BONITA BEACH ROAD VISIONING STUDY

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City of Bonita Springs
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This report is to summarize the thought processes and considerations that informed the design concepts for Bonita Beach Road (BBR) between Tower Drive to the east and the west end curve at the Gulf of Mexico. The design concepts for the vision were developed during two public workshops that occurred from January 25th to the 29th and February 22nd to the 26th, 2016. During this open process, there were many opportunities for the public, stakeholders, Lee and Collier Counties, special interest groups, property owners, various agencies, and City staff to provide input and feedback. The process culminated in a final public meeting during which there was a broad consensus to move forward with the design direction in the vision.

INTRODUCTION

BBR, is classified as an arterial street and has many roles, including goods movement and evacuation. Its roles also include providing access to neighborhoods, businesses, the beaches, Interstate 75, and the downtown of Bonita Springs. The street accommodates pedestrians, cyclists, transit users, and motorists. The street also provides a first impression of the City of Bonita Springs. Its design is an important part of the identity of the city and surrounding counties, speaks to the values of the broader community in its look, roles, and operations. The vision was developed to identify and reflect the values of a broad range of stakeholders within Collier County, Lee County, and the City of Bonita Springs.

Past policy, design, and funding practices have allocated most of the public right-of-way and design attention to accommodating automobiles so much so that the street that does not comfortably accommodate cycling and walking along it or across it, diminishing the overall community. The vision is intended to create a complete street to the greatest extent feasible recognizing that the community also does not wish to reduce the street's car-carrying capacity. The vision includes increasing the streets capacity for social and economic exchange, creating identity, becoming a desirable address, provide active transportation while ensuring safe and effective evacuation during emergencies, and contributing to the sense of place.

Opportunity

The portion of BBR, within the study area, is roughly 8.5-mile long and comprised of two-lane to six-lane streets. It extends from the Gulf of Mexico on the western end to Tower Drive, just to the east of I-75. The arterial street is typically composed of four motor vehicle travel lanes. It also has multiple turn lanes, a planted median, numerous driveways, sidewalks directly adjacent to the travel lanes, intermittent five-foot bicycle lanes, overhead utility wires, and a lack of street trees along the edges. It is the main connection from I-75 to the neighborhoods adjacent to the Gulf of Mexico.

The current design encourages high speeds and aggressive driver behavior and simultaneously discourages walking and cycling. The current design is a physical and psychological barrier in the City. It is difficult to cross

Exisitng condition photos of Bonita Beach Road. Poor pedestrian and bicycle conditions has engineered bad behaviors and made the road dangerous for all modes of transportation.

by pedestrians. It also has pockets of congestion during the tourist season. The street provides suburban/ strip style investment and development along its length. There are several potential redevelopment nodes, but the current condition of the street limits the interest in development in these areas to more suburban forms of development. Because this corridor is such a vital link to the beach, downtown, neighborhoods, and other streets and is central to a successful tourist and retirement area, there is great opportunity to redesign the street, address the existing problems, and foster better outcomes in the future economically, socially, recreational, safety-wise, functionally, and aesthetically.

What is More Important; Analysis or Vision?

The answer is that both are important. However, the better questions are:

i) Where are the analyses that support the vision?

ii) What are the appropriate types of analyses?

Over the last few decades, conventional transportation analyses have driven transportation planning in the area. The measures of effectiveness have been predominantly automobile-oriented. Pursuing higher levels-of-service and less delay (i.e., higher speeds) for motorists, via road widening, has been the predominant transportation planning strategy. After decades of trying this approach, that strategy has failed to deliver acceptable results for the motorists and has delivered even worse results for people who walk, cycle, or use public transit. That strategy has also failed in terms of energy consumption, automobile-dependent land use responses, community health, and far more. There is no evidence or reason to believe that continuing with the same practices would suddenly deliver better results. Consequently, the City is leading a different approach by envisioning the outcomes that the broad community wants. Then, to achieve that vision, the City is doing the planning, design work, coordination, land use work, etc. So when it comes to analyses, the City can ensure that the right analyses are done. In other words, as parts of the vision are being considered, they will not be tested solely against measures of effectiveness that have produced unsustainable and poor outcomes (i.e., peak hour LOS, etc.) A more complete set of analyses and metrics should be used that are reflective of the values upon which the vision is based.

Timeline

There is no particular timeline for the fruition of the vision. The vision is intended to be a means to help the area move forward in a coordinated way with the various agencies, property owners, jurisdictions, and other stakeholders towards a brighter future and more valuable place. This study identifies the trajectory, starting with the first series of priorities, identifying key potential projects, development, and other mechanism of change that are aligned with the vision.

Policy and Land Use

The vision takes land use and growth-related policies into consideration and provides a framework for better coordination. This is particularly important in the nodes where mixed use development, walkability, street network, and place-making are desired.

Coordination

Invitations to participate in the visioning work, conducted earlier this year, were broadly distributed among jurisdictions, agencies, stakeholders groups, businesses, and the public. The visioning office hours, one-on-one meetings, and community workshops were well attended. Thus, the vision is reflective of the broader community and their desires for the street and area. Recognizing that the vision affects others, just as neighboring jurisdictions' actions and traffic affect the City of Bonita Beach, BBR, US 41, Old 41, and the area in general. Over the next months and years, coordination, refinement, realignment, strategizing, and planning with all stakeholders will be needed to implement the vision. Key stakeholders include Lee County, Collier County, FDOT, Lee and Collier County MPOs, businesses, developers, property owners, and other interested parties.

COMMUNITY VALUES

The people who attended the public workshops recognize that the street and area have untapped potential. Participants mentioned that they see a lot of people using the street today, but envision and desire that even more people use it in the future. They value the street's proximity to destinations and the beach. They would like the designs to reflect the historic character of the area. Many people mentioned that the values that should be reflected in the designs should be based upon comfort, aesthetics, safety, and connectivity. People felt that there was a lack of identity for the street, lack of landscaping, and it was referred to as an "auto sewer". Many people felt that the signal timing at the intersections were terrible. People wanted parallel streets/ routes to allow users to avoid using BBR to get to their destinations. They see the western end of BBR as the gateway to the beach and the entire corridor as the link to get them to it. They like the idea of having few stops along the street, but being able to cross the street comfortably on foot, on a bike, or in a car.

During the workshops, people described the current barrier effect that the street has today. Participants complained about the poor aesthetics such as the enormous expanse of asphalt, lack of trees, uncomfortable sidewalks, lack of crossing locations, and what seemed like never ending traffic congestion during peak tourist season. Additionally, participants mentioned they did not like the speeding and hoped that the vision's designs could provide options for walking and biking that would be protected from the automobile traffic.

