan statistical areas that combine to create a CSA retain separate identities within the larger CSA.
- **Competitive Market Area (CMA):** A geographical area created to analyze real estate market and socioeconomic data for comparison to a similar geographical area.
- **Diverse Housing:** Residential development that is responsive to factors such as the need for homes of various sizes and price points, regional economy, infrastructure availability, and population growth.
- **Extraterritorial Jurisdiction (ETJ):** Unincorporated area that is contiguous to the corporate boundaries of the municipality.
- **Framework Plan:** Understanding how existing patterns may be improved and how recommendations fit in with an existing or proposed system.
- **Greenfield Development:** Development on undeveloped parcels not sur- rounded by existing development, or on large parcels surrounding partially developed areas or undeveloped areas.
- **Greenway:** A linear park, alternative transportation route, or open space conservation area that provides passive recreational opportunities, pedestrian and/or bicycle paths, and/or the conservation of open spaces or natural areas.
- **Impervious Surface:** Any hard-surfaced, man-made area that does not readily absorb or retain water, including but not limited to building roofs, parking and driveway areas, graveled areas, sidewalks, and paved recreation areas.
- **Infill:** Development and redevelopment of underused buildings and vacant lots in areas served by existing infrastructure. Development that channels economic growth into existing urban and suburban areas and conserves open space and agriculture at the periphery of the city.
- **Infrastructure:** Facilities and services needed to sustain industry, residential, commercial, and all other land-use activities, including water, sewer lines, and other utilities, streets and roads, communications, and public facilities such as fire stations, parks, and schools.
- **Land Use:** The type of use activity occurring on a land parcel or within a building situated upon a land parcel.
- **LEED® for Neighborhood Development (LEED-ND):** A green building rating system for neighborhood design developed by the U.S. Green Building Council (USGBC) in partnership with the Congress for the New Urbanism (CNU) and the Natural Resources Defense Council (NRDC).

Sources:
https://capitol.texas.gov/tlodocs/83R/handouts/C2102013022110301/c2897258-ca4b-4c11-b981-72e4a9498f34.PDF
https://udlastudio.com/glossary-of-terms-urban-design/
http://www.communityplanning.net/glossary/glossary.php?sfield=&type=title
http://www.planningandlaw.com/uploads/SMW_Paper-Presentation.pdf

- » **Low Impact Design (LID):** Design tools and techniques used to meet regulatory and receiving water protection program goals for urban retrofits, re-development projects, and new development sites.
- » **Market Analysis:** Conditions and opportunities that will ultimately shape recommendations for revitalization, redevelopment, and general enhancement of an area.
- » **Market Leakage (Leakage):** The exit of money from an economy. In retail, leakage refers to consumers spending money outside of the local market. For instance, traveling to neighboring towns to buy goods instead of making the same purchase from local shops.
- » **Market Value:** The amount for which something can be sold on a given market.
- » **Metropolitan Statistical Area (MSA):** A geographic entity . . . based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core. Qualification of an MSA requires the presence of a city with 50,000 or more inhabitants, or the presence of an urbanized area and a total population of at least 100,000 (United States Census Bureau).
- » **Mixed Use:** Used or suitable for several different functions a mixed-use building.
- » **Mobility:** The quality or state of being mobile or movable.
- » **Multi-family:** All dwellings which share a common wall between units (e.g., townhomes, condominiums, apartments, etc).
- » **Multimodal:** Accommodates various modes of travel such as walking, cycling, automobile, public transit, and connections among modes.
- » **Pervious Surface:** A surface that presents an opportunity for precipitation to infiltrate into the ground.
- » **Photovoltaic:** Conversion of solar radiation (rays from the sun) to electricity by the effect of photons (tiny packets of light) on the electrons in a solar cell. For example, the photo-voltaic panels installed on the roofs of houses to generate energy.
- » **Public Improvement District (PID):** A defined geographical area established to provide specific types of improvements or maintenance which are financed by assessments against the property owners within the area. PIDs provide a development tool that allocates costs according to the benefits received.
- » **Purchase behavior:** Attitudes, preferences, intentions, and decisions regarding consumers' behaviors in the marketplace when purchasing products or services.
- » **Rain Garden:** A depression formed on a natural slope and planted with deep-rooted native plants and grasses designed to hold and absorb rainwater from nearby impervious surfaces such as roofs, drives, walkways, parking lots, or compacted lawn areas.
- » **Regulating Plan:** Plan or map of an area designating locations where development regulations apply based on clear community goals regarding the character of the area being regulated.
- » **Revenue Per Available Room (RevPAR):** A performance metric used in the hotel industry calculated by multiplying a hotel's average daily room rate (ADR) by its occupancy rate. It may also be calculated by dividing a hotel's total room revenue by the total number of available rooms in the period being measured.
- » **Right of Way:** Space that is publicly owned and lies between property lines.
- » **Shared Lane:** Environment for bicycles and automobiles. Among other benefits shared lane markings reinforce the legitimacy of bicycle traffic on the street and recommend proper bicyclist positioning.
- » **Single-family:** A classification of housing where a building is usually occupied by just one household or family, and consists of just one dwelling unit or suite.
- » **Single-family attached:** Dwelling that shares an inside wall with another house or dwelling.
- » **Single-family detached:** All dwellings are freestanding on their own platted lots and do not share any physical connection with another building.

Sources:
https://capitol.texas.gov/tlodocs/83R/handouts/C2102013022110301/c2897258-ca4b-4c11-b981-72e4a9498f34.PDF
https://udlastudio.com/glossary-of-terms-urban-design/
http://www.communityplanning.net/glossary/glossary.php?sfield=&type=title
http://www.planningandlaw.com/uploads/SMW_Paper-Presentation.pdf

- **Sustainable Sites Initiative ™ (SITES ™):** A program dedicated to fostering resiliency and transforming land development and management practices towards regenerative design. The SITES v2 Rating System is a voluntary set of guidelines and performance benchmarks for assessing sustainable site design, construction, and maintenance.
- **Stakeholder:** Person or organization with an interest because they will be affected or may have some influence.
- **Stormwater:** The flow of water which results from precipitation and which occurs immediately following rainfall or a snow-melt.
- **Sustainability:** Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.
- **Tax Increment Reinvestment Zone (TIRZ):** A municipality may designate a contiguous or noncontiguous defined area of land within the municipality or extraterritorial jurisdiction as a Tax Increment Reinvestment Zone ("TIRZ") under Chapter 311, Texas Tax Code. Chapter 311, Texas Tax Code, also authorizes a county to designate a contiguous defined area of land as a TIRZ. Taxing entities may participate in the TIRZ by dedicating the portion of their taxes collected on new development and redevelopment ("Tax Increment"), or portions thereof, to the TIRZ's "Tax Increment Fund." The municipality (or county) enters into a contract with each participating governmental entity ("Participant") establishing the terms of the participation. During the creation process the various Participants will work with the municipality to cooperatively plan for the TIRZ and the TIRZ Improvements.
- **Transportation Improvement Program (TIP):** A list of upcoming transportation projects developed in cooperation with state and public transit providers that includes capital and non-capital surface transportation projects, bicycle and pedestrian facilities and other transportation enhancements, Federal Lands Highway projects, and safety projects.
- **Traffic Assessment:** Estimation and calculation of traffic loading for the design of roads.
- **Wayfinding:** Availability and quality of signs, maps and visitor information services.
- **Wetland:** Areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season.

Sources:
https://capitol.texas.gov/tlodocs/83R/handouts/C2102013022110301/c2897258-ca4b-4c11-b981-72e4a9498f34.PDF
https://udlastudio.com/glossary-of-terms-urban-design/
http://www.communityplanning.net/glossary/glossary.php?sfield=&type=title
http://www.planningandlaw.com/uploads/SMW_Paper-Presentation.pdf

ii

APPENDIX

VISION STATEMENT RECAP

To create a new main street and city center that will serve as a destination within the community, Mont Belvieu Main will have a mix of uses and contribute to a high quality of life. The project will be characterized by vital amenities such as open space and year-round activities, housing choices for all, and environmental sensitivity. Varied employment choices and thriving business will be well-connected to the greater community through well-designed sidewalks, trails and streetscapes.

PROJECT PRINCIPLES

COMMUNITY

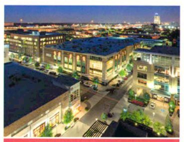
- Creation of quality, walkable and mixed-use places that improve the lives of existing populace.
- Development of multi-modal transportation choices, including connectivity within the area as well as to destinations outside of the area.

ART

- Planning and conceptual design of street, sidewalk, trail, signage and lighting improvements.

ENVIRONMENT

- Improvement of health and environmental quality.
- Sustainable growth and capacity over a period of time.
- Estimation of potential for private investment to be leveraged from public improvements.



ECONOMY

- Promotion of investment in downtown areas.
- Promotion of economic development, with emphasis on both the tools to promote entrepreneurship and small business growth, as well as expansion or location of large scale businesses.

GOALS

1 **PUBLIC REALM:** Create vital amenities that address lighting, wayfinding, connectivity, human comfort, parks and cultural venues.

2 **MOBILITY:** Develop greater mobility through trail connectivity, parking strategies, on-street networks for all and transit options (trolley, bike, bus).

3 **SUSTAINABLE GROWTH + ECONOMY:** Guide future development that generates return on investment and creates a localized economy where residents may age in place.

4 **FUNDING:** Generate funding mechanisms for a catalyst project(s) that will guide the City with an implementable 5-year plan.

5 **INFRASTRUCTURE:** Build for resiliency and capacity by integrating infrastructural systems and stormwater management with anticipated population growth.

VALUES WORKSHOP RESULTS

OVERVIEW

In what ways do you use the study area? (Select all that apply)

Live	**66%**
Work	32%
Own a Home In	57%
Own A Business In	9%
Own Property In	14%
Commute Through	48%
Volunteer In	20%
Recreate In	40%
Go to School In	24%
Other	2%

Which zip code do you live in?

77521	2%
77523	**73.5%**
77535	18.5%
77580	1.5%
Other	4.5%

Where do you work ?

Mont Belvieu	**33%**
Old River-Winfree	2%
Baytown	20%
Beaumont	0%
Deer Park	8%
Channelview	2%
Pasadena	5%
Other.	30%

Key Take-away: The framework will accommodate amenities and connections that cater to a wider audience.

How did you hear about
apply)

Email
Flyer/Poster
Social Media
Digital Bulletin
Gov't Website
Billboard
Other.

Key Take-away: The team
public announcements re

EXISTING CONDITIONS

Do you think the existing sidewalks in the study area are adequate?

Definitely	19%
Somewhat	**51%**
Not Really	19%
Definitely No	10%
Other suggestions.	1%

Key Take-away: Town Center recommendations will reference all existing sidewalks to be connected to future ones to ensure pedestrians have safe walking opportunities.

How often do you travel outside Mont Belvieu for shopping or recreation?

Once per day	39%
Once per week	**54%**
Three (3) or less times per month	5%
Once (1) per year	1%
Never	1%

Key Take-away: The design team will need to consider recommendations that provides local retail and public space amenities within the City of Mont Belvieu.

How important is improving traffic circulation and capacity in the Study Area?

Very Important	**79%**
Somewhat Important	16%
Neutral	3%
Somewhat Unimportant	1%
Not at All Important	1%

Key Take-away: The design team will provide a town center framework plan that will maximize traffic capacity while maintaining walkability and bikability.

What types of parks do

Passive
Active
Nature Focused
Program Focused
Other,

Key Take-away: The design
will have frequent activitie
concerts and holiday perfo

VISION

Do you agree with the vision?

Definitely	**43%**
Somewhat	32%
Neutral	13%
Not Really	6%
Definitely Not	3%
Other suggestions.	3%

Do you like the idea of Mont Belvieu having a downtown?

Definitely	**58%**
Somewhat	29%
Neutral	6%
Not Really	4%
Definitely Not	3%

Do you like the idea of smart cities + resiliency?

Definitely	**52%**
Somewhat	31%
Not Really	5%
Definitely No	3%
I don't know	9%

Is this project on the right track?

Definitely	**43%**
Somewhat	40%
Not Really	4%
Definitely No	4%
I don't know	9%

What land uses do you think are ideal for the Study Area? (Select all that apply)

Retail/Commercial (large retailers)	21%
Local Shops and Grocers	21%
Affordable Housing	2%
Mixed-Use	11%
Hospitality/Hotels	8%
Civic Spaces/Community + Conference Centers	**24%**
Multifamily Housing	1%
Single-family Housing	12%
None of the Above	0%
Other	0%

Key Take-away: Mont Belvieu's downtown plan will host a range of activities that prioritizes civic spaces, public amenities, retail and local shopping.

Key T
that
prog

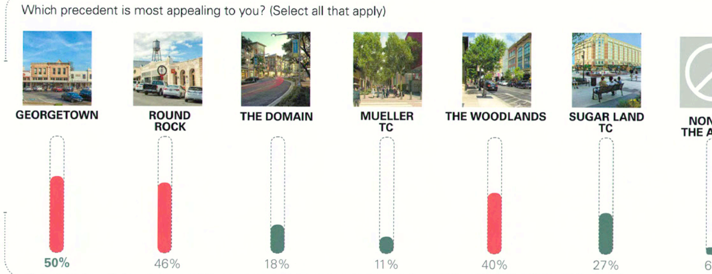
270 RESPONDENTS

32 IN-PERSON RESPONSES

238 ONLINE RESPONSES

PRECEDENTS

Which precedent is most appealing to you? (Select all that apply)



Key Take-away: Mont Belvieu's downtown will exemplify architecture that is traditional and neo-colonial.

Alternatives Workshop

VALUES WORKSHOP RECAP

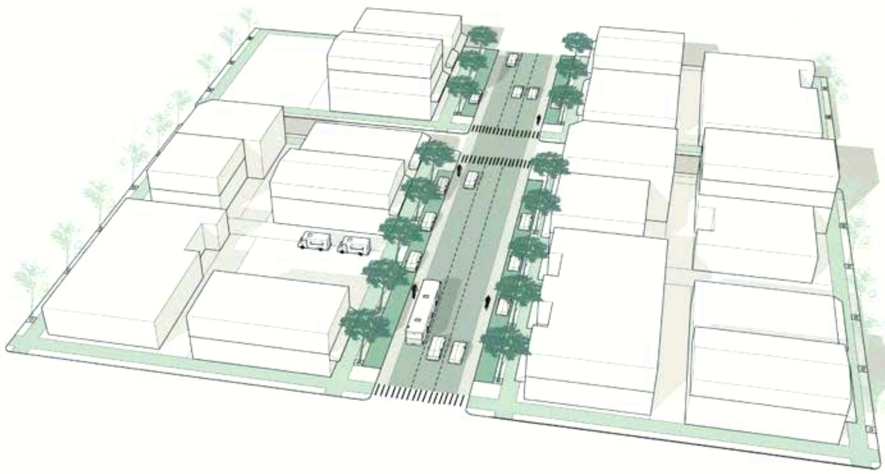
this meeting? (Select all that
2%
1%
73%
0%
16%
0%
8%
will work with the City to ensure
ach the wider internet audience.
How important is job growth for Mont Belvieu?
Very Important 40%
Somewhat Important 35%
Neutral 16%
Somewhat Unimportant 6%
Not at All Important 3%
Key Take-away: The design team will look to develop recommendations that prioritizes diversity in job growth.
Which aspect(s) of living in Mont Belvieu are most important to you? (Select all that apply)
Quality of Life 50%
Cost of Living 13%
Ability to Walk or Bike to Destinations 8%
A Great School District 39%
Easy Access to Amenities 9%
Ability to Age-in-Place with Higher Education Options 8%
Diversity of Jobs in and around the City 6%
Access to a Diverse Housing Market 2%
Other,, 1%
Key Take-away: The design team will ensure any and all recommendations reflect a rich quality of life for residents/visitors of Mont Belvieu.
you want more of?
18%
12%
29%
38%
3%
team will plan for parks that
s and year-round events such as
rmances.
Where do you travel outside Mont Belvieu for shopping or recreation?
Baytown 61%
Beaumont 2%
Deer Park 1%
Pasadena 3%
Houston 25%
None of the Above 1%
Other 7%
Key Take-away: Recommendations will look to providing a variety of retail, civic and public space programs within Mont Belvieu.
What do you think defines Mont Belvieu? (Select all that apply)
Stormwater detention + trails/ parks 15%
New development 49%
Tall grass prairie 7%
Riparian corridors and easements 3%
School district 87%
Industry 53%
Other. 4%
Key Take-away: The design team will equip the City with recommendations that build upon Mont Belvieu's excellent school system such that students will be able to age-in-place.
Which aspect(s) of the precedents are most important to you? (Select all that apply)
Architecture 56%
Streetscape+Walkability + Transportation 65%
Density and Types of Development 31%
Diverse Programming + Year-Round Activity 48%
Parks, Plazas and Open Space 67%
Parking 34%
Retail Opportunities/Localized Economy 60%
Housing Options 15%
None of the Above 3%
Other 3%
Take-away: The design team will focus on providing vital open space amenities
cater to all ages. These include parks, trails, plazas, forested areas and other
rammed spaces (ie: amphitheaters, farmers markets, dog parks, etc).
What part(s) of the vision resonate most with you? (Top 3) (multiple choice, multiple response)
Creation of a Downtown Core as the Heart of the City 82%
Diverse Housing Choices 17%
Employment Choices + Thriving Business Industries 62%
Identifiable Architecture and Wayfinding. 53%
Well-connected Multimodal Network 37%
None of the above 8%
Other. 8%
Key Take-away: The design team will ensure that recommendations follow the vision statement that has been vetted by the community. The creation of a vital downtown core will be central to the study with emphasis that surrounding uses be able to grow with it over time.
GOALS
Which goal is most important to you (Top 3)
1 PUBLIC REALM 76%
2 MOBILITY 54%
3 SUSTAINABLE GROWTH + ECONOMY 61%
4 FUNDING 26%
5 INFRASTRUCTURE 58%
6 OTHER 4%
7 NONE OF THE ABOVE 6%
Key Take-away: The design team will ensure that the goals vetted by the community as most important will be reflected in the downtown framework recommendations.
H-GAC MONT BELVIEU LIVABLE CENTERS STUDY
MONT BELVIEU, TX • H-GAC/ CITY OF MONT BELVIEU • 05-09-2018

COMPONENTS OF A TOWN CENTER

Both public and private components of town center was presented at the Alternatives Workshop

REALIZING A VISION:

Smart, appropriately-scaled development is an important criteria because it can enhance the economic, physical and environmental vitality of a city within specified project areas. These efforts can improve the community's image and improve economic and social values while ensuring the assets of the community are not lost. The implementation of amenities improves the appearance, functionality and circulation of an area, which benefits the community and encourages future investment.

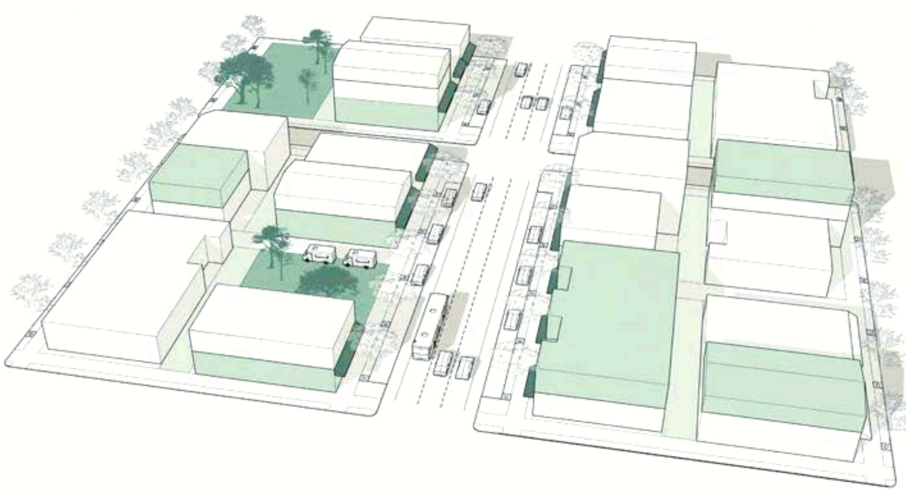


Outside patio
Eating, social, etc.
?

1 PUBLIC REALM

Public realm investments typically use government resources to provide basic services such as utilities, sidewalks and roads. However, this can be expanded to include amenities within the right of way or public realm, such as bike lanes, trails, street trees and parks. Public realm improvements are essential for attracting new development and ensuring that safety, human comfort and emergency access are provided. Public realm amenities include:

- Streetscape amenities (lighting, signage)
- Public plazas + parks
- Roadway hierarchy
- Parking
- Continuous sidewalks
- Bike lanes
- Transit routes
- Street trees and vegetation



2 PRIVATE REALM

The private realm is often characterized by retail, commercial and residential land uses, and is paid for through private funds. This development generates jobs and bolsters economic activity in new developments. Without a framework plan, appropriate growth that responds to population needs may not be achieved. A private realm framework will assist future development on private land and ensure developers follow a community-vetted vision for an area. Private realm amenities include:

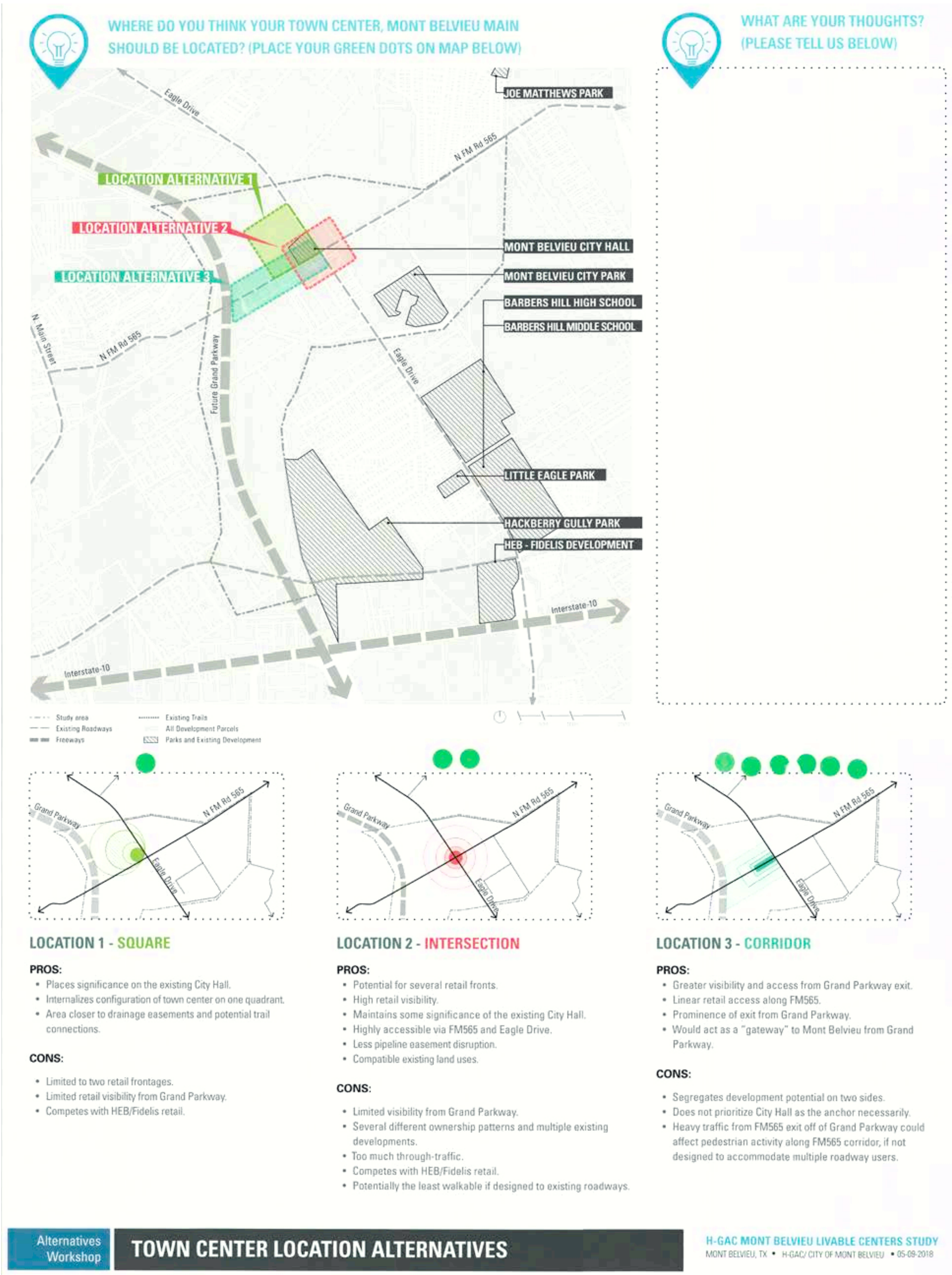
- Development (multi-use, mixed)
- Architecture typologies
- Residential (multifamily, single-family)
- Private parks
- Affordable housing
- Commercial, civic, retail, hospitality, office, etc
- Market absorption rates

Alternatives Workshop | **COMPONENTS OF A TOWN CENTER**

H-GAC MONT BELVIEU LIVABLE CENTERS STUDY
MONT BELVIEU, TX • H-GAC/ CITY OF MONT BELVIEU • 05-09-2018

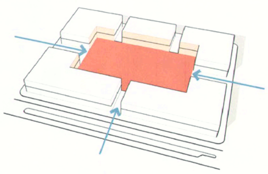
TOWN CENTER LOCATION ALTERNATIVES

Git averfer vilica iam ompli poteribus. Ipiem ex silicam adducer fectus viciorum prore moeridetim poritis.Torebus conost priciesse inum tum hilius ponfecur, des! Seraciae ad



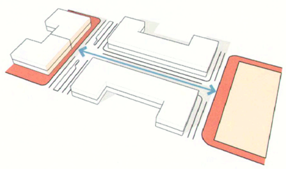
WHAT IS THE ALTERNATIVE 1?

TOWN SQUARE

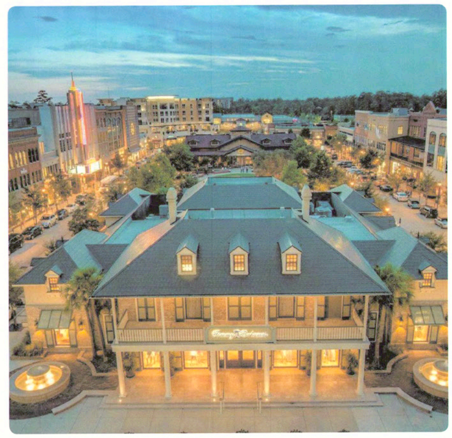


+

DUMBBELL



- Develops around FM565.
- Retail perpendicular to the FM565 with the main town square park facing it.
- Retail faces the park with minimal setbacks.
- To protect the retail along FM565 and maintain front-door access, 'Alternative 1' proposes a row of parking along the corridor.
- Allows existing town center to remain as is and develops adjacent to it using the dumbbell and main street models.
- Green 'fingers' or linear parks are proposed along existing easements.
- Distribution centers and linear greenways buffer other uses from the future Grand Parkway traffic noise/ pollution.



GOALS ACHIEVED

PUBLIC REALM:

- Greenway connections from town center to the future Hackberry Gully Regional Park.
- Development fronting neighborhood park plazas.
- Greenway buffer from Grand Parkway.

SUSTAINABLE GROWTH + ECONOMY

- Anchor tenants bookending town center (phase1).
- Retail fronts off of FM565 along pedestrian-friendly collectors.
- Existing town hall is kept as is.
- Housing distributed from high to low density as needed.

MOBILITY

- Vehicular traffic coming off of Grand Parkway is maintained.
- Alternative 1 set up closer to drainage easements and potential trail connections.
- Housing placed in northeast quadrant away from traffic off of Grand Parkway and FM565.

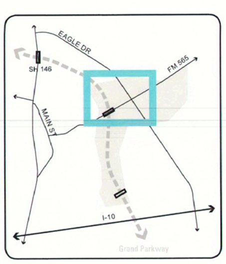
INFRASTRUCTURE

- Regional detention needs met with greenway connections to future Hackberry Gully watershed.
- Smaller parks have detention capabilities that do not burden larger stormwater systems.

FUNDING

- TxDOT and City funding of FM565 will be a key priority.
- Funding of town center does not rely on existing City Hall status.
- Proposed development will only rely on one or two property owners (most of development is on one quadrant).

WHICH MODEL DO YOU PREFER?



- Existing Major Roadways
- Freeways
- Planned Trails (on/off-street)
- Proposed Roadways
- Park Space
- Proposed Greenways
- Civic/ Institution
- Distribution Centers
- Hospitality
- Existing Commercial

CORE INTENSITY

- Retail
- Stacked Flats
- Garden Townhomes
- Single-family

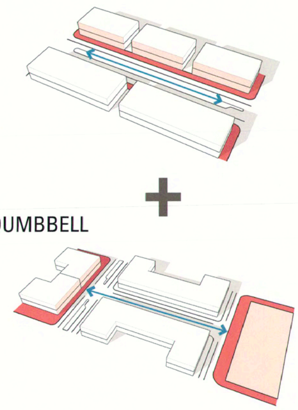
LEAST INTENSITY

Note: Land Use patterns are kept along street edges and not entire parcels to emphasize

Alternatives Workshop

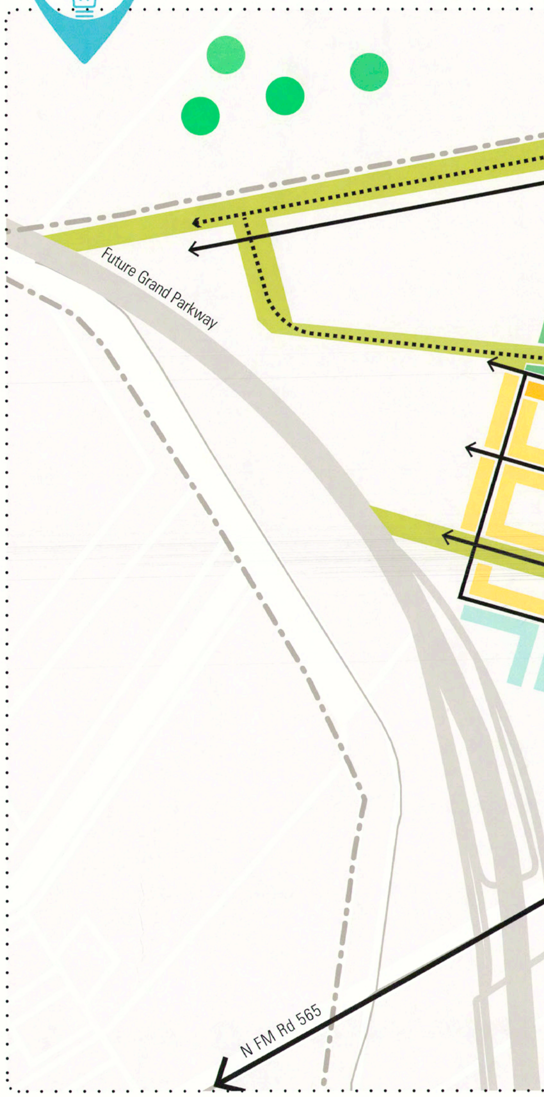
LAND USE/ INTENSITY - ALTERNATIVE 1 (PHASE 1+2)

TOWN CENTER ALTERNATIVE 1



it to become a smaller collector road to protect pedestrians.
- Road off of FM565 acts as main street.
- Town center anchored by park in south and retail/ civic in north.
- Existing pipelines are treated as greenways.
- Program is located north/south of FM565, west of Eagle Drive.
- Existing uses at intersection of FM565 and Eagle Drive are protected.Town center is developed independently.
- Majority of site is developed away from future Grand Parkway.
- Town center uses dumbbell and main street models.

WHICH MODEL DO YOU PREFER



Note: Land Use patterns are kept along street edges and not entire parcels to emphasize r

GOALS + METRICS ACHIEVED

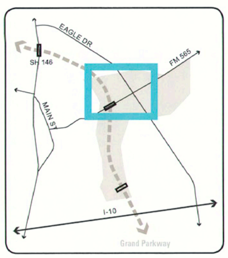
PUBLIC REALM:
- Greenway connections from town center to the future Hackberry Gully Regional Park.
- Existing pipelines protected by linear greenways.
- All linear greenways connect to smaller parks/plazas.

SUSTAINABLE GROWTH + ECONOMY
- Town center is developed away from existing uses at intersection of Eagle Drive and FM565.
- Existing town hall structure remains as is, but has retail added.
- Housing distributed from high to low density as needed.

MOBILITY
- Vehicular traffic off of Grand Parkway/ FM565 exit diverted by two major round-a-bouts.
- Walkability and pedestrian activity protected at town center.
- Traffic-calming measures used.
- Regional trail connections provided.

INFRASTRUCTURE
- Regional detention needs met with greenway connections to future Hackberry Gully watershed.
- Smaller parks have detention capabilities that do not burden larger stormwater systems.

FUNDING
- TxDOT and City funding of FM565 will be a key priority.
- Funding of town center relies somewhat on existing City Hall status.
- Proposed development will rely on a public-private partnership between City and private developers/multiple property owners.



Existing Major Roadways
Freeways
Planned Trails (on/off-street)
Proposed Roadways
Park Space
Proposed Greenways
Civic/ Institution
Distribution Centers
Hospitality
Existing Commercial

Retail
Stacked Flats
Garden Townhomes
Single-family

CORE INTENSITY
LEAST INTENSITY

Alternatives Workshop

LAND USE/ INTENSITY - ALTERNATIVE 2 (PHASE 1+2)

TOWN CENTER ALTERNATIVE 2

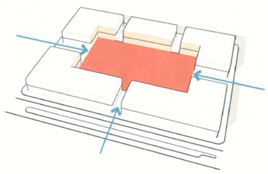
? (PLACE YOUR GREEN DOTS ON YOUR FAVORITE LAND USE ALTERNATIVE)

elationship between streetscape and building frontage (building setbacks, sidewalks, etc).

0' 500' 1000' 2000'

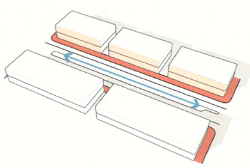
WHAT IS ALTERNATIVE 3?

TOWN SQUARE

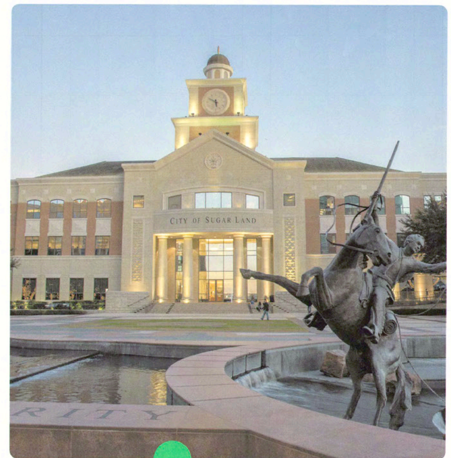


+

MAIN STREET



- FM565 diverts traffic with a couplet to allow town center to develop around median park.
- Existing City Hall is reconstructed/relocated completely on original axis with retail fronting Eagle Drive.
- Main Street is perpendicular to proposed couplet with round-a-bouts on either end.
- Develops heavily around the intersection of Eagle Drive and FM565.
- Town Center development phase 1+2 are developed entirely away from the Grand Parkway.
- Easements are used as linear greenways.
- Town center uses town square and main street models.



WHICH MODEL DO YOU PREFER? (

GOALS + METRICS ACHIEVED

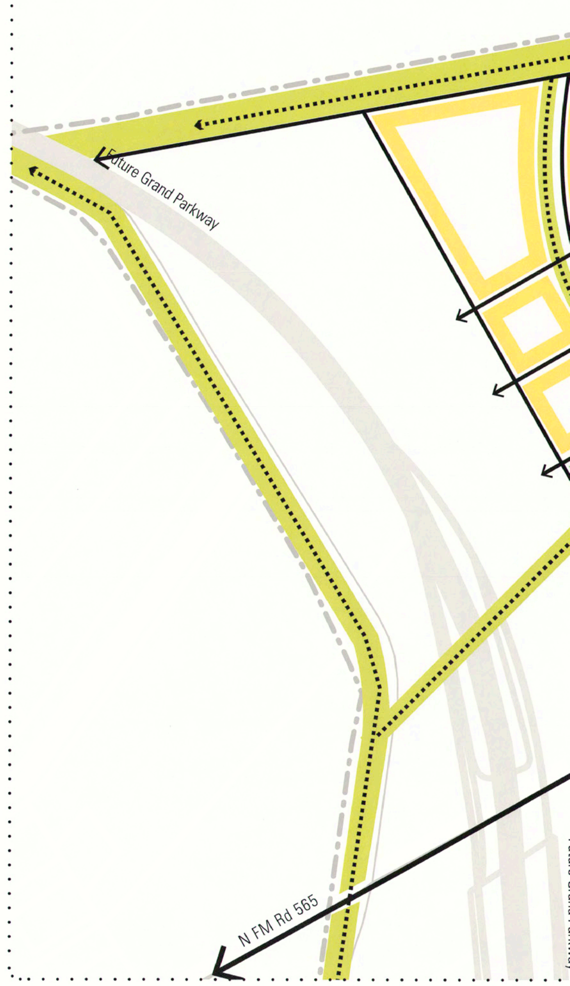
PUBLIC REALM:
- Greenway connections from town center to the future Hackberry Gully Regional Park.
- Linear greenways separate land use intensities.

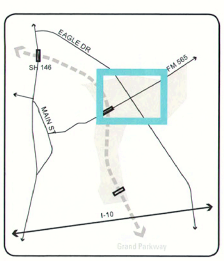
SUSTAINABLE GROWTH + ECONOMY
- Town center developed away from future Grand Parkway and around the intersection of Eagle Drive and FM565.
- Existing City Hall is part of phase 1 town center redevelopment.
- High return on investment.
- Relies on civic use rather than retail to achieve activity.

MOBILITY
- Vehicular traffic off of Grand Parkway/ FM565 exit diverted by three major round-a-bouts and a couplet.
- Walkability and pedestrian activity protected at town center.
- Traffic-calming measures used.
- Regional trail connections provided.

INFRASTRUCTURE
- Regional detention needs met with greenway connections to future Hackberry Gully watershed.

FUNDING
- TxDOT and City funding of FM565/Eagle Drive intersection will be a key priority.
- Funding of town center relies entirely on town hall status.
- Proposed development will rely on a public-private partnership between City and private developers/multiple property owners.





Existing Major Roadways
Freeways
Planned Trails (on/off-street)
Proposed Roadways
Park Space
Proposed Greenways
Civic/ Institution
Hospitality

Retail
Stacked Flats
Garden Townhomes
Single-family

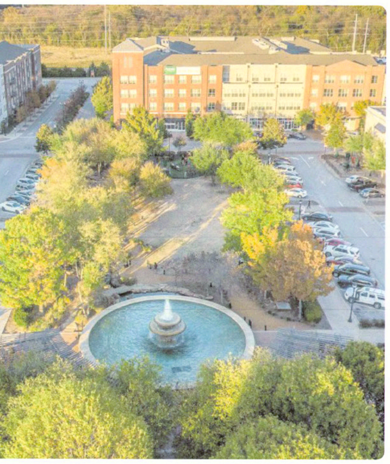
CORE INTENSITY
LEAST INTENSITY

Note: Land Use patterns are kept along street edges and not entire parcels to emphasize relatio

Alternatives Workshop

LAND USE/ INTENSITY - ALTERNATIVE 3 (PHASE 1+2)

TOWN CENTER ALTERNATIVE 3



(PLACE YOUR GREEN DOTS ON YOUR FAVORITE LAND USE ALTERNATIVE)

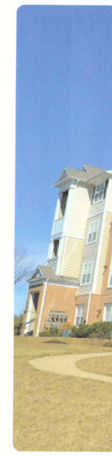
nship between streetscape and building frontage (building setbacks, sidewalks, etc).

Like more walking paths

H-GAC MONT BELVIEU LIVABL … DY
MONT BELVIEU, TX • H-GAC/ CITY OF MON … 8

WHAT WILL HAPPEN IF DEVELOPMENT OCCURS AS IT HAS IN THE PAST?

- Results in large setbacks off of major thoroughfares such as FM565 and Eagle Drive.
- Large-scale retail centers will be located at the FM565 and Grand Parkway exit (service road).
- Vehicle-oriented retail (drive-thrus, etc) with large areas of surface parking.
- Private, less connected and ad-hoc single-family subdivisions will result in less walkable neighborhoods.
- Utilities powerlines will likely be placed above ground, impeding on sidewalks and the public realm.
- Multifamily needs will result in poorly-planned apartment complexes.
- Traffic will be backed up on FM565 and Eagle Drive due to the little to no interconnected roadway network.



GOALS + METRICS ACHIEVED

PUBLIC REALM:
- NONE

SUSTAINABLE GROWTH + ECONOMY
- Faster speed of development, but with ad hoc results.
- Development will occur as there are needs in the community.

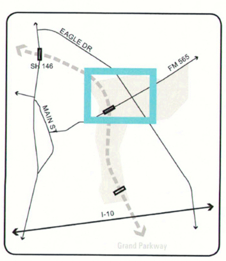
MOBILITY

NONE

INFRASTRUCTURE
- Detention/retention ponds are developed around residential subdivision to maintain stormwater needs.

FUNDING
- Funding for new construction of roadway and development will rely mainly on builders and developers.
- Funding for City Hall renovation will be independent of surroundings.

WHICH MODEL DO YOU PREFER? (



- Study area
- Existing Roadways
- Freeways
- Existing Trails (on/off-street)
- Existing Roadway
- Park Space
- Existing Commercial

- Retail
- Apartment Complexes
- Garden Townhomes
- Single-family

CORE INTENSITY

LEAST INTENSITY

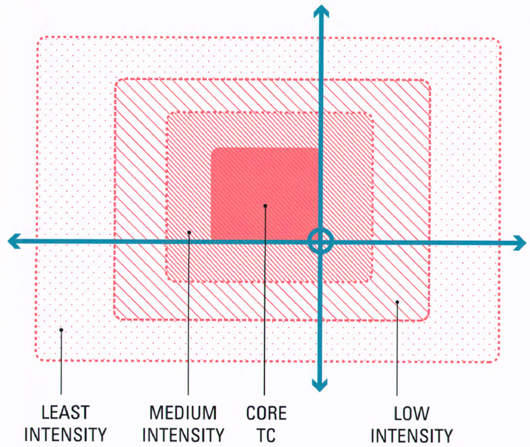
Note: Land Use patterns are kept along street edges and not entire parcels to emphasize relation

Alternatives Workshop

MONT BELVIEU MAIN ALTERNATIVES - 'DEVELOPING AS IS' (PHASE 1+2)

TOWN CENTER ALTERNATIVE 4

OVERALL PLANNING STRATEGY

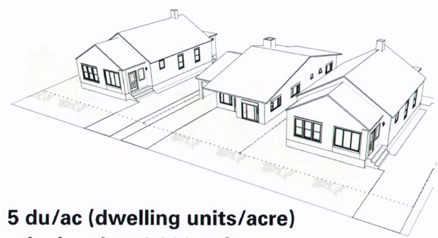


The overall planning strategy for the town center and its surrounding land uses is to propose levels of intense development in the core near town center retail, and maintain low intensity (less dense) housing development moving out from the core. For example, stacked flats would be located in or just around the town center, followed by attached single-family, garden-style detached homes and finally, larger single-family lots on the outer perimeter of the town center complex. In order to achieve this, there will need to be prescribed regulations in place (ie: zoning overlays, overlay districts, form-based code).

