RESOLUTION NO. 20-1396

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF DOUGLAS, COCHISE COUNTY, ARIZONA, APPROVING THE CITY OF DOUGLAS DOWNTOWN DOUGLAS G AVENUE STREETSCAPE DESIGN.

WHEREAS, as part of the 2010-2011 Downtown Revitalization study, the City of Douglas once again brings forward the design guidelines plans for the historic downtown district; and

WHEREAS, in an effort to ensure that the public preferences and vision from 2010-2012 were still valid, four outreach meetings were held in the fall of 2019 at various locations in and around downtown, culminating with the largest meeting at the Visitor Center on October 15, 2019; and

WHEREAS, the City of Douglas now reintroduces the Design Guidelines for the historic downtown district as part and parcel of the ongoing tourism, economic development, and local revitalization campaigns; and

WHEREAS, it is in the best interest of the City of Douglas to approve and adopt the Design Guidelines for the historic downtown district for immediate implementation by city officials and administration to attain the noted goals.

NOW, THEREFORE, BE IT RESOLVED that the Mayor and Council of the City of Douglas, Arizona:

Section 1. hereby approves and adopts the Design Guidelines for the historic downtown district, in the form attached on Exhibit "A" herein, along with any related documentation necessary to achieve the goals set out therein for and on behalf of the City of Douglas.

Section 2. The officers of the City Council and the City of Douglas are hereby authorized and directed to fulfill all obligations under the guidelines of the noted Strategic Plan.

PASSED AND ADOPTED by the Mayor and Council of the City of Douglas, Arizona, this 12th day of February, 2020.

Robert Uribe, Mayor

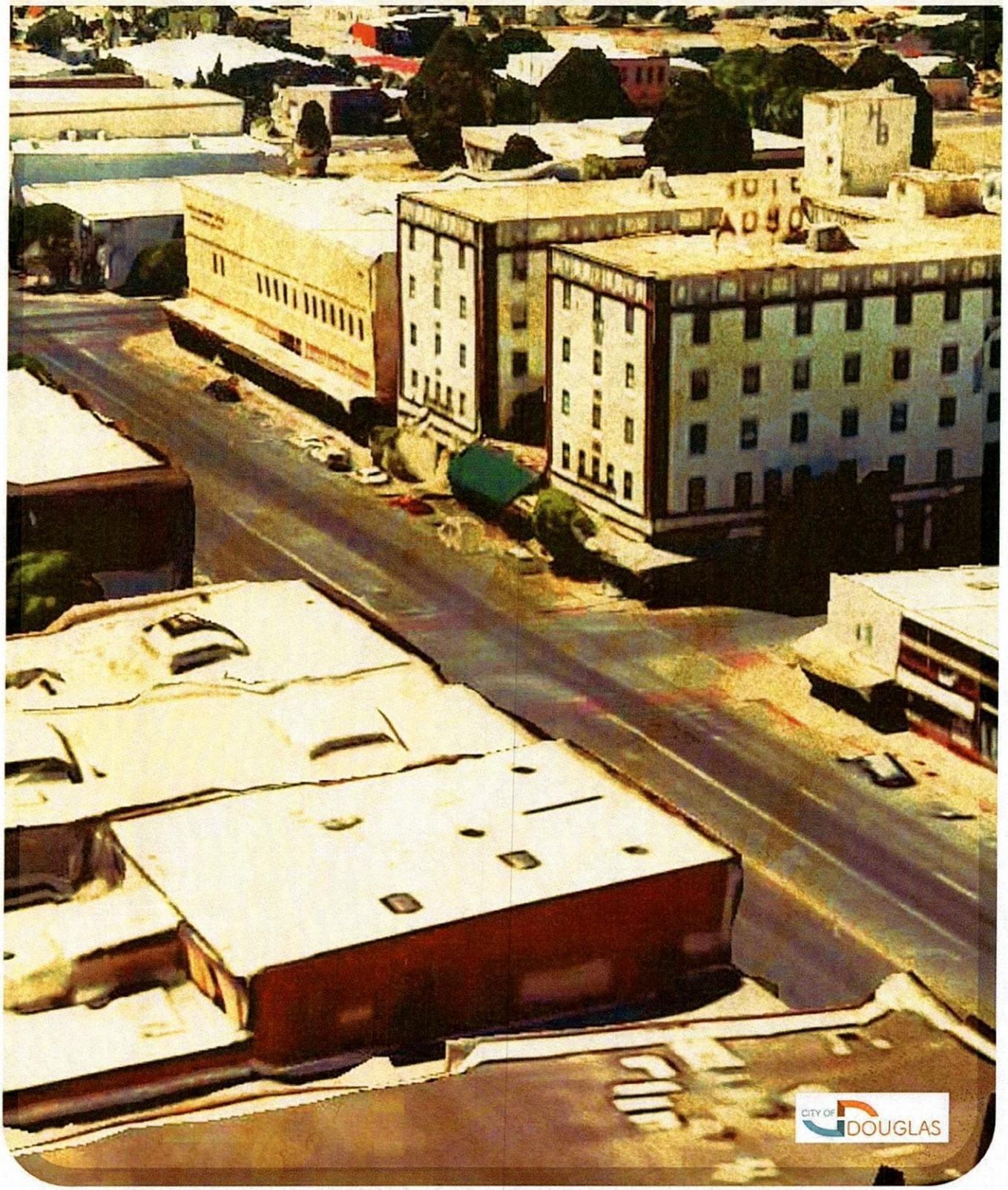
Attest:

Alma Andrade, Acting City Clerk

Approved as to form:

Juan Pablo Flores, City Attorney

DOWNTOWN DOUGLAS
G AVENUE STREETSCAPE



2020

CHAPTER 1
Introduction

CHAPTER 2
Inventory & Analysis

CHAPTER 3
Streetscape Elements

CHAPTER 4
Right-of-Way Elements

PROJECT LIMITS

The City of Douglas is a historic City located in Cochise County, Arizona adjacent to the Arizona-Mexico Border. It is approximately twenty five miles from Bisbee and fifty five miles from Tombstone and Sierra Vista. The Mexican city of Agua Prieta is Douglas' closet neighbor across the US/Mexico border. Pan American Highway directly connects to the Douglas Port of Entry. G Avenue is truly the heart of downtown. The importance of an attractive and vibrant streetscape along G Avenue has been recognized within several previous planning documents. The intent of this document is to serve as the bridge from planning to design/implementation.

G AVENUE

For the purposes of this document, the planning boundaries of streetscape improvements extend along G Avenue for approximately 0.75 miles, from Pan-American Avenue south to 5th Avenue.

HOW TO USE THIS DOCUMENT

The development standards contained in this document are intended to assist the City in the renovation and maintenance of the G Avenue streetscape. There is an existing streetscape in place; however, many of the specific design elements have aged are in need of repair. The focus of this document's recommendations is how to realistically renovate this streetscape using existing City funding and resources. The design standard preferences are largely based upon the results of a visual preference survey, detailed in the following section. It should be noted that direction was also received from a July 10, 2019 City Council meeting, a Downtown Douglas Merchants Association Meeting held on August 13, 2019, and Town Hall Ward Meetings conducted on September 19, 2019. This document begins with a summation of the information received from this public outreach. This is followed by an inventory and analysis of existing conditions on the roadway. The document concludes with specific information regarding desired streetscape and right-of-way elements.

COMMUNITY MEETING

On October 15, 2019, City staff held a community meeting where participants were asked to provide their opinions on a range of streetscape design elements and relevant considerations within a visual preference survey. The intent was help direct the direction of particular design elements into one that is supported by the community. Specifically, meeting participants were asked to rank their preference regarding thirteen different streetscape elements. Thirty surveys were completed and submitted for analysis.

A. Tabulation Methodology

All completed surveys were assigned a number, from 01 - 30. An individual tab was created in excel for the data input and analysis of each question. All results were analyzed twice. First, the highest preference for each of the 13 elements was determined. Each letter was assigned a numerical value as follows:

A = 1,

B = 2,

C = 3,

D = 4,

E = 5,

No response = 0.

Next, the responses were analyzed for their overall ranking. Options A-E were given points based on their individual survey ranking.

First Choice = 1,

Second choice = 2,

Third choice = 3,

Forth choice = 4,

Fifth Choice = 5.

All the values for options A-E were then tabulated and divided by the total number of responses for each question. For example, if option "A" received 27 responses on slide 8, the total number of responses was divided by 27. The lower the final score, the higher the preference.

B. Results

The following section of the document is a summation of the visual preference survey, which includes the range of alternatives provided and the preferred options selected by participants.

BENCHES

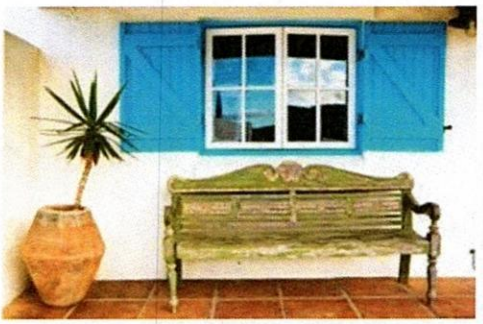
A. Benches: Participants were asked to rank their preference for the following five bench options.

A. Classic

B. Contemporary

C. Ornate

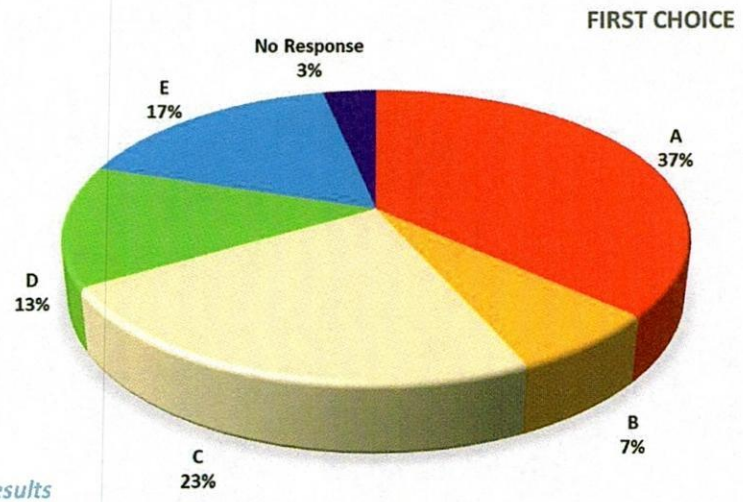
D. Colorful



E. Traditional

Overall, Option A was the first choice of 37% of the participants. In addition, when ranked, Option A was also the top choice while the least preferred option in both cases was Option B, Contemporary.