People described their desire for a street that was at a pedestrian scale, easy to cross, comfortable to walk and bike along, inclusive of people with disabilities and of all ages, and connected to the history of the community. Many mentioned an interest in beautiful landscaping and a streetscape that includes large street trees that would canopy over the street and sidewalks for both aesthetics and shade. There was a desire for gateway treatments at the I-75 Interchange, key intersections, and at the curve on the western end at the beach. People mentioned an interest in roundabouts as a solution for congestion relief, having slow speeds, while allowing for more efficient flow and increased safety. People frequently mentioned the need for slower motor vehicle speeds, and also the desire to retain the ability to turn left in and out of businesses. People understand the importance of environmentally responsible street design and mentioned the design should use native plants for the landscaping and green infrastructure for stormwater treatment. People wanted a bike facility that was separated from the car traffic, in keeping with best practices.

The vision for BBR is a context-sensitive and comfortable street. The desired context gleamed from the workshops is: beach-oriented, relaxed, human-scale, green, friendly and welcoming, slow and steady (vs hurry up and wait), accessible businesses and neighborhoods, attractive, walkable and bikeable for people of all ages and abilities.

The Florida Department of Transportation (FDOT) states in their Complete Streets Implementation Plan from 2015, "The Department will routinely plan, design, construct, reconstruct and operate a context-sensitive system of 'Complete Streets' while maintaining safety and mobility. Complete Streets shall serve the transportation needs of transportation system users of all ages and abilities, including but not

Community input at one of the charrette pin-up discussion tables.

limited to: cyclists, freight handlers, motorists, pedestrians, and transit riders."

A quote from the workshop sums it up perfectly,

"We want Bonita Springs to be a place, not somewhere where people just drive through quickly."

The Future

The City of Bonita Springs anticipates growth in its population, diversity, and economy, just as the neighboring jurisdictions have done. This vision is to better coordinate land use and transportation planning and give people a range of mobility options.

THE APPROACH

Currently, the daily traffic volumes on BBR range from approximately 11,500 vehicles per day at the western end at the beach, to about 37,000 vehicles per day for the busier sections of the corridor. Three-lane streets around the country have been successfully shown to carry more traffic than what is using the low-volume sections of BBR. However, the spikes in traffic at the intersection for US 41 become problematic for a three-lane cross-section in that vicinity.

For example, Edgewater Drive, in Orlando, has shown that i it is not so much the number of lanes that dictates the car-carrying capacity, but rather it is the intersections and their continuity of flow.

At the intersections of Tamiami, Imperial Parkway, and at Old 41 a two-lane roundabout was tested to see if it was feasible to change the signalized intersection into a roundabout. The analysis showed that the volumes were too high at Tamiami and Imperial Parkway to use this design solution to calm the intersections. However, at Old 41 during the peak hours, the roundabout will process the cars far more efficiently that the current traffic signals and can perform even better when used in concert with the proposed roundabouts and proposed new network streets in the vicinity. The roundabouts would also:

i) Reduce cars idling at the intersections, reducing air pollution and gas consumption;
ii) Reduce the impervious area (because the turn lanes would be unnecessary);
iii) Make it easier for pedestrians, cyclists, and trail users to cross BBR in any direction;
iv) Preserve the two-lane scale of Old 41;
v) Provide a great entrance feature for the corridor;
vi) Reduce speeding;
vii) Improve aesthetics,
viii) Save maintenance money; and
ix) Increase safety.

They would also efficiently process traffic, even during the peak hours. The roundabout at Old 41 will help make it easier for northbound, westbound, and eastbound motorists to head north toward the downtown. With the additional nearby roundabouts and better access to connecting streets, the downtown street network will be better utilized and BBR and its current intersections will be relieved from the excess traffic. The roundabouts and street network will also increase resiliency, which is important for many reasons, ranging from accommodating maintenance needs, to hurricane evacuation, to accommodating parades, and to hosting other special events. The roundabouts may require some land acquisition (i.e., corner clips) at the intersections to accommodate the roundabouts themselves as well as the sidewalks and separated bike facilities.

The signalized intersections at Imperial Parkway and at Tamiami constrain how much traffic can use BBR. The Florida Department of Transportation (FDOT) recently widened the intersections to their ultimate configurations.

Consequently, the intersections will not be widened again for the foreseeable future. However, the idea of grade separation at SR41 and other drastic solutions are still fresh in people's minds. Context-sensitive solutions were desired by the broad community more than rewarding the long-distance car trips that highway-like infrastructure would induce or promoting long-distance commuting through the City.

THE BIG IDEAS

The two big ideas are:

i) a separated bikeway on south side of BBR; and
ii) increasing the street network in the vicinities of the intersections of US 41 and Old 41 Road.

The intent is to change the rather unsuccessful conventional practice of battling congestion by adding car-carrying "capacity" through adding lanes to existing streets (i.e., widen oneself out of congestion). Instead, the idea is to advance mobility by:

a) adding network;
b) creating redundancy and parallel routes to aid in evacuation or other emergencies;
c) making walking and cycling viable and comfortable; and
d) shortening trip lengths by providing direct routing.

These concepts will reduce trip lengths in conjunction with supportive strategies such as land use planning, mix, density, and building placement.

The First Priority: the Intersection at US 41

During the visioning process and in subsequent communications, a consensus was established that the biggest challenge to the area is the confluence at the intersection of BBR and US 41. Though the land use densities in the area are relatively low, the lack of network and few routing options require an excessive number of motorists to use that intersection. The City has already begun exploring network options in the vicinity.

OTHER NETWORK OPTIONS

With exception of the street networks within the City's center, the newer and more expansive street network in the region is sparse. This pattern concentrates the traffic burden on too few streets and at too few intersections. One of the vision's goals is to change that pattern and practice. Part of the vision is to preserve every remaining opportunities for network, preserve the existing network, and add to the network over time.

Intersection at Old 41 and Vicinity

The vision for the area around the intersection with Old 41 is a good example where addition network is feasible and widenings can be avoided. There is enough opportunity and undeveloped land to provide a supportive street network that can result in a place with a human scale, provide multiple routing options, share traffic loads, result in a desirable land use pattern, provide a connected open space system, and support the downtown and area. The idea of the roundabouts is to increase safety, encourage the use of more of the network, reduce speeding, process traffic efficiently, increase walkability, improve aesthetics, and remove the barrier effect of BBR.

The City recognizes that widening Old 41 has been identified as a potential project. The City is also aware of PD&E study proposed by both Lee and Collier County MPOs to widen the road. The City wishes to collaborate with the involved parties to scope the PD&E study so that it will take an objective look at the area, consider the multiple roles of the street, including multimodalism, and consider adding additional network in the vicinity of the intersection of Old 41 and BBR, and the breadth of considerations that affect the place. In short, the vision is to preserve the two-lane section along Old 41 and accommodate any increases in pedestrians, cyclists, and motorists through additional street network, more intersections, and additional paths and trails.

