

6. Plaza Park and Vicinity (Figures 3-7 to 3-14)

- Section Width — Main Street, 75 feet, peripheral streets, 60 feet.
- ADT — 20,000.
- Accidents from January 2005 through March 2006 — Eight total, three at each Main Street corner (east and west), and one at each Imperial Avenue corner (north and south).
- Issues — Crossing Main is dangerous at east and west corners, trucks ignore truck route signs, pedestrians need safety education.
- Resident recommendations — Reduce speeds, continue bike lanes, road diet, pedestrian improvements; better crosswalks all around the plaza, high visibility crosswalk with flashers at City Hall; ADA ramps all around the Plaza; install countdown pedestrian signals at intersections; divert through traffic and convert Main Street Plaza to parking; install traffic circles at east and west corners of Plaza; consider traffic circles at 2nd Street and 6th Street intersections.



Left turns should again be safe after lane reduction.

Short Term Solution (Figures 3-7 to 3-14)

The Plaza and blocks surrounding it mean more to the community than any other part of Brawley (with the possible exception of the arena during Cattle Call). The town's signature Planters Hotel is here. It is home to City Hall, the Post Office, Sheriff's substation and the Police Department, other public facilities, and the Main Street commercial core with its arcades and storefront shops.

All the concepts applied to Main Street west of the Plaza come to a focus here. Vehicle traffic will be slower, quieter, and safer. Bicycle and pedestrian activity will increase. Plaza Park will be transformed into a better refuge, a proper setting for the public buildings sited there, and focal point for community activities.

Of course, the complete makeover is only possible once the City of Brawley has full control over the Main Street right-of-way. Until that occurs, planning for the ultimate design should proceed, and near-term measures should be implemented to advance this project's goals.



The Planters Hotel holds potential for renovation.

There are five components to these early steps:

- First, restripe this section of Main Street to match the lane reduction design, and add bicycle lanes. The bike lanes are narrower than the vehicle lanes they will replace, so the extra street width can buffer parked cars. Reducing conflicts with opening car doors is important at this location due to the heavy parking activity during the day and through traffic (in the short term). This configuration is shown in Figure 3-7 on the following two pages.



Redesigned Plaza will improve walking conditions.



Planters Hotel will benefit from reduced truck traffic

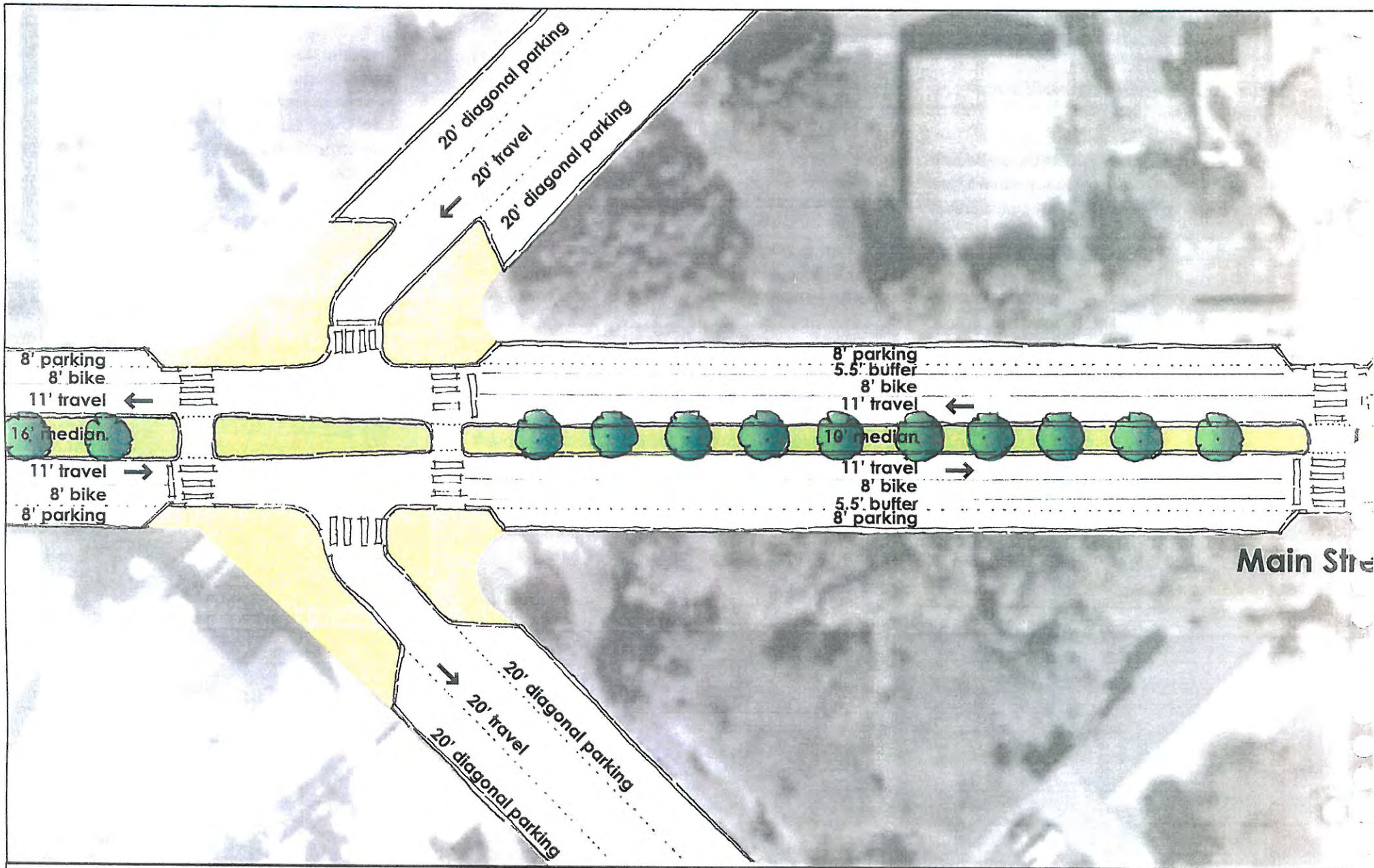


Figure 3-7: Short-term recommendations for Main Street through Plaza Park.

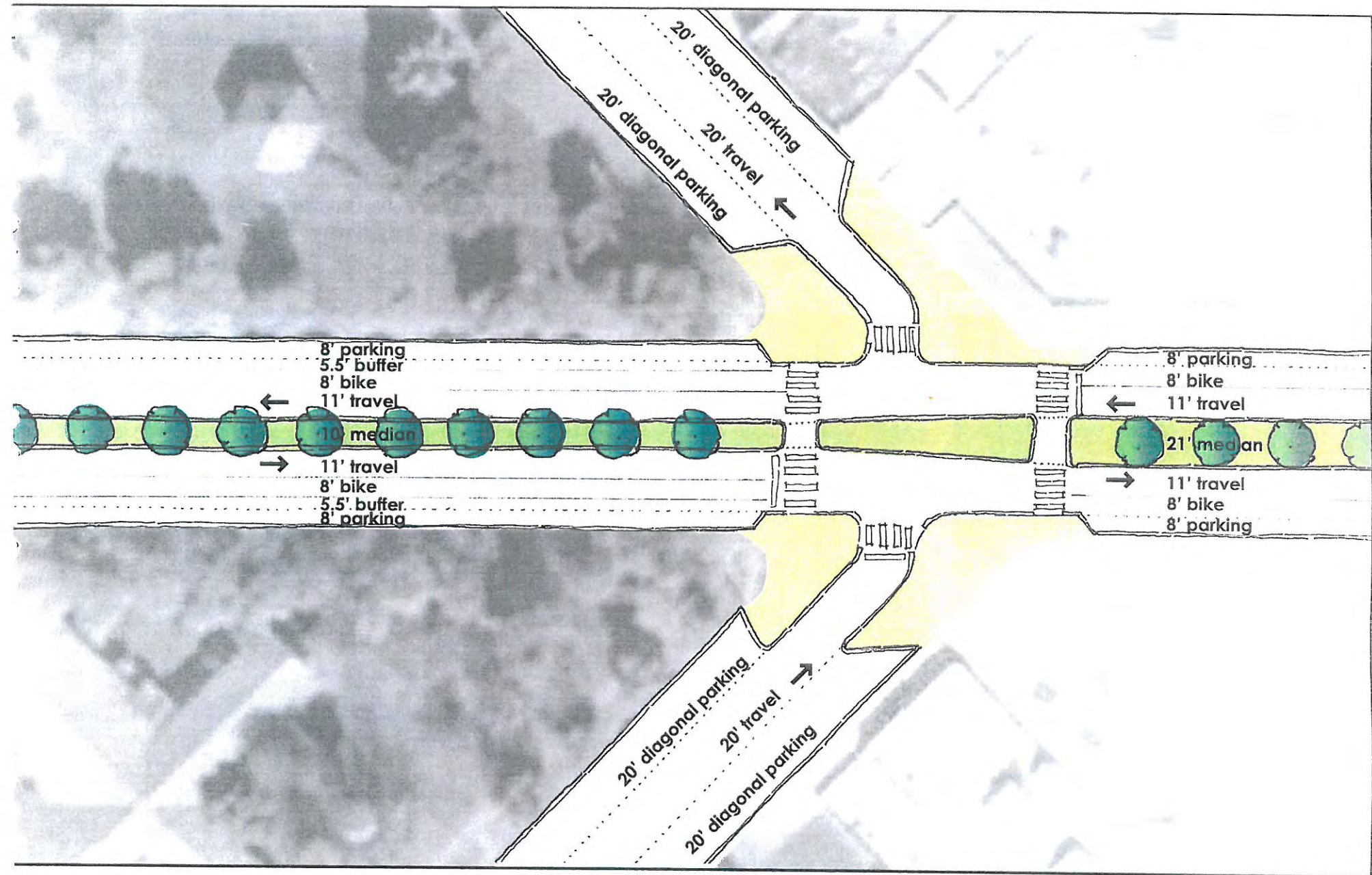


Figure 3-7: Short-term recommendations for Main Street through Plaza Park.



Posts with "knock down" capability for emergencies.



"Jersey" barriers (above) and planter median (below).



Three examples of temporary median barricades.

- Second, is a temporary measure until the long-term solution routes through traffic around the Plaza. The hazard to vehicles crossing Main Street is best dealt with by redirecting that traffic to signals at 2nd and 6th Streets. Temporary median barriers as shown in Figure 3-7 will prevent traffic from crossing Main Street. Three examples are shown in the photos at the left, each with different advantages. The "jersey" barriers are effective and easy to remove, but block emergency access. Posts require boring holes in the street, but can

provide "knock down" access for police and fire vehicles. The last barrier is attractively landscaped, but much more expensive and not easily removed.

- Next are short-term recommendations for curb extensions and improved crosswalks at many areas around the Plaza and in front of City Hall. Figure 3-8 is the design for the crosswalk in front of the Post Office that was shown at the closing charrette session.



Figure 3-8: Mid-Plaza crossing connecting the Post Office and Brawley City Hall.

- Fourth, are changes for pedestrian and vehicle safety at the east and west corners of the Plaza. Temporary curb extensions can be outlined with parking lot bumper blocks, as recommended for interim medians in other places on Main Street. Later these areas will get full curbs and landscaping. Curb extensions slow traffic and assist pedestrians walking along Main Street. Figures 3-9 and 3-10 are designs for both sides of the Main Street and West Plaza intersection.
- Finally, a solution for the large expanses of open asphalt at the north and south Plaza corners. They bake in the heat, encourage speeding, and are a hazard to pedestrians. One solution is curb extensions to narrow vehicle space as shown in Figure 3-11. This increases landscaping areas, “chokes” traffic down, and shortens crosswalk distances. An alternative design could include a large triangular island at these locations as shown in Figure 3-12. This requires pedestrians to use two crosswalks, but would minimize vehicle conflicts. It also allows large vehicles rounding the Plaza corner to make that turn in two 45 degree movements, rather than a single, sharper, 90 degree turn.



