DOWNTOWN REDDING COMMUNITY BASED TRANSPORTATION PLAN

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INTRODUCTION

In the late 1960's, with the rising popularity of regional malls and many cities competing for retail sales, the City of Redding met that challenge by combining their Downtown vision with an ambitious plan to create a Downtown Mall. Segments of Market Street, Butte Street, and Yuba Street were closed to vehicular traffic to create a six (6) block super area, as the City's own enclosed climate controlled "regional mall," attracting both retail and commercial offices alike to forge an even stronger Downtown presence. Over time, the retail tenants in the Downtown Mall moved to other commercial areas in the City and these spaces were converted to office or other personal service uses. The creation of the Mt. Shasta Mall in the Hilltop/Dana Drive area in addition to commercial shopping centers throughout the City affected the viability of the retail outlets in the Mall. In addition, the reduced accessibility and circulation patterns associated with the Downtown Mall were clearly identified as one of the key reasons why the Downtown Mall was not a retail success.

In 2001, in an attempt to plan for the economic revitalization of the Downtown area, the Downtown Redding Specific Plan was adopted with a key goal being the removal of the roof over the Downtown Mall and the re-introduction of the former streets. Between 2006 and 2008, the mall's roof was removed and in 2009, the newly created pedestrian mall was rebranded as The Market Street Promenade. These actions were intended to be the first of incremental steps toward re-introducing the former streets and revitalizing Downtown. Subsequently in 2010, the Specific Plan was updated. Another update of the Specific Plan is to begin in late 2016 and be completed in 2017.

While there are many retail, service sector, office, and housing success stories in Downtown, the vibrant Downtown vision remains as an elusive reality for not only the Redding community, but also the region as a whole. To this end, it is recognized that additional comprehensive strategies are necessary to revitalize Downtown. Vehicular circulation to and through Downtown, an attractive Market Street Promenade, effective parking management, improved parking garage structures and lots, expanded transit service, and safe pedestrian and bicycle travel are components needed for an economically viable Downtown. Downtown should be a destination that residents, businesses, and visitors want to repeatedly experience. For this reason in 2014, the City of Redding with financial participation from the Shasta Regional Transportation Agency applied for and received a state Community-Based Transportation Planning grant. Additionally, Shasta County Public Health and the City committed to provide staff time to the project. As stated in the Caltrans grant award description:

> "The proposed project will engage the community in development of a community-based transportation plan to coordinate transportation planning with the economic and residential revitalization goals of the Downtown Redding Specific Plan. The Community-Based Transportation Plan will develop conceptual circulation and parking strategies to support a multimodal transportation and 'complete streets' network in Downtown Redding."

The Transportation Element of the General Plan, the Downtown Specific Plan, other guidance plans and reports, and now this Redding Downtown Community Based Transportation Plan advance realistic goals, objectives, and policies that provide additional strategies that upon implementation are continuing the effort towards Downtown revitalization.

ORGANIZATION

The Downtown Redding Community Based Transportation Plan (Downtown Transportation Plan) is organized for ease of use. This chapter is the principal component of the overall Downtown Transportation Plan, written with the intent to be read within a short time period while addressing all major issues. The information provided is sufficient in content so that the reader obtains an understanding of the Downtown Transportation Plan while referring readers to the following appendices to review a specific subject in more detail:

Appendix A – Existing Transportation Conditions
Appendix B – Future Year 2035 Traffic Analysis
Appendix C – Existing Regulatory Plans
Appendix D – Existing Guidance Plans & Reports
Appendix E – Community Engagement
Appendix F – Public Engagement Comments
Appendix G – Other Downtown Studies
Appendix H – Goals, Guiding Principles & Action Plans
Appendix I – Recommended Regulatory & Guidance Plans & Report Amendments
Appendix J – Transportation Plan Implementation Funding
Appendix K – Previous & Proposed Significant Funded Transportation Projects

The following provides a brief overview of each Appendix:

Appendix A – Existing Transportation Conditions
Reviews current transportation physical and operational conditions of the Downtown area to establish a baseline for future analysis and programming. The existing transportation system includes the streets, parking, public transit, non-motorized travel, and wayfinding serving the Downtown area.

Appendix B – Future Year 2035 Traffic Analysis
Provides future traffic conditions analysis. Future traffic forecasts help assess the future viability of alternative Downtown improvement concepts.

Appendix C – Existing Regulatory Plans
Discusses the Transportation Element of the General Plan and Downtown Specific Plan.

Appendix D – Existing Guidance Plans & Reports
Reviews other relevant plans and documents having pertinent information that provide guidance for transportation improvements in Downtown.

Appendix E – Community Engagement
Addresses the community engagement process and an assessment of the visual realities of Downtown.

Appendix F – Public Engagement Comments
Identifies public engagement comments made at stakeholder and community meetings, including two Community Workshops. Also includes comments and suggestions received by email and telephone from interested community members.

Appendix G – Other Downtown Studies
Briefly discusses other downtowns and their pedestrian mall experiences.

Appendix H – Goals, Guiding Principles & Action Plans
Identifies and discusses the Goals, Guiding Principles, and resultant Action Plans that evolved from reaching out to the public and obtaining their input, evaluating how other communities addressed transforming their downtowns, and evaluating the potential opportunities and constraints of the Downtown area.

Appendix I – Recommended Regulatory & Guidance Plans & Report Amendments
Provides a summary of current City goals, policies, strategies, and actions that need to be amended or added to fully implement the Downtown Transportation Plan.

Appendix J – Transportation Plan Implementation Funding
Discusses potential federal, state, and local agency funding sources with a brief description of each source. In addition, a table provides a summary of the estimated costs associated with implementing the recommended projects advanced for each Action Plan.

Appendix K – Previous & Proposed Significant Funded Transportation Projects
Identifies significant projects implemented since 2010 that were funded by various programs. Also identifies two significant projects scheduled for construction and potential funding.

STUDY AREA & EXISTING LAND USE

The Study Area for the Downtown Transportation Plan is the same as the Downtown Redding Specific Plan area boundary with the addition of areas connecting Downtown to the Sacramento River Trail and the Dana to Downtown Trail (**Figure 1**). The Specific Plan area boundary is generally defined as the area from Riverside Drive/ Sacramento River to the North, Court Street to the West, Continental Street to the East, and Lincoln Street to the South.

The center of Downtown is generally the area occupied by The Market Street Promenade and the California Street parking structures. Land use within The Market Street Promenade consists of a mix of restaurant, office, education, and service uses. North of Shasta Street, land use is primarily auto-oriented and includes fast food restaurants, a car wash, tire shop, car sales, and similar uses. West of The Market Street Promenade, land uses include the U.S. Post Office, Veterans Memorial Hall, Redding Area Bus Authority (RABA) Downtown Transit Center, Amtrak station, a mix of professional and legal offices, restaurants, the Shasta County Administrative Center, and supporting governmental uses. Located along the east side of the core area is the Shasta Regional Medical Center and complimentary medical-oriented uses. An "L" shaped financial district is dominant in the southeastern portion of the core area that includes portions of Market Street, and areas north of Sacramento Street and along Pine Street. South of South Street, land uses are largely auto-oriented. Residential uses are mixed throughout the Downtown area, but in limited quantities.

Figure 1 – Downtown Redding Specific Plan Area Boundary

STUDY PROCESS

Once grant funding was approved, the City included from the onset the Shasta Regional Transportation Agency (SRTA), Shasta County Public Health, and Caltrans staff in order to ensure the development of a comprehensive transportation plan with broad appeal. The City then retained a highly qualified and diversified team of consultants led by the Redding firm of Omni-Means, Ltd., a traffic and civil engineering firm which was supported by Design Workshop, Inc., Trilogy Architecture, and Watry Design, Inc. With the consultant team in place, engagement began with the community to vet the good and bad of previous Downtown improvement efforts and then to explore future opportunities to achieve a successful Downtown Transportation Plan.

The vision of City of Redding leaders and residents alike has long been for an inviting, vibrant, and accessible Downtown. Because of the Caltrans Community-Based Transportation Planning grant, the City was afforded the opportunity to focus on identifying a plan that is another step towards establishing an economically viable Downtown, which thrives as a vibrant community asset and as a "place to be." To that end, through this study process, the community supported the following Vision Statement for the Downtown Transportation Plan:

VISION STATEMENT

Provide a transportation system that enables all modes of travel and supports a sustainable, livable, and economically vibrant Downtown.

The City recognized that multimodal accessibility and connectivity are keys to unlocking the constraints that have impeded the creation of a successful Downtown. Therefore, the key study purposes of this Downtown Transportation Planning effort were to:

- Create a place where people go to, not through.
- Explore the feasibility and implications of reopening previously closed streets that created the current pedestrian mall setting (The Market Street Promenade).
- Develop a parking strategy that includes replacing the Downtown parking structures, increasing on-street parking, and addressing the need for parking meters and time zones.
- Encourage transit use to and from Downtown.
- Plan for a Downtown that honors active pedestrian and bicycle transportation.
- Create strong bicycle and pedestrian connections between Downtown and the Sacramento River Trail system.
- Create "Green Streets" incorporating sustainable streetscape infrastructure and landscape design elements.
- Identify funding sources.

The major steps of the study process are straightforward as follows:

1. **Establish a Transportation Setting and Future Circulation Needs**
   Appendices A and **B** define the existing Downtown physical conditions and services, and then forecast future vehicular travel demand on the existing transportation system to identify the future vehicular circulation needs of the Downtown.

2. **Understand Existing Policy Framework**
   Appendices C and **D** provide an overview of current City and other agency regulatory and guidance policies that address Downtown. The most relevant policies that could provide guidance to the development of a comprehensive Downtown Transportation Plan are identified.

3. **Engage, Synthesize, and Analyze**
   Appendices E, **F**, and **G** share the community's input, reflecting on the past, other community downtowns, and the community's insights into what they see or desire for the future for Downtown. Then, with well-founded data and the public's input, the Design Team in concert with the City, SRTA, Shasta County Public Health, and Caltrans developed meaningful findings and conclusions. Goals and Guiding Principles were then established and Action Plans formulated.

4. **Action Plans**
   Appendix H is the "heart" of the Downtown Transportation Plan, which outlines Action Plans with tangible steps to assist in the transformation of Downtown to a place where people want to work, shop, live, recreate, and socialize – a desirable City and regional destination for residents and visitors alike. Seven Action Plans are advanced in the Downtown Transportation Plan:

   - Vehicular Action Plan
   - The Market Street Promenade Action Plan
   - Parking Action Plan
   - Transit Action Plan
   - Pedestrian Action Plan
   - Bicycle Action Plan
   - Green Streets Action Plan

5. **Create Enabling Policies, Funding Options, and Improvement Costs**
   Appendices J and **I** follow the Action Plans with recommended modifications of existing policies and the identification of new policies to legislate change and allow implementation of the Action Plans. Funding opportunities are identified in addition to the estimated costs to finance projects to implement the Action Plans.

6. **Previously & Currently Funded Projects**
   Appendix K provides an overview of previously and currently funded Downtown transportation projects.

Led by the Vision Statement, the Downtown Transportation Plan evolved through the study process. The Plan established a set of Goals and Guiding Principles that led to a specific set of Action Plans. The Action Plans encompass the transformation of an auto-centric transportation network system to a multimodal mobility plan that will provide meaningful connectivity within and between Redding's Downtown and surrounding activity/destination centers.

GOALS & GUIDING PRINCIPLES

In addition to the goals, principles, and actions identified in existing City regulatory documents, guidance plans, and reports, the following Goals and Guiding Principles are identified in the Downtown Transportation Plan:

GOAL 1 – ***Provide a safe and efficient transportation system that meets the needs for local, regional, and interregional travel for all modes of travel and encourages a vibrant Downtown.***

Guiding Principles

- Manage select streets as Arterials (Major Thoroughfare) with high priority given to vehicular traffic. Balance vehicular operations with actions that slow vehicular speeds, improve the pedestrian and bicycle environments, and encourage business activities in the public right-of-way.
- Manage select streets as Minor Arterials with a stronger balance between vehicular efficiency and pedestrian, bicycle, and business needs.
- Manage all other streets as Local Streets with high priority given to non-motorized activities, lower traffic volumes, and slower vehicle speeds.
- Implement road diets on portions of South Street and Tehama Street.
- Re-introduce Market, Butte, and Yuba Streets through The Market Street Promenade as illustrated in **Figure 2**.
- Encourage diverse use of the public right-of-way. Activities include, but are not limited to café seating, canopies, parklets, signing, lighting, bicycle parking, and public art.
- Revise the coordinated traffic signal timing on California Street and Pine Street, from approximately 30 MPH to no more than 25 MPH.
- Encourage the California-Market Alley and the Market-Pine Alley to develop into shared space alleys that serve as the "front door" to small businesses and residences.
- Provide traffic calming features at every intersection.
- Perform additional studies to determine the potential for converting portions of the one-way north-south Pine Street/California Street couplet to two-way streets.
- Perform additional studies to determine the potential for reconstruction of the Market/Pine/Cypress intersection as a modern roundabout as illustrated in **Figure 3**.

GOAL 2 – Restore streets through The Market Street Promenade.

Guiding Principles

- Re-introduce Market, Butte, and Yuba Streets through The Market Street Promenade as identified in Goal 1 and **Figure 2**.
- Provide facilities to promote the highest level of pedestrian use.
- Encourage business activities in the public right-of-way, including café seating, canopies, parklets, signing, lighting, bicycle parking, and public art.
- Provide flexible-use spaces to encourage business use of the right-of-way, changes as businesses turn over, and pedestrian/bicycle only events.
- Provide on-street parking.
- Provide wayfinding signage.
- Phase improvements based on available funding and private redevelopment.

GOAL 3 – Meet the needs for vehicular parking Downtown in support of business, recreational, and residential development.

Guiding Principles

- Maintain and consolidate the current public parking supply to accommodate future Downtown development.
- Replace the current California Street parking structures with new, taller structures sited on a smaller land area footprint (Refer to **Figure 4**). As an alterative to the current locations, a northerly structure should be considered on the existing RABA parcels between Tehama and Shasta Streets.
- Retain, to the maximum degree feasible, the current parking structure under the former Dicker's building. Also, allow flexible use through development agreements.

Figure 2 – Conceptual Site Plan for Restoring Streets through The Market Street Promenade

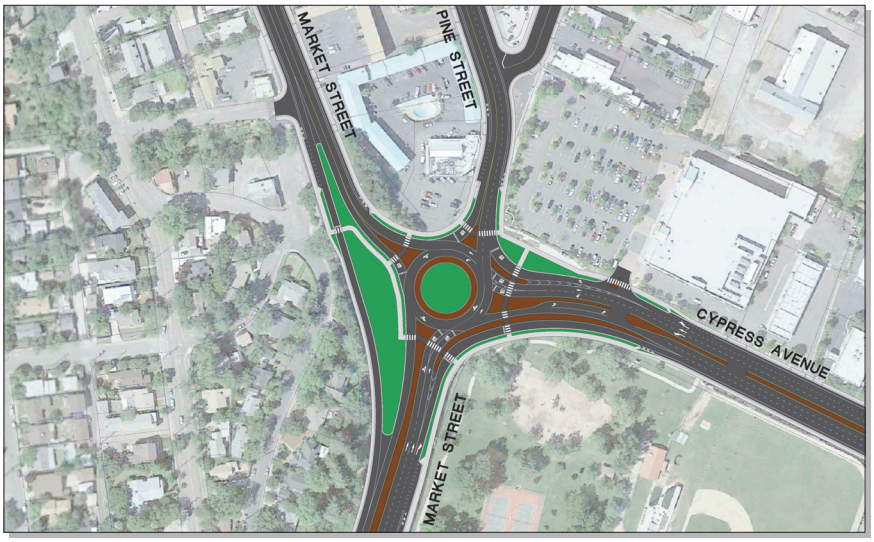


Figure 3 – Example of a Modern Roundabout at Cypress/Pine/Market Street Intersection

- Add a multi-story parking structure on the City's Pine Street parking lot. Also, allow flexible use through development agreements.
- Charge for on-street parking on a block-by-block basis to achieve an approximate 85% occupancy rate. At locations that do not reach 85% occupancy, do not charge for parking.
- Implement smart parking meters where warranted to manage when parking exceeds the 85% occupancy rate goal.
- Provide dynamic parking availability information and guidance systems for public parking structures.
- Provide electric vehicle charging stations in public and private parking lots/structures.
- Implement a priority parking program for car-share, low-emission, and electric vehicles.

GOAL 4 – Encourage transit ridership by providing safe and effective service and real-time information.

Guiding Principles

- Implement real-time passenger information systems.
- Improve Americans with Disabilities Act (ADA) access, lighting, and shelters.
- Add a new fixed route that provides service in and around Downtown, and to Turtle Bay.

GOAL 5 – Improve the pedestrian environment to encourage walking as the primary mode of travel in the Downtown core.

Guiding Principles

- Calm appropriate roadway intersections with curb extensions and high-visibility crosswalks, as also identified in Goal 1.
- Encourage the California-Market Alley and the Market-Pine Alley to develop into shared space alleys that serve as the "front door" to small businesses and residences as also identified in Goal 1.
- Provide pedestrian-scale wayfinding signage.
- Promote comfort with shade, landscaping, public art, seating, and refuse receptacles.
- Provide nighttime safety with improved lighting.
- Continuously improve traffic signal control and coordination to prioritize pedestrian safety and minimize pedestrian delay.

Figure 4 – Example of a Modern Multi-story Parking Structure Sited on a Smaller Footprint

GOAL 6 – Provide a transportation environment that encourages bicycle use.

Guiding Principles

- Provide protected (Class 4) bikeways to connect the Diestelhorst Bridge Trailhead with Downtown and Downtown to Turtle Bay.
- Provide protected (Class 4) bicycle lanes on California and Pine Streets as illustrated in **Figure 5**.
- Provide modern pavement delineation and signing for all bikeways.
- Update the City's bikeway system plan map.
- Continuously improve traffic signal control and coordination to ensure bicycle safety and minimize bicycle delay.
- Provide wayfinding signage.
- Add bicycle parking facilities.
- Establish a Downtown Bicycle/Pedestrian "Trailhead" in the vicinity of the RABA Downtown Transit Center.
- Add green color bicycle lane pavement delineation at key traffic conflict areas.
- Perform additional studies for extending the proposed California Street two-way protected bicycle lane, south of Placer Street.

GOAL 7 – Implement low impact development practices to environmentally "Green" Downtown.

Guiding Principles

- Improve stormwater quality utilizing Green infrastructure design features.
- Provide an environment rich with amenities that encourages pedestrian, bicycle, business, and outdoor activity areas.

Figure 5 – Example of Protected Bicycle Lanes on California and Pine Streets

ACTION PLANS

The Action Plans are the "to do lists" to bring about changes needed to create the vibrant environment recognized as the "place to be" in the City and region. From needed multimodal connections to convenient circulation and parking, to the needed hard and soft landscape that is inviting to the community, these Action Plans identify the recommendations necessary to bring the Downtown Transportation Plan vision and goals to fruition. The following provides a brief synopsis of each Action Plan, more fully described in **Appendix H**.

VEHICULAR ACTION PLAN

The Vehicular Action Plan advances recommendations for balancing the needs of vehicles, bicycles, and pedestrians in creating safe and comfortable streets. Key street recommendations include road diets for South and Shasta Streets, slowed vehicular speeds along major thoroughfares through signal timing, and implementation of traffic calming to increase pedestrian and bicycle safety. The Action Plan calls for streets through The Market Street Promenade, including segments of Market, Butte, and Yuba Streets, to be reopened to vehicular traffic to improve and increase local street connectivity and circulation.

THE MARKET STREET PROMENADE ACTION PLAN

The Market Street Promenade Action Plan closely examines streetscape design elements for reintroducing streets to vehicle use that enhance the attractiveness and activity of Downtown. The Action Plan calls for Market Street to be one-way with on-street parking from Tehama Street to Butte Street and two-way with on-street parking from Butte Street to Placer Street. Both Butte and Yuba Streets will be two-way streets with parking. Raised pedestrian table intersections will prioritize pedestrian traffic and slow through vehicular traffic along Market Street. Additional streetscape elements proposed include alleys to increase activity, connectivity, and visibility between buildings; parklets to provide additional open urban spaces for casual gathering; street parks, public art, overhead lighting, shade trees, and flexible use spaces. All of these streetscape design elements are intended to help create a safe, comfortable, and attractive pedestrian environment that people from throughout the community will come to and enjoy.

PARKING ACTION PLAN

The Parking Action Plan presents alternatives to promote a Downtown-wide parking strategy with no net loss of spaces, as well as recommendations for parking systems and management programs that can begin to create a revenue structure for funding future parking improvements. The California Street parking structure is nearing the end of its life expectancy and a plan for the future must be explored. Four parking garages are identified and strategies proposed to meet the current and potential future demand for Downtown parking.

TRANSIT ACTION PLAN

The Transit Action Plan identifies key components to increase efficiency and ease of access to transit information and availability. Coordination to increase connectivity between public transit, vehicular travel, bicycling, and walking, in various combinations will increase mobility options for access and connectivity between Downtown and the surrounding community.

PEDESTRIAN ACTION PLAN

The Pedestrian Action Plan provides recommendations for creating a comfortable, walkable Downtown core that will help promote business growth and outdoor activities. Strategies to prioritize walking include safe and visible crosswalks at pedestrian-scaled intersections. All streets should become Complete Streets with controlled travel speeds, pedestrian buffers, comfortable walking spaces, shade, and good lighting.

Figure 6 provides a conceptual site plan with typical design elements to provide a quality pedestrian-oriented environment.

BICYCLE ACTION PLAN

The Bicycle Action Plan recognizes bicycles as a growing form of transportation in not only Redding, but on a regional and national scale. Key to the success of bicycle infrastructure is to clearly identify the bicycle zone to minimize conflicts within shared roadway space. The City has implemented innovative bicycle infrastructure improvements over the last several years and will continue to do so on a citywide scale. Recommendations include extending the Dana to Downtown mixed-use trail to connect Turtle Bay to Downtown. A mixed-use path is proposed between the Diestelhorst Bridge Trailhead along the Sacramento River and Riverside Drive. A protected two-way bicycle path is proposed along portions of Riverside Drive, Center Street, Trinity Street, and Continental Street to complete the connection between the Dana to Downtown Trail and the Diestelhorst Bridge Trailhead. In addition, green painted bicycle lanes should be incorporated in locations where vehicular-bicycle weaving occurs.

Figure 7 identifies the existing and proposed Downtown Bikeway System Plan.

GREEN STREETS ACTION PLAN

The Green Streets Action Plan identifies general guidelines for streetscape infrastructure, landscaping, and streetscape amenities that are safe, aesthetically pleasing, and inviting as well as promoting environment sustainability. Green infrastructure design elements are identified that reduce and treat stormwater at its source while delivering environmental, social, and economic benefits. Streetscapes with appropriate landscaping design provide aesthetic softening of the built environment and environmental benefits that reduce carbon and heat islands while increasing human comfort through shading and cooling. The combination of green infrastructure, landscaping, and streetscape amenities can enhance an area's overall pedestrian environment and viability. The streetscape elements can identify an area as a special and distinct place for employees, shoppers, visitors, and residents.

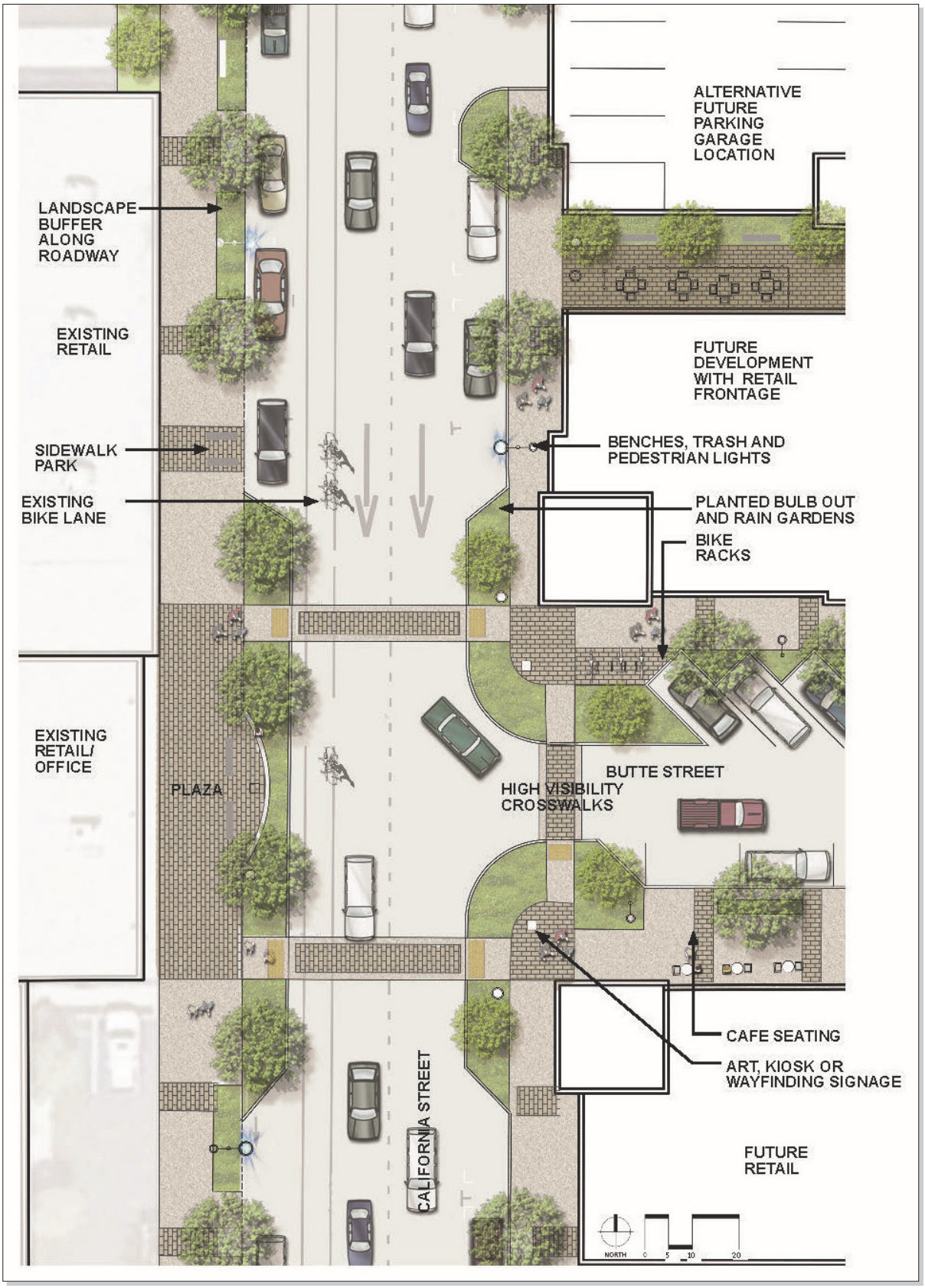


Figure 6 – Typical Design Elements to Provide a Quality Pedestrian Environment

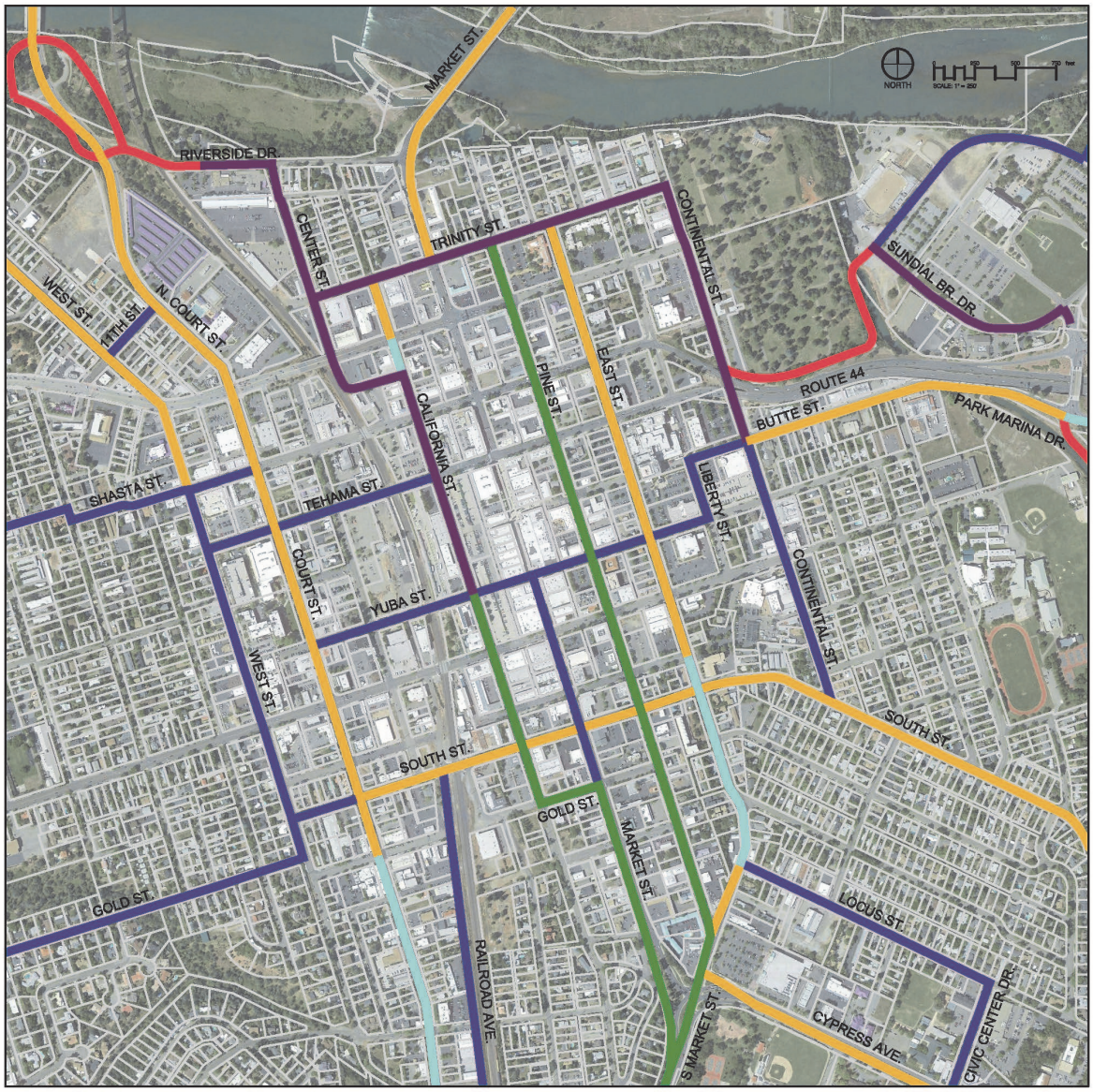


Figure 7 – Existing and Proposed Downtown Bikeway System Plan

RECOMMENDED REGULATORY & GUIDANCE PLANS & REPORT AMENDMENTS

Following the formulation of the Action Plans, existing City transportation regulatory documents, associated policies, and guidance plans and reports were reviewed to assure conformity with current legislative policy direction. In general, the Action Plans are found to be consistent with policy direction apart from a few exceptions. **Table 1** provides a summary of current City goals, policies, strategies, and actions that need to be amended or added for the Downtown Redding Community Based Transportation Plan to be fully consistent with the City's current transportation policy direction. To achieve legislative consistency, recommended changes need to be formally processed and approved.

DOWNTOWN TRANSPORTATION PLAN IMPLEMENTATION ESTIMATED COSTS

Table 2 provides a summary of the estimated costs associated with implementing the recommended projects advanced for each Action Plan. Costs for the Green Streets Action Plan components are incorporated into the Vehicular, The Market Street Promenade, Parking, Pedestrian, and Bicycle Action Plans.

Table 1 – Recommended Changes to City Policy Documents

POLICY DOCUMENT	ITEM	TOPIC	RECOMMENDATION
General Plan Goals			
GP	Goal T5, Policy T5A and T5B	Traffic Delays (LOS)	Update the policies to incorporate SB 743, which will change the way transportation impacts are analyzed under CEQA. CEQA will no longer use LOS as a measurement of delay. Vehicle Miles Traveled (VMT) will be the new measurement. NOTE: To date, the state has not adopted the new CEQA guidelines and they are expected to allow agencies two years to adopt the new CEQA guidelines.
GP	Goal T10, Policy T10A	Pedestrianism	Update the policy to provide pedestrian-oriented features, including but not limited to quality lighting, benches, landscaping, shading from trees, awnings, and other building design features.
Specific Plan Goals			
SP, Chapter II, Section E	Implementation Strategy 4c	Traffic Delays (LOS)	Update the strategy to incorporate SB 743 (as discussed above).
SP, Chapter II, Section E	Implementation Strategy 4j	Caltrans Value Analysis Traffic Circulation Improvements	Delete the strategy since the referenced roadway improvements north of the Market Street Promenade were constructed by Caltrans.
SP, Chapter II, Section E	Implementation Strategy 4k	Parking	Modify the strategy to identify the locations recommended in this Transportation Plan for future parking garages. Excess land area, after reconstruction of the California Street parking structures, should be considered for "high-rise" mixed-use residential/retail/office buildings.
SP	NEW Strategy	Complete Streets	Work with Caltrans to change the coordinated traffic signal timing on the Downtown couplet to approximately 25 MPH instead of the current approximate 30 MPH.
SP	NEW Strategy	Complete Streets	Create a Parklet Program with applicable policies.
Specific Plan Recommended Actions			
SP, Chapter VII, Section B	B.4 Recommendations, Action 1	Traffic Delays (LOS)	Update the action to incorporate SB 743 (see above) while retaining the portion of the strategy that encourages slow traffic operations that are good for businesses, pedestrians, and bicyclists.
SP, Chapter VII, Section B	B.4 Recommendations, Action 2	Caltrans Value Analysis Traffic Circulation Improvements	Delete the action since Caltrans constructed the referenced improvements.
SP, Chapter VII, Section B	B.4 Recommendations, Action 6	Consolidate Greyhound Service at Transit Center	Delete the action since the relocation has already occurred.
SP, Chapter VII, Section B	B.4 Recommendations, Action 7	State Highway Relinquishment	Modify the action to encourage working closely with Caltrans on implementing Complete Street improvements on the state highways, rather than the City taking over state highway ownership.
SP, Chapter VII, Section C	C.2 Recommendations, Short-Term Recommendation 1	Public Parking Signing	Update the recommendation to include the addition of parking guidance systems, including space occupancy detection and dynamic advance street signing to direct motorists to available parking.

Table 1 – Recommended Changes to City Policy Documents *(Continued)*

POLICY DOCUMENT	ITEM	TOPIC	RECOMMENDATION
Specific Plan Recommended Actions			
SP, Chapter VII, Section C	C.2 Recommendations, Short-Term Recommendation 3	Road Diets on Low-Volume Streets	Eliminate the reference to Sacramento Street since the "Diet" was implemented. Add road diets to South Street, from Court Street to East Street; and Shasta Street, from Court Street to California Street.
SP, Chapter VII, Section C	C.2 Recommendations, Mid-Term to Long-Term Recommendation 5	Public Parking at Former Police Facility	Eliminate this recommendation and do not consider constructing a public parking facility at the former police facility.
SP	NEW Recommendation	Parking Management Program	Hire a consultant to conduct a comprehensive parking study resulting in an on-street and public off-street parking management program with policies and ordinance updates (if necessary). The outcome will be a program that identifies the use of meters, time allowances, loading zones, permit parking, etc.
SP	NEW Recommendation	Parking Structures	Hire a consultant to develop a financing plan for implementing the recommended new parking garage structures. At the northern California Street location, the plan recommends alternative sites, one of which is a site owned by RABA instead of the City. The footprint on the California Street structures should be reduced to create the opportunity for new redevelopment on California Street.
SP	NEW Recommendation	On-Street Parking Meters	Until a parking management program is adopted (see above), implement the following regarding on-street meters: (1) Retain or install meters on a block-by-block basis on any block with typical weekday parking utilization that exceeds 85% occupancy for more than one continuous hour during typical workdays. (2) Upgrade to electronic smart meters with telemetry with centralized management. (3) Increase the minimum hourly rate to at least $0.25/hour. (4) Use different time of day rates to facilitate the maximum occupancy rate identified above.
Bikeway Action Plan			
BAP	Recommendation 3.7	Bikeway Map	Update the Redding Bikeway Map to incorporate features identified in the updated map contained in this Transportation Plan.
Parks, Trails, and Open Space Master Plan			
PTOMP	Goal TB4A	Bicycle Plan	Update the cross reference to the current Bikeway Action Plan.

Legend: GP – General Plan
SP – Specific Plan
BAP – Bikeway Action Plan
PTOMP – Parks, Trails, and Open Space Master Plan

Table 2 – Downtown Redding Community Based Transportation Plan Action Plan Implementation Summary of Estimated Costs

ACTION PLAN IMPLEMENTATION FEATURE	TOTALS	COMMENTS
Vehicular Action Plan	***$ 7,050,000***	
Road Diet	$ 2,250,000	Angle striping, planters, and pavement treatment
Shared Space Alleys	$ 4,800,000	Complete reconstruction, lighting, and landscaping
Improve Cypress / Pine / Market Intersection (Additional Study Required)	$ 4,000,000	Conceptual only - amount not included in the total
Restore Two-Way Streets (Additional Study Required)	$ 9,000,000	Conceptual only - amount not included in the total
The Market Street Promenade Action Plan	***$ 9,000,000***	
Promenade Streets	$ 9,000,000	Assumes right-of-way dedication and complete reconstruction
Parking Action Plan	***$ 31,670,000***	
Parking Management	$ 1,420,000	On-street and parking garage smart meters and real-time parking garage space-available signs
Electric Vehicle Charging Stations	$ 150,000	3% of parking garage spaces
Parking Garages	$ 30,100,000	Four alternative garages yielding 115, 270, 320, and 375 parking stalls
Transit Action Plan	***$ 1,110,000***	
Bus Stop Improvements	$ 660,000	Retrofit into existing right-of-way
Route Expansion	$ 450,000	New bus and shelters
Pedestrian Action Plan	***$ 5,000,000***	
Intersection Safety & Traffic Calming	$ 5,000,000	Curb extensions, signal modifications, and high-visibility crosswalks
Improve Cypress / Pine / Market Intersection (Additional Study Required)	$ 1,000,000	Conceptual only - amount not included in the total
Bicycle Action Plan	***$ 9,699,500***	
Class I Mixed-Use Trails	$ 5,500,000	Various locations
Class II Bike Lanes	$ 157,500	Pavement delineation and signing
Upgrade to Buffered Class II Bike Lanes	$ 42,000	Pavement delineation and signing
Class III Bike Lanes	$ 50,000	Pavement delineation and signing
Class IV Bike Lanes	$ 2,350,000	Retrofit into existing right-of-way and Sundial Bridge Drive widening
Area-Wide Design Elements	$ 1,150,000	Signing, intersection markings, crossing signals, and bicycle parking
Class IV Bike Lanes (Additional Study Required)	$ 450,000	Retrofit into existing right-of-way
Green Streets Action Plan	***N/A***	***Costs included in other Action Plans***
Total Estimated Construction Costs	***$ 63,529,500***	Costs distributed over a 20-year implementation period
Total Estimated Construction Costs with Conceptual Projects	***$ 73,529,000***	Includes conceptual designs costs for 3 projects requiring additional studies

APPENDIX A

EXISTING TRANSPORTATION CONDITIONS

Appendix A reviews current transportation conditions of the Downtown area to establish a baseline for future analysis and programming discussed in **Appendix B – Future 2035 Traffic Analysis**. The physical and operational characteristics of the existing Downtown transportation system are described. The existing transportation system includes the streets, parking, public transit, non-motorized travel, and wayfinding serving the Downtown area.