Potential new street network connections in the region.

Greenway to the Gulf Separated Bikeway

The separated bikeway is proposed to be a two-way, 10-foot wide, facility that is placed on the south side of the street. The bikeway has a six-foot minimum planted buffer between it and the roadway. This buffer space is to be planted with large canopy trees and palms and contain street scale lighting, when necessary. As much street-scale lighting as feasible should be placed in the median to allow the trees on the sides of the street to provide canopy and shape for the cyclists and walkers. The bikeway is also to have a seven-foot pedestrian sidewalk running parallel to it with a one to four-foot buffer between it and the bikeway. This narrow buffer between the bikeway and the sidewalk will be a pervious paving material and will contain furnishings (trash receptacles, benches, pedestrian-scale lighting, bike racks, wayfinding signage, bicycle fix-it stands, water fountains, etc.) The reasons for the two-way operation of the bikeway are:

i) One-way facilities on both sides of the street would require more right-of-way width and the width was not available unless on-street parking was eliminated.
ii) It is consistent with the two-way trail facilities in the area.
iii) There are fewer driveways on the south side compared to the north side; and
iv) The beach-front parks to the west and the gated communities to the east are on the south side.

Just as a sidewalk creates a separate space for pedestrians, a separated bike lane creates an exclusive space for people bicycling. Separated bike lanes include two fundamental elements: Separation from motor vehicles both a) horizontally, with a separated space for bicycling along the street and at intersection crossings, and b) vertically, with a physical object and/or a change in elevation from the street surface. This separation increases the comfort for the cyclists dramatically compared to conventional bike lanes.

Many people are interested in bicycling but are dissuaded by stressful interactions with motor vehicles. These "interested but concerned" individuals vary by age and bicycling ability and account for a majority of the general population. Some bicyclists (i.e., the "casual and somewhat confident" or the "experienced and confident") are more traffic tolerant. However, they account for a small percentage of the population (i.e., usually about 10%). By designing for those who are "interested but concerned," separated bike lanes enhance the quality, safety

and comfort of the bicycling environment for a large percentage of the population. The adjacent graphic compares design users with their various tolerances for stress caused by interactions with motor vehicles.

When implementing separated bicycle lanes along an arterial, such as BBR, safe and comfortable intersections must be also implemented to reduce conflicts and reduce the risk of collisions and injury. Intersection treatments are conducted at streets as well as at driveways, alleys, sidewalks, shared use paths and other separated bike lanes. Design care must also occur at the transitions of separated bike lanes with shared use paths such that they are intuitively understood by all users.

Intersections with separated bike lanes should be designed to: i) minimize bicyclist exposure to motorized traffic; and ii) minimize the speed differential at the points where travel movements intersect. The design objective are to: i) provide clear messages regarding right-of-way to all users moving through the intersection; and ii) provide geometric features that result in higher compliance where users are expected to yield.

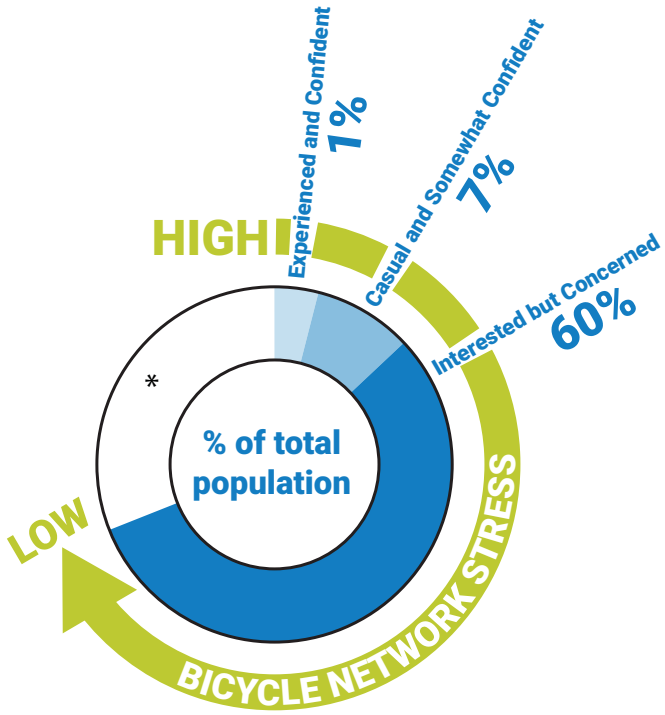
Raised crossings are an effective strategy for minimize crashes between motorists and bicyclists because they are conspicuous, slow the turning speed of motor vehicles, increase visibility of vulnerable street users, and increase yielding behavior of motorists.

Raised crossings should be considered for separated bike lane crossings where turning or crossing motorists are required to yield the right-of-way to bicyclists. Examples where this treatment may be particularly beneficial are at: i) collector and local street crossings; ii) crossings of driveways and alleys; and iii) crossings of channelized right turn lanes and roundabouts.

Accessibility for Pedestrians

Currently, pedestrians can cross Bonita Beach Road at twelve locations within the 8.5 mile-long study area, and are all at signalized intersections. The crossings are inconveniently and sparsely spaced. Consequently, pedestrians risk crossing at random locations along the whole corridor. The vision's design concept provides several new crossing locations that coincide with the proposed network streets, roundabouts, and mid-block

Potential new street network connections at SR41.



Percentage of bicycle user comfort level.

crossings. These will make it far more convenient and safer to cross BBR. The roundabouts will accommodate pedestrians safely and comfortably. Additionally, several refuge islands were designed with the intent that pedestrians can cross half of the street at a time.

Plant Materials

The plant materials should be those approved by the Florida Native Plant Society. The trees next to the travel lanes, in the center island of the roundabouts, and in the short medians/refuge islands should be a mix of palms, medium flowing and accent trees, and canopy trees. The trees between the bikeway and sidewalk should be ornamental and accent trees that will also provide shade over the sidewalk over time. Accent trees should be used to help enhance the roundabouts as signature elements of the street. In addition to trees, the low plants in the rain gardens and planting beds should be a combination of native grasses and ground cover.

ZONES

The vision divides the 8.5 mile corridor of Bonita Beach Road (BBR) from Kings Kew (the beach) to Radio Tower Road into 6 different zones of which there are 4 distinct zone types - Beach Zone, Commercial Zone, Historic Zone and Community Zone. The following is a brief description of each zone - moving from West to East along the corridor, the current and proposed characteristics.