Figure 3-9: Outline of curb extensions on West Plaza corner near the Police Station.



Figure 3-10: Outline of curb extensions on West Plaza corner near the Planters Hotel.

Long Term Solution (Figures 3-13 and 3-14)

The most important long term change is to route Main Street traffic around the Plaza so that east/west traffic behaves like north/south traffic currently does. Circles, curb extensions and islands will transform the Plaza into a large traffic circle.

Once the street through the center of the Plaza is closed to through traffic, it becomes available for other uses. It was noted at the resident design session that City Hall, the Post Office, and the Sheriff's Station all have entryways oriented towards the current Main Street. A Brawley resident suggested a concept that retains street-frontage access, and adds parking. This idea proves the value of local design workshops. It would consist of

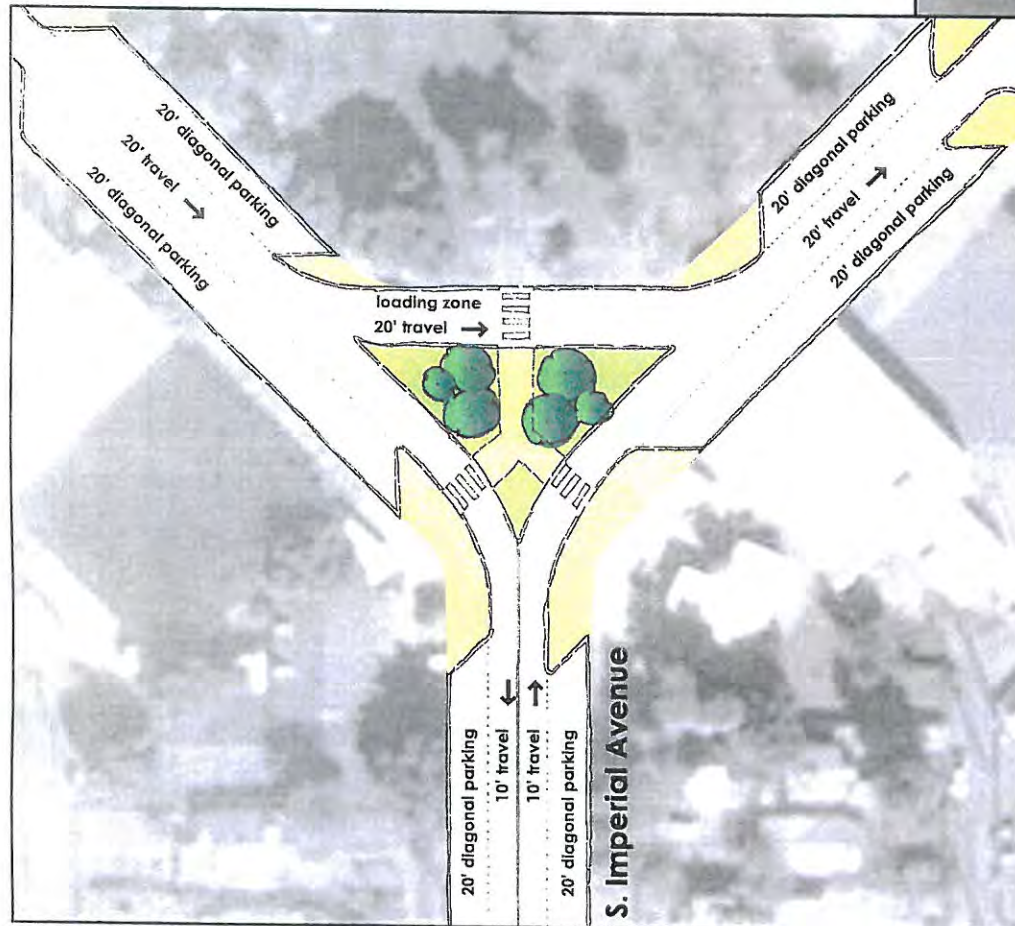


Figure 3-11: Center island alternative.

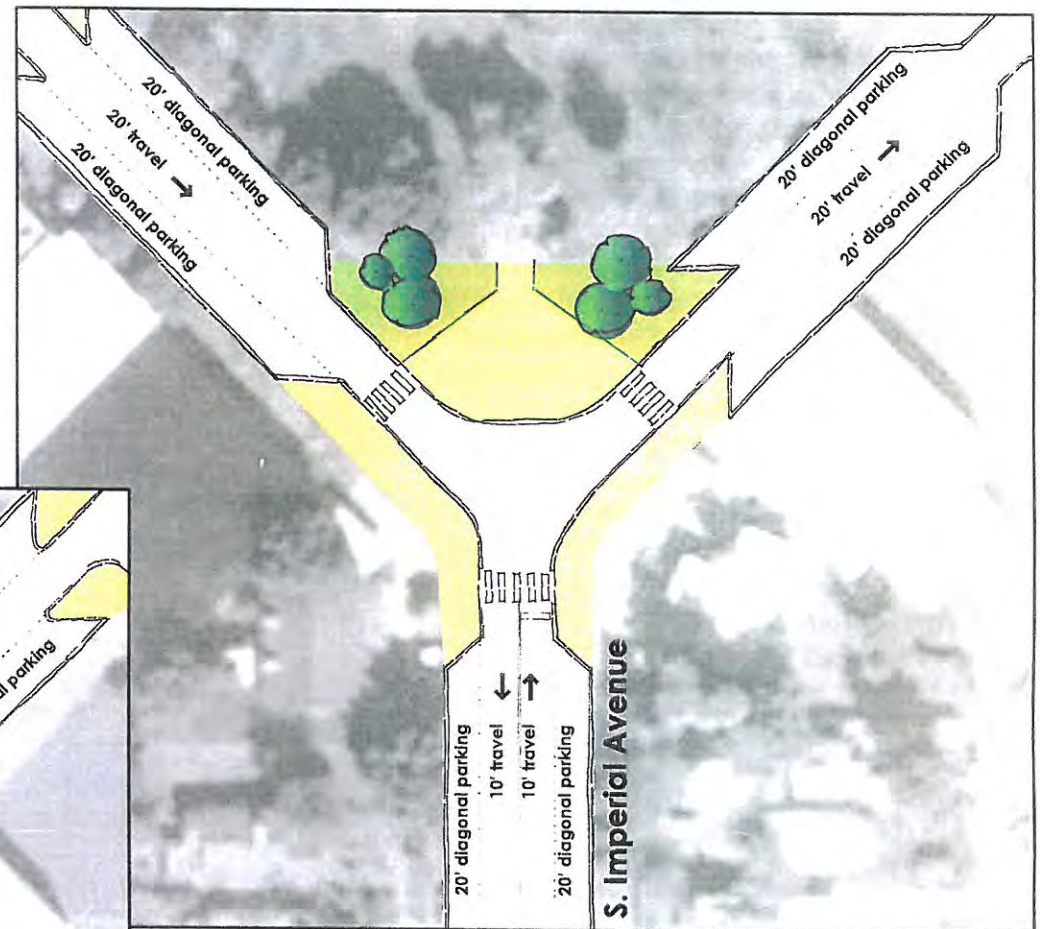


Figure 3-12: Curb extension alternative.

two long “U”-shaped sets of parking stalls, with through access only for bicycles and emergency vehicles, as shown in Figure 3-13. Bike lanes would not be painted in this area, but “sharrow” stencils on the asphalt would instruct drivers and bicyclists to share the lanes.

During festivals, farmers markets, or other events, this area could be closed to parking. The community should consider large shade structures to cover parked cars, farmers market stands, or festival booths. This would transform this once busy expressway into the kind of functional public plaza that is part of the town's heritage. Figure 3-14 on the next page highlights that solution. Inset photos show a “sharrow” example, two shade structures, and a possible move to a mid-Plaza location for the horse and cowboy sculpture now on the corner nearest the Planters Hotel.

Figure 3-13: Plaza conversion into traffic circle with central parking and special event space.

