



# Implementation

*Our Bee Cave 2037 Comprehensive Plan consists of many goals and strategies described in Chapter 3: Plan Elements. These goals and strategies originate from the aspirations of the Vision Statement. Chapter 4: Implementation describes how the City and our partners will carry out the framework of the plan, and make the community's vision a reality.*

*Included in this Chapter are definitions and a companion guide to support the implementation of the plan, an overview of the regularity framework, principles for regional coordination, and a set of protocols for monitoring and updating the plan on a regular basis.*

## ***Terms used in Our Bee Cave 2037***

These planning concepts are used in the Our Bee Cave 2037 and defined here for reference. In addition, key ideas are illustrated graphically and provide a companion guide to the Comprehensive Plan to be used by staff, Planning and Zoning, and Council, and others in explaining and illustrating various recommendations of the plan in Section 4.2.

**Blight:** The visible and physical decline of a property, neighborhood, or city due to an economic downturn, disinvestment, or the cost of maintaining the quality of older structures.

**Character Overlay Areas:** As depicted on the Future Land Use Map, there are several areas delineated in Bee Cave that are intended to provide additional guidelines for the development and redevelopment of each area tailored to the specific context. Each area has a set of primary and secondary land uses, principles for site development and land uses, description of expectations for community facilities and infrastructure, and related zoning districts.

**Central Business District (CBD):** Also referred to as a Downtown or Town Center, Bee Cave’s CBD serves as the primary activity area of the City, where retail, employment, civic, and entertainment land uses and associated economic and social resources and activities are concentrated.

**Complete Streets:** A design approach that allows for safe travel by users of all modes of transportation including walking, biking, driving automobiles, and riding public transportation.

**Conservation Subdivision or Conservation Development:** A development approach to subdivision design that maintains the majority of a site as open space to conserve natural and cultural resources. Typically used in rural areas as an alternative to “traditional subdivision”, the design process begins by delineating primary and secondary conservation areas (sensitive environmental areas) before locating homes and roads. Some communities require that at least 50% of the site is preserved as open space, and require design of a “conventional” vs “conservation” sketch plan for comparison. The result should be that the overall density is the same as it would be in a “traditional” subdivision, with large areas of the site conserved and a cost-effective approach to development.

**Corridor:** The land that lies alongside key transportation routes and serves as a connector between destinations. Sections of a corridor may be devoted mostly to one land use or may include a mix of uses. The Future Land Use Map defines Rural, Suburban, and Urban Corridors.

**Crowdfunding:** The practice of funding a project by raising many small amounts of money from a large number of people, typically via the Internet.

**Floodplain:** Land bordering or in the vicinity of a river or other water body that is subject to flooding, which is often defined by FEMA maps.

**Future Land Use Categories:** Provide general guidance for future development, infrastructure planning, and zoning and serve as a guide for future development or redevelopment.

**Gateways:** Transition points from one area to another or entrances to a neighborhood or district. These points are often developed a key areas for signage, commercial development, and other public realm initiatives.

**Indicators:** A set of measurements or data that provide information about the social, economic, and environmental factors that impact a community's well-being. Indicators can be tracked over time to monitor the implementation of a plan or set of strategies.

**Low Impact Development (LID) / Green Infrastructure:** Often used interchangeably in the region to define structural and non-structural sustainable stormwater management techniques, LID is a comprehensive approach to site planning, design and pollution prevention strategies that create a more economically sustainable and ecologically functional landscape. As such, the LID approach provides many benefits to a community's water resources and overall quality of life (San Marcos Green Infrastructure – LID Practices, 2011).

**Mixed-Use:** Development that integrates compatible residential, commercial, office, institutional, or other uses within the same building or in separate buildings on a project site as a single, unified development.

**Mobility:** The ability of all types of people to move about easily and safely using a variety of forms of transportation (e.g., biking, walking, driving).

**Redevelopment:** Restoring buildings, developing vacant lots, or replacing a building, or parts of a neighborhood to a better condition by rehabilitating existing buildings or constructing new buildings.

**Residential, as a Secondary Use:** When located in generally non-residential area or zone, the residential use may be described as secondary or subordinate to the principal use in a building or zone. Examples include: residential units above retail or office on the ground floor, live-work units, residential as part of a vertical mixed-use building with other non-residential uses.

**Tactical Urbanism / Projects:** Small, inexpensive, sometimes temporary, projects designed to make places more vibrant. (Referenced in the Preliminary Work Plan Appendix).

**Trends:** Describes the general direction in which something is changing or developing over time.

## **Companion Guides**

Urban design principles strive to improve the quality of life, or “livability”, within a community by enhancing the man-made environment and by creating new opportunities for social interaction among residents. Good urban design practices also help to create a legible development pattern that makes the community understandable to residents and visitors alike. They often deal with the sensory response of people to the community’s physical environment: its visual appearance, its aesthetic quality, and its spatial character.

Urban design can be used to bolster people’s sense of well being and civic pride, their awareness of different places within the community, and even their behavior toward one another. The creative application of specific urban design improvements, no matter how large or small they may be, should result in a more aesthetically and functionally stable community which is a happier and healthier place to live, not only in the physical sense, but in the psychological and emotional sense, as well.

Promoting livability also has long lasting financial benefits. Creating places where people want to be encourages reinvestment into the community. This reinvestment in turn helps to keep taxes low because property values tend to increase which lessens the need to raise tax rates. Quality, sustainable development attracts businesses and residents, expanding the tax base. Financial investments promote a sense of ownership of the community.

The Companion Guides found in this section of the Comprehensive Plan integrate urban design considerations into the City’s growth and development processes to create an attractive and recognizable physical environment that complements the functional organization of Bee Cave, and to reinforce a sense of “community” among the people who live here. The intent is to provide guidance for maintaining and strengthening both the City’s image as a community of excellence and leisure, as well as its identity as a small town in spite of its proximity to the expanding City of Austin.

In the simplest terms, creating “livability” means creating places where people want to be, that contribute to interaction and discourse with others, and that are personally fulfilling.



Bee Cave Sculpture Garden (Bee Cave Arts Foundation)

## BEE CAVE AND THE HILL COUNTRY CHARACTER

*The City firmly establishes itself as a progressive community, noted for its scenic Hill Country surroundings complemented by a stable and skilled workforce, vast natural resources, and rich cultural heritage, as well as for its role in the region as a key transportation corridor, all of which enhances the City of Bee Cave's ability to support and manage quality growth while maintaining the integrity and security of a family-oriented, sub-rural or urbi-rural community.*

### *2009 Bee Cave Comprehensive Plan*

While the City of Bee Cave was founded only a few decades ago, settlers came to the area as early as the 1850's seeking a peaceful, self-sufficient Hill Country lifestyle removed from the growing City of Austin. Today, both Bee Cave and its neighbors have become part of a vibrant, growing metropolitan area but still manage to retain the sense of nature, peaceful lifestyle, and small-town feel that defines the Hill Country Character. The City's residents – both old-timers and newcomers – express the rural setting and natural beauty as defining characteristics. However, unlike many of the more distant Hill Country towns, Bee Cave is intrinsically part of a larger metro-area: many residents work in Austin, and the Town Center is a regional destination for shopping and dining. In the 2037 Vision Statement, the City and residents of Bee Cave expressed a desire to retain the distinctive character of the surrounding Hill Country while accommodating new residents, including a balance of commercial and retail development, and fostering community amenities and a high quality of life. Moving forward, the City of Bee Cave should seek to build on this cultural heritage as well as embrace the opportunities that come from its location within a growing metropolitan area.