Beach Zone

This zone extends from Hickory Boulevard tot Vanderbilt Drive. The vision is to connect the beach accesses/ parking areas, make the area walkable, create more parking and make this a better destination. The vision includes two new roundabouts:

1. At BBR and Kings Kew - currently the road is a two-lane facility here but transitions as it heads East past this intersection to four lanes. The Vision has it remaining a two-lane facility until the intersection at Bonita Beach Boulevard (BBB).
2. At BBR and BBB – currently the road here is a four-lane facility, controlled by a traffic signal at the intersection. The vision is to employ a roundabout at the intersection and a northbound, right-hand slip lane from BBB to BBR. There will likely be corner clip to accomplish the roundabout. Further coordination will be needed with Collier County and the Barefoot Beach PUD to help achieve the vision in this area.

Protected intersection and driveway crossings help minimize bicyclist exposure to motorized traffic.

Commercial Zone
Currently this is a four-lane corridor from Vanderbilt Drive to west of Old 41. This section includes the intersection of US 41 and BBR. Within the Corridor, the space for the separated bike facilities, landscaping, and wider sidewalks would be obtained by using safer 10' lane-widths and a narrower median. This allocation of space places the design emphasis on the sides of the street where the pedestrians and cyclists are.

At BBR and US 41, the vision is to avoid further widenings of this already enormous intersection, but to look for better ways to carry the same or more motorists, while simultaneously increasing mobility for pedestrians and cyclists. The vision recommends sensible staging by adding network in the four quadrants of BBR/US 41 intersection. Due to the lack of parallel routes to the beach, new network is most needed in the North West quadrant of the intersection. That would involve a new street behind the Publix and a signalized intersection north of BBR on US 41. The new streets will be coordinated with the development in the area.

Historic Zone
Currently, this is a four-lane corridor to just west of Old 41 and transitions to a six-lane corridor at the intersection of Old US41. The vision's roundabouts do not need turn lanes and, thus, the location of the transition back to six lanes will occur to the east end of the Historic Zone (i.e., east of the intersection of BBR and Race Track Road). The six to four-lane transition occurs by allowing two of the six lanes to become right turn lanes, eastbound off of and westbound onto BBR at Race Track Road.

The series of three roundabouts on BBR, in place of two signalized intersections, will help make the area become more walkable and will nicely facilitate the separated bike facilities. There will be roundabouts at Industrial, Old 41, and Race Track Road. There will be two additional roundabouts on Old 41; one to the north of BBR and one to the south of BBR. The result will be an effective network of streets and intersections that will provide multiple routing options, a human scale, and better integration with the development and redevelopment in the area. Furthermore, the area can keep a two-lane scale which will improve the environment dramatically for cyclists and walkers compared a scenario in which Old 41 were widened to four lanes.

Commercial Zone
Currently, this s a six-lane corridor from Race Track Road to Imperial. The vision for this part of the corridor includes safer and narrower lane widths and the addition of the separated bike facilities. The narrower lane

Various native trees, palms, and plant material to enhance the streetscape aesthetics and provide shade.

Zone graphic for the vision concept.

widths are fully supported by the Florida Department of Transportation and should help reduce speeding and reduce crossing distances for pedestrians.

Interstate Zone

The City recognizes that the Lee County MPO 2040 LRTP Cost Feasible Plan includes a widening Bonita Beach Road from I-75 to Bonita Grande. If this project were to move forward, then the vision's separated bike facilities would be included. Should the installation of the separated bike facilities predate any road widening, then the bike facilities should be designed to not be compromised by the road widening, should it take place in the future.

The interstate zone is also envisioned to receive a "bold landscape" treatment for the FDOT in order to identify it as the entrance into the City of Bonita Beach.

Existing conditions for the Beach Zone.

Proposed concept for the Beach Zone.

Community Zone

Currently, this is a four-lane corridor from I-75 to Radio Tower Drive. The vision is for it to remain a four-lane corridor.

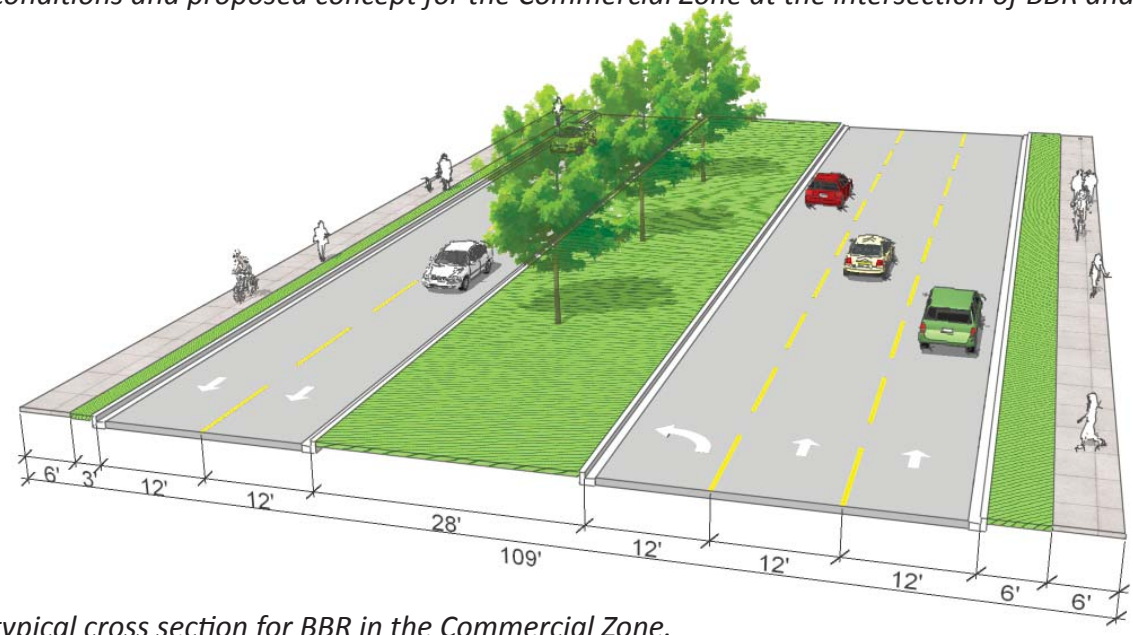
CONCLUSION

Bonita Beach Road is a freight route, an evacuation route, the long-distance motor vehicle access to both Collier and Lee County beaches, and an arterial roadway. It is also home to many businesses and accommodates walking, cycling, and transit. And it contributes greatly to identity of the area. While a majority of the roadway is in Lee County, portions of the corridor are on the northern boundary of Collier County. It is also part of the Bonita Springs Urban Area. There are several jurisdictional issues that will need to be reviewed and coordinated as this vision is implemented. The City of Bonita Springs will continue to coordinate with its regional planning partners in the area.

