

Riverbank SR 108 Enhancement Plan

Places and Connections



Riverbank SR 108 Enhancement Plan

August, 2003

Prepared for:

City of Riverbank

Prepared by:

Walkable Communities, Inc. in association with the

Local Government Commission

WALKABLE COMMUNITIES, INC.

Consultant team: Dan Burden, Director Michael Wallwork, P.E. Sue Newberry Mary Van Buskirk

This plan was developed and the public participation activities described in this report were conducted with funding support through a Caltrans Community Based Transportation Planning grant awarded to the City of Riverbank in 2002. For background information on details found in this report contact Josh Meyer, Local Government Commission, 916-448-1198.

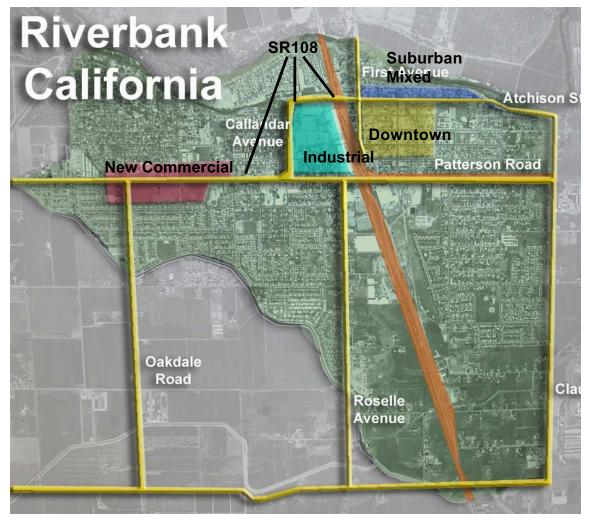
Disclaimer

The contents of this report represent the knowledge, experience, and expertise of the citizens and authors in providing ideas and concepts to improve safety, access, mobility and livability through streetscaping, transit, walking, bicycling enhancements and other traffic management strategies. This report does not constitute a standard, specification, or regulation, and is not intended to be used as a basis for establishing civil liability. The decision to use any particular measure should be made on the basis of engineering studies of the location. This report is not a substitute for sound engineering judgment. Adherence to the principles found in this report can lead to an overall improvement in neighborhood and community livability.



Table of Contents

Background	5
Public Involvement	7
Vision Plan	11
Places Village Centers and Public Spaces	12
Connections SR108 Streetscape and Americans with Disabilities Act Intersections and Pedestrian Crossings Site Recommendations Other Network Streets Trails, Greenways and Links	19 22 24 27 30 32
Implementation	35
Funding Opportunities	36
Appendix Public Involvement Documentation Engineering Drawings of Concepts	44



Riverbank's main street and commercial corridor is SR 108, a busy state highway linking the Sierra foothills with the growing Central California Valley. At the western edge of Riverbank the highway is new and wide. It narrows as it approaches Callander Avenue. Where it turns north at Callander, a banked curve facilitates fast speeds. The highway heads east on Atchison Avenue, where the number of lanes has been reduced from four to three. New strip commercial services and retail development, a regional multiplex theatre, older suburban commercial buildings, housing, and a school are located along the highway. In some sections there are on-street parking areas, bike lanes, and sidewalks. In other areas, there are no curbs, gutters or sidewalks.

Background

The City of Riverbank is now a town of approximately 17,000 people located in Stanislaus County. It has experienced rapid growth in the past decade, climbing from 8,547 residents in 1990 to 15,826 in 2000. Over 45% of the population is Latino, more than 17% of the population is unemployed, and 9% of families and 12% of individuals are living below the poverty level (2000 U.S. Census).

State Route 108 passes through the heart of Riverbank, serving as its main street and major commercial corridor. Downtown is on one side. New commercial activity, including a regional multiplex theatre, and a City regional park is on the other side. Residential neighborhoods, schools and parks are on both sides of SR 108. All generate heavy traffic along and across the corridor. In addition, all communities along the route are experiencing growth, placing increasing regional traffic demand on the roadway. The heavy traffic flow makes it difficult and hazardous for users of all types vehicles, pedestrians, bicyclists and transit riders – to reach local destinations. The wide and fast-moving transportation corridor also creates a barrier that diminishes the connectivity between places that helps form a sense of community. This situation is encountered by many communities that have a state highway as their main street.









Existing Conditions

These photos are examples of the conditions on SR 108 and nearby neighborhoods. In the photo above, two pedestrians actuated the flashing crossing warning, but the driver did not yield. In the photo below, a vehicle blocks the crosswalk as the driver focuses on finding a gap in traffic. There are many pedestrians and bicyclists visible along the corridor.









To address this challenge, the City of Riverbank applied for and was awarded a California Department of Transportation (Caltrans) Community Based Transportation Planning grant to develop a plan for calming traffic and improving pedestrian and bicycle access along the SR 108 corridor and its main intersecting streets. Caltrans has issued these types of grants to encourage Context Sensitive Solutions in urbanized corridors within its rights of way. Context Sensitive Solutions seek to incorporate elements of the existing town that the community wants to preserve while maintaining the mobility of a state highway. See California Department of Transportation Director's Policy, "Context Sensitive Solutions," November 29, 2001.

The City chose a public design charrette process as the means to develop the plan with direct involvement of community stakeholders. From February 6 –10, Walkable Communities, Inc., in association with the City of Riverbank, Local Government Commission, Applied Development Economics and kd Anderson Transportation Engineers, conducted a charrette in Riverbank that allowed all interested parties to work together to create a vision for SR 108 and related areas. This report summarizes the process that was followed and the concepts that were developed during the planning charrette.

The document begins with an overview of public involvement activities. Concepts for the

Vision Plan address the concerns and suggestions offered by citizens and staff. The plan addresses SR108, its relationship to other streets and the role of land development patterns. The report concludes with suggested implementation strategies.

Public Involvement

Outreach

The Local Government Commission (LGC) and City staff conducted outreach in advance of the charrette. LGC held advisory meetings with agency staff and met individually with various community leaders and service organizations to plan the charrette events and encourage community involvement.

In January staff representatives from the LGC, City, Stanislaus Council of Governments and Caltrans met to facilitate interagency project support and coordination. The participants decided to convene in a combined focus meeting and field tour of the SR 108 corridor and other key community destinations. The Walkable Communities charrette facilitator led the meeting and tour to identify key government agency interests, concerns and goals. Additional meetings and information

sharing between the charrette team transportation engineer and Caltrans District 10 staff were arranged.

Four additional focus groups were held to involve the community in the charrette process and resulting plan. These included California Elementary School 5th grade students (California School has a large number of ESL Spanish-speaking students), community service organizations (e.g., St. Francis of Rome Catholic Church, many of whose members are predominantly Spanish speaking), local businesses, and city officials.

Articles ran in The Riverbank News local newspaper and Chamber of Commerce newsletter to help advertise the events. The Sheriff's Department posted an electronic message board on 108 near the intersection of Patterson and Callender. The City mailed an invitation to Chamber of Commerce members. Because the City is approximately 40% Latino, 4500 announcement flyers were printed in English and Spanish and sent home with every elementary and middle school student in the community. A translator was available at all events for monolingual Spanish participants. Flyers were also distributed to school faculty and at other locations, such as the Healthy Start Collaborative, Head Start program, and St. Francis of Rome Catholic Church to help reach under-represented members of the community.



Students learn firsthand what it would be like to use a wheelchair to get to and from school.

Charrette Process

For purposes of this report, the term charrette is used to describe a multi-day series of meetings, presentations, and workshops that engaged citizens and local staff in a variety of interactive activities designed to elicit their concerns and suggestions, provide information about possible solutions, and create an atmosphere that fosters cooperative development of a community vision. Each of the activities are summarized below. More detailed coverage of activities is provided in the Appendices.

School Visit

Charrette activities began with a visit to a fifth grade class at California Avenue School on Thursday, February 6. About half of these children walked to school, but all said they would rather walk or bike than ride in a car. Three students tested their skills at maneuvering a wheelchair in the areas near the school while the remaining students participated in a series of activities. The students who used the wheelchair told how difficult it was to move around, especially where cars blocked the sidewalks. The students in the classroom helped identify links, or shortcuts, that allowed them to walk shorter distances to access their destinations.

These fifth graders used their mapping skills to explain where they find shortcuts to make their walking trips more convenient.



Field Tour

The school visit was followed by a meeting and field inspection with Caltrans and City staff. The bus stopped at various sites on SR108 to allow people to alight and observe the roadway and adjacent areas.

Participants discussed current conditions and shared ideas for creating a more hospitable environment for people with disabilities and others who walk and ride bicycles. Many people walked some sections of SR108 to experience the environment for themselves. Overall, the consensus of the group was that they are eager to learn more about how community members would like SR 108 to serve their needs.

Dan Burden, of Walkable Communities, Inc., used the field tour as an opportunity to share ideas on how SR108 could better serve the needs of all roadway users.





These field tour participants walked from Callander Avenue to First Street. There is a sidewalk on some portions of the highway, but as shown above it is not wide enough to allow two people to walk side-by-side without impeding the progress of others.

Focus Groups

Several focus groups were conducted on Thursday evening and Friday. Facilitator Dan Burden explained to each group that focus groups allow the consultant team to learn vital information about community concerns, past efforts, and future hopes. Some of the key points that were discussed in all focus groups include:

◆ Riverbank is growing rapidly as Bay Area and Modesto residents seek more affordable housing. A major new housing development is conveniently located for car-

oriented trips to Modesto. Some new housing provides pedestrian connections at cul-de-sacs, but some are surrounded by walls. Several participants said they would have preferred a more village-like development pattern, but the builder was not cooperative.

- ♦ The City is geographically fractured by SR108 and the train tracks, by commercial areas, and by two school districts.
- ◆ Destinations are scattered, SR108 crossings are difficult, and sidewalks are discontinuous, making it hard for people to walk. Designated bikeways are nonexistent in most areas.
- ♦ Many people purchase their goods and services outside of Riverbank. The downtown commercial area has suffered, although it continues to generate substantial revenue primarily because of its grocery stores. The downtown lacks a bank and other basic needs that could attract customers, but several new enterprises have opened. Obscure titles and 50% out-oftown ownership makes it difficult to purchase downtown properties. The downtown post office generates traffic, as does the new movie theater on the west end of Riverbank.
- ◆ Speeds on SR108 are fast, although they dropped when portions of the street were reduced from 4 lanes to 3 lanes.
- ♦ The City is working to attract new enter-

- prises in the downtown core. Many participants cited the need for more appealing downtown streets, additional parking, and a strong, visible connection to SR 108.
- ◆ The City recently opened a recreation center on the west side of town at the multiplex movie theater. Currently many children play soccer in Modesto.
- An effort to form a redevelopment committee a number of years ago ignited a bitter struggle that divided the community. No redevelopment agency was formed, but there is a revitalization group.
- ◆ Jacob Meyers Park needs better connections for people walking and bicycling. There was reference to a potential trail system that has not gone forward due to a lack of funding. Many people spoke of a proposed pedestrian bridge to connect Riverbank to this park.



Input from focus group discussions provided insights into issues facing Riverbank.



During the walking tour citizens pointed out there are several potential sites for a pedestrian bridge over the river.

Citizen Participation

Friday evening a public meeting was conducted. People participated in activities to determine their values and priorities for the charrette. They viewed a presentation that showed existing conditions and some potential solutions used in other communities. Dan

Burden, facilitator for the presentation, explained principles involved in creating more walkable, livable places using images to demonstrate his points.

On Saturday morning, about twenty people walked from Scout Hall to the river, downtown, and back. During the walk they discussed various opportunities and challenges presented by current conditions. Their summary upon return underscored a need for sidewalks to be continuous, set back from traffic, and easy for people in wheelchairs to use. Opportunities included formalizing a trail connection to Jacob Meyers Park, extending downtown curbs, and improving existing crossing points.

Following the walk and discussion, the consultant team conducted a training module featuring design principles and street elements. Topics included functions of

roundabouts, potential for a highway bypass, and impacts of various treatments on traffic, pedestrians, and bicyclists. After a lunch break, participants gathered around maps to develop ideas to improve pedestrian and bicycle access in the vicinity of SR108. They emphasized a bypass to reroute traffic that does not stop in Riverbank. Their suggestions centered on smooth traffic flow, but slower speeds. They asked for roundabouts to achieve that goal, and for raised medians, bulb outs, a continuous sidewalk and trail system and other features to facilitate pedestrian movements and beautification.

Concerns and suggestions from all events were compiled and refined into a Vision Plan. Vision Plan highlights were featured in a final public meeting on Monday, February 10, 2003. Participants at the meeting generally endorsed the Vision Plan concepts. Many people pledged to help with implementation.



Saturday afternoon participants gathered around maps to discuss ways to address their concerns. They combined new knowledge from training sessions with their knowledge of the community to prepare a list of suggestions. Those suggestions form the foundation of the Vision Plan.



Vision Plan

The concepts that evolved from the input gathered over three days of activities led to a vision of future development in the vicinity of SR108 through Riverbank. These concepts are guided by proven principles for developing livable places, beginning with concepts for creating pedestrian-friendly places.

The Vision Plan organizes existing and proposed features of Riverbank in two categories: places and connections.