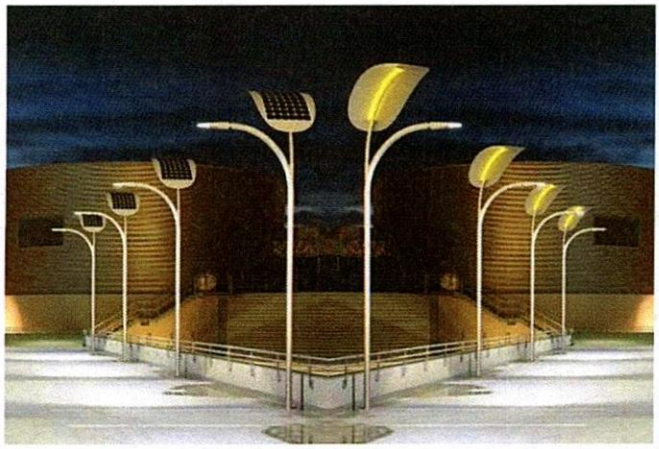
Option A is a classic, durable steel bench that can be finished in a variety of colors. The standard length is six feet and all benches come with equipped with armrests.



First Choice Bench Results

STREET LIGHTS

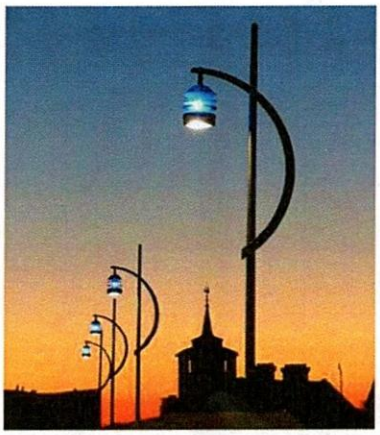
Participants were asked to rank the following four street lighting options.



A. Solar/Contemporary

B. Traditional/ With Emblem

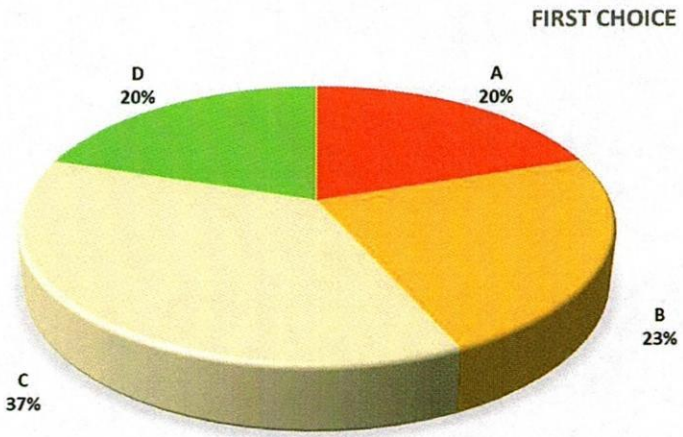
C. Traditional/ With Banner



D. LED/Modern

Overall, Option C was the first choice of 37% of the participants. In addition, when ranked, Option C was also the top choice while the least preferred option in both cases was Option A, Solar/Contemporary.

Option C is a traditional, durable with a historic flare. In addition, this option is shielded and pointed downwards towards the pavement to help minimize light pollution. While there are existing street lights on G Avenue, these lights are oriented to the streets, rather than towards the sidewalks, and their light can be obscured by the street tree canopy. Lower pedestrian-scaled street lights can improve visibility along the sidewalks and enhance pedestrian's feelings of safety and security.

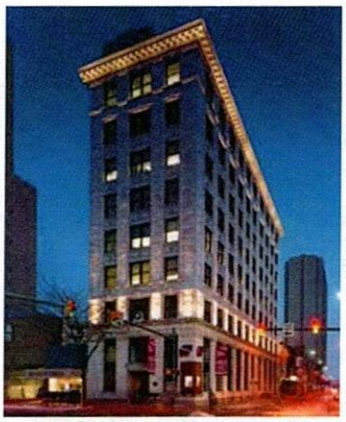


First Choice Street Lighting Results

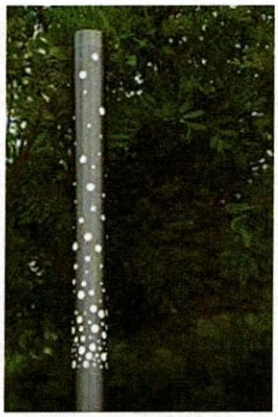
DECORATIVE LIGHTING

Participants were asked to rank the following four decorative lighting options:

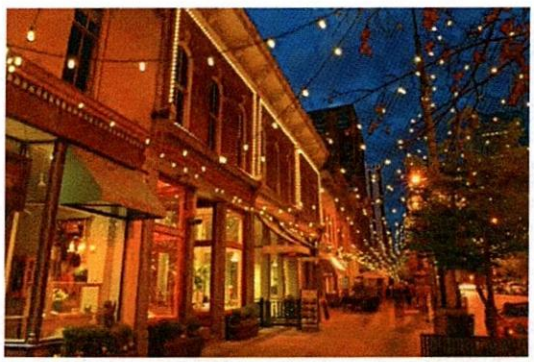
A. Tree String Lights



B. Building Lights



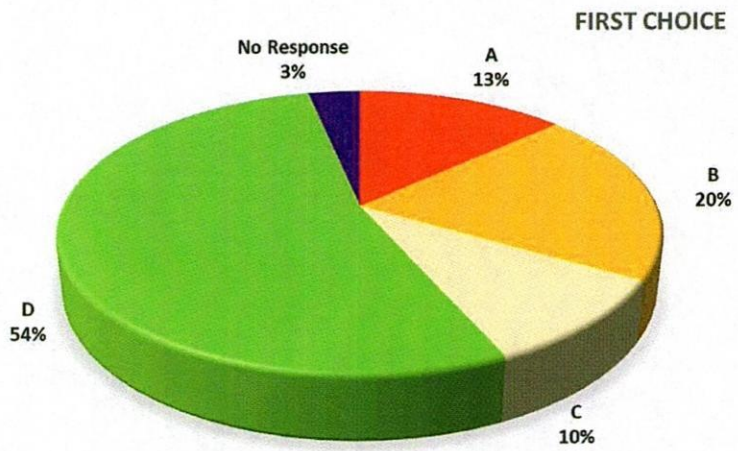
C. Bollard Light Column



D. String Lights

Overall, Option D was the first choice of 54% of the participants. In addition, when ranked, Option D was also the top choice while the least preferred option in both cases was Option C, Bollard Light Column.

Currently, there are string lights present along G Avenue. They hang along on the street lights over the roadway Additional strings can be added along the road and/or they may be hung to extend over the sidewalks.



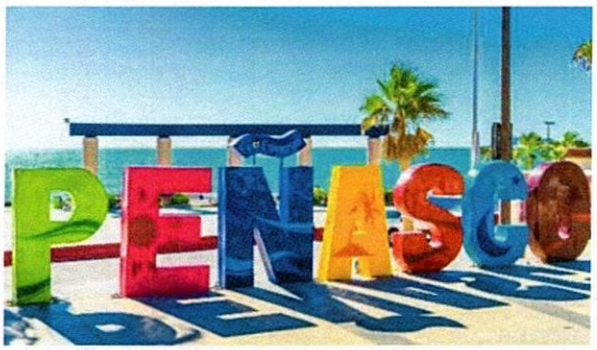
First Choice Decorative Lighting Results

PUBLIC ART

Participants were asked to rank the following four public art options:

A. Interactive Light Statue

B. Tree Sweaters

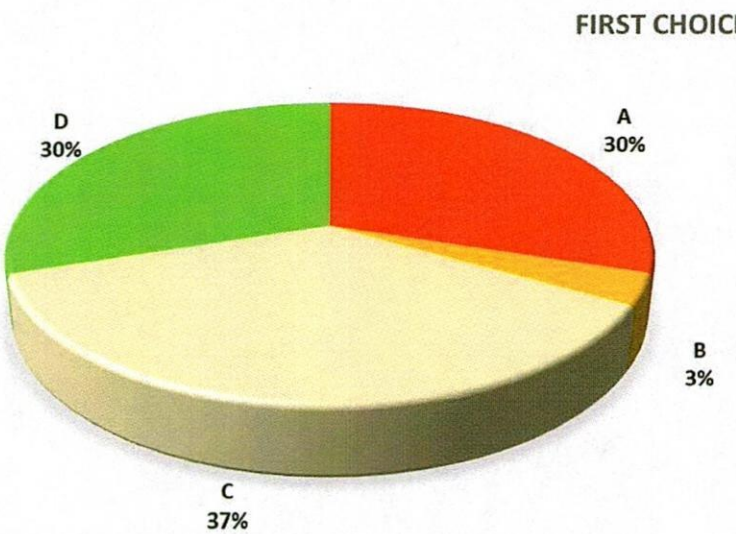


C. Large Name Sign

D. Lighting Message

Overall, Option C was the first choice of 37% of the participants. However, in this case, the most preferred option, when weighted, was Option D. In addition, Options A and D also tied for second place for the participant's first choice. All options are stand-alone, highly specific features that would likely need to be commissioned with an artist. If desired, the City could use one or more of these features along G Avenue or elsewhere in the downtown area.

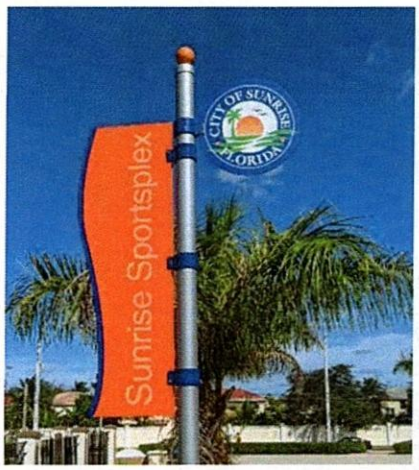
Currently, there is public art downtown, mostly in the form of building and utility murals. Any proposed public art is intended to add to, and enhance, this existing art.