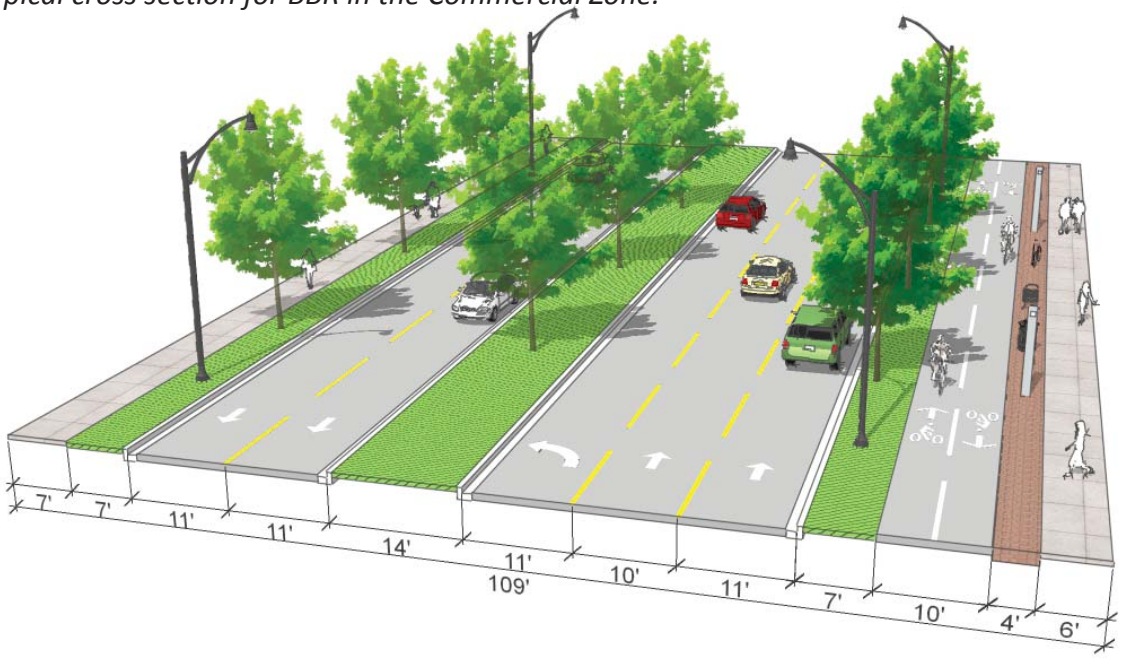
REGULATORY REVIEW AND RECOMMENDATIONS-BONITA CORRIDOR

The following site design components are commonly regulated for development purposes. The regulations can either serve as impediments to walkability or provide requirements that will support walkability. The vision supports the latter. Along with the strategies outlined for the vision's overall Corridor Plan, it is recommended to review the City's Land Development Code requirements to determine if policies need to be updated to be consistent with the direction of the vision.

Existing conditions and proposed concept for the Commercial Zone at the intersection of BBR and SR41.



Existing typical cross section for BBR in the Commercial Zone.



Proposed typical cross section for BBR in the Commercial Zone.

Six major categories of regulations were identified to help achieve the vision for the Bonita Beach Road and the area in general. Each category has:

- a concise explanation regarding on the need to regulate the category
- a summary of how Bonita Springs already regulates the category, and
- recommended updates for the City's land development code.

1. Mix of Uses

A well-integrated mix of land uses on a complete street provides the community with multimodal access to living, shopping, and eating; this reducing car-dependency. A mix of uses, also increases the area's resilience to market changes.

FINDINGS:

Land Use

Bonita Beach Road's land use categories are predominately Commercial and Interchange Commercial. Additional categories are Residential (Moderate Density and Medium Density), Industrial and a portion of the area is within the Old Town Overlay. The Commercial Land Use category allows for up to 10 units an acre of residential and a mix of uses.

Zoning Use and Process

The majority of the corridor has a commercial zoning district designation that permits a range of uses that would be consistent with the overall plan for BBR. In addition to the permitted uses, any parcel over 1 acre of land has to go through a Planned Unit Development when specific uses are being applied to the parcel of land.

Recommendations: To create a consistent design, and regulatory framework, it is recommended to remove the PUD requirement along the corridor, create an overlay that: i) permits the supportive land uses the City wants to support; and ii) adds a special exception process to evaluate the use(s) that the City would like to have a public vetting and hearing. Giving every parcel over 1 acre the ability to create a PD, modify underlying design requirements, will continue to create long-term challenges that can be better solved and better regulated with a new zoning overlay.

2. Setback (roadway)

Siting buildings properly on parcels provides the greatest site design opportunity to support walkability as per the vision. The farther a building is setback from the roadway, the more problematic it is for a pedestrians and transit riders. Large setbacks diminish general walkability and access.

Existing conditions and proposed concept for the Historic Zone at the intersection of BBR and Imperial Parkway.

Findings: Setbacks are regulated in the City's Zoning Code by the functional classification of the street. BBR would require a minimum front setback of 25'. The Land Development Code does not stipulate a maximum setback.

The area(s) within the Beach Zone are challenged to meet this requirement due to the shallow lot dimensions. The vision for development and redevelopment in the Commercial, Interstate, and Historic Zones includes having buildings front the bikeways and sidewalks with minimum obstructions.