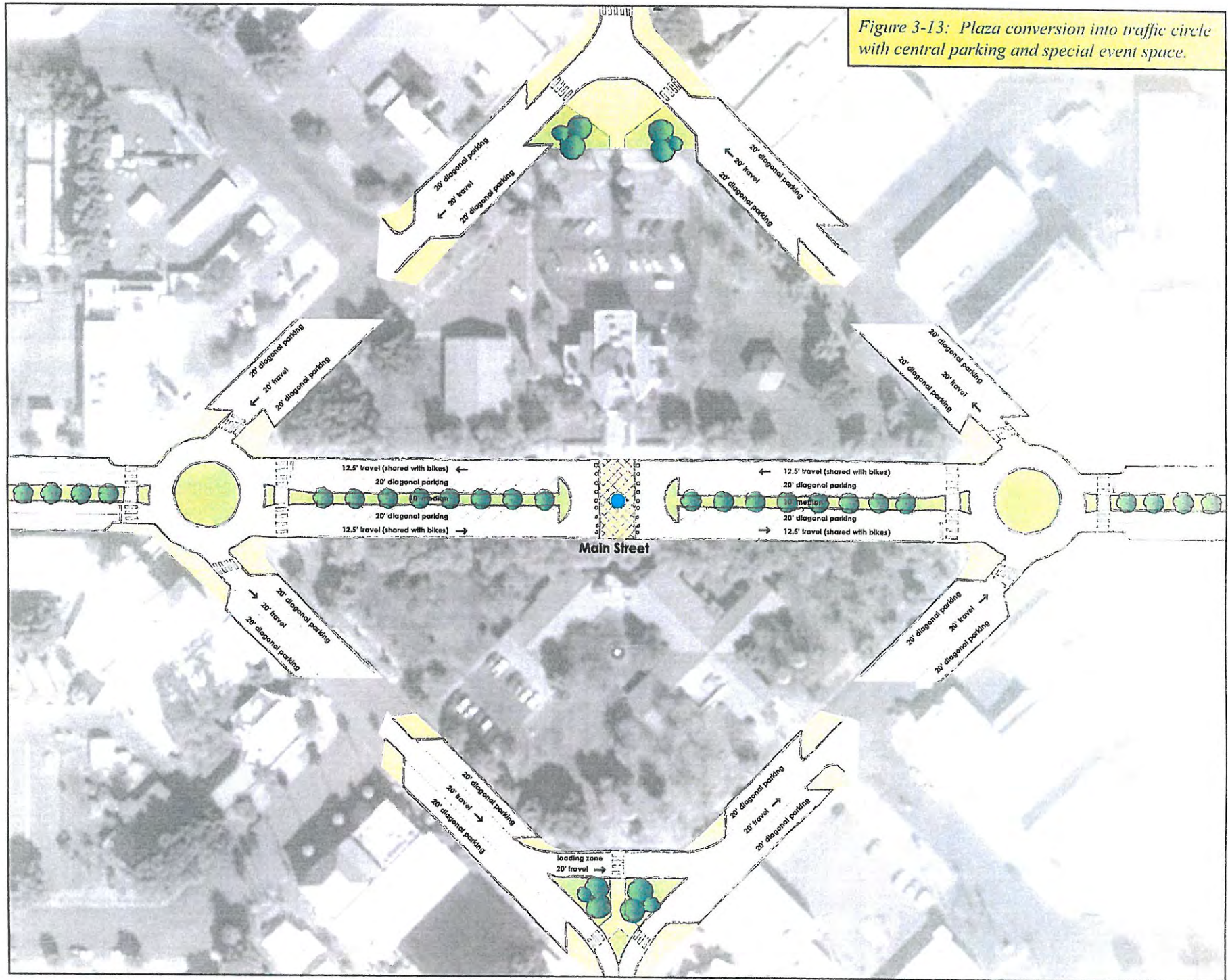
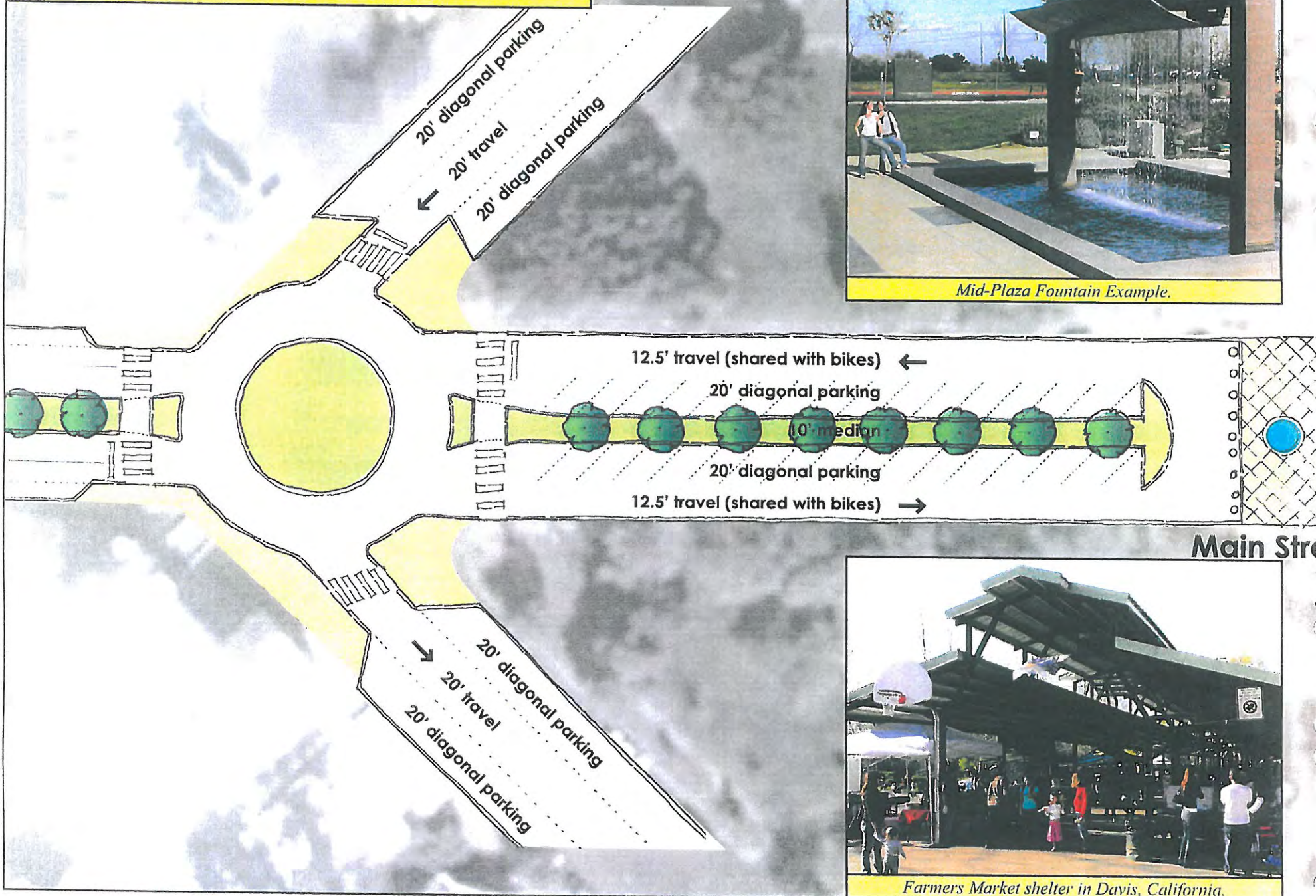
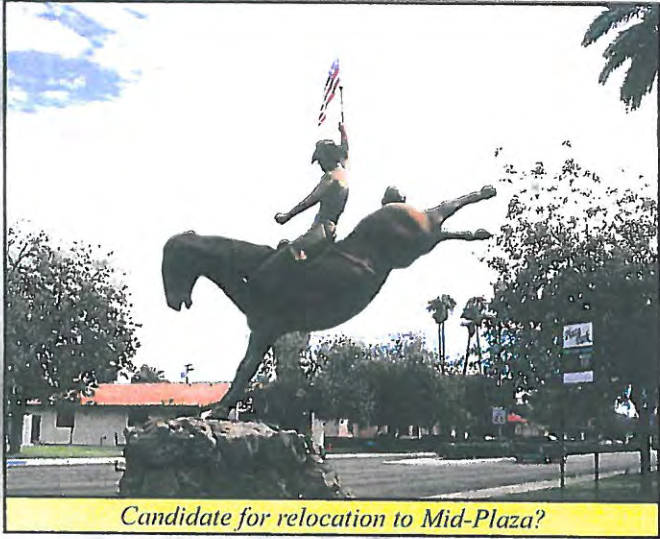


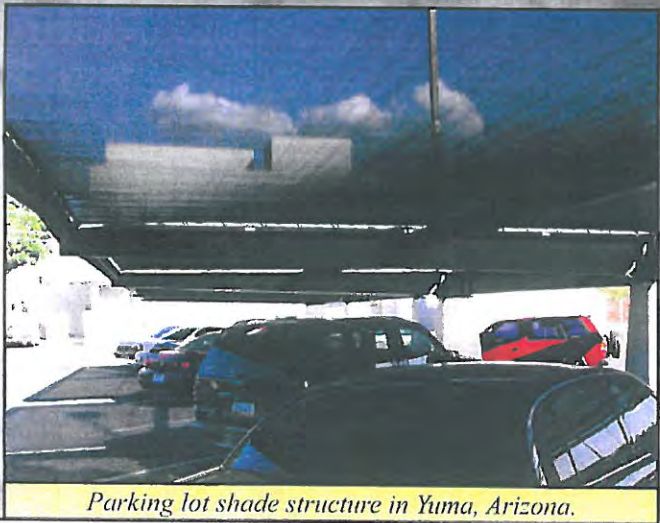
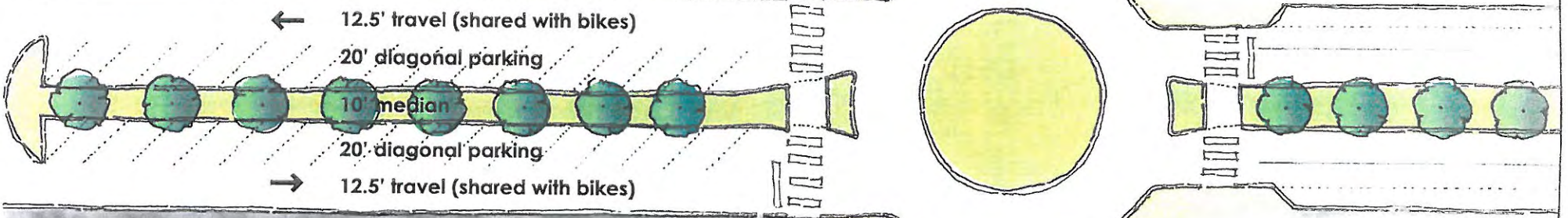
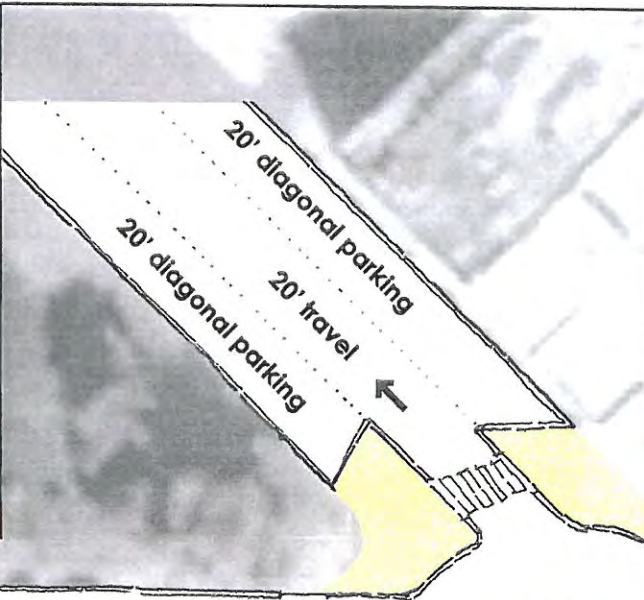
Figure 3-14: Central Plaza area detail with possible centerpiece sculpture or fountain, shade structures, and sharrow stencil.



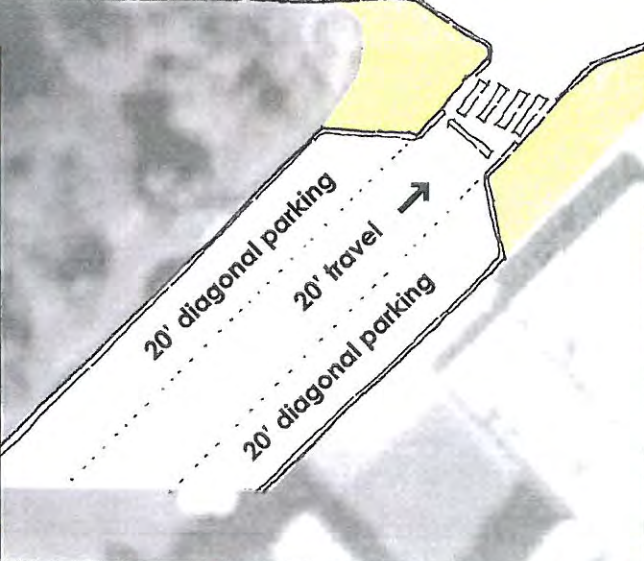
Main Street



Candidate for relocation to Mid-Plaza?



Parking lot shade structure in Yuma, Arizona.



Share the lane "sharrow" in San Francisco, CA.