Places

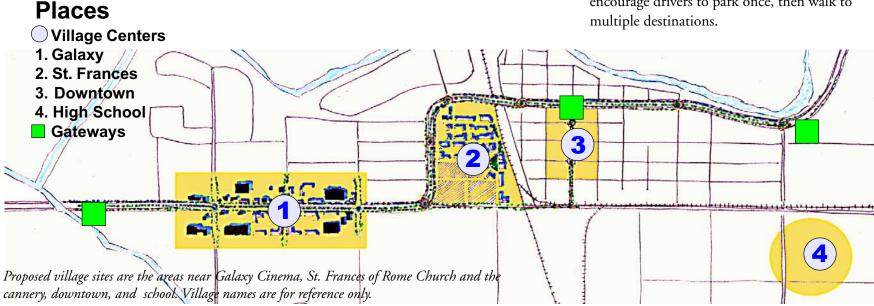
The Plan identifies existing places within Riverbank as prospective "village centers," with future redevelopment and planning effort moving away from car-oriented designs to a more human, walkable scale. Public spaces will enliven these centers both socially and economically. Gateways at the entrance to Riverbank and to the downtown announce that one has "arrived" at a special destination. Security, convenience, efficiency, comfort, and welcome are the 5 key elements to creating successful, vibrant places that attract shoppers, residents, bicyclists, and walkers. People are motivated to walk and shop locally when these elements are present.

Connections

Streets serve as the motorized connections between places. Greenways, walkways, alleys, and sidewalks serve as non-motorized connections between places.

SR108 and other key streets are envisioned as connections that allow people to access village centers within Riverbank. The proposed bypass and other commute routes connect Riverbank to other communities.

Proposed streetscapes and intersection treatments in the Vision Plan complement the village concept. The non-motorized connections, including a greenway trail system, connect activity centers with neighborhoods. Parking is maximized to encourage drivers to park once, then walk to multiple destinations.



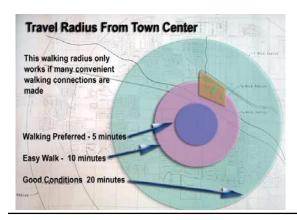
Village Centers
Galaxy
St. Frances
Downtown
School
Gateways

Village Centers

Currently Riverbank commerce is scattered along SR108 and downtown. Four areas emerge as potential villages. These sites all have existing attributes that could be incorporated into appealing, pedestrian-friendly places. Each village could have unique qualities while maintaining Riverbank's citywide character.

Village centers can be created with City policies that encourage a variety of uses centered in one compact area. Mixed-use buildings combine a number of uses including retail, office, residential, and even parking.

At the center of a village is a public space, which may be a plaza, a square, a green, or an important street intersection. These centers can become focal points in the community, often taking on a unique neighborhood character. People are more likely to leave their cars parked and seek out a restaurant, shop, or





Davis, California, requires developers to include public space in their commercial projects.

park if it is located within a 1/4 mile walk.

In a village, facilities are provided to encourage walking and bicycling between nearby residential areas and the village. Neighborhood streets are designed to provide equity between pedestrian comfort and automobile movement. Increasing pedestrian activity encourages casual meetings that form bonds of community. A village setting with closely spaced goods and services easily accessed by foot will attract walkers. Each village area should include:

- ♦ A balanced set of activities: shopping, work, recreation and dwelling.
- Housing for a variety of incomes. Inclusive housing includes backyard apartments, apartments above shops, and apartment

buildings adjacent to workplaces.

- ◆ A variety of business types, from retail and professional offices to live-work units.
- ♦ A transit stop.

Each walkable village should seek to fulfill the goal of balanced uses within the village, such that under ideal conditions, daily needs of residents can be met within the area. This goal fosters community formation, reduces motor vehicles, aids in establishment of a stable tax base and retail sector, and allows residents who cannot drive to live full lives. As a rule of thumb for North America, balanced use includes: 2.4 residents per household, each household requiring 40 square feet of retail and 120 square feet of workplace.

This drawing of a typical shopping mall in Hamburg, N.Y. illustrates how parking area can be in-filled with buildings to create a village center. Buildings added along the edge of the streets help create a more walkable environment.

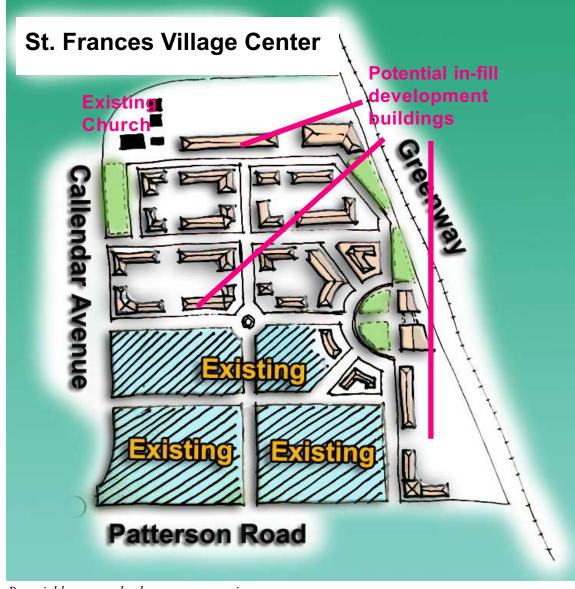


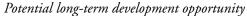


Galaxy Village Center

The newest of the village areas, this auto-oriented conventional suburban development can be transformed into a walkable village by incrementally in-filling its ample asphalt areas with additional buildings. This idea offers the potential for increased revenue for property owners, increased foot traffic for tenants, less asphalt, and a sense of place for nearby residents. Implementation of such a plan may require the City to closely evaluate its parking requirements and other prescriptive codes that promote car-oriented development. Large, sparsely used parking lots create a sterile and uninviting environment.









St. Frances Village Center

Charrette participants pointed out that although the cannery is a welcomed employer, the property would likely yield more benefits to both the community and the owners if it were converted to shopping, residential, and office spaces, with the cannery rebuilt in an industrial area further from downtown. A mixed-use approach to this space could create a village with a unique character similar to that which has made Cannery Row in Monterey and Ghirardelli Square in San Francisco famous.



The village areas shown are conceptual, and could vary as refined plans are developed.

Downtown

Downtown is blessed with many attributes that lend themselves well to creation of a dynamic village center. Main streets through the downtown are overly wide and do not carry large volumes of through traffic, providing space for parking and potential street edge improvements. Existing sidewalks on Third Street are wide, with ample room for

This image from Gridley, California shows how buildings relate to the sidewalk and street in village environments. Off-street parking is in the rear, and usually accessed from side streets.



Image Courtesy Peter Swift & Associates



This is another potential village site.

street furniture, additional landscaping and creating public spaces. The City is currently negotiating for a vacant lot across the street from City Hall. This piece of property could become the plaza needed in every village center.

School Village Area

There is potential for a fourth village in the vicinity of Riverbank High School.

Windows facing the street help create a sense of security.





Public Space

In village centers and throughout Riverbank it is important to create places where people can gather, linger, and socialize. Plazas, parks, sidewalks, and other privately or publicly owned outdoor spaces filled with people perpetuate a safe public realm. Programmed activities in the public space, such as Farmer's Markets, street celebrations, music festivals, and parades bring life to places and contribute to a sense of ownership and pride.

This patio area and public garden was created from a street that was too wide.











Public Space

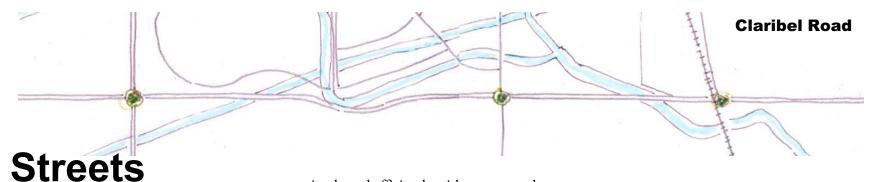
The images in the top two rows show how public spaces can be varied in use and location. A study published in the American Journal of Public Health (December, 2001) found that communities that build bicycling and walking trails, support exercise programs, and provide public areas, such as parks and sidewalks, can boost physical activity levels. Riverbank has many opportunities to create active, vibrant places, similar to those shown here, that attract residents and visitors. Public spaces in Riverbank include the library, schools, and parks. Other places such as the parking lot or vacant lot on the left or the parking area in front of the Galaxy on the right could be transformed into additional public space. These places could provide room for a weekly farmers' market, music programs or other activities that attract people.







Streets
Bypass
SR108 Corridor
Streetscape and ADA
SR108 Intersections and Pedestrian Crossings
Site Recommendations
Other Network Streets
Greenway and Linkages



The grant project goal is to improve pedestrian and bicycle access along the SR108 corridor and its main intersecting streets. A key factor in how well this can be done is the volume of traffic that must be served. Traffic volumes are projected to increase by 130% over the next 17 years according to the State Route 108 Corridor Access Management Plan report prepared by kdAnderson Transportation Engineers. Six lanes would be needed to provide a reasonable level of service for these volumes. It would be difficult to exit side streets, driveways and other unsignalized crossing points. Crash rates and crash severity could increase. SR 108 would act as a major barrier between the north and south sides of Riverbank.

With community input through the charrette activities, the consultant team developed a concept to address this challenge, which is presented in the following sections. The concept includes a strategy to shift some future projected traffic from SR108 to Claribel Road, where it can move more safely, conve-

niently and efficiently with proper roadway design improvements. This enables SR 108 to be maintained as a two-lane street that can well serve vehicular traffic, pedestrians, and bicyclists throughout the corridor. The concept includes the use of roundabouts on SR 108 and Claribel Road, and identifies a number of design measures to increase access and safety for all users along and across SR 108. Caltrans addresses all the measures discussed as appropriate options to consider where state highways serve as main streets in its publication, *Main Streets: Flexibility in Design and Operations* (July, 2002).

Claribel Road

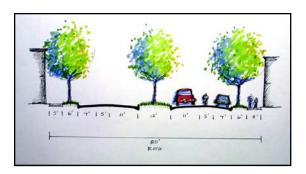
Claribel Road is a high speed, two-lane rural road with signalized intersections at Claus and Oakdale. Participants suggested the bypass on Claribel under consideration would provide those who do not intend to stop in Riverbank with a convenient travel alternative.

All-way stop intersections on Claribel are located at Terminal Avenue, Roselle Avenue, and Coffee. Charrette testimony indicated all-

way stops were installed to slow speeds. These stops signs are ineffective at this task because intersections are so widely spaced. While crash data was not provided at the charrette, overhead flashing red lights at the stop signs are a sign of crash problems.

Travel time on Claribel between Coffee and Claus was 1 minute 10 seconds *less* than traveling on SR108 during a Sunday morning time study conducted during the charrette. Time can vary depending on traffic congestion and the number of stops.

Replacing stop signs and signals with one-lane roundabouts could improve travel time and safety on Claribel and facilitate developing the bypass incrementally, rather than in one phase. Replacing signalized intersections on a two-lane highway with roundabouts can increase capacity one-third or more, according to FHWA's *Roundabouts: An Informational Guide.* For an initial investment of approximately \$1 million in roundabouts, plus any right-of-way costs, Claribel could become a useful bypass with increased capacity. Roundabouts help





Drawings above illustrate proposed concepts for 80 and 100 foot sections of SR108. One lane of traffic in each direction, a bicycle lane, parking, a planter strip, and sidewalks are envisioned along the entire length of the corridor. The photo below is of a street with similar features.



maintain constant average speeds, while reducing the need for braking and acceleration. Smoother traffic flow would help improve safety and air quality, and reduce driver stress.

The next stage in upgrading Claribel as a bypass would be to widen it to 4 lanes and install 2 lane roundabouts. A 4-lane road with roundabouts would provide corridor capacity of nearly 40,000 cars a day. Widening Claribel to 4 lanes with signals would only increase its capacity to 32,000 vehicles per day.

The third and final stage in Claribel bypass development would be to convert it to an expressway by constructing overpasses. This would provide capacity for between 60,000 and 80,000 vehicles daily.

These improvements on Claribel would allow SR108 to be designed to balance needs of pedestrians and bicyclists with those of motorists and merchants without adversely affecting the regional capacity.

SR108 Corridor

Certain concepts and principles apply to the entire SR 108 corridor throughout Riverbank. The corridor should include features that balance the needs of motorized and non-motorized users. Sidewalks with planter strips should be provided on both sides of every new

or reconstructed street. Other elements, such as bike lanes, on-street parking, and medians should be considered in context with adjacent land use, right-of-way constraints, and other contributing factors. Early, ongoing, and highly interactive public involvement is an effective strategy for assessing context and community needs.

Travel Lanes

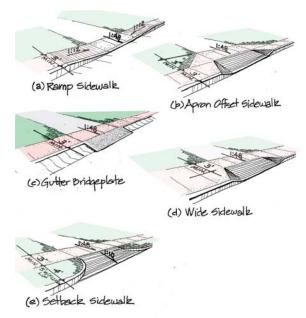
Roadway travel lanes must move traffic at uniform speeds, provide flexibility in movement, and provide good, non-slip surfaces. A single urban travel lane can manage 15,000 vehicles daily (1500 in peak hour) to 20,000 vehicles (1800 in peak hour).