The Texas “Hill Country Character” is a distinct notion that describes the environment, culture, and lifestyle of the rugged yet fragile area of Central Texas that Bee Cave belongs to. The elements that make up the distinct Hill Country Character can be hard to define, as they are not monumental skyscrapers, mountains or canyons, but together they create a distinct and unique place. A sense of immersion in nature's vastness comes from the views and rolling hills, as well as the historical small size and isolation of the Hill Country's towns and communities.



Bee Cave's original Bohls cabins can be spotted near the entrance to the Spanish Oaks subdivision (Bee Cave Chamber)



Special Events Venue in Bee Cave (J. Beyerly, Flickr CC)

**Nature** is rugged yet fragile, with only a thin layer of topsoil over rocky outcrops of granite and sandstone. The trees and plants that define the Hill Country, are conditioned for the dry climate and extreme variations in temperature. Small creeks that wind through the hills dry up during the summer and come alive during the spring and rainstorms. Bluebonnets and wildflowers sprout up among the prairie grasses and along the sides of roads in March and April.

The **natural character** of Bee Cave can be preserved by:

- Preserving and protecting the ecological health of this area, with an additional emphasis on tree conservation.
- Protecting watershed areas of the City of Bee Cave, especially Little Barton Creek.
- Establishing and maintaining scenic roadways throughout the City of Bee Cave.
- Respecting property rights while protecting the environment, specifically trees, watersheds, view corridors, and wildlife
- Establishing a greenbelt system along the local creeks, and hike and bike trails within large parks and developments.
- Conserving natural areas of vegetation, especially those along flood plains.
- Conserving and respecting areas with scenic views.



Hill Country wildflowers (Jerry and Pat Donaho, Flickr)

The Hill Country’s **culture** can be traced back to the meeting of Spanish settlers, German immigrants, and “Anglo” frontiersmen. The town of Bee Cave much more closely linked with Austin, where early settlers came to establish a quiet, agricultural lifestyle. Buildings and dwellings were modest and mainly constructed from local stone. The **cultural character** of Bee Cave can be preserved by:

- Preserving and protecting sites of historic importance and significance via public and private endeavors (such as the Old Bee Cave Schoolhouse, the Spillman House and cemeteries).
- Use of a variety of building materials seen in the Hill County that complement the landscape and reflect vernacular traditions.
- Maintaining the friendliness and speed of a rural atmosphere with a unique, hometown feeling is of the utmost importance.
- Requiring sufficient architectural modifications to national prototypes in order to define a unique Hill Country look for Bee Cave.
- Ensuring the maintenance of a hometown focus that reflects the desires of the local people.



“Hike it Baby” at Central Park (Sarah Elizabeth Maxwell)

Although the spread-out nature of the older neighborhoods reflects the desire for a calm and peaceful lifestyle, the City lacked a historic main street that anchored many other Hill Country towns and helped create a tight sense of community. Continuing to enhance the Town Center as a center of civic activity can help to strengthen the ‘small town’ feel of Bee Cave and instill a stronger sense of civic pride and involvement among citizens. The **Cultural Character** of Bee Cave can be enhanced by:

- Creating and promoting a stronger sense of community through urban design criteria, reinforcing the City of Bee Cave’s charm and integrity as that of a small town in spite of the big city.
- Maintaining a balance of uses and density that make Bee Cave a place where residents can “decompress from stress”, yet have convenient access to basic necessities and amenities.
- Developing extensive pedestrian linkages throughout the City to provide an alternative to short automobile trips and encourage interaction among residents.



Bee Cave’s library serves as a centrally located meeting place for many community members (Texas State Library and Archives)



Hill Country Galleria storefronts use a mix of muted colors and stone, metal, and stucco materials

## HILL COUNTRY CHARACTER - LOCAL ARCHITECTURAL EXAMPLES

In architectural terms, the Texas Hill Country style has its roots in the German and other European immigrants who settled the area in the 1800s, the local resources that were available to them, the influence of agricultural structures, and the need for affordable construction materials. The region's settlers brought their carpentry and stone mason skills to their homes and other buildings. Homes were also built to protect settlers from the natural elements - the heat, rain, and wind typical to the region.

The locally available white limestone and later brown sandstone were used with the local cedar in construction. This rustic or simple style remains popular in the region and can be seen interpreted in modern construction as well.

Today, Hill Country architecture in a general sense contains identifiable materials. Limestone and wood are used for exterior construction as well as interior ceilings, floors, and cabinets. Steel structures, pipe columns, and seamed metal roofs are distinct components but as Austin architect Jay Hargrave points out in *Modern Austin*, "the original buildings were more visceral, rougher, made of fieldstone and not streamlined into a ranch style layout." He adds, "Modern' Hill Country style takes these elements and does more with them, adding commercial style windows, for instance."

Typical design features include: low pitch metal roofs, rustic to contemporary in character, wooden beams, and regional materials.

Sources: "Hill Country Architectural Style" <http://modernaustin.com/hill-country-architectural-style/> (accessed 8/22/16)

"Hill Country Contemporary" Design Features by Architect Elliot Johnson <http://www.imagesof.net/io2-texasregional.html> (accessed 3/17/16)



Restaurant on Bee Caves Road



Office Building on FM 2244

## HILL COUNTRY CHARACTER - RECOMMENDED MATERIALS + COLORS



Figure 4-1: Recommended Materials and Colors

Flickr images courtesy of: Damian Gadal, Jerry and Pat Donaho, Matt Deturck, Karen, International Sustainable Solutions, and Davebleasdale.

Bee Cave should continue to include within the Zoning Ordinance a list of acceptable materials and materials that require further examination by requiring a Conditional Use Permit, as well as permitted and prohibited colors to reflect the Hill Country atmosphere.

Recommended materials include: limestone, rustic wood, stucco, granite marble, other stone, glass (30% or less of exterior wall), brick, and adobe brick. Material colors should be muted, rustic earth tones to adhere to the Hill Country character. Painted wood, concrete (that is smooth/untextured and unpainted), glass (when over 30% of exterior wall), synthetic materials, and bright or primary colors should be avoided.