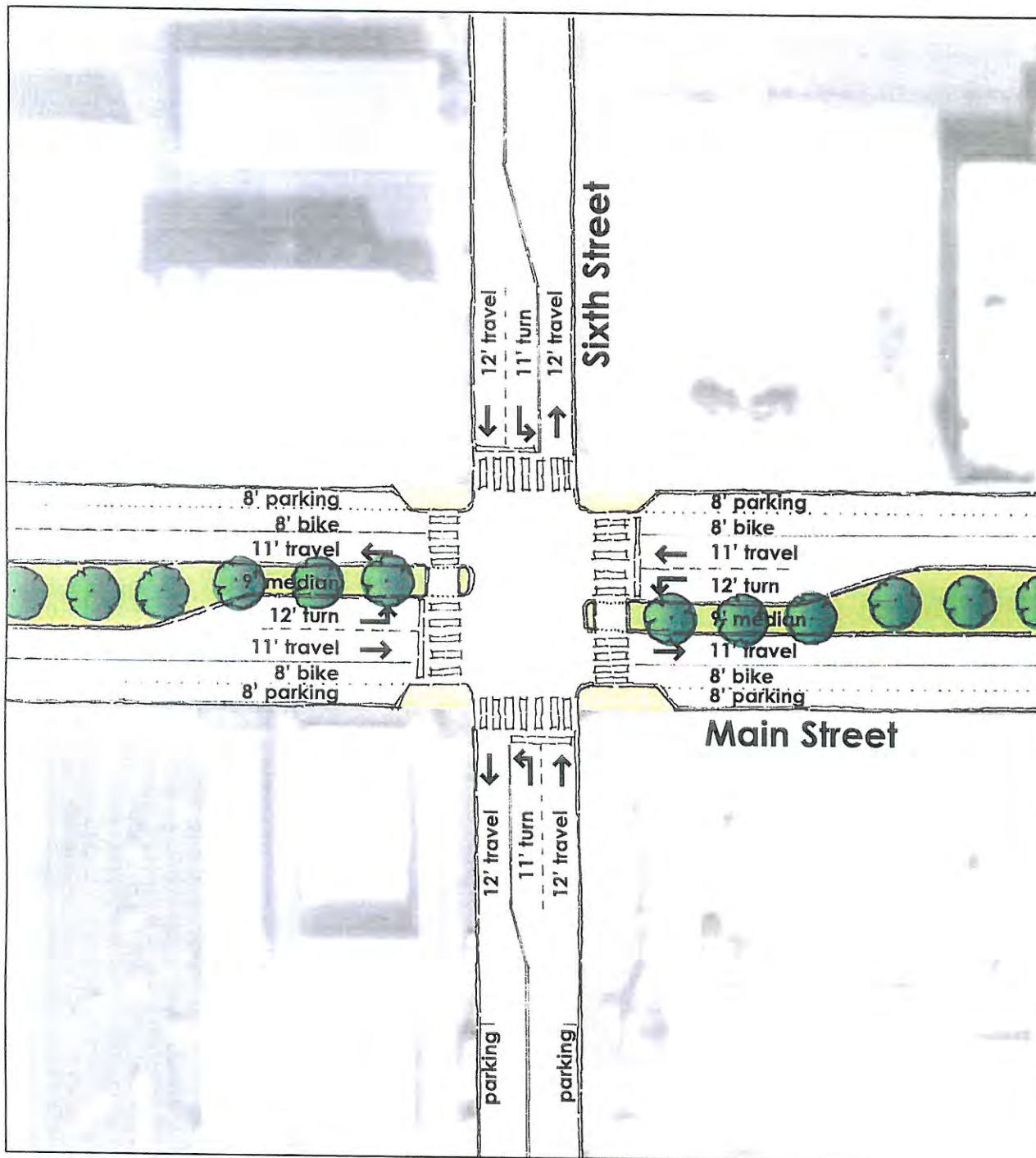


Figure 3-15: Sixth Street and Commercial Core.

7. 6th Street and 500 and 600 Blocks (Figures 3-15 and 3-16)

- Section Width — 75 feet.
- ADT — 19,000.
- Accidents from January 2005 through March 2006 — Five.
- Issues — Light cycles are too fast for pedestrians crossing Main Street.
- Resident recommendations — Medians are good. Other view: remove medians to move traffic away from parking and sidewalks.

Short Term Solution

Once past the Plaza area, the recommended design for Main Street continues with two through lanes, left turn lanes, bike lanes, medians, and curbside parking. Removing one through lane on each side of the median provides room for the bike lanes, which moves traffic away from the shops and sidewalks (one of the design table objectives). This extra distance, the expected reduction in heavy truck traffic, and the lower speeds of passing vehicles will all combine to reduce noise levels in the arcade passageways. This change will bring about an immediate improvement in the “feel” of these two central commercial blocks.

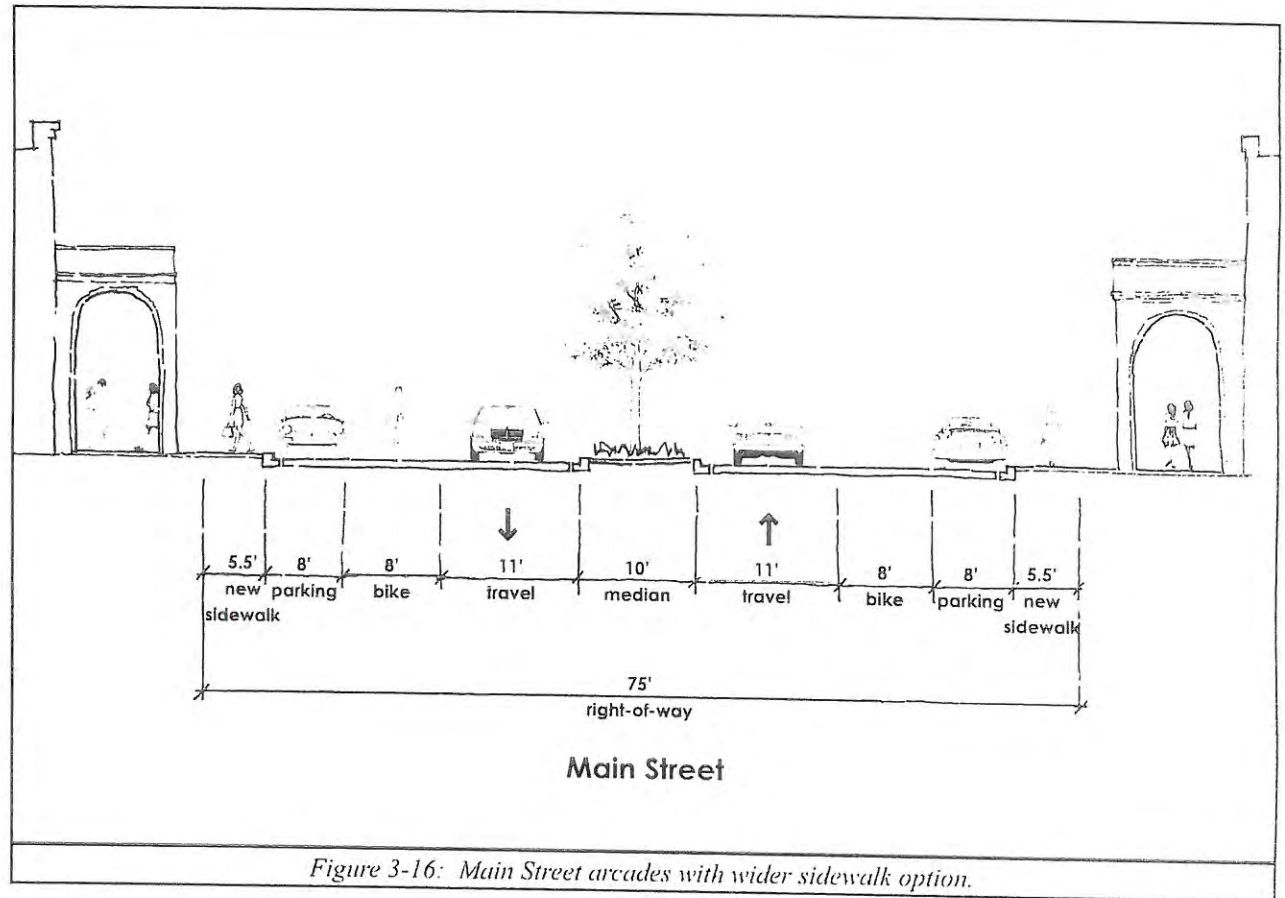
Long Term Solution

As with the intersections discussed above, for these blocks on either side of 6th Street the long-term solution is to follow up with the median and curb extension improvements as funding becomes available. In this busy and important part of downtown, and elsewhere on Main Street, lessons

learned while the short-term solutions are painted on the street may lead to refinements in the design.

A slight modification would leave the median a bit narrower than the design shown in Figure 3-15. If the left turn lane was reduced to the 10 foot width of the existing median, and no median nose was provided at the corners, 11 feet of width would be available on the existing asphalt. That could be split to widen the sidewalks 5.5 feet on either side of the street as shown in Figure 3-16. This would make curbside ingress and egress from parked vehicles easier, and also move through-traffic further from the shops and arcades.

Additional recommendations for these core blocks are in the land use section of this report. They also respond to issues raised during the charrette process and recommendations from the citizen design groups. It is important to note that in other communities in America, redesigned streets have been the catalyst for economic revival. After the streetscape is improved, property owners in the area make improvements, businesses thrive, and people come to the street to socialize and shop.



City officials reviewing commercial district.



Traditional arcades in Brawley core area.



A variety of goods are available in core area.



The Ciudad Plaza building is frequently damaged as large trucks negotiate the tight right turn onto Main Street.



Recently, a truck making a very wide right turn onto westbound Main Street became stuck on top of the median in the middle of Main Street. This blocked traffic on Main Street for a lengthy period of time until a towing service could extract the truck. This was not the first occurrence of this type.

The difficulty lies in balancing pedestrian safety and traffic calming designs that narrow vehicle spaces down, with the wide lanes necessary for large trucks to turn at this location. The first action should be to install the curb extension on the northwest corner to protect the Ciudad Plaza building, as shown in Figure 3-17. This will also require the cooperation of Caltrans for immediate restriping of 8th Street at this point to reflect the new lane configuration. This will move trucks farther away from the 8th Street curb and the Ciudad Plaza building when they initiate the turn, and give them more room to swing wide onto Main Street.

8. 8th Street/Highway 111 North (Figure 3-17)

- Section Width — 75 feet.
- ADT — 18,000.
- Accidents from January 2005 through March 2006 — Seven.
- Issues — Many accidents. Trucks turning from southbound 8th Street to westbound Main Street running over the Main Street median, or hitting the Ciudad Plaza building.
- Resident recommendations — Continue lane reduction design.

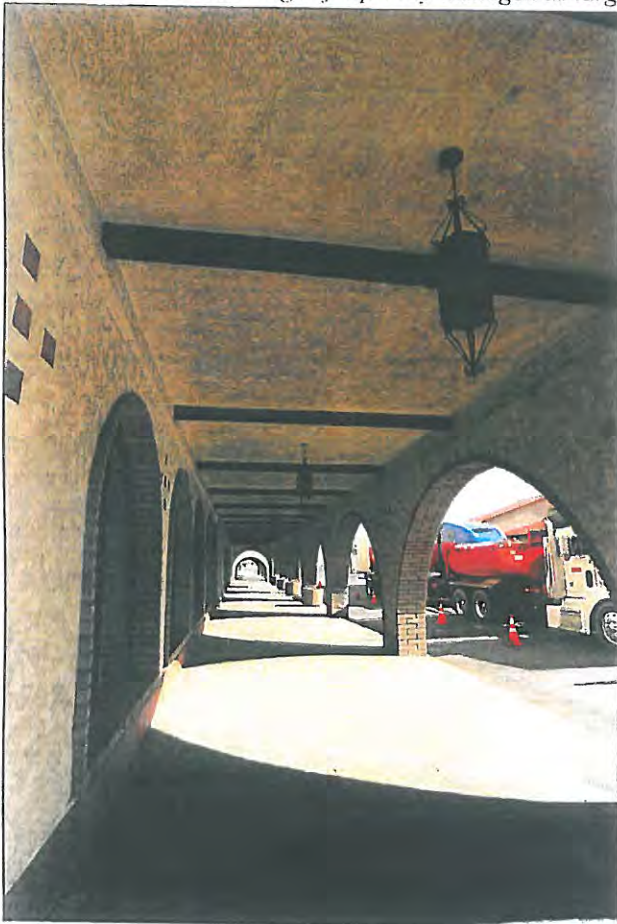
This same curb and median strategy should be done on the southeast corner of this intersection, even though there is much less truck traffic at that point. However, only the northwest corner by the Ciudad Plaza building will require the additional protection of steel posts or similar devices as a last defense for the building.

Long Term Solution

Long-term, this intersection should get a more thorough treatment. Curb extensions should appear at three corners, and the existing raised medians will be redesigned as shown in Figure 3-17. Except for the immediate protection of the Ciudad Plaza building discussed above, this work and the accompanying landscaping must wait until funding is available.

