SANTA ROSA AVENUE CORRIDOR PLAN

JANUARY 11, 2011
SANTA ROSA AVENUE CORRIDOR PLAN

CITY OF SANTA ROSA

Submitted by

DESIGN, COMMUNITY & ENVIRONMENT
1625 SHATTUCK AVENUE, SUITE 300
BERKELEY, CALIFORNIA 94709
TEL: 510 848 3815
FAX: 510 848 4315

In Association with
W-Trans
TABLE OF CONTENTS

1. INTRODUCTION & PROJECT BACKGROUND  1

2. EXISTING CONDITIONS  9

3. STREETSCAPE PLAN  19

4. DESIGN GUIDELINES  37

5. REALIZING THE VISION  47

APPENDICES
Appendix A: Community Meeting Summaries
Appendix B: Working Alternatives
Appendix C: Transportation Analysis
Appendix D: Conceptual Cost Estimates
Appendix E: Relationship to Other Documents
LIST OF FIGURES

Figure 2-1. Citywide Context ........................................................................................................................................................2-9
Figure 2-2. 2035 General Plan Designation and Redevelopment Project Areas ................................................................. 2-10
Figure 2-3. Downtown Station Area Specific Plan Street Types .............................................................................................. 2-11
Figure 2-4. Existing Land Uses ................................................................................................................................................2-12
Figure 2-5. Typical Street Section ........................................................................................................................................... 2-12
Figure 2-6. Bicycle and Pedestrian Circulation ...................................................................................................................... 2-13
Figure 2-7. Transit Connections ............................................................................................................................................. 2-14
Figure 2-8. Built Form and Parking ........................................................................................................................................ 2-15
Figure 2-9. Weekday Traffic Volume Trends ........................................................................................................................ 2-16
Figure 3-1. Proposed Streetscape Reconfiguration (with parking removed along the western side of
Santa Rosa Avenue) ................................................................................................................................................................. 3-19
Figure 3-2. Proposed Streetscape Reconfiguration (with parking removed along the eastern side of
Santa Rosa Avenue) ................................................................................................................................................................. 3-20
Figure 3-3. Loss of Parking Diagram ...................................................................................................................................... 3-21
Figure 3-4. Roadway Configurations Adjacent to Juilliard Park (parking remains on both sides of the
street) ......................................................................................................................................................................................... 3-21
Figure 3-5. Potential Redevelopment Locations .................................................................................................................. 3-28
Figure 3-6. Santa Rosa Avenue Streetscape Plan (Sonoma Avenue to Mill Street/Sebastopol Avenue) ...... 3-35
Figure 3-7. Santa Rosa Avenue Streetscape Plan (Mill Street/Sebastopol Avenue to A Street) .................. 3-36

LIST OF TABLES

Table 2-1 Summary of Existing Roadway Segment Level of Service Calculations .................................................. 2-17
Table 2-2 Existing Multimodal Level of Service Analysis .............................................................................................. 2-18
Table 3-1 Multimodal Level of Service Comparison – PM Peak Hour ............................................................................. 3-33
Table 5-1 Conceptual Cost ..................................................................................................................................................... 5-47
Table 5-2 Project Phasing ....................................................................................................................................................... 5-48
Table 5-3 Potential Public Funding Sources by Project Type .......................................................................................... 5-51
CHAPTER 1: INTRODUCTION AND PROJECT BACKGROUND

1. PURPOSE

The goal of the Santa Rosa Avenue Corridor Plan (the Plan) is to create a comprehensive and long-term vision for this corridor and surrounding area, including recommendations for capital improvements, design guidelines, and a discussion of next steps required to implement the Plan. The Plan includes the area along Santa Rosa Avenue from Sonoma Avenue to Highway 12. A diverse group of stakeholders, including local residents, City staff, and public agencies developed the Plan to improve access and safety for pedestrians and bicyclists; propose aesthetic improvements; and strengthen linkages between the Santa Rosa Avenue Corridor and the adjoining neighborhoods, downtown, and the Sonoma Marin Area Rail Transit (SMART) station site.

2. STRUCTURE OF THE REPORT

This planning process was comprised of three stages, culminating in the creation of a Corridor Plan. The stages included an existing conditions analysis, the development of the final streetscape design, and the preparation of the Corridor Plan.

This document contains the following five chapters:

◆ Chapter 1 – Introduction and Project Background provides an overview of the planning process and the goals of the project and describes the community involvement and the process for the development of the Corridor Plan.

◆ Chapter 2 – Existing Conditions outlines the analysis of the existing conditions of the Santa Rosa Avenue Corridor.

◆ Chapter 3 – Streetscape Plan presents the recommendations and solutions that make up the Streetscape Design.

◆ Chapter 4 – Design Guidelines outlines a series of streetscape design guidelines that will guide the implementation of the streetscape recommendations.

◆ Chapter 5 – Implementation Strategy discusses the next steps required to implement Plan recommendations, identifies the City departments and other community partners that should be involved, and presents a range of potential funding sources.

◆ Appendices – Include the following:
  • Appendix A: Community Meeting Summaries
  • Appendix B: Working Alternatives
  • Appendix C: Transportation Analysis
  • Appendix D: Conceptual Cost Estimates
  • Appendix E: Relationship to Other Documents
3. COMMUNITY TRANSPORTATION PLANNING

The Caltrans Office of Community Planning works to promote and participate in community-based planning by funding the Community Based Transportation Planning (CBTP) grant program. CBTP grants are given to local communities to encourage planning that promotes efficient land use and transportation infrastructure investments, and helps communities address their existing and future needs while maintaining community value and integrity.

Upon award, Caltrans provides 90 percent of the planning costs, with the additional 10 percent provided by the local grantee. The City of Santa Rosa, with support from numerous local community groups, applied for, and received a grant to fund the Corridor Plan. This Plan builds upon previous planning efforts initiated by the community to address traffic, safety and quality of life issues within the neighborhood, and City efforts to create a pedestrian friendly, diverse environment with strong ties to the downtown and future SMART rail station site.

4. PROJECT TEAM AND ADVISORY COMMITTEES

The project team for this project included staff from Design, Community & Environment (DC&E) and W-Trans. DC&E was responsible for community outreach and participation and developed the Plan designs. W-Trans performed traffic and circulation analysis of the existing conditions and proposed alternatives, and provided technical input on the designs. City of Santa Rosa staff from Advance Planning and Public Policy managed the project for the City and coordinated the Technical Advisory Committee (TAC) and the Citizens’ Advisory Committee (CAC).

To ensure that the Plan is consistent with the needs of the community and standards of other agencies, a TAC and a CAC were formed to help guide the planning process. The committees were involved throughout the planning process to ensure that the proposed concepts and recommendations were feasible and consistent with the visions of the surrounding communities.

The TAC was formed to provide input on technical issues regarding the existing conditions of the Plan Area and the feasibility of proposed recommendations, and to help prioritize the plan recommendations. The TAC included members from public agencies such as Caltrans, as well as staff from the following departments of the City of Santa Rosa: Community Development; Economic Development and Housing; Fire; Police; Recreation, Parks & Community Services; Public Works; Transit; and Utilities.

The CAC was formed to help represent the needs of the surrounding constituency and provide high-level guidance for the Plan. Members of the CAC included residents from the Burbank Gardens and Juilliard Park Neighborhoods, the Sonoma County Bicycle Coalition and business owners along the corridor.
5. PLANNING PROCESS

Extensive community participation is key to the development of a community-supported Corridor Plan. The planning process for the Corridor Plan was developed to create an open and public dialogue to solicit input and build consensus among all members of the community. Community outreach was performed to encourage community-wide participation and reach out to all members of the community, especially those who have not participated in community planning events in the past.

Community Outreach

Multiple types of community outreach methods were employed to engage the community in the planning process. To invite community members to the workshop, fliers were sent to a list of neighbors and interested parties. The City of Santa Rosa also maintained a web page for the project on the City’s website that provided information about the process, dates for workshops, and provided links to all of the project reports and streetscape alternatives. Announcements advertising the workshops were included in the local newspaper and broadcast on the local radio stations.

Community Workshop #1: Existing Conditions and Visioning

On October 21st, 2009 the first Community Workshop for the Corridor Plan was held to review the existing conditions analysis of the Plan area and discuss potential goals and visions for the project. Approximately 50 people attended the meeting.

The project team presented the existing urban design context and the traffic conditions analysis performed on the Corridor as part of the background research for the project. A toolbox of potential interventions that could be used along the street to make the Corridor more livable and safe was also presented. Meeting participants were then divided into small groups of 8 to 10 people and asked to use the tools presented to comment on significant areas of concern and discuss potential improvements to the Corridor. Each group was asked to report back to the larger group on their ideas and suggested improvements.

Community members were eager to express their concerns and share their first-hand observations regarding the Corridor. The participants of the small group exercise identified key issues in the Corridor and suggested potential improvements to address the issues. Groups actively discussed and debated the benefits and drawbacks of the potential improvements. The following is a brief synopsis of the groups’ concerns and recommendations:

<table>
<thead>
<tr>
<th>Workshop #1: Summary of Community Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Concerns</td>
</tr>
<tr>
<td>Speeding throughout the Corridor.</td>
</tr>
<tr>
<td>Potential loss of parking.</td>
</tr>
</tbody>
</table>
WORKSHOP #1: SUMMARY OF COMMUNITY INPUT

**Community Concerns**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe for bikers.</td>
<td>Too much traffic in the Corridor.</td>
</tr>
<tr>
<td>The Corridor is ugly and unpleasant and has too much asphalt.</td>
<td>The crosswalk between Juilliard Park and Luther Burbank Home &amp; Gardens needs improvement.</td>
</tr>
<tr>
<td>The Corridor is unsafe.</td>
<td>The Corridor needs better transit service to downtown.</td>
</tr>
</tbody>
</table>

**Community Proposed Solutions**

<table>
<thead>
<tr>
<th>Proposed Solution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrow the road from 4 to 3 lanes.</td>
<td>The addition of left turn lanes along the Corridor.</td>
</tr>
<tr>
<td>Dedicated bicycle lanes.</td>
<td>A new traffic signal at the Sebastopol Avenue/Mill Street Intersection.</td>
</tr>
<tr>
<td>Reduce and reconfigure the number of curb cuts.</td>
<td>The addition of street trees and art to the Corridor Area.</td>
</tr>
<tr>
<td>Improve pedestrian crossings with bulbouts, more crosswalks and crosswalk signals.</td>
<td>Pedestrian-scaled lighting, benches, trash cans and art along the Corridor.</td>
</tr>
<tr>
<td>Gateways for either end of the Corridor.</td>
<td>Widen the sidewalks.</td>
</tr>
<tr>
<td>Creation of a median down the center of the roadway.</td>
<td>Undergrounding utilities in the Corridor.</td>
</tr>
</tbody>
</table>

Based upon the existing conditions analysis and the knowledge and input provided by the TAC, CAC, and community members, the project team developed two alternatives for the Corridor. The Alternatives included: Alternative A – Multimodal Transformation, and Alternative B – Multimodal Enhancement. Alternative A – Multimodal Transformation reconfigures the lanes within the Corridor from two northbound and two southbound travel lanes to one northbound and one southbound travel lane with a center turn lane. The lane reduction allows for wider sidewalks, a center median and northbound and southbound Class II bicycle lanes. Alternative B – Multimodal Enhancement keeps the existing vehicular lane configuration and provides for wider sidewalks and a northbound and southbound Class II bicycle lane by removing parking on one side of the road throughout the Corridor.

Community Workshop #2: Alternatives Review

On Thursday February 4th 2010, the second Community Workshop for the Corridor Plan was held to review the two proposed alternatives for the Corridor and gather the community’s insight regarding the alternatives. Approximately 35 people attended the meeting. DC&E presented an overview of the project, the project goals, and described the key features of the two proposed alternatives. W-Trans discussed the traffic implications of the two alternatives.

After the large group presentations, the meeting participants were divided into four small groups of 8 to 10 people and asked to compare and discuss the two alternatives. The groups were then asked to try to come to a consensus about which alternative they preferred, and discuss any potential changes they proposed to that alternative. The workshop participants were also asked to fill out a questionnaire regarding their opinions about the two alternatives. Each group was asked to report their choice of a preferred alternative and suggest design changes to the large group.
Three out of four of the small groups unanimously chose Alternative A as their preferred alternative. The fourth group contained only one person who preferred Alternative B. The groups actively discussed and debated the benefits and drawbacks of the proposed Alternatives A and B. The following is a brief synopsis of the recommendations to improve Alternative A:

### Workshop #2: Summary of Community Input

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carefully locate the medians to ensure that access to driveways of active businesses is maintained.</td>
<td>Consider changing the lane configuration at the Sonoma Avenue intersection to create a right turn-only lane.</td>
</tr>
<tr>
<td>Create signage at the Santa Rosa Marketplace to encourage drivers to use the freeway to travel north, rather than Santa Rosa Avenue.</td>
<td>Reconsider the need for a traffic light at the Sebastopol Avenue/Mill Street intersection as it might encourage more users on a residential street.</td>
</tr>
<tr>
<td>Use the freeway underpass as an opportunity to create a gateway for the neighborhood.</td>
<td>Include additional traffic calming.</td>
</tr>
<tr>
<td>Consider one-way traffic or limiting access on surrounding residential streets as a method to address potential overflow into the neighboring streets.</td>
<td>Remove proposed street trees in front of Juilliard Park and Luther Burbank Home &amp; Gardens.</td>
</tr>
<tr>
<td>Include pedestrian amenities along the Corridor.</td>
<td>Reduce the speed limit along the street.</td>
</tr>
</tbody>
</table>

### Community Workshop #3: Draft Preferred Alternative

Based upon the input received at the second Community Workshop, the project team further developed Alternative A: Multimodal Transformation, as the Draft Preferred Alternative. On Monday April 26th, 2010, the third Community Workshop for the Corridor Plan was held to review the Draft Preferred Alternative for the Corridor and gain the community’s input on the design. Approximately 22 people attended the meeting. DC&E presented an overview of the project, the project goals, and then described the key features, and a brief analysis of the potential traffic impacts of the Draft Preferred Alternative.

Staff from the Traffic Division of the Public Works Department, and the Transit Department of the City of Santa Rosa, gave a presentation of the potential traffic impacts that could result as an outcome of the Draft Preferred Alternative as well as the potential negative implications for transit. Staff from the Traffic Division expressed concerns about this Draft Preferred Alternative because reducing the roadway from two northbound and southbound lanes to one northbound and one southbound lane with a central turning lane has potential negative impacts on vehicular level of service and queues at either end of the Corridor during peak hours. An analysis of the potential queuing lengths associated with the Draft Preferred Alternative and a visualization of the potential routes that drivers may take through the adjacent neighborhoods to avoid the traffic, were presented.

The Deputy Director of Transit for the City of Santa Rosa gave a presentation on the potential implications that the Draft Preferred Alternative could have on transit operations in the City. Of particular concern were potential queue lengths and timing during peak hours that could result from the implementation of the Preferred Draft Alternative. Bus Route 19, along Santa Rosa Avenue, is
the CityBus route that serves the neighborhood. There is concern that the potential queues will add more times to the routes and make it hard for the buses to meet their schedules. Increasing route times would result in the need to add more buses, which means hiring more drivers, which entails higher costs. The vehicle queues during peak hours have the potential to interfere with the bus schedule, which could result in the route being removed from the Corridor and diverted to the freeway. This would limit the transit access for people living along the Corridor.

The majority of the community members supported the plan and felt that when considering the potential impacts to traffic, the positive aspects of improving the neighborhood for walking and bicycling outweighed the negatives. Members of the community understood that the traffic changes along Santa Rosa Avenue could cause overflow traffic into their neighborhoods and expressed concern about this fact. There was a significant amount of support for the aesthetic and pedestrian amenity improvements recommended in the Plan.

Following the discussion, a brief presentation was made about potential design elements, such as furnishings, paving and plantings, to be incorporated into the Plan. Three palettes, representing historic, contemporary, and artistic themes, were presented. Community members were each given a sticker and asked to vote on an appropriate street furniture palette illustrated on large wall posters. The historic palette received the most number of votes, followed by artistic and then contemporary.

City Council Progress Report

As a result of the Traffic Division and Transit Department concerns regarding the Draft Preferred Alternative, on June 22nd 2010, a progress report was made to the City Council. The report outlined the planning process to date and potential technical implications of the Draft Preferred Alternative. As a result of the potential traffic, transit, and fire department implications of the Draft Preferred Alternative the City Council asked that City staff work with the neighborhood to identify a new Revised Alternative that would satisfy the needs and desires of the neighborhood and meet the technical requirements of the City Departments to ensure safe operation of Santa Rosa Avenue.

Staff and Citizen Working Group

Following the council meeting, staff and a number of active citizens who had been involved in the Corridor Plan process met and discussed a variety of options in an effort to develop a compromise alternative. The group discussed a number of different potential solutions, including utilizing a center turn lane as a travel lane in either direction during peak hours, utilizing the parking lanes as travel lanes during peak hours, and allowing the bus to use the parking lane as a dedicated bus lane during peak hours.

City staff then convened several times to identify a new alternative that it felt met technical needs, while addressing citizen interests to the greatest degree. The Revised Alternative that was developed includes two northbound vehicle lanes, a center turn lane with medians, one southbound vehicle lane, and northbound and southbound bicycle lanes. This alternative requires the removal
of approximately 12 parking spaces, mostly along the west side of the corridor. This Revised Alternative was then presented to the citizen working group for its consideration. The group found that the Revised Alternative accomplished many of the goals and included the same components as the previous Preferred Draft Alternative, and expressed general support.

Community Presentation #4: Revised Alternative

The project team further developed the Revised Alternative in order to present the design to the community. A Community Presentation of the Revised Alternative was held on September 8th, 2010 and approximately 25 community members attended the meeting. DC&E presented the Revised Alternative and identified how it compared to the previous alternative.

The community was given the opportunity to ask questions and comment on the Revised Alternative. The majority of the community members at the presentation supported the Revised Alternative and felt that it still met the community’s needs and would create a better environment along the Corridor. Many participants expressed their appreciation that a compromise alternative had been developed.
CHAPTER 2: EXISTING CONDITIONS

This chapter summarizes the existing land use, urban design, and traffic conditions that influence the development of the Santa Rosa Avenue Corridor Plan.

1. CONTEXT

Citywide Context

The Plan Area is located in central Santa Rosa, bounded by State Route 12 to the south and by Sonoma Avenue to the north. Santa Rosa Avenue is an arterial that carries 22,600 ADT (average daily traffic volume) and leads directly to the downtown. It is a gateway to the civic center of the city and is a key connection between the neighborhoods and destinations to the south. Figure 2-1 shows the study area location in the context of the city, including downtown and highways.

The City of Santa Rosa’s General Plan, Santa Rosa 2035 and the Downtown Station Area Specific Plan (DSASP) both contain goals and policies that address the land use and urban design of the

Figure 2-1. Citywide Context

Luther Burbank Home & Gardens
Neighborhood Context

Santa Rosa Avenue is bordered by the Juilliard Park Neighborhood to the west and the Burbank Gardens Neighborhood to the east. The Burbank Gardens Neighborhood is a Historic Preservation District. Luther Burbank Home & Gardens, located between Sonoma Avenue and Charles Street, is on the National Register of Historic Places and the California Register of Historic Resources. The site marks the turn-of-the-century home of Luther Burbank, who chose Santa Rosa’s ideal geography for horticultural experimentation and propagation.

In addition to Santa Rosa Avenue’s position between two neighborhoods, the Corridor falls within the Arts District...Downtown Santa Rosa, a program of the Recreation, Parks, and Community Services Department’s Art in Public Places Committee. The goal of the Arts District is to create a “beautiful and inspiring destination that maximizes the public’s opportunities to experience art.” The recently unveiled Maple Street mural is in the southern part of the Burbank Gardens neighborhood.

General Plan Land Use Designation and Redevelopment Project Areas

The 2035 General Plan land use designations and Redevelopment Project Areas are shown in Figure 2-2. With the exception of parcels designated Park/Recreation and Retail and Business Service at the northern end of the Corridor, both sides of the street are designated Retail and Business Services/Medium Density Residential. This designation allows a housing density of 8 to 18 housing units/gross acre. Adjacent residential areas are designated Medium Density Residential and Low Density Residential. The northern portion of the Luther Burbank Home & Gardens site is in the Santa Rosa Center Redevelopment Project Area. Most of the remainder of the project area is within the Gateways Redevelopment Project Area.

The Corridor Plan project limits are contained within the Downtown Station Area Specific Plan (DSASP), which envisioned the Corridor as a place where “new development will provide a shared identity for these two neighborhoods and enable new connections across Santa Rosa Avenue.” The DSASP also emphasized a mixed-use area with housing and retail uses allowed throughout. At the same time, the DSASP recognized that the Corridor is an area in transition, and included provisions for existing nonconforming uses to operate in the interim. Land use regulations for the Corridor included a three-story height limit for new buildings, and a minimum height of two stories. In addition, the plan stated that “new buildings should be built up to the edge of the property line along Santa Rosa Avenue to give better definition to the street, with activity-generating uses on the ground floor of all new development, with parking set behind the structure.”
Downtown Station Area Specific Plan Street Types

The Downtown Station Area Specific Plan provided Development and Streetscape Guidelines for two street types along the Santa Rosa Avenue Corridor, the Boulevard Street Type and the Shop Front Street Type, as illustrated in Figure 2-3. The street types are intended to be implemented with consideration of existing conditions such as street right-of-way dimensions.