"Caltrans recognizes the potential benefits of measures such as reducing the number of lanes in a downtown, reducing lane widths, installation of traffic calming devices, lowered speed limits, angled parking, wider sidewalks, roundabouts, raised medians and a number of other street side amenities that provide a feeling that a town's main street is where you would want to be." - Jeff Morales, Director of the California Department of Transportation, Main Streets: Flexibility in Design and Operations (July, 2002)

This is more than adequate for Riverbank's needs after early improvements to Claribel as described on the previous page.

Medians and Turning Pockets

Medians provide essential buffers between opposing lanes of traffic and can increase carrying capacity of individual lanes by 30%. They do this by restricting crossover traffic and lane stoppages at turning points. Left turn pockets are provided in the median at major



There are many driveways along SR108. Driveways should be consolidated where feasible. Where they remain, the designs above can be used to eliminate sloped areas, which are uncomfortable for people walking as well as for people pushing strollers or using wheelchairs.

turning points. Medians provide pedestrians with safe refuge as they cross streets. They allow space for street beautification and gateway treatments and help eliminate aggressive behaviors such as inappropriate passing.

Medians in Riverbank will vary in width depending on right-of-way. Fourteen foot medians allow a double row of trees to be planted. Trees help cool asphalt and create a pleasant environment.

Bike Lanes

Bike lanes along the length of SR108 will increase driver sight-distance, provide forgiveness for errant drivers, allow easier entry and exit from parking spaces, create temporary storage areas for cars while emergency responders go by and myriad of other benefits.

On-street Parking

On-street parking provides convenient auto access to streetside businesses. It also provides a buffer between pedestrians and moving traffic. The provision of bulb-outs ensures visibility between drivers and people waiting to cross streets is not impeded by parked cars. Bike lanes need to be wide enough that opening car doors do not endanger passing bicyclists.

Parallel parking lanes are envisioned on both sides of SR108 except in areas where right-of-

way is constrained.

Many participants talked about a lack of parking in the downtown area. On-street parking can be increased by converting to head-in parking. However, it is important that parking also be well-managed to provide the most convenient spaces for customers. Too often, business owners and employees use premium parking spaces in front of their businesses.

As the downtown area becomes more successful, it will be important for businesses to work together to make the best use of their parking. This may require pooling their offstreet parking, providing municipal parking, limiting driveways to provide maximum onstreet curb space, and offering incentives for employees to walk or bicycle to work.

The combination of bike lanes and on-street parking helps drivers enter and exit parking areas, improves bicycle conditions, and separates pedestrians from traffic.



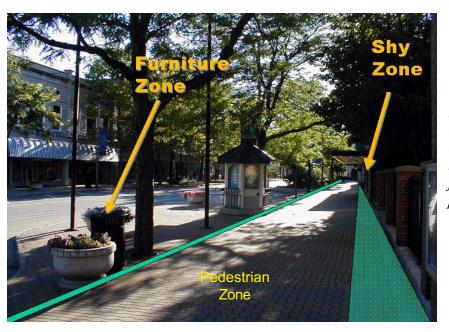
Streetscape and Americans with Disabilities Act (ADA)

Riverbank lacks a continuous system of sidewalks, both along SR108 and in many areas that connect to the street. Some existing sidewalks are in need of repair or replacement. Many lack a curb ramp or have ramps that do not serve the intended purpose of facilitating access for people in wheelchairs.

New national rules for public rights-of-way currently under consideration offer guidance on how minimum standards can be improved. Designs such as two separate curb ramps, rather than one ramp angled into the street, are likely to soon be required to meet the mobility needs of all pedestrians. The Federal Department of Transportation publication, *Designing Sidewalks and Trails for Access*, is an



Curb ramps should be designed so that people with mobility and vision limitations can use the sidewalk system.



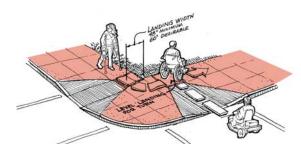
Furniture, signs, and other fixtures are placed in a furniture zone to keep the pedestrian zone free of obstacles and protruding objects.

excellent resource that provides details for many design options.

In addition to providing a basic transportation route, sidewalks offer an opportunity to create safe, appealing public space that reflects community pride and invites people to walk. Commercial sidewalk areas should be at least 8 feet wide. A furniture zone provides space for landscaping, hydrants, transit stops, bike racks, and benches so that the walkway remains unobstructed.

Street furnishings, including benches, kiosks, transit shelters, bike racks, trash cans, and public art can contribute a sense of identity to streets in addition to increasing the comfort and convenience of those afoot. Bicycle racks

should also be provided, preferably in highly visible locations close to desirable destinations. This provides a sense of security for the bicycle owner and also sends a message that bicycling is welcomed.



Curb ramps aligned perpendicular to the curb provide a straight path of travel.



Add trees and greenery along SR108. Colors and landscaping treatments can be varied to identify different village centers.

Consistent application of these elements along the entire corridor will provide a pleasant walking environment and slower traffic speeds. In addition, special considerations are needed at intersections and selected sites.

"Quality landscaping that is close to the highway or in medians can increase driver awareness of the immediate environment and alter driver behavior, resulting in slower speeds and a safer main street . . . Although a row of trees doesn't actually impede drivers, it may calm traffic by making the road appear narrower." — Main Streets: Flexibility in Design and Operations (Caltrans, July, 2002)

Additional trees should be planted along SR108, both for aesthetic value and for their practical benefits. Trees provide a welcome cooling effect to roadways, parking lots, and other paved surfaces. Summer temperature differentials of ten degrees or more are possible. Trees can help reduce energy costs in adjacent structures up to 30%.

Lighting is another essential element of developing a safe and attractive walking environment. Attractive streets at night have three lighting elements. The first combines pedestrian-scale and higher vehicle luminares. Lower lamps are placed to provide warm radiant light creating continuously lit corridors. Higher light poles provide more diffuse, general area lighting.

Lighting from shops and restaurants adds ambiance and a sense of security to the street.



Street furnishings provide an excellent opportunity to express the unique character of Riverbank. Children made tiles to decorate downtown litter cans in Encinitas, CA.

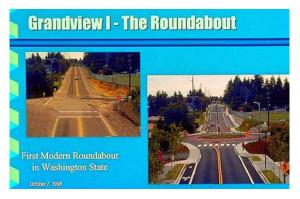






The second source of light should be theme lighting. This element often includes lights focused on building edges, crowns, entryways or other locations celebrating buildings and plaza space. Trees can also be lit.

The third source of lighting is the warm, radiant glow of lights from ground level shops. These lights are set on timers and should remain lit until a designated hour, such as midnight on weeknights, or 2:00 a.m. on weekends. The combination of these three sources of light create welcoming, secure, night conditions and inviting evening walks. Increased presence of people making use of corridors for night walking and gathering adds security, social interaction, vitality and economic success.



Roundabouts are becoming a popular alternative to traffic signals and stop signs.

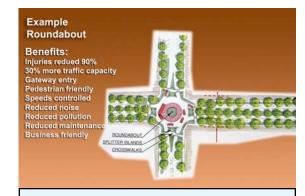
SR108 Intersections and Pedestrian Crossings

Roundabouts

Roundabouts are the safest form of traffic control for pedestrians, bicyclists and vehicle occupants. Roundabouts reduce the number of lanes needed to move traffic because intersection delays are reduced or eliminated. The reduced delays can generally improve capacity of an intersection by 30%. Reduced street widths and elimination of signals also save construction and maintenance costs. Roundabouts can be landscaped to beautify and distinguish a community.

Cities such as Golden, CO and Avon, CO use up to five roundabouts in series to create safe, efficient road systems. Speeds are lower and more consistent. Slower, more constant speeds improve access to driveways and sidestreets and increase pedestrian safety. Traffic entering roundabouts yields to drivers circulating in roundabouts. Drivers enter just as they would turn right from driveways, wait for gaps, and enter. Pedestrian crosswalks are placed one car length away from circulating traffic to ensure driver attention is focused on pedestrians, not turning movements. This placement also encourages pedestrians to cross behind vehicles entering roundabouts. Splitter islands, triangular islands at roundabouts, create refuges for pedestrians waiting for crossing gaps.

The Vision Plan includes a series of roundabouts on SR108 through Riverbank, on Third Street downtown, and on the Claribel bypass. Based on the traffic information provided for the charrette, the consultant team determined that the proposed roundabouts are the best alternative for



A four-leg roundabout has 75 percent fewer conflicts between vehicles, pedestrians, and other vehicles when compared to a conventional four-leg intersection.

Roundabouts: An Informational guide-- Federal Highway Administration (June, 2000)



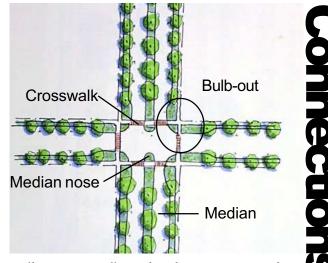
This roundabout at G Street and La Loma in Modesto handles 20,000 cars each day. Pedestrians wait for a gap in traffic or for a driver to stop, then cross to the refuge area.

efficiently moving traffic. Traffic data indicates predicted future volumes on SR 108 will outpace the capacity that a four-lane road with traffic signals can carry with reasonable levels of service. Further, there are serious constraining factors that could make provision of additional lanes and road widening to meet the increase prohibitively costly and largely ineffective. There is a 90-degree bend in the road at Patterson and Callander. The intersection at First Street carries large north-south volume that severely restricts the east west traffic on 108, regardless of the number of lanes. Widening of 108 on approach to First Street is severely limited because the road segment is built on a railroad bridge. Existing construction along the currently three lane section of roadway from First to Eighth Streets poses right of way acquisition constraints that make provision of additional lanes potentially unfeasible, limiting the capacity of Atchison Street to carry traffic increases.

Review of traffic data, field inspection of site conditions, and traffic movement analysis of the intersections at Jackson and Callander Avenues by the consultant team transportation engineer indicate that SR 108 as a two lane road with the installation of a series of roundabouts combined with medians and turn pockets could carry a substantial increase in traffic in comparison to 108 as a four-lane roadway with additional signalized intersec-

tions. Development of Claribel Road as a bypass would further ease demand, adding assurance that 108 built according to the recommended approach would be well-within capacity.

It is important to note that the proposed roundabouts are conceptual and that further refinements are necessary to ensure proper design and to determine if any additional right of way acquisitions are required. For more information regarding Caltrans policy regarding roundabouts, see *Design Information Bulletin Number 80: Roundabouts* (September, 1998), which can be downloaded at http://www.dot.ca.gov/hq/oppd/roundabt/index.htm.



Bulb outs, crosswalks, and medians are envisioned at SR108 intersections where there are no roundabouts. These features shorten pedestrian crossing distances and provide a refuge area between travel lanes.

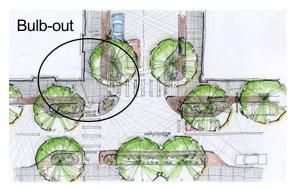


Raised medians, similar to the one above, are proposed along the SR108 corridor. Plantings are carefully selected to ensure they do not limit driver visibility.

Typical Intersections and Pedestrian Crossings

Intersections with no roundabouts have bulbouts on the corners, turn pockets at most locations, and a median on SR108.

Bulb-outs extend curbs into the street at corners and at mid-block pedestrian crossing points. They shorten pedestrian crossing distances and provide vantage points where it is easier for drivers to see them and for them to see traffic. They calm traffic at intersections by slowing turning traffic movements and provide added space for street amenities.



This drawing of a "tee" intersection illustrates how bulb-outs extend into the parking lane to protect parked vehicles and shorten pedestrian crossing distances.

Bulb-outs must provide sufficient turn radius to enable trucks to maneuver corners without driving over the curb. Additional information on the use of bulb-outs is provided on page 11 of the Caltrans guide, *Main Streets: Flexibility in Design and Operations*.

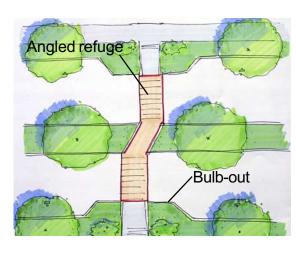


The mid-block bulb-out in the photo above provides space for landscaping and for pedestrians to wait for a gap in traffic.

Long walking distances between controlled intersections on SR108 may entice people to cross mid-block for easier access to schools, churches, or other activity centers. As the traffic calming approach and village development proposals in the Vision Plan are implemented, mid-block crossings should be considered for improved pedestrian and bicycle access and mobility, and creation of an active main street environment.

One example of where this may be appropriate is at a trail crossing. In this case, both bicycle and pedestrian crossings can be expected, but the distance to the nearest signal or roundabout may prompt users to cross where it is more convenient. The refuge island allows people to cross one direction of traffic at a time, wait in the center, then cross the opposing lane of traffic during a gap in traffic.

An engineering and safety evaluation will be needed to assess opportunities and placement of mid-block crossings as corridor development proceeds.



A refuge island in the center of the street allows people to cross one-half of the street at a time. They can wait in the center median area for a gap in traffic to finish crossing. The angle on the refuge area is designed to encourage people to look at oncoming traffic.





A gateway feature in the median at the western entry will announce arrival in Riverbank The raised median could incorporate a mid-block crossing to provide a designated crossing point for those using the trail along the nearby canal.



Beginning at the western entry to Riverbank, a trail crossing and highly visible gateway is proposed. The purpose of the gateway is to notify drivers they have entered an area where it is appropriate to drive more slowly than they would on a rural highway. Plantings and trees in the raised median and on street edges would reinforce this message. The trail crossing is suggested to allow people using the canal to cross the street. It could be designed as shown in illustrations on page 26.

