# Castroville Comprehensive Plan

Back To Our Future



**By: Simplecity Design** 

# **Executive Summary**

This is a story about our small Texas city embarking on a purposeful journey to determine the future of Castroville and "New Castroville," as the locals say. This journey began with a deep appreciation for what we have, an acknowledgment that growth is inevitable, and an understanding that we have a say in how this growth occurs, just as this community has done since the arrival of the founders.

According to projections by the Alamo Area Metropolitan Planning Organization (AAMPO), the population of Castroville, Texas, is expected to reach approximately 5,000 by the year 2030 and a large population to serve in the ETJ. This growth is part of a broader trend as the San Antonio metropolitan area continues to expand, influencing surrounding towns like Castroville. The city's population increase is driven by its beauty and charm and its proximity to San Antonio, making it an increasingly attractive location for new residents.

Under normal conditions, growing cities face challenges. Castroville's challenges are magnified compared to typical growth conditions due to the patterns of growth, the implications of Highway 90, and changing state legislation regarding growth management. Landowners can now opt in or out of the city, making budget forecasting nearly impossible. The anticipated population boom has led to a range of growth projections and a spectrum of philosophies on how to manage it.

This Plan aims to consider all perspectives, balance a series of trade-offs, and determine a pragmatic path forward. The planning process allowed the community to think big, sort through its values, and identify the projects that matter most.

Participating citizens, businesses, landowners, developers, city leaders, and city staff worked together to shape the important elements into a digestible plan for the people of Castroville. The Project Advisory Committee (PAC) members guided the project by sharing stories and insights. Recognizing that the current rules and standards on the books do not align with the community values of today, Castroville provided themselves the grace and time needed to shape the standards for the future through clear intentions grounded in the fabric that makes Castroville, Castroville.

#### Castroville now has:

- Plans, policies, and processes aligned with the community values,
- Clarity and outlined expectations for growth and,
- An achievable list of City projects to guide the community forward.

#### **Mayor & Council**

Mayor - Darrin Schroeder

**District 1 - Sheena Martinez** 

**District 2 - Paul Carey** 

**District 3 - Phil King** 

**District 4 - David Merz** 

District 5 - Herb Dyer

#### **City Staff**

**City Administrator - Scott Dixon** 

**Community Development Director -**

**Breana Soto** 

City Secretary - Debra Howe

**Financial Director-Leroy Vidales** 

**Accounting Manager -**

Hilda Bernal-Chavez

Public Works Director - John Gomez

**Tourism & Business Development** 

**Director - Darin Hamm** 

# Planning & Zoning Commission

Jeff Gardner

Priscilla Garrett

**Bruce Alexander** 

Jim Welch, Chair

Kyle McVay

#### **Project Advisory Committee**

**Darrin Schroeder** 

**Phil King** 

Kyle McVay

**Priscilla Garret** 

William Jette

**Breana Soto** 

**Scott Dixon** 

#### **Simplecity Design**

Matt Lewis, CNUa

**Zach Lewis** 

**Lacy Patterson** 

**Lisa Sutton** 

**Grace Hartman** 

Milosay Ceckic

JJ Zanetta

#### **Popken Popups**

Amanda Popken McCullough,

AICP, CNUa

**Amy Albright** 

#### **Crabtree Group Inc**

Paul Crabtree, PE

Aaron Cook, PE

Jacob Hyman, PE

### **Purpose**



reference documents brimming with technical information and an exhaustive list of to-do items. Their mere size can create a level of intimidation to the reader that deters the use of the plan. The Internet has changed access to information, but how Comprehensive Plans are written has not changed. Today, a tremendous amount of community information is literally a few clicks away. Therefore, only statistically relevant information has been included here so as not to overwhelm the reader with reference materials that are easily accessed elsewhere.

Castroville's historic attributes from the past shaped this plan guide the future.

#### **Purpose of the Plan**

The **Castroville Back to Our Future Plan** is an educational, inspirational, and transformational tool to be used as a decision-making guide to coordinate development and key community projects through a simple, illustrative document. It creates a future grounded by the vision statement and key attributes celebrated by the community. It integrates the natural setting, the loved built environment, and the culture of Castroville to maintain local preferences for current and future generations.

This Plan is written to inspire the community to understand its challenges, feel empowered by the possible solutions, and have a sense of urgency to act. This Plan is not a complete list of every identified issue facing the community related to land use, transportation, and infrastructure. Such lists can be overwhelming and create a defeatist mindset among elected officials and citizens. Castroville is a small rural community with just under 3,000 people and finite resources. Therefore, this Plan is written with a large dose of reality based on fiscal considerations and engagement with the community. It capitalizes on the community's strengths and opportunities while addressing the most significant threats immediately impacting Castroville's future and survival. The Action Plan is designed around transformational outcomes through achievable projects, which can be implemented over time to set the community up for success.

Comprehensive plans are required by State law to accompany zoning ordinances. Comprehensive plans shape the long-term goals of the community through a series of organized chapters focusing on land use and growth alongside a roadmap for success. The Texas Local Government Code requires that comprehensive plans be updated every five years to be consistent with the community zoning rules.

Guiding Castroville's growth is accomplished by embedding favorable patterns from the past into key strategies of the plan. In an attempt to guide development rather than overly regulate it, Castroville took a different approach to a conventional land use plan. The plan provides four area categories of development intensity, which should be aligned with the city's budgetary and infrastructure goals. This new way of doing business provides clarity for the city staff, city leaders, the community, and the development community about where and what type about development can occur. These elements are also integrated into the Unified Development Ordinance (UDO) as development standards. They will be modified with current best practices and modern building practices.

# **Using the Plan**

#### How to Use the Plan

- The Plan is organized into a series of chapters, starting with why and how the documents were created. They explain why the selected key components are so important to the community. Each chapter's topic is written to help city staff direct growth and development to follow Castroville's intentions
- The **Greenprint** and **Blueprint** make up a physical analysis of the landscape, informing where development should go based on Castroville's geography and current city structure. The outcome of this analysis helped shape the **Growth Guidance Map**.
- The Growth Guidance Map anticipates creating orderly development by utilizing existing infrastructure and growing from the center outward as new additions to the community are expected. Because land uses come and go, Castroville's Growth Guidance Map focuses on curating complete communities through the use of development patterns. The development patterns allow the development community to pick patterns that best support their models as determined by the natural environment and the existing built environment.
- To maintain and update the Plan as change occurs, an annual report must be prepared. As projects are completed, they should be removed and updated with new projects.
- Evaluation of the Growth Guidance Map must be presented to determine when and if various area updates are appropriate.
- The thoroughfare plan must support the Growth Guidance Map and should be revised as development occurs.
- Goals should be evaluated as they may shift as community leaders change. This is a normal political reality. However, the elements celebrated as the Plan's foundations are grounded in the community's physical and social fabric and should be considered when Plan modifications are proposed.

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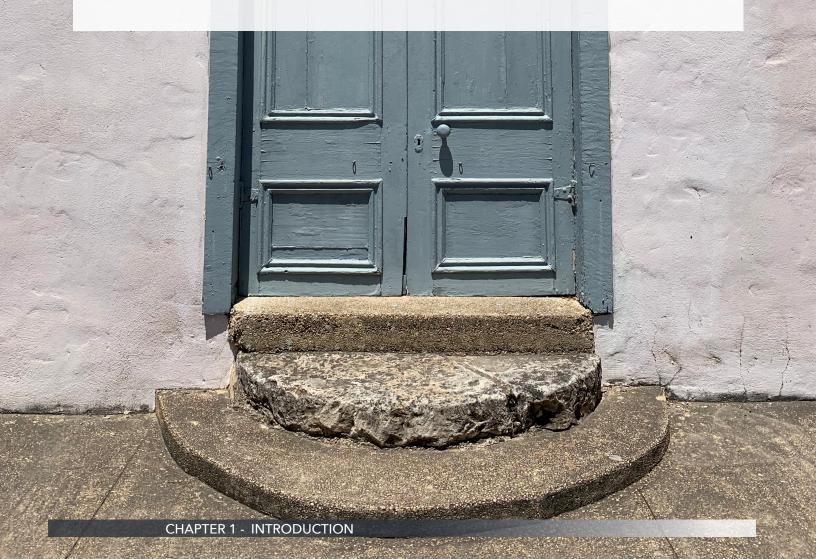
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#### **Uniquely Castroville**

Comprehensive Plans are the 15,000-foot view of the community. Comprehensive Plans align land use, transportation, and community preferences to goals and aspirations created by the community. The land use portion of the Comprehensive Plan is required by state law to be aligned with zoning to ensure predictability for the city leaders and development community. Creating alignment will enable the community to better forecast budgets and manage growth as it occurs through public and private efforts.



Castroville was designed to be timeless, flexible, and built to support a thriving community. Walkable neighborhoods connected to commerce were an important part of the original design. The community was laid out prior to the use of motorized vehicles, which gives the small-scale feel that Castroville loves. The physical patterns that make up Castroville are the reasons for its success and why the community loves it so much. Its small block-gridded street network provides the framework for spaces to adapt quickly. The location of natural amenities threaded through the community offers access to nature. The large rural in-town lots provide a lifestyle unique to Castroville. Compared to the isolation of suburban sprawl, the city's residents can easily walk to nearby local businesses that add character and life to the active community. This easy access to personalized local commerce is becoming rare in today's development culture. The quaint, enduring building designs have easily adapted as their businesses change with the times. Accessible small-town businesses also provide income to residents and revenue to support the city and its infrastructure. These features allow Castroville to function like a series of complete communities within a small area.

Castroville's favorite elements and values have been compared against the current city plans, processes, and policies to focus the guidance within this plan and the UDO that will follow.

Today's typical suburban sprawl development patterns booming throughout the country and the region are in direct conflict with Castroville's values and could threaten to change the city in ways that disrupt the current style of life. Furthermore, maintaining stability in the original Castro area is at the heart of the community's concerns. Erosion of the current physical patterns within this area has been uniformly rejected by the community. Defining the right scale and style of development within this area required tough conversations with an understanding that consensus would not always be achieved without compromise, but rather that tradeoffs could be evaluated for the long-term interests of the City.

Now that the core values and fundamental elements have been identified, structure must be provided to accommodate the newly defined development styles Castroville seeks. The land area within Castroville and its Extraterritorial Jurisdiction (ETJ) has been divided into organization zones to facilitate the desired growth trends. The **Growth Guidance Map** is a key tool to help ensure that Castroville maintains the original Castro area, grows in a logical and productive manner, and preserves lands for the future.

The projects within the Plan may shift as community leaders change. This is a normal function of city transition and operation. However, the elements celebrated as the foundations of the Plan are well grounded and should be considered when modifications are proposed.

Unprecedented growth and suburban sprawl threatens the Castroville way of life, and the community responded to protect the city they love.

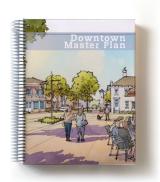
# **Building Block Project**

The Castroville Building Block Project (CBBP) is made up of three individual, projects. The first is this Comprehensive Plan, the second is the Downtown Plan, and the third is the Unified Development Ordinance (UDO).

Combined, these individual documents comprise the CBBP. Capturing the essence of Castroville's authenticity for incorporation into the first phase of the CBBP, the Comprehensive Plan, happened in a two-prong approach. The first phase of developing the CBBP was capturing the elements that would inform the Comprehensive Plan through two approaches:

**DNA Analysis and Community Engagement.** 







#### What is Included in this Comprehensive Plan?

The elements included in the Comprehensive Plan are policies and intents that keep Castroville in alignment with its unique history. This Plan meets all requirements of the Texas Local Government Code, Chapter 213 Municipal Comprehensive Plans. It includes provisions on:

$\bigcirc$	Existing Conditions	Growth Trend
$\bigcirc$	Community Resources / Connections	Action Plan
$\bigcirc$	Streets and Drainage	



#### DNA

As the first step in the planning process, simplecity conducted a DNA Analysis of Castroville's built environment. In the spring of 2023, it gathered foundational information on what makes Castroville, Castroville. The DNA is formed by its streets, buildings, sidewalks, blocks, natural settings, and more. When combined, these components create complex environments and complete neighborhoods. At its very core, the DNA Analysis puts a numerical value on the physical elements of the 160 plus years of history and characteristics of Castroville, including the beloved 13,887 square foot lots. The characteristics that make up Castroville are those of a traditional town, not suburbia, and are what makes Castroville a unique and wonderful place.

The Castroville DNA Analysis revealed many important patterns of the built environment. Five Character Areas were identified in the analysis: Nature, Rural, Residential, Core Castroville, and Highway Corridor.

The Medina River and Castroville Regional park serve as natural gateways and outdoor community spaces. Rural areas include farmlands that surround the city and hearken back the classic Alsace design of urban places surrounded by agriculture. Examining Residential areas highlighted how prevalent 13,887 square feet lots there are across the city's neighborhoods. The small, mixed use blocks with Alsatian architecture and curb-less streets define the Core. These small blocks, almost always 330' x 330', are the foundation of the original grid and In summary, the DNA Analysis identified that Castroville's authentic culture and timeless development patterns are the city's foundation and recipe for success. Small walkable blocks are not only important for the past, they're critical for the future. The findings of the DNA Analysis were shared with the community in a presentation given at the Landmark Inn in December 2023.











# **Community Voice**

#### **Community Engagement Overview**

#### Strategy and Approach

Public engagement has been a key component throughout this planning effort.

A robust public engagement process is essential in any planning initiative. Input from all stakeholders is crucial to creating a community that functions well for all its members. As a city uniquely rooted in its history and keen to protect itself from "Anywhere, USA" cookie-cutter development, Castroville required a tailored and iterative community engagement strategy.

This customized input process has included meetings, events, and Online feedback across five phases: the DNA Roundup, Castroville Dreamin', the Design Rodeo, the Code Rodeo, and the Community Roundup. Adoption of the plan documents will be the final step in the official planning process, although plan adoption is just the beginning of the community's journey in implementing the plan. Each plan phase is shown in the timeline graphic below.



#### **Engagement by the Numbers**

Community

Roundup

**TBD** 

**TBD** 

The table below specifically highlights online engagement in more detail. Social Pinpoint was used as the project website platform because of its robust variety of survey-building tools, including map-based survey questions.

The online input windows for each phase did not precisely align with the in-person meetings for the same phase. For example, the Castroville Dreamin' workshops occurred during the DNA Roundup's online input window. This was by design, as online survey questions for the Castroville Dreamin' phase were developed and posted online after the Dreamin' workshops to be responsive to community input heard at the workshops. Online surveys covered the same topics as in-person meetings for each phase but posed slightly different questions to further community dialogue productively.

The five-phase approach to community engagement was specifically designed to inform updates to the Comprehensive Plan, the Downtown Plan, and the UDO. More details and all comments received are included in the Community Engagement Appendix. The tables below present an overview summary of these engagement metrics.

Engagement At-a-Glance

Phase	Meeting Venue	Meeting Date(s)	Participant Metrics	First-Time Sign-Ups to Receive Stakeholder Email and/or Text Updates
DNA Roundup	Landmark Inn and online	November 28, 2023	50 individuals	50
Castroville Dreamin'	Elsass Hall	January 16-17, 2024	155 individuals over two days (80 individuals for citywide topics, around 75 additional individuals for downtown topics)	72
Design Rodeo	Legion Hall	March 27-28, 2024	Around 77 individuals over two days	12
Walkabout Code Tour (part of Design Rodeo Phase)	Downtown Castroville	April 12, 2024	Around 30 individuals	N/A - Event functioned as an informal community conversation and thus did not include sign-in
Code Rodeo	St Louis Braden Keller Community Center	August 6-8, 2024	TBD	TBD

**TBD** 

**TBD** 

# **Online Engagement Numbers**

The following table specifically highlights online engagement in more detail. Social Pinpoint was used as the project website platform because of its robust variety of survey-building tools including map-based survey questions.

#### Project Website - Online Engagement Metrics\*

Phase	Online Input Window*	Page Views	Site Visits	Visitors	Contributions	Contributors
DNA Roundup	Nov 5, 2023 - Feb 28, 2024	1,739	802	445	53	23
Castroville Dreamin'	Feb 29 - Mar 18, 2024	1,784	491	295	1,431	131
Design Rodeo	Mar 19 - Apr 30, 2024	711	398	233	19	13
Code Rodeo	TBD	TBD	TBD	TBD	TBD	TBD
Community Roundup	TBD	TBD	TBD	TBD	TBD	TBD
Total To-Date	N/A	4,234	1,691	973	1,503	167

Continuing the public engagement process through the creation of the UDO will help the community see how the vision turns into reality. During the Code Rodeo, and the Community Round Up, revisions and refinements will be made to this plan, and the UDO will be created and calibrated to support Castroville local preferences. As Castroville grows, it will be important to maintain community engagement and update them as projects are completed. Maintaining community feedback helps citizens, business owners, and landowners make decisions based on the investments by the city. Cities are not built in isolation, but rather collaboration.

#### **Key Findings from Community Engagement**

Throughout the community engagement process, Castroville stakeholders volunteered their time in community meetings and provided hundreds of comments on dozens of topics. The Castroville community is exceptionally active and invested in its future—this level of civic loyalty and engagement is a tremendous asset.



Many Castroville residents have local family ties extending back for generations and are understandably protective of the town and its heritage. For these and other stakeholders, preserving Castroville's unique feel is paramount and personal. The depth and complexity of community discourse in Castroville presented challenges and opportunities for the planning process. In-person meetings were offered at different times of the day to reach various audiences, and online input windows were open for multiple weeks to provide everyone with opportunities to make their voices heard. An iterative process allowed for overarching themes and sometimes conflicting perspectives to emerge. This Plan considers all participants' insights and is the result of the community's collective effort.

#### **DNA Roundup Key Findings**

The DNA Roundup (November 28, 2023) kicked off the planning process with a community meeting at the Landmark Inn. This kickoff focused on initial findings from the DNA Report, a preliminary assessment of Castroville's history along with the natural and built environment factors that have shaped the town. This report highlighted key elements of Castroville's story: its authentic culture, timeless grid-pattern plan, ingredients for success handed down from past generations, a focus on courtyards and community gathering spaces, and a desire for clearly articulated boundaries preserving a unique sense of place. The DNA Roundup meeting and subsequent online surveys obtained initial high-level input from the community, summarized below.

- Preserve Historic District and Small-Town Feel: Stakeholders overwhelmingly desire to maintain the historic district and unique small-town atmosphere.
- Cultivate Development: Support for preserving historic areas while permitting carefully guided peripheral development that respects the community's foundational grid pattern.
- Protect Nature: Desire to protect natural features such as the Medina River, parks, trails, and green spaces within neighborhoods.
- Improve Connections: Concern about car traffic and a desire for better vehicular and pedestrian connections across dividing barriers like the highway and the river.
- Enhance Safety: Improved safety for children walking to school.
- Support Small-Scale Agriculture: Agreement on allowing small-scale backyard agriculture and farming, including chickens and horses.

#### **Castroville Dreamin' Key Findings**

The Castroville Dreamin' workshops (January 16-17, 2024) began the second phase of the Building Block Project. Over two days and six sessions, residents and business owners were invited to envision the Castroville they wish to hand down to the next generation. Following the meetings, public comments were solicited on the project website. Key findings include:

- Preserve and Celebrate Unique Features: Strong desire to maintain and enhance architectural styles, cultural heritage, and natural environment.
- Address Flooding and Drought Concerns: Support for adequate drainage solutions and native landscaping.
- Encourage Local Businesses: Preference for locally-owned, family-friendly businesses, with some support for enhanced signage to attract Highway 90 motorists.
- Focus on Local Events: Emphasis on events and festivals catering to local and regional residents, with improved event operations to minimize disruption.
- Support Thoughtful Infill Development: Acceptance of small and mid-sized infill buildings, excluding Houston Square, with support for aesthetic enhancements rather than dramatic changes.

- Improve Pedestrian Safety: Desire for safer pedestrian crossings, especially near the library and schools.
- Enhance Walkability: Preference for walking to downtown and neighborhood parks if safer paths were available.
- Address Parking Issues: Recognition of parking challenges, with most drivers finding spots within two blocks of their destination.

#### **Design Rodeo Key Findings**

The Design Rodeo (March 27-28, 2024) focused on analyzing development standards. Key findings include:

- Conservation Areas: Support for designating areas around the river as Areas of Conservation and for a buffer zone around the Downtown TIRZ.
- Highway 90 Safety Improvements: Community backing for working with TxDOT on safety improvements and slip streets, prioritizing safe crossings.
- Main Street Enhancements: Openness to enhancing Paris Street as the Main Street of Castroville with shared street standards.
- Public Works Yard Redevelopment: Overwhelming support for redeveloping the Public Works Yard site into a plaza with green space and mixed-use spaces.
- Water Conservation and Green space: Favor of water conservation measures and green space allotment in new development.

The Design Rodeo phase also included the Castroville Walkabout Tour (April 12, 2024), which offered stakeholders an opportunity to discuss city codes and standards at the pedestrian level. Key takeaways included the desire for flexible codes and standards, allowing for a range of options for front yard fences, porches, and small-scale development to reflect community desires.

#### **Future Phases**

The Code Rodeo workshops in August 2024 will help build the community's code framework. The Community Roundup will validate the information presented to Castroville and solicit final feedback from the community, ensuring that the Comprehensive Plan, UDO, and Downtown Master Plan align with the collective vision for Castroville's future.



#### **A Trio of Documents**

The **Comprehensive Plan** acts as Castroville's visioning guide for the next 15 years. Here, focus is put on the pressing issues which the city needs to address as a priority. These priorities are identified through analysis of the existing built and natural landscape, the "Greenprint-Blueprint", mixed with recommendations from the community.

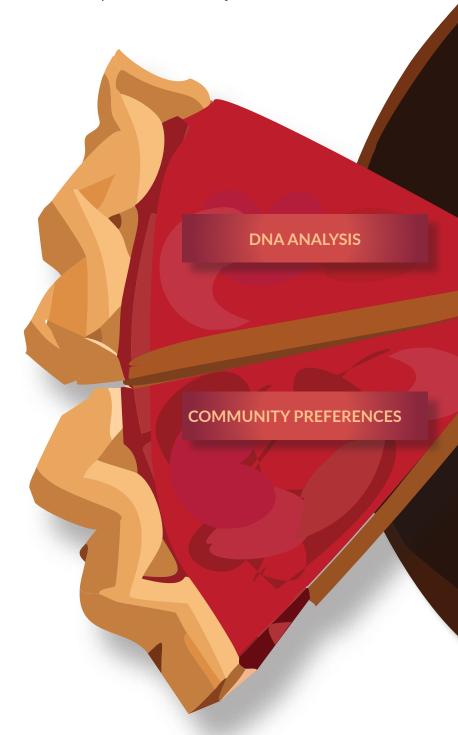
The **Downtown Plan** focuses on the original Castro plan area and serves as a reference guide to the past patterns used to guide the future. The plan is guided by illustrative plans with callouts, providing a clear path for creating an implementation schedule. The plan has an action plan with to-do items to ensure the community stays on track with its efforts.