- **Boulevard Street Type.** This street type applies to Santa Rosa Avenue north of Mill Street and south of Palm Avenue. Goals for this type of street include supporting access into the central core of the city for vehicular and transit traffic, while also providing a safe and pleasant pedestrian environment. Boulevards typically have four travel lanes with Class II bicycle lanes and a regular pattern of tall canopy trees. Specific Boulevard Streetscape Standards and Guidelines call for the inclusion of curb bulbouts, special paving, Class II bicycle lanes, and bus stops and benches. The streetscape standards also call for a landscaped tree median along Santa Rosa Avenue, and for street trees and landscaping elements along visible parking lots to screen them from the street and promote a sense of enclosure.

- **Shop Front Street Type.** This street type applies to Santa Rosa Avenue between the intersections with Mill Street and Palm Avenue. The street type is designated to encourage development containing retail uses on the ground floor level with commercial and residential uses above. Development and Streetscape Guidelines for the street are aimed at supporting the retail uses, both through a balance of pedestrian comfort and vehicular access. As with the boulevard street type, the Shop Front Streetscape Standards and Guidelines call for the inclusion of curb bulbouts, special paving, Class II bicycle lanes, and bus stops and benches. The Streetscape Standards call for an enhanced pedestrian crossing where Sebastopol Avenue and Mill Street intersect with Santa Rosa Avenue.

**Existing Land Use**

The predominant land use along the Corridor is retail, shown in red in Figure 2-4. Land use consists primarily of auto-oriented uses and other retail. Auto-oriented uses are concentrated in the southern half of the Corridor. Several service establishments such as beauty salons, and tattoo and piercing studios are located along the street. Other commercial uses include offices, motels, eating establishments, appliance repair, pet-grooming, and a convenience store.

A small amount of residential uses exist directly on Santa Rosa Avenue, including four single family residences on the east side of Santa Rosa Avenue between Charles Street and Wheeler Street, the Park Apartments, and the second story of several two-story mixed use buildings located on the east side of Santa Rosa Avenue.

Three park and open space amenities occupy the northern end of the Corridor: Luther Burbank Home & Gardens, Prince Gateway Park, and Juilliard Park. All three spaces are accessible directly from Santa Rosa Avenue.
2. CIRCULATION

Street Description

Within the Corridor, Santa Rosa Avenue is a four-lane street with two travel lanes in each direction with parallel parking on both sides of the street, and sidewalks on both sides of the street ranging from 6 to 8 feet in width, and minimal streetscape amenities and furnishings. With the exception of the intersections with Sonoma Avenue and Maple Avenue/South A Street, turning movements at all intersections share lanes with the through movements. The posted speed limit within the Corridor is 35 miles per hour (mph). A typical street section drawing is shown in Figure 2-5. Generally, the four lanes are each 12 feet wide with an adjacent 8-foot-wide parking lane and no bicycle lanes for a typical curb-to-curb width of 64 feet. The Corridor is classified in the Santa Rosa General Plan as a regional street, which is similar to an arterial classification in other jurisdictions.

Pedestrian Connections

Bicycle and pedestrian connections are shown in Figure 2-6. Sidewalks along the Plan Area vary in width from 6 to 8 feet and are in fair to good condition. There are a significant number of driveway curb cuts which result in potential pedestrian-vehicle conflict areas along the Corridor. The frequency of the driveways and the related vertical changes present an obstacle to pedestrians with physical challenges.

There are a total of five marked (painted on the pavement) pedestrian crossings of Santa Rosa Avenue along the Corridor. Two crossings are controlled by traffic signals at Maple Avenue/South A Street and Sonoma Avenue. The marked crosswalk at Sebastopol Avenue/Mill Street is ‘uncontrolled’ (main street does not stop), but is supplemented with pedestrian warning signs and a pedestrian activated (push buttons) warning beacon (flashing yellow light). The other two marked crosswalks are ‘uncontrolled’ at Charles and Oak Streets and are supplemented with pedestrian...
warning signs. Additionally, marked crosswalks are present for crossing of all the side streets within the Corridor with the exception of Juilliard Park Drive, Pine Street, and Palm Avenue. The locations of the marked crosswalks are shown in Figure 2-6.

The City of Santa Rosa has taken several steps in recent years to improve pedestrian safety along the Corridor. Pedestrian crossing signs along the Corridor are high-intensity yellow-green in color to improve visibility to motorists. Additionally, the pedestrian activated warning beacon at the intersection of Santa Rosa Avenue/Sebastopol Avenue/Mill Street helps to improve motorist awareness of pedestrians crossing Santa Rosa Avenue.

During field reviews, pedestrians were observed using only marked crosswalks to cross Santa Rosa Avenue; however, many pedestrians appeared hesitant to step into the crosswalk. This hesitation was also observed at Sebastopol Avenue/Mill Street when the pedestrian warning beacon was activated. The hesitancy is likely due to the relatively high traffic volumes, width of the street, and fear that oncoming drivers will not yield. It was noted, however, that drivers did generally stop when pedestrians were assertive.

Bicycle Circulation

The City’s Bicycle and Pedestrian Master Plan designates Class II bicycle lanes on Santa Rosa Avenue through the study segment. Class II bicycle lanes do exist to the south of the Corridor beginning at the South A Street-Maple Avenue intersection. There are no bicycle lanes on the Corridor to the north through downtown. Bicycle circulation is identified in Figure 2-6.

During the evening peak hour, 44 bicyclists were observed at the intersection of Santa Rosa Avenue/Mill Street-Sebastopol Avenue. Many of the cyclists were observed using the sidewalk for travel rather than the street. Approximately 63 percent rode on the sidewalk, with nearly half of those traveling opposite the direction of traffic. Approximately 36 percent of cyclists rode on the street in the correct direction (with traffic), though one bicyclist was observed riding against traffic on the wrong side of the street. The large proportion of bicyclists riding on the sidewalk is likely attributed to the fact that the Corridor does not have marked bicycle facilities on the street, which, combined with the high traffic volumes and travel speeds, may make Santa Rosa Avenue an uninviting corridor for bicyclists.

Transit Connections

Figure 2-7 shows the transit connections in the Plan Area, and the location of two key transit facilities, the proposed SMART station at Railroad Square and the Transit Mall at Second Street in Downtown. The figure also shows walking radii around each of these facilities, illustrating pedestrian access to these facilities.

The corridor is well served by Santa Rosa City Bus, Golden Gate Transit and Sonoma County Transit, as described in the Existing Multimodal Circulation Report for the Santa Rosa Avenue Corridor Plan. However, while the transit stops have signs indicating route numbers, they lack shelters, benches, and time tables.
3. BUILT FORM

Built Form and Parking

An analysis of built form along the Corridor shows that the street lacks in a strong building edge and an undefined pedestrian environment. While seven of the existing buildings along the Corridor are two stories in height, the majority of the buildings are one story in height. Many of the parcels lack any buildings and are used for parking and automobile sales and storage. These auto-oriented parcels are located throughout the Plan Area and frequently border the sidewalk. In addition, many of the existing buildings are set back some distance from the property line. As a result, the street lacks a sense of enclosure. All of these factors contribute to the sense of a wide, auto-dominated corridor, and to an unfriendly pedestrian environment. Figure 2-8 shows the building footprints along the corridor and illustrates that many are used for parking and automobile sales and storage.
On-street parallel parking is provided along the entire corridor with limited prohibitions near intersections. Additionally, most side streets have parallel parking. During multiple field observations in the morning, midday, and afternoon, parking along Santa Rosa Avenue was observed to be underutilized with no more than half of the available parking spaces being used. Parking on the residential side streets intersecting Santa Rosa Avenue is generally utilized much more frequently since it serves as the primary parking for residents and their visitors. Based on a field review and considering the non-parking areas created by driveway curb cuts and transit stops, about 67 vehicles could feasibly park on-street along the Santa Rosa Avenue corridor between Maple Avenue and Sonoma Avenue.

Infrastructure

Key utilities in the Corridor include water, sewer, telephone, electrical, and storm drain infrastructure, all of which are underground in the Corridor. The Downtown Station Area Specific Plan recommended a future upgrade to the sewer trunk line that runs from downtown to points along Santa Rosa Avenue. No utility poles exist along the streets as the utility lines are located underground.

Landscape and Streetscape Amenities

The Corridor is relatively flat, generally devoid of street trees, and has a fairly dense distribution of street lighting. There are also banners indicating the Arts District as well as small signs on street sign posts indicating the Burbank Gardens Historic Preservation District. The street is lacking in other streetscape amenities, such as bicycle racks, trash receptacles, benches, planting areas, and pedestrian-scaled lighting.

While Juilliard Park and Luther Burbank Home & Gardens are important open space amenities immediately adjacent to Santa Rosa Avenue, their presence is not strongly felt when moving along the street. Vehicles, cyclists, and pedestrians moving through the Corridor do not experience strong visual cues indicating the location of the access points to these spaces.

4. TRAFFIC

Traffic Volumes

The City of Santa Rosa supplied 24-hour vehicle counts collected on Santa Rosa Avenue (near Sebastopol Avenue) on a Wednesday in April 2008. As shown in Figure 2-9, morning traffic peaks around 8:00 to 9:00 a.m. and volumes drop off until mid-morning then gradually increases to another peak around 5:00 to 6:00 p.m., which is greater than the morning peak hour. This is consistent with what is generally expected on an arterial, as peak traffic tends to occur during the typical morning and evening commute hours. Throughout the day, the northbound traffic volumes are consistently greater than the southbound traffic volumes, except for late night and early morning periods when the southbound traffic volumes are slightly higher.
Vehicle Level of Service Operations

Vehicular level of service is a qualitative indication of the level of delay and congestion experienced by motorists using an intersection. Typically, corridors are evaluated and assigned a letter grade from Level of Service (LOS) A to F. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions.

Santa Rosa General Plan Policy TD-1 states that the City will maintain a LOS D or better along all major corridors. Exceptions to meeting this standard are allowed:
- Within downtown (the segment of Santa Rosa Avenue considered in this Plan is outside of the designated downtown area);
- Where attainment would result in significant environmental degradation;
- Where topography or environmental impacts makes the improvement impossible; or
- Where attainment would ensure loss of an area’s unique character.

Under existing conditions, the Corridor operates acceptably at LOS C. Segment levels of service are based on average travel speeds, accounting for both the time that drivers spend driving and the time they spend stopped at traffic signals or other traffic control devices. In other words, while Santa Rosa Avenue currently has average speeds of 20 to 21 mph, it is important to distinguish that this includes both driving and stopped time. Based on observations, midblock vehicle speeds are in the range of 30 to 40 mph (see Table 2-1).
### Table 2-1 Summary of Existing Roadway Segment Level of Service Calculations

<table>
<thead>
<tr>
<th>Study Segment</th>
<th>Speed PM Peak Hour</th>
<th>LOS PM Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Rosa Avenue – Sonoma Ave. to Maple Ave. – South A Street Northbound</td>
<td>21</td>
<td>C</td>
</tr>
<tr>
<td>Southbound</td>
<td>20</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes: Speed is measured in miles per hour.

**Multimodal Level of Service**

Similar to vehicular level of service as described above, a multimodal level of service (MMLOS) is used to assign a qualitative indication of the efficiency of a roadway. However, multimodal levels of service for pedestrian, bicycle, and transit travel are considered differently. For these modes, LOS A should be considered to represent ease of travel and the presence of a circulation network that supports and encourages the travel mode. LOS F represents difficult travel conditions and a circulation network that discourages or creates barriers to that mode of travel. For the subject of this analysis the following is the basis upon which the MMLOS is measured.

- **Pedestrian Level of Service.** The methodology considers the presence of pedestrian facilities, lateral separation between pedestrians and vehicular traffic, width of sidewalk, speed and makeup of vehicle traffic, and number of vehicle traffic lanes. Pedestrian level of service is determined for both segments and signalized intersections. Additionally, a pedestrian mid-block crossing factor is calculated, which is considered in tandem with the segment and intersection levels of service to develop an overall pedestrian level of service.

- **Bicycle Level of Service.** The methodology considers the presence of bicycle facilities, lateral separation between bicycles and vehicular traffic, speed and makeup of vehicle traffic, crossing distances at intersections, and pavement condition. Bicycle level of service is determined for both segments and intersections. The overall bicycle level of service considers the segment and intersection results, as well as the number of unsignalized intersections and driveways per mile along the study segment (the resulting "conflict points" adjustment heavily influences the overall bicycle level of service).

- **Transit Level of Service.** The methodology considers the frequency of service, in-vehicle travel time rate, reliability of service, load factors, and quality of pedestrian access to transit stops. Ridership elasticities based on headways and the users’ perception of travel time are also included.

- **Vehicle Level of Service.** Methodology considers average vehicle delay, running speed, left turn lane presence, and stops per mile.

The results of the MMLOS analysis are outlined in Table 2-2. The pedestrian facilities that run along Santa Rosa Avenue are complete, but lack amenities and a pleasant walking environment. Pedestrian facilities at signalized intersections are adequate. The greatest difficulty for pedestrians is in crossing Santa Rosa Avenue at unsignalized locations, and it is this difficulty that largely influ-
ences the overall LOS E determination. This level of service is consistent with observed hesitancy of pedestrians along the Corridor as they attempt to cross Santa Rosa Avenue.

**TABLE 2-2  EXISTING MULTIMODAL LEVEL OF SERVICE ANALYSIS**

<table>
<thead>
<tr>
<th>Transportation Mode</th>
<th>Overall Corridor LOS</th>
<th>Intersection LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>E</td>
<td>B*</td>
</tr>
<tr>
<td>Bicycle</td>
<td>F</td>
<td>C</td>
</tr>
<tr>
<td>Transit</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Vehicle</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

* Signalized Intersection crossings

Santa Rosa Avenue lacks on-street bicycle lanes, though the presence of underutilized on-street parking does provide sporadic areas of additional space for cyclists. Still, the combined speeds and volumes of traffic lead to an undesirable riding environment for cyclists, leading to a LOS D segment score and LOS C intersection score. The substantial number of driveways (curb cuts) along the Corridor presents numerous conflict points to bicyclists. The lack of on-street bicycle facilities and this very high number of conflict points leads to the overall bicycle designation of LOS F.

Between CityBus and Sonoma County Transit services, the average time between bus departures along the study segment of Santa Rosa Avenue is approximately 12 minutes. Regional commute-based service provided by Golden Gate Transit also helps to make transit a viable option for users destined to or originating from uses along the Corridor. Components that lead to a less-desirable transit environment include the lack of transit amenities (shelters, benches, route information) and the poor pedestrian score of LOS E.
CHAPTER 3: STREETSCAPE PLAN

The Streetscape Plan for Santa Rosa Avenue was developed from input received from the Technical Advisory Committee, the Citizens’ Advisory Committee, and the Community Workshops. This chapter describes the components of the Streetscape Plan and provides an overview of the multi-modal analysis conducted on the Plan. The Streetscape Plan is illustrated in Figures 3-6 and 3-7, at the end of this chapter.

The Streetscape Plan has been developed to achieve the community’s goals of:

♦ Improving access, circulation, and safety for pedestrians, bicyclists and vehicles throughout the Corridor.
♦ Creating a safe and walkable corridor.
♦ Uniting the surrounding neighborhoods.
♦ Celebrating the adjacent neighborhoods’ unique character.

1. ROADWAY CONFIGURATION

The new roadway configuration of Santa Rosa Avenue is illustrated in Figures 3-1, 3-2, and 3-4. The roadway configuration varies based upon location along the Corridor and the location of existing and removed parking. The Streetscape Plan illustrated in Figures 3-6 and 3-7 shows the variation in the roadway configuration.

Travel Lane Reduction

The Streetscape Plan proposes reconfiguring the vehicular travel lanes from two northbound and two southbound travel lanes to two northbound vehicular travel lanes and one southbound vehicular travel lane. Removing one of the existing southbound vehicular travel lanes allows for the creation of a new center turn lane that provides left-hand turn pockets and a landscaped median and the creation of northbound and southbound bicycle lanes.

The decision to remove a southbound travel lane was made based upon existing traffic data, which indicate that the northbound traffic volumes are greater than the southbound traffic volumes throughout the day, and specifically during the peak morning and evening times. The creation of a new center turn lane will im-
prove the flow of traffic in both directions of Santa Rosa Avenue by providing an area for vehicles that are turning left across traffic to safely wait for an opportunity outside of the travel lanes. Presently, in the absence of a center turn lane, vehicles waiting to turn left across traffic create congestion because through traffic is forced to wait behind the turning vehicle.

Bicycle Lanes

The Streetscape Plan recommends removing parking along one side of the roadway throughout the Corridor to provide right-of-way to be utilized for Class II bicycle lanes as recommended in the City’s Bicycle and Pedestrian Master Plan. Removing parking, narrowing the travel lanes, and utilizing the existing right-of-way allows for new northbound and southbound 6-foot Class II bicycle lanes to be provided throughout the majority of the Corridor. The bicycle lanes transition to 5 feet as they approach the Sonoma Avenue intersection, where right-of-way is limited.

Limited Access

The new roadway configuration limits the access from Wheeler Street and Pine Street by prohibiting left hand turns onto Santa Rosa Avenue. Drivers needing to turn left out of Wheeler Street would need to travel to Charles Street or Mill Street. Drivers needing to turn left out of Pine Street would need to travel to Mill Street or Oak Street. Access onto Wheeler Street and Pine Street from Santa Rosa Avenue is not limited.

Parking

The loss of parking is necessary to provide enough right-of-way for the proposed travel lane realignment and inclusion of dedicated bicycle lanes. The loss of parking is illustrated in Figure 3-3.

Figure 3-2. Proposed Streetscape Reconfiguration (with parking removed along the eastern side of Santa Rosa Avenue)
There are approximately 67 parking spaces throughout the Corridor, measured using an estimated 20 feet per space measurement. Based upon this estimate, a total of 12 spaces are lost throughout the Corridor as a result of the Streetscape Plan. This represents 18 percent of the existing spaces.

The decision of where to remove parking was based upon minimizing the overall loss of parking, preventing the loss of parking adjacent to existing businesses that utilize on-street parking, and locating the loss of parking adjacent to parcels that are likely to redevelop in the future. Parking has been removed in the following locations:

- On the east side of the street between Wheeler Street and Mill Street/Sebastopol Avenue
- On the west side of the street between Mill Street/Sebastopol Avenue and Maple Street

The majority of the parking loss occurs between Mill Street/Sebastopol Avenue and Maple Street – on the west side of Santa Rosa Avenue. The existing land use along this stretch is predominately auto sales. The General Plan designation for these parcels is Retail/Medium Residential and they are a part of the Gateways Redevelopment Area. These parcels may be redeveloped at some point in the future. The larger parcel sizes and possibility for future redevelopment is why this area was identified for parking removal. As these parcels redevelop, on-site parking will be required, and if developers wish to reinstate on-street parking the City will coordinate with the developers to relocate the curb to allow for on-street parking. Guidance on this topic is included in Chapter 4: Design Guidelines.

In order to maintain parking adjacent to Juilliard Park and Luther Burbank Home & Gardens, the right-of-way in this section of roadway is widened to accommodate parking and bicycle lanes on both sides of the street, as illustrated in Figure 3-4. To widen the right-of-way, the curb and sidewalk adjacent to Juilliard Park will be relocated approximately 6 feet to the west in front of Juilliard Park.

Figure 3-3. Loss of Parking Diagram

Figure 3-4. Roadway Configurations Adjacent to Juilliard Park (parking remains on both sides of the street)
Sidewalk Widening

As a result of reconfiguring the street right-of-way, there is additional right-of-way available to increase the sidewalk width in locations along the Corridor. The locations of widened sidewalk are shown in Figures 3-6 and 3-7 in brown. These locations are dependent upon the existing roadway right-or-way, which varies along the Corridor. Depending on the existing right-of-way, sidewalks are widened by between 1 to 4 feet on the east side of the street, resulting in sidewalks widths ranging between 6 to 11 feet along the eastern Corridor. The extra sidewalk is concentrated on the eastern side of the Corridor because a number of existing buildings on this side are built up to the edge of right-of-way, and are less likely to be redeveloped in the future. In comparison, parcels on the western side of the street have relatively fewer buildings and the buildings that do exist are typically set back from the right-of-way edge. As a result, the western side of the street is more likely to experience redevelopment in the future, thus there is a greater potential to widen the sidewalks through other means in the future. Widening the sidewalk will create additional space for pedestrian amenities, street trees, and landscaping.