Oakdale and Patterson Roads

The intersection of Oakdale Road and SR108 (Patterson) is a wide, high-speed intersection. Large, fast intersections are difficult for pedestrians, especially for those with mobility or vision restrictions.

A roundabout at this site would shorten pedestrian crossings, slow traffic, reduce noise, and facilitate smooth traffic flow. The resulting pedestrian-friendly environment helps generate foot traffic to support village-style infill patterns.

Patterson Road at Estelle Avenue

Street improvement plans indicate Estelle Avenue will soon connect between Patterson and Colony Manor Drive. The roundabout proposed for this site can be designed to accommodate the added street when the project is complete.

Patterson Road at Jackson Avenue

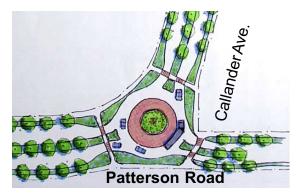
A traffic signal is planned at this site as a safety project. Using the designated funds to install a roundabout instead of a signal will yield greater safety benefits while facilitating a smooth flow of traffic.





Roundabouts vary in size and even shape, depending on where they are located and how much traffic will flow through them. The two images above show projects in Cotati and Gridley, California. The drawing below is a roundabout that will be built in Encinitas, California.





A roundabout at this intersection will address traffic safety concerns and make it much easier for drivers on the Patterson Road to continue westbound.

Callander at Patterson

This is another site slated for safety improvements. Callander intersects Patterson on a curve, which creates problems when designing a signal system. One option is to bend Patterson slightly to intersect the curve at 90 degrees. This maintains Patterson to Callander as the primary vehicle movement pattern. This would place the signal on a curve, which limits visibility for approaching drivers.

Another alternative is to have Callander intersect at 90 degrees. This option changes the eastern section of Patterson from a secondary road to the primary road. The high volumes of through traffic traveling from Patterson to Callander west to north would be making left turns instead of proceeding through a highway curve. This option decreases signal efficiency.

A roundabout would allow the eastern section of Patterson to intersect the intersection at approximately 90 degrees, which reduces construction cost. Visibility is less of an issue with the roundabout because it would be highly visible from all three directions, especially if it is landscaped well.

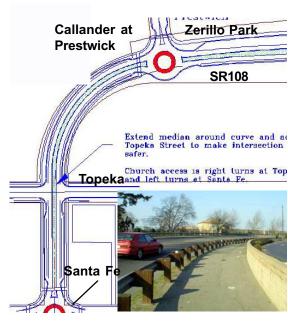
Callander at Santa Fe

Charrette participants suggested a roundabout at Santa Fe to break up the long straight section and ease crossing movements for pedestrians and vehicles. A roundabout at this site would slow eastbound traffic prior to entering the curve.

Callander at Topeka

Participants suggested a median be extended across Topeka with no opening because people entering and leaving Topeka cannot see vehicles coming around the curve. This would allow drivers to turn right into and out of Topeka, but they could not make left turns. Charrette participants suggested drivers use the driveway that runs parallel to Callander to connect to Santa Fe, where the roundabout will facilitate entry onto Callander.

The guardrail on the east side of the curve north of Topeka should be replaced with curb and gutter. On the west side it should be replaced with a context-sensitive concrete "jersey" barrier. A jersey barrier is recommended because it is more attractive, requires less maintenance, and is far more visible



A median across Topeka would eliminate left turns and cross traffic. A concrete "jersey" barrier is shown at the right of the photo inset.

particularly at night. A sidewalk should be provided behind the barrier. Participants suggested a landscaped median between Topeka and First Street to replace an existing concrete median.

Callander at Prestwick

Paricipants wanted a roundabout at Prestwick. Prestwick is the only entrance to the adjacent neighborhood and the roundabout would allow improved acess. The roundabout would also allow easier crossings for pedestrians and bicyclists.

Atchison and First Street

A roundabout to replace the existing traffic signal will improve traffic flow at this site. The roundabout will also require drivers to slow down.

Atchison at Third Street

A roundabout at this site will create opportunities for a gateway to the downtown area.

Atchison at Seventh Street

A roundabout at this site will slow traffic to facilitate crossings for Cardozo School students.

Atchison between Eighth and Claus

The intersections of Eighth and of Claus at Atchison (SR108) were mentioned as high crash locations. Signal installations at these locations are unlikely to effectively reduce crashes because of poor visibility on approach curves. An alternative is to straighten SR108 between these two intersections, move the road slightly south and add a roundabouts at Claus. Unused space between the new road and the river bank would be an ideal location for an overlook of the valley. The roundabout

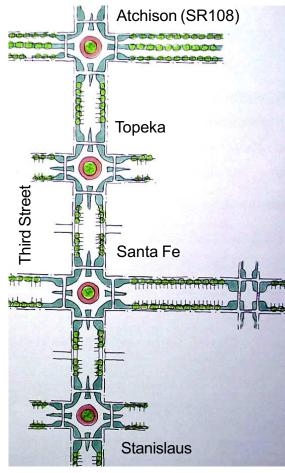
will facilitate pedestrian crossings to the view area.

Downtown

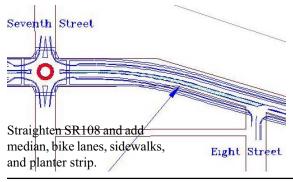
Participants recommended a series of roundabouts on Third to create focal points, slow traffic, and reduce asphalt.

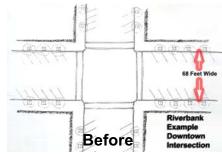
Third Street between Atchison and Stanislaus primarily provides access for people whose destination is downtown. It does not serve as a major through route. This creates an opportunity to change existing angled parking spaces to head-in parking. Bulb-outs at the corners add additional landscaping space.



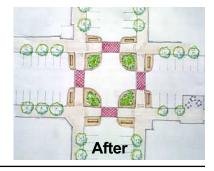


Converting overly wide downtown streets to head-in parking with compact intersections can create a unique ambiance that invites people to park once and stroll along pleasant sidewalks.





Excess street width downtown can be used to create landscape space and additional parking. Street crossings are shortened and speeds are reduced.





This student crossing Oakdale is at risk because the street is wide and fast. Drivers in this environment often hurry past a car stopped in one lane without noticing they have stopped for a reason.

Other Network Streets

Portions of Oakdale Road have been built to widths that make it very difficult for pedestrians to cross the street. This is contrary to the goals of the Stanislaus County Regional Transportation Plan that strives to reduce air pollution and encourage alternative travel modes.

Transportation projects programmed for the next several years appear to impose a similar design requirement of excessive width on Roselle Avenue and portions of Patterson Road. Construction of the Claribel bypass would eliminate any need for Oakdale, Patterson, and other collectors to be constructed primarily to move large volumes of traffic at high speeds.

Traffic Circulation

Once early implementation phases of the Claribel bypass are implemented, traffic circulation patterns in Riverbank must be adjusted. Roundabouts will insure ample capacity. This model applied throughout Riverbank reduces total investment needed to maintain smooth traffic flow throughout the area. Savings could be used to strengthen alternative modes of transportation, including regional multi-use trail systems, sidewalks, and transit.

Circulation Network

- ◆ Claribel is the primary regional road for Riverbank
- ◆ SR108 becomes a minor regional street providing considerable through movement, but more importantly, a road that brings people to Riverbank to access commerce and activities.
- ◆ Oakdale, Roselle, Terminal and Claus are connector streets from the Claribel Expressway into Riverbank. These streets, in conjunction with Morrill, Country Manor Drive, Ward Avenue, Stanislaus, Topeka, Santa Fe, and Kentucky distribute traffic east and west throughout the city.

Recommendations: Using the above points, develop a tiered street hierarchy to define streets in terms of multiple street uses and relationship to adjacent land use. Revise street standards to reflect the role of those streets.

Streets built in conjunction with future development should complete the existing network with connections that facilitate walking, bicycling and vehicle travel. This distributes traffic more evenly on all streets, rather than putting many vehicles on a few streets and some people on streets with little traffic.

To complete the system of sidewalks throughout the city, establish priorities including access to schools, community centers, churches and village centers.

Extend the on-street bicycle network. Link sidewalks and on-street bike lanes to a trail system that utilizes rail and canal corridors.

Expand transit service and provide comfortable, secure, attractive transit stops.

Transit shelters can be designed to complement community character. The shelters should provide security, comfort, and schedule information.



Traffic control: Roundabouts are safer, more efficient, more attractive, and usually less costly than signalized intersections. They may not work at all intersections. In keeping with policy changes elsewhere in the country the consultant team recommends that roundabouts be evaluated and compared whenever traffic control is being considered. Elements to consider include:

- ♦ Construction costs
- ♦ Right-of-way acquisition costs
- ♦ Twenty year maintenance costs
- ♦ Crash costs
- ♦ Air quality impacts
- ♦ Delay
- ♦ Level of Service/efficiency

When comparing crash data between signals and roundabouts the data from the Insurance Institute for Highway Safety can be used as a basis.

Pedestrian Crossings: Pedestrian crossings are a vital part of a circulation element. The use of pedestrian counts to determine if a crossing is warranted is not feasible because few pedestrians cross busy streets or excessively wide roads. Crossing points should be based on need. Schools are an obvious location for crossings. Community centers, senior citizen meeting locations, parks, and shopping areas are other logical locations for pedestrian crossings. In



Bulb-outs, a short raised median, and a raised speed table provide a safe, convenient crossing for pedestrians.

areas where speed control is needed, a raised speed table can be installed.

Gateways: Entries/Transitions

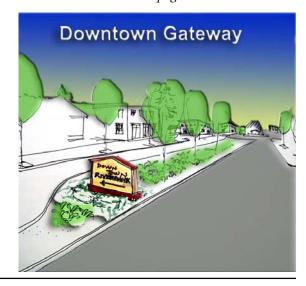
Many charrette participants remarked that it is difficult for drivers to realize when they have actually entered Riverbank. Many communities establish their borders by creating gateway entrances on major streets. The best entries send a message to drivers that conditions have changed and it is now time to slow down. Signs can be used as a gateway element entry, but they must be carefully designed and placed to capture the attention of entering traffic.

Roundabouts, center and splitter islands can also also serve as gateway elements.
Roundabouts terminate long street views and have a calming affect on all approaching

streets. The more height and color to landscaping the further out the calming effect and the safer the island becomes to all approaching motorists. Fixed objects in the center islands are acceptable because of low speed approaches.

One gateway for Riverbank is envisioned at the western entrance on Patterson Road in the raised median. This concept is illustrated below. At the eastern entrance, the roundabout on Atchison could anchor an attractive gateway treatment. The third gateway would be at Atchison and Third, to mark the entrance to downtown.

Gateways vary in size, shape and placement. An archway over the road, distinctive landscaping in roundabouts or medians, signs, or a combination of features can be used. A concept for the eastern entry to Riverbank is shown on page 27.



Multi-Use Trails, Greenways, and Links

Communities across the country have discovered the many benefits that a greenway network offers. Chattanooga, Tennessee and Providence, Rhode Island have transformed unsightly urban decay into inviting and popular greenways and walkways that make their communities more livable and walkable.



These before and after photos of an alley show how these spaces can be turned into valuable community assets that help complete the transportation system.



Greenways and walkways compose a network of multi-use routes of non-motorized routes. They include corridors of protected open space managed for conservation and recreation purposes. Greenways can follow natural or man-made features like railroad tracks. These corridors link nature reserves, parks, cultural features and historic sites with each other and with populated areas. Riverbank's walkways



This path near the train tracks shows there is a need for trails that serve everyone. The trail below is in an abandoned rail corridor, but in many areas rails and trails share corridors.



and trails should be linked with each other and with popular destinations such as parks, schools, shopping, and rural trailheads in a network of greenways.

In urbanized areas, the network of non-motorized routes can incorporate existing alleys and shortcuts. Alleys and shortcuts are an important element of the transportation system for people walking and bicycling. The children at California Avenue School identified many places in Riverbank where they could take shortcuts to reach their destinations more easily. These linkages can be formalized and woven into the system of sidewalks and trails to form safe, secure, convenient travel routes to encourage healthy, human-powered transportation.

Pathways through the grass in many areas of Riverbank near the railroad tracks reveal that people in Riverbank already use this route.



A network of multi-use trails should be pursued as part of the transportation circulation system and for development of a truly livable Riverbank. In fact, this system of trails could be one of the assets that would distinguish Riverbank from nearby communities.

"Properties along the trail have taken off. I've got a list of 300 prospective buyers waiting for property along the river and trail, and they're willing to wait for those properties."

Susan Beal, Coldwell Banker Real Estate Sales Associate.

Economic Benefits

The economic benefit of greenways has been the subject of many studies. All research shows increased property values for adjacent and nearby residential parcels. Surveys of homeowners and realtors in different communities show properties adjacent to trails can command a 6%-9% premium and sell faster than comparable properties away from the trails. Realtors commonly advertise nearby trails and trail systems as amenities to help sell their properties.