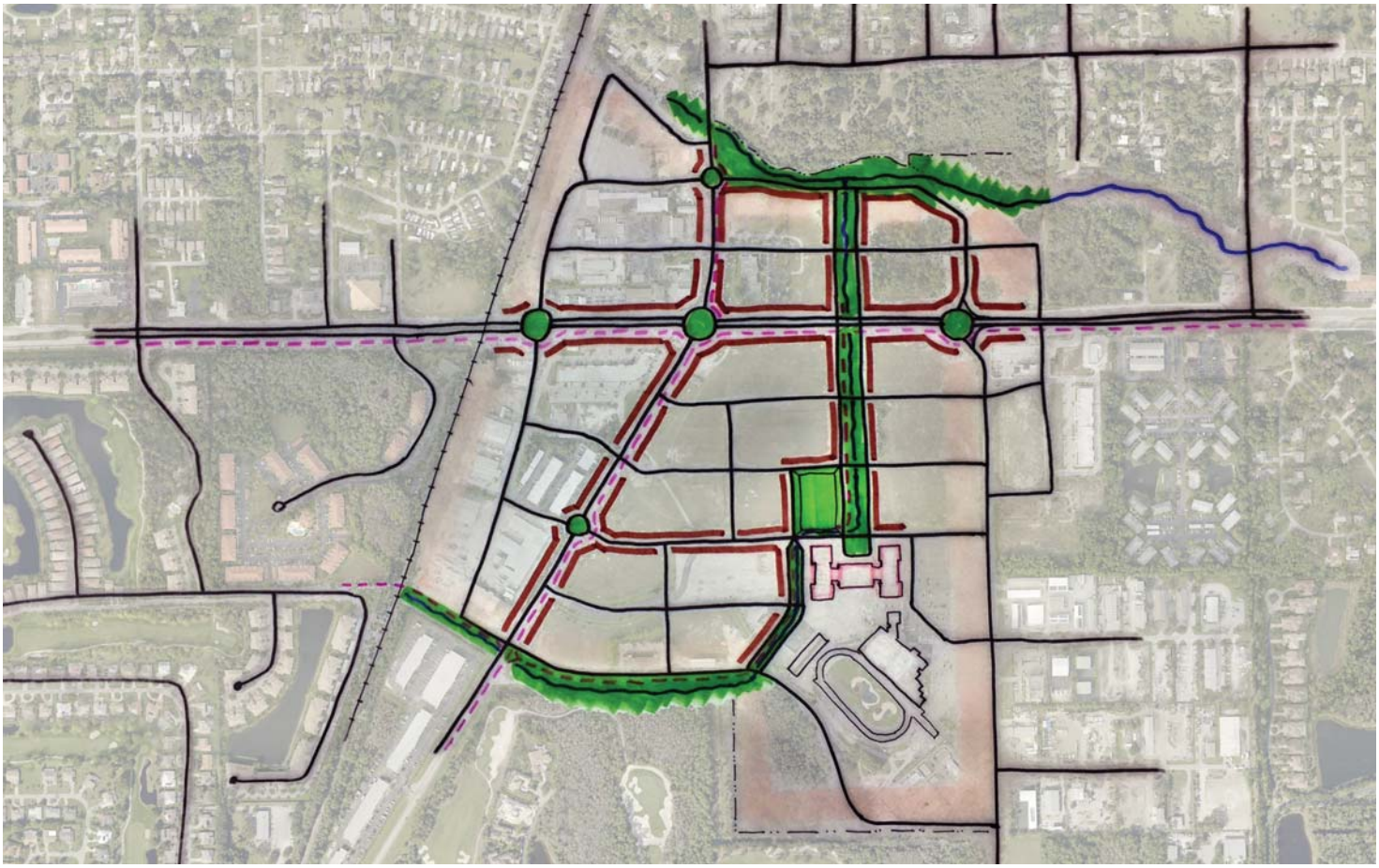
Recommendations: There are different cross-sections along the BBR. The Commercial, Interstate, and Historic Zones will have a setback that is 15-25' from the back of the sidewalk. The figures illustrate the ranges for each zone. The Beach and Community Zones do not require any updates to the underlying zoning setbacks.

3. Parking Requirements

a. Min/max standards: By establishing maximum parking ratios, a development will not provide excessive parking. Furthermore, high minimum parking standards are typically associated with more auto-oriented uses and discourages walking, cycling, and transit.
b. Location of parking: Regulations, that permit buildings to "face" a parking lot, diminish the pedestrian experience.
c. On-street parking: On-street parking provides a more walkable street.
d. Shared parking: Permitting shared parking between uses allows for a reduction in total parking spaces.
e. Bicycle parking: Require bicycle parking in lieu of or in addition to vehicular parking.

Existing conditions for the Commercial Zone at the intersection of BBR and Old 41.

Proposed concept for the Commercial Zone at the intersection of BBR and Old 41.

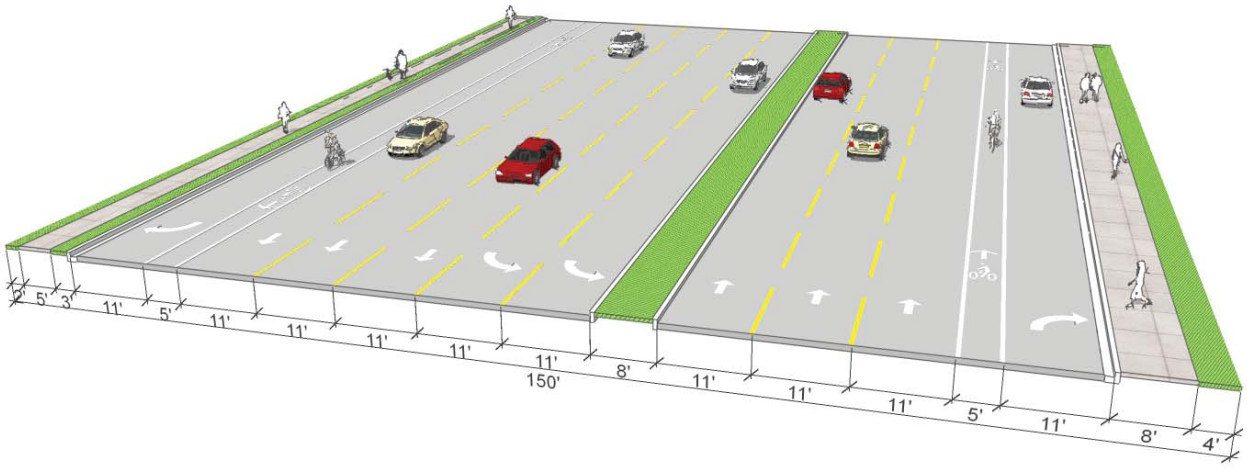


Proposed new street network for the Race Track development area.

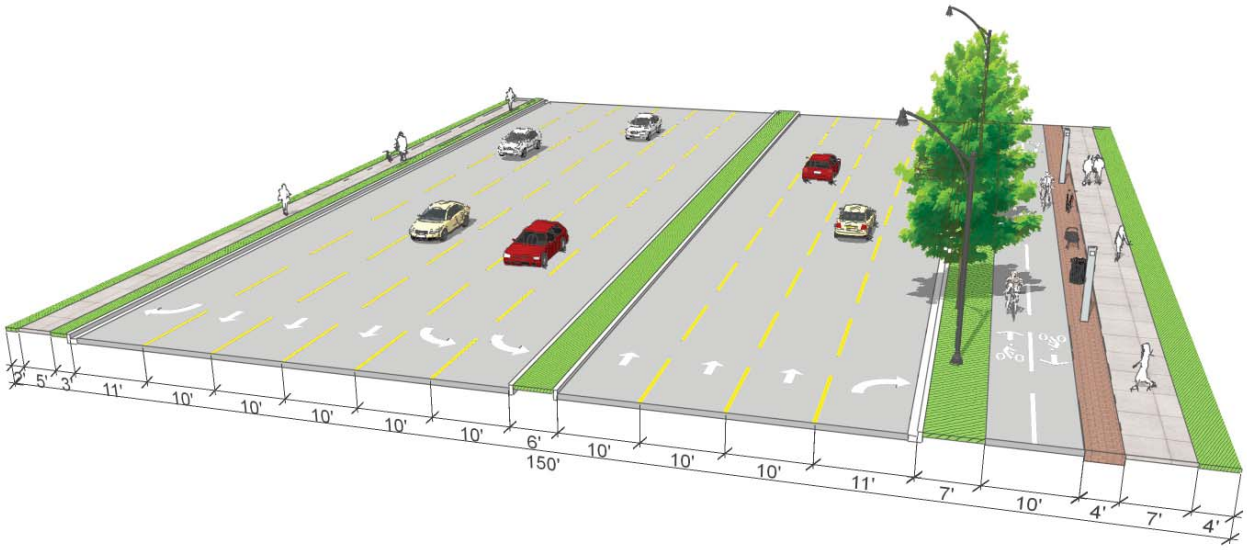
Findings: The Land Development Code provides minimum standards for applicants to provide parking on their lot. There are no maximums in place. Requirements for the placement of the on-site parking in relationship to the buildings and the street only involve distance requirements. Shared parking standards are not included in the City' Land Development Code. Section 3-263 requires only "large scale" developments to provide 1 bicycle parking space per 5,000 square feet of building area.