Mill Street/Sebastopol Avenue Traffic Signal

The Streetscape Plan includes a new traffic signal at the intersection of Sebastopol Avenue/Mill Street and Santa Rosa Avenue. The traffic signal would improve pedestrian and bicycle mobility at this central intersection by providing protected pedestrian crossings. The signal will also create gaps in traffic flow along Santa Rosa Avenue that will allow easier crossings of the street for pedestrians, cyclists, and motorists at adjacent intersections. This signal will be coordinated with nearby signals to help maintain vehicular flow through the Corridor.

Traffic Calming

The Streetscape Plan incorporates traffic calming techniques throughout the Corridor, such as narrowed traffic lanes, a central landscaped median, new street trees, and bulbouts. Limiting the width of the traffic lanes from 12 feet to 10 to 11 feet reduces drivers’ speeds because they feel constrained by the limited lane width. The addition of street trees within the landscaped median and along the sidewalk reduces a driver’s perceived width of the street, thereby discouraging speeding. Bulbouts, described further below, also limit a driver’s perceived width of the street by extending the curb and tree plantings into the street right-of-way, even further limiting the perceived width of the street.

2. PEDESTRIAN SAFETY IMPROVEMENTS

The Streetscape Plan incorporates a number of elements that create a safer pedestrian environment by calming traffic and improving the visibility of pedestrians.
Improved Pedestrian Crossings

Crosswalks help improve pedestrian safety by directing pedestrians to cross the street at locations where vehicles will expect them. Three new pedestrian crosswalks across Santa Rosa Avenue are recommended as part of the Streetscape Plan, at the following locations:

- On the south side of the Wheeler Street intersection
- On the south side of the Mill Street/Sebastopol Avenue intersection
- On the south Side of the Pine Street intersection

All uncontrolled crosswalks are recommended to be ladder-style crosswalks to improve their visibility. The crosswalks at signalized intersections and on the side streets are recommended as parallel striped (continental) crosswalks. The total number of striped crosswalks in the Corridor will increase from 5 to 8.

In addition, the existing crosswalk on the north side of Charles Street is relocated to the south side of Charles Street. The safety of pedestrians at the relocated Charles Street crossing is improved by the incorporation of bulbouts and a pedestrian refuge island.

Pedestrian Refuge Islands

Pedestrian refuge islands help pedestrians to safely navigate an intersection by providing a protected area in the center of a roadway. At controlled intersections pedestrian refuge islands allow people with slower walking speeds, who might not be able to cross the whole intersection within one signal cycle, to cross an intersection during two separate cycles by providing them with a protected space to wait. At uncontrolled intersections pedestrian refuge islands allow pedestrians to navigate one direction of traffic flow at a time when crossing the roadway.

The crosswalks at the Wheeler Street and Pine Street intersections are designed as pedestrian “Z” crossings. Similar to a pedestrian refuge island, the “Z” crossing utilizes the central median as a location for pedestrians to safely wait to cross each direction of traffic. The “Z” crossing differs from a refuge island in that the two crosswalks are offset and connected by a short path along the central median. This configuration forces pedestrians to turn in the median and face oncoming traffic before turning again to cross the second half of the crosswalk.

Bulbouts

Bulbouts, also known as sidewalk extensions, extend the sidewalk into the parking lane and result in a narrowed street right-of-way. Bulbouts improve pedestrian crossings by reducing the distance pedestrians have to cross and improving the ability of pedestrians and drivers to see each other. Additionally, bulbouts help to physically and visually narrow the street, which has been proven to result in slowing motorists because of their perception of the narrowed right-of-way.

Bulbouts have been included in the plan at every crosswalk location where there is an adjacent parking lane into which the bulbout can extend. New bulbouts are located:
Pedestrian Actuated Warning Beacon

Pedestrian actuated warning beacons are flashing warning beacons that are activated by pedestrians to alert drivers that they are using a crosswalk. Pedestrian actuated warning beacons are recommended at three locations: the Charles Street, Wheeler Street, and Pine Street pedestrian crossings. The warning beacons will either be lights embedded into the asphalt on either side of the crosswalk, or mounted on signs in advance of the crosswalk. When activated by pedestrians, the lights or sign will flash for a defined cycle which is timed to allow pedestrians enough time to cross the street.

3. TRANSIT STOPS

Santa Rosa Avenue is an important transit corridor which has the potential to increase in importance in the future as downtown Santa Rosa develops more regional transportation options. The goal of the following recommendations is to improve the efficiency, safety and comfort of transit stops along the Corridor. The Streetscape Plan recommends relocating two bus stops in the Corridor to improve transit efficiency and coordinate with other recommended improvements.

Mill Street/Sebastopol Avenue Intersection

The southbound bus stop at the Mill Street/Sebastopol Avenue intersection is relocated to the "far-side" south of the intersection. Relocating the bus stop to the far-side location will help reduce conflicts between buses and right-turning vehicles and encourage pedestrians to cross the street at the crosswalks located behind the bus rather than in front of it. Far-side locations are also easier for bus drivers to negotiate. The northbound bus stop at the Mill Street/Sebastopol Avenue intersection is recommended to remain at its present far-side location.

Oak Street/Maple Avenue Mid-block Location

The northbound bus stop located mid-block between Maple Avenue and Oak Street is relocated north to the "far-side" of the Oak Street intersection at a new bus bulbout. Bus bulbouts are similar to regular bulbouts in that they extend the sidewalk typically 6 feet into the parking lane, but are special in that they are typically 40 to 60 feet long in order to accommodate the length of a bus. Bus bulbouts can help maintain transit headways by allowing buses to partially block one of the through traffic lanes, eliminating the delays that occur when bus drivers need to wait for a gap in traffic before pulling into travel lanes. Bus bulbouts also provide ample space for transit ameni-
ties such as bus shelters and route information signs, bicycle parking, and pedestrian lighting. The southbound bus stop located mid-block between Palm Street and A-Street is recommended to remain at its present location.

4. LANDSCAPING

Street Trees

The Streetscape Plan includes 65 street trees planted along the sidewalks and 25 trees planted in the landscaped medians, illustrated in Figures 3-6 and 3-7. New street trees have been located strategically to coordinate with the existing conditions and new design recommendations, however the exact location of the trees will likely change during future design development. Guidelines regarding the placement of street trees are outlined in Chapter 4: Design Guidelines.

Street trees contribute to the safety and beauty of the pedestrian realm and improve the environmental quality of the neighborhood. Street trees improve safety by defining the edge of the road, which helps drivers to guide their movements and assess their speeds, and results in speed reduction. Additionally, street trees act as a buffer between pedestrians and vehicles and improve the pedestrian environment by providing shade and contributing to lower summer temperatures. Street trees also improve the health of the environment by filtering pollutants from the air, reducing greenhouse gases, and absorbing precipitation, which would otherwise become stormwater run-off.

The Santa Rosa Tree Program of 2000 recommends the use of *Ginkgo biloba* and *Pistacia chinensis* as street trees along Santa Rosa Avenue between Sonoma Avenue and Hearn Avenue. The Gingko trees have a narrow shape and typically grow to between 35 to 50 feet tall. Gingko trees are recommended for the center landscaped median throughout the Corridor. Only male Gingko trees should be planted, as the female trees produce a messy, ill-smelling fruit. Pistacia trees are recommended as the sidewalk street tree along the Corridor. Pistacia trees grow to between 30 to 60 feet tall and tolerate a wide range of conditions, which makes it a reliable tree for streetscape plantings. The foliage of Pistacia trees turns a bright orange to red color in the fall.

Landscaping

Plants in the streetscape palette should be water-efficient and able to thrive in an urban streetscape environment. Community members were interested in landscape planting along the Corridor which would reflect the local influence of Luther Burbank, where possible. Luther Burbank was a horticulturist who came to Santa Rosa in 1875 and developed numerous varieties of plants during his career. He lived and worked in what is now Luther Burbank Home & Gardens at the corner of Santa Rosa and Sonoma Avenues. A planting plan that is water efficient and takes inspiration from Luther Burbank Home & Gardens should be developed for the Corridor. Plants selected would be required to meet the planting palette Design Guidelines outlined in Chapter 4.
5. STREET FURNISHINGS

Pedestrian-Scaled Lighting

The Streetscape Plan incorporates pedestrian lighting as a way to improve the visibility and safety for pedestrians throughout the Corridor. Pedestrian lighting is oriented to provide light within the pedestrian realm and is typically 10 to 14 feet in height which is shorter than standard street lights. The Streetscape Plan identifies potential locations of pedestrian lights throughout the Corridor. The lights have been strategically located to coordinate with the existing cobra head street lighting, existing and proposed location of street trees, and areas of high pedestrian activity. The pedestrian lights should be designed to cast their light down towards the sidewalk, along dark sky principles to avoid overspill of light upward that would negatively impact being able to observe the night sky.

Pedestrian-scaled lights should be chosen to coordinate with the rest of the street furniture palette. Guidelines regarding the placement of Pedestrian Scaled Lighting are outlined in Chapter 4: Design Guidelines.

Street Furnishings Palette

The Downtown Station Area Specific Plan (the Plan) recommends the development of a unique Street Furnishings Palette for each of the seven sub-areas within the Plan Area. Santa Rosa Avenue lies in the Park and Gardens sub-area, and this Corridor Plan is the first step in the determination of the Park and Gardens Furnishings Palette.

During the community workshop process, participants were asked to give input regarding a potential streetscape palette that would accentuate the neighborhood’s character. Community members were asked to choose between a contemporary, historic, and artistic palette. The historic palette received the highest number of votes. However, the artistic option also received a high number of votes. During a discussion with workshop participants, many articulated that they would prefer a historic-based palette that is open to providing potential for art to be incorporated into street furniture design and implementation. The images shown at left represent the types of images shown to the community and can serve as a starting point to choose specific streetscape furnishings.

Street Furniture

The Streetscape Plan includes the addition of new street furniture in locations where space is available and where it is appropriate to enhance the pedestrian environment. Street furniture includes new bicycle racks, pedestrian scaled lighting, trash and recycling receptacles, and benches.

Street furniture would help to improve the aesthetics and cleanliness of the pedestrian environment, and also enliven the pedestrian realm by encouraging pedestrian use and activity. The Plan calls out the potential locations of street furniture as identified in Figures 3-6 and 3-7. However the exact placement should be determined during further design development. In addition, as future parcels are redeveloped there is the potential to incorporate more street furnishings into the
Streetscape Plan. Guidelines regarding the placement of Street Furniture are outlined in Chapter 4: Design Guidelines.

6. JUILLIARD PARK ENTRANCE

As a result of altering the street right-of-way in front of Juilliard Park to maintain parking, and relocating the Charles Street crosswalk for safety concerns, it will be necessary to create a new sidewalk and improve the entrance to Juilliard Park. A new sidewalk with a minimum width of 8 feet should be created along this section and is proposed to occupy the 8-foot park edge adjacent to the existing sidewalk.

The formal pedestrian entrance to Juilliard Park is an approximately 40-foot pathway that aligns with Charles Street. The park edge and entrance are defined by Yew trees that formalize the edge. The relocation of the curb will need to be carefully coordinated with the existing Yew trees to protect the trees and their root structure and ensure future survival. It is proposed that a bulbout be incorporated in front of this entrance, replacing existing parking. This bulbout will aid to create a more welcoming entrance. In addition, the bulbout will provide more space for benches, lighting, and the creation of a formal landscaped entrance that will better connect the park to the street.

7. SIGNAGE

Signage is an essential part of creating a walkable and inviting neighborhood as it helps orient and welcome neighborhood visitors.

Entry Features

Entry elements will help to highlight the entrances to the neighborhood and help to alert drivers that they are entering a neighborhood area. A new entry feature is recommended at the southern entrance to the neighborhood, either as part of the existing Highway 12 underpass, or located just south of the underpass. At the northern entrance to the neighborhood, the community felt that the new central landscaped median and existing landscaped features associated with Juilliard Park and Luther Burbank Home & Gardens, would create the northern entry feature to the neighborhood.

There is no formal recommendation for the type of entry feature to be implemented at the southern entrance to the neighborhood. The community discussed the possibility of creating a mural either along the underpass or a mural above the entrance to the underpass. Community members also discussed the potential of a statue or other stand-alone public sculpture to announce the arrival in the neighborhood. The City of Santa Rosa has a thriving public arts program, and the City of Santa Rosa’s Art in Public Places Committee should work with the neighborhood to discuss location, theme and strategy for developing a southern entry feature to the neighborhood.
Wayfinding Signage

A system of wayfinding signage should be implemented to direct visitors to the downtown and various destinations within and near the Corridor, such as Luther Burbank Home & Gardens, Juliard Park, and the Transit Mall. The signage should be created for pedestrians, bicyclists, and drivers and should be clear and easy to understand and use. The wayfinding signage should also be used as an opportunity to inform visitors of the historic character of the surrounding neighborhood. Wayfinding signage should be further developed along with the streetscape palette.

Directional Signage

During the community process, community members expressed concern that many people drive on Santa Rosa Avenue even though they could drive along Highway 101, which is parallel to Santa Rosa Avenue. As part of this Plan, it is recommended that signage directing drivers to Highway 101 be located along Santa Rosa Avenue, to the south of the Corridor. Signage directing drivers to the highway should be coordinated with Santa Rosa Market Place and Costco, which are major citywide destinations located about a mile south of the Corridor on Santa Rosa Avenue.

8. FUTURE DEVELOPMENT

The Santa Rosa Avenue Corridor falls mostly within the Gateways Redevelopment Project Area of the City of Santa Rosa. The main goal of the redevelopment area is to “revitalize Santa Rosa’s residential, commercial, and industrial areas so that the area will be healthy both physically and economically.” One of the ways in which the development area will be encouraged to change is that owners of properties will be able to take advantage of incentives to rehabilitate their properties or build new properties, as long as they are consistent with the City’s General Plan and other policy documents.

There are a number of parcels along Santa Rosa Avenue that are partially or entirely vacant. Most properties along the Corridor are designated Retail/Medium Residential, which allows a mixture of uses including residential development of 8 to 18 units per gross acre and retail and business services. Some of the properties’ existing uses are not consistent with this designation.

As a result of proximity to downtown, the available redevelopment area incentives, General Plan designations, and the availability of undeveloped land, some parcels along Santa Rosa Avenue Corridor may wish to redevelop. As parcels are redeveloped, the City should work with property owners to set back in order to widen the existing sidewalk, and potentially reconfigure the existing curb line to reintroduce on-street parking in locations where parking has been removed to accommodate the plan. Specific recommendations for these parcels, which build upon the existing design guidelines in the Santa Rosa Downtown Station Area Specific Plan, are included in Chapter 4: Design Guidelines.
9. SUSTAINABLE DESIGN

Throughout the planning process many community participants vocalized the desire to include principles of sustainability into the streetscape design. Sustainability within the streetscape has the potential to conserve energy, minimize stormwater run-off, reduce the heat island effect, and lessen the use of resources. The discussion below identifies a number of ways to incorporate sustainable design into the Streetscape Plan.

Energy Conservation

The main source of energy use in streetscapes is for pedestrian and street lighting, and the decisions about the types of lights used should be based upon sustainability. Light-emitting diode (LED) lighting should be considered for pedestrian lighting because they require low energy consumption and little maintenance. LED lighting has high initial costs, but is longer lasting, and thus is a cost effective option. Induction lighting is a new technology in lighting that transmits energy by way of a magnetic field. Induction lighting is energy efficient, requires very little maintenance, and is very long lasting, which makes it a sustainable choice. Other sustainable pedestrian lighting options include new solar- and wind-powered lights.

Low Impact Development

Low Impact Development (LID) is a term used to describe an innovative stormwater management approach that seeks to minimize the amount of stormwater that is conveyed into the stormwater system. LID’s goal is to mimic a more natural hydraulic cycle by using design techniques that infiltrate, filter, store, evaporate or recycle stormwater runoff. These techniques help to reduce water pollution, replenish groundwater supplies and increase water reuse. The Plan is subject to the requirements of the Municipal Stormwater Permit through the Regional Water Quality Control Board (RWQCB) and will need to incorporate LID features to treat all stormwater coming off of paved areas. The proposed reconfiguration of the roadway and inclusion of landscaped medians helps to improve stormwater management by reducing the amount of impervious pavement and replacing it with pervious landscaped medians.

There are two categories of LID techniques that are applicable to streetscape design, infiltration and bioretention, which are described more in detail below. The Streetscape Plan incorporates a number of other recommendations that can potentially incorporate LID strategies.

a. Bioretention

Bioretention LID strategies are techniques designed to capture, store, infiltrate, and treat stormwater runoff. Typically, bioretention strategies incorporate landscape features, such as plants and soil, which help to remove pollutants from stormwater runoff through a variety of techniques. Because bioretention techniques typically incorporate landscape features, they have the potential to contribute to the aesthetic environment of their surroundings.
Structural Soils

Structural soils are a mixture of specially selected soil components that are chosen to maintain gaps between the components when the soils are compacted. The gaps within the soil components have two beneficial aspects: they provide space for air to be available to tree roots, and they provide the capacity for stormwater to infiltrate into the groundwater system. Given their makeup, structural soils can also be compacted to meet pavement loading requirements; thus they have the capacity to be used below roadways and sidewalks. Structural soils could be incorporated with strategies to increase the infiltration capacity of the soils within the Corridor.

Subsurface Geogrid Systems

Subsurface geogrid systems, such as DeepRoot’s Silva Cell© system, are modular systems that are designed to maximize the amount of soil volume for root growth and stormwater treatment, and provide support for load-bearing hardscapes. Geogrid systems are typically a plastic, box-like structure that can support the weight of the pavement above, and provide space for soils to be housed in an area free of compaction. Geogrid or similar systems using current LID standards could be incorporated into the planting plan for all of the recommended trees throughout the Corridor, functioning to increase the space for tree roots to expand, and provide additional stormwater infiltration.

Curb Treatments

Traditional curbs direct stormwater toward storm drains and prevent the flow of stormwater into planting areas where the water can be used by the plantings and infiltrate. Creating breaks in the curb, or lowering the curb, will allow water to flow into planting areas. In conjunction with curb breaks, the planting areas are designed to provide for stormwater detention and infiltration into the subsurface. Along Santa Rosa Avenue, similar curb treatments could be incorporated into tree wells along the sidewalk, planting areas in bulbouts, and/or along the center landscaped median.

Infiltration

Infiltration LID strategies are engineered techniques designed to capture and infiltrate stormwater runoff. The main goals of infiltration are to reduce the volume of stormwater runoff and to help recharge the groundwater supply.

Permeable Paving

Permeable paving significantly reduces the quantity of runoff entering the storm drain systems by allowing stormwater to infiltrate through the paving system into the soil below, rather than conveying stormwater to the storm drain system. Permeable paving systems use open-jointed block paving systems that are set above a subsurface material that has been amended and prepared to allow stormwater to filter down through the subsurface aggregate and soils. These paver units are available in a variety of patterns and color combinations while adding a rich urban texture to the roadway. Permeable pavers could be utilized within the Corridor in locations with on-street parking or as sidewalk paving materials. Utilizing permeable paving within the street corridor can result in improved water quality and potential cost savings due to a reduced need for storm drainage infrastructure.
Pervious Concrete

Pervious concrete is specially designed to allow water to percolate through the concrete and infiltrate into the subsurface below, rather than conveying water to the storm drain system as with more conventional impervious surfaces. Pervious concrete is created by reducing the amount of sand and manipulating the size of aggregate in the concrete to create voids in the concrete structure. These voids within the concrete allow water to percolate through the concrete into the subsurface aggregate and soil, which have been prepared and amended to allow for proper infiltration. Pervious concrete can be used for a number of applications; its primary use is in pavement applications such as roadways and sidewalks. Pervious concrete is an efficient technique because it can easily be incorporated into designs where concrete is called for and has no additional above ground spatial requirements. Pervious concrete does require regular maintenance to remove debris from the voids.

Urban Heat Island Effect Reduction

The Urban Heat Island Effect is a condition in which air and surface temperatures are elevated in urban areas as a result of a large amount of heat-absorbing surfaces, the lack of shade, and the accumulation of waste heat from cars and energy consumption. The urban heat island effect results in uncomfortable pedestrian environments and the consumption of energy for air conditioning. Plants can contribute to reducing the heat island effect by providing shade and contributing to cooling the air through the evaporation from their leaves, resulting in a more comfortable pedestrian environment and decreased energy consumption. In addition, choosing materials with high solar reflectivity, or albedo, reduces the heat island effect because such materials reflect solar energy rather than absorbing and re-radiating it. Surface materials such as light-colored paving or white roofs have a high albedo and will help reduce the contributions to the urban heat island effect.

Materials Reuse

The reuse of materials not only reduces the consumption of new resources but often reduces the cost of construction. Within the construction of streetscapes there is the opportunity to reuse the existing concrete and asphalt surface materials as base materials for new roadway and sidewalk paving. There is also the potential to use street furnishings that contain recycled content, such as recycled metals and recycled plastics. In addition, fly-ash, which is a byproduct of coal burning, can be added to concrete to make it stronger and more durable. The addition of fly-ash reduces the amount of cement in concrete, thus limiting the amount of energy consumed in producing concrete.