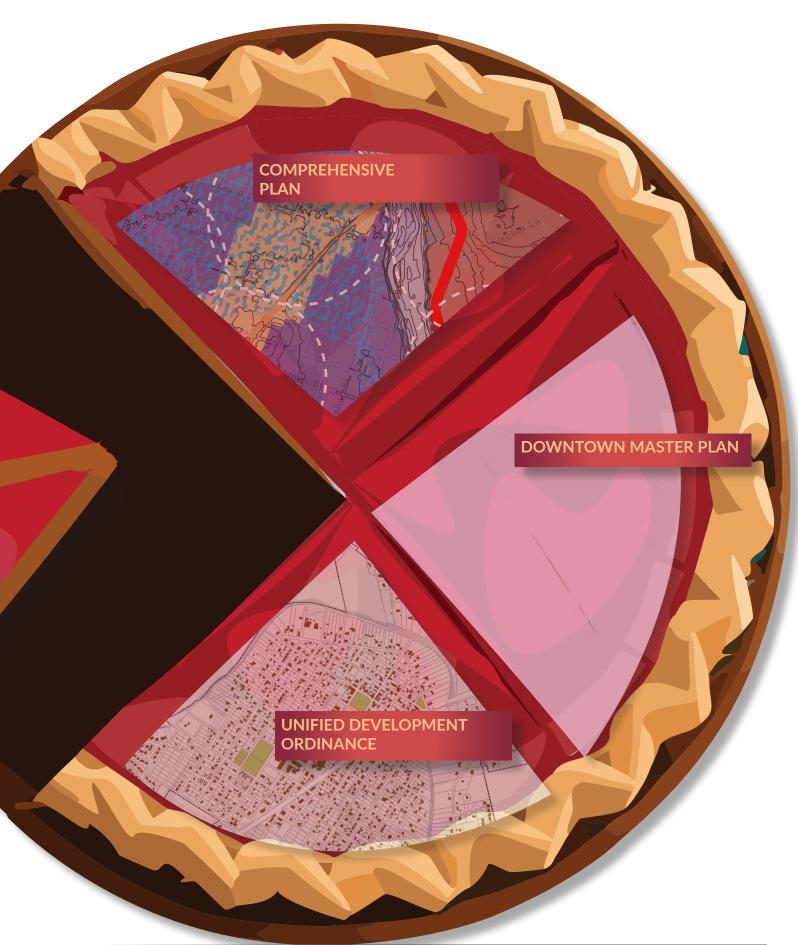
The Unified Development Ordinance (UDO) is the policy document that brings the comprehensive and downtown plans to life. It provides consistency and predictability for future developers and the community as incremental changes occur. The UDO standards are derivative of the Castroville's original development patterns. The UDO removes arbitrary barriers by aligning the standards with community values rather than just standard metrics for development. The values for development were established by the community throughout the public process. Clear expectations for how the community will look, feel, and function are embedded into the plans, goals, and UDO development standards.

These three documents work with each other to envision, illustrate and carry out the desires of the community. During this critical time, they give the city the tools to ensure growth happens in a way that fits with its ideals. Cities do not get do overs easily. The practice of conventional

development has been rejected by the community, but has already begun to seep into the city. Community members are losing hope for the city east of the river.

These documents use the beautiful examples of Castroville to preserve its pioneering spirit and bring back the hope of a vibrant city on both sides of the river.





# PLAN von CASTROVILLE.



# **Complete Communities**

1-6

Downtown Castroville functions as a Complete Community by seamlessly integrating natural and urban environments, creating a harmonious blend that caters to diverse needs and lifestyles. The area is characterized by its Traditional Neighborhood Development (TND) pattern, which ensures well-connected streets, walkable blocks, and a mix of residential, commercial, and civic spaces. Natural features such as parks, green spaces, and tree-lined streets are interwoven throughout the downtown, providing residents with accessible recreational areas and enhancing the

overall aesthetic and environmental quality. This thoughtful design facilitates a gradual transition from the bustling urban core, with its shops, restaurants, and cultural amenities, to quieter residential neighborhoods and serene natural landscapes. The result is a vibrant, livable downtown that supports a high quality of life, fosters community engagement, and respects the area's ecological integrity.

Different people have different expectations of life and Castroville offers something for everyone. For people who want to reside in a rural environment, they've got that. For people who want to experience an urban environment. They have that too, from suburban to urban. Downtown Castroville offers a quality of life that is hard to beat, all within a very small geography. This is what the complete community is all about.

Thankfully, the city leaders understand and appreciate the gift provided from the past and have selected to use these tools to build its future. While this method will be met with resistance from conventional volume builders and big box stores, Castroville is willing to stand by its history, providing a pathway for the building community to follow. Back to our future is a way to respect the environment and ensure that the next generation can have as much pride in the city as today's population.

US Highway 90 W

# **Castroville Essentials**

The essential components of Castroville are a collection of values established by the community. These items range from the strong support of local businesses to the in-town rural feel Castroville has to offer. These core assets must be leveraged by the community and supported through plans and policies. Make it easy to do good and difficult to erode the nature of the built environment.

#### In Town Rural

1-7

In Town Rural having the ability to seamlessly venture from an urban place to nature within a close distance is uniquely Castroville.

For most of Castroville's life as a city, it has been primarily a rural place connected to a small city center. Physically, this translates into large lots, informal streets, and rural land uses within close distance to town services, places of worth, and other civic functions. With the pressures of development approaching Castroville, strategic planning is necessary to maintain the rural feel that is beloved by its citizens. This applies to the existing built areas and the raw lands next to be developed.



#### **Community Feel**

It is often said "The people make the place, and the buildings support the people." The same could be said in Castroville, where neighbors frequently run into one another in and around the town. The many gathering spaces like Houston Square, Magnolia Station, and The Regional Park facilitate the local Castroville community feel. Continuing this feeling is critical to the health and draw of the city. Supporting the community by connecting the people to the celebrated places will help foster that Castroville feel. Making new gathering spaces by emphasizing existing areas or using development can serve as a community connector rather than a community strain.

#### The City's Fabric

As the community evaluated the fabric that makes up Castroville, it understood some core components it wanted to retain and integrate into future neighborhoods and additions. Throughout the drafting of the plan, a series of feedback loops were held to discuss the elements and map the path forward, ultimately leading to the outcomes within.



#### Consolidating Castroville' Values

The development of cities is one of the most complex processes on earth. Humans are adaptable, some more than others, however, disruptions to peoples ordinary lives can cause uncomfortableness and potential modifications to one's daily lifestyle. Rapid growth in this region is an experience many human civilizations have never witnessed. In fact, we are growing faster today than ever before, and many of them are moving to Central and South Texas. This type of adaptation, unfamiliar to people, causes great angst in some of the populace. Others will embrace the change, excited about the opportunities it brings.



#### **Conventional Versus Castroville**

Castroville's slow and incremental growth allowed it to build with a wide variety of characteristics. Today's volume builders select a few products that are not aligned with the local context. This type of development can threaten the very elements that allow Castroville to be the timeless place it is.

By embedding the values of the community into the plans and policies, developers will be provided a handbook of how to appropriately build and develop in Castroville. This approach not only empowers the community but also makes them an integral part of the development process.

Through an evaluation of trade-offs, the development patterns recommended in the Plan will prevent Castroville from morphing into anywhere in America, respect the existing natural landscape, and enhance the community as new residences and businesses arrive.

Not all density is created equal. The subdivision with the cul-de-sac is a perfect depiction of the type of development the Castroville community is rejecting. This type of development has no place in Castroville and can threaten the integrity of its historic assets. Compared to

the small block, Castroville grid, where relief from density is provided on-site and within civic spaces sprinkled throughout the grid. This grid development pattern has proven to be timeless and flexible and is Castroville's key ingredient for its future.

Castroville wants new neighborhoods, not subdivisions.





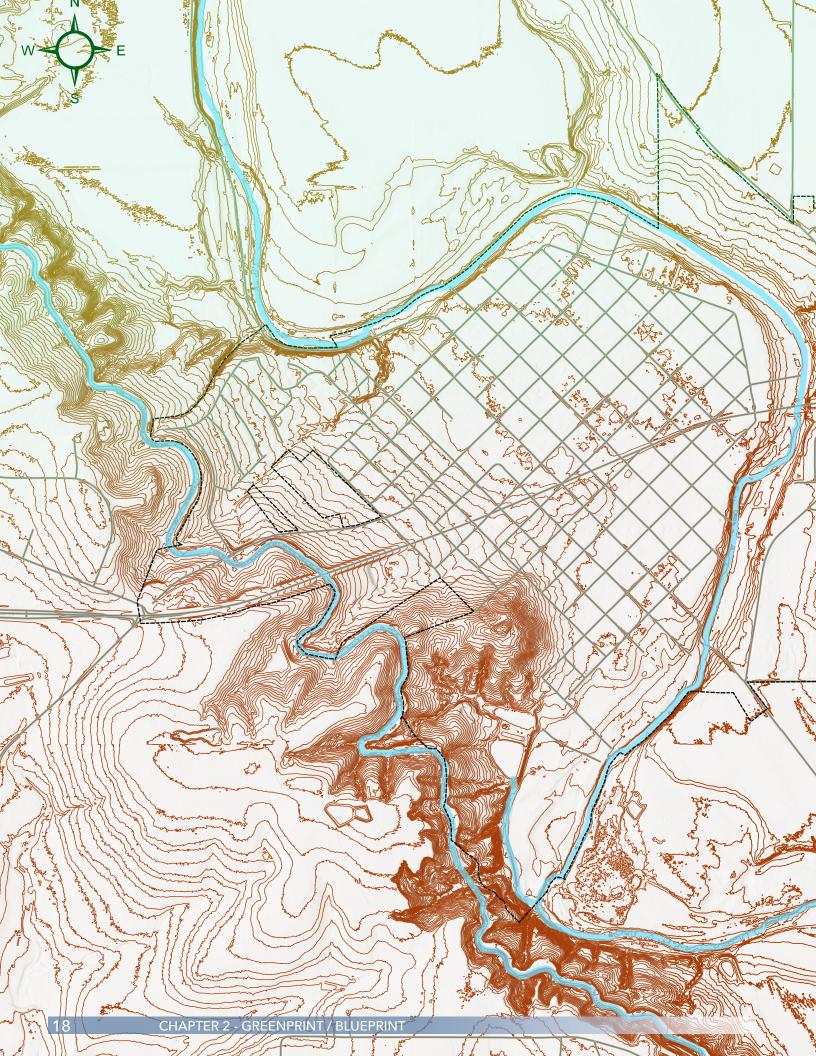
#### Introduction

#### What Is a Greenprint/Blueprint?

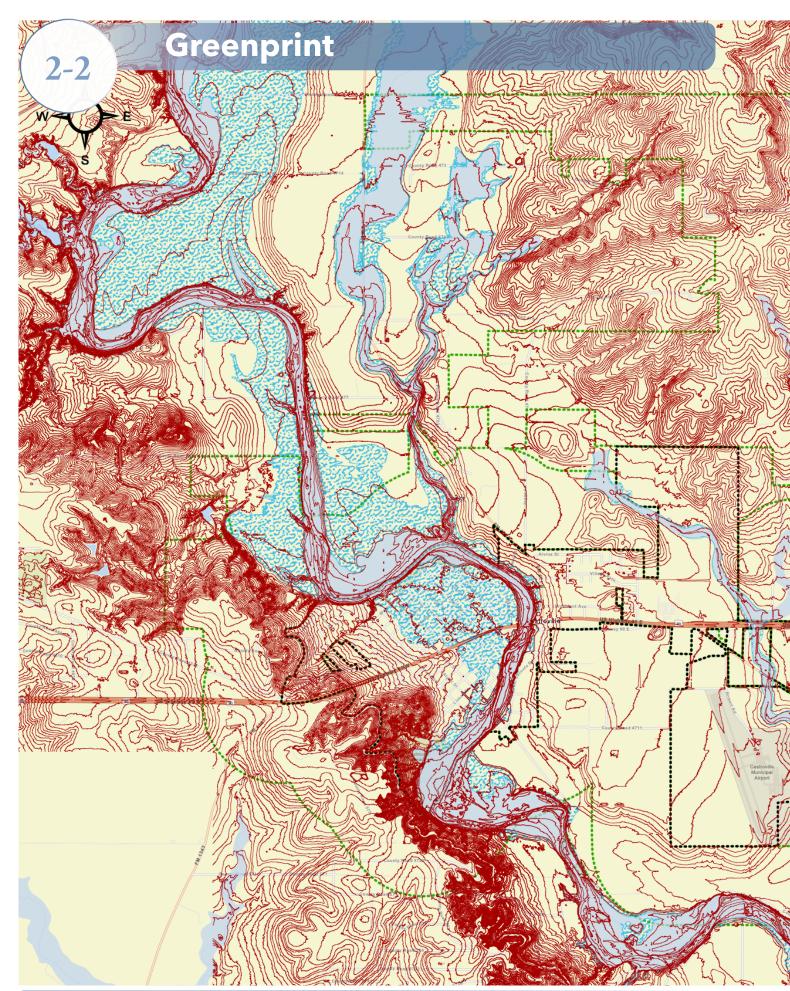
The Greenprint/Blueprint strategy utilizes mapping techniques to determine areas suitable or unsuitable for development based on the landscape's complexity and natural systems like floodplains. Understanding these natural systems allows development to align with nature rather than oppose it. This strategy evaluates the full inventory of natural systems to guide development patterns.

#### Why It Matters

By using natural systems to shape development patterns, the Greenprint/Blueprint strategy helps maintain a high quality of life, making the community a uniquely attractive place to live and work. The careful management of natural features ensures they continue to enhance the community's unique appeal and protect its authentic natural setting, setting it apart from other communities and fostering a sense of pride and protection among its residents.



# Castroville **□** City Limits -Road Centerlines Rivers and Streams 5 Foot Contour **Naturally Castroville** The Greenprint/Blueprint strategy brings about a host of direct benefits. It leads to reduced infrastructure costs, improved development layouts and designs, and the creation of additional recreation areas. Moreover, it enhances property values due to the proximity to parks and nature. This strategy doesn't destroy the natural setting but leverages it to enhance design and property value. The Medina River wraps itself like arms around the original Castro Plan and the existing town grid. Public access is limited to a few entry points, including the Regional Park and near the Landmark Inn. Preserving riparian zones and buffers around the Medina River is not just about enhancing water quality and creating future trails and natural gathering spaces. It's about preserving the very essence of Castroville because once these spaces are lost, it's difficult to return them to their natural state. This is a responsibility we must act on with urgency. Along with this effort, the series of recommendations in the Streets and Drainage chapter can help integrate nature into the built environment.





#### **Overview of the Natural Landscape**

#### **Topography**

Castroville, is laid out in a varied topography that adds to the town's scenic charm. It has gently rolling hills, expansive flatlands, and the winding course of the Medina River, which meanders through the landscape. This diverse topography provides a mix of fertile river valleys and elevated areas that offer stunning views of the surrounding countryside. The rolling hills are covered with native grasses and dotted with live oak and pecan trees, creating a picturesque setting. This varied terrain not only enhances the natural beauty of Castroville but also influences land use and development patterns, making certain areas more suitable for agriculture while others are ideal for residential and commercial growth.

#### **Soil Conditions**

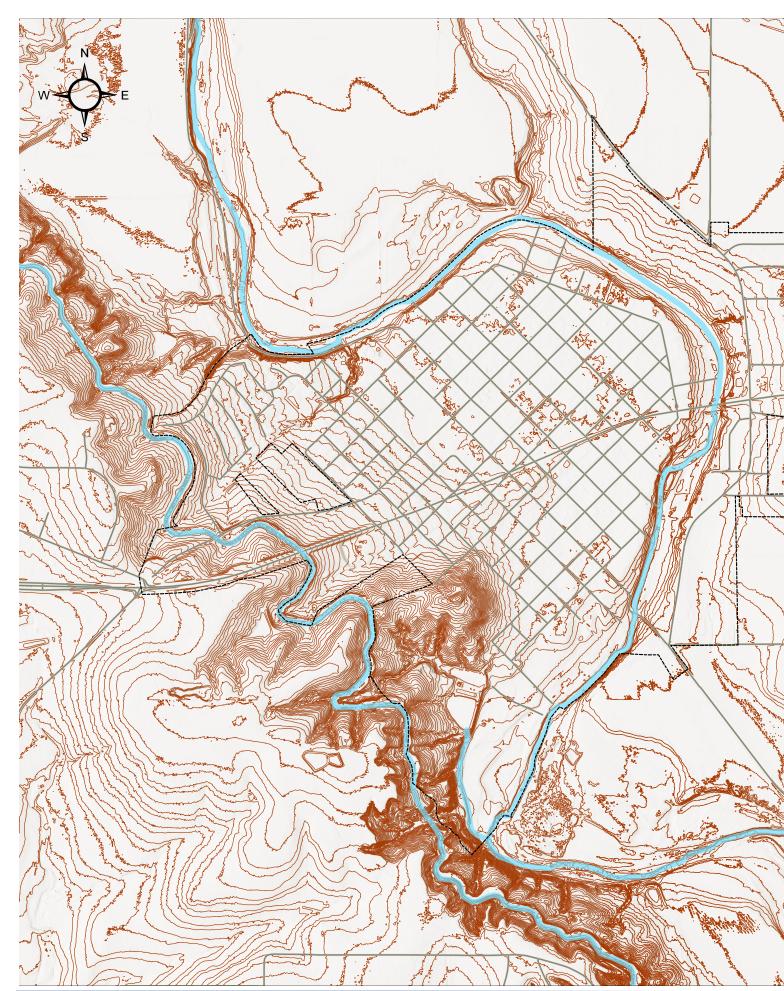
Castroville's soils are characterized by a diverse mix of soil types, each contributing to the area's agricultural productivity and development potential. The region predominantly features clay and loam soils, which are known for their fertility and ability to retain moisture, making them ideal for farming and gardening. However, certain areas also contain sandy soils, which provide good drainage but may require additional fill for stable development. The varied soil composition necessitates tailored land-use strategies to support agricultural output and sustainable development. Understanding and managing these soil conditions are essential for the successful growth of crops and the planning of construction projects in Castroville.

#### Climate

Castroville has a humid subtropical climate characterized by hot summers and mild winters. During the summer months, humid temperatures often soar into the high 90s and low 100s degrees. Winters are generally mild, with temperatures rarely dropping below freezing, making the season quite temperate compared to other regions. The area receives a moderate amount of rainfall annually, primarily concentrated in the spring and early summer months, which leads to area flooding. However, periods of drought can occur, necessitating water conservation measures.

#### What Does This Mean For Castroville

By incorporating these considerations into the development standards and plans, Castroville can ensure growth and development that enhances the quality of life for its residents while preserving its unique natural and cultural heritage.



# Contour lines, Waterway lines, Road lines, Boundary lines - these natural and man made lines are foundational to the current orientation and design of the city Contour lines, Waterway lines, Road lines, Boundary lines - these natural and man made lines are foundational to the current orientation and design of the city Rivers and Streams - 5 Foot Contour

#### **Best Practice Based on Greenprint**

Throughout the process, there was concern about water availability, small area flooding, and that storm water was appropriately managed. This can be a daunting undertaking considering the severe droughts in Texas. The surrounding area is commonly referred to as "Flash Flood Alley." The greenprint findings led to a series of recommendations which could be utilized to best facilitate appropriate development within the City's natural systems.

- 1. Integrate Natural Systems: Use the Greenprint/Blueprint strategy to align development standards with natural landscapes. This involves preserving floodplains, protecting water quality and riparian zones, and maintaining green spaces. Preserving the lands just north of the original Castro area will be critical to retain upstream runoff before it hits the Medina River.
- 2. Flood Management: Given the new Atlas 14 data and the city's location within a floodplain, it is crucial to implement robust flood management strategies. These include constructing elevated buildings two feet above the Base Flood Elevation (BFE), creating upstream water detention basins, and designing permeable surfaces to enhance stormwater infiltration.
- 3. Sustainable Landscaping: Use native and drought-resistant plants to reduce water usage and ensure vegetation can thrive in the local climate and soil conditions. Implementing green roofs and rain gardens can also help manage storm water.
- 4. Soil Conservation: Implement erosion control measures, such as retaining walls, terracing, and ground cover, especially on slopes. Ensure that construction activities minimize soil disturbance and use best practices for soil stabilization.
- 5. Efficient Drainage Systems: Design efficient storm water management systems that mimic natural water flow patterns. This can include bioswales, permeable pavements, and retention ponds to manage runoff and reduce flooding risks. Discourage reverse engineering where the natural flow of water is reversed to a new location. This can cause flooding in areas downstream that normally would not be taking on water.

## **Blueprint - Existing Built Systems**

#### Overview of the Built Environment

The Blueprint represents the built environment overlaid on the Greenprint. To understand the Blueprint, each component is extracted, entered into a geographic information system (GIS), mapped, and analyzed.

#### **Historical Context**

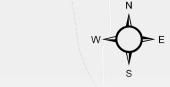
Castroville has been shaped by its original settlers and successive community leaders. Despite changes over time, the original Castro Plan remains the foundation of the town's built environment. This Plan includes intentional elements identified in the DNA Analysis, which will be codified in the development standards.

#### **Blueprint Elements**

- Building Placement: Strategic positioning of buildings to optimize space and functionality.
- **Lot Orientations:** The direction and layout of lots to enhance community cohesiveness and housing choice.
- Street Network: A gridded network of streets that facilitates movement and connectivity within the community.
- Parks and Civic Spaces: The placement of parks and civic spaces which enhance community interaction and emulate the existing Castro Plan.



# Castroville



- **Respect the River:** Embracing and respecting the Medina River as a key attribute of the city. While public access points are limited, the Medina River still functions as one of the most loved elements within the community.
- **Transition Standards:** Detailed standards necessary to transition smoothly between different environments within the town. The intensity of development transitions from Highway 90 back into the neighborhood. The new development standards must support these critical transition zones to protect the integrity of the neighborhoods.