First Choice Public Art Results

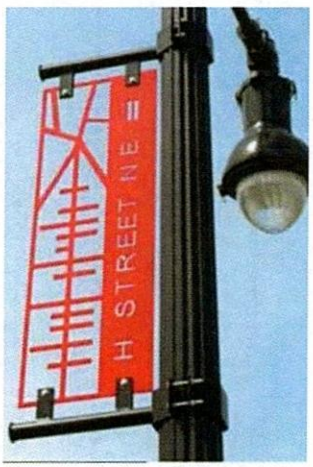
BANNERS

Participants were asked to rank the following four banner options.



A. Small City Emblem

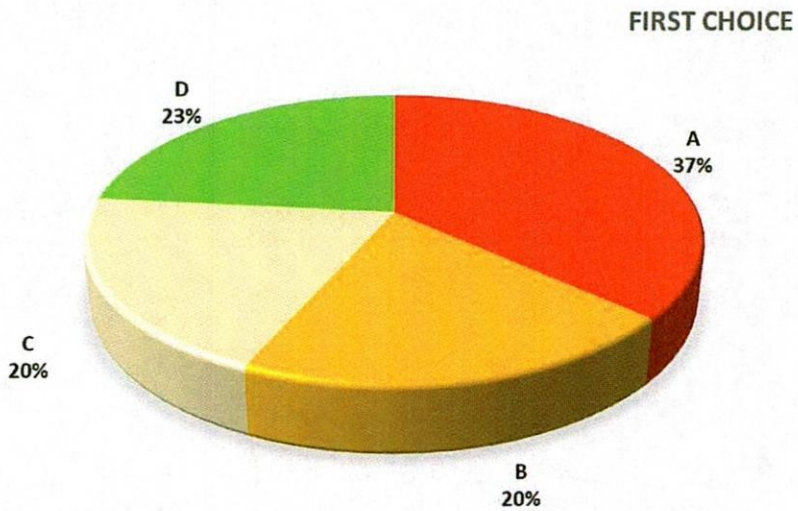
B. Diagonal/Decorative



C. Informative

D. Decorative

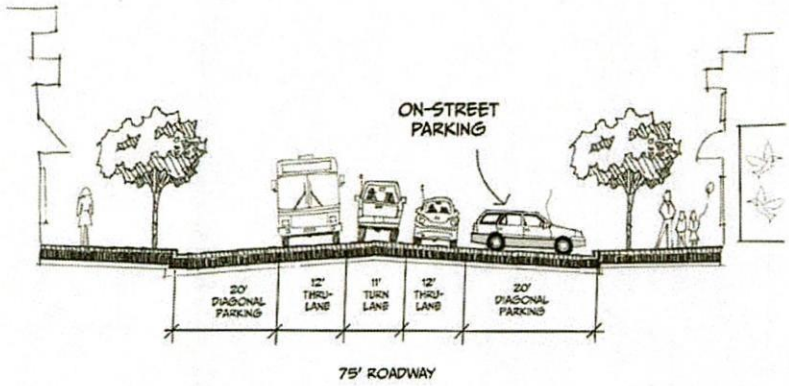
Overall, Option A was the first choice of 37% of the participants. However, in this case, the most preferred option when weighted was Option B. An option that somewhat incorporates the two top options, while also taking into account the rectangular orientation of the current City logo, is discussed in Chapter 3, Streetscape Elements.



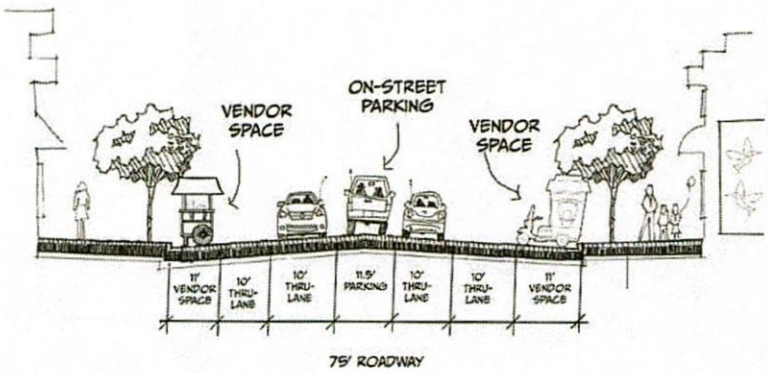
First Choice Banner Results

PARKING

Participants were asked to rank the following three parking options:



A. Diagonal Parking on the Side

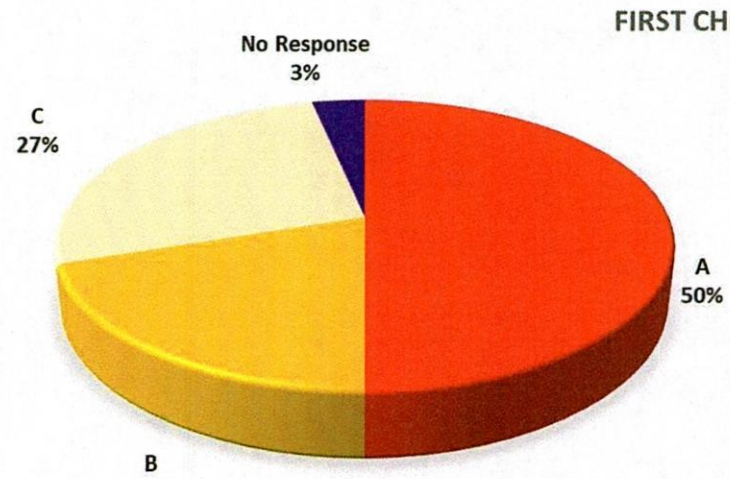


B. Parallel Parking in the Middle

C. Parallel Parking on the Side

Currently, Avenue G has on-street parking along both sides of the roads for the majority of project limits. There is both parallel and diagonal parking provided depending on the particular road segment. There are trade-offs to both forms of parking. However; overall, Option A was the first choice of 50% of the participants.

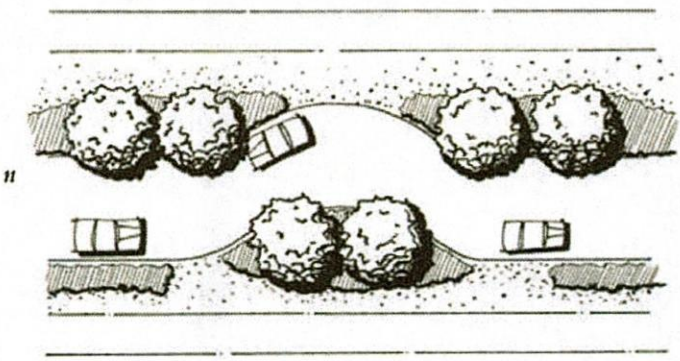
While the road segment between G Avenue and Pan-American Avenue to 14th Street will likely need to retain parallel parking, the remainder of the streetscape could be modified to allow more diagonal spaces following roadway resurfacing.



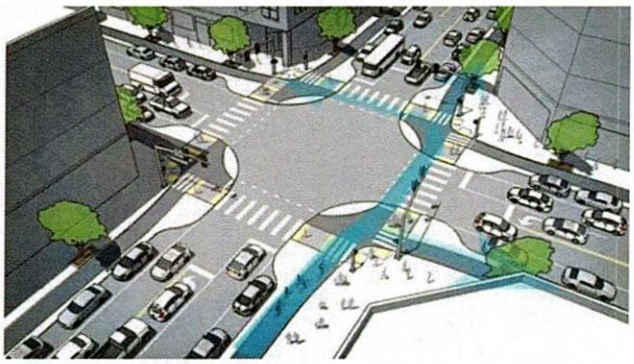
First Choice Parking Results

ROAD DIETS

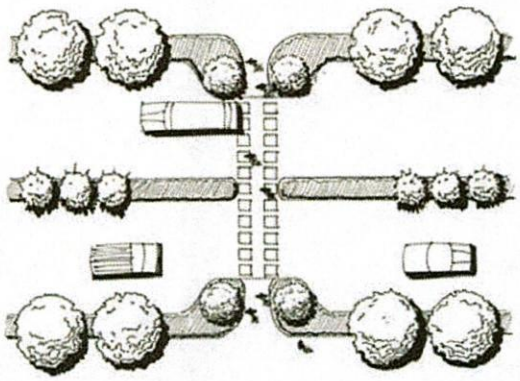
Participants were asked to rank the following four road diet options:



A. Chicane



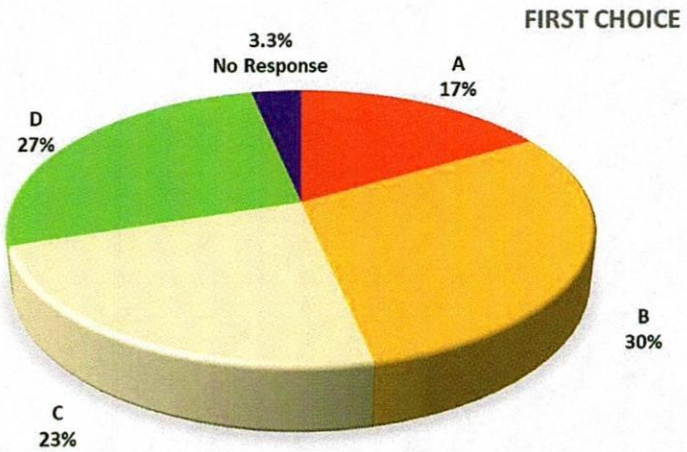
B. Bump-Out (Intersection)



C. Bump-Out (Mid-block)

D . Leave it as it is

Overall, Option B was the first choice of 30% of the participants. However, in this case, the most preferred option when weighted was Option C. Both alternatives are the extension of the curb, which narrows the road and reduces the spaces necessary for a pedestrian to cross the road. Bump-outs also provide additional space for pedestrian amenities, like landscape and benches. All intersections along G Avenue within the study area currently have a traditional design with no curb extensions. Future inclusion of this design should be given to busier, signalized intersections within the study area.