Short Term Solution

This is a problem intersection in many ways. It has the highest number of accidents of any intersection on Main Street, now that the left turn issue at 2nd Street has been addressed. The Ciudad Plaza building has been scraped many times. This damages not only the vehicles and building, but the traffic signals attached to the building.



The renovated arcades of the Ciudad Plaza building.

At the northeast corner, a different approach is necessary to give trucks turning from westbound Main Street onto northbound 8th Street the room they need. A new “pork chop” island on the northeast corner near the fire station, as shown on Figure 3-17, will protect pedestrians as they cross either way from that corner and still allow a wider turn radius for large vehicles. Please note that this island is not symmetrical, but is more sharply pointed on the eastern corner. This is necessary to keep vehicles from sweeping around the corner as if it were a freeway onramp, endangering pedestrians.

The recommendation does not include small median extensions (median noses) beyond the crosswalks as are found in the other designs, because these may impede truck turning movements at this busy location. If the wider sidewalk option discussed above is chosen for the 500 and 600 blocks of Main Street, it would be prudent to remove the median noses completely at this intersection for compatibility with that design and to eliminate another obstacle to trucks. Curb extensions and crosswalk improvements will help offset the loss of the pedestrian refuge.

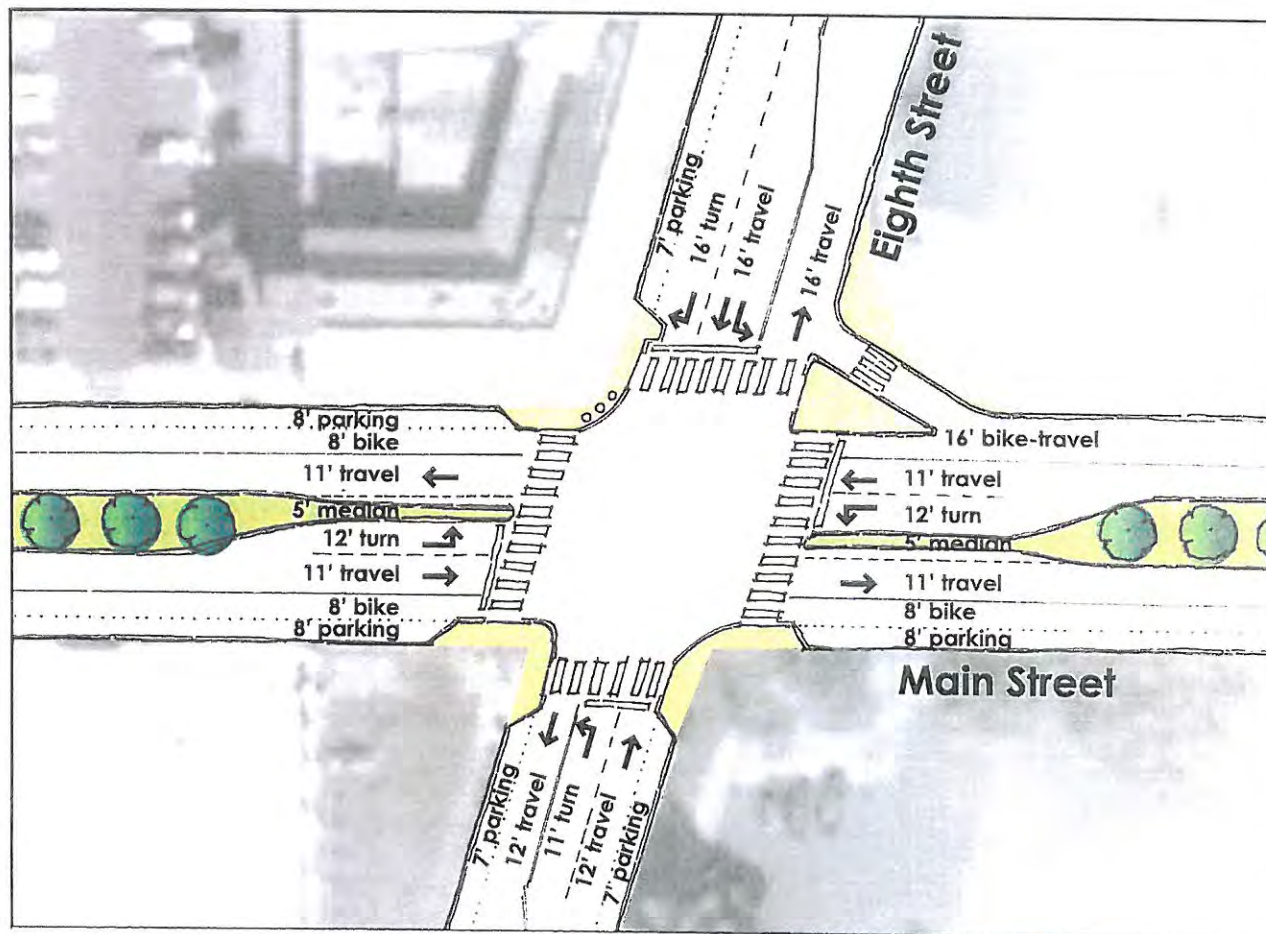


Figure 3-17: Long-term redesign for Eighth Street intersection.



Pedestrians feel vulnerable in exposed crosswalks.



Excess width on Eighth Street that can be closed in with curb extensions.



Pedestrian and wheelchair obstacles on sidewalks.



Brawley Fire Department headquarters.

EAST MAIN STREET

9. Eastern Avenue (Figure 3-18)

- Section Width — 69 feet.
- ADT — 4,000 to 16,000.
- Accidents from January 2005 through March 2006 — twenty between 9th Street and Best Road.
- Issues — The design of East Main Street invites speeding. Meat plant employees speed on Best Road, especially leaving work in the evening. A request not to install continuous medians, because many of the businesses on East Main Street either service or have deliveries by large vehicles. Another request to complete the sidewalks further east on Main Street to Best Road.
- Resident recommendations — Continue lane reduction design.



The streetscape of East Main has its own feel.

Short Term Solution

The width of Main Street narrows back to the 69 or 70 feet at the railroad tracks near 8th Street, continues unchanged from that point to Best Road, and eventually on to the Highway 111 Bypass. The design of Main Street simplifies east of the railroad tracks, with the intersections farther apart as the central Brawley grid system of short blocks and frequent cross streets decays into the superblock, collector, and arterial style street system.

The recommended configuration for the Eastern Avenue intersection is shown in Figure 3-18. It is representative of other intersections between 9th Street and the Highway 111 Bypass (9th Street, Cesar Chavez Avenue, Palm Avenue, and Best Road).

Short-term, changes to the roadway will be done primarily with paint: lane narrowing, and adding bike lanes. Future curb extensions can initially be outlined with low concrete blocks.



The roadway is more open, with businesses set back.

Long Term Solution

Over time, continuous sidewalks, center medians, curb extensions, and landscaping can be added to East Main Street. Note the comment from one participant in the charrette who asked that continuous raised medians not be installed east of the tracks. Many of the businesses along that portion of Main Street either service, or require deliveries by, large trucks or RVs. Larger vehicles cannot negotiate u-turns or other maneuvers to access these driveways like smaller vehicles can.

Additional “greening” of the street can be done over time as driveway access is better controlled, and as experience indicates where landscaped medians should be. These medians could be “islands” with trees and other landscaping. Even though they would not be continuous, the same beautification and traffic calming benefits would occur. An example of a street tree retrofit accomplished by boring holes through existing asphalt is shown in the photograph at the upper right on this page. Safety concerns about trees in the street are minimal with a 25 MPH speed limit.



Food stands and cafes tend to front on the sidewalk.

10. Highway 111 Bypass

Because work on the immediate area of the intersection of Main Street and Highway 111 would occur in the Caltrans right-of-way, no image was prepared for this area. The East Main Street configuration is carried to this point, with possible changes at the intersection to aid heavy vehicle traffic. Additionally, a gateway should be created a short distance west of the intersection, as discussed earlier in this Chapter.



Inexpensive tree addition with new holes in street.

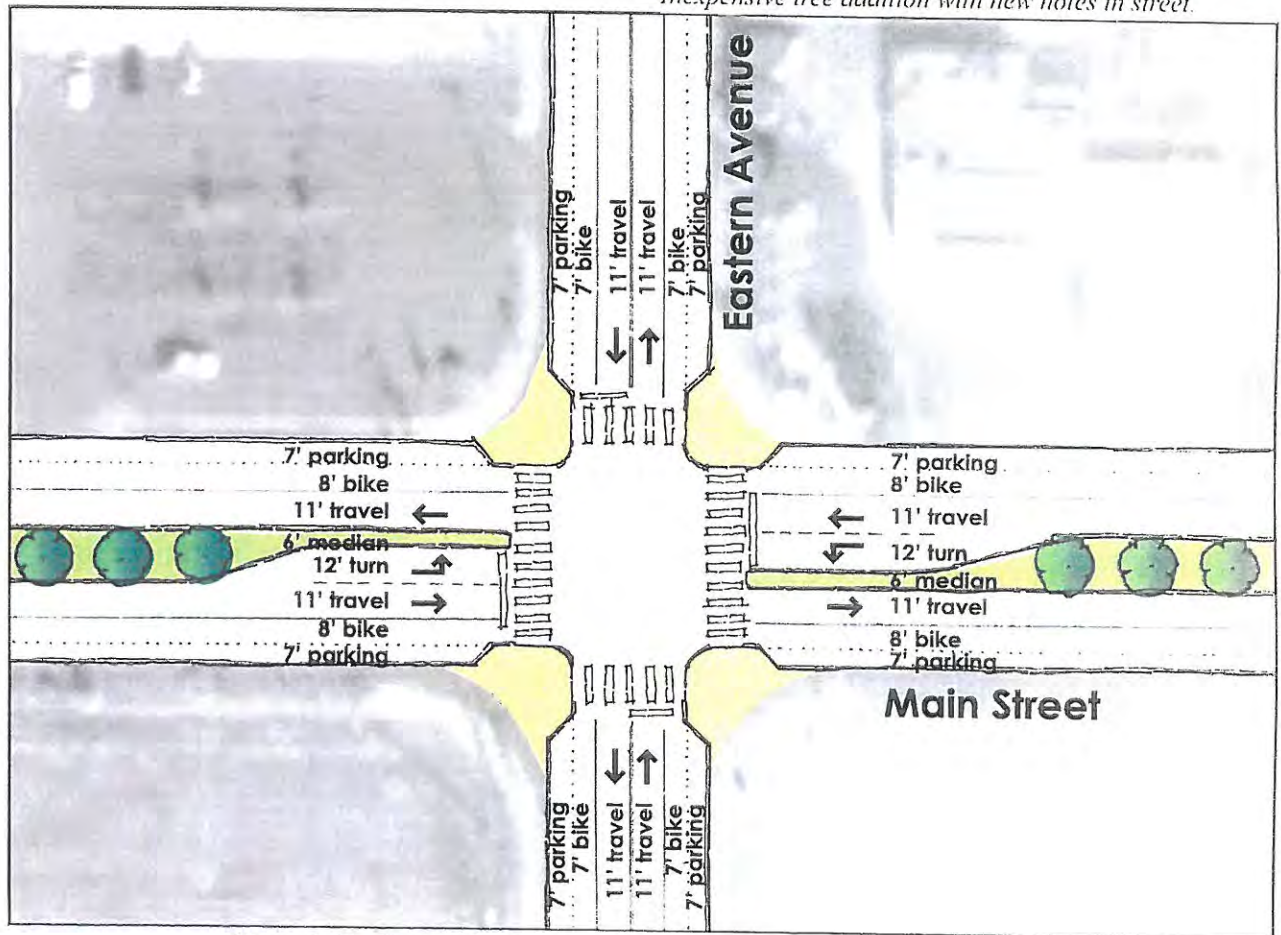


Figure 3-18: Eastern Avenue, as prototype for other East Main intersections.