A.1 STREET SYSTEM

A hierarchy of streets within Downtown provides connection with residential, commercial, and industrial uses throughout the City and beyond. The street system within Downtown is a grid-like network with one-way streets providing circulation around The Market Street Promenade, to and from the state highways and connections to other local streets. The Market Street Promenade is currently defined by the area within California Street, Placer Street, Pine Street, and Tehama Street. The existing street system for Downtown is identified in **Figure A1** and described as follows:

STATE HIGHWAY SYSTEM

Upon entering Downtown, two of the state highway routes become one-way couplets with at-grade intersections with local streets. The following state routes service Downtown as well as interregional traffic:

- State Route 44 (SR 44) is an east-west arterial commencing in Downtown at the one-way couplet and extending easterly to Lassen County. Within Downtown, Tehama Street provides three one-way eastbound lanes with a posted 30 MPH speed limit. Shasta Street has four one-way westbound lanes with a posted 30 MPH speed limit. East of Liberty Street, SR 44 transitions to a four-lane freeway.

- Approximately one mile south of Downtown, State Route 273 (SR 273) at Wyndham Lane is a north-south four-lane divided expressway. Proceeding north from Wyndham Lane to West Cypress Avenue, SR 273, as Market Street in the City, is a four-lane divided arterial providing access to collector and local streets. At West Cypress Avenue, SR 273 forms a couplet with Pine Street going northbound to Market Street/Eureka Way and with Market, Tehama, and California Streets going southbound from Market Street/Tehama Street and then on Market Street from Gold Street. SR 273 joins with SR 44 at Shasta Street, at Eureka Way, and at Market Street between Eureka Way and Tehama Street. The one-way couplet has three northbound lanes and two southbound lanes with a posted speed limit of 30 MPH. SR 273 joins with SR 299 between Eureka Way/Market Street and Lake Boulevard to the north. North of Lake Boulevard, SR 273 terminates when it merges onto I-5 as an on-ramp.

- State Route 299 (SR 299) is a major arterial within Downtown that provides regional access to the east and west. At the western city limits, SR 299 is a two-lane rural highway that transitions to a four-lane arterial near Buenaventura Boulevard and continues as a four-lane arterial to Market Street in Downtown. At Market Street, SR 299 turns north, joining with SR 273, and continues north out of Downtown. At Lake Boulevard, approximately 1.5 miles northeast of Downtown, SR 299 turns east eventually becoming a freeway to the eastern city limits.

Figure A1 – Downtown Redding Specific Plan Area Boundary

ARTERIAL STREETS

The Transportation Element of the General Plan identifies that arterials are used to "provide for through traffic movement between areas and across the City and direct access to abutting property, subject to necessary control entrances, exits, and curb use." The following arterial streets serve the Downtown area:

- California Street is a north-south arterial between Angelo Street/SR 273/Market Street and Riverside Drive. California Street is a two-way roadway between Riverside Drive and Tehama Street. Between Tehama Street and Gold Street, California Street is a two-lane one-way street going southbound with on-street parallel parking and a bike lane. California Street again becomes a two-way street south of Gold Street.

- Court Street is a north-south two- and four-lane arterial between Railroad Avenue and Eureka Way/SR 299. North of Eureka Way, Court Street is reduced to two lanes and at Riverside Drive continues as Benton Drive over the Sacramento River. South of Sonoma Street, Court Street is a three-lane facility. Court Street within the Downtown area provides on-street parallel parking and access to the Shasta County Courthouse, County Administration Center, and other business related uses.

- Eureka Way is an east-west arterial that begins at the western City limits, as a continuation of SR 299, and terminates at Continental Street. Beginning from the City limits, the two-lane highway transitions to a four-lane arterial near Buenaventura Boulevard and continues as a four-lane arterial to Market Street. At Market Street, SR 299 merges with SR 273. For the one-block section from Market Street to Pine Street, Eureka Way is the northbound portion of the one-way Downtown couplet. From Pine Street to Continental Street, Eureka Way is a two-lane local street with on-street parking.

- Market Street serves as SR 273, an arterial, and a Downtown business district street. Beginning at the southern City limits, as a continuation of SR 273, Market Street is a four-lane expressway until its intersection with Wyndham Lane. From Wyndham Lane northward to West Cypress Avenue, Market Street is a four-lane divided arterial. Market Street is also southbound SR 273 from West Cypress Avenue to Gold Street. For three blocks, from Gold Street to Placer Street at The Market Street Promenade, Market Street is a Downtown local street. From Tehama Street, at the north end of The Market Street Promenade, to the Sacramento Bridge, Market Street is an arterial and serves as SR 273. North of the Sacramento River, to its interchange with I-5, Market Street is a four-lane divided arterial and a four-lane expressway.

- Pine Street begins as SR 273 at West Cypress Avenue as a three-lane one-way couplet until the couplet turns westerly at Eureka Way. Nearly every intersection is signalized with pedestrian signals. The traffic signals are coordinated for approximately 30 MPH. On-street parking is generally provided on both sides of the street. North of Eureka Way, Pine Street is a local street serving businesses and residents.

- Placer Street is an east-west arterial beginning many miles west of the City and entering the City as a rural two-lane roadway. Approaching Downtown, Placer Street is a four-lane two-way arterial with sections of on-street parking and signalized intersections with pedestrian signals. Placer Street traverses the Downtown core as a four-lane two-way arterial providing important access through and to Downtown. East of East Street, Placer Street transitions to a two-lane local street serving businesses and residents.

- Tehama Street is an east-west arterial between West Street and Liberty Street. Tehama Street between West Street and the railroad crossing is a two-way two-lane roadway with on-street parallel parking. Between the railroad crossing and California Street, Tehama Street has two lanes eastbound and one lane westbound. Between California Street and Market Street, Tehama Street is a two-way four-lane roadway. Between Market Street and Liberty Street, Tehama Street is a three-lane one-way couplet (SR 44) going eastbound, with on-street parallel parking.

COLLECTOR STREETS

The Transportation Element identifies that collector streets "provide for traffic movement between major arterials and local streets and direct access to abutting property." The following collector streets serve the Downtown area:

- Butte Street is an east-west two-lane collector street from Walnut Avenue to West Street where it terminates at the Shasta County Administration Building. It then continues as a local street between Court Street and Oregon Street where it terminates and continues again between Market-Pine Alley and East Street. Butte Street was abandoned between East Street and Liberty Street to allow for the Shasta Regional Hospital expansion. Butte Street begins again at Liberty Street to the east and continues as Park Marina Drive at Sequoia Street. Prior to the construction of the Downtown Mall in the late 1960's, Butte Street was a through street, but currently only provides access to parking structures.

- East Street is a north-south two-way collector beginning at the intersection of Pine Street/SR 273/West Cypress Avenue and ending at Trinity Street. South of Gold Street, East Street is a two-lane roadway serving residences and small businesses. East Street, between Gold Street and Shasta Street, is a four-lane arterial serving the eastern Downtown commercial areas, and is a major route to eastbound SR 44, nearby businesses, and residential areas east of Downtown. North of Shasta Street, East Street is a two-lane local street serving residences and local businesses.

LOCAL STREETS

The Transportation Element identifies that local streets provide "for direct access to abutting land and for local traffic movements." Local streets usually have a 25 MPH speed limit. The following local streets serve the Downtown area:

- Sacramento Street is an east-west two-lane local street that is divided into three segments between West Street and Railroad Avenue, between Center Street and East Street, and between Continental Street and Sequoia Street. The first two segments of Sacramento Street have on-street diagonal parking and provide access to adjacent parking lots for commercial businesses and small offices.

- Shasta Street is an east-west local street between Stratford Avenue/Pleasant Street and Liberty Street. West of West Street, Shasta Street is a two-lane residential street. Between West Street and Market Street, Shasta Street is a two-way four-lane roadway providing access to other local streets and commercial areas. Between Market Street and Pine Street, Shasta Street has three one-way westbound lanes. Between Pine Street and Liberty Street, Shasta Street is a four-lane one-way couplet of SR 44.

- South Street is a two-way east-west roadway between West Street and Park Marina Drive. South Street is four lanes between Court Street and East Street with on-street parallel parking. In Downtown, South Street provides access to adjacent parking lots for commercial businesses and small offices. East of East Street, it is a two-lane roadway providing access to the local residential streets of the Garden Tract neighborhood and commercial areas along Athens Avenue.

- Yuba Street is an east-west two-lane roadway with on-street parking that extends from the Shasta County Courthouse, just west of Court Street, to Sequoia Street. Prior to the construction of the Downtown Mall, Yuba Street was a through street, but currently only provides access to the parking structures. Yuba Street also provides access to the Redding Amtrak station, the RABA Downtown Transit Center, the U.S. Post Office, nearby commercial uses, and the Shasta County Courthouse and Juror Parking Lot. East of Continental Street, Yuba Street primarily serves the residential area of the Garden Tract neighborhood.

EXISTING TRAFFIC OPERATIONS

To understand existing traffic operational conditions within Downtown, seven intersections were identified, in consultation with City staff, for the traffic operational baseline analysis. The intersections were chosen based on their strategic location within Downtown and their current traffic flow patterns. The intersections are on an interconnected coordinated network in Downtown, providing circulation around The Market Street Promenade. Both AM and PM peak hour turning movement counts were collected. The study intersections are:

1. California Street at Placer Street
2. Market Street at Placer Street
3. Pine Street at Placer Street
4. California Street at Tehama Street
5. Market Street at Tehama Street
6. Pine Street at Tehama Street
7. Market Street at Shasta Street

At the intersections, consistent with the January 2009 City of Redding Traffic Impact Analysis (TIA) Guidelines, existing traffic conditions were analyzed using guidance from the City of Redding's Transportation Element of the General Plan and Caltrans Guide for the Preparation of Traffic Impact Studies.

The Transportation Element establishes the following Level of Service (LOS) standards for traffic planning and development review:

- Use LOS "C" - "acceptable delays" - for most arterial streets and their intersections.
- Use LOS "D" - "tolerable delays" - for the Downtown area where vitality, activity, and pedestrian and transit use are primary goals.
- Use LOS "D" - "tolerable delays" - for streets within the state highway system and interchanges.
- Use LOS "D" - "tolerable delays" - for river-crossing street corridors whose capacity is affected by adjacent intersections.

The LOS "D" threshold is applicable to all study intersections.

The December 2002 Caltrans Guide for the Preparation of Traffic Impact Studies states:

> "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."

Based on the above policies and guidelines, LOS "D" was used as the minimum acceptable LOS for all study intersections. The traffic study provides a preliminary operational level evaluation of traffic operating conditions.

The existing conditions analysis established the Downtown baseline traffic operational conditions. **Table A1** provides a summary of the existing peak hour intersection delay and intersection Levels of Service.

Table A1 – Existing Conditions

#	Intersection	Control Type[1]	Target LOS[2]	AM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]
1	California St & Placer St	Signal	D	13.6	B	-	11.4	B	-
2	Market St & Placer St	AWSC	D	11.8	B	No	13.5	B	No
3	Pine St & Placer St	Signal	D	17.1	B	-	18.6	B	-
4	California St & Tehama St	Signal	D	20.5	C	-	24.9	C	-
5	Market St & Tehama St	Signal	D	5.1	A	-	10.6	B	-
6	Pine St & Tehama St	Signal	D	15.1	B	-	22.7	C	-
7	Market St & Shasta St	Signal	D	17.8	B	-	16.7	B	-

Notes:

1. *AWSC = All Way Stop Control*
2. *LOS = Delay based on average of all approaches for AWSC & Signal*
3. *Signal Warrant = Based on California MUTCD Warrant 3*

A.2 PARKING

Parking is one of the key elements for a viable Downtown. Maintaining an adequate supply of on- and off-street parking in close proximity to the businesses served is important to the retention and expansion of businesses, in particular retail.

In late 2010, the City of Redding Public Works Department conducted an extensive inventory of existing parking in the Downtown Core Area, bounded on the north by Shasta Street, on the south by South Street, on the west by West Street, and on the east by East Street. For the purposes of analysis, the Downtown Core Area was separated into six sections, as shown in **Figure A2**.

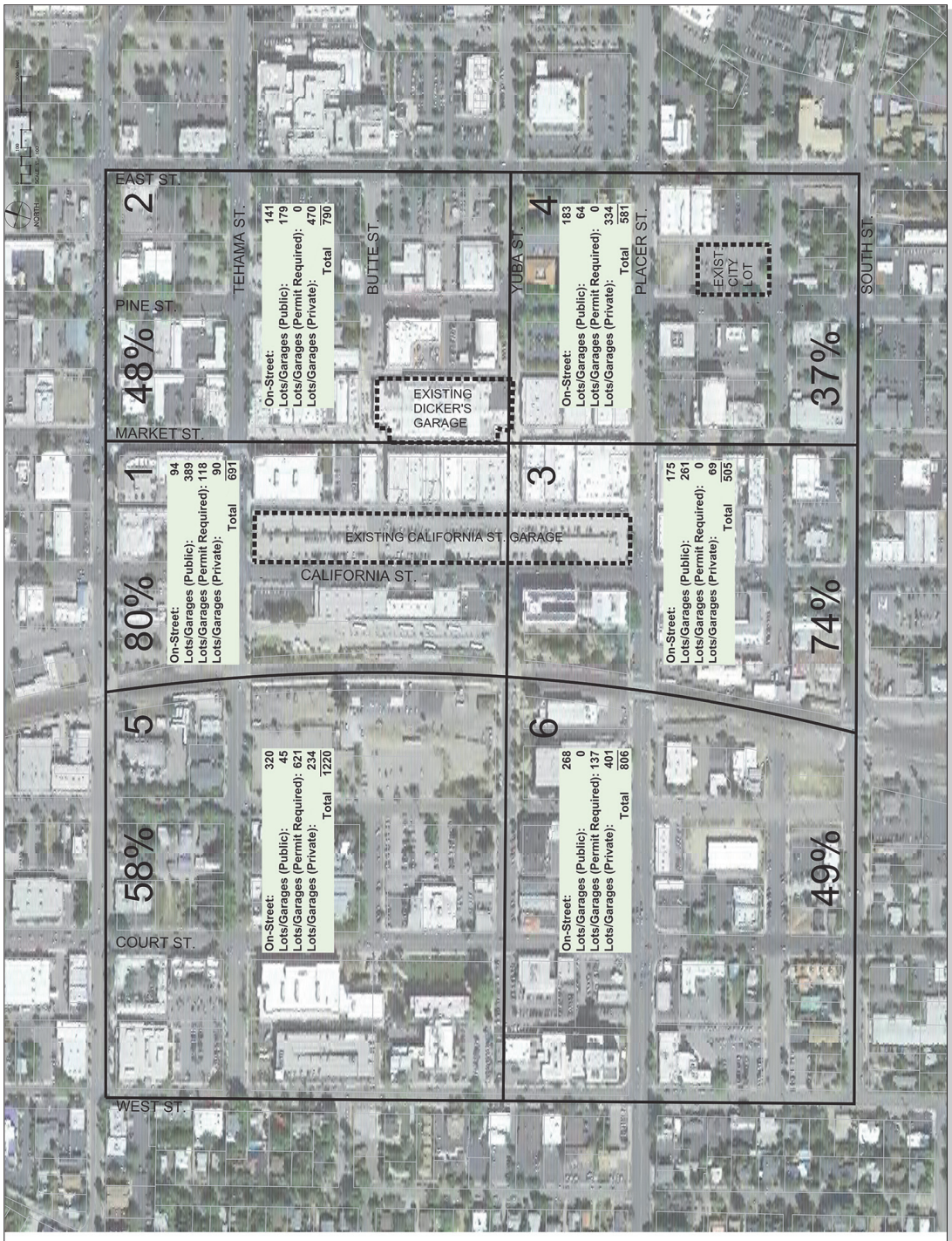
ON-STREET PARKING

In the Downtown Core Area, on-street parking consists of parallel and diagonal curbside parking. On-street public parking is both metered and unmetered. **Table A2** identifies 1,181 on-street public parking spaces serving the Downtown Core Area.

Table A2 – Existing On-Street Parking Supply

Section	Parking Spaces
1	94
2	141
3	175
4	183
5	320
6	268
Total	**1,181**

Source: *City of Redding*



EXISTING PARKING SUPPLY

YEAR 2010 UTILIZATION

LOCATION	Percent of spaces occupied
Quadrant 1:	
On-Street Unmetered Parking	24%
On-Street Metered Parking	46%
Off-Street Public Parking	94%
Off-Street Private Parking	71%
Public Employee/Permit Parking	66%
TOTALS	**80%**
Quadrant 2:	
On-Street Unmetered Parking	42%
On-Street Metered Parking	36%
Off-Street Public Parking	75%
Off-Street Private Parking	41%
Public Employee/Permit Parking	0%
TOTALS	**48%**
Quadrant 3:	
On-Street Unmetered Parking	68%
On-Street Metered Parking	67%
Off-Street Public Parking	87%
Off-Street Private Parking	42%
Public Employee/Permit Parking	0%
TOTALS	**74%**
Quadrant 4:	
On-Street Unmetered Parking	36%
On-Street Metered Parking	28%
Off-Street Public Parking	13%
Off-Street Private Parking	44%
Public Employee/Permit Parking	0%
TOTALS	**37%**
Quadrant 5:	
On-Street Unmetered Parking	57%
On-Street Metered Parking	77%
Off-Street Public Parking	0%
Off-Street Private Parking	42%
Public Employee/Permit Parking	63%
TOTALS	**58%**
Quadrant 6:	
On-Street Unmetered Parking	49%
On-Street Metered Parking	58%
Off-Street Public Parking	0%
Off-Street Private Parking	40%
Public Employee/Permit Parking	72%
TOTALS	**49%**
TOTAL SYSTEM	
On-Street Unmetered Parking	53%
On-Street Metered Parking	46%
Off-Street Public Parking	82%
Off-Street Private Parking	43%
Public Employee/Permit Parking	65%
TOTALS	**57%**

Figure A2 – Existing Parking Supply and Use

OFF-STREET PARKING

Within the Downtown Core Area, off-street parking is located in both public and private parking lots.

Table A3 – Existing Off-Street Parking Supply Available to the Public

Section	Parking Spaces
1	389
2	179
3	261
4	64
5	45
6	0
Total	**938**

Source: *City of Redding*

Public Parking

There are approximately 938 off-street parking spaces available to the public in City- and County-owned parking lots in the Downtown Core Area, as depicted in **Figure A3** and **Table A3**. The lots include the California Street parking structures (650 spaces), the parking garage beneath the former Dicker's Department Store (145 spaces) and another 98 spaces in two surface lots along Pine Street. In addition, there are 45 metered spaces in the County-owned parking structure at the County Administration Center at the corner of West Street and Butte Street.

Private Parking

There are several private parking lots serving the public and the adjoining businesses distributed throughout the Downtown Core Area. In general, the parking spaces in Sections 1 and 2 are in small parking lots serving hotels, restaurants, and retail uses. In Section 2, many spaces are in private parking lots serving Shasta Regional Medical Center and other support businesses in the immediate area. In Sections 3 and 4, many of the private spaces are in bank parking lots, many of which are available to the public after work hours. For example, U.S. Bank of California allows use of its parking by patrons of the Cascade Theatre for evening performances. Most of the private parking spaces serving Sections 5 and 6 are in small lots that serve offices, restaurants, and the predominant government uses in the area. In all, there are approximately 1,598 off-street spaces in private parking lots, as summarized in **Table A4**.

Table A4 – Existing Off-Street Private Parking Supply

Section	Parking Spaces
1	90
2	470
3	69
4	334
5	234
6	401
Total	**1,598**

Source: *City of Redding*

Figure A3 – Existing Downtown Parking Lots
Source: *Omni-Means*

Table A5 – Existing Off-Street Public Employee/Permit Parking Supply

Section	Parking Spaces
1	118
2	0
3	0
4	0
5	621
6	137
Total	**876**

Source: *City of Redding*

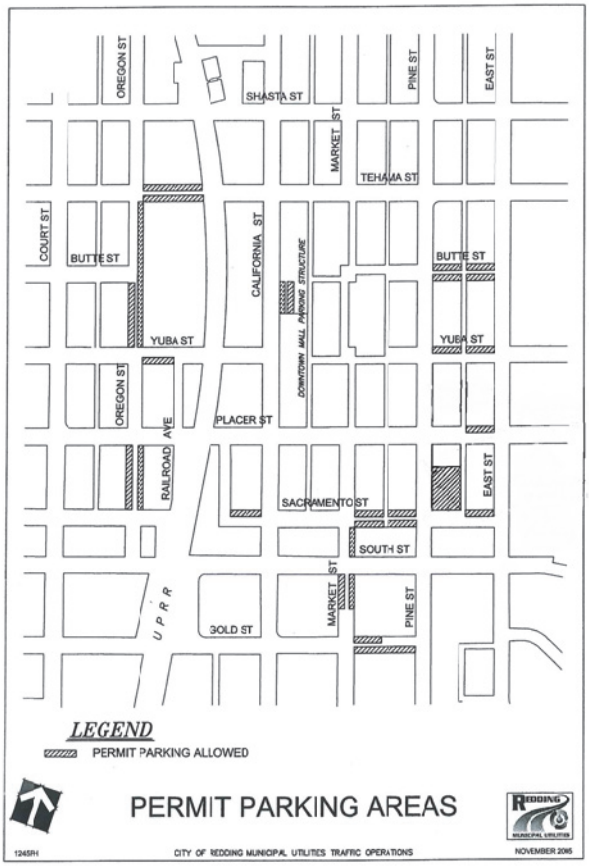
Public Employee & Permit Holders Parking

Throughout the Downtown Core Area, there are several designated off-street parking areas for public employees and permit holders only. An example is RABA employee parking and users at the Transit Center. There are 876 public employee and permit parking spaces in the Downtown Core Area, as shown in **Table A5**. The vast majority of these spaces are near the Shasta County Administration Center and County Courthouse, which includes the County Administration parking structure, and Juror Parking Lot along Oregon Street on UPRR property.

The City issues parking permits in, and adjacent to, Downtown on a first-come, first-served basis. The following identifies the type of parking permits available:

- Preferred Parking Permits - $58 per quarter. For use in designated spaces on the ramps of the California Street parking structure and other designated "Permit Parking" spaces.
- Regular Parking Permits - $38 per quarter. For use in parking spaces in all City lots and on-street parking spaces designated for permit parking. This permit cannot be used in the California Street parking structure.

- Lorenz Senior Apartments Residents Parking Permits - $29 per quarter. Residents are permitted to park in designated spaces in the California Street parking structure 24 hours per day. This permit is also good in any City lot for time periods as posted. **Figure A4** identifies City-operated Downtown Permit Parking Areas.



The City also issues free Residential Parking Permits allowing residents in neighborhoods adjacent to Downtown to park on specific streets, adjacent to their residence, 24 hours per day. Occupants of residences along the following streets are eligible for permits:

- Chestnut Street – between Placer and Butte Streets
- Shasta Street – between West and Rose Streets
- Court Street – between Tehama and Butte Streets
- West Street – between Placer and Sacramento Streets

Including free Residential Parking Permits, the City only issues approximately six parking permits per quarter. As a result, revenue generated by parking permit sales is minimal.

Figure A4 – City-operated Downtown Permit Parking Areas

PARKING STRUCTURES

The City-owned two-story California Street parking structure is located immediately west of The Market Street Promenade fronting California Street, between Shasta and Tehama Streets. The north structure was constructed in 1972 and the south structure in 1977. There are 650 spaces total in both structures.

Over the past 15 to 20 years, there were many discussions regarding the safety and viability of the structures. In 1998, the City hired International Parking Design, Inc. to analyze the structural integrity and life expectancy of the structures. The consultant concluded that the structures were in fairly good structural condition with a remaining useful life of between 25 and 30 years, provided regular maintenance was performed. Based on the consultant's findings and strictly from a life-expectancy standpoint, the two structures can be expected to remain safe and functional parking garages for another seven to 12 years, or until 2023 to 2028.

PARKING MANAGEMENT

Parking meters, time limits, and parking permits are used by the City as part of its overall parking management strategy. Enforcing time limits, whether metered or posted, helps ensure adequate turnover of parking space availability for business customers, promoting economic activity.

Meters

In the mid-1970s, the City had 1,300 on-street parking meters in the Downtown Core Area. Today, there are fewer than 300 on-street parking meters. Nearly all of these are mechanical, or coin-operated, meters. The vast majority of the meters are $0.10 per hour. The remaining meters are $0.20 per hour. Parking in all public parking lots is currently free. The most recent lot where meters were removed in October 2010 was Lot 4, at the corner of Pine and South Streets. Yearly parking meter revenue generated is approximately $60,000.

There is virtually no City inventory of available replacement mechanical meter heads. As meters fail, or are stolen or vandalized, they are replaced with mechanical heads taken from meters in less-used parking areas, or not replaced at all. As a result, there are many areas throughout Downtown where meter coverage is intermittent or non-existent. Unfortunately, there are numerous examples in Downtown where a parking space is metered and the adjacent space is not.

Time Limits

Time limits are used in Downtown to ensure customer-parking turnover beneficial for businesses and to afford loading and unloading opportunities. Generally, time limits are in effect Monday through Friday, between the hours of 9 am and 6 pm, except for legal holidays. Throughout Downtown, there are over 20 different time limits and zones, resulting in an inconsistency in the application of time limits. In some areas, one side of a street may have parking meters yet the other side has only time limit signs. This creates a sense of inequity for some businesses. The vast majority of parking meters have two-hour limits; however, there are some parking meters with a variety of time limits, as follows:

- 10-hour meters
- 2-hour meters
- 30-minute meters
- 8 am - 6 pm meters
- 9 am - 5 pm meters
- 9 am - 6 pm meters
- Permit parking OK meter spaces
- Market Street Faire meter spaces

There are many areas in Downtown where time limit signs are used in lieu of parking meters. Often, this has been due to requests from business owners asking the City to remove parking meters and replace them with time limit signs. This was the case with the construction of the Market Street and Yuba Street Demonstration Blocks.

Enforcement

Since the end of 2009 when the Redding Police Department's Parking Enforcement Technician retired, City parking enforcement is the sole responsibility of the Public Works Parking Meter Service Worker. This individual spends four days per week in Downtown and focuses on cleaning and maintaining the California Street parking structure, other public parking lots, and the Market Street and Yuba Street Demonstration Blocks. Work consists of sweeping the parking lots and streets, trash removal, replacing light bulbs in the California Street parking structure, and parking meter maintenance. Duties also include collecting meter revenue and some minimal parking enforcement.

A.3 TRANSIT SERVICES

The Redding Area Bus Authority (RABA) was formed in 1976 by a Joint Powers Agreement (JPA) between the City of Redding and the County of Shasta to provide public transportation services within the greater Redding area. RABA began as a fixed route and complementary paratransit public transportation service in November 1981. The JPA was amended in 1998 to include the cities of Anderson and Shasta Lake. RABA serves an area of about 100 square miles with a population of about 120,000 persons. RABA provides a network of fixed route and paratransit services.

RABA FIXED ROUTE SERVICE

RABA fixed route service, using 27 to 33 seat passenger buses, consists of ten local routes and three express routes. Each month the Fixed Route system carries nearly 70,000 riders, including 2,500 riders in wheelchairs, in addition to those carried by paratransit service. The local routes operate 12 or 13 service hours per day, Monday through Friday, starting at 6:20, 6:50, or 7:20 am. Saturday service commences three hours later than the weekday start time, but ends at the same time as weekday services. There is no Sunday service.

All local routes depart from one of three RABA transit centers: eight routes depart from the Downtown Transit Center, four from the Masonic Transfer Center, and three local routes from the Canby Transfer Center. In most cases, these routes complete a loop in the span of one hour, and return to the starting point at the respective transit center.

RABA DEMAND RESPONSE SERVICE

RABA's Demand Response transportation service provides origin and destination transportation for individuals who, because of a disability, are not able to utilize a regularly scheduled fixed route bus service. RABA's demand response provides Americans with Disabilities Act (ADA) Paratransit service. The system utilizes 20 smaller buses or vans to pick up disabled passengers and their aides within three-quarters of a mile of fixed routes. The seating capacity of these vehicles is 12-18 persons depending upon how many wheelchairs are on board at any one time. Demand Response carries over 4,600 riders each month and service is provided Monday to Saturday during the same operating hours as fixed route services.

RABA DOWNTOWN TRANSIT CENTER

The RABA Downtown Transit Center opened in August 1996. **Figure A5** shows the RABA System Map for Downtown. Currently 12 gates provide access to all transit vehicles. Seven routes depart from the RABA Downtown Transit Center. The Downtown Transit Center also provides riders with the following conveniences:

- Canopied waiting areas with benches
- Public restrooms
- Vending machines
- Bike racks
- Passenger parking
- Access to the Amtrak bus
- Access to Greyhound bus
- Access to other county-wide transit services such as Trinity Transit, Sage Stage, and Susanville Indian Rancheria Public Transportation Program

Figure A5 – Downtown Redding RABA System Map
Source: *RABA*

A.4 NON-MOTORIZED TRANSPORTATION – PEDESTRIANS, BICYCLES & TRAILS

Non-motorized transportation means pedestrian (including wheelchairs) and bicycle travel, and their ability to safely and efficiently traverse Downtown, a critical component of Downtown viability. This transportation mode is defined by characteristics such as location, accessibility, safety, and aesthetics.

PEDESTRIAN CIRCULATION

Downtown, and in particular The Market Street Promenade, has good connections for all citizens to the surrounding street system, with the implementation of the Americans with Disabilities Act (ADA) improvements on sidewalks along the streets and marked crosswalks at intersections. All pedestrian signals installed in Redding in the past ten years have been countdown signals, and improved LED lighting is used on all traffic signals. The following observations were made in the Pedestrian Safety Assessment (Tech Transfer, ITS Berkeley, 2010):

- The City has opened up the Downtown Mall (The Market Street Promenade) with good pedestrian connections to the surrounding street system.
- Streetscape improvements have been made along the south portion of Market Street between Placer and Sacramento Streets, and along the western portion of Yuba Street between Oregon and California Streets, which make the streets more inviting to pedestrian activity.
- Good links are provided to transit stops and the RABA Downtown Transit Center.
- On-street parking provides a buffer for pedestrians.
- Angled parking has been installed along Butte Street, the eastern portion of Yuba Street, and Sacramento Street.
- The City allocated funding to provide pedestrian improvements at railroad crossings at Yuba, Placer, and South Streets with construction completed in 2011.

- Wide sidewalks are provided with trees.
- High-visibility crosswalk striping is provided.

As part of its recommendations, the Pedestrian Safety Assessment stated that it is important to improve the balance between motor vehicles, pedestrians, and bicyclists along California Street and Pine Street consistent with federal policies for development of Complete Streets.

Pedestrian Comfort Issues

The walkability of Downtown can be affected by comfort and/or aesthetic issues relating to the way the streetscape feels and looks to the user. Adequate trees and lighting are inviting for pedestrians. Residential areas in Downtown have an abundance of street trees but the predominant Downtown commercial areas lack sufficient trees, particularly along the large one-way streets. Lighting is also a safety measure to see hazards, to be seen, and to discourage crime. Downtown lighting can best be described as minimal and insufficient for most non-motorized traffic to feel safe.

BICYCLE CIRCULATION

The Bikeway Action Plan 2010-2015 was developed to improve bicycle transportation within the City by identifying and prioritizing necessary bikeway system improvements, establishing bicycle-friendly policies, and outlining needed bicycle-related education, promotion, and enforcement standards. The City's developing bikeway system consists of multi-use Class 1 paths and trails, Class 2 bike lanes on arterial and collector streets, and signed Class 3 bike routes on connecting and neighborhood streets. Caltrans and the City have begun implementing buffered Class 2 bike lanes. Buffered lanes incorporate additional pavement delineation to provide additional separation between the vehicular travel lane and the bike lane.

California passed the Protected Bikeway Act of 2014, creating a new category of bike lanes: Protected Bike Lanes (Class 4). Class 4 bike lanes use a vertical element as the buffer between the vehicular lane and the bike lane.

Bicycle Parking Facilities

More and more bicycle racks are being installed in Downtown through a cooperative agreement between Healthy Shasta, Viva Downtown, and the City. The racks, designed by Viva Downtown's Design Committee, are fabricated locally by Gerlinger Steel Company, and installed by the City. The cost is shared by Healthy Shasta and Viva Downtown. To date, over 25 bike racks have been installed.

TRAIL CIRCULATION

The Parks, Trails, and Open Space Master Plan "recommends a network of pedestrian and bicycle trails that provide links between parks, open space areas, and major destinations, as well as create safe commuter routes." The Trail and Bikeway Strategy in the Master Plan identifies that "Linkage is a central goal of trails and bikeways – to parks, schools, transit stops, shopping, neighborhoods, cultural attractions, and to other trails and bikeways." The Downtown is a major destination with linkages to the Sacramento River Trail, Dana to Downtown Trail, and the Palisades Trail discussed as follows.

Sacramento River Trail

The hub of the City's trail system is the nationally recognized Sacramento River Trail, designated as a National Recreation Trail by the U.S. Department of the Interior. West, north and east of Downtown, the Sacramento River Trail is a 16-mile network of paved and dirt paths along the banks of the Sacramento River through Redding. The first mile-long section of the Sacramento River Trail was

constructed in 1983. The City is home to the national headquarters of American Trails and co-hosted the 2000 National Trails Symposium. In 2000, Redding and its partners initiated an aggressive $30 million trail and bikeway capital improvement program. When completed, the Sacramento River Trail will connect to hundreds of miles of mountain bike, hiking, and equestrian trails within the Whiskeytown and Shasta-Trinity National Recreation Areas. The eight-foot wide trail is designed for pedestrian and bicycle traffic only.

The Sacramento River Trail extends from Shasta Dam to Hilltop Drive. At the three-mile trail mark is the Sacramento River Trail Bridge (Ribbon Bridge), an impressive 420-foot stress-ribbon bridge opened in 1990. It was the first bridge of its kind built in North America. Near the six-mile mark is the old Diestelhorst Bridge, completed in 1915. The Diestelhorst Bridge was the first automobile bridge across the Sacramento River, but now is used exclusively by bicyclists and pedestrians. Refer to **Figure A6**.

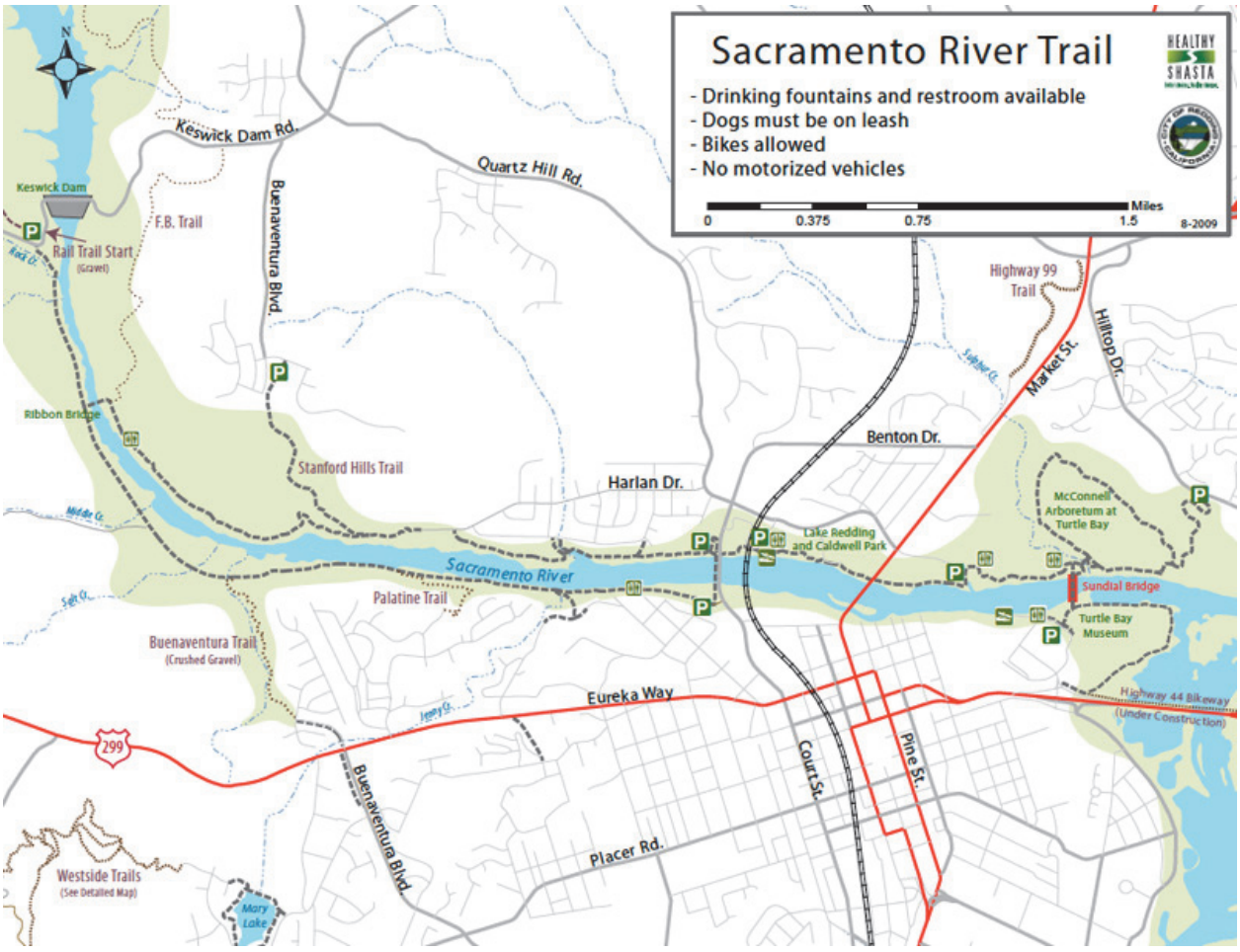


Figure A6 – Sacramento River Trail Map
Source: *Healthy Shasta*

Dana to Downtown Trail

The Dana to Downtown Trail was a part of a larger widening and reconstruction project of SR 44 between Downtown and I-5 completed in 2010. The project was a joint undertaking by Caltrans, the Federal Highway Administration, and the Shasta Regional Transportation Agency. The improvements

included replacing the SR 44 Bridge crossing the Sacramento River, adding lanes on SR 44 to reduce congestion, adding an on-ramp from Dana Drive to westbound SR 44, reconstructing the Sundial Bridge Drive interchange, constructing a bicycle and pedestrian walkway connecting east and west Redding, and incorporating aesthetic treatments highlighting the natural scenic beauty of the Redding area.