#### **Built Systems and Patterns**

Different environments within Castroville support various building patterns, such as the street grid, land use, and lot patterns within blocks. These built systems, established years ago, collectively form the Blueprint. It's not just the individual components but their arrangement and how they fit together that define the character of a space or place

#### Preserving the DNA of Castroville

Understanding the intentional arrangement of lots and buildings helps remove the guesswork about what is important. This knowledge allows for creating standards that support these foundational elements, ensuring they can be quantified and written into development codes.

The built pattern, deeply rooted in Castroville's heritage, is a critical element embedded in the community's DNA. Shifting away from this pattern would uproot Castroville's culture and forever alter the timeless Blueprint that has defined it for over a century.

#### The Castro Plan

Henry Castro's Plan for Castroville, Texas, envisioned a thriving settlement rooted in European agricultural traditions and community values. In the mid-19th century, Castro, a French impresario, aimed to establish a colony of European, primarily Alsatian, immigrants in the fertile lands of Texas. He meticulously planned the town's layout with an emphasis on agricultural development, creating a network of farms and plots designed to sustain a close-knit, self-sufficient community. Castro's vision included not only the physical infrastructure but also the social and cultural integration of the settlers, ensuring that the town would prosper through collective effort and shared heritage. His forward-thinking approach laid the foundation for Castroville's unique identity, blending European customs with the Texan frontier spirit.

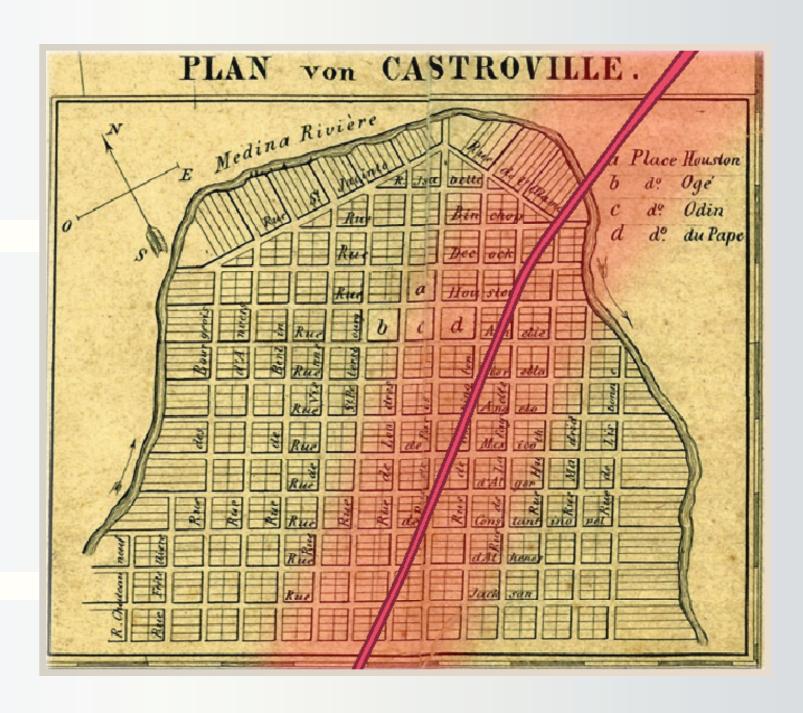
#### The Grid

Castroville's streets were laid out using grid pattern in the Castro Plan. Castroville's grid is aligned along a northeast-southwest orientation, perfectly wrapped in the arms of the Medina River. This timeless pattern facilitates the movement of people walking, using golf carts, biking, and driving. The grid is easy to navigate, creates orderly development, and provides endless configuration options. It creates developable blocks where a wide variety of lot arrangements are possible, supporting environments from compact main streets to relaxed rural residential areas.

The grid network provides transportation flexibility for the community. Residents have expressed interest in establishing bike trails and encouraging more golf cart use, which can be integrated using the gridded street network. Certain streets can be classified as primary access points for alternative modes of transportation, allowing for creative retrofitting of the built environment to align with community desires without costly construction or additional right-of-way (ROW) acquisitions.

#### Highway 90

An unfortunate addition to Castroville's Blueprint is Highway 90, which diagonally slices the original grid into two areas: north and south of the highway. This separation creates a barrier with speeding traffic and heavy trucks, raising safety concerns along its entire stretch through the grid. Wide lanes, wide shoulders, and a lack of indications for drivers entering a unique and historic area encourage speeding. The angle at which Highway 90 cuts the grid creates dangerous obtuse and acute angle turns, particularly hazardous for pedestrians. The highway's presence results in oddly clipped parcels and portions of the original grid, exacerbating access management issues and creating endless potential conflict points. Pedestrian accommodations are minimal, with crosswalks at only two points along the almost mile-long stretch of highway that serve only two legs of five-plus leg intersections.





#### **Short Blocks**

Castroville was platted into short blocks with adequate ROW between blocks for streets. These short, navigable blocks were internally configured using 330 x 330 square foot farm lots as the foundation for the block's internal makeup. This pattern of lots filled most of the blocks, both historically and currently.

Lots closest to the historic core were divided to foster the city's economic growth in an orderly and responsible manner. Lots further from the historic core have largely remained the same size and have become residential-only areas. The placement of blocks is directly coordinated with the city's topography. As Castroville grew, the remaining blocks were built according to the Castro Plan, and lots were developed as needed.

Using the same block and street pattern, future generations can continue to enjoy a high quality of life without altering what makes Castroville work so well. Short blocks within a gridded street network are critical to ensuring long-term fiscal sustainability. Studies conducted across America have proven that this timeless pattern retains its value over time.

#### **Lot and Parcel Lines**

Most lot sizes in residential districts are 13,887 square feet, consistent with the farm lots created when Castroville was originally platted in the 1800s. The smallest residential lot size is 3,500 square feet. These dimensions have allowed the community to maintain a sense of space and order while supporting various residential needs.

The information in this plan and the eventual Development Standards will incorporate these historical details to guide the development of "New Castroville" while protecting the cherished aspects of the existing community.

In the historic commercial core area of downtown, lot sizes are smaller to provide more services within convenient distances. The smallest lot dimensions in this area are designed to meet the community's needs, although specific measurements were historically configured to suit local requirements at the time.

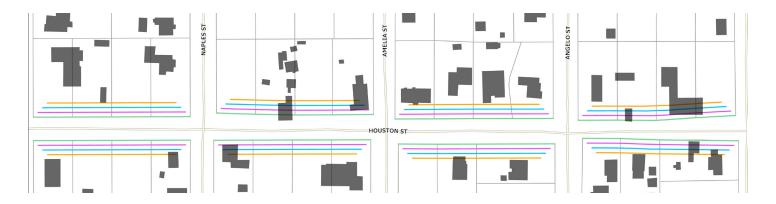
### **Building Placement**

In the areas of the original town grid, there is no standard building placement. Buildings sit at varying locations on lots throughout the original grid. Closer to the historic commercial core, connecting the building to the sidewalk establishes a human scale and defines the public realm at the block level. Some buildings are

flush with the front property line while others are upwards of 40 feet back. This variation creates a unique sense of place as well as defines courtyards and patios. Structures are human scale and create smaller footprints.

In newer additions to Castroville, such as River Bluff or Westheim Village, front setbacks are standardized with front facing garages. While this might work for some areas, if built everywhere this could create a mono culture of house types harming the sense of place.

Although Castroville has pockets of suburban tract housing, it does not have the conventional suburban house types called "snout houses." Snout houses are homes where the garage is the dominate feature protruding infront of the primary structure facing the street. Even two or three of these houses built in a row, causes a garage-scape, where all that can be seen are a series of garages. Builders cannot suburbanize Castroville with this pattern of development, as it would fundamentally change Castroville. Castroville is a mixture of house types. Castroville is not a tract housing community.

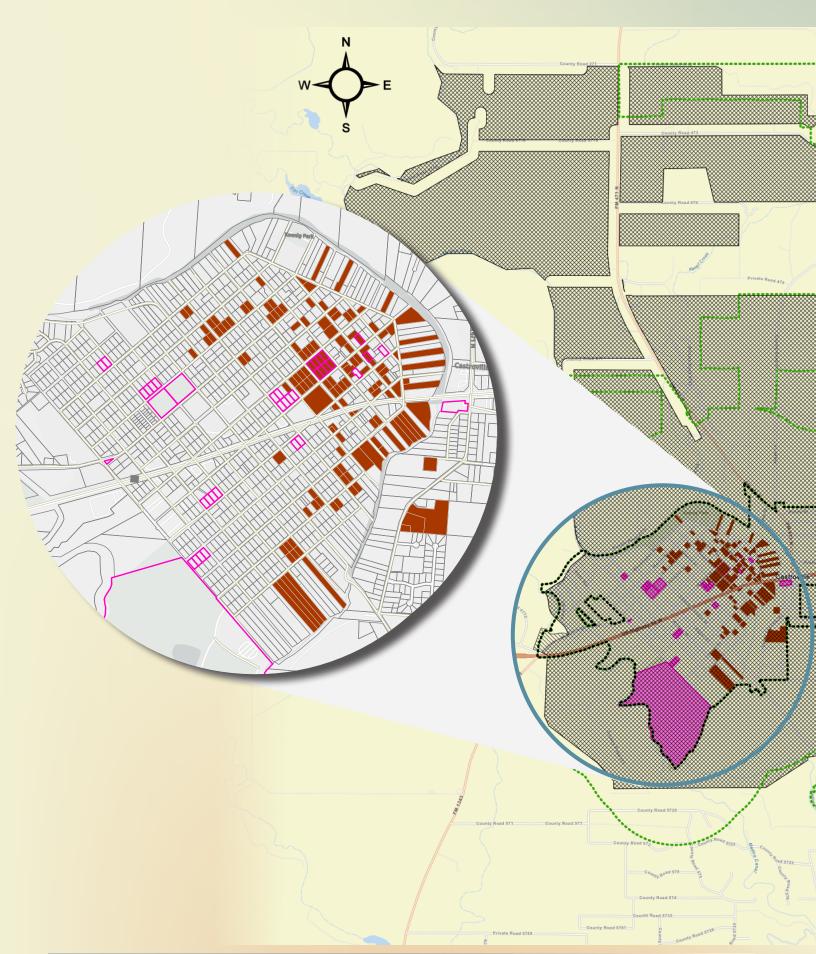


#### **Sidewalks**

Throughout the original town grid, streets are simple paved routes without raised sidewalks, reinforcing a rural, small-town feel. This atypical street-scape is one of Castroville's defining features, which distinguishes it from more urbanized environments. The lack of raised sidewalks promotes a seamless transition between private and public spaces. Many community members celebrated this element throughout the process and encouraged new streets to emulate this design.







## **Existing Development Patterns**

#### Old

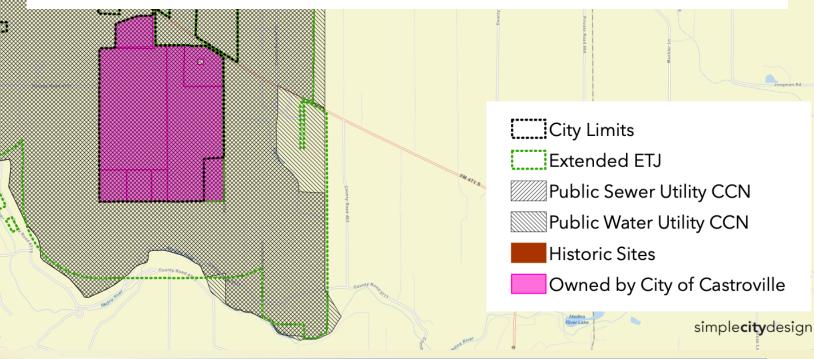
The community has grown incrementally, allowing costs associated with maintaining services and supporting new growth to stay balanced. Incremental growth spreads revenue over time, which reduces property tax burdens and pressures. Castroville primarily features a historic development pattern within its original grid, technically known as Traditional Neighborhood Development (TND). TND is not only authentic to Castroville but many small Texas towns. This pattern effectively manages and disperses traffic, provides a range of housing types, and supports a mixture of uses. Key features of TND in Castroville include:

- Diverse Building Placement: Variable setbacks and building positions that create a dynamic streetscape are found throughout Castroville.
- Mixed-Use Areas: Integration of residential, commercial, and civic spaces within close proximity.
   Services within a walkable distance help foster community relationships and provide people from 8 to 80 access to services.
- Human-Scale Design: Buildings and streets are designed to be pedestrian-friendly, promoting community interaction.
- Efficient Traffic Management: Grid layout that disperses traffic and enhances accessibility.
- Range of Housing Types: Variety of lot sizes and housing styles, reflecting the town's historical roots. While large residential lots are common throughout Castroville, providing a range of housing types and lot sizes helps balance price points for a diverse community.

#### New

The second development pattern in Castroville is Sprawl Development, also known as Big-Box Development. This Development Pattern exists on the edges of Castroville and is poised to explode on the east side of the Medina River along Highway 90. This Development Pattern also occurs through the existing historic pattern of development along Highway 90 through the grid. Key features include:

- Single-Use Buildings: Large, standalone buildings primarily used for retail or commercial purposes.
- Extensive Parking: Large parking lots that dominate the landscape, reducing pedestrian connectivity and reducing places for smaller shops and vendors.
- Automobile-Oriented Design: Infrastructure primarily designed to accommodate cars, often at the expense of access via other modes of transportation.
- Fragmented Development: Development that lacks the integration and connectivity found in TND, often leading to a less cohesive community. Sometimes called leapfrog development.





# Introduction: Castroville Conundrums & Course Correction

When it comes to celebrating and enhancing Castroville's distinctive patterns, several conundrums must be addressed to avoid less desirable outcomes. A conundrum, by definition, is an intricate and difficult problem. City leaders and residents have expressed concerns about losing the small-town charm and timeless character that has long defined life in Castroville. This Plan offers course corrections for a series of conundrums that are impeding Castroville's ability to secure future financial stability and maintain its existing rural lifestyle.

# **Resource Management**

### **Conundrum: Resource Management**

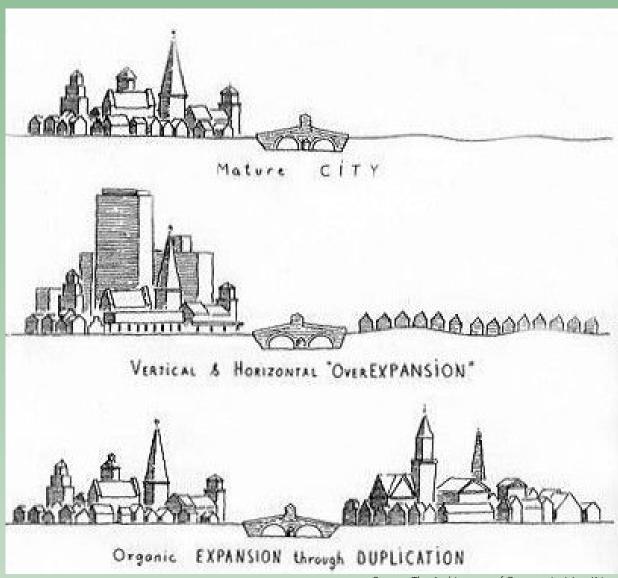
Rapid growth brings instant demands on infrastructure, resources, and services. To provide the new population with the same level of services as the existing population, new city services and facilities will be required. These items include police, fire, parks, library, water, wastewater, electric services, and more. The community burden is multiplied and must be aligned with the amount of revenues generated from the new development. Past city leaders forecasted the growth and oversized the wastewater treatment plant to serve new residents. This helps mitigate one issue the communities typically face with fast growth.

Water is the most critical feature for supporting the current and future population growth. Castroville's long-term water availability is unknown at this point. This is particularly true due to the slow recharge rate of the aquifer. The community wishes to ensure that it has adequate water to maintain its current population before taking on additional residences.

#### **Course Correction**

Water availability studies and aquifer analysis should be completed to answer unknown questions about the availability of service demands. Some communities have made water availability studies the first step in the development process to prevent overcommitments.





Source: The Architecture of Community Léon Krier

#### **Organic Expansion through Duplication**

The original Castro Plan provided a framework for the citizens of Castroville to organically fill in. It was organized, containing clear centers with services surrounding these centers. Repeating intentional planning of the Castro Plan will create other centers, evening out development pressures and access to services. If Castroville chooses to develop based on lowest land value, that over-expansion will have an opposite effect on its existing centers, raising land values and damaging character.

# 3-3

# **Undesirable Patterns**

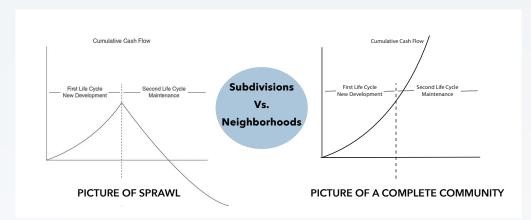
#### Conundrum:

#### **Undesirable Development Patterns**

The gridded streets, mixture of uses, walkable neighborhoods, historic homes, and large lots create a quaint sense of place that is uniquely Castroville. Residents want to protect this area of town from the threat of growth and new development.

New growth will happen on the edge of town. Although not a problem in and of itself, forcing new development to the fringe can create problems if its underlying structure is flawed, like Sprawl Development. This development pattern has already taken root on the edges of the Castro Plan and is quickly swallowing the open space north and south of Highway 90, East of the Medina River.

The community identified undesirable development patterns in a series of visual preference surveys. They overwhelmingly rejected sprawl development patterns and favored traditional designs.



#### Why Sprawl Development in Castroville Does Not Work

Sprawl is a free-for-all development strategy that produces wasteful results and leaves arguably permanent, detrimental patterns of infrastructure. It is unsustainable for the city to subsidize linear feet of utility lines and roadway infrastructure through vacant land, "leapfrogging," to reach new development far from the city core without greatly increasing utility fees and property taxes. Extending streets, water, wastewater, and electricity past vacant land will put the city in a fiscal bind.

Sprawl creates a single-use model which constricts buildings to their original use. Empty storefronts become blight rather than opportunities for new local businesses. This model not only limits how a place can adapt to evolving technology and markets but surpasses the social capital and real capital cities need to thrive.



Each dot represents a vote o preference from community.













#### Financial Reality of TND and Sprawl

Communities rely heavily on property and sales taxes to fund public services. As growth pressures seep into Castroville, so too will the impacts of supply and demand. It's not an unfamiliar story of how demand for land increases property values. When property values skyrocket, so do the taxes levied on the landowner.

For perspective, 80% of Castroville's Operating Revenue comes from sales tax and property tax. According to the City of Castroville - General Fund Summary for the Fiscal Year 2023 Adopted Annual Operating and Capital Budget, sales and property taxes account for similar amounts of revenue.

Commercial properties provide more taxable value than residential properties in terms of sales and property taxes. Commercial properties generate the majority of sales tax, and in addition to being generally appraised at higher values, single-family properties have homestead exemptions and other taxable value caps. Predominately, single-family sprawl puts financial strains on municipalities, and Castroville is no exception. TND commercial properties provide more taxable value than sprawl commercial properties. More diverse land uses on smaller lots provide financial flexibility and increase the money available for city services.

The impacts urban design choices have on incoming city revenue are evidenced by the property values set today. The taxable value can be examined across different growth patterns in Castroville. Land use and appraisal analysis showcase this point using four example areas that fall within the grid and sprawl patterns of the city.



It is possible to visualize the long-term financial impacts that land use and development pattern decisions can have in a city. We compared taxable property values in four areas of Castroville. These areas were selected because they demonstrate the divergence of mixing uses on smaller lots and gridded street patterns versus larger lots with less street connections.

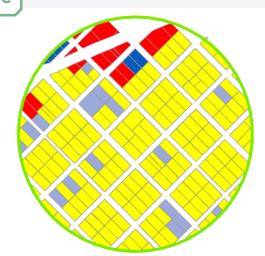
These areas are roughly 80 acres in size and span one-half of a mile. The Downtown Core and South Residential study areas have smaller lots (when compared to the city as a whole) that are divided into 330′ blocks. The Downtown Core has a broader mix of uses while South Residential has primarily single-unit residential uses. The East Residential and East Mix Use analysis areas have larger lots and blocks than the historic gird. The East Mix Use has a broader mix of land uses while the East Residential is primarily single-unit residential. This study primarily compares historic mix use with sprawl mix use, and historic residential with sprawl residential.

When looking at overall taxable value, the areas developed in the traditional [or historical] grid pattern outperform the newer, sprawled development patterns. Commercial properties account for 60% more land in the East Mix Use analysis area than in the Downtown Core analysis area. However, those commercial properties generate 45% less taxable value than the commercial properties in the Downtown Core.

Mixing uses generates more taxable value and provides more financial stability than predominately single-unit residential. The taxable value of the Downtown Core analysis increases by 55% percent when compared to the South Residential analysis area.



Land Use	Acres	% of land use	Appraised value
Commercial	11.0	19%	\$12,742,676
Institutional	15.8	27%	\$2,021,962
Park Open Space	3.0	5%	\$107,320
Single Family	27.4	48%	\$15,948,550
Vacant	.4	1%	\$205,937
Total Appraised Value of all properties			\$31, 026, 445



Land Use	Acres	% of land use	Appraised value
Commercial	8.6	14%	\$5,060,607
Single Family	34.5	54%	\$12,804,865
Vacant	20.3	32%	\$2,138,644
Total Appraised Value of all properties			\$20,004,116

To put these numbers in a different perspective, let's look at the value that could be generated in the future.

- A quarter of the land in both of the analysis areas east of the river is vacant. This amounts
  to roughly 33 acres that are vacant in these two analysis areas. Let's examine what
  their potential taxable value could be if developed under sprawl conditions versus
  traditional grid patterns.
  - The estimated value of a commercial property in the East Mix Use analysis area is \$494,000 per acre.
- 33 acres X \$494,000 = \$16,500,000 in potential taxable value
- The estimated value of a commercial property in the Downtown Core analysis area is \$1.6 million per acre.
  - 33 acres X \$16,500,000 = \$52,800,000 in potential taxable value

The results show that there is a potential \$36 million in taxable value being left off the table under current development regulations.