WHAT ARE YOUR THOUGHTS?

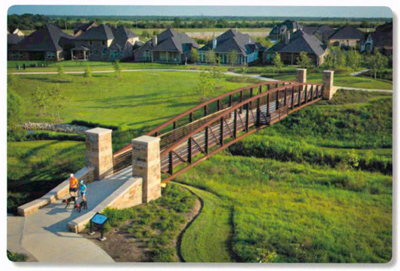
housing

single-family

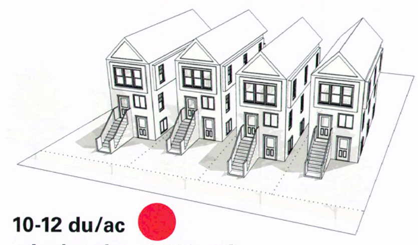


5 du/ac (dwelling units/acre)
min. lot size: 6,000 sqft

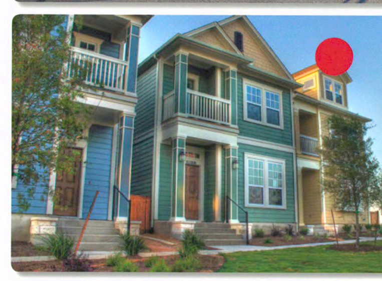
LEAST INTENSITY

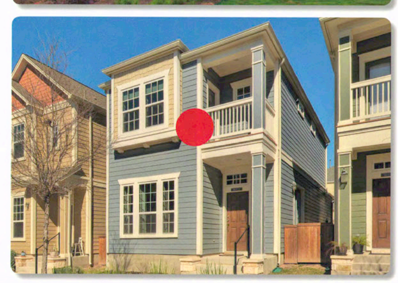


detached garden homes



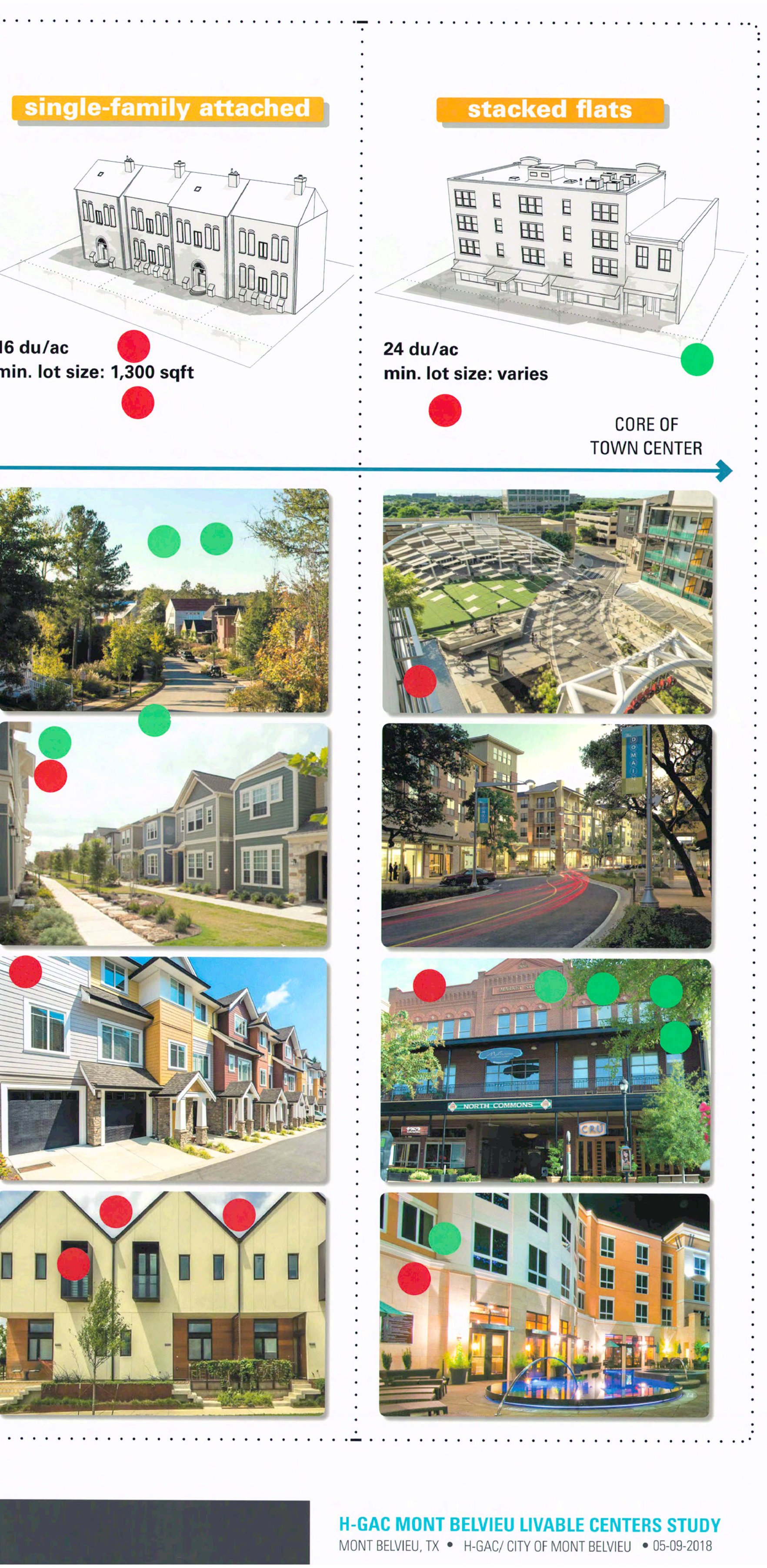
10-12 du/ac
min. lot size: 4,500 sqft





MONT BELVIEU MAIN - PROGRAM DENSITY

PROGRAM DENSITY

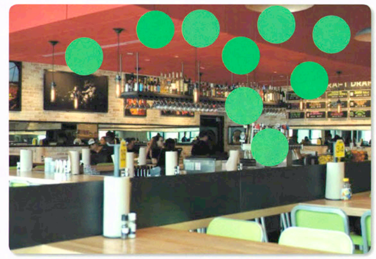


WHAT ELSE WOULD YOU LIKE TO SEE IN MONT BELVIEU MAIN? (PLEASE WRITE YOUR IDEAS HERE!)

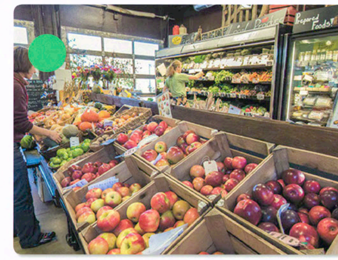
SHOE STORE

PROPOSED PROGRAMMATIC ELEMENTS

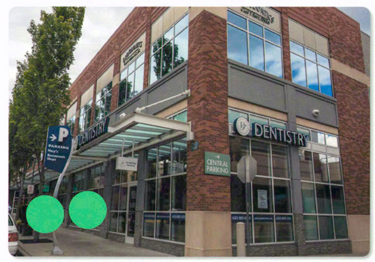
retail



RESTAURANTS/ CAFES



LOCAL GROCERS

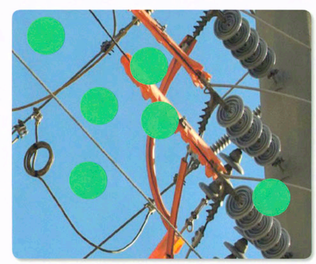


BOUTIQUE HEALTHCARE

FITNESS

smart systems

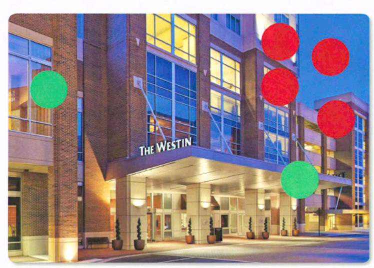
SOLAR-POWERED PANELS/ LED LIGHTING



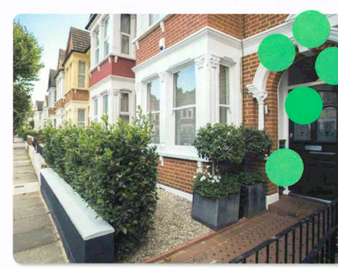
MICRO-GRID, GROUNDED UTILITIES

WATER

hospitality



HOTELS

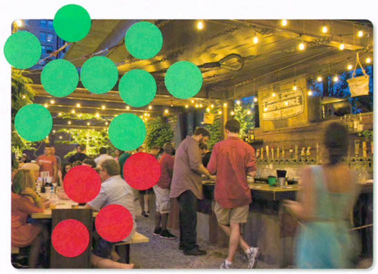


BED AND BREAKFASTS

Alternatives Workshop

PROGRAM IDEAS AT YOUR MONT BELVIEU MAIN

PROGRAM IDEAS FOR MONT BELVIEU MAIN



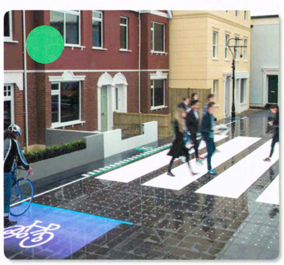
BEER GARDENS/ BREWERY

FLORISTS/ BAKERIES/ DESSERTS

PERSONAL SERVICES

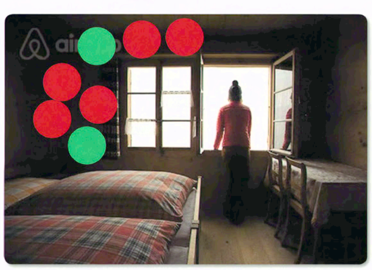
SMALL OFFICE

MANAGEMENT



TRAFFIC SENSORS, SMART PEDESTRIAN CROSSINGS

PUBLIC WI-FI



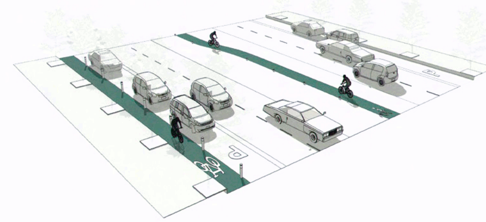
SHORT-TERM RENTALS

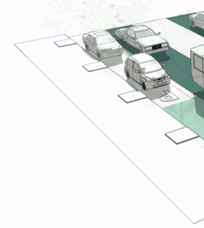
WHAT ELSE WOULD YOU LIKE TO SEE IN MONT BELVIEU MAIN? (PLEASE WRITE YOUR IDEAS HERE!)

·Water feature that also doubles as a splash area for kids.

PROPOSED PROGRAMMATIC ELEMENTS

public realm



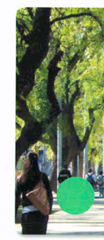


BIKE PATHS/ TRAILS

INTERNAL TROLLEY NET

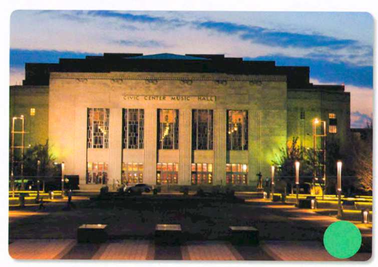
STORMWATER MANAGEMENT (BIOSWALES/ RAINGARDENS)

PARKS/ PLAZAS



SHADE TR

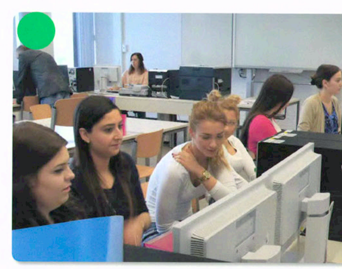
civic



CIVIC CENTERS

CULTURAL HUBS

AMPHITHEATERS



HIGHER EDUCATION/ TRADE SCHOOLS

PROGRAM IDEAS AT YOUR MONT BELVIEU MAIN

PROGRAM IDEAS FOR MONT BELVIEU MAIN

MONT BELVIEU LIVABLE CENTER

MARKET ASSESSMENT

PREPARED BY:

CDS

MONT BELVIEU LIVABLE CENTER MARKET ASSESSMENT

Prepared for:

City of Mont Belvieu

Prepared by:

CDS Community Development Strategies

1001 S. Dairy Ashford, Suite 450

Houston, TX 77077

(713) 465-8866

www.cdsmr.com

TABLE OF CONTENTS

FIGURES

TABLES

GLOSSARY OF TERMS

Abbreviation	Definition
ADR	Average Daily Rate - a statistical unit used in the hotel industry to show the average rental income per paid occupied room in a given time period.
RevPAR	Revenue Per Available Room - a performance metric used in the hotel industry calculated by multiplying a hotel's average daily room rate (ADR) by its occupancy rate. It may also be calculated by dividing a hotel's total room revenue by the total number of available rooms in the period being measured.
TAZ	Traffic Analysis Zone - the unit of geography most commonly used in conventional transportation planning models. Zones are constructed by census block information. Typically, these blocks are used in transportation models by providing socio-economic data. States differ in the socio-economic data that they attribute to the zones. The critical information it displays and can be used to forecast include; residential population, households and employment within these zones. This information helps to further the understanding of trips that are produced and attracted within the zone.
CMA	Competitive Market Area - a geographical area created to analyze real estate market and socioeconomic data for comparison to a similar geographical area.
HGAC	Houston Galveston Area Council - the regional 13-county organization through which local governments consider issues and cooperate in solving area wide problems such as transportation and land use.
MLS	Multiple Listing Service - a database used by real estate brokers representing sellers under a listing contract to provide property transaction data.
PRIZM	Potential Rating Index for Zip Marketers - defines every U.S. household in terms of 66 demographically and behaviorally distinct types, or "segments," to help marketers discern those consumers' likes, dislikes, lifestyles and purchase behaviors taking place in the American marketplace.
ETJ	Extra Territorial Jurisdiction - the legal ability to exercise authority of the nearest town / city's form of government. An ETJ is measured from any given city limit line to a mile out or more depending on the population of the adjacent town / city.

INTRODUCTION

This report summarizes the research and analysis performed by CDS Community Development Strategies (CDS) for the Mont Belvieu Livable Center Study of the Houston-Galveston Area Council (H-GAC). It contains an overview of the market conditions and opportunities that will ultimately shape the recommendations for revitalization, redevelopment, and general enhancement of the Livable Center Study Area.

MONT BELVIEU (STUDY AREA)

Mont Belvieu is a city in Chambers and Liberty Counties. It is just north of Interstate 10 along State Highway 146. A small part of the city limits extends north into Liberty County. The city is 14 miles northeast of Baytown via Highway 146 and 31 miles east of Houston via Interstate 10. The city will be referred to at some points throughout this report as "Study Area".

Figure 1: Map of Mont Belvieu City Limits and ETJ

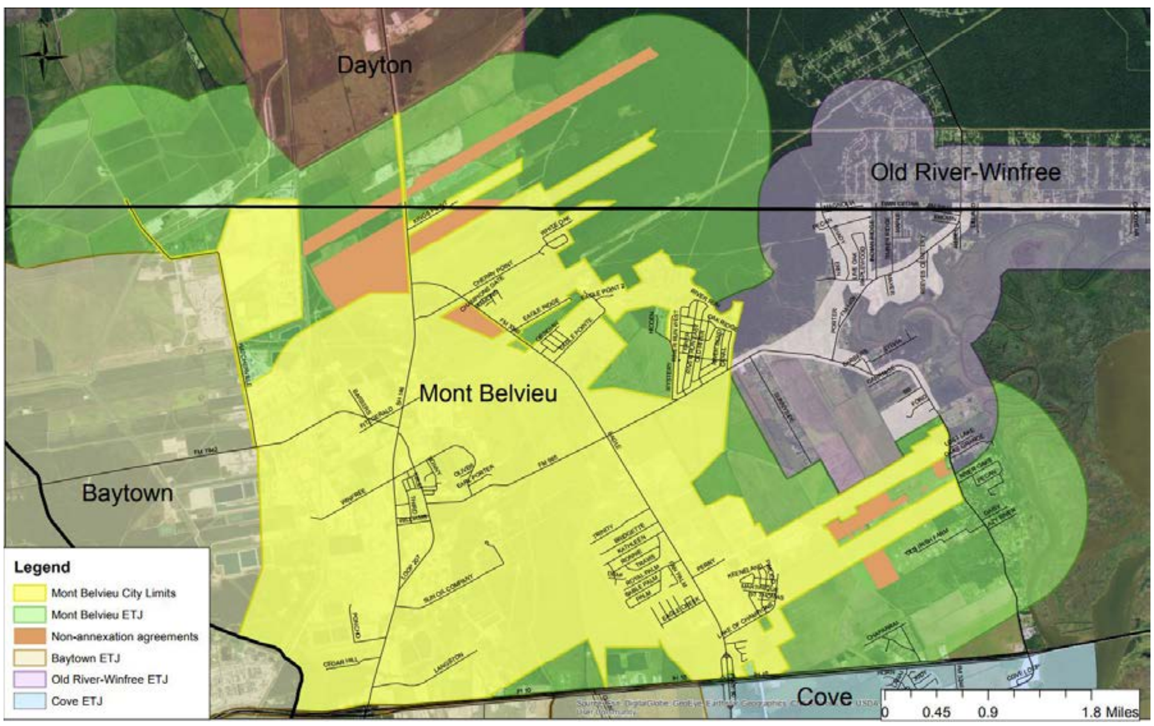
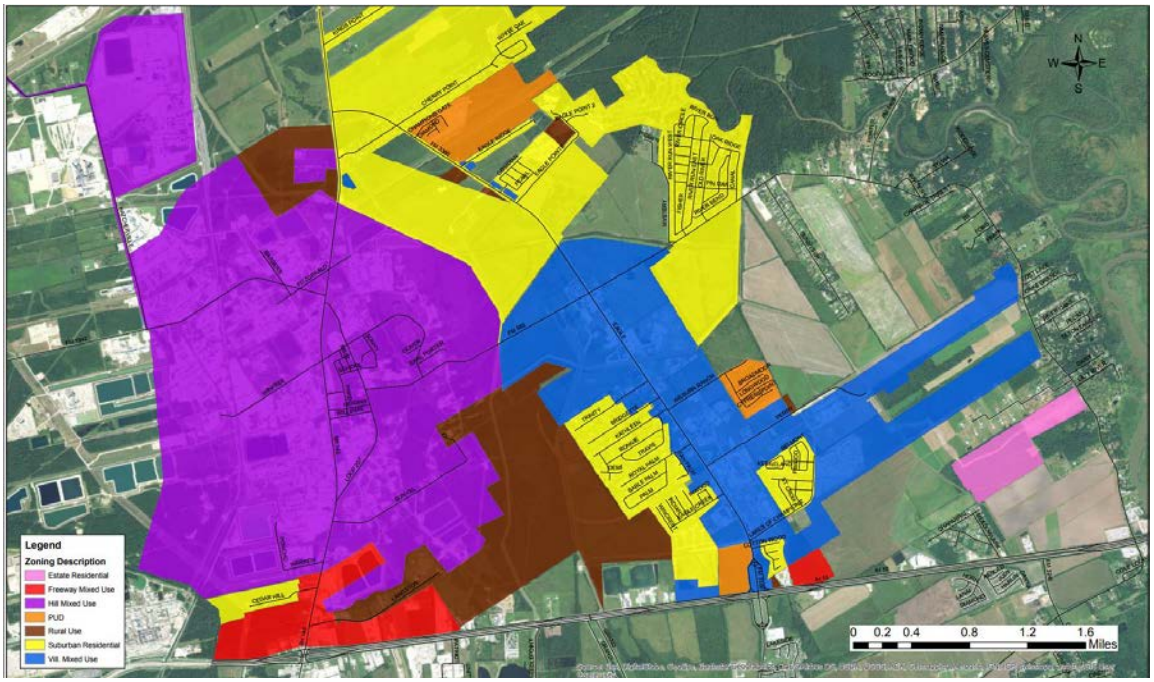


Figure 2: Mont Belvieu Zoning Map, 2017



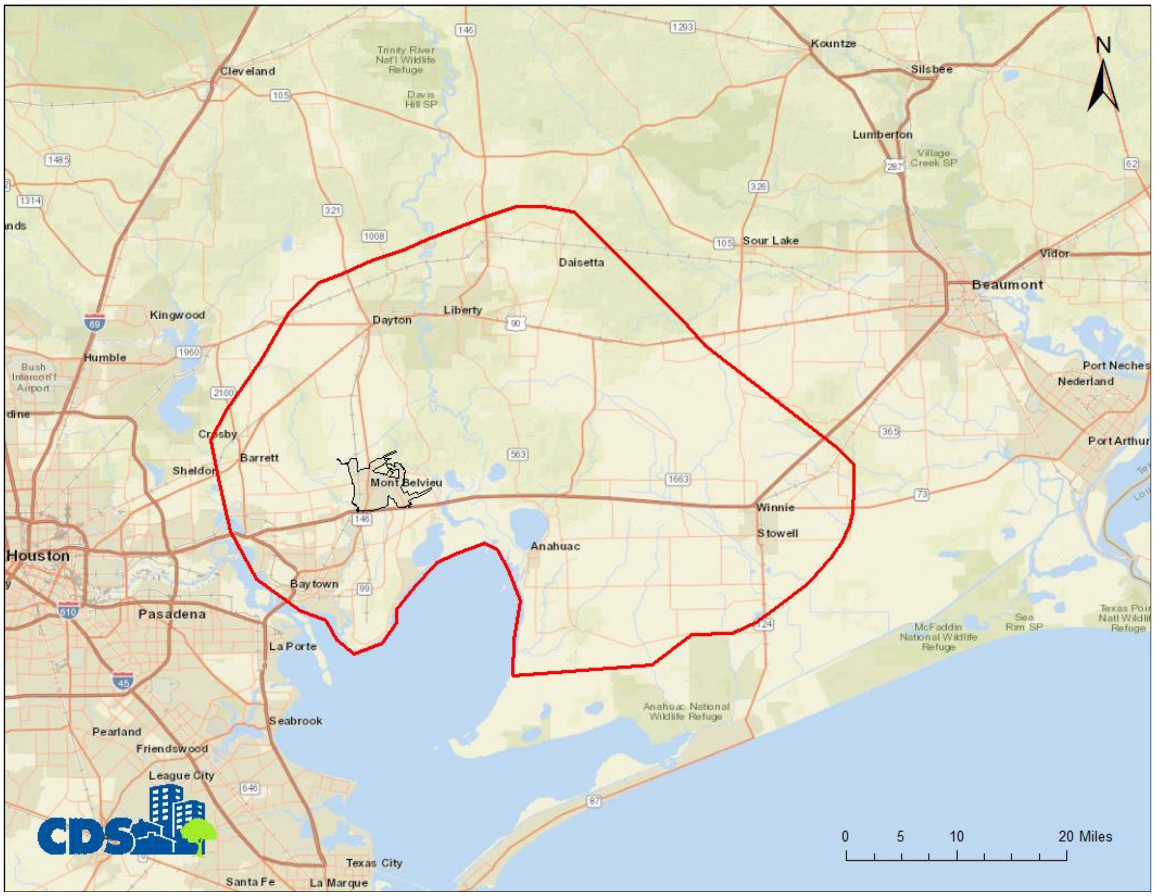
Source: CDS Community Development Strategies

A large portion of Mont Belvieu is zoned Hill Mixed Use (purple). Suburban residential and Village Mixed Use are the next larger zoning areas as shown on the map above.

MONT BELVIEU COMPETITIVE MARKET AREA (CMA)

The economic and development opportunities within the Livable Center Study Area are ultimately determined by the overall nature and volume of market demand in the greater area of which the Study Area is located. CDS considered a Competitive Market Area (CMA), encompassing an area that is roughly bounded by the following landmarks: Highway 90 to the north, FM 365/FM 1406 to the east, Trinity Bay to the south, and San Jacinto River to the west. The term "market area" and CMA are used interchangeably in this report.

Figure 3: Map of the Competitive Market Area and Study Area

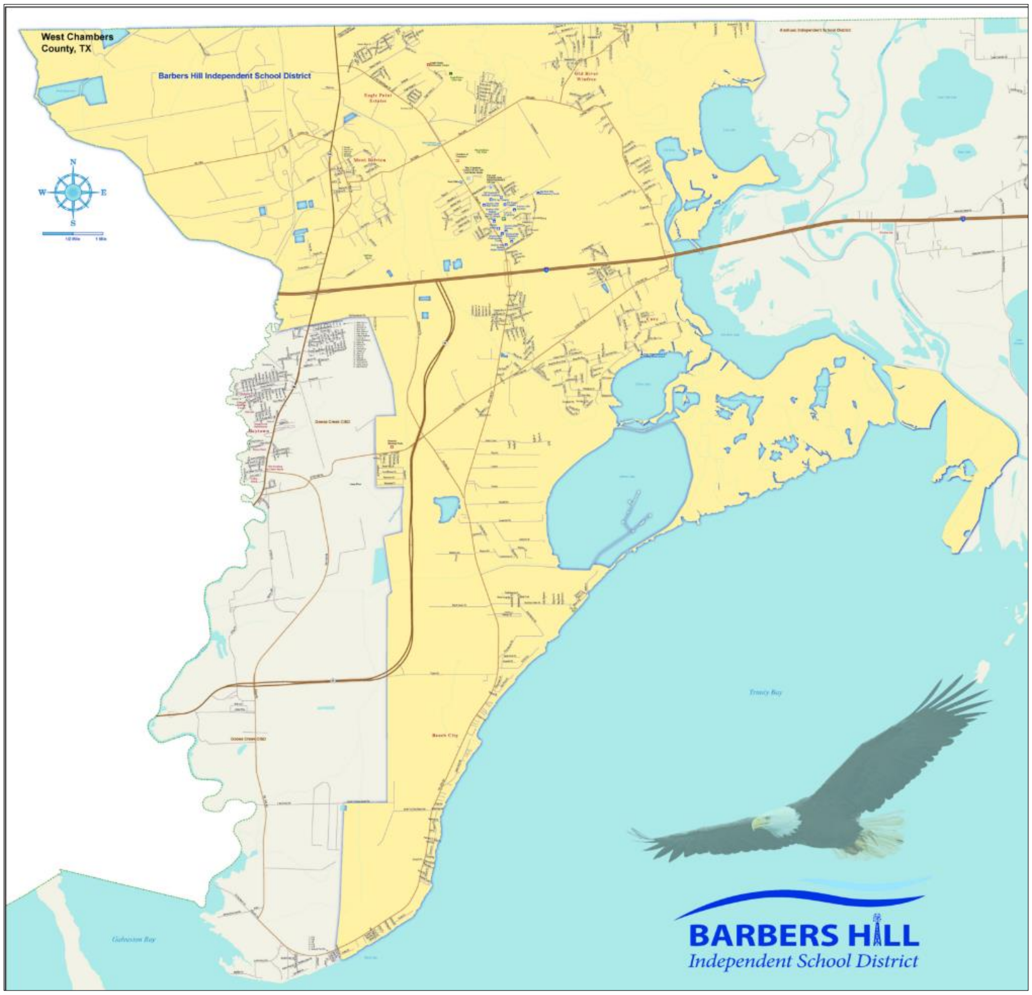


MONT BELVIEU CHARACTERISTICS

Schools

Mont Belvieu is served by the Barbers Hill Independent School District. The district encompasses four communities: Mont Belvieu, Old River-Winfree, Cove, and Beach City, and covers 192.3 square miles.

Figure 4: Barbers Hill Independent School District Map



Barbers Hill ISD includes 8 campuses: one high school, two middle schools, two elementary, one primary (first grade) campus, a kindergarten campus, and an alternative (disciplinary) campus. Enrollment was 5,236 in 2016.

All BHISD campuses "Met Standard" in 2017, which is the highest rating by the Texas Education Agency. In addition, Barbers Hill High School, Barbers Hill Elementary School North and Barbers Hill Elementary School South received 8 TEA Distinction Designations.

SUMMARY OF FINDINGS

DEMOGRAPHIC AND ECONOMIC ANALYSIS

- The Competitive Market Area (CMA) includes the following 25 zip codes shown to the right.
- The Study Area is defined by the City of Mont Belvieu.
- The Study Area includes 7,479 persons while the CMA has a population of 215,829.

CMA Zip Codes				
77665	77514	77560	77597	77533
77575	77521	77705	77520	77519
77659	77580	77661	77049	77564
77538	77530	77562	77535	77044
77561	77523	77622	77532	77629

Since 2010, estimates for the Study Area show a population increase of 95%. Over the same period, from 2010 to 2018, the CMA has seen high growth at 14.6%.

- The CMA only saw increases in age groups of people 55 and older and a slight increase of people 25 to 34 from 2010 to 2018; the largest increase was in ages 65 to 74. The highest percentage of growth in the Study Area took place in the age groups of 21 to 24, followed by 65 to 74. The largest percentage decrease was in ages 10 to 14 and 35 to 44 in the Study Area.
- The Study Area has 15.06% Hispanic or Latino population and the CMA has 34.09%.
- Average Household size is about 2.9 in the Study Area and in the CMA as well. Educational attainment in the Study Area and CMA shows a higher portion of residents with an advanced degree, yet at the same time shows a lower portion of residents with a bachelor's degree compared to Chambers and Harris Counties. The Study Area shows a lower portion of residents with lower educational attainment (less than 9th grade and some high school no diploma) than compared to Chambers and Harris Counties.
- The average household income in the Study Area is $114,891; in the CMA, $80,177.
- According to 2017 estimates, the Study Area has a lower percentage of families in poverty (7.42%) and the CMA has a just slightly higher percentage (12.1%) when compared to Harris (20.9%) County.
- The 2025 projections from the H-GAC and CDS projections estimate that the population in the CMA will increase by roughly 6.5%.

Average of CDS and HGAC Forecasts - CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	187,537	197,515	229,796	262,166	298,206	353,604
Households	66,687	71,441	83,261	96,629	110,783	132,729
Employment	67,341	72,130	77,466	84,849	95,051	105,118

Source: CDS Community Development Strategies, H-GAC

- The CMA has 90,310 employed residents, or 41.8% of the population; there are 48.94% white collar and 35.99% blue collar workers in the CMA.

SINGLE FAMILY HOUSING MARKET

- Single-family home sales for the full year rose 3.5 percent compared to 2016, the previous record year.
- As 2018 gets underway, the supply of housing remains constrained.
- Inventory had begun to reach more balanced levels when Harvey's widespread flooding sent affected residents desperately seeking undamaged rental and sales homes on the market.
- Sales of all property types in 2017 totaled 94,726 units, a 3.5-percent increase over 2016's volume, which was 91,530.
- Total dollar volume for single-family homes sold in 2017 rose 6.5 percent to $23 billion.
- December single-family home sales rose 4.1 percent to 6,875 versus December 2016. The strongest sales performance took place among homes priced between $250,000 and $500,000.
- The single-family home median price (the figure at which half of the homes sold for more and half sold for less) rose 1.7 percent to $230,000. That marks the highest median price ever for a December. The average price declined 0.6 percent to $292,174.
- Months of inventory began the year at a 3.3-months' supply, and while it grew to a 4.3-months' supply just before Harvey struck the region, it ended 2017 at a 3.2-months' supply.
- Days on Market (DOM), or the number of days it took the average home to sell, was unchanged at 62.
- The average sales price for existing homes rose 2.6 percent to $276,738 while the median sales price of existing homes increased 1.2 percent to $211,000.
- Townhome and condominium sales increased 3.2 percent in December, with 552 units selling versus 535 a year earlier. The average price fell 5.5 percent to $199,197 and the median price dropped 9.3 percent to $158,250. Inventory went from a 3.4-months' supply to 3.3 months.
- Houston's lease market had a mixed performance in December. Single-family home leases fell 3.6 percent and townhome/condominium leases rose 7.3 percent. The average rent for single-family homes increased 3.3 percent to $1,745, while the average rent for townhomes/condominiums rose 2.4 percent to $1,532.

Competitive Market Area Housing

- The CMA includes 74,346 housing units of which 72.53% are owner occupied.
- Approximately 15.7% of the housing units are multifamily (12,989 units) which includes townhomes, duplexes, apartments, etc.
- The median housing value of owner occupied homes is $133,493.
- There were 2,125 sales in 2017. The average price was $191,875.
- The average price was $191,875 and the median price was $180,000. Prices rose 6.5% from 2016 to 2017.
- There are 540 current active listings ranging from $15,000 to $1,650,000.
- The average list price is $261,237. The max priced homes are located at Point Barrow on the Bay in Beach City.
- There were 2,005 homes sold in the CMA in 2016. The average sales price was $180,228 and the median was $169,000.
- There were 392 new construction homes sold in 2017.

- As shown using the 72.53% of households owning in the CMA (2017 estimate) there is a potential demand to support 2,150 new homes through 2020 based on current lot supplies.

CMA Single Family Demand

Category	2015	2020	2025	2030
Total current and projected CMA households	66,687	71,441	83,261	96,629
Incremental housing unit demand		4,754	11,820	13,368
CMA single family demand (72.53%) p.31		3,448	8,573	9,696
Less CMA Available Lots p.39		-1,298		
CMA Single Family Demand		2,150	8,573	9,696

Sources: US Census, American Community Survey, PCensus, CDS

Study Area Housing Market

- There are an estimated 2,955 housing units in the City of Mont Belvieu, including single and multifamily.
- Approximately 81.1% of the occupied units are owner-occupied.
- The median value for owner-occupied housing is $211,301 which is greater than the CMA ($133,493).
- There are 78.8% single family housing units in the Study Area and 15.5% multifamily units (457) which includes apartments, townhomes, duplexes, triplexes and fourplexes.
- The largest share (34.4%) of the housing structures were built between 2000 and 2009. Only 14.2% have been built before 1980.
- In 2017, 65 homes in Mont Belvieu were sold. The average sales price was $288,352 or $111.76psf. This is 49.6% higher average sales price than the CMA in 2017.
- There are only 7 active listings (resale) in the Study Area currently. They range from $199,000 to $420,000.
- There were 61 homes sold in the Study Area in 2016. The average sales price was $260,535 and the median was $265,000.
- In 2017, 90 new construction homes sold in the Study Area.
- The average sales price for new construction homes in the Study Area was $303,765 or $114.07psf. This is 21.6% higher average new home sales price in the CMA in 2017.
- New Construction subdivisions in Mont Belvieu include Eagle Point Estates, Legends Bay, Magnolia Landing, Villages of Champion Gate, Brookstone, Cherry Creek, and Ice Creek Crossing.
- At 2017, Mont Belvieu has an estimated 4% capture of the overall CMA housing units (2,151/53,921). Application of the capture rate to the CMA single family forecasted demand results in 86 homes by 2020 and an additional 343 homes by 2025 based on projected demand.

Study Area Single Family Demand

	2020	2025	2030
CMA Projected Single Family Demand	2,150	8,573	9,696
Study Area housing unit demand (3.2%)	215	857	970
Study Area Single Family Demand Annually	**108**	**172**	**194**

Sources: PCensus for Map Info, Copyright 2016 Tetrad Corporation, CDS, HGAC

MULTIFAMILY HOUSING MARKET

- The Houston multifamily sector had an auspicious quarter as Hurricane Harvey pummeled the city with fifty-five inches of rain. While hampering leasing activity in the short run and impacting a sizeable number of units citywide, Harvey's long-term impacts should help push the market towards equilibrium.
- Overall occupancy decreased by 0.6% over the quarter, finishing at 88.3%.
- Class A properties continue to rebound with occupancy increasing by 4.2% over the period, ending at 83.8%.
- Class B properties recorded the highest occupancy amongst the class groups averaging 90.5%.
- Class C assets averaged 89.2%, followed by Class D assets at 87.3%.
- When subtracting units damaged by Harvey, overall occupancy increased to over 90% this quarter.
- Absorption for the Houston multifamily market was negative in the third quarter, with absorption of negative 4,170 units. However, when removing damaged units from this calculation, absorption for the market equates to 10,926, or just under 24,000 units year-to-date.
- Asking rental rates increased significantly over the period, ticking up by 1.7% to $999 per unit, from $982 per unit at the close of the second quarter.
- Extrapolated over a full year, this growth rate equates to just under 7.0%.
- Submarkets with the highest rental rate growth quarter over quarter were Katy/Cinco Ranch/Waterside – 5.5%, Highland Village/ Upper Kirby/West U – 5.3%, and Galleria/Uptown – 4.3%.
- Concessions were reported in 41% of the market with the average special provided at 8.4% of total rent.
- Capitalizing on the sudden surge of demand generated by Harvey, rental rates should continue to increase as pressure mounts on concessions.
- For the 12 months ending in September, over 19,501 units in 73 communities were delivered across the Houston metro.
- Currently, there are 10,445 units in 39 communities under construction and 16,436 units in 56 communities proposed. Submarkets with the highest level of construction activity include Montrose/Museum/Midtown – 1,771 infill units, Energy Corridor/City Centre/Briar Forest – 1,762 suburban units, and Woodlands/Conroe South – 1,117 suburban units.
- Construction activity has declined drastically from its peak in 2015, but is anticipated to slowly pick back up as job growth increases and demand for apartment units remains high.

CMA Multifamily Housing Market

- The CMA includes three multifamily submarkets; I-10 East/Woodforest/Channelview, Northeast Houston/Crosby and Baytown, with occupancy rates of 82.5%, 83.3%, and 88.6% respectively.
- Compared to the overall Houston rate of 88.3% the submarkets, except for Baytown, are below market.
- Rents vary from $0.88 to $1.00 which are all below the Houston average of $1.13.
- The CMA includes 12,918 units.
- Five hundred eighty-two (582) units are under construction and another 240 are proposed.
- Most of the units are market rate, with 2,631 being affordable (20.4%).
- There are 484 Senior units (280 are affordable).
- The vacancy rate in the CMA is 11.9%.
- Rental rates for apartments have been steadily increasing since 2013.
- Rents have increased 30% in this market over the past five years.

- Rental rates range from $0.80psf to $1.05psf.
- Rental rates are at $1.00psf on average. Concessions are being offered in this market.
- Overall absorption in the CMA has been a positive 117 units annually.
- There are 1,381 Class A units; 5,066 are Class B and 6,344 are Class C.
- The average year built is 1982.
- Newer units are Class A and B.
- Of all the multifamily units in the CMA, 39.1% are one-bedroom units; 42.7% are two-bedroom units and 9.8% are three-bedroom units.
- Units under construction are one and two-bedroom units only.

CMA Multifamily Demand

Category	2015	2020	2025	2030
Total current and projected CMA households	66,687	71,441	83,261	96,629
Incremental housing unit demand		4,754	11,820	13,368
CMA multifamily demand (27.5) p.31		1,307	3,251	3,676
Less CMA Pipeline Units p.48		-866	0	0
CMA Multifamily Demand		441	3,251	3,676

Sources: US Census, American Community Survey, PCensus

Study Area Multifamily Housing Market

- There are 152 units in one Class B complex in the Study Area constructed in 2010, located on Eagle Dr. just south of FM 565.
- Asking rents are $1.44psf on average with vacancy of 4%.
- 52.6% one-bedrooms; 42.1% two-bedrooms; 5.2% three-bedrooms
- Amenities – gated, pool, w/d, business center, clubhouse

Potential Demand – Multifamily Housing

- At 2017, Mont Belvieu has an estimated 2.5% capture of the overall CMA multifamily units. Application of the capture rate to the CMA multifamily forecasted demand results in a total of 346 units through 2030 based on projected demand by CDS. Due to the low demand, townhomes may be a more attractive product for this market.

Study Area Multifamily Demand

Category	2020	2025	2030
CMA Projected Multifamily Demand	441	3,251	3,676
Study Area Projected Multifamily Demand (1.8%)	22	163	184

Sources: CDS Community Development Strategies

Given the number of existing apartments in the Study Area and rental rates, CDS does not recommend conventional market rate apartments at this time.

SENIOR HOUSING

- There are currently three Senior housing projects in the CMA.
- None of these are in the Study Area, they are in Baytown.
- Two are existing (Affordable) and one is under construction (Market Rate).
- Rental rates for affordable units range from $0.95psf to $1.01psf.
- Vacancy is low at 2.4%.
- Units are new.
- 61.4% are one-bedroom units; 38.6% two-bedrooms.
- Amenities include w/d, Breakfast/Coffee, Concierge, Elevator, Fitness center, Outdoor Grill, Movie Theatre, Planned Social Activities, and Pool.
- Approximately 31.4% (834) of the total 2018 Study Area housing units are owner-occupied by persons age 55 and over in the Study Area; 7.4% (195) are rental units occupied by seniors.

Potential Demand – Senior Housing

- CDS estimated that the Study Area could capture 100% of the estimated market growth based on the percentage of households age 55+ currently renting in the Study Area. The total future Study Area household growth results in 36 additional renters in the next five years (by 2022) age 55+.

Study Area Adult Living Demand Projections

Category	2018	2023
Study Area Senior HH Growth	1,029	1,467
Incremental Senior HH Growth		437
22.8% CMA Households age 55+ Renters		32

Sources: CDS Community Development Strategies

- CDS recommends a small 30 to 50-unit gated age 55+ rental community – perhaps townhomes, patio homes, cottages or traditional garden apartments.
- Tax Credit **does not** appear to be feasible in this area.
- Class A development.
- Lease rates should be between $1.25psf and $1.45 depending on level of amenities and finishes.
- Amenities should include access gates, community room, planned activities, BBQ area, walking trails, fitness room, and pool at a minimum.
- Higher rents could be supported by shuttle service, hair salon, coffee bar, etc.
- Unit mix should consist of 60% one bedroom and 40% two-bedroom units.
- Average unit size should be consistent with the current market – 800 square feet on average.
- Using the suggested pricing (average rental rates) of $1.25psf at 800sf the average rental rate would be $1,000/month.