The construction of the bicycle and pedestrian trail was in response to the lack of a connection from the Hilltop Drive area at I-5 and Downtown across the Sacramento River. The Dana to Downtown Trail provides a one-mile long dedicated bicycle and pedestrian path across the Sacramento River that is completely separated from the SR 44 vehicular traffic.

Palisades Trail

A new section of trail was completed in mid-2015 connecting the Dana to Downtown Trail to Palisades Avenue, west of Hilltop Drive. This new 1.43-mile segment provides a direct connection to Hilltop Drive along the bluff on the north and east sides of the Sacramento River.

A.5 WAYFINDING

Wayfinding encompasses the ways in which people orient themselves to places and attractions, and then navigate from place to place. A well-designed wayfinding system points out attractions, identifies public parking facilities, and locates amenities. Signage and other graphic communication systems are extremely important wayfinding components necessary to contribute to the success of Downtown.

Following the adoption of the Downtown Redding Specific Plan, the City established a Wayfinding Committee in 2005 to develop a comprehensive public signage program for Downtown and the key corridors leading into and out of Downtown. The Committee identified three levels of public signage:

- Gateways
- Vehicular Signs
- Kiosk Signs

GATEWAYS

The Gateways concept was developed to provide a physical announcement that you have "arrived" at a particular place, in this case – Downtown. The Wayfinding Committee identified the following five primary entry points into Downtown:

- Market Street at Shasta Street
- Eureka Way at the Union Pacific Railroad overpass
- Shasta Street at East Street
- Pine Street at South Street
- Placer Street at the Union Pacific Railroad crossing

While some preliminary designs, as shown in **Figure A7**, have been developed by City staff, to date, no Gateways have been constructed.

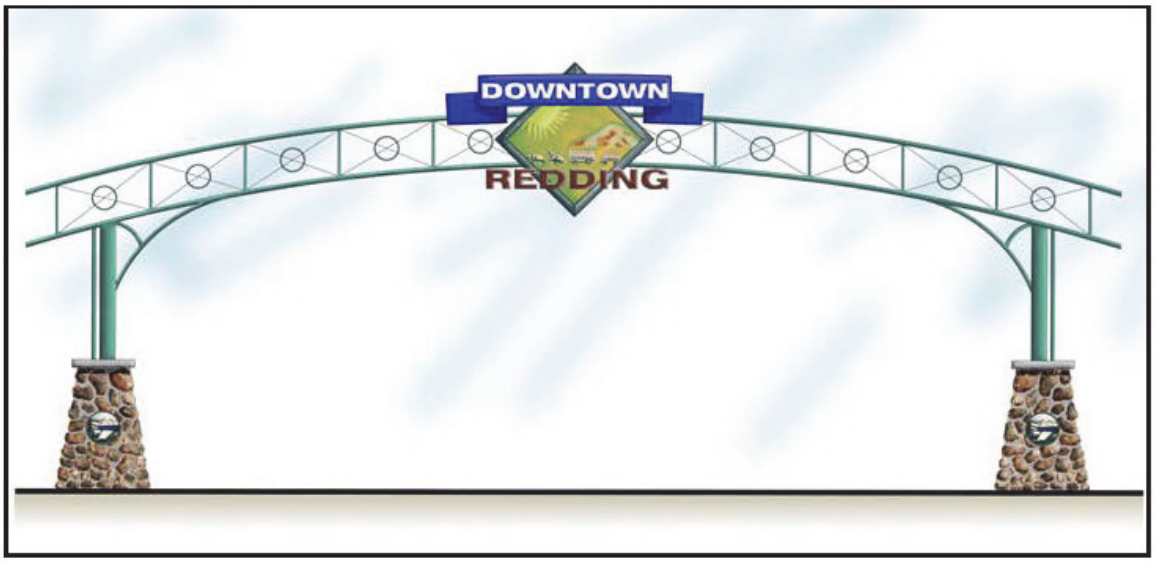


Figure A7 – Gateway Arch Design
Source: *Downtown Redding Specific Plan*

VEHICULAR SIGNS

City staff, working with the Wayfinding Committee, designed two types of vehicular signs – Downtown Entry Signs and "In" Downtown Directional Signs – and determined their location. The City's sign shop fabricated and installed 60 vehicular directional signs.

Downtown Entry Signs

Entry signs are installed along major corridors leading into and out of Downtown. The signs direct drivers to Downtown and nearby points of interest. The sign design is white on teal with a blue river and its identifier is the iconic Sundial Bridge. Refer to **Figure A8**.

Figure A8 – Downtown Entry Sign

"In" Downtown Directional Signs

Travelers encounter "In" Downtown Directional Signs within Downtown. The design is white on burgundy, and the identifier icon is a silhouette of the Old City Hall, located at the southeast corner of Market and Shasta Streets. Refer to **Figure A9**.

Figure A9 – "In" Downtown Directional Sign

KIOSK SIGNS

The Wayfinding Committee was also tasked with developing public kiosk signage to help pedestrians and bicyclists navigate Downtown. The kiosk sign design draws its inspiration from the decorative light poles on the Market Street and Yuba Street Demonstration Blocks, as shown in **Figure A10**. The map panel sits in a yoke that reflects the design of the misting fans in Library Park. The map images are full color and include digital photographs of key destinations. A unique feature of the sign is its ability to move side to side and back and forth. For individuals in wheelchairs, the ability to tip the sign towards them makes the sign easier to read.

There are six pedestrian directory signs located in Downtown at the following locations:

Figure A10 – Kiosk Sign

- Market Street – adjacent to the Cascade Theatre
- Market and Butte Streets – at the west entrance to The Market Street Promenade
- California and Yuba Streets – at the northwest corner
- Yuba Street – adjacent to the Post Office
- Pine and Yuba Streets – at the northwest corner
- Pine and Butte Streets – at the northwest corner

APPENDIX B

FUTURE YEAR 2035 TRAFFIC ANALYSIS

Based on the current transportation conditions identified in **Appendix A**, **Appendix B** provides future programming and analysis. Future traffic forecasts are presented to help assess the future viability of alternative Downtown improvement concepts.

Appendix A noted that to understand existing traffic and future traffic operational conditions within Downtown, the following seven intersections were evaluated:

1. California Street at Placer Street
2. Market Street at Placer Street
3. Pine Street at Placer Street
4. California Street at Tehama Street
5. Market Street at Tehama Street
6. Pine Street at Tehama Street
7. Market Street at Shasta Street

LOS "D" was identified as the minimum acceptable LOS for all study intersections. The traffic study prepared projected Year 2035 Base Conditions with and without streets through The Market Street Promenade.

YEAR 2035 BASE CONDITIONS (WITHOUT STREETS THROUGH THE MARKET STREET PROMENADE)

Conditions for 2035 refer to an analysis scenario that would exist following approximately 20 years of local and regional growth. The 2035 Base Condition includes the current street network (without streets through The Market Street Promenade) but with future 2035 travel forecasts based on growth of the region. **Table B1** provides a summary of the potential 2035 base conditions.

YEAR 2035 CONDITIONS (WITH STREETS THROUGH THE MARKET STREET PROMENADE)

The 2035 Conditions with streets through The Market Street Promenade scenario includes the opening of Market Street to vehicle traffic through The Market Street Promenade as a two-lane two-way street, and the addition of east-west streets at Yuba Street and Butte Street. The northbound approach of the intersection of Market Street and Tehama Street is only allowed to exit turning right; northbound left turns would be prohibited. All other roadways maintain their existing geometry. **Table B2** provides a summary of the potential 2035 Conditions with streets through The Market Street Promenade. In order to maintain an acceptable LOS there will only be one southbound lane from Tehama Street on Market Street.

Table B1 – Year 2035 Base Conditions without Streets through The Market Street Promenade

#	Intersection	Control Type[1]	Target LOS[2]	AM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]
1	California St & Placer St	Signal	D	15.0	B	-	15.2	B	-
2	Market St & Placer St	AWSC	D	11.8	B	No	13.8	B	No
3	Pine St & Placer St	Signal	D	17.1	B	-	18.6	B	-
4	California St & Tehama St	Signal	D	23.4	C	-	33.8	C	-
5	Market St & Tehama St	Signal	D	9.1	A	-	23.0	C	-
6	Pine St & Tehama St	Signal	D	16.2	B	-	31.4	C	-
7	Market St & Shasta St	Signal	D	20.9	C	-	20.5	C	-

Notes:

1. AWSC = All Way Stop Control

2. LOS = Delay based on average of all approaches for AWSC & Signal

3. Signal Warrant = Based on California MUTCD Warrant 3

Table B2 – Year 2035 Conditions with Streets through The Market Street Promenade

#	Intersection	Control Type[1]	Target LOS[2]	AM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]
1	California St & Placer St	Signal	D	15.5	B	-	11.5	B	-
2	Market St & Placer St	AWSC	D	11.8	B	No	14.8	B	No
3	Pine St & Placer St	Signal	D	17.1	B	-	19.1	B	-
4	California St & Tehama St	Signal	D	27.6	C	-	30.1	C	-
5	Market St & Tehama St	Signal	D	85.1	C	-	49.0	C	-
6	Pine St & Tehama St	Signal	D	16.5	B	-	24.0	C	-
7	Market St & Shasta St	Signal	D	18.4	B	-	18.4	B	-

Notes:

1. AWSC = All Way Stop Control

2. LOS = Delay based on average of all approaches for AWSC & Signal

3. Signal Warrant = Based on California MUTCD Warrant 3

APPENDIX C

EXISTING REGULATORY PLANS

California land use is regulated through comprehensive long-term planning (general plan), zoning, environmental, subdivision, and building controls. The evaluation process to develop a Downtown Redding Community Based Transportation Plan begins with understanding regulatory requirements providing goals and policies that guide vehicular, parking, transit, pedestrian, and bicycle travel within Downtown. **Appendix C** discusses the Transportation Element of the General Plan and Downtown Specific Plan with which the Downtown Redding Community Based Transportation Plan must comply.

C.1 TRANSPORTATION ELEMENT OF THE GENERAL PLAN

The City of Redding General Plan is the City's "long-term blueprint for the City's vision of future growth." Zoning and subdivision ordinances are required to be consistent with the City's General Plan. The General Plan must contain seven state-mandated elements, one of which is a circulation element, referenced as the Transportation Element in the City's General Plan.

The City of Redding Transportation Element of the General Plan was adopted in 2000 and updated as needed over time. The Transportation Element provides the necessary framework to guide the growth and development of the City's transportation-related infrastructure. It is not limited to vehicular-related transportation, but addresses the development of a balanced, multimodal transportation system for the entire community. Specific topics relevant to the Downtown Redding Community Based Transportation Plan include:

- Complete Streets
- Level of Service (LOS) for Downtown
- Connections between Downtown and Destination Areas
- Parking
- Public Transit
- Pedestrian Systems
- Bicycle Systems
- Downtown Circulation Revisions

COMPLETE STREETS

The City of Redding has established goals and policies to create a comprehensive and integrated transportation system that is safe and convenient for all users, including motorists, public transit riders, pedestrians, and bicyclists. This type of transportation network is accomplished through development of a system of "Complete Streets." In September 2008, the state enacted "The California Complete Streets Act," requiring local jurisdictions to amend their general plans, as necessary, to ensure that they include policies that will lead to the construction of "Complete Streets." In August 2010, the City adopted amendments to the General Plan Transportation Element to comply with the Complete Streets Act. The City also adopted Council Policy 1303 that further reinforces the City's goal to actively pursue the creation of "Complete Streets" throughout the City.

GP Goal T1 – Provide safe, efficient, and comfortable routes for walking, bicycling, and public transportation to increase the use of these modes of transportation, enable convenient and active travel as part of daily activities, and meet the needs of all users of the streets.

GP Policy

T1A. Ensure that multimodal infrastructure improves transportation choices for pedestrians, bicyclists, motorists, and public transportation riders of all ages and abilities and that all users are considered and included in the planning, design, approval, construction, and operation of new streets, and the alteration and maintenance phases of existing streets by:

- Including infrastructure that promotes a safe means of travel for all users along the right-of-way, such as sidewalks, shared-use paths, bicycle lanes, and paved shoulders.
- Providing pedestrian and bike connections from developments to adjacent main streets, open space areas, parks, transit stops, schools, commercial and employment centers, and other activity centers as opportunities arise.
- Designing new development to incorporate street connectivity for all users.
- Including new or alteration of existing infrastructure that facilitates safe crossing of the right-of-way for all users, such as: accessible curb ramps; high-visibility crosswalks; pedestrian refuge islands; smaller curb radii; corner bulb outs; pedestrian signals; and bicycle detection at traffic signals where warranted.
- Incorporation of street design features and techniques that promote safe and comfortable travel along streets by pedestrians, bicyclists, and public transportation riders. Examples include constructing traffic-calming mechanisms in neighborhoods; providing pedestrian refuge medians on busy streets; reducing the number of motor vehicle lanes and/or widths where appropriate; providing transit turnouts; and, constructing physical buffers and separations between vehicular traffic and other users.
- Incorporation of street design features and techniques that promote safe and comfortable travel along streets by pedestrians, bicyclists, and public transportation riders. Examples include constructing traffic-calming mechanisms in neighborhoods; providing pedestrian refuge medians on busy streets; reducing the number of motor vehicle lanes and/or widths where appropriate; providing transit turnouts; and, constructing physical buffers and separations between vehicular traffic and other users.
- Providing features that improve the comfort, convenience, and safety of users such as: pedestrian-oriented/wayfinding signs; pedestrian-scale lighting; benches and other street furniture; bicycle parking facilities; comfortable and attractive public transportation stops and facilities; street trees and landscape and planting strips.

GP Goal T2 – Establish a systematic Complete Streets retrofit program that will effectively alter existing streets into Complete Streets as resources become available.

GP Policies

T2A. Identify and prioritize physical improvements that would make bicycle and pedestrian travel safer along current key bicycling and walking routes. Establish an implementation strategy to construct needed improvements. Undertake improvements as part of street projects where feasible.

T2B. Identify intersections and other locations where collisions have occurred or that present safety challenges for pedestrians, bicyclists, or other users, including, but not limited to, intersections within one mile of schools. Consider gathering additional data through methods such as walkability/bikeability audits.

GP Goal T3 – Ensure that existing standards, programs, and procedures include Complete Streets implementation as a main focus.

GP Policy

T3C. Collaborate with the Redding Area Bus Authority (RABA) to incorporate infrastructure to assist users in employing multiple means of transportation in a single trip in order to increase transportation access and flexibility. Examples include providing for bicycle access on public transportation, secure bicycle racks at transit stops, and public transportation access to trails and recreational locations.

LEVEL OF SERVICE (LOS) FOR DOWNTOWN

Level of Service (LOS) is a quantitative measure used to describe traffic conditions. Factors taken into consideration include traffic volume, street and intersection design, and signal timing. Each LOS is assigned a letter, ranging from "A" (minimal delay at intersections and no restrictions on speed along arterials) to "F" (delays of more than one green cycle at intersections and "stop and go" movement along the street). LOS is most often used to describe peak-hour conditions – the morning or afternoon hour when traffic is the heaviest.

GP Goal T5 – Coordinate transportation and land use planning; protect existing and planned land uses from transportation-related conflicts; and, promote multimodal transportation options.

GP Policy

T5A. Use LOS "D" - "tolerable delays" - for the Downtown area where vitality, activity, and pedestrian and transit use are primary goals.

DOWNTOWN CIRCULATION REVISIONS

GP Goal T6 – Use transportation systems to reinforce the urban land use pattern of Downtown.

GP Policy

T6A. Retain alleys in the Downtown area to provide pedestrian circulation and convenient service access to local businesses.

Appendix "A" in the Transportation Element identifies needed future street improvements, one of which is the construction of Market Street as a two-lane collector between Tehama and Placer Streets, through The Market Street Promenade.

PARKING

Parking facilities are an important part of the transportation system. Providing an adequate supply of both on- and off-street parking is a key factor in the economic vitality of Downtown.

GP Goal T11 – Ensure that sufficient, well-designed, and convenient on- and off-street parking facilities are provided to serve land uses throughout the City.

GP Policies

T11A. Maintain adequate on-street and public off-street parking areas within the Downtown area to meet ongoing parking demands.

T11C. Pursue funding options and strategies for the construction and maintenance of shared-use parking facilities/structures in the Downtown area.

T11D. Establish maximum and minimum standards for parking spaces in transit corridors and Downtown to promote use of alternate modes of transportation.

PUBLIC TRANSIT

Public transportation, particularly bus service, is essential to the circulation system. It is often the only means of transport for people who cannot or choose not to drive, including schoolchildren, the elderly, and disabled persons.

GP Goal T13 – Promote and maintain a public transit system that is safe, efficient, cost-effective, and responsive to the needs of residents.

GP Policies

T13A. Support the continuation and expansion of private commercial bus operations to provide additional regional transit opportunities for residents.

T13B. Work with the Redding Area Bus Authority (RABA) on an ongoing basis to plan and implement additional transit services that are timely, cost-effective, responsive to growth patterns, and meet the needs of existing and future transit demand.

T13E. Provide attractive, well-lighted, comfortable, and protected waiting areas for bus passengers.

PEDESTRIAN SYSTEM

In order to be effective, sidewalks and other pedestrian facilities need to be designed for use by all individuals, including those with mobility constraints. The design should be attractive, promote a sense of safety, and be separated from vehicles.

GP Goal T10 – Provide an attractive, safe, and continuous system of sidewalks and other pedestrian facilities.

GP Policies

T10A. Provide pedestrian-oriented features, such as benches, enhanced landscape, and trash receptacles in commercial areas, particularly in the Downtown and Park Marina areas.

T10D. Pursue funding for the continued replacement and repair of sidewalks that have deteriorated due to age and tree-root invasion.

T10E. Develop and implement a program to identify, prioritize, and fund the retrofitting of existing intersections that do not currently have handicapped access ramps at the street corners.

T10F. Require all new or renovated pedestrian facilities to be of a sufficient width to ensure pedestrian comfort and safety and to accommodate the special needs of the physically disabled.

T10G. Restrict speed limits in residential neighborhoods, Downtown, and other areas of the City where pedestrian activities are strongly encouraged to reduce the potential for pedestrian injuries and fatalities.

BICYCLE SYSTEM

Bicycles are an integral part of a city's transportation system. As lifestyles and land use patterns continue to change, there is every reason to expect that bicycle use will increase. To make the most of bicycle transportation, a comprehensive system of facilities need to be constructed.

GP Goal T12 – Make it easier and safer for people to travel by bicycle.

GP Policies

T12A. Develop and maintain a Comprehensive Bikeway Plan geared to establishing an integrated bicycle system.

T12B. Incorporate facilities suitable for bicycle use in the design of interchanges, intersections, and other street improvement/maintenance projects.

T12C. Make improvements to streets, signs, and traffic signals as needed to improve bicycle travel.

T12D. Keep bikeways free of overhanging shrubbery, debris, and other obstacles.

T12E. Install bicycle parking in the Downtown area and at City parks, civic buildings, and other community centers.

T12F. Support the efforts of the Redding Area Bus Authority (RABA) to provide bicycle racks on all buses within the system.

T12G. Require new development to provide bicycle facilities or pay in-lieu fees based on the fair share of that developer's impacts on the bikeway system and needs identified on the Comprehensive Bikeway Plan.

TRAIL CONNECTIONS BETWEEN DOWNTOWN, TURTLE BAY, AND THE RIVER TRAIL

GP Goal T6 – Use transportation systems to reinforce the urban land use pattern of Downtown.

GP Policy

T6B. Establish motorized and/or non-motorized transportation linkages to connect Downtown to the Park Marina, Turtle Bay, and Civic Center areas; augment the transit system to establish frequent and convenient access to these destination areas.

RAIL SERVICES AND FACILITIES

GP Goal T16 – Improve safety at locations where rail and other transportation facilities interface.

GP Policy

T16A. Provide for additional grade-separated railroad crossings at South Bonnyview Road and in the Downtown area.

C.2 DOWNTOWN REDDING SPECIFIC PLAN

The California Office of Planning and Research defines a specific plan as "a tool for the systematic implementation of the general plan. It effectively establishes a link between implementing policies of the general plan and the individual development proposals in a defined area." The Downtown Redding Specific Plan was adopted in 2001 and updated in 2010. Several transportation-related goals, implementation strategies, and recommended actions adopted as part of the Specific Plan have a direct bearing on the development of the Downtown Redding Community Based Transportation Plan.

CIRCULATION AND PARKING GOALS AND IMPLEMENTATION STRATEGIES (CHAPTER II, SECTION E)

SP Goal 1 – Provide a circulation system that furthers economic development, convenience, safety, and choice.

SP Goal 2 – Provide adequate and accessible parking throughout Downtown Redding.

SP Implementation Strategies

a. Modify current zoning to introduce more pedestrian-friendly regulations.
b. Improve streetscapes throughout Downtown based on the Market Street Demonstration Block to enhance both pedestrian and vehicular travel.
c. Adopt LOS "D" standard for vehicular travel in Downtown.
d. Evaluate the effects on existing neighborhoods of City/Caltrans proposed circulation changes north of the Mall.
e. Capitalize on the existing rail system within the community as a means of transportation and for historical significance.
f. Maximize on-street parking by identifying opportunities to increase diagonal parking.
g. Initiate improvements to the existing parking structure on California Street, such as repainting, installing new lights, applying brick veneer, and introducing micro-retail and enhanced landscape.
h. Utilize building rears as secondary storefronts to make parking behind buildings more attractive. Employ wayfinding systems to assist in promoting these and other lesser known parking spaces.
i. Target potential sites in the Downtown for future parking structure locations.
j. Support the City/Caltrans Value Analysis (VA) Alternatives for traffic circulation Downtown.
k. The City should consider using publicly owned sites in the Downtown as potential locations for long-term parking solutions.

RECOMMENDED ACTIONS (CHAPTER VII, SECTION B)

In addition to goals and implementation strategies, the Specific Plan identifies recommended actions needed to not only satisfy the recommendations of the Specific Plan, but also to assist in the revitalization of Downtown. The recommendations are the following:

SP Actions

1. **Traffic Operations Levels of Service** - Use LOS "D" as the standard for Downtown to encourage slow traffic operations that are good for businesses and pedestrians.
2. **City/Caltrans Value Analysis (VA) Alternatives** - Implement the following improvements north of the Mall:
   - Add Tehama Street counter flow lane, between California Street and Market Street.
   - Add 3rd lane on eastbound SR 299, between East Street and Auditorium Drive.
   - Adjust traffic signals to optimize system.
   - Extend Tehama Street and Shasta Street couplets system to Court Street.
   - Add Eureka Way counter flow lane, between Market Street and Pine Street, if viable.
   - Enhance pedestrian facilities on Market Street.
   - Add an additional lane to eastbound Eureka Way, between California Street and Market Street.
3. **Railroad Overpass** - An above-grade overpass of the railroad should occur in Downtown. The overpass is a City proposal and is endorsed by the Specific Plan.
4. **Open Mall Streets** - Open Market, Butte, and Yuba Streets to through traffic. All streets shall be two-way and exhibit a distinctive pedestrian orientation similar to the Market Street Demonstration Block design.
5. **Central Axis** - Delineate both Yuba Street and Market Street as the two central axis streets. The purpose is to create two strong streetscapes, one east-west and the other north-south, providing high quality streetscape designs. The streetscape treatments should be based on the full Demonstration Block design.
6. **Relocate the Greyhound Bus Station** - Relocate the Greyhound Bus Station to the RABA intermodal site.
7. **Achieve Highway Relinquishment** - Work closely with Caltrans to facilitate the relinquishment of SR 273 right-of-way on Pine, California, and Market Streets. This would permit the City to install high quality pedestrian-oriented streetscape improvements that follow the Market Street Demonstration Block design.
8. **Pedestrian Improvements to Turtle Bay and Park Marina** - Maintain and seek to improve pedestrian and bicycle connectors to Turtle Bay, Park Marina, and City Hall through: quality and width of sidewalks, streetscape elements (lights, banners, trees, benches), bike lanes, and wayfinding systems/improvements (signs, kiosks, etc.).
9. **Prohibit Blind Street Closures** - Prohibit the vacation of street or alley right-of-way to allow expansion of private development. Maintain the openness of the grid pattern of streets in Downtown.

PARKING REQUIREMENTS (INCLUDING CBD NON-PARKING REQUIREMENT)

In 1956, the City adopted the "C-4" zoning district for the core area of Downtown. Unlike other zoning districts throughout the City, which require off-street parking for employees and customers, the "C-4" district relieves the property owner or developer of this requirement. The purpose is to maximize density within the Downtown core area to create a more pedestrian-oriented shopping district. The reduction in off-street parking was partially offset by the construction of the Downtown Mall and California Street parking structures, which provide approximately 650 parking spaces. The Downtown Redding Specific Plan

continued the policy of not requiring off-street parking by rezoning the "C-4" district to the "CBD" – Central Business District.

Outside of the CBD zone, off-street parking in Downtown is provided as required in Chapter 18.41 of the Redding Municipal Code. However, the City recognizes the uniqueness of existing buildings and their associated parking in the Downtown area. When parking is required or provided for any remodel or reuse of an existing building in Downtown outside of the CBD zone, the parking standards (number of spaces, space and aisle dimensions, etc.) may be reduced or modified subject to approval of a site development permit by the Board of Administrative Review.

Short-Term Recommendations

1. Develop a clear and comprehensive signage program that complements the existing Wayfinding Sign Program to direct motorists to existing public parking within the Study Area. An example of a large, easily recognized parking lot identifier sign was developed by the City's Sign Shop and is installed in Public Lot 4.
2. Explore the possibility of modifying the Municipal Code to allow parking in loading zones after hours on a case-by-case basis. Some of these loading zones may be for daytime delivery only and may be available for evening use.
3. Designate low-volume streets as parking streets, and where space allows, re-stripe parallel spaces to diagonal spaces to increase the number of on-street parking spaces. A potential candidate street is Sacramento Street between California and Pine Streets.
4. Pursue the development of Shared-Use Parking Agreements within the Study Area to make private off-street parking available for public use after business hours. Examples include area banks and professional offices.
5. Enforce parking time limits, both metered and non-metered. Adequate enforcement ensures turnover for business customers and promotes economic activity.
6. Retain the existing Central Business District (CBD) non-parking requirement without modification.
7. Collaborate with area businesses to facilitate the installation of bicycle racks throughout Downtown as a way to promote alternative modes of travel other than the automobile.

Mid-Term to Long-Term Recommendations

1. Remove the remainder of the Mall roof and reintroduce the streets with diagonal parking. This action could result in the addition of 140 or more on-street parking spaces and would improve the connectivity between destinations and parking within the Study Area.
2. Hire a consultant to develop an in-lieu parking fee for new development to help pay for future public parking. Consider a graduated scale to keep the fee low at the beginning and increase the fee over time so as not to discourage new development in Downtown.
3. Hire a consultant to develop a property-owner-based assessment district in Downtown to help pay for the maintenance and enhancement of existing public parking facilities and for parking meter time limit enforcement.
4. Hire a consultant to design and develop cost estimates for the redevelopment of the parking structure into a modern, multi-level structure with a retail shopping component at the ground level and the extension of Butte and/or Yuba Streets through to California Street.
5. Consider constructing public surface parking on the site of the Redding Police Department when the department relocates. At the appropriate time, consider constructing a parking structure on the site. Additional public parking may be needed in this area of Downtown to address demand resulting from the Shasta College Health Sciences & University Center.

EXISTING GUIDANCE PLANS & REPORTS

In addition to the Transportation Element of the General Plan and Downtown Redding Specific Plan with which the Downtown Transportation Plan must comply as discussed in **Appendix C**, other relevant plans and documents have pertinent information relative to providing guidance for transportation improvements in Downtown. These documents include:

- Caltrans Transportation Concept Reports
- Pedestrian Safety Assessment
- Bikeway Action Plan
- City of Redding Parks, Trails, and Open Space Master Plan
- City of Redding Council Appointed Committee Recommendations

Appendix D discusses the above plans and reports, which the Downtown Transportation Plan considered.

D.1 CALTRANS TRANSPORTATION CONCEPT REPORTS

The Transportation Concept Report (TCR) is a District 2 California Department of Transportation (Caltrans) System Planning document that includes an analysis of a transportation route or corridor. A TCR establishes a 20-year consensus-based concept for how California state highways should operate and broadly identifies the extent of improvements needed to attain that operating condition. A TCR identifies long-range objectives for a route and helps to guide short-term decisions for improvement. Caltrans prepares Route Concept Reports for all of the state highways in California. There are three State Routes within Downtown.

STATE ROUTE 273 (REDDING COUPLET NB) - CYPRESS AVENUE TO MARKET STREET/EUREKA WAY

Segment Management

This segment is forecast to exceed the Concept LOS of "D" by 2030. Due to the inability to add lanes to this highly developed segment of the route, emphasis will be on system management. Possible actions that could be considered in cooperation with the City of Redding include:

- Enhancement of existing coordinated signal system/timing plan.
- Implement Adaptive Signal Control Technology.
- Modification/removal of traffic signals at intersections with low-volume cross streets.
- Channelization and/or limitation of vehicle movements at select locations.
- Open road linkages through The Market Street Promenade to improve traffic, bicycle, and pedestrian flow as well as to increase the parking supply.

Work with the community and local agencies along SR 273 to upgrade and construct safe and accessible pedestrian facilities, in high-volume pedestrian areas, consistent with the provisions of the Americans with Disabilities Act (ADA) and Caltrans design standards.

Work with local agencies and developers as new projects and/or facilities are proposed along SR 273 to address traffic impacts associated with growth.

STATE ROUTE 273 (REDDING COUPLET SB) - MARKET STREET/EUREKA WAY TO CYPRESS AVENUE

Segment Management

This segment's volumes are not as high as the corresponding northbound segment, so it will not exceed the Concept LOS of "D" at 2030. Caltrans is committed to working with the City of Redding when the Downtown Redding Specific Plan is updated to evaluate possible pedestrian, bicycle, parking, and landscape enhancements in the Downtown couplet area.

Work with local agencies and developers as new projects and/or facilities are proposed along SR 273 to address traffic impacts associated with growth. Monitor and enhance signal coordination, and maintain the existing truck turning radii.

Work with the community and local agencies along SR 273 to upgrade and construct safe and accessible pedestrian facilities, in high-volume pedestrian areas, consistent with the provisions of the Americans with Disabilities Act (ADA) and Caltrans design standards.

Open road linkages through The Market Street Promenade to improve traffic, bicycle, and pedestrian flow as well as to increase the parking supply.

STATE ROUTE 299 - REDDING CITY LIMITS TO SR 273

Segment Management

This segment's challenges relate to higher traffic volumes and signalized intersections affecting the flow of mainline traffic. As traffic counts continue to rise traffic signals may benefit from further evaluation to maintain safety and satisfactory operations. Detector technology may offer possible improvements to safety and operations at intersections and pedestrian/bike crossings.

No capacity projects or significant operational projects were proposed.

STATE ROUTE 44/STATE ROUTE 299 - BUENAVENTURA BOULEVARD TO CONTINENTAL STREET

Segment Management

Operational concerns in this segment of the east-west Focus Route are generally related to the high volume of traffic, multiple driveways, parking, and reduced speed limits through the older Downtown area.

The Redding Downtown Improvement project (EA 02-32802) added capacity at the Eureka Way and North Market Street intersection. The project also incorporated some turn radii changes and lane width increases to help trucks pass more safely through Downtown.

Recurring congestion is managed through traffic signalization while the north-south intersecting routes of SR 273 and Buenaventura Boulevard provide some opportunity to move traffic off the corridor.

No capacity projects or significant operational projects were proposed.

STATE ROUTE 44/STATE ROUTE 299 - CONTINENTAL STREET TO STATE ROUTE 44/1-5 CONNECTOR

Segment Management

Operational concerns in this segment of the East-West Focus Route are generally related to the high volume of traffic. The Dana Drive to Downtown project (EA 02-32803 Construction & 02-32804 Landscaping) addresses these concerns by:

- Replacing the Sacramento River Bridge and adding westbound and eastbound auxiliary lanes from 1-5 to Auditorium Drive Interchange. (This was constructed).
- Adding a ramp from Dana Drive to westbound SR 44.
- Reconstruct the Auditorium Drive Interchange.
- Widen the Continental Street undercrossing. (This was constructed).
- Adding CCTV near Continental Street.
- Adding a bike lane and pedestrian path from the Dana Drive/Hilltop Drive intersection to the Turtle Bay Park and Bird Sanctuary. (This was constructed).

Fiber optic (ITS communication) is planned between PMs 0.0 to 1-5/SR 44 interchange. Vehicle detection for real-time traffic speed data is also planned for this area.

D.2 PEDESTRIAN SAFETY ASSESSMENT

The Pedestrian Safety Assessment (PSA) was completed in April 2010 by the Technology Transfer Program (Tech Transfer) of the Institute of Transportation Studies (ITS) at the University of California, Berkeley. The objective of the PSA is to improve pedestrian safety and enhance walkability and accessibility for all pedestrians in the City. Downtown was one of six focus areas evaluated. The following suggestions are treatments for general downtown traffic circulation and some citywide suggestions. **Figures D1** and **D2** identify recommendations advanced in the PSA:

DOWNTOWN IMPROVEMENTS

- Stripe high-visibility crosswalks on all approaches at controlled intersections
- Install curb extensions where feasible
- Install protected left-turn signal phases where appropriate
- Consider leading pedestrian intervals

MARKET STREET PROMENADE AREA IMPROVEMENTS

- Reverse the direction of travel of the California-Market Alley and the Market-Pine Alley to reduce recirculation on major public streets.
- Consider extending Yuba Street through the Downtown Mall as plans are developed for parking structure replacement or other mall improvements.

ROAD DIETS

- Road diets would reduce the number of lanes of travel from four lanes (with no left-turn lanes) to three lanes, including a median with left-turn lanes. Any changes to state highways require approval with Caltrans. Road diets are suggested for the following streets:
  - East Street from Lincoln Street to Shasta Street
  - Placer Street from Court Street to East Street
  - South Street from Court Street to East Street
  - Court Street from Eureka Way (SR 299) to Sonoma Street

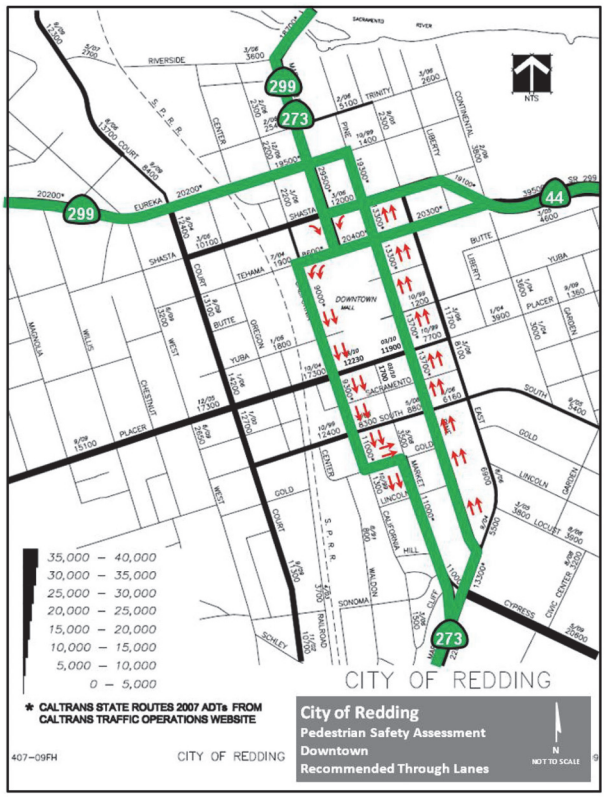


Figure D1 – City of Redding 2010 Pedestrian Safety Assessment, Suggested Through Lanes

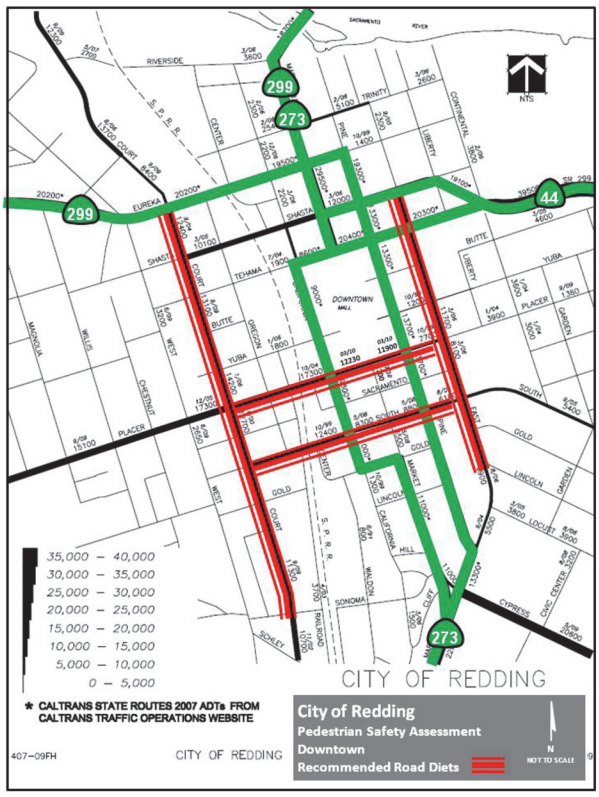


Figure D2 – City of Redding 2010 Pedestrian Safety Assessment, Suggested Road Diets

GENERAL CITY-WIDE IMPROVEMENTS

- Use a high-visibility crosswalk striping pattern for uncontrolled crosswalks (the "triple four" is suggested)
- Use a parallel crosswalk striping pattern for controlled crosswalks
- Add advanced stop lines for stop-sign or signal controlled crossings
- Add advanced yield lines for multi-lane uncontrolled crossings
- Continue to maintain sidewalk clear zone
- Install pedestrian countdown signal heads at all signalized intersections based upon priority process
- Ensure signal timings are adequate for pedestrians
- Install new fluorescent yellow green (FYG) signage for all pedestrian locations
- Where possible, provide a buffer between vehicles and pedestrians by separating sidewalks from the curb
- Strive for "pedestrian-friendly" medians, which are wide enough (at least 6') for pedestrian refuge
- Provide directional curb ramps, rather than diagonal ramps, where appropriate
- Maintain ADA-compliant crossings (truncated domes, cross slopes, audible signals, etc.)