Land Use	Acres	% of land use	Appraised value
Commercial	4.6	8%	\$3,907,070
Institutional	1.4	3%	\$267,670
Single Family	46.9	81%	\$24,791,852
Vacant	4.9	8%	\$2,349,361
Total Appraised Value of all properties			\$31,315,953



Land Use	Acres	% of land use	Appraised value
Agricultural	0.7	1%	\$7,568
Commercial	17.7	28%	\$8,749,941
Institutional	4.3	7%	\$759,230
Multi Family	6.9	11%	\$6,396,230
Single Family	20.8	32%	\$6,541,443
Utilities	1.0	1%	\$0
Vacant	13.0	20%	\$656,008
Total Appraised Value of all properties			\$23,110,730

### Course Correction: Continue Castroville

The primary development pattern in Castroville is Traditional Neighborhood Development (TND). TND features a grid layout as the fundamental arrangement of blocks and lots. While grid sizes vary place by place, Castroville's grid is 330' x 330'. It incorporates a variety of housing types, well-defined public spaces such as parks, squares, civic spaces, and services such as stores, schools, and third places within walking distance of residences. TND is integral to the Castro Plan and is highly valued by residents for its adaptability and resilience over time.

#### **Historical Context**

Castroville has undergone significant changes over its 150-plus years yet retains a familiar feel due to the enduring TND pattern underlying the Castro Plan. This pattern has proven to be flexible and timeless, changing with the community's needs and desires over time without affecting the built environment. The flexibility and robustness of TND have contributed to the prosperity of Castroville. It's what the community knows and loves.



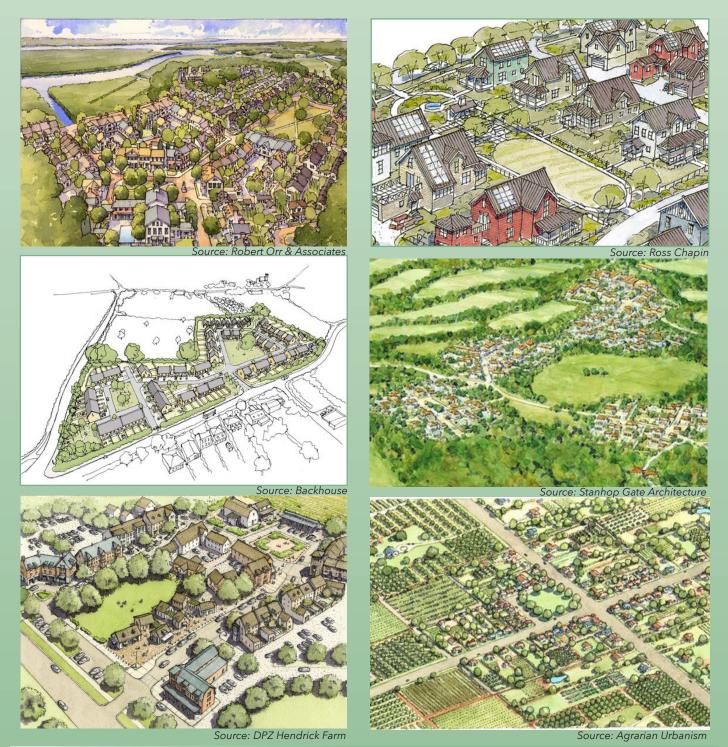
#### **Future Development**

Authenticity in New Castroville should be inspired by the existing TND pattern. Protecting and extending this grid pattern is a natural progression. Two other patterns that would be appropriate in Castroville would be Cluster Land Development (CLD) and Village Center Development (VCD). They are both useful for preserving open space, managing stormwater, providing services within close proximity, and allowing for a diversity of housing types, which are important concerns for Castroville. Detailed guidance on allocating these development patterns is provided in Chapter 4, Growth Guidance.

Traditional Neighborhood Development (TND) - TND is the primary Development Pattern in the City of Castroville. However, it is not being continued at this time in new construction developments in New Castroville. TND may occur in infill areas as an adaptive reuse of existing buildings, on undeveloped land as new construction, or as a new neighborhood on previously undeveloped land. TND characteristics include the continuation of the grid as the basic platform of arrangement of the development. TNDs contain a range of housing types, a network of well-connected streets and blocks, well-defined public spaces, and amenities such as stores, schools, and places to meet and linger within walking distance of residences.

**Cluster Land Development (CLD)** - CLD is designed to preserve open space and direct development away from natural and agricultural resources deemed important for protection by the city. This development pattern reserves space for agricultural purposes, stormwater management, and parks and provides immediate relief from density by preserving 50% or more of the landscape in a natural state.

**Village Center Development (VCD)** - A VCD is a series of small streets lined with buildings at the street edge, creating a unique village-style community. VCD consists of a small, dense grouping of structures serving as residential, live/ work, commercial, and office buildings organized in a vernacular, curvilinear grid or grid network of blocks and streets. Vehicles are kept on the exterior of the development.





### **Conundrum: Barriers to Cross Town Connections**

#### **North-South Connections**

The existing Castroville grid is distinctly divided into a north section and a south section by the high-speed, five-lane Highway 90. The detrimental impacts of Highway 90 slicing through Castroville are significant and exacerbated by the angle at which the highway was constructed. Highway 90 creates a substantial barrier for the town. The immediate negative implications for Castroville residents include speeding vehicles, heavy truck traffic, noise pollution, vehicle exhaust, insufficient sight distance, dangerous vehicular turning movements, inadequate pedestrian crossing facilities, reduction in safe left-turn options, and an almost complete lack of safety for pedestrians and bicyclists.

Residents overwhelmingly want more and safer pedestrian crossings and more places to safely make a left turn onto Highway 90. Currently, residents must drive to a traffic light to cross Highway 90, as it is the only reasonable option to navigate the barrier.

#### **East-West Connections**

As Castroville has grown beyond the constraints of its existing grid, it has not added any parallel access other than Highway 90 to enter and exit the town from the east. One additional access point exists at Constantinople Street, but it does not provide access to the area north of Highway 90, including the historic commercial core. All road users must cross the Medina River using the Highway 90 bridge, which is a dangerous, stressful, and indirect route for many potential walkers, cyclists, and golf cart drivers

Similarly to the West, Old Highway 90 is the only connection to Castroville on the Western edge outside of the current Highway 90. Old Highway 90 does not have a safe connection for anything outside of a car, further isolating the town.

### **Course Correction**

#### **North-South Connections**

Currently, Highway 90 is a high-speed state highway with wider-than-standard lanes and shoulders, an oversized median, and generous clear zones. Drivers have no indication they are entering a small town and should slow down. The solution to reducing the barrier effect of Highway 90 is a highway-to-boulevard design. By narrowing lanes to eleven feet, adding a landscaped median where appropriate, adding trees where feasible, and implementing an access management plan, Highway 90 can be tamed through the original Castro Plan area. The entire Highway 90 conceptual design is discussed in Chapter 5: Streets and Drainage.

#### East-West Connections

The City of Castroville owns a public right-of-way that dead-ends at the Medina River along each street in the existing grid. These "paper streets" are an obvious solution to the lack of east-west connections across the Medina River. While full vehicular bridges may be cost-prohibitive, walking and multimodal bridges are capable of moving people walking, biking, and in golf carts and are a reasonable option for the City to implement.

On the Western edge, "Old 90" could add a multi-use trail to provide a safe connection along that route. As part of a larger street and stormwater plan discussed in Chapter 5, Castroville should identify these connection points and pinpoint actions to take.







# **Chapter 4 - Growth Guidance**

#### Introduction

Castroville is experiencing significant pressure from the rapid growth of the nearby San Antonio metropolitan area. Similar to other peripheral cities, Castroville faces potential burdens from this growth, including increased property taxes, congestion, and demand for city services and utilities. While measures like walling off the city or freezing property taxes indefinitely are not viable, proactive growth management strategies can mitigate these challenges.

#### **Growth Management Strategies**

Recognizing the inevitability of growth, Castroville is uniquely positioned to shape this expansion through strategic planning and regulation. City leaders have committed to protecting the community by guiding growth into development patterns that align with the city's values and character.

#### **Growth Guidance Objectives**

- 1. Funneling Growth into Better Development Patterns:
  - Implement policies that direct growth into desirable areas and development types, such as Traditional Neighborhood Development (TND), Cluster Land Development (CLD), and Village Center Development (VCD).
  - Ensure new developments adhere to the principles of TND, maintaining a grid layout, mixed-use areas, and walkable communities.
- 2. Balancing Development and Community Needs:
  - Prioritize developments that provide public amenities, green spaces, and civic areas, ensuring a high quality of life for residents.
  - Encourage adaptive reuse of existing buildings and infill development to preserve the city's historical character while accommodating growth.

- 3. Mitigating Increased Property Taxes:
  - Develop mixed-income housing strategies to ensure affordability for residents of varying economic backgrounds.
  - Implement tax incentives or abatements for developments that meet community goals, such as providing public spaces or affordable housing.
- 4. Addressing Increased Congestion:
  - Enhance public transportation options and infrastructure to reduce reliance on vehicles and ease traffic congestion.
  - Promote the development of pedestrian and bike-friendly pathways to encourage alternative modes of transportation.
- 5. Managing Increased Demand on City Services and Utilities:
  - Plan for the expansion of city services and utilities to meet the growing population's needs efficiently.
  - Invest in low-impact development (LID) infrastructure and alternative technologies to manage resources more effectively. Conventional infrastructure often fights nature, is costly, and absorbs large land areas.

Castroville is committed to managing growth in a way that preserves the city's unique character and meets the needs of its residents. Implementing strategic growth management practices allows the community to avoid the pitfalls of uncontrolled expansions and ensures that development enhances the quality of life for all.

# 4-2

# **Area Organization**

Different parts of the City and the ETJ have different patterns, uses, and characteristics that create a sense of place. New development should fit the existing or future anticipated context of a place by establishing the best-suited development patterns and land uses. The Plan identifies areas for future use and building scale to direct where and to what capacity new growth will go. These areas are divided into four categories: Conservation, Stability, Change, and Change Downtown.

### **Areas of Conservation**

Areas of Conservation should prioritize retaining their natural or rural state. This designation does not preclude development of any kind but instead emphasizes the importance of concentrating development in a way that preserves open space for future generations. This designation is mostly located in the ETJ and open lands surrounding Castroville. The Cluster Village Development pattern best funnels development to allow for growth while still conserving the surrounding nature. The intentional clustering of housing and businesses can conform to topography and enhance water conservation and flood mitigation efforts with nature.

Cluster Village Development patterns in an Area of Conservation do not prescribe or exclude residential, commercial, or public uses. Residential, accessory dwelling units, duplexes, and small multiplexes are allowed. This type of development pattern encourages a mix of housing in very close proximity to retail and commercial space that serves the neighborhood. Small-scale mixed-use, office, or commercial uses are allowed in low-rise forms.

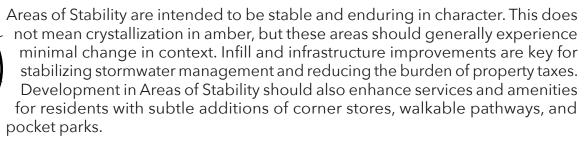
# **Areas of Change**

As the name implies, Areas of Change are places where new development and higher-intensity land uses are desired and make the most sense. These areas include the commercial properties near Highway 90 that serve residents of Castroville and the Region.

Village Centers or Traditional Neighborhood Development patterns may be most appropriate, depending on the scale and location of future development. Commercial and auto-oriented uses should front Highway 90 to the extent possible. A mix of housing and neighborhood commercial and retail services should be oriented away from the highway. A mix of housing types is encouraged, ranging from small residential lot units with accessory dwelling units to multi-unit apartment complexes or mixed-use buildings.







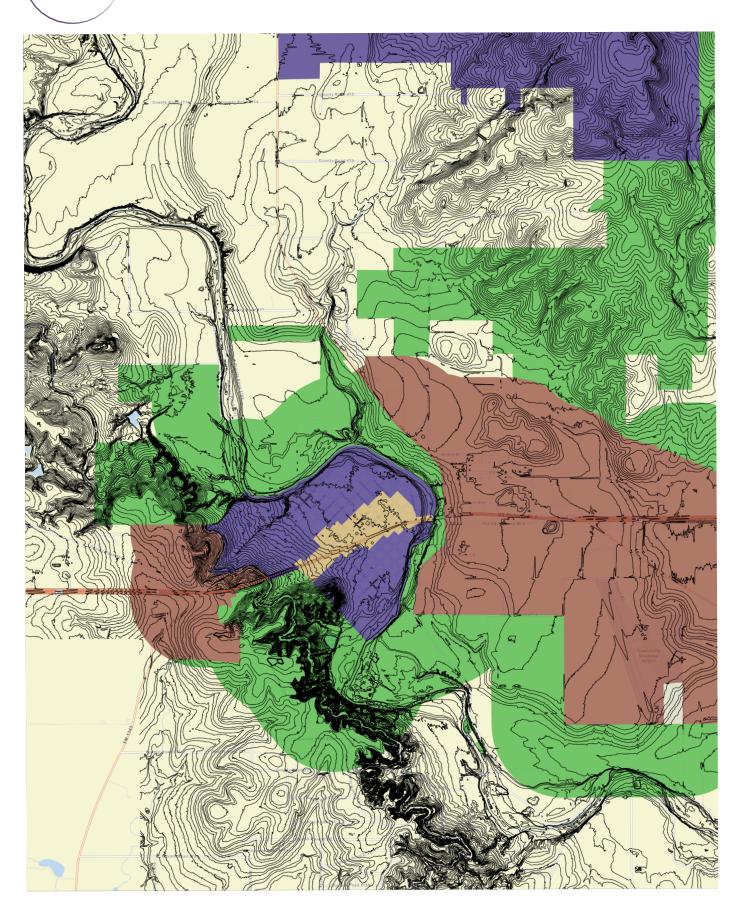
The Areas of Stability include neighborhoods developed under the Traditional Neighborhood Development pattern that encompasses the Castro Plan area. A mix of infill housing types can add to the existing context, and any development that does occur should contribute to the area's longevity and stability.

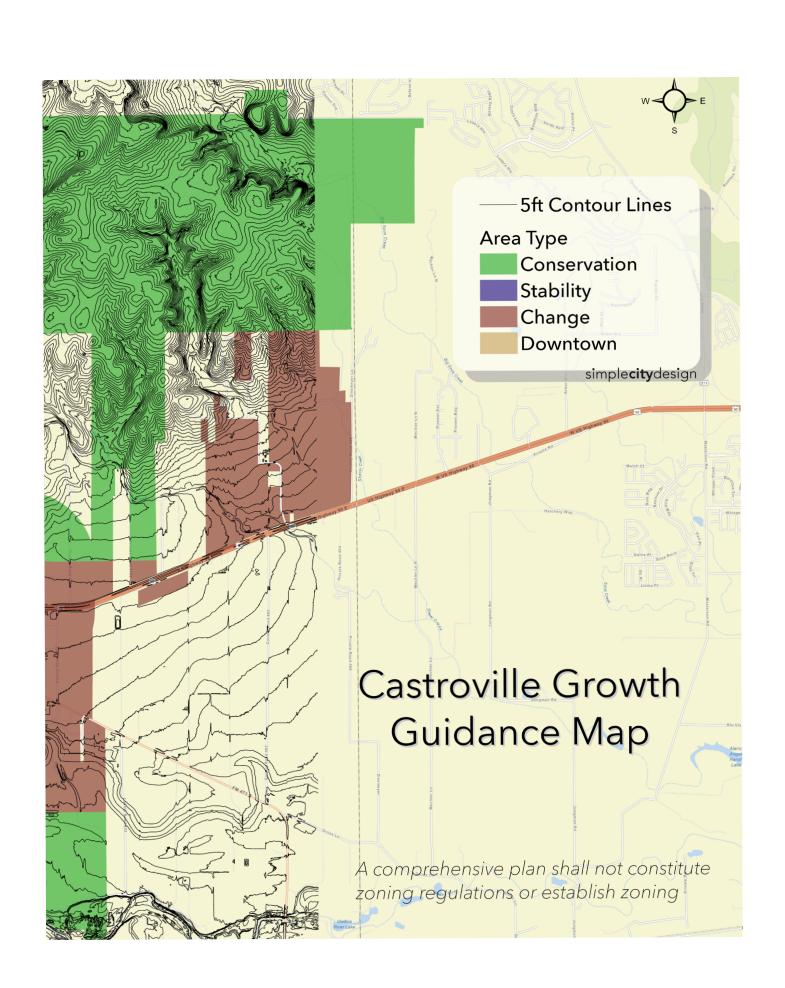
Future residential uses will include large lot residential, infill housing such as accessory dwelling units on existing home sites, duplexes, and the occasional quadplex on the corner or larger lots that serve as a transition from the commercial core. Commercial and office spaces can be developed at a house scale and seamlessly integrate into the neighborhood.

## **Areas of Change Downtown**

Downtown serves as the commercial core of a city. As such, downtown growth will happen at a different scale than in other parts of the City. This is why Downtown has its own Areas of Change designation. This will be the area that can accommodate more mixed-use development that fits within and increases the scale of the existing architecture.

Downtown is characterized by the existing Traditional Neighborhood Development pattern with the 330' blocks in place. The existing TND pattern can absorb growth with infill residential and commercial in multi-story, mixed-use buildings that are close to the street and fit the Alsatian character of the historic buildings that exist today. This area is where mid-rise, mixed-use buildings that include residential, office, commercial, and civic buildings with strong architectural standards are most appropriate. Denser and higher intensity change is intended to predominantly occur along Highway 90 and one or two blocks deep into downtown.





# **Complete Communities**

The development of complete communities has been a clear intention of the City Council and the community. Downtown Castroville functions as a complete community and is the foundation for the principals within this effort. A complete community is a place that offers a diversity of choices for many types of people to live, work, and play. Complete communities fit the context of the people that make up the place, meaning that the place should facilitate the lives people want to live. Key elements nurture complete communities to form, many of which can be seen in existing Castroville in the Castro Plan area.

#### Elements of Castroville that make complete communities



## **Clear Centers and Edges**

- Part of what makes Castroville function well is that it retains clear centers within the town where people convene, meet, and celebrate. Houston Square was originally platted to be that space, and the City has grown around the celebrated spot.
- As Castroville expands beyond its original boundaries, securing these types of centers is critical. They are necessary to continue the community connection intended by Henry Castro's original layout.
- Not only are there clear centers, but defined edges. Defined edges create a boundary that transitions from one neighborhood to another, identifying a clear edge, whether it be a natural or a physical transition.



#### **Access to Green Space**

- Access to green space is proven to be directly associated with individuals' mental and physical health. Therefore, maintaining this space is critical when designing spaces for people.
- Green space can take many forms, from small pocket parks like September Square to larger natural areas like the Regional Park. A diversity of these spaces provides people with options for having access to nature in a way that suits them.
- Natural features, including streams, creeks, rivers, trees, and wildlife habitats, should be preserved and accessible.



#### **Community Pockets**

 Smaller public places embedded in neighborhoods allow residents to rest, play and naturally connect with their neighbors. Castroville has many examples of these pockets throughout the city. They allow people to exist in a public place with a more intimate setting, creating more opportunities for engagement and activity.



#### **Connections**

- Connection increases the access people have to a place. Neighborhoods should be walkable and connected, with a mixture of uses and parks where daily activities occur within a quarter-mile distance from one another. The more active a place is, the more engaging it will be for other people to visit, creating a compounding effect for the neighborhood.
- It is essential to secure these connections and ensure their maintenance throughout and across the city. A variety of parks and open spaces should be integrated into the design of neighborhoods and parks, with trails and paths connecting to neighborhoods and services.



#### **Close to Services**

- Proximity to services like schools, daily services, restaurants, and parks allows for more free time as less time is spent on transport. This gives flexibility and provides options that otherwise would not be possible.
- Clustering services together allows for more services to build upon each other and provide more benefits than if they are spread all over town. A perfect example is the Filling Station next to the dance studio in Downtown Castroville. Parents can meet at the coffee shop before, during, or after dance lessons. This offers both better business opportunities and a more comfortable environment for all patrons.



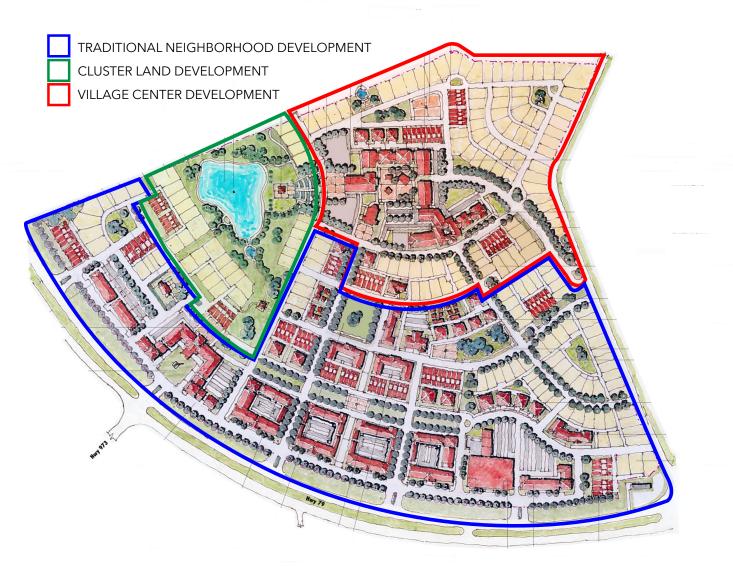
#### **Celebrated Architecture**

- A building is about more than how it looks; it functions as a place that directly impacts the surrounding environment and how people behave. A porch closer to the street creates opportunities for more encounters with neighbors, just as the continuous buildings in Downtown promote lingering customers and more visits to the next store rather than leaving. Castroville has a diversity of additional quality examples to emulate in future development.
- Castroville's historic buildings and sites are valuable assets with a rich history and should be preserved and protected whenever possible.

# **Development Patterns**

Development Patterns are the manner in which a neighborhood is configured. Different geographies accept different Development Patterns. To accommodate Castroville's range of landscapes, there are three Development Patterns that provide adequate facilitation of development. These Development Patterns can exist separately or intermingled with one another throughout the city. It is critical to have the connection between developments as a series of neighborhoods, not isolated subdivisions. Below is an example of the different development styles and how they can connect with one another, each offering its own unique character. The Development Pattern type will be used to guide the creation of the Neighborhood Plan configurations suitable for different geographies. The Areas of Growth Organization will determine the types of Development Patterns suitable for the area.

TND is the primary and default Development Pattern in the City of Castroville. The downtown area and surrounding neighborhood comprise the bulk of Castroville west of the river bend and are designed in the TND pattern. The 330'x330' blocks that have been in place since the city's founding define the unique TND pattern, which supports the sense of the city's scale.