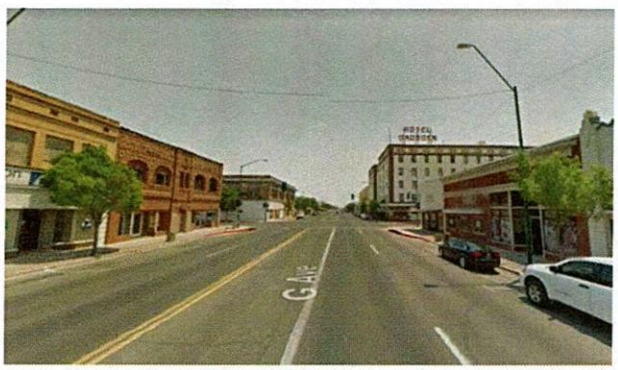
First Choice Road Diet Results

PEDESTRIAN WAYS

Participants were asked to rank the following three options for expanding the pedestrian realm, particularly during special events:

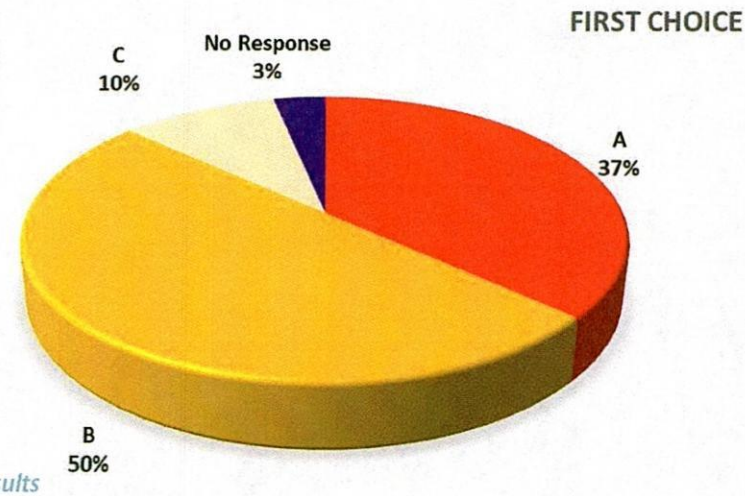
A. Alley Closures (during events)

B. Road Closures (during events)



C . Leave it as it is

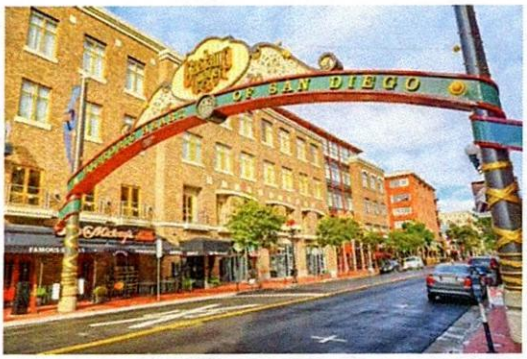
Overall, Option B was the first choice of 50% of the participants. It was also the preferred option when weighted. Given the temporary nature of this element, the costs associated with this item will largely not be a capital consideration. The City will need plans to divert traffic for special event, temporarily designated parking lots and road closure devices.



First Choice Pedestrian Ways Results

ENTRY WAYS

Participants were asked to rank the following three options for entry way signage:

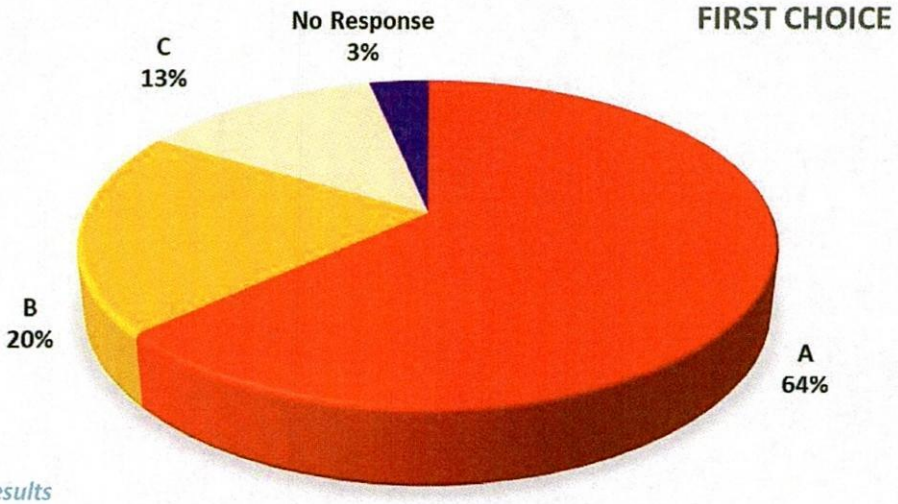


A. Overhead Arch

B. Free-standing Median Sign

C. Freestanding Sign (Side of Road)

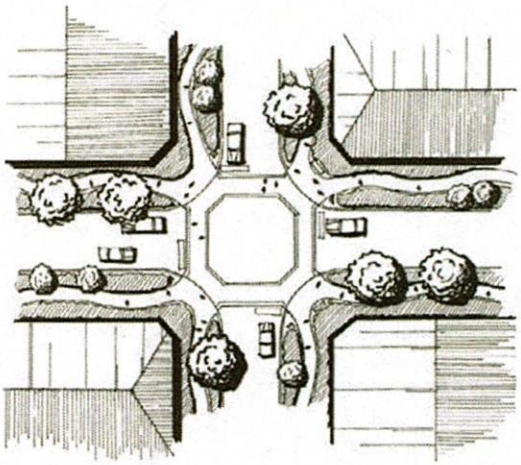
Option A was the first choice of 64% of the participants. It was also the preferred response when weighted. There are numerous examples of other successful arches around the country. The exact design and placement will require additional planning and engineering.



First Choice Entry Ways Results

INTERSECTIONS

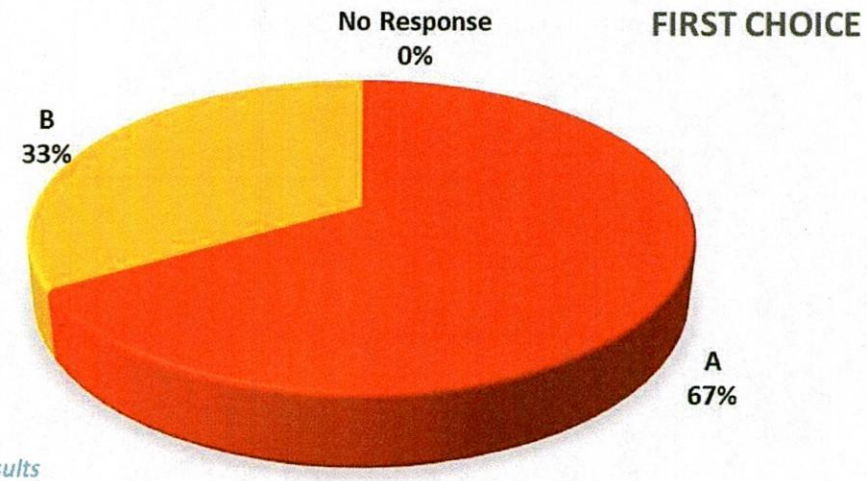
Participants were asked to rank the following two options regarding how to handle traffic flow at key intersections. The primary intent of the question was to gauge interest in roundabouts. Roundabouts tend to be more efficient than traditional traffic lights, as well additional landscaping opportunities, but can cause some initial discomfort to drivers that are less familiar with them.



A. Traditional (with traffic lights)

B. Roundabout

Overall, Option A was the first choice of 67% of the participants. While this is a clearly a majority, it does indicate that a significant number of the participants would consider the inclusion of roundabouts. When dealing with a new traffic circulation pattern, this could indicate that over time, if there is the political will to move forward with this option, it could be accepted.



First Choice Intersections Results

ROADWAY CROSSWALKS

Participants were asked to rank the following four options for roadway crosswalks:

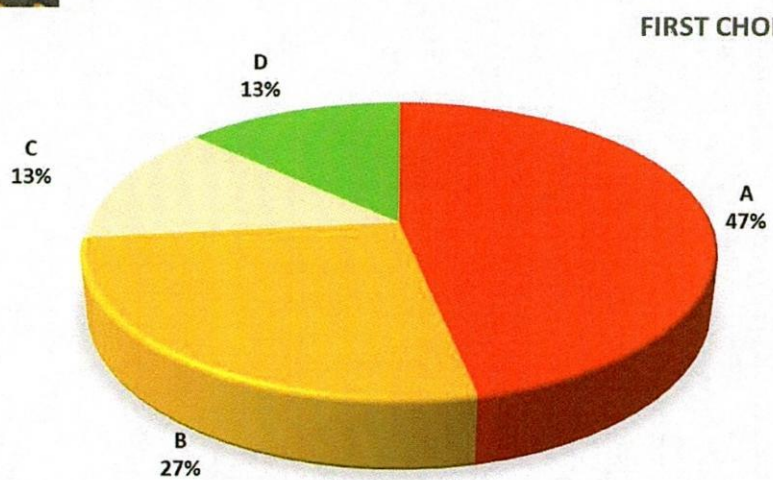
A. Colorful

B. Classic

D. Geometric

C. Artistic

Overall, Option A was the first choice of 47% of the participants. It was also the preferred option when weighted. Currently, the City has Option B (Classic) installed where high visibility crosswalk treatments are more warranted. These crosswalks are severely faded and in need of replacement. It is recommended that a more vibrant, colorful option replace the existing crosswalk design.