While some buildings sit neglected...



...others show the results of renovation and care.



While some sidewalks need repair...



...others are in excellent shape in pleasant environments.



While portions of central Brawley are uninviting...



...other spots invite a relaxing sit to watch traffic go by.

11. Streetscape

At this time, the “streetscape” along Main Street sends mixed images to the community and visitors. By streetscape, we mean all the visible features between the front portions of properties on either side of the street.

“Streetscape” includes:

- Building facades — materials and paint, awnings, signs, windows, displays, and lighting
- Street lighting — poles and lamps
- Sidewalks — also crosswalks and ramps
- Landscaping — street trees, bushes, flowers, and grassy areas
- Public art, fountains, statues, sculptures, etc.
- Street furniture — benches, tables, trash and recycling receptacles, newspaper racks, bike racks, etc.

Work on refreshing Main Street must include as many of these elements as possible, in addition to the basic changes in the design of the street itself. Much of this work can be done in conjunction with the long-term measures recommended in this chapter. This is economically efficient, and spares residents the inconvenience of sequential construction projects.

One neighborhood in Orlando, Florida, took a comprehensive approach to install, build, or plant everything in the streetscape one block at a time. That strategy generated support for the project as each “unveiling” showed the potential for the entire package of improvements.

A broad mix of funding programs is often used to rework streets in this fashion. Chapter 5 of this report offers suggestions for funding sources, along with internet links to funding program websites.

SCHOOL ZONE RECOMMENDATIONS

Although this project is focused on Main Street, two school sites were examined after parents and educators expressed concerns. The project team visited the Brawley Union High School and Barbara Worth Jr. High School locations several times, observing student drop-off behavior and general activity. This was repeated at Witter Elementary School near south Highway 86. Both areas have seen an unfortunate number of accidents, several involving young children on foot or on bicycles.

One quick and inexpensive suggestion is to install 4-way stop signs at all intersections near Brawley's schools, unless other design measures are better. If vehicles blocking bicycle lanes become a problem, those lanes could be highlighted with colored paint as shown in the photo below.

While the design team offered recommendations at two areas, it should be understood that school access safety is a complex topic best addressed by a design effort focused around that topic. Good design is enduring. Safe streets reduce City costs for education, and enforcement.



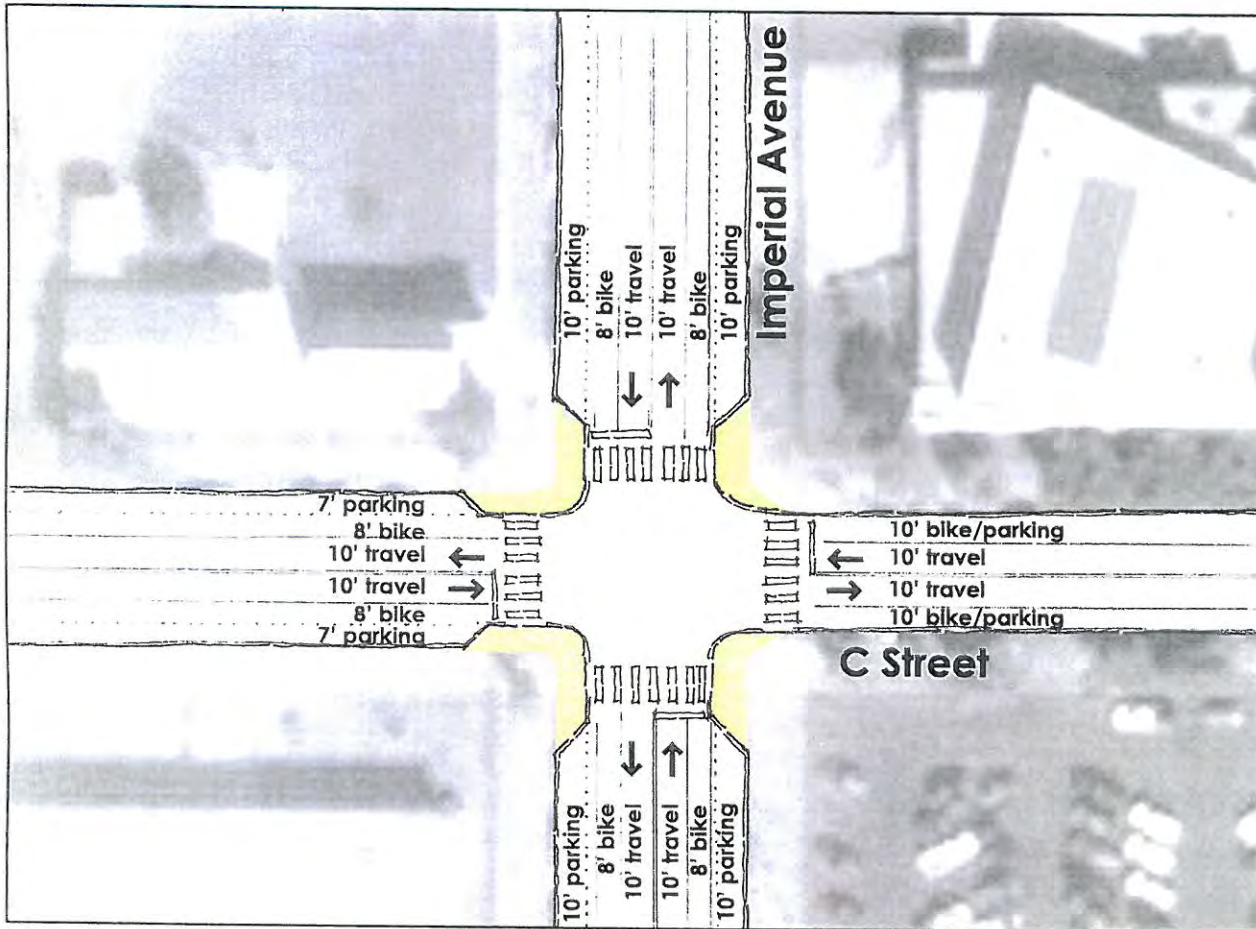
Bike lanes can be highlighted with colored paint.



School children of varying ages congregate happily near Barbara Worth Jr. High School.



Some children are escorted by parents or friends.



12. Brawley Union High School (Figure 3-19)

In the 15 months from January 1, 2005 to March 31, 2006, City records show thirteen accidents on the streets bordering Brawley High School and Barbara Worth Jr. High School. Other accidents were reported in the general vicinity of these schools during the time immediately before and immediately after school hours. This is an accident frequency that must be addressed. The most serious threat is to young students on foot or riding bicycles.

Figure 3-19 is an example treatment for intersections around the high school. The curb extensions minimize the time students are exposed to vehicle traffic while crossing streets, and channel that vehicle traffic into narrower single-file lanes. This provides room for clearly striped bike lanes, which should be on all approaches to the high school and other schools in the community. The precise configuration and lane widths will change as existing street widths vary.

Figure 3-19: Imperial Avenue and C Street near Brawley High School and Barbara Worth Jr. High School.



Crosswalks are difficult to see and often not respected by drivers.



Although students often ignore them as well.

13. Witter Elementary School (Figure 3-20)

In the 15 months from January 1, 2005 to March 31, 2006, City records show six accidents on the streets near Witter Elementary School. Several of these accidents involved bicyclists or pedestrians, adults as well as students.

The situation near this school is complex, due to the proximity of the heavy vehicle traffic on Highway 86. One obvious danger is the unnecessary street width and lane count on Highway 86. The highest traffic volumes projected for Highway 86 south of Main Street are barely half the vehicle count that could be served by a single through lane in each direction.

Therefore, 1st Street/Highway 86 should get the same lane reduction treatment that is recommended for Main Street — one through lane in each direction, left turn pockets at corners, raised and landscaped medians, and bike lanes. This design should extend to the south at least as far as Pioneers Memorial Hospital, where gateway features as



Multiple safety issues on this trip to school.

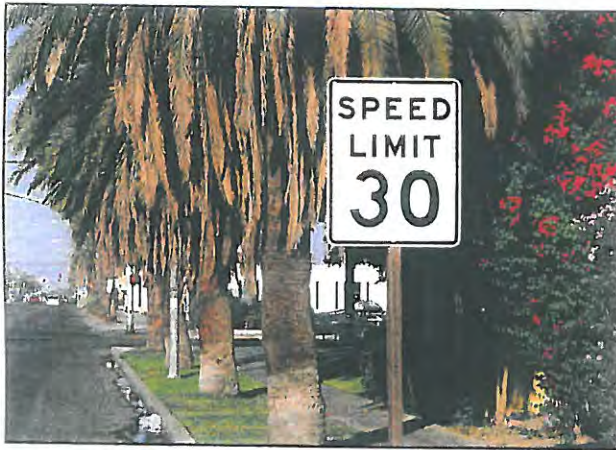
described above should announce the entry into Brawley and tell drivers it is time to slow down.

Second, single-lane roundabouts as depicted in Figure 3-20 should be designed and installed at the 5-way intersections of Hwy 86/Malan Street/

Western Avenue and Hwy 86/K Street/1st Street. These will smoothly regulate traffic flow without the delays of signals, reduce vehicle speeds as drivers slow to negotiate the system, and improve pedestrian safety. The designs shown on Figure 3-20 are schematic only, not final.



Figure 3-20: Recommendation for roundabouts on Highway 86 near Witter Elementary School



Better than 45 MPH, but 30 MPH is still too fast.



Crossing streets will be safer for everyone.



Many large vehicles will divert to bypass routes.

SUMMARY OF DESIGN RECOMMENDATIONS

Short Term

Because of funding limitations, right-of-way ownership, and external projects (completion of the Highway 111 bypass), the initial phase of the Main Street improvements will be done primarily with paint and other inexpensive methods. The complete list is as follows:

- Work with Caltrans to reduce the speed limit on all of Main Street to 25 MPH.
- Mark curbside parking on Main Street from 1st Street/Highway 86 South to Best Road.
- Mark continuous bicycle lanes from the west side of the New River Arroyo to Best Road with a 10 to 12 inch wide separator stripe.
- Separate bicycle lanes from vehicle lanes in the arroyo with low concrete pucks.
- Stripe a 3-foot buffer between the bike lanes and parking stall through the Plaza.
- Stripe two 11-foot wide through lanes in each direction from the west side of the arroyo to 1st Street/Highway 86 South.



Businesses thrive as streets get calm and quiet.

- Stripe only one 11-foot wide through lane in each direction from 1st Street to Best Road.
- Outline future curb extensions with paint and low concrete pucks.
- Stripe center medians and turn lanes as depicted in the images in this chapter.
- Outline the medians with concrete pucks.
- Use more prominent median barriers to prevent crossing and turning near Marjorie Avenue (Figure 3-4) and the East and West Plaza crossings (Figure 3-7).
- Outline traffic control curb extensions or islands at the north and south Plaza corners with low concrete pucks. Two optional designs are shown in Figures 3-11 and 3-12. Perhaps experimentation during this phase will reveal which design works best.
- Install the measures shown in Figure 3-17 on the Ciudad Plaza corner of 8th Street and Main Street to protect the building.
- Begin work on curb extensions, additional stop signs, and other safety measures in the area around Brawley Union High School and Barbara Worth Jr. High School.
- Begin discussions with Caltrans about traffic calming and safety improvements in the area of Witter Elementary School on Hwy 86.



Business interiors will also be quieter.

Long Term

The following additional improvements can be made as funding becomes available, as the Highway 111 bypass is completed, and as experience with the short-term design dictates.