D.3 BIKEWAY ACTION PLAN

The Bikeway Action Plan adopted in 2010 expands the capacity of the 1998 Redding Bicycle Plan. The Action Plan encompasses goals outlined in the General Plan and the Parks, Trails, and Open Space Master Plan. The Bikeway Action Plan provides a detailed inventory and analysis of the existing bikeway system, and identifies and prioritizes specific service improvements. The Action Plan recommends upgrading 57.62 miles of Class 3 bike routes to Class 2 bike lanes to provide greater safety for cyclists on major bikeway connections.

BIKEWAY ACTION PLAN GOALS AND RECOMMENDATIONS

Goal 1 – Improve and add bikeways, connections, and facilities.

Recommendations

1.1 Improve and expand the bike route system and provide functional and distinctive signs and markings for the system.

1.2 Upgrade significant Class 3 Bike Routes to Class 2 Bike Lanes when possible.

1.3 Provide bicycle parking in public spaces.

1.4 Encourage bicycle parking in existing uses private spaces and require bicycle parking in new uses private spaces.

1.5 Improve bicycle access through complex intersections.

Goal 2 – Develop bicycle-friendly policies.

Recommendations

2.1 Adopt a Complete Streets ordinance, and review and recommend necessary changes to Redding ordinances, regulations, policy documents, and design standards to address bicycle accommodation.

2.2 Provide training to City of Redding Staff and policymakers.

2.3 Review City of Redding projects to ensure they provide bicycle accommodation.

Goal 3 – Develop bicycle-related education, promotion, and enforcement initiatives.

Recommendations

3.1 Educate motorists about safe operating behavior around bicyclists.

3.2 Educate bicyclists about safe bicycling.

3.3 Enforce traffic laws related to bicycling.

3.4 Establish a Bicycle Advisory Committee.

3.5 Seek recognition from the League of American Bicyclists as a bicycle-friendly community.

3.6 Promote increased bicycle usage.

3.7 Regularly update the Redding Bikeway Map.

Bikeway Advisory Committee

The Bikeway Action Plan calls for the establishment of a Bikeway Advisory Committee to monitor the progress of the Action Plan and to make recommendations to the Planning Commission and the City Council. The Committee will also provide community input on design standards, aid in the undertaking of bicycle counts, and assist in the design and delivery of public education.

D.4 CITY OF REDDING PARKS, TRAILS, AND OPEN SPACE MASTER PLAN

The Parks, Trails, and Open Space Master Plan adopted in 2004 creates a long-range plan for recreational sites and community open spaces. It looks at every aspect of the current system and offers strategies to continue the successes, remedy mistakes, and anticipate future needs. This Master Plan implements some of the same goals set forth in the Transportation Element of the General Plan.

GOALS RELATING TO THE TRANSPORTATION ELEMENT AND DOWNTOWN

Goal TB2 – Design and develop trails to provide maximum recreational and non-motorized opportunities for all segments of Redding's population.

Policy

TB2E. Sidewalks
Connect the trail system with an attractive, safe, and continuous system of sidewalks and other pedestrian facilities. Give special consideration in prioritization of sidewalk improvement projects to school and walk zones. [T10]

Goal TB4 – Make it easier and safer for people to travel by bicycle.

Policies

TB4A. Bicycle Plan
Implement the goals and policies found in the 1998 Redding Bicycle Plan. Incorporate the bikeway components of this document into subsequent revisions of that Plan. [T12A]

TB4B. Improvements
Make improvements to existing streets, signs, and traffic signals as needed to improve bicycle travel. [T12C]

TB4C. Design
Incorporate facilities suitable for bicycle use in the design of interchanges, intersections, street-improvement, and maintenance projects. [T8B]

TB4D. Safety
Separate bicyclists and pedestrians from vehicular traffic, and pedestrian facilities from bicycle facilities whenever feasible. [R11A]

TB4D. Bicycle Parking
Install bicycle parking in the Downtown area and at City parks, trailheads, civic buildings, and other community centers. [T8E]

TB4G. Maintenance
Keep bikeways free of overhanging shrubbery, debris, and obstacles, and periodically re-grade earthen and gravel shoulders next to bikeways to prevent drop-offs. [T8D]

D.5 DOWNTOWN PARKING COMMITTEE REPORT

In addition to the adopted goals, policies, and implementation strategies contained in the General Plan Transportation Element, Downtown Redding Specific Plan, Bikeway Action Plan, and Parks, Trails, and Open Space Master Plan, the City Council occasionally creates citizen committees to address key community concerns. One of these committees, the Downtown Parking Committee, presented the City Council with recommendations in response to many of the parking concerns addressed by the Downtown Redding Transportation Plan.

In 2006, there was a growing concern on the part of many Downtown stakeholders that several Downtown projects both planned and close to being constructed, including the 43,000-square-foot Shasta College Health Sciences & University Center, would overload the current supply of parking in Downtown. At that time, the Downtown Mall roof had been removed over the north half of the Mall and the Shasta College project was under construction. It should be noted that the Downtown Mall was renamed to The Market Street Promenade (The Promenade) following removal of the entire Mall roof and construction of the pedestrian improvements.

In response, the City Council created a Downtown Parking Committee, comprised of Downtown stakeholder agencies, organizations, and property owners, to address the growing concerns about the adequacy of Downtown parking and to begin the process of developing an overall Downtown parking strategy.

DOWNTOWN PARKING COMMITTEE KEY FINDINGS

The ten-member Downtown Parking Committee met for five months in 2006 and made the following key findings:

- With the exception of special events, Downtown does not have a parking problem.
- The public perception of a parking problem is due in large part to a lack of physical and visual connectivity between parking areas and activity centers caused by the presence of The Market Street Promenade.
- Some parking areas were extremely underutilized because they are perceived to be unsafe due to a lack of surrounding activity and poor lighting.
- Some parking areas are separated from others by SR 273 (Pine and California Street one-way couplet), which is difficult for pedestrians to cross.
- Reintroducing streets through the Mall (The Market Street Promenade) could add 140 on-street spaces.

DOWNTOWN PARKING COMMITTEE RECOMMENDATIONS

While not specifically codified, many of the following recommendations by the Downtown Parking Committee support the goals and policies of the General Plan Transportation Element and the Downtown Redding Specific Plan:

- Continue the CBD zone non-parking requirement to foster development of a dense core area, uninterrupted street frontages, and a business-friendly environment.
- Designate low volume streets as parking streets and, where possible, re-stripe parallel spaces to diagonal spaces to increase the number of on-street public parking spaces.
- Partner with area businesses to facilitate the installation of bicycle racks throughout Downtown to help promote bicycle travel.
- Reintroduce Market, Butte, and Yuba Streets into The Market Street Promenade, resulting in the addition of as many as 140 on-street parking spaces and improved connectivity between destinations and parking areas.
- Develop an in-lieu parking fee for new development to help pay for future parking.
- Develop a property-based assessment district to help pay for the maintenance and enhancement of parking facilities and enforcement of time limits.
- Consider constructing a public surface parking lot on the site of the Redding Police Department facility when the department relocates to the Civic Center campus. At the appropriate time, consider constructing a parking structure on this site.

COMMUNITY ENGAGEMENT

Appendix E includes the community engagement process and an assessment of the visual realities of Downtown. **Appendix E**, and the ensuing **Appendices F** and **G** collectively, were used to formulate the Goals, Guiding Principles, and Actions for the Downtown Redding Community Based Transportation Plan identified in **Appendix H**, even though each appendix can be reviewed independently. **Appendix F** provides public engagement comments. **Appendix G** briefly discusses comparable experiences of other U.S. downtowns.

The future viability of Downtown is dependent on creating a place where people want to be – to work, to shop, to eat, to play, or to just socialize and relax, which is to "hang out." Through the Community Engagement process, the Design Team shared the visual realities of Downtown and its current draw upon the community as a "place to be" in the City. The participants listened, interacted, and shared what they felt needs to be undertaken and eventually accomplished to create a viable Downtown. Through this effort, Guiding Principles were formed that drive the Downtown Transportation Plan Action Plans.

E.1 COMMUNITY ENGAGEMENT

Public participation was critical to the success of the Downtown Transportation Plan. The Project Team, comprised of City, Caltrans, Shasta Regional Transportation Agency, Shasta County Public Health Department, and consultant team staff, conducted two community workshops and smaller focus group workshops with the Downtown and Community stakeholder groups and the general public. Additionally, the Shasta County Public Health Department assisted in outreach efforts by involving traditionally underrepresented populations, including low-income and senior residents in and around Downtown.

Participants engaged to identify concerns and problem areas, generate ideas, clarify and resolve issues, and recommend solutions. The following summarizes the public outreach effort:

DOWNTOWN STAKEHOLDER ORGANIZATIONS

Initially, four ongoing key Downtown stakeholder groups have worked together in a collaborative manner for over 20 years to help revitalize Downtown. These groups include:

- **Viva Downtown Redding** - Formed in 1996, Viva Downtown Redding is a National Main Street Organization, designated by the National Trust for Historic Preservation and the State of California, Office of Historic Preservation. The Main Street approach encourages citizens, businesses, and interested groups to enhance the vitality of their Downtown communities using the structure of four committees: Design, Business Improvement, Organization, and Promotion. Viva Downtown Redding is dedicated to enhancing the cultural, social, and economic development of Downtown.

- **Mid-town Mall Benefit Corporation** - Established in 1993, this organization is comprised of property owners within The Market Street Promenade (formerly known as the Downtown Redding Mall).

- **Renaissance Redding** - Established in 1996, Renaissance Redding is a support group of volunteers dedicated to community enhancement, cultural development, and the beautification of Redding.

- **Downtown Redding Business Association (DRBA)** - This organization was formed in 1995, and until 2015 managed the Business Improvement District (BID) assessment collected within the BID. The DRBA was comprised of over 300 businesses and approximately $35,000 per year was collected for programs and activities to benefit Downtown. The BID was disestablished in May of 2015.

For over 20 years, these four organizations collaborated on numerous projects for the benefit of Downtown, including: Library Park renovation, Cascade Theatre renovation, Yuba Street "Cornerstones" art installation, The Market Street Promenade art installation, parking structure lighting improvements and identifier signs, Downtown murals, seasonal banners on light poles, street tree installation, and wayfinding signage.

"REDDING, SET, GO" EVENT

The Downtown Redding Community Based Transportation Plan process began on October 9, 2014 at the Cascade Theatre with the premier of the KIXE video, "Redding, Set, Go." The video identified many transportation-related challenges in Downtown and offered design solutions for consideration. Viva Downtown Redding introduced the City's Downtown Transportation Plan Project Team, led by Omni-Means. Omni-Means, with City and Caltrans staff, then made brief presentations on the roles of each organization, the Study Area boundaries, the scope and focus of the study, and the vision for a transformative Downtown Transportation Plan. Since the start of the process, KIXE has broadcast the video 27 times.

SOCIAL MEDIA

Working with Outlander Creative and the City of Redding, a project website - www.downtownreddingtransportationplan.com, and a Facebook page were created. The primary purpose was to summarize the project objectives, identify community outreach efforts, invite public comments, obtain feedback, and provide a calendar of upcoming events.

The social media outreach was considered successful recognizing that the City of Redding has a population of less than 100,000 people. Clearly, both residents and visitors alike had sufficient interest in Downtown to examine the City's website. The website had a total of over 17,600 visits and over 10,600 unique or first-time visitors. There were over 7,000 repeat visits. The Facebook page has over 200 followers.

COMMUNITY STAKEHOLDER MEETINGS

The Project Team participated in a number of small group interviews, focus group workshops, and Downtown bicycle and driving tours that included 30 stakeholder organizations, including:

- American Public Works Association
- Anderson Partnership for Healthy Children
- Bike Redding
- California State Retirees Association
- Caltrans
- City of Redding Community Services Department
- City of Redding Police Department
- College Options
- Downtown Collaborative - Monthly Meetings
- Downtown Redding Business Association
- Empire Recovery Center
- Garden Tract Society

- Healthy Shasta
- Hotel Redding
- K2 Development
- Leadership Redding
- Lorenz Senior Apartments
- Redding Memorial Cemetery
- Rowell Family Empowerment
- Shasta County Child Abuse Prevention Coordinating Council
- Shasta County Health & Human Services Agency
- Shasta County Health Center (HOPE)
- Shasta County Public Health Department
- Shasta Driving School
- Shasta Historical Society
- Shasta Living Streets
- Shasta Regional Transportation Agency
- Shasta Wheelmen
- Trails & Bikeways Council of Greater Redding
- Viva Downtown Redding

COMMUNITY STAKEHOLDER EVENTS

In addition to meeting individually and collectively with various community stakeholder groups, the consultant team also participated in the following events as a part of the public outreach/education process:

- Healthy Shasta: Building Connections (January 30, 2015)
- Leadership Redding Presentation (February 5, 2015)
- SafeTREC Conference Workshop (May 1, 2015)
- Bike-In at The Market Street Promenade (May 22, 2015)

In addition to the community stakeholder events, comments and suggestions were received by email and telephone from interested community members. A summary of the key comments received to date through the public outreach effort is presented in **Appendix F**.

COMMUNITY WORKSHOPS

Community Workshop #1

The first Community Workshop was held on Wednesday, March 25, 2015, in the Atrium at the south end of The Market Street Promenade. Omni-Means and Design Workshop gave a PowerPoint presentation to share Downtown transportation ideas and concepts based on feedback received from over two dozen stakeholder group meetings and interested individuals over the previous five months. Employing keypad polling, approximately 80 people were asked regarding their support for a variety of design ideas in four major categories:

- Downtown Traffic Circulation (including converting one-way streets to two-way streets)
- Reintroducing Streets into The Market Street Promenade
- Downtown Parking Areas
- Bicycle Connections between Downtown and the Sacramento River Trail and Turtle Bay/Civic Auditorium

Following the PowerPoint presentation, the audience was invited to participate in detailed discussions regarding the topics with City staff and consultant team members at breakout stations. In addition to keypad polling, participants were invited to provide "sticky note" comments on display boards at the breakout stations and submit comment cards at the end of the workshop. Comment card responses and "sticky note" comments are summarized under Public Engagement Comments in **Appendix F**.

Community Workshop #2
The second Community workshop was held on Thursday, September 24, 2015, in the Atrium at the south end of The Market Street Promenade. The firms of Omni-Means, Design Workshop, and Trilogy Architecture gave a PowerPoint presentation to approximately 100 persons, identifying proposed recommendations based on feedback received at Community Workshop #1, comments received, as well as ongoing discussions with City staff. The recommendations addressed five key focus areas:

- Traffic Circulation
- The Market Street Promenade Streets
- Parking
- Public Transit
- Pedestrians & Bicycles

Following the PowerPoint presentation, the audience was invited to discuss in more detail with each other, the consultants, and City staff regarding the proposed recommendations. Breakout stations were set up for more direct interaction and discussion of the details amongst the participants and consultant team. Participants were encouraged to complete comment cards and leave them with the consultant team for input to formulate the final recommendations to the City. Comments card responses are summarized in **Appendix F**.

E.2 VISUAL CHARACTER

Among the information shared in the Community Workshops was an individual's visualization of the Downtown. People observe where they are often very differently. The first-time visitor may notice a vista of The Market Street Promenade or the unique bike racks, whereas the Downtown business owner may see only the tired parking structure and peeling paint. The following general site inventory identifies the mundane and the unusual elements that make Downtown what it is today and establish the framework for the future. Selected characteristics are shared in the following categories:

- Street Character
- Pedestrian Realm
- Bicycle Connections
- Landscape and Furnishings

STREET CHARACTER

The streets in Downtown have a variety of characters, including a strong one-way street backbone. Most streets have alley access, wide sidewalks, and on-street parking. Much of the geometry favors motorized travel, resulting in higher than desirable speeds for a Downtown environment.

PEDESTRIAN REALM

A pedestrian realm is the area between the back of the curb and the face of buildings or edge of the right-of-way. The pedestrian realm within Downtown includes sidewalks, crosswalks, and The Market Street Promenade. The pedestrian realm within The Market Street Promenade does not view or experience much pedestrian activity since retail is limited along the interior. California and Pine Streets have a wide

pedestrian space but limited site furnishings and streetscape amenities. In addition, there is a long expanse of blank concrete walls associated with the California Street parking structure that is not aesthetically pleasing.

BICYCLE CONNECTIONS

Bicycle lanes in the Study Area exist along California and Pine Streets. Bicycle connections to Turtle Bay and the Sacramento River Trail are key challenges.

LANDSCAPE AND FURNISHINGS

The Downtown does not have consistent streetscape treatment for landscape and site furnishings. Many of the trees are planted in small tree wells, and their roots are cracking and lifting up the sidewalks. Following the visual review of the existing realities of what one sees Downtown, options of street landscape treatments and furnishings to enhance the pedestrian experience were considered for their applicability to Downtown. Using potentially applicable landscape and furnishing streetscape studies, the public considered how streets might be improved to enhance the Downtown experience for motorists, pedestrians, and bicyclists alike.

Based on a right-of-way width of 80 feet, different roadway sections allow for a range of streetscape pedestrian-oriented zones within varying sidewalk widths. The pedestrian zone studies evaluated each zone within the different sidewalk widths to understand the allowable uses for creating an active pedestrian-oriented realm.

Sidewalk Zones

The following defines components of each streetscape pedestrian sidewalk zone:

- **Building Frontage Zone** - The space along the streetscape associated with the building or building uses. This could include doors, entries, awnings, retail displays, and café seating as an extension of the interior space.
- **Pedestrian Through Zone** - The space along the streetscape that allows for pedestrians to travel parallel to the street. The space should be of appropriate width for people to pass by one another and to be free of obstructions for wheelchairs, strollers, and other objects.
- **Planting/Furniture Zone** - This space along the streetscape provides amenities such as street trees or landscape as well as light fixtures, benches, trash receptacles, bike racks, and other elements that contribute to user needs.
- **Edge Zone** - This zone is the space between the pedestrian zone and the street edge. A buffer should be provided to contribute to the sense of safety from vehicular travel which could include street poles, trees, bollards, signage, and other site furnishings.

Streetscape Pedestrian Zone Options

Pedestrian Zone 1 – 4 Feet to 8 Feet (Figure E1)

- Building Frontage Zone - Small signs, overhangs
- Pedestrian Through Zone - Meets minimum ADA requirements, fits 1-2 people
- Edge Zone - Street lights, parking meters, utility poles

Pedestrian Zone 2 – 10 Feet to 14 Feet (Figure E2)

- Building Frontage Zone - Small furnishings aligned with frontage, overhangs, small displays/signage
- Pedestrian Through Zone - Meets ADA requirements, fits 2 people with room for passing
- Edge Zone - Street trees, street lights, parking meters, utility poles

Pedestrian Zone 3 – 20 Feet to 24 Feet (Figure E3)

- Building Frontage Zone - Café seating, overhangs, displays/signage
- Pedestrian Through Zone - Meets ADA requirements, fits a few people with room for passing
- Planting/Furniture Zone - Larger street trees, planting beds, street lights
- Edge Zone - Walkable surface, street lights, parking meters, utility poles

Pedestrian Zone 4 – 28 Feet to 32 Feet (Figure E4)

- Building Frontage Zone - Extensive café seating, overhangs, larger displays/signage
- Pedestrian Through Zone - Meets ADA requirements, fits groups with room for passing
- Planting/Furniture Zone - Pedestrian seating areas, larger street trees, planting beds, street lights
- Edge Zone - Walkable surface, street lights, parking meters, utility poles

Based on the evaluation of the Pedestrian Zone options, the ideal sidewalk width along The Market Street Promenade would be no less than 10 feet, with a preference of 10 to 20 feet to allow for the uses identified. Higher traffic volume roadways, such as Pine and California Streets, should also consider a sidewalk width of no less than 10 feet to allow for pedestrian buffering. Low volume roadways such as Butte and Placer Streets and other cross streets would benefit from increase widths; however, a pedestrian zone width of 8 feet or less could be accommodated.

Figure E1 – Typical 4' - 8' Pedestrian Zone

Figure E2 – Typical 10' - 14' Pedestrian Zone

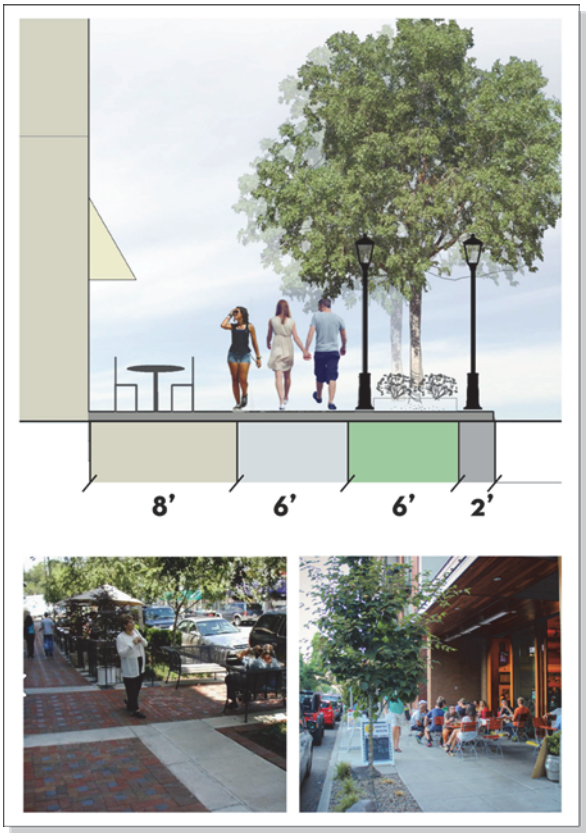


Figure E3 – Typical 20' - 24' Pedestrian Zone

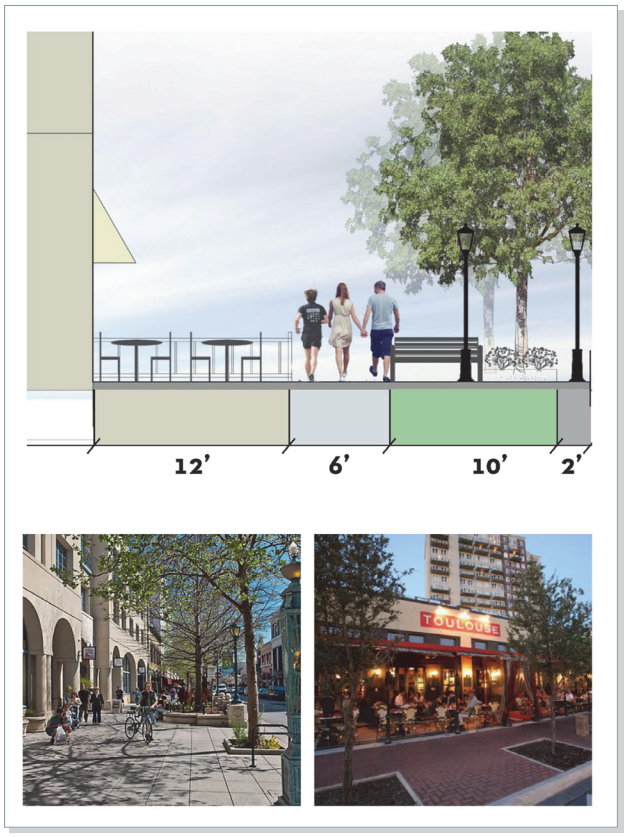


Figure E4 – Typical 28' - 32' Pedestrian Zone

PUBLIC ENGAGEMENT COMMENTS

Appendix F provides public engagement comments that, combined with **Appendix E – Community Engagement** and **Appendix G – Other Downtown Studies**, collectively serve to establish the Goals, Guiding Principles & Action Plans for the Downtown Redding Community Based Transportation Plan identified in **Appendix H**.

F.1 SUMMARY OF STAKEHOLDER MEETINGS

In addition to the meetings with stakeholder groups, comments and suggestions were received by email and phone from interested community members. The following summarizes the key comments received through the public outreach effort:

TRAFFIC CIRCULATION

- Constructing Market, Butte, and Yuba Streets through The Market Street Promenade should help retail business expansion.
- Need a traffic signal or pedestrian-activated crosswalk at the intersection of Placer and Market Streets.
- Do not put streets back through The Promenade. Maintain as a pedestrian/bicycle mall. Install shopping center identifier signage.
- Consider posting Pine and California Streets with the programmed speed to traffic lights so drivers can travel through the corridors on green signals to avoid stop and go movements, improve air quality, reduce gas usage, and possibly create safer roads for pedestrians and bicyclists.
- Address the circulation movements and transient elements in and around the Safeway Grocery Store on Cypress that create an unsafe environment and provide a negative impression to those entering the Downtown area on Pine Street.
- Address parking, access, circulation, and safety issues in conjunction with activities and large vehicle deliveries in congested areas. Put the streets back through The Promenade. Butte and Yuba Streets one-way from the east and west into The Promenade and Market Street two-way north and south. Build wide sidewalks. Add parking, but not too much parking.
- Do not add any more traffic signals Downtown. They are expensive and the money could be better spent on bicycle and pedestrian improvements.
- Redesign the intersection of East Street at Pine Street, adjacent to Safeway.
- Slow down traffic in Downtown by accepting a lower Level of Service for design speeds.
- Center and Continental Streets are in need of resurfacing.
- Consider replacing the traffic signal at Market and Gold Streets with stop signs.
- Consider pedestrian-actuated signals on Pine Street at the intersections with Yuba and Butte Streets.
- Opening Market Street again? Oh, please do! This would make a world of difference.
- Design streets in The Market Street Promenade similar to what is in front of the Cascade Theatre.
- Consider converting Riverside Drive to one-way vehicular traffic to accommodate a bicycle/pedestrian path of adequate design. Another option would be to eliminate vehicular traffic on Riverside Drive, between N. Court and Center Streets.
- Restore the left-turn lanes on Pine Street at South and Placer Streets.
- The Promenade is too big and too long to feel quaint. Constructing Market, Butte and Yuba Streets in The Promenade will break the space up into distinct areas with parking close by.

- Adjust the traffic signal timing on Pine Street to slow traffic and make it safer for bicyclists and pedestrians.
- Adding bike lanes in Downtown is important, but the public needs to be educated about bicycle rules of the road.
- If the streets are put back through The Market Street Promenade, they should prioritize reaching local destinations by foot and be very inviting for walking.

PARKING

- Need designated overnight parking for Lorenz Hotel residents on the California Street parking structure to be closer to the hotel – nearer to the Yuba Street intersection.
- Need identified overnight parking for Hotel Redding residents in close proximity to the hotel.
- Need handicapped parking in close proximity to the Hotel Redding.
- Address the need for long-term, dedicated, safe parking for Downtown employees, business owners, and volunteers. Consider reserved, well-lighted and secure lot(s) for those who would pay for this by the month(s). The property could be either purchased by the City, by an investor or group, or obtained through a long-term lease.
- Support much better lighting, improved cleanliness, and even more frequent bicycle and walking patrols of the Downtown parking structure by Redding Police until a long-term parking alternative is identified, funded, and available.
- Encourage people to choose to visit, shop, do business, eat, and socialize in Downtown by providing clean, safe, well-lighted, and free parking for short-term stays (e.g. Monterey, Walnut Creek, Carmel, Los Altos, Placerville, and many other viable and successful downtown areas).
- Eliminate parking meters. They discourage people from coming Downtown and create issues for businesses who are asked for change. Parking stations that are used in some communities are complicated for many drivers and sometimes difficult to find and operate. Instead, use signs notifying drivers of parking limits for short-term transactions.
- Create a map of the public and private lots in Downtown. Widely distribute this in paper form in City Hall, with new and renewing business licenses, and online in an interactive version (e.g., San Jose Downtown: http://sjdowntownparking. com/parking-map).
- Investigate how to relocate providers of free social services who park on public streets in Downtown Redding.
- Eliminate curbside parking on Court Street adjacent to the County Courthouse complex. Too narrow and dangerous with car doors opening.
- Downtown needs safe parking areas – well lighted, visible.
- Reduce the number of time limit restrictions. Be consistent with use of parking meters.
- Consider using police cadets for parking enforcement in Downtown.
- In order to increase the amount of retail and residential use in The Promenade, it is important to build Market, Butte, and Yuba Streets through the space. The design should be based on the Market Street and Yuba Street Demonstration Blocks, with as much on-street parking as possible.
- We have more than enough parking. Need to charge for parking to get people to move their cars and move on to the next shopping opportunity.
- Use vacant lots for public parking. Just park cars on the grass, no need to add asphalt. Encourage owners to hold markets or fairs on their vacant lots.
- Add parklets between parking spots and public art.
- Support the concept of reconfiguring the California Street parking structure into two vertical parking garages with a park/plaza in between.
- The big California Street parking structure is desirable because it offers free and convenient parking. It just needs some maintenance.

TRANSIT

- Need more bus stops in close proximity to the Hotel Redding. It is difficult walking to the Downtown Transit Center for those using walkers or canes.
- Would like to see Sunday bus service.
- Need protected bus shelters in and around the Garden Tract neighborhood.
- Need to control loitering and smoking at the Downtown Transit Center.
- Would like to see some basic evening bus service for employees.
- Downtown merchants would benefit from a bus or shuttle service between Downtown and the Sundial Bridge.

BICYCLES & PEDESTRIANS

- Like the idea of a "scramble" intersection at Placer and California Streets. Stops traffic in all directions and lets pedestrians cross in any direction, including diagonally.
- Would like to see a pedestrian crossing of Yuba Street directly between the Lorenz Hotel and the Downtown Transit Center.
- Need a sidewalk along the east side of Oregon Street adjacent to Calaboose Creek.
- Need more benches, shade trees, and trash cans on Downtown streets.
- It is hard for a pedestrian to cross California Street because there is not enough time between signals.
- Need to fix tripping hazards on Downtown sidewalks.
- The wait for pedestrians at signals is too long.
- Need to prohibit skateboarders and bicyclists on sidewalks.
- One-way streets in Downtown are safer for pedestrians because the traffic is only coming from one direction.
- A safe walking environment for Lorenz Hotel residents is very important because all needed services are within one mile of the hotel.
- Need street trees that do not drop tripping hazards like the sycamore balls along Sacramento Street.
- Consider crosswalk signals that not only tell you how long you have to cross safely, but also identify how long until it is safe to cross to encourage people to wait rather than walking against the light.
- Support the "scramble" crosswalk concept at the intersections of California and Placer Streets, Placer and Pine Streets, and other major pedestrian crossings in Downtown.
- Improve the bike route "wayfinding" signage system (e.g., Downtown Denver).
- Consider incorporating exercise stations into bicycle/pedestrian paths and "parklets" as appropriate. Investigate partnership opportunities with Healthy Shasta and Shasta Living Streets.
- Work with Rotary, other service clubs, and interested organizations to design, create, and possibly help obtain funding for new and enhanced trails to and from Downtown for bicyclists and walkers and others (e.g., Redding West Rotarians have created several trails that could be included and extended).
- Establish a bike share program for frequent bicyclists who prefer to ride around Downtown rather than driving. This could be linked to national programs with reciprocity such as Bikeshare.com to encourage bicyclists from other communities/cites/states to visit Downtown. "Bike sharing is an innovative transportation program, ideal for short distance point-to-point trips, providing users the ability to pick up a bicycle at any self-serve bike station and return it to any other bike station located within the system's service area."
- As a related concept, consider implementing an inexpensive bike rental system that links Downtown to Turtle Bay and other trailhead destinations. Bike corrals could be established at key destinations for this purpose.
- Create a great, inviting, safe pedestrian space, especially in the Downtown core – safe crossings/ intersections are a big deal; wide sidewalks, pleasant interesting things to see, shade, inviting environment, etc.

- The Promenade, as a pedestrian mall, is an attractive feature.
- Need a really great connection between the Sundial Bridge/Dana Trail and Downtown – this is the most important non-motorized corridor! A trail or "trail like" experience (attractive protected bikeway or neighborhood greenway). If the chosen route is in the area of the cemetery, it will still be very important to greatly improve bike/pedestrian facilities in the vicinity of Park Marina/Butte/Sundial Bridge Drive interchange and connect somehow to Sequoia School/Garden Tract area.
- Need a good east-west bikeway through downtown (Yuba could work well as its central, quiet, and has great destinations). Should tie into the connection to the Sundial Bridge/Dana to Downtown Trail, Garden Tract, and to Shasta and Gold Streets to the west.
- Need a northbound bikeway on a more pleasant street than Pine (Pine has too high of traffic volumes, trucks, speeds, noise, etc. – not inviting for bicycling – find a better way than passing through Pine/Tehama/Shasta/Eureka). Choose a parallel route and make the crossings safe – it would be much more inviting and safer.
- California Street seems to make sense for southbound bikeway, ideally with protected bikeway in the core area (perhaps separated by landscaping and parked cars?). Continue to mark California as a bike route through the residential area (fix intersection with Hwy 273) and provide a clear, safe way to get to Railroad or Court southbound as well.
- Would like to see diagonal pedestrian crossings at key intersections to reduce crossing movements.
- Better wayfinding signage is needed to highlight bicycle routes.
- To increase bicycle activity, build bicycle paths that are separated and buffered from vehicle travel lanes.
- Downtown needs centralized bicycle parking areas – "Bike corral" – with sufficient numbers of bike racks.
- Bicyclists and pedestrians tend to want to travel along the same path as automobiles because that is generally where shopping and services are located.
- Be consistent in building bicycle paths – avoid gaps between sections.
- Separate and buffered bicycle paths are preferred, but even striped and signed paths alert motorists to the presence of bicycles making it safer for riding.
- Bicyclists and pedestrians "stop and shop" while cars just drive through Downtown.
- Need super wide sidewalks in Downtown – at least 10-feet-wide.
- Create a "trail like experience" on the street – such as wide sidewalks and protected bikeways on Butte Street or creating a bike boulevard on Yuba Street (treatments to slow and discourage driving but to make it safe and easy for non-motorized users). Make it really inviting and safe – so it invites tourists and local trail users who may otherwise drive to the trailhead.
- Need to develop a good bicycle/pedestrian connection between the Diestelhorst Bridge Trailhead and Riverside Avenue. One option is to extend the trail under the Lake Redding Bridge to the east side of North Court Street then up to Riverside Drive.
- From the Diestelhorst Bridge Trailhead, the best route to the Downtown core is via Riverside Drive to Center Street to Division Street then to California Street – no major street crossings or signal conflicts.
- There is a significant conflict between the bicycle lane and vehicle lanes at the intersection of California and Gold Streets.
- Bicycle travel north on South Market Street is dangerous at the intersections of Cypress Avenue and East Street (adjacent to Safeway Market).
- Consider a bicycle/pedestrian connection between Continental Street and the Civic Auditorium property (access to the Dana to Downtown Trail) through the Redding Memorial Park Cemetery.
- Consider a bicycle/pedestrian trail connection between Continental Street and the Dana to Downtown Trail along the north side of State Route 44, adjacent to the cemetery.
- Butte Street through the Redding Medical Center campus offers the best bicycle route between Downtown and the Civic Auditorium, based on moderate street grades and lower traffic volumes.
- The proposed County Courthouse project in the area of Yuba and Oregon Streets creates the opportunity for a Yuba Street pedestrian bridge over Court Street.

- Bicycle paths in Downtown should be suitably safe for children to use.
- Establish a Downtown trailhead.
- Consider using Butte and Yuba Streets to and from Downtown as streets built for bikes – Yuba Street eastbound and Butte Street westbound.
- Consider adding bike lane on East Street between Tehama and Placer Streets.
- Create an "art walk" between Turtle Bay museum and Downtown with sculptures, sidewalk art, or other interesting things to look at along the way and to confirm the route.
- Need safer crosswalks, especially at the northwest corner of the parking garage.
- Market Street is the ideal north-south street through Downtown for walking and biking and slow vehicular traffic.
- Yuba Street is the ideal east-west street through downtown for bicycles and pedestrians, but need better crossings at key locations, such as East Street.
- The bicycle/pedestrian connection between Turtle Bay and Downtown needs to be visually powerful, recognizable, and named.
- Design identifiable walkway crossings, preferably with artistic graphics on the road.