First Choice Roadway Crosswalk Results

DISTRICT NAMING

Participants were asked, in place of the name "Barrio District," which of the following names they preferred for the southernmost subdistrict of the Downtown:

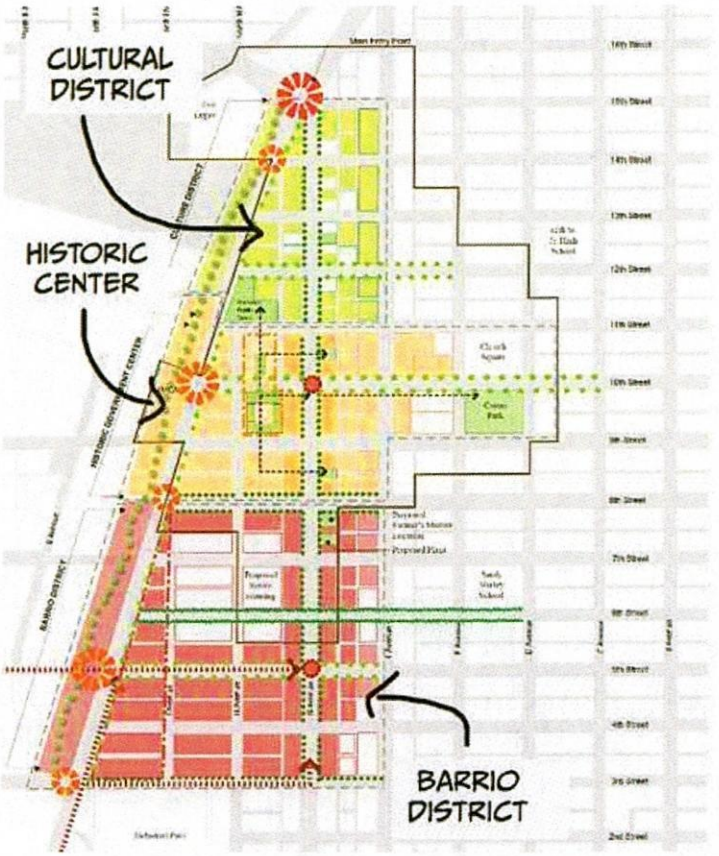
*A. **Mercado District***

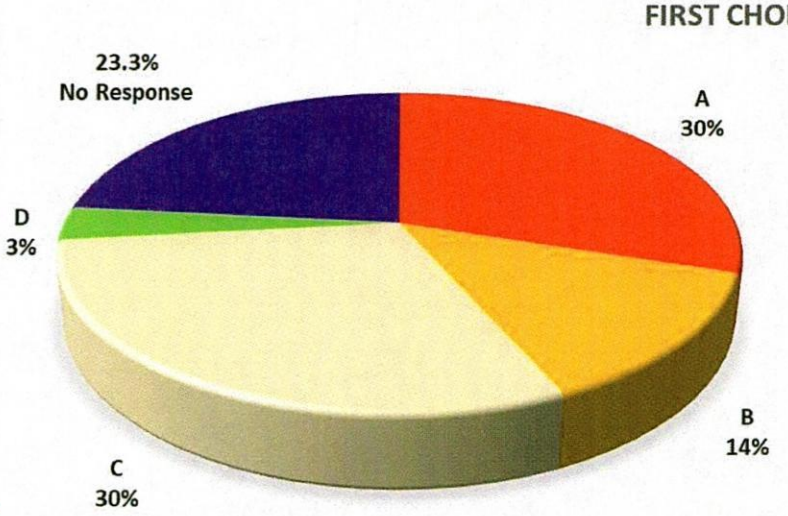
*B. **Neighborhood District***

*C. **Community District***

*D. **Centro Sur***

Overall, Options C and A tied for the first choice of 30% of the participants. However, in this case, the most preferred option when weighted was Option A. Consequently, if the City chooses to further refine Avenue G into subdistrict theming, it is recommended that the name "Barrio District" be replaced by "Mercado District."





First Choice District Naming Results

PROJECT LIMITS

Participants were asked what they considered to be the southern limits of the downtown.

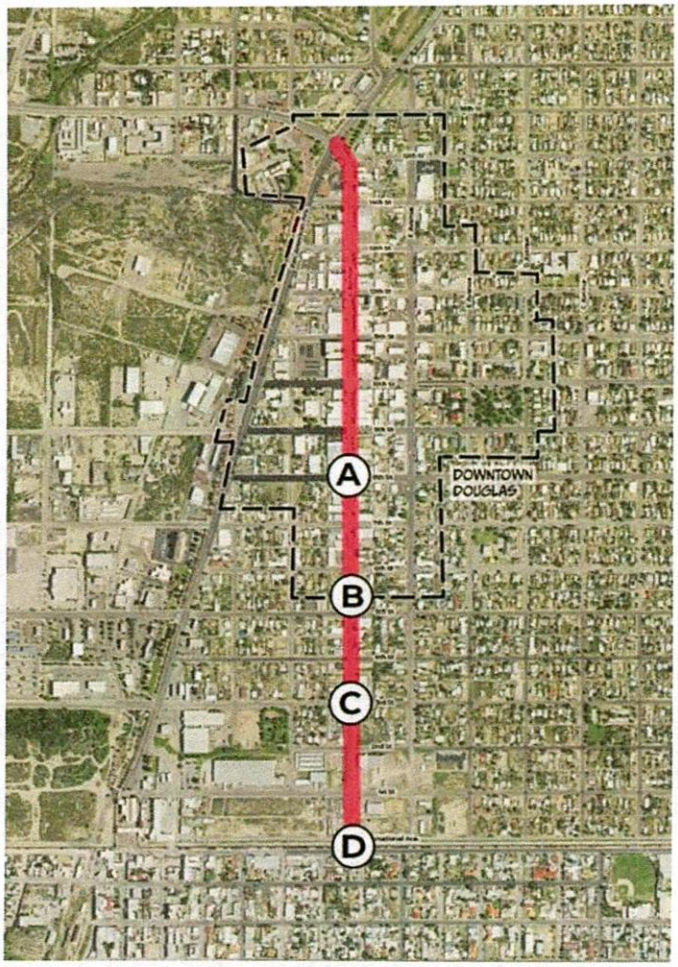
A. ***8th Street (focus on the cultural and historic districts)***

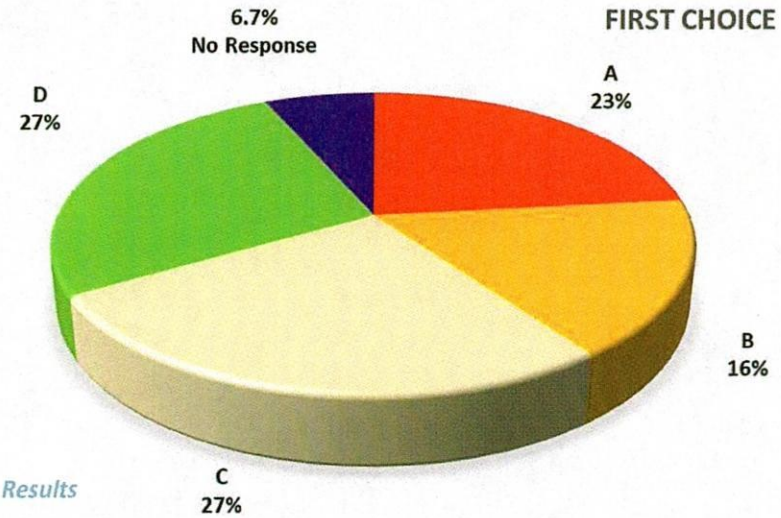
B. ***3rd Street (as in the Downtown Revitalization Plan)***

C. ***Between 5th and 6th Street (current historic district limits)***

D. ***International Avenue (the International Border)***

Overall, Option C and D tied for the first choice of 27% of the participants. When the results were weighted; however, the most preferred option when weighted was Option C. Option C, is the limit of the designated historic district for Douglas. Given the results of the visual preference survey, the streetscape design guidelines terminate between 5th and Street. If the City chooses to expand the historic district in the future, it may also choose to extend the corresponding streetscape elements of this plan.