- Use colored paint if necessary to highlight bicycle lanes.
- Widen the short-term 6-foot bicycle lanes near the Vons market to 8 feet.
- Reduce through lanes to one 11-foot lane in each direction through the arroyo and on to 1st Street/Highway 86 South.
- Install permanent raised and landscaped medians as depicted in the images in this chapter.
- Install intermittent raised landscaped median islands on East Main Street in locations where they will not interfere with heavy vehicle movements.
- Install a gateway west of Las Flores Drive.
- Replace the temporary median barriers at the East and West Plaza crossings with traffic circles and curb extensions as depicted in Figure 3-14.
- Close the central Plaza to through vehicle traffic and reconfigure the area as shown in Figure 3-14 into angled parking and shared travel lanes indicated by sharrows.
- Place a prominent feature such as a fountain, archway, or statue in the exact center of the Plaza. Perhaps the bronze cowboy near the Planters Hotel could be moved to this location.
- After evaluating the designs shown in Figures 3-11 and 3-12, select the best choice for raised and landscaped traffic control measures at the north and south corners of the Plaza.

- Decide if the extra street width through the 500 and 600 blocks should be used for wider medians, or new sidewalk width and build accordingly.
- Complete the curb extensions shown on all long-term images in this chapter.

Main Street Design Cross Sections (Figure 3-21)

Figure 3-21 details the vehicle lane, turn lane, bicycle lane, parking, and median configurations for each of the distinct segments in the design recommended for Main Street. It was prepared to assist City of Brawley staff in striping and engineering work for the new designs. Two designs are shown for the Las Flores intersection, because the existing east and west side roadway widths differ by ten feet. For the 500 and 600 blocks of the commercial core, three designs are shown. One is for immediate striping, and two long-term designs. The first long term design has wide medians as shown in Figure 3-15, and the second the wide sidewalk option shown in Figure 3-16 (pages 22 and 23).



Existing medians will be landscaped.



At last — the proper speed limit for Main Street.



Healthy streets attract renovation investments.



Crosswalks will be enhanced for improved safety.

Figure 3-21 BRAWLEY MAIN STREET CROSS-SECTIONS

Arroyo at New River Bridge--90 feet wide



Figure 1

West side of Las Flores--90 feet wide



Figure 2

East side of Las Flores (100 feet wide)



Figure 2

Brawley Inn to Von's Market--Narrows from 100 feet to 70 feet--mid-point shown

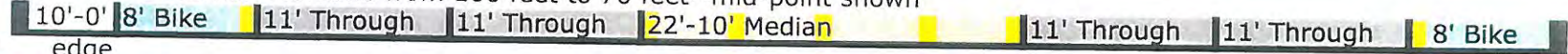


Figure 3 edge

Von's Market to east Von's Market driveway--70 feet wide



Figure 3

East Von's Market driveway to west side of First Street--70 feet wide

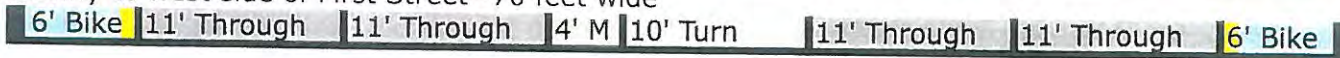


Figure 4

East side of First Street to West Plaza--70 feet wide



Figures 4 and 5

Central Plaza Short Term--75 feet wide



Figure

Central Plaza Long Term--75 feet wide



See Figure

500 Block--Short Term--75 feet wide



Figure

500 Block Long Term Wider Median Option--75 feet wide



Figure

500 Block Long Term Wider Sidewalks Option--75 feet wide



Figure

Railroad Tracks to Highway 111 Bypass--70 feet wide



Figure



BRAWLEY MAIN STREET PLAN

CHAPTER 4: LAND USE

Main Street Corridor

This chapter addresses land use and zoning for properties on or near the Main Street corridor. The primary focus is the several blocks from the Planters Hotel to the Ciudad Plaza building (3rd Street to 8th Street), but the eastern and western stretches of Main Street are also touched upon. What follows is not the code for regulating land use along the Main Street corridor, but rather an outline of the steps necessary to develop and adopt that code.

The core area of downtown Brawley has a long tradition with its distinctive arcade-style architecture. These covered walkways shelter residents from winter rains and intense summer heat, and are also used for merchandise display. They are the signature architectural feature of commercial development in Brawley. Similar arcades should be required as appropriate for any future development on Main Street or the nearby streets in the core area.

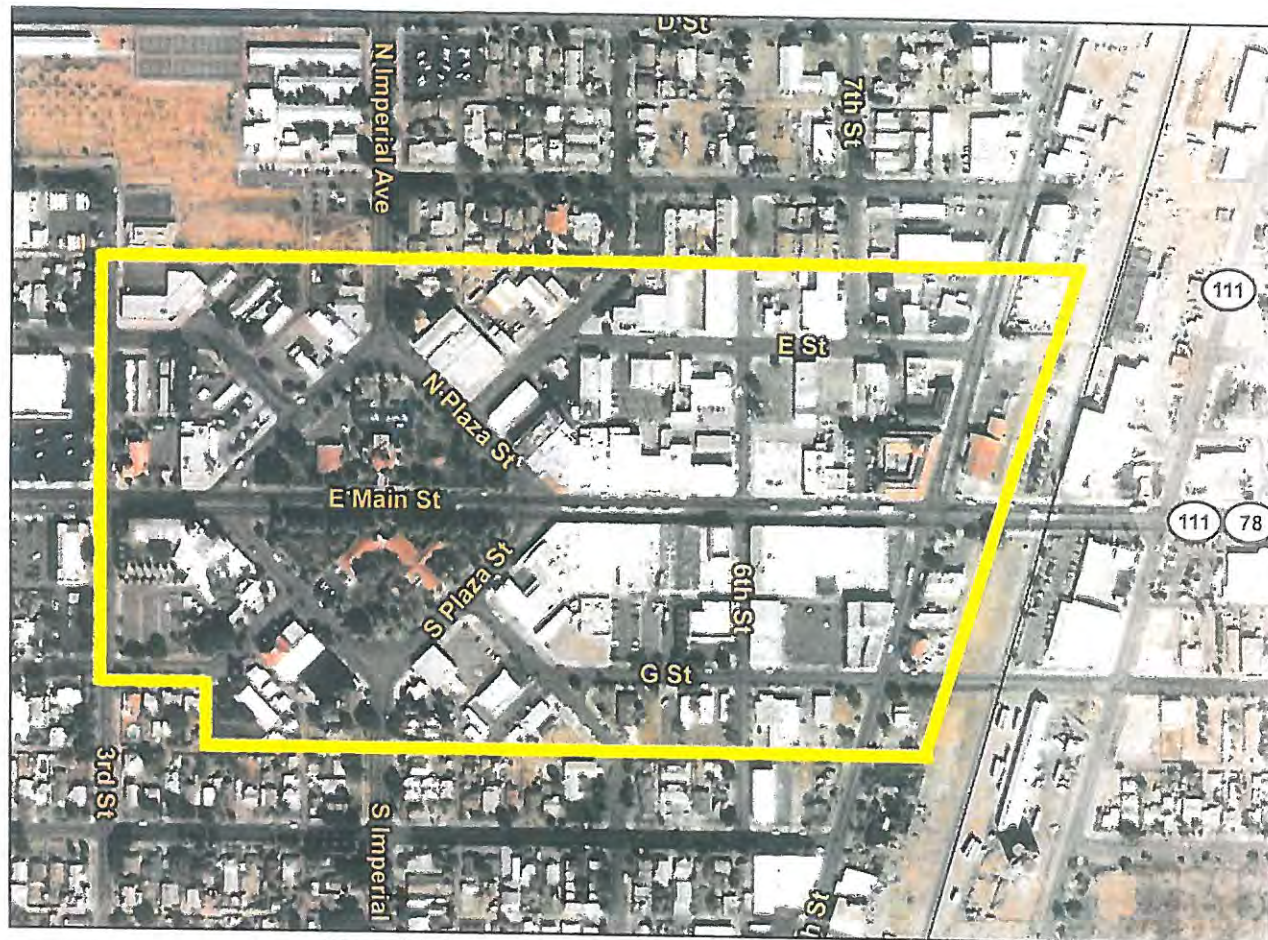


Figure 4-1 Proposed Core Area Form-Based Code Overlay Zone

Figure 4-1 outlines the district the project team recommends for initial redevelopment and renovation efforts. This area was selected after considering the following factors:

- It contains Brawley’s commercial center.
- A redesigned Main Street will improve the area’s environment, promoting investment.
- It is small enough to concentrate attention without diluting resources.
- It encompasses the “back alley” areas useful for employee and customer parking.
- Possible expansion zones are immediately

adjacent to the district, for example west on Main Street or north along 8th Street.

- The boundary is generally the back sides of properties, leaving both sides of streets within the district with compatible zoning rules.

As a new code for this area is developed we recommend that the City use a relatively new approach referred to as a form-based code. A form-based code will help insure that the vision that emerged from the charrette is implemented as new development takes place.

The information that follows is from a recent Local Government Commission (LGC) document on form-based codes, which is available for download without charge at the LGC website:

www.lgc.org/freepub/land_use/factsheets/form_based_codes.html

Form-based codes place less emphasis on uses and more emphasis on building types, dimensions, parking location, and façade features. They stress the appearance of the streetscape, or public realm, over long lists of different use types.

THE CHARACTERISTICS OF FORM-BASED CODES

Modified from a definition by Paul Crawford, AICP

- **Zoning Districts** — Form-based codes are defined around districts, neighborhoods and corridors where conventional zoning districts may bear no relationship to the transportation framework or the larger area.
- **Regulatory Focus** — Form-based codes de-emphasize density and use regulation in favor of rules for building form. They recognize that uses may change over time, but the buildings will endure.
- **Uses** — Form-based codes emphasize mixed use and a mix of housing types to bring destinations into close proximity to housing and provide housing choices to meet many individuals' needs at different times in their lives.
- **Design** — Greater attention is given to streetscape and the design of the public realm, and the role of individual buildings in shaping the public realm.
- **Place** — Form-based codes recognize how critical these public spaces are to defining and creating a "place."
- **Public Participation** — A design-focused public participation process is essential to insure thorough discussion of land use issues as the code is created. This helps reduce conflict, misunderstanding and the need for hearings as individual projects are reviewed.
- **Understandable Format** — Form-based codes address one of the most insidious evils of conventional codes — which are often so complex, full of technical terms, cross-referenced, and confusing that they do not serve the general population well. Form-based codes are greatly simplified, and make extensive use of charts, graphics, and photographs. They are user-friendly, as they should be, since a zoning code is the primary tool that shapes a community for its residents.

Why are form-based codes effective?

The focus on building and street design in form-based codes allows graphics and photos – instead of lengthy, repetitive text – to explain the details of zoning requirements. In turn, these codes are much more democratic instruments, because they are more readily understood by residents who are not otherwise involved in land use or development professions.

Pictures tell the story

Form-based codes can greatly reduce discussions about the meaning of zoning terms and arguments over the interpretation of code language, allowing everybody involved in a public participation process to focus their time and energy on the essence of the regulations, rather than on "wordsmithing." Using form-based codes, a picture really can be worth a thousand words.

Information is easy to find

Another improvement offered by form-based codes is that they contain all relevant information in a concise format. By contrast, conventional codes usually include this information in several different sections of the code, sometimes even in side documents that may not be readily apparent or available to the inexperienced user.

By consolidating information and using a simple pictorial style that avoids jargon and complex, repetitive language, form-based codes offer a much more accessible format.