## SITE DESIGN - LANDSCAPE SCREENING AND BUILDING SETBACKS

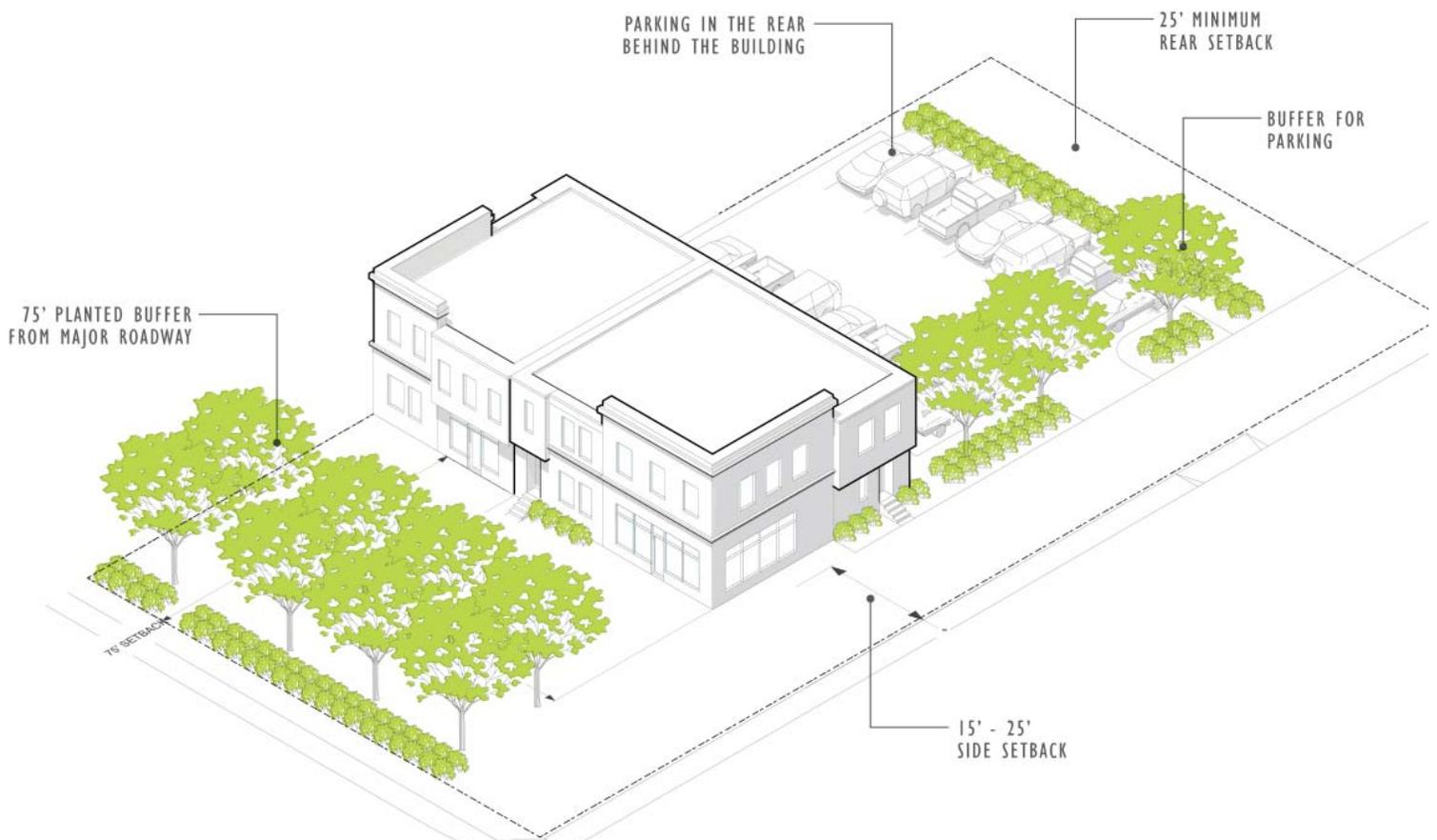


Figure 4-2: Landscape Setbacks / Buffers

Many of Bee Cave's site design standards for non-residential development are intended to provide a positive visual image of the City, from roadways and other locations. Buildings are required to be setback from street, with a minimum 75 foot landscaped buffer.

The majority of related parking and other facilities should be placed either at the side or at the rear of the primary structure and away from the major thoroughfares, thereby ensuring that they are not visible from the major thoroughfares whenever possible. Rear building entrances and loading areas should not face the primary street, and any entrance fronting a street

should be designed so that it does not appear to be a rear building entrance. Landscape buffering elements are required between residential and nonresidential land uses and along all major thoroughfares. The City currently requires all nonresidential uses located along any of the major thoroughfares to implement landscaping elements along the length of any major thoroughfare frontage within the setback area.