Greenways have proven a sure bet to stimulate local economic activity. A 1992 study of three urban/suburban greenways showed users generated more than an additional \$1.2

million annually on each trail network. Visitors to Ohio's Little Miami Scenic Trail spend an average of \$13.54 per visit just on food, beverages and transportation to the trail, over \$2 million per year. In addition, they spend an estimated \$277 each year on clothing, equipment and accessories to use during these trail trips. Job creation for trail-related products and services for local residents and tourists is another economic benefit. A National Park Service study revealed that the total economic impact of a trail involves a combination of newly created trail-related jobs and the expansion of existing businesses related to travel, equipment, clothes, food, souvenirs and maps. Trails and greenways bring job growth in construction and maintenance as well as tourism-related opportunities like river rafting tours, bike rentals, restaurants and lodging.

Trail networks have many other important benefits. A study of seven trails in Indiana showed that 70% of users had increased their general physical activity due to trail use, helping to prevent the many disorders caused or aggravated by inactivity. Research also shows that students who exercise tend to get better grades in school and experience fewer behavioral problems. Trail networks encourage non-motorized trips for commuting, shopping and recreation, and provide safe routes to school for children. A 1997 trail use study of the Iron Horse Regional Trail in California found that approximately one-third of those

surveyed use the trail for transportation purposes, including commuting to work or school, or using the trail as an alternative route to access shopping areas and restaurants. Fewer motorized trips mean a reduction in emissions, congestion, lost time, societal costs, public costs and personal costs. Greenways help the environment by protecting sensitive wildlife habitat, riparian corridors, wetlands, historic sites. River- and creek-side greenways mitigate damage caused by floods by absorbing excess water when rivers overflow. Greenways provide natural buffer zones that protect streams, rivers and lakes from pollution run-off caused by the frequent use of fertilizers and pesticides on yards and farms.

"Three new gift shops have recently opened, another bike shop, a jewelry store, an antique and used furniture store, a thrift shop, a Wendy's Restaurant and a pizza and sandwich shop have also cropped up. All this is happening, and only with the PROS-PECT of the trail opening in July. There is an air of excitement and anticipation now within this community. Something Connellsville has not felt for many years."

Chris Wagner, Executive Director of the Greater Connellsville Chamber of Commerce, Pennsylvania



Multi-use trail in Reedley, CA

Planning and development of trail networks must be community based. The most popular trail and greenway projects are those that grow out of community desire and effort rather than those that are imposed on a community. Trail systems need broad-based public and private partnerships. Trail systems are created through a planning process that includes community input throughout each stage of

The canal is already used as a trail by many bicyclists and runners.



development. This community involvement generates support for the trails and ensures that the system will address the community's needs. The success of a trail is also dependent upon good design.

Design of a whole trail system as well as its component parts must meet the needs of the anticipated users, which include people of all ages, socio-economic status, abilities and activities (bicycling, walking, running, wheelchair, equestrian, in-line skating).

What are potential roadblocks to a greenway and walkway network? Just like any other public project, trails do run into some opposition, especially NIMBY opposition (not in my backyard). The concerns shared by many people include safety, vandalism and liability. Many studies have examined these issues and have found that these concerns rarely materialize and can be addressed by creating a solid design and management plan. Studies show crime rates on greenways networks are far lower than in surrounding neighborhoods. The majority of trail projects studied met with either no opposition or with routine landowner and citizen concerns that were addressed as part of the process. (Cited studies are courtesy of Trails & Greenways: Advancing the Smart Growth Agenda, Rails-to Trails Conservancy, 2002.)

Throughout the proposed village areas there are alleys and similar passages that could



This attractive alley links parking to shops.

contribute to both character and convenience. The use of landscaping and public art can transform drab and dreary passageways into attractive and safe routes. Alleys and passageways in Riverbank need pedestrianscale lighting and beautification to become appealing links between neighborhoods, parking areas, and activity centers.

Reedley, CA trail crossing.



Implementation

This section offers suggestions the community can use to begin to realize the vision defined during the charrette. Many people have volunteered to assist. The City should take advantage of their offers and the current enthusiasm.

Phase One (1 to 2 Years)

- ◆ Assign or outsource a full time plan implementer
- ◆ Identify, prioritize missing sidewalk, ADA elements
- Identify new pocket park, plaza and other open space locations
- ◆ Establish consensus vision for suggested walking villages
- ♦ Clean up area streets, public space and alleys
- ◆ Build roundabouts at Jackson, Estelle and Callander on SR108
- ◆ Create facade improvement program
- ◆ Develop greenway and open space master plan
- ◆ Adopt Ahwahnee Principles
- ◆ Develop Smart Growth Code, adopt and train developers

 Conduct citizen and developer training courses

Phase Two (2-10 years)

- ♦ Complete sidewalk system in village areas
- ◆ Develop distinct character/personality for each village
- ◆ Complete links into neighborhoods ° mile from centers
- ♦ Incubate new businesses for each village
- All community decisions and funding support villages
- ◆ Smart growth code and strategies well in place
- ◆ Build 5 intersection improvements for Claribel bypass/ roundabouts at Coffee, Oakdale, Roselle, Terminal, and Claus
- ♦ Provide bike lanes and sidewalks
- ◆ Rebuild 108 in phases / roundabouts at Oakdale, Santa Fe, Prestwick, First, Third, Seventh and Claus
- ♦ Rebuild downtown streets in phases
- ♦ Mini-Roundabouts on Third and Topeka, Santa Fe and Stanislaus
- ♦ Curb extensions on all other corners
- ♦ Maximize on-street parking
- ♦ Create municipal parking lots, if needed

Phase Three (Long Term)

- ♦ Complete bypass and reduce lanes
- ◆ Complete town center, with incentives for mixed use development, senior residence living, other compact development
- ◆ Complete rebuild of all portions of Atchison and Patterson
- Expand bypass, if needed
- ♦ Build other villages, as defined by growth
- ♦ Complete greenway



These Riverbank children like to walk. Their future transportation choices will be dictated by the decisions made and actions taken now.

Funding Opportunities

Funding Sources

There are a number of funding sources to explore for street improvements, community facilities, and other infrastructure needs in Riverbank. The funding sources outlined in this section include:

- ◆ Local County general fund (or possible future city general fund)
- ◆ Capital Improvement Programs funded by developer fees
- ♦ Redevelopment funds
- ♦ Special Districts
- ◆ State and federal transportation funds (TEA-21, STIP/RTIP, transit funds, etc.)
- ♦ Grants and Loans to Communities
- ◆ Community Development Block Grant (CDBG)
- ◆ Economic Development Administration (EDA)
- ◆ US Department of Agriculture Rural Development Program (USDA –RD)

- ♦ Parks bonds and other programs
- ♦ Central Valley Empowerment Initiative

Local Funds

Traffic Calming and Beautification

Several cities have successfully added traffic calming, sidewalks, curbs and similar elements to other projects which involve digging up or rebuilding portions of a street: storm drain and sewer improvements, utility undergrounding projects, and routine street repaving and reconstruction are all possibilities. The greater the extent of the reconstruction, the greater the possibilities are for adding elements such as bulb-outs, medians and roundabouts at little cost. In some cities, combining traffic calming with other street work has allowed them to build traffic calming features for as little as 5% of the cost of a stand-alone project. In addition, communities avoid the disruption, noise and expense of repeatedly digging up a street and detouring traffic. However, such combination projects are not always feasible, and may require extensive coordination between departments and capital improvement projects whose schedules and budgets are normally separate.

Street Resurfacing or Reconstruction

Many cities have incorporated traffic calming into street reconstruction projects. In Venice, Florida, for example, officials brought new life to a dilapidated downtown by adding \$80,000 to a main street resurfacing project: intersection bulb-outs, mid-block bulb-outs and median crossings, and crosswalks of colorful paver stones were all included. Also, county transportation sales tax measures can provide substantial funding for city street maintenance and rehabilitation.

Sewer and Storm Drain Projects

In Fort Pierce, Florida, three blocks of new sidewalks together with a new roundabout were added to a long-planned sewer project. Built as concurrent construction, the sidewalks and roundabout added just \$15,000 to the cost of the project. Similarly, Seattle has added planted medians to several streets at little or no extra cost as part of sewer upgrade projects. Since the storm drain system is largely buried beneath the city's streets, any planned improvements might be combined with the implementation of traffic calming measures. Opportunities may arise on various residential arterial, collector and local streets where traffic calming is desired.

Utility Under-grounding

Utility under-grounding projects often require extensive digging, demolition and replacement. Utility under-grounding typically requires the installation of new conduit, bases and often poles for streetlights (when the lights are on luminaires mounted on the overhead utility poles). Substantial savings

may be possible by installing pedestrian-scale lighting (if it is desired for a street) at the same time, rather than digging up the street a second time to provide conduits and bases for pedestrian scale lighting, which typically requires more lights, placed closer together than the existing highway-scale lighting.

Require Walkable Design Standards in New Development

The City of Riverbank can specify traffic calming measures and pedestrian features in new commercial and residential development through adoption of citywide design guidelines and standards or on a conditional basis in the approval of individual plans for new development. Traffic-calming and pedestrian-oriented community design can often increase profit for developers. Narrower streets, for example, reduce construction costs and create room for additional lots, park space or land-scaping, which increase project marketability and value.

Riverbank may also explore the use of development impact fees in conjunction with a capital improvements program (CIP) to systematically fund traffic calming, pedestrian and bicycle infrastructure, such as trail connections linking schools, housing, shopping, and recreation destinations.

Generally, development impact fees are

"scheduled charges applied to new development to generate revenue for the construction or expansion of capital facilities located outside the boundaries of new development (i.e. off-site) that benefit the contributing development." As described in A Practitioner's Guide to Development Impact Fees (Nicholas, Nelson & Juergensmeyer, 1991), "Where capital facilities are not adequate, permitting development to occur is contrary to the responsibility of a local government to protect public health, safety and welfare." In order to protect public health and safety, then, the courts have held that cities may charge impact fees in order to recoup from each new development a proportionate share of the cost of providing adequate capital facilities — including the provision of safe streets.

In the specific case of traffic calming measures, bicycle and pedestrian facilities, a city may proceed as follows. As the Practitioner's Guide explains, "A properly created impact fee system begins with a good comprehensive plan backed up with an equally good capital improvements program (CIP)." City Comprehensive Plan policies should clearly establish the city's desire to protect public safety and welfare by providing bicycle and pedestrian facilities, and using traffic calming measures to create safe streets. Next, facilities services standards must be adopted. A city usually establishes measures of adequate roadway capacity for motor vehicles measured as Levels

of Service. An example is, that no more than 40 seconds average rush hour delay (i.e. Level of Service 'D') is acceptable for any intersection. A city may establish Level of Service standards for bicycling and walking. For example, the standards might specify that:

- ◆ 5' wide sidewalks are required on both sides of any roadway carrying more than 2500 vehicles per day; or it could require that walks are required on all streets belonging to the City's designated pedestrian network.
- all arterial and collector streets shall provide bicycle lanes;
- the capital facilities specified in the City's Bicycle and Pedestrian Plans must be completed;
- ♦ local residential streets shall operate at an 85th percentile speed of 20 m.p.h. or less; and collector and arterial streets shall operate at 30 m.p.h. or less.

Once the standards for a community have been set, the cost of achieving those standards must be determined (for example, the cost per mile of new sidewalks, multiplied by the miles of sidewalks needed). Finally, a proportionate share of that cost may be levied on new developments, in the form of an impact fee. This is likely to be the most difficult step. For roadway expansions, parks, public schools, parks, sewers and various other facilities, the methods of determining fair shares are well

established. However, few if any cities have established regular impact fees for bicycle and pedestrian facilities or for traffic calming measures, since until recently many communities have largely overlooked bicycling and walking needs. Nonetheless, the same principles apply: a fee schedule may be developed to raise a proportionate share of the cost of the needed capital facilities from new development. For a sidewalk impact fee, for example, a proportionate fee might be based on the number of pedestrian trips expected to be generated by the new development. Or the fee could be proportionate to the number of automobile trips generated (since reaching a certain level of automobile traffic on a street may require the construction of a sidewalk in order to meet a city's standard for protecting pedestrian safety).

Redevelopment Funds

The State of California originally approved the concept of redevelopment in 1945 in order to give cities and counties the authority to create redevelopment agencies and to give these agencies the authority and power necessary to attack and solve problems of urban decay and blight. Redevelopment agencies were (and are) able to apply for grants and loans from the federal government.

The economic base for redevelopment is tax increment financing (TIF). TIF allows the governing body of a city or county to adopt a

redevelopment plan that provides for the redevelopment of a designated area and to use tax increment financing to fund the costs of redevelopment projects in the designated area. The method of financing involves the issuance of bonds or other obligations that are secured by a pledge of all or part of the funds raised by the redevelopment agency. The agency raises funds because of the increase in assessed valuation of taxable real property within its designated redevelopment area. This is based on the assumption that the assessed value of real property within a redevelopment area will increase due to redevelopment improvements.

In addition to providing assistance with public improvements to facilitate redevelopment, a redevelopment agency can provide assistance to a variety of private development interests if the specific projects are in conformance with the agency's plan:

- ♦ Development of new industrial and commercial uses in the project area.
- ♦ Commercial building and property renovation and improvement projects.
- ◆ Rehabilitation and expansion of the community's existing private housing stock.
- "Writing Down" the cost of land when it is sold to a developer or owner participant (in accordance with an approved development agreement providing adequate assurances that the project would be completed).