Water Conservation

Water is a precious resource and the choice of plant materials should strive to conserve the amount of water required for landscaping. When possible, landscaping choices should use native or other climatically appropriate and drought-resistant plants with low water requirements.
Additionally the design of irrigation systems should be developed to minimize the amount of wa-
ter loss through irrigation. Irrigation systems should be designed to respond to seasonal variations
of rainfall. Plants should be irrigated at night or early in the morning, and drip irrigation should be
used, rather than overhead irrigation to minimize water loss due to evaporation.

10. MULTIMODAL LEVEL OF SERVICE

Multimodal level of service (MMLOS) for pedestrians, bicyclists, transit users, and vehicle drivers
has been used throughout the planning effort as metrics by which various scenarios could be
compared. MMLOS values were determined using the draft methodologies anticipated to be
included in the forthcoming *Highway Capacity Manual 2010*. In order to understand the long-
term implications of change to the Corridor, the analysis has largely focused on the future (year
2035) PM peak hour, during which time the travel modes tend to experience their highest num-
bers of users.

With implementation of the Streetscape Plan, the pedestrian level of service is projected to be in
the LOS C to D range versus LOS E without the project. The Plan’s improved crossings, enhanced
streetscape amenities including trees, larger buffers between pedestrians and moving traffic all
help to improve the pedestrian environment. The biggest factor prohibiting pedestrian level of
service from achieving higher levels is the amount of vehicular traffic on Santa Rosa Avenue. Bicy-
cle level of service is projected to be in the LOS B to C range versus LOS F without the project.
The provision of bicycle lanes and moderation of automobile speeds helps to improve both safety
and comfort for bicyclists on the Corridor. The Plan would be expected to result in modest im-
provements to transit level of service, increasing to the LOS A to B level versus LOS B without the
project, as a result of improved pedestrian amenities. Finally, the plan would be expected to result
in vehicle level of service ranging from LOS C to LOS E, similar to that which would be experi-
enced without the project, though at slightly lower speeds. The vehicular level of service de-
creases with the project primarily because of the reduction in southbound travel lanes from two to
one, as well as the introduction of a new traffic signal at the Sebastopol Avenue/Mill Street inter-
section.

A summary of the MMLOS results for the Corridor is provided in Table 3-1.
### Table 3-1 Multimodal Level of Service Comparison – PM Peak Hour

<table>
<thead>
<tr>
<th></th>
<th>Existing Conditions</th>
<th>Future Conditions Year 2035&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Project</td>
<td>No Project With Project</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>LOS E</td>
<td>LOS E</td>
</tr>
<tr>
<td></td>
<td>Difficult mid-block and intersection crossings; limited pedestrian amenities</td>
<td>Increasingly difficult to cross street; limited pedestrian amenities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOS C-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substantial improvements to pedestrian crossings and amenities, though increased traffic reduces comfort</td>
</tr>
<tr>
<td>Bicycle</td>
<td>LOS F</td>
<td>LOS F</td>
</tr>
<tr>
<td></td>
<td>No on street bicycle lanes and limited shoulder space</td>
<td>Lack of bicycle lanes; somewhat higher vehicle speeds; high vehicular traffic volumes reduce comfort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOS B-C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substantial improvement with bicycle lanes, though increasing regional traffic volumes affect comfort</td>
</tr>
<tr>
<td>Transit</td>
<td>LOS B</td>
<td>LOS B</td>
</tr>
<tr>
<td></td>
<td>Frequent service, but limited transit stop and pedestrian amenities</td>
<td>Frequent service, but affected by poor pedestrian conditions and amenities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOS A-B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequent service, enhanced by improved pedestrian conditions and amenities</td>
</tr>
<tr>
<td>Vehicle&lt;sup&gt;b&lt;/sup&gt;</td>
<td>LOS C</td>
<td>LOS C-E</td>
</tr>
<tr>
<td></td>
<td>Average corridor vehicle speed of 20</td>
<td>Average corridor vehicle speed of 14 to 20 mph</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average corridor vehicle speed of 12 to 19 mph</td>
</tr>
</tbody>
</table>

<sup>a</sup> Level of service ranges reflect different regional buildout scenarios as defined in the SCTA Comprehensive Transportation Plan. The higher (better) level of service values reflect the “do everything” scenario, whereas the lower level of service values reflect the “business as usual” scenario.

<sup>b</sup> Vehicle level of service based on *Highway Capacity Manual 2000* methodologies; Pedestrian, Bicycle, and Transit level of service based on draft methodologies in the forthcoming *Highway Capacity Manual 2010*. 
3. Streetscape Plan

- Maintain existing accessible parking space
- New bulbout
- No left turn onto Santa Rosa Avenue
- Widened sidewalk
- Parking removed
- Bus stop remains

Figure 3-6. Santa Rosa Avenue Streetscape Plan (Sonoma Avenue to Mill Street/Sebastopol Avenue)

- Luther Burbank Home and Gardens
- Juilliard Park
- Merge from one southbound vehicle travel lane to two lanes
- Maintain parking by relocating sidewalk
- New entry feature at Juilliard Park entrance
- Relocated crosswalk with pedestrian refuge
- New pedestrian "Z" crossing
- New bulbout
3. Streetscape Plan

SANTA ROSA AVENUE CORRIDOR PLAN

Figure 3-7. Santa Rosa Avenue Streetscape Plan (Mill Street/Sebastopol Avenue to A Street)
CHAPTER 4: DESIGN GUIDELINES

The right-of-way and adjoining properties on Santa Rosa Avenue are regulated by several City of Santa Rosa documents, including the Santa Rosa General Plan 2035, the Downtown Station Area Specific Plan, and the City of Santa Rosa Design Guidelines. The goals of this Santa Rosa Avenue Corridor Plan align with similar goals, policies, and standards in all of these documents.

The Downtown Station Area Specific Plan identifies the neighborhood surrounding Santa Rosa Avenue as the “Park and Gardens” Urban Design Sub-Area. The Park and Gardens Sub-Area is envisioned as a place where new development will provide a shared identity for the Juilliard Park neighborhood and the Burbank Gardens neighborhood and will enable new connections across Santa Rosa Avenue. Also in the Downtown Station Area Specific Plan are Streetscape Standards that encourage pedestrian amenities such as pedestrian bulb-outs, broad canopy trees, and a landscaped tree median along Santa Rosa Avenue.

The City of Santa Rosa Design Guidelines have been updated to reflect the goals, policies and standards from the Downtown Station Area Specific Plan. The Core Area section of the Design Guidelines includes some guidelines specifically focused on Santa Rosa Avenue.

♦ Goal 2.1.12, Guideline D: The Park and Gardens Sub-Area is currently characterized as a commercial strip, but is envisioned to be a mixed-use area with housing and retail uses throughout and where new development provides a shared identity for the Juilliard Park and Burbank Gardens neighborhoods.

♦ Goal 2.2.1, Guideline E: A neighborhood retail hub and pedestrian crossing at the intersection of Sebastopol Avenue, Santa Rosa Avenue, and Mill Street should be created. This will enable increased interaction between the Juilliard Park neighborhood and the Burbank Gardens neighborhood.

♦ Goal 2.2.5, Guideline F: Creation of a pedestrian-oriented environment along Santa Rosa Avenue is encouraged, with 2- to 3-story mixed-use buildings, improved street furnishings and other pedestrian amenities.

Following are design guidelines for Santa Rosa Avenue which will augment existing guidelines to ensure that the vision developed with the community during the planning process is achieved.

1. DESIGN GUIDELINES

These Design Guidelines build on the comprehensive guidelines already put in place by the City of Santa Rosa. They are not intended to supplant the existing guidelines but rather clarify and provide additional detail that will ensure that streetscape improvements and new development will help support the vision for Santa Rosa Avenue set forward by the community.
They apply only to improvements in the public right-of-way at Santa Rosa Avenue and to new development on properties facing Santa Rosa Avenue. The limit to the north is Sonoma Avenue and the limit to the south is State Route 12, including the overpass.

Streetscape Furnishings

a. Pedestrian-Scale Lighting
Pedestrian-scale street lighting will not only help improve security, but will also add to the character of the street and neighborhood. Sidewalks and landscaped areas should be lit to enhance safety and comfort.

- Sidewalks should be illuminated through the use of pedestrian-scaled pole fixtures (10 to 14 feet in height) or fixtures attached to the face of the buildings.
- The type and size of fixture should be consistent along a single block.
- Placement of lighting should not interfere with the pedestrian path of travel and should not distract or interfere with vehicular circulation.
- Street lamps should be oriented toward the ground and designed with “dark sky” technology to help preserve views of the night sky.

b. Benches
Benches encourage pedestrian activity and enhance gathering spaces along the street. Benches can also provide for the opportunity to include artwork or to be custom designed by artists or the community, reflecting the aesthetics and culture of the neighborhood.

- Public seating should be attractive, yet easy to maintain and enhance the identity of the neighborhood.
- Groupings of benches should be of the same style rather than differing styles adjacent to each other.
- Bench placement should consider social activity on the street, and seek to enhance areas where people tend to meet and congregate.
- Where possible, benches should be placed against a building wall to allow clear pedestrian paths of travel, and to face the sidewalk accommodating neighborhood interaction.
- Facing bench placement is encouraged to help create “outdoor rooms” in areas where people meet and gather.
- Bench placement should not interfere with the pedestrian path of travel.

c. Bicycle Racks
Bicycle racks encourage bicycling by providing safe and convenient locations to park bicycles. Bicycle parking facilities should be provided on Santa Rosa Avenue adjacent to major destinations where possible. Bicycle racks can be free standing or attached to stationary objects such as buildings.
Bicycle racks should be discreet, functional, easy to use and maintain. Artistically designed or custom designed models could be an opportunity to enhance the character of the street.

- Placement should consider ease of entry and exit with bicycles and should not conflict with pedestrian paths of travel.
- Larger racks should be provided within bulbouts where there is additional public space.
- Smaller racks should be placed near the curb on sidewalks, where necessary and feasible.

d. Trash and Recycling Receptacles
Trash and recycling receptacles encourage cleanliness and recycling, resulting in a more pleasant street environment. Trash and recycling receptacles should be provided for outdoor public spaces.
- The receptacles should have a lid.
- Placement of receptacles should not interfere with pedestrian path of travel.

e. Bollards
Bollards can provide protection to pedestrians from moving vehicles. Bollards are typically arranged in a path to separate vehicle traffic from pedestrians and to control parking zones along sidewalks.
- Bollards should be installed in areas along the curb side of the sidewalk if additional buffer space is needed between the sidewalk and street.
- Bollards should be strategically placed to allow a clear path of travel for pedestrians and should not distract or interfere with vehicular circulation.

f. Directional Signage
Directional signage for neighborhood shops and amenities can enhance street character and orient visitors to major destinations. Walking maps or plaques could be strategically placed, marking unique places along the corridor.
- Signs should be appropriately integrated into their surroundings in terms of size, shape, color, texture, and lighting in order to complement the architecture of the buildings and the immediate neighborhood context.
- Signs should be strategically placed to ensure a clear path of travel for pedestrians and should not distract or interfere with vehicular circulation.
- Signs should be professionally constructed of durable high-quality materials such as metal, stone, hardwood, brass plating, and exposed or channel neon.

g. Bus Shelters
Bus stops should include bus shelters when possible. Bus shelters encourage transit use by enhancing comfort and safety for riders. The bus stops provide shelter from weather for those waiting for the bus, as well as bus schedule information.
- Bus shelters should face the street.
- Bus shelters should be located to not conflict with the pedestrian path of travel.
- Bus shelters should be made of transparent materials to allow for visibility to maintain safety.
Street Trees and Landscaping

a. Street Trees
Street trees provide a large number of social and environmental benefits to city residents and visitors. Street trees should be planted along Santa Rosa Avenue to provide shade for pedestrians, assist in on-site stormwater management, buffer pedestrians from vehicular traffic, and provide visual interest on the street.

♦ Street trees should be placed on the street side of the sidewalk to provide a buffer between pedestrians and the street.
♦ Trees shall be healthy and typical for the species in: crown form, leaves, branches, trunk, tree height, and trunk diameter.
♦ Sizing and planting time should be determined by the type and condition of tree.
♦ Tree spacing must also allow for visibility at intersections and mid-block left-turn locations.
♦ Utility location and pedestrian path of travel should be considered in the placement of street trees.
♦ Mature street trees should be pruned up to 14 feet minimum to maximize visibility.

b. Tree Wells
The size of tree wells, or the soil area in which trees are planted, is an important design consideration when planning for street trees. Tree well size will help to determine which species to plant and will affect available sidewalk width.

♦ Where possible, individual tree wells should be connected with linear planting strips or larger planting areas. This will increase the soil volumes and potential for a more robust urban forest.
♦ Street trees should be provided with adequate sub-surface root space to allow for growth.
♦ The minimum square footage of a tree well is 24 square feet (4 feet X 6 feet). Where space is extremely limited, the tree well could be reduced to 16 square feet (4 feet X 4 feet) and planted with appropriately sized trees.

c. Surface Treatment for Tree Wells: Tree Grates
♦ Tree grates should be used on for all trees placed in the sidewalk of Santa Rosa Avenue.
♦ Wherever possible, tree grates should be located out of the pedestrian path of travel.

d. Plant Palette
The plant palette can unify and enhance the visual character of the street. Planter boxes can be added to the street as buffers between pedestrians and vehicles, and can add visual texture to the street.

♦ Drought tolerant plants that are climate appropriate should be chosen.
♦ If planter boxes are used, these should be placed against a building wall or the street edge in order to allow for easy pedestrian movement along the sidewalk.
e. Vegetated Swales and Rain Gardens
Vegetated swales are linear open channels planted with vegetation that filter out sediments as the runoff flows across the surface. Rain gardens are depressions that infiltrate and treat runoff through evaporation and transpiration.

- Side slopes for both features should have a ratio of 2:1, with 3:1 or flatter preferred.
- Plant material used in vegetated swales and rain gardens needs to tolerate inundation and drying periods. Grasses and fine leaf plants are preferred to trap sediments. However, mowed turf is discouraged due to the use of fertilizers and herbicides. Drought tolerant no-mow turf varieties are more desirable.

Surface Treatments

a. Decorative Paving
Decorative paving can greatly enhance the character of a neighborhood, direct traffic flow, and can be used as a street-calming measure.

- Placement of decorative paving should complement the character of the street and be appropriate for the space available.
- Paving in crosswalks is encouraged for pedestrian safety and as a street-calming measure.

b. Permeable Paving
Permeable paving significantly reduces the quantity of runoff entering the storm drain systems. Paving systems using open-jointed block paving with permeable aggregates have proven to be a viable approach to stormwater management. The pre-cast pavers are designed to lock together for strength and stability, with openings in the joints where open-graded aggregates allow water to infiltrate.

- Permeable paving should complement the character of the street and be appropriate for the space available.
- Permeable pavers should be placed strategically to collect stormwater, such as spots between tree plantings to create a continuous permeable strip or along parallel street parking spots to maximize stormwater intake.

c. Sidewalks
Sidewalks exist from the edge of the parcel line to the curb. Their design significantly affects the quality of the pedestrian experience.

- Sidewalks should meet all ADA requirements for width and surfacing.
- The use of high albedo paving is encouraged to reduce the urban heat island effect.

d. Driveways
Driveways allow vehicles to cross the sidewalk and provide access between the street and private parcels. The design of driveway aprons affects the accessibility and safety of the sidewalk.
Driveways should be designed to provide a level pedestrian path of travel at the back of the sidewalk, with a more steeply sloped driveway apron at the street edge.

Wherever possible, driveways should be consolidated.

e. Curb Ramps
Curb ramps provide access between a sidewalk and the street. Curb ramps are required every time a pedestrian path crosses a curb, typically at an intersection. Curb ramps are important for creating a safe and accessible pedestrian environment.

- Curb ramps should be provided at every intersection.
- Curb ramps should be designed to meet all ADA requirements.
- Whenever possible, one curb ramp should be provided perpendicular to every pedestrian crossing.

f. Curb Treatments
Traditional curbs prevent the flow of stormwater into planting areas. Improvements to existing planting areas or the establishment of new planting areas provide an opportunity to explore curb treatments that allow planting areas to capture some stormwater runoff.

- Drainage within planting areas must be considered before these strategies are employed.

Public Art

a. Murals
Murals can be added to building fronts or sides as a means of reflecting community history, culture, and art. The artwork selection process can include the community as well as showcase local artists.

- Placement of murals should be considered at important intersections.
- Mural artwork should reflect community character and enhance the visual and cultural aspects of the street.

b. Artistic Benches
Benches can provide an opportunity to include artwork or to be custom-designed by local artists or community members. The construction or decoration of artistic benches can incorporate community through a workshop or workday.

- Artistic benches should be limited to one bench per block each side.
- Artistic benches should showcase different artists.

c. Tree Grates
Tree grates can incorporate decorative art while allowing air and water circulation for healthy trees.

- Decorative grates should unify areas with distinct character. Custom grate designs can be developed as part of an arts competition or program.
Tree grates should be flush with the sidewalk and not impede foot traffic. Installation and dimensions of openings shall meet accessibility guidelines.

2. GUIDELINES FOR NEW DEVELOPMENT

This section contains guidelines for new development on properties facing Santa Rosa Avenue. New development along the Santa Rosa Avenue Corridor should follow Development Guidelines contained in the Downtown Station Area Specific Plan as well as existing design guidelines from the Core Area section of the City of Santa Rosa Design Guidelines. The following guidelines are supplemental guidelines to improve the pedestrian environment along the Corridor and achieve the goals of the community for Santa Rosa Avenue.

a. Building Setbacks

Building setbacks for new development that faces Santa Rosa Avenue in the Plan Area falls into two “street type” categories in the Downtown Station Area Specific Plan. Properties on Santa Rosa Avenue from Sonoma Avenue to Wheeler Street and Pine Street to A Street are regulated by the “Boulevard” street type, and in the central section of Wheeler Street to Pine Street they are regulated by the “Shopfront” street type.

New development in the Shopfront street type is encouraged to provide a mix of retail and residential uses. Along Santa Rosa Avenue the Shopfront street type specifies that buildings should be built up to the street frontage or back of sidewalk. Any recess or setback shall be associated with building entry or public space. Ground floor uses need to be a minimum of 12 feet high to provide generous retail environment. Building entries and publicly accessible space should face Santa Rosa Avenue. No off-street parking is allowed within 20 feet of the street frontage or back of sidewalk.

New development in the Boulevard street type is intended to set back from the street property line 10 feet to allow a broad canopy of regularly spaced street trees. Commercial or residential uses are allowed at the ground floor, and entries should face the primary street. No off-street parking is allowed within 20 feet of the street frontage or back of sidewalk.

The Santa Rosa Avenue Corridor Plan has developed a streetscape plan that accommodates bicycles and a median in the street right-of-way, but it only allows for 1 to 4 feet of sidewalk widening on the east side of the street, and existing sidewalks along the corridor are narrow. For this reason, the following supplemental guidelines should be followed when future development occurs in the corridor:

- New development on the west side of Santa Rosa Avenue from Wheeler Street to Pine Street (Shopfront Street Type) should set back an additional 5 feet from the street frontage or back of sidewalk to allow for wider sidewalks.
- New development on the east side of Santa Rosa Avenue from Wheeler Street to Pine Street (Shopfront street type) should follow the Shopfront street type in order to relate to the existing context of buildings built up to the street frontage or back of sidewalk.
Design Guidelines

SANTA ROSA AVENUE CORRIDOR PLAN
CITY OF SANTA ROSA

♦ New development on both sides of Santa Rosa Avenue from Sonoma Avenue to Wheeler Street and from Pine Street to A Street should follow the Boulevard street type setback of 10 feet to allow for wider sidewalks.

♦ The area within setbacks (between the existing sidewalk and the building) should be continuous and publicly accessible pedestrian sidewalk space.

b. Off-Street Parking

New development should follow Development Guidelines from the Downtown Station Area Specific Plan which governs off-street parking. These guidelines ensure that new buildings face the street with pedestrian friendly activity rather than parking lots. In addition to these existing guidelines, the Santa Rosa Avenue Corridor Plan contains the following additional guidelines:

♦ Access to private off-street parking should be located on side streets rather than Santa Rosa Avenue wherever possible.

♦ Access to public off-street parking (retail parking, for example) should also be located on side streets, and should be well signed with attractively designed signage indicating public parking.

♦ Curb cuts for driveways along Santa Rosa Avenue should be minimized where possible, either by providing access from side streets, combining two driveways into one, or sharing parking access with neighboring parcels. This will lessen potential conflict between pedestrians and autos on Santa Rosa Avenue, and will allow more continuous curb space for on-street parking.

♦ Access driveways should be located away from street intersections to help alleviate turning vehicle conflicts.

♦ Driveways leading from ground floor parking in buildings should have appropriate warning devices for pedestrians on sidewalks. These can be mirrors or flashers to alert pedestrians to cars leaving buildings.