RETAIL MARKET

- This year brought its challenges to the Houston retail market: an abundance of U.S. retail bankruptcies, Hurricane Harvey's impact on local restaurants, and a continued supply shortage of prime space.
- Stable demand during the final 90 days of 2017 resulted in the year's strongest quarter of net absorption and brought the annual total to almost 2 million sq. ft.—well above the 10- year average of 1.1 million sq. ft.
- Tightening availability propelled overall occupancy to 94.1% and Class A to 97.4%, slowed large expansions, and drove deal flow in small-shop and restaurant segments.
- New construction activity continues to provide lift to net absorption totals, as 719,000 sq. ft. was occupied in projects delivered this quarter.
- October 2017 sales tax revenues show improving consumer and business spending across the Houston metro, likely due to hurricane recovery expenditures for furniture and home improvement needs.
- Houston regional retail sales volumes are forecast to reach $75.5 million in 2018, a 5.7% increase from 2017.
- Similar sales growth is projected over the next 5 years.
- Good indicators for the retail sector in the year ahead.

CMA Retail Market

- There are 818 retail buildings including 10,653,156sf in the CMA.
- The average rental rate is $13.24psf (NNN) with a vacancy rate of 4.4%.
- There is 300,000sf currently under construction.
- In the past 12 months, 291,474 square feet have been absorbed in the CMA.
- Net absorption has been relatively positive in the market despite a negative in 2015. The leasing outlook over the next 60 months is for continued absorption.

Potential Demand

- The phenomenon of pioneering local businesses such as bars or restaurants investing in the Study Area is more likely to occur with incentives or additional middle-income population in the area.
- The top lifestyle segments, correlated to likes, dislikes and purchase behavior relative to retail goods and services show the largest household segment in the Study Area is Township Travelers (8.54% or 4,275 households), followed by Second City Generations (5.68% or 2,840 households).
- The psychographics data for Township Travelers represent a consumer base oriented towards upscale incomes and small-town environment, enjoying outdoor activities, watching college sports and shopping at wholesale clubs and gourmet groceries.
- Furthermore, Second City Generations are often multi-generational households with parents or grandparents and new babies and young children under one roof, often bilingual. They are entertained by a wide variety of media channels and programs.

- CDS believes that the three retail business categories mentioned above are supportable at the neighborhood level and could be successful in Mont Belvieu Main.
- It is the opinion of CDS that new retail space should be focused on facilitating local businesses in three main categories or types; food and drink like a wine bar, beer garden, coffee shop, café, grill – personal services like local real estate agents, boutique healthcare (dentist, chiropractor, etc.), local tax service, hair salon/barber shop – and, fitness, health and wellness businesses, for instance a local cross fit, yoga, pilates - activity based businesses.
- The aggregate expenditure estimates for the CMA are higher in every category except Clothing Accessories Stores. This indicates that residents are shopping outside the CMA for these items, thus there is very little leakage in the CMA currently.
- The category representing the highest leakage is Clothing Accessories Stores, which could mean opportunities for clothing retailers in the future, especially if household and employment continue to grow. However, Mont Belvieu Crossing will address this leakage to some extent with the newly constructed TJ Maxx and likely at least one additional large clothing retailer.
- Perhaps the Study Area and CMA could support a modest community/neighborhood level retail as a component of Mont Belvieu Main but only if a close eye is kept on the type and scale of business and space provided for businesses with regards to CDS recommendations on the types of businesses.
- Independent local businesses serving the area’s moderate-income population will generally prefer the lower-rent existing retail space in the area over more expensive newer space.
- Increasing population growth will help mitigate this situation over time as associated retail demand increases, along with the ability of local businesses to pay higher rents.
- In some cases, an independent entrepreneur will have enough access to capital to allow for new construction or substantial renovation of existing buildings.

HOSPITALITY MARKET

The Houston MSA includes 99,160 rooms (YE2017) with a 65.2% estimated occupancy and a $71.75 RevPAR according to Source Strategies, Inc.

The following hotels have experienced either minor or major renovations in the past several years: Hotel Derek, Royal Sonesta, Wyndham Houston West Energy Corridor, Westin Houston Downtown, Lancaster Houston Hotel, and the Sam Houston Hotel. Houston continues to have double-digit RevPAR growth, and this trend will continue further into the future with the expansion of businesses, jobs, and population in the city.

The office of the Governor, Economic Development & Tourism reports that from 2006 to 2015, room revenues increased 58.5% in the overall Houston hotel market. Occupancy rose steadily from 2006 to 2008 and fell dramatically from 67.5% (2008) to 57.7% in 2010. From 2011 occupancy increased from 62.1% to 70.8% in 2014 and decreased slightly in 2015 to 67.2%.

CMA Hospitality Market

- Historical hotel performance statistics for the CMA resemble the same trends for the MSA overall.
- Performance figures were steady and increasing from 2010 to 2014 but dropped off in 2015 when effects of the oil prices hit Houston and affected both business and leisure travel.
- At the same time, the market was supported by large construction crews creating demand and occupancy in the CMA due to local and regional expansions in the petrochemical industry.
- The CMA contains 2,040 hotel rooms that vary in type, quality, and size. The most recent occupancy figures for the CMA show 66.2% in 2017 for an average of 65.2% since 2011. RevPAR on average is $53.75.
- The number of hotels in the CMA has remained flat since 2011 when there were 24 hotels in the CMA to 2016 which shows 29 hotels in the CMA.
- The number of rooms has increased since 2011 by 22.6% from 1,664 total rooms to a total of 2,040 in 2017.
- Hotel revenues have increased significantly in the CMA by 143% rising from $15,088,248 in 2011 to $36,689,260 in 2017.
- Occupancy from the low in 2011, increased 66.2% in 2017.
- RevPAR has increased by 115% from 2011 ($24.98) to 2016 ($53.75).
- As petrochemical facility construction dwindles hotel room occupancy will follow accordingly with decreased occupancy.
- It is important to note that 2018 hotel data was not available at the time of this report, therefore any new hotels finished in 2018 are not listed in the hotel data in this section for the CMA.
- Occupancy is higher and RevPAR is lower in the CMA compared to the MSA due to the bulk of hotels in the CMA being moderate to lower rate establishments.

Potential Demand

- The CMA is certainly oriented at this time to the petrochemical manufacturing industry, and this fact must be recognized when considering performance trend data and future demand.
- With petrochemical facility construction in the CMA and region dwindling, it is difficult to say precisely what is going to happen in the near and long term with respect to occupancy and demand.
- Of all areas compared, the CMA is currently faring identically to the Houston MSA comparison area at 66.18% occupancy.
- At the same time, rooms were added in 2016 and 2017, which inherently impacts occupancy due to an increase in supply, even if demand does not decrease.
- The hospitality market in the CMA is decidedly moderate to low priced limited service since almost half of the establishments offer nightly rates at or below $50, reflected by the average RevPAR of $53.75.
- In 2017 new, higher end brand hotels were constructed in Baytown at I-10 and Garth Road which will offer higher rates in the $70-$100 a night range, bringing average RevPAR in the market up slightly.
- Based on what is currently supported by the market, new construction in 2017 and potential uncertainty of future construction related demand from petrochemical plant expansions, CDS has determined that additional hotel rooms at this time are not optimal.

OFFICE MARKET

- The final 90-days of 2017 marked the first quarter of positive net absorption in the Houston office market in 18 months.
- Overall leasing velocity remained relatively subdued compared to 2012-2015, trend data continue to suggest a subtle reversal in 2018.
- Decreasing levels of both direct and sublease availability indicate that modest gains in occupancy may continue to materialize in the near-term versus the consolidation and flight-to-quality themes prevailing during the past two years.
- Given healthy Texas and U.S. economic conditions, in concert with equilibrium levels of energy employment following a broad sector restructuring over the past several years, Houston's office market should begin 2018 on relative solid footing.
- Overall net office absorption totaled negative 2 million sq. ft. in 2017, with Class B activity contributing the bulk of move-outs which totaled almost 1.9 million sq. ft.
- This activity is consistent with the general market expectations, as a saturation of availability in both direct and sublease space drove competitiveness and lower effective rents in the Class A market.
- While a migration of occupiers to higher quality Class A space has resulted in falling levels of Class B occupancy, Class A buildings continue to be encumbered by the expiration of available sublease terms and footprint contractions.
- Houston's primary energy-exposed submarkets exemplified these trends, as the CBD, Energy Corridor, and Westchase all posted negative yearend net absorption totals across both Class A and B categories.
- Through 2018, Central Business District activity will remain a bellwether for overall market sentiment, and steady energy employment should provide some stability as excess capacities slowly subside.

CMA Office Market

- There are 230 office buildings totaling 2,245,466 square feet in the CMA.
- The vacancy rate is 6.2% and gross rents are at $21.48psf.
- The average year built is 1978.
- Throughout the entire CMA there are no existing Class A buildings.
- This is a Class B and C market.
- The growth of retail sales of $291 million is projected to take place in the CMA and would equate to a demand, in the CMA, for 971,198 square feet of new retail space of all types over the next 5 years.

Potential Demand – Office Space

- Using 200 square feet per employee, the estimated office space needed in the CMA by 2020 is 459,747sf for employment growth based on HGAC/CDS projections or 91,949sf annually.
- Absorption in the CMA overall has been -11,793sf annually over the past five years.

Future Office Demand for the CMA

	2015	2020	2025
Employment Projections	67,341	72,130	77,466
Incremental Increase		4,789	5,336
47.06% Labor Force/Prof. Jobs (p.24)		2,344	2,611
200 SF per Job		468,747	522,288
Less: CMA pipeline space to 2020		-9,000	
Incremental Demand		459,747	522,288
Annual Demand		**91,949**	**104,458**

Source: PCensus, CDS Community Development Strategies, HGAC

- By 2020, the CMA will have demand for 459,747 square feet of office space, including the currently under construction or proposed, to accommodate the expected employment growth in the market area Traffic Analysis Zones (TAZ).
- Based on the current supply of office space in the sub market (2,519,420sf), 89% (2,245,466sf) is located in the CMA and 1.3% (32,683sf) is located in Mont Belvieu.
- Therefore, the CMA can expect to absorb 459,747 square feet from 2016 to 2020 or 91,949sf annually based on employment projections.
- Based on these calculations Mont Belvieu can expect only about 240-300 square feet of office demand per year to 2020.
- It should be noted that nearly all of the existing and future expected office space is primarily driven by and normally attatched to a petrochemical cluster development in the CMA and overall region.
- In the City of Mont Belvieu there is one office building on Eagle Dr., but it is fully owner-occupied by Enterprise Products. Other Mont Belvieu office space is attached to petrochemical manufacturing facilities and is entirely Class C space.
- This means that future demand for office space in the CMA will be heavily correlated to petrochemical expansions and relocations in the CMA and region.
- This market is not suited for a traditional Class A spec, multi-tenant office building.
- CDS does not recommend a traditional office building of this kind.
- If creating a small supply of new office space is important, then a small to moderate scale of spec office space in Mont Belvieu could be executed as long as it can be accomplished in a unique and very deliberate manner, such as a component to a potential Mont Belvieu Downtown/Town Square project.
- Financial management businesses and other personal services like law, specialty boutique or alternative health businesses would be appropriate users and likely in demand as Mont Belvieu's affluent population grows.

INDUSTRIAL MARKET

- Houston's industrial market weathered the effects of low oil prices with expansions in industrial construction and absorption into Q22016.
- Total direct vacant space and total availability decreased in 2017 and Hurricane Harvey's impact had perceptible repercussions, yet Houston's key economic sectors still provided strong support of industrial expansion.
- Both the CMA and Study Area are in the Northeast sub-market.
- The Northeast market includes 32,654,962 square feet with a vacancy rate of 2.9% and asking rents at $0.53psf (gross).
- Net occupier demand was strong in 2017; however, pre-leased completions have begun to flatten, signaling potential tightening in the overall market in 2018, with the North submarket experiencing the greatest tightening (1.2%) in 3Q2017.
- The Northwest and Southeast submarkets saw the greatest expansion in speculative projects geared toward Port and West Houston distribution and logistics.
- The first two quarters of 2018 are anticipated to experience tightening, mostly due to a rise in user requirements and pipeline timing.
- The two sectors of the regional economy most closely tied to industrial performance in the region, Port and petrochemical, are predicted to continue to remain strong through 2018.
- Industrial is projected to continue moving in a steady or slightly upward trend entering 2018.
- This is based on the region's competitive advantage in petrochemical manufacturing and Port Houston's 2017 record-setting container volume expected to continue.

Potential Demand – Industrial Space

- As with the demand for the development of office space in the CMA, the demand for industrial development will be heavily dictated by the level of future petrochemical and related business development.

Future Industrial Demand

	2018	2020	2025	2030
CMA Employment Projections	67,341	72,130	77,466	84,849
36% Labor Force/Industrial Jobs	24,243	25,967	27,888	30,546
5 Yr increase		1,724	1,921	2,658
825 SF per Job		1,422,333 sf	1,584,792 sf	2,192,751 sf
Less: CMA pipeline space to 2020		1,368,664 sf	0 sf	0 sf
Total CMA SF Demand		53,669 sf	1,584,792 sf	2,192,751 sf
Study Area 5% of CMA		**2,683 sf**	**79,240 sf**	**109,638 sf**
Annual Study Area Demand		**537 sf**	**15,848 sf**	**21,928 sf**

Source: PCensus, CDS Community Development Strategies, HGAC

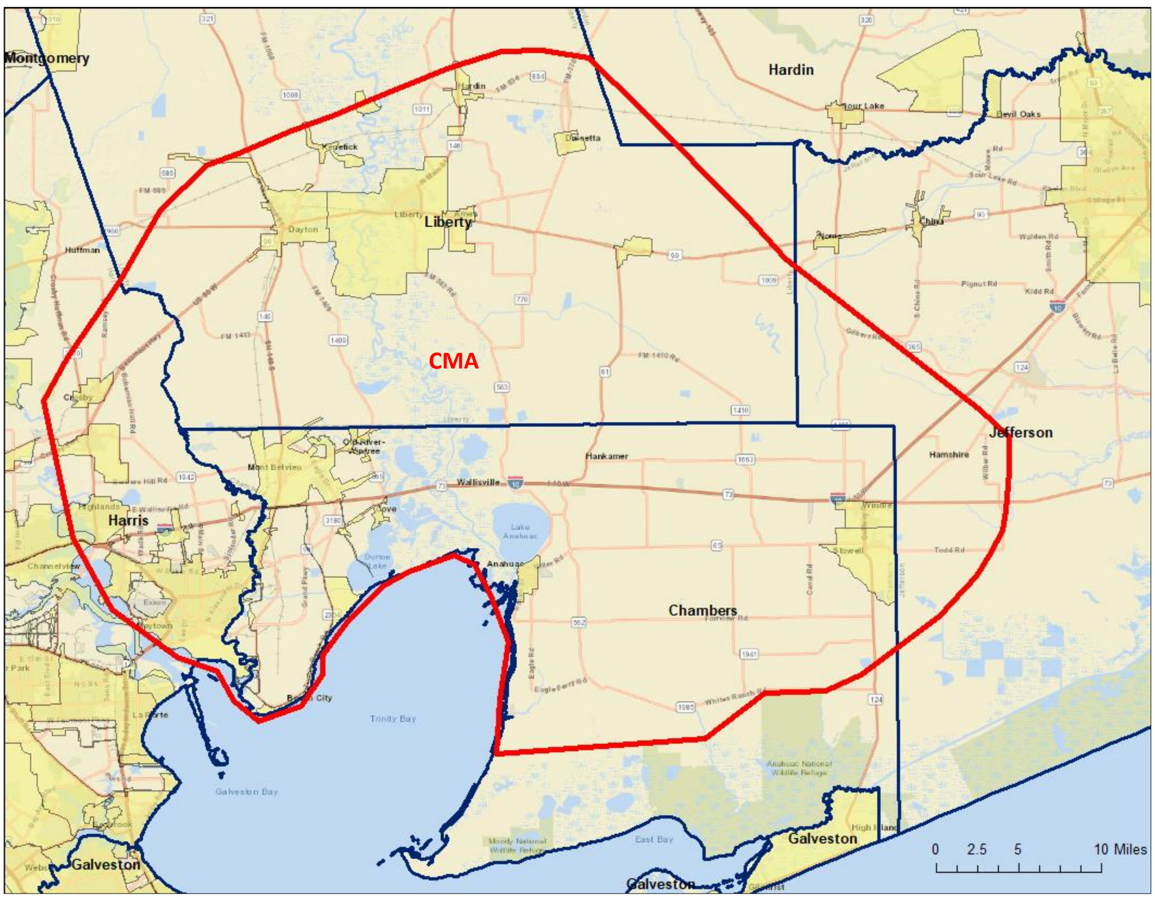
- By 2020, the CMA will have demand for 53,669 square feet of industrial space, including the current 1,368,664 square feet under construction or proposed, to accommodate the expected employment growth in the market area Traffic Analysis Zones (TAZ).
- Based on the current supply of industrial space in the CMA the Study Area makes up 5% of industrial employment is located in Mont Belvieu.
- Therefore, the Study Area can expect 2,683 square feet from 2018 to 2020 or 537sf annually and 15,848sf annually from 2020 to 2025, based on employment projections.

DEMOGRAPHIC AND ECONOMIC ANALYSIS

CDS researched primary and secondary data sources to provide a current demographic and economic portrait of the area. Past, present and future figures were estimated by utilizing data from the following sources: US Census, American Community Survey, Nielsen/Claritas – PCensus for ArcView (hereafter referred to as "PCensus"), Chambers and Liberty County Appraisal Districts, Houston—Galveston Area Council, and CDS Community Development Strategies.

Understanding the economic and demographic trends for an area is an important element in assessing the market demand for various land uses. This section examines those trends at two levels: a larger Competitive Market Area and a smaller Livable Center Study Area (City of Mont Belvieu).

Figure 5: CMA, Counties, and Cities Map



POPULATION CHARACTERISTICS

This section examines the historical population growth, current population estimates, ethnic makeup, household size, educational attainment, current household income, employment, and income trends of the Study Area, CMA, and both Chambers and Liberty Counties. The Study Area and Mont Belvieu will be used interchangeably to describe the same area through-out this report.

Historical Population Growth and Current Estimates

According to data from the US Census, population in the Study Area increased significantly from 2000 to 2010 (81%). Since 2010, estimates for the Study Area show a tremendous population increase of 95%. From 2000 to 2010, the CMA has seen steady population growth at 17% while Chambers County experienced strong growth at 35%. Liberty County has shown the slowest growth. The City of Mont Belvieu has provided an official city estimate based on city water account records and housing data for the 2018 population estimate of 7,479.

Table 1: Population and Households, 2000 to 2023

Population	2000 Census	2010 Census	2018 Estimate	2023 Estimate	↑ '00-'10	↑ '18-'23
Mont Belvieu	2,121	3,835	7,479	9,695	80.81%	29.7%
Chambers County	26,031	35,096	41,199	44,644	34.82%	8.36%
Liberty County	70,155	75,643	83,029	88,234	7.82%	6.27%
CMA	161,527	188,411	215,829	232,508	16.64%	7.73%
Households	**2000 Census**	**2010 Census**	**2018 Estimate**	**2023 Estimate**	**↑ '00-'10**	**↑ '18-'23**
Mont Belvieu	733	1,315	2,653	3,438	79.40%	29.59%
Chambers County	9,140	11,952	13,814	14,904	30.77%	7.89%
Liberty County	23,241	25,073	27,643	29,475	7.88%	6.63%
CMA	56,672	65,115	74,346	80,016	14.90%	7.63%

Source: US Census, American Community Survey, Nielsen/Claritas 2018 Estimates – PCensus for ArcView (hereafter referred to as PCensus), City of Mont Belvieu

The following table breaks down the population growth by age groups. The median age in the Study Area is 36.13 compared to 35.98 in Chambers County, 36.50 in Liberty County and 34.88 in the CMA.

Mont Belvieu's population includes 51.3% in the age ranges 25 to 64. Only 12.14% are over age 65 and 25.98% are under the age of 18.

Table 2: Population by Age, 2018

Population by Age	Mont Belvieu		Chambers County		Liberty County		CMA	
	2018	%	2018	%	2018	%	2018	%
Total Population	7,479		41,199		83,029		215,829	
Age 0 to 4	458	6.13%	2,717	6.59%	5,693	6.86%	16,114	7.47%
Age 5 to 9	486	6.50%	2,915	7.08%	5,728	6.90%	16,331	7.57%
Age 10 to 14	609	8.14%	3,252	7.89%	5,753	6.93%	16,248	7.53%
Age 15 to 17	390	5.21%	1,991	4.83%	3,490	4.20%	9,698	4.49%
Age 18 to 20	345	4.62%	1,760	4.27%	3,295	3.97%	8,811	4.08%
Age 21 to 24	446	5.97%	2,241	5.44%	4,711	5.67%	11,874	5.50%
Age 25 to 34	894	11.96%	5,167	12.54%	11,300	13.61%	29,199	13.53%
Age 35 to 44	979	13.09%	5,662	13.74%	10,298	12.40%	28,348	13.13%
Age 45 to 54	1084	14.50%	5,533	13.43%	10,683	12.87%	26,481	12.27%
Age 55 to 64	879	11.75%	4,929	11.96%	10,374	12.49%	25,271	11.71%
Age 65 to 74	598	8.00%	3,306	8.02%	7,364	8.87%	17,159	7.95%
Age 75 to 84	250	3.34%	1,308	3.17%	3,331	4.01%	7,485	3.47%
Age 85 and over	60	0.80%	418	1.01%	1,009	1.22%	2,810	1.30%
Median Age	36.13		35.98		36.5		34.88	

Source: US Census, American Community Survey, PCensus

Household Size

The following table provides statistics on the various household sizes contained within the outlined geographies. Both the Study Area and the CMA closely resemble each other. A noticeable difference is in the 1-person households which are significantly greater in Liberty County while 3 and 4-person households are greater in Mont Belvieu.

Table 3: Household Size, 2018

Category	Mont Belvieu	Chambers County	Liberty County	CMA
Total Households	2,653	13,814	27,643	74,346
1-person household	15.14%	16.34%	21.89%	20.89%
2-person household	30.29%	30.30%	31.37%	29.51%
3-person household	22.18%	19.20%	17.11%	17.83%
4-person household	20.08%	18.72%	14.21%	15.73%
5-person household	7.88%	9.50%	8.94%	9.28%
6-person household	3.06%	3.66%	3.73%	4.06%
7+ household	1.36%	2.29%	2.75%	2.70%
Estimated HH Size	2.91	2.97	2.82	2.88

Source: US Census, American Community Survey, PCensus

Educational Attainment

Educational attainment in the Study Area has a lower portion of lesser-educated individuals in households as compared to the CMA and the Counties. The Study Area has roughly 19% of bachelor's degrees and professional and graduate degrees (master's and doctorate), compared to the CMA at 14.6%.

Table 4: Educational Attainment of Population 25+ Years Old, 2018

Category	Mont Belvieu	Chambers County	Liberty County	CMA
Less than 9th grade	4.55%	7.84%	9.74%	9.26%
Some High School, no diploma	8.58%	9.08%	15.11%	11.34%
High School Graduate (or GED)	32.30%	31.93%	36.84%	30.97%
Some College, no degree	26.42%	25.81%	22.77%	25.93%
Associate Degree	9.26%	6.75%	5.19%	7.85%
Bachelor's Degree	9.32%	13.28%	6.95%	10.05%
Master's Degree	7.07%	4.32%	2.91%	3.58%
Professional School Degree	0.09%	0.34%	0.23%	0.52%
Doctorate Degree	2.40%	0.65%	0.24%	0.49%

Source: US Census, American Community Survey, PCensus

Household Income

This section provides information on income growth for households from the year 2000 to 2018. As can be seen in the table, the share of all households in the CMA making over $75,000 increased by 19.4% points, or an overall growth of 91.5%, with significant growth seen above $100,000. The Study Area also saw a concurrent increase in higher household incomes of $100,000 and greater. The Study Area has a significantly higher median income than all the other areas.

Table 5: Household Income Groups, 2000 to 2018

Household Income	Mont Belvieu		Chambers County		Liberty County		CMA	
	2000	2018	2000	2018	2000	2018	2000	2018
Households	733	2,653	9,140	13,814	23,241	27,643	37,588	74,346
Less than $15,000	8.32%	9.87%	14.61%	11.66%	20.06%	10.79%	16.10%	11.08%
$15,000 to $24,999	10.50%	5.90%	10.69%	6.07%	14.05%	12.29%	11.84%	9.50%
$25,000 to $34,999	9.69%	6.69%	10.25%	7.23%	11.62%	8.15%	12.90%	8.06%
$35,000 to $49,999	19.65%	8.85%	17.04%	11.44%	18.59%	14.01%	16.99%	12.76%
$50,000 to $74,999	24.28%	10.44%	20.75%	13.30%	21.13%	18.21%	21.31%	18.03%
$75,000 to $99,999	15.01%	13.73%	13.89%	14.07%	8.19%	12.65%	11.02%	13.11%
$100,000 to $124,999	8.73%	10.66%	7.79%	11.06%	3.74%	9.41%	5.80%	9.77%
$125,000 to $149,999	1.36%	7.09%	2.35%	8.13%	0.90%	5.92%	2.11%	6.46%
$150,000 to $199,999	2.18%	12.88%	1.74%	9.29%	0.94%	4.30%	1.43%	5.96%
$200,000 or more	0.68%	13.90%	0.84%	7.73%	0.77%	4.29%	0.82%	5.25%
Median HH Income	**$52,107**	**$90,031**	**$47,707**	**$75,527**	**$38,440**	**$56,544**	**$43,225**	**$61,914**

Source: US Census, American Community Survey, PCensus

Poverty Status

The poverty status of families is examined to ascertain the level of economic challenge. The data presented comes from the Census Bureau, which uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using the Consumer Price Index. The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and TANF).

Table 6: Poverty Status, 2018

Income	Mont Belvieu	Chambers County	Liberty County	CMA
2018 Families at or Above Poverty	92.58%	93.16%	87.58%	87.90%
2018 Families at or Above Poverty with Children	48.63%	48.91%	41.04%	45.62%
2018 Families Below Poverty	7.42%	6.84%	12.42%	12.10%
2018 Families Below Poverty with Children	4.81%	3.77%	8.87%	9.49%

Source: US Census, American Community Survey, PCensus

According to 2018 estimates, the Study Area has a slightly lower percentage of families in poverty, when compared with the CMA and Liberty County. Chambers County has the highest percentage of families at or above poverty.

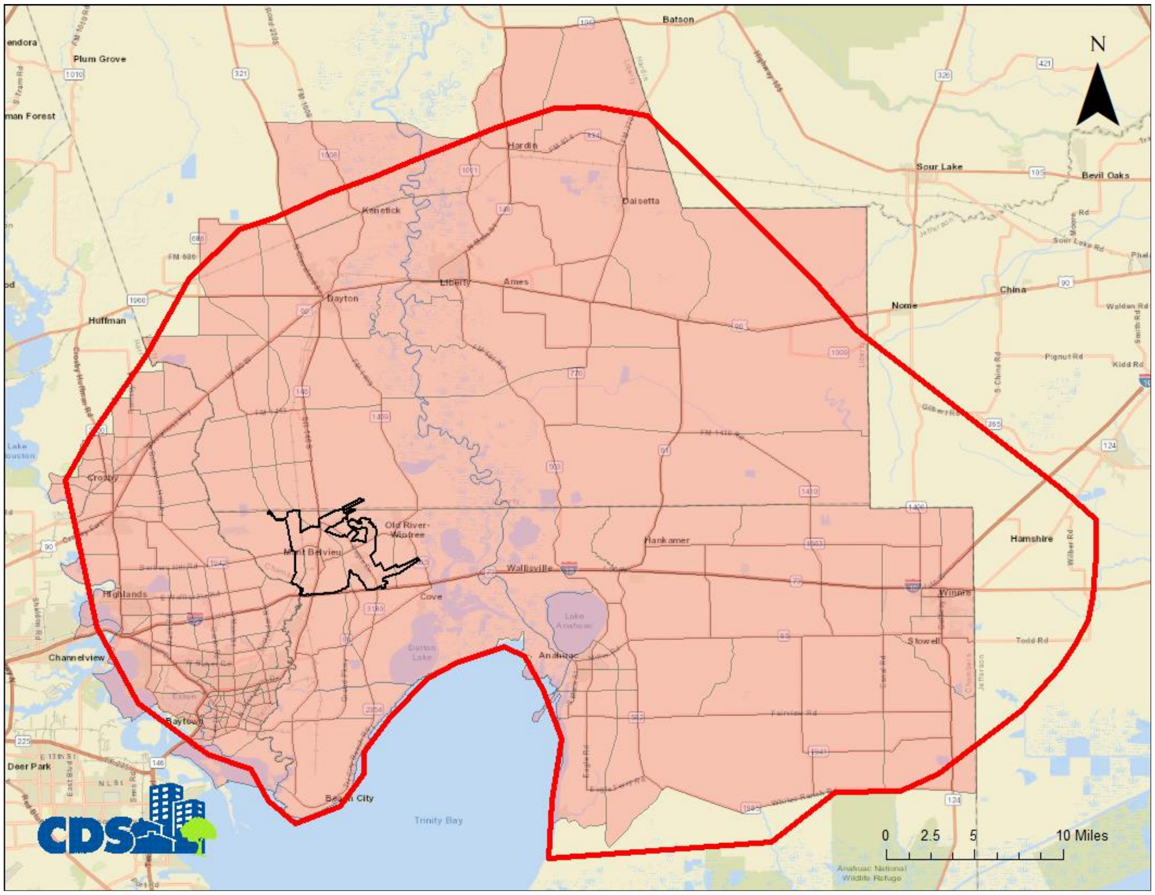
LONG TERM AREA PROJECTIONS

This section presents population projections which estimate both the short term and long term demographic possibilities for the Study Area and CMA. Developers who are interested in investing in the area will likely consult such projections to determine demand relating to how successful their project may be.

Short term demographic forecasts for the Study Area and CMA were determined by utilizing PCensus data, which uses a formula to project future numbers based on existing Census data trends. Long term projections in the Houston MSA are provided by the Houston—Galveston Area Council (H-GAC), which offers five-year projections extending from 2015 to 2040. These estimates are distributed regionally by Traffic Area Zones (TAZ), shown for the CMA in the following map.

CDS Community Development Strategies also provides an independent forecast of future population, housing and employment projections, and these have been included. The projections by CDS are similar to the H-GAC's projections in that they are also connected to the TAZ geography. As can be seen in the following map, the TAZs associated with the CMA and Study Area are roughly equivalent to the area boundaries.

Figure 6: TAZ Map for CMA



The following three tables display short term Study Area and CMA projections based on Census trends, as well as longer term Study Area and CMA projections provided by the H-GAC and CDS Community Development Strategies.

Table 7: Short Term Study Area and CMA Projections Based on US Census Trends

Population	2000 Census	2010 Census	2018 Estimate	2023 Estimate
Mont Belvieu	2,121	3,835	7,479	9,695
CMA	161,527	188,411	215,829	232,508
Households	**2000 Census**	**2010 Census**	**2018 Estimate**	**2023 Estimate**
Mont Belvieu	733	1,315	2,653	3,438
CMA	56,672	65,115	74,346	80,016

Source: US Census, American Community Survey, PCensus

The short-term projections based on US Census trends estimate that from the year 2018 to 2023, the CMA population will grow at 8.4%, and the Study Area population will grow at 30%. This equates to roughly 16,679 new residents in the CMA, with 2,216 new residents in the Study Area. The 2030 projection from the average of the H-GAC and CDS forecasts estimate that the population in the CMA will increase by 21.5%. The 2030 projection from the average of the H-GAC and CDS forecasts estimate that the population in the Study Area will increase by roughly 93%.

Table 8: Longer Term Study Area and CMA Forecasts from the H-GAC

H-GAC Forecasts						
Population	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	6,634	8,436	10,318	13,835	17,906	33,838
CMA	174,386	183,041	223,872	261,405	300,209	372,240
Households	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	2,331	3,147	3,919	5,120	6,574	12,415
CMA	63,499	68,533	83,205	99,581	115,119	144,080
Employment	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	4,736	5,660	6,007	6,895	7,343	7,537
CMA	68,400	75,102	78,151	83,272	91,194	96,283

Source: H-GAC 2017 Forecasts

Table 9: Longer Term Study Area and CMA Projections from CDS

CDS Forecasts						
Population	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	6,302	7,926	11,532	14,985	18,849	22,514
CMA	200,688	211,988	235,720	262,926	296,202	334,967
Households	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	2,127	2,755	4,102	5,386	6,839	8,219
CMA	69,874	74,348	83,316	93,676	106,447	121,378
Employment	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	5,607	6,051	7,097	8,429	9,920	11,547
CMA	66,281	69,158	76,781	86,426	98,907	113,952

Source: CDS Community Development Strategies 2017 Forecasts

The projections from the H-GAC and CDS also include estimates for households and employment. Looking at jobs gains, both projections assume the areas will continue to grow, although the CDS model is much more ambitious in its forecast that the CMA and Study Area will gain more employment. For our analysis herein, we will use an average of both forecasts due to the differences in actual numbers. The following will be used to illustrate the forecasted longer-term growth in the CMA and Study Area.

Table 10: Average CDS and HGAC Projections for the CMA

CDS and H-GAC Average Forecasts						
Population	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	6,468	8,181	10,925	14,410	18,378	28,176
CMA	187,537	197,515	229,796	262,166	298,206	353,604
Households	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	2,229	2,951	4,011	5,253	6,707	10,317
CMA	66,687	71,441	83,261	96,629	110,783	132,729
Employment	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Mont Belvieu	5,172	5,856	6,552	7,662	8,632	9,542
CMA	67,341	72,130	77,466	84,849	95,051	105,118

Source: H-GAC 2017 Forecasts, CDS Community Development Strategies 2017 Forecasts, CDS calculations

FUTURE HOUSEHOLD AND POPULATION GROWTH

The City of Mont Belvieu's General Plan 2035 includes a population forecast which projects 30,115 residents in the city by 2035. The Plan's future growth scenario for the Study Area envisions a strong future expansion of the regional and local economy with accompanying gains in housing and population. Current, and near-term plans for housing and commercial development plus anticipated future growth, supported by regional transportation infrastructure investments in and around Mont Belvieu could push the city's population to the 30,115 mark.

Several development projects represent the supply that can be the impetus for this scenario. The city has provided important future development information that shows 1,561 Vacant Developed Lots (VDL) are currently on the ground with 3,000 single family homes slated for a master planned community in addition to 500 multifamily units. This equates to 5,016 housing units. Mont Belvieu Crossing, a newly built 300,000 square foot grocery store anchored retail center located at the intersection of I-10 and Eagle Drive, will serve current and future residents with new shopping options.

The future Grand Parkway tollway segment I-1 projected alignment has been set west of the current location of the Mont Belvieu City Hall and could have very a strong impact on the future growth. As long as this alignment maintains and Grand Parkway segment I-1 opens with an exit for FM 565, this will provide avenues of future demand to support growth of every aspect of the entire Study Area and CMA.

The future Grand Parkway tollway segment I-1 combined with current and future development on an equal or faster pace as Mont Belvieu has experienced over the last several years through 2035 would enable the General Plan's 2035 population forecast of 30,115.

EMPLOYMENT AND ECONOMY

This section provides local resident employment and economic statistics—key indicators used to examine the development potential of an area.

Employment by Occupation and Classification

As previously mentioned, the Study Area has a population of 7,479. Of that amount, 2,853—or 38.1%—are at least 16 years old and employed. The CMA has 90,310 employed, or 41.8%. For Chambers County, the percentage of those 16 and older who are employed is 41.5%. The following tables break down this employed resident population by occupation for all geographies.

Table 11: Employment by Occupation, 2017

Estimated Employed Population Age 16 and Over by Occupation	Mont Belvieu		Chambers County		CMA	
	2,853		17,100		90,310	
Architect/Engineer	115	4.04%	696	4.07%	1,914	2.12%
Arts/Entertainment/Sports	12	0.41%	127	0.74%	512	0.57%
Building Grounds Maintenance	71	2.48%	641	3.75%	3,470	3.84%
Business/Financial Operations	75	2.64%	657	3.84%	2,833	3.14%
Community/Social Services	33	1.14%	182	1.06%	898	0.99%
Computer/Mathematical	15	0.52%	247	1.44%	898	0.99%
Construction/Extraction	337	11.80%	2,075	12.13%	10,885	12.05%
Education/Training/Library	201	7.04%	1,444	8.44%	5,650	6.26%
Farming/Fishing/Forestry	0	0.00%	88	0.51%	457	0.51%
Food Prep/Serving	46	1.60%	623	3.64%	4,529	5.02%
Healthcare Practitioner	77	2.69%	586	3.43%	3,769	4.17%
Healthcare Support	10	0.36%	148	0.87%	1225	1.36%
Maintenance Repair	102	3.57%	660	3.86%	4,125	4.57%
Legal	41	1.45%	50	0.29%	466	0.52%
Life/Physical/Social Science	9	0.31%	188	1.10%	651	0.72%
Management	324	11.34%	1,664	9.73%	6,842	7.58%
Office/Admin. Support	458	16.05%	2,113	12.36%	12,192	13.50%
Production	597	20.91%	2,247	13.14%	9,408	10.42%
Protective Service	60	2.12%	240	1.40%	1,801	1.99%
Sales/Related	126	4.40%	1119	6.54%	7,578	8.39%
Personal Care/Service	18	0.62%	190	1.11%	2,125	2.35%
Transportation/Moving	128	4.50%	1,115	6.52%	8,084	8.95%
Type of Worker						
Blue Collar	1,164	40.79%	6,097	35.65%	32,501	35.99%
White Collar	1,484	52.02%	9,073	53.06%	44,202	48.94%
Service & Farm	205	7.19%	1,930	11.29%	13,607	15.07%

Source: US Census, American Community Survey, PCensus

As shown, there are 52.02% white collar and 40.79% blue collar workers in the Study Area. The largest percentage of the population are in Production occupations, followed by Office/Admin Support. As compared to the CMA, there is a lower percentage of white-collar workers and blue-collar workers but a higher percentage of service and farm. These percentages corroborate the information presented earlier, showing the Study Area and Chambers County with higher educational attainment rates and median household incomes compared to the CMA.

Employment Inflow and Outflow

To better understand local demand for various land uses, it is helpful to look at the jobs data provided by the Longitudinal Employer-Household Dynamic (LEHD), which is part of the US Census Bureau. While the most recent data available is from 2015 (and differs slightly from the employment estimates provided previously), it is still helpful in understanding present day commuting patterns.

Table 12: Employment Inflow and Outflow, 2015

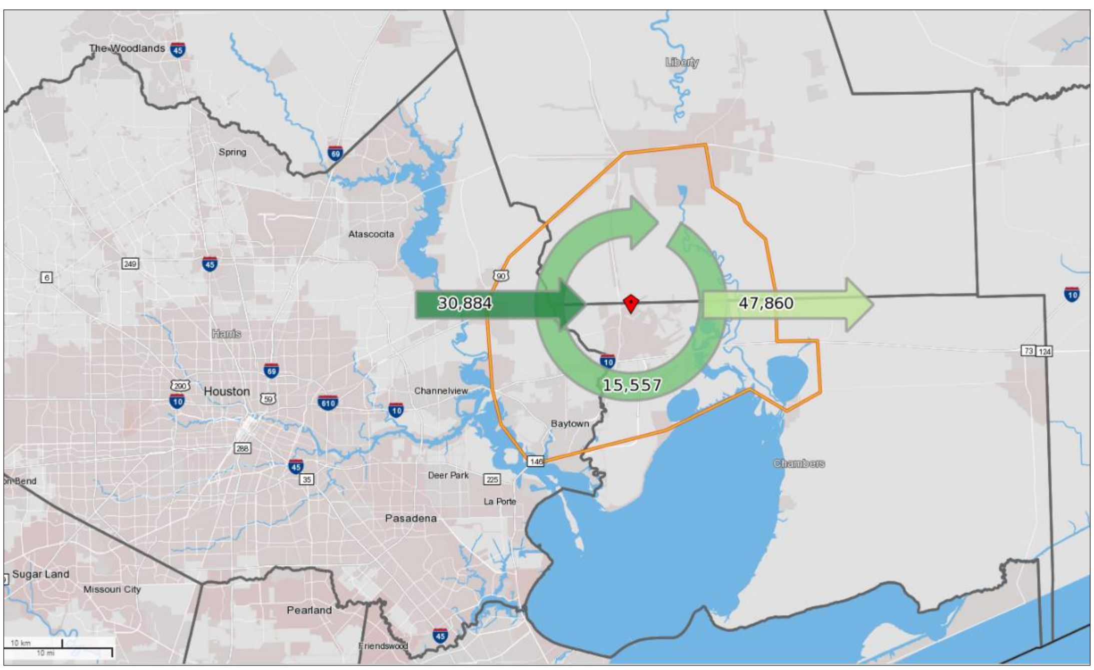
Employment Inflow/Outflow	Mont Belvieu		CMA	
	#	%	#	%
Employed in the Area	1,701	100.0%	46,441	100.0%
Employed in the Area but Living Outside	1,580	92.9%	30,884	66.5%
Employed in the Area and Living Inside	121	7.1%	15,557	33.5%
Living in the Area	2,477	100.0%	63,417	100.0%
Living in the Area but Employed Outside	2,356	95.1%	47,860	75.5%
Living in the Area and Employed Inside	121	4.9%	15,557	24.5%

Source: US Census Longitudinal Employer-Household Dynamics, 2015

Note: 2015 is latest data available from the Census LEHD

The following figure utilizes LEHD data to provide a visualization of where workers in the CMA reside, and where residents in the CMA work. As can be seen, workers come from all parts of the Houston area, but a relatively large percentage (33.5%) are employed in the CMA *and* living inside.

Figure 7: Where Workers in the CMA Reside, Where Residents in the CMA Work



Source: US Census, LEHD 2015, CDS

SINGLE FAMILY HOUSING

OVERALL HOUSTON MARKET

Houston Association of Realtors (HAR) reported despite the devastating assault that Hurricane Harvey waged on the greater Houston area last summer – from which many property owners are still recovering – the Houston real estate market set new records by the time the sun set on 2017. Single-family home sales for the full year rose 3.5 percent compared to 2016, the previous record year. However, by the first quarter of 2018, the supply of housing remains constrained. Inventory had begun to reach more balanced levels when Harvey's widespread flooding sent affected residents scrambling for whatever undamaged rental and sales homes were available to provide safe shelter for themselves and their families.

According to the latest report produced by the Houston Association of Realtors (HAR), sales of all property types in 2017 totaled 94,726 units, a 3.5-percent increase over 2016's volume, which was 91,530. Total dollar volume for single-family homes sold in 2017 rose 6.5 percent to $23 billion.

December single-family home sales rose 4.1 percent to 6,875 versus December 2016. The strongest sales performance took place among homes priced between $250,000 and $500,000. Total property sales for the month climbed 3.5 percent to 8,125.