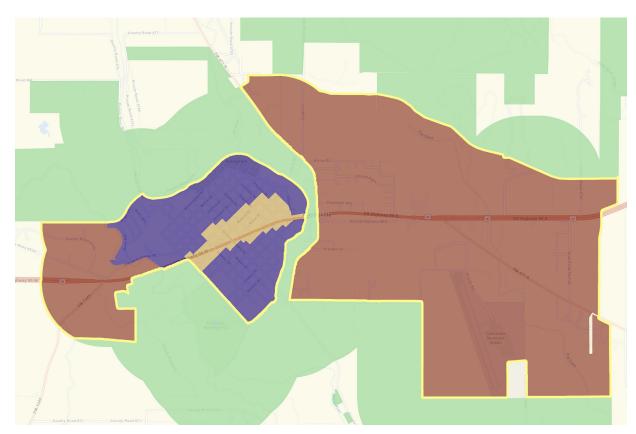
Source: Erin Jonson Louisiana

Source: Belfastcity.gov

## **Traditional Neighborhood Development (TND)**

Traditional Neighborhood Development is the historic development pattern of Castroville. TND characteristics include:

- Small, walkable blocks
- The continuation of the street grid as new neighborhoods are planned
- A variety of lot sizes that accommodate a variety of building types
- A range of housing types
- Well-defined public spaces
- A definable neighborhood center and edge
- They contain amenities such as stores, schools, and places to meet and linger within a comfortable walking distance of homes.









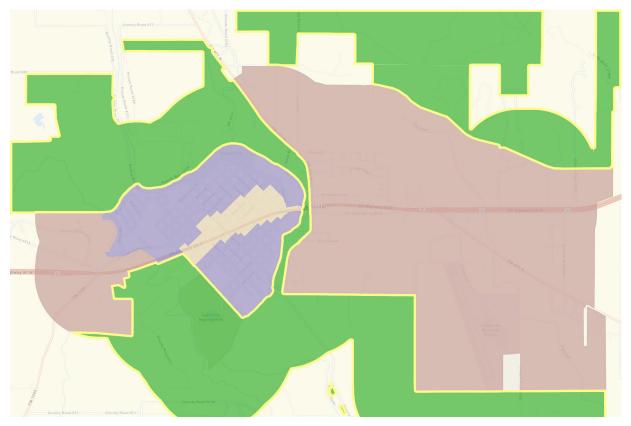
Source: The CoHousing Company

Source: Big Apple Pocket Neighborhood

### **Cluster Land Development (CLD)**

Cluster Land Development is a Development Pattern that fosters a balance between community development and preservation of nature, open space, and conservation lands. CLD characteristics include:

- Assuring the permanent preservation of open space, agricultural lands, and other natural resource through land reservations or conservation easements
- Encouraging the use of land in accordance with its character and adaptability
- Allowing innovation and greater flexibility in the design of residential developments to ensure the same overall amount of development permitted with the conventional home lot size
- Facilitating the construction and maintenance of streets, utilities, and public services in a more economical and efficient manner increasing affordability and reducing the cost of building and maintaining infrastructure
- Ensuring compatibility of design and use between neighboring properties









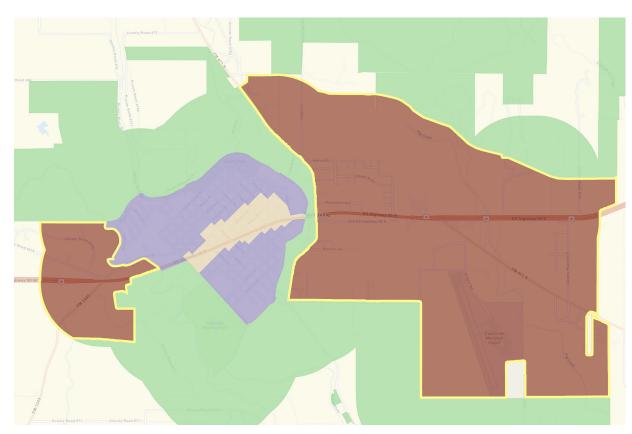
Source: Hartness Greenville

Source: La Roca Village

### **Village Center Development (VCD)**

A Village Center Development is a series of small streets lined with buildings at the street edge, creating a unique village-style neighborhood. Characteristics of a VCD consist of:

- Small dense grouping of multi-story buildings serving as residential, live/work, commercial, and office buildings
- Organized in a long, short, or curved grid network of blocks and streets
- The streets are small and serve as shared streets for slow and safe mix of driving, golf-carting, biking, and walking
- Vehicles are kept on the exterior of the developments
- Buildings are located at or very close to the street edge
- Buildings often face inward to pedestrian plazas, with parking behind the buildings that face the main plaza



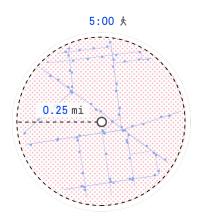
# 4-6

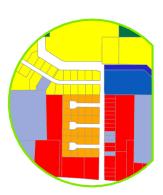
# **Complete Neighborhood Units**

This plan uses a "Complete Neighborhood Unit" (CNU) to size a neighborhood. These are areas that can be covered by walking within five minutes, typically a quarter-mile radius. This is used as a metric for defining urban areas because that is the average distance an individual is comfortable walking for everyday activities. Organizing services within these five-minute zones is critical to establishing resilient and complete neighborhoods.

The original Castro Plan area was built when walking was one of the primary ways of getting around. This facilitated the density of services and structures that exist in historic Castroville today. This pattern of development, a grid designed at a walkable scale, is called Traditional Neighborhood Development (TND). A Complete Neighborhood Unit in a TND such as Castroville can cover a range of homes, services, and institutions.







There are and will be differences in intensities, uses, and dynamics throughout the many neighborhoods of Castroville. The elements of curating complete communities should still be present in each CNU, regardless of its location. Each place can exhibit its own take on these elements, creating a diversity of options for people attracted to different lifestyles and places in life. This creates diverse options and develops resiliency for the city, as many people and industries can find themselves in Castroville.

A challenge for Castroville in the newer sections of the city is that the total walkable area of the CNU is not accessible because connectivity throughout that shed is difficult or not entirely possible. This limits access to services eliminates any sense of center, chokes green space, and pigeonholes neighborhoods and people. The city can help amend this through targeted retrofitting, but the most immediate solution is promoting traditional neighborhood development and preventing development, which does not allow for the type of cross-connectivity seen in the grid of the Castro Plan.

# A map showing the potential locations for CNU's



A downtown center serving the entire city will look and feel different than a neighborhood center serving more of the immediate area. As such, the intensities, form, and drop-off of any increased intensity will be different. In the facilitation of curating complete communities, centers are very important, yet they should match that community's context. Houston Square and Lions Park offer good examples of these different contexts.

# 4-7

# **Sample of Centers**

A downtown center serving the entire city will look and feel different than a neighborhood center serving more of the immediate area. As such, the intensities, form, and drop-off of any increased intensity will be different. In the facilitation of curating complete communities, centers are very important, yet they should match that community's context. Houston Square and Lions Park offer good examples of these different contexts.

# **Houston Square**



Originally platted as Castroville's primary square, Houston Square has lived up to that intention throughout the years. Celebrations are centered at this place; Castroville's main downtown amenities and cultural institutions stem from it. It is, in every way, the center of the town. As such, this center should be treated as much as a center for the local neighborhood as a center for the entire city.

Centers do not have to fit neatly into the box of one block but could be a corner, a terminating vista, or any point that the neighborhood identifies as the center. It should then be built upon and emphasized in the name of curating complete communities. If no place is seen as the center, future development or redevelopment should look to fill that gap while still matching the context around it. In the undeveloped section of Castroville, as did Henri Castro, identifying these centers is critical for lasting resilience, a sense of place, and continuing the spirit of Castroville.

## **Lions Park**

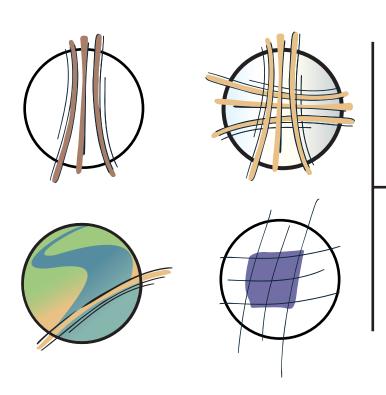


While it still has amenities serving the entire city, Lions Park is more of a park for the local neighborhood than Houston Square. If viewed as a center for the neighborhood, what might be added? A small restaurant, local offices, workshops?

# **Development Organization**

#### 1. Find Areas of Organization

The Growth Guidance Map is divided into four areas: Area of Conservation, Area of Stability, Area of Change, and Area of Change Downtown. These areas denote the available development patterns and levels of intensity allowed.



# 2. Default Neighborhood Design Pattern

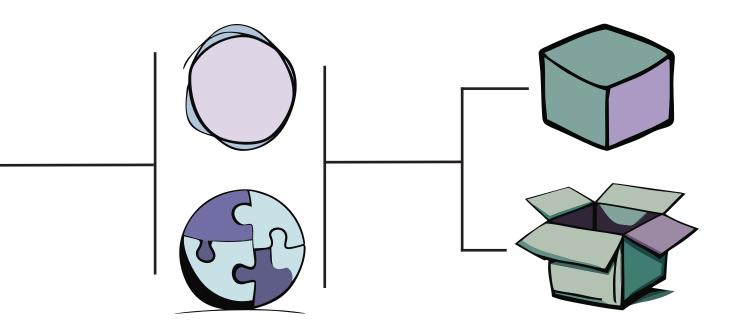
Traditional Neighborhood Design pattern with 330' blocks is the default development pattern within Area of Stability, Area of Change, and Area of Change Downtown. In Areas of Conservation, the default development pattern is Cluster Development. Special attention is needed to balance development with open space preservation within Areas of Conservation.

# Neighborhood Scale Development

Larger-scale developments, roughly 80 acres or larger, need to be designed with the appropriate development pattern, intensity, and mix of uses that create a complete neighborhood unit.

### **Inside City Limits**

Inside city limits, the UDO and other development standards will guide developments under rules that promote the creation of a complete community.



### **Smaller Scale Development**

Smaller-scale developments that don't encompass an entire CNU, less than 80 acres, should support complete community concepts.

### **Outside City Limits**

In the ETJ, outside the city limits, collaboration with the county will be necessary to ensure development standards and agreements align with the city's goal of having a complete community.

### Introduction

The streets and drainage systems of Castroville, Texas, are vital components of the town's infrastructure, playing a crucial role in ensuring the safety, accessibility, and overall well-being of the community. The narrow, tame city streets facilitate smooth transportation, support local businesses, and enhance the quality of life by providing easy access to essential services. The streets also help facilitate the movement of stormwater to the tributaries and to the Medina River. Efficient drainage systems are critical for preventing flooding and minimizing property damage. Together, the streets and drainage networks form the backbone of Castroville's urban environment, fostering a resilient and sustainable community capable of withstanding both everyday demands and extreme events.

The recommendations within this chapter can help green existing streets, which will manage additional stormwater and clean the water before it arrives in the Medina River.



5-2

# The Streets of Castroville

The streets of Castroville are notable compared to many typical streets designed today. In downtown and the central neighborhoods, there are no uniform sidewalks, grade separations, or striping. This layout of the street is common in rural contexts.

As Castroville has grown, a unique culture has developed between pedestrians and cars that isn't seen in many cities. The streets don't only serve to move people walking or driving. They also hold and transport water after it rains. Just as the street serves multiple purposes, so too should the uses along these streets be mixed to enhance people's experience in the streets of Castroville. Castroville can use the unique rural character of its public life as a template for newer sections of town.

In Castroville, addressing the overlapping challenges of drainage, traffic management, and enhancing the pedestrian nature of the streets can be approached holistically to improve both infrastructure and community spaces. Here's how these challenges and solutions can be integrated:



An example of a Castroville street in town: The street appears to go right up to the building, with no clear crosswalks or grade separation. It is not uncommon to see residents crossing at any point along the street and lingering throughout the subsection. Because of this activity, cars will slow down to avoid or say hello to fellow citizens. Having mid-block crossings and frequent pedestrian activity in the streets encourages vehicular traffic to use secondary streets and gives them the opportunity to interact unscheduled with neighbors.



In more residential sections of Castroville, the street remains without delineations; thus, the same effect of a shared street is present. Ditches are common along North and South streets, and natural elements and gardens extend from residences. The street feels shared between drivers and walkers, although some roads face speeding challenges.



#### **The Casual Castroville Street**

Castroville is not anywhere America. The streets of Castroville, as noted throughout this plan, are some of the core components that make it special. Building similar local street types supports Castroville's casual way of street use. Public features like the will ensure the preservation of the small-town charm they know and love.

# **Street Approach**

#### (1) DRAINAGE SOLUTIONS

Green Infrastructure: Implementing green infrastructure such as bioswales, rain gardens, and permeable pavements can manage stormwater effectively while also creating attractive green spaces. These can enhance the pedestrian experience and provide natural areas for residents to enjoy.

Tree Planting: Increasing the number of trees along streets can improve drainage by absorbing rainwater, reducing heat island effects, and creating shaded, pleasant walking areas for pedestrians.

#### (3) ENHANCING PEDESTRIAN NATURE

Widened Sidewalks and Pedestrian Zones: Expanding sidewalks and creating pedestrian-only zones can encourage walking and reduce vehicular traffic. These areas can incorporate greenery and drainage features to handle stormwater.

Public Spaces and Amenities: Adding benches, lighting, and other amenities can make streets more inviting for pedestrians. Green spaces integrated into these areas can serve as both recreational spaces and drainage solutions.

#### (2) STREET MAGAGEMENT

Speed Calming Measures: Installing features such as, curb extensions, and pedestrian islands can slow down traffic, making streets safer for pedestrians. These measures can also be designed to direct stormwater to green spaces or permeable areas.

Complete Streets: Adopting a complete streets approach ensures that streets are designed for all users, including pedestrians, cyclists, and drivers. This approach can integrate drainage solutions and traffic calming measures into a cohesive design.

### (4) COMBINED SOLUTIONS

Multi-functional Spaces: Design streetscapes that serve multiple functions. For example, a median strip could include a rain garden that handles stormwater while also providing a green space for pedestrians.

Shared Streets: Implement shared street designs where vehicles, pedestrians, and cyclists share the same space. These streets can be designed with permeable surfaces to manage drainage and traffic calming features to enhance safety.

This chapter will develop a summation of Castroville's street considerations, drainage challenges, and needed action items. These three elements can overlap, which could allow the City to combine dollars in the budget, have compounding effects, and benefit from the greater efficiency found in infrastructure overlap.

### **Development of Action Plan for Drainage**

The K Frieze Report for the Stormwater Master Plan (2022) provided informational data used to integrate new solutions. This plan aims to use localized solutions with traditional Castroville Street types to facilitate drainage, access management, and an enhanced pedestrian environment.

### **Identify Streets**

Almost every street could benefit from some form of retrofitting to manage speed, improve accessibility, manage traffic, etc. There is a menu of options that can adapt to the context of the individual street. A systematic approach to each solution shall be based on the street network rather than one individual street at a time.

#### **Model For New Sections**

The integrated approach used in the established parts of Castroville can serve as a model for new developments. By prioritizing multi-functional infrastructure, new sections can be designed to handle drainage, manage traffic, and enhance pedestrian spaces from the outset, creating cohesive and sustainable communities.

# **Drainage Conditions**

### **Areas of Drainage Impact**

In different areas of Castroville, development can increase or lessen impacts on the existing drainage system. It is obvious that development anywhere in the Castroville area has the potential to impact properties downstream and adjacent to the Medina River. That said, planning to mitigate potential impacts where systems are at or above capacity can be useful for local drainage concerns.

Apart from a few corridors, the drainage system of original Castroville has historically been reliant on surface flows, meaning that water drains on the surface, not through a pipe. Those streets that have additional piping infrastructure can handle more water, necessitated by larger tributary areas. Because of reliance on surface flow drainage, increased development that leads to greater impervious areas may increase the amount of runoff within the originally platted portion of Castroville.

A large portion of the originally platted portion of Castroville is within the 500-year flood plain. Yet, except for the actual Medina River, almost no portion of the original town site is within the 100-year flood plain (FEMA, 2020). Localized flooding can occur from overland flows and flows through the city street network (Laubach, 2013). With appropriate grading, flows through the street do not necessarily impact adjacent properties. Without this grading, significant impacts are possible.

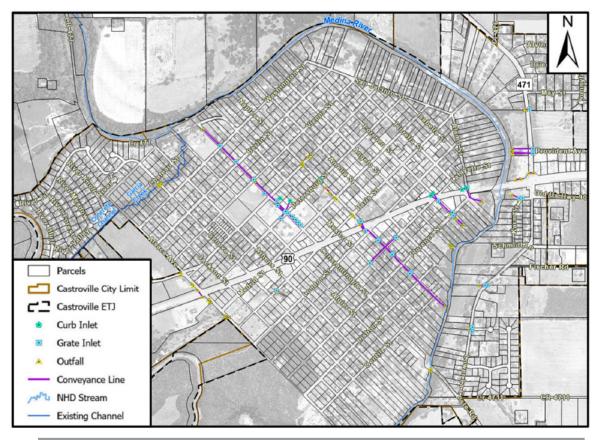


FIGURE 1: EXISTING STORM DRAIN NETWORK (K FRIESE + ASSOCIATES, 2022)

### STREETS AND DRAINAGE FRAMEWORK

Using data gathered from the community, the K Friese report, and newly modeled stormwater data, these series recommendations were established. The K Friese + Associates Report (December 2022) (hereafter referred to as The Report) outlines existing conditions and a preliminary stormwater floodplain model and suggests capital improvement projects to alleviate flooding concerns for the existing area of Castroville, among other items. Problem areas for drainage were identified using 2D hydraulic analysis and further identified with anecdotal evidence of problem areas from local experience and knowledge. These areas of concern, including Athens, Naples, and Lorenzo Streets, were identified in the charrette community input sessions as well. Up to this point, we understand the K Friese report to be reasonable for the level of detail and assumptions outlined in the report and have not independently verified calculations or assumptions. A figure of the identified existing infrastructure from The Report is shown in Figure 1. The identified areas of concern had several conceptual- or highlevel analyses outlining capital improvement scope and costs. These projects are outlined in Appendices B and C of The Report and include "a storm drain and inlet collection system and full-depth reconstruction of the impacted roadways with a curb and gutter street section" for several portions of the network.

Historically, in Castroville, roadside swales and ditches have moved rainwater into the original Castro Plan area. The Report states that the extent of these original ditches is difficult to determine, but they were more extensive than they are today. It will benefit the city to clean out the existing ditches in alignment with not only K Friese's recommendations but also city regulations. Castroville City Ordinance states that "Any person filling in, covering or closing any drainage ditch, bar ditch, culvert or any

part of a street or alley..., so as to slow down, stop or prevent surface waters from draining along or across any street or alley, shall be guilty of a misdemeanor," §46-1, Ord. No. 32, 6-26-56; Amd. No. 32, 3-24-70 (City of Castroville).

The Report continues to recommend full-depth reconstruction of several streets with full curb and gutter sections. From community feedback and survey responses in community engagement sessions, citizens consider shared-use, curbless streets no wider than 20' as a defining feature of the existing area of Castroville. The addition of curbs and gutters is disfavored, as they change the defining characteristics of the streets.

K Friese estimated that full-depth reconstruction would entail the repair or replacement of water and sewer lines, along with service line connections. These repairs can be performed when full-depth resurfacing happens, as the street is already closed and asphalt has already been removed, so further disruption for future repairs can be reduced. This decision needs to be made on a case-bycase basis based on a specific analysis of the expected remaining service life of the road, water, and sewer components. Resurfacing, water lines, sewer lines, and curb installation are four (4) different decisions that all make a difference in the cost of capital projects. Doing one does not necessitate doing all; however, if they all are to be eventually done, doing them at the same time will likely be more cost-efficient. This means that Castroville should identify what projects need to be done and what streets should have which improvements and systematically perform these projects over time. Based on feedback, a raised curb and gutter will not be worth the cost for almost any street in the original Castroville portion, and the cost of installing a curb and gutter can be applied towards other improvements.

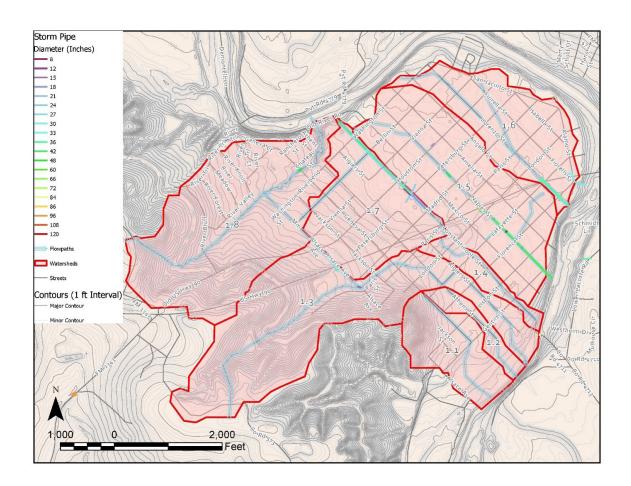
### **Watershed Delineations**

Existing infrastructure and surface flows were analyzed using data provided by the US Geological Survey (USGS) to locate the tributary areas for each portion of the original Castroville area. These tributary areas inform the mapping of watershed boundaries to understand what direction and where water flows after rainfall. This analysis and mapping add a finer grain review that supplements the work done by K Friese + Associates, as they did not show watersheds correlating to individual street-level analysis.

Watersheds are delineated using soil, land use, and rainfall data. The hydrological soil group (HSG), along with a ¼ acre residential land use cover, were fed into a simple TR-55 model. This model estimates the anticipated flow from each watershed during the rainfall events identified in the NOAA Atlas 14 index for Castroville. It should be noted that slight variations can change the flow of water through an intersection when more than one leg is 'downhill' of it; this may affect some of the flow paths shown.

This level of analysis identified and sorted priorities of problem areas. A more detailed study will be appropriate for each improvement project before the exact sizing of infrastructure upgrades.

The watersheds are numbered from 1.1 to 1.8; each of these subbasins drains to the Medina River. A map of the watersheds as divided is shown in Figure 6. From the size of the watersheds alone, the variation in tributary areas immediately shows some areas of relative concern - watersheds 1.3, 1.5, 1.6, and 1.7 are the larger watersheds that drain through the street network of Castroville.