♦ Provision should be made in every new development to provide adequate bicycle parking, including both public parking for visitors and private parking for residents or employees.

c. On-Street Parking

On-street parking is an important component of the Plan. Every effort has been made to minimize the loss of parking resulting from the implementation of the plan. Therefore, the following guidelines should be followed to ensure that the remaining on-street parking supply is maintained and expanded.

♦ This Corridor Plan eliminates on-street parking on the west side of Santa Rosa Avenue south of Sebastopol Avenue. Many of the parcels along this stretch are quite large and take up a half block or more. For this reason, these guidelines recommend that private property owners planning new development should consider moving the curb line to the west to allow for the return of on-street parking on that side of the street.

♦ The existing on-street parking supply is very inefficient due to the inconsistent nature of curb cuts, red curbs, bus stops, etc. New development should help expand the amount of parking
available on Santa Rosa Avenue by minimizing curb cuts and thinking carefully about locations of obstacles such as fire hydrants, bus stops and landscaping.

- Any new on-street parking will be required to meet City Standards for dimensions and pavement markings and should maximize the supply of spaces.
CHAPTER 5: REALIZING THE VISION

This chapter summarizes the next steps to realizing the vision of the Santa Rosa Avenue Corridor Plan (the Plan), the conceptual cost estimate developed for the Plan, and potential funding mechanisms to implement the Plan.

1. CONCEPTUAL COST ESTIMATE

Conceptual cost estimates were developed for the streetscape improvements. Conceptual cost estimates are based on 2010 construction costs with a generous 30 percent contingency added for unknown conditions and further design development of project improvements. The total cost of all projects, including Civil Engineering and Utility Cost, is estimated at $4,681,826. This estimate includes all of the streetscape recommendations and the additional soft costs: Project Management (5%); Design Fee (15%), Construction Management, Survey, Testing (15%). A list of the conceptual cost estimates per type of recommendation is included in Table 5-1 below. The complete cost estimation for all recommendations and additional Civil Engineering components is included in Appendix D.

<table>
<thead>
<tr>
<th>Conceptual Cost</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway and Sidewalk Reconfiguration &amp; Civil Engineering</td>
<td>$1,568,645</td>
</tr>
<tr>
<td>Roadway Striping</td>
<td>$40,452</td>
</tr>
<tr>
<td>Landscape and Irrigation Improvements</td>
<td>$476,110</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>$60,000</td>
</tr>
<tr>
<td>Lighting and Electrical Improvements</td>
<td>$522,500</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$2,667,707</td>
</tr>
<tr>
<td>Construction Contingency (30%)</td>
<td>$800,312</td>
</tr>
<tr>
<td>Soft Costs (Project Management, Design Fee, Construction Management, Survey, Testing)</td>
<td>$1,213,807</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$4,681,826</td>
</tr>
</tbody>
</table>

The conceptual cost estimate does not include costs for the potential LID strategies discussed in Chapter 3 given that further study and design will be necessary to determine which LID strategies are most appropriate for the Corridor. It is likely that incorporating LID strategies into the streetscape plan will entail additional design and construction costs. However, LID is also associated with numerous cost savings, including reduced costs of stormwater management and energy use as well as numerous environmental benefits.

There currently exists a 3- to 4-foot-deep strip of concrete beneath the roadway in the center of Santa Rosa Avenue, however little is know regarding the exact location and depth. Given the uncertainty surrounding this, no costs have been incorporated into the conceptual cost estimate.
Further analysis and design will need to be done in order to understand the implications of this limitation on the design and associated cost.

2. PHASING

Ideally, implementation of the Plan would entail design and construction of the elements identified in the Plan as a single cohesive project. This would require identifying funding to pay for the cost described above. However, availability of such funding is uncertain. One approach to implementation given funding constraints would be to prioritize improvements that are relatively low-cost and can be easily implemented in the short-term. Low-cost recommendations that require minimal further study and/or extensive coordination with other recommendations are identified as short-term improvements.

The long-term improvements are the recommendations that will require more design development, entail higher costs, and should be implemented in coordination with other recommendations. Although it may be possible to implement some of the long-term recommendations in isolation, a comprehensive construction plan for the long-term solutions is the most cost-effective and efficient project management strategy. The recommendations are identified as either short-term or long-term in Table 5-2 below.

<table>
<thead>
<tr>
<th>Table 5-2</th>
<th>Project Phasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-Term</td>
<td>Long-Term</td>
</tr>
<tr>
<td>Roadway &amp; Bike Lane Striping</td>
<td>Traffic Signal at Mill Street/Sebastopol Intersection</td>
</tr>
<tr>
<td>Bus Stop Relocation</td>
<td>Pedestrian Lighting</td>
</tr>
<tr>
<td>Crosswalk Striping</td>
<td>Medians and Landscaping</td>
</tr>
<tr>
<td>Bulbout Striping (temporary roadway striping of bulbouts to indicate to drivers the location pedestrian areas)</td>
<td>Widened Sidewalks</td>
</tr>
<tr>
<td>Public Art</td>
<td>New Sidewalks and Sidewalk Improvements</td>
</tr>
</tbody>
</table>
| Street Trees (only in locations without widened sidewalks or bulbouts) | Bulbout \n
3. IMPLEMENTATION STRATEGY

As noted at the outset of this planning process, no funding has been identified for any improvements recommended by this Plan. Because of this, the timing of implementation of various components of this Plan will vary. Different portions of the Plan may need to be advanced before others in order to be more competitive for a particular funding opportunity.

Despite these circumstances, having a community-based plan is an important first step to becoming eligible for many sources of grant funding, as well as to being considered for City discretionary funding (when and if this becomes available in the future). Implementing the recommendations...
of the Plan will require the on-going efforts of many, including neighbors, business owners, property owners, developers, volunteer organizations, and the City.

a. Adoption of the Plan
The first step towards implementation is City Council adoption of the Plan. Adoption of the Plan will establish City Council support of the Plan recommendations and allow the Plan to move forward as a vision for the Corridor. City Council support will also be necessary in order for City staff to move forward with identifying potential funding for further design and construction of the Plan.

b. Further Design and Engineering as Necessary
An additional step towards implementing the Plan is to develop a complete set of construction documents, which would identify specifically how this conceptual design can be constructed. An engineering survey of the existing roadway conditions will be necessary to identify the exact parameters of the existing streetscape. The survey will identify the existing utilities and this conceptual streetscape plan will likely need to be revised to coordinate with the existing utility infrastructure. Additionally, as the design is further refined the exact dimension and geometry of bulbouts, installation and placement of signs, lights and pavement markings would be evaluated in greater detail.

c. Apply for Grants to Fund Improvements
As previously mentioned, the first step in acquiring grant funding for design and construction projects is the development of a community-vetted comprehensive vision for the future. This Plan identifies a clear vision for the Corridor and represents a commitment of the community and City towards the implementation of this Plan. This document can be used as supporting material to help qualify for further design and construction funding. Potential funding sources are identified below.

4. POTENTIAL FUNDING SOURCES

The purpose of this section is to identify funding opportunities that might be utilized to fund the implementation of the recommendations presented in this Plan. This section outlines the types of funding available, briefly describes how the funds can be used, and the process of attaining the funds. The funding opportunities listed below include funding for further planning and construction/implementation.

Available funding is affected by the economic climate. As a result this list is subject to change. Applications for the majority of the grant funding opportunities would need to be pursued by the City of Santa Rosa.

City of Santa Rosa Capital Improvement Program

The City of Santa Rosa Capital Improvement Program is programmed on a yearly basis. The Capital Improvement Plan is a long-range planning tool. Items included in the Capital Improvement Plan are prioritized based on need and the amount of funding available. Improvement recom-
Conditions of Approval, Impact Fees, and Special Districts

As a condition of approval for new development, the City of Santa Rosa may require that a developer provide certain improvements related to potential impacts of a proposed project, such as sidewalk improvements or transit amenities. Alternatively, developers may contribute funding in support of neighborhood infrastructure and needs in the form of impact fees (payments required by local governments of new development for the purpose of providing new or expanded public capital facilities). Many cities develop a citywide traffic impact fee (TIF) in order to allow for a mechanism for individual development projects that may contribute to cumulative traffic impacts (possibly at intersections a substantial distance from a the proposed project site) to pay a proportionate or “fair share” towards a capital project providing service to that development.

Assessment Districts

Establishing special (taxation) districts, such as a Mello-Roos Community Facilities District (CFD) is also a potential way to fund public improvements in the Plan Area. The Mello-Roos Community Facilities Act of 1982 allows any county, city, special district, school district or joint powers authority to establish a Mello-Roos CFD which allows for financing of public improvements and services through taxation within the district. The services and improvements that Mello-Roos CFDs can finance include streets, sewer systems and other basic infrastructure. A CFD is created by a sponsoring local government agency and includes all properties that will benefit from the improvements to be constructed or the services to be provided. A CFD cannot be formed without a two-thirds majority vote of residents living within the proposed boundaries—often a substantial challenge to successfully establishing such a district. Once the CFD is approved, a Special Tax Lien is placed against each property in the CFD and property owners pay a Special Tax annually.

Redevelopment

The Corridor is situated within the boundaries of both the Gateways and the Santa Rosa Center Redevelopment Project Areas. Although it is unlikely that redevelopment would fully fund the project, contribution to such public improvements are an allowable expenditure of tax increment revenues from both districts. Redevelopment contributions often provide a critical local match to other sources in capital projects like this one.

Federal, State, and Local/Regional Grant Programs

This section focuses primarily on funds available through grant programs (with some exceptions). Each of the fund sources requires a competitive grant application process. Many of the funding sources discussed below are already in use by relevant agencies; securing funding for implementing improvements described in this Plan is likely to be an ongoing challenge.
Sources of public sector funding have been roughly categorized into three groups: federal, State, and local/regional programs. These potential funding sources are summarized by project type in Table 5-3. A final section of this chapter discusses additional private funding opportunities.

**Table 5-3 Potential Public Funding Sources by Project Type**

<table>
<thead>
<tr>
<th>Projects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Facility</td>
<td>• Congestion Mitigation and Air Quality Improvement Program</td>
</tr>
<tr>
<td>Improvements</td>
<td>• Community Development Block Grant Program</td>
</tr>
<tr>
<td></td>
<td>• Safe Routes to School</td>
</tr>
<tr>
<td></td>
<td>• Highway Safety Improvement Program</td>
</tr>
<tr>
<td></td>
<td>• Regional Bicycle and Pedestrian Program</td>
</tr>
<tr>
<td></td>
<td>• Safe Routes to Transit</td>
</tr>
<tr>
<td></td>
<td>• Redevelopment</td>
</tr>
<tr>
<td>Bicycle Facility</td>
<td>• Surface Transportation Program</td>
</tr>
<tr>
<td>Improvements</td>
<td>• Congestion Mitigation and Air Quality Improvement Program</td>
</tr>
<tr>
<td></td>
<td>• Safe Routes to School</td>
</tr>
<tr>
<td></td>
<td>• Highway Safety Improvement Program</td>
</tr>
<tr>
<td></td>
<td>• Transportation for Livable Communities</td>
</tr>
<tr>
<td></td>
<td>• Regional Bicycle and Pedestrian Program</td>
</tr>
<tr>
<td></td>
<td>• Transportation Fund for Clean Air</td>
</tr>
<tr>
<td></td>
<td>• Safe Routes to Transit</td>
</tr>
<tr>
<td></td>
<td>• Redevelopment</td>
</tr>
<tr>
<td>Transit</td>
<td>• Surface Transportation Program</td>
</tr>
<tr>
<td>Improvements</td>
<td>• Transportation for Livable Communities</td>
</tr>
<tr>
<td></td>
<td>• Transportation Fund for Clean Air</td>
</tr>
<tr>
<td></td>
<td>• Safe Routes to Transit</td>
</tr>
<tr>
<td></td>
<td>• Redevelopment</td>
</tr>
</tbody>
</table>

a. Federal Programs
   i. Safe Routes to School
       Building on Safe Routes to School (SRTS) programs initiated in California and other states, a new federal program was initiated under SAFETEA-LU. The program is intended to promote bicycling and walking to school among children in kindergarten through 8th grade and to provide for increased safety for children bicycling and walking. Both infrastructure projects and non-infrastructure projects (such as educational programming) are eligible for funding. Eligible applicants include State, local, and regional agencies; schools or school districts; and non-profit organizations. Caltrans administers the SRTS program through its Division of Local Assistance. The annual apportionment to California for the federal SRTS program was $22.58 million in 2009.

   ii. Congestion Mitigation and Air Quality Improvement Program
       Congestion Mitigation and Air Quality Improvement Program (CMAQ) is a federal program supporting a range of projects that reduce transportation-related air emissions in air quality nonattainment areas. The San Francisco Bay Area is currently in a nonattainment area for which CMAQ funds are available. Eligible projects include (but are not limited to) bicycle and pedestrian facilities programs. CMAQ funds are administered by MTC and are targeted to the needs according to
the priorities of MTC’s Regional Transportation Plan. CMAQ funds are distributed within Sonoma County by the SCTA.

iii. Highway Safety Improvement Program
The Highway Safety Improvement Program is a federal safety program that provides funds for safety improvements on all public roads and highways (including publicly-owned bicycle and pedestrian pathways). These funds serve to eliminate or reduce the number and/or severity of traffic accidents at locations selected for improvement. Eligible activities include roadway modifications, installation of traffic signals, roadway striping, installation of curb ramps and crosswalks, and project engineering and construction. The program is administered by Caltrans, and funding is awarded annually on a competitive basis.

iv. Regional Bicycle and Pedestrian Program
MTC created the Regional Bicycle and Pedestrian Program in 2003 to fund the construction of the Regional Bicycle Network, regionally-significant pedestrian projects, as well as bicycle and pedestrian projects serving schools or transit. MTC has committed $200 million in the Transportation 2030 Plan to support the regional program over a 25-year period ($8 million each year). The program is administered through the Sonoma County Transportation Authority.

b. State Programs
The following discussion describes State funds that could be used for transportation solutions that were identified in the Plan. Each of the fund sources requires a competitive grant application process. Funds for transportation-related projects are available from the Transportation Development Act (TDA), and from various State programs and agencies including the California Department of Transportation (Caltrans) and the California Office of Traffic Safety (OTS).

i. Transportation Development Act Article 3
TDA funds generated from a ¼-cent of the general state sales tax are returned to the source counties to fund transportation projects. TDA Article 3 provides for 2 percent of County TDA funds to be set aside for bicycle and pedestrian projects. Eligible projects include right-of-way acquisition; planning, design, and engineering; and construction of bicycle and pedestrian infrastructure (including retrofitting to meet ADA requirements) and related facilities.

ii. Bicycle Transportation Account
The Caltrans Bicycle Transportation Account (BTA) provides State funds on a competitive basis for City and County projects that improve safety and convenience for bicycle commuters, including design, engineering, and construction of bicycle lanes and paths. To be eligible for BTA funds, a City or County must adopt a Bicycle Transportation Plan that complies with Streets and Highways Code Section 891.2 within four years prior to the year of application. The City of Santa Rosa has a Bicycle and Pedestrian Master Plan, which was adopted in 2001, and is currently finalizing an update to the plan, which is scheduled to be finished in 2010. Nineteen projects throughout the state received BTA funding during FY 2008-2009, for a total of $7.2 million in BTA funds. BTA funds are awarded by Caltrans on an annual basis, with a call for proposals typically in the Fall.
iii. **Safe Routes to School**
The California State Safe Routes to School (SR2S) Program pre-dates the newer federal program established under SAFETEA-LU in 2005 (discussed in the section above). This program provides funding for sidewalk improvements, traffic calming and speed reduction measures, pedestrian and bicycle crossing improvements, on-street and off-street bicycle facilities, and traffic diversion improvements. To qualify for this program the project must be within the vicinity of a school. Luther Burbank Elementary School is located on A Street a block away from Santa Rosa Avenue. The State program was established by State legislation with a sunset date of January 1, 2008. However, with the passage of AB 57 in 2007, the State SR2S program was extended indefinitely. An eighth cycle (for FY 08/09 and 09/10) was announced on January 15, 2009 with a total of $48.5 million in statewide funding.

iv. **Urban Greening for Sustainable Communities Program**
The Strategic Growth Council was created in 2008 by Governor Arnold Schwarzenegger. State Legislation SB 732 formed a committee to coordinate the State agency’s goals to improve air and water quality, protect natural resource and agriculture lands, increase the availability of affordable housing, improve infrastructure systems, promote public health, and assist State and local entities in the planning of sustainable communities and meeting AB 32 goals. The Urban Greening for Sustainable Communities Program will provide funds to assist entities to develop urban greening master plans or implement urban greening improvements. Urban Greening projects will use natural systems, or systems that mimic natural systems, or create, enhance, or expand community green spaces. The recommendations for new street trees potential stormwater mitigation improvements as part of this Plan would be eligible for funding under this grant program.

The Strategic Growth Council is currently ironing out the funding requirements for the Urban Greening Implementation and Planning Programs. The implementation program anticipates a total of two funding cycles with up to $31.5 million available in Fiscal Year 2010/11 and up to $31.5 million in Fiscal Year 2011/12. Grant funds will be awarded to a city, county, or nonprofit organization. They anticipate a total of $60 million dollars available to cities, counties, Metropolitan Planning Organizations (MPOs), Joint Powers Authorities (JPAs), Regional Transportation Planning Agencies (RTPAs), and Council of Governments (COGs) for the Planning programs to be distributed in 2 or 3 funding cycles.

c. **Regional/Local Programs**
Funds are available from Bay Area regional agencies, such as MTC, as well as from Sonoma County.

i. **Transportation Fund for Clean Air**
The Transportation Fund for Clean Air (TFCA) is a grant program funded by a $4 surcharge on motor vehicles registered in the Bay Area, with approximately $22 million per year in regionwide revenue. TFCA’s goal is to implement cost-effective projects that will decrease motor vehicle emissions. The fund covers a wide range of project types, including bicycle facility improvements such as bicycle lanes, bicycle racks, and projects to enhance the availability of transit information.

Funds are available through two main channels: the Regional Fund administered by Bay Area Air Quality Management District (BAAQMD), which allocates 60 percent of revenues, and the County
Program manager Fund via the Congestion Management Agency in the respective County. Within Sonoma County the SCTA is responsible for the County’s funds. Any public agency within the BAAQMD’s jurisdiction can apply for TFCA funds, either through the BAAQMD or the relevant Congestion Management Agency. Non-public entities can also apply for TFCA grants, directly or via public agency, to sponsor and implement clean air vehicle projects only.

**ii. Safe Routes to Transit**

Funded through Regional Measure 2, this program supports capital improvement projects, such as planning and construction development and implementation, which enhance pedestrian and bicycle access to transit stations. Funding is awarded competitively. The program is administered by Transform (formerly the Transportation and Land Use Coalition, or “TALC”). Transform is a Bay Area partnership of over 90 groups that develops and forwards a range of projects, programs, and campaigns supporting sustainability and equity in the land use, housing, and transportation arenas. Priority for funding is given to projects that best provide access to regional transit, which is considered a transit service that crosses the bay. This Plan would qualify because one of the stated goals of the project is to create better pedestrian and bicycle linkages to the downtown Santa Rosa SMART Station.
Appendix A

Community Meeting Summaries
1. COMMUNITY WORKSHOP #1

On Wednesday October 21, 2009, the First Community Workshop for the Santa Rosa Avenue Corridor Plan was held to review the existing conditions analysis of the corridor and discuss potential goals and visions for the project. Approximately 50 people attended the meeting.

Bruce Brubaker, DC&E Associate Principal, gave a presentation on the existing urban design context and the traffic conditions analysis performed on the corridor as part of the background research for the project. He also presented a toolbox of potential interventions that could be used along the street to make the corridor more livable and safe. Meeting participants were then divided into small groups of 8-10 people and asked to use the tools presented to comment on significant areas of concern and discuss potential improvements to the corridor. Each group was asked to report their ideas and suggested improvements back to the large group.

Community members were eager to express their concerns and share their first-hand observations regarding the corridor. The participants of the small group exercise identified key issues in the corridor and suggested potential improvements to address the issues. Groups actively discussed and debated the benefits and drawbacks of the potential improvements. The following is a brief synopsis of group discussions.

GROUP #1

Key Issues

- There is concern that the area surrounding the intersection of Santa Rosa Avenue and Sonoma Avenue should be the heart of the community and help to bring the neighborhoods to the east and west of Santa Rosa Avenue together.
- The group had concerns regarding the potential loss of parking, especially for existing businesses along the corridor and for Juilliard Park and Luther Burbank Home and Gardens.
- Speeding is a concern along the corridor, and decreasing speeding should be a major goal for the project.
- There is a need to time the traffic signal along the corridor.
- Vehicles waiting to turn left cause a lot of congestion in the corridor.
- The group discussed and generally supported the benefits of future mixed-use development along the corridor that would lead to a livelier, safe and livable neighborhood center and improved quality of life.
Solutions

- The group was divided on whether narrowing the road from four lanes to three lanes was a good idea. A number of group members supported the idea as a method to slow traffic. However, other group members were concerned about increased congestion and about the ability of emergency vehicles to navigate the corridor.