## SITE DESIGN - PEDESTRIAN-SCALED ELEMENTS & ARTICULATION OF BUILDING FACADES

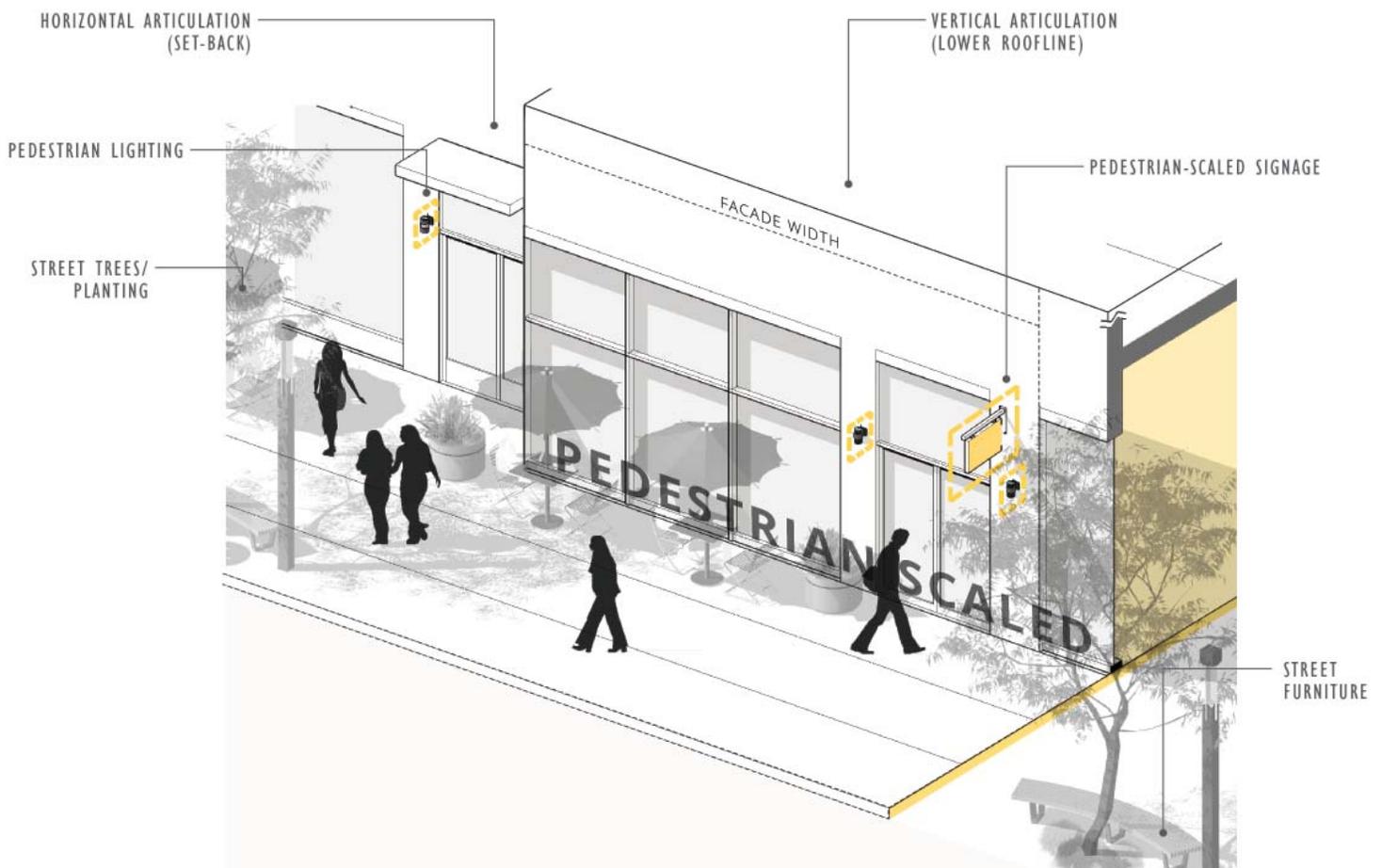


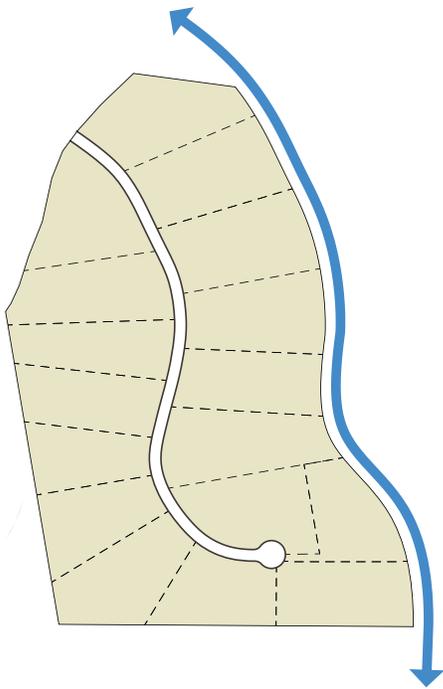
Figure 4-3: Pedestrian-Scaled Elements

Building facades and streetscapes should incorporate pedestrian-scaled elements. The articulation of building facades (breaking the vertical and horizontal planes) ensures the aesthetic value of nonresidential land uses, especially larger scale buildings.

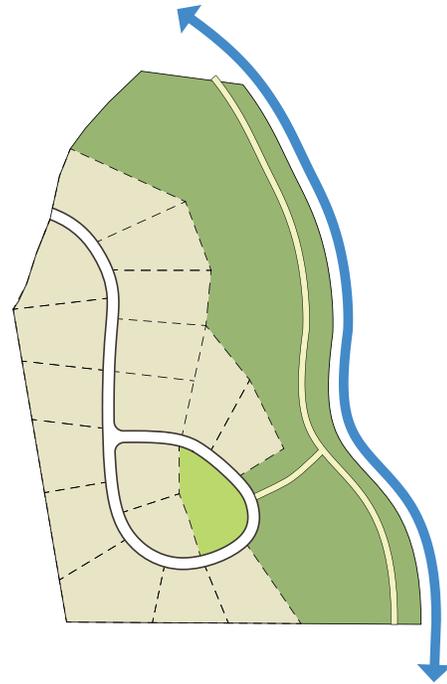
According to the current Zoning Ordinance, buildings with walls longer than 50 feet should have some form of horizontal articulation. Horizontal articulation simply means that elements of the building (e.g., a wall or a column) push out or recede into the facade breaking up the wall plane.

The Zoning Ordinance also requires buildings longer than 50 feet to have some form of vertical articulation for at least 30% of the width of the wall or roofline. Vertical articulation means that elements of the roofline are pushed up or recede into the building. This could be as simple as cornice line for a portion of the building that is taller than the rest of the building or a portion of the building that is an entire story higher. Note that in the drawing above, the blade signage is currently only permitted in the Town Center Zoning District.

**SITE DESIGN - CONSERVATION DEVELOPMENT / DESIGN**



*A 17 acre property developed as a conventional low-density residential subdivision.*



*The same property subdivided using the principles of conservation development creates 6.5 ac of open space, including a creekside trail, with the same overall density.*

*Figure 4-4: Traditional (left) vs Conservation Subdivision Design (right)*

Conservation development is a strategy to preserve natural habitats and provide common green space as larger parcels are redeveloped or subdivided. The diagrams above show how a large lot might be subdivided into 17 lots while keeping the overall density at approximately 1 dwelling unit per acre.

In the conservation development diagram (left) half-acre lots are allowed in an area that would otherwise require larger one-acre lots, with the condition that the remainder of the area be dedicated as contiguous preservation land and a small neighborhood park. This strategy should be especially encouraged along creeks, planned trails, and other ecologically sensitive or strategic locations.

The City of Bee Cave should encourage conservation development in appropriate cases or locations by making the case for a better and more cost-efficient type of development, allowing a small density bonus, or reducing permit fees. The “Conservation Development in Texas” white paper published by the Lady Bird Johnson Wildflower Center lays out a good description of potential benefits and provides model ordinance language for community use. ([http://www.wildflower.org/consdev/cd\\_whitepaper.pdf](http://www.wildflower.org/consdev/cd_whitepaper.pdf))

**LOW IMPACT DESIGN / GREEN INFRASTRUCTURE - BEST MANAGEMENT PRACTICES (BMPs)**



Figure 4-5: BMP Examples

Bee Cave has very high standards for addressing stormwater management and reducing runoff on site. The Comprehensive Plan recommends a combination of BMPs in green stormwater infrastructure to reduce and mitigate stormwater runoff. The diagram above illustrates a variety of treatment options that can be used in combination to provide stormwater retention, attractive landscape and open space amenities, and building and parking lot cooling / energy savings. BMPs may include stormwater basins, stormwater planters, green roofs, rain gardens, rain barrels, flow-through planters, pervious pavers, and other similar interventions. Public / community sites provide an opportunity to showcase BMPs and educate the development and general public about potential benefits.

## COMPLETE STREETS AND MULTI-USE TRAILS

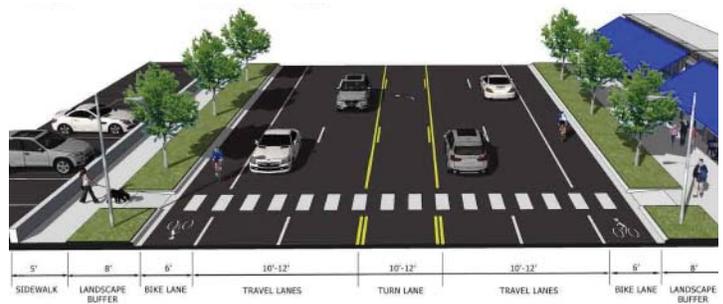
The intent of Complete Streets design is to allow safe travel for all users. By adopting a Complete Streets policy, communities can direct their elected officials, planners, engineers, and developers to regularly design and use the right of way to encourage safe access for everyone - from pedestrians to bicyclists to motorists.

Complete Streets principles are woven into the City’s Hike and Bike Connectivity Plan, and includes a mix of off-street and on-street connections. As defined in the plan, the primary purpose of Bee Cave’s trail system is to provide a safe, convenient, and functional transportation link across the City for pedestrians and bicyclists who seek to utilize nonmotorized modes of transportation to meet their regular travel needs as well as for recreational purposes all while maintaining the natural beauty of the City of Bee Cave.

There is no “one-size fits all” design for complete streets, but some basic elements to consider include: wide sidewalks, separated bike lanes, narrowed traffic lanes, center turn lanes or medians, and street trees. Other elements may include parking for bicycles, street furniture, prominent crosswalks, and pedestrian timed intersections.

There are many benefits associated with Complete Street design, including: reduced crashes through safety improvements, encouraging walking and biking, and allowing children an option to walk to school or other activities. Another benefit of implementing Complete Street design elements as roadways are improved are the potential benefits to **air quality and community health**:

- Providing interconnectedness of streets between neighborhoods and retail, recreation and services to minimize trip length and congestion,
- Providing alternative circulation systems such as hike/bike trails; and
- Use of low maintenance grass and ground covers to reduce the need for mowing.