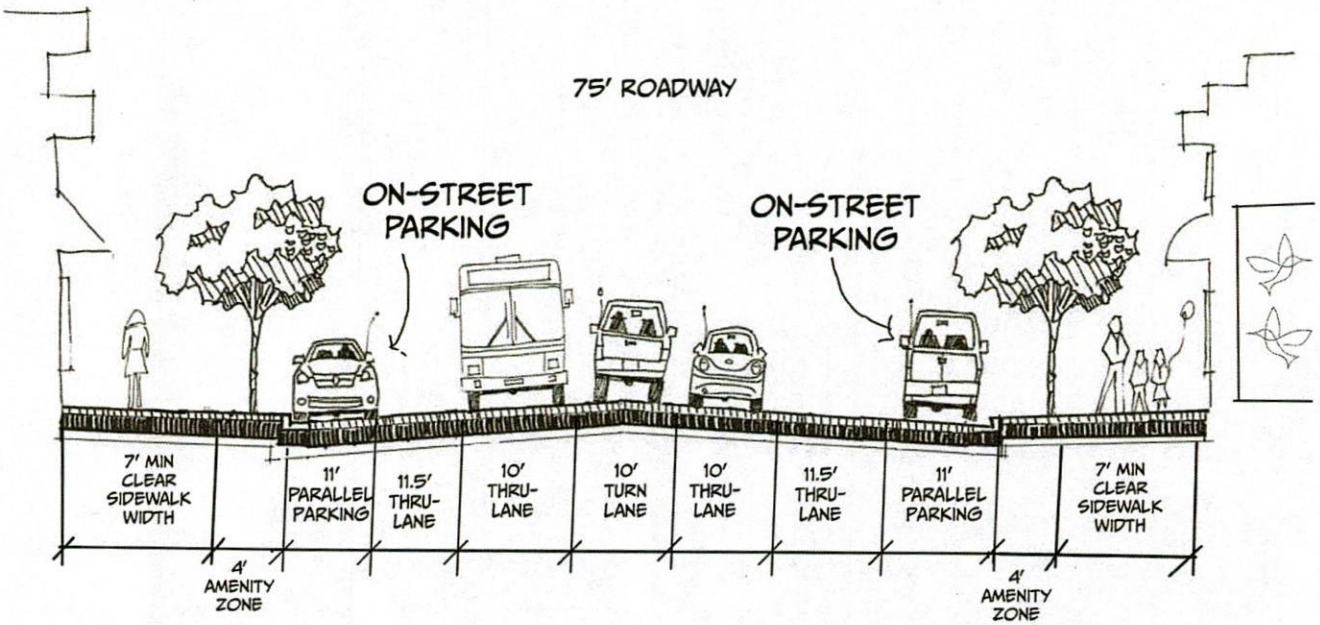


First Choice Project Limits Results

EXISTING RIGHT-OF-WAY

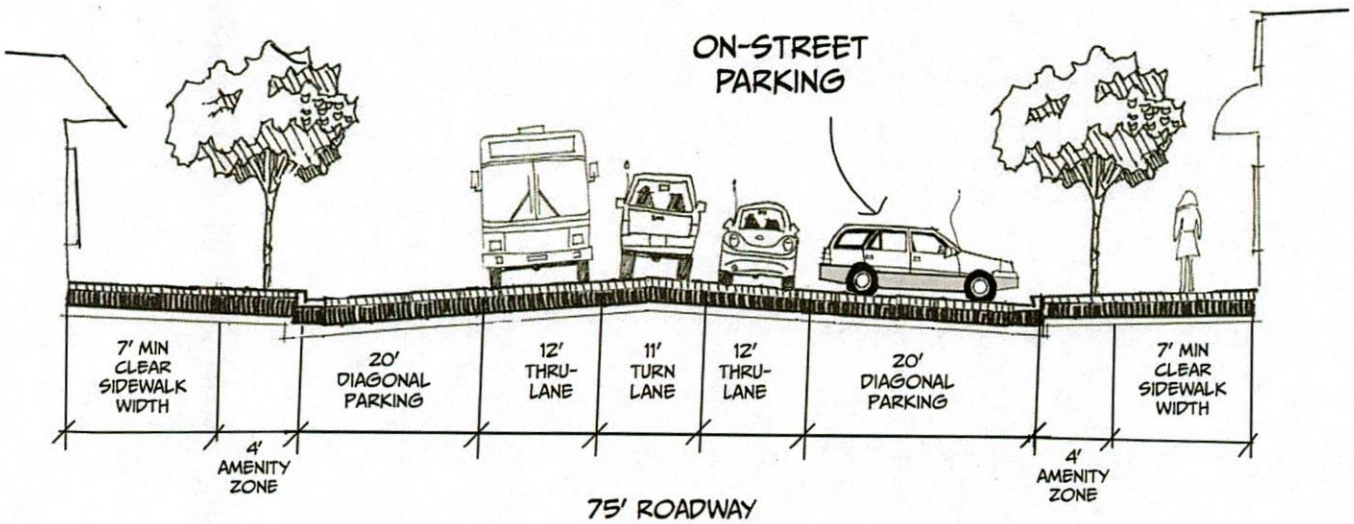
There are variations of the existing G Avenue streetscape, both in terms of the right-of-way and within the public realm. The following diagram is typical cross-section of G Avenue from the intersection of G Avenue with Pan-American Avenue to the intersection of G Avenue with 10th Street.

As the vehicular gateway to the City, this section has the most travel thru-lanes, with two thru-lanes running north and south. The roadway width is approximately 75'-80'.



Typical Cross-Section from the Intersections of G Avenue with Pan-American south to 10th Street

Heading south along G Avenue, between the intersection of G Avenue and 10th Street to the intersection of G Avenue and 6th Street, the right-of-way width remains approximately 75'-80'; however, in place of a north- and south-bound travel lanes is a largely continuous row of diagonal spaces. In between the north– and south-bound travel lanes is a continuous turn lane for vehicles. The elimination of two travel lanes in favor of diagonal parking provides an increased amount of parking for vehicles within this portion of the right-of-way.



Typical Cross-Section from the Intersections of G Avenue with 10 Street to 6th Street

EXISTING INTERSECTIONS

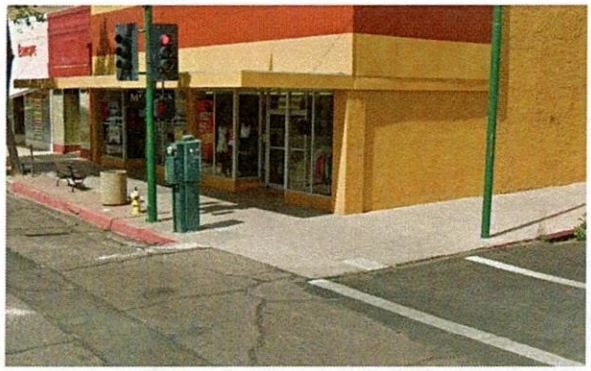
A. **Crosswalks:** There are eleven intersections between the northern project boundary of Pan-American Avenue to 5th Street. Intersection treatments vary, depending on volume of vehicular traffic at the intersection. Of the eleven intersections, five intersections are signalized. Higher visibility, aesthetic treatments, as depicted below, were provided at each of the following signalized intersections of G Avenue: Pan-American Avenue, 14th Street, 11th Street and 10th Street.

Faux brick crosswalk at the intersection of G Avenue and 14th Street

At all other intersections along G Avenue, in place of traffic signals are two-way stop signs, stopping only cars traveling at cross-streets to G Avenue. Instead of high-visibility crosswalks, are standard, white bar crosswalks, as depicted below. The only exception to this is the intersection of G Avenue with 9th Street, which is signalized but only has white crossbars at the intersection.

White bar crosswalks at the intersection of G Avenue and 9th Street

B. **Curb Extensions:** There are no existing curb extensions along G Avenue. The curbs at each intersection are mountable, which means they have sloping faces that allow vehicles to encroach or roll over them without damage to their wheels. Based on the wear to the intersections, it appears many drivers over the years have rolled over the curbs. Curb extensions tighten intersection curb radii and encourage slower turning speeds.



Example of a flush curb at the intersection of G Avenue and 9th Street

SIDEWALKS

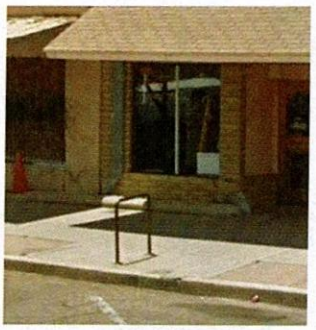
Safe, accessible, and well-maintained sidewalks are a fundamental and necessary investment for all cities. Avenue G has a continuous curb and gutter sidewalk within the project limits. There is a 4' wide brick portion of the sidewalk nearest to the curb. Over time, there has been some uneven settling of the brick, especially near street tree plantings. It is recommended that the brick material be removed and replaced with larger landscape planting bed cut outs and lower-maintenance concrete.

Example of the existing sidewalk along G Avenue

STREETSCAPE ELEMENTS

Existing bench

A. **Benches:** There are 20 benches present along the corridor, including one double bench. The benches are wood with metal armrests and bases. Overall, it is recommended that all existing benches be removed and replaced due to their age and the evident associated wear.

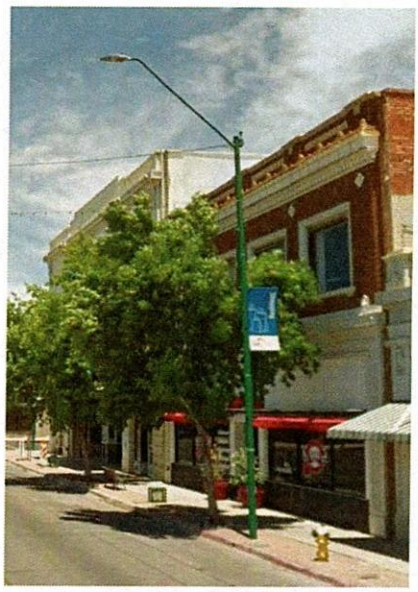


Existing bike rack

B. **Bike Racks:** There are 2 inverted U- bike racks in the southern portion of the study area. In addition, cyclists have been observed securing bikes to trees, which indicates a need for additional bicycle parking.

C. **Street Trees:** There are 76 street trees present in the study corridor. Of those, 42 are in good or fair condition and should be preserved, if possible. Thirty-four (34) trees are in declining or poor condition and should be replaced. Finally, there are 22 planting spaces within the streetscape that appear to have either once contained trees that have completely been removed or where trees were never planted. Overall, it appears that trees are spaced approximately 50' on center along the corridor. It should be noted that future outreach and partnering with business owners is suggested regarding landscape. When young, trees many obscure signage, causing business owners to incorrectly and/or aggressively pruning the vegetation. This behavior must be

discouraged in order to preserve the trees and promote proper growth pattern. There appears to be an irrigation system in place. The irrigation should be tested to evaluate any maintenance or expansion requirements, in conjunction with landscape plantings.

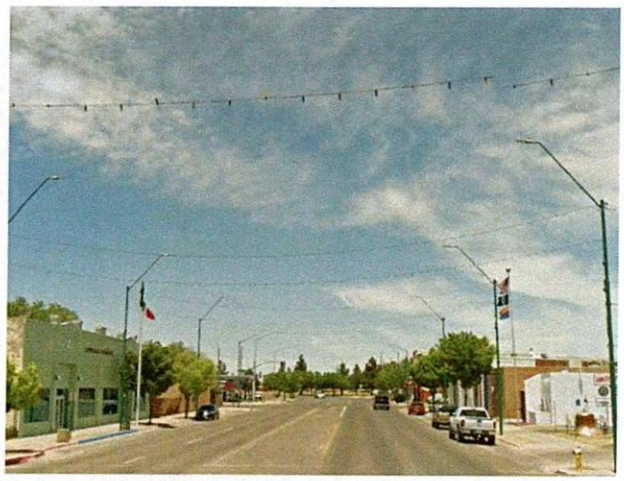


Example street light

D. **Street Lights:** Currently, there are 60 Cobra-style street lights within the study boundaries. Of those, 47 have a dark green finish while 13 lights, south of 8th Street, do not have a dark green finish. The existing lights are approximately 100' on center and are positioned to light the roadway. There is no pedestrian lights, which are lower scale lights, intended to light sidewalks. Ideally, pedestrian-scale lights should be spaced no more than 50 feet apart. Where there are taller, existing street lights, a shorter arm that extends over the sidewalk can be installed.

Example banner

E. **Banners:** The City has installed banners, or at least the brackets for banners, along streetlights on Avenue G. There is evidence of wear and fading on the majority of these banners. It is recommended that these banner be removed and replaced with more durable aluminum banners, as indicated in the following chapter.



Example street light, overhanging the right-of-way along G Avenue

D. **Decorative Lighting:** Avenue G currently has string lights that hang from the street lights. There is a strong preference to see this form of decorative lighting continued and possibly enhanced with additional strings of light.

E. **Public Art and Entry Features:** Currently, the majority of the artwork present is in the form of painted murals on the side of buildings. This plan recommends the addition of durable, graffiti—resistant art, that advertises the City of Douglas and serves as an additional draw to the downtown.