The single-family home median price (the figure at which half of the homes sold for more and half sold for less) rose 1.7 percent to $230,000. That marks the highest median price ever for a December. The average price declined 0.6 percent to $292,174.

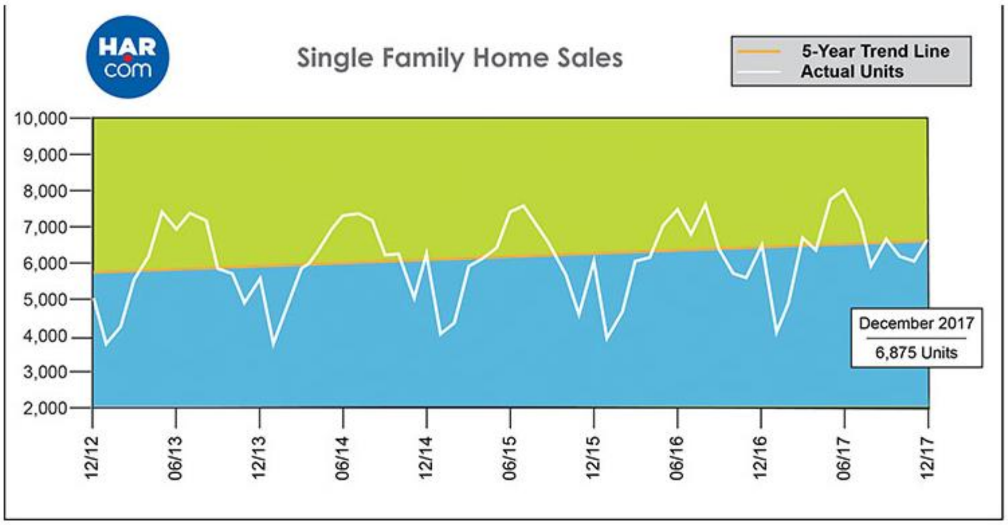
Months of inventory began the year at a 3.3-months' supply, and while it grew to a 4.3-months' supply just before Harvey struck the region, it ended 2017 at a 3.2-months' supply. Months of inventory estimates the number of months it will take to deplete current active inventory based on the prior 12 months sales activity.

CATEGORIES	FULL-YEAR 2016	FULL-YEAR 2017	CHANGE
Single-family home sales	**76,450**	**79,117**	**3.5%**
Total property sales	**91,530**	**94,726**	**3.5%**
Total dollar volume	**$21,645,218,533**	**$23,049,934,248**	**6.5%**
Single-family average sales price	**$283,133**	**$291,340**	**2.9%**
Single-family median sales price	**$221,500**	**$229,900**	**3.8%**

** Months inventory estimates the number of months it will take to deplete current active inventory based on the prior 12 months sales activity. This figure is representative of the single-family homes market.*

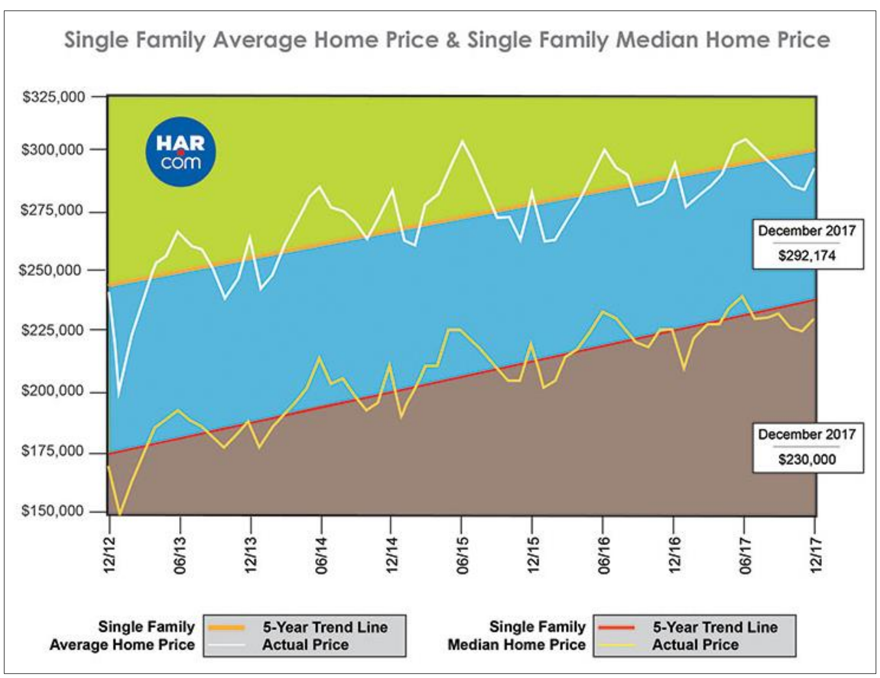
Single-family home sales totaled 6,875, up 4.1 percent from December 2016. The median price rose 1.7 percent to a December high of $230,000. The average price declined a fractional 0.6 percent to $292,174. Days on Market (DOM), or the number of days it took the average home to sell, was unchanged at 62.

Figure 8: Single Family Home Sales in Houston



HAR also breaks out the sales figures for existing single-family homes. Existing home sales totaled 5,460 in December, up 3.7 percent versus the same month last year. The average sales price rose 2.6 percent to $276,738 while the median sales price increased 1.2 percent to $211,000.

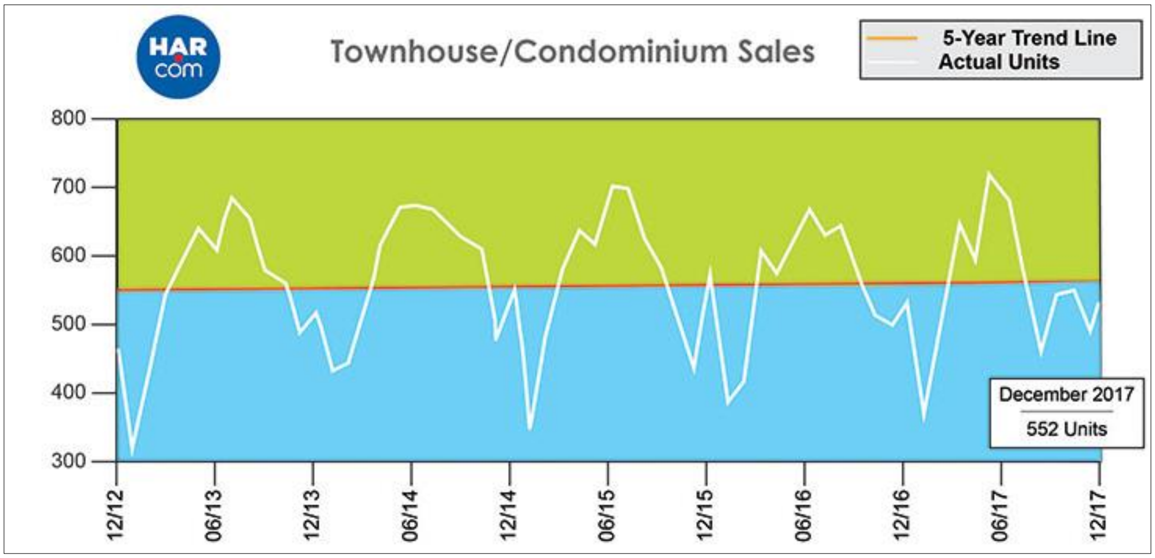
Figure 9: Single Family Average Home Price & Single Family Median Home Price in Houston



Townhouse/Condominium Update

Townhome and condominium sales increased 3.2 percent in December, with 552 units selling versus 535 a year earlier. The average price fell 5.5 percent to $199,197 and the median price dropped 9.3 percent to $158,250. Inventory went from a 3.4-months' supply to 3.3 months.

Figure 10: Townhouse/Condominium Sales



Source: HAR

Lease Property Update

Houston's lease market had a mixed performance in December. Single-family home leases fell 3.6 percent and townhome/condominium leases rose 7.3 percent. The average rent for single-family homes increased 3.3 percent to $1,745, while the average rent for townhomes/condominiums rose 2.4 percent to $1,532.

CMA SINGLE FAMILY HOUSING MARKET

The CMA includes 74,346 housing units of which 72.53% are owner occupied. The median housing value of owner occupied homes is $133,493. Approximately 15.7% of the housing units are multifamily (12,989 units) which includes townhomes, duplexes, apartments, etc.

Table 13: CMA Housing Statistics

Category	CMA	
2018 Est. Occupied Housing Units by Tenure	**74,346**	
Owner-Occupied	53,921	72.53%
Renter-Occupied	20,425	27.47%
2018 Occupied Housing Units: Avg. Length of Residence		
Owner-Occupied		11
Renter-Occupied		3
2018 Est. Owner Occupied Housing Units by Value	53,921	
Value Less than $20,000	1,930	3.58%
Value $20,000 to $39,999	2,616	4.85%
Value $40,000 to $59,999	3,539	6.56%
Value $60,000 to $79,999	4,456	8.26%
Value $80,000 to $99,999	5,355	9.93%
Value $100,000 to $149,999	13,198	24.48%
Value $150,000 to $199,999	8,905	16.51%
Value $200,000 to $299,999	8,604	15.96%
Value $300,000 to $399,999	2,726	5.06%
Value $400,000 to $499,999	996	1.85%
Value $500,000 to $749,999	786	1.46%
Value $750,000 to $999,999	364	0.67%
Value $1,000,000 or more	446	0.83%
2018 Est. Median All Owner-Occupied Housing Unit Value	**$133,493**	
2018 Est. Housing Units by Units in Structure	82,944	
1 Unit Attached	1,498	1.81%
1 Unit Detached	54,597	65.82%
2 Units	613	0.74%
3 or 4 Units	1,773	2.14%
5 to 19 Units	7,022	8.47%
20 to 49 Units	1,994	2.40%
50 or More Units	1,587	1.91%
Mobile Home or Trailer	13,326	16.07%
Boat, RV, Van, etc.	533	0.64%

Category	CMA	
Total Housing Units in the CMA	**82,944**	
Housing Units Built 2014 or Later	7,658	9.23%
Housing Units Built 2010 to 2013	2,977	3.59%
Housing Units Built 2000 to 2009	17,680	21.32%
Housing Units Built 1990 to 1999	12,061	14.54%
Housing Units Built 1980 to 1989	10,878	13.12%
Housing Units Built 1970 to 1979	12,230	14.74%
Housing Units Built 1960 to 1969	7,213	8.70%
Housing Units Built 1950 to 1959	5,904	7.12%
Housing Units Built 1940 to 1949	3,627	4.37%
Housing Units Built 1939 or Earlier	2,714	3.27%
Dominant Year Structure Built	**1989**	

Source: US Census, American Community Survey, PCensus

Resale Market

There were 2,005 single family home sales in 2016 and 2,125 in 2017 in the CMA. The average sale price was $191,875 and the median sale price was $180,000. Both the average and median sales price rose at the same rate, 6.5%, from 2016 to 2017. There are currently 540 active listings ranging from a list price of $15,000 to $1,650,000. The average list price at present is $261,237 and the median list price is $233,402. The max priced homes are located at Point Barrow on the Bay in Beach City.

Table 14: CMA Home Sales 2017

2,125 Total Sales	Sale Price	SF	$/SF	Yr Built	DOM
Min	$15,500	568	$13.45	1900	
Max	$1,125,000	6,376	$482.59	2018	764
Average	$191,875	2,048	$93.32	1992	49
Median	$180,000	1,947	$93.57	2002	24

Source: Houston Association of Realtors (HAR)

Table 15: CMA Active Home Listings

540 Total Listings	List Price	SF	$/SF	Yr Built	DOM
Min	$15,000	399	$3.81	1910	
Max	$1,650,000	217,800	$622.14	2018	1,027
Average	$261,237	2,719	$113.23	1993	70
Median	$233,402	2,268	$107.14	2006	36

Source: Houston Association of Realtors (HAR)

Comparatively, there were 2,005 homes sold in the CMA in 2016. The average sales price was $180,228 and the median was $169,000.

Table 16: CMA Home Sales, 2016

2,005 Total Sales	Sale Price	SF	$/SF	Yr Built	DOM
Min	$21,200	520	$15.82	1893	
Max	$785,000	5,648	$284.55	2016	697
Average	$180,228	2,047	$87.83	1992	47
Median	$169,000	1,957	$86.77	2002	24

Source: Houston Association of Realtors (HAR)

New Home Construction

There appears to be new construction in the CMA (2017). The map below illustrates the location of the new home construction. There were 392 new construction homes sold in 2017, with the largest concentrated in Mont Belvieu, Baytown and Crosby.

Figure 11: CMA New Home Construction

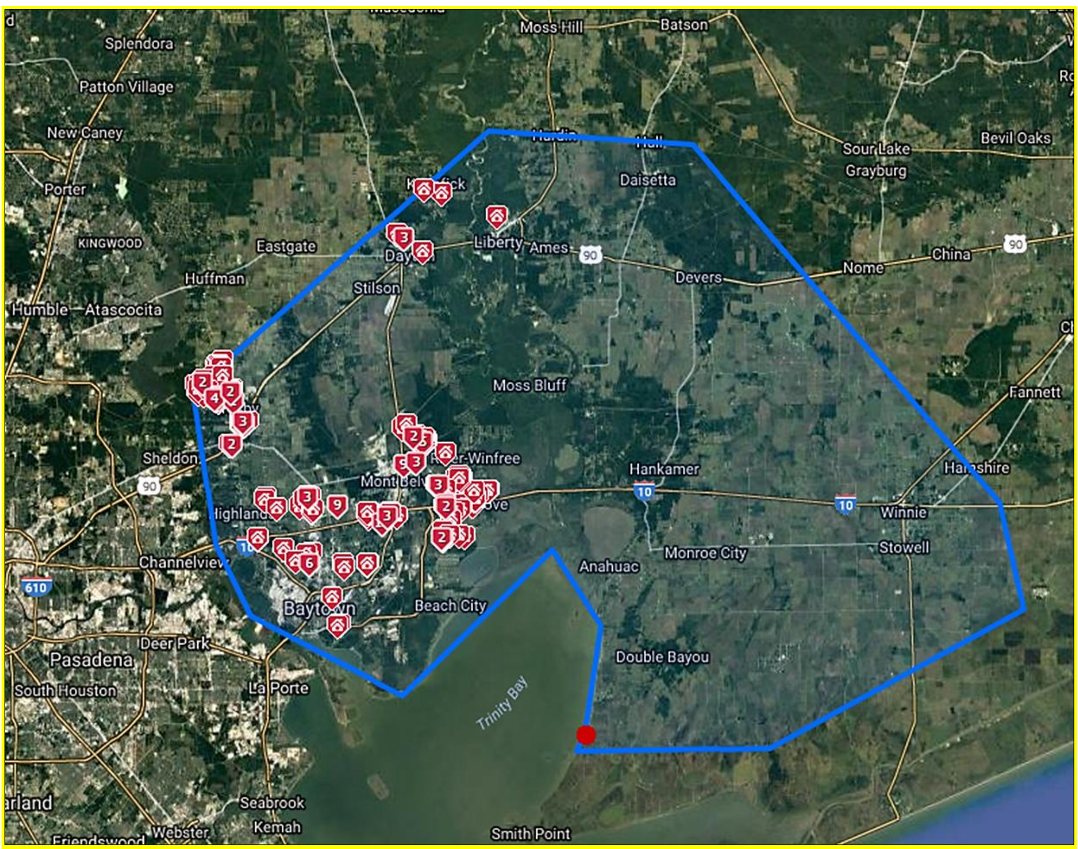
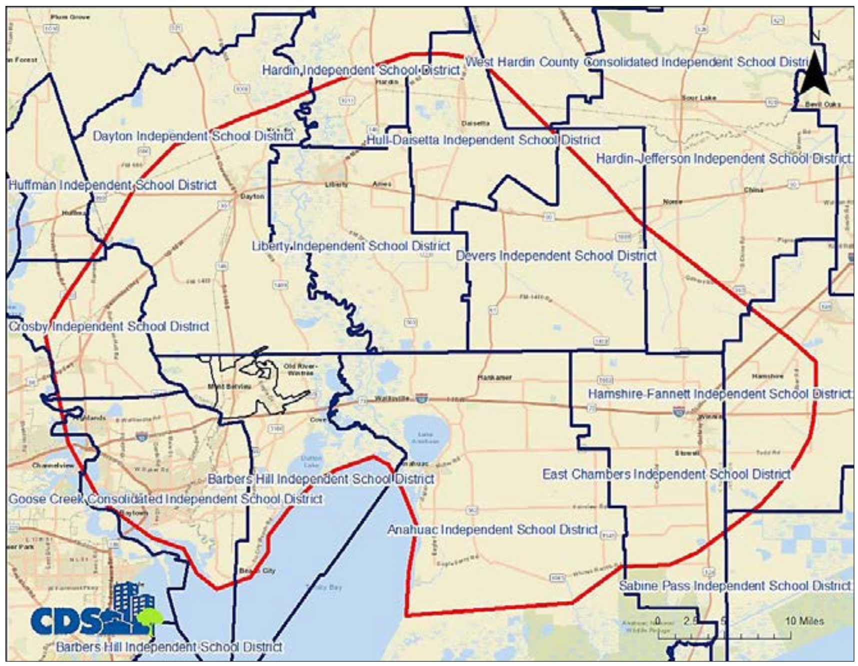


Table 17: CMA New Construction Sales, 2017

392 Total Sales	Sale Price	SF	$/SF	Yr Built	DOM
Min	$15,500	1,051	$13.45	2012	
Max	$462,576	4,035	$153.44	2018	392
Average	$241,005	2,239	$108.98	2017	76
Median	$227,733	2,213	$107.28	2017	48

Source: Houston Association of Realtors (HAR)

CMA School Districts



School Districts often drive demand for housing. The table below displays the school districts in the CMA.

Goose Creek CISD, which serves Baytown, has by far the largest enrollment, followed by Crosby, Dayton and Barbers Hill ISDs.

The districts along the northern boundary of the CMA have the lowest enrollments in the CMA. Devers ISD is the smallest followed by Sabine Pass, Hull-Daisetta and West Hardin County ISDs.

The percent of economically disadvantaged students is greatest in Hull-Daisetta, Goose Creek, Liberty and Dayton ISD. Barbers Hill ISD has the lowest percentage of economically disadvantaged students in the CMA.

Devers, Sabine Pass and Barbers Hill ISDs have the highest STAAR stats with Barbers Hill having the highest achievement of the larger enrollment districts.

Table 18: CMA ISD Performance

ISD	Enrollment	# of Teachers	Teacher Ratio	% Economically Disadvantaged	2017 STAAR Stats
Goose Creek CISD	23,837	1,482	16.1	64.40%	72%
Crosby ISD	5,974	406	14.7	49.60%	74%
Dayton ISD	5,400	331	16.3	60.40%	66%
Barbers Hill ISD	5,254	364	14.4	16.60%	90%
Huffman ISD	3,427	221	15.5	35.70%	77%
Hardin-Jefferson ISD	2,247	153	14.7	39.30%	86%
Liberty ISD	2,141	141	15.2	63.00%	71%
Hamshire-Fannett ISD	1,834	130	14.1	29.80%	82%
Hardin ISD	1,483	101	14.7	54.90%	70%
East Chambers ISD	1,473	101	14.6	57.00%	76%
Anahuac ISD	1,310	95	13.8	54.30%	79%

ISD	Enrollment	# of Teachers	Teacher Ratio	% Economically Disadvantaged	2017 STAAR Stats
West Hardin County CISD	562	39	14.4	53.70%	70%
Hull-Daisetta ISD	467	45	10.4	76.00%	68%
Sabine Pass ISD	379	33	11.5	55.70%	90%
Devers ISD	181	15	12.1	48.10%	92%

Sources: TEA

Study Area Housing Market

There are an estimated 2,955 housing units in the Study Area currently, including single family and multifamily. Approximately 81.1% of the occupied units are owner-occupied. The median value for owner-occupied housing is $211,301, which is greater than the CMA ($133,493). There are 78.8% single family housing units in the Study Area and 15.5% multifamily units (457), which includes apartments, townhomes, duplexes, triplexes and fourplexes. The largest share (34.4%) of the housing structures were built between 2000 and 2009. Only 14.2% have been built before 1980.

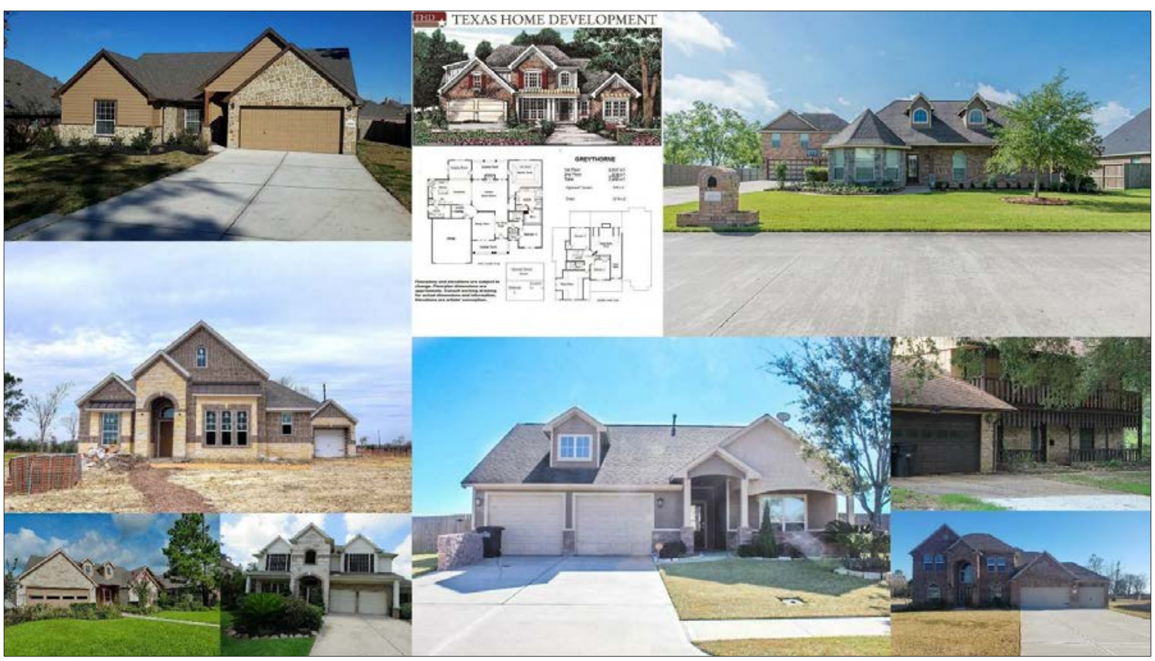
Table 19: Mont Belvieu Housing Statistics

Category	Mont Belvieu	
2018 Est. Occupied Housing Units by Tenure	**2,653**	
Owner-Occupied	2,151	81.06%
Renter-Occupied	502	18.94%
2018 Occupied Housing Units: Avg. Length of Residence		
Owner-Occupied		8
Renter-Occupied		3
2018 Est. Owner Occupied Housing Units by Value	2,151	
Value Less than $20,000	42	1.96%
Value $20,000 to $39,999	39	1.82%
Value $40,000 to $59,999	83	3.85%
Value $60,000 to $79,999	101	4.69%
Value $80,000 to $99,999	98	4.55%
Value $100,000 to $149,999	352	16.38%
Value $150,000 to $199,999	274	12.74%
Value $200,000 to $299,999	659	30.65%
Value $300,000 to $399,999	286	13.30%
Value $400,000 to $499,999	128	5.95%
Value $500,000 to $749,999	60	2.80%
Value $750,000 to $999,999	5	0.21%
Value $1,000,000 or more	25	1.12%
2018 Est. Median All Owner-Occupied Housing Unit Value	**$211,301**	
2018 Est. Housing Units by Units in Structure	**2,955**	
1 Unit Attached	44	1.49%
1 Unit Detached	2,285	77.31%

Category	Mont Belvieu	
2 Units	0	0.00%
3 or 4 Units	13	0.43%
5 to 19 Units	212	7.17%
20 to 49 Units	96	3.24%
50 or More Units	137	4.62%
Mobile Home or Trailer	170	5.74%
Boat, RV, Van, etc.	0	0.00%
Total Housing Units in the Study Area	**2,955**	
Housing Units Built 2014 or later	564	19.08%
Housing Units Built 2010 to 2013	138	4.68%
Housing Units Built 2000 to 2009	1,016	34.38%
Housing Units Built 1990 to 1999	485	16.42%
Housing Units Built 1980 to 1989	335	11.32%
Housing Units Built 1970 to 1979	165	5.58%
Housing Units Built 1960 to 1969	63	2.13%
Housing Units Built 1950 to 1959	83	2.82%
Housing Units Built 1940 to 1949	19	0.64%
Housing Units Built 1939 or Earlier	88	2.98%
Dominant Year Structure Built	**2002**	

Source: US Census, American Community Survey, PCensus

Figure 12: Examples of Single Family Housing in the Study Area



Source: Multiple Listing Service

Resale Market

In 2017, 65 homes in Mont Belvieu were sold. The average sales price was $288,352 or $111.76psf. This is 49.6% higher average sales price than the CMA in 2017.

Table 20: Mont Belvieu Home Sales, 2017

65 Total Sales	Sale Price	SF	$/SF	Yr Built	DOM
Min	$41,000	1,300	$31.53	1970	
Max	$825,000	3,648	$281.57	2017	352
Average	$288,352	2,564	$111.76	2004	71
Median	$288,000	2,653	$110.32	2009	35

Source: Houston Association of Realtors (HAR)

There are only 7 active listings (resale) in Mont Belvieu currently. They range from $199,000 to $420,000.

Table 21: Mont Belvieu Active Home Listings

8 Total Listings	List Price	SF	$/SF	Yr Built	DOM
Min	$199,000	1,455	$78.24	1970	5
Max	$420,000	4,064	$158.31	2016	220
Average	$342,527	2,988	$116.97	2006	84
Median	$389,900	2,653	$109.55	2008	30

Source: Houston Association of Realtors (HAR)

Comparatively, there were 61 homes sold in the Study Area in 2016. The average sales price was $260,535 and the median was $265,000.

Table 22: Mont Belvieu Home Sales, 2016

61 Total Sales	Sale Price	SF	$/SF	Yr Built	DOM
Min	$63,000	839	$75.09	1970	1
Max	$480,000	4,097	$192.46	2015	231
Average	$260,535	2,449	$108.10	2004	51
Median	$265,000	2,463	$106.03	2009	31

Source: Houston Association of Realtors (HAR)

New Home Development

In 2017, 90 new construction homes sold in Mont Belvieu. The average sales price was $303,765 or $114.07psf. This is a 21.6% higher average new home sales price in the CMA in 2017.

Table 23: Mont Belvieu New Home Construction Sales, 2017

90 Total Sales	Sale Price	SF	$/SF	Yr Built	DOM
Min	$226,500	1,829	$91.71	2016	
Max	$400,000	3,628	$153.44	2017	290
Average	$303,765	2,699	$114.07	2017	78
Median	$301,681	2,675	$111.88	2017	78

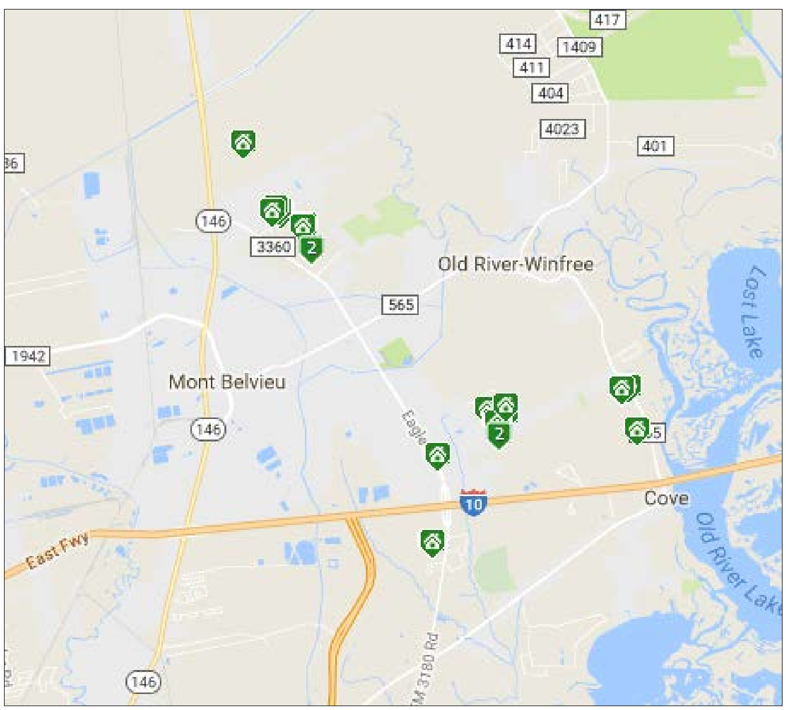
Source: Houston Association of Realtors (HAR)

Table 24: Mont Belvieu New Construction Listings

27 Total Listings	List Price	SF	$/SF	Yr Built	DOM
Min	$267,990	1,881	$90.00	2017	
Max	$433,536	2,786	$155.56	2018	187
Average	$332,779	3,559	$121.48	2017	61
Median	$325,275	2,675	$121.78	2017	59

Source: Houston Association of Realtors (HAR)

Figure 13: Mont Belvieu New Construction Homes



New Construction subdivisions in Mont Belvieu include Eagle Point Estates, Legends Bay, Magnolia Landing, Villages of Champion Gate, Champions Lakes, Brookstone, Cherry Creek, and Ice Creek Crossing.

According to the Housing Study Data, the CMA is in the I-10 North and Ship Channel Areas.

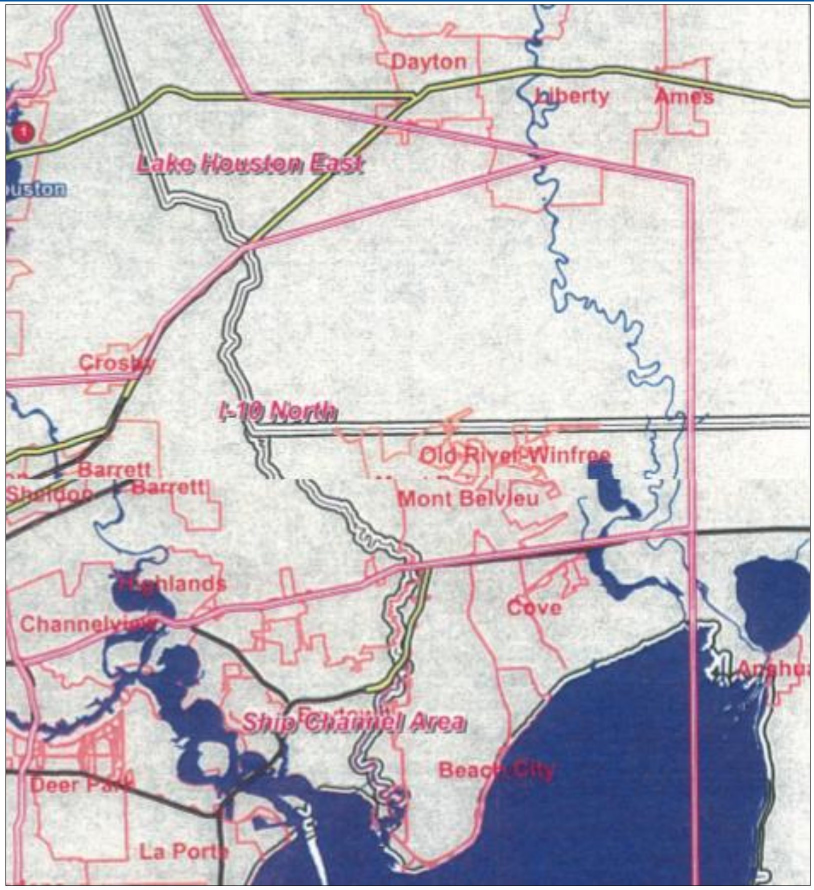
I-10 North:

For 1Q2018 there were 111 housing starts; 199 closings; 200 houses in inventory, or 3.6 months' supply. There are 595 vacant developable lots available (11-month supply). Homes range in value from $73k to $500k in 27 subdivisions.

Ship Channel:

For 1Q2018 there were 93 housing starts; 128 closings; 179 houses in inventory, or 5.6 months' supply. There are 703 vacant developable lots available (20-month supply). Homes range in value from $108k to $501k in 33 subdivisions.

Current lot supply in the CMA is 1,298.



POTENTIAL DEMAND – SINGLE FAMILY HOUSING

Demand for new construction of single family homes is primarily rooted in the need to house additional population in an area. Therefore, we will quantify demand for new homes within the CMA based on the previously mentioned CDS/HGAC forecasts that have been prepared for the CMA as well as market performance within the CMA.

Table 25: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	187,537	197,515	229,796	262,166	298,206	353,604
Households	66,687	71,441	83,261	96,629	110,783	132,729
Employment	67,341	72,130	77,466	84,849	95,051	105,118

Source: CDS Community Development Strategies, H-GAC

To plan and project new housing units, the number of projected housing units is multiplied by the percentage of owners for single family homes. As shown using the 72.53% of households owning in the CMA (2018 estimate), there is a potential demand to support 9,696 new homes by 2030 based on current lot supplies. The two combined single family markets in the CMA had a total of 327 closings 1Q2018.

Table 26: CMA Single Family Demand

Category	2015	2020	2025	2030
Total current and projected CMA households	66,687	71,441	83,261	96,629
Incremental housing unit demand		4,754	11,820	13,368
CMA single family demand (72.53%) p.31		3,448	8,573	9,696
Less CMA Available Lots p.39		-1,298		
CMA Single Family Demand		**2,150**	**8,573**	**9,696**

Sources: US Census, American Community Survey, PCensus, CDS, H-GAC

At 2018, based on past trend data for the Study Area, Mont Belvieu has an estimated 4% capture of the overall CMA owner-occupied housing units (2,151/53,921). Application of the capture rate to the CMA single family forecasted demand results in 86 new homes by 2020, an additional 343 homes by 2025, and 388 homes by 2030 based on projected demand and the 4% capture rate. This would be a total demand of 817 single family units by 2030, which is just slightly more than half of the current amount of homes currently planned for the Study Area.

Therefore, a 4% capture rate for the Study Area is a conservative projection given that the future Grand Parkway tollway segment I-1 alignment is located just west of the current location of the Mont Belvieu City Hall, and a large 300,000 SF grocery anchored new construction retail center is underway at I-10 and Eagle Dr. Also, according to data provided by the city for this analysis, there were an annual average of 124 single family home permits issued in the city from 2011 to 2017 for a total of 866 new single-family lot permits during that time. There are currently ten subdivisions with a combined total of 1,516 single family vacant, platted or proposed lots in the city.

Thus, the capture rate is increased to 10% to reflect the true quantification of recent, current and future housing demand within the Study Area. This increase is attributed to permitting and other city data coupled with the assumption that a boost of future demand will occur for single family housing in the Study Area mostly from planned future real estate and infrastructure development in Study Area and CMA. Moreover, the CMA is very large and contains only a few small to moderate sized cities with only several experiencing even moderate growth. On the other hand, Mont Belvieu is one of the top attractors of the potential single-family consumer market in the CMA. The Study Area has the highest achieving school district (which is a prime factor in single family home consumer preference), new construction retail and other infrastructure projects underway, funds and plans for capital improvement projects and is located adjacent to the future Grand Parkway segment I-1 which will provide improved access to the Study Area. This all makes Mont Belvieu the prime candidate, aside from Baytown, for new housing creation and demand in the CMA from now through 2030.

Using the 10% capture rate, the Study Area can expect a total demand of 2,042 single family units from 2018 to 2030. The table below shows the average annual single-family demand for the Study Area.

Table 27: Study Area Single Family Demand

Category	2020	2025	2030
CMA Projected Single Family Demand	2,150	8,573	9,696
Study Area housing unit demand (10%)	215	857	970
Study Area Average Annual Single-Family Demand	**108**	**172**	**194**

Sources: US Census, American Community Survey, PCensus, CDS

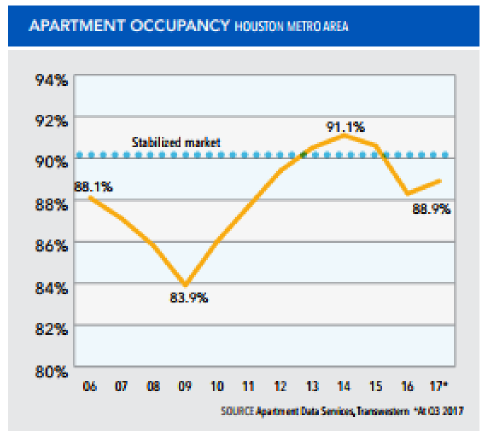
MULTIFAMILY HOUSING

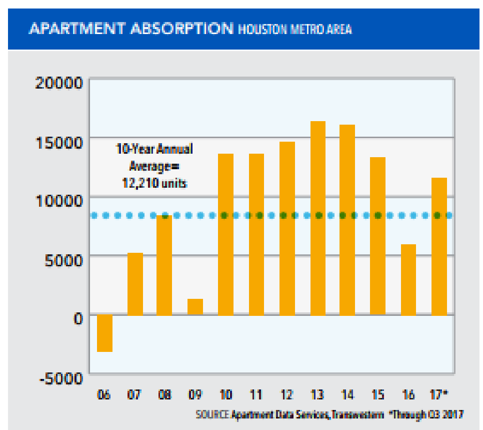
According to the 3Q2017 TransWestern Multifamily Market Report, the Houston multifamily sector had an auspicious quarter as Hurricane Harvey pummeled the city with fifty-five inches of rain. While hampering leasing activity in the short run and impacting a considerable number of units citywide, Harvey's long-term impacts should help push the market towards equilibrium. With respect to impacted units, 215 properties reported a total of 15,662 units damaged from the storm, according to a report by ApartmentData.com. The most heavily impacted submarkets were Greenspoint with 1,366 units (8.1% of market), Med Center/Braes Bayou with 804 units (3.4%), and the Energy Corridor with 761 units (2.3%) affected. The construction pipeline has ticked up after a slow second quarter, moving past 10,000 units again.

Overall occupancy decreased by 0.6% over the quarter, finishing at 88.3%. However, Class A properties continue to rebound with occupancy increasing by 4.2% over the period, ending at 83.8%. Class B properties recorded the highest occupancy amongst the class groups averaging 90.5%. Class C assets averaged 89.2%, followed by Class D assets at 87.3%. When subtracting units damaged by Harvey, overall occupancy increased to over 90% this quarter.

Absorption for the Houston multifamily market was negative in the third quarter, with absorption of negative 4,170 units. However, when removing damaged units from this calculation, absorption for the market equates to 10,926, or just under 24,000 units year-to-date.

Figure 14: Houston Multifamily Trends





Asking rental rates increased significantly over the period, ticking up by 1.7% to $999 per unit, from $982 per unit at the close of the second quarter. Extrapolated over a full year, this growth rate equates to just under 7.0%. Submarkets with the highest rental rate growth quarter over quarter were Katy/Cinco Ranch/Waterside – 5.5%, Highland Village/ Upper Kirby/West U – 5.3%, and Galleria/Uptown – 4.3%. Additionally, concessions were reported in 41% of the market with the average special provided at 8.4% of total rent. Capitalizing on the sudden surge of demand generated by Harvey, rental rates should continue to increase as pressure mounts on concessions.

For the 12 months ending in September, over 19,501 units in 73 communities were delivered across the Houston metro. Currently, there are 10,445 units in 39 communities under construction and 16,436 units in 56 communities proposed. Submarkets with the highest level of construction activity include Montrose/Museum/Midtown – 1,771 infill units, Energy Corridor/City Centre/Briar Forest – 1,762 suburban units, and Woodlands/Conroe South – 1,117 suburban units. Construction activity has declined drastically from its peak in 2015, but is anticipated to slowly pick back up as job growth increases and demand for apartment units remains high.

Submarket Indicators

The CMA includes submarkets 6, 12, and 29 in the table below. The occupancy rates are 82.5%, 83.3%, and 88.6% respectively. Compared to the overall Houston rate of 88.3%, the submarkets except for Baytown are below market. Rents vary from $0.88 to $1.00, which are all below the Houston average of $1.13.