10 - Year Return Period						Ponding Factor					
		Dominant		Avg Slope	Length of Path of	Fp	1.00	0.97	0.87	0.75	0.72
Watershed	Name	HSG	Area (AC)	Flowpath	Concentration (ft)	% Ponds	0	0.2	1	3	5
1.1	Trib to S Geneva	D	52.4	2.6%	2517		190	185	166	143	137
1.2	Trib to 5 Athens	D	16.3	2.1%	2133	- 12	59	57	51	44	42
1.3	Trib to S Algier	D	186.7	3.2%	8550	(cfs)	460	446	400	345	331
1.4	Trib to 5 Constantinople	С	19.8	1.8%	2496	Flow	59	57	51	44	43
1.5	Trib to S Naples	C	154.7	1.4%	4975	Ē	348	338	303	261	251
1.6	Trib to S Lorenzo	С	88.7	0.6%	4166	Total	170	165	148	127	122
1.7	Trib to N Constantinople	D	91.3	1.2%	2937	-	265	257	230	199	191
1.8	Trib to Garcia Creek	D	187.8	5.1%	5660		650	631	566	488	468

100 - Year Return Period						Ponding Factor						
		Dominant		Avg Slope	Length of Path of	Fp	1.00	0.97	0.87	0.75	0.72	
Watershed	Name	HSG	Area (AC)	Flowpath	Concentration (ft)	% Ponds	0	0.2	1	3	5	
1.1	Trib to S Geneva	D	52.4	2.6%	2517	Total Flow (cfs)		388	376	338	291	279
1.2	Trib to 5 Athens	D	16.3	2.1%	2133		119	116	104	89	86	
1.3	Trib to S Algier	D	186.7	3.2%	8550		960	931	835	720	691	
1.4	Trib to 5 Constantinople	С	19.8	1.8%	2496		126	122	110	95	91	
1.5	Trib to S Naples	C	154.7	1.4%	4975		743	721	647	557	535	
1.6	Trib to S Lorenzo	С	88.7	0.6%	4166		363	352	316	272	261	
1.7	Trib to N Constantinople	D	91.3	1.2%	2937	-	540	524	470	405	389	
1.8	Trib to Garcia Creek	D	187.8	5.1%	5660		1325	1286	1153	994	954	

# **Watershed Conveyance Capacities**

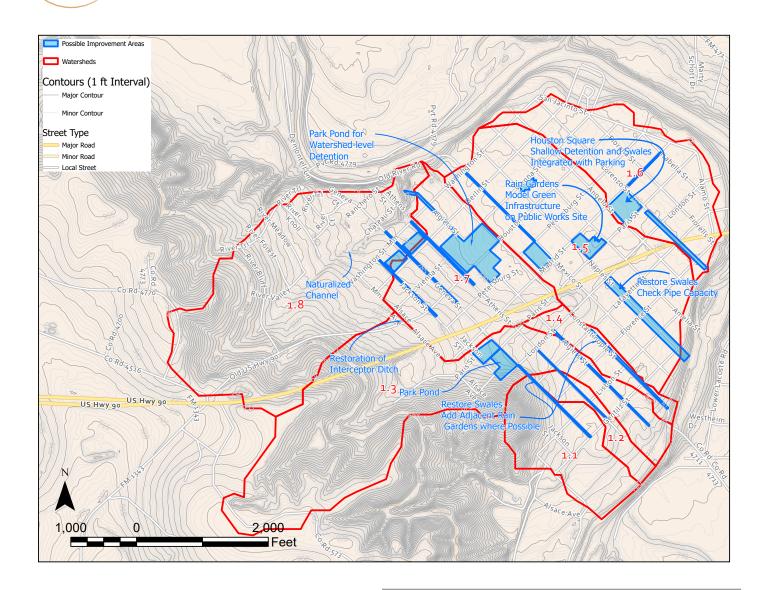
The areas that are tributary to each portion of the original Castroville town area were delineated, taking into account the existing infrastructure and diversions, as well as the surface, flow apparently from the data available from the US Geological Survey (USGS). It should be noted that slight variations can change the flow of water through an intersection when more than one leg is 'downhill' of it; this may affect some of the flow paths shown. A simple TR-55 model, using the mode hydrological soil group (HSG) for each watershed and a ¼ acre residential land use cover, was used to generate an estimated anticipated flow from each watershed during the rainfall events in the NOAA Atlas 14 index for Castroville. While a more detailed study would be appropriate for each improvement project before exactly sizing infrastructure upgrades, this level of analysis was to identify and sort priorities of problem areas. This effort is not to replace the analysis done by K Friese but to supplement at a finer grain the watersheds analyzed. The K Friese report did not show watersheds correlating to individual street-level analysis.

The watersheds are numbered from 1.1 to 1.8; each of these sub-basins drains to the Medina River. A map of the watersheds as divided is shown in Figure 6. From the size of the watersheds alone, the variation in tributary areas immediately shows some areas of relative concern - watersheds 1.3, 1.5, 1.6, and 1.7 are the larger watersheds that drain through the street network of Castroville.

			Appx Street Flow Depth (100-year Storm)				
		Avg Slope					
Watershed	Name	Flowpath	0% Ponds	1% Ponds	5% Ponds		
1.1	Trib to S Geneva	2.6%	0.6 - 0.7	0.6 - 0.7	0.5 - 0.6		
1.2	Trib to S Athens	2.1%	0.1 - 0.2	0.1 - 0.2	0.0 - 0.1		
1.3	Trib to S Algier	3.2%	>1'	0.9 - 1.0	0.8 - 0.9		
1.4	Trib to S Constantinople	1.8%	0.1 - 0.2	0.1 - 0.2	0.0 - 0.1		
1.5	Trib to S Naples	1.4%	0.9 - 1.0	0.6 - 0.7	0.4 - 0.5		
1.6	Trib to S Lorenzo	0.6%	0.8 - 0.9	0.7 - 0.8	0.6 - 0.7		
1.7	Trib to N Constantinople	1.2%	0.8 - 0.9	0.7 - 0.8	0.5 - 0.6		
1.8	Trib to Garcia Creek	5.1%		N/A			

5-5

# Recommended Categorization of Drainage Improvements



#### FIGURE 2: POTENTIAL IMPROVEMENT LOCATIONS

The map above (figure 2) shows areas where either conveyance or improved detention on the most impacted streets (South Algier, South Naples, South Constantinople, and South Lorenzo streets). Improvements range from restoring the swale network to offline detention in public parks or city-held properties. One such location is Houston Square, where additional detention or infiltration can reduce the amount of water crossing US 90 and continuing down South Naples.

This recommendation is without any insistence of drastically changing the character of the street through curb and gutter but instead enhancing the character by using Light Impact Design infrastructure to create infrastructure with function and quality aesthetic.

# **Design Flow Limits**

The design of any system should start with the recognition of local conditions, precedents, and experience to establish appropriate performance standards. Setting an appropriate performance standard starts with establishing an acceptable depth of flow in the street during rain events. This decision affects both the cost of implementing improvements to bring streets in compliance with the design standard and the timeline in which improvements could be made to achieve the standard (as the City has only a large budget every year).

For the depth of flows in the street, the city has a current law [Sec 100-144 (City of Castroville)], which does not allow flows in the street to exceed the top of the curb in the 10-year storm. The originally platted section of Castroville cannot meet this standard without the installation of storm sewers or the extensive restoration of roadside ditches, as the 'curb height' is 0 inches (the edge of the roadway). A more appropriate standard could be to define the maximum allowable depth of flow at the edge of the pavement, such as 1' of depth during a 100-year storm and 3" or 6" during a 10-year storm. This depth of flow sets a performance limit and gives a standard against which to compare, with anticipated flows past that limit indicating additional infrastructure needs. It further allows several methods to achieve it, as discussed in the conveyance section, while not penalizing a curb-and-gutter-free section.

The exact depth limits are a policy decision that should be determined by the City. A lower value would lead to reduced depth of flows in the street at the cost of more extensive and larger infrastructure, while a higher allowable depth value will reduce infrastructure costs at the cost of potentially deeper flows. Below a certain depth (2.5" to 3"), street flows do not have much appreciable capacity, and handling of most stormwater events will then need to be handled in underground piping. Above a certain depth (about 1'), most flows can be handled in the street section, and pipes will be unnecessary for all but the largest watersheds and flows, but also create a greater burden to transportation during a storm event.

In determining this standard, two broad categories of handling rainwater can be used: **Demand Reduction and Conveyance Improvement.** 



### **Demand Reduction**

Demand Reduction encompasses any strategy where either the rate or the volume of water moving downstream is reduced. Generally, this involves making a place 'spongier' - that is, making it better able to absorb, infiltrate, and slow water as it is being conveyed. Almost any technique that reduces the amount of water flowing downstream, either in its rate or total volume, is a demand reduction strategy. These include:

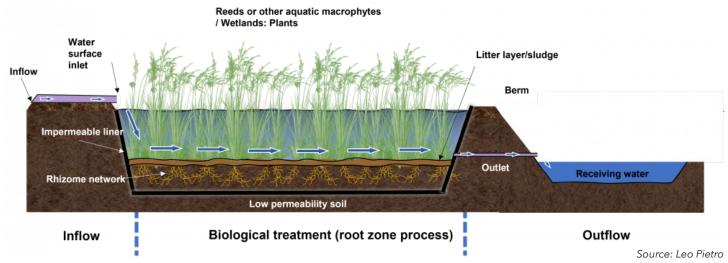
- Rain gardens
- Green roofs
- Disconnecting impervious surfaces ('downspout disconnection')
- Permeable paving
- Urban tree canopy improvements
- Constructed ponds and wetlands
- Rainwater harvesting, rain barrels (and later release)
- Conventional detention facilities
- Checkdams in swales (providing distributed detention)

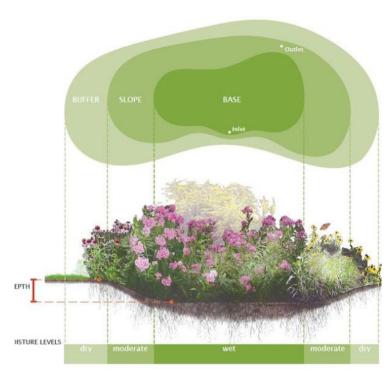
# **Demand Reduction Strategy**

Many rainwater demand reduction strategies result in the land acting like small 'ponds' filling with rainstorms, then draining or infiltrating slowly over time. Within the TR-55 method (USDA NRCS, June 1986), there is a provision for adjusting flows based on the percentage of ponds and other wetlands anticipated in the area, showing that having 1% of a land area 'ponded' can reduce flows to 87% of the non-ponded flows, and 3% of land area ponding reduces flows to 75% of the non-ponded state. **Encouraging the creation and distribution of many small ponds and detention can contribute to the reduction of demand for large flows, as these will reduce the impact of flows.** 

Conventional detention or retention ponds are also viable in some areas to store large volumes of water and throttle flows downstream. These are best where both a need and an area are available for the pond. Any pond installation should be designed with consideration of how deep a pond should be limited by the outlet elevation - too deep of a pond will require extensive piping.

Conventional detention or retention ponds, either up- or down-stream of the St Louis Cemetery, in Lions Park, or along Naples Street, are all potentially good regional areas to provide detention and reduce flows and demand on the conveyance system.









Source: Site Design Concepts





Source: University of Kentucky

# **Conveyance Improvement**

Conveyance improvements are fairly straightforward, as water will fill the lowest portions of a conveyance pond and accumulate as more water demand occurs. Conveyance improvements give either more room or a better definition of where the water will go. Overland flows can first be accommodated by expanding roadside swales, then moved underground into storm sewers. Overland channels can be provided to bring water away from street and alley rights of way. These are all sized relative to a given storm and design limits (i.e., how much rain fell? How deep can the water be?).

Swales without curb and gutter can have inlets with screening leading to underground pipes to allow for additional capacity where necessary. Other areas may benefit from a wider swale where right of way exists or can be acquired. **Castroville has several examples of these in service along Constantinople St. and Naples St.** 

This Plan recommends that the scope of capital improvements identified by K Friese + Associates be revised to reflect a curb and gutter-free section, matching the typical road section of the existing Castroville, with adjustments to allow for curb-free inlets as appropriate.

# **Conveyance Improvement Strategy**

Drainage improvements work should start with a focus on restoring the existing swales as much as possible. Castroville should only consider additional underground capacity once flows (either modeled or actual) are shown to exceed the established design standards. Further, Swales with appropriate stormwater inlets will be more in character and less expensive than a full rebuild of street sections with curb and gutter in the existing section of Castroville.

The map which K Friese developed showing the criticality of certain ditches (Figure 3) may inform the prioritization of ditches. However, additional on-the-ground data and information needs to be compiled (either by the city, a citizen's task force, or a contractor) to more fully document evidence of the past extents of ditch systems.

The street grid can be used to advantage by opening parallel streets for drainage channels, and by making the grade in an intersection angled so that it splits the flow of water.

(e.g., not 100% of the flow follows one or another street, but the grading of the intersection 'splits' the flow), can also alleviate problems, using the grid to advantage to balance demands. For example, the more that Jackson, Geneva, and Athens handle flows crossing Washington or Berlin streets on the Northwest of the city, the less that Algier or Constantinople need to convey.

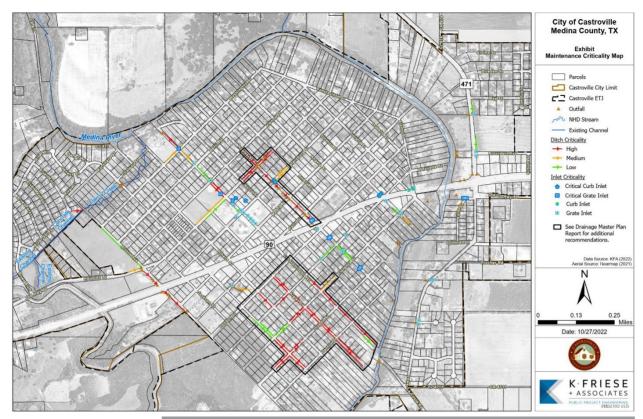


FIGURE 3: DITCH CRITICALITY MAP (K FRIESE + ASSOCIATES, 2022)

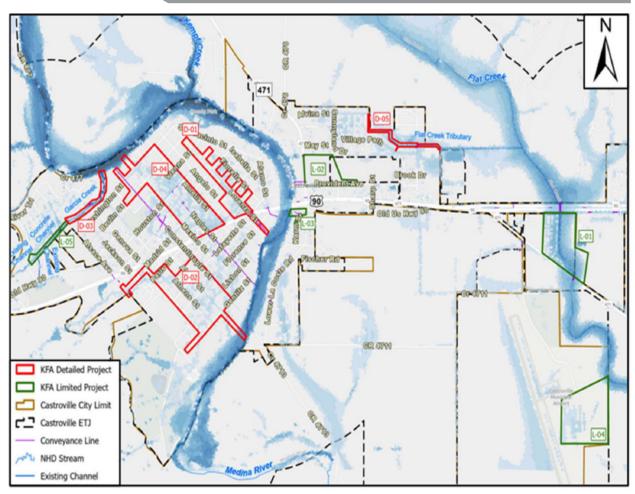


FIGURE 4: IDENTIFIED DRAINAGE PROBLEM AREAS AND CAPITAL IM-PROVEMENT PROJECT LOCATIONS (K FRIESE + ASSOCIATES, 2022)

# **Street Improvements**

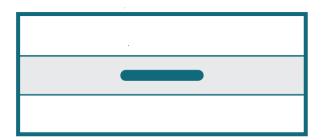
# **Speed Mitigation Menu**

Street calming consists of various tactics to reduce speeds on a street or corridor to increase safety. Some tactics change the configuration of the roadway, while others are features that alter how drivers perceive the roadway, which causes them to respond accordingly. The following are options Castroville can implement in streets throughout the city instead of speed bumps, which mitigate speeding while promoting the shared street culture seen throughout Castroville's more established neighborhoods.



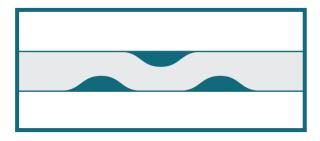
### (1) Pinch Point

Also known as chokers, they act to restrict speeding by narrowing the street and expanding sidewalks, landscaping, or stormwater infrastructure.



### (2) Median

Raised island in the center of a roadway serve to separate traffic moving in opposite directions. Medians visually narrow the roadway and physically reduce the amount of pavement available to drivers. Medians can also serve as pedestrian refuge islands to shorten pedestrian crossing distances.

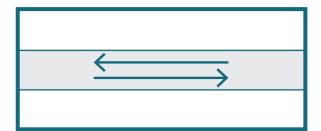


#### (3) Chicanes

Chicanes alter the roadway by inserting additional landscaped areas into the driving lanes to require motorists to maneuver around the bulb-outs. This shortens sight lines, resulting in lower speeds.

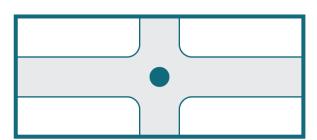
### (4) Two Way Street

Two-way streets serve to calm traffic by narrowing travel lanes. Drivers slow down due to vehicles traveling head-on towards them. Two-way streets remove the "race car" mindset by adding friction to the street.



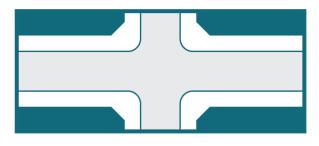
### (5) Traffic Circle

Also known as mini roundabouts, traffic circles require drivers to proceed with caution through an intersection. This results in slower speeds as drivers yield and negotiate with other vehicles.



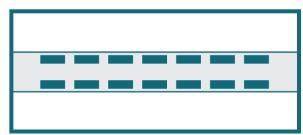
### (6) Building Lines

Street trees or any type of public shading are critical to facilitating a comfortable pedestrian environment.



### (7) On Street Parking

Street parking adds potential friction with vehicles moving on and off the curb. Additionally, on-street parking narrows the driving lanes of the street and protects the sidewalk.



# **Combined Street Solutions**



### **Speed Mitigation and Drainage Improvements Integrated Together**

Street design is one of the most important components in determining how a place functions. Castroville's narrow streets and short blocks are key to the quaint, small-town feel it possesses. The streets also serve many purposes, ranging from connecting people to places to conveying stormwater to the river. The streets are public spaces that link the private land to one another. This is why it's important that the intensity of the street design matches the land area that they serve.

Castroville's straight, uninterrupted blocks can lead to speeding from block to block. Through the use of various traffic calming measures, Castroville's streets can be tamed without negatively impacting the overall design of the community. Furthermore, it's possible to do low-cost solutions that create identifiable characteristics for each street section. Because Castroville Streets also convey drainage, it will be important to align the street designs with drainage solutions.

Speed mitigation and drainage improvements can combine together primarily through landscaping interruptions in streets like pinch points, medians, chicanes, and traffic circles. These can reduce flow and detain water, putting less strain on conveyance infrastructure.



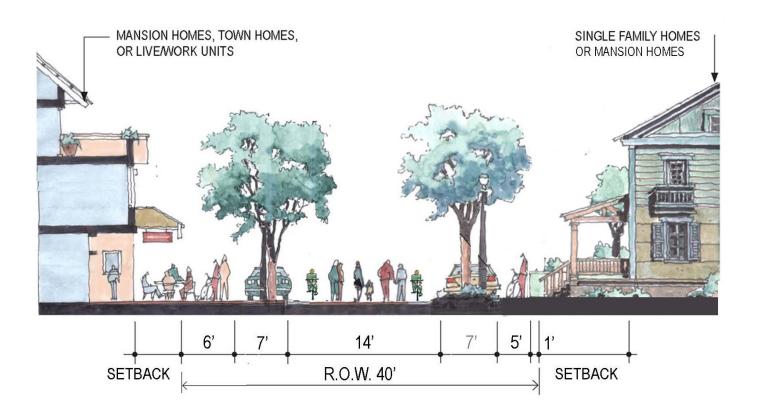
Source: Rocky View County



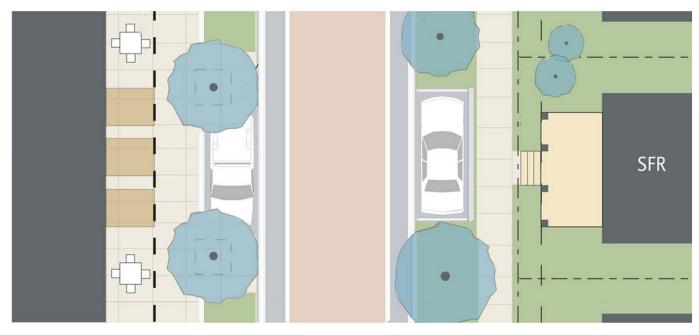


Source: Urban Green-Blue Grids

All these examples center around opening more space for porous retention while altering how automobiles can move through a street, thus slowing their speed.



This conceptual rendering shows how the "Casual Castroville Street" can be organized in certain circumstances to incorporate more street trees and organized parking along the street while still retaining no grade separation, allowing pedestrians to cross and congregate where they please.

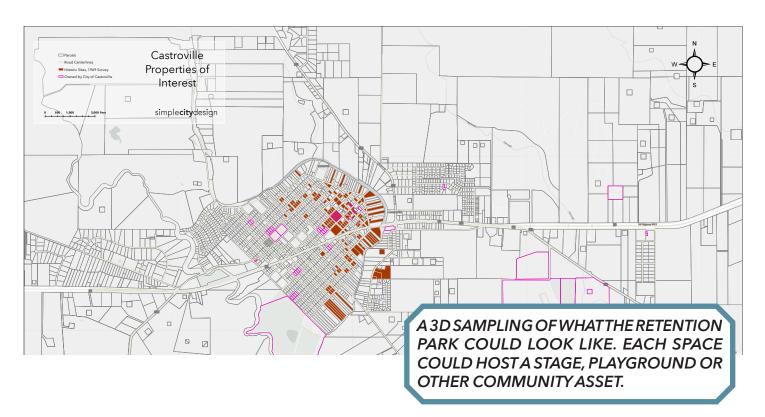


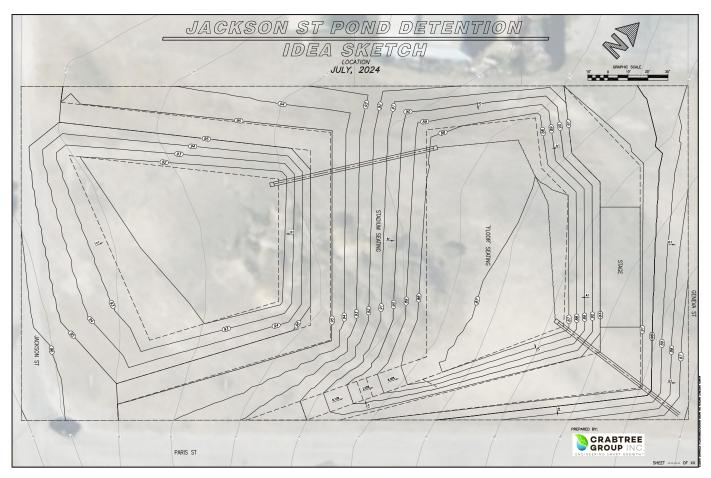
### **Retentention Facility Turned Into Public Park**

Just like the streets can be altered to turn the water issue into an opportunity to add more green in the city, the same can be done for the retention facilities in the city. The City of Castroville has bought land to develop detention facilities in order to prevent flooding in the city. These facilities can have the opportunity to serve a dual purpose of stormwater detention and public parks. The park could have playgrounds, soccer fields, a stage, or a wildlife refuge. This could create another natural asset to the city along with the many that exist.