OTHER GENERAL OBSERVATIONS

- Need to increase life in the core of Downtown – building mixed-use projects, creating an inviting public space, adding housing, etc.
- Need public restrooms in Downtown.
- Relocate Aramark Uniform Services facility on Butte Street out of the Garden Tract neighborhood. Aramark creates on-street parking concerns due to lack of employee parking. Large truck movements create safety issues at Butte and Sequoia Streets.
- Encourage Downtown businesses to participate in organized programs and efforts such as Shasta Crime Watch where people work together and with law enforcement to create and perpetuate a safe environment.
- Establish a Downtown Police Substation in a centrally located place to give the Redding Police a valued and valuable continuing presence in Redding Downtown.
- Investigate the idea of involving retired first responder volunteers (police, Highway Patrol, fire, related military service) using electric golf carts to help Downtown in various ways. Assistance could be provided such as patrolling, escorting employees to safe parking areas especially after dark, helping elderly and physically challenged get to the Riverfront Playhouse, the Cascade Theatre, and other entertainment venues, alerting Redding Police when a situation needs their attention.
- Integrate Crime Prevention through Environmental Design concepts into the transportation design process.
- Protect and enhance the safety of the street and public parking areas in Downtown to encourage people to come Downtown to work, shop, conduct business, volunteer, socialize, enjoy performances, patronize restaurants, and more.
- Trash cans in Downtown are a concern due to uncertainty of what is actually being placed in the containers and being an attraction to people who go through the trash cans and leave the contents strewn around as they often do with dumpsters.
- Both drivers, bicyclists, and pedestrians need to be educated as to the "rules of the road."
- Train school children to be good pedestrians and bicyclists.
- Dream big because transportation-related funding sources are available and could be combined with other resources.
- Consider creating a linear park that prohibits motorized vehicles.
- Provide ample trash cans in Downtown.
- We treat cars, roads, and parking as a public right. What if bicycles were treated that way?

- In order to make Downtown safer, we must deter the homeless, transients, and criminals from congregating there. The provision of social services (e.g., HOPE Van) in Downtown attracts this population.
- Concerned about losing the grassy area adjacent to the Shasta College Health Sciences Center. Okay if replaced with a new central, attractive outdoor public space.
- Consider a trolley car, which is only accessed with a Turtle Bay ticket stub or a receipt from one of the Downtown businesses or businesses could offer a token. That would help keep transients from using it.
- Desire a Downtown that is very pedestrian-oriented, but also options for driving through efficiently as well.
- Increase residential densities in Downtown and in surrounding neighborhoods to lessen dependence on autos. Well-designed connecting corridors that are attractive, safe, comfortable, and well-lighted, should be built to provide access between Downtown and the residential areas.
- More large, shady, street trees are needed in Downtown.
- It would be nice if Redding felt more quaint like downtown Chico or Ventura.

F.2 COMMUNITY WORKSHOP #1 SUMMARY

The first of two planned Community Workshops was held on Wednesday, March 25, 2015 in the Atrium at the south end of The Market Street Promenade. During the PowerPoint presentation, participants were able to provide feedback through keypad polling, the results of which are attached. Following the PowerPoint presentation, the audience was invited to participate in detailed discussions with the consultants and City staff. In addition to keypad polling, participants were invited to provide "sticky note" comments on the display boards and submit comment cards at the end of the workshop. The following summarizes "sticky note" and comment card responses:

"STICKY NOTE" COMMENTS

Traffic Circulation

- "Money could be spent on improving Downtown instead of a roundabout."
- "Please fix the Cypress intersection for people walking and on bikes."
- "I think it would be okay to turn some of the one-way streets into two-way, but not the narrow streets."
- "Love the roundabout at Cypress/Pine Streets. This intersection is so dangerous for cars, bikes, and pedestrians. It simply doesn't work for anyone."
- "Restore the grid!"
- "Roundabouts aren't very pedestrian-friendly."
- "Reclaim the alleys as public places for art, pedestrians, etc. And they should get names."
- "Redding traffic isn't bad but getting through Downtown is confusing for visitors."
- "A trolley car between Downtown and Turtle Bay is a must."
- "One-way streets, please."
- "Restore the right hand turn lane at Pine Street and Tehama Street."

Promenade/Mall Streets

- "Two-way streets everywhere."
- "No. Do not open the streets in the Mall."
- "Two-way street on Market Street. Yes!"
- "I like the widest sidewalks with patio seating."
- "I love the Mall as a park-like, family-friendly place – no cars."
- "If The Promenade does not have shade features, shopping and walking is out of the picture – too hot!"

- "Open up Butte and Yuba Streets. Yes!"
- "The Promenade is a nice name … but it's a cement cauldron. Push Market Street through – bring small businesses to the newly opened streets."

Parking

- "Love easy angled parking."
- "Solar over parking lot … shade."
- "Parking Downtown for semi-handicapped needs to be provided near shops, etc. The way it is now keeps me from activities."
- "Back in diagonal parking is safer for all."
- "Parking structures go underground."
- "Get rid of car lots in Downtown. Why would you fill parking lots with cars that no one drives and then complain about the lack of parking?"
- "Preserve the parking structure."
- "No fees or meters at public parking spaces!"
- "Too often there's a shortage of parking spaces for older, less agile vehicles."
- "Tear down the parking structure and build one high-rise style parking garage on half the space. Use the remaining half for condos and retail/office space."
- "Parking should not be so easy that people don't walk some."
- "Designate a Downtown trailhead parking area – possibly in the Oregon Street/Rail Yard area."
- "Keep in mind the concept of apartments and/or businesses above parking areas."
- "Shaded parking Downtown will encourage people to visit and stay downtown."
- "Light up and paint the parking garage now."
- "I think parking Downtown is great as it is."

Pedestrians/Bicyclists

- "I hate biking with cars. Would love more separate paths."
- "I'd love a walking/biking trail between Diestelhorst Bridge and Turtle Bay, along Riverside Drive."
- "Only limit vehicular traffic on Riverside Drive from N. Court Street to Center Street."
- "Concerned about no vehicles on Riverside – if cars not going by will there be enough 'eyes on the street' to keep it safe?"
- "Solar power for shade – not trees. You have to water trees."
- "Extend the Sacramento River Trail into the Downtown Mall. Fully protected."
- "To ban vehicular traffic from Riverside Drive is a bad idea. It will close off or severely restrict ingress and egress for residents there."
- "More sidewalks with seating. More parklets!"
- "Increase the duration of green lights for pedestrians at crosswalks."
- "Please construct separated and buffered bike lanes apart from vehicular traffic."

COMMENT CARD RESPONSES

Traffic Circulation

- "Leave Pine and California Streets as one-way streets."
- "I would like to see two-way streets replace the one-way streets in Downtown."
- "Restoring a grid of two-way streets that are bicycle and pedestrian-friendly is the best way to support Downtown's revival."
- "I love the idea of a traffic circle at Pine/Cypress/Market Streets!"

Promenade/Mall Streets

- "The Promenade streets should be opened to us as in the pre-Mall era. There is too little exposure now for businesses and inadequate parking."
- "Instead of spending millions to re-open the streets, spend millions on redeveloping The Promenade to attract bicyclists and pedestrians."

Parking

- "There is a serious parking problem during work hours, especially during a daytime Cascade Theatre event."
- "Employ the use of parklets in Downtown."
- "Investigate new technology for paying for parking and enforcement."
- "I support paying for parking because it is sign of a thriving economy and it's needed for enforcement and for public safety."
- "Parking areas beneath businesses and apartments seems like a viable idea."
- "We need better signage to identify public parking areas in Downtown."
- "I support paying for parking on the structure to pay for maintenance."
- "Parallel parking is difficult on one-way streets."
- "The parking structure should be rebuilt with commercial and dining opportunities at the ground level."
- "I would like to see a bigger parking structure or more parking structures and increased on-street diagonal parking – not parallel parking."
- "I would be willing to pay reasonable rates for metered parking only during business hours; however, evening parking should be free."
- "On-street parallel parking is preferred."
- "I would prefer to see increased parking in a structure and save the space on the streets for bikes and pedestrians, however, security needs to be addressed in garages."

Transit

- "Bus routes are often not timely or convenient."
- "There is too much second hand smoke on busses."

Pedestrians/Bicyclists

- "Will law enforcement help bicyclists comply with traffic rules?"
- "Promote more business activity by increasing pedestrian activity."
- "Revisit the design of the bike lane on California Street at Gold Street. It's incomplete, confusing, and dangerous."
- "I'm excited about the bicycle connections between Downtown and the Dana to Downtown Trail and the Diestelhorst Trailhead."
- "Bike parking is such an issue everywhere in Downtown. Please add bike parking."
- "Bicycle and pedestrian access into and out of Downtown is vital."
- "I support closing Riverside Drive between Court and Center Streets to facilitate the bicycle/pedestrian trail connection."
- "Downtown should be for people first, not cars. Cars do have a place, though!"
- "Develop the alleys along the sides of The Promenade into attractive pedestrian experiences."

F.3 COMMUNITY WORKSHOP #2 SUMMARY

The second of two planned community workshops was held on Thursday, September 24, 2015 in the Atrium at the south end of The Market Street Promenade. The consultant team gave a PowerPoint presentation of proposed recommendations to the City based on feedback received at the first workshop held on March 25, 2015 as well as ongoing discussions with City staff. Approximately 100 people attended the workshop.

Following the PowerPoint presentation, the audience was invited to talk to consultants and staff in more detail about the proposed recommendations. Participants were encouraged to complete comment cards and leave them with the consultant team for input into the final recommendations to the City. Comment card responses are summarized as follows:

COMMENT CARD RESPONSES

Traffic Circulation

- "Like the idea of reducing the speed to 25 MPH on Downtown streets."
- "Will a roundabout really work at rush hour?"
- "Slower speeds in general is a good idea."
- "Need to re-establish the left-turn lane on Pine Street at South Street."
- "Allow right turn from two lanes on Pine Street at Tehama Street (access to Highway 44)."
- "Closing Riverside Drive to auto use is outrageous to me. Have you really considered how closing Riverside Drive would impact people?"
- "Traffic signals are inefficient and have many false calls."

Promenade/Mall Streets

- "Open Butte and Yuba Streets to cars. Keep Market Street pedestrian."
- "An alternative would be to open Market Street to cars and leave Butte and Yuba Streets for pedestrians."
- "Market Street must be both directions all the way through The Promenade. Otherwise, the 'mission' will be grossly compromised."
- "Like the idea of improving the alleys as shared use spaces."
- "The reopened streets Downtown should be considered shared use roads with cars considered guests having to yield to pedestrians and bikes."
- "Don't reopen the streets – you will lose valuable space for outdoor activities."

Parking

- "Without redevelopment funding I don't see how 4-5 story parking structures can be financed. Will they be used if there are high fees?"
- "No parking meters!"
- "Paid parking will kill Downtown – again!"
- "Strengthen the existing structures while putting the streets back through. New structures are cost-prohibitive."
- "Removing existing parking garages is critical to making Downtown alive, used, busy, enjoyable, and viable."
- "Keep meter fees low so that shoppers will shop."
- "Consider 'garden-top' parking structures."
- "Consider parking structures with two floors underground."

Transit

- "Need better signage at bus stops that is easy to understand and clearly identifies the bus route schedule along with electronic updates to tell if bus is on time."
- "Need bike lockers at transit centers."

Pedestrians/Bicyclists

- "Like protected bike lanes and proposed connections to the river trails and Turtle Bay."
- "My biggest concern is bike movement from south (think South City Park and Safeway) to north and west through Downtown. The current routes are dangerous and confusing. I don't see this addressed in the plan."
- "Very much like the idea of a strong bike/pedestrian connection between Downtown and Turtle Bay – bring visitors from Turtle Bay to Downtown."
- "Planters adjacent to on-street parking make getting out of cars difficult. Use special paving and tree wells."
- "Currently the timing of traffic lights makes it hard to bicycle on California Street since you get stopped by 2 to 3 of the lights in a row. As long as this problem exists, California Street will not be appealing for bicyclists."
- "Need plenty of secure bicycle parking if you want to attract more bicycle riders. Look into Bike Link parking lockers."
- "Extend the proposed Class 2 bike lane on California Street down to Lincoln Street then east to Market Street rather than using Gold Street. Can continue down California Street to S. Market Street with a Class 3 bike lane."
- "Designate Gold Street, between California and Pine Streets, as a Class 2 or 3 bike lane."
- "Would bike share be considered at Turtle Bay and a few Downtown locations?"
- "The bike plan is in good shape."
- "Incorporate ADA improvements into all designs. Existing paths of travel are in poor shape."
- "Consider sky bridges over streets for pedestrians and bicyclists – similar to what's been done in Las Vegas."
- "Love the trees and pedestrian/bike focus. Nice work!"

Other

- "I like the mixed-use plans for the former Dicker's building."
- "All very good ideas! I like what I am seeing in the design and planning stages!"
- "Expand the zoning to encourage more mixed-use residential in a larger portion of Downtown."

OTHER DOWNTOWN STUDIES

Appendix G discusses other downtowns and their pedestrian mall experiences. When combined with **Appendix E – Community Engagement** and **Appendix F – Public Engagement Comments**, these three Appendices cumulatively establish the Goals, Guiding Principles & Action Plans for the Downtown Redding Community Based Transportation Plan identified in **Appendix H**.

Recognizing the existing developed environment of Downtown, it is important to consider other downtowns that made similar decisions to construct pedestrian oriented shopping malls in the 1960's and 1970's. How are those pedestrian malls doing? Do the malls remain, or over time, have those communities had to make similar decisions that the City is considering?

This Appendix, on a cursory level, reviews other downtowns and what they have accomplished, or not accomplished, to maintain, enhance, or renovate their downtowns to achieve their vision for a safe, attractive, and vibrant destination. The studies were shared in the Community Workshops to provide a range of solutions from maintaining exclusive pedestrian spaces to opening up streets to vehicular traffic.

PROMENADE STUDIES

To better understand design approaches for The Market Street Promenade area, open mall and retail spaces on a national scale were reviewed to understand principles to guide the approach for The Market Street Promenade.

Pearl Street Mall – Boulder, CO

- National and local designations ensure the historic character of Downtown Boulder.
- A four block pedestrian mall with local and national chain shops, restaurants, bars, and government institutions.
- Summer months hold street performances and public art displays.

Third Street Promenade – Santa Monica, CA

- A shopping, dining, and entertainment complex in the downtown area.
- In 1960, three blocks were converted to a pedestrian mall with two intersecting cross streets.
- An enclosed shopping mall was added at the end of the promenade to anchor the street.
- Over the years there has been a drastic decrease in local shops in favor of the larger chains.

Pacific Avenue – Santa Cruz, CA

- The Pacific Garden Mall was designed as a semi-pedestrian street in 1969 and destroyed in the 1989 earthquake.
- After the earthquake, the Garden Mall theme was eliminated and an updated downtown design was implemented.
- Located in the center of the city's downtown with shops, restaurants, and theatres. It is known for street vendors and performers.

Fillmore Plaza – Denver, CO

- A one block, hybrid street with two-way vehicular traffic and on-street parking that can be closed off to traffic during planned events.
- Home to over a dozen businesses, dominated by fashion businesses. The Plaza serves as the unofficial town center of Cherry Creek.
- Serves as a connector from Cherry Creek North to the Cherry Creek Shopping Center on First Avenue.

Other Examples

In addition to the four downtowns identified, other examples were presented and discussed at the Community Workshops. The examples included the K Street Mall in Downtown Sacramento, 10th Street in the City of Modesto, and the Downtown Malls in the Cities of Bend and Eugene, Oregon.

CONCLUSION

What became evident during the community discussion, as it relates to Redding's Downtown, are the following aspects of a broader solution to establish, maintain, and enhance the viability of any downtown:

- Be a safe and clean place to be 24 hours per day with visible security.
- Provide reasons to be Downtown, including places to reside, work, shop, eat, recreate, relax, and socialize.
- Establish goals and policies that treat Downtown differently than elsewhere in the City which:
    - Encourage mixed-use development.
    - Reduce the need for motor vehicle travel.
    - Enhance walking and bicycling.
    - Create an inviting place to be, with venues that encourage individuals as well as entire families to want to come Downtown.
- For a pedestrian only mall to be successful, a major tourism draw needs to be in place.

GOALS, GUIDING PRINCIPLES & ACTION PLANS

From reaching out to the public and obtaining their input, evaluating how other communities have addressed transforming their downtowns, and evaluating the potential opportunities and constraints of Downtown Redding, Goals and Guiding Principles evolved. Of utmost importance is that the Goals and Guiding Principles responded to the original Vision Statement and are the basis of the seven Action Plans identified in this **Appendix H**.

VISION STATEMENT

Provide a transportation system that enables all modes of travel and supports a sustainable, livable, and economically vibrant Downtown.

H.1 GOALS & GUIDING PRINCIPLES

In addition to the goals, principles, and actions identified in existing City regulatory documents and guidance plans and reports, the following Goals and Guiding Principles are identified in the Downtown Redding Community Based Transportation Plan:

GOAL 1 – ***Provide safe and efficient roadways that meet the vehicular needs for local, regional, and interregional travel in a manner that meets the needs for all modes of travel and encourages a vibrant Downtown.***

Guiding Principles

- Manage select streets as Arterials (Major Thoroughfare) with high priority given to vehicular traffic. Balance vehicular operations with actions that slow vehicular speeds, improve the pedestrian and bicycle environments, and encourage business activities in the public right-of-way.
- Manage select streets as Minor Arterials with a stronger balance between vehicular efficiency and pedestrian, bicycle, and business needs.
- Manage all other streets as Local Streets with high priority given to non-motorized activities, lower traffic volumes, and slower vehicle speeds.
- Implement road diets on portions of South Street and Tehama Street.
- Re-introduce Market, Butte, and Yuba Streets through The Market Street Promenade as illustrated in **Figure H1**.
- Encourage diverse use of the public right-of-way. Activities include, but are not limited to: café seating, canopies, parklets, signing, lighting, bicycle parking, and public art.
- Revise the coordinated traffic signal timing on California Street and Pine Street, from approximately 30 MPH to no more than 25 MPH.
- Encourage the California-Market Alley and the Market-Pine Alley to develop into shared space alleys that serve as the "front door" to small businesses and residences.
- Provide traffic calming features at every intersection.
- Perform additional studies to determine the potential for converting portions of the one-way north-south Pine Street/California Street couplet to two-way streets.
- Perform additional studies to determine the potential for reconstruction of the Market/Pine/Cypress intersection as a modern roundabout as illustrated in **Figure H2**.

Figure H1 – Restore Streets through The Market Street Promenade: Illustrative View Looking East on Butte Street

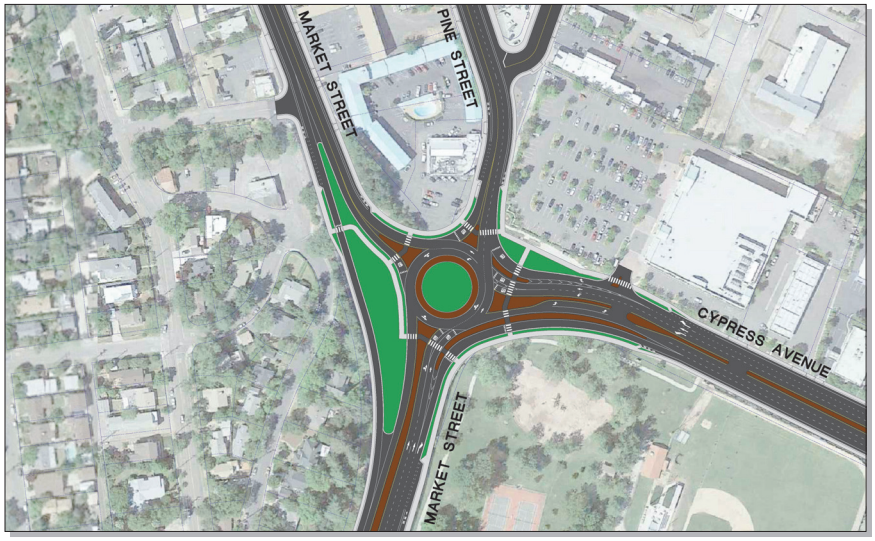


Figure H2 – Example of a Modern Roundabout at Cypress/Pine/Market Street Intersection

GOAL 2 – Restore streets through The Market Street Promenade.

Guiding Principles

- Re-introduce Market, Butte, and Yuba Streets through The Market Street Promenade as identified in Goal 1 and **Figure H1**.
- Provide facilities to promote the highest level of pedestrian use.
- Encourage business activities in the public right-of-way, including café seating, canopies, parklets, signing, lighting, bicycle parking, and public art.
- Provide flexible-use spaces to encourage business use of the right-of-way, changes as businesses turn over, and pedestrian/bicycle only events.
- Provide on-street parking.
- Provide wayfinding signage.
- Phase improvements based on available funding and private redevelopment.

Figure H3 – Example of a Modern Multi-story Parking Structure Sited on a Smaller Footprint

GOAL 3 – Meet the needs for vehicular parking Downtown in support of business, recreational, and residential development.

Guiding Principles

- Maintain and consolidate the current public parking supply to accommodate future Downtown development.
- Replace the current California Street parking structures with new, taller structures sited on a smaller land area footprint (Refer to **Figure H3**). As an alterative to the current location, a northerly structure should be considered on the existing RABA parcels between Tehama and Shasta Streets.
- Retain, to the maximum degree feasible, the current parking structure under the former Dicker's building.
- Add a multi-story parking structure on the City's Pine Street parking lot.
- Charge for on-street parking on a block-by-block basis to achieve an approximately 85% occupancy rate. At locations that do not reach 85% occupancy, do not charge for parking.
- Implement smart parking meters where warranted to manage when parking exceeds the 85% occupancy rate goal.
- Provide dynamic parking availability information and guidance systems for public parking structures.
- Provide electric vehicle charging stations in public and private parking lots/structures.
- Implement a priority parking program for car-share, low-emission, and electric vehicles.

GOAL 4 – Encourage transit ridership by providing safe and effective service and real-time information.

Guiding Principles

- Implement real-time passenger information systems.
- Improve Americans with Disabilities Act (ADA) access, lighting, and shelters.
- Add a new fixed route that provides service in and around Downtown, and to Turtle Bay.

Figure H4 – Example of Protected Bicycle Lanes on California and Pine Streets

GOAL 5 – Improve the pedestrian environment to encourage walking as the primary mode of travel in the Downtown core.

Guiding Principles

- Calm appropriate roadway intersections with curb extensions and high-visibility crosswalks, as also identified in Goal 1.
- Encourage the California-Market Alley and the Market-Pine Alley to develop into shared space alleys that serve as the "front door" to small businesses and residences as also identified in Goal 1.
- Provide pedestrian-scale wayfinding signage.
- Promote comfort with shade, landscaping, public art, seating, and refuse receptacles.
- Provide nighttime safety with improved lighting.
- Continuously improve traffic signal control and coordination to prioritize pedestrian safety and minimize pedestrian delay.

GOAL 6 – Provide a transportation environment that encourages bicycle use.

Guiding Principles

- Provide protected (Class 4) bikeways to connect the Diestelhorst Bridge Trailhead with Downtown and Downtown to Turtle Bay.
- Provide protected (Class 4) bicycle lanes on California and Pine Streets as illustrated in **Figure H4**.
- Provide modern pavement delineation and signing for all bikeways.
- Update the City's bikeway system plan map.
- Continuously improve traffic signal control and coordination to ensure bicycle safety and minimize bicycle delay.
- Provide wayfinding signage.
- Add bicycle parking facilities.
- Establish a Downtown Bicycle/Pedestrian "Trailhead" in the vicinity of the RABA Downtown Transit Center.
- Add green color bicycle lane pavement delineation at key traffic conflict areas.
- Perform additional studies for extending the proposed California Street two-way protected bicycle lane, south of Placer Street.

GOAL 7 – Implement low impact development practices to environmentally "Green" Downtown.

Guiding Principles

- Improve stormwater quality utilizing Green infrastructure design features.
- Provide an environment rich with amenities that encourages pedestrian, bicycle, business, and outdoor living activities.

H.2 VEHICULAR ACTION PLAN

The Vehicular Action Plan provides a framework for improvements to the street network within the Study Area. It is important to balance the need for drivers to get to Downtown, through Downtown, and around Downtown.

EXISTING CONDITIONS

The automobile has had a highly influential effect on the shape and culture of cities. Street networks define the urban realm. However, the rise of the automobile in the 20th century has contributed to negative consequences such as roadway congestion, increased pollution, and human obesity. However, the automobile has also provided increased access and the independence associated with a mobile lifestyle. The goal of a healthy urban street network is to strike a balance where vehicles, pedestrians, bicyclists, and non-transportation related users can share the public right-of-way.

OBJECTIVES

While the Downtown has a strong circulation backbone, there are enhancements that would improve mobility for all modes of travel. The goal is to balance the need to facilitate traffic through Downtown while providing an environment that encourages a healthy and active Downtown.

DESIGN ELEMENTS

There are key streets in the Downtown area that are critical to providing a viable street network for the Downtown area. **Figure H5** identifies streets recommended to continue as major thoroughfares, while others are candidates for road diets. Per the Transportation Element, the City's street network is "comprised of a number of different types of streets, each performing a special function and serving different types of traffic." The following is a functional classification of streets:

- **Arterial (Major Thoroughfare)** - These streets connect regional and interregional activity centers and should continue to place importance on vehicular efficiency while also improving safety and access for other modes of travel. Slower vehicles and business activities in non-motorized areas in the public right-of-way should be a priority when maintaining vehicular efficiency.
- **Minor Arterial** - These streets provide an important linkage between regional, neighborhood, and commercial areas. Vehicular efficiency should continue as a priority while providing increased opportunities for businesses, parking, and business activities in non-motorized spaces in the public right-of-way. Slower vehicle speeds and travel lanes will improve the balance with pedestrian and bicycle safety.
- **Collector** - These streets provide for traffic movement between major arterials and local streets and direct access to abutting property.
- **Local Streets** - All streets not specifically highlighted on the map will place higher priority on non-motorized transportation and activating outdoor public spaces. The public right-of-way along these streets should be designed to encourage infill development, walking, biking, and outdoor activities.

Other design elements considered in the Vehicular Action Plan are:

- **Road Diet Candidate** - These streets are identified as good candidates to reduce the lanes from four lanes to two-lane or three-lane. The reduction of the number of vehicular lanes will slow traffic and allow for implementation of improved bike and pedestrian spaces.

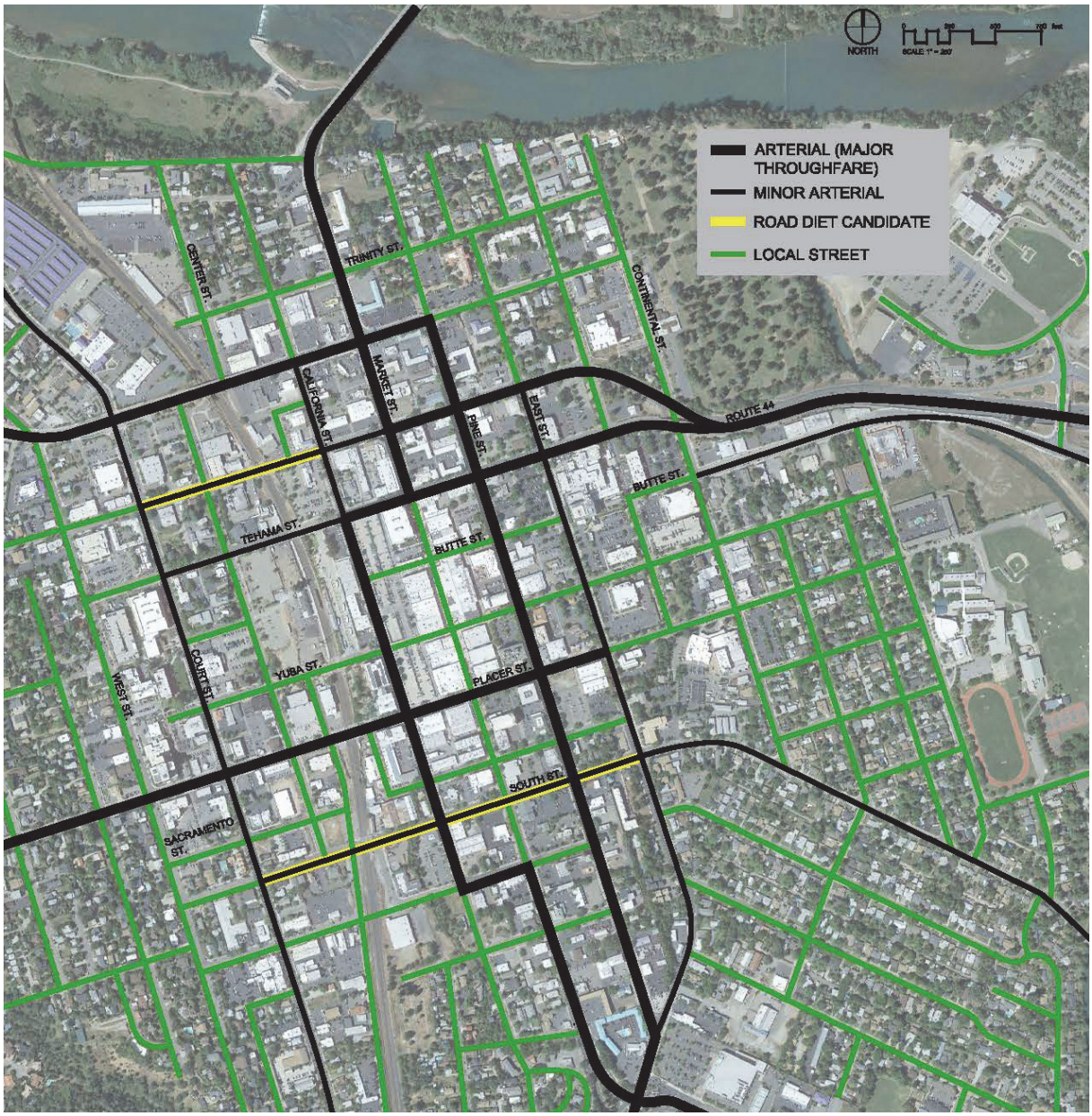


Figure H5 – Proposed Street Designations and Road Diets

- **The Market Street Promenade Streets** - The central core of Downtown will reintroduce streets to prioritize business access, outdoor sidewalk activity, and pedestrian safety.
- **Signal Timing** - Signal timing control for Pine and California Streets has been set for approximately 30 MPH since the 1970's. With the construction of the Downtown Mall, the one-way state highway couplet was created and Caltrans established the 30 MPH plan, placing the highest priority on moving interregional traffic through Downtown. The existing signal timing prioritizes "efficient" vehicular flow through Downtown over non-motorized travel and business concerns. A signal timing control plan that generally reduces speeds to less than 25 MPH or less is expected to have the following benefits:
    - Increased retail sales since vehicle drivers and passengers will have an opportunity to view street side retail opportunities.
    - Easier on-street parking.
    - Increased pedestrian and bicyclist comfort and safety. Travel lanes, bicycle lanes, crosswalks, parking spaces, and sidewalks will be more attractive for these non-motorized users.

- **Traffic Calming** - A well designed street balances vehicular flow with the needs of businesses, pedestrians, and bicyclists. Traffic calming features serve to improve driver awareness of the streetside environment, improve business visibility and access, and improve safety for all modes of travel. Traffic calming is integral to the City's Complete Streets policies in the General Plan. Traffic calming is expected to have the following positive impacts to Downtown:
    - Slower motor vehicle speeds.
    - Improved aesthetics.
    - Attracting investment, redevelopment, and new business opportunities.
    - Improved social interaction.
    - Increased access and safety for non-motorized travel.
    - Reduced collision frequency and severity.
    - Reduced traffic enforcement.
- **Shared Space Alleys** - Downtown alleys can do more than provide access for deliveries, refuse disposal, and collection. Reconfigured alleys can provide multimodal access, stormwater management, and usable public space. The California-Market and Market-Pine Alleys should provide common spaces that facilitate a wide range of activities, including local access, pedestrian and bicycle movement, public interaction, and commercial and restaurant activity (components of the activated streets concept). Motorists will feel like they are the guest in a space intended for more than just vehicular flow.
- **City Streets vs. State Highways** - Going back to at least the 1990's, Caltrans has been interested in relinquishing their lower priority highways to local agencies. Additionally, the historical Caltrans restrictions on traffic calming and conducting business within the state's right-of-way sometimes prompts local agencies to welcome the opportunity to convert sections of a state highway into local street right-of-way. The Downtown Redding Specific Plan has a recommendation to relinquish the state highways through Downtown to the City. Since then, Caltrans has implemented many policy changes that encourage improvements in the state's right-of-way that are consistent with the desires of cities, businesses, and residents. Some of the significant policy changes include:
    - Establishment of a Complete Streets Program and related training for Caltrans staff.
    - Major updates to the Caltrans Highway Design Manual integrating a multimodal approach to highway design.
    - An endorsement of the National Association of City Transportation Officials (NACTO) guidelines that include many flexible and innovative designs.

  In light of the recent Caltrans policy changes and the roadway maintenance and operation costs the City would incur in maintaining the state highways, there is no longer a compelling reason to pursue the relinquishment.

H.3 THE MARKET STREET PROMENADE ACTION PLAN

The Market Street Promenade Action Plan provides a framework for revitalizing The Market Street Promenade pedestrian mall that, in turn, will help serve as a catalyst for revitalizing Downtown. The plan envisions a revitalized Downtown core that is attractive, safe, and economically vibrant. The pedestrian-oriented design and amenities included assist to make pedestrian travel especially welcome in Downtown. People are encouraged to linger and spend time shopping, socializing, and relaxing. The opportunity also exists to reside within The Market Street Promenade area.

EXISTING CONDITIONS

In the late 1960's and early 1970's, the City's Redevelopment Agency (Agency) closed portions of Market Street, Butte Street, and Yuba Street to create the enclosed, climate-controlled Downtown Mall. At that time, portions of the rights-of-way were abandoned and sold to adjacent property owners to allow for new construction. However, with the completion of the Mt. Shasta Mall in 1975, the Downtown Mall began to lose retail shops and associated revenue to the then new suburban mall and other new outlying shopping

centers. In 2003, in an effort to reverse this downward economic trend, the Agency partnered with Shasta College to build the College's Health Sciences & University Center at the northwest corner of the property immediately south of Tehama Street and west of Market Street. The Agency's role was to remove the adjacent Mall roof and construct pedestrian improvements. Removal of the Mall roof was accomplished in two phases and completed in December 2008.

The removal of the roof over the Downtown Mall and construction of pedestrian improvements created some open lines of sight, and better pedestrian and bicycle access to the retail spaces. However, the area still lacks vehicular access, parking opportunities, adequate lighting, shade, and other pedestrian amenities including site furnishings, which hinder retailer success. While vacancy rates are low in The Market Street Promenade, the predominantly "office park" environment does little to draw residents and visitors to the heart of Downtown.

OBJECTIVES

The Market Street Promenade Action Plan places a priority on business visibility and physical access, facilitating "high-rise" mixed-use and residential projects, as well as providing for increased pedestrian safety and comfort. Restoring the 80-foot right-of-way through The Market Street Promenade and reconstructing the closed streets will ensure generous sidewalk widths, ample room for Complete Streets, and increased visibility and direct access to businesses. On-street parking and installing pedestrian amenities will promote high levels of activity throughout the day. **Figures H6**, **H7**, and **H8** provide conceptual site plans for restoring streets through The Market Street Promenade. Objectives include:

- The new streets will prioritize pedestrian and bicycle use while accommodating vehicular travel and parking.
- Sidewalks and plazas are part of the public realm. The sidewalks will be the "front yards" for businesses and will serve as public gathering places where social interactions are the priority.
- Reintroducing Market Street, Butte Street, and Yuba Street through The Market Street Promenade will promote access and visibility to businesses. The new vehicular access will meet the needs for visibility and improved access to parking. The current need to drive several blocks to simply reach the opposite side of The Market Street Promenade will be eliminated.
- On-street parking (diagonal and parallel) will support ground-floor retail use. Active ground-floor retail use along the new streets will serve to provide a higher turnover of on-street parking.
- Minimizing driveway access points impacting sidewalks by promoting alley access at the rear of buildings. Too many driveways are an impediment to the creation of a high quality pedestrian environment.
- Since bicycles share the streets with vehicles, the design of the public right-of-way will result in slow vehicle speeds with bicycle commuters and recreational cyclists sharing the "calmed" street network.
- Street intersections will prioritize pedestrian crossings over vehicles. All intersections will be controlled with design elements to slow vehicle speeds and maximize pedestrian comfort and safety.