Recommendations: Maximum parking ratios should be established in the areas transitioning towards urban conditions. On-street parking should be provided on intersecting streets, but not on Bonita Beach Road, except in the Historic Zone. Shared parking should be permitted in the mixed-use areas. Add bicycle parking requirements for all of the zones along the whole corridor. The magnitude of the requirements should be determined for each zone. The urban areas should be permitted to reduce their parking ratio standards using a 3 to 1 ratio (i.e., for every 3 bicycle parking stalls, a reduction of 1 vehicular parking may be done). Require

Existing conditions and proposed concept for the Interstate Zone at the intersection of BBR and I-75.



Existing typical cross section for BBR in the Interstate Zone.



Proposed typical cross section for BBR in the Interstate Zone.

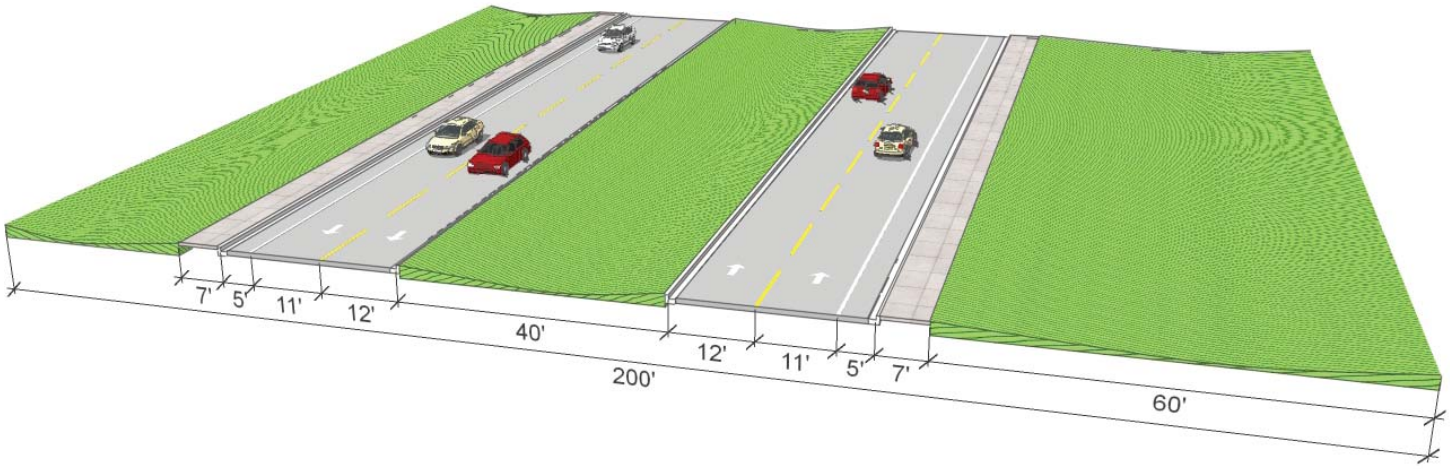
buildings to face BBR.

4. Vehicular Standards

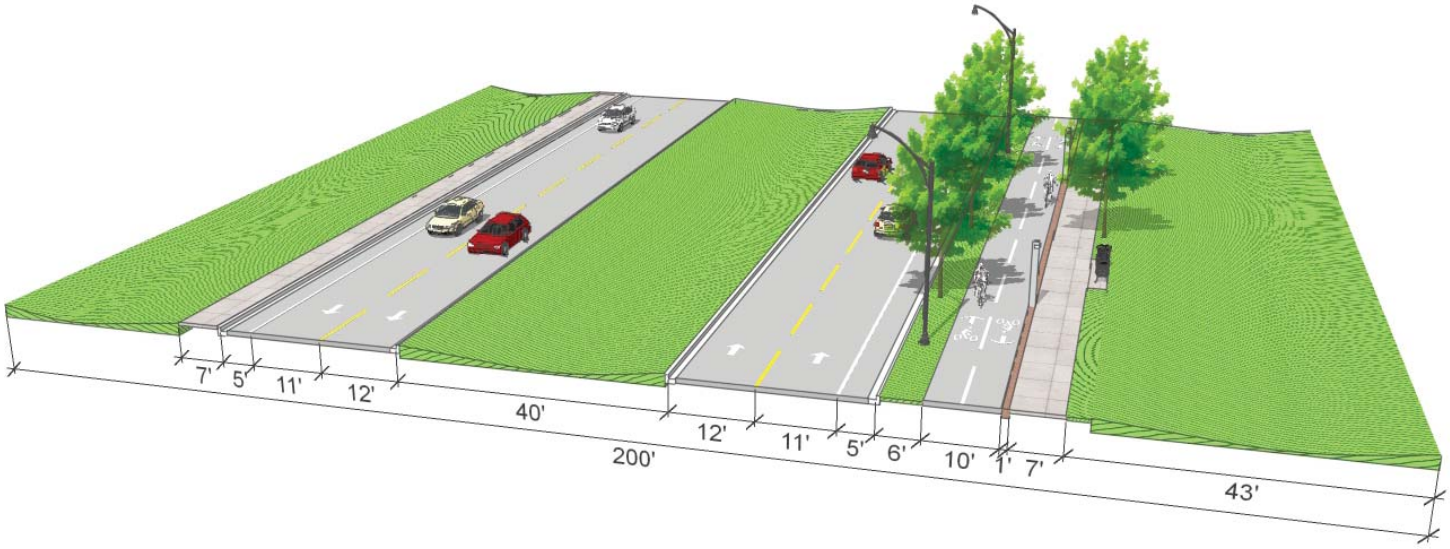
a. Block Standards: regulating block sizes creates a walkable environment that provides for convenient and safe pedestrian access, direct linkages, routing options, and a human scale.
b. Cross Access can also create a better connected network of vehicular and pedestrian routes, particularly for short trips. They allow for increase access between adjacent sites and take the pressure off of the cross-streets and BBR.