The following images on this page show a potential detention pond and park on the cemetery parking on Jackson Street. This would both stop the stormwater from overflowing from the hills to the West into the neighborhood below while adding a park to the immediate neighborhood. This example can serve as an inspiration and template for other retention facilities in the city.





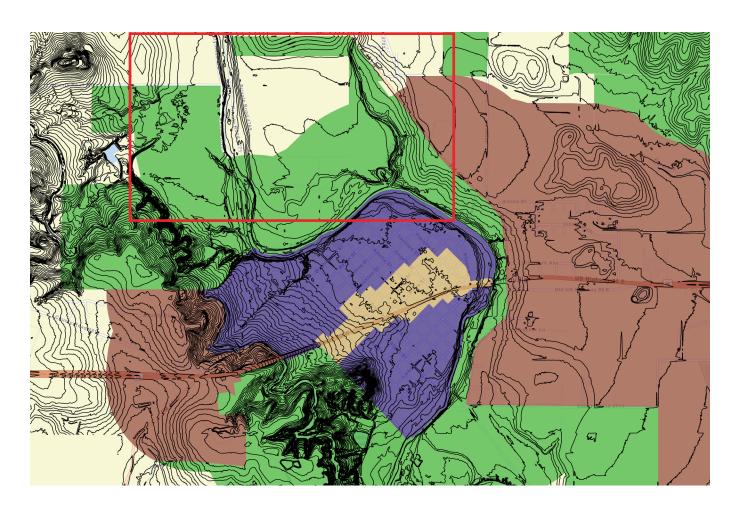


# 5-9

# **Upstream Development**

The increase in development upstream of the existing location of Castroville may, without proper detention, cause an increase in the river- (rather than rainfall-) caused flooding. This is because portions of existing Castroville are in the 500-year floodplain. Efforts to minimize risks in the area upstream of downtown should be made, either through ETJ powers, development agreements, or negotiation with private landowners. These talks could be organized through a Medina River Valley Coalition in a united plan, more detail discussed in Ch. 7. The potential impacts of development are lesser where volumes do not flow past the bend in the river. Castroville should develop its own stormwater management manual to limit flows from development from exceeding pre-development levels.

Figure 8 shows a general indication of potentially greater and lesser impact areas to the original Castroville grid based on the potential for more runoff overtopping the riverbanks and flooding the town, as shown in the 500-year floodplain (0.2% annual occurrence probability) FEMA map. This assumes that detention is limited to rate control, not volume control, for both conditions and is an area to be examined in a master drainage study.



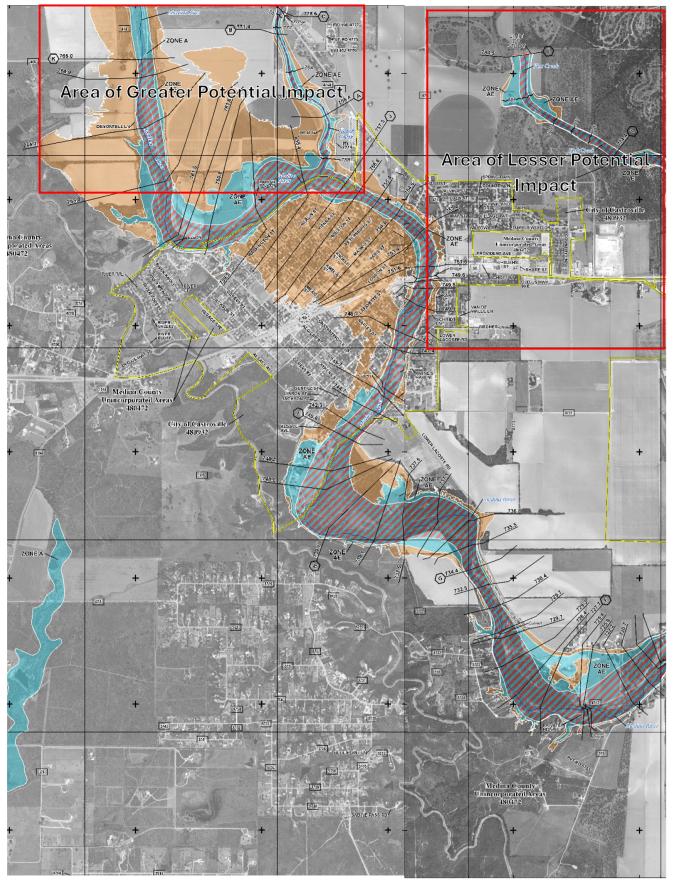


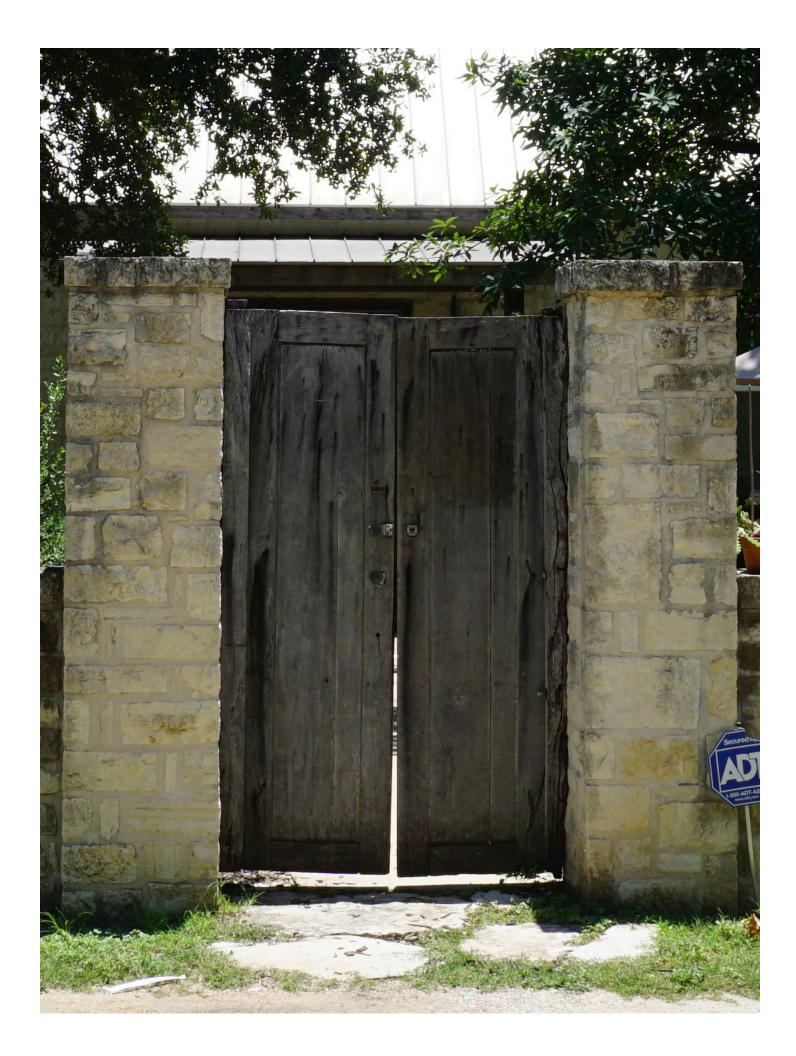
Figure 8. Areas of Greater and Lesser Potential Impacts to Castroville from a Drainage Perspective (FEMA, 2020).

Annotation by author

### Introduction

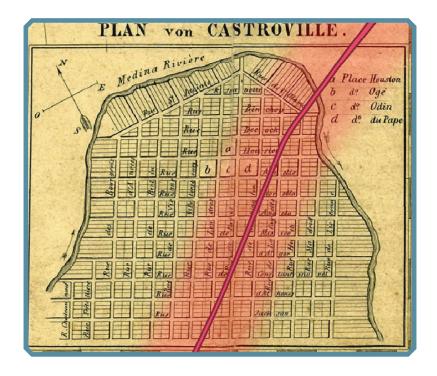
The arrival of Highway 90 significantly disrupted Castroville's traditional grid layout, creating a host of negative outcomes for the community. The increased traffic brought an influx of noise and air pollution, harming the town's serene atmosphere and impacting the health and well-being of its residents. The highway's off-angle trajectory sliced through the town, breaking the cohesive integration of neighborhoods. This makes it difficult for pedestrians and local traffic to navigate the area safely. This disruption led to decreased connectivity within the community, undermining the sense of unity from north to south. The harmful elements introduced by Highway 90 have altered the fabric of Castroville, challenging the town's ability to maintain its historic charm and close-knit community spirit.

This chapter establishes a framework for incrementally addressing these challenges to a complete redesign of Highway 90 once the timing is right.



# Highway 90 - A Cut Throught Castroville`

In the 1940s, Castroville's world as they knew it would take a significant change. While some community members supported and welcomed the change, many were in direct opposition, recognizing the catastrophic outcomes that could occur. Highway 90 was built bisecting the grid at an off angle creating problematic remainder parcels of land. Castroville's existing grid is distinctly broken into north and south sections, creating a physical barrier between the communities. The community would like to see this issue addressed as the town progresses.



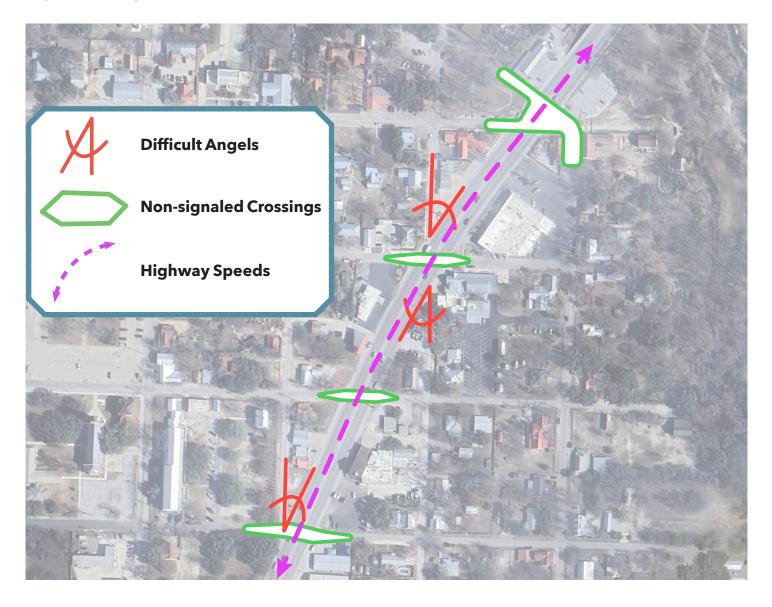
The results of Highway 90 brought problematic situations to an area that was calm, connected, and uniformly designed. Some of the major challenges include high rates of speeds by large volumes of traffic, noise and air pollution, dangerous turning movements, and an almost complete lack of cross connectivity for all other modes of transportation, including walking. The Highway 90 scar plagues the community in their daily activities.





Safety concerns are everywhere along the entire stretch of Highway 90 through the original Castro Plan area. Speeding is encouraged through wide lanes, wide shoulders, and a lack of any indication to drivers that they are entering a unique and historic area. The angle at which Highway 90 cuts the grid creates both obtuse and acute angle turns. These are dangerous for all users of the road but play a particular role in preventing pedestrians from attempting to cross Highway 90. Furthermore, oddly clipped parcels and portions of the original grid remain in place along Highway 90 as a result of the angle of the Highway. Access management, for all intents and purposes, is non-existent, creating endless potential conflict points along the route exacerbated by the dangerous angles. Pedestrian accommodations exist at two points on an almost mile-long stretch of highway. Pedestrian crosswalks at these two locations only exist on two of over five intersections.

Overwhelmingly, residents want more and safer pedestrian crossings, and more places to safely turn left onto Highway 90. Many residents feel that the only option for crossing Highway 90 is to drive to a traffic light. To be effective, the solution to Highway 90 through the original Castro Plan area will need to reduce speeding, reduce the barrier effect, and implement an access management strategy for improved safety.



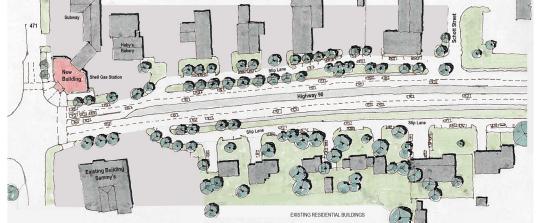
# **Continuing of The Conversation**

Improvements to Highway 90 have been a continuous dialogue among the city leaders and TxDOT Efforts within this plan are a continuation of the many hours of community gathering, planning, and deliberation around the matter.





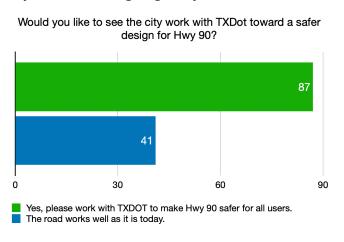
Source: A Vision Plan for Castroville

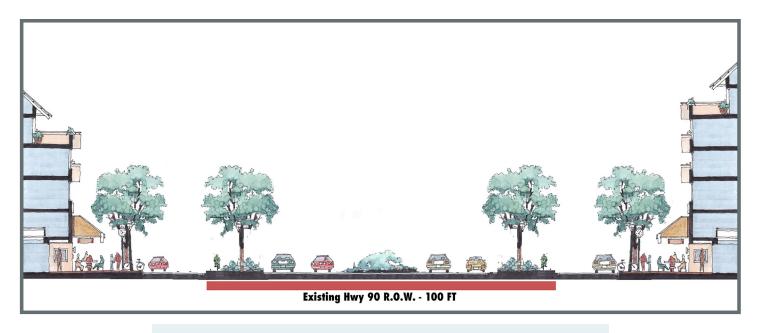


Source: MC/A Architects, Inc

The Comprehensive Plan preceding this Plan (A Vision Plan for Castroville, Texas: Where History Shapes the Future) recommended a better entrance to Castroville through the use of slip streets, added trees, and entrance signage, all using existing ROW.

The previous Comprehensive Plan initiative was continued in 2023 for another round of conversations with TxDOT concerning the same stretch of road. The city leaders have been diligent, understanding the complexity and necessity of addressing Highway 90.





This proposal has been a culmination of active community input and past projects to arrive upon a proposed solution to such a critical problem for the city.

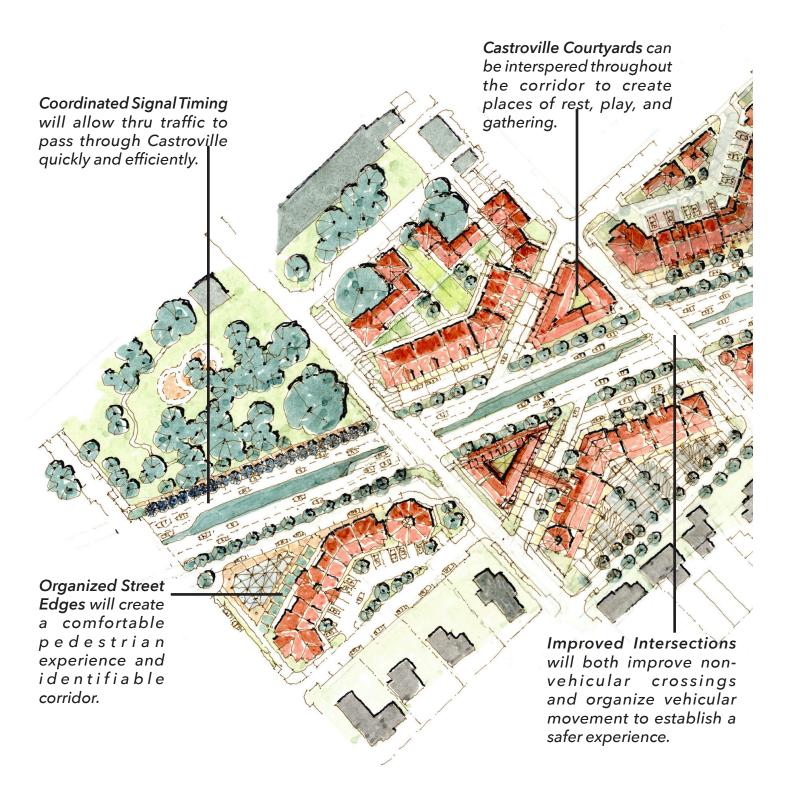
### **The Castro Boulevard**

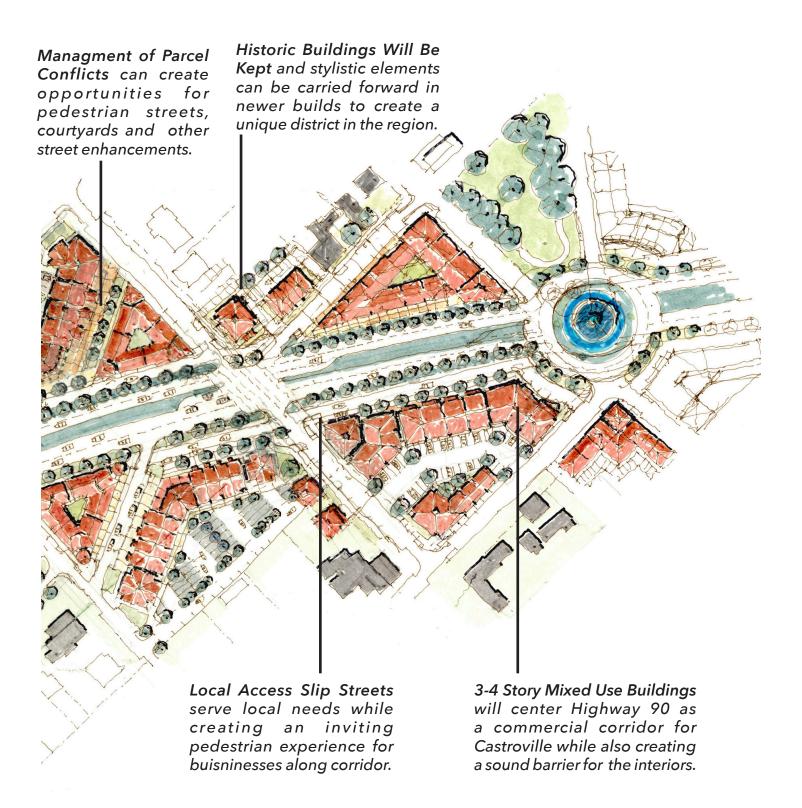
A multi-way boulevard on Highway 90 would maintain the existing lane configuration and thus maintain existing traffic volumes but add local access frontage streets running parallel to Highway 90 to handle local access needs while creating a pedestrian realm inviting to businesses. Tree-lined medians separating the through traffic from the local access frontage streets act as the access management plan by consolidating access points along the corridor to the numerous intersections. By slowing traffic, consolidating access points, creating a sense of place, and providing pedestrian refuge islands, a multi-way boulevard can tame Highway 90 through the original Castro Plan area.

A conceptual drawing is shown on page 96, beginning to the East at Alamo Street and continuing West to Naples Street. The key feature of the concept plan is frontage streets intended to provide access to local businesses for local, turning movement traffic while maintaining the existing cross-section for thru traffic on Highway 90. The proposed cross-section for this concept plan is shown above.

A major concern with Highway 90 is the impact on existing traffic. The multi-way boulevard concept maintains the existing cross-section, albeit right-sizing the lanes to the standard twelve-foot rural arterial width recommended by TxDOT. Speeds are reduced through the narrowing of the travel lanes, the addition of a landscaped median, and the addition of a tree-lined median between the local access frontage street and Highway 90 through lanes. The sense of enclosure from the planting strip and eventual construction of buildings abutting the frontage streets will indicate to drivers to slow down.

Frontage streets are intended to be one-way streets providing access to local businesses. Introducing frontage streets in tandem with a continuous tree-lined median implements an access management strategy while maintaining access to local businesses. This concept would solve the continuous and uncontrolled access to Highway 90 while providing safe turning movement opportunities at signalized intersections. This proposal would require careful design at intersections. Signals will be required along Highway 90 at more intersections than the two current signalized intersections at Fiorella Street and Constantinople Street. Although counterintuitive, signalized intersections improve traffic flow. Coordination and optimization of existing and any new signals regulate the flow of traffic through the Castroville grid while providing for safe pedestrian crossings and controlled left-turn movements.







# **Highway 90 Challenges**





### **BYPASS PHILOSOPHY**

TXDOT HAS STALLED CONVERSATIONS AROUND BOULEVARDING THE INTOWN SECTION OF HIGHWAY 90 UNTIL A BYPASS ACROSS CASTROVILLE IS SETTLED.

This can either mean waiting or urging a change in philosophy and approach, as this portion of the Highway 90 solution can provide immediate relief both for local and regional issues. Viewing this as a part of the solution rather than another is a critical difference that will impact the entire scope of solutions.



### MODIFICATIONS TO MEET REALITY

AS THE PROJECT MOVES FROM A MORE CONCEPTUAL TO AN ACTIVE PHASE, MODIFICATIONS TO THE DESIGN WILL NEED TO ACCOMMODATE DISCREPANCIES IN THE RIGHT OF WAY, CONTINUING EXISTING STRUCTURES AND A NONLINEAR DEVELOPMENT OF THE CORRIDOR.

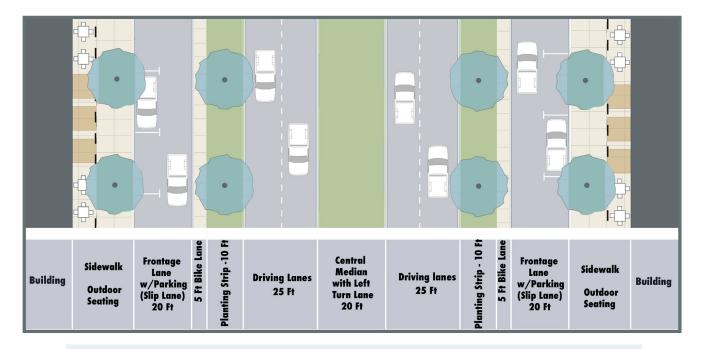
The evolution of Highway 90 into a corridor district is not a project that can be completed through a singular takedown and redevelopment of the district at once. Instead, a unified plan needs to be structured in a way that allows individual, or groupings, of parcels to be redeveloped over time to assemble a whole. This includes identifying which buildings need to remain and which can be replaced.