Figure H6 – Conceptual Site Plan for Restoring Streets through The Market Street Promenade

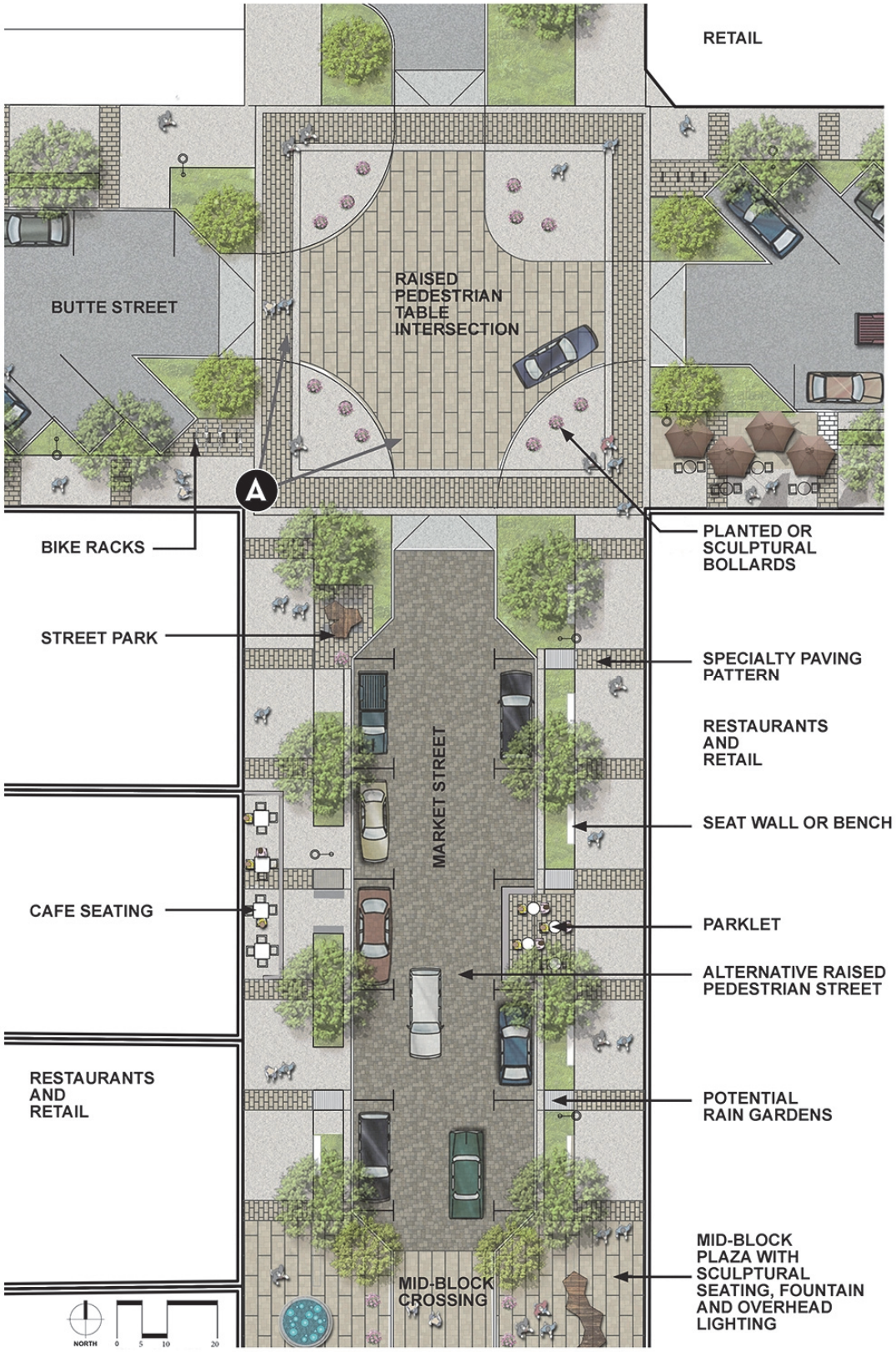


Figure H7 – Conceptual Market Street Promenade Site Plan

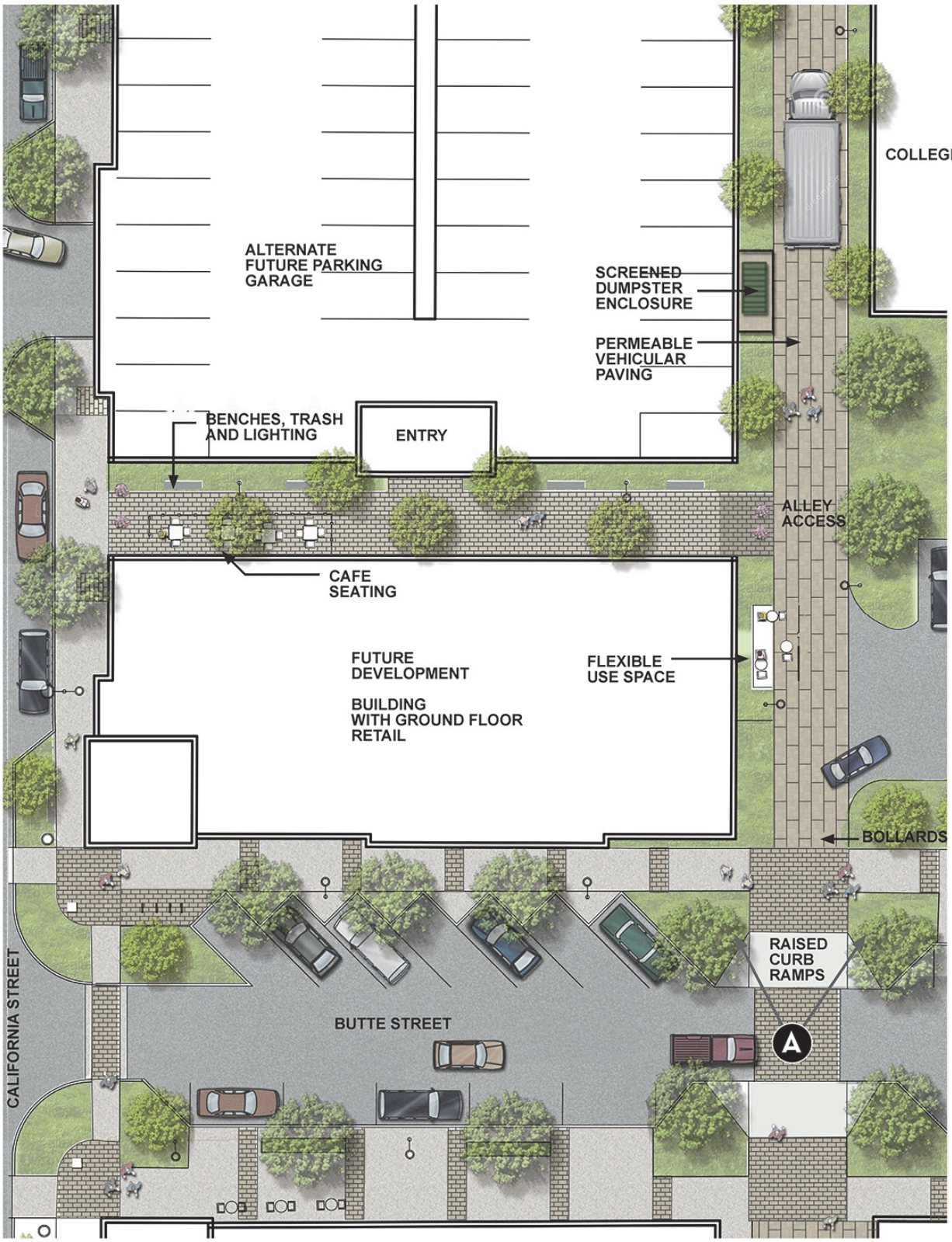


Figure H8 – Conceptual Site Plan with Design Elements along the California-Market Alley

DESIGN ELEMENTS

The objectives of The Market Street Promenade Action Plan are to facilitate business growth and activity, support the growing demand for mixed-use residential projects, and provide a safe and comfortable pedestrian environment. Key to meeting the objectives of the Plan is reintroducing Market, Butte, and Yuba Streets into The Market Street Promenade to allow for slow moving vehicles and pedestrian-oriented streets, where bicycle commuters and recreational cyclists share the "calmed" streets with pedestrians and motorists. The following design elements are incorporated into The Market Street Promenade Action Plan.

- **Alleys** - In Downtown, the alley along the west side of The Market Street Promenade (California-Market Alley) has the best access to the California Street parking structure. The alley has become a heavily used pathway for visitors to Downtown, providing a "front door" feel for abutting businesses. The role of the alley will change as the "front door" shifts to Market Street. This will also be the circumstance for businesses fronting the alley along the east side of The Market Street Promenade, especially as properties like the former Dicker's building are redeveloped. Therefore, alleys should be designed to accommodate pedestrians and low-volume vehicular traffic needing to access businesses. Design through traffic calming and flexible uses, as defined below, will help create usable public space as well as vehicular access.

- **Parklets** - Parklets are a streetscape extension that are often installed within on-street parking spaces that provide amenities for passive recreation including art, seating, tables, planters, and sometimes bike racks. Parklets are normally at sidewalk level, often constructed as a temporary installation or are easily removed. Parklets can be constructed by cities, artists, grass roots organizations, or business owners and often require a partnership between cities, businesses, and residents. A parklet policy should be developed to ensure consistency and to safeguard visual activity.

- **Street Parks** - Similar to parklets, street parks extend the pedestrian zone by activating underutilized portions of the streetscape such as bump outs, islands, medians, and extended rights-of-way by providing increased amenities when parking spaces are not desirable places to incorporate design elements or are not available.

- **Sculptural Seating/Interactive Art** - Streetscapes provide opportunities to incorporate seating along the street. Artistic elements provide visual interest and engagement and create an identity and character for the area.

- **Overhead Lighting** - Needs to be pedestrian-scale and visually pleasing to provide safety and ambiance along the streetscape. Lighting locations should be coordinated with building facades and awnings.

- **Café Seating** - Key to the success of a vibrant and active streetscape is the opportunity to incorporate café and restaurant seating areas outside the building along the street edge. For restaurants and bars, this requires a barrier between the restaurant zone and public realm. Collaboration between business owners and the City is crucial for proper regulatory permitting and clearances. Consideration should be given to the seating location, number of seats, orientation, exposure, and method of separation.

- **Flexible Use Spaces** - Loosely defined, these spaces can accommodate a variety of intended uses. For example, Market Street should be designed to accommodate vehicular traffic, as well as the opportunity to be closed to traffic for pedestrian only events such as farmers markets, music festivals, parades, etc. Flexible use spaces can also result by activating underutilized spaces such as along building edges, in alleys, and along street corners by providing the opportunity for programming including seating, art, and other street elements.

H.4 PARKING ACTION PLAN

The Parking Action Plan presents a framework for improving parking management and supporting accessibility while controlling the availability and flexibility of parking opportunities in Downtown. General guidelines for overall strategies and recommendations for parking management in the Downtown area are identified.

EXISTING CONDITIONS

Based on projected growth over the next 20 years, with effective management there currently exists a sufficient amount of parking available Downtown. Historically, growth has been slow but steady in Downtown. It is more likely that growth will continue on a steady basis with periodic spikes associated with development of significant projects. The number of existing City- and RABA-owned parking stalls at the locations proposed for new and/or reconstructed parking structures is approximately 921 spaces. When coupled with private parking lots, the parking stall supply can accommodate existing and projected Downtown parking demand.

There are a number of different user groups associated with parking in Downtown.

- **Employee Parking** - Employee and customer conflicts are common in Downtown areas. Employees should be encouraged to park in off-street parking lots or structures away from the Downtown core or toward the fringes.
- **Customer Parking** - Ideally, customers should be able to park in on-street parking stalls in the Downtown core or in off-street lots or structures in the Downtown core.
- **ADA Parking** - ADA parking should be evaluated to ensure that the appropriate amount is provided per facility and that installed conditions meet current code requirements.
- **Alternative Fuel Vehicles, Car Pools, and Electric Vehicle Charging Stalls** - The California Green Building Standards Code (Cal Green) of the California Building Standards Code requires 8% of parking supply be designated for alternative fuel vehicles, car pools, and electric vehicle charging stalls. These stalls should be sited in preferential locations.
- **Electronic Vehicles** - The percentage of electric vehicles on the road is a trend that will continue to increase. Per Cal Green, 3% of stalls are required to be electric vehicle charging stations. A mix of Level 1 and Level 2 chargers is recommended. Level 1 chargers take approximately 4 to 8 hours to recharge a vehicle. Level 2 chargers are twice as fast and therefore should have a 2 hour maximum time limit to encourage turnover that allows more vehicles to charge.

OBJECTIVES

From an overall parking supply standpoint, the goal is to maintain and consolidate the number of parking spaces currently available. Future development can result in additional parking spaces that could be accommodated through construction of new and/or redeveloped parking lots/structures identified in the Parking Supply Plan in this Appendix. Design considerations include the following objectives:

- Parking availability and turnover is critical to the success and viability of local businesses.
- "Park Once" strategies will encourage more walking and less driving, and increase the number of people walking past businesses.
- Shared parking strategies allow uses with different peak demands to share the spaces in the area to lessen the overall required parking supply.
- Limited parking, pay parking, and other strategies encourage use of alternative modes of transit.
- Future development should be designed so that parking is not the dominant architectural feature. Parking structure architecture should respect the Downtown context of Redding.

- Parking lot and parking garage structure design can incorporate sustainable strategies to reduce environmental impacts, increase energy efficiency and performance, and manage parking spaces efficiently. The Green Parking Council has established Parksmart (formerly Green Garage) certification, which currently is the world's only rating system defining and recognizing sustainable practices in parking structure management, programming, design, and technology.
- Ensure, to the extent feasible, that as much of the Downtown parking supply is a publicly-available resource convenient and easily accessible for all user groups. Private parking lots that are closed in the evening are a lost resource. The objective is to achieve the most efficient use of all public and private parking spaces before investing in additional parking spaces/lots.
- Manage the public and private parking supply as part of an integrated, Downtown-wide system. Parking/stall counting systems are available that understand garage occupancy in real time. The addition of dynamic stall counting signage will motivate motorists to get out of their cars and into businesses faster and thus decrease congestion and increase revenue.
- Support the ability of employees to find convenient parking, but discourage them from parking in "prime" on-street spaces. Identify nearby parking areas that are safe and convenient.
- Ensure safeguards to help prevent "spillover" parking into adjacent residential neighborhoods.
- Provide strategies that recognize and properly incentivize the differing needs of short- and long-term parking. For example, employees that need to park for 8-hour shifts should have the ability to purchase permits at reduced rates.
- Embrace new parking technologies, where appropriate, to maximize customer satisfaction as well as foster enhanced parking data management.
- Provide flexibility to decision makers and in turn, to City staff to adapt to seasonal and long-term changes in parking demand. Develop a parking management plan to deal with seasonal and special event parking demands.
- Locate new parking in centralized locations within the Downtown core. Where possible, incorporate parking into mixed uses to complement the Downtown character, thereby improving aesthetics.
- Create a Downtown parking pricing plan and update and replace parking payment technology as necessary.
- Provide enforcement that is more effective. Develop an improved method of collecting parking payment without additional staffing costs.

DESIGN ELEMENTS

Payment Methodology and Options

Currently in Downtown, there are on-street parking meters that only accept coins. A significant number of the meters are damaged and for some spaces, meters are missing. There are a number of options to collect payment for parking without additional significant staffing costs.

- **Pay by Space** - Pay by space parking payment systems use centralized pay stations to process payment. A user exits their car, takes note of their stall number, and then inputs the number into a pay station and pays for the amount of planned parking time. This system lowers installation costs since one pay station can serve a group of stalls. Stalls must be grouped together in close proximity to be effective. Pay by space is compatible with pay by smart phone applications. Pay by space can increase revenue; if a user leaves the stall with leftover time paid, it then becomes possible to "double up" on payment if another vehicle parks and pays while the last vehicle is still paying for parking.

- **Smart Parking Meters** - Smart parking meters are user-friendly parking meters accepting payment by credit or debit card in addition to cash or coins. This works well for on-street parking and existing parking meter poles can be used with a new parking meter head, thereby reducing installation cost. Smart parking meters are compatible with pay by smart phone applications. Smart parking meters can increase revenue when a user leaves the stall with leftover time paid for. It is possible to "double up" on payment if another vehicle parks and pays while the last vehicle is still paying for parking. The smart meter resets when a vehicle leaves the stall. A Specific Plan recommended action is to replace existing meters with smart meters where parking utilization exceeds 85% for more than one continuous hour.
- **Pay on Foot** - Pay on foot parking payment systems use centralized pay stations to process payment. A pay on foot operation is appropriate for parking structures or on grade lots. The parking facility would need to have parking controls in the form of gate arms at entry and exit points. A user pulls a ticket upon entry and keeps it on their person. When they return to the parking lot they would stop at a pay station, insert their parking ticket, and pay. There is also the option to pay at the pay station at the exit gate.

Parking Guidance Systems

Parking guidance systems will provide several benefits for Downtown. They reduce congestion since vehicles are directed to the nearest open parking space. In addition, without parking guidance it is typical for parking facilities to operate at a maximum capacity of approximately 90 percent. With parking guidance, it is possible to approach 100% capacity. In addition, the user experience is enhanced since it is easier for a user to find an available parking space. A common problem in Downtown areas is that users often search for available on-street parking stalls while parking structures are at low capacity. A Downtown parking guidance system can help direct users to underutilized parking structures.

- **Space by Space Detection with lights directing users to open stalls** - This system is applicable to parking structures. Each stall has a red or green light hanging from the level above that indicates if there is an open stall or not. This system is most beneficial for very large parking structures. It allows parking structures to fill to 100% capacity and enhances the user experience. However, the initial cost is high at around $400 to $600 per stall depending on the size of the facility.
- **Dynamic Stall Counting Signage by level within structures** - This system counts vehicles entering a parking structure and communicates real-time availability of parking spaces to users seeking parking. It is effective in speed ramp parking structures. If lower levels are at capacity, a user can continue passing by full levels until they reach a level with open stalls. This system allows for better parking distribution throughout the structure and enhances user experience. Costs associated with this type of system are approximately $25,000 per facility.
- **Dynamic Signage directing users to garages or lots with available parking** - This system would create additional directional signage in the Downtown to direct visitors to the locations of available parking. Dynamic signage located at strategic locations within Downtown would list all public parking facilities in the Downtown and identify available stalls. This system allows for the best distribution of parking demand by reducing parking concentration in the Downtown core while increasing utilization of parking structures, thereby opening up on-street parking. Costs associated with this type of system are approximately $25,000 per facility and $50,000 for a network to tie all the facilities together in real time and to communicate that information to dynamic signage in key locations in the Downtown.

Enforcement

Effective enforcement is the key for a successful parking payment system. Several options are available to facilitate enforcement with minimal additional staff.

- **Car Sensors in Stalls** - Car sensors track whether a vehicle is parked in a stall. The sensor communicates with the parking and revenue control system server and if a vehicle has not paid or is over the time limit, enforcement personnel can be notified. Car sensors can be used in tandem with smart meters to enhance enforcement and minimize staffing needs, since cars that have not paid or have passed their limit can be identified so that enforcement personnel can be more efficient. Some sensors resemble a "hockey puck" that is placed on the ground in the parking stall. In addition, smart meters have parking sensors built in and can sense if a car is present or not.
- **Variable Time Limits** - Allows free or reduced cost parking with different time limits as necessary. Time limits can vary from 20 minutes to 3 or 4 hours; this provides flexibility for customers and improves turnover and availability during typical peak demand periods, which are weekday and weekend evenings. This option can be more labor intensive than paid parking and without adequate enforcement, time limits, and restrictions would have limited effect. Costs associated with this implementation strategy are minimal and are largely associated with staff time to implement changes. Capital costs to replace signage are minimal. This strategy will not increase parking supply, but offers a low-cost means to achieve modest increases in parking turnover and availability. However, the labor cost for enforcement is high but can be enhanced and facilitated through the use of License Plate Recognition systems.
- **License Plate Recognition** - Enforcement can be improved with a License Plate Recognition system (LPR). The LPR camera on an enforcement vehicle can be used to simply drive through the parking lots and scan parked vehicles. The LPR system will cross-reference the plates with the registered permits or paid parking and flag vehicles that are in violation. This option works well for employee permits and can be integrated with any of the paid parking concepts to reduce enforcement staffing levels.
- **Permits/Employee Parking** - Employees often park in prime on-street limiting parking for customers and visitors, increasing the number of vehicles searching for parking.
    - An Employee Parking Permit (EPP) program operates by designating priority parking within the Downtown core area for employers and/or employees. Designated parking areas can be located in off-street facilities, with permit holders eligible to park in those spaces during a specific time period exempt from posted regulations. Ownership of a permit, however, does not guarantee the availability of a parking space. For this reason, it is important not to sell permits far in excess of parking supply.
    - Many conventional EPP programs do not prohibit non-employee parking, but allow the general public to park within the area, subject to posted parking restrictions. Permits provide a consistent parking option for employees, reducing the need for an employee to search for a parking space or move their vehicle to avoid parking restrictions. Experience with other cities has shown that most employees will choose to pay for a permit that offers a reliable parking option over searching for free on-street parking and having to move their vehicle throughout the day. A convenient parking option makes it easier for employers to attract and retain employees. When employees park in popular on- or off-street spaces, those spaces are no longer available for customers and visitors. Employee permits encourage participants to park in select areas while improving customer parking turnover at prime locations. Permit parking programs do create additional City administrative costs and potential additional costs to employers and employees.
    - Implementation of a new employee permit program would involve costs to the City to administer the program, including enforcement. Permit costs would generally be set at a rate to offset the administrative costs, but the City should ensure that permit rates are low

enough to encourage their use. The cost of this program is low to moderate compared to the other strategies, depending on the price the City sets for permits. The strategy does not increase parking supply, but would likely free up prime parking spaces that are currently used by Downtown employees parking for long time periods. This program is likely to be a very cost-effective strategy, as it could improve the availability of on-street parking spaces in the Downtown core at a relatively low cost to the City.

PARKING SUPPLY PLAN

From an overall parking supply standpoint, the goal is to maintain, or slightly increase, the number of public parking spaces currently available to accommodate future growth.

- On-street parking will benefit from increased use of angled parking that will help offset the loss of parking due to wider, business-friendly sidewalks, parklets, and green infrastructure.
- New parking structures will be constructed to replace the existing California Street parking structure with the goal to provide the same number of spaces. Additional parking structures will be provided to account for growth over time.
- A number of parking structures were studied in the Downtown. The California Street parking structure is nearing the end of its useful life and should be replaced. Refer to **Figure H9** for the proposed parking garage structures location options.

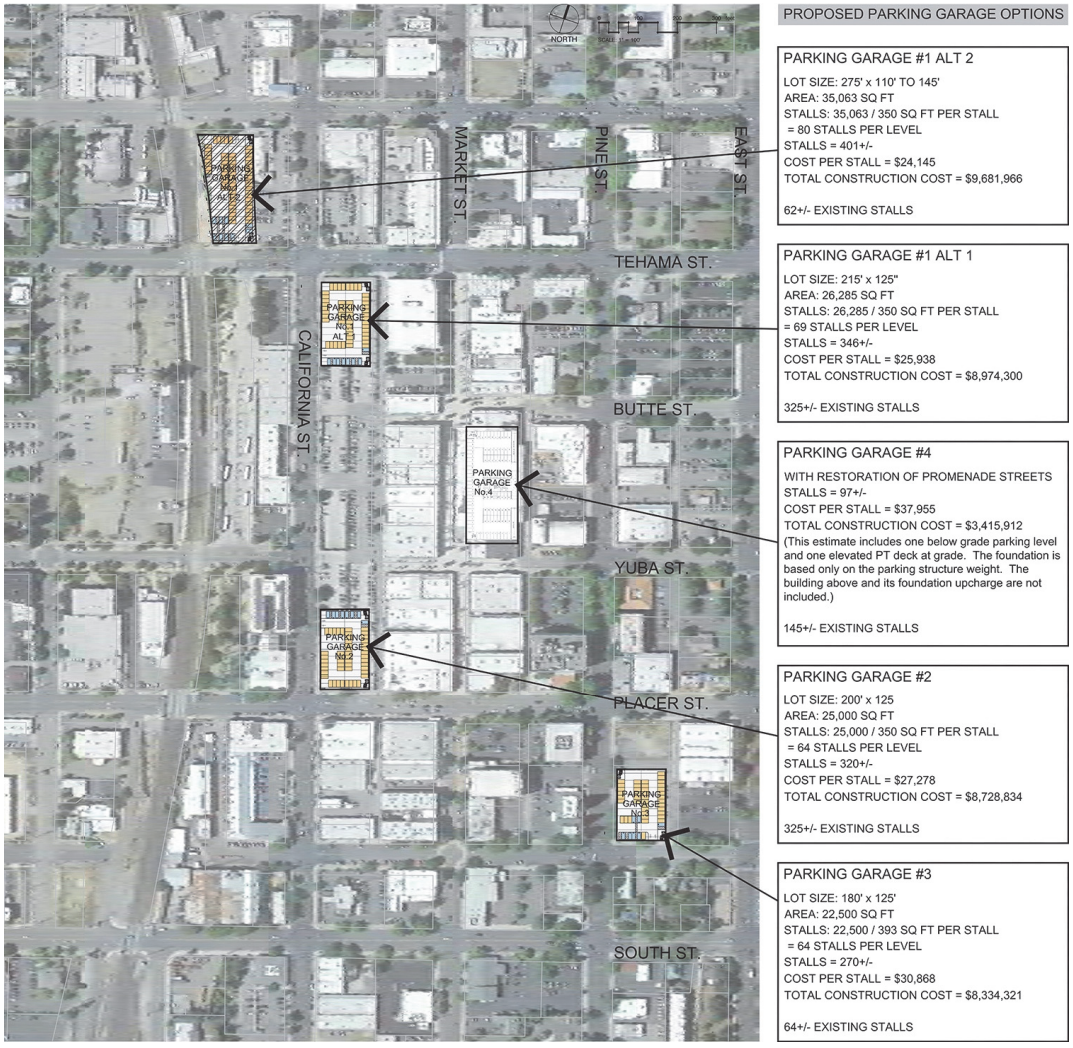
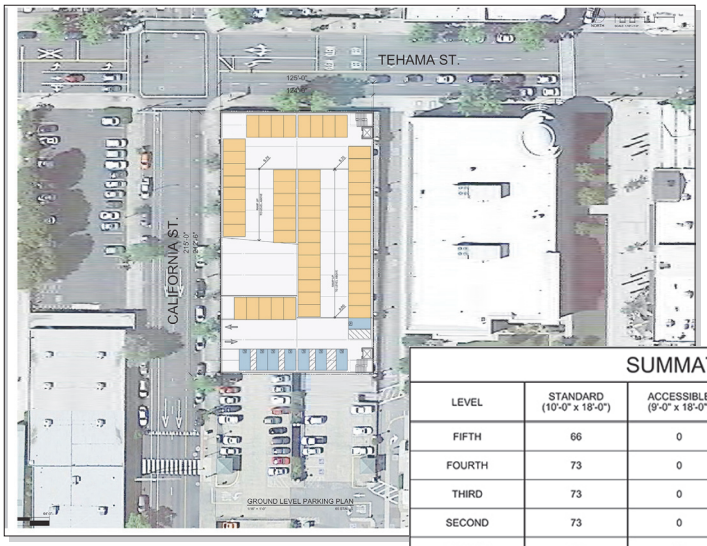


Figure H9 – Proposed Parking Garage Structures Location Options

Parking Garage #1 (Alternative 1)

This proposed City-owned five-story garage would be located on the site of the existing California Street and Tehama Street parking structure (**Figure H10**). The garage would replace a portion of the structure while opening up an area between Butte Street and Yuba Street for development. The garage would result in a slight net increase in the number of lost stalls in the California Street garage. Were it developed in tandem with Parking Garage #2, approximately 340 stalls could be added to the Downtown supply (Refer to **Figure H12**).



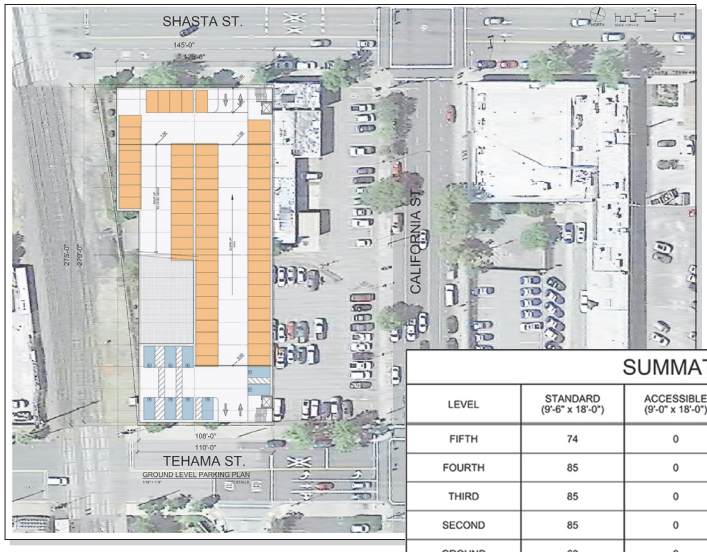
SUMMATION CHART — PS 1 - ALT 1

LEVEL	STANDARD (10'-0" x 18'-0")	ACCESSIBLE (9'-0" x 18'-0")	TOTAL	SQ. FOOTAGE	SQ. FT. / STALL
FIFTH	66	0	66	23,700	359
FOURTH	73	0	73	26,300	360
THIRD	73	0	73	26,300	360
SECOND	73	0	73	26,300	360
GROUND	53	8	61	23,500	385
TOTAL:	338	8	346	126,100	364

Figure H10 – Parking Garage #1 (Alternative 1)

Parking Garage #1 (Alternative 2)

This site is owned by RABA and bordered by Shasta, California, and Tehama Streets and the railroad tracks (**Figure H11**). However, it is not located in the center of the Downtown core, but is close enough to be within an acceptable walking distance. There are 62 existing stalls on the site, so the proposed five-story garage could provide approximately 340 net new stalls for Downtown. This garage would be very effective for employee parking, helping to free up stalls in the center of the Downtown core. Only one-half of the site is being considered for a parking garage to allow for redevelopment of the other half.



SUMMATION CHART — PS 1 - ALT 2

LEVEL	STANDARD (9'-6" x 18'-0")	ACCESSIBLE (9'-0" x 18'-0")	TOTAL	SQ. FOOTAGE	SQ. FT. / STALL
FIFTH	74	0	74	27,100	366
FOURTH	85	0	85	31,000	365
THIRD	85	0	85	31,000	365
SECOND	85	0	85	31,000	365
GROUND	63	9	72	27,900	388
TOTAL:	392	9	401	148,000	369

Figure H11 – Parking Garage #1 (Alternative 2)

Parking Garage #2

This proposed City-owned five-story garage would be constructed at the south end of the existing California Street and Placer Street parking structure and would replace a portion of the existing structure while opening up an area between Butte Street and Yuba Street for development (**Figure H12**). This garage would offset the lost stalls in the existing California Street garage and, in tandem with Parking Garage #1 - Alternative 1, would add approximately 340 stalls to the Downtown supply.

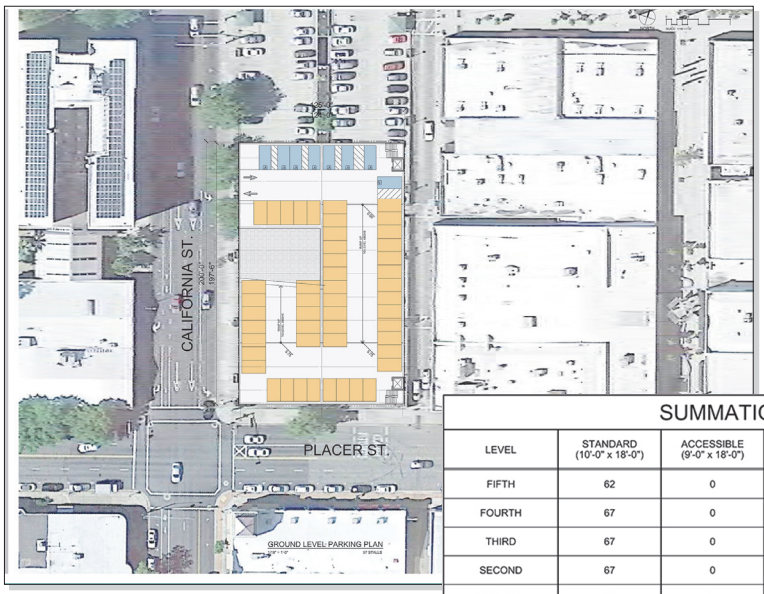


Figure H12 – Parking Garage #2

SUMMATION CHART PS 2

LEVEL	STANDARD (10'-0" x 18'-0")	ACCESSIBLE (9'-0" x 18'-0")	TOTAL	SQ. FOOTAGE	SQ. FT. / STALL
FIFTH	62	0	62	22,800	368
FOURTH	67	0	67	24,500	366
THIRD	67	0	67	24,500	366
SECOND	67	0	67	24,500	366
GROUND	49	8	57	22,100	388
TOTAL:	312	8	320	118,400	370

Parking Garage #3

This site, located at the northeast corner of Pine and Sacramento Streets, is not in the center of the Downtown core, but is close enough to be within an acceptable walking distance (**Figure H13**). There are 64 existing stalls, so the proposed five-story parking garage could potentially provide 206 net new stalls for the Downtown and would be very effective for employee parking, helping to free up stalls in the center of the Downtown core.

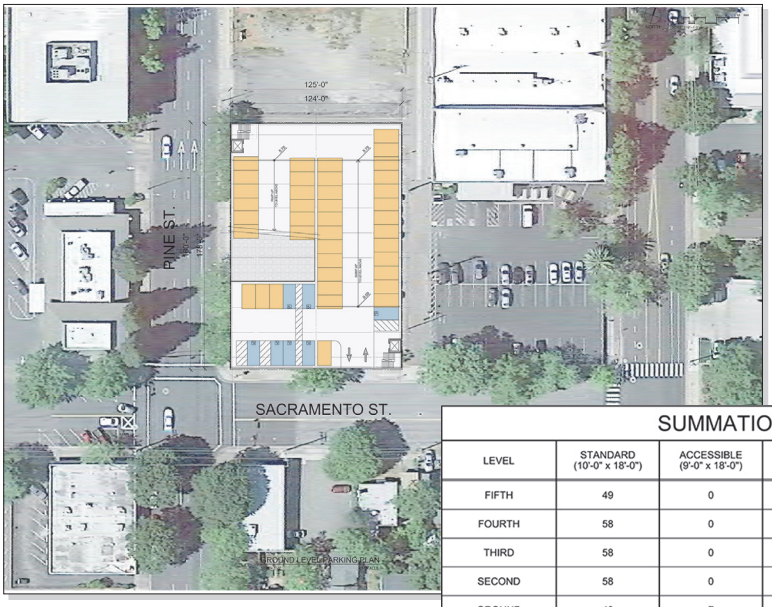


Figure H13 – Parking Garage #3

SUMMATION CHART PS 3

LEVEL	STANDARD (10'-0" x 18'-0")	ACCESSIBLE (9'-0" x 18'-0")	TOTAL	SQ. FOOTAGE	SQ. FT. / STALL
FIFTH	49	0	49	19,900	406
FOURTH	58	0	58	22,100	381
THIRD	58	0	58	22,100	381
SECOND	58	0	58	22,100	381
GROUND	40	7	47	20,000	426
TOTAL:	263	7	270	106,200	393

Parking Garage #4

This City-owned garage is located beneath the former Dicker's building at the western end of Yuba Street east of Pine Street that has been proposed for development as part of a multi-story, mixed-use project (**Figure H14**). Proposed modifications to this garage would reduce the Downtown parking supply by approximately 50 stalls. However, the lost stalls could be partially recaptured by near on-street licensed parking and the restoration of streets and accompanying parking spaces along Market, Butte, and Yuba Streets through The Market Street Promenade.

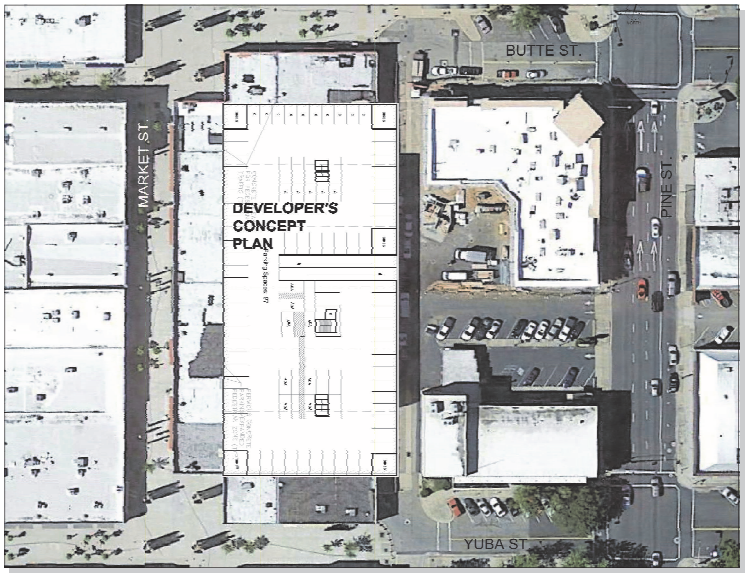


Figure H14 – Parking Garage #4

H.5 TRANSIT ACTION PLAN

The Transit Action Plan provides a framework for improvements to the current transit system.

EXISTING CONDITIONS

The Redding Area Bus Authority (RABA) provides vital services in Downtown. The Downtown Transit Center is a well-designed facility providing service to RABA, Greyhound, Amtrak, Trinity Transit, Sage Stage, and other bus operators. It also functions as a multimodal transfer station. **Figure H15** provides the current RABA Downtown map and schedules.

OBJECTIVES

Transit is a key component to developing multimodal cities. Successful transit programs will support increased walking and biking as well as decreasing the impacts to parking and roadways. Objectives include:

- Transit systems are integrated into a strong pedestrian and bicycle network.
- Encourage a mix of complementary uses at a higher density within the local area of a transit center.
- Provide mobility for all ages, incomes, and lifestyles.
- Efficiency and experience is improved through the availability of information, comfort , safety, and ease of access which improves public image and ridership.

ROUTE 2 E. RTE 2 W

CLOCKWISE: (DEPARTS TERMINAL EVEN HOURS) COUNTERCLOCKWISE: (DEPARTS TERMINAL ODD HOURS)

EFFECTIVE 3/28/16

Leaves Downtown Transit Center	Rescue Mission	RABA	Social Security	Downtown Transit Center	Airpark/Rosaline (Mercy)	Placer/ Buenaventura	Eureka Way/ Walnut (Shasta HS)	Downtown Transit Center
D		C	C	D	C		C	D
6:20 AM Sat: 9:20 AM	:24	:30	:35	6:50 AM Downtown Transit Center	6:55 AM Eureka Way/ Pioneer Shasta HS	7:00 AM Placer/ Buenaventura	7:05 AM Airpark/Rosaline (Mercy)	:17
				7:50 AM	8:00 AM	8:05 AM	8:10 AM	
THEN EVERY HOUR UNTIL LAST BUS AT:								
6:20 PM	6:24	6:30	6:35	6:50 PM	6:55 PM	7:00 PM	7:05 PM	7:17 PM

ROUTE 5

Leaves Downtown Transit Center	Hartnell at Shotwick Trail	Hartnell/ Shasta View (Holiday Mrkt)	Galaxy at Meteor	Hartnell/Victor (Tower Mart)	Hartnell at Shotwick (Veteran's Affairs)	Placer/East (SRMC)	Arrives Downtown Transit Center
D	A	B			C		D
6:20 AM Sat: 9:20 AM	:35	:40	:45	:50	:00	:10	:15
THEN EVERY HOUR UNTIL LAST BUS AT:							
6:20 PM	6:32	6:40	6:45	6:50	7:00	7:10	7:15 PM

ROUTE 3

EFFECTIVE 3/28/16

Leaves Downtown Transit Center	Railroad at El Reno	Breslauer Social Services	E. Bonnyview S. Bonnyview	Happy Valley Rd. at 273	El Reno/ Westside	Sheridan @ Court (MLK Park and Center)	Arrives Downtown Transit Center
D		B		C		C	D
6:20 AM Sat: 9:20 AM	:30	:35	:45	:50	:55	:05	:15
THEN EVERY HOUR UNTIL LAST BUS AT:							
6:20 PM	6:30	6:35	6:45	6:50	6:55	7:05	7:15 PM

ROUTE 11

Leaves Canby Transfer Center	Hilltop/ Peppertree	Masonic Transfer Station	Court at Elk's Lodge	Downtown Transit Center	Cypress (City Hall)	Hilltop/ Commerce	Arrives Canby Transfer Center
C		M		D			C
6:20 AM Sat: 9:20 AM	:25	:35	:39	:50	:55	:00	:15
THEN EVERY HOUR UNTIL LAST BUS AT:							
6:20 PM	6:25	6:35	6:39	6:50	6:55	7:00	7:15

ROUTE 4

Leaves Canby Transfer Center	Maraglia (K Mart)	Lassen View School	Bechelli/ Knollcrest	Lassen View School	Churn Crk at Cypress (CVS)	Dana /Bradford (Wal-Mart)	Arrives Canby Transfer Center
C	A				B		C
6:20 AM Sat: 9:20 AM	:35	:40	:50	:55	:00	:10	:15
THEN EVERY HOUR UNTIL LAST BUS AT:							
6:20 PM	6:35	6:40	6:50	6:55	7:00	7:10	8:15 PM

ROUTE 14

Leaves Downtown Transfer Center	Benton/ Quartz Hill	Masonic Transfer Station	Hilltop/ Mercedes	Canby Transfer Center	Hilltop/ Commerce	Cypress/ Civic Center Drive	Arrives Downtown Transfer Center
D		M		C			D
6:20 AM Sat: 9:20 AM	:26	:35	:43	:50	:02	:10	:17
THEN EVERY HOUR UNTIL LAST BUS AT:							
6:20 PM	6:26	6:35	6:43	6:50	7:02	7:10	7:17

Figure H15 – Current RABA Downtown Map and Schedules

DESIGN ELEMENTS

The following tools can be used to increase rider comfort and system efficiency. A well-connected network with higher efficiency will increase ridership.