◆ Provide low-interest loans or tax exempt financing to reduce financing costs through certificates of participation, lease revenue bonds, industrial development bonds or various forms of tax exempt notes.

Some charrette participants voiced concerns about the prospect of a redevelopment district, stating that a previous prosposal had been rejected by the community. If this possibility is reconsidered, early involvement of all stakeholders will be crucial to community-wide support for the endeavor.

Special Districts

Special districts can be used by a jurisdiction to obtain up-front and on-going financing for projects benefiting defined areas or development. The County government could choose to develop a "special district" defined by: areas that receive "special benefits" from the development of infrastructure. Special assessment districts generally assess a charge levied upon parcels of real property within the District's boundaries to pay for "local improvements," such as infrastructure. In many cases they require a vote of the affected property owners to be created. Sewer districts are examples of special districts which primarily operate by virtue of collecting fees.

Typically, assessment bonds are sold to provide the capital needed to pay for immediate construction of a project and are secured by property liens. Landowners are given the option to pay off the assessment immediately, otherwise, the assessments become liens against the property and landowners pay them off in installments. Special assessment districts can conduct annual assessments or one assessment at the transfer of property. Most special assessment acts provide for the issuance of bonds. In effect, bonds provide money that the local government is borrowing to construct the improvements authorized by the assessment district. These bonds are generally secured by the property within the district and the bonded indebtedness is repaid with the money generated by the assessments. Several types of districts are possible, depending on the specific project goals and a host of legal considerations. Examples include Infrastructure Financing Districts, Community Service Districts, Facilities Benefit Assessments.

State and Federal Transportation Funds

TEA- 21 and SB 45

The Transportation Equity Act for the 21st Century (TEA-21) increased federal funding for transportation by over 40%. In sharp contrast to previous years, TEA-21 and California's recent Senate Bill 45 (SB 45) make traffic calming projects eligible for most federal and state sources of transportation dollars. The specific programs that can fund traffic calming are described in greater detail below. Essentially, these funds are accessed in

two ways:

- 1) A few programs, such as the Hazard Elimination/Safety program or the Transportation for Livable Communities fund are administered at the state level or regional level. Municipalities apply directly to the state (to the California Department of Transportation, or 'Caltrans') or regional transportation planning agency for these competitive funding pots. Those cities which have set clear priorities and have Council-approved plans in hand can often secure a larger share of funds.
- 2) For most transportation funding, the process begins at the local level, where city and county transportation and public works departments often draw up a list of project priorities. City staff then gathers at the county level to negotiate priorities.

Major state and federal transportation funding resources are outlined below. Useful resources for more details and updates on these funding programs, and for announcements of new opportunities include:

- ◆ Surface Transportation Policy Project, California
 - http://www.transact.org/ca/
- ♦ Caltrans Division of Local Assistance http://www.dot.ca.gov/hq/LocalPrograms/

♦ California Trail Connection http://www.caltrails.org/

State Transportation Improvement Program (STIP)

Funded at \$8.3 billion over the 1999-2005 period, this program represents the lion's share of California's state and federal transportation dollars. Under California Senate Bill 45, 25% of the funds are allocated for roads in the state Interregional Road System (IRRS) (which does not include SR 108), and 75% of the funds are directed to regional and county transportation agencies to fund improvements for locally adopted priorities contained in Regional Transportation Improvement Programs (RTIP). Senate Bill 45 declares that RTIP funds may be used for, among other things, improving local roads, pedestrian and bicycle facilities, and safety: in short, for application toward many of the alternatives suggested in the proposed Riverbank SR 108 Enhancement Plan. The Stanislaus Council of Governments is the regional transportation planning agency for Stanislaus County.

Transportation Enhancement Activities (TEA)

This federal program, amounting to \$60 million per year for California, funds a wide variety of smaller community-oriented projects, including renovation of historic transportation facilities, bicycle and pedestrian

facilities, and Main Street revitalization programs. Seventy-five percent is programmed by local regional transportation planning agencies, and twenty-five percent is programmed by Caltrans at the state level. For SR 108, these funds could be used to help fund many of the suggested projects, including sidewalk and crosswalk improvements, medians, lighting and intersection safety improvements.

Surface Transportation Program (STP)

This federal fund is worth approximately \$500 million per year in California, and is usually programmed once every two to three years by the regional transportation planning agencies. STP funds are highly flexible funds for all sorts of capital projects, and could be used to fund any of the suggested street design projects.

Hazard Elimination and Safety Program

This federal safety funding provides \$60 million per year for California, and is controlled by Caltrans. One-third of the funding is only available for state highways, one-third is locally-oriented and may be used for traffic calming, bicycle and pedestrian projects, and one-third is currently directed into the Safe Routes to School program.

Safe Routes to School: (Assembly Bill 1475)

This program currently directs \$25 million per year in funding to projects providing safe passage to children walking or bicycling to school, including building bicycle paths and lanes, constructing sidewalks where none exist, and implementing "traffic calming" programs in neighborhoods around schools. The program sunsets on January 1, 2005, unless a later enacted statute deletes or extends that date.

Bicycle Transportation Account (BTA) This state fund, administered by the Caltrans Bicycle Facilities Unit, can be used for numerous items that aid cyclists, including median crossings, bicycle/pedestrian signals and bike lanes. SB 1772, which takes effect July 2001, increased funding for the BTA to \$7.2 million per year for Fiscal Years 2001/02 through 2005/06. After 2005/06, annual BTA funding will be \$5 million. For Fiscal Year 2001/02, the maximum an applicant may receive is \$1.8 million. BTA funds pay a maximum of 90 percent of the cost of an eligible project.

Environmental Enhancement & Mitigation (EEM)

This state fund is worth \$10 million annually. Applications are accepted yearly, usually in November, by the California State Resources Agency in Sacramento. Two categories could be appropriate for improving SR 108: the

Highway Landscaping and Urban Forestry category is designed to offset vehicular emissions of carbon dioxide by funding the planting of street trees and other suitable plants. The Roadside Recreation category has been used by cities to fund parks and trailheads along streets. Unfortunately, under the current state budget crisis, the Governor's proposed budget eliminates funding for this program for FY 2003/2004. So the future of EEM funds is uncertain.

Congestion Mitigation & Air Quality

This federal fund, worth over \$300 million per year for California, is distributed to regional transportation planning agencies in areas with air quality problems for projects that improve air quality and reduce congestion. Bicycle and pedestrian improvements are specifically eligible for these funds.

Federal Transit Funds

California receives close to \$1 billion annually in federal transit funds, and these funds may now be used not just for buses and trains, but also for projects which improve transit stops and bicycle/pedestrian access to them.

Grants and Loans to Communities

US Department of Agriculture (USDA) USDA has a number of grant and loan programs that can be utilized for the purposes of improving the economic and environmental climate of rural communities. USDA funding is open to agencies ranging from local and state government agencies to public and private non-profits, as well as for-profit entities. These programs include Business and Industry Direct and Guaranteed Loans, Rural Business Enterprise Grants, Rural Business Opportunity Grants, Rural Economic Development Loans/Grants, an intermediary lending program, and Community Facilities Loan/Grant Program.

USDA /US Forestry Economic Program provides grants ranging from \$10,000 to \$30,000 for projects that help communities organize and develop community action plans, and projects that will help diversify local economies and develop or enhance forest and natural resource based industries.

Community Development Block Grant (CDBG) Program

Under the State Small Cities Community Development Block Grant (CDGB) Program, rural cities and counties may apply for funding for a broad range of activities ranging from establishment and operation of revolving loan

funds and construction of infrastructure improvements to construction of new housing and community facilities. Applicants may also apply for funding to conduct planning studies and to write grant applications relating to the above mentioned activities. Funding programs under the CDBG Economic Development Allocation include the Economic Enterprise Fund for small business loans, Over-the-Counter Grants for public infrastructure associated with private-sector job creation, and Planning and Technical Assistance Grants. Applications under the Economic Development Allocation will require a job creation/ retention component. Potential projects include street and traffic improvements, water system expansion and improvements, and sewer system expansion and improvements. Go to http://www.hcd.ca.gov/ca/ for more information.

Economic Development Administration (EDA)

Funding is available through the EDA for activities such as infrastructure improvements and planning projects. Programs under the EDA grants include the Public Works and Economic Development Program, Research and National Technical Assistance Program, and the Technical Assistance Program (Local). Potential projects for EDA grants include water system expansion and improvements, and sewer system expansion and improvements, and construction of publicly owned

facilities (including demolition and renovation.)

Caltrans Planning Grants

Caltrans provides a number of grant opportunities that could be pursued in revitalizing Riverbank. At the moment, the future of these grants is uncertain, due to proposed spending cuts associated with the state's current economic challenges. For a description of these grants, see the Caltrans Transportation Planning web page: http://www.dot.ca.gov/hq/tpp/grants.htm.

Community-Based Transportation Planning Grants

The source of Caltrans grant funding for the Riverbank Community Design Charrette, this funding program funds transportation/land use planning projects that support livable community concepts. Projects may address a variety of topics, including long-term sustainable economic growth, mixed-use development, pedestrian, bicycle and transit lineages, and restoring a jobs and housing balance.

Caltrans Environmental Justice Grants

This program funds one-time demonstration projects for environmental justice in order to create and highlight the most effective processes and policies. Public outreach efforts, identification of minority and low-income community needs and concerns in transportation are among possible project types.

Caltrans Transit Planning Grants

This grant funds public and intermodal transportation studies in rural transit areas of California (population 50,000 and less.) Eligible potential studies include short-range transit development plans, ridership surveys, and site selection studies.

Inter-Regional Partnership (IRP) Grants for Jobs Housing Balance

The California Department of Housing and Community Development has competitive grants available to Councils of Governments, two or more sub-regions within a Council of Governments (CoG), or to counties working in collaboration with the state and federal governments to address the impact of substantial jobs housing imbalances. For more information: http://www.hcd.ca.gov/ca/

Appendix

Public Involvement

Public Involvement February 6 – 7, 2003

School Visit

On Thursday, February 6, 2003, the Walkable Communities team visited a fifth grade class at the California Avenue School. Dan Burden began by asking the children how they arrived at school that morning. About half the children arrived in cars, 2 on the bus, 1 by bicycle, and the remaining children walked. When asked how many liked to walk, all except the one child who bicycled raised their hand.

Dan Burden showed a series of slides to demonstrate how walking and bicycling links are sometimes built in communities to allow people easy access to places. The students viewed several sets of slides and discussed which links, sidewalks, and bike lanes they preferred. Their teacher, Jose Beltran, helped the students work with maps to identify places in Riverbank where there are informal links used as shortcuts. They identified many shortcuts near the train tracks. Some gave specifics, explaining shortcuts like one on Texas Avenue by the baseball field. Dan explained that shortcuts can become formal connections that encourage people to stay healthy by walking more and using their cars less.

Three of the students went outdoors with Josh

Meyer of the Local Government Commission to test their skills using a wheelchair. Each took a turn in the wheelchair, and all agreed it was more difficult than they realized. They reported it was very easy to fall off the sidewalk edge and that sometimes cars parked on the sidewalks blocked their travel route. They also talked about how fast the wheelchair rolled down the ramps and driveways.

Dan explained that many Americans cannot move around without a wheelchair. He explained that we need to make sure we build really good sidewalks because many people, like "superman" may end up disabled.

Field Tour

Caltrans and City staff from public works and community planning joined the consultant team for a brief meeting followed by a tour of the project area. Each participant spoke briefly about their goals for the project. Their input is summarized below.

- ◆ Clear goals reflecting the input of citizens would provide agencies with guidance and enable maximum funding.
- ◆ Safety was improved with the lane reduction on Atchison. Continued safety improvements are a priority.
- ◆ Street crossings are difficult, especially at night. More lighting is needed.
- ◆ Areas where the number of lanes fluctuate are a safety issue.
- Improved air quality is a priority.

- ♦ Identify ways to link the downtown with areas in the south.
- ◆ The City is doing downtown revitalization. They would like to see integration between 3rd Street and SR108 that draws people downtown so it can be revitalized. The business environment seems fairly stable. There are 3 grocery stores in town.
- Maintain the interregional transportation system to meet current and future traffic needs.
- Improved bicycle and pedestrian mobility and integration with the downtown project needed. Sidewalks need to connect.
- Improved lighting along the corridor. Crossing the highway at night is dangerous.
- Where the number of lanes change there are problems.

Participants boarded a bus to tour the project area, stopping to walk at selected sites. The first stop was at the M.I.D. Main Canal where a sign marking the entrance to Riverbank is provided. Here the group exited the bus to discuss issues such as the use of canal service roads, the possibility of a bypass for through traffic, and the need for drivers to sense a change in the environment as they enter the City.

The tour continued along Patterson Road with stops that included Oakdale Road, Jackson

Avenue, Callander Avenue, and Jacob Meyer Park. At each point the participants disembarked and discussed issues such as sidewalks, crosswalks, curb ramps, and vehicle traffic.

Focus Groups

Several focus groups were conducted. Facilitator Dan Burden opened each group discussion by asking participants what they feel are the most important issues facing Riverbank. Additional questions asked are provided in italics. Summaries of the discussion points in each group follow.