Table 28: Current Multifamily Market Indicators

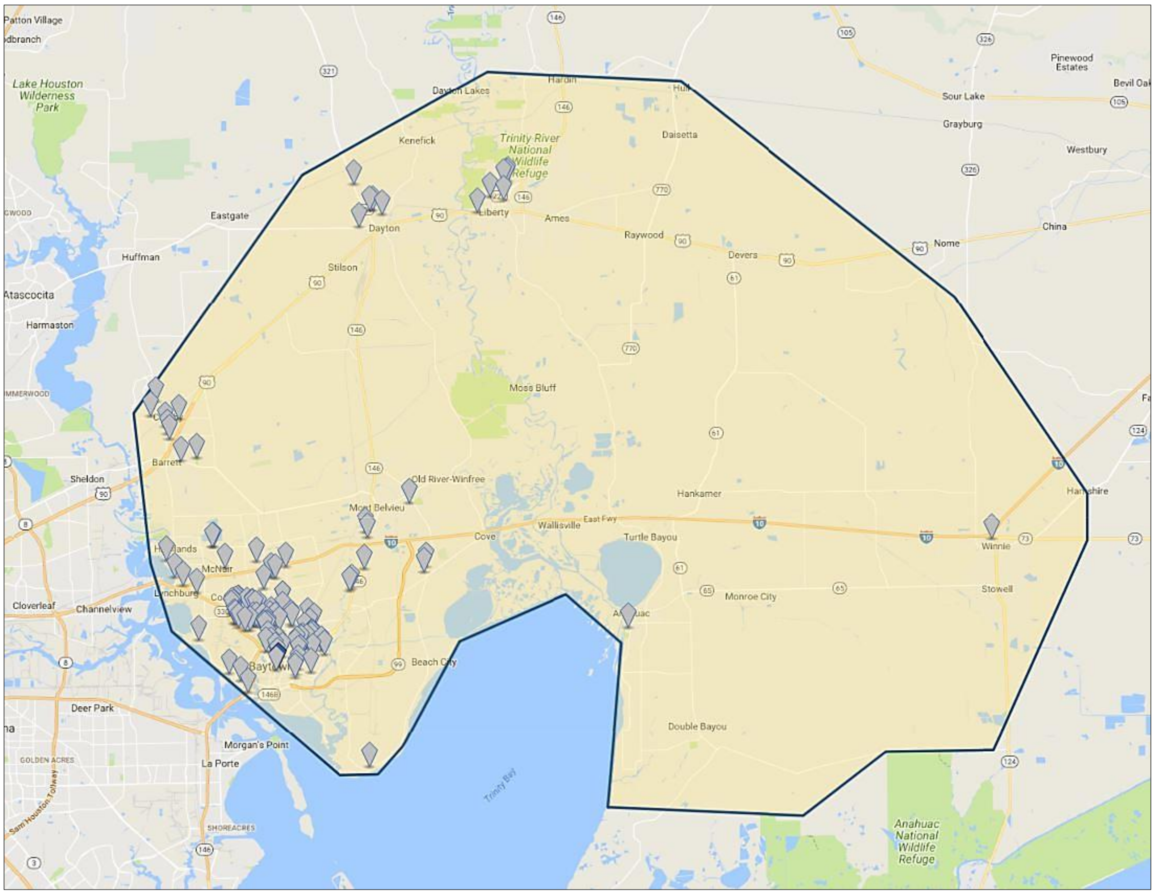
	SUBMARKET	# OF APT. COMMUNITIES	# OF APT. UNITS	AVERAGE OCCUPANCY	AVERAGE UNIT SF	AVERAGE EFFECTIVE RENT/MONTH	AVERAGE EFFECTIVE RENT/SF	UNITS UNDER CONSTRUCTION	UNITS ABSORBED Q3 2017	ABSORPTION TRAILING 4 QUARTERS
1	Montrose/Museum/Midtown	50	12,501	86.7%	926	$1,685	$1.82	1,771	559	1,235
2	Highland Village/Upper Kirby/West U	63	16,619	89.2%	970	$1,700	$1.75	-	520	1,105
3	Med Center/Braes Bayou	79	23,361	85.7%	880	$1,265	$1.44	652	119	586
4	Heights/Washington Ave	46	10,625	89.0%	895	$1,541	$1.72	435	(146)	632
5	Downtown	23	5,951	62.3%	967	$1,960	$2.03	-	266	1,018
6	I-10 East/Woodforest/Channelview	56	11,353	82.5%	833	$829	$1.00	546	(857)	(966)
7	I-69 North	27	3,605	93.6%	851	$760	$0.89	350	(2)	25
8	Northline	47	6,294	91.8%	840	$754	$0.90	154	(98)	(52)
9	Greenspoint/Northborough/Aldine	67	17,120	80.5%	796	$699	$0.88	-	(1,081)	(784)
10	FM 1960 East/IAH Airport	46	8,778	93.8%	897	$858	$0.96	-	(42)	115
11	Lake Houston/Kingwood	48	12,356	86.2%	939	$1,071	$1.14	300	(288)	(24)
12	Northeast Houston/Crosby	21	3,278	83.3%	884	$778	$0.88	-	(312)	(303)
13	Brookhollow/Northwest Crossing	90	19,712	90.0%	826	$823	$1.00	-	(206)	(98)
14	Memorial/Spring Branch	107	21,642	92.5%	916	$922	$1.01	133	205	212
15	Inwood/Hwy 249	31	5,828	94.5%	882	$750	$0.85	-	(31)	(54)
16	Willowbrook/Champions/Ella	158	39,001	89.3%	885	$886	$1.00	-	(368)	(734)
17	Jersey Village/Cypress	61	15,131	91.4%	908	$958	$1.06	-	(227)	(126)
18	Bear Creek/Copperfield/Fairfield	59	16,240	88.1%	902	$1,008	$1.12	-	(8)	312
19	Katy/Cinco Ranch/Waterside	90	24,753	86.2%	955	$1,176	$1.23	207	(222)	1,183
20	Tomball/Spring	53	12,566	82.5%	929	$1,113	$1.20	788	478	1,923
21	Woodlands/South Conroe	66	18,983	90.1%	942	$1,103	$1.17	1,117	20	1,451
22	Conroe North/ Montgomery	47	8,649	84.6%	896	$898	$1.00	-	255	466
23	Hwy 288/Pearland West	45	11,599	86.6%	966	$1,112	$1.15	400	(61)	310
24	U of H/I-45 South	105	17,257	88.4%	797	$711	$0.89	240	(316)	(453)
25	Beltway 8/I-45 South	47	13,204	89.6%	861	$861	$1.00	-	(149)	(261)
26	Pasadena/Deer Park/La Porte	120	23,205	89.6%	849	$821	$0.97	135	(395)	-
27	Friendswood/Pearland East	28	5,458	93.3%	857	$987	$1.15	108	(10)	(83)
28	Clear Lake/Webster/League City	95	24,032	90.8%	885	$1,040	$1.18	558	(90)	29
29	Baytown	53	9,678	88.6%	852	$851	$1.00	384	(227)	(307)
30	Dickinson/Galveston	74	11,330	91.3%	840	$861	$1.03	-	88	(85)
31	Alvin/Angleton/Lake Jackson	66	10,525	84.8%	825	$887	$1.08	-	36	80
32	Galleria/Uptown	102	24,306	86.1%	896	$1,270	$1.42	281	179	420
33	Woodlake/Westheimer	37	12,233	88.0%	889	$1,031	$1.16	-	39	397
34	Energy Corridor/CityCentre/Briar Forest	99	31,175	87.4%	944	$1,132	$1.20	1,762	(1,120)	212
35	Westchase	50	14,922	88.7%	840	$951	$1.13	-	115	23
36	Alief	110	26,897	91.4%	872	$837	$0.96	-	(20)	(375)
37	Sharpstown/Westwood	106	25,538	90.9%	790	$689	$0.87	-	(44)	(420)
38	Westpark/Bissonnet	57	16,900	92.9%	810	$735	$0.91	-	(72)	(322)
39	Braeswood/Fondren SW	82	21,786	87.8%	838	$761	$0.91	-	(625)	(586)
40	Almeda/South Main	25	4,646	86.7%	838	$829	$0.99	124	(183)	(236)
41	Sugar Land/Stafford/Sienna	51	12,896	88.9%	958	$1,189	$1.24	-	162	190
42	Richmond/Rosenberg	29	4,766	92.3%	875	$955	$1.09	-	(11)	(30)
	Greater Houston	**2,716**	**636,699**	**88.3%**	**882**	**$999**	**$1.13**	**10,445**	**(4,170)**	**5,625**

SOURCE Apartment Data Services, Transwestern

CMA MULTIFAMILY HOUSING MARKET

Using the previously defined Competitive Market Area (CMA), CDS has found that the market includes 12,918 units. The majority of the units are located southwest of Mont Belvieu.

Figure 15: Map of Multifamily Housing Locations in the CMA



The vacancy rate in the CMA is 11.9%. Rental rates are at $1.00psf on average. Concessions are being offered in this market.

Leasing Units	Survey	5-Year Avg
Vacant Units	1,540	1,124
Vacancy Rate	11.9%	9.0%
12 Mo. Absorption Units	-130	117

Rents	Survey	5-Year Avg
Studio Asking Rent	$575	$535
1 Bed Asking Rent	$787	$718
2 Bed Asking Rent	$906	$829
3+ Bed Asking Rent	$1,062	$981
Concessions	2.8%	1.5%

Inventory in Units	Survey	5-Year Avg
Existing Units	12,918	12,510
12 Mo. Const. Starts	204	280
Under Construction	444	328
12 Mo. Deliveries	144	195

Sales	Past Year	5-Year Avg
Sale Price Per Unit	$75,200	$75,544
Asking Price Per Unit	$37,075	$36,357
Sales Volume (Mil.)	$60	$49
Cap Rate	7.1%	7.9%

Table 29: Multifamily Trends in the CMA

Source: CoStar

Vacancy and Rental Rates

The CMA has experienced overall steady vacancy, ranging from a low of 7% in early 2015 to 12% at present. Currently, vacancy is the highest it has been in the CMA since 2013.

Rental rates for apartments have been steadily increasing since 2013. Rents per square foot have increased 30% in this market over the past five years. Rental rates range from $0.80psf to $1.05psf.

Absorption

Overall absorption in the CMA has been net positive 117 units over the last five years.

Existing Units

There are 12,918 units in the CMA. Another additional five hundred eighty-two (582) units are under construction and another 240 are proposed. Most of the units are market rate, with only 2,631 being affordable (20.4%). There are 484 Senior units (280 are affordable). There are 1,381 Class A units; 5,066 are Class B and 6,344 are Class C. The average year built is 1982. Newer units are Class A and B.

Unit Mix

The unit breakdown for multifamily in the CMA is as follows; 39.1% are one-bedroom units; 42.7% are two-bedroom units and 9.8% are three-bedroom units.

CMA Apartment Supply

Table 30: CMA Apartment Supply

Building Name	Building Address	Building Class	# Of Units	Avg Asking/SF	Avg Unit SF	Vacancy %	Yr Built	Yr Renovated	Rent Type
Boterra Bay Apartments	99 W Cedar Bayou Lynchburg Rd	A	144	1.54	995		2017		Market
Ravella at Eastpoint	7447 Eastpoint Blvd	A	283	1.33	982	8.48	2016		Market
Newport Village	5925 FM 2100	A	80	0.85	989	1.25	2015		Affordable/Rent Restricted
Villas at Rollingbrook	3717 Emmet Hutto Blvd	A	204	1.24	989	11.27	2009		Market
Oxford at Country Club	2200 W Baker Rd	A	198	1.33	901	18.18	2009		Market
Birdsong Place Villas	1017 Bird Song Dr	A	96	1.01	772	0	2008		Affordable/Rent Restricted
Stone Brook	619 Rollingbrook St	A	376	1.25	862	10.11	2000		Market
Aria at Rollingbrook	1700 Rollingbrook Dr	B	240	1.29	835	15.83	2015		Market
Oxford at Country Club Phase II	2200 W Baker Rd	B	218	1.36	830	13.3	2013		Market
Alexander Place Apartments	2401 N Alexander Dr	B	36		1057	8.33	2012		Affordable
Trinity Garden Apartment Homes	2010 Panther Dr	B	76	0.73	963	3.95	2011		Affordable/Rent Restricted
Eaglebrook Apartments	10855 Eagle Dr	B	152	1.52	860	1.97	2010		Market
Wyndham Park	2700 Rolling Brook Dr	B	184	0.95	905	3.26	2009		Affordable/Rent Restricted
Piedmont	7510 Decker Dr	B	250	0.86	1083	4.4	2007		Affordable/Rent Restricted
Bayview Apartments	6900 N Main St	B	242	0.99	883	2.89	2007		Affordable/Rent Restricted
Townhomes of Bay Forest	6304 Decker Dr	B	128	0.72	1099	2.34	2001		Affordable/Rent Restricted
Madison Court Apartments	1451 W Clayton St	B	112	1.03	907	0.89	2000		Market
Shady Creek	1220 Knowlton Dr	B	88	0.96	750	4.55	1999		Affordable/Rent Restricted
Advenir At The Preserve	2100 W Baker Rd	B	272	1.2	841	8.46	1999	2018	Market
Stuart Apartments	10527 Langston Dr	B	54	0.62	924	5.56	1987		Affordable/Rent Restricted
West Lodge Apartments	4219 W Baker Rd	B	198	1.11	676	10.1	1987		Market
Raintree Apartments	3300 Rollingbrook St	B	248	1.07	819	10.89	1986		Market
Cedar Ridge	2900 W Baker Rd	B	276	1.15	806	9.78	1984	1996	Market
Greenfield Apartments	2105 Cedar Bayou Rd	B	104	1.09	865	7.69	1984		Market
Roseland Manor Apartments	18 Stacey Ln	B	138	0.75	982	0	1984		Market/Affordable
Lakes at Madera	305 W Baker Rd	B	392	1.08	738	8.93	1983		Market
Ranch at Rolling Brook	3403 Garth Rd	B	219	1.18	691	5.94	1983	2010	Market
Willow Tree	1800 James Bowie Dr	B	100	1.09	733	8	1983		Market
Crosby Square Apartments	15016 FM 2100	B	16	1.01	856	25	1983		Market
Avalon Bay Apartment Homes	925 Northwood St	B	220	0.8	759	5.91	1982	2000	Market
Park Place Apartments	2342 Park Place Dr	B	64			3.13	1980		Market
n/a	3415 Lantern Ln	B	4			0	1978		Market
Laguna Azul Apartments	1200 Northwood St	B	259	0.73	845	20.08	1976	2008	Market
The Inverness Baytown	907 N Pruett St	B	51	1.23	589	11.76	1972		Market
Providence at Baytown	1711 James Bowie Dr	B	186	0.96	868	9.68	1970		Market
Autumn Ridge	510 Massey Tompkins Rd	B	100			9	1968		Market

Building Name	Building Address	Building Class	# Of Units	Avg Asking/SF	Avg Unit SF	Vacancy %	Yr Built	Yr Renovated	Rent Type
Oaks of Baytown Apartments	2011 Ward Rd	B	248	0.71	978	22.18	1967	2010	Market
Villas At The Palms	3800 W Baker Rd	B	66	0.88	978	9.09	1966		Market
n/a	7259 FM 3180 Rd	B	125		886	9.6	1993		Market
Gracemont House Apartments	1021 Ward Rd	C	102		750	8.82	2008		Affordable/Rent Subsidized
San Jacinto Riverfront RV Resort	540 S Main St	C	300			8.33	2006		Market
Rosemont at Baytown	6033 Garth Rd	C	250	0.98	960	4.8	2005		Affordable/Rent Restricted
Thomas Manor Apartments	700 FM 1942 Rd	C	17	1.09	935	0	2003		Market
Ocean Mobile Home Park	7030 FM 2354	C	91			9.89	2002		n/a
The Savannah	400 Lazy Ln	C	18	0.79	790	11.11	2001		Market
Rollingbrook Apartments	730 Rollingbrook St	C	25		620	8	1999		Affordable/Rent Subsidized
n/a	1725 Massey-Tomkins Rd	C	101			8.91	1998		n/a
Dayton Park Apartments	4490 N Cleveland	C	174	0.9	802	5.17	1997		Market/Affordable/Rent Subsidized
Dayton Retirement Center	1900 N Winfree St	C	48		750	4.17	1996		Affordable
Country Terrace Village II	8409 Oleander St	C	48	0.8	781	6.25	1995		Affordable
Park Forest Apartments	200 Cook Rd	C	56			5.36	1986		Affordable/Rent Restricted
Brookhollow Apartments	704 E Waring St	C	128	1.02	826	3.13	1984	2006	Market
Hunt Garden Apartments	800 Hunt Rd	C	100	1.06	755	9	1984		Market
Bay Terrace Apartments	1502 Nolan Rd	C	130	1.26	695	1.54	1983		Affordable/Rent Subsidized
Crosby Meadows Apartments	303 Krenek Rd	C	97	0.59	865	5.15	1982		Affordable/Rent Subsidized
n/a	3436 Lantern Ln	C	6			16.67	1981		Market
Crosby Plaza Apartments	6616 FM 2100 Rd	C	86	0.91	806	5.81	1980		Affordable/Rent Subsidized
Country Terrace Village I	2500 E Wallisville Rd	C	80		900	8.75	1980		Affordable/Rent Subsidized
Whisper Oaks Apartments	4015 Highway 90	C	64	1.11	691	3.13	1980		Market
Crosby Mobile Home Community	2929 Highway 90	C	60			6.67	1980		n/a
Centennial Square Apartments	805 Schilling St	C	100		680	9	1978		Affordable
Creekside Apartments	3120 Decker Dr	C	250	0.75	992	9.6	1978		Market
Bay Oaks Apartment Homes	1700 Bob Smith Rd	C	146	1.09	829	9.59	1978		Market
Reserve at Garth Road Reserve at Garth Rd	3700 Garth Rd	C	256	1.05	760	14.06	1978		Market/Affordable/Rent Subsidized
Sterling Bay Apartments	4601 Quail Hollow Dr	C	324	1.03	819	7.41	1976	2009	Market
Bay Pointe	811 Northwood St	C	314	0.64	855	20.06	1976		Market
KeiraBella Apartments	3400 Shady Hill Dr	C	179	0.93	922	8.94	1976		Market
Mont Belvieu Apartments	9407 N Highway 146	C	140	0.95	860	35	1976		Market
Houston Leisure RV Resort	1601 S Main	C					1976		n/a
Baycity Village Apartments	3301 Royal St	C	64	0.74	857	9.38	1975		Affordable/Rent Restricted
Cedar Ridge Apartments	1907 N Winfree St	C	80	0.76	708	11.25	1975		Affordable/Rent Subsidized
The Brixton	1601 Garth Rd	C	301	1.02	885	15.28	1974		Market
Kendallwood Apartments	1809 Monta	C	32	0.93	708	0	1973		Market
Watermark At Baytown	2700 Ward Rd	C	290	1.13	779	25.86	1972		Market
Horizon Apartments	1311 Beaumont Rd	C	79		900	70.89	1972		Market
Forest Grand Apartments	1301 Lakeland Dr	C	72	0.79	948	6.94	1972		Market
Village Green Townhomes	2104 James Bowie	C	18			11.11	1972		Market

MONT BELVIEU LIVABLE CENTER MARKET ASSESSMENT

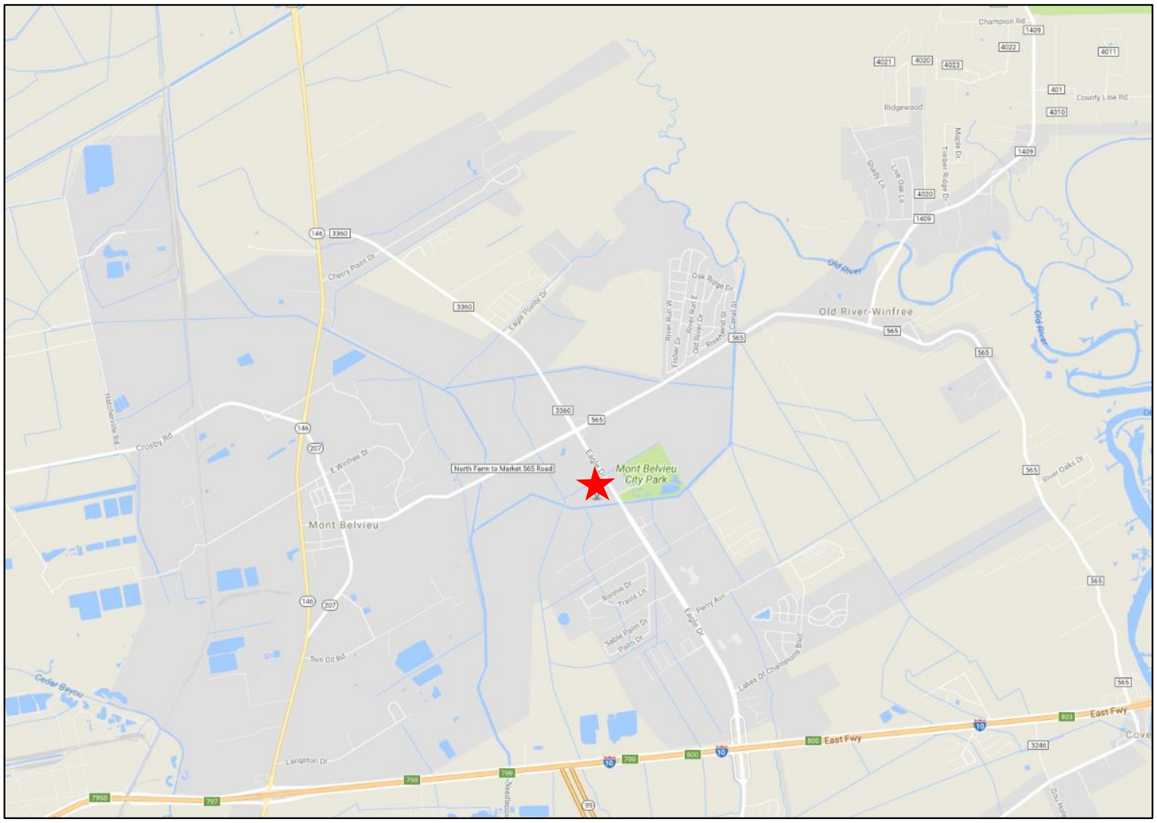
Building Name	Building Address	Building Class	# Of Units	Avg Asking/SF	Avg Unit SF	Vacancy %	Yr Built	Yr Renovated	Rent Type
n/a	2104 James Bowie Dr	C	18	0.89	876	11.11	1972	1985	Market
Village at Baytown	4601 Village Ln	C	210	0.87	842	2.86	1971	2008	Affordable/Rent Subsidized
The Place at 2500 James	2500 E James	C	304	0.83	1000	13.82	1971		Market
Palms at Baytown	1000 N Northwood St	C	89	0.9	898	5.62	1971		Market
Tompkins Green Apartments	605 Massey Tompkins Rd	C	99	1.05	629	17.17	1971	1997	Market/Affordable/Rent Subsidized
Marina Club at Baytown	1200 Missouri St	C	148	0.96	905	10.14	1969		Market
The Verve	3201 Garth Rd	C	56	1.13	827	10.71	1968		Market
Village Green Apartments at Baytown	115 Arbor St	C	21	0.63	1099	4.76	1967		Affordable/Rent Subsidized
Sunshine Apartments	4520 Hemlock Dr	C	21	0.86	943	0.00%	1967		Market
Bluebird Apartments	510 Williams Ave	C	69	1.31	717	4.35	1965		Market
Graywood Arms Apartments	1305 Memorial Dr	C	44	0.98	806	4.55	1965		Market
n/a	1505 Donovan St	C	8				1965		Market
Forest View	301 Tri City Beach Rd	C	158	0.88	853	16.46	1964		Market
The Inverness Gardens	1300 E James St	C	32	0.87	844	0	1960		Market
Sky Apartment Homes	3500 Decker Dr	C	31	1.08	649	6.45	1959		Market
Country Club Manor	3600 Decker Dr	C	32			9.38	1950		Market
n/a	116 Marion St	C	6		675	0	1950		Market
n/a	1507 N 10th St	C	20	1.04	800	5	1947	2007	Market
The Dakotas	219 W Magnolia Ave	C	24	0.77	790	20.83	1942		Market
n/a	3419 Illinois St	C	3				1940		Market
n/a	502 N Jones St	C	2			0	1940		n/a
n/a	214 W Republic St	C	10	0.62	568	10	1938		Market
The Del Mont	123 W Defee Ave	C	7	1.29	829	0	1935	2018	Market
Willow Creek Rv Park	2305 N Highway 146	C	62			8.06			Market
Ashford Pecan Grove	2 Rodney Ln	C	58	1	997	5.17			Market
Cedar Bayou Mobil	6310 N Highway 146	C	111			9.01			n/a
n/a	6227 N Highway 146	C	75			90.67			n/a
n/a	FM 563	C							n/a
n/a	13535 Sralla Rd	C							n/a
n/a	7030 Tri City Beach Rd	C							n/a
TOTALS			**12,791**						
			Under Construction						
Boterra Bay Apartments - Phase II	99 W Cedar Bayou Lynchburg Rd	A	240	1.72	777		2018		Market
Arabella of Baytown	700 Hunt Rd	A	204		700		2018		Market
Crosby Green	3529 Crosby Cedar Bayou Rd	F	138	0.52	1019	89.86		2018	Market
TOTALS			**582**						
			Proposed						
	Kilgore Pky @ Hwy 146	A	240				2019		Market
TOTALS			**240**						

Sources: CoStar; CDS

STUDY AREA MULTIFAMILY HOUSING MARKET

The Study Area is defined as Mont Belvieu. According to CoStar there are 152 units in one property in the Study Area located on Eagle Dr. just south of FM 565.

Figure 16: Map of Multifamily Housing Locations in the Study Area



Source: CoStar

EAGLEBROOK APARTMENTS

- Built 2010
- Class B
- Asking rents are $1.44psf on average
- Vacancy at 4%.
- 52.6% one-bedrooms; 42.1% two-bedrooms; 5.2% three-bedrooms
- Amenities – gated, pool, w/d, business center, clubhouse

Potential Demand – Multifamily Housing

Demand for new market rate multifamily apartments is primarily rooted in the need to house additional population in an area. Therefore, we will quantify demand for new apartments within the CMA based on the previously mentioned CDS/HGAC forecasts that have been prepared for the CMA as well as market performance within the CMA.

Table 31: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	187,537	197,515	229,796	262,166	298,206	353,604
Households	66,687	71,441	83,261	96,629	110,783	132,729
Employment	67,341	72,130	77,466	84,849	95,051	105,118

Source: CDS Community Development Strategies, H-GAC

To plan and project new housing units, the number of projected housing units is multiplied by the percentage of renters. As shown using the 27.5% of households renting in the CMA (2018 estimate) there is a potential demand to support 441 new units through 2020 based on current units under construction and proposed. By 2030 there will be additional demand for 3,676 units.

Table 32: CMA Multifamily Demand

Category	2015	2020	2025	2030
Total current and projected CMA households	66,687	71,441	83,261	96,629
Incremental housing unit demand		4,754	11,820	13,368
CMA multifamily demand (27.5%) p.31		1,307	3,251	3,676
Less CMA Pipeline Units p.48		-866	0	0
CMA Multifamily Demand		**441**	**3,251**	**3,676**

Sources: US Census, American Community Survey, PCensus, CDS Community Development Strategies, H-GAC

At 2018, Mont Belvieu has an estimated 2.5% capture of the overall CMA multifamily units based on percentage of renters (502/20,425). However, as with the actual single-family capture rate for the demand calculation used previously, the same method will apply here to the increased multifamily capture rate for the Study Area. A more accurate capture rate is representative of the planned and expected real estate and infrastructure development in the CMA and Study Area. Application of the adjusted capture rate to the CMA multifamily forecasted demand results in a total of 346 units through 2030 based on projected demand by CDS. In some cases, traditional multifamily development is not popular, thus alternative housing types can be produced deliberately as rental units such as single-family patio homes, townhomes or small-scale condo developments may be a more attractive rental product for this market.

Table 33: Study Area Multifamily Demand

Category	2020	2025	2030
CMA Projected Multifamily Demand	441	3,251	3,676
Study Area housing unit demand (5.0%)	**22**	**163**	**184**

Sources: CDS Community Development Strategies

SENIOR HOUSING

There are currently three Senior housing projects in the CMA. None of these are in the Study Area, they are in Baytown. Two are existing (Affordable) and one is under construction (Market Rate).

- Rental rates for affordable units range from $0.95psf to $1.01psf
- Vacancy is low at 2.4%
- Units are fairly new
- 61.4% are one-bedroom units; 38.6% two-bedrooms
- Amenities include w/d, Breakfast/Coffee, Concierge, Elevator, Fitness center, Outdoor Grill, Movie Theatre, Planned Social Activities, and Pool

Table 34: CMA Senior Housing

Building Name	Building Address	Building Class	# Of Units	Avg Asking /SF	Avg Unit SF	Vacancy %	Yr Built	Rent Type
Birdsong Place Villas	1017 Bird Song Dr	A	96	1.00	772	0.94	2008	Affordable/ Senior
Wyndham Park	2700 Rolling Brook Dr	B	184	0.95	905	3.91	2009	Affordable/ Senior
TOTALS/AVERAGE			**280**	**$0.99**	**838**	**2.4**	**2009**	
Arabella of Baytown	700 Hunt Rd	A	204		700		2018	Market/ Senior

Arabella at Baytown Independent Living is a 17-acre development just west of Garth Road on the south side of Hunt Road. Progressive care is a combination of independent living, assisted living, and memory care. The target market for progressive care is the adult population of 55 years of age and older. The development will consist of 204 dwelling units. Of the 204 dwelling units, 24 units will be devoted to memory care (MC) residents, 120 units will be devoted to independent living (IL) and 60 units will be devoted to assisted living (AL). There will be on-site services for the residents of the facility. The services consist of commercial kitchen and laundry, hair salon, fitness facility and leasing & management office. Of the 120 units for independent living, 20 will be duplex cottages and 100 will be in the West building (multi-story).

Study Area Senior Demographics

- The Study Area includes 1,787 persons 55 and older
- 24% of the total Study Area population 55 and older
- By 2023, the population 55 and older is expected to increase to 2,647 (by 860) or 27% of the total population
- 24% of the total female population in the Study Area are over age 55 and 23% of the male population
- There are 1,029 households with persons age 55 and older; the largest cohort is age 55-64; 55 and older HHs are expected to increase by 437 by 2023 to 1,467
- 64.3% of 55 to 64 households have incomes of $75,000 and greater
- 40.2% of 65 to 74 households have incomes over $75,000 and greater

Table 35: Study Area Senior Population, 2018 - 2023

	2018		2023	
Est. Population Study Area	**7,479**	**% of Total Population**	**9,695**	**% of Total Population**
Age 55 to 64	879	11.75%	1,241	12.80%
Age 65 to 74	598	8.00%	886	9.14%
Age 75 to 84	250	3.34%	419	4.32%
Age 85 and over	60	0.80%	101	1.04%

Source: US Census, American Community Survey, PCensus

Table 36: Senior Householder Income by Age, 2018

Category	55-64	65-74	75-84	85+
Household Totals	**495**	**337**	**159**	**38**
% Of Total Study Area HH	18.66%	12.71%	6.01%	1.42%
Income Less than $15,000	7.90%	11.6%	15.1%	16.0%
Income $15,000 to $24,999	7.20%	9.4%	16.0%	16.0%
Income $25,000 to $34,999	5.17%	11.6%	16.0%	16.0%
Income $35,000 to $49,999	7.60%	13.0%	13.2%	20.0%
Income $50,000 to $74,999	7.90%	14.3%	15.1%	20.0%
Income $75,000 to $99,999	9.42%	16.5%	13.2%	4.0%
Income $100,000 to $124,999	15.81%	2.7%	1.9%	0.0%
Income $125,000 to $149,999	7.29%	0.0%	0.0%	4.0%
Income $150,000 to $199,999	16.63%	12.1%	5.7%	4.0%
Income $200,000 or more	15.11%	8.9%	3.8%	0.0%
Median Household Income	**$110,817**	**$57,813**	**$38,214**	**$36,500**

Source: US Census, American Community Survey, PCensus

Approximately 31.4% (834) of the total 2018 Study Area households (2,653) are owner-occupied housing units with householders age 55 and older; 7.4% (195) of the occupied Study Area housing units are rental units occupied by senior householders.

POTENTIAL DEMAND – SENIOR HOUSING

The total population aged 55 and older represents the primary pool of prospects that would be expected to populate a senior housing project over the near-term forecast window.

Using the same analysis as the market rate illustration, we have derived the demand for basic Age Restricted or Active Adult Apartment units (no medical services) based on household growth in the Study Area over the next five years. By 2023, there will be an additional 437 households in the Study Area age 55 and older or, an average of 87 annually over that span.

Although the exact percentage of the population who would live in senior living developments is unknown, 7.4% of the current householders age 55 and over are renters. CDS estimates that the Study Area could capture 100% of the estimated market growth based on the percentage of households age 55+ currently renting in the Study Area. Based on this number, 32 additional 55 and older renter households will be in the Study Area by 2023.

Table 37: Study Area Senior Housing Demand Projections

Category	2018	2023
Study Area Senior HH Growth	1,029	1,467
Incremental Senior HH Growth		437
7.4% CMA Households age 55+ Renters		32

Source: US Census, American Community Survey, PCensus

Conclusions and findings include the following:

- CDS recommends a small 30 to 50-unit gated age 55+ rental community – can be townhomes, patio homes, cottages or traditional garden apartments
- Tax Credit **does not** appear to be feasible in this area
- Class A development
- Lease rates between $1.25psf and $1.45 depending on level of amenities and finishes
- Amenities should include access gates, community room, planned activities, BBQ area, walking trails, fitness room, and pool at a minimum.
- Higher rents could be supported by shuttle service, hair salon, coffee bar, etc.
- Unit mix should consist of 60% one bedroom and 40% two-bedroom units
- Average unit size should be consistent with the current market – 800 square feet on average

Using the suggested pricing (average rental rates) of $1.25psf at 800sf the average rental rate would be $1,000/month. If the property required 2X income for income qualifications that would be annual HH income levels of $24,000; 3x income qualifications would be $36,000. At $1.45psf the rent would be $1,160; income qualifications would be $27,840 and $41,760.

Currently the median income for householders 55 to 64 in the Study Area is $110,817; age 65 to 74 $57,813; age 75 to 84 $38,214 and over 85 is $36,500. Those that could currently qualify for senior housing at the suggested pricing of $1.30psf to $1.50psf are in the $26,364 to $45,612 householder income range threshold required for these prices. As seen, there are qualified renters in the Study Area to support the suggested pricing for a senior living complex in Mont Belvieu.

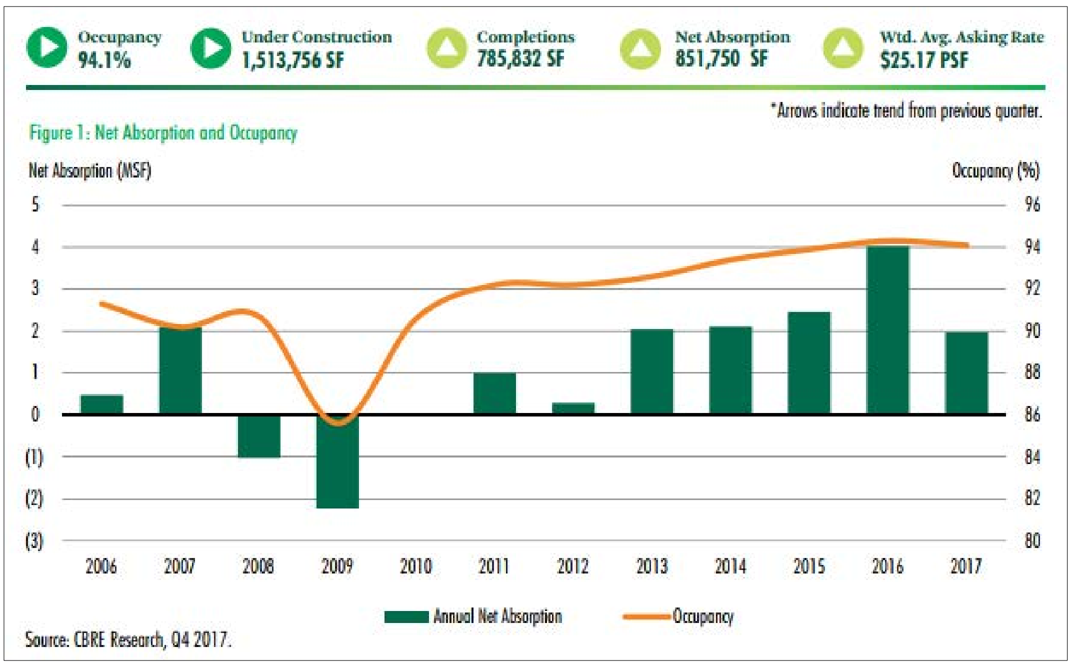
RETAIL SPACE

OVERALL HOUSTON MARKET 4Q2017

This year brought its challenges to the Houston retail market: an abundance of U.S. retail bankruptcies, Hurricane Harvey's impact on local restaurants, and a continued supply shortage of prime space. However, stable demand during the final 90 days resulted in the year's strongest quarter of net absorption and brought the annual total to almost 2 million sq. ft.— well above the 10- year average of 1.1 million sq. ft. Tightening availability propelled overall occupancy to 94.1% and Class A to 97.4%, slowed large expansions, and drove deal flow in small-shop and restaurant segments.

New construction activity continues to provide lift to net absorption totals, as 719,000 sq. ft. was occupied in projects delivered this quarter.

Figure 17: Houston Area Retail Inventory, Absorption, and Occupancy Rate



October sales tax revenues continue to show improving consumer and business spending across the Houston metro, likely due to hurricane recovery expenditures for furniture and home improvement needs. Additionally, Houston regional retail sales volumes are forecast to reach $75.5 million in 2018, a 5.7% increase from 2017. Similar sales growth is projected over the next 5 years. These are good indicators for the retail sector in the year ahead.

Table 38: Houston Area Retail Market Trends

Market	Number of Centers	Net Rentable Area (SF)	Vacancy (%)	Asking Rate, NNN Avg. Annual ($/SF)	Under Construction (SF)	Delivered Construction (SF)	Q4 2017 Net Absorption (SF)
Inner Loop	321	15,534,434	3.7	38.00	147,000	0	(9,677)
Northeast	245	15,595,798	4.7	16.00	116,396	108,230	107,088
Near North	109	6,405,774	3.5	14.00	0	0	25,433
Far North	467	32,162,397	7.8	24.00	418,550	367,195	272,858
Near Northwest	185	10,641,313	4.7	25.00	20,000	0	22,631
Far Northwest	480	27,812,651	5.8	32.00	0	0	61,470
Near West	191	12,479,830	4.3	36.00	20,000	0	11,873
Far West	290	18,093,411	6.2	30.00	266,635	148,200	186,404
Near Southwest	222	12,673,368	8.5	17.75	70,000	0	43,565
Far Southwest	352	22,389,161	5.8	25.50	393,800	86,000	27,468
South	161	8,438,346	6.1	24.00	20,025	47,200	56,657
Near Southeast	137	9,116,348	7.0	18.00	0	0	541
Far Southeast	328	22,933,398	5.4	23.25	41,350	29,007	45,439
HOUSTON TOTAL	3,488	214,276,229	5.9	25.30	1,513,756	785,832	851,750

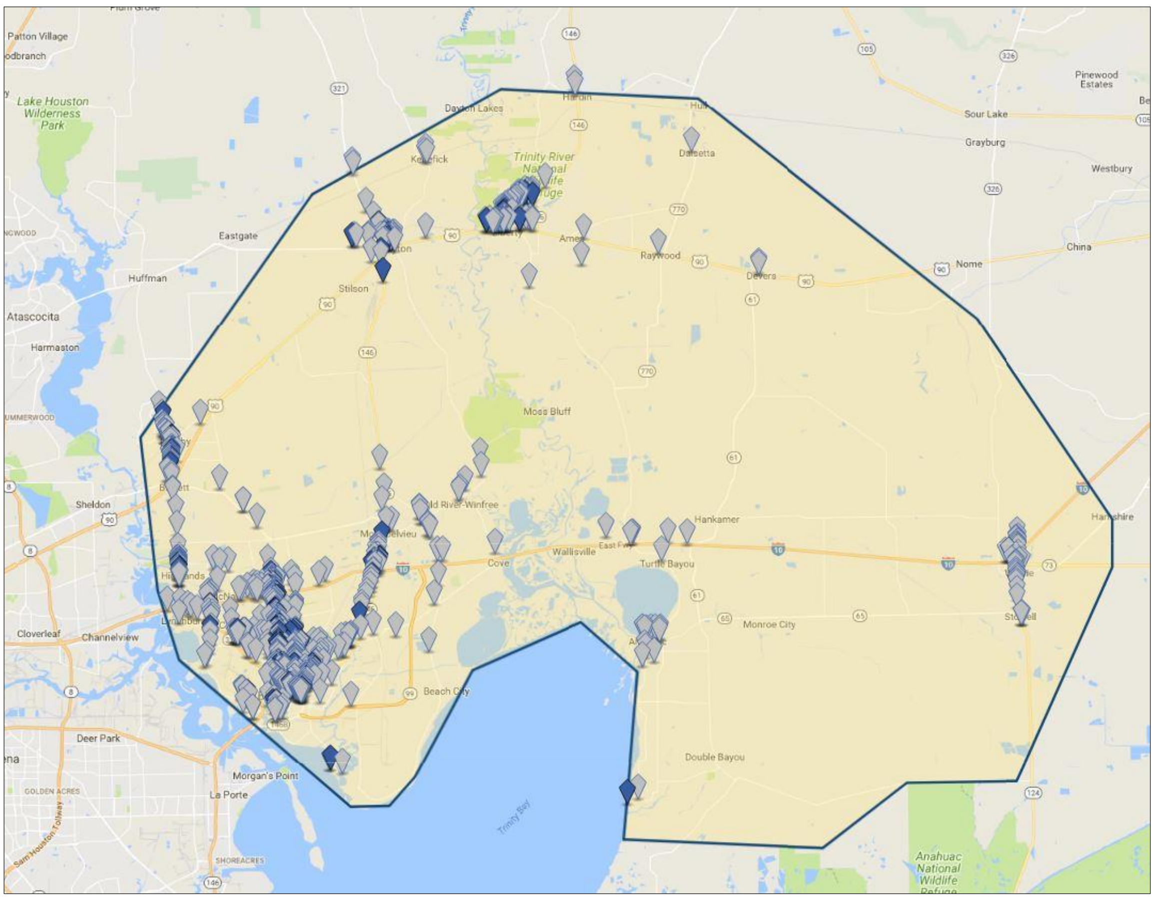
Source: CBRE Research, Q4 2017.

* Market total reflects weighted average asking rate

CMA RETAIL MARKET

The map below illustrates retail locations in the Mont Belvieu Competitive Market Area (CMA). The largest existing concentration of retailers in the CMA is located at the intersection of Garth Rd. and I-10 near San Jacinto Mall in Baytown. However, the past several years has seen new small-scale retail development in Mont Belvieu along Eagle Drive corridor from FM 565 to I-10. Currently a 300,000sf new construction grocery-anchored retail center is underway at the entrance to Mont Belvieu from I-10 at Eagle Dr.

Figure 18: Map of Retail Locations in the CMA



Source: CoStar

Inventory

There are 818 retail buildings comprising a total of 10,653,156sf in the CMA, mostly concentrated along the TX-146 and I-10 corridors. The average rental rate is $13.24psf (NNN) with a vacancy rate of 4.4%. There is 300,000sf currently under construction by Fidelis located at the intersection of I-10 and Eagle Drive called Mont Belvieu Crossing. The large retail center will be anchored by an 87,000sf HEB grocery store. So far other signed tenants include TJ Maxx, Finest Nails and Supercuts. In the past 12 months, 291,474 square feet of retail has been absorbed in the CMA.

Availability	Survey	5-Year Avg
NNN Rent Per SF	$13.24	$12.32
Vacancy Rate	4.4%	5.8%
Vacant SF	464,317	593,817
Availability Rate	6.5%	8.2%
Available SF	702,043	848,295
Sublet SF	58,530	40,662
Months on Market	10.6	17.2

Demand	Survey	5-Year Avg
12 Mo. Absorption SF	291,474	168,311
12 Mo. Leasing SF	219,489	156,128

Inventory	Survey	5-Year Avg
Existing Buildings	818	799
Existing SF	10,653,156	10,252,562
12 Mo. Const. Starts	244,258	150,208
Under Construction	169,412	94,766
12 Mo. Deliveries	193,443	138,369

Sales	Past Year	5-Year Avg
Sale Price Per SF	$94	$91
Asking Price Per SF	$275	$229
Sales Volume (Mil.)	$15	$9.9
Cap Rate	6.3%	7.5%

Source: CoStar

CMA Performance

- The CMA retail vacancy rate has continued to decrease over the past 2.5 years. Rates have gone from a peak of 7.0% in 2013 to the current rate at 4.4%.
- Rental rates have been on a spiky, but steadily increasing trend since 2013 in the CMA. Rates climbed from $11.50psf NNN to the current $13.20psf. An increase of 14.8% over the past 5.5 years, or approximately 2.7% average annually over that time is seen in the market.
- Net absorption has been positive in the market. The leasing outlook over the next 60 months is for continued absorption.