- **Real-Time Passenger Information** - Informs riders of real-time trip information at their desktop computer, smart phone, and at bus stops. Real-time passenger information systems require automatic vehicle location systems, roadway delay and/or incident detection, and computer modeling. At bus stops, audio and visual information systems are needed. The principal method by which transit users access real-time information is through the use of smart phones. The benefits result in increased ridership, decreased time spent waiting, and increased rider satisfaction.
- **Bus Stop Improvements** - RABA has a strong bus stop infrastructure program that provides signage, maps, and often, shelters. Amenities invite ridership by making riders comfortable and confident in the service. Design elements that maximize safety, visibility, and comfort should be incorporated into bus stops to the degree feasible. Shelters, benches, and refuse disposal containers are basic amenities at high demand bus stops. Where space is limited, a single-pole bus shelter design is effective. One item currently lacking at Downtown bus stops is adequate lighting. However, this is not an issue specific to bus stops, rather an issue throughout Downtown since only minimal and dated street lighting is provided.
- **Buses** - Fixed route transit buses need to be reliable, safe, and comfortable. Physical features of particular importance are ADA accessibility, bike racks, seat comfort, and fare box efficiency. RABA operates buses that meet these expectations with the exception of a specific issue involving people that smoke. During the Community Workshops, some non-smokers report that even though the other riders do not smoke while on the buses, the smoke smell that emanates from some riders is severe enough to cause them to utilize other modes of travel rather than RABA. There may not be a reasonable solution to this issue but better ventilation systems on buses may be available to mitigate this concern.
- **Route Expansion** - In the context of current ridership demand, the current fixed routes effectively provide access into and out of Downtown. As Downtown develops, a new fixed route should be added to provide additional circulation around the Downtown area and to/from the Turtle Bay area. This expanded route would provide improved opportunities for Downtown residents to access the trail and park-like amenities at the Civic Center/Turtle Bay campus, and encourage tourism connectivity to Downtown once the Turtle Bay Hotel is completed.

H.6 PEDESTRIAN ACTION PLAN

The Pedestrian Action Plan provides a framework for streetscape and intersection improvements within Downtown. The Action Plan envisions sidewalk treatments and traffic calming features that will increase walking as a travel choice and improve safety and security for pedestrians. The increased pedestrian activity will complement increased business activity, additional residential development, and additional social interaction.

EXISTING CONDITIONS

Downtown streets are characterized by a mixed condition of sidewalks and pedestrian street crossings. Streets such as California and Pine Streets have wide commercial-width sidewalks along commercial frontages with parallel street parking and street trees to buffer pedestrians from vehicular traffic. Streets such as Butte and Yuba Streets have a narrower sidewalk width and mix of parallel and angled parking. The scale of the Downtown core is comfortable to walk and has an excellent "backbone" to improve upon. A number of destinations including civic and medical related workplaces are within a short walking distance to The Market Street Promenade. However, apart from a few exceptions, pedestrians are accommodated rather than prioritized, with motorized travel as the historic priority.

OBJECTIVES

Overall Streets

Vibrant downtowns are places that accommodate different types of users at different times of day. Street rights-of-way are visible places within the City that not only allow vehicles to pass through, but provide a place to shop, dine, play, and meet. Streets must be safe, sustainable, multimodal, and economically viable as well as accommodate through-traffic and parking. Objectives include:

- Complete Streets to attract more businesses and create great public space.
- Slow vehicle operating speeds to reduce vehicle noise and improve pedestrian safety and comfort. Streets need to be safe and designed to accommodate a variety of activities including driving, parking, walking, biking, sitting, shopping, and working.
- Implement streetscape design features that evolve over time as businesses turn over.
- Intersections that are safe for all users that consider size, spacing, and signal timing control to accommodate vehicles, pedestrians, and bicycles.
- "Park Once" Strategies to encourage walking by the strategic placement of parking so that most users are within a comfortable walking distance to their destination(s).
- Pedestrian priority features provided at varying street classification levels for Arterial (Commercial Thoroughfare), Minor Arterial, Collector, Local, and Mixed-Use Streets defined for pedestrian purposes.

Arterial Streets (Commercial Thoroughfares)

Commercial streets that move higher volumes of traffic across town in a variety of travel modes (automobiles, bus, bikes, and walking) should be comfortable for all forms of transportation. These streets have successful retail, business, and residential potential but also include major driveway access points and more conflict potential between bikes and pedestrians. These streets would benefit from enhancements in the pedestrian zone and streetscape elements that promote safety at points of conflict.

Minor Arterial Streets

Downtown connector streets that pass through a variety of use types including retail and restaurant, office and financial, civic, residential, and mixed-use in the Downtown core. Streetscape improvements need to focus on separation and buffering of vehicular roadways and sidewalk spaces. This provides a usable public realm through landscape and sidewalk treatments to facilitate a pleasant space to walk, bike, live, and work.

Collector Streets

Downtown collector streets place a greater emphasis on direct access to retail, business, civic, and mixed uses, as compared to arterial and minor streets, which have greater emphasis on through-traffic movement. Collector streets penetrate commercial and residential areas collecting and distributing traffic between neighborhoods and arterial streets.

Local Streets

Downtown local streets place a higher priority on non-motorized transportation and activating outdoor public spaces. The public right-of-way along these streets should be designed to encourage infill development, walking, bicycling, and outdoor activities.

Mixed-Use Streets

Mixed-use streets emphasize a variety of travel choices such as pedestrian, bicycle, and transit use located in high-intensity mixed-use commercial, retail, and residential areas with substantial pedestrian

activity. Mixed-use streets have on-street parking and wide sidewalks depending on the type and intensity of adjacent commercial uses. On-street parking, bicycle lanes, landscaping, and sidewalk width are higher priorities than the number of travel lanes on this type of street.

Streetscape improvements need to focus on separation and buffering of streets and sidewalk spaces, providing usable public realm through landscape and sidewalk treatments to facilitate a pleasant space to walk, bike, live, and work. The Downtown mixed-use streets such as Market, Butte, and Yuba Streets pass through a variety of uses including retail, restaurant, office, financial, civic, residential, and mixed uses in the Downtown core.

DESIGN ELEMENTS

"Thriving downtown areas are a combination of successful retail stores, various attractions, destination restaurants, live-work accommodations, and an inviting atmosphere. A downtown of this type, not only strives economically, but also significantly contributes to a city's identity. Positive qualities and character can contribute to this sought after atmosphere, when implemented in conjunction with other successful planning and design methods"[1] as illustrated in **Figure H16** and identified below:

- **Street and Pavement Narrowing** - There is a relationship between street width and driving speeds. Narrower lanes break up a long straight street, reduce traffic speeds, and increase pedestrian comfort. Ten feet is often considered the ideal lane width in an urban setting. In addition, visual elements such as parallel parking, signage, and crosswalks are visual markers for drivers to be more alert, which in turn improves pedestrian safety. In 2015, Caltrans narrowed lanes on California and Pine Streets from 12-feet wide to 11-feet wide and the City has narrowed lanes to 10-feet wide in some Downtown locations.
- **Bulbouts/Curb Extensions** - Curb extensions, similar to street narrowing, narrow the overall roadway width, and provide a visual marker to vehicles to slow down. They are best used at pedestrian crossings, either at intersections or at mid-block crossings, and work well in tandem with on-street parking. They can incorporate cut-throughs for bicycles. These areas also present an ideal location to capture stormwater runoff. Curb extensions at pedestrian crossings reduce pedestrian crossing distances and improve visibility between pedestrians and vehicle drivers. Curb extensions have been constructed at a few Downtown locations (e.g., Market Street and Yuba Street Demonstration Blocks and the Market Street/Shasta Street intersection).
- **Speed Control** - Speed control mechanisms influence behavior, lower speeds, and in turn, reduce injuries and fatalities. Embracing a proactive design approach on new and existing streets with the goal of reducing speeds "may be the single most consequential intervention in reducing pedestrian injury and fatality."[2] Lower design speeds reduce observed speeding behavior, providing a safer place for people to drive, park, and walk. Design elements should be signed and highly visible. Types of speed control measures include narrower lane widths, speed humps and bumps, pedestrian tables, speed cushions, and curb extensions.
- **Intersection Size** - Intersections should be compact while still meeting vehicular transportation needs. Intersections are shared spaces that need to balance all modes of travel. Clear views should be maintained and corner radii should be narrow.
- **Crosswalks** - High-visibility marked crosswalks should be the norm at all intersections. In Downtown, to promote pedestrian connectivity, all four sides of each intersection should incorporate crosswalks with high-visibility materials. All crossings must be ADA compliant.
- **Traffic Signals** - Pedestrian crossing times need to be sufficiently long to accommodate the elderly and disabled, and must meet ADA standards.

[1]The majority of this text is derived from an article by Kristen Salinas, "Walkability: Elements for Creating a Walkable Downtown."

[2]"Pedestrian Safety Review: Risk Factors and Countermeasures," (Salt Lake City: Department of City & Metropolitan Planning, University of Utah; School of Public Health and Community Development, Maseno University: 2012).

- **Signage** - Signage creates legibility and understanding of the pedestrian, bike, and vehicular space and can improve visibility of pedestrians through the use of flashing lights and/or signage indicating a pedestrian zone.

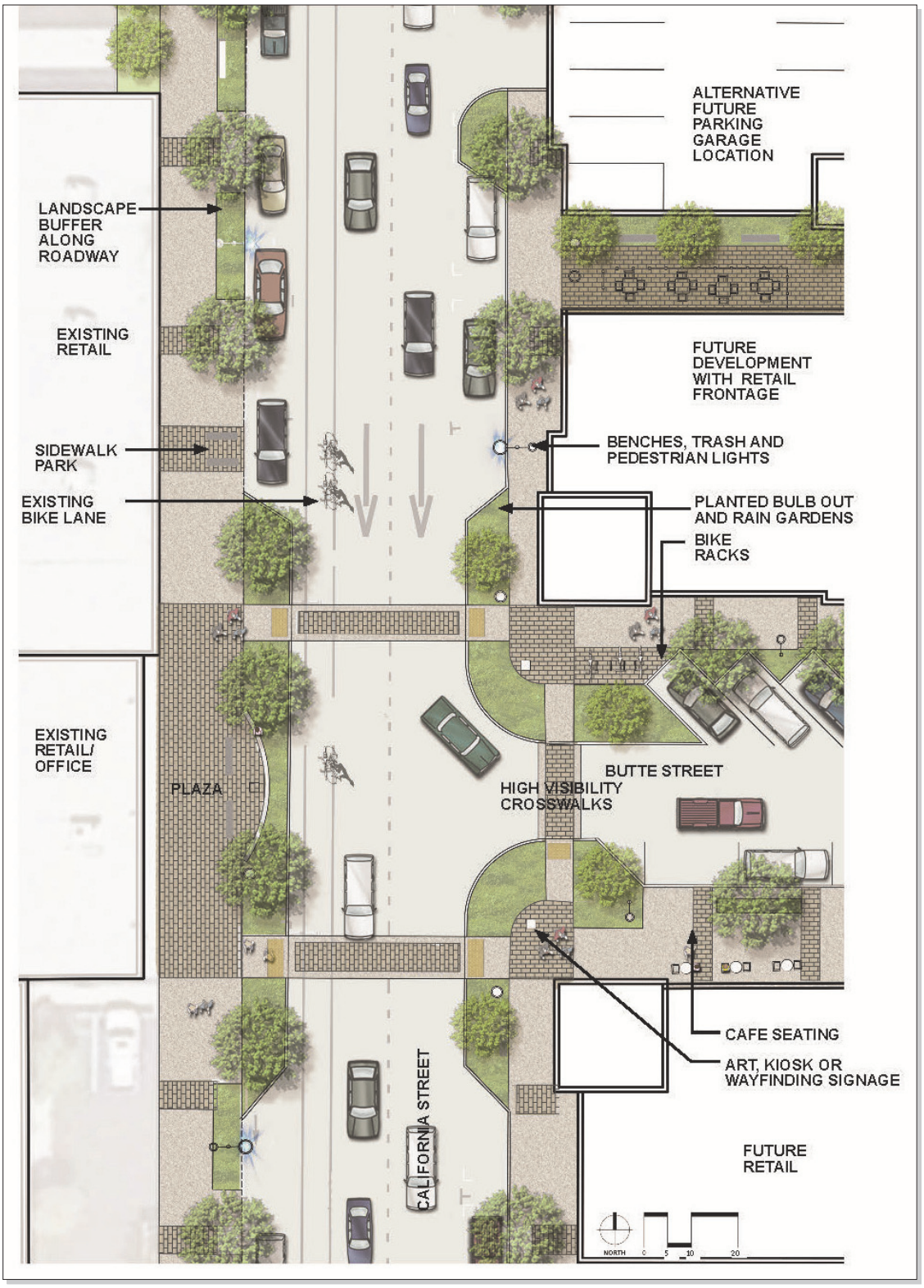


Figure H16 – Typical Design Elements to Provide a Quality Pedestrian Environment

H.7 BICYCLE ACTION PLAN

The Bicycle Action Plan outlines a framework for bike improvements within Downtown. Cycling for recreation, commuting, and shopping is on the rise across the U.S. and particularly, in Redding. The more bicycles and pedestrians on the roadways, the safer streets become for all user groups. Cities with strong bicycle advocacy, such as exists in Redding, see an increase in bicycle ridership and facilities. Safer, more accessible streets for walking and bicycling will attract more people to the Downtown area in addition to increasing health and wellness within the community. **Figure H17** identifies existing and proposed bikeways.

EXISTING CONDITIONS

Cycling in Redding is a growing form of transportation for recreation and for local commuters. Popular destinations such as Turtle Bay and the Sacramento River Trail are local amenities available to residents and visitors; however, there currently lacks a bicycle network, not only within Downtown, but one that connects with Turtle Bay and the Sacramento River Trail.

OBJECTIVES

Bicycle facilities including bicycle lanes, enhanced pavement delineation signage, and parking areas are necessary to support a viable bicycle network. Of utmost importance for the safety and mobility of bicyclists, pedestrians, and vehicles are increased visibility and designated bicycle lanes on roadways. Objectives include:

- Bicycles need to be provided a safe path of travel.
- A visible, designated bicycle zone allows for increased visibility and predictability of movements between vehicles and bicycles.
- The more separation of space between bicycles and vehicles, the safer the roadway is for both users.
- Street intersections are where most conflicts occur and should have clearly marked zones for vehicles, pedestrians, and bicycles.
- Signage and markings communicate information and instruction for both bicyclists and motorists.

DESIGN ELEMENTS

Bicycle Classifications

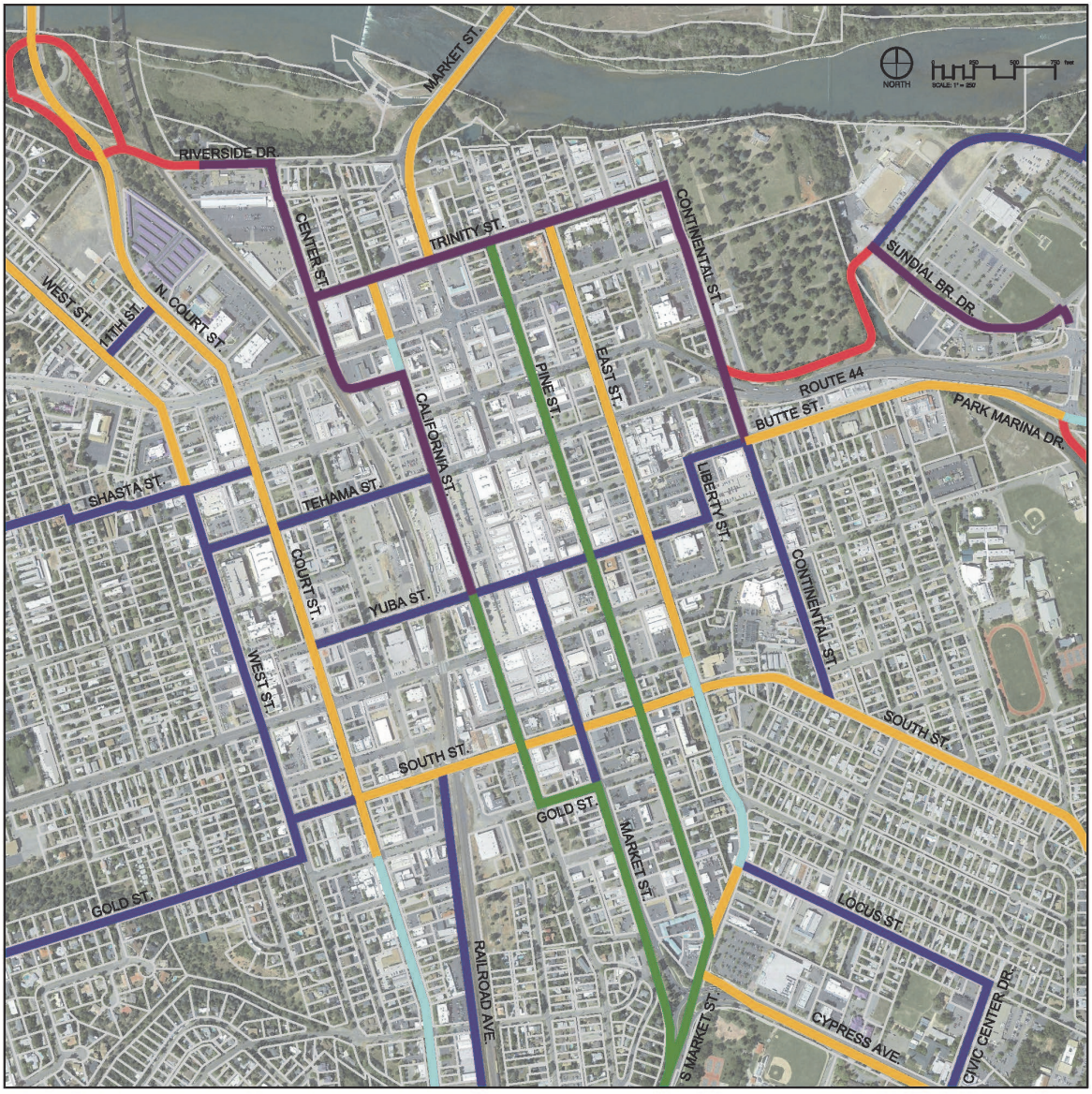
National and State Standards define specific classes of bicycle facilities, with variations by local jurisdictions determined by pertinent circumstances.

- Class 1: Off-street paths on a separate right-of-way from roadways usually shared by bicycles and pedestrians. Shared paths are both recreational and commuter facilities and should not be used along high-speed roadways.

- Class 2: Bicycle lanes that are located on-street. Signage and pavement delineation is used to delineate the right-of-way assigned to bicyclists and vehicles, and to provide more predictable movements for each.

- Class 3: Signed on-street facilities that accommodate vehicles and bicycles in a shared space. While bicyclists are permitted on most roadways, for safety purposes, signed bicycle routes are often found on streets with lower volumes and speeds, and are intended to guide cyclists to their destination.

- Class 4: Located in the roadway and include physical separators between vehicular traffic and bicycle lanes. Lanes may be in one direction, on each side of the street, or combined.



LEGEND

CLASS 1 - PROPOSED

CLASS 2 - EXISTING
CLASS 2 - PROPOSED

BUFFERED CLASS 2 - PROPOSED

CLASS 3 - PROPOSED

CLASS 4 - PROPOSED

Figure H17 – Existing and Proposed Downtown Bikeway System Plan

Additional Design Elements

Bicycle facilities require different design elements to provide safety and information to riders and motorists, including:

- **Traffic Signs** - Standardized signing is used to regulate and guide bicycle and vehicular traffic.
- **Informational/Directional Signage** - Route identification and "How to Use" signs inform users regarding destinations, distances, and user expectations.
- **Intersection Markings** - Multi-lane intersections can be challenging for bicyclists and motorists alike. Bicycle lanes should be provided at significant conflict points and in merge areas. The primary focus is on building protected bicycle lanes, some of which use green color paint or thermoplastic. These lanes are referred to as "Green lanes" and provide for physical separation that distinguishes them from conventional bike lanes. **Figures H18** and **H19** provide examples of Green bike lane configurations. Also, a bike box can be used to indicate areas designated for bicycles in an effort to minimize conflicts between bicycles and vehicles. A bike box places bicycles at the front of the queue in clear view of motorists and should be considered for use at major intersections.
- **Crossing Signals** - Bicycle crossing signal push buttons can be positioned to provide bicyclists with signal changing ability when vehicles are not present.
- **Bicycle Parking** - Public bicycle parking facilities can be located at key destinations to organize bicycles to keep bicycles from being secured to trees and utility poles.
- **Shared Lane Markings** - Where insufficient pavement width exists to separate bicycles from vehicles, shared lane marking should be added to turn lanes as per **Figure H20**.

Figure H18 – Green Bike Lane Weaving Areas Example

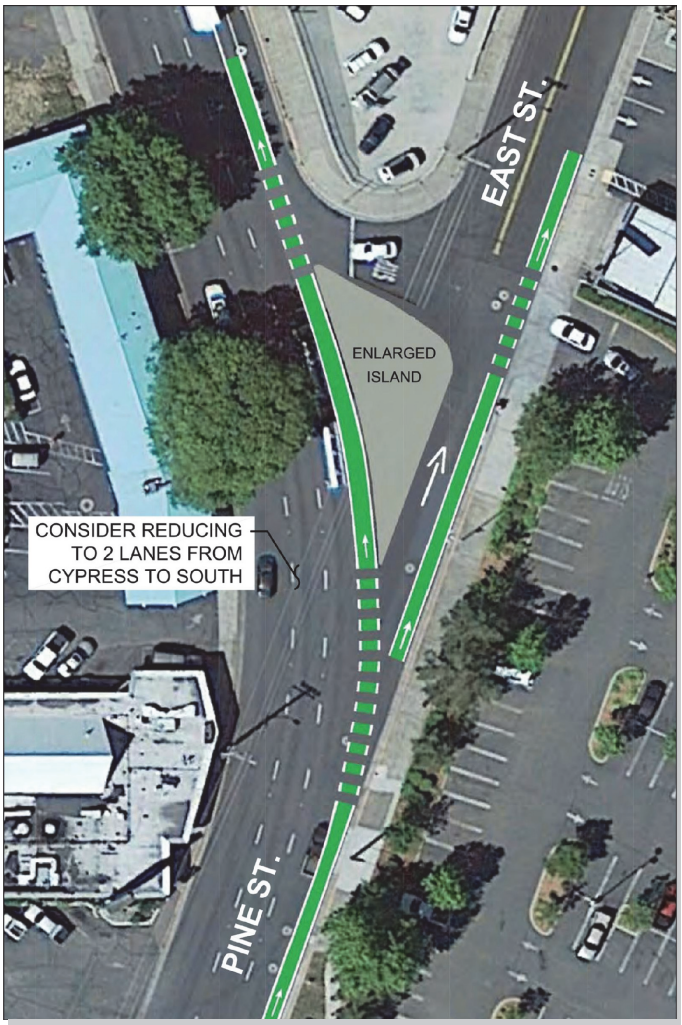


Figure H19 – Green Bike Lane Weaving Areas Example

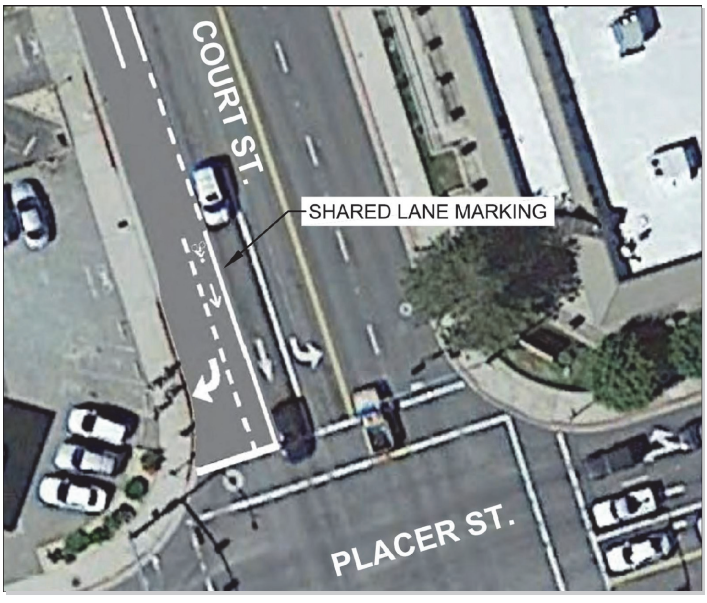


Figure H20 – Shared Lane Markup Example

Downtown Connections

Roadway modifications on select streets and trail construction as depicted in **Figure H21** will provide enhanced commuter and recreation opportunities for bicyclists and pedestrians and improve connectivity between Downtown and Turtle Bay and Downtown and the Diestelhorst Trailhead.

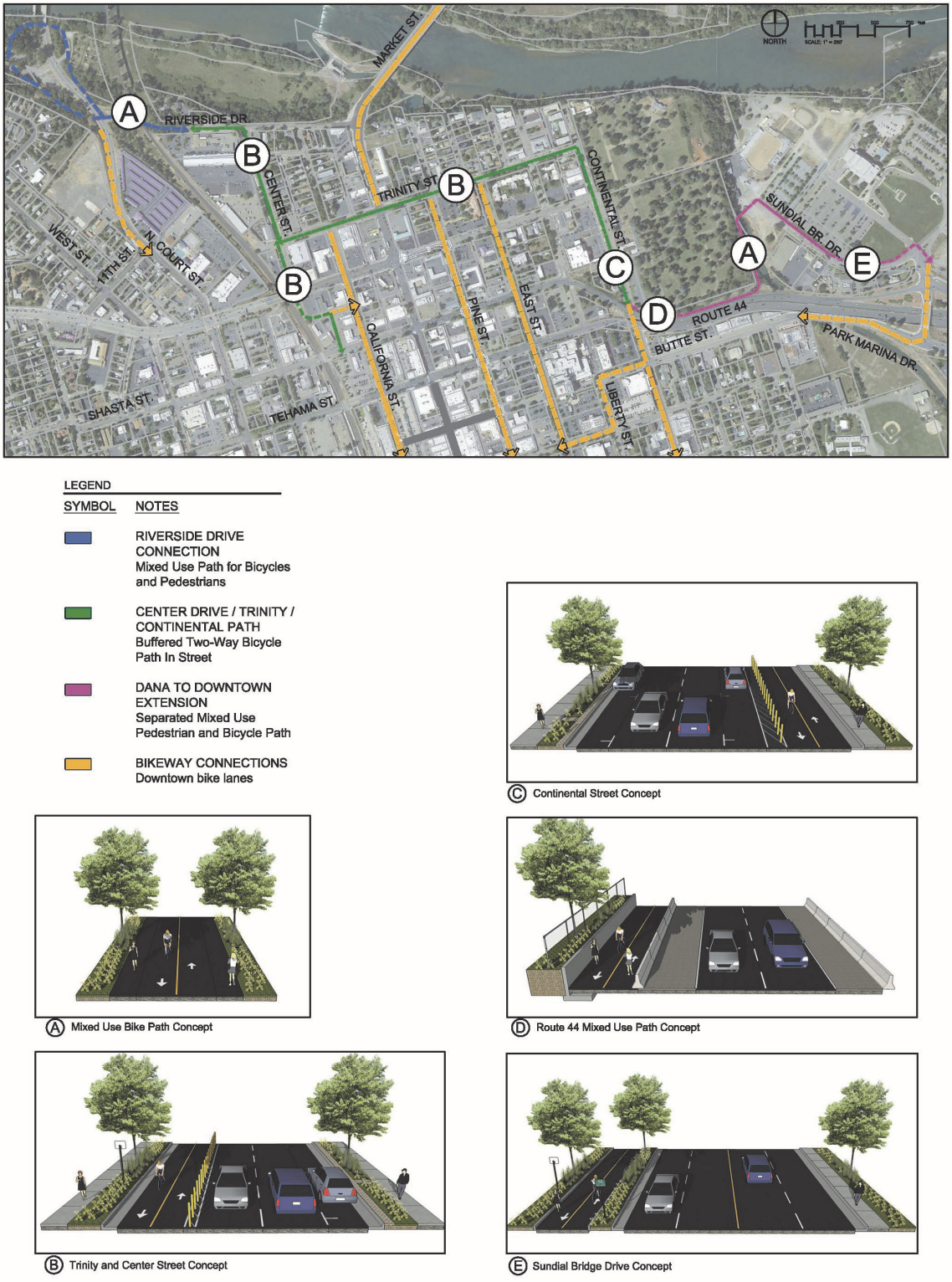


Figure H21 – Cross-Town Connections between the Diestelhorst Trailhead and Turtle Bay

- **North Court Street/Riverside Drive and Multi-Use Path (Section A)** - This path provides a wide off -street multi-use path. The path includes converting a portion of Riverside Drive to pedestrian and bicycle use only.

- **Riverside Drive/Center Street/Trinity Street In-Street Protected Bikeway Facility (Section B)** - This facility provides a two-way direction protected bike path on one side of the street. Sidewalks are provided on both sides of the street for pedestrians.

- **Continental Street Path In-Street Protected Bikeway Facility (Section C)** - This facility provides an in-street protected bikeway facility with separated sidewalks for pedestrians. Accommodations are made for parking on both sides of the street.

- **SR 44 Multi-Use Path (Section D)** - Part of the Dana to Downtown Trail extension, this facility provides an off-street multi-use path between Continental Street and Turtle Bay.

- **Sundial Bridge Drive Protected Multi-Use Facility (Section E)** - Part of the Dana to Downtown Trail extension, this facility provides a protected bikeway.

H.8 GREEN STREETS ACTION PLAN

Complete Streets are a natural complement to sustainability efforts, ensuring benefits for mobility, community, and the environment. The Green Streets Action Plan, a Complete Streets component, presents a sustainability effort. General guidelines for streetscape infrastructure design that is safe, aesthetically pleasing, and inviting as well as promoting environment sustainability are described.

EXISTING CONDITIONS

Downtown streets are dominated by the vehicle and accommodate pedestrians and bicyclists, but do not encourage alternative modes of travel. Market Street between Placer and Sacramento Streets and Yuba Street between Oregon and California Streets were developed as Demonstration Blocks to highlight site furnishings and design elements along the streetscape.

Redding has a National Pollution Discharge Elimination System (NPDES) permit under the 1972 Clean Water Act that requires extensive stormwater treatment systems beginning in 2015. Very few treatment systems have been constructed Downtown and the existing built environment will require stormwater treatment retrofits as streets are reconstructed and areas redeveloped.

OBJECTIVES

Green Infrastructure

In urban settings, building roofs, street paving, sidewalks, and parking lots prevent rainwater from absorbing into the ground. Rainwater collects in pipes channeling chemicals, oils, and other by-products to our streams, rivers, and lakes, thereby restricting water from recharging groundwater aquifers. During large storm events, runoff can contribute to flooding and erosion. Stormwater management tools provide a broad range of opportunities that can be applied to a range of street types to make streets more aesthetically pleasing and provide ecological benefits to counteract the impacts of urban development on the local ecosystem. Objectives include:

- Improving water quality through removal of sediments, trash, oils, and chemicals.
- Slowing the movement of water from storm events by detaining it on-site for a longer duration of time.

- Increasing the amount of pervious surfaces to reduce runoff volumes.
- Reducing traditional infrastructure impacts by minimizing pipe size to thereby reduce the impact to wastewater treatment, repurposing greywater, and increasing the aesthetics of landscape areas.

Landscaping

Landscaping serves to enhance the aesthetic quality and design of the Downtown, create an inviting environment for pedestrians, and minimize impacts related to privacy and to a degree, noise. Landscaping can provided buffers between sidewalks and vehicular traffic and between commercial and residential development.

Landscape creates color and texture to soften the hardscape of parking areas, asphalt streets, and concrete walks. Many studies have shown the value that green spaces can bring to human health, wellness, and sense of comfort in spaces. Landscape planting should consider a variety of planting materials and a blend of color, texture, sizing, and spacing in developing streetscape designs. Objectives include:

- Existing and future trees should be preserved by designing future improvements to minimize encroachment into the tree dripline.
- Improve the functionality of streets and increase human comfort through the provision of shade and cooling.
- Reduce carbon and heat islands due to human activities, in particular, vehicular traffic.

DESIGN ELEMENTS

Green Infrastructure

Green infrastructure reduces and treats stormwater at its source while delivering environmental, social, and economic benefits. **Figure H22** illustrates the following design elements to address green infrastructure objectives:

- **Bio-Retention** - Combines stormwater runoff with landscape areas to collect, filter, and infiltrate runoff from roofs, streets, and sidewalks to reduce pollutants and mirror the infiltration techniques of natural systems. Soil traps pollutants and plants uptake pollutants as water percolates through the system.

- **Bio-Swales** - Swales are narrow depressions that collect and convey stormwater to improve water quality through removal of sediments and reducing runoff volumes. Typically, bio-swales include a subsurface infiltration trench below amended soil.

- **Flow Through Planters** - Flow through planters are hard-edged stormwater management facilities with an impermeable base. Flow through planters treat water by allowing runoff to soak through its soil matrix and filter into an underdrain system.

- **Pervious Strips** - Pervious strips are long, linear landscaped areas or linear areas of pervious pavement that capture and slow runoff. Depending on the underlying subsurface soil condition, pervious strips can provide some infiltration, but to a much lesser extent than bio-swales.

- **Permeable Paving** - An alternative to standard paving that reduces stormwater runoff by increasing infiltration into the ground. Water is temporarily stored in rock base before being absorbed into the soil or discarded though subdrains.

- **Channels and Runnels -** Concrete or stone lined paths that convey water, reducing the need for buried storm drains to carry water to a desired location for additional treatment.

- **Infiltration and Soakage Trench** - Infiltration trenches are 2 to 5 feet deep subsurface facilities with sand or course drain rock that allows on-site stormwater detention by collecting and recharging stormwater to the ground.

- **Infiltration Boardwalks** - Segments of the sidewalks can be constructed with boardwalks to provide pedestrian throughways over planted drainage rock or amended soils in a trench that allows stormwater to pass beneath the walking surface.

Landscaping

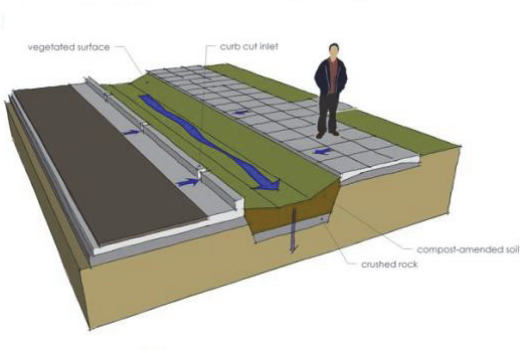
Landscaping provides aesthetic softening of the built environment and environmental benefits that reduce carbon and heat islands while increasing human comfort through shading and cooling. When designing for landscaping improvements and in particular, street trees, the following design elements assist in meeting green landscaping objectives:

- Proper visibility at drive entrances and corners needs to be considered. Plants should not grow over 18 inches in height and trees need to be limbed to 5 feet to maintain sight distance visibility so that drivers can see other vehicles.
- Plant a variety of trees along the streetscape to promote biodiversity as well as allow for a mix of color, textures, and characteristics.
- Select the right tree for the right space. Consider mature size conflicts, growth habits, hardiness, characteristics, and potential diseases.
- Consider the full canopy size of the tree to determine tree planting spacing.
- Consider mature growth of the tree when planting in tree grates or small planting beds to allow space for the truck and roots to grow.
- Larger planting beds with good soil will produce healthier and longer living trees by increasing permeability, reducing tree-root conflict points, and lessening compaction at the base of the tree.
- Proper soil amendments are necessary to the life of the tree.
- Consider tree litter when selecting a tree species from leaf, seeds, and fruit.
- Trees and plants require continued care and maintenance for longevity. Maintenance considerations include pruning, cleaning, seasonal planting, and replacements.

SITE AMENITIES (STREETSCAPE) DESIGN ELEMENTS

Streetscape amenities can enhance an area's pedestrian environment and viability. The streetscape elements can identify an area as a special and distinct place for employees, shoppers, visitors, and residents. Streetscape elements to consider include decorative street lighting, paving, seating, bike racks, waste receptacles, bollards, planters, public art, signage, kiosks, and utilities. The following provides an overview of each element:

- **Street Lighting** - Street lighting is a key organizational element to streetscapes and supports a positive urban character. Street lighting should:
  - Support a safe and secure environment.
  - Be evenly distributed along the street with no dark spaces.
  - Utilize energy efficient light sources and pleasing lighting color.