Typical Bike Lane along two way road with a mid-block crossing (Source: Bee Cave Hike and Bike Connectivity Plan)



Example of a complete street design with center turn lane, bike lanes, and sidewalks in a residential neighborhood (Charlotte, NJ; Source: Charmeck.org)

## CREATING A SENSE OF PLACE

Often thought of as mere beautification of a community, “community image” elements contribute to a much more complex process of utilizing a community’s natural and man-made features to establish a distinct visual image and identity -- a “sense of place” -- for the community. A recognizable image/identity is not only important to the inhabitants of a particular community, it is also important to those who live within surrounding areas and to visitors. It helps to provide orientation -- a point of reference for people moving into, around within, and out of a community.



The Old Bee Cave School House is an example of a building that creates a strong community sense of place. Art classes are held at the facility.

## COMMUNITY GATEWAYS

The “sameness” that is often inherent to communities within a particular geographic area makes it appear that each one is just like its neighbors. For example, the visual appearance of the City to a traveler along SH 71, R.M. 620, or F.M. 2244 may be the same, or very similar, to the appearance of any other community.

Gateways are significant elements that can help residents and visitors to determine the geographical boundaries of a community. Also known as entryways or portals, gateways can provide a strong sense of arrival to, as well as a sense of departure from, the community. They are the first thing visitors see when they come into a community, and the last impression visitors have when leaving, and they can provide a strong indication of a community’s image if they are prominent enough.

## PRESERVING SCENIC VIEWS

Preservation of the rural and Hill Country character, as well as views of nature preserves are priorities of the Comprehensive Plan. Tools to protect views and the open space character that exist in Bee Cave include the use of existing building height restrictions, tree preservation and landscape screening, and building setbacks. Any increase to the current building height limits should be on a case by case basis and take the surrounding topography and elevation from the roadway into consideration.

In addition, the City should discourage building placement at the highest points of elevation on a site with the goal of protecting the integrity of ridgelines that are found in the Hill Country.



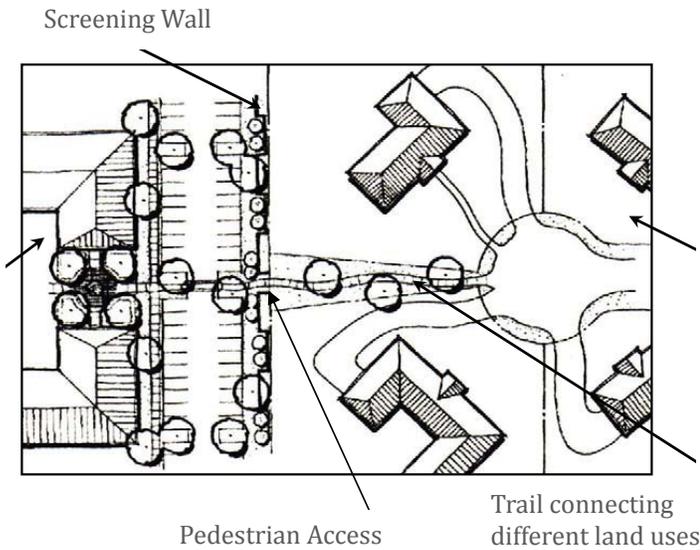
Wide open space view in Bee Cave

Many communities across the country have adopted laws to protect historic and scenic viewsheds. In one example, the small historic town of Georgetown, Colorado (pop 1,028) employs a Design Review Committee that must issue a Certificate of Appropriateness prior to permitting. Georgetown uses design guidelines and character areas (published in a guidebook) to assist developers and architects understand the Design Review Committee’s criteria for recommendation.

Source: <http://www.town.georgetown.co.us/drc/old%20DRC/drcbk1ch1.html>

## PEDESTRIAN CIRCULATION

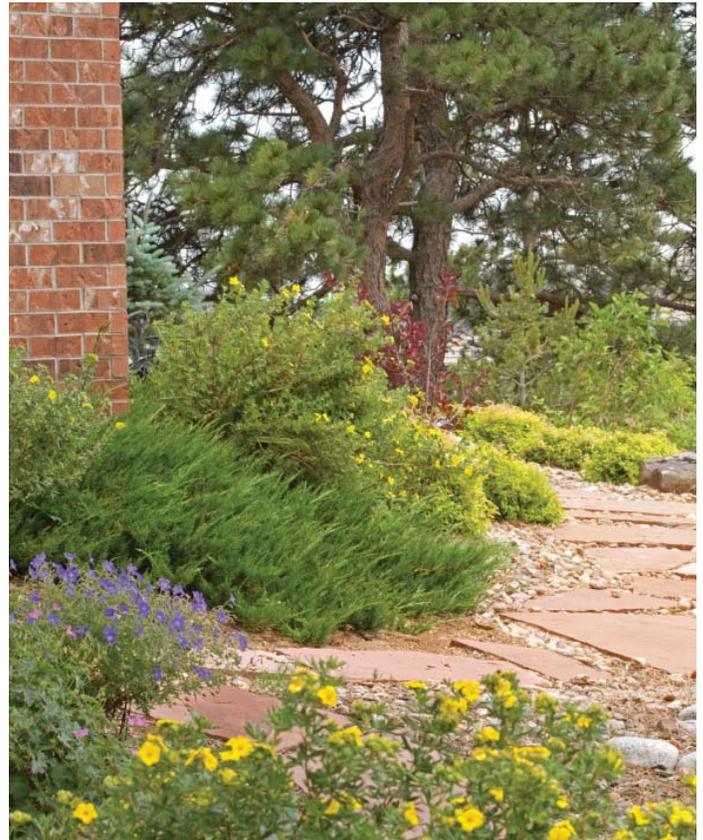
Both the Comprehensive Plan and the Hike and Bike Connectivity Plan emphasize the importance of pedestrian access, through sidewalks and trails, throughout Bee Cave. Pedestrian connectivity between varying land uses is encouraged, including residential and commercial uses.



Pedestrian Trail Access between Residential and Non-Residential Land Uses

## LANDSCAPE AND TREE PRESERVATION

The City's Landscape Requirements are intended to add value to property and increase pervious areas that help manage stormwater runoff. Preservation of existing trees in areas that are not used for buildings, parking, and walkways is required to be retained in its natural state to the extent possible. The City's Zoning Ordinance describes the requirement for tree preservation and maintenance in all new development. Xeriscape Landscaping, which minimizes water consumption to reduce the amount of watering and irrigation often necessary for common landscaping materials and discourages the use of ground cover that would require a large amount of watering and irrigation (i.e. Saint Augustine grass) is preferred.



Attractive Xeriscaping in Texas (Brazos River Authority)

## **SCREENING OF REFUSE CONTAINERS, LOADING AREAS, AND OUTSIDE STORAGE**

The City should continue to require screening to maintain and enhance the appearance of Bee Cave from public streets and neighboring properties. Loading, service, and outside storage areas should be screened and should not face onto or be visible from a major or minor thoroughfare, wherever possible. Loading docks and service areas should be located at the rear of the building. When loading docks and/or outside storage areas are located within a side yard, they should be screened from adjacent properties and public rights-of-way by using masonry walls in conjunction with landscaping materials.