Table 39: Retail Market Trends in the CMA

Source: CoStar

POTENTIAL DEMAND – RETAIL SPACE

Given the previously described regional economic trends, retail market trends, realistic potential capture of regional office growth, and competitiveness factors for the CMA, CDS has estimated what might be a realistic expectation of retail development based on projections and illustrated in the table below.

Table 40: Future Retail Demand for the CMA

Retail Store Type	2018 Aggregate Expenditures	2023 Aggregate Expenditures	Total Expected Sales Growth	Sales/SF	Additional SF of Demand	Sf/Store	Total # of New Stores
TOTAL SPECIFIED CONSUMER EXPENDITURES (CMA)	$4,100,057,260	$4,836,010,203	$735,952,943				
All Retail Stores*	$1,631,148,238	$1,922,507,611	$291,359,373	$300.00	971,198		
Automotive parts/accessories/tire stores	$33,115,575	$38,608,329	$5,492,754	$172.90	31,768	5,600	6
Furniture stores	$19,385,754	$22,831,515	$3,445,761	$263.98	13,053	7,360	2
Other home furnishing stores	$12,901,877	$15,320,357	$2,418,480	$216.13	11,190	4,854	2
Household appliance stores	$5,565,066	$6,547,386	$982,320	$302.00	3,253	1,800	2
Building materials/garden equipment/supplies dealer	$106,273,288	$125,358,442	$19,085,154	$388.65	49,106	116,826	0
Home centers	$51,535,907	$60,856,735	$9,320,828	$388.65	23,983	3,700	6
Hardware stores	$7,320,464	$8,632,557	$1,312,093	$144.44	9,084	6,561	1
Grocery stores	$212,375,416	$250,623,993	$38,248,577	$472.63	80,927	44,094	2
Health and personal care stores	$104,500,768	$123,350,513	$18,849,745	$429.47	43,891	13,078	3
Clothing and clothing accessory stores	$76,980,876	$90,538,551	$13,557,675	$268.71	50,455	6,500	8
Clothing accessory stores	$2,858,191	$3,360,637	$502,446	$155.59	3,229	2,948	1
Shoe stores	$12,181,268	$14,357,909	$2,176,641	$141.51	15,382	2,950	5
Jewelry stores	$7,453,523	$8,714,958	$1,261,435	$317.37	3,975	1,494	3
Luggage and leather goods stores	$773,016	$915,531	$142,515	$245.69	580	1,485	0
Sporting goods stores	$11,608,125	$13,569,031	$1,960,906	$220.87	8,878	3,850	2
Hobby, toy and game shops	$4,343,858	$5,149,400	$805,542	$194.92	4,133	1,700	2
Sewing/needlework/piece goods stores	$1,015,078	$1,202,120	$187,042	$139.42	1,342	2,262	1
Book stores	$3,041,989	$3,540,109	$498,120	$246.02	2,025	4,120	0
General merchandise stores	$233,289,532	$274,876,520	$41,586,988	$169.10	245,931	8,000	31
Department stores (excluding leased)	$51,397,016	$60,514,829	$9,117,813	$243.25	37,483	20,000	2
Florists	$1,531,605	$1,810,425	$278,820	$264.55	1,054	1,445	1
Gift, novelty and souvenir shops	$4,609,620	$5,451,687	$842,067	$145.43	5,790	4,000	1
Sporting goods, hobby, book and music stores	$21,371,278	$25,136,573	$3,765,295	$220.60	17,068	4,000	4
Office supplies and stationery stores	$5,040,038	$5,978,912	$938,874	$219.40	4,279	1,779	2
Eating places	$183,849,764	$213,718,475	$29,868,711	$289.57	103,148	4,416	23
Full service restaurants	$89,351,186	$103,868,919	$14,517,733	$308.18	47,108	4,416	11
Fast food restaurants	$78,437,264	$91,015,421	$12,578,157	$246.32	51,064	1,710	30
Drinking places	$6,094,300	$7,135,007	$1,040,707	$396.27	2,626	3,196	1

Source: PCensus, Urban Land Institutes Dollars & Cents of Shopping Centers, CDS Market Research. *All Retail Stores Total is NOT the sum of the other line items. Some line items are sub-categories of multiple line items and could appear in more than one line item.

Using a rough "rule of thumb" from the Dollars & Cents of Retail Shopping Centers, published by the Urban Land Institute, it is possible to estimate the net annual increase of retail space. According to that source, the average retail sales per square foot is approximately $300. Therefore the sales growth of retail sales of $291 million would equate to a demand, in the CMA, for 971,198 square feet of new retail space of all types over the next 5 years.

The above table represents the number of supportable new establishments that could likely succeed if there were no leakage of future expenditures from the Competitive Market Area.

CMA Consumer Buying Power

A critical factor in consideration for commercial retail development is the buying power of the market area in which a potential development site is located. Buying income can be measured by the level of disposable or expendable income from consumers in a market area.

CDS analyzed retail potential for a subset of ZIP codes in the CMA that represent the key geographic sources for potential spending in the Mont Belvieu Study Area. The CMA's aggregate zip codes have an effective buying income of $63,512 on average per household.

Table 41: Household Effective Buying Income for CMA Zip Codes

Category	Number	% of Total
Total Households	72,712	100%
EBI Less than $15,000	8,735	12.01%
EBI $15,000 to $24,999	7,597	10.45%
EBI $25,000 to $34,999	8,149	11.21%
EBI $35,000 to $49,999	11,459	15.76%
EBI $50,000 to $74,999	14,648	20.15%
EBI $75,000 to $99,999	10,627	14.62%
EBI $100,000 to $124,999	5,076	6.98%
EBI $125,000 to $149,999	2,919	4.01%
EBI $150,000 to $199,999	2,067	2.84%
EBI $200,000 to $249,999	324	0.45%
EBI $250,000 to $499,999	914	1.26%
EBI $500,000 or more	197	0.27%
2017 Average Effective Buying Income	**$ 63,512**	

ZIP codes analyzed: 77575, 77521, 77580, 77523, 77562, 77597, 77520, 77535, 77532
Source: US Census, American Community Survey, PCensus

CMA Zip Codes Retail Sales Trends

As seen in the table below, Food & Beverage Stores, which includes grocery stores, have shown the greatest increase in sales (up 34.4%) from 2014 to 2016. Decreases were seen in Electronics and Appliance Stores, Gasoline Stations, General Merchandise and Non-Store Retailers categories. The largest decrease in sales from 2014 to 2016 was the General Merchandise category (down 71.3%)

Table 42: Actual Retail Sales in the CMA Zip Codes, 2010 to 2Q 2017

NAICS Code	NAICS Category	2010	2011	2012	2013	2014	2015	2016	2Q 2017
441	Motor Vehicle & Parts Dealers	$292,627,683	$320,996,589	$361,702,600	$434,533,344	$555,033,413	$548,779,267	$571,836,744	$279,991,195
442	Furniture & Home Furnishings	$14,976,103	$16,681,303	$19,196,548	$37,119,808	$39,775,782	$43,831,491	$42,045,863	$15,812,467
443	Electronics and Appliance Stores	$53,195,743	$53,723,890	$58,151,453	$43,460,186	$38,180,231	$35,654,886	$33,327,895	$14,488,248
444	Building Material & Garden Equipment	$114,211,456	$118,153,427	$126,502,701	$133,572,066	$145,970,106	$156,210,498	$157,881,443	$81,236,790
445	Food & Beverage Stores	$302,666,343	$328,255,776	$351,899,986	$360,700,197	$367,558,162	$477,697,737	$494,025,165	$229,879,012
446	Health & Personal Care Stores	$108,705,374	$113,146,217	$105,068,963	$111,238,312	$125,338,078	$147,942,050	$175,326,273	$76,136,838
447	Gasoline Stations	$274,635,597	$347,195,649	$384,778,998	$385,043,559	$386,487,876	$285,664,710	$270,594,242	$145,013,457
448	Clothing & Clothing Accessories	$36,964,848	$40,028,098	$41,405,804	$46,367,956	$47,815,863	$50,619,375	$56,026,703	$27,936,203
451	Sporting Goods, Hobby, Book, & Music	$20,547,787	$30,067,463	$48,843,234	$53,258,520	$53,193,427	$55,827,472	$58,456,331	$24,355,754
452	General Merchandise	$2,615,628,126	$3,104,186,537	$2,790,035,052	$2,390,693,158	$1,811,322,587	$515,168,166	$519,799,468	$244,506,599
453	Miscellaneous Store Retailers	$95,327,958	$129,989,486	$136,273,936	$150,872,507	$166,634,060	$184,250,458	$176,407,364	$93,566,301
454	Non-store Retailers	$15,499,186	$27,290,077	$168,434,682	$140,438,472	$45,556,963	$22,506,450	$23,041,427	$16,146,066
721	Hotels, RV, camping,	$232,677	$341,699	$755,223	$540,797	$688,452	$690,510	$698,914	$392,797
722	Drinking and Eating Places	$208,043,252	$225,623,970	$260,007,492	$282,810,862	$309,633,023	$336,977,062	$343,103,450	$180,618,044
812	Personal Services	$18,549,224	$18,613,321	$18,084,557	$19,556,207	$20,038,852	$22,388,949	$26,496,977	$12,327,862
Grand Total		**$4,171,811,357**	**$4,874,293,502**	**$4,871,141,229**	**$4,590,205,951**	**$4,113,226,875**	**$2,884,209,081**	**$2,949,068,259**	**$1,442,407,633**

ZIP codes analyzed: 77575, 77521, 77580, 77523, 77562, 77597, 77520, 77535, 77532
Source: Texas Comptroller of Public Accounts for 2010-2Q2017

Retail Surplus/Leakage

The comparison of some categories presents a very superficial look at the potential retail leakages or surpluses. The aggregate expenditure estimates for the CMA are higher in every category except Clothing Accessories Stores. This indicates that residents are shopping outside the CMA for these items, thus there is some leakage in the market. The category representing the highest leakage is Clothing Accessories Stores, which could mean opportunities for clothing retailers in the future, especially if household and employment continue to grow. However, Mont Belvieu Crossing will address this leakage to some extent with the newly constructed TJ Maxx and likely at least one additional large clothing retailer. Perhaps the Study Area and CMA could support a modest community/neighborhood level retail as a component of Mont Belvieu Main.

Table 43: Comparison of Actual Sales with Expected Household Expenditures for CMA Zip Codes, 2017

BUSINESS CATEGORY DESCRIPTION	Actual Sales	Total Expenditures	Surplus or (Leakage)
Furniture and Home Furnishings Stores	$42,045,863	$32,731,387	$9,314,476
Electronics and Appliance Stores	$33,327,895	$7,965,376	$25,362,519
Food and Beverage Stores	$494,025,165	$263,190,466	$230,834,699
Health and Personal Care Stores	$175,326,273	$144,350,526	$30,975,747
Clothing and Clothing Accessories Stores	$56,026,703	$78,702,958	($22,676,255)
Sporting Goods, Hobby, Book, and Music Stores	$58,456,331	$20,585,859	$37,870,472
General Merchandise Stores	$519,799,468	$264,671,573	$255,127,895
Food Services and Drinking Places	$343,103,450	$215,842,745	$127,260,705

ZIP codes analyzed: 77575, 77521, 77580, 77523, 77562, 77597, 77520, 77535, 77532
Source: Texas Comptroller of Public Accounts 2017, PCensus

CMA RETAIL

Psychographic analysis is used to identify consumer segments and match retail demand categories in the trade area(s). CDS has broken down the market area resident populations utilizing a consumer segmentation methodology. This system is used to understand and profile the population in the market area for the purpose of targeting the largest consumer lifestyle segments. Every household is defined in terms of 66 demographically and behaviorally distinct groups. Specific lifestyle segments will be quantified and ranked for the trade area. The top segments, described in this section, are correlated to likes, dislikes and purchase behavior relative to retail goods and services. The largest household segment in the Study Area is Township Travelers (8.54%) followed by Second City Generations (5.68%).

Table 44: Top 10 PRIZM Segments of the Population in the CMA

Households by PRIZM Segment	Households	% of Total Households
23 Township Travelers	4,275	8.54%
Homeowners in Township Travelers exhibit a blend of behaviors representative of their upscale incomes and small-town environment. They enjoy outdoor activities like fishing and off-road biking but also enjoy the creature comforts of reading, watching college basketball, and shopping at wholesale clubs and gourmet groceries.		
61 Second City Generations	2,840	5.68%
Second City Generations are often multi-generational households with middle-aged parents or grandparents and new babies and young children all under one roof. Also, often bilingual, they are entertained by a wide variety of media channels and programs.		
11 Fast-Track Families	2,583	5.16%
Fast-Track Families lead busy, active lives often centered around the schedules and interests of their children. Always on the go, they are frequent restaurant diners, drive larger SUVs, visit Pinterest, and tend to shop in bulk at wholesale clubs.		
27 Big Sky Families	2,336	4.67%

Households by PRIZM Segment	Households	% of Total Households
Scattered in placid towns across the American heartland, Big Sky Families is a segment of middle-aged rural families who have turned high school educations and blue-collar jobs into busy, upper-middle-class lifestyles. Residents enjoy country music and all types of team sports and outdoor activities, especially hunting. To entertain their families, they buy virtually every piece of sporting equipment on the market.		
33 Second City Startups	2,270	4.54%
In Second City Startups, young to middle-aged families have settled in neighborhoods within smaller cities and metro areas. These families are ethnically diverse and are more likely to have a military affiliation of some kind and have average technology use.		
36 Toolbelt Traditionalists	2,267	4.53%
Like many other older segments, Toolbelt Traditionalists have empty nests. If something needs to be fixed, they are likely to do the work themselves with their own power tools or paint. They enjoy the benefits of AARP and are frequent QVC and HSN shoppers.		
30 Pools & Patios	2,256	4.51%
Pools & Patios is a segment of middle-aged suburban families. In these stable neighborhoods graced with backyard pools and patios, residents work as white-collar managers and professionals, and are now at the top of their careers. They are above average technology users, often researching products and shopping online.		
59 New Melting Pot	1,941	3.88%
New Melting Pot neighborhoods are populated by a blend of ethnically diverse, young families and singles in the nation's second cities. They are mainly high school graduates that rent and work in a mix of service jobs. They are big fans of gospel music, wrestling, and monster trucks.		
48 Generation Web	1,767	3.53%
Having grown up in the age of the internet, Generation Web are younger families with above average technology use. They are more often renters, living in suburban neighborhoods and second cities, and frequent video game and accessory stores.		
51 Campers & Camo	1,718	3.43%
Primarily found in more rural areas, Campers & Camo families enjoy the outdoors. A top segment for ownership of an RV, they also enjoy hunting and fishing. Despite their age, they are below average in their use of technology but are big fans of country music and prefer a value when shopping, traveling, and eating out.		

ZIP codes analyzed: 77575, 77521, 77580, 77523, 77562, 77597, 77520, 77535, 77532
Source: US Census, American Community Survey, PCensus

Conclusions and findings include the following:

- Independent local businesses serving the Study Area's population generally prefer lower rent retail space over newer space, which can typically rent for much higher rates per square foot. However, regional and national chains with recognizable brands are less likely to be interested in class B and particularly class C retail space. Increasing population growth has mitigated this situation now with Mont Belvieu Crossing attracting national retailers who will provide new Class A space and well-known retailers heretofore not existing in Mont Belvieu.
- The overall aesthetics of an area are very important to retailers. Mont Belvieu has made important public investments already with new sidewalks, parks and connected pathways to encourage more retail interest, which can spur retail property owners to renovate or build newer properties to compete for new tenants. Retail realtors, brokers, and stakeholders in the area who were interviewed mentioned several types of retail and eating places that are very much lacking and in demand in the Study Area. The most popular types of retail mentioned were eating and drinking places, personal services and fitness, health and wellness.
- CDS believes that the three retail business categories mentioned above are supportable at the neighborhood level and could be successful in Mont Belvieu Main as long as the mechanisms and tools recommended for Mont Belvieu Main are incorporated to support these businesses, such as a deliberate design which orients attention and traffic to the development coupled with programmed public space(s) to activate the development.
- It is the opinion of CDS that new retail space should be focused on facilitating local businesses for food and drinking like a wine bar, beer garden, coffee shop, café, or grill; personal services like local real estate agents, boutique healthcare (dentist, chiropractor, etc.), local tax service, hair salon/barber shop; and, fitness, health and wellness businesses, for instance a local cross fit, yoga, pilates alternative health niche businesses.

Figure 19: Images of Retail Locations in the CMA

Source: CDS Community Development Strategies, Google Street View

MONT BELVIEU MAIN

As previously noted, additional retail space marketed to neighborhood level restaurants, bars, and entertainment/health and fitness venues would be expected to do well. This is related in part to the relatively fast growth in new residents and single-family subdivisions in the Study Area who are employed in the area. In addition, new retail space deliberately designed and devoted to restaurants, bars, and entertainment/health and fitness can serve as important catalyst components to Mont Belvieu Main by not only providing space for businesses, services and activities the community demands but also providing opportunities for interactive community events that can create a stronger identity, increasing the quality and sense of place for Mont Belvieu's residents and visitors.

The key to such a project would be to provide retail space that is unique and attractive, prioritizing independent retailers (over chains) and providing a neighborhood experience, perhaps a gravel flex space for food trucks or other local culinary enthusiasts or businesses with rear placed alley-style parking and outdoor patio seating. Experience has shown that this type of retail has a greater chance of attracting those who are visiting the area and looking for a unique dining/entertainment experience. This type of development could support local businesses by providing a space for company sponsored events like barbecues, chili cook offs, fundraisers, Fourth of July festivities, etc.

The following figure depicts three locations in the Houston area that could serve as examples. On the left is a very popular, small retail center in a residential section of Montrose. This retail center has three tenant spaces totaling 6,000 square feet, with minimal but attractive landscaping and space in the front for patio seating. The top right is the Back-Pew Brewing Co. facility just west of I-69 in a rural but growing West Kingwood submarket along Sorters-McCllelan Rd., a setting like Mt. Belvieu. This facility is utilized for brewing and event space for local businesses and other community-based organizations like the chamber of commerce. But the brewery also provides tours and space for local and regional food trucks and culinary enthusiasts/businesses with outdoor patio and picnic table seating which attracts many visitors. The bottom right is Bernie's Backyard, located just off I-45 near Hwy 99. This location has an indoor bar and a large outdoor patio area with parking for several mobile eateries. It is known to many as a food truck park. All three of these locations support their local community in many ways while also attracting visitors and hosting events, both private and public.

Figure 20: Examples of Neighborhood Retail / Restaurant Projects

Source: HTownChowDown.com, Google Street View

HOSPITALITY

The Houston MSA includes 99,160 rooms (YE2017) with a 65.2% estimated occupancy and a $71.75 RevPAR according to Source Strategies, Inc. According to Integra Realty (2016), the Houston hospitality market has a higher Average Daily Rate (ADR) than both the South region and the Nation in full-service and Limited Service hotels. At $175 it is significantly above $148 in the South region (full-service).

The following hotels have experienced either minor or major renovations in the past several years: Hotel Derek, Royal Sonesta, Wyndham Houston West Energy Corridor, Westin Houston Downtown, Lancaster Houston Hotel, and the Sam Houston Hotel. Houston continues to have double-digit RevPAR growth, and this trend will continue further into the future with the expansion of businesses, jobs, and population in the city.

The office of the Governor, Economic Development & Tourism reports that from 2006 to 2015 room revenues increased 58.5% in the overall Houston hotel market. Occupancy rose steadily from 2006 to 2008, fell dramatically from 67.5% (2008) to 57.7% in 2010. From 2011, occupancy increased from 62.1% to 70.8% in 2014 and decreased slightly in 2015 to 67.2%.

CMA HOSPITALITY MARKET

Historical hotel performance statistics for the CMA resemble the same trends for the MSA overall. Performance figures were steady and increasing from 2010 to 2014 but dropped off in 2015 when effects of the oil prices hit Houston and affected both business and leisure travel.

The number of hotels has remained flat since 2011, when there were 24 hotels in the CMA, to 4Q2017, when there were 29 hotels in the CMA. However, the number of rooms has increased since 2011 by 22.6% from 1,664 rooms to a total of 2,040 in 2017. Hotel revenues have increased significantly in the CMA by 143% rising from $15,088,248 in 2011 to $36,689,260 in 2017.

This may be a signal that the CMA is increasing in popularity and demand for higher room rates and higher quality amenities. The occupancy has risen consistently since 2011 to 66.2% occupancy in 2017. RevPAR has increased by 115% from 2011 ($24.98) to 2017 ($53.75).

A significant portion of this demand is tied to the rise and fall of large traveling construction crews employed at new petrochemical facilities being constructed over the past several years in the region and especially in and around the CMA. This is a crucial factor influencing hotel demand in this market, as petrochemical construction crews have a strong impact on room occupancy. As petrochemical facility construction dwindles, hotel room occupancy will follow accordingly, with decreased occupancy that will create a challenge to maintain or grow occupancy once the petrochemical facility construction is fully complete. The future construction and completion of the Grand Parkway Segment I-1 can serve as additional support and activity in the Study Area and CMA.

The most recent new hotel construction within the CMA has occurred on Garth Road north of I-10 in 2017 – Hilton Garden Inn Houston-Baytown and Home2 Suites by Hilton.

A detailed list of hotels within the CMA is organized by zip code in the table in this section. The CMA contains 2,040 hotel rooms that vary in type, quality, and size. The most recent 2017 occupancy figures for the CMA show an average of 66.18% and RevPAR on average is $53.75.

Occupancy is higher and RevPAR is lower in the CMA compared to the MSA due to the bulk of hotels in the CMA being moderate to lower rate establishments. However, the CMA, especially the areas closest to the Study Area have been the location of the most recent new hotel development that took place in 2017.

Table 45: Hotels in the CMA by Zip Code

Zip	Hotel Name	# Rooms	$ Room Revenues	Occupancy	RevPAR
77520	Super 8	60	$967,487	64.00%	$44.18
	Palace Inn	42	$706,447	65.60%	$46.08
	America's Best Value Inn	48	$521,646	57.20%	$29.77
	Bays Inn & Suites	90	$1,144,825	66.70%	$34.85
	Baytown Inn	50	$275,425	69.50%	$29.94
	Deluxe Inn & Suites	39	$596,977	63.60%	$41.94
	Econo Lodge	109	$724,225	43.80%	$18.20
	Sub-total	**438**	**$4,937,032**	**61.49%**	**$34.99**
77521	Springhill Suites	80	$3,961,097	85.80%	$135.65
	Scottish Inn & Suites	42	$541,743	62.80%	$35.34
	Woodspring Suites	124	$1,649,082	63.30%	$36.44
	Hilton Garden Inn	125	$1,015,260	64.40%	$88.28
	Garth Road Holiday Inn Express	91	$2,738,949	67.40%	$82.46
	Candlewood Suites	81	$2,548,391	68.70%	$86.20
	Hampton Inn	70	$2,395,286	72.20%	$93.75
	Comfort Suites	61	$2,141,676	78.20%	$96.19
	La Quinta Inn	103	$2,507,853	71.60%	$66.71
	Baymont Inn & Suites	82	$2,055,649	78.50%	$68.68
	Quality Inn & Suites	62	$1,227,374	67.90%	$54.24
	Best Value Inn	33	$607,172	66.30%	$50.41
	Days Inn	50	$804,636	66.20%	$44.09
	Premiere Suites	45	$693,968	65.70%	$42.25
	Palace Inn	36	$479,699	65.00%	$36.51
	Hilton Home 2 Suites	94	$1,491,575	69.80%	$86.24
	Motel 6	128	$1,882,835	64.70%	$40.30
	Super 8	56	$850,275	70.20%	$41.60
	Sub-Total	**1,363**	**$29,592,520**	**69.37%**	**$65.85**
77523	Motel 6	124	$869,720	48.00%	$25.69
	Manguson Hotel	42	$455,719	65.50%	$29.73
	Scottish Inn & Suites	42	$364,431	62.10%	$31.55
	Sub-total	**208**	**$1,689,870**	**58.53%**	**$28.99**
77562	Highlands Suites	31	$469,838	64.50%	$41.52
TOTALS/AVERAGES	**29**	**2,040**	**$36,689,260**	**66.18%**	**$53.75**

Source: Source Strategies 4Q 2017 - Annual

POTENTIAL DEMAND – HOSPITALITY

Demand for hotel rooms is directly affected by population and employment/jobs in a given area. The CMA is certainly oriented at this time to the petrochemical manufacturing industry, and this fact must be recognized when considering performance trend data. With petrochemical facility construction in the CMA and region winding down from its peak, this makes it difficult to say precisely what is going to happen in the near and long term with respect to occupancy and demand.

Of all areas compared, the CMA is currently faring identical to the Houston MSA comparison area at 66.18%. Although this may not be considered impressive performance typically, it is considered positive for the Houston region, especially given recent and current overall national, state, regional and local economic climate, which certainly affects demand for hotel rooms. At the same time, rooms were added in 2016 and 2017, which inherently impacts occupancy due to an increase in supply, even if demand does not decrease.

The hospitality market in the CMA is decidedly moderate to low priced limited service since 62% of the establishments offer nightly rates at an average close to $50 reflected by the average RevPAR of $53.75. However, in 2017 new, higher - end brand hotels were constructed in Baytown at I-10 and Garth Road which will offer higher rates, in the $70-$100 a night range, bringing average RevPAR in the market up slightly.

Based on what is currently supported by the market, new construction in 2017, planned hotel projects in the CMA and potential uncertainty of future construction related demand from petrochemical plant expansions, CDS has determined that additional hotel rooms at this time are not optimal. Smaller scale, higher end boutique or alternative types of lodging may be more feasible for the Study Area in the middle to long term, however.

Future Mont Belvieu Opportunities

A hotel of some type - limited service, select service, or boutique/lifestyle - has a good shot at feasibility in the new Mont Belvieu Main provided that the following has occurred already:

- The local economy continues to be strong (petrochemical and other industrial companies)
- The Grand Parkway is open with an FM 565 exit
- A set of eating and drinking/entertainment places is operating successfully within Mont Belvieu Main
- The public environment in the project has made a compelling destination for local residents

Assuming that no other such environments have been developed in the Baytown area (like a successful revitalization of Baytown's downtown) where hotels are included, a hotel at Mont Belvieu Main would have a competitive advantage for many travelers due to its more compelling environment. This would be especially true for travelers that can pay slightly higher room rates. This enables hotel classes such as select service (Marriott Courtyard, Hyatt Place) and boutique/lifestyle classes (Aloft, Hyatt Centric) as options.

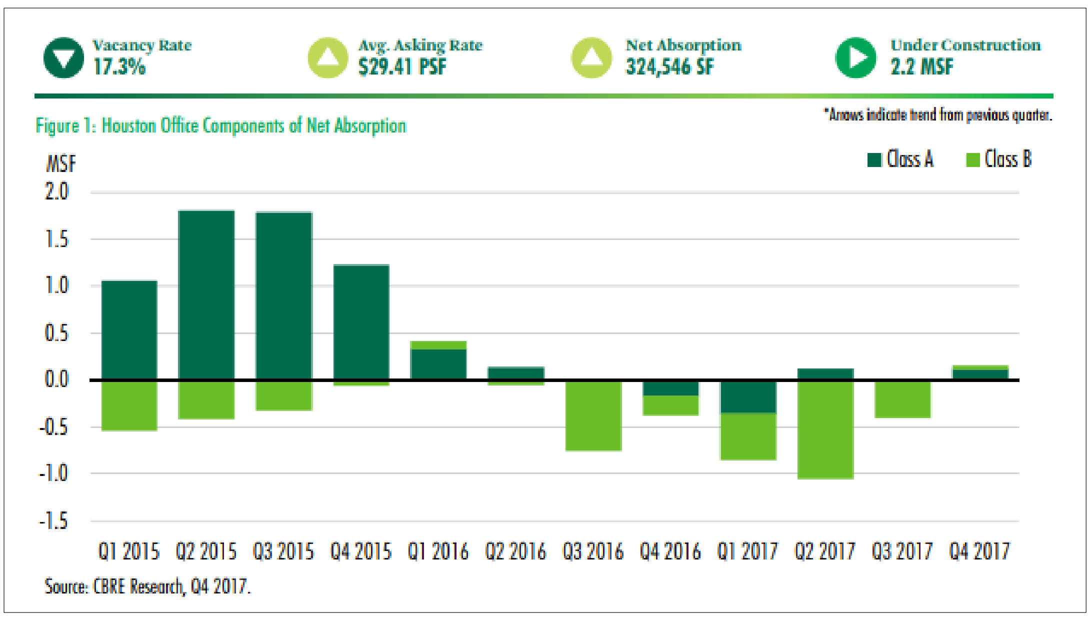
The City of Baytown has undertaken a determined effort to construct a conference center and hotel on its shoreline near the Fred Hartman bridge. Assuming this effort is successful, it is not recommended that Mont Belvieu pursue a similar development in the near to middle term. This can be re-evaluated when excess demand in the meetings market not accommodated by the Baytown project has been confidently established.

OFFICE SPACE

OVERALL HOUSTON OFFICE MARKET – 4Q2017

The final 90-days of 2017 marked the first quarter of positive net absorption in the Houston office market in 18 months. While overall leasing velocity remained relatively subdued compared to 2012-2015, trend data continue to suggest a subtle reversal in 2018. Decreasing levels of both direct and sublease availability indicate that modest gains in occupancy may continue to materialize in the near-term versus the consolidation and flight-to-quality themes prevailing during the past two years. Given healthy Texas and U.S. economic conditions, in concert with equilibrium levels of energy employment following a broad sector restructuring over the past several years, Houston's office market should begin 2018 on relative solid footing. However, expectations of flat energy employment could restrain any significant office sector leasing activity, moderating any major occupancy gains through the first half of the new year.

Figure 21: Houston Office Trends



Overall net office absorption totaled negative 2 million sq. ft. in 2017, with Class B activity contributing the bulk of move-outs which totaled almost 1.9 million sq. ft. This activity is consistent with the general market expectations, as a saturation of availability in both direct and sublease space drove competitiveness and lower effective rents in the Class A market. While a migration of occupiers to higher quality Class A space has resulted in falling levels of Class B occupancy, Class A buildings continue to be encumbered by the expiration of available sublease terms and footprint contractions. Houston's primary energy-exposed submarkets exemplified these trends, as the CBD, Energy Corridor, and Westchase all posted negative yearend net absorption totals across both Class A and B categories. Through 2018, CBD activity will remain a bellwether for overall market sentiment, and steady energy employment should provide some stability as excess capacities slowly subside.

Submarket

The CMA is in the East submarket. There is a total of 2.5 million square feet of office space. The vacancy is 13.3% with rental rates at $18.60psf. Comparatively, the submarket has lower vacancy and rents than the overall Houston market.

Table 46: Current Office Market Stats for Houston Area Neighborhoods

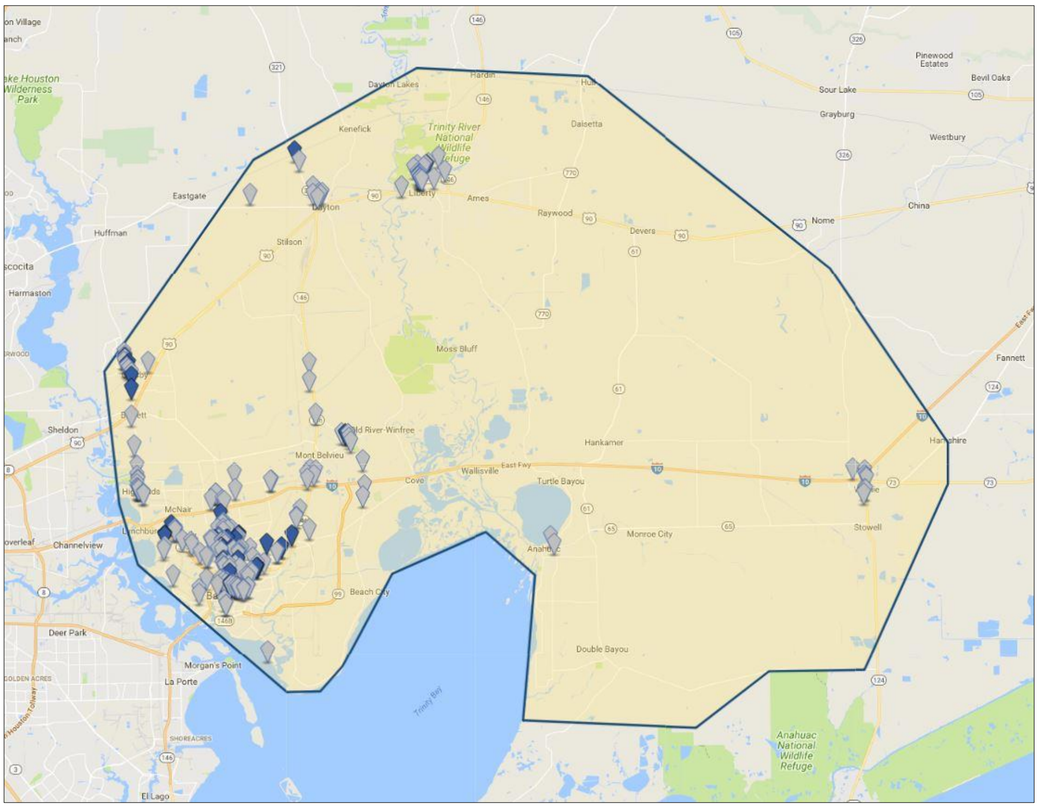
Submarket	Net Rentable Area	Total Vacancy (%)	Total Availability (%)	Sublease (SF)	Average Asking Rate ($/PSF)	Under Construction (SF)	Deliveries (SF)	Q4 2017 Net Absorption	2017 YTD Net Absorption
East	2,519,420	13.3	13.5	5,544	18.60			-13,981	73,114
Class A	356,376	14.1	14.6	1,699	27.35			574	-11,763
Class B	1,426,393	12.8	13.0	3,845	19.32			-34,546	59,624
Houston Total	213,189,747	17.3	21.7	9,339,002	29.41	2,236,736		324,546	-2,000,480
Class A	115,940,185	15.5	21.4	6,752,233	38.10	2,049,536		113,598	-213,980
Class B	72,280,631	20.4	23.7	2,385,404	22.75	187,200		37,849	-1,886,049

Source: CBRE Research, Q4 2017.

CMA OFFICE MARKET

There are 230 office buildings totaling 2,245,466 square feet in the CMA. The vacancy rate is 6.2% and gross rents are at $21.48psf. The average year built is 1978. Throughout the entire CMA there are no existing Class A office buildings. This market is currently only Class B and C.

Figure 22: Office Locations in the CMA



Source: CoStar

CMA Performance

The vacancy rate in the CMA has been somewhat varied, ranging from below 4% in late 2012 to a high of 8% in mid-2017, averaging 6.8% over the past five years. Current office vacancy for the CMA is 6.2%. Gross rents have steadily increased from $16.00psf in 2013, peaking near $24.00psf in late 2016 and dipping slightly in 2017 to a current rate of $21.48psf (gross).

Table 47: Office Market Trends in the CMA

Availability	Survey	5-Year Avg
Gross Rent Per SF	$21.48	$18.67
Vacancy Rate	6.2%	5.8%
Vacant SF	139,216	128,939
Availability Rate	6.5%	7.3%
Available SF	145,714	163,079
Sublet SF	4,000	1,780
Months on Market	6.2	10.5

Demand	Survey	5-Year Avg
12 Mo. Absorption SF	-22,741	-11,793
12 Mo. Leasing SF	51,683	46,544

Inventory	Survey	5-Year Avg
Existing Buildings	230	226
Existing SF	2,245,466	2,216,515
12 Mo. Const. Starts	15,003	13,832
Under Construction	9,000	9,909
12 Mo. Deliveries	6,003	15,580

Sales	Past Year	5-Year Avg
Sale Price Per SF	$63	$60
Asking Price Per SF	$211	$184
Sales Volume (Mil.)	$0.2	$0.9
Cap Rate	-	8.6%

Source: CoStar

Performance Trends

Net absorption in the CMA was negative in 2013 with some moderate positive absorption in 2014, 2015 and 2016 with 2017 once again showing negative absorption of -44,831 sf. But, current data shows absorption has been positive so far into 2018. There is 9,000sf of office space under construction in the CMA and 145,714sf currently available.

Table 48: Office Market Trends in the CMA

Source: CoStar

POTENTIAL DEMAND – OFFICE SPACE

Given the previously described regional economic trends, office market conditions, realistic potential capture of regional office growth, and competitiveness factors for the CMA, CDS has estimated what might be a realistic expectation of office development based on employment projections by HGAC/CDS as illustrated in the tables below.

Table 49: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	187,537	197,515	229,796	262,166	298,206	353,604
Households	66,687	71,441	83,261	96,629	110,783	132,729
Employment	67,341	72,130	77,466	84,849	95,051	105,118

Source: CDS Community Development Strategies, H-GAC

Employment growth in the market area is projected by both H-GAC/CDS to increase at a rate of 7% 2017 to 2020 and 7.4% from 2020 to 2025.

In the analysis herein, the CDS and HGAC estimates averaged together will be used.

An office space per office employee factor industry standard has ranged from a low of 325 square feet in 2007 to a high of 365 square feet in 2010. It rebounded to 343 square feet per employee in 2012. CCIM reported in a recent article in 2015, that office space per employee is decreasing with companies increasing the proportion of collaboration and team space in offices, along with more space devoted to amenities.

These flexible spaces are offsetting some of the square footage lost to smaller dedicated work spaces. For now, 200 sf to 250 sf per worker is still a reasonable estimate for most traditional firms, but at the same time, 100 to 150 sf is closer to what some of the larger public firms are now achieving.

Using 200 square feet per employee, the estimated total office space demand in the CMA by 2020 is 459,747sf for employment growth based on HGAC/CDS projections or 91,949sf annually. Absorption in the CMA overall has been at an annual average of -11,793sf annually over the past five years.

Table 50: Future Office Demand for the CMA

	2015	2020	2025
Employment Projections	67,341	72,130	77,466
Incremental Increase		4,789	5,336
48.94% Labor Force/Prof. Jobs (p.26)		2,344	2,611
200 SF per Job		468,747	522,288
Less: CMA pipeline space to 2020		-9,000	
Incremental Demand		459,747	522,288
Annual Demand		**91,949**	**104,458**

Source: PCensus, CDS Community Development Strategies, HGAC

By 2020, the CMA will have demand for 459,747 square feet of office space, including the currently under construction or proposed to accommodate the employment growth in the market area (TAZ) that is expected in the area. Based on the current supply of office space in the sub market (2,519,420sf), 89% (2,245,466 sf) is located in the CMA and 1.3% (32,683sf) is located in Mont Belvieu. Therefore, the CMA can expect to absorb 459,747 square feet from 2016 to 2020 or 91,949sf annually based on employment projections, while the Study Area is estimated to expect about 2,000sf. Based on these calculations, Mont Belvieu can expect only about 240-300 square feet of office demand per year to 2020.

It should be noted that nearly all of the existing and future expected office space is primarily driven by and normally attached to or a direct or indirect result of the petrochemical cluster development in the CMA and overall region. In the City of Mont Belvieu there is one office building on Eagle Dr., but it is fully owner owned and occupied by Enterprise Products. Other Mont Belvieu office space is attached to petrochemical manufacturing facilities and is entirely Class C space.

This means that future demand for office space in the CMA will be heavily correlated to petrochemical expansions and relocations in the CMA and region. Just one project may create several thousand square feet of office space, which means the calculations and projections above for Mont Belvieu office space demand can be considered a conservative estimate.

This market is not suited for a traditional Class A spec, multi-tenant office building. CDS does not recommend a traditional office building of this kind. If creating a supply of new office space is important, then a small to moderate scale of spec flex retail/office space in Mont Belvieu could be executed as long as it can be accomplished in a unique and very deliberate manner, such as a component to a potential Mont Belvieu Downtown/Town Square project.

For instance, office suites above retail in a town square-like development may be successful. Pictured below is Kingwood Town Center, which provides office space above street level retail and restaraunts. The office space in Kingwood Town Center is typically occupied by local businesses like real estate, title, insurance and financial management businesses and other personal services like law, specialty boutique or alternative health businesses.

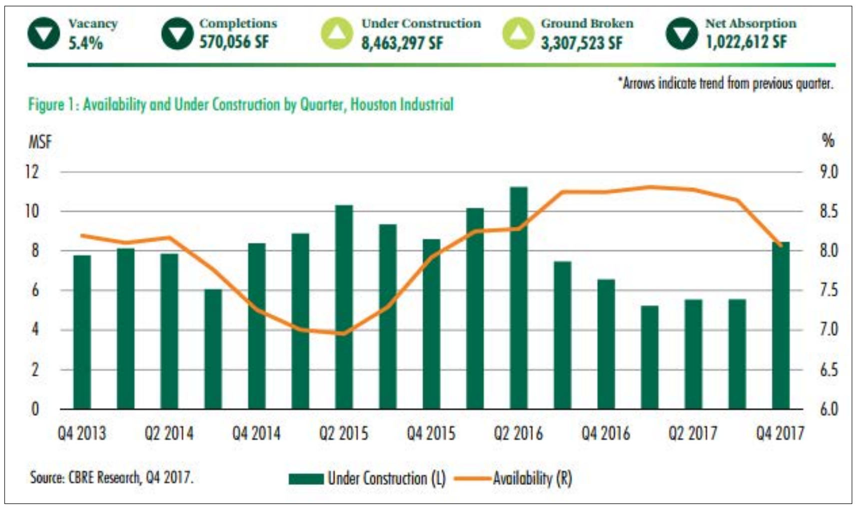
Figure 23: Examples of Office Space over Retail, Kingwood Town Center

Source: Google Maps Street View

INDUSTRIAL SPACE

OVERALL HOUSTON INDUSTRIAL MARKET – 4Q2017

Figure 24: Houston Industrial Trends



Houston's industrial market weathered the effects of low oil prices with positive growth in industrial construction and absorption into Q22016. Total direct vacant space and total availability decreased in 2017 and Hurricane Harvey's impact had perceptible repercussions, yet Houston's key economic sectors still provided strong support of industrial expansion.

Net occupier demand was strong in 2017; however, pre-leased completions have begun to flatten, signaling potential tightening in the overall market in 2018 with the North submarket experiencing the greatest tightening (1.2%) in 3Q2017. The Northwest and Southeast submarkets saw the greatest expansion in speculative projects geared toward Port and West Houston distribution and logistics.