F. **Trash Receptacles:** It is recommended that the existing trash receptacles be removed and replaced with an updated design that corresponds to the rest of the recommended streetscape elements. In addition, more receptacles are recommended, in order to provide

Example trash receptacle

more opportunity for trash disposal in order to keep the downtown clean.

BENCHES

A. Purpose: Seating, often in the form of bench seating, encourages the creation of an environment where people are comfortable. It can provide a rest area while at the same time, activating a space and enhancing feelings of safety by giving a place for people to see others while being seen.

B. Design: The use of high-quality, durable materials is essential. The hot, arid climate of Douglas, must also be taken into consideration as well as how the look of the benches will reinforce the overall look of the downtown. While benches should be comfortable enough to encourage sitting for rest, the benches design should not encourage sleeping. For G Avenue, a traditional to slightly ornate bench design was preferred, as depicted below. Potential color finishes my either be a more traditional black/grey/bronze or a more vibrant red or teal.

D. Location:

1. Existing Benches: All existing benches should be removed due to their current poor condition.

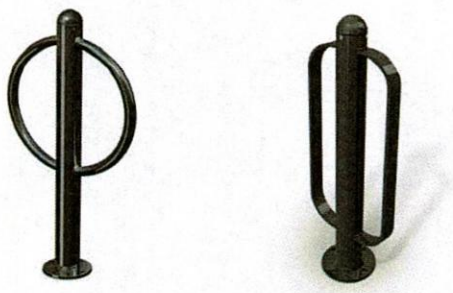
2. Orientation: In order to maintain a wide passable sidewalk, benches should be oriented parallel to the curb. Benches should face towards buildings when located adjacent to the curb in the landscape/ furnishing zone. Benches should face away from the buildings when located adjacent to the building in the frontage zone.

E. Unit Cost: $1,200 -$1,500

BIKE RACKS

A. Purpose: Bike racks are intended to provide safe, convenient parking for bicyclists and encourage non-vehicular travel to, from and within Downtown Douglas.

B. Design: The use of high-quality, durable materials is essential. The material, finish and color should match other streetscape design elements. Racks must be securely attached to the ground, a minimum of two inches in diameter and composed of stainless steel or galvanized steel to prevent theft.



Two-Capacity Bike Rack Options

C. Location:

1. Existing Bike Racks: There are minimal number of bike racks present.

2. Bike racks should be clustered near other streetscape elements, like street trees and benches. The spacing of the rack should consider the amount

of space required once in complete use. For example, a 2-capacity bike racks should have sufficient space around it to accommodate two bikes while not encroaching into pedestrian walkways. Although racks should be provided where there is high pedestrian traffic, locations directly in front of an entrance/exit or driveway must be avoided. Shaded locations are preferred to provide bicycles protection from the sun and elements.

D. Unit Cost: $264-$364. Funding partnership opportunities for the production and installation of bike racks with local utility provider, Arizona Public Service, should be considered.

TRASH RECEPTACLES

A. Purpose: Convenient, attractive trash receptacles, that are regularly serviced by the City, are a necessary streetscape design element to keep the streetscape clean and free of debris.

B. Design: Trash receptacles should be selected from the same or a similar design "family" as other site furnishings and should be finished or painted to complement other site furnishings. Trash receptacle construction should use durable, high-quality materials, such as galvanized or stainless steel. Materials should be painted to reflect colors similar to nearby elements. Material and paint selection should be graffiti resistant. Trash receptacles should be able to open from the side to allow easy access for removal of garbage bags. A domed lid is preferred because of frequent high winds in the area.

C. Location:

1. Existing Trash Receptacles: All existing trash receptacles should be removed due to their current poor condition and in order to maintain a common streetscape element design theme.

2. Trash receptacles should be located:

- Near the corners at intersections,
- Near civic and commercial centers,
- At transit stops,
- Near benches and other streetscape furnishings, and
- Approximately every 200 feet along the corridor.

D. **Unit Cost:** $800-$1,000

STREET TREES

A. Purpose: Street trees and other landscape elements are value-adding community features that increase greenspace, reduce air pollution, provide shade and comfort to G Avenue patrons.

B. Design: The mature canopy should not interfere with street lighting, signage, or building fronts. The crown of the tree at maturity should not affect surrounding infrastructure or overhead high-voltage power lines. The root systems should not affect utilities, sidewalks, or curbs. The best trees for sidewalk planting are those that are deep rooted and find nutrients from deep within the soil, which minimizes the instances of roots pushing through nearby pavement.

C. Location:

1. Existing Trees: Existing streets that are in good condition should be preserved. Trees in poor or declining condition should be removed and replaced. In general, the current spacing of trees should be maintained.

2. Orientation: Tree roots generally extend at least to the edge of the zone beneath the canopy of the tree, and often beyond that. The planting hole should be at least twice the diameter of the root ball. To avoid conflicts with lights, trees should be placed midway between light pole

D. **Unit Cost:** $500-$700 per tree, installed

TREE GRATES VS. PAVEMENT CUT-OUTS

A. **Purpose:** Historically, ADA-compliant tree grates have been used in many downtown settings to cover tree roots, making the surface over top the tree grate walkable. Avenue G was designed with brick bands extending from the sidewalk to curb. These bands are approximately 4-5' in width and have 4'x4' wide cut-outs where trees are present. There are no existing tree grates.

B. **Design:** Tree grates provide more room for pedestrians where space is limited and a more formal appearance, however, they can also damage trees if they are not expandable, can present trip hazard to patrons in heels, even when designed ADA assessible. Alternatively, the continued use of pavement cut-outs is recommended, with additional area provided for tree roots and understory landscape.

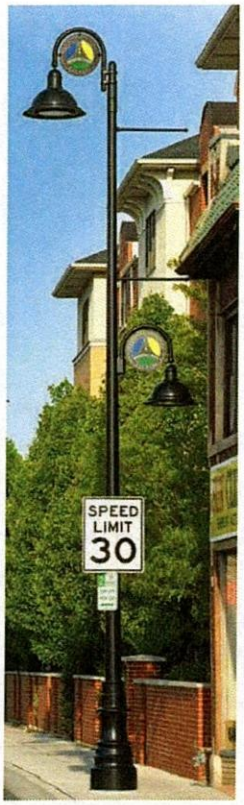
C. **Location:**

1. Existing: Due to widespread and uneven sinking of bricks and weed growth, is recommended that the existing brick pavers be removed. This area should instead be reserved for interconnected beds, wherever feasible to promote better plant growth, and concrete, where required to connect to on-street parking.

2. Orientation: The above example shows a meandering greenspace. To maintain ADA accessibility, a linear bed is recommended.

D. **Unit Cost:** The primary cost will be in the removal of the existing brick pavers, the cost may depend on the amount of bricks removed and whether the labor will be out-sourced. Regular maintenance of plant bed and irrigation will add additional costs.

STREET LIGHTS



A. **Purpose:** Street lights and pedestrian lights are intended to create an environment at nighttime in which people can quickly and accurately identify objects. Pedestrian lighting improves visibility of pedestrians walking along and across the street and enhances security. Overall, pedestrian lighting can be used alone or in combination with roadway-scale lighting in high activity areas to encourage nighttime use.

B. **Design:** Pedestrian scaled street lighting is directed toward the sidewalk, positioned lower than roadway lighting (luminaires are mount 12 to 14 feet above the sidewalk), and is more closely spaced than roadway lighting. This lighting should be considered when calculating the maintained foot candles and uniformity of roadway lighting. Pedestrian scaled street lighting may either be attached to the existing street poles, to minimize the number of poles present in the streetscape or the lighting may be stand-alone and spaced every 50' on center. Downlighting that conforms to Dark Sky ordinances, should be used.

C. **Location:**

1. Existing Street Lights are present at least two of the four corners of every intersection, approximately 15' north or south of the curb and 2' east or west of the curb. Four street lights are present at every signalized intersection. Traffic signals, where present,

are co-located on street light poles. Street lights generally follow these locations north-south every 100' on center. Light poles locations alternate between placement directly across the street from one another, in the most concentrated part of G Avenue, and in a staggered pattern, where there are fewer buildings, for maximum lighting efficiency.

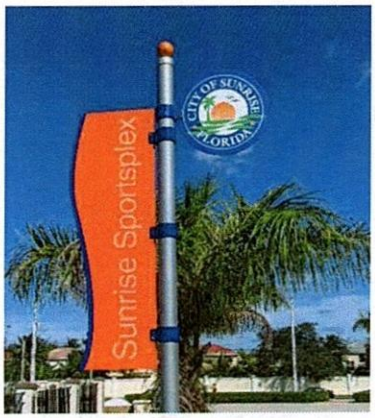
2. Orientation: Existing lighting is oriented toward lighting G Avenue for vehicular users. It is within the streetscape zone.

D. **Unit Cost:** $4,000 per stand-alone pole,

BANNERS

A. Purpose: Banners are a form of wayfinding signage. Wayfinding signage informs, directs, and guides people who are unfamiliar with their surroundings. It is also an important part of reinforcing the City branding.

B. Design: Aluminum sign panels, paired with heavy gage (welded) steel brackets, provide the structural integrity needed for extended outdoor use. As opposed to fabric banners, these banners are designed to last several years.



C. Location:

1. Existing: There are some existing banners on street poles. It is recommended that this be removed and replaced with newer, more durable banners that reinforce the proposed streetscape elements.

2. Orientation: Banners can be incorporated on existing street poles.

D. **Unit Cost:** $300

DECORATIVE LIGHTING

A. Purpose: Decorative lighting can take many forms. While viewed primarily as an aesthetic improvement, it can also enhance feelings of safety and help "activate" a streetscape.

B. Design: The use of commercial grade string lights, in a non-suspended styles, with globe lights is preferred. Strands of lights shall be installed at a height that does not impair or otherwise impede pedestrian or vehicle traffic. The strands must hang 8 feet or higher above sidewalks, and 14 feet or higher above vehicle-travel or parking lanes. All installations must conform to national electrical standards and codes.

C. Location:

1. Existing Lighting: There are existing string lights , attached to the street lights, that extend over G Avenue.

2. Orientation: Additional strings, attached to lower pedestrian lights, can be installed as long as the minimum overhead distance prescribed above is maintains.