Findings: Transportation, roadways, streets and bridges do not include any standards for regulating block dimensions, or cross access requirements.

Recommendations: Any development along the corridor that is over three acres in size should be required to submit a block layout plan for the site. The Urban Areas should have a block length and width 375'x 375'. The most critical block length dimensions for the area around Old 41 are the north/south dimensions. The east/west layout of these blocks can exceed the standard. However, the City should maintain a walkable block pattern that requires that the block perimeter is no greater than 1600 feet.



Existing typical cross section for BBR in the Community Zone.



Proposed typical cross section for BBR in the Community Zone.

5. Pedestrian Standards

a. The presence of sidewalks and their placement and size affects the walkability and potential for pedestrian activity along BBR.
b. Continuity of sidewalks within a development, connections to adjacent developments, and connections to the sidewalks along streets are important to pedestrian mobility, access to transit, and access to BBR in general.
c. Well-lit walkways and sidewalks improve pedestrian comfort and safety.
d. Landscape and shade along walkways and sidewalks provide comfort and sense of security.

Findings: The Land Development Code states in Section 3-263 (3) that on-site pedestrian facilities must be provided but is ambiguous as to what they are. Only “large scale retail establishments” have a large sidewalk requirement (i.e., Sidewalks next to a building shall be 8’ wide, and located at least 6’ from the façade of the building, every other area in the city is four feet in width).

Recommendations: In the Historic Zone, there should be a maximum setback to ensure a relationship exists between buildings and the sidewalk.

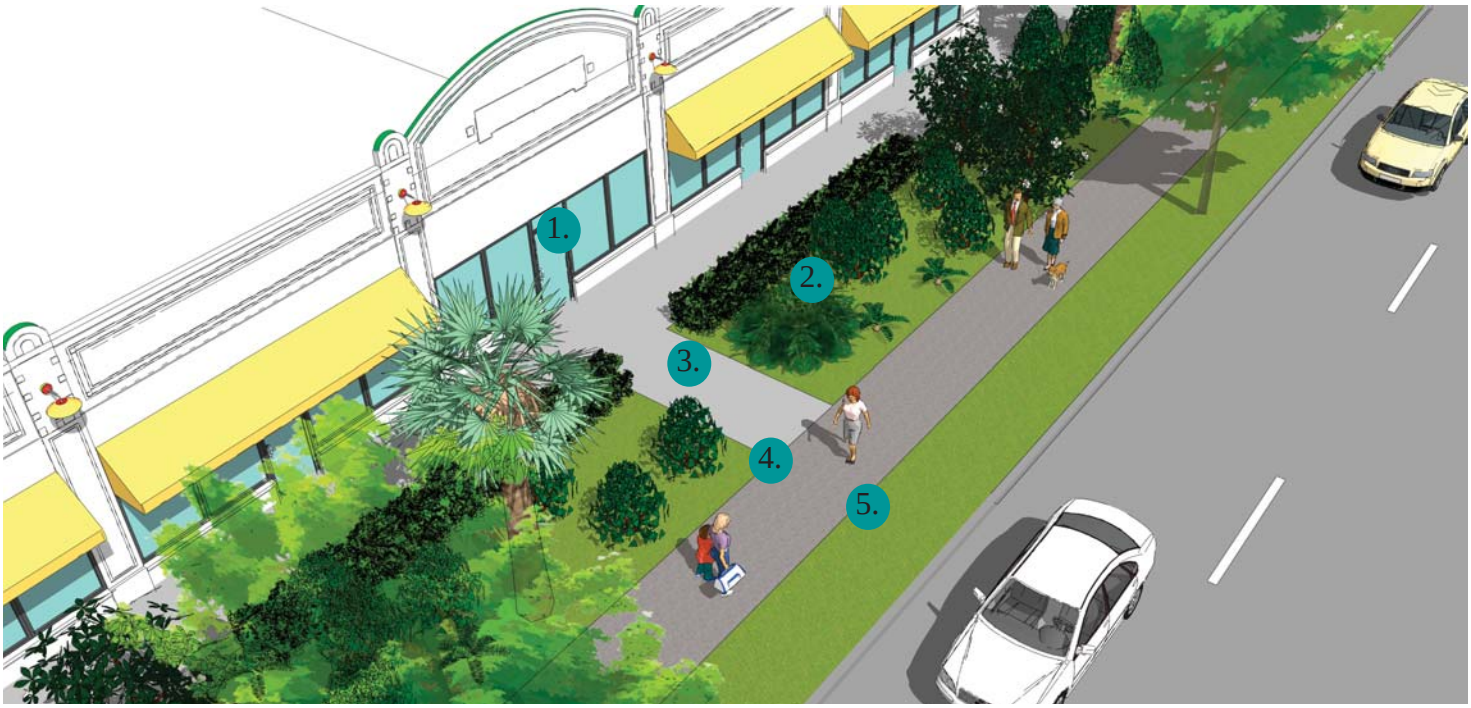
6. Building Features

The design of a building can provide shelter, visual interest, safety, and increase the legibility and comfort of the sidewalk. The three most popular building features to regulate are:

a. Entry ways that face the street.
b. Transparency, contributes to the natural surveillance and comfort for pedestrians.
c. Regular façade changes that add interest for the people walking and biking past. Engaging buildings can entice people to walk further and provide shelter if needed. Long and repetitive facades do the opposite.

Findings: The city has design standards and guidelines for commercial buildings and developments (article IV) that could provide all of the necessary guidance as suggested above.

Recommendations: The glazing requirement should be increased from 30% to 70% on the ground floor. This requirement is consistent with most downtowns and is recommended for any area developing as an urban space. Requiring operable front doors, which are open during normal business hours, facing the street is recommended. Requiring the periodic altering of the facades of buildings is recommended.



	Commercial/Interstate Zone Guidelines	Minimum (feet)	Maximum (feet)
1.	Setback	20’	20’
2.	Front Buffer	12’	14’
3.	Access to Multi-use Path/Sidewalk	5’	8’
4.	Sidewalk	6’	8’
5.	Furnishing Zone	5.5’	6’
	Multi-use Path (not illustrated)	10’	12’

	Historic Zone Edge	Minimum (feet)	Maximum (feet)
1.	Setback	12’	15’
2.	Furnishing Zone (closest to the building)	5’	8’
3.	Bike Lane	10’	12’
4.	Furnishing Zone (adjacent to parking) *Provide necessary spacing of furnishings and trees as to not impeded vehicle doors from opening.*	5’	6’
5.	On-street Parking	7’ (width)	8’ (width)