The first two quarters of 2018 are anticipated to experience tightening, mostly due to a rise in user requirements and pipeline timing. The two sectors of the regional economy most closely tied to industrial performance in the region, Port and petrochemical, are predicted to continue to remain strong through 2018.

Industrial is projected to continue moving in a steady or slightly upward trend entering 2018. This is based on the region's competitive advantage in petrochemical manufacturing and Port Houston's 2017 record-setting container volume expected to continue.

Table 51: Current Industrial Market Stats for Northeast Submarket

NORTHEAST								
Absorption (Net, SF)	-557,410	540,243	541,559	545,670	702,720	-4,371	329,543	-365,859
Asking Rent (Gross Avg. Mthly $/SF)	0.40	0.43	0.43	0.48	0.59	0.61	0.53*	0.53*
Delivered Construction (SF)	149,134	0	40,000	0	40,000	100,560	408,825	20,088
Vacancy Rate (%)	5.4	5.7	4.5	3.0	2.0	1.5	2.1	2.9

Source: CBRE 2017

Both the CMA and Study Area are in the Northeast sub-market. The Northeast market includes 32,654,962 square feet with a vacancy rate of 2.9% and asking rents at $0.53psf (gross). Comparatively, the overall Houston market includes 510,269,965 square feet with a 5.4% vacancy and rates at $0.61psf. The Northeast sub-market has by far the lowest vacancy in Houston through Q42017 and the lowest rental rates at $0.53psf other than the CBD submarket at $0.52psf. The South, Southeast and North submarkets all saw modest to moderate net absorption (CBRE).

POTENTIAL DEMAND – INDUSTRIAL SPACE

Using the CDS/HGAC average trends of employment in the Houston MSA and industrial space market trends in the CMA, CDS has estimated that approximately 825 square feet per employee currently exists in the Houston MSA. Based on 2017 data from PCensus and CDS/HGAC TAZs, 36% of CMA labor force growth estimates are in industrial employment. The space per employee of 825sf multiplied by 36% of the employees being in industrial or industrial support, annual demand for industrial facilities in the Market Area is 53,669 square feet through 2020, after accounting for already announced and under construction industrial developments in the CMA. Currently 5% of total CMA industrial employment is in the Study Area. CDS estimates that the Study Area could capture 537 square feet thru 2020 and an additional 15,848 thru 2025, again accounting for announced and under construction developments that are planned to deliver through 2020. This includes projects like the ONEOK $1 billion new natural gas liquids processing plant, ExxonMobil Chemical expansion in, and Enterprise Products Partners expansion all taking place in Mont Belvieu in addition to a 400,000 square foot project and 350,000 square foot distribution center in Baytown and the Plastic Bagging & Packaging Cedar Port distribution center with 520,000 square feet.

Table 52: Future Industrial Demand

	2018	2020	2025	2030
CMA Employment Projections	67,341	72,130	77,466	84,849
36% Labor Force/Industrial Jobs	24,243	25,967	27,888	30,546
5 Yr increase		1,724	1,921	2,658
825 SF per Job		1,422,333	1,584,792	2,192,751
Less: CMA pipeline space to 2020		1,368,664	0	0
Total CMA Demand		53,669	1,584,792	2,192,751
Study Area 5% of CMA		**2,683**	**79,240**	**109,638**
Annual Study Area Demand		**537**	**15,848**	**21,928**

Source: PCensus, CDS Community Development Strategies, HGAC

As with the demand for the development of office space in the CMA, the demand for industrial development will be heavily dictated by the level of future petrochemical development. If competitive advantages in the CMA can be exploited in the future for the logistics and distribution industry this will boost industrial development in the market. The extent to which two of the CMA's most important economic development assets, the I-10 corridor and Cedar Port Industrial Park, are capitalized will have a significant impact on future development demand in the CMA and Study Area. Currently most indicators signal that future projections for growth in the CMA are very positive.

APPENDIX:

Table 53: Current Inventory of Multifamily Housing in the CMA

Building Name	Building Address	Building Class	# Of Units	Avg Asking /SF	Avg Unit SF	Vacancy %	Yr Built	Year Reno vated	Rent Type
Oxford at Country Club	2200 W Baker Rd	A	198	1.32	901	6.72	2009		Market
Birdsong Place Villas	1017 Bird Song Dr	A	96	1.00	772	0.94	2008		Affordable/ Senior
Boterra Bay Apartments	99 W Cedar Bayou Lynchburg Rd	A	82	1.47	116 8	67.2	2017		Market
Ravella at Eastpoint	7447 Eastpoint Blvd	A	283	1.32	978	7.95	2016		Market
Villas at Rollingbrook	3717 Emmet Hutto Blvd	A	204	1.56	989	7.16	2009		Market
Stone Brook	619 Rollingbrook St	A	376	1.26	862	5.69	2000		Market
Alexander Place Apartments	2401 N Alexander Dr	B	36		105 7	7.5	2012		Affordable
Lakes at Madera	305 W Baker Rd	B	392	1.15	738	7.91	1983		Market
Oxford at Country Club Phase II	2200 W Baker Rd	B	228	1.34	835	4.12	2013		Market
Cedar Ridge	2900 W Baker Rd	B	276	1.09	806	6.52	1984	1996	Market
Villas At The Palms	3800 W Baker Rd	B	66	0.87	978	5.76	1966		Market
West Lodge Apartments	4219 W Baker Rd	B	198	1.10	676	4.34	1987		Market
Greenfield Apartments	2105 Cedar Bayou Rd	B	104	1.07	865	9.13	1984		Market
Townhomes of Bay Forest	6304 Decker Dr	B	128	0.71	109 9	3.67	2001		Affordable
Piedmont	7510 Decker Dr	B	250	0.86	108 3	3.92	2007		Affordable
Eaglebrook Apartments	10855 Eagle Dr	B	152	1.44	860	3.95	2010		Market
	7259 FM 3180 Rd	B	125		886	8.8			Market
Ranch at Rolling Brook	3403 Garth Rd	B	219	1.18	691	2.74	1983	2010	Market
Briarwood Apartments	1711 James Bowie Dr	B	186	0.93	868	5.91	1970		Market
Willow Tree	1800 James Bowie Dr	B	100	1.09	733	9.33	1983		Market
Shady Creek	1220 Knowlton Dr	B	88	0.96	750	4.89	1999		Affordable
Stuart Apartments	10527 Langston Dr	B	54	0.53	924	7.41	1987		Affordable
	3415 Lantern Ln	B	4			7.5	1978		Market
Bayview Apartments	6900 N Main St	B	242	0.99	883	4.01	2007		Affordable
Autumn Ridge	510 Massey Tompkins Rd	B	100			5	1968		Market
Avalon Bay Apartment Homes	925 Northwood St	B	220	0.80	759	0	1982	2000	Market
Laguna Azul Apartments	1200 Northwood St	B	259	0.74	845	20.04	1976	2008	Market
The Inverness	907 N Pruett St	B	51	1.04	740	4.81	1972		Market
Wyndham Park	2700 Rolling Brook Dr	B	184	0.95	905	3.91	2009		Affordable/ Senior
Aria at Rollingbrook	1700 Rollingbrook Dr	B	240	1.32	835	4.29	2015		Market
Raintree Apartments	3300 Rollingbrook St	B	248	1.07	819	12.5	1986		Market
Roseland Manor Apartments	18 Stacey Ln	B	138	0.76	982	1.3	1984		Market/Aff ordable
Advenir At The Preserve	2100 W Baker Rd	B	272	1.10	841	7.02	1999	2018	Market
Oaks of Baytown Apartments	2011 Ward Rd	B	248	0.67	978	12.1	1967	2010	Market
	1507 N 10th St	C	20	1.04	800	4	1947	2007	Market
Horizon Apartments	1311 Beaumont Rd	C	79		900	71.52	1972		Market
Bay Oaks Apartment Homes	1700 Bob Smith Rd	C	146	1.07	829	4.38	1978		Market
Creekside Apartments	3120 Decker Dr	C	250	0.74	992	4.88	1978		Market
Sky Apartment Homes	3500 Decker Dr	C	31	1.08	649	8.39	1959		Market
Country Club Manor	3600 Decker Dr	C	32			8.13	1950		Market
	1505 Donovan St	C	8				1965		Market
Thomas Manor Apartments	700 FM 1942 Rd	C	17	1.06	935	0	2003		Market
Ocean Mobile Home Park	7030 FM 2354	C	91			8.35	2002		
	FM 563	C							

Building Name	Building Address	Building Class	# Of Units	Avg Asking /SF	Avg Unit SF	Vacancy %	Yr Built	Year Renovated	Rent Type
The Brixton	1601 Garth Rd	C	301	0.98	885	19.4	1974		Market
The Verve	3201 Garth Rd	C	56	1.13	827	14.11	1968		Market
Reserve at Garth Road Reserve at Garth Road	3700 Garth Rd	C	256	1.05	758	10.59	1978		Market/Affordable
Rosemont at Baytown	6033 Garth Rd	C	250	0.94	960	4.48	2005		Affordable
Sunshine Apartments	4520 Hemlock Dr	C	21	0.86	943	2.86	1967		Market
Willow Creek Rv Park	2305 N Highway 146	C	62			7.42			Market
	6227 N Highway 146	C	75			90			
Cedar Bayou Mobil	6310 N Highway 146	C	111			7.3			
Mont Belvieu Apartments	9407 N Highway 146	C	140	0.91	860	35.93	1976		Market
Hunt Garden Apartments	800 Hunt Rd	C	100	1.07	755	21	1984		Market
The Place at 2500 James	2500 E James	C	308	0.84	997	15.84	1971		Market
The Inverness Gardens	1300 E James St	C	32	0.83	844	0	1960		Market
Village Green Townhomes	2104 James Bowie	C	18			7.22	1972		Market
	2104 James Bowie Dr	C	18	0.89	876	7.22	1972	1985	Market
	502 N Jones St	C	2			10	1940		
	3436 Lantern Ln	C	6			8.33	1981		Market
Houston Leisure RV Resort	1601 S Main	C					1976		
	116 Marion St	C	6		675	0	1950		Market
Tompkins Green Apartments	605 Massey Tompkins Rd	C	99	1.05	629	0.61	1971	1997	Market/Affordable
	1725 Massey-Tomkins Rd	C	101			7.52	1998		
Graywood Arms Apartments	1305 Memorial Dr	C	44	0.98	806	4.32	1965		Market
Bay Terrace Apartments	1502 Nolan Rd	C	130	1.26	695	2.31	1983		Affordable
Bay Pointe	811 Northwood St	C	314	0.67	855	19.39	1976		Market
Palms at Baytown	1000 N Northwood St	C	89	0.97	898	6.4	1971		Market
Country Terrace Village II	8409 Oleander St	C	48	0.80	781	5.42	1995		Affordable
Sterling Bay Apartments	4601 Quail Hollow Dr	C	324	1.02	819	9.94	1976	2009	Market
	214 W Republic St	C	10	0.62	568	8	1938		Market
Rollingbrook Apartments	730 Rollingbrook St	C	25		620	7.2	1999		Affordable
Baycity Village Apartments	3301 Royal St	C	64	0.74	857	7.66	1975		Affordable
Centennial Square Apartments	805 Schilling St	C	100			7.7	1978		Affordable
The Bridge at Shady Hill	3400 Shady Hill Dr	C	179	0.88	922	4.33	1976		Market
	13535 Sralla Rd	C							
Forest View	301 Tri City Beach Rd	C	158	0.84	856	15.57	1964		Market
Village at Baytown	4601 Village Ln	C	210	0.87	842	2.81	1971	2008	Affordable
Country Terrace Village I	2500 E Wallisville Rd	C	80		900	7.75	1980		Affordable
Gracemont House Apartments	1021 Ward Rd	C	102		750	7.45	2008		Affordable
Watermark At Baytown	2700 Ward Rd	C	290	1.09	779	28.24	1972		Market
Bluebird Apartments	510 Williams Ave	C	69	1.32	717	3.91	1965		Market
The Del Mont	123 W Defee Ave	C	7		1070	4.29	1935	2018	Market
Crosby Green	3529 Crosby Cedar Bayou Rd	F	138	0.52	1019	90		2018	Market
			11,064	**1.00**	**853**	**11.2%**	**1982**	**2006**	
Under Construction									
Boterra Bay Apartments - Phase II	99 W Cedar Bayou Lynchburg Rd	A	322	1.73	765		2018		Market
Arabella of Baytown	700 Hunt Rd	A	204		700		2018		Mkt/Senior
			526						
Proposed									
	Kilgore Pky @ Hwy 146	A	**240**				2019		Market

Source: CoStar

Table 54: Current Inventory of Retail Locations in the CMA

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
5218 10 Fwy E	Outback Steakhouse	General Retail	1998	6,806	-	100	
2118 N Alexander		General Retail	1970	4,225	-	100	
100 N Alexander Dr	Former Walgreens	General Retail	1992	12,323	-	100	
105 N Alexander Dr		General Retail	1974	2,416	-	100	
110 N Alexander Dr		General Retail	1983	5,870	-	100	
200 N Alexander Dr		General Retail	1966	7,636	-	100	
217 N Alexander Dr		General Retail	1972	6,200	-	100	
308 N Alexander Dr		General Retail	1978	2,400	-	100	
310 N Alexander Dr		General Retail	1994	3,004	-	100	
400 N Alexander Dr		General Retail	1998	8,000	-	100	
501 N Alexander Dr		General Retail	1977	1,789	-	100	
900 N Alexander Dr		General Retail	1990	640	-	100	
1101 N Alexander Dr		General Retail	1984	2,640	-	100	
1117 N Alexander Dr	Taco Bell	General Retail	1974	1,188	-	100	
1200 N Alexander Dr		General Retail	1978	11,310	Withheld	0	
1300 N Alexander Dr		General Retail	1960	2,436	-	100	
1411 N Alexander Dr		General Retail	1972	10,080	-	100	
1514 N Alexander Dr		General Retail	2004	12,000	-	100	
1515 N Alexander Dr		General Retail	2014	13,946	-	100	
1601 N Alexander Dr		General Retail	1994	4,090	-	100	
1611 N Alexander Dr		General Retail	1995	2,100	-	100	
1615 N Alexander Dr		General Retail	1979	988	-	100	
1715 N Alexander Dr	Conn's	General Retail	1981	12,300	-	100	
1722 N Alexander Dr		General Retail	1972	7,000	-	100	
1900 N Alexander Dr		General Retail (Neighborhood Center)	1967	3,250	-	100	
1906 N Alexander Dr		General Retail (Neighborhood Center)	1964	4,473	-	100	
2109 N Alexander Dr		General Retail	1970	4,000	-	100	
2120 N Alexander Dr		General Retail	1979	2,072	-	100	
2123 N Alexander Dr		General Retail (Strip Center)	1984	4,884	-	100	
2206 N Alexander Dr		General Retail	1970	1,800	12	0	
2207 N Alexander Dr		General Retail	2001	3,162	-	100	
2210 N Alexander Dr		General Retail (Neighborhood Center)	1970	2,308	-	100	
2310 N Alexander Dr		General Retail	1965	2,077	-	100	
2701 N Alexander Dr		General Retail	1992	4,150	-	100	
2713 N Alexander Dr		General Retail	1969	4,680	-	100	
2801 N Alexander Dr		General Retail	1980	5,000	-	100	
2911 N Alexander Dr		General Retail	2002	4,692	-	100	
4006 N Alexander Dr		General Retail	1992	5,151	-	100	
100 S Alexander Dr		General Retail	2009	4,301	-	100	
101 S Alexander Dr	timewise	General Retail	1986	2,500	-	100	
120 S Alexander Dr		General Retail (Strip Center)	1970	8,500	-	100	
4404 Allenbrook Dr	Jimmy's Auto	General Retail	1992	3,750	-	100	
122 W Archer Rd		General Retail	1980	3,055	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
100 W Baker Rd	Mobil	General Retail	1983	2,321	-	100	
108 W Baker Rd		General Retail	1978	2,489	-	100	
116 W Baker Rd		General Retail	1986	2,052	-	100	
507 W Baker Rd		General Retail	1985	2,221	-	100	
1109 W Baker Rd		General Retail	1984	5,000	-	100	
1115 W Baker Rd		General Retail	1983	6,000	-	100	
2121 W Baker Rd	Baker Lane Market	General Retail	2014	7,000	-	100	
2717 W Baker Rd		General Retail	2004	4,646	-	100	
2901 W Baker Rd		General Retail	1999	1,584	-	100	
3700 W Baker Rd		General Retail		13	-	100	
3712 W Baker Rd		General Retail		13	-	100	
3714 W Baker Rd		General Retail		13	-	100	
4309 W Baker Rd		General Retail (Neighborhood Center)	1976	2,997	-	100	
4450 Baytown Central Blvd		General Retail		2,679	-	100	
7916 Bayway Dr		General Retail		3,809	-	100	
7916 Bayway Dr		General Retail	2016	9,100	-	100	
7924 Bayway Dr		General Retail	1930	2,953	-	100	
8105 Bayway Dr		General Retail	1940	2,346	-	100	
1414 Beaumont St		General Retail	1970	2,200	-	100	
1602 Beaumont St		General Retail	1979	3,920	-	100	
119-203 Bryan St		General Retail	1963	13,000	-	100	
705 Cedar Bayou Rd		General Retail	1975	7,040	-	100	
2107 W Cedar Bayou Lynchberg Rd	Texaco Express	General Retail	2004	4,450	-	100	
1502 W Cedar Bayou Lynchburg Rd		General Retail		544	-	100	
4612 W Cedar Bayou Lynchburg Rd	Shell	General Retail	1999	3,600	-	100	
615 N Commerce St		General Retail		5,500	-	100	
11011 Crosby Lynchburg Rd	Sterling-White Funeral Home	General Retail	1975	13,160	-	100	
13110 Crosby Lynchburg Rd		General Retail	1986	2,153	-	100	
12008-12028 N Crosby Lynchburg Rd		General Retail (Strip Center)	1972	11,551	-	100	
900 Decker Dr	Jack in the Box	General Retail	1968	1,726	-	100	
1215 Decker Dr	Meineke	General Retail	1974	2,500	-	100	
1770 Decker Dr		General Retail (Neighborhood Center)	2001	4,155	-	100	
1900 Decker Dr		General Retail	1973	5,900	-	100	
1905 Decker Dr		General Retail	1947	2,385	-	100	
3000 Decker Dr		General Retail	1985	2,395	-	100	
3200 Decker Dr	MAACO Franchising, Inc.	General Retail	2003	9,000	-	100	
3312 Decker Dr		General Retail	1975	2,560	-	100	
4232 Decker Dr		General Retail (Neighborhood Center)	1977	5,128	-	100	
4234 Decker Dr	Jack In the Box	General Retail (Neighborhood Center)	1977	2,396	-	100	
4300 Decker Dr		General Retail	2000	2,217	-	100	
4400 Decker Dr		General Retail	1964	9,922	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
4401 Decker Dr		General Retail	1976	7,065	-	100	
6114 Decker Dr		General Retail	1998	4,500	-	100	
6206 Decker Dr	Sunoco	General Retail		7,317	-	100	
7005 Decker Dr		General Retail	1985	2,100	-	100	
7303 Decker Dr		General Retail	1981	2,112	-	100	
7503 Decker Dr		General Retail		3,164	-	100	
12 W Defee Ave		General Retail	1918	4,000	-	100	
122 W Defee Ave		General Retail	1935	2,704	-	100	
310-311 W Defee St		General Retail	1970	456	-	100	
1816 Dr Martin Luther King Jr Dr		General Retail	1968	3,600	-	100	
10305 Eagle Dr		General Retail	1997	3,586	-	100	
10425 Eagle Dr		General Retail	1997	6,114	-	100	
11003 Eagle Dr	Sonic Restaurants, Inc.	General Retail	2009	1,824	-	100	
11303 Eagle Dr	Family Dollar	General Retail		8,500	-	100	
11522 Eagle Dr		General Retail	2001	3,365	-	100	
11540 Eagle Dr	Subway	General Retail		10,342	-	100	
1872 East Fwy	Wingfoot Commercial Tire Systems	General Retail	2005	10,535	-	100	
1880 East Fwy		General Retail	2014	12,078	-	100	
4221 East Fwy	Kia Dealership	General Retail	2003	14,796	-	100	
4343 East Fwy		General Retail	2003	10,001	-	100	
4701 East Fwy	Baytown Toyota	General Retail	1981	10,000	-	100	
4717 East Fwy		General Retail	1984	8,898	-	100	
4750 East Fwy		General Retail	1999	5,202	-	100	
4802-4808 East Fwy		General Retail (Super Regional Mall)	2002	7,000	-	100	
4810 East Fwy		General Retail (Super Regional Mall)	1992	5,795	25	100	
4846 East Fwy		General Retail	1992	5,800	-	100	
4915 East Fwy		General Retail	1984	3,405	-	100	
4975 East Fwy		General Retail	1990	5,000	-	100	
5017 East Fwy	Star Bucks	General Retail	1996	2,867	-	100	
5050 East Fwy		General Retail	2002	5,655	-	100	
5225 East Fwy		General Retail	1998	6,400	-	100	
5333 East Fwy		General Retail	2004	13,000	-	100	
5517 East Rd	Power & Chrome Outlet	General Retail	1980	12,600	-	100	
3700 Emmet Hutto Blvd		General Retail	2002	3,770	-	100	
2 E Fayle St		General Retail	1977	3,400	-	100	
9040 Fm 1405 Rd		General Retail		2,112	-	100	
FM 1409		General Retail	1996	14,960	-	100	
11590 FM 1409		General Retail	1981	4,604	-	100	
12021 Fm 1409	Chevron	General Retail		2,279	-	100	
12806 FM 1409		General Retail	1981	9,140	-	100	
111 FM 1942		General Retail	1945	2,028	-	100	
4506 FM 1942		General Retail	1970	3,416	-	100	
3615 FM 1942 Rd		General Retail		4,345	-	100	
8013 FM 3180 Rd		General Retail	2000	7,000	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
4605 FM 563		General Retail	1989	2,800	-	100	
6417 FM 563		General Retail	1985	11,185	-	100	
227 FM 565		General Retail	2004	2,133	-	100	
1201 N FM 565 Rd		General Retail	1978	2,400	-	100	
1201 N FM 565 Rd		General Retail		2,400	-	100	
4404 N FM 565 Rd	Subway	General Retail	2013	9,450	-	100	
8407 N FM 565 Rd		General Retail	2005	176	-	100	
2233 Fm-1942 Rd	Texaco	General Retail	2011	6,513	-	100	
12118 FM-2100		General Retail	1960	1,700	-	100	
3615 FM1942	Texas Wild	General Retail	1983	3,002	-	100	
1301 Garth Rd	WingStreet	General Retail	1980	2,700	-	100	
1305 Garth Rd		General Retail	1988	7,653	-	100	
1310 Garth Rd		General Retail	1981	4,500	-	100	
1925 Garth Rd		General Retail	1984	2,288	-	100	
1929 Garth Rd		General Retail	1982	1,716	-	100	
1931 Garth Rd		General Retail	1982	1,631	-	100	
2000 Garth Rd	Walgreens	General Retail	1999	13,905	-	100	
2001 Garth Rd		General Retail	1996	11,200	-	100	
2304 Garth Rd		General Retail	1945	1,158	-	100	
2310 Garth Rd		General Retail	1968	2,000	-	100	
2400 Garth Rd		General Retail	1989	7,980	-	100	
2401 Garth Rd	timewise	General Retail	1988	2,200	-	100	
3000-3010 Garth Rd		General Retail (Strip Center)	1970	4,880	-	100	
3129 Garth Rd		General Retail	1996	3,200	-	100	
3131 Garth Rd		General Retail	1970	2,760	-	100	
3203 Garth Rd		General Retail	2016	1,210	-	100	
3410 Garth Rd	KinderCare	General Retail	1985	4,920	-	100	
3414 Garth Rd		General Retail	1987	10,000	-	100	
3426 Garth Rd		General Retail	1992	3,060	-	100	
3520 Garth Rd	Taco Bell	General Retail	2010	2,808	-	100	
3525 Garth Rd		General Retail	1984	2,688	-	100	
3600 Garth Rd		General Retail (Strip Center)	1980	1,747	-	100	
3703 Garth Rd		General Retail	1991	11,311	-	100	
3719 Garth Rd		General Retail	2005	3,467	-	100	
3902 Garth Rd	NTB	General Retail	2007	8,064	-	100	
3909 Garth Rd		General Retail	1998	9,826	-	100	
3911 Garth Rd		General Retail	1998	4,770	-	100	
3912 Garth Rd		General Retail	2008	3,116	-	100	
3916 Garth Rd		General Retail	1998	3,895	-	100	
3923 Garth Rd	CVS/Pharmacy #5388	General Retail	2002	11,957	-	100	
4010 Garth Rd		General Retail	1998	2,900	-	100	
4055 Garth Rd	Hollywood Video	General Retail		7,475	-	100	
4500 Garth Rd		General Retail	1989	1,874	-	100	
4502 Garth Rd		General Retail	1990	3,390	-	100	
4503 Garth Rd	McDonald's	General Retail	2017	1,067	-	100	
4508 Garth Rd	Cici's Pizza	General Retail	1998	4,320	-	100	
4508 Garth Rd	Baytown Central	General Retail (Strip Center)	1994	9,521	21	84.25	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
4555 Garth Rd		General Retail (Community Center)	1996	9,788	-	100	
4557 Garth Rd	Starbucks	General Retail (Community Center)	1996	3,123	-	100	
4557A Garth Rd		General Retail (Community Center)	1996	466	-	100	
4567 Garth Rd		General Retail (Community Center)	1996	5,047	-	100	
4567 Garth Rd		General Retail		8,835	-	100	
4601 Garth Rd		General Retail	2013	7,022	-	100	
4603-4609 Garth Rd		General Retail (Community Center)	1996	8,536	-	100	
4610 Garth Rd	Golden Corral	General Retail	1995	9,038	-	100	
4611 Garth Rd		General Retail (Community Center)	1996	10,410	-	100	
4721 Garth Rd		General Retail (Community Center)	1982	5,500	-	100	
4868 Garth Rd		General Retail	2009	6,000	-	100	
4910 Garth Rd		General Retail	1987	2,127	-	100	
4921 Garth Rd	Wells Fargo Bank	General Retail	2007	4,055	-	100	
4996 Garth Rd		General Retail	2014	2,225	-	100	
5001 Garth Rd	International House Of Pancakes	General Retail (Neighborhood Center)	1998	3,784	-	100	
5006 Garth Rd		General Retail	2007	3,972	-	100	
5035 Garth Rd		General Retail	2005	9,573	-	100	
5100 Garth Rd	Dollar Tree Plaza	General Retail (Neighborhood Center)	2007	13,337	-	100	
5123 Garth Rd		General Retail	2005	12,457	-	100	
5165-5175 Garth Rd		General Retail (Neighborhood Center)	2007	15,000	-	100	Dollar Tree
5222 Garth Rd	Auto Zone	General Retail	2007	7,360	-	100	
5521 Garth Rd		General Retail		18	-	100	
5620-5628 Garth Rd		General Retail (Strip Center)	1999	9,196	-	100	
5701 Garth Rd	Bush's Chicken-Personal Guaranty from CEO	General Retail	2017	3,168	Withheld	0	
5702 Garth Rd		General Retail (Strip Center)	2001	6,290	-	100	
5818 Garth Rd		General Retail	1994	5,031	-	100	
6011 Garth Rd		General Retail	2006	9,390	-	100	
6123 Garth Rd		General Retail	1987	10,329	-	100	
6123 Garth Rd		General Retail	1987	11,738	-	100	
6231 Garth Rd	Starbucks	General Retail		1,745	-	100	
6231 Garth Rd	PetSmart	General Retail		14,058	-	100	
6311 Garth Rd	Pollo Tropical	General Retail	2016	3,400	-	100	
6325 Garth Rd		General Retail	2017	5,509	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
6331-6345 Garth Rd	Baytown Marketplace	General Retail	2016	11,748	-	100	
6405 Garth Rd		General Retail (Strip Center)	2012	12,800	-	100	
6431 Garth Rd		General Retail	2013	2,911	-	100	
6439 Garth Rd		General Retail	2013	4,976	-	100	
6502 Garth Rd	Baytown Plaza	General Retail (Strip Center)	2011	8,000	-	100	
6503 Garth Rd		General Retail	2017	10,795	-	100	
6525 Garth Rd		General Retail	1995	2,442	-	100	
6560 Garth Rd		General Retail (Neighborhood Center)	2003	8,000	-	100	
6604 Garth Rd		General Retail (Neighborhood Center)	1998	5,700	-	100	
6624 Garth Rd		General Retail		2,418	-	100	
6644-6646 Garth Rd	Outlot	General Retail (Neighborhood Center)	2000	5,525	-	100	
6744 Garth Rd	Olive Garden	General Retail (Neighborhood Center)	2010	7,573	-	100	
6800 Garth Rd	Pizza Hut	General Retail	1994	2,420	-	100	
6804 Garth Rd		General Retail	1995	2,507	-	100	
6806 Garth Rd	Wendy's	General Retail	2009	1,868	-	100	
6810 Garth Rd		General Retail	1981	4,200	-	100	
7000 Garth Rd		General Retail	1987	3,726	-	100	
7100 Garth Rd	Timewise	General Retail	1984	2,200	-	100	
7203 Garth Rd		General Retail	1993	1,709	-	100	
7216 Garth Rd		General Retail	2008	14,820	-	100	
7300 Garth Rd		General Retail		13	-	100	
7360 Garth Rd	Sonic Drive-In	General Retail	2006	1,715	-	100	
7415 Garth Rd		General Retail		13	-	100	
7416 Garth Rd	O'Reilly Auto Parts	General Retail	2009	7,370	-	100	
808 Grace Ln		General Retail	1991	1,070	-	100	
7615 Harrison St		General Retail	1960	1,300	-	100	
1947 Highway 146		General Retail	2011	1,800	Withheld	0	
2227 Highway 146		General Retail	1940	1,825	-	100	
11820 Highway 146		General Retail	1996	9,500	-	100	
13102 Highway 146	Chevron	General Retail	1982	2,400	-	100	
4623 N Highway 146		General Retail	1930	3,399	-	100	
5906 N Highway 146		General Retail	2016	7,000	22.32	100	
6236 N Highway 146	Bldg 2	General Retail		1,200	-	100	
6600 N Highway 146		General Retail	1978	394	-	100	
7010 N Highway 146		General Retail		10,317	-	100	
7105 N Highway 146		General Retail	1984	6,550	-	100	
7630 N Highway 146		General Retail	2011	5,264	-	100	
7714 N Highway 146	D	General Retail	2017	2,181	-	100	
7714 N Highway 146	C	General Retail	2017	2,135	-	100	
7930 N Highway 146		General Retail	2011	4,952	-	100	
8302 N Highway 146		General Retail	2011	3,109	-	100	
8314 N Highway 146		General Retail	2011	8,216	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
8823 N Highway 146		General Retail	1996	2,832	-	100	
8841 N Highway 146		General Retail	2003	1,573	-	100	
8909 N Highway 146		General Retail	1995	2,574	-	100	
8915 N Highway 146		General Retail		2,401	-	100	
9102 N Highway 146		General Retail		2,500	-	100	
9226 N Highway 146		General Retail	1999	3,000	-	100	
9430 N Highway 146		General Retail	1999	2,000	-	100	
9529 N Highway 146	Mont Belvieu Center	General Retail	1980	9,000	-	100	
9529-9545 N Highway 146		General Retail (Strip Center)		10,582	-	100	
10124 N Highway 146		General Retail	1970	2,561	15	0	
1402 Highway 90	O'Reilly Auto Parts	General Retail	2004	5,808	-	100	
1409 Highway 90		General Retail	2003	2,000	-	100	
1411 Highway 90		General Retail	1999	3,185	-	100	
1413 Highway 90		General Retail	1989	2,034	-	100	
1450 Highway 90	AutoZone	General Retail	1997	6,116	-	100	
1501 Highway 90	Dillon's Liquor Strip Center	General Retail		5,000	9	0	
1520 Highway 90	Shell	General Retail	1976	3,085	-	100	
1710 Highway 90	Popeyes	General Retail	1994	1,987	-	100	
1821 Highway 90	SONIC	General Retail	1976	4,224	-	100	
1830 Highway 90	Taco Bell	General Retail	1994	1,846	-	100	
1921 Highway 90	Whataburger	General Retail	1989	3,440	-	100	
1923 Highway 90	McDonald's	General Retail	2009	2,376	-	100	
1924 Highway 90	Check Into Cash	General Retail		5,374	-	100	
2119 Highway 90		General Retail	1960	9,180	Withheld	0	
2201 Highway 90		General Retail	1969	1,624	Withheld	0	
101 E Highway 90		General Retail		1,130	-	100	
104 E Highway 90	Dairy Queen	General Retail	1971	3,289	-	100	
208 E Highway 90	Jack in the Box	General Retail	1990	2,800	-	100	
201 W Highway 90		General Retail	1996	1,478	-	100	
204 W Highway 90	Hartz Chicken Buffet	General Retail		1,760	-	100	
207 W Highway 90		General Retail	1994	4,133	-	100	
209 W Highway 90	Walgreens	General Retail	2003	14,160	-	100	
402 W Highway 90		General Retail		13,000	-	100	
483 W Highway 90		General Retail	1955	5,885	-	100	
119 W Houston St		General Retail	2009	12,793	-	100	
742 Hwy 146	Dayton Drive Thru	General Retail	1983	7,500	-	100	
4849 N Hwy 146	Walgreens	General Retail	2006	14,820	-	100	
2315 Hwy 90		General Retail	1985	6,000	-	100	
508 W Hwy 90		General Retail	1995	2,400	-	100	
11012 HWY. 146-4500		General Retail		4,500	-	100	
1703 I-10	Love's Travel Stops & Country Stores	General Retail	1999	9,872	-	100	
3510 I-10		General Retail		3,400	-	100	
7304 I-10 E		General Retail	1984	3,600	-	100	
3516 E I-10 Fwy		General Retail	1960	2,250	Withheld	100	
10330 E I-10 Fwy		General Retail	1996	13,402	-	100	
Interstate 10 @ Highway 146		General Retail	2000	1,250	-	100	
5173 Interstate 10		General Retail	1993	10,433	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
22902 Interstate 10	Jack In The Box	General Retail	2005	4,634	-	100	
5151 Interstate 10 E	Whataburger	General Retail	1989	3,135	-	100	
5171 Interstate 10 E	Jack In the Box	General Retail	1993	1,948	-	100	
13625 Interstate 10 E		General Retail	2002	4,338	-	100	
6110 Interstate 10 Hwy	Baytown Citgo Travel Center	General Retail	1995	8,878	-	100	
22734 Interstate 10 FM 563 Hwy	JJ Chevron	General Retail		3,344	-	100	
907 E James St		General Retail	1977	6,000	-	100	
2206 E James St		General Retail	1973	2,400	-	100	
2110 James Bowie Dr		General Retail	1975	2,548	-	100	
101-103 Kerry Rd		General Retail	1984	3,050	-	100	
1399 Lacey Dr		General Retail	1975	2,485	-	100	
1308 Lacy Dr		General Retail (Neighborhood Center)		9,104	-	100	
1410 Lacy Dr		General Retail	1980	4,000	-	100	
2115 Lacy Dr		General Retail (Neighborhood Center)	1966	6,375	-	100	
1601 Mabry St		General Retail	1980	3,150	-	100	
4349 Main St	Texaco	General Retail (Strip Center)	2008	10,880	16.8	86.21	
500 N Main	Dollar General	General Retail	2001	7,500	-	100	
2 N Main St		General Retail	1930	3,375	-	100	
100-104 N Main St		General Retail	1940	6,702	8.4	59.27	
101 N Main St	Baytown Historical District	General Retail	1928	7,500	Withheld	100	
106 N Main St		General Retail	1985	9,367	-	100	
111 N Main St		General Retail	1993	2,642	-	100	
116 N Main St		General Retail	1943	3,238	-	100	
116 N Main St		General Retail	1928	5,250	-	100	
146 N Main St		General Retail	1928	3,000	-	100	
205 N Main St		General Retail		720	-	100	
212 N Main St		General Retail	1972	4,880	6.15	0	
214 N Main St		General Retail	1960	3,927	-	100	
217 N Main St		General Retail	1957	3,200	-	100	
223 N Main St		General Retail	2009	2,492	-	100	
224 N Main St		General Retail	1943	1,125	-	100	
300 N Main St		General Retail	1978	2,650	-	100	
302 N Main St	Jack In the Box	General Retail	2000	1,715	-	100	
405 N Main St		General Retail	1940	3,896	-	100	
407 N Main St		General Retail	1960	2,100	-	100	
504 N Main St	O'Reilly Auto Parts	General Retail	2010	6,000	-	100	
519 N Main St		General Retail	1946	2,832	-	100	
1010 N Main St		General Retail	1963	4,055	-	100	
1010 N Main St		General Retail	1940	5,980	-	100	
1312 N Main St		General Retail	1943	10,896	-	100	
1316 N Main St		General Retail	1968	7,816	-	100	
1409 N Main St		General Retail	1930	4,208	-	100	
1504 N Main St		General Retail		2,420	-	100	
1610 N Main St		General Retail	1968	3,351	-	100	
1610 A N Main St		General Retail	1968	1,532	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
2001 N Main St		General Retail	1954	1,044	-	100	
2004 N Main St		General Retail	1981	4,182	-	100	
2502 N Main St		General Retail	1961	6,250	-	100	
2504 N Main St		General Retail	1961	3,000	-	100	
2702 N Main St		General Retail	1974	4,200	-	100	
2703 N Main St		General Retail	1968	1,914	-	100	
2814 N Main St	Jack's Plaza	General Retail	2001	4,140	15.31	43.19	
2818 N Main St		General Retail	2010	3,073	-	100	
2828 N Main St		General Retail	1999	4,700	-	100	
2906 N Main St		General Retail	1993	7,200	-	100	
3021 N Main St		General Retail	1982	6,095	-	100	
3209 N Main St	O'Reilly Auto Parts	General Retail	1999	9,500	-	100	
3320 N Main St		General Retail		777	-	100	
3520 N Main St		General Retail	1979	2,600	-	100	
3600 N Main St		General Retail	1985	3,160	-	100	
3601 N Main St	Jack In The Box	General Retail	2000	2,738	-	100	
3606 N Main St	Dollar General	General Retail	2010	9,100	-	100	
3636 N Main St		General Retail	2013	2,504	-	100	
3720 N Main St		General Retail	1988	6,840	-	100	
4404 N Main St		General Retail	1986	6,000	Withheld	0	
4500 N Main St		General Retail		3,835	-	100	
5003 N Main St		General Retail	2005	3,034	-	100	
5552 N Main St		General Retail	2004	8,087	-	100	
5750 N Main St		General Retail	1996	8,760	Withheld	100	
5790 N Main St		General Retail	1993	6,000	-	100	
6730 N Main St		General Retail	2015	8,691	-	100	
7303 N Main St		General Retail	2010	3,516	-	100	
102 S Main St		General Retail	1990	1,584	-	100	
103 S Main St		General Retail	1994	1,650	-	100	
105 S Main St		General Retail		7,483	-	100	
128 S Main St		General Retail	1990	2,194	-	100	
216 S Main St		General Retail	1973	6,518	-	100	
300 S Main St		General Retail	1970	2,400	-	100	
401 S Main St		General Retail	1955	2,086	-	100	
411 S Main St	Backdraft	General Retail		2,288	-	100	
413 S Main St		General Retail	1972	2,331	-	100	
420 S Main St		General Retail	1957	8,041	-	100	
501 S Main St		General Retail	1972	5,118	-	100	
504 S Main St		General Retail	1953	5,739	-	100	
211 W Main St		General Retail	1957	1,528	-	100	
710 W Main St	Family Dollar	General Retail	1940	9,581	-	100	
717 W Main St		General Retail		5,115	-	100	
1000 W Main St		General Retail		900	-	100	
1402 N Market Loop		General Retail	1955	2,072	-	100	
305 Massey Tompkins Rd		General Retail	2002	7,431	-	100	
322 Massey Tompkins Rd		General Retail	1955	1,896	-	100	
507-511 Massey Tompkins Rd		General Retail	1970	4,400	-	100	
605 Massey Tompkins Rd	Tompkins Green Shopping Center	General Retail	1968	8,844	7.19	83.96	
1421 Massey Tompkins Rd	Beauty Salon and Spa	General Retail	1999	3,299	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
1712 Massey Tompkins Rd		General Retail	1982	6,571	-	100	
1800 Massey Tompkins Rd	Valero	General Retail	1988	2,350	-	100	
3615 Massey Tompkins Rd		General Retail	1940	1,800	-	100	
812 Miller St		General Retail	1990	1,308	-	100	
1102 Miller St	The Wooden Spoon	General Retail	2003	5,600	-	100	
1104 Miller St	Family Dollar	General Retail		6,500	-	100	
1106 Miller St	Dollar General	General Retail	1997	8,000	-	100	
2110 N Alexander Dr	Gas Station	General Retail	1979	1,850	-	100	
8730 N Hwy 146	Whataburger	General Retail (Lifestyle Center)	2014	3,189	-	100	
500 North Rd		General Retail	1972	1,711	-	100	
602 Park St	Wilks Shopping Center	General Retail (Strip Center)	1966	4,000	-	100	
614 Park St	Park Street Plaza	General Retail (Strip Center)	1977	6,900	14	43.48	
715 Park St		General Retail	1985	6,578	-	100	
808 Park St		General Retail	1996	4,191	-	100	
1000 Park St		General Retail	1998	5,910	-	100	
719 E Pearce St		General Retail	1961	7,040	-	100	
1501 N Pruett St		General Retail		3,000	-	100	
1505 N Pruett St		General Retail		4,000	-	100	
1695 N Pruett St		General Retail		1,160	-	100	
1904 N Pruett St		General Retail	1970	5,040	-	100	
1905 N Pruett St		General Retail	1961	4,000	-	100	
2001 N Pruett St		General Retail	1961	2,490	-	100	
700 Rollingbrook Dr	Kwik Kopy	General Retail (Strip Center)	1997	9,774	-	100	
2215 Rollingbrook Dr	The Center at Rollingbrook	General Retail (Strip Center)	2016	9,900	19.5	53.54	
2443 Rollingbrook Dr	Citgo	General Retail	2012	5,322	-	100	
723 Rollingbrook St		General Retail	1984	1,472	-	100	
139 S Ross Sterling Ave		General Retail	2013	6,888	-	100	
211 San Jancinto St		General Retail	1996	7,920	-	100	
1301-1313 Sandy Ln	Sandy Lane	General Retail (Strip Center)	1970	12,900	-	100	
9224 SH 146 Hwy		General Retail	1983	8,609	-	100	
7101 Sjolander Rd		General Retail	1984	10,252	-	100	
100 Sterling St	Pizza Hut	General Retail	2010	2,420	-	100	
621 W Sterling		General Retail	1970	5,140	-	100	
310 W Sterling St		General Retail	1950	4,500	-	100	
1008 W Sterling St		General Retail	1974	1,500	-	100	
132 Texas Ave		General Retail		3,559	-	100	
522 Texas Ave		General Retail	1954	5,460	-	100	
11 E Texas Ave		General Retail	1915	3,012	-	100	
410 E Texas Ave		General Retail	1959	2,850	-	100	
420 E Texas Ave		General Retail	1944	2,000	-	100	
518 E Texas Ave		General Retail	1950	2,375	-	100	
701 E Texas Ave		General Retail		2,000	-	100	
721 E Texas Ave		General Retail (Strip Center)	1957	10,372	-	100	
723 E Texas Ave		General Retail (Strip Center)	1954	6,450	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
1006 E Texas Ave		General Retail	1976	3,750	-	100	
500 W Texas		General Retail	1940	924	-	100	
100 W Texas Ave		General Retail	1924	4,973	10.8	59.78	
130 W Texas Ave		General Retail	1924	7,679	-	100	
206-208 W Texas Ave		General Retail	1927	6,340	-	100	
214 W Texas Ave		General Retail	1926	4,600	-	100	
316 W Texas Ave		General Retail	1935	1,070	-	100	
660 W Texas Ave		General Retail	2017	1,500	Withheld	0	
1804 W Texas Ave		General Retail	1957	1,450	-	100	
6019-6031 Thompson Rd		General Retail (Strip Center)	1972	7,080	-	100	
6800 Thompson Rd	Baytown Travel Center	General Retail		5,000	-	100	
15838 Tri City Beach Rd	RWJ Office Park	General Retail	2013	5,200	-	100	
3209 Tx-146		General Retail	1982	3,471	-	100	
8102 TX-146		General Retail	2012	6,127	-	100	
4006 N Tx-146	SUNDOWNERS NIGHT CLUB	General Retail	1992	4,561	-	100	
4619 N Tx-146 Hwy		General Retail	1979	3,995	-	100	
4627 N Tx-146 Hwy		General Retail	2013	3,619	-	100	
8829 N Tx-146 Hwy		General Retail	1998	3,749	-	100	
8835 N Tx-146 Hwy		General Retail	2004	3,267	-	100	
2315 US 90		General Retail	1985	6,000	-	100	
1829 US Hwy 90	KFC	General Retail	1978	2,555	-	100	
202 Us-90		General Retail		1,480	-	100	
1755 Us-90		General Retail	2008	4,000	-	100	
1200 Us-90 Hwy		General Retail	1977	5,250	-	100	
1500 Us-90 Hwy		General Retail	1955	9,400	-	100	
210 W Us-90 Hwy		General Retail	1993	2,895	-	100	
302 W Us-90 Hwy		General Retail		4,237	-	100	
1600 Wallisville Rd		General Retail	2002	8,342	-	100	
2404 Wallisville Rd		General Retail	1990	4,500	-	100	
1900 E Wallisville Rd		General Retail	1975	7,350	-	100	
2924-2930 E Wallisville Rd		General Retail	1994	7,500	-	100	
5035 E Wallisville Rd		General Retail		2,873	-	100	
233 Wallisville Liberty Rd		General Retail	2013	240	-	100	
906 Ward Rd		General Retail	1973	1,054	-	100	
1503 Ward Rd		General Retail	1997	2,286	-	100	
2005 Ward Rd	B & D Center	General Retail	1965	4,400	-	100	
2518 Ward Rd		General Retail (Strip Center)	1971	4,160	10	71.15	
1215 Willow St		General Retail	1973	1,950	-	100	
405 S Winfree St		General Retail	1980	5,367	-	100	
111 W Wye Dr		General Retail	1955	10,776	-	100	
8018 N Highway 146		General Retail (Strip Center)	2016	10,532	Withheld	76.42	
108 E Highway 90		General Retail	1969	1,414	Withheld	0	
515-519 Park St		General Retail	1970	4,370	Withheld	51.95	
4607 Tx-146		General Retail (Strip Center)	2008	5,000	Withheld	0	
600 N Alexander Dr		General Retail	1960	19,300	-	100	
706 N Alexander Dr		General Retail (Strip Center)	1975	17,506	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
1102 N Alexander Dr		General Retail	1960	17,832	-	100	
1505 N Alexander Dr	Chase Bank	General Retail	1975	31,466	-	100	
1700 N Alexander Dr		General Retail	1972	56,178	-	100	Kroger
2107-2348 N Alexander Dr	Bay Plaza	General Retail (Neighborhood Center)	1965	139,222	7.46	66.73	Family Dollar Store
2133-2143 N Alexander Dr		General Retail (Neighborhood Center)	1966	18,939	-	100	
2215-2321 N Alexander Dr	Baytown 146 Center	General Retail (Neighborhood Center)	1979	30,400	15	91.12	
2921 N Alexander Dr		General Retail	1981	41,930	-	100	
407 W Baker Rd	Baker Road Plaza	General Retail (Neighborhood Center)	1985	36,200	12	59.28	
1201 W Baker Rd	Baker Court	General Retail (Strip Center)	1984	26,850	-	100	
3002 W Baker Rd	Food Town	General Retail	1992	36,585	-	100	
1700 Danubina St		General Retail	1980	15,288	-	100	
4110-4126 Decker Dr		General Retail (Neighborhood Center)	1977	16,000	-	100	
4128-4216 Decker Dr		General Retail (Neighborhood Center)	1977	92,467	12.6	67.56	Dollar General
219 W Defee Ave		General Retail	1950	25,902	-	100	
1701 East Fwy	Reading Buick Pontiac Gmc Toyota	General Retail	1980	25,687	-	100	
1876 East Fwy		General Retail	2005	17,996	-	100	
4110 East Fwy		General Retail	2000	62,586	-	100	
4114 East Fwy		General Retail	2000	151,879	-	100	
4141 East Fwy	Baytown Honda	General Retail	2001	30,790	-	100	
4815 East Fwy		General Retail	1986	23,000	-	100	
5236 East Fwy		General Retail	2009	123,094	-	100	
12103 FM 1409		General Retail	1981	36,000	-	100	
1250 Garth Rd		General Retail (Neighborhood Center)	1962	114,081	-	100	
1705-1927 Garth Rd		General Retail (Neighborhood Center)	1976	92,956	13.71	92.47	Palais Royal
1900 Garth Rd	Garth Plaza	General Retail (Strip Center)	1982	17,927	-	100	
3602-3634 Garth Rd	Rollingbrook Plaza	General Retail (Strip Center)	1980	20,000	15	71.39	
3920 Garth Rd		General Retail	1993	15,514	-	100	
4308 Garth Rd	Baker Court	General Retail (Strip Center)	1984	26,850	14	65.42	
4505-4539 Garth Rd	Willowcreek Shopping Ctr	General Retail (Neighborhood Center)	1977	130,701	9	56.01	
4506 Garth Rd		General Retail	1998	21,441	-	100	
4510 Garth Rd	Target	General Retail	1994	95,509	-	100	
4537 Garth Rd		General Retail (Neighborhood Center)	1983	42,935	15	88.89	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
4615-4665 Garth Rd	Building 2	General Retail (Community Center)	2001	51,667	18	92.26	Office Depot, Old Navy, Petco Animal Supplies
4620 Garth Rd	Former Best Buy	General Retail	2005	28,299	-	100	
4900 Garth Rd	Wal-Mart	General Retail	2001	235,447	-	100	Walmart
4915 Garth Rd	Home Depot	General Retail	2000	108,500	-	100	
5002 Garth Rd	Lowe's Home Improvement	General Retail	1995	125,357	-	100	
5003-5075 Garth Rd	San Jacinto Court	General Retail (Neighborhood Center)	1998	59,860	22	89.39	
5010 Garth Rd		General Retail (Neighborhood Center)	2007	52,445	25	89.43	Conn's Home Plus
6202 Garth Rd		General Retail	2006	22,689	-	100	
6311 Garth Rd	Baytown Marketplace	General Retail	2016	50,959	-	100	
6315 Garth Rd	Kroger-Baytown Marketplace	General Retail	2016	60,000	-	100	
6425 Garth Rd	Academy Sports + Outdoors	General Retail	2011	75,600	-	100	Academy Sports and Outdoors
6515 Garth Rd		General Retail (Neighborhood Center)		58,541	-	100	
6520-6550 Garth Rd		General Retail	2008	85,000	-	100	
6608-6614 Garth Rd	Baytown Plaza	General Retail (Neighborhood Center)	1998	44,020	-	100	Michaels, Pier 1
6731 Garth Rd		General Retail (Super Regional Mall)	1981	52,288	-	100	
6902-6958 Garth Rd	Shoppes at Baytown	General Retail (Neighborhood Center)	1984	75,591	11.75	100	
7209 Garth Rd		General Retail	2004	40,326	-	100	
7211 Garth Rd		General Retail	1996	36,456	-	100	
810 Highway 146		General Retail		24,661	-	100	
9235 Highway 146 N	Mont Belvieu Plaza	General Retail (Neighborhood Center)	1985	44,000	-	100	
3103 N Highway 146		General Retail	1999	18,480	-	100	
8700 N Highway 146	Wal-Mart	General Retail (Lifestyle Center)	2014	185,989	-	100	
9235 N Highway 146		General Retail	1985	42,314	-	100	
403 E Highway 90		General Retail	1980	32,487	-	100	
5552 Hwy 146		General Retail		20,870	-	100	
4530 E I-10 Fwy		General Retail	2010	18,594	-	100	
I-10 & Hwy 146	Outparcel 5A	General Retail (Lifestyle Center)		17,686	-	100	
I-10 & Hwy 146	Outparcel 4	General Retail (Lifestyle Center)	2014	17,782	-	100	
10550 Interstate 10 Service Rd	ShowBiz Cinemas	General Retail (Lifestyle Center)		57,560	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
1222 Main St		General Retail	1949	36,515	-	100	
227 N Main St		General Retail	1980	18,600	-	100	
302 N Main St		General Retail (Neighborhood Center)	1978	55,133	-	100	Family Dollar Store, Gerland's Food Town
306-312 N Main St		General Retail	1950	15,560	-	100	
2200 N Main St	H E B	General Retail	1990	27,840	-	100	
3517 N Main St	Food Town	General Retail	1995	77,000	-	100	
4510 N Main St	Service King	General Retail	2003	19,689	-	100	
5620 N Main St		General Retail		25,000	-	100	
2 S Main St	Winfield Furniture	General Retail	1926	22,532	-	100	
3422 McKinney Rd		General Retail		21,120	-	100	
518 Miller St		General Retail	1988	17,600	-	100	
NEC Garth Rd @ Baker Road	Best Buy	General Retail	2005	30,038	-	100	
1801 N Pruett St	Central Baytown Business Center	General Retail	1970	123,214	13.5	16.97	
3000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	873,836	18	96.48	Macy's, Sears
5000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	127,330	-	100	
8000 San Jacinto Mall		General Retail (Super Regional Mall)	1984	76,107	-	100	
9000 San Jacinto Mall	Former Marshalls	General Retail (Super Regional Mall)	1981	29,110	-	100	
315-319 W Texas Ave		General Retail	1929	19,704	Withheld	0	
622 W Texas Ave		General Retail	1945	15,879	-	100	
700 W Texas Ave		General Retail	1946	23,303	-	100	
5206 Wade Rd		General Retail	1979	18,216	-	100	
330 Ward Rd	McCoy's	General Retail	1984	27,375	-	100	
330 Ward Rd		General Retail	1984	27,375	-	100	
701 Ward Rd		General Retail	1930	31,059	-	100	
3407-3517 Garth Rd	Baytown Shopping Center	General Retail (Neighborhood Center)	1987	69,873	Withheld	82.95	24 Hour Fitness
3409-3421 Garth Rd		General Retail (Neighborhood Center)	1986	20,267	Withheld	100	
3500 Garth Rd		General Retail (Neighborhood Center)	1992	84,966	Withheld	100	
4553 Garth Rd		General Retail (Community Center)	1994	105,133	Withheld	95.3	Hobby Lobby, Ross Dress for Less
7599 Garth Rd	Chase Plaza Center	General Retail (Strip Center)	2010	23,300	Withheld	85.41	
I-10 & Hwy 146	Retail Building 5B	General Retail (Lifestyle Center)		19,472	Withheld	92.81	
Under Construction							
1300-1400 N Alexander Dr	Brand New Development Dollar General #4357	General Retail	2018	10,566	-	100	
Grand Pky		General Retail	2018	2,640	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
951 Rollingbrook Dr		General Retail	2018	5,270	Withheld	76.47	
Hunt Rd @ Hunt Rd at Garth Rd		General Retail	2018	80,000	-	100	
5623 Garth Rd	Shops on Garth Road	General Retail	2018	16,000	Withheld	66.56	
Garth Rd & Hunt Rd		General Retail (Neighborhood Center)	2018	25,360	Withheld	47.71	
Garth Rd & Hunt Rd	Baytown Shops	General Retail (Neighborhood Center)	2018	92,546	Withheld	83.79	
Proposed							
1100 Ward Rd		General Retail		12,640	32	100	
Garth Rd		General Retail (Community Center)	2018	27,000	-	100	
3412 Garth Rd	Baytown Retail	General Retail	2019	18,215	25	0	
8501 Texas 146 Rd	Chambers Commons	General Retail	2018	24,500	-	100	
8703 SH 146		General Retail	2018	100,000	Withheld	0	
306-312 N Main St		General Retail	1950	15,560	-	100	
2200 N Main St	H E B	General Retail	1990	27,840	-	100	
3517 N Main St	Food Town	General Retail	1995	77,000	-	100	
4510 N Main St	Service King	General Retail	2003	19,689	-	100	
5620 N Main St		General Retail		25,000	-	100	
2 S Main St	Winfield Furniture	General Retail	1926	22,532	-	100	
3422 McKinney Rd		General Retail		21,120	-	100	
518 Miller St		General Retail	1988	17,600	-	100	
NEC Garth Rd @ Baker Road	Best Buy	General Retail	2005	30,038	-	100	
1801 N Pruett St	Central Baytown Business Center	General Retail	1970	123,214	13.5	16.97	
3000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	873,836	18	96.48	Macy's, Sears
5000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	127,330	-	100	
8000 San Jacinto Mall		General Retail (Super Regional Mall)	1984	76,107	-	100	
9000 San Jacinto Mall	Former Marshalls	General Retail (Super Regional Mall)	1981	29,110	-	100	
315-319 W Texas Ave		General Retail	1929	19,704	Withheld	0	
622 W Texas Ave		General Retail	1945	15,879	-	100	
700 W Texas Ave		General Retail	1946	23,303	-	100	
5206 Wade Rd		General Retail	1979	18,216	-	100	
330 Ward Rd	McCoy's	General Retail	1984	27,375	-	100	
330 Ward Rd		General Retail	1984	27,375	-	100	
701 Ward Rd		General Retail	1930	31,059	-	100	
3407-3517 Garth Rd	Baytown Shopping Center	General Retail (Neighborhood Center)	1987	69,873	Withheld	82.95	24 Hour Fitness
3409-3421 Garth Rd		General Retail (Neighborhood Center)	1986	20,267	Withheld	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
3500 Garth Rd		General Retail (Neighborhood Center)	1992	84,966	Withheld	100	
4553 Garth Rd		General Retail (Community Center)	1994	105,133	Withheld	95.3	Hobby Lobby, Ross Dress for Less
7599 Garth Rd	Chase Plaza Center	General Retail (Strip Center)	2010	23,300	Withheld	85.41	
I-10 & Hwy 146	Retail Building 5B	General Retail (Lifestyle Center)		19,472	Withheld	92.81	
Under Construction							
1300-1400 N Alexander Dr	Brand New Development Dollar General #4357	General Retail	2018	10,566	-	100	
Grand Pky		General Retail	2018	2,640	-	100	
951 Rollingbrook Dr		General Retail	2018	5,270	Withheld	76.47	
Hunt Rd @ Hunt Rd at Garth Rd		General Retail	2018	80,000	-	100	
5623 Garth Rd	Shops on Garth Road	General Retail	2018	16,000	Withheld	66.56	
Garth Rd & Hunt Rd		General Retail (Neighborhood Center)	2018	25,360	Withheld	47.71	
Garth Rd & Hunt Rd	Baytown Shops	General Retail (Neighborhood Center)	2018	92,546	Withheld	83.79	
Proposed							
1100 Ward Rd		General Retail		12,640	32	100	
Garth Rd		General Retail (Community Center)	2018	27,000	-	100	
3412 Garth Rd	Baytown Retail	General Retail	2019	18,215	25	0	
8501 Texas 146 Rd	Chambers Commons	General Retail	2018	24,500	-	100	
8703 SH 146		General Retail	2018	100,000	Withheld	0	
306-312 N Main St		General Retail	1950	15,560	-	100	
2200 N Main St	H E B	General Retail	1990	27,840	-	100	
3517 N Main St	Food Town	General Retail	1995	77,000	-	100	
4510 N Main St	Service King	General Retail	2003	19,689	-	100	
5620 N Main St		General Retail		25,000	-	100	
2 S Main St	Winfield Furniture	General Retail	1926	22,532	-	100	
3422 McKinney Rd		General Retail		21,120	-	100	
518 Miller St		General Retail	1988	17,600	-	100	
NEC Garth Rd @ Baker Road	Best Buy	General Retail	2005	30,038	-	100	
1801 N Pruett St	Central Baytown Business Center	General Retail	1970	123,214	13.5	16.97	
3000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	873,836	18	96.48	Macy's, Sears
5000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	127,330	-	100	
8000 San Jacinto Mall		General Retail (Super Regional Mall)	1984	76,107	-	100	
9000 San Jacinto Mall	Former Marshalls	General Retail (Super Regional Mall)	1981	29,110	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
315-319 W Texas Ave		General Retail	1929	19,704	Withheld	0	
622 W Texas Ave		General Retail	1945	15,879	-	100	
700 W Texas Ave		General Retail	1946	23,303	-	100	
5206 Wade Rd		General Retail	1979	18,216	-	100	
330 Ward Rd	McCoy's	General Retail	1984	27,375	-	100	
330 Ward Rd		General Retail	1984	27,375	-	100	
701 Ward Rd		General Retail	1930	31,059	-	100	
3407-3517 Garth Rd	Baytown Shopping Center	General Retail (Neighborhood Center)	1987	69,873	Withheld	82.95	24 Hour Fitness
3409-3421 Garth Rd		General Retail (Neighborhood Center)	1986	20,267	Withheld	100	
3500 Garth Rd		General Retail (Neighborhood Center)	1992	84,966	Withheld	100	
4553 Garth Rd		General Retail (Community Center)	1994	105,133	Withheld	95.3	Hobby Lobby, Ross Dress for Less
7599 Garth Rd	Chase Plaza Center	General Retail (Strip Center)	2010	23,300	Withheld	85.41	
I-10 & Hwy 146	Retail Building 5B	General Retail (Lifestyle Center)		19,472	Withheld	92.81	
Under Construction							
1300-1400 N Alexander Dr	Brand New Development Dollar General #4357	General Retail	2018	10,566	-	100	
Grand Pky		General Retail	2018	2,640	-	100	
951 Rollingbrook Dr		General Retail	2018	5,270	Withheld	76.47	
Hunt Rd @ Hunt Rd at Garth Rd		General Retail	2018	80,000	-	100	
5623 Garth Rd	Shops on Garth Road	General Retail	2018	16,000	Withheld	66.56	
Garth Rd & Hunt Rd		General Retail (Neighborhood Center)	2018	25,360	Withheld	47.71	
Garth Rd & Hunt Rd	Baytown Shops	General Retail (Neighborhood Center)	2018	92,546	Withheld	83.79	
Proposed							
1100 Ward Rd		General Retail		12,640	32	100	
Garth Rd		General Retail (Community Center)	2018	27,000	-	100	
3412 Garth Rd	Baytown Retail	General Retail	2019	18,215	25	0	
8501 Texas 146 Rd	Chambers Commons	General Retail	2018	24,500	-	100	
8703 SH 146		General Retail	2018	100,000	Withheld	0	
306-312 N Main St		General Retail	1950	15,560	-	100	
2200 N Main St	H E B	General Retail	1990	27,840	-	100	
3517 N Main St	Food Town	General Retail	1995	77,000	-	100	
4510 N Main St	Service King	General Retail	2003	19,689	-	100	
5620 N Main St		General Retail		25,000	-	100	
2 S Main St	Winfield Furniture	General Retail	1926	22,532	-	100	
3422 McKinney Rd		General Retail		21,120	-	100	
518 Miller St		General Retail	1988	17,600	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
NEC Garth Rd @ Baker Road	Best Buy	General Retail	2005	30,038	-	100	
1801 N Pruett St	Central Baytown Business Center	General Retail	1970	123,214	13.5	16.97	
3000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	873,836	18	96.48	Macy's, Sears
5000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	127,330	-	100	
8000 San Jacinto Mall		General Retail (Super Regional Mall)	1984	76,107	-	100	
9000 San Jacinto Mall	Former Marshalls	General Retail (Super Regional Mall)	1981	29,110	-	100	
315-319 W Texas Ave		General Retail	1929	19,704	Withheld	0	
622 W Texas Ave		General Retail	1945	15,879	-	100	
700 W Texas Ave		General Retail	1946	23,303	-	100	
5206 Wade Rd		General Retail	1979	18,216	-	100	
330 Ward Rd	McCoy's	General Retail	1984	27,375	-	100	
330 Ward Rd		General Retail	1984	27,375	-	100	
701 Ward Rd		General Retail	1930	31,059	-	100	
3407-3517 Garth Rd	Baytown Shopping Center	General Retail (Neighborhood Center)	1987	69,873	Withheld	82.95	24 Hour Fitness
3409-3421 Garth Rd		General Retail (Neighborhood Center)	1986	20,267	Withheld	100	
3500 Garth Rd		General Retail (Neighborhood Center)	1992	84,966	Withheld	100	
4553 Garth Rd		General Retail (Community Center)	1994	105,133	Withheld	95.3	Hobby Lobby, Ross Dress for Less
7599 Garth Rd	Chase Plaza Center	General Retail (Strip Center)	2010	23,300	Withheld	85.41	
I-10 & Hwy 146	Retail Building 5B	General Retail (Lifestyle Center)		19,472	Withheld	92.81	
Under Construction							
1300-1400 N Alexander Dr	Brand New Development Dollar General #4357	General Retail	2018	10,566	-	100	
Grand Pky		General Retail	2018	2,640	-	100	
951 Rollingbrook Dr		General Retail	2018	5,270	Withheld	76.47	
Hunt Rd @ Hunt Rd at Garth Rd		General Retail	2018	80,000	-	100	
5623 Garth Rd	Shops on Garth Road	General Retail	2018	16,000	Withheld	66.56	
Garth Rd & Hunt Rd		General Retail (Neighborhood Center)	2018	25,360	Withheld	47.71	
Garth Rd & Hunt Rd	Baytown Shops	General Retail (Neighborhood Center)	2018	92,546	Withheld	83.79	
Proposed							
1100 Ward Rd		General Retail		12,640	32	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
Garth Rd		General Retail (Community Center)	2018	27,000	-	100	
3412 Garth Rd	Baytown Retail	General Retail	2019	18,215	25	0	
8501 Texas 146 Rd	Chambers Commons	General Retail	2018	24,500	-	100	
8703 SH 146		General Retail	2018	100,000	Withheld	0	
306-312 N Main St		General Retail	1950	15,560	-	100	
2200 N Main St	H E B	General Retail	1990	27,840	-	100	
3517 N Main St	Food Town	General Retail	1995	77,000	-	100	
4510 N Main St	Service King	General Retail	2003	19,689	-	100	
5620 N Main St		General Retail		25,000	-	100	
2 S Main St	Winfield Furniture	General Retail	1926	22,532	-	100	
3422 McKinney Rd		General Retail		21,120	-	100	
518 Miller St		General Retail	1988	17,600	-	100	
NEC Garth Rd @ Baker Road	Best Buy	General Retail	2005	30,038	-	100	
1801 N Pruett St	Central Baytown Business Center	General Retail	1970	123,214	13.5	16.97	
3000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	873,836	18	96.48	Macy's, Sears
5000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	127,330	-	100	
8000 San Jacinto Mall		General Retail (Super Regional Mall)	1984	76,107	-	100	
9000 San Jacinto Mall	Former Marshalls	General Retail (Super Regional Mall)	1981	29,110	-	100	
315-319 W Texas Ave		General Retail	1929	19,704	Withheld	0	
622 W Texas Ave		General Retail	1945	15,879	-	100	
700 W Texas Ave		General Retail	1946	23,303	-	100	
5206 Wade Rd		General Retail	1979	18,216	-	100	
330 Ward Rd	McCoy's	General Retail	1984	27,375	-	100	
330 Ward Rd		General Retail	1984	27,375	-	100	
701 Ward Rd		General Retail	1930	31,059	-	100	
3407-3517 Garth Rd	Baytown Shopping Center	General Retail (Neighborhood Center)	1987	69,873	Withheld	82.95	24 Hour Fitness
3409-3421 Garth Rd		General Retail (Neighborhood Center)	1986	20,267	Withheld	100	
3500 Garth Rd		General Retail (Neighborhood Center)	1992	84,966	Withheld	100	
4553 Garth Rd		General Retail (Community Center)	1994	105,133	Withheld	95.3	Hobby Lobby, Ross Dress for Less
7599 Garth Rd	Chase Plaza Center	General Retail (Strip Center)	2010	23,300	Withheld	85.41	
I-10 & Hwy 146	Retail Building 5B	General Retail (Lifestyle Center)		19,472	Withheld	92.81	
Under Construction							
1300-1400 N Alexander Dr	Brand New Development Dollar General #4357	General Retail	2018	10,566	-	100	