City Officials

- ♦ We need jobs. Unemployment is at 20%.
- ◆ People who move here for cheap homes will commute from Modesto and the Bay area. The unemployment rate will go down because they will dilute those numbers. Population will probably be 25,000 within 5 years.
- ♦ My dream is a self-sustaining downtown so people don't go to Modesto. That helps the city keep the air clean. Other clean-air strategies have been implemented, including a dial-a-ride system and CNG city vehicles. In August they will have a trolley between Oakdale and Riverbank all CNG.
- ◆ There is nothing here for children and shopping is limited. Schools are crowded.

- There are a lot of farm and factory workers here. A lot of seasonal workers come here from Mexico and Texas. They share homes.
- New subdivisions have open-ended cul de sacs and the roads will be bike and pedestrian friendly.
- ◆ There is a beautiful park here, about 7 acres developed and some undeveloped, but people can't get there. The Riverbank Walkers club doesn't really have a place to walk.
- The town needs to in-fill so people can walk to their destinations. The kids are always in their cars.
- Seniors are clustered near downtown.
- Many people in town walk, but they have to be careful. It's only scenic if you are in a nice subdivision.
- ◆ Would like to see more active lifestyles, but the streets are deathtraps. Between 4 and 5 pm you cannot cross the street (SR108).
- ◆ I think the new subdivisions with separated sidewalks will be walkable. The original design was even more village-like, but the developers wouldn't cooperate. This development is pooled and its better, but not what they really wanted. The density is about 5 houses per acre although they would like more.
- ◆ There are some trails and pedestrian bridges across the canals. The edge of the Hetch Hetchy canal will have trails.

• We have a very active central town, but the people living on the other side are only 3 miles from Modesto and they have no connection to the town. They play soccer and go to school in Modesto.

What would it take to get people to re ignite about their downtown? Are there any good examples in the San Joaquin valley?

- Sonora, Lodi are two examples. The buildings need to be renovated. There are many empty buildings that are falling apart. If we could turn this into an Olivera Street people would come.
- ◆ The Chamber has a cheese and wine tasting that is very successful.
- ◆ We had a farmers market for a long time but it went away. It was successful and people had a lot of fun.
- ♦ One of the problems we have is that we don't have a redevelopment agency. There are funds. We need a master plan so we can set up what we need for money. There was an effort made to form a redevelopment district, but it was soundly defeated.
- Medians in the middle of the street and lights in the trees would dress it up and make it look pretty. Parking in the back of buildings wouldn't feel unsafe if it was well lit. Dress it up. We started, but we ran out of money.

What is the biggest thing to keep you from achieving your dream?

- ◆ Leadership is thin. We need to grow leaders. People get burned out.
- ♦ A large percentage of the people who have come here to live drive 90 miles west to the bay area to work. They have good wages to buy the homes here. They don't even subscribe to the local newspaper.
- Money is also a big problem. The trails thing is hung up over a million dollars. Things are drying up. We have plans that could do some great things but we don't have enough money for it.

If you could wave a magic wand how would the traffic work in twenty years?

- ◆ Claribel going through would be the best, but it's a county thing moving very slowly. It will probably be done in twenty years. The streets here could then be narrower.
- ◆ The other thing is, will the cannery be here in twenty years? If not, that may become shopping area. The cannery set idle for five years. The cannery provides 900 jobs a year seasonal workers.
- ◆ Big box is being pursued on Claribel. The plan some years back was to connect the cities and county with the one connecting road.
- ◆ There are 20 trains in a 24 hour period. They fought to save the passenger train

stop, but it went to Modesto.

Is it a possibility to use train for the commuters?

- ♦ They are doing it in Modesto.
- ◆ The solution is to have someone realize there is a good labor pool here, then get limited light rail.

What do you think SR108 wants to be?

- ◆ From the bridge the other way would be all shops. The zoning is right. Going the other direction it may not change much.
- ◆ It would be nice to have some apartment housing because there is only one or two apartment houses anywhere.
- ♦ The housing authority does have some ideas about in-fill in downtown. The problem is there are very few in-fill sites that don't have a problem, like estate issues and multiple property owners. The titles are confused and other problems make it too hard to move fast and the developers don't want to take on a clouded titled. If public money is used it would require relocating existing residents.
- ◆ It appeals to me to have parking in back or on the sides of the building. I can't understand why the Long's drugstore couldn't have been built closer to the street with cars behind the building.
- ♦ We want neighborhoods where people know and watch out for one another.
- ◆ The new, young homeowners are dot com kids who are into their own business and

- work. They aren't friendly.
- ◆ The state road could be so nice with a nice median and turning the street so traffic would flow. The middle one doesn't do any good right now. A median in there would do a lot for Riverbank.
- ◆ There were two fatalities on Adams Gravel Creek Road. It is a death trap.
- ◆ There are 800 kids in the Catholic catechism class. We need a safe crossing.
- ◆ The speed limit is going to be reduced on SR 108. There have been several fatalities.

Business Group

What is your dream for Riverbank?

- ◆ A friendly community with a rebuilt downtown and a walking environment where people are talking in the street. I'd like to see the two sides of town, new and old, more connected.
- ♦ I'm interested in downtown and opening a new business behind City Hall. I've always thought downtown Riverbank could be like a village. I'd like to see a good mix of businesses, professional offices, antiques, and another bank. I think downtown is now pulling itself up. There is a lot of movement in ownership and some of the empty properties now have tenants.
- ◆ About 50% of downtown property owners live in the community; most absentee owners are not that far out of the central valley.

- ♦ We are interested in what the community wants to say. We think they will want to preserve some of the quaintness, but we need to give people a reason to come downtown. That may need a good vibrant mix of residential, office, and shops. Also the history and landmarks of this place are great.
- ♦ Downtown was vital before the mall north of Modesto was built. There is a business here that has been here fifty years a leather shop. I see more little unique shops.

What would it take to attract niche businesses? Why would they come here?

- ◆ The friendly people. I think the older residents would support downtown businesses. Many people would like to have something downtown they could walk to. Every south to north main artery ends right here − Claus Road, Roselle, Oakdale. We draw people from as far away as Sonora for the movies.
- ◆ There are lots of vital businesses downtown, but there are many owners who will retire over the next decade. The concern is how to remain viable while all this growth is going on. The change over is both a threat and an opportunity.
- We have a program going in which we are trying to start fresh businesses. The town needs a good cleaning and an exhibit of pride. Demonstration of pride is the first

- step. This town is actually 3 towns commercially. Oakdale Road is where the growth and activity is. There are merchants chasing SR108 in a strip mentality. Then we have the downtown and its magnet is the City Hall and the post office. A nice little community bank would be beneficial, but getting the \$6-7 million to do it would be difficult.
- ♦ A magnet is needed downtown. About 49% of the population is Hispanic. We need some kind of a theme to spring it. The other option is to shrink the downtown. One way to do that is to put senior housing and remove commercial and then the housing will attract convenience type of businesses that would keep it up nice. What happens is the businesses looking for cheap rent go downtown and they aren't the kind of businesses you want to attract.
- ♦ Housing here is good, but the people go to the bay area and spend their money. They don't come this direction.
- ◆ This community rejected a redevelopment agency, which was astounding. If my future was here I would definitely put a redevelopment agency in here, but the people are still there and they are still afraid.
- Recreation downtown would also be good.
 A skate park will be built downtown this summer.
- ♦ There is a perception issue about

- downtown. The numbers show it is actually fairly viable. Two years ago the downtown Riverbank accounted for 40% of the retail in the city based on sales tax returns. It's the grocery stores.
- I see movement and believe if you get our streets looking good we will be successful.
- ◆ This area is like Sunnyvale used to be. It is reality that Riverbank will grow that way. I see eventually a beautiful city but I believe you need to bring something here that attracts. There is a lot of money leakage because there is no retail. If we can have more like the theaters it would attract people from Modesto. As we progress a hotel or motel will be needed. The houses are coming. They almost can't build them fast enough. It needs to be beautiful.
- ◆ People don't understand that redevelopment takes many years. We have an opportunity to learn from the mistakes of other areas. One error made in the past was the whole town was to be in the redevelopment district. I would like to see our history preserved and perhaps be something that attracts people. I would like to see downtown not try to be a commercial hub. It should be its own place.

What is Riverbank's uniqueness that could be captured as a theme?

◆ The river or the railroad. But the river isn't linked to downtown. The railroad is ugly

but they are not interested in doing anything about it.

Is there a connection to the river?

◆ The grade change presents a big challenge.

How walkable is your downtown? How would you describe the walk from nearby residential?

- ♦ It is isolated by the highway, the railroad and Patterson. It's walkable between 1st and 8th. The groceries down the street tend to attract people. The post office also attracts cars.
- We don't have much parking downtown.
 Employees at city hall park on the streets.
 We are looking at some property from PG
 & E that would give us some parking. The City has some minimum parking requirements that are very difficult to meet.

What issue is most important to be addressed during the charrette?

- ♦ Some type of plan for a safe crossing from this part of town across the highway.
- ◆ A safe walking and friendly route to Jacob Meyers Parks.
- ♦ How we are going to move people to the downtown.
- ◆ I think in order to have a successful program you need to have a focus point. There are a lot of other issues that can be solved. I agree with a beautification

- program. I don't object to having certain colors and signs. We need to wipe away the sigma. Come up with some ideas that we would start to focus on as far as rebuilding downtown.
- We need to designate what is downtown.
 What are the borders? Then everything else can come off that.
- ♦ There needs to be a stop light at 3rd.
- I would like it to be like Winter Park in Florida.
- ◆ In Oakdale the fruit and nut folks from Robert & Berry rehabbed a building. The area by the Hersheys could have been a cohesive hub but they gave up and left. It had such nice promise and it was starting to grow.
- ◆ Historic preservation. Beautify it. Make it nice.
- ◆ Let's develop a logo, an icon, an identity that helps get some of the 18,000 cars a place to turn. Like Escalon. They did a great job with their streets. A year ago they didn't have the shops. New shops have come in.
- At the end of this charrette if we don't have master plan with everything that was said we've wasted our time.

SR108 is the backbone of Riverbank, so do you want a consistent theme applied from edge to edge or do you want to focus on an area around downtown? Do you want to have a discussion of traffic calming?

- ◆ It's controversial, but there should be some open discussion about that. Caltrans generally is more interested in getting people from point a to point b. To what degree is that goal in conflict with what the community wants?
- The wish lists are really good, but I'd like to know how you are going to fund it. I think there should be some understanding of that.
- ◆ One of the problems I've found is that beautification seems the simplest but in order to have a true maintenance program you need an assessment district.

Community Service Group

- ♦ This community is based on diversity.
- ◆ A sense of pride, which was needed, started when new development and other improvements such as the use of alternative fuel vehicles occurred.
- The problem is the mixed zoning. We are in need of industrial development. The residential is good, but our jobs to housing ratio is very poor. People are commuting to jobs and to other areas for goods and services.
- ◆ An arts center would help this community. Activities bring people together. Over 100 people came to remodel and reclaim Jacobs Meyers Park.
- ◆ We need more places within the community where people can come

- together to interact. We should look ahead and be a city where we are working to break barriers.
- ◆ There is no Latino cultural center in the nearby counties. One thought is to develop such a culture downtown.
- ◆ Another thought is to develop the cannery into a retail site. The train depot could be moved and made into an attraction.
- The city is negotiating for the lot across the street from the City Hall for parking or for a park.
- ◆ The new people are more affluent, but they do not go past Jackson Street because there is no draw.
- ◆ The recreation office was moved to the Galaxy Cinema so people on the west side would know about city services.
- ♦ The town is separated by a school district. Kids west of Jackson go to Sylvan District schools. Sylvan has an excellent reputation. Riverbank beat some outside schools in competitive academics, but the tests show lower scores, largely because of language issues.

What about the physical side of the vision? What's missing and what needs to be here?

- ◆ Downtown needs an entry at 108 and 3rd. Attractions could include water play areas or a portable ice skating rink or a public plaza. Murals could be painted.
- ◆ The social structure is as important as the infrastructure.

- ◆ There must be a buy-in from the downtown owners. The out of town folks may not be interested.
- ♦ A town plaza is needed.
- ◆ Parking will be a problem once you start getting people down there.
- ♦ We need a mix downtown.
- ◆ Murals are important. Why not get some high school over to paint some murals?
- ♦ Lighting is important.
- ◆ A traffic circle that was funded was rejected by Council.

What will it take to make 108 a place where people feel they have arrived?

- ♦ Where we live a lot of people walk and jog. If there were a way for people to walk from there to downtown it would be good. You could stay on the north side of the Zorella mansion, go over the viaduct and come down to First Street, but then crossing the street is just nasty. It would be a great thing if people could come over to downtown.
- ◆ Driving is one of the things we do a lot of here. If we could walk more it would address the health issues.
- Crime rate is temperate.
- Oliveria Street in Los Angeles is a good model for a downtown Mercado, but smaller.
- Many people don't want to lose the family aspect of the community. The dialogue is not quite there yet.

◆ If we do the roads in a way that it doesn't just become an efficient place for cars, but we create a lace where you can walk and bicycle it would promote a sense of community. My vision is for an active town with involved people.

What about the new growth? Will it add to diversity?

 It won't be good. It emulates what is happening in other communities. It won't attract a population distributed in the same diverse way as the existing communities.

Will the Crossings be walkable?

◆ Internally it will be, but it won't be walkable outside the development.

Do you have any other critical issues?