D. **Unit Cost:** $300-$400 per string

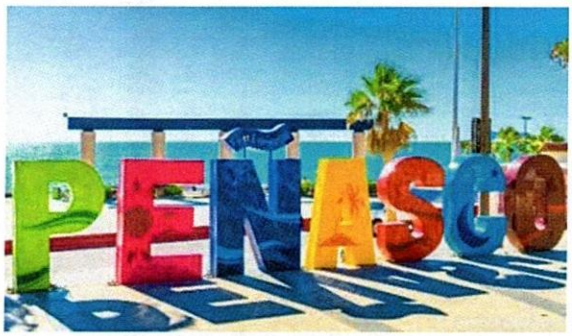
PUBLIC ART

A. Purpose: Public art is important. A majority of Americans see it as a way to improve the image and identity of their community. It can also enhance the cultural identity of where it is placed. Public art can take many forms and it can be phased in and/or evolve over time.

B. Design: The use of high-quality, durable, graffiti–resistant materials is essential. Public art with dual functions, such as art that reinforces the City's branding and/or activates the space it is placed in, is desirable.

C. Location:

1. Existing: The City has several murals painted on buildings throughout the downtown. The preservation of these murals, and the encouragement of additional murals through City regulations and incentive programs is recommended.



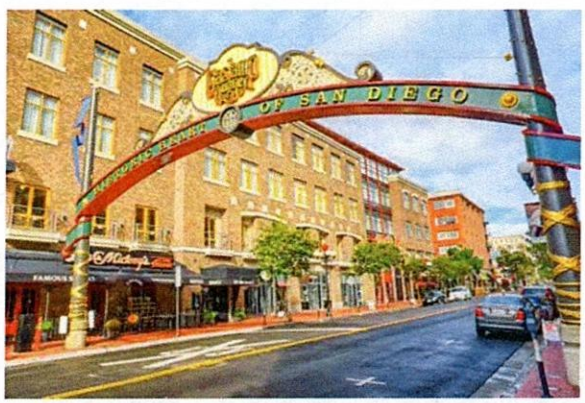
2. Orientation: To encourage interaction and photo-taking with the art, it should be placed in a walkable location near shopping, parking and other amenities. At the same time, it should be framed by a dramatic backdrop, like the Chiricahua Mountains.

D. **Unit Cost:** $20,000—$50,000

ENTRY FEATURES

A. Purpose: A gateway is a physical or geometric landmark that indicates a change in environment from a higher speed arterial or collector road to a lower speed residential, mixed-use, or in this case, commercial district.

B. Design: The arch is a street spanning arch supported by metal posts. The City name as well as "Downtown Douglas" and/or Historic G Avenue should be included on the archway.



C. Location:

1. Existing sign: The existing "Welcome to Douglas" monument sign is located at the southwestern corner of G Avenue and Pan-American Avenue.

2. Orientation: The proposed archway can either be located outside of the Pan-American right-of-way, immediately south of the intersection (preferred location) or slightly further south at the intersection of G Avenue and 14th Street.

D. **Unit Cost:** $30,000-$65,000

TEMPORARY TRAFFIC CONTROL BARRIERS

A. Purpose: Ground-installed bollards are a form of permanent vehicular barrier. For special events, a temporary traffic control barrier is often necessary to prevent cars from entering a designated space. Temporary road closures during special events give non-vehicular users more space. It can also activate a space. To prevent vehicles from entering the spaces, traffic control barriers will be necessary.

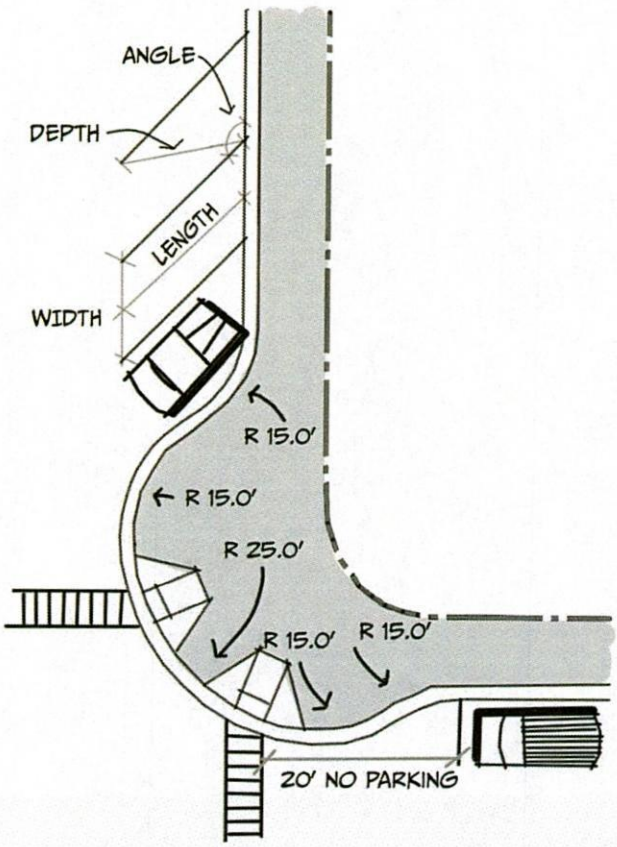
B. Design: While modular plastic barriers and movable traffic signs are often used, more creative, placemaking elements, such as painted tire planters, are encouraged. Tires should be painted for aesthetics and stacked to provide greater visibility. Individual tire dimensions are approximately 15 -17 inches in diameter x 6—8 in. height (per tire).

C. Location: To prevent vehicles from entering a space, temporary traffic control barriers should be spaced no more than five feet apart. Therefore, approximately five traffic control barriers are needed per 40' wide street closure.

D. Unit Cost: $20 per barrier. (Often, used tires may be donated. Paint, the time needed to decorate the tires and even plant material may also be donated.)

CURB EXTENSIONS

A. Purpose: Curb extensions, also known as chokers or bulb-outs, extend the sidewalk or curb line out into the parking lane, which reduces the effective street width and creates a pinch point along the street. Curb extensions also create space for the addition of a curb ramp, which is important for ADA accessibility. They can be used with either parallel or angled parking. Costs vary depending on specific site conditions and whether utility relocations are necessary.



B. Design: General dimensions and turn radii are provided in the figure above. Two separate curb ramps, one for each crosswalk, should be provided at corner of an intersection. In the above example, the curb is expanded only on G Avenue. The existing parking design and road width would be maintained on all side streets.

C. **Location:** Curb extensions should only be used where there is an existing on street parking lane and should never encroach into travel lanes, bike lanes, or shoulders.

D. **Unit Cost:** $2,000 to $20,000 per extension, with an average cost of $13,000 each, or $52,000 per intersection.

ANGLED PARKING

A. **Purpose:** On-street parking is an important part of the streetscape along G Avenue. Angled parking can accommodate more vehicular parking spaces and are considered by many drivers easier to navigate than the existing parallel spaces.

B. **Design:** The overall dimensions required for an angled parking space depend on the angle of the stall. Based upon that measure, the following table indicates the required stall length, width and depth.

Angle	Stall Length	Stall Width	Stall Depth
30°	32.7′	17′	16.36′
45°	26.5′	12′	18.7′
60°	22.9′	9.8′	11.5′
75°	20.3′	8.8′	19.6′

C. **Location: To** prevent vehicles from entering a space, temporary traffic control barriers should be spaced no more than five feet apart.

D. **Unit Cost:** Included in roadway surfacing costs

RESURFACING

A. **Purpose:** The pavement condition of Avenue G shows evidence of wear and tear. It is recommended that G Avenue be resurfaced prior to the installation of new crosswalks and parking restriping.

B. **Design:** There are different resurfacing treatment options, which vary significantly in terms of overall cost, durability, and maintenance requirements.

1. Fog seal is a light application of a diluted slow-setting asphalt emulsion to the surface of an aged (oxidized) pavement surface. Fog seal helps postpone the need for asphalt overlays or other surface treatments, and it's especially helpful after chip sealing to keep the stone aggregate stuck securely in place. Although fog sealing is will make the surface it is applied to look new, it will only lasts for a few years due to how thin of a layer is applied.

2. Chips seal is a pavement surface treatment that combines one or more layers of asphalt with one or more layers of fine aggregate. For preservation purposes, chip seals should be applied to pavements that are in relatively good condition with no structural damage. When a chip seal is applied to a pavement in good condition, six to eight additional years of service is a typical expectation.

3. Asphalt milling/resurfacing is the process of removing and replacing the top layer of an asphalt pavement. This is the most costly option; however, this treatment should last ten to fifteen years.

B. **Location:** It is recommended the entire G Avenue corridor be resurfaced using one or more of the techniques and materials listed above.

D. **Unit Cost:** Fog-seal $3k per lane mile, Chip-seal $36k per lane mile, asphalt replacement $300k per lane mile

CROSSWALKS

A. **Purpose:** Crosswalks are intended to make designated pedestrian crossings more visible and safe. They are often installed to warn motorists to expect pedestrians crossings ahead and also to indicate a preferred crossing location to pedestrians. Crosswalks may be installed at intersections or midblock locations.

There are numerous materials used for marking crosswalks, including paint (waterborne or oil-based), epoxy, poly urea, thermoplastic and preformed tape. Thermoplastic is the crosswalk marking material most favored by many communities currently, due to it's longevity, durability, and ability to be applied using city equipment and labor. On the other hand, crosswalk murals, using local artists and volunteers, can offer a

community engagement opportunity. Retroflected preformed thermoplastic striping should be used for outside crosswalk striping.

B. **Design:** Thermoplastic crosswalks require professional installation. The City may choose to provide more expensive and long-lasting preformed thermoplastic crosswalks, like the one featured below, at signalized intersections. Intersections with less vehicular travel could instead be painted with murals and use striped preformed thermoplastic standard banding on the edges. Painted crosswalks will require more maintenance.

Location:

1. Existing Crosswalks: All existing crosswalks have severely faded over time and require maintenance., preferably in conjunction with roadway resurfacing.

2. Crosswalks should be located at all four sides of each intersection along G Avenue.

D. **Unit Cost:** $3,000 per crossing, $12,000 per intersection for preformed thermoplastic mural crosswalk. $700 per crossing, $2,800 per intersection for standard white thermoplastic banding.