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
Grand Pky		General Retail	2018	2,640	-	100	
951 Rollingbrook Dr		General Retail	2018	5,270	Withheld	76.47	
Hunt Rd @ Hunt Rd at Garth Rd		General Retail	2018	80,000	-	100	
5623 Garth Rd	Shops on Garth Road	General Retail	2018	16,000	Withheld	66.56	
Garth Rd & Hunt Rd		General Retail (Neighborhood Center)	2018	25,360	Withheld	47.71	
Garth Rd & Hunt Rd	Baytown Shops	General Retail (Neighborhood Center)	2018	92,546	Withheld	83.79	
Proposed							
1100 Ward Rd		General Retail		12,640	32	100	
Garth Rd		General Retail (Community Center)	2018	27,000	-	100	
3412 Garth Rd	Baytown Retail	General Retail	2019	18,215	25	0	
8501 Texas 146 Rd	Chambers Commons	General Retail	2018	24,500	-	100	
8703 SH 146		General Retail	2018	100,000	Withheld	0	
2 S Main St	Winfield Furniture	General Retail	1926	22,532	-	100	
3422 McKinney Rd		General Retail		21,120	-	100	
518 Miller St		General Retail	1988	17,600	-	100	
NEC Garth Rd @ Baker Road	Best Buy	General Retail	2005	30,038	-	100	
1801 N Pruett St	Central Baytown Business Center	General Retail	1970	123,214	13.5	16.97	
3000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	873,836	18	96.48	Macy's, Sears
5000 San Jacinto Mall		General Retail (Super Regional Mall)	1981	127,330	-	100	
8000 San Jacinto Mall		General Retail (Super Regional Mall)	1984	76,107	-	100	
9000 San Jacinto Mall	Former Marshalls	General Retail (Super Regional Mall)	1981	29,110	-	100	
315-319 W Texas Ave		General Retail	1929	19,704	Withheld	0	
622 W Texas Ave		General Retail	1945	15,879	-	100	
700 W Texas Ave		General Retail	1946	23,303	-	100	
5206 Wade Rd		General Retail	1979	18,216	-	100	
330 Ward Rd	McCoy's	General Retail	1984	27,375	-	100	
330 Ward Rd		General Retail	1984	27,375	-	100	
701 Ward Rd		General Retail	1930	31,059	-	100	
3407-3517 Garth Rd	Baytown Shopping Center	General Retail (Neighborhood Center)	1987	69,873	Withheld	82.95	24 Hour Fitness
3409-3421 Garth Rd		General Retail (Neighborhood Center)	1986	20,267	Withheld	100	
3500 Garth Rd		General Retail (Neighborhood Center)	1992	84,966	Withheld	100	
4553 Garth Rd		General Retail (Community Center)	1994	105,133	Withheld	95.3	Hobby Lobby, Ross Dress for Less

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
7599 Garth Rd	Chase Plaza Center	General Retail (Strip Center)	2010	23,300	Withheld	85.41	
I-10 & Hwy 146	Retail Building 5B	General Retail (Lifestyle Center)		19,472	Withheld	92.81	
Under Construction							
1300-1400 N Alexander Dr	Brand New Development Dollar General #4357	General Retail	2018	10,566	-	100	
Grand Pky		General Retail	2018	2,640	-	100	
951 Rollingbrook Dr		General Retail	2018	5,270	Withheld	76.47	
Hunt Rd @ Hunt Rd at Garth Rd		General Retail	2018	80,000	-	100	
5623 Garth Rd	Shops on Garth Road	General Retail	2018	16,000	Withheld	66.56	
Garth Rd & Hunt Rd		General Retail (Neighborhood Center)	2018	25,360	Withheld	47.71	
Garth Rd & Hunt Rd	Baytown Shops	General Retail (Neighborhood Center)	2018	92,546	Withheld	83.79	
Proposed							
1100 Ward Rd		General Retail		12,640	32	100	
Garth Rd		General Retail (Community Center)	2018	27,000	-	100	
3412 Garth Rd	Baytown Retail	General Retail	2019	18,215	25	0	
8501 Texas 146 Rd	Chambers Commons	General Retail	2018	24,500	-	100	

Source: CoStar

Table 55: Current Inventory of Office Locations in the CMA

Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	% Leased	Average Weighted Rent
1107 Willcox St		77514	B	2,400	1995	100	-
1010 Baker Rd	Baker Road Professional Building	77521	B	21,980	2003	100	-
1650 Baker Rd		77521	B	6,000	2010	0	Withheld
1674 Baker Rd		77521	B	8,781	2008	100	-
311 W Baker Rd		77521	B	3,300	1986	0	Withheld
1602 W Baker Rd		77521	B	7,000	2008	100	-
1608 W Baker Rd		77521	B	4,411	2009	100	-
1618 W Baker Rd		77521	B	4,282	2009	100	-
1666 W Baker Rd	Dow Medical Complex	77521	B	8,001	2008	100	-
1682 W Baker Rd		77521	B	3,445	2009	100	-
1690 W Baker Rd		77521	B	5,716	2009	100	-
2307 W Baker Rd		77521	B	8,930	2015	100	-
2707 W Baker Rd		77521	B	4,832	2004	100	-
1025 Birdsong Dr	San Jacinto Surgery Center	77521	B	12,000	1998	100	-
2001 Cedar Bayou Rd		77520	B	10,000	1977	100	-
2800 Decker Dr	Exxon Baytown Refinery	77520	B	35,000	1986	100	-
9200 East Fwy	Chevron Phillips Chemical Company	77521	B	119,365	1988	100	-
9200 East Fwy	Chevron Phillips Chemical Company	77521	B	11,215		100	-
4816 Eastchase St		77521	B	7,194	2012	100	-
7600 FM 3180 Rd		77523	B	4,800	2006	100	-
FM 565 @ FM 1405	Office 2	77523	B	4,800		100	-
3200 FM 565	Building 1	77523	B	24,000	2016	33.33	16
2800 Garth Rd	Primary Medical Tower II	77521	B	129,286	1988	100	-
2802 Garth Rd	Umar Syed Medical Tower	77521	B	46,120	1979	94.36	1.2
3711 B Garth Rd		77521	B	14,216	2001	100	-
4000 Garth Rd	Bank of America	77521	B	33,327	1983	100	-
4201 Garth Rd	Independence Plaza I	77521	B	71,531	1987	100	-
4301 Garth Rd	San Jacinto Professional Bldg	77521	B	71,760	1989	100	-
4310 Garth Rd		77521	B	4,941	1979	100	-
5000 Garth Rd		77521	B	4,429	2011	100	-
6051 Garth Rd		77521	B	20,268	2011	21.06	24
4127 N Highway 146		77520	B	1,808	1950	100	-
4203 N Highway 146		77520	B	929	1950	100	-
8831 N Highway 146		77523	B	6,020	2015	100	-
4544 E I-10 Fwy		77521	B	47,185	1984	100	-
6730 Independence		77521	B	12,000	2000	100	-
1107 E James St		77520	B	2,729	1969	100	-
1610 James Bowie Dr	Plaza I	77520	B	25,745	1972	58.86	17

Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	% Leased	Average Weighted Rent
10603 Langston Dr		77523	B	1,344		100	-
4618 N Main St		77521	B	1,240		100	-
1300 Rollingbrook Dr	Amegy Bank	77521	B	81,147	1984	96.6	10.59
400 W Texas		77520	B	11,000	1980	100	-
300 W Texas Ave		77520	B	8,300	1935	100	-
6236 Texas 146	Bldg 1	77523	B	3,760	1986	100	-
3711 Garth Rd	Baytown Professional Office Plaza	77521	B	25,417	2001	77.18	Withheld
1600 James Bowie Dr	Plaza II	77520	B	16,682	1972	52.63	Withheld
315-415 Jones Rd		77562	B	13,446	2003	100	-
501 Palmer St		77575	B	11,267	1965	100	-
Sub-total				**983,349**			
2005 N Alexander Dr		77520	C	1,299	1952	100	-
2717 N Alexander Dr		77520	C	2,834	1949	100	-
2635 Baker Rd	Baker Health Center	77521	C	4,088	2005	100	-
104 W Baker Rd		77521	C	1,896	1978	100	-
1001 W Baker Rd		77521	C	6,428	1984	67.33	11.4
1642 W Baker Rd		77521	C	1,900	2009	100	-
4705 W Baker Rd		77520	C	8,600		100	-
1005 Bob Smith Rd		77520	C	4,190	1952	100	-
111 Cedar Bayou Rd		77520	C	6,348	1960	100	-
230 W Cedar Bayou Lynchburg Rd		77521	C	4,541	2000	100	-
504 W Cedar Bayou Lynchburg Rd		77521	C	500	1940	100	-
1303 W Cedar Bayou Lynchburg Rd		77521	C	1,755	1950	100	-
4300 Cynda Brooke Dr	Damon Clinical Laboratory	77521	C	9,824	1984	100	-
909 Decker Dr	Baytown Teachers Credit Union	77520	C	19,669	1969	100	-
1209 Decker Dr		77520	C	2,000	1966	100	-
2900 Decker Dr	Southwest Resource Credit Union	77520	C	22,400	1972	100	-
3818 Decker Dr		77520	C	8,625	1984	100	-
4026 Decker Dr	West Town Center	77520	C	19,401	1984	7.84	8
5307 Decker Dr		77520	C	4,687	1985	100	-
5313 Decker Dr		77520	C	5,890	1985	100	-
5313 Decker Dr		77520	C	6,000	1976	100	-
5514 Decker Dr		77520	C	8,600	1995	75.58	12
119 W Defee St	West Defee Bldg	77520	C	18,750	1924	100	-
319-321 W Defee St		77520	C	3,460	1940	100	-
11340 Eagle Dr		77523	C	6,800	2002	100	-
10331 East I-10		77521	C	2,200		100	-
7222 Eastpoint Blvd	Building 1	77521	C	2,262	2008	100	-
7232 Eastpoint Blvd	Building 2	77521	C	2,240	2008	100	-

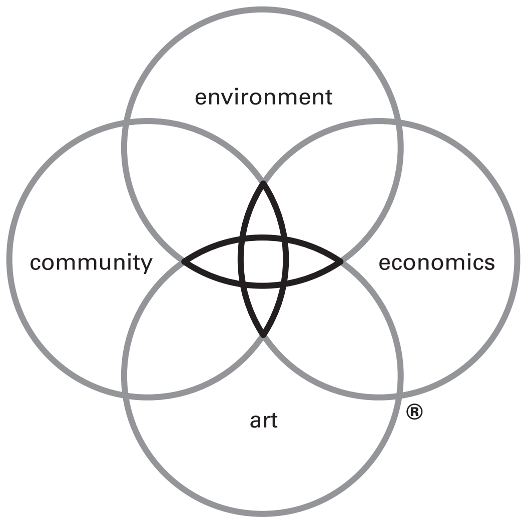
Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	% Leased	Average Weighted Rent
7328 FM 3180		77523	C	2,940	1989	100	-
2200 Garth Rd		77520	C	2,250	1968	100	-
2301 Garth Rd		77520	C	8,000		100	-
3007 Garth Rd		77521	C	2,200		100	-
3009 Garth Rd		77521	C	2,827	1959	100	-
4721 Garth Rd	Baytown Chamber of Commerce	77521	C	19,724	1982	100	-
5225 Garth Rd	A-Building	77521	C	2,268	1997	100	-
5231 Garth Rd		77521	C	2,400	1989	100	-
10 Harold Ln		77521	C	3,402	1977	100	-
3732 N Highway 146		77521	C	1,546	1950	100	-
3746 N Highway 146		77520	C	1,125	1940	100	-
5303 N Highway 146		77523	C	5,005	1974	0	Withheld
9122 N Highway 146		77523	C	4,456		100	-
6822 Hwy 146		77523	C	4,082	1967	100	-
6232 N Hwy 146 Hwy		77523	C	13,950	1986	100	-
10700 Interstate 10 E		77523	C	1,859		100	-
1105 E James St	Baytown Family Dentistry	77520	C	3,233	1971	100	-
1101 Knowlton Rd		77520	C	3,328	1957	100	-
1103 W Lobit St		77520	C	4,744	1955	100	-
3406 N Main Rd		77521	C	3,410	1978	100	-
2815 N Main St		77521	C	3,500	1965	100	-
3402 N Main St		77521	C	1,150	1970	100	-
3500 N Main St		77521	C	2,121	1963	100	-
3722 N Main St		77521	C	3,500	1986	100	-
4406 N Main St		77521	C	2,055	1955	100	-
4501 N Main St		77521	C	1,768	1994	100	-
4505 N Main St		77521	C	3,057		100	-
7303 N Main St		77521	C	2,188	1980	0	13.71
8200 N Main St		77521	C	19,495	1971	100	-
511 W Main St		77520	C	3,360	1921	100	-
1722 Market St	1722 Market Street Baytown, TX 77520	77520	C	4,032	1954	0	11.9
115 Massey Tompkins Rd		77521	C	1,496	1962	100	Withheld
323 Massey Tompkins Rd		77521	C	1,146	1940	100	-
1023 Massey Tompkins Rd		77521	C	2,000	2005	100	-
513 Park Ave		77520	C	1,100	1945	100	-
1009 Polly St		77520	C	2,220	1955	100	-
1 Price St		77520	C	34,344	1980	100	-
2400 N Pruett St		77520	C	1,200	1986	100	-
507 Rollingbrook Dr		77521	C	3,786	1984	100	-
606 Rollingbrook Dr	Rollingbrook Professional Bldg	77521	C	18,252	1981	71.51	16.46

Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	% Leased	Average Weighted Rent
608 Rollingbrook Dr		77521	C	4,000	1977	100	-
2202 Rollingbrook Dr		77521	C	11,104	2004	100	-
621 Rollingbrook St		77521	C	2,695	1983	29.5	19.8
112 Schilling St		77520	C	844	1960	100	-
313 S SH 146		77520	C	6,480	1982	100	-
729 Sharon Ln		77521	C	4,872	1978	100	-
101 W Sterling Rd		77520	C	2,208	1919	100	-
617 W Sterling St		77520	C	1,245	1960	100	-
1004 W Sterling St		77520	C	2,810	1958	0	10.68
200 E Texas Ave		77520	C	6,063	1964	100	-
301 E Texas Ave		77520	C	2,600	1955	100	-
311 E Texas Ave		77520	C	2,832	1950	100	-
800 E Texas Ave		77520	C	16,788	1950	100	-
315 W Texas Ave		77520	C	19,000	1950	100	-
401 W Texas Ave		77520	C	7,663	1963	0	12.48
420 W Texas Ave		77520	C	5,944	1928	0	4.04
612 W Texas Ave		77520	C	40,273	1954	100	-
623 W Texas Ave		77520	C	7,138	1980	0	Withheld
910 TX-146 Frontage		77520	C	14,611	1970	100	-
600 Ward Rd		77520	C	550	1981	100	-
1113 W Baker Rd	Baker Complex	77521	C	5,000	1984	100	Withheld
1319 N Pruett St		77520	C	21,026	1968	88.11	Withheld
12859 Highway 146		77535	C	10,000		100	-
13012 Highway 146		77535	C	2,800	1998	100	-
400 E Highway 90		77535	C	9,659	1961	100	-
111 N Main St		77535	C	2,838	1964	100	-
501 FM-2100		77562	C	3,117	1972	100	-
3110 Grace Ln		77562	C	915	1991	100	-
415 Jones Rd		77562	C	4,200	2005	100	-
412 N Main St		77562	C	2,092	1930	100	-
1008 N Main St		77562	C	1,970	1987	100	-
211 S Main	EAST HOUSTON AREA SUMMER DAYCARE CAMP	77562	C	6,256	1975	100	-
201 S Main St		77562	C	1,300	1963	100	-
208 S Main St		77562	C	1,200	1982	100	-
416 S Main St		77562	C	1,661	1980	100	-
440 S Main St		77562	C	1,919	2009	100	-
444 S Main St		77562	C	2,778	1978	100	-
507 S Main St		77562	C	3,560	1973	100	-
123 E Texas		77520	C	1,300	1946	100	-

MONT BELVIEU LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	% Leased	Average Weighted Rent
323 San Jacinto St		77575	C	949		100	-
10739 Eagle Dr		77580	C	1,826	1980	100	-
11330 Eagle Dr		77523	C	2,200	1997	100	-
2770 N FM 565 Rd		77523	C	2,843	2009	100	-
13012 Hwy 146		77535	C	1,814	1998	100	-
Sub-total				**644,649**			
Totals/Averages				**1,627,998**	**1978**	**91.09%**	**$12.62**

Source: CoStar



DW LEGACY DESIGN®

We believe that when environment, economics, art and community are combined in harmony with the dictates of the land and needs of society, magical places result — sustainable places of timeless beauty, significant value and enduring quality, places that lift the spirit. Design Workshop is dedicated to creating Legacy projects: for our clients, for society and for the well-being of our planet.

PREPARED BY

DESIGNWORKSHOP

918 CONGRESS STREET
HOUSTON, TEXAS 77002
713.227.0862