## MANAGING ACCESS

WHERE AND HOW SLIP STREETS ENGAGE WITH HIGHWAY 90 AND ITS MAIN INTERSECTIONS IS CRITICAL TO THE SUCCESS OF THIS SOLUTION.

A slip street is designed to provide a local route for buildings along Highway 90. If the slip street creates more of a traffic complication, then the solution will overburden rather than alleviate the problem. Careful, context-specific design of the interchanges and the slip street's relationship with these interchanges must be carried out in order to properly flow traffic. A full engineering analysis is required as part of the design of the corridor to ensure this function of the solution is done correctly.



Highway 90 greatly impacts the City of Castroville, but it is owned and operated by the Texas Department of Transportation (TxDOT). Any maintenance, alternation, or complete reconstruction of a TxDOT facility will need to be done by TxDOT in continuous coordination with the City of Castroville and pertinent stakeholders. A project of such magnitude will require a dedicated planning effort to effectively retrofit Highway 90. This Plan outlines a process below to achieve a reconfiguration of Highway 90 into a multi-way boulevard through dual efforts by TxDOT and the City of Castroville.



# **The Healing Process**



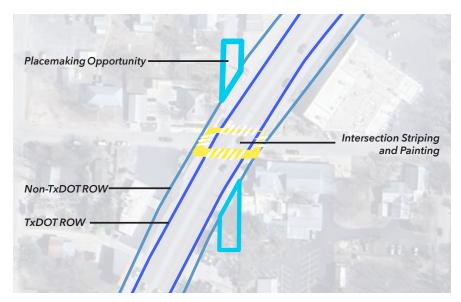
Repairing Highway 90 requires multiple agencies, thorough examinations from planners and engineers and partnerships from landowners and business owners. This effort will be a large undertaking, but incremental improvements can happen through a series of steps. Each of these improvements can slightly better the existing environment until the full repair is complete, the steps below provide a series of task and projects that must be defined and allocated budget and resources to accomplish.



### IMMEDIATE RETROFITTING

One of the quickest solutions to creating a visual transformation of Highway 90 would be to delineate the space using paint. By defining the narrower lanes, it's possible to create slower, moving traffic while managing the same volume of cars. Narrow lanes provide less margin for error; therefore, people feel compelled to slow down and pay more attention. Next, striping bold crosswalks at the intersections will significantly delineate the space where people's visual plane terminates into a bold pattern. Having delineated crosswalks also further protects pedestrians at these conflict points. During this process, it would be important to see if some excess right away could be reclaimed where gardens or other features could soften the edges and serve as stormwater management tools. It's also possible to integrate art into these additional rights as a way to further celebrate Castroville's uniqueness.

The City of Castroville could direct funds towards these striping and paint initiatives along with closures of problematic streets, reserving them for other mobility options. Showing how eliminating these difficult interchange angles both create a safer highway and neighborhood street will help citizens and planning parties visualize how a new relationship with the highway can be established. One which is safer, more efficient and seen as an asset rather than an obstruction.





#### COMPREHENSIVE PLANNING OF NON-TXDOT RIGHT OF WAY

Next is a master plan of the Highway 90 corridor, including the right-of-way reservation, detailed street planning, urban design guidelines, and process walk-through. This will give clear direction for the private realm by private investment as redevelopment occurs along the corridor. This phase will facilitate outer right-of-way organization and building forms toward an environment more conducive to living, working, and shopping. The conceptual drawing can serve as inspiration and direction for more detailed planning initiatives.

The City will need to establish ROW reservations running the length of the corridor to bridge the gap between the existing (varying) ROW and the necessary one hundred forty-two (142) foot ROW. A ROW reservation designates a portion of a parcel for future ROW acquisition. The City must pay fair market value for the cost of the ROW acquisition upon sale or redevelopment. By using ROW reservations, the City can ensure the necessary ROW will be available to complete the outer ROW in Phase 2. The ROW reservation will also serve to solve the access obstacle for parcels with frontage only from Highway 90.

Phase 2 completes the construction of the outer ROW, which includes a one-way driving lane, a parking lane, and a sidewalk with trees. Access is granted to the parcels needing it via street parking, or, in special circumstances, a curb cut could be granted through the sidewalk to the local access frontage street.

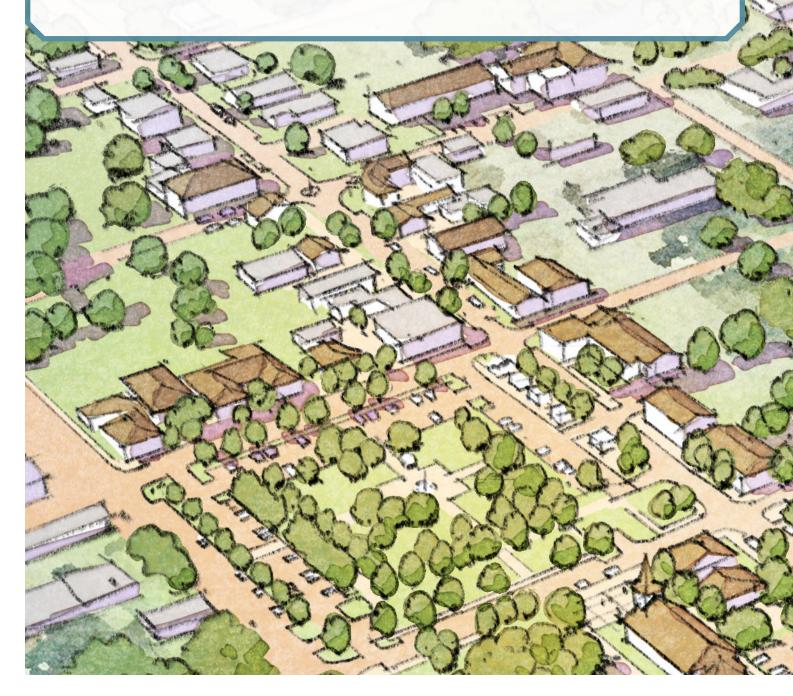
The most important aspect of a project converting Highway 90 to a multi-way boulevard through the Castroville grid is the complexity of the design. Although the inner ROW for Phase 3 is straightforward, designing and constructing the outer ROW in Phase 2 will need to be customized and adjusted for each block face of the grid. The angle at which Highway 90 cuts through the Castroville grid renders each block unique, necessitating a specialized approach to bridge the gap between the public ROW and the private realm achieved through the local access frontage streets. Additionally, intersections for multi-way boulevards are unique on an orthogonal grid. The skewed angle of the Castroville grid will require even finer analysis and detailed design to ensure intersections function adequately and safely.



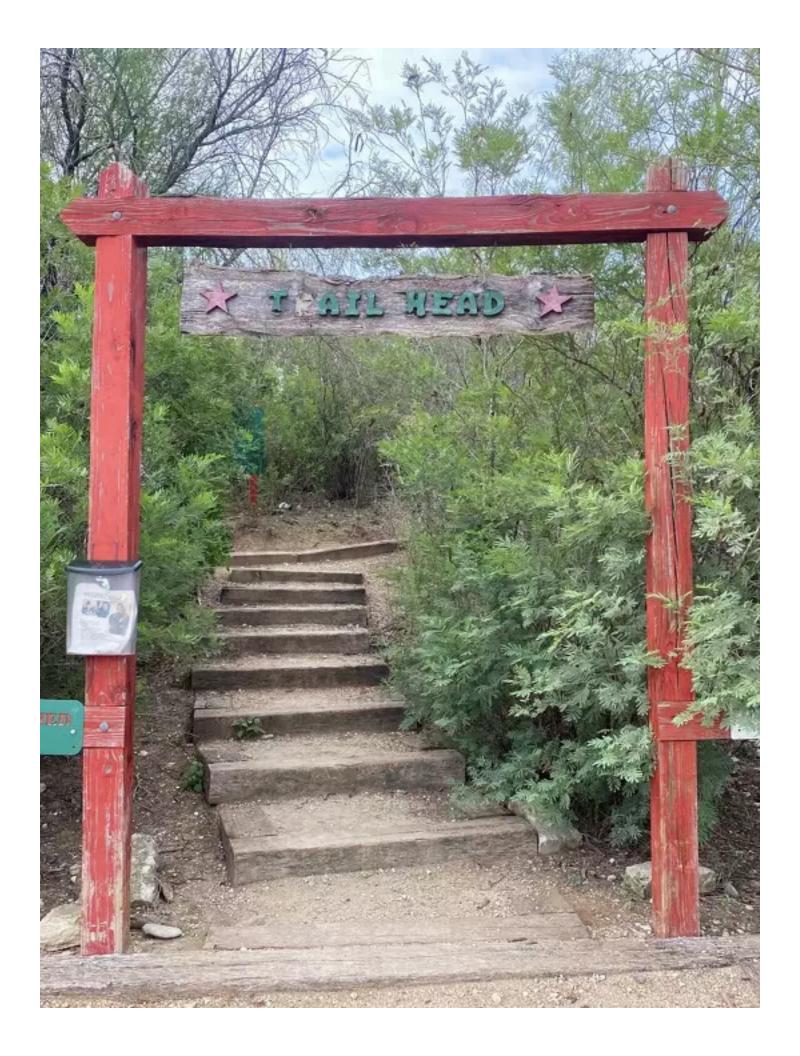
#### INCORPORATE TXDOT RIGHT OF WAY

Public improvements made in the public realm, or the public right-of-way (ROW). In this case, the ROW currently comprising Highway 90 is owned and operated by TxDOT. This phase completes the retrofit of the Highway to the boulevard by bridging the gap between the outer ROWs. Throughout phase 2, TxDOT should be deeply included in the conversation to ensure a seamless translation between ROW managed by TxDOT and outside ROW.

Taming Highway 90 means both stitching the Castro Plan back together and establishing an entirely new district that can build on the existing look and feel of Castroville's downtown. Using the uncommon parcel angles creates opportunities for courtyards, plazas, and terminal vistas, which celebrate the unique elements of Castroville. This commercial corridor can act as a buffer from Highway 90 in a way that still feels comfortable and a welcome place to be.







#### Introduction

Implementing the Action Plan effectively requires a structured approach and strategic planning. The Action Plan is broken into geographic areas with timelines ranging from short-term to long-term project goals. The following steps are critical to lead the Action Plan to successful outcomes. Each of the projects will require detailed programming.

This chapter will structure the many action items in this plan into easy-to-understand steps, describing priorities and action processes.

# Chapter 7: Action Plan

# Goals for Continuing Castroville

## Define Project Scope and Objectives

- Clearly Outline the Scope: Define what the project will deliver, the boundaries of the project, and any limitations. This prevents scope creep and ensures everyone involved understands the project's focus.
- **Set Clear Objectives:** Establish specific, measurable, achievable, relevant, and timebound (SMART) objectives that the project aims to achieve. This helps in aligning the team's efforts with the project goals.

#### 2. Develop a Project Plan

- Break Down the Work: Use a Work Breakdown Structure (WBS) to decompose the project into smaller, manageable tasks. This makes it easier to assign tasks, estimate resources, and schedule activities.
- Create a Timeline: Develop a project schedule that outlines the start and finish dates of each task. Utilize tools like Gantt charts to visualize the timeline and dependencies.
- **Resource Allocation:** Identify and allocate the necessary resources (people, equipment, materials) for each task. Ensure that resource availability aligns with the project schedule.

#### 3. Develop a Project Plan

• Identify Key Roles: Determine the roles needed for the project (e.g., project manager, team members, stakeholders) and assign responsibilities accordingly. Managing

Increased Demand on City Services and Utilities:

- **Build the Team:** Select team members based on their skills, experience, and the specific needs of the project. Ensure the team has a balance of technical and managerial skills.
- **Define Roles and Responsibilities:** Clearly outline each team member's responsibilities and authority. This ensures accountability and reduces confusion.
- Conventional infrastructure often fights nature, is costly, and absorbs large land areas.

#### 4. Develop a Project Plan

- Identify Risk: Conduct a risk assessment to identify potential risks that could impact the project. Consider risks related to scope, time, cost, quality, resources, and external factors.
- Analyze and Prioritize Risk: Evaluate the likelihood and impact of each risk. Prioritize risks based on their potential impact on the project's success.
- **Develop Mitigation Strategies:** Create plans to mitigate identified risks. This might include contingency plans, risk avoidance strategies, or transfer strategies.

#### 5. Budget and Funding Allocation

• Estimate Cost: Develop a detailed budget that includes all project costs such as labor, materials, equipment, and overheads. Ensure that estimates are realistic and comprehensive.

- **Secure Funding:** Identify funding sources and secure the necessary financial resources. This may involve obtaining approvals, securing grants, or allocating internal funds.
- Monitor and Control Budget: Implement processes to track spending against the budget. Regularly review financial reports to ensure the project stays within budget.

#### 6. Implementation and Execution

- **Kick-Off Meeting:** Hold a project kick-off meeting to align the team, review the project plan, and set the tone for collaboration and communication.
- Task Execution: Begin executing tasks as per the project plan. Ensure team members are aware of their responsibilities and have the resources needed to perform their tasks.
- Monitor Progress: Use project management tools to track progress. Regularly compare actual performance against the plan and take corrective actions when necessary.review financial reports to ensure the project stays within budget.

#### 7. Communication Plan

- **Define Communication Channels:** Establish how information will be communicated among team members and stakeholders. This could include meetings, emails, reports, or project management software.
- **Regular Updates:** Schedule regular progress meetings and status updates. Keep stakeholders informed about project progress, risks, and issues.
- **Documentation:** Maintain thorough documentation of project activities, decisions, and changes. This ensures transparency and provides a record for future reference.

#### 8. Quality Management

- **Set Quality Standards:** Define the quality standards that the project must meet. These should align with industry standards and stakeholder expectations.
- Implement Quality Control: Use quality control measures to ensure that project outputs meet the required standards. Conduct regular inspections, reviews, and testing.
- **Continuous Improvement:** Encourage a culture of continuous improvement. Use feedback from quality assessments to refine processes and improve project outcomes.

#### 9. Project Closure

- Completion Checklist: Ensure that all project tasks have been completed as planned. Use a checklist to verify that all deliverables have been met.
- **Evaluation:** Conducta post-implementation review to evaluate the project's success. Gather feedback from team members and stakeholders to identify lessons learned.

#### 10. Celebrate

- **Celebrate:** The community and project team must celebrate the success of the project by holding a community gathering. This will help inform the greater community of how projects in Castroville are brought to life.
- Launch the Next Project: Using the steps above its time to launch the next project and lead it to a successful implementation. inspections, reviews, and testing.

7-3

# Chapter 7: Action Plan

# Goals for Continuing Castroville

The Castro Plan area was an intentionally planned area; it was not designed in an ad-hoc manner, with various entities laying out the underlying structure. The intentionally designed patterns that exist within the Castro Plan have proven to be timeless, lovable, and fiscally productive. The richness and authenticity of the Castroville community were accomplished over time through the incremental development of the Castro Plan. Continuing Castroville is a list of recommendations and projects that are within the existing built environment to help maintain and preserve the Castroville everyone knows and loves.



#### STORMWATER MANAGEMENT

DEVELOP ACTION PLAN FOR STORMWATER IMPROVEMENTS THOUGHOUT CASTROVILLE. FIRST DEFINE FLOW LIMIT POLICY AND PLAN INFRASTRUCTURE FROM THAT POINT.

Investing in this project is crucial for the community and should not be delayed. The approaches outlined in Chapter 5 use existing street networks and resources to create a chain of ponds and stormwater mitigation strategies. These tools can be applied to existing and new streets to protect the existing network's functionality. Additionally, they will ensure that new developments resemble historic Castroville.



#### STREET PLANNING

DEVELOP NEEDS ASSESSMENT OF STREETS NEEDING IMPROVEMENT FOR SPEED MITIGATION, TRAFFIC MANAGEMENT AND, MOBILITY ENHANCEMENT. THEN SYNC ROADWAY IMPROVEMENTS WITH STORMWATER IMPROVEMENTS.

The overlap of needs positioned in Chapter 5 defines the opportunity for combining budget dollars from multiple sources to handle such a critical public asset. In order to properly identify where these solutions could overlap, a street analysis is needed. This analysis should highlight sections needed for repair, speeding or traffic hotspots, and general problem areas. From that analysis, compare the recommended stormwater improvement areas (pg.84) to clarify the overlap of needs and prioritize where investments should go.



#### **DOWNTOWN PLANNING**

UTILIZE THE TIRZ TO FUND ESSENTIAL INFRASTRUCUTRE IMPROVEMENTS, INCENTIVIZE PRIVATE INVESTMENT, AND SUPPORT REDEVELOPMENT PROJECTS THAT ALIGN WITH THE COMMUNITY GOALS AND PLAN.

Castroville's downtown is positioned to be a regional draw for visitors and families, an attractive site for businesses, and a fiscal generator for the city. By improving a number of key assets, organizing the district, and spending effort in recruiting, the city can make the most of such a celebrated part of the city. The Downtown Master Plan outlines in detail both the key elements to success and the steps of implementation.



#### **HIGHWAY 90 DISTRICT**

CONTINUE ONGOING DIALOGUE WITH TXDOT AND INSIST ON DESIGN STUDY OF BOULEVARD APPROACH AS PART OF LARGER SOLUTION.

The community has worked hard to mitigate the negative impacts of Highway 90, and these efforts must continue. This substantial project will require partnerships, significant funding, and a change in philosophy at the DOT level. Chapter 5 outlines a design leveraging innovative transportation tools and integrating the town's historic fabric. This design offers an opportunity for a transformative retrofit that will significantly benefit Castroville.

7-4

# Chapter 7: Action Plan

# Goals for New Castroville

New Castroville can either be designed to support existing Castroville or done in isolation. The community believes it has a say in how the city grows and has selected to plan a new Castroville using the key elements that make up the existing environment. Understanding how to grow Castroville in an orderly manner will help the community develop. Castroville is built on a small block grid, whereas the current patterns use single points of access loaded off of arterial road systems, which has been proven to create problematic traffic.



#### **GROWTH GUIDANCE**

# FOLLOW GROWTH GUIDIANCE MAP AS A STRUCTURE FOR INCOMING DEVELOPMENT.

The Growth Guidance Map and associated text should serve as development agreement and charette conversations. Castroville's City Council and the community alike have made their desire for a better, complete community clear.



#### **CROSS TOWN CONNECTIONS**

#### **IDENTIFY PRIORITY CONNECTIONS AND BEGIN PLANNING**

The sooner safe connections are defined, funded, and built, the sooner the town can grow around these connections. Identified on pg. Forty-six (46) are possible connection points. Community members have made progress in improving the connections between Landmark Inn and the Steinbach House. The city should work to complete these negotiations to serve as an example for other planned connections.



#### SECURE NATURAL FEATURES

THE CITY MUST WORK TO SECURE ITS NATURAL FEATURES AROUND THE RIVER, AND IN THE PLAINS BEFORE IT IS TOO LATE.

To the north and south of the original Castro Plan Area are critical floodplains. A significant investment will be required to purchase upstream land for regional detention, which will manage large volumes of water in a controlled setting before it reaches town. This solution will have long-term benefits by preventing area flooding and managing future storms.

Furthermore, securing land for recreation, trails, and parks as part of incoming development agreements will ensure all citizens of Castroville enjoy the beloved natural features of the area.



#### CARRYING OVER CASTROVILLE

TXDOT HAS STALLED CONVERSATIONS AROUND BOULEVARDING THE INTOWN SECTION OF HIGHWAY 90 UNTIL A BYPASS ACROSS CASTROVILLE IS SETTLED.

This can either mean waiting or urging a change in philosophy. This portion of Highway 90 can provide immediate relief both for local and regional issues. Viewing this as a part of the solution rather than another is a critical difference that will impact the entire scope of solutions.

NORTH OF CASTROVILLE MANAGEMENT

FORM MEDINA RIVER VALLEY COALITION

CITY STORMWATER MANAGEMENT

ADJUSTMENT OF PLAN WITH K-FRIESE

STREET IMPROVEMENT MANAGEMENT

EXISTING STREET TYPE SURVEY

#### **MEDIUM TERM**

#### **LONG TERM**

STUDY OF EXISTING STORMWATER REALITIES

MEDINA RIVER VALLEY
MANAGEMENT MASTER
PLAN

CONSERVATION
EASEMENT WITH
LANDOWNERS

MEDINA VALLEY
DEVELOPMENT
AGREEMENT

ESTABLISH FUNDS
FOR CONSERVATION,
RECREATINOAL
AND STORMWATER
IMPROVEMENTS

CONSTRUCTION OF WATER RETENTION PARK

Identified on page \_\_ of ch. 5 is the future projects of turning City property slated for stormwater management into a detention park. This is both a critical infrastructure project but also recreational asset for the city

STREET AND
STORMWATER DESIGN
BASED ON STREET TYPE

MATCH IMPROVEMENT PHASING SCHEDULE

This coordination should be done through a combined improvement plan that is informed by a Street and Stormwater Design Manual Based on Street Types defined in the Code. The manual will be comprehensive list of options to combine speed mitigation and Low Impact Design for stormwater, as listed in the Comprehensive plan, except matching to assigned street types. These options will be specified to engineered detail to facilitate shovel ready options

**HIGHWAY 90** 

STRIPING PLAN

ROW ASSESMENT AND INVENTORTY

PARIS AND FIORELLA

**HOUSTON SQUARE** 

**CREATE TIRZ PRIORITIES** 

ASSIGN DOWNTOWN
PROJECT MANAGEMENT
TEAM

**PUBLIC WORKS** 

### **MEDIUM TERM**

#### **LONG TERM**

### **FURTHER GUIDANCE**

**ESTABLISH DELEGATION** 

HIGHWAY 90 STRATEGIC PLAN

JOIN TXDOT DESIGN PROCESS

This plan will serve as a community-backed guide in negotiations with state and regional agencies, ensuring that the project aligns with Castroville's long-term vision and enhances the quality of life for its residents.

SYNC IMPROVEMENTS
WITH STREETS
AND STORMWATER
MANAGEMENT PLAN

HOUSTON SQUARE DESIGN

**CITY INITIATE PROJECT** 

PUBLIC WORKS DESIGN
COMPETITION

SELECT MASTER
DEVELOPER