They work great for mixing uses

Another key characteristic of form-based codes is the way they treat different use types. Since the dawn of zoning, conventional codes were built around the concept of separating uses. They seldom allow uses from a different category (retail, single-family, multi-family, office, etc.) within the same zoning district.

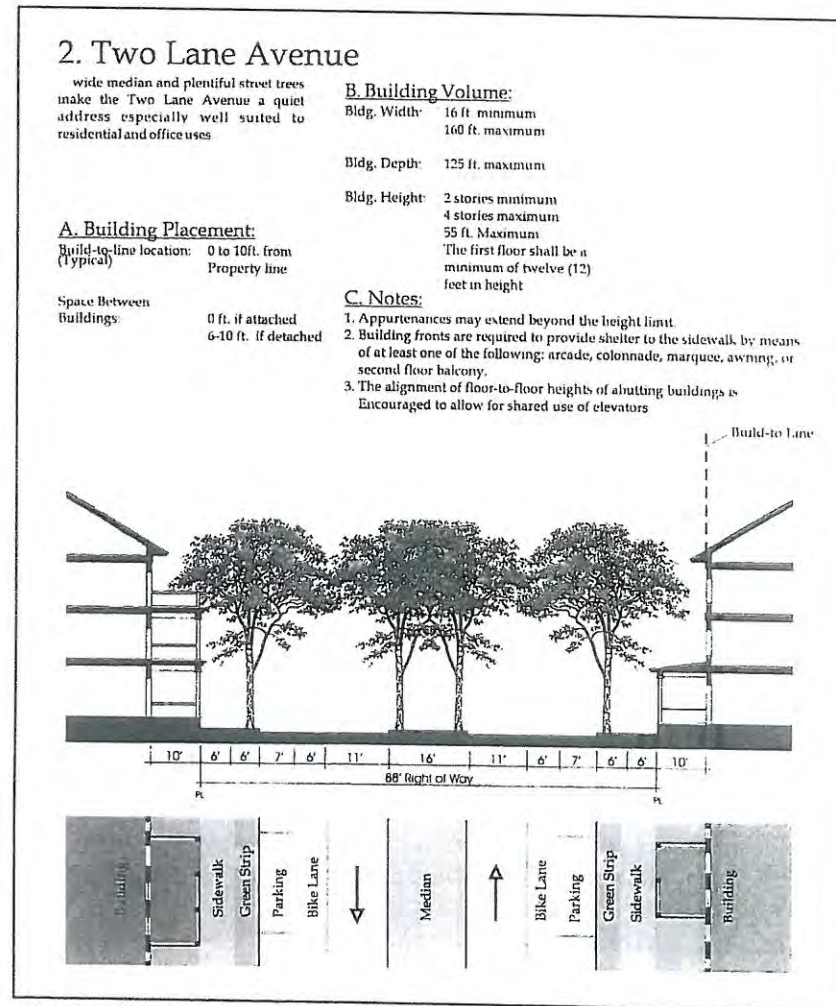
When uses from different categories are proposed by project developers, extra processes and additional hearings are often required. In contrast, form-based codes assume a mix of uses, especially in neighborhood or town centers.

They bring a better, faster, cheaper process

This clarity of format and intent can lead to a shift in approval processing from a hearing-heavy process to one that is largely administrative. Simply put, if all the details are discussed and clarified when the code is developed, and if they are accurately represented in a format that leaves no doubt as to the requirements, then a “build-by-right” approach is possible.

This means the review of a project application follows procedures similar to those for obtaining building permits. If the proposed project meets all of the code’s requirements, the application can be approved administratively.

Obviously, this reduces time, expense and uncertainty for the developer, but it also reduces processing and hearing costs for the jurisdiction involved. This can free up staff time for more proactive planning.



Example form-based code page regulating properties fronting on a two-lane avenue.

RECENT CHANGE IN STATE LAW AUTHORIZES THE USE OF FORM-BASED CODES

Like many unconventional ideas, form-based codes were at first met with skepticism in many communities. At times it was argued they were not even a legal means of regulating land use. To clarify that issue, the California legislature weighed in by adopting legislation specifically authorizing form-based codes. Assembly Bill 1268 was signed into law in July 2004 by Governor Schwarzenegger, resulting in clear language in the state’s General Plan Guidelines and the statutes governing zoning that allow form-based codes.



Alleys need to be cleaned up.



Opportunity for infill on vacant lot at 6th Street and Main Street.



Excess parking lot reuse opportunity on East Main Street.



Plaza fronting business will benefit.



Opportunity to develop frontage and sidewalks on East Main Street.



Reuse parking lots.

Steps for preparing a form-based code

How does a community go about preparing a form-based code? What are the steps that need to be taken to prepare a form-based code?

According to planner Paul Crawford, a national expert on form-based codes, the typical steps required to prepare this type of code include:

1: Existing conditions analysis and inventory

Before embarking on development of the code it is critical to understand clearly what the existing patterns of development are in a community. This record of existing conditions – especially of areas that the community identifies as special, or significant – can help planners develop a code that fits local characteristics.

Using diagrams and notes, a typical analysis will look at:

- Street types (by setback, walkway, roadway, and landscape)
- Block types (shape, size, alleys, parcelization)
- Building types (footprint, profile, streetfront, access by car or pedestrian, service areas)
- Open space types (front, back and side yards, squares and parks, undeveloped parcels with urban zoning)
- Parking types and location (parallel, diagonal, lots)
- Natural features (creeks, significant trees, views, hills, etc.)

2: Public visioning and charrette sessions

Input from the community is gathered early through a public visioning and charrette process similar to that held for this Brawley Main Street redesign

project. This will require individual sessions for the distinct portions of Brawley where this new code will be applied. Based upon the nature of the existing development along Main Street, and feedback from residents and city officials during the charrette process, this report assumes the areas are:

- Main Street west of 3rd Street to the western side of the New River arroyo. This district would include only properties that front directly on Main Street.
- The commercial core, which includes the Plaza, properties east and west of the Plaza that front on Main Street, and a broader area that extends 1-1/2 blocks north and south of Main Street, as shown in Figure 4-1.
- East Main Street, from the railroad tracks to the new Highway 111 bypass. Like West Main Street, this district would include only properties that front directly onto Main Street.

As the community begins to develop this code, the exact boundaries of these three districts should be discussed and adjusted if that seems appropriate.

The charrette is a collaborative planning process that brings together residents and design professionals in an intensive multi-day process that typically includes focus group meetings, workshops, presentations, and public engagement exercises to develop a feasible plan for future revitalization and development.

3: Determine the appropriate spatial basis for regulation (districts, transect, streets or special zones)

There are a number of different approaches that can be taken in determining how the form-based code

will be defined and regulated. Although there is some overlap between these approaches, Crawford describes four basic alternatives that are typically used by different practitioners:

- Neighborhoods, districts, corridors
- Transect
- Street-based regulating plan
- Special purpose zones

This process entails identifying which parts of the community are appropriate for different types of development. In Brawley's case, the central area would be covered by a neighborhood-type code, while a street-based approach fits best for West and East Main Street.

4: Develop urban standards (streets, blocks, building placement, height, land uses, etc.)

The next step is to define and code the urban standards for the different parts of the community mapped in Step 3. The result will be a set of diagrams for each zone that clearly establish standards for some of the following key ingredients of an urban place: street and sidewalk widths, building placement, building height and profile, and, the location of on-site parking if it is a relevant issue.

5: Develop architectural standards (building or frontage types, etc.)

The inventory conducted in Step 1 and the public visioning and charrette process in Step 2, help to identify the different types of buildings and how they front the street to define the public realm.

The form-based code builds on this information to define what types of buildings fit into different parts of the community. For example, the form-based



The Hercules, CA code specifies every architectural detail.



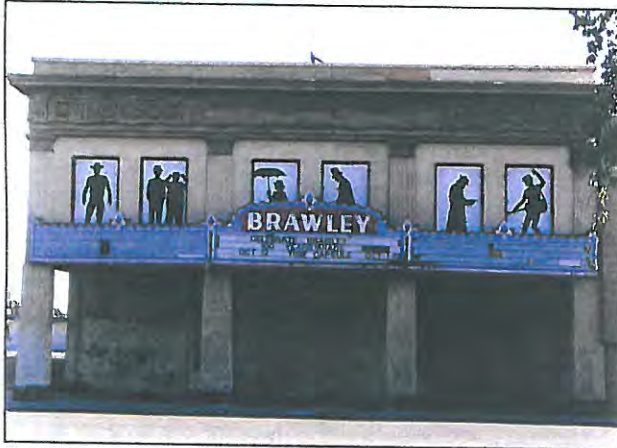
Mixed-use live-work development in Hercules, CA.



Mixed-use at Stapleton Airport redevelopment, Denver CO



Current renovation in progress in Brawley.



Potential opportunity for renovation.



Another potential opportunity for renovation.

code for the City of Ventura, California, identifies the following types of buildings as appropriate for different parts of the community: single family, carriage house, duplex, triplex, quadplex, mansion apartment, bungalow court, townhouse, sideyard housing, live/work, courtyard, stacked flats, commercial block, and blended development.

The code then lays out very clearly which types of buildings are appropriate in the different districts for different lot widths through a table.

6: Allocate and illustrate standards

The final step in the process is to prepare the standards in a format that is rich in graphics, well-illustrated, jargon-free, and easy to understand.

This format should include all information and regulation relevant to each of the districts in Brawley in one concise piece. This avoids the confusion that cross-referencing, scattered requirements, side documents, and obscure terms can introduce.



Side street businesses will benefit from a form-based code.

Other Points to Consider

Large-scale revisions of zoning codes always have the potential for unanticipated problems, whether a form-based approach, or a more conventionally structured code built around smart growth principles, is used. The need to monitor and revise these new codes after they are adopted must not be overlooked with any format. With form-based codes, these problems will likely surface when the underlying basis for regulation is changed from a focus on uses within and around buildings to a focus on the structures first.

Form-based codes require re-educating everyone in the community — elected and appointed officials, planners, engineers, developers, and residents.

This begins with a broad public participation effort as the code is developed, of course, but it must also continue after the code is adopted. Code modifications should be expected over time, and must be explained to everyone involved.

Some cities have hired an architect or urban designer to work with builders and developers to help implement the code's objectives. This education — particularly of staff — will help reassure developers and the public that application approvals will meet the code's intent.

If code reform streamlines the process in a way that eliminates hearing check-points, people must be confident that staff are trained to properly assess whether proposed projects comply with the detail requirements in the code.

Conclusion

Brawley's downtown and the two Main Street corridors on either side of it should have similar architecture at the street frontages. The design team suggests a requirement to continue the covered sidewalk arcades. There should be a two-story minimum height along Main Street and throughout the core area, with a maximum of three or four stories.

Mixed use should be required in all Main Street frontage development, unless there is a compelling reason not to. Ground floor uses should be community-serving, both retail and office uses. Second stories could be either office or residential. Any additional floors should be residential. Bringing a 24-hour people presence downtown is important to improving the safety and economic vitality of the area.

Parking standards should be less than conventional standards. Do not let parking requirements prevent a desired use from locating downtown. Shared parking arrangements must be included in all project approvals. Nearby curb-side parking should be counted in a project's supply (this requires some monitoring). Other parking should be away from the street frontages as much as possible. Basically, have less parking and hide it.

Work to clean up the alley areas for parking, security, and access through pascos to Main Street.

To summarize, the rules for zoning to revitalize the downtown and Main Street corridor areas are:

1. Make new development denser than existing development.
2. Require a mix of uses.
3. Improve connections to and along Main Street.
4. Streamline the process and remove barriers for the desired type of development.



New mixed-use development in Petaluma, CA



Example of live-work development in Hercules, CA