Example of refuse container screening

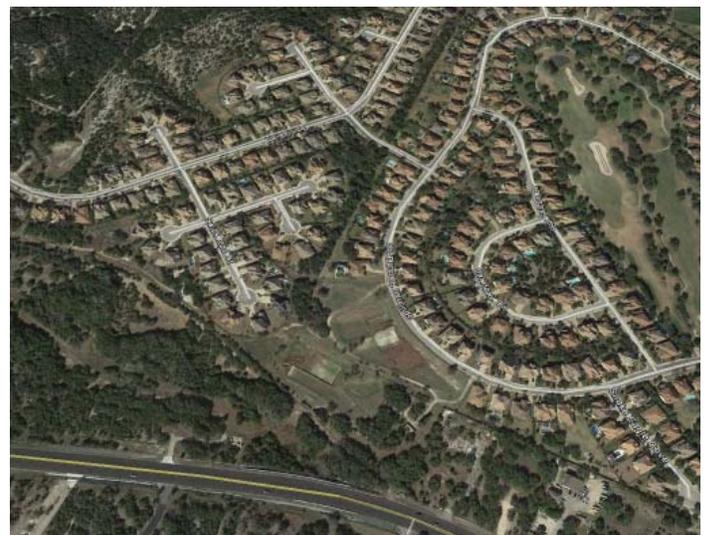
## **DESIRABLE NEIGHBORHOODS & RETAIL AREAS**

This section discusses recommendations on how to create desirable neighborhoods, or places where people want to live – both existing and future residents. Many of the recommendations could also apply to nonresidential development.

### **RESIDENTIAL NEIGHBORHOOD DESIGN**

The design and character of residential neighborhoods is an important component of the community's overall urban design. As more property is developed into residential subdivisions, such design factors as the provision of open space, adjacency issues, screening, and landscaping, as well as the design layout of the subdivision itself, will be critical to the perception of the City's residential neighborhoods.

Older residential neighborhoods will need continued maintenance in such areas as streets and utility service, while newer residential subdivisions offer the potential of embracing and including positive design elements that will add value, both aesthetic and monetary, to the homes constructed within them. The vast majority of the existing homes and residential areas in the City of Bee Cave are characterized by high-quality development. The enhancement and maintenance of these high-quality areas are of critical importance.



Example of Bee Cave residential neighborhood with a mix of curvilinear streets and cul-de-sacs

The quality and livability of the City’s neighborhoods are integral components of the overall character. The key to a successful neighborhood is creating a sustainable environment where the ongoing investment in property is supported by public investment in parks and greenbelt areas; opportunities for social interaction; accessibility for pedestrians, bicyclists and vehicles; and distinctive characteristics which give an area a unique identity. Ideally neighborhoods in Bee Cave should provide the following :

- Opportunities for social interaction;
- Careful and strategic placement of retail uses and other appropriate nonresidential uses within the neighborhood area;
- Continued investment in public and private property to stabilize property values;
- Good condition of public facilities and infrastructure serving the area;
- A sense of community and belonging among residents;
- Access to adjacent neighborhoods and non-residential areas; and
- Access to amenities such as parks, trails, community use space, and usable open space.

Bee Cave has well-defined subdivision design standards in place. As part of the City’s updates to its zoning and subdivision codes, the updates should include graphics to communicate and illustrate the intended goals of the design standards for streets and residential subdivision design.

### **AESTHETICALLY-PLEASING & PEDESTRIAN-FRIENDLY STREETS (COMPLETE STREETS)**

An important aspect of a desirable neighborhood is the streetscape and the level to which it accommodates pedestrian activity. The streets should not diverge from the “urban fabric” of the neighborhood, but rather complement the surroundings. The following are recommendations to help promote aesthetically-pleasing and pedestrian-friendly streets:

- Maximize the visibility of architecturally distinctive cultural and civic facilities and open space area corridors;
- Maximize visibility of open space areas by locating parks in prominent locations, and by widening open space corridors such as flood plains and trails where they are crossed by roadways;
- Where streets terminate or “T” into another roadway, ensure that there is a prominent feature or building at that point. Good examples of prominent features include such things as parks, clock towers, public art, and architecturally distinctive civic, cultural or nonresidential structures;
- Design streets so that they gently curve, to provide oblique views of buildings and streetscape, but still maintain a general grid pattern to maintain a sense of orientation;
- Ensure that sidewalks are at least 5-10 feet wide (the minimum dimension that two people can comfortably pass each other) and that canopy trees are located between the sidewalk and curb to create shade and a feeling of safety for pedestrians. Consider multi-use trails instead of sidewalks where appropriate.

## EXISTING NEIGHBORHOOD IMPROVEMENTS

Bee Cave has many established and recently developed neighborhoods. The City should continue to work with neighborhood associations and groups on issues related to traffic calming, sidewalks and trails, parks, and other related topics. One possibility is for the City to work with neighborhood associations and property owners to retrofit neighborhoods with canopy trees to slow traffic and to shade sidewalks and street paving, when physically and financially feasible. Another potential approach is to include bike “sharrows” and “share the road” signage to encourage safe bicycle transportation.

The City may find it useful to document the conditions of neighborhoods as they age to identify deteriorating areas and to prioritize such areas for improvements. Facts that should be documented include but are not limited to, code violations, public safety reports (e.g., police and fire), and ownership/rental percentages.



Landscaped curb extension in a residential neighborhood helps to slow traffic and improve neighborhood aesthetics (Richard Drdul, Flickr Creative Commons)

## LOW IMPACT DESIGN AND ENVIRONMENTAL QUALITY

There are many opportunities, discussed throughout the plan, in which the City can encourage green practices in the development process. Bee Cave can encourage development that is sensitive to the environment through the following guidelines:

**Site Planning.** Utilize environmentally sound site layout and density that will minimize the need for continuously high levels of energy consumption. This may include such things as:

- Clustered development (i.e., conservation subdivision design, see above) that preserves open space and minimizes construction and maintenance of roads and utilities, and
- Higher density developments in mixed use centers that reduces utility distribution, roads and vehicle trips.



Example of a mixed use development with a connected greenspace network and transition to low density residential (Lafayette, LA, WRT)

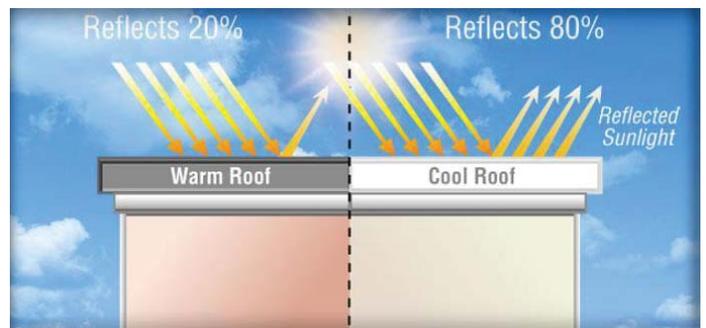
**Water Quality.** Preserve open space throughout developments to allow ground absorption of water and the natural filtering and cleaning effect of soil and plant material to improve ground and stream water quality. In addition, utilize native and/or drought-tolerant species with organic mulch for landscaping to minimize fertilizers and excessive water use.



Stormwater runoff from a parking lot is delivered to a series of rain gardens to reduce runoff (CNT)

**Heat Island Effect.** Trees and vegetation provide shade that lowers temperatures by 20-45 degrees on the surface and can be extremely useful as a mitigation strategy when planted in locations around buildings or to shade pavement in parking lots and streets. According to the EPA, researchers have found that planting deciduous trees and vines to the west is typically most effective for cooling a building.