- They supported the addition of left turn lanes along the corridor, either consistently or in appropriate locations.

- The group supported improving pedestrian crossings along the corridor and most members supported the ideas of bulbouts.

- They suggested reducing and reconfiguring a number of curb cuts within the corridor.

- The group supported the addition of trees and art to the corridor area.

- The group neither supported nor opposed the idea of a roundabout at the intersection of Santa Rosa Avenue and Sonoma Avenue.

GROUP #2

Key Issues

- Speeds along the corridors are too fast, and it is difficult to make left turns from Santa Rosa Avenue.

- The sidewalks are uneven because of the number of driveways along the corridor.

- The sidewalks along the corridor are too narrow and there is no buffer between the sidewalk and vehicles.

- The existing crosswalks don't provide enough safety for pedestrians.

- The corridor is unsafe for biking.

- There is the potential for parking and traffic spillover into the adjacent neighborhoods and the need for changes along Santa Rosa Avenue.

Solutions

- The group favored reducing the number of travel lanes along the corridor and installing left turn lanes.

- The group suggested that the utilities in the corridor should be under grounded.

- The group supported the need for pedestrian scaled lights within the corridor.

- The group suggested that a buffer could be a planting strip for landscaping. They also suggested if the sidewalks are widened, the driveway aprons could be located at the front of the sidewalk, so that the back of the sidewalk is more continuous.

- The group suggested a new traffic signal at the Sebastopol Avenue/Mill Street intersection.

- The group felt that a northbound bike lane is needed along Santa Rosa Avenue, and that it would be best to have a bike lane in the southbound direction as well.
• The group also suggested dead-ending Henley Street.

• The group supported parallel parking, shared parking between businesses, motorcycle parking and bicycle parking.

• The group supported the ideas of gateways on either end of the corridor and suggested a statue of Luther Burbank and Sonoma Avenue and a mural under Highway 12.

• **The group felt a roundabout at Sonoma Avenue could potentially work.**

• The group suggested a trolley system could be implemented to connect the neighborhood to downtown Santa Rosa.

---

**GROUP #3**

**Key Issues**

• Speeding along the corridor is a major concern.

• There is concern for the safety of bicyclists traveling along Santa Rosa Avenue.

• Buildings that are too close to the sidewalk have the potential to block vision of cars turning onto side streets.

• The intersection of Sonoma Avenue and Santa Rosa Avenue should be better looking.

• There is a need for more senior serving uses along the corridor.

• There is a need to improve the existing crosswalks and make them more prominent and attractive and include marked crosswalks on all four sides.

**Solutions**

• **The group suggested one travel lane in each direction with a center median and occasional left turn pockets.**

• The group supported the potential for mixed-use along the corridor, with first floor commercial and second floor residential.

• The group was worried that pedestrian refuges are unsafe.

• **The group liked the idea of a roundabout at Sonoma Avenue, but had some concerns about emergency vehicle access, bicyclist navigation, and general safety concerns.**

• The group supported the addition of bicycle lanes along Santa Rosa Avenue.

• The group supported an architectural theme for the corridor that is consistent with the downtown.

• The group supported the idea of wider sidewalks, which would enable outdoor dining, music, and other uses.

• The group supported new lighting, especially near Juilliard Park

• The group supported the addition of benches, street trees, trashcans and art along the corridor.
• The group suggested that one of the empty lots along the corridor be developed as an electric car charging station.

• Some group members supported diagonal parking in conjunction with a reduction to one travel lane. Other group members had concerns about the safety of backing out of diagonal parking spots.

GROUP #5

Key Issues

• There is a lack of neighborhood services along the corridor and the lack of a walkable market.

• There is a lack of crosswalks along the corridor and the lack of any street furniture, landscaping and shade trees.

• There is too much traffic on Santa Rosa Avenue.

Solutions

• Some group members supported the potential for a road diet, but there was concern for potential traffic impacts to neighborhood streets resulting from a road diet, especially Oak Street and Wheeler Street.

• The group supported more pedestrian-scaled lighting along the corridor and especially in association with crosswalk. They suggested that lighting could match the existing lighting at Juilliard Park.

• The group suggested creating a median down the center of Santa Rosa Avenue.

• The group suggested the intersection of Sebastopol Road/Mill Street should have bulbouts and a new traffic signal.

• The group supported the potential for future mixed use development along the corridor, and the opportunity to provide housing/working space for new artist.

• The group felt that bike lanes on Sonoma Avenue were important and supported bike facilities and connectivity. They suggested a northbound bike lane on Santa Rosa Avenue.

• The group suggested changing the number of curb cuts along the corridor and widening the sidewalk.

• The group supported the idea of a potential roundabout at the Sonoma Avenue Intersection.

• The group supported the idea of potential gateway improvements for the corridor.

• The group suggested implementing a Jitney system (or similar short shuttle system) to improve the transit service between the corridor and downtown.

• The group suggested diagonal parking on the west side of the street near the center of the corridor.
GROUP #6

Key Issues

- The corridor is ugly, hot, and has too much asphalt.
- The corridor is an unsafe pedestrian environment. Drivers don’t stop for pedestrians throughout the corridor, even at the pedestrian activated warning beacon.
- The corridor is not safe, and Juilliard Park attracts the homeless.
- There is concern regarding the potential for out existing businesses to be forced out.

Solutions

- The group felt that the corridor should have more trees and landscaping.
- The group supported bicycle accessibility on Santa Rosa Avenue.
- The group felt the crosswalk between Juilliard Park and Luther Burbank Home and Gardens should be improved.
- The group supported wider sidewalks, and the use of wider sidewalks to narrow the street (bulbouts).
- The group suggested a trolley service between the corridor and downtown.
- The group did not think a road diet would work on the street and was concerned about emergency vehicle access.
- The group supported artwork at the Highway 12 underpass.
- Some group members suggested considering losing parking on one side of the street, or combining parking into shared parking areas.
- The group suggested including pedestrian refugee islands with trees, in-ground blinking lights, and bulbouts at strategic pedestrian crosswalks.
- The group was uncertain about the potential for a roundabout at the Sonoma Avenue Intersection.
- The group suggested A Street could be used as a bicycle lane.

GROUP #7

Key Issues

- Speeding along Santa Rosa Avenue is a problem.
- The corridor is an unsafe pedestrian environment, especially at the Charles Street & Mill Street intersections.
- The corridor is ugly.
- There is a lack of outdoor seating or businesses activating the street along the corridor.
- There are too many automobile and motel uses along the corridor.
- The cross slopes on the sidewalks are too steep.
• There are too many curb cuts along the corridor.
• There is a need to indicate the accessible path of travel along the corridor.
• Bike safety along the corridor is a concern.

Solutions

• The group supported the idea of bulbouts or refuge medians at corners and mid-block crossings.
• The group was divided about the potential for a roundabout at the intersection of Sonoma Avenue and Santa Rosa Avenue.
• The group felt that there should be more pedestrian lights throughout the corridor (similar to the lights at Juilliard Park), and there should be a reduction of the cobra head street lights throughout the corridor.
• The group supported bike access throughout the corridor.
• The group suggested extending the feeling of Juilliard Park and Burbank Park and Gardens down the street, with extended landscaping and seating at bulbouts.
• The group suggested creating a self-guided trail along the corridor to inform and educate people about the history of the neighborhood using plaques.
• The group supported the idea of gateways and banners at the Sonoma Avenue Intersection and under Highway 12 to enhance connectivity and identity.
• The group supported the idea of extending the life of downtown into the corridor.
• The group suggested a new grocery store for one of the existing vacant lots.
• The group did not support the idea of a road diet, because of concerns for congestion.

2. COMMUNITY WORKSHOP #2

On Wednesday Thursday February 4th 2010, the second Community Workshop for the Santa Rosa Avenue Corridor Plan was held to review the two proposed alternatives for the corridor and gather the community’s insight regarding the alternatives. Approximately 34 people attended the meeting.

Bruce Brubaker, DC&E Associate Principal, presented and overview of the project, the project goals and then described the key features of the two proposed alternatives: Alternative A - Multimodal Transformation and Alternative B - Multimodal Enhancement. The participants were given an opportunity to ask questions regarding the alternatives and share their opinions. Zack Matley of W-Trans discussed the traffic implications of the two alternatives and presented the conceptual roundabout option for the intersection of Santa Rosa Avenue and Sonoma Avenue.

After the large group presentations, the meeting participants were divided into four small groups of 8-10 people and asked to compare and discuss the two alternatives. The groups were then
asked to try to come to a consensus about which alternative they preferred, and then discuss any potential changes they would like to propose. The workshop participants were also asked to fill out a questionnaire regarding their opinions about the two alternatives. Each group was asked to report their choice of a preferred alternative and input on the potential design to the large group.

The groups actively discussed and debated the benefits and drawbacks of the proposed alternatives. Below is a brief summary of feedback from the small group exercise.

**Group #1**

The group had complete agreement regarding the choice of Alternative A: Multimodal Transformation as the preferred alternative. The group's comments and suggestions for the alternative included:

- Include enough room at intersections for cars to turn right, potentially removing some bulbouts.
- Include turnouts for buses.
- Add benches at bus stops.
- The group questioned whether Mill Street/Sebastopol Avenue needs a light at this intersection because the street is a residential street, which is only two blocks long in either direction.
- The groups suggested carefully considering the location of medians, to ensure that left hand turns into and out of driveways are maintained at active business driveways.
- The group suggested 6-foot bike lanes.
- Reduce the speed limit to 25 mph.
- In general the group felt that roundabouts are a good idea, although they did not feel very strongly about them either way. They liked the optional bike and pedestrian paths even if pedestrians do have to walk a little further than they already do. They felt that the roundabout could be beautiful and good for the environment.

**Group #2**

The majority of the group favored Alternative A: Multimodal Transformation, but one person favored Alternative B: Multimodal Enhancement. The group’s comments and suggestions for the alternative included:

- The group liked the center turn pockets.
- There is concern that the trees shown in front of Juilliard Park and Luther Burbank Home and Gardens would block the view into the parks and compete with the parks.
- The group suggested that the proposed lane configuration at northbound Sonoma Avenue be changed from the proposed configuration to one combined left and thru lane, one thru lane, a bike lane, and a right turn only lane.
- The group suggested keeping the crosswalk north of Charles Street to remain where it is in order to avoid the addition of a bulbouts and loss of parking.
- The group suggested extending the study area to Petaluma Boulevards road of the Freeway on-ramp.
- The group wanted to include garbage cans, recycle bins, benches, planter boxes along the corridor.
- The group likes the medians and trees in the middle of the street.
• The group questioned the need for a signal at Mill Street/Sebastopol Avenue because it will encourage people to drive down the residential street.
• The group thought moving the bus stops is a good idea.
• The group did not have strong feelings about the roundabout either way.

**Group #3**

The group had complete agreement regarding the choice of Alternative A: Multimodal Transformation as the preferred alternative. The group’s comments and suggestions for the alternative included:

• The group supported the idea of extending the study area to Petaluma Hill Road.
• The group suggested using the freeway underpass as an opportunity to create a gateway for the entrance to the neighborhood.
• The group suggested signs further south on Santa Rosa Avenue to direct people shopping at Costco and the Santa Rosa Marketplace to use the Freeway rather than Santa Rosa Avenue to travel north.
• The group suggested 2 right turn lanes onto Bennett Valley Road to access the freeway.
• The group suggested moving the Charles Street crosswalk to the north side of the intersection to save parking at this location.
• The group agreed that they were willing to trade slower traffic in the corridor for the overall benefits of the Alternative.
• The group questioned the addition of street trees in front of Juilliard Park and Luther Burbank Home and Gardens because the trees will compete with the existing landscaping at those locations.
• The group suggested more freeway signs within the greater area to help people to find their way to the freeway.
• The group suggested that with the suggested improvements to Santa Rosa Avenue, A Street may need some traffic calming interventions.
• Approximately 2/3 of the group members were in favor of the roundabout and 1/3 of the group members were against the roundabout.
• Regarding the roundabout, there were concerns with the blockage of the view to downtown and the roundabout creating too much blockage to the road in conjunction with the Courthouse Square Reunification.
• Some group members felt the roundabout could be a beautiful addition to the city.
• Some participants were concerned with the high cost of a roundabout, and felt the money could be better spent along the street.

**Group #4**

The group had complete agreement regarding the choice of Alternative A: Multimodal Transformation as the preferred alternative. The group’s comments and suggestions for the alternative included:

• Many of the group members live within the area and walk there and they supported the medians and pedestrian refugee areas.
• The group was more or less in favor of the roundabout, but felt that it doesn’t need to require two lanes in each direction.
• The group expressed concerns with the potential additional traffic on A Street as a result of the Alternative.
• The group suggested that there are a number of other streets within the city which had similar traffic volumes, which had successful road diets.
• The group was concerned that the trees in front of Juilliard Park and Luther Burbank Home and Gardens have the potential to block the areas.
• The group liked the idea of a gateway for entering the neighborhood.
• The group suggested that signage could be added near the Santa Rosa Marketplace to encourage people to use the freeway rather than Santa Rosa Avenue.
• The group supported trying to maintain as much parking as possible in front of Luther Burbank Home and Gardens. They felt the perception of parking is good because it encourages shoppers.
• The group suggested considering one-way traffic in the neighboring streets as a method of addressing potential overflow into the neighboring streets.

**Questionnaire Results**

As part of the workshop, participants were asked to complete a questionnaire regarding the alternatives, as well as specific elements to be included in the streetscape plan. Results of the questionnaire are included in the attached tables and generally reflect the outcomes of the small group exercise.

Participants were asked to select their preference among Alternative A, Alternative B, and maintaining existing conditions. Results indicated that 94% of respondents preferred Alternative A and 6% preferred Alternative B. The questionnaire also asked that the respondent indicate their support or opposition for specific design elements. Results indicated support for most elements contained in the alternatives, including bulbouts, widened sidewalks, a signal at the Mill Street intersection, landscaped medians, bike lanes, public art and other pedestrian amenities. There was not strong support for a roundabout, nor was there strong support for maintaining all parking in the corridor, with 91% of respondents supporting some loss of parking to allow for design improvements.

**3. COMMUNITY WORKSHOP #3**

On Monday April 26th 2010, the third Community Workshop for the Santa Rosa Avenue Corridor Plan was held to review the Draft Preferred Alternative for the Corridor and gain the community’s input on the design. Approximately 22 people attended the meeting.

Bruce Brubaker, DC&E Associate Principal, presented an overview of the project, the project goals and then described the key features, and a brief analysis of the potential traffic impacts of the Draft Preferred Alternative. The participants were given an opportunity to ask questions regarding the alternatives and share their opinions.

Rob Sprinkle, of the Traffic Division of the Public Works Department in the City of Santa Rosa gave a presentation of the potential traffic implications that could result as an outcome of the Draft Preferred Alternative. Mr. Sprinkle stated that he is a fan of road-diets in general but he has concerns about this road-diet because of the potential impacts on Level of Service and queues at either end of the Corridor during peak hours. Mr. Sprinkle gave a presentation illustrating the
potential queuing lengths associated with the Draft Preferred Alternative and visualized the potential routes that drivers may take through the adjacent neighborhoods to avoid the traffic.

Following his presentation, Mona Babauta, the Deputy Director of Transit for the City of Santa Rosa, gave a presentation regarding the potential implications that the Draft Preferred Alternative could have on transit operations in the City. She stated that she shares Mr. Sprinkle’s concerns regarding the potential queue lengths and timing during peak hours that could result with the implementation of the Preferred Draft Alternative. Route 19 travels along Santa Rosa Avenue, and is the only Route that serves the neighborhood. There is not a huge ridership within the neighborhood as of yet, but with the potential growth in the neighborhood that is likely to change in the future. Route 19 connects southern Santa Rosa with a number of different employment and education centers. Ms. Babauta is concerned that the potential queues will add more times to the routes and make it hard for the buses to meet their schedules. Increasing route times would result in the need to add more buses, which means hiring more drivers, which entails higher costs. Ms. Babauta fears that if the queues during peak hours interfere with the bus schedule too much, then the route could potentially be taken off of the corridor and diverted to the freeway. This would limit the transit access for people living along the Corridor. Ms. Babauta reminded the community members that multi-modal includes transit, and that a negative impact to transit is a negative impact to the multi-modal access of the Corridor, and that Santa Rosa Avenue is a regional Street and the effects on this street will have an effect on the greater region.

After the presentations, the meeting participants engaged in a large group discussion about their opinions and questions regarding the Draft Preferred Alternative. Key questions and opinions shared and discussed by community members included the following:

- One community member asked how the center median would affect people gaining blocked by a new median. *In the Draft Preferred Alternative people would not have southbound access to driveways on the east side of the street. Customers would need to arrive from the southbound direction. It was discussed that this is a long term plan for the corridor and the medians shown in the Plan may not be built for many years to come.*

- A community member asked if there has been thought as to where people will drive, other than along the Corridor, as a result of the traffic implications. *Rob Sprinkle presented an analysis showing potential routes that drivers may take to avoid the Corridor as a result implementation of the Plan. He suggested that northbound drivers might drive through the neighborhood to the East of Petaluma Hill Road and South of Highway 1, or on Bennett Valley Road, to travel north on E Street. Additionally, some drivers may choose to take Highway 101 northbound. Southbound drivers might cut through the neighborhoods east and west of the corridor, to travel south on A or E Streets.*

- A community member commented that you cannot cut the street to two lanes and not think other streets would be impacted? *It was discussed that this is one of the concerns identified by Rob Sprinkle, and it is likely that adjacent streets will be impacted by more traffic.*

- Someone asked if the plan called for metered or managed parking? The other community members were divided about whether this would be a benefit or a hindrance to the neighborhood. It was stated that there are a number of interests, residential and business, that would need to be balanced in a parking policy. *Presently, the Plan does not include any policy recommendations for parking.*
The reunification of Railroad Square was brought up, and it was suggested that if the square was closed people might avoid Santa Rosa Avenue at all costs? It was questioned whether the traffic numbers took into account the potential traffic changes as a result of the reunification process. The traffic projections did include the reunification of Railroad Square as one of its inputs.

One community member asked if there is anything that the community can do to encourage the City to fund this project in the near future. It was stated that by participating in the planning process the community is already showing its support for the project. The Mayor of Santa Rosa suggested that community members could write letter to the Redevelopment Agency. The Redevelopment Agency is about to elect a Citizens Advisory Committee to advise Redevelopment, and this is an issue that could also be brought to the Citizens Advisory Committee’s attention.

There was a question if readjusting the signal timing could improve the projected traffic impacts? It was explained that the signal timing has been optimized in the traffic models.

A community member asked if we are going to still be using cars in 35 years. He suggested that he is willing to get out of his car and hopes that we will not be using cars as much as we do now.

Another community member stated that cars are not going away and you cannot reduce Santa Rosa Avenue to two lanes and cause congestion just for bicycles.

There was a question regarding how much of a time impact on transit schedules is predicted. That estimate was not predicted.

A community member stated that the City of Santa Rosa is divided by highway 101 and it should be utilized for north and south travel. It was stated that although there is nothing to prevent local use of the highway, highways are designed for regional travel.

It was suggested by one community member that in many big cities there are special timing and schedules for transit during commute hours, and that this might be something that could be considered for transit in this location.

One community member asked how the queues would be affected by a roundabout. Roundabouts would improve the queue length and times, however, for other reasons including Fire Department access, the roundabout is not part of this Plan.

Another community member suggested that as a result of the queue time and length, the Plan will encourage cars to enter the freeway at Colgan Avenue, rather than travel north along the Corridor, which is a good thing because a lot of cars that travel along the Corridor do not belong there.

It was suggested by another community member that a lot of traffic goes thru this neighborhood that doesn’t belong there and doesn’t benefit neighborhood businesses.

One community member reminded the group that when considering the traffic impacts it is important to remember the multiple other benefits to the neighborhood that this Plan would encourage, including walking, bicycling, beautification, etc.

One community member asked why other streets in Santa Rosa Avenue are two lanes, have more traffic and function well? The difference between the streets discussed is that those
streets do not have a merge from four lanes to two, which is what causes the congestion. Some of those streets also do not have traffic lights, which affects traffic flow.

♦ It was suggested that this Plan will serve people in the neighborhood and the downtown, and it is okay if others are encouraged to travel elsewhere.

♦ A community member stated that the neighborhood wants an aesthetically pleasing plan that appeals to people and meets the goals for improving bicycle and pedestrian connections and that this Plan fulfills those needs.

♦ Another community member suggested that there are drawbacks that the neighbors don’t see because they are excited about the aesthetics of the Plan.

At the conclusion of the meeting community members were asked to vote either for or against the Draft Preferred Plan. Three community members voted against the Plan, and the rest voted in support of it.

Before leaving, community members were each given a sticker and asked to vote on a street furniture palette that they felt would be appropriate for the Corridor. Community members were asked to vote for one of three palettes, Historic, Artistic, or Contemporary, all of which were illustrated graphically. The historic palette received the most number of votes, followed by Artistic and then Contemporary.