- ◆ 108 is a mish mash. We are undergrounding utility poles from Longs Drugs to ??.
- ◆ If people miss the left turn at Oakdale and 108 they cut through the Longs Drug Store lot. Traffic is becoming a major problem.
- ◆ The critical fact here is that whatever comes out of this we have got to take some risks and take that next step to implement the ideas. There have to be some folks who will put some time into this. We need some of the 90% who aren't

- usually involved to be engaged.
- ◆ If the vision is there for a community that brings people together I'll be happy.

Public Meeting

Friday, February 7, 2003 Scout Hall

Dan Burden opened the meeting by asking the audience to write on a 3 x 5 card what they would expect to see if they had just returned to Riverbank after an absence of 20 years. The following statements are samples of those that were read aloud:

- Tree lined streets with a park and bandstand downtown. A roundabout downtown and a trail along the river. The highway rerouted completely south of town.
- ◆ Tree lined streets with bike lanes and the best schools in the nation.
- ♦ Vibrant community with a pleasant atmosphere.
- ♦ Nice cozy downtown with many trees and people. A highway with pedestrian walkways, bicycle paths lined with trees, lighting, and benches.
- ◆ Downtown rezoned to residential because there is not enough traffic that can come down there to build it up. I do envision nice senior citizen and low income housing. I would like to see the city

maintain a slow growth policy because when I come home from Modesto I think thank goodness I'm home from the big city. Accessories at Jacob Meyer park for adults and children. Trees take lots of money to maintain and there is a water shortage.

- Unique and creative entrance, children playing, high rise buildings in downtown with commercial on bottom and residential on top.
- I see people walking among trees and shade, nice restaurants. Some development in the alleys.
- ♦ A cottage community; people-friendly infrastructure; commonality of purpose with diversity; safe environment with caring people who live here and seek out each other's company. New jobs and convenient shopping so you don't have to drive.
- ♦ Sidewalk flashing lights for students sidewalks to walk to school.

Dan then asked people to write one word representing something they value for Riverbank on each of five Post-it notes. They pasted the notes on boards in the back of the room. These were later sorted to determine which values were most often cited.

Following this activity the audience viewed a slide presentation narrated by Dan Burden. He explained how some of the issues that have arisen during early input meetings are similar to issues dealt with in other communities. The images featured many of the things being done elsewhere that are potential solutions for Riverbank.

After the viewing, people in the audience helped create a list of things they would like to have in Riverbank. They then selected their top priorities by affixing dots to their preferences.

Riverbank Priorities			
#	Item	#	ltem
9	Trees & Landscaped street	"	item
8	Recreation downtown	1	Fix street/parking at library
8	Revitalize downtown	1	Move truck route
7	Good, wide sidewalks	1	Eliminate noise
6	Roundabouts	1	Jogging facilities
6	Ampitheater	0	Historical walking trail
6	Safe walk to Jacob Meyer Park	0	County Western Museum
5	Street lamps	0	Curbs down 1st Street
5	Downtown activities		
4	Aesthetics		
4	Beautify alleys		
3	Eliminate dips in streets		
3	Bicycle canal trails		
3	Money		
3	Underground utilities		
3	Bypass		
3	Safe ped crossing on 108 from		
	the north to downtown		
3	Entrance gateways		
3	Safety		
2	Bike System		
2	Senior centers		
2	Move industrial away from		
	downtown		
2	Safe crossing over tracks at		
	Patterson		
2	Public art		
1	Focal points		
1	Multi-use canals		
1	Speed humps		
1	Art center downtown		

Saturday, February 10, 2003 Walking Audit

On Saturday, a group of citizens joined Walkable Communities team member Sue Newberry on a walk in nearby areas. Highlights of points of interest are summarized below:

- 1. At Scout Hall, the street is very wide.

 There is angled parking on one side of the street now, but it may be feasible to add it to the other side as well.
- 2. There is a sidewalk in front of Scout Hall, but it does not continue along the park edge to the corner.
- 3. Houses that back up to Pioneer Park have high fences that prevent the residents from "watching over" this public space.
- 4. North of Scout Hall on River Cove Drive near the river and train tracks there are two potential sites where a pedestrian bridge might be feasible. There is intermittent flooding in this area.
- 5. There is a well-worn "social path" at the foot of the train tracks. It is possible a greenway could be developed along the train tracks to connect to the pedestrian bridge.
- 6. Curb ramps throughout the walking area appeared to meet minimum standards, but they often seemed unusable because of slopes or missing sidewalk links.

- 7. First Street needs sidewalks, preferable with a planter strip between the sidewalk and the back of curb. The group agreed it is far more pleasant to walk where they were separated from the moving traffic.
- 8. Alleys along Atchison need cleaning.
- 9. Pedestrian push buttons on Atchison have disadvantages. First, some aren't the best design for people with physical limitations. Second, they require the pedestrian to wait if they don't arrive at the corner before the green light comes on.
- 10. It was pointed out that every intersection is a legal crosswalk, even if it is not marked.
- 11. Participants form a "bulb out" on Third Street to gain an understanding of how the crossing distance for pedestrians could be shortened.

Following the walk, people were asked to share what they felt would be most important to address during the charrette. Their comments included:

- ♦ Sidewalks that are missing or in poor condition
- ♦ Better crosswalks/ like curb extension
- ♦ Wheelchair access to safe areas, such as sidewalks
- Excited about trail to park potential connection
- ♦ Different parts of community have

- different needs; lots of funding is needed to retrofit everything, so there is a need to set priorities.
- Important to get people out of the street – properly designed sidewalks are critical.

Training

Dan Burden and Michael Wallwork narrated several sets of visuals to help people understand the issues involved in designing a community that promotes walking and bicycling. A complete set of presentation materials were provided to the City.

Design Workshops

Following a lunch group, participants gathered at two tables to share ideas about how some of their concerns could be addressed. Using their maps and notes, they then presented their ideas to the entire group. The following bullets were compiled from their presentations:

Group 1

- ◆ SR 108: Use a bypass, maybe Claribel. The people who are just traveling through stop (to shop) anyway.
- ♦ Don't make 108 traffic friendly
- ♦ 2 lanes
- ♦ Walkway to tie downtown to Galaxy Theater area
- ◆ Spend money on the north side of 108 first
- ♦ Roundabouts in the following priority

order:

Patterson & Callander
Jackson
3rd Street
1st Street
Oakdale

- ♦ Planter strip lined with trees along SR108
- ◆ Jacob Meyers Park: Access from downtown: pedestrian bridge Nice walkway around the park Access via a path through the train corridor on the east side and tie it into Patterson Road.
- ◆ Walkway on Patterson from 8th all the way to the Galaxy Theater for recreational bicycling, walking, or running.
- ◆ Tie these together using 3rd street as the center
- ♦ Put roundabouts on 3 locations on 3rd
- ◆ Community Center to 1st street pedestrian friendly
- ♦ Extremely user friendly
- Maximize parking straight in on downtown core area with diagonal on other areas.
- ◆ Do something with the alley and make it pedestrian friendly
- ◆ Downtown concept: there is a lot of noisy industries that are old. As they leave we want them converted to high density quality housing. Diverse housing that will attract a business clientele that will be businesses feasible.
- ♦ Attract offices on multi-level buildings.

♦ Attract recreation for children/adults in early revitalization stages.

Group 2

- ◆ Concentrated on 108 and Patterson, with Claribel Road as bypass
- ◆ Starting at 7th Street we want a roundabout we needed someplace to be the gateway to downtown and a place we could slow traffic. It had the most utility in terms of accessing the area. 7th Street leads directly to the community center and Santa Fe which goes into downtown. There is also a school on that corner and people ignore the speed.
- ◆ Between 7th and 1st we wanted a median with trees. We liked the idea of it extending across some streets that would be right turn only access.
- ♦ 2nd street would be a right in right out.
- ♦ On 3rd and the highway a roundabout
- ◆ Down 3rd street we want traffic circles with bulb-outs at Topeka, Santa Fe and Stanislaus.
- ◆ At Patterson and 3rd we want a gateway because that road is going to get busier. That will help direct people downtown.
- Want an overpass over the rr tracks.
- ◆ On 1st street we want sidewalks both sides of street down to park and to skatepark.
- ◆ Remove ugly concrete median (SR108) and replace with landscaped median.
- ◆ As you curve around 108 add another roundabout. Sidewalks curbs gutters both

- sides of the street.
- ♦ Move the church entrance to Stanislaus because they own a little lane behind the church. That would eliminate the left turn at the curve. Provide a crossing at Stansilaus.
- ♦ 2 lanes on SR108
- ♦ As pretty as we can get it
- ♦ Roundabout at Patterson and the highway; no left turn onto the highway.
- Sidewalks, curbs and gutters down Patterson to high school.
- Replace concrete median with a landscaped median.
- West side of Oakdale continue median to canal. We know that is going to be 4 lanes.
 We want bike lanes.
- ◆ Coming into Riverbank there is a subdivision with right turn lanes that are often used for illegally passing.
- ◆ Oakdale to Claribel: add a raised landscaped median. Sidewalks, curbs, gutters, planter strips.
- Roselle: at Claribel there is a traffic light planned so there isn't much we can do.
- ♦ We want to slow traffic at Morrill.
- Crawford comes out on Roselle. There will be a traffic light there. That should help slow it down.
- ◆ SR108 they saw it as a four lane because it has always been planned that way, but if it can safer and be two lanes I'm for that. That highway has to be kid friendly.
- Buildings: especially on Callander they are

- mostly junk.
- ◆ Rails and trails: under the impression that was only where they had abandoned railroads, but if not, they want a trail.

Closing Presentation

Monday, February 10, 2003

Josh Meyer opened the meeting and explained the role of the Local Government Commission in helping communities address land use and transportation issues. He asked Jane Perez of Caltrans to speak about the role of Caltrans in the development of the Vision Plan. She explained that the Caltrans Director Jeff Morales endorses an approach of working with communities so that streets are sensitive to the context of each area.

Dan Burden opened his presentation by explaining that people during the past several days have helped the consultant team understand what the priorities are in Riverbank. Dan began with a brief background of Riverbank and pointed out that communities were not developed for cars, but for people. He explained that to preserve the sense of character, everything that is done must contribute to the unique qualities of Riverbank. He showed photos of some areas in Riverbank that do not look different than other communities. Many photos were of people walking and bicycling, often in places lacking adequate sidewalks. He pointed out that Riverbank is not alone facing such challenges, and that many places in the United States were built in much the same way.

He explained the process that provided background for the Vision Plan, showing photos of many activities in which citizens and staff participated. He said when citizens get involved with the design process, places reflect the beauty and convenience they prefer.

Principles that must be considered in order to build a place that addresses values and priorities of the public were explained using a series of photos, some of which showed before and after photos. As a community, places should attract children and address the needs of all people.

Dan showed images to demonstrate how portions of Riverbank can become village-like environments by clustering commercial development at the center of a " mile radius. In time, buildings can be built closer to streets, public spaces can be incorporated into retail areas, and green space can be added. The roadway comes first and is critical. These pieces are completed first, followed by quasipublic or private plazas that serve as gathering places. Liner buildings may be introduced over a longer period of time. At some point, mixed use buildings that could include ground level commercial and one or two floors above with residential uses. Dan explained with each village that the illustrations are thematic and represent an idea, but they are not intended to be specific.

He said the intersections and roadways in the Vision Plan were selected to provide maximum efficiency for the transportation system. A visual, graphic code can be developed to help guide future development design.

Dan explained that there is some additional work underway for the downtown area, but the ideas that immerged during the charrette activities were included. He showed how the very wide streets would allow head-in parking, curb extensions, and very short pedestrian crossings.

Each walking village needs its own personality or character. Public space can be gained from the excess asphalt on some streets. Pocket parks can be built in very small spaces. People in the neighborhood should be the designers of their park.

Michael Wallwork, P.E., opened his presentation by remarking that the streets in Riverbank are excessively wide. He pointed out that reallocating the money spent on these wide streets could fund the sidewalks that are needed. Michael reviewed the elements of streets in detail, explaining how each item affects the people using the street. He pointed out that traffic is going to grow whether the citizens want it to or not. There is a choice between leaving the traffic on SR108 and eventually having a six lane highway, or shifting a portion of it to a bypass. He pointed

out that Roselle and Terminal are becoming super highways. He explained these streets could accommodate projected volumes with two lanes, rather than four.

Dan Burden then discussed mid-block pedestrian crossings and inset parking. He also discussed the importance of streetscapes and Americans with Disabilities Act designs.

Michael Wallwork gave a detailed presentation on roundabouts and how they function. He explained the benefits of roundabouts. In 1999 red light running in the U.S. injured 85,000 people and killed 1,000. Red light cameras can reduce this, but roundabouts completely eliminate it. He showed a roundabout at G Street and La Loma Street in Modesto that is carrying 20,000 cars a day. SR 108 has about 12,000 cars per day. He pointed out that it is feasible to progressively increase capacity on Claribel by replacing the stop signs and signals with roundabouts for an initial improvement that could handle 20,000 cars.

Dan showed photos of additional Vision Plan features, including a gateway and a greenway system. He said in time the community should be able to form a partnership with the railroad to allow a rails with trails system. He discussed how parking requirements in the downtown need modification.

He closed the presentation by discussing the importance of implementation. The difference between towns where action occurs and those where it doesn't is dramatic. A specialist is needed to implement this plan because staff is already busy. Grant funding could be sought for such a purpose.