Cool roofs - with a high solar reflectance value - help roofs absorb less heat and stay up to 50-60 degrees cooler than conventional materials in peak summer months. Benefits include reduced energy use and cost, reduced emissions, and improved comfort. Cool roofing products are used regularly by building owners and contractors on commercial and residential buildings across the country.



Cool roof materials can reflect much more sunlight and heat than traditional roof materials (Heat Island Group, Lawrence National Lab)

**Lighting and Dark Skies.** There is a growing body of evidence regarding the negative impacts of light pollution and urban sky glow (brightening of the night sky due to man-made lighting). They include increasing energy consumption, disruption of wildlife, harming human health, and negative impacts on crime and safety.

The City should continue to monitor the impact of its lighting and glare standards to determine if lighting standards need to be updated to reduce urban light pollution. The current standards require fixtures be fully shielded and pointed downward and most outdoor fixtures must be turned off between the hours of 8:30 p.m. and sunrise. The International Dark Sky Alliance (IDA) has a certification process for cities that wish to be designated as [“Dark Sky” places](#), which is something the plan discusses and the City could consider pursuing. The IDA also certifies light fixtures as “IDA Dark Sky Approved” through a third party certification process. The City could consider revising the lighting and glare standards to require the use of IDA approved lighting fixtures in all multi-family and non-residential development projects.



Urban light pollution makes it difficult to see a starry sky (James Liu, Flickr Creative Commons)

## ***Regulatory Framework & Decision Making***

With the publication and adoption of this Comprehensive Plan document, the City of Bee Cave has taken an important step in continuing to shape the future of the community. The Plan will provide an important tool for City staff and civic leaders to use in making sound planning decisions regarding the long-term growth and development of the community. The various elements of the Plan are based upon realistic growth objectives and goals for the City of Bee Cave which resulted from a community planning process involving citizens, City staff, elected and appointed officials, the development community, regional agencies and utilities, and other stakeholders.

The current physical layout of the City is a product of previous efforts put forth by many diverse individuals and groups. In the future, each subdivision that is platted, each home that is built, each new school, church or shopping center represents an addition to the City's physical form. The composite of all such efforts and facilities creates the community as it is seen and experienced by its citizens, business owners, and visitors. If planning is to be effective, it must guide each individual decision, whether it is that of a private homeowner or of the entire community. The City, in its daily decisions pertaining to whether to surface a street, to approve a subdivision, to amend a zoning ordinance, to enforce the building or other codes or to construct a new trail, should always refer to the basic principles and goals outlined within the Comprehensive Plan. The private builder or investor, likewise, should recognize the broad concepts and policies of the Plan so that their efforts become part of a meaningful whole in planning the community. Those investments are, over the years, reinforced and enhanced by the City's form, development pattern and economic vitality.

The City's primary tools for implementing the Comprehensive Plan are the City of Bee Cave's Zoning Code, Subdivision Ordinance, and Capital Improvements Plan (CIP). Following the adoption of the Comprehensive Plan, the City anticipates updating its zoning and subdivision codes to ensure consistency with the plan. As part of the update, Bee Cave will explore and weigh the potential for a Unified Development Code (UDC), as one option, to help streamline and integrate the City's development ordinances.

APA's "The Sensibility of Unified Development Codes" (Meck, 2006) characterizes the benefits of UDCs to include:

- Weaving regulations together in one place to allow easier linkages to the comprehensive plan policies;
- Building on the strengths of the best planned development regulations by blending the use / intensity factors with design review;
- Eliminating distinctions between subdivisions and developments that are often arbitrary ; and
- Consolidating various development regulations into a single document to help improve transparency and potentially streamline the ease of administration and understanding of the code.

City staff, the Planning and Zoning Commission, and City Council can use the following principles to guide the process of updating codes, reviewing development requests, and investing in capital projects and operating budgets:

**1) Bee Cave's land development ordinances should be consistent with the Our Bee Cave 2037 vision, goals, and strategies.** Any existing inconsistencies should be identified and addressed through the code update process that will follow the adoption of the Comprehensive Plan. Potential areas to consider include: new or combined zoning districts that are better aligned with the Future Land Use Map, a revised and simplified list of permitted or prohibited uses, a process for encouraging redevelopment of incompatible and nonconforming buildings, and incentives for pedestrian-scale design in targeted areas of the City.

**2) Rezoning requests and proposed development site plans should be consistent with Our Bee Cave 2037 and the Future Land Use Map.** While the process to update the City's codes will take some time to initiate, City Staff, the Planning and Zoning Commission, and City Council can use the Comprehensive Plan as a guide for incrementally implementing the long-range vision for Bee Cave that is described in the plan. Applicants requesting zoning changes should demonstrate that a proposed use is consistent with the intent of the Future Land Use Map (FLUM). In the case where proposed development clearly conflicts with the Comprehensive

The future quality of life within the City of Bee Cave and the environment of the community will be substantially influenced by the manner in which plan recommendations are administered and maintained. The plan should never be considered a finished product, but rather a broad guide for community growth and development that is always evolving and changing in scope.

Plan, an approval should not be granted unless the FLUM is amended.

**3) Our Bee Cave 2037 is a guide to direct how the City of Bee Cave invests money in capital improvements and annual operating budgets.** In addition to considering the Comprehensive Plan in other specific plans and the update to development codes, the City should consider the Comprehensive Plan in prioritizing capital improvements and department budgets. The effectiveness of Our Bee Cave 2037 relies in large extent on how regularly departments and City Council consider the plan in their planning, funding, and decision making processes.

The Comprehensive Plan makes recommendations on the various public improvements that will be needed to accommodate growth and development envisioned for the City over the next 20 years or more. Many of the changes involve improvements that will be financed by future improvement programs. As the City continues to grow and change, it is desirable to invest regularly in the physical maintenance and enhancement of the City of Bee Cave rather than to undertake large improvement-type programs at longer time intervals. A relatively modest expenditure on a regular basis in accordance with Plan recommendations will produce a far greater return to the community, than trying to keep up with deferred maintenance and infrastructure needs.

As part of the annual work plan development, the City should implement and continue to maintain / update a Capital Improvements Program (CIP) showing a recommended, generalized plan for capital facilities within City of Bee Cave. The CIP should also identify priorities and the approximate cost of improvements over a specific period of time. Capital improvements

programming should be viewed as a continuation of the ongoing comprehensive planning process.

## *Regional Coordination*

The majority of the goals, strategies, and actions included in Our Bee Cave 2037 are locally focused and fall under the purview of City Council Members, City Commissions, City staff, and local partners. However, Bee Cave does not operate in a vacuum and depends on regional partnerships to implement the community's vision for the future. As part of the first-year work plan and in subsequent years, the City should participate in regular proactive programs to coordinate with CAMPO, CARTS, TxDOT, CAPCOG, Travis County, regional utilities and the LTISD to promote transportation and roadway planning and improvements, sound environmental planning and improvements, and long-range planning that benefits the region.

## **SURROUNDING MUNICIPALITIES AND REGIONAL SERVICE PROVIDERS**

There are areas where the City and its neighboring communities can seek to improve regional planning and share resources. Potential areas where services could be further coordinated or shared include parks and recreation, public safety and emergency services, transportation, water and sewer services, water quality and conservation, and long-range regional planning. Recreation and trail network planning is another area where Bee Cave could work with its neighbors to implement a connected regional network.