4. COMMUNITY MEETING #4

On Wednesday September 8th, 2010, the fourth Community Meeting for the Santa Rosa Avenue Corridor Plan was held to review the revised Alternative for the Corridor and gain the community’s input on the design. Approximately 25 people attended the meeting.

Lisa Kranz, City of Santa Rosa, presented an overview of the project, explained why a Revised Alternative was necessary, and gave a brief analysis of the process that was used to develop the Revised Alternative. Bruce Brubaker and Isabelle Minn, DC&E, then gave a presentation of the Revised Alternative. They discussed how the Revised Alternative was similar to and different from the previous existing Draft Alternative. The presentation included a brief discussion of the multimodal impacts of the Revised Alternative. After the presentation, the community was given a chance to ask questions and give comment regarding the project and the Revised Alternative. Following is a summary of the community comments and questions:

♦ One community member expressed surprise to see that there were trees in the median because of the necessity for fire and emergency access. It was discussed that as long as a minimum clearance for fire and emergency is met, they can remain.

♦ There was a question about what the proposed plan does to reduce speeding. It was discussed that traffic calming will be achieved by a number of measures, including the lane reduction, lane width reduction, introduction of a landscaped median and new bulbouts. After implementation of a major design change the City will also reassess the posted speed limits, according to City policy.
A community member asked if cars would be able to turn onto side streets. It was discussed that the Plan does not limit turns off of Santa Rosa Avenue, but does limit the ability to turn left onto Santa Rosa Avenue from Wheeler Street and Pine Street.

There was a question regarding the benefits of a Pedestrian Z-crossing. It was discussed that Pedestrian Z-crossings are beneficial to pedestrians and motorists because the use of offset crosswalks and a refuge island force pedestrians to turn and walk towards the direction of oncoming traffic, which helps alert both pedestrians and motorists to one another’s presence.

A community member asked why the bike lanes had changed from 5 feet to 6 feet. It was discussed that it was felt that a 6 foot lane was more protective of cyclists, especially adjacent to on-street parking.

There was a question if it would be possible to incorporate a dedicated right turn lane at the Sonoma intersection to reduce potential conflicts between bicyclists and vehicles turning right. It was discussed that this had been previously considered and this configuration is not possible given the spatial requirements.

A community member asked how this Plan would be affected by the Mendocino Avenue and Courthouse Square reconfiguration. The traffic analysis has taken into account these planned changes, so they have been incorporated into the Plan.

There was a question about why there was just one crosswalk at Juilliard Park, especially with the events and high number of people. It was discussed that the placement and number of crosswalks is based upon a safety analysis. The goal of crosswalks is to direct people to the safest location. The south side of Wheeler Street is the safest location because it is adjacent to two bulbouts and a pedestrian refuge island.

There was a question regarding where the sidewalks are widened. It was discussed that the sidewalks were widened on the east side of the street whenever possible. This decision was based upon the fact that this side of the street has a number of buildings already built up to the parcel line and has a more limited potential for change (and potential Right-of-way widening) that the west side of the street.

There was a question about if public safety was included in the process. It was discussed that creating a more active street environment, which is a goal of the plan, would have a beneficial impact on the safety of the street. In addition, the implementation of pedestrian scaled lighting would improve safety.

A community member asked about the existing traffic count and where the traffic would go if you reduce a vehicle lane. It was discussed that the reduction of a vehicle lane in the southbound direction was chosen because it would have less of an impact on the traffic diversion than reducing the number of northbound lanes. However, it was acknowledged that the reduction of the lane will increase the congestion on Santa Rosa Avenue in the southbound direction, and may increase adjacent neighborhood traffic as drivers look for alternative routes.

A community member commented that there was an enormous amount of money just spent to widen Highway 101 in the area and that drivers should be directed to use Highway 101 rather than Santa Rosa Avenue. Specifically, there is no signage near Costco/Market Place Center to direct drivers to Highway 101 and a recommendation for signage in this location should be part of the Plan.
• A community member stated that we should consider walking and bicycling as forms of people moving, and even if we are reducing auto use within the corridor we are increasing pedestrian and bicyclist activity, which is still moving people.

• Another community member stated that the goal of transportation linkage to the train station is not being achieved and suggested that something similar to a trolley to link to the train is needed along this corridor.

• Another community member felt that this Revised Alternative was a good compromise between the previous Alternative, and that they would like to see it go forward as soon as possible.

• A community member commented that on a daily basis people still go to the coffee shop thinking it is the Greyhound station. It was recommended that the City and Greyhound make sure to update their materials to prevent people from making this mistake.
APPENDIX B

WORKING ALTERNATIVES
WORKING ALTERNATIVES

This section summarizes the draft alternatives prepared for the Santa Rosa Avenue Corridor Plan and provides more detail than in Chapter 1 of this Plan.

Alternative A: Multimodal Transformation

Alternative A reduces the number of vehicle travel lanes from two lanes in each direction to one lane in each direction and a center lane, which depending on the location alternates between a landscaped median and a dedicated turn lane. Removing a northbound and a southbound vehicle travel lane allows for the inclusion of a dedicated Class II bike lane along the entirety of the street in both directions. As a result of changing the right-of-way dedicated to vehicle travel lanes, there is space available to include a landscaped median at multiple locations along the street, and increase the sidewalk width throughout the corridor. Alternative A also includes pedestrian amenities and safety improvements. Specific design elements for this alternative include the following:

♦ **Bike Lane Improvements:** Alternative A provides a 5-foot wide dedicated Class II bike lane in both the northbound and southbound directions

♦ **Bulbouts:** Bulbouts are a traffic calming tool that reduces speeding by narrowing the street right-of-way and increases visibility for drivers and pedestrians. Bulbouts are customarily located at intersections or important pedestrian mid-block crossings, and are typically a 6-foot extension of the sidewalk and curb. Bulbouts increase pedestrian safety by reducing the distance a pedestrian must cross at an intersection. They also improve visibility by for pedestrians and drivers by allowing pedestrians to stand adjacent to the travel lane at pedestrian crossings, where they are more visible, rather than being visually blocked by vehicles parked in the parking lane. Alternative A includes 8 bulbouts located at important intersections or new and existing mid-block crossings.

♦ **Sidewalk Widening:** As a result of changing the street right-of-way dedicated to vehicles, there is additional right-of-way available to increase the sidewalk width throughout the corridor. Widening the sidewalk will create space for more pedestrian amenities, street trees and landscaping. Depending on the existing right-of-way, sidewalks are widened by between 1 to 4 feet on both sides of the street, resulting in sidewalks widths ranging between 8 to 12 feet along the corridor.

♦ **Crosswalk Improvements:** Alternative A includes two new crosswalks across Santa Rosa Avenue at the Wheeler Street and Palm Street intersections. The alternative also proposes the relocation of existing crosswalks at the Charles Street and Oak Street Intersections to coordinate with the proposed bulbout and median improvements. The reduction in vehicle lanes also reduces the exposure of crossing pedestrians to vehicular traffic. Where crosswalks pass through medians, pedestrians would have a “refuge” area that effectively allows pedestrians to cross one direction of traffic at a time.

♦ **Parking:** Alternative A requires the removal of some existing parking to accommodate the proposed lane configurations, bicycle lanes and bulbouts. All parking figures are estimates
based upon the average of 20-foot parking stalls. Alternative A would require the removal of approximately seven parking spots on the east side of Santa Rosa Avenue in front of Luther Burbank Home and Gardens. Additionally, the alternative would also eliminate approximately 4 to 6 parking spaces throughout the corridor in locations where bulbouts are proposed. The alternative also calls for the consolidation of driveways as part of future development, which would result in the creation of approximately 7 to 10 new on-street parking spaces.

♦ Landscaped Median and Dedicated Center Turn Lane: The removal of the two travel lanes allows for the inclusion of a center turn lane or landscaped median (5 total). The location of the median or turn lane is dependent upon the requirements for cross street entrances and exits. The medians are located adjacent to a number of new and relocated crosswalks, and create opportunities for pedestrian “refuge” areas. In two locations, the intersections with Wheeler Street and Pine Street, the landscaped median prohibits left turns onto Santa Rosa Avenue to improve safety and provide additional pedestrian “refuge” areas.

♦ Sebastopol Avenue/Mill Street Intersection: Alternative A includes a new traffic signal at the intersection of Sebastopol Avenue/Mill Street and Santa Rosa Avenue. The traffic signal would improve pedestrian and bicycle mobility at this central intersection by providing protected crossings. The signal will also create gaps in traffic flow along Santa Rosa Avenue that will allow easier crossings of the street for pedestrians, cyclists, and motorists at adjacent intersections. This signal would also be coordinated with nearby signals to help maintain vehicular flow through the corridor.

♦ Pedestrian Amenities: Improvements to the pedestrian realm include sidewalk surface improvements, sidewalk widening where feasible, and the addition of bulbouts. The addition of street trees and landscaping within the sidewalk, bike racks, and street furniture will also enhance the pedestrian environment. The specific locations of pedestrian amenities will be identified in the preferred alternative.

♦ Bus Stop Improvements: Alternative A proposes the relocation of the southbound bus stop to the far side of the Santa Rosa Avenue and Mill Street intersection. Locating bus stops on the far side of an intersection helps to facilitate transit operations by reducing the conflicts between buses and vehicles that are turning right; they can also improve bus maneuverability when pulling into stops. Far side stops also encourage pedestrians to cross the street at crosswalks located behind the bus rather than in front of them.

Alternative B: Multimodal Enhancement

Alternative B provides the Santa Rosa Avenue Corridor with pedestrian and bicycle amenities within the existing street right-of-way while retaining 4 vehicular travel lanes. The alternative includes the removal of some on-street parking in order to allow for bicycle lanes. The on-street parking alternates between the east and west sides of the street. Alternative B also includes pedestrian amenities and safety improvements. Specific design elements of this alternative include the following:

♦ Bike Lane Improvements: The alternative provides dedicated Class II bike lanes in the northbound and southbound directions.

♦ Bulbouts: Alternative B includes 6 bulbouts located at important intersections or new and existing mid-block crossings.
• **Sidewalk Widening:** There is limited space to widen the sidewalk width in this alternative. The sidewalk is widened by 1 to 3 feet where possible, on the side of the street where parking is removed. This results in the creation of 7 to 10-foot sidewalks on alternating sides of the street.

• **Crosswalk Improvements:** Alternative B includes two new crosswalks across Santa Rosa Avenue: a new mid-block crossing between Juilliard Park and Luther Burbank Home and Gardens, and a new crosswalk at the Palm Street intersection. The alternative also proposes the relocation of existing crosswalks at the Charles Street and Oak Street intersections to coordinate with the proposed bulbout and median improvements. Where crosswalks pass through medians, pedestrians would have a “refuge” area that effectively allows pedestrians to cross one direction of traffic at a time.

• **Parking Changes:** In order to accommodate Class II bike lanes in both the northbound and southbound directions and the existing vehicle travel lanes, parking is removed on one side of the street throughout the corridor. All parking figures are estimates based upon the average of 20-foot parking stalls. On-street parking is provided on the west side of the street between the proposed mid-block crossing in front of Juilliard Park and Charles Street, and include the removal of approximately 14 spaces on the east side in front of Luther Burbank Home and Gardens. No parking would be provided between Charles Street and Juilliard Park Drive, necessitating the removal of approximately 3 parking spots on the east side of the street, and 4 parking spots on the west side of the street. Parking would be allowed on the east side of the street between Juilliard Drive and Palms Street, with the removal of approximately 16 parking spots on the west side of the street. Parking would be allowed on the east side of the street between Pine Street and Maple Avenue, with the removal of approximately 9 parking spots on the east side of the street.

Alternative B also calls for the consolidation of driveways as part of new development, which would result in the creation of approximately 5 to 7 new on-street parking spaces.

• **Landscaped Median Adjacent to Juilliard Park:** A new median is proposed in the center of Santa Rosa Avenue in front of Juilliard Park. The new median would function to calm traffic and highlight the importance of Juilliard Park and Luther Burbank Home and Gardens by creating a landscaped element that links the two parks. The inclusion of the median requires that the roadway be widened at this location. As a result the sidewalk will need to relocated 6 feet to the west, into the Juilliard Park property. The new median would include a mid-block crossing connecting Juilliard Park and the Luther Burbank Home and Gardens.

• **Sebastopol Avenue/Mill Street Intersection:** Alternative B also includes a new traffic signal at the intersection of Sebastopol Avenue/Mill Street and Santa Rosa Avenue. The traffic signal would improve the pedestrian and bicycle mobility at and in the vicinity of this intersection by providing protected crossings. This signal would also create gaps in traffic along the corridor, facilitating pedestrian crossings and vehicle movements at adjacent locations. The signal would be coordinated with nearby signals to help maintain vehicular flow through the corridor.

• **Pedestrian Amenities:** Improvements to the pedestrian realm include sidewalk surface, sidewalk widening where feasible, and the addition of bulbouts. The addition of street trees and landscaping within the sidewalk, bike racks, and street furniture will also enhance the pedestrian environment.
**Bus Stop Improvements:** This alternative includes a new bus bulbout at the existing northbound bus stop on Santa Rosa Avenue at the Mill Street intersection. Bus bulbouts are similar to regular bulbouts in that they extend the sidewalk typically 6-feet into the parking lane, but are special in that they are typically 40-60 feet long in order to accommodate the length of a bus. Bus bulbouts can help maintain transit headways by allowing buses to partially block one of the through traffic lanes, eliminating the delays that occur when bus drivers need to wait for a gap in traffic before pulling into travel lanes. Bus bulbouts also provide space for transit amenities such as shelters and route information signs.

The southbound bus stop at this intersection is relocated to the far side of the intersection, reducing conflicts between buses and right turning vehicles. Far side stops also encourage pedestrians to cross the street at crosswalks located behind the bus rather than in front of them, and can be easier for bus drivers to negotiate when pulling into the stop. The southbound bus stop located south of the Oak Street intersection is also relocated to a proposed bus bulbout at the Maple Avenue Intersection.

**Roundabout Options**

Two potential roundabout concepts were explored at the intersection of Sonoma Avenue and Santa Rosa Avenue as part of the alternatives development process. Either roundabout concept could be paired with either of the streetscape alternatives with a negligible effect on the LOS findings of the multimodal analysis for the alternatives analysis findings. Vehicular volumes require that a roundabout in this location be multi-lane, allowing two through lanes of traffic to pass through the roundabout along both directions of Santa Rosa Avenue. A dual-lane approach on westbound Sonoma Avenue that allows dual left turn movement through the roundabout is also needed. Pedestrian crossings would be provided on all legs of the roundabout, including refuge areas within the roundabout’s “splitter islands”, allowing pedestrians to cross one direction of traffic at a time. A roundabout at this intersection should include pathways around its periphery that are at least 10 feet wide, which will allow less experienced bicyclists to proceed around the intersection with pedestrians if they choose. The community considered the two options.

The City of Santa Rosa Fire Department had concern regarding a roundabout along a primary response route, and a roundabout’s potential to compromise the response times for emergency vehicles. The Department has also expressed concern regarding the loss of signal pre-emption, as well as the loss of ability to use the opposing side lane for emergency access in the event of congestion at the intersection. Other concerns regarding a roundabout included: the loss of signal pre-emption for buses with potential for future Bus Rapid Transit, loss of parking and right-of-way to accommodate the roundabout, and utility access and maintenance requirements. Based on these concerns and the level of community interest, inclusion of a roundabout was not part of the preferred alternative.
Relocate crosswalk to south side of intersection

No left turn onto Santa Rosa Avenue from Wheeler Street

New crosswalk with Pedestrian Refuge

Existing parking to remain

Bus stop to remain
**Alternative A**

**Santa Rosa Avenue Corridor Plan**

- **NEW BULBOUTS**
- **RELOCATE BUS STOP TO FARSIDE OF INTERSECTION**
- **EXISTING PARKING TO REMAIN**
- **NO LEFT TURN ONTO OR OFF OF PINE STREET**
- **NEW CROSSWALK, PEDESTRIAN REFUGE AND BULBOUTS**
- **CONSOLIDATE DRIVEWAY CURBCUTS**

- **Tree**
- **Widened Sidewalk**
- **Crosswalk**
- **Intersection Signal**
- **Bus Stop**
- **Pedestrian Light**
- **Median**
**RELOCATE CROSSWALK TO SOUTH SIDE OF INTERSECTION**

**CONSolidate Driveway Curbcuts**

**Existing Parking to Remain**

**Bus Stop to Remain**

**Consolidate Driveway Curbcuts**

**Existing Parking to Remain**

**Reconfigured Vehicle Lanes**

**Merge from Two Northbound Vehicle Travel Lanes to One Lane**

**Tree**

**Widened Sidewalk**

**Crosswalk**

**Intersection Signal**

**Bus Stop**

**Pedestrian Light**

**Median**
relocate sidewalk and curb & gutter to accommodate median, travel lanes and 8 feet of parking
RELOCATED CROSSWALK TO SOUTH SIDE OF INTERSECTION

RELOCATE SIDEWALK AND CURB & GUTTER TO ACCOMODATE MEDIAN, TRAVEL LANES AND 8 FEET OF PARKING

NO PARKING

LANE TRANSITION

NEW LANDSCAPED MEDIAN WITH PEDESTRIAN REFUGE

NO PARKING

8 FEET PARKING

NEW BUS BULBOUT BUS STOP TO REMAIN

ALTERTATIVE B

SANTA ROSA AVENUE CORRIDOR PLAN

2 OF 5
RELOCATE BUS STOP TO FARSIDE OF INTERSECTION

NO PARKING

NEW CROSSWALK AND BULBOOUTS

CONSOLIDATE DRIVEWAY CURBCUTS

8 FEET PARKING

NEW SIGNAL AT INTERSECTION

8 FEET PARKING

NO PARKING

LANE TRANSITION

ALTERNATIVE B
SANTA ROSA AVENUE CORRIDOR PLAN

3 OF 5
8 FEET PARKING

RELOCATE BUS STOP
NEW BUS BULBOUT

CONSOLIDATE DRIVEWAY CURBCUTS

CONSOLIDATE DRIVEWAY CURBCUTS

RELOCATE CROSSWALK TO SOUTH SIDE OF INTERSECTION

RECONFIGURED VEHICLE Lanes

8 FEET PARKING
APPENDIX C

TRANSPORTATION ANALYSIS
TRANSPORTATION ANALYSIS

Whitlock & Weinberger Transportation, Inc. (W-Trans) has completed an operational analysis of an
final alternative for the Santa Rosa Avenue corridor which would maintain two northbound lanes
and reduce the southbound direction to one lane, plus install on-street bicycle lanes and provide
center turn lanes or medians. This work builds on our prior analyses, which to date have focused
on a road diet option and an alternative that maintained two vehicle lanes in each direction.
Analysis of the road diet option indicated that vehicle delay and queuing problems could arise in
the future as drivers enter the road diet section.

As with the previous analysis, this analysis considers delay experienced by drivers entering the
corridor. Also, two volume scenarios for the year 2035 were considered based upon the Sonoma
County Transportation Authority’s (SCTA) Travel Demand Model. One represents the financially-
constrained buildout of the transportation network (worst case scenario), which only includes
funded infrastructure improvements and policy programs. The other assumes a comprehensive
buildout of the transportation network and implementation of all of the transportation-related
policies identified in regional planning documents (best case scenario). See the Santa Rosa Ave-
nue Streetscape Alternatives Analysis memo submitted by W-Trans on January 15, 2010 for addi-
tional description of these two SCTA travel demand model scenarios.

Arterial Level of Service

Arterial Level of Service (LOS) was calculated for the extended corridor using the same analysis
methodologies previously applied. As presented in Table 1, with the implementation of this alter-
native and under financially-constrained (worst-case) model volumes, year 2035 northbound and
southbound traffic operation is projected to be LOS E. With no changes to the corridor, operation
would be LOS D in the northbound direction and LOS E in the southbound direction.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>SANTA ROSA AVENUE EXTENDED CORRIDOR YEAR 2035 ARTERIAL LEVEL OF SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume Scenario</strong></td>
<td><strong>Level of Service</strong></td>
</tr>
<tr>
<td>No Project</td>
<td></td>
</tr>
<tr>
<td>Comprehensive (best case)</td>
<td>C (19 mph)</td>
</tr>
<tr>
<td>Financially Constrained (worst case)</td>
<td>E (13 mph)</td>
</tr>
<tr>
<td>July 2010 Alternative</td>
<td></td>
</tr>
<tr>
<td>Comprehensive (best case)</td>
<td>C (19 mph)</td>
</tr>
<tr>
<td>Financially Constrained (worst case)</td>
<td>E (14 mph)</td>
</tr>
</tbody>
</table>

Note: NB = Northbound; SB = Southbound
Also presented is the comprehensive (best case) volume scenario, which would result in LOS C corridor operation for northbound traffic and LOS D for southbound traffic with implementation of the July 2010 Alternative. Without implementation of the Plan, LOS C operation would be expected for both directions of travel assuming these best-case future traffic volumes.