In addition, the City could consider sharing the cost of staff training (e.g., workshops, tools) and data collection as one potential cost-sharing tool that could be pursued. Many communities seek to share services to share the cost of providing services and reduce duplication and more efficiently serve residents.

As stated previously, the City should engage in regular communication with the large conservation owners in the region, including City of Austin Water Quality Protection, City of Austin Wildlands Conservation District and Travis County, the Nature Conservancy, and the Shield Ranch Conservation Area. Coordination will assist with the City's policy of the existing conservation areas remaining as undeveloped, as well as the potential

for additional conservation of land or expanded recreation opportunities.

Bee Cave should continue to coordinate regularly with the region's service providers including the Lake Travis ISD, Lake Travis Fire and Rescue, West Travis County Public Utility Agency (WTCPUA), the West Travis County Control and Improvement District (WCID) 17, Austin Energy and the Pedernales Electric Cooperative (PEC).

### **CAMPO (CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION)**

CAMPO is the MPO (Metropolitan Planning Organization) for Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties. As part of Travis County, Bee Cave takes part in CAMPO's regional planning initiatives. As the MPO for the region, CAMPO is responsible for completing the regional transportation plan to guide planning for the six county regions. CAMPO's 2040 Regional Transportation Plan, adopted in 2015, aims to balance strategies for operating, managing, maintaining, and financing the regional transportation system.

CAMPO is governed by its Transportation Policy Board (TPB) which is composed of state, regional, and local officials. The two main products of CAMPO are the Regional Transportation Plan and the short-range plan, the Transportation Improvement Program (TIP). The Regional Transportation Plan sets the long-term vision for transportation improvements in the Capital Area region. The four-year TIP serves to prioritize those improvements and set more specific timelines for their implementation. Both plans are regularly reviewed and updated (Regional Transportation Plan every five years; TIP every two years).

### **CAPCOG (CAPITAL AREA COUNCIL OF GOVERNMENTS)**

The Capital Area Council of Governments (CAPCOG) is a voluntary association of more than 90 cities, counties and special districts in Central Texas, located in Austin. CAPCOG is a member of the Texas Association of Regional Councils, and serves as an advocate for priorities of regional significance, coordinator, and service provider. Bee Cave is a member of CAPCOG. Some of the regional programs include an Air Quality program to reduce

ground-level ozone pollution, an open forum for data exchange, and cost-sharing and training.

### **CARTS**

The CARTS District is a rural/urban transit district organized under Chapter 458 of the Texas Transportation Code as a political subdivision of the state and an entity responsible for transit services in a 7,200 square mile nine-county area surrounding Austin. The District includes the non-urbanized areas of Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Travis and Williamson counties, and the San Marcos urbanized area. As the population in the once rural areas of the region has expanded, the role of the CARTS District has evolved to integrate its transit services and planning with its metropolitan transit counterpart, Capital Metro, including opening a jointly-managed Mobility Management Office, and through interlocal agreement providing blended transit services region-wide to establish a seamless interface between the two statutory transit jurisdictions.

### ***Monitoring and Updating the Plan***

Changes in Bee Cave's socioeconomic climate and in development trends, which were not anticipated during the preparation of Our Bee Cave 2037, may occur from time to time. In addition, changes to the City Limits and ETJ may require additional study, and potentially require amendments / updates the Comprehensive Plan.

Elements of the community that were treated in terms of a general relationship to the overall area may, in the future, require more specific and detailed attention through small area plans or specific area plans. As a City, Bee Cave has changed and evolved quickly over time. Planning for the community's future should be an ongoing process, and the Comprehensive Plan should be considered as a dynamic tool that can be modified and periodically updated to keep it in tune with changing conditions and trends.

The full benefits of a comprehensive citywide plan can only be realized by maintaining it as a vital, up-to-date document. As changes occur and new facets of the community become apparent, the Plan should

be revised rather than ignored. By such action, the Plan will remain current and effective in meeting the community's decision-making needs regarding growth and development.

Our Bee Cave 2037 is intended to be a dynamic planning document -- one that responds to changing needs and conditions. Plan amendments should not be made without thorough analysis of immediate needs, as well as consideration for long-term effects of amendments to the Plan. The City Council and other City officials should consider each proposed amendment carefully to determine whether or not it is consistent with the Plan's vision, goals and strategies, and whether it will be beneficial for the long-term health and vitality of the City of Bee Cave.

### **ANNUAL REVIEW AND REPORTING**

At approximately one-year intervals, the City should undertake a periodic review of the Comprehensive Plan with respect to current conditions and trends. Such ongoing, scheduled reevaluations will provide a basis for adjusting the annual work plan, capital expenditures, and City priorities, and will reveal changes and additions which should be made to the Plan in order to keep it current and applicable long-term.

The City should devote one annual joint Planning and Zoning Commission and City Council meeting to reviewing the status and continued applicability of the plan in light of current conditions, and to prepare a report on these findings to the City Council. City staff should submit its comments and findings to the Council at least 60 days prior to the scheduled annual review of the Comprehensive Plan. Any items that appear to need specific attention should be examined in more detail, and changes and/or additions should be made accordingly. By such periodic reevaluations, the plan will remain functional, and will continue to give civic leaders effective guidance in decision-making.

The City should seek out opportunities to continue to involve a Citizens Advisory Committee or Working Group in implementation of the plan, through special projects and through the process of compiling annual reports and regular updates.

**In addition to regular annual reviews, the Comprehensive Plan should undergo a complete, more thorough review and update every five years.** Every five years, staff will submit a Five-Year Evaluation Report to the Planning and Zoning Commission that includes the information typically included in an annual report with the addition of updated performance metrics from the last five-year period and any recommended major updates to Bee Cave 2037. **Approximately, every 10 years, the City should undertake a complete update to the Comprehensive Plan.**

### **Annual reviews and five-year reviews of the plan should include consideration of the following:**

-  The City's progress and successes in implementing the plan in the past year;
-  Proposed updates and next year priorities for the Annual Work Plan;
-  Changes in conditions and trends that form the basis of the plan;
-  Changes in indicators measuring Bee Cave's progress toward implementation of the comprehensive plan;
-  Defining an ongoing role for the Citizens Advisory Committee or other vehicle for continuous citizen participation and dialogue with the community;
-  Any changes in State laws; and
-  Update performance metrics with data from the last five-year period or as data becomes available (five-year only).

The five- year review and updating process should include discussion and feedback from a citizen advisory committee, encouraging citizen input from the beginning of the process. As City staff and an advisory committee identify specific areas to update, input should be sought from various groups, including property owners, neighborhood groups, civic leaders, developers, business owners, and other citizens and individuals as needed.

## **TRACKING PROGRESS WITH INDICATORS**

As noted above, the City should define and use numeric indicators in plan implementation and monitoring to measure if the plan's goals and strategies are being met over time. Indicators are typically GIS based and may include:

- Demographic snapshot (10-year census, three and five-year ACS survey)
- Population and housing counts (using Census, LUS projections, annual certificate of occupancy data)
- Housing diversity (single-family, attached single-family, multi-family, etc.)
- Impervious coverage ratio (by defined planning area, citywide, ETJ)
- Non-residential uses by category (% mixed-use, % office, % entertainment / recreation)
- Development applications by land use type
- Tourism data (e.g., number of annual events, attendance, visitor spending)
- Acres or percent of land in conservation areas
- Acres or percent of land classified as parkland
- Miles of sidewalk / trails constructed toward meeting the goals of the hike and bike network
- Grant funding / public private partnership investments