**Queueing**

Since the July 2010 alternative involves a lane reduction, it is expected that some vehicle queuing would occur at the locations of this merge. Therefore, queuing was studied at the intersection adjacent to where the lane merges would occur, Santa Rosa Avenue/Sonoma Avenue. To be consistent with previous analysis queuing at the intersection of Santa Rosa Avenue/Petaluma Hill Road was also studied. The results are presented in Tables 2 and 3, respectively. The intersection queuing lengths were calculated using Simtraffic. The maximum observed queues within the simulation were averaged for five randomly seeded “runs,” and reported for each intersection approach.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>SANTA ROSA AVENUE/SONOMA AVENUE YEAR 2035 INTERSECTION QUEUING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum Queue (Feet)</td>
</tr>
<tr>
<td>Volume Scenario</td>
<td>NB</td>
</tr>
<tr>
<td>No Project</td>
<td>Comprehensive (best case)</td>
</tr>
<tr>
<td></td>
<td>Financially Constrained (worst case)</td>
</tr>
<tr>
<td>July 2010 Alternative</td>
<td>Comprehensive (best case)</td>
</tr>
<tr>
<td></td>
<td>Financially Constrained (worst case)</td>
</tr>
<tr>
<td>Notes:</td>
<td>NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound</td>
</tr>
<tr>
<td></td>
<td>Bold = Queue extends beyond adjacent signalized intersection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>SANTA ROSA AVENUE/PETALUMA HILL ROAD YEAR 2035 INTERSECTION QUEUING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum Queue (Feet)</td>
</tr>
<tr>
<td>Volume Scenario</td>
<td>NB</td>
</tr>
<tr>
<td>No Project</td>
<td>Comprehensive (best case)</td>
</tr>
<tr>
<td></td>
<td>Financially Constrained (worst case)</td>
</tr>
<tr>
<td>July 2010 Alternative</td>
<td>Comprehensive (best case)</td>
</tr>
<tr>
<td></td>
<td>Financially Constrained (worst case)</td>
</tr>
<tr>
<td>Note:</td>
<td>NB = Northbound; SB = Southbound; WB = Westbound</td>
</tr>
<tr>
<td></td>
<td>Bold = Queue extends beyond adjacent signalized intersection</td>
</tr>
</tbody>
</table>
With the implementation the July 2010 alternative, queuing is expected to be similar to the no project alternative. Maximum queues are not expected to extend beyond adjacent signalized intersections on the approaches of Santa Rosa Avenue and Sonoma Avenue under either "best case" or "worst case" 2035 traffic volumes.

At Santa Rosa Avenue/Petaluma Hill Road, queues would be similar both with and without implementation of the July 2010 alternative. In both the financially-constrained and comprehensive future volume scenarios, southbound queues would extend through the adjacent signalized intersection at Bennett Valley Road.

Multimodal Level of Service

The street configuration alternatives were analyzed using the Multimodal Level of Service (LOS) criteria and standards established in the Existing Multimodal Circulation Report for the Santa Rosa Avenue Corridor Plan (W-Trans, October 2009). Pedestrian, Bicycle, and Transit LOS were determined using the draft methodologies anticipated to be included in the forthcoming Highway Capacity Manual 2010. Vehicle LOS methodologies are based on the current Highway Capacity Manual 2000.
## Conceptual Cost Estimates

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roadway and Sidewalk Reconfiguration &amp; Civil Engineering (subtotal of below)</strong></td>
<td></td>
<td></td>
<td></td>
<td>1,568,643</td>
</tr>
<tr>
<td>Remove Concrete Curb &amp; Gutter (for bulbouts and sidewalk widening)</td>
<td>1907</td>
<td>LF</td>
<td>$9.00</td>
<td>$16,266</td>
</tr>
<tr>
<td>Remove Concrete Sidewalk (Julillard Park)</td>
<td>4688</td>
<td>SF</td>
<td>$2.50</td>
<td>$11,720</td>
</tr>
<tr>
<td>Repair and Update Sidewalks (throughout corridor)</td>
<td>25000</td>
<td>SF</td>
<td>$10.00</td>
<td>$250,000</td>
</tr>
<tr>
<td>New Concrete Sidewalk (Bulbouts and Widened Sidewalk)</td>
<td>5364</td>
<td>SF</td>
<td>$10.00</td>
<td>$53,640</td>
</tr>
<tr>
<td>New Concrete Sidewalk (Julillard Park)</td>
<td>4266</td>
<td>SF</td>
<td>$10.00</td>
<td>$42,660</td>
</tr>
<tr>
<td>New Concrete Curb &amp; Gutter (Bulbouts and widened Sidewalk)</td>
<td>1551</td>
<td>LF</td>
<td>$30.00</td>
<td>$46,530</td>
</tr>
<tr>
<td>Concrete Curb Ramp</td>
<td>37</td>
<td>EA</td>
<td>$250.00</td>
<td>$9,250</td>
</tr>
<tr>
<td>New Concrete Curb &amp; Gutter (Median)</td>
<td>1843</td>
<td>LF</td>
<td>$9.00</td>
<td>$16,584</td>
</tr>
<tr>
<td>Actuated Pedestrian Crossing Warning Signs (Per location)</td>
<td>3</td>
<td>EA</td>
<td>$100,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Drain Inlet Modification (Estimated)</td>
<td>10</td>
<td>EA</td>
<td>$10,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Street Utility, Monument &amp; Manhole Grade Adjustment</td>
<td>1</td>
<td>LS</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Paving</td>
<td>1</td>
<td>LS</td>
<td>$521,595</td>
<td>$521,595</td>
</tr>
<tr>
<td>Loop Water Main at Sonoma Avenue</td>
<td>1</td>
<td>LS</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td><strong>Roadway Striping (subtotal of below)</strong></td>
<td></td>
<td></td>
<td></td>
<td>40,452</td>
</tr>
<tr>
<td>Thermoplastic Crosswalk Striping</td>
<td>1200</td>
<td>SF</td>
<td>$5.00</td>
<td>$6,000</td>
</tr>
<tr>
<td>Tape Bike Lane Striping and Marking</td>
<td>3132</td>
<td>LF</td>
<td>$8.00</td>
<td>$25,056</td>
</tr>
<tr>
<td>Thermoplastic Roadway Striping and Marking</td>
<td>1568</td>
<td>LF</td>
<td>$10.00</td>
<td>$15,680</td>
</tr>
<tr>
<td><strong>Landscaping &amp; Irrigation Improvements (subtotal of below)</strong></td>
<td></td>
<td></td>
<td></td>
<td>476,110</td>
</tr>
<tr>
<td>Landscaping Medians (Planting, Mulch, Soil amendment, Water Barrier)</td>
<td>4967</td>
<td>SF</td>
<td>$8.00</td>
<td>$39,736</td>
</tr>
<tr>
<td>Landscaping Street Trees (Planting,Mulch, Soil amendment, Water Barrier)</td>
<td>928</td>
<td>SF</td>
<td>$8.00</td>
<td>$7,424</td>
</tr>
<tr>
<td>Street Trees- (24&quot; box, 1CY Yard Soil Import/Offhaul, DG Tree Well, Root Barrier)</td>
<td>68</td>
<td>EA</td>
<td>$3,500</td>
<td>$230,000</td>
</tr>
<tr>
<td>Median Trees- (24&quot; box, 1CY Yard Soil Import/Offhaul, DG Tree Well, Root Barrier)</td>
<td>58</td>
<td>EA</td>
<td>$650</td>
<td>$37,700</td>
</tr>
<tr>
<td>Decorative Tree Grate</td>
<td>25</td>
<td>EA</td>
<td>$650</td>
<td>$16,250</td>
</tr>
<tr>
<td>Irrigation System (Mainline, Trenching, Backfill &amp; Compaction, Sleeves)</td>
<td>59</td>
<td>EA</td>
<td>$1,500</td>
<td>$90,000</td>
</tr>
<tr>
<td>Irrigation Meter</td>
<td>1</td>
<td>LS</td>
<td>$60,000</td>
<td>$60,000</td>
</tr>
<tr>
<td><strong>Electrical &amp; Lighting Improvements (subtotal of below)</strong></td>
<td></td>
<td></td>
<td></td>
<td>522,500</td>
</tr>
<tr>
<td>Pedestrian Lights (including wiring, conduit, pullbox)</td>
<td>22</td>
<td>EA</td>
<td>$8,000</td>
<td>$176,000</td>
</tr>
<tr>
<td>Trenching, Conduit, Conductors, Fittings, Service Connections</td>
<td>22</td>
<td>EA</td>
<td>$3,250</td>
<td>$71,500</td>
</tr>
<tr>
<td>New Traffic Signal</td>
<td>1</td>
<td>LS</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Existing Traffic Signal Timing Adjustment</td>
<td>1</td>
<td>LS</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td><strong>Site Furnishings (subtotal of below)</strong></td>
<td></td>
<td></td>
<td></td>
<td>60,800</td>
</tr>
<tr>
<td>Benches</td>
<td>10</td>
<td>EA</td>
<td>$1200</td>
<td>$12,000</td>
</tr>
<tr>
<td>Recycling &amp; Trash Receptacles</td>
<td>17</td>
<td>EA</td>
<td>$2,000</td>
<td>$34,000</td>
</tr>
<tr>
<td>Bike Racks</td>
<td>14</td>
<td>EA</td>
<td>$1,000</td>
<td>$14,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>2,667,707</td>
</tr>
<tr>
<td>Construction Contingency (30%)</td>
<td></td>
<td></td>
<td></td>
<td>800,312</td>
</tr>
<tr>
<td><strong>Subtotal-Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td>3,468,019</td>
</tr>
<tr>
<td>Project Management (5%)</td>
<td></td>
<td></td>
<td></td>
<td>173,401</td>
</tr>
<tr>
<td>CM, Survey, Testing (15%)</td>
<td></td>
<td></td>
<td></td>
<td>520,203</td>
</tr>
<tr>
<td><strong>Subtotal-Soft Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>1,213,807</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>4,881,826</td>
</tr>
</tbody>
</table>
APPENDIX E

RELATIONSHIP TO OTHER DOCUMENTS
RELATIONSHIP TO OTHER DOCUMENTS

The information below discusses the relationship between the Santa Rosa Avenue Corridor Plan and the goals and policies of other relevant City of Santa Rosa documents.

City of Santa Rosa General Plan, Santa Rosa 2035, Goals and Policies

**Land Use and Livability**

Goal: LUL-E Promote livable neighborhoods through the Build it Green and LEED programs to ensure that new construction meets high standards of energy efficiency and sustainable material use. Ensure that everyday shopping, park and recreation facilities, and schools are within easy walking distance of most residents.

- **LUL-E-2** As part of planning and development review activities ensure that projects, subdivisions, and neighborhoods are designed to foster livability. Utilize the city’s Design Guidelines as a reference when evaluating the following neighborhood components:
  - **Street.** Street design, traffic calming, and landscaping can make great contributions to the creation of successful neighborhoods. Neighborhood streets should be quiet, safe, and accommodate pedestrians and bicyclists.
  - **Connections.** Neighborhoods should be well connected to local shops and services, public plazas and gathering places, park lands, to local shops and services, public spaces, downtown, schools, and recreation by adequate and safe streets, bike lanes, public pathways, trails, general infrastructure (e.g., sidewalks and crosswalks), and transit.
  - **Public Spaces.** Downtown serves as the most important public place in the city. Developments in the area should further this by incorporating natural features and bicycle/pedestrian connections, to encourage use and social interaction.
  - **Neighborhood Character.** Each neighborhood should maintain a distinct identity, such as the historic preservation districts featuring Victorian cottages and California bungalows.
  - **Diversity and Choice.** Neighborhoods should provide choices for residents with different values. Different housing types and locations within the city accommodate a diverse range of needs.

**Downtown Station Area Specific Plan**

Goal: LUL-L Ensure land uses that promote use of transit.

- **LUL-L-2** Improve pedestrian, bicycle, and bus transit connections from surrounding areas to the downtown SMART station site as well as between neighborhoods surrounding the SMART station site.
- **LUL-L-3** Create pedestrian friendly environments and provide convenient connections to the transit facility for all modes of transportation.
Goal: LUL-M Ensure new development and streetscape projects provide pedestrian and bicycle circulation improvements.

♦ LUL-M-2 Require dedication of right-of-way for improvement and/or expansion of pedestrian and bicycle facilities where insufficient right-of-way currently exists.

Urban Design

Goal: UD-C Enhance and strengthen the visual quality of major entry routes into the city, as well as major corridors that link neighborhoods with downtown.

♦ UD-C-1 Enhance the appearance of the city’s major entries through special design criteria and streetscape improvements. City entries, which occur at the Urban Growth Boundary, are shown in Figure 3-1: City Entries and Corridors:

<table>
<thead>
<tr>
<th>Highway 101</th>
<th>Piner Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 12</td>
<td>Hall Road/West Third Street</td>
</tr>
<tr>
<td>Mendocino Avenue/Old</td>
<td>Santa Rosa Avenue</td>
</tr>
<tr>
<td>Redwood Highway</td>
<td>Stony Point Road</td>
</tr>
<tr>
<td>Fulton Road</td>
<td>Petaluma Hill Road</td>
</tr>
<tr>
<td>Calistoga Road</td>
<td>Bennett Valley Road</td>
</tr>
<tr>
<td>Guerneville Road</td>
<td></td>
</tr>
</tbody>
</table>

Major corridors can be improved as entries to the city through unified planting of street trees, appropriately scaled lighting, public art, framing of landmarks, sign controls, and pedestrian and bicycle amenities. Additional policy recommendations include:
- Landscaping to provide continuity, focal elements, and to screen unsightly development;
- Clear expression of the community separators as natural open space at the north, south, west, and east entries; and
- Framing of key views of downtown and landmarks along the routes.

♦ UD-C-7 Install planted medians on wide regional/arterial streets to make them more pedestrian friendly. Regional/arterial streets requiring landscaped medians include:

<table>
<thead>
<tr>
<th>Corporate Center Parkway</th>
<th>Santa Rosa Avenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulton Road</td>
<td>Mendocino Avenue</td>
</tr>
<tr>
<td>Guerneville Road</td>
<td>Sonoma Avenue</td>
</tr>
<tr>
<td>Stony Point Road</td>
<td>Farmers Lane</td>
</tr>
<tr>
<td>Northpoint Parkway</td>
<td>Fountain Grove Parkway</td>
</tr>
<tr>
<td>Sebastopol Road</td>
<td>West Third Street</td>
</tr>
</tbody>
</table>

Goal: UD-D Avoid strip patterns of commercial development. Improve the appearance and functioning of existing commercial strip corridors, such as Santa Rosa Avenue and Sebastopol Road.

♦ UD-D-3 Minimize curb cuts through shared access and width reduction. Excessive curb cuts reduce or completely eliminate pedestrian space and the possibility of curbside parking.

♦ UD-D-4 Provide continuous sidewalks and bicycle lanes on both sides of major regional/arterial streets.
UD-D-5 Provide planting strips with large canopy trees between the road and sidewalk to buffer pedestrians from traffic, and help define the street space along commercial streets. Install pedestrian amenities in the planting strip such as:

- Street lighting;
- Seating;
- Bus stop shelters;
- Bicycle racks; and
- Mail boxes.

Goal: UD-E Create a framework of public spaces at the neighborhood, city, and regional scale.

- UD-E-2 Provide an open space network that is linked by pedestrian and bicycle paths, and that preserves and enhances Santa Rosa’s significant visual and natural resources.

- UD-E-4 Enhance pedestrian activity and safety by designing streets, buildings, pathways, and trails to provide a visual connection with public spaces such as parks and Santa Rosa Creek. Review and revise the Zoning Code and Subdivision Guidelines to support this policy.

Transportation

Goal: T-A Provide a safe and sustainable transportation system.

- T-A-6 Expand non-motorized and bus infrastructure throughout the city such that greater amenities exist for cyclists, pedestrians and transit users in order to promote a healthy, sustainable city and further reduce GHG emissions.

Goal: T-B Provide a safe, efficient, free-flowing circulation system.

- T-B-1 require site design to focus through-traffic on regional/arterial streets. Promote the following design techniques to increase driver safety and traffic efficiency:
  - Reduce the number of driveways and intersections;
  - Combine driveways to serve numerous small parcels;
  - Avoid residential access;
  - Install street lights;
  - Install and facilitate timing of traffic signals; and
  - Ensure continuous sidewalks.

- T-B-4 Promote the use of roundabouts in lieu of stop/signal controlled intersections to improve safety, reduce delay.

Goal: T-C Reduce traffic volumes and speeds in neighborhoods.

- T-C-3 Implement traffic calming techniques on streets subject to high speed and/or cut-through traffic, in order to improve neighborhood livability. Techniques include:
  - Narrowed streets;
  - On-street parking;
  - Chokers or diverters;
  - Speed bumps;
  - Rough paved crosswalks;
• Rumble strips; and
• Planted islands.

Traffic calming should be incorporated into the Design Guidelines, Subdivision Ordinance, and Department of Public Works (DPW) Policy, Design, and Construction Manuals, and the Capital Improvement Program.

♦ T-C-4 Improve traffic flow and reduce neighborhood traffic impacts in all quadrants of the city by completing needed improvements, such as road widening and traffic calming. Seek innovative funding mechanisms in order to maximize the number of projects completed.

Goal: T-I Provide attractive and safe streets for pedestrians and bicyclists.
♦ T-I-1 Pursue implementation of walking and bicycling facilities as envisioned in the city’s Updated Bicycle and Pedestrian Master Plan.
♦ T-I-2 Provide Street lighting that is attractive, functional, and appropriate to the character and scale of the neighborhood or district, and that contributes to vehicular and pedestrian safety.
♦ T-I-4 Provide Street trees to enhance the city’s livability and to provide identity to neighborhoods and districts.

Goal: T-K Develop a safe, convenient, and continuous network of pedestrian sidewalks and pathways that link neighborhoods with schools, parks, shopping areas, and employment centers.
♦ T-K-1 Link the various citywide pedestrian paths, including street sidewalks, downtown walkways, pedestrian areas in shopping centers and work complexes, park pathways, and other creekside and open space pathways.
♦ T-K-3 Orient building plans and pedestrian facilities to allow for easy pedestrian access from street sidewalks, transit stops, and other pedestrian facilities, in addition to access from parking lots.

Goal: T-L Develop a citywide system of designated bikeways that serves both experienced and casual bicyclists, and which maximizes bicycle use for commuting, recreation, and local transport.
♦ T-L-1 Provide bicycle lanes along all regional/arterial streets and high volume transitional/collector streets.
♦ T-L-2 Provide bicycle lanes on major access routes to all schools and parks.
♦ T-L-3 Improve bicycle networks by finishing incomplete or disconnected bicycle routes.
♦ T-L-4 Maintain all roadways and bicycle-related facilities so they provide safe and comfortable conditions for bicyclists.
♦ T-L-5 Consider bicycle operating characteristics and safety needs in the design for roadways, intersections, and traffic control systems.
♦ T-L-6 Promote and facilitate the use of bicycles with other transportation modes.
♦ T-L-7 As part of the city’s Capital Improvement Program, or street and intersection projects constructed by private developers, install and construct bicycle facilities, including:
  • Class I paths, Class II lanes, Class III route signs;
Downtown Station Area Specific Plan Goals and Policies

**Land Use**

Goal SP-LU-1: Ensure land uses that promote use of transit.

- Policy SP-LU-1.2: Improve pedestrian, bicycle and bus transit connections from surrounding areas to the Downtown SMART Station site as well as between neighborhoods surrounding the SMART Station site.
- Policy SP-LU-1.3: Create pedestrian friendly environments and provide convenient connections to the transit facility for all modes of transportation.

Goal SP-LU-4: Develop a cohesive network of travel routes by guiding new development toward appropriate uses and design.

- Policy SP-LU-4.3: Support the creation of a pedestrian-oriented environment along Santa Rosa Avenue with two to three-story mixed use buildings, improved street furnishings and other pedestrian amenities.
- Policy SP-LU-4.9: Encourage the creation of a neighborhood retail hub and pedestrian crossing at the intersection of Sebastopol Avenue, Santa Rosa Avenue and Mill Street to enable interaction between the Juilliard Park neighborhood and the Burbank Gardens neighborhood.

**Transportation**

Goal SP-T-3: Ensure new development and streetscape projects provide pedestrian and bicycle circulation improvements.

- Policy SP-T-3.3: Require dedication of right-of-way for improvement and/or expansion of pedestrian and bicycle facilities where insufficient right-of-way currently exists.

Goal SP-T-4: Ensure appropriate levels of parking are provided in association with new development.

- Policy SP-T-4.9: Monitor parking demand over time, particularly in locations where Specific Plan Sub-Areas and adjacent residential neighborhoods interface. Such locations include the Railroad Square Sub-Area’s interaction with the West End neighborhood, the Park & Gardens Sub-Area’s interaction with the Burbank Gardens and Juilliard Park neighborhoods, and the Courthouse Square Sub-Area’s interaction with the Cherry Street and St. Rose neighborhoods.