Bio-Retention

Bio-Swales

Flow Through Planters

Pervious Strips

Permeable Paving

Channels and Runnels

Infiltration and Soakage Trench

Infiltration Boardwalks

Figure H22 – Green Infrastructure Stormwater Treatment Examples

- **Paving** - Paving can consist of a variety of materials ranging from concrete and asphalt to decorative brick and stone. Paving can be used to define spaces such as pedestrian and vehicle zone changes and identify edges and transitions, as well as providing a stormwater amenity. Paving should:
  - Define the pedestrian zone to emphasize places of importance.
  - Be ADA accessible and not provide a tripping hazard or excessive vibration for wheelchairs.

- **Seating** - Public seating is an opportunity for people to stop, rest, watch, and create a sense of activity along the street where people can see and be seen. Seating should:
  - Be located in a comfortable location, protected from the elements and outside of the path of travel.
  - Allow for informality and comfort.
  - Face inward towards buildings and primary pedestrian pathways, away from the street.
  - Be incorporated into walls, art, and other street features.

- **Bicycle Racks/Corrals -** Bicycling is a growing and important element of the streetscape, and bicycle parking should be located at primary destinations and throughout the urban fabric. Bicycle racks should:
  - Be located outside the pedestrian thoroughfare.
  - Be located at least 2 feet from, and perpendicular to the curb.
  - Allow for the opportunity to be integrated with public art.

- **Waste Receptacles** - Trash, recycle and cigarette disposal is important to maintain cleanliness and user comfort along the streetscape. Trash receptacles should:
  - Be located in high activity areas, at corners and at regular intervals along the corridor.
  - Be durable and functional for maintenance purposes.
  - Complement a selected family of furnishings.

- **Bollards** - Bollards can be permanent, removable, or movable fixtures to allow for flexibility of use and separation of pedestrian and vehicular spaces along the roadway or at intersections.

- **Planters** - Planter pots or landscape beds can function as an aesthetic element to provide color and contrast, soften hard edges, provide screening along the streetscape or function as a bollard element.

- **Public Art** - Public art is a growing trend in streetscape design that provides the opportunity for individual expression in creating a sense of place and community pride to enhance the overall user experience. Public art should:
  - Be visually prominent along main thoroughfares for pedestrians, bicycles and vehicles.
  - Be integrated with other site furnishings such as seating, walls, bicycle racks.
  - Provide information, interpretation, or wayfinding.

- **Signage and Kiosks** - Signage such as gateway signage, wayfinding signage, interpretive signage retail signage, and transit/traffic/parking signage should:
  - Be considered as part of the use experience.
  - Be designed with graphical consistency that is both visible within and complimentary of the overall streetscape.

- **Utilities** - Utility box locations and vault locations need to be considered and integrated into the streetscape pattern whenever feasible.
  - Utility boxes allow for the opportunity to be integrated with public art.

Additional considerations such as water bottle fill stations, charging stations, social media check-ins and other streetscape elements can be incorporated into the streetscape to provide for the changing needs of the digitally conscious age.

APPENDIX I

RECOMMENDED REGULATORY & GUIDANCE PLANS & REPORT AMENDMENTS

Following the formulation of the Action Plans, existing City transportation regulatory documents and associated policies, guidance plans, and reports identified in **Appendices C** and **D** were reviewed to assure conformity with current legislative policy direction. In general, the Action Plans are found to be consistent with policy direction apart from a few exceptions. **Table I-1** in this **Appendix I** provides a summary of current City goals, policies, strategies, and actions that need to be amended or added for the Downtown Redding Community Based Transportation Plan to be fully consistent with the City's current transportation policy direction. This Appendix also recommends additional studies and associated improvements to be undertaken with respect to Downtown and bicycle lanes on California Street.

Table I1 – Recommended Changes to City Policy Documents

POLICY DOCUMENT	ITEM	TOPIC	RECOMMENDATION
General Plan Goals			
GP	Goal T5, Policy T5A and T5B	Traffic Delays (LOS)	Update the policies to incorporate SB 743, which will change the way transportation impacts are analyzed under CEQA. CEQA will no longer use LOS as a measurement of delay. Vehicle Miles Traveled (VMT) will be the new measurement. NOTE: To date, the state has not adopted the new CEQA guidelines and they are expected to allow agencies two years to adopt the new CEQA guidelines.
GP	Goal T10, Policy T10A	Pedestrianism	Update the policy to provide pedestrian-oriented features, including but not limited to quality lighting, benches, landscaping, shading from trees, awnings, and other building design features.
Specific Plan Goals			
SP, Chapter II, Section E	Implementation Strategy 4c	Traffic Delays (LOS)	Update the strategy to incorporate SB 743 (as discussed above).
SP, Chapter II, Section E	Implementation Strategy 4j	Caltrans Value Analysis Traffic Circulation Improvements	Delete the strategy since the referenced roadway improvements north of the Market Street Promenade were constructed by Caltrans.
SP, Chapter II, Section E	Implementation Strategy 4k	Parking	Modify the strategy to identify the locations recommended in this Transportation Plan for future parking garages. Excess land area, after reconstruction of the California Street parking structures, should be considered for "high-rise" mixed-use residential/retail/office buildings.
SP	NEW Strategy	Complete Streets	Work with Caltrans to change the coordinated traffic signal timing on the Downtown couplet to approximately 25 MPH instead of the current approximate 30 MPH.
SP	NEW Strategy	Complete Streets	Create a Parklet Program with applicable policies.

Table I1 – Recommended Changes to City Policy Documents *(Continued)*

POLICY DOCUMENT	ITEM	TOPIC	RECOMMENDATION
Specific Plan Recommended Actions			
SP, Chapter VII, Section B	B.4 Recommendations, Action 1	Traffic Delays (LOS)	Update the action to incorporate SB 743 (see above) while retaining the portion of the strategy that encourages slow traffic operations that are good for businesses, pedestrians, and bicyclists.
SP, Chapter VII, Section B	B.4 Recommendations, Action 2	Caltrans Value Analysis Traffic Circulation Improvements	Delete the action since Caltrans constructed the referenced improvements.
SP, Chapter VII, Section B	B.4 Recommendations, Action 6	Consolidate Greyhound Service at Transit Center	Delete the action since the relocation has already occurred.
SP, Chapter VII, Section B	B.4 Recommendations, Action 7	State Highway Relinquishment	Modify the action to encourage working closely with Caltrans on implementing Complete Street improvements on the state highways, rather than the City taking over state highway ownership.
SP, Chapter VII, Section C	C.2 Recommendations, Short-Term Recommendation 1	Public Parking Signing	Update the recommendation to include the addition of parking guidance systems, including space occupancy detection and dynamic advance street signing to direct motorists to available parking.
SP, Chapter VII, Section C	C.2 Recommendations, Short-Term Recommendation 3	Road Diets on Low-Volume Streets	Eliminate the reference to Sacramento Street since the "Diet" was implemented. Add road diets to South Street, from Court Street to East Street; and Shasta Street, from Court Street to California Street.
SP, Chapter VII, Section C	C.2 Recommendations, Mid-Term to Long-Term Recommendation 5	Public Parking at Former Police Facility	Eliminate this recommendation and do not consider constructing a public parking facility at the former police facility.
SP	NEW Recommendation	Parking Management Program	Hire a consultant to conduct a comprehensive parking study resulting in an on-street and public off-street parking management program with policies and ordinance updates (if necessary). The outcome will be a program that identifies the use of meters, time allowances, loading zones, permit parking, etc.
SP	NEW Recommendation	Parking Structures	Hire a consultant to develop a financing plan for implementing the recommended new parking garage structures. At the northern California Street location, the plan recommends alternative sites, one of which is a site owned by RABA instead of the City. The footprint on the California Street structures should be reduced to create the opportunity for new redevelopment on California Street.
SP	NEW Recommendation	On-Street Parking Meters	Until a parking management program is adopted (see above), implement the following regarding on-street meters: (1) Retain or install meters on a block-by-block basis on any block with typical weekday parking utilization that exceeds 85% occupancy for more than one continuous hour during typical workdays. (2) Upgrade to electronic smart meters with telemetry with centralized management. (3) Increase the minimum hourly rate to at least $0.25/hour. (4) Use different time of day rates to facilitate the maximum occupancy rate identified above.

Table I1 – Recommended Changes to City Policy Documents *(Continued)*

POLICY DOCUMENT	ITEM	TOPIC	RECOMMENDATION
Bikeway Action Plan			
BAP	Recommendation 3.7	Bikeway Map	Update the Redding Bikeway Map to incorporate features identified in the updated map contained in this Transportation Plan.
Parks, Trails, and Open Space Master Plan			
PTOMP	Goal TB4A	Bicycle Plan	Update the cross reference to the current Bikeway Action Plan.
Legend: GP – General Plan SP – Specific Plan BAP – Bikeway Action Plan PTOMP – Parks, Trails, and Open Space Master Plan			

POTENTIAL ADDITIONAL DOWNTOWN IMPROVEMENTS

An issue that plagues Downtown is the emphasis on moving motorists to, though, and around Downtown as efficiently as possible. While motorist efficiency is important, it must be balanced with other transportation modes and the overriding need to facilitate a thriving Downtown environment. Two concepts beyond the scope of this Transportation Plan due to budgetary constraints warrant additional study:

- **Restore Two-Way Streets** - Two-way streets offer the best environment for bicycles, pedestrians, and thriving businesses. If a balance can be struck between motorized and non-motorized needs, much of California Street, Pine Street, and Market Street would benefit from two-way operation. In addition, it is also easier for many vehicles to navigate two-way streets. Future studies should analyze the potential for this change. Refer to **Figure 11**.

- **Improve Cypress/Pine/Market Street Intersection (potential roundabout to provide a more direct route to the heart of Downtown)** - If Market Street and Pine Street are converted to two-way streets, an opportunity exists to channel traffic directly west up Market Street from Cypress Avenue and into Downtown. Pine Street would remain the primary northbound reroute for going through Downtown, but Market Street could take motorists to Downtown.

CALIFORNIA STREET PROTECTED BICYCLE LANE

The potential exists to construct a two-way protected bicycle lane on California Street along the segment recently reduced from three to two lanes. The City is currently working with K2 Development and Caltrans on a possible two-way buffered bicycle lane on California Street between Division Street and Yuba Street as part of a grant application. Typically, protected bicycle lanes have a barrier between bicycles and vehicles. The barrier could be parked cars, planter pots, or raised islands. See **Figures I2** and **I3** for illustrative examples of this proposal.

- Studies have shown significant bicycle use increase after construction of protected bicycle lanes.
- There are fewer injuries among bicycle riders on streets with protected bicycle lanes.
- Drivers do not need to worry about unexpected bicycle maneuvers.
- Green paint bicycle boxes can be located to provide priority staging areas for bicycles.
- Skipped green paint can be provided through intersections to bring attention to the presence of bicyclists and delineate the path of travel.
- At intersections, raised separator islands provide better separation between vehicles and bicycles.

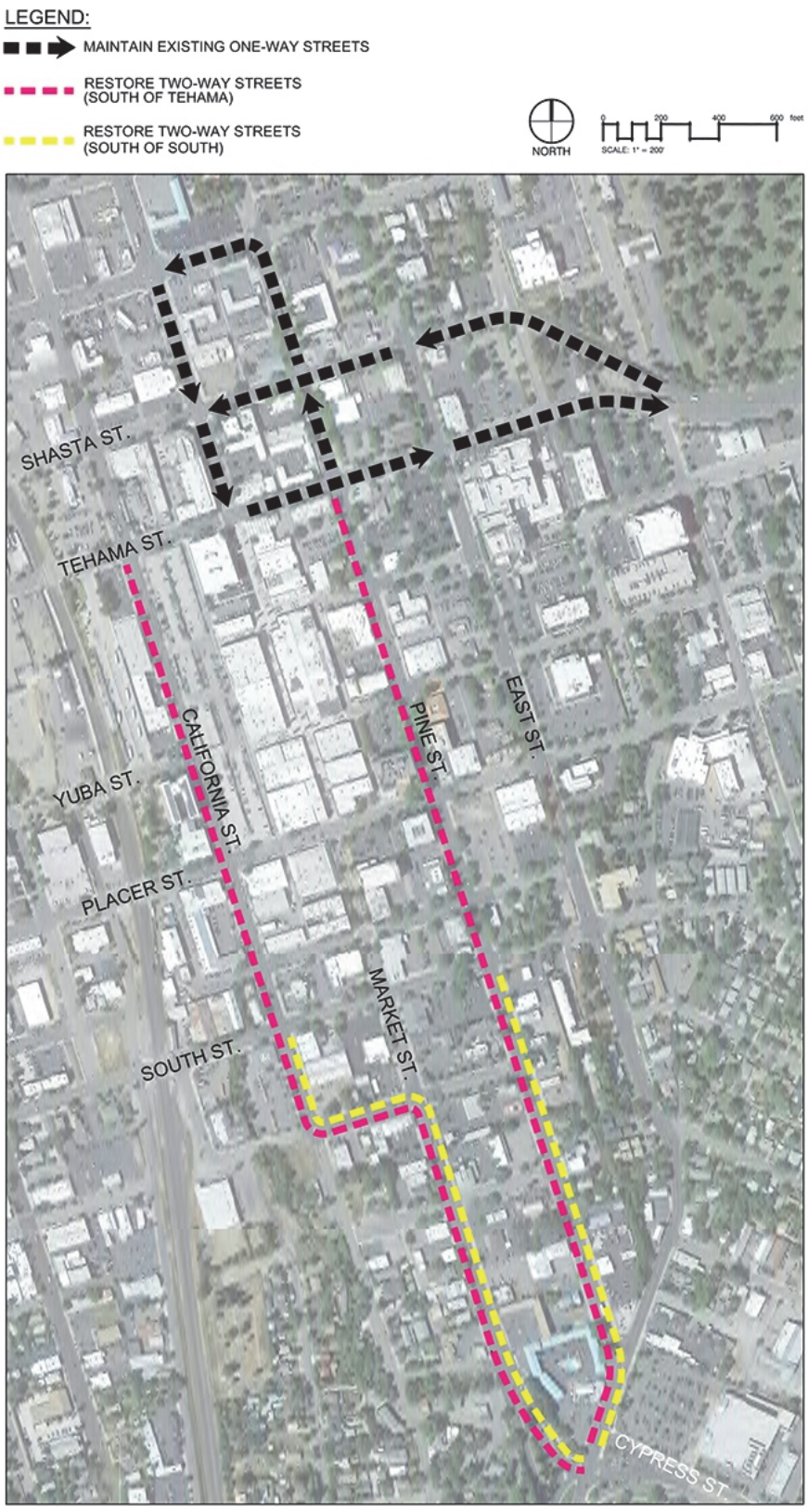


Figure I1 – Potential Two-Way Street Conversions

Figure I2 – Conceptual Illustrations for Protected Bike Lanes on California Street

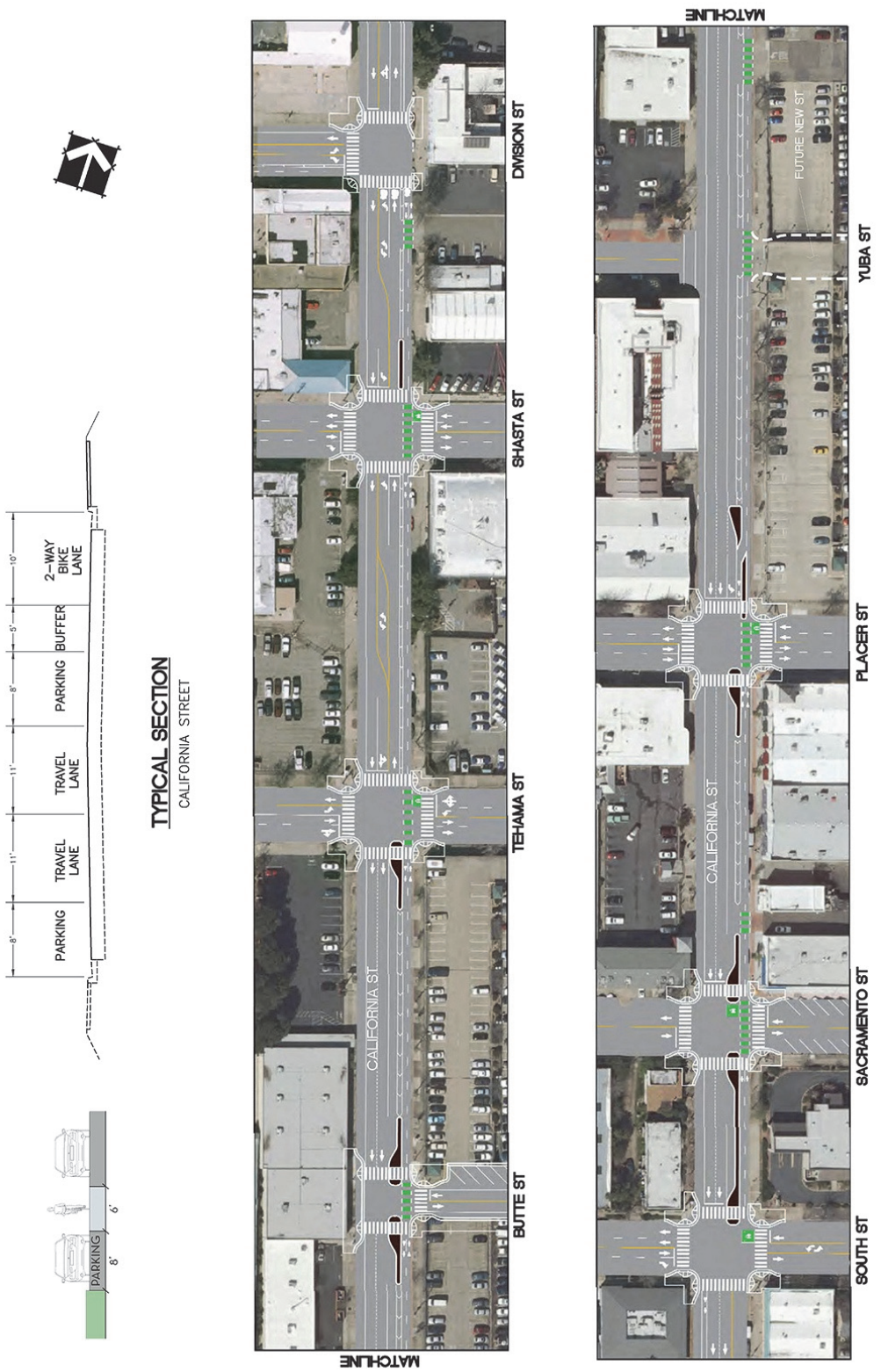


Figure I3 – Conceptual Plan View & Section for Protected Bike Lanes on California Street

APPENDIX J

TRANSPORTATION PLAN IMPLEMENTATION FUNDING

Obtaining funding for the transportation improvements identified in the Action Plans in **Appendix H** can be a complex process. There are many different funding mechanisms available, including federal, state, and local sources. Projects may require multiple-year funding commitments from multiple funding sources. Each funding source has specific eligibility and application processes. Developing project funding through federal, state, and local agencies requires the creation of comprehensive funding packages based upon a wide array of programs and funds. Funding projects through non-traditional sources require creative and innovative thinking. This **Appendix J** provides a listing of potential funding sources and a brief description of each source. **Table J1** provides a summary of the estimated costs associated with implementing the recommended projects advanced for each Action Plan.

J.1 POTENTIAL FUNDING SOURCES

The following federal, state, combination state and regional, and local programs are potential funding sources for design and/or construction of the various projects advanced by the Action Plans. Funding programs are subject to ongoing change or outright elimination depending on the funding source. The current federal and state emphasis on projects that emphasize sustainability, promote renewable resources, reduce greenhouse gases, and promote partnerships to address housing and employment will provide funding opportunities that benefit Downtown revitalization efforts.

FEDERAL PROGRAMS

Community Development Block Grant (CDBG)

Community Development Block Grant funding is provided to the City by the U.S. Department of Housing and Urban Development (HUD). HUD awards grants to the City to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services. Individual communities are allowed to develop their own programs and funding priorities. Construction and rehabilitation of public facilities, such as streets, neighborhood centers, and utility infrastructure are eligible for CDBG funding.

Funding Agencies: HUD and City of Redding
Reference: http://www.cityofredding.org/Home/Components/News/News/126/18?backlikst=%2fdepartments%2fhousing-division

Sustainable Communities Regional Planning (SCRP) Grant

The HUD Sustainable Communities Regional Planning (SCRP) Grant Program supports locally led collaborative efforts that bring together diverse interests from the many municipalities in a region to determine how best to target housing, economic and workforce development, and infrastructure investments to create more jobs and regional economic activity. The program places a priority on investing in partnerships. These partnerships include nontraditional partnerships (e.g., arts and culture, recreation, public health, food systems, regional planning agencies, and public education entities). The partnerships are to translate the "Six Livability Principles" into strategies that direct long-term development and reinvestment, demonstrate a commitment to addressing issues of regional

significance, use data to set and monitor progress toward performance goals, and engage stakeholders and residents in meaningful decision-making roles. The "Six Livability Principles" are:

- Provide more transportation choices;
- Promote equitable, affordable housing;
- Enhance economic competitiveness;
- Support existing communities;
- Coordinate policies and leverage investment, and
- Value communities and neighborhoods.

The SCRP program is a key initiative of the Partnership for Sustainable Communities, in which HUD works with the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA) to coordinate and leverage programs and investments. A grant application would be made in partnership with the Shasta Regional Transportation Agency.

Funding Agency: HUD
Reference: http://portal.hud.gov/hudportal/HUD?src=/program_offices/economic_resilience/sustainable_communities_regional_planning_grants

STATE PROGRAMS

Affordable Housing and Sustainable Communities (AHSC) Grant

The Strategic Growth Council's Affordable Housing and Sustainable Communities Program funds land-use, housing, transportation, and land preservation projects to support infill and compact development that reduces greenhouse gas (GHG) emissions. These projects facilitate the reduction of GHGs by improving mobility options and accessibility to affordable housing, employment centers, and key destinations via low carbon transportation options (walking, biking, and transit), resulting in fewer vehicle miles traveled (VMT).

Funding Agency: California Strategic Growth Council
Reference: https://www.sgc.ca.gov/s_ahscprogram.php

Active Transportation Program (ATP)

On September 26, 2013, Governor Brown signed legislation creating the Active Transportation Program (ATP) in the State Department of Transportation (Caltrans). The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S) into a single program with a focus, making California a national leader in active transportation. The ATP is administered by Caltrans as a competitive grant program. The purpose of the ATP is to encourage increased use of active modes of transportation by achieving the following goals:

- Increase the proportion of biking and walking trips;
- Increase safety and mobility for non-motorized users;
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas (GHG) reduction goals;
- Enhance public health;
- Ensure that disadvantaged communities fully share in the benefits of the program, and
- Provide a broad spectrum of projects to benefit many types of active transportation users.

Funding Agency: Caltrans
Reference: http://www.dot.ca.gov/hq/LocalPrograms/atp/

State Highway Operation and Protection Program (SHOPP)

Caltrans manages and prepares a four-year State Highway Operation and Protection Program (SHOPP) that prioritizes maintenance, rehabilitation, operation, and safety projects throughout the state. The SHOPP is updated biannually with the purpose of funding projects that maintain and preserve the State Highway System. SHOPP funds are only available for state highways. The SHOPP is divided into Major and Minor Programs with Major projects competing for statewide funds and Minor projects competing within Caltrans District 2. The maximum available funding in the Minor Program is $1.0 million. SHOPP funding categories include:

- Major damage restoration;
- Collision reduction;
- Legal and regulatory mandates;
- Mobility improvements;
- Bridge preservation;
- Roadway preservation;
- Roadside preservation, and
- Facility improvements.

Funding Agencies: Caltrans and California Transportation Commission (CTC)
Reference: http://www.dot.ca.gov/hq/transprog/shopp.htm

Sustainable Transportation Planning Grant

The Sustainable Transportation Planning Grant Program was created to support Caltrans' current Mission: *Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability*. Current significant efforts were also considered during grant program development, such as:

- California Transportation Infrastructure Priorities Vision and Core Concepts;
- State Smart Transportation Initiative Assessment and Recommendations;
- Caltrans Program Review Major Actions;
- California Transportation Plan 2040 Vision and Goals, and
- Smart Mobility 2010 Principles.

Grant Program Overarching Objectives were also identified to ensure consideration of these major efforts in transportation planning, including Sustainability, Preservation, Mobility, Safety, Innovation, Economy, Health, and Equity.

Although dedicated grants no longer exist for Environmental Justice, Community-Based Transportation Planning, and Transit Planning, these important areas are still eligible for funding under the new Grant Program. Caltrans still provides transportation planning grants to promote a balanced, comprehensive, multimodal transportation system. However, Caltrans revised the Grant Program to reflect current goals that direct Caltrans to emphasize more transportation planning efforts that promote sustainability.

These grants may be used for a wide range of transportation planning purposes which address local and regional transportation needs and issues. The implementation of these grants should ultimately lead to the adoption, initiation, and programming of transportation improvements. The Caltrans Division of Transportation Planning provides the following transportation planning grants:

- Strategic Partnerships
- Sustainable Communities

The Sustainable Communities Planning Grant Program can fund transportation planning projects that identify and address mobility deficiencies in the multimodal transportation system, including the mobility needs of environmental justice and disadvantaged communities; encourage stakeholder collaboration; involve active public engagement; integrate Smart Mobility 2010 concepts; and, ultimately result in programmed system improvements. Example project types:

- Studies that advance a community's effort to reduce transportation-related greenhouse gases;
- Studies that assist transportation agencies in creating sustainable communities;
- Community to school studies or safe routes to school plans;
- Studies that advance a community's effort to address the impacts of climate change and sea level rise;
- Jobs and affordable housing proximity studies;
- Context-sensitive streetscapes or town center plans;
- Complete street plans;
- Bike and pedestrian safety enhancement plans;
- Traffic calming and safety enhancement plans;
- Corridor enhancement studies;
- Health equity transportation studies;
- Climate change adaptation plans for transportation facilities;
- Transit plans, surveys, and research;
- Studies that evaluate accessibility and connectivity of the multimodal transportation network;
- Transit marketing plans;
- Social service improvement studies, and
- Studies that address environmental justice issues in a transportation-related context.

Funding Agency: Caltrans
Reference: http://www.dot.ca.gov/hq/tpp/grants.html

Funding Agency: Caltrans
Reference: http://www.dot.ca.gov/hq/tpp/grants.html

STATE AND REGIONAL PROGRAMS

State Transportation Improvement Program (STIP)

The State Transportation Improvement Program (STIP) is a five-year capital improvement program of transportation projects for City and Caltrans facilities. The CTC updates the STIP biennially, adding two new years to prior programming commitments. The programming cycle begins with the release of a transportation fund estimate in July of odd-numbered years, followed by CTC adoption of the fund estimate in August. The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional transportation planning agencies prepare transportation improvement programs for submittal by December 15. Caltrans prepares the Interregional Transportation Improvement Program (ITIP) for their share (25%) of funding and regional agencies prepare Regional Transportation Improvement Programs (RTIPs) for their respective share (75%). State and regional agencies must work together to leverage each other's funds for greatest benefit.

Funding Agencies: Shasta Regional Transportation Agency, Caltrans, and CTC
Reference: http://www.catc.ca.gov/programs/stip.htm

LOCAL FUNDING PROGRAMS

Development Impact Fees

A development impact fee is a monetary exaction other than a tax or special assessment that is charged by a local governmental agency to an applicant in connection with construction of a development project for defraying all or a portion of the cost of public facilities related to the development project (Gov. Code § 66000 [b].). The Citywide Transportation Development Impact Fee program requires all developments in the City to pay impact fees either at the time a building permit is issued or at occupancy. Proceeds can only be spent on transportation improvements. The current program identifies projects (roadway, bike, pedestrian, safety, and operational improvements) and intersection improvements (signals or roundabouts) as eligible for funding.

Funding Agency: City of Redding
Reference: August 20, 2013 Report to City Council, Ordinance for Chapter 16.20

Business Improvement District (BID)

There are two primary types of Business Improvement Districts (BID) allowed by California law:

- Parking and Business Improvement Districts, implemented in 1989.
- Property-Based Business Improvement Districts, implemented in 1994.

A BID is a tool available to property and business owners to improve a downtown or other commercial area. It is a partnership between the public and private sectors, organized for the improvement of a specific geographic area. BIDs raise funds through a special assessment on real property, businesses, or a combination of both. The funds are used by a dedicated non-profit corporation to augment local government services. The funds can be used for activities such as public safety, maintenance, parking management, and infrastructure improvements.

Funding Agency: None currently exists in Downtown
References: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=36001-37000&file=36500-36504
http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group= 36001-37000&file=36600-36604

Enhanced Infrastructure Financing Districts (EIFD)

Enacted in 2014, SB628 authorizes cities and counties to establish an EIFD, adopt an infrastructure financing plan, and issue bonds, for which only the district is liable. Financing can be used for public capital facilities or other specified projects of community-wide significance, including, but not limited to: the acquisition, construction, or rehabilitation of housing for persons of low and moderate income for rent or purchase; the acquisition, construction, or repair of industrial structures for private use; transit priority projects; and, projects to implement a sustainable communities strategy. Upon approval of an EIFD, the City would then issue bonds, upon approval of 55% of the voters in the EIFD.

Funding Agency: None currently exists in Downtown
Reference: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id= 201320140SB628

Mello-Roos Community Facilities Districts (CFD)

The Community Facilities Act (more commonly known as Mello-Roos) is a law enacted in 1982. The Act enabled Community Facility Districts (CFDs) to be established by local government as a means of obtaining community funding. Counties, cities, special districts, joint powers authorities, and school districts use CFDs to pay for public works and some public services. A CFD is an area where a special property tax on real estate, in addition to the normal property tax, is imposed on those real property owners. These districts seek public financing through the sale of bonds for financing public improvements and services. These services may include streets, water, sewage and drainage, electricity, infrastructure, schools, parks, and police protection to newly developing areas. The tax paid is used to make the payments of principal and interest on the bonds.

Funding Agency: None currently exists in Downtown
Reference: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=53001-54000&file=53311-53317.5

J.2 ACTION PLAN COST ESTIMATES

Table J2 provides cost estimates for projects identified in the Action Plans. The table also includes three projects **Appendix I** identified as needing additional studies that were not undertaken as part of the scope of the Downtown Transportation Plan due to budgetary constraints.

The Vehicular Action Plan identifies the need to study the improvement of the Cypress/Pine/Market Street intersection as one project and the restoration of two-way streets south of South Street and south of Tehama Street as another. Conceptual cost estimates for these projects are $3.0 and $6.0 million, respectively. The Pedestrian Action Plan recommends the study of pedestrian access improvements at the Cypress/Pine/Market Street intersection with an associated conceptual cost estimate of $1.0 million. The Bicycle Action Plan estimated costs for the construction of a two-way protected bike lane on California Street, along the segment recently reduced from three to two lanes, are not included in the table.

Table J1 – Downtown Redding Community Based Transportation Plan – Action Plan Implementation Estimated Costs

Feature	Unit of Measure	Quantity	Unit Price	Total	Comments
Vehicular Action Plan			***Total Cost:***	***$ 7,050,000***	
Road Diet				**$ 2,250,000**	
Shasta Street: Court to Pine	City Block	3	$ 250,000	$ 750,000	Angle striping, planters, and pavement treatment
South Street: Court to East	City Block	6	$ 250,000	$ 1,500,000	Angle striping, planters, and pavement treatment
Promenade Streets				**N/A**	
Market Street	N/A	N/A	N/A	N/A	Included in The Market Street Promenade Action Plan
Yuba Street	N/A	N/A	N/A	N/A	Included in The Market Street Promenade Action Plan
Butte Street	N/A	N/A	N/A	N/A	Included in The Market Street Promenade Action Plan
Signal Timing				**ZERO**	
Coordinate for Less than 25 MPH	Lump Sum	1	ZERO	ZERO	No capital cost involved
Traffic Calming				**N/A**	
Intersection Enhancements	N/A	N/A	N/A	N/A	Included in Pedestrian Action Plan
Shared Space Alleys				**$ 4,800,000**	
California-Market Alley	City Block	6	$ 400,000	$ 2,400,000	Complete reconstruction, lighting, and landscaping
Market-Pine Alley	City Block	6	$ 400,000	$ 2,400,000	Complete reconstruction, lighting, and landscaping
Improve Cypress / Pine / Market Intersection (Additional Study Required)				**$ 4,000,000**	(Amount not included in above total)
Modern Roundabout	Lump Sum	1	$ 4,000,000	$ 4,000,000	Conceptual only
Restore Two-Way Streets (Additional Study Required)				**$ 9,000,000**	(Amount not included in above total)
South of South Street Only	Lump Sum	1	$ 3,000,000	$ 3,000,000	Conceptual only
South of Tehama Street	Lump Sum	1	$ 6,000,000	$ 6,000,000	Conceptual only
The Market Street Promenade Action Plan			***Total Cost:***	***$ 9,000,000***	
Promenade Streets				**$ 9,000,000**	
Market Street	City Block	3	$ 1,500,000	$ 4,500,000	Assumes right-of-way dedication and complete reconstruction
Yuba Street	City Block	1.5	$ 1,500,000	$ 2,250,000	Assumes right-of-way dedication and complete reconstruction
Butte Street	City Block	1.5	$ 1,500,000	$ 2,250,000	Assumes right-of-way dedication and complete reconstruction
Parking Action Plan			***Total Cost:***	***$ 31,670,000***	
Parking Management				**$ 1,420,000**	
Smart Meters (On-Streets)	Each	400	$ 1,000	$ 400,000	Meter approximately 20% of on-street parking
Smart Meters (Parking Garages)	Each	920	$ 1,000	$ 920,000	Meter all garage parking spaces
Real-Time Parking Garage Space-Availability Signs	Lump Sum	1	$ 100,000	$ 100,000	Provide advance notification regarding available parking spaces
Electric Vehicle Charging Stations				**$ 150,000**	
Level 2 and 3 Charging Stations	Each	30	$ 5,000	$ 150,000	3% of parking garage spaces
Parking Garages				**$ 30,100,000**	
California @ Tehama	Lump Sum	1	$ 9,300,000	$ 9,300,000	Assumes 375 +/- stalls
California @ Placer	Lump Sum	1	$ 8,700,000	$ 8,700,000	Assumes 320 +/- stalls
Pine @ Sacramento	Lump Sum	1	$ 8,300,000	$ 8,300,000	Assumes 270 +/- stalls
Former Dicker's Building	Lump Sum	1	$ 3,800,000	$ 3,800,000	Assumes 115 +/- stalls
Transit Action Plan			***Total Cost:***	***$ 1,110,000***	
Real-Time Passenger Information				**N/A**	
Real-Time Applications and Signing	N/A	N/A	N/A	N/A	System-wide issue that requires additional study
Bus Stop Improvements				**$ 660,000**	
Provide Shelters & Seating, and Improve ADA Access & Lighting	Each	22	$ 30,000	$ 660,000	Retrofit into existing right-of-way
Route Expansion				**$ 450,000**	
Downtown to Turtle Bay	Lump Sum	1	$ 150,000	$ 450,000	New bus and shelters

Table J1 – Downtown Redding Community Based Transportation Plan – Action Plan Implementation Estimated Costs *(Continued)*

Feature	Unit of Measure	Quantity	Unit Price	Total	Comments
Pedestrian Action Plan			***Total Cost:***	***$ 5,000,000***	
Intersection Safety & Traffic Calming				**$ 5,000,000**	
Intersection Enhancements	Each	50	$ 100,000	$ 5,000,000	Curb extensions, signal modifications, and high visibility crosswalks
Improve Cypress / Pine / Market Intersection (Additional Study Required)				**$ 1,000,000**	(Amount not included in above total)
Pedestrian Access Improvements	Lump Sum	1	$ 1,000,000	$ 1,000,000	Conceptual only
Bicycle Action Plan			***Total Cost:***	***$ 9,699,500***	
Class I Mixed Use Trails				**$ 5,500,000**	
Diestelhorst Bridge to Riverside Drive CT DW	Lump Sum	1	$ 900,000	$ 900,000	Includes loop trail under Lake Redding Bridge
Continental Street to Sundial Bridge Drive	Lump Sum	1	$ 4,000,000	$ 4,000,000	Assumes construction in Caltrans and ACID right-of-way
ACID Trail: Cypress Street to Park Marina Drive	Lump Sum	1	$ 600,000	$ 600,000	Assumes construction in ACID right-of-way
Class II Bike Lanes				**$ 157,500**	
West Street: Shasta Street to 7th Street	Mile	0.6	$ 30,000	$ 18,000	Pavement delineation and signing
Court Street: Gold Street to Quartz Hill Road	Mile	1.4	$ 30,000	$ 42,000	Pavement delineation and signing
South Street: Court Street to Athens Avenue	Mile	1.1	$ 30,000	$ 33,000	Pavement delineation and signing
California Street: Eureka Way to Trinity Street	Mile	0.1	$ 30,000	$ 3,000	Pavement delineation and signing
Market Street: Trinity Street to Quartz Hill Road	Mile	0.5	$ 30,000	$ 15,000	Pavement delineation and signing
East Street: Pine Street to Locust Street	Mile	0.1	$ 30,000	$ 3,000	Pavement delineation and signing
East Street: Sacramento Street to Trinity Street	Mile	0.45	$ 30,000	$ 13,500	Pavement delineation and signing
Cypress Avenue: Pine Street to Athens Avenue	Mile	0.6	$ 30,000	$ 18,000	Pavement delineation and signing
Butte Street: Continental Street to Auditorium Drive	Mile	0.4	$ 30,000	$ 12,000	Pavement delineation and signing
Upgrade to Buffered Class II Bike Lanes				**$ 42,000**	
California Street: Gold Street to Yuba Street	Mile	0.3	$ 20,000	$ 6,000	Pavement delineation and signing
Gold Street: California Street to Market Street	Mile	0.1	$ 20,000	$ 2,000	Pavement delineation and signing
Market Street: Parkview Avenue to Gold Street	Mile	0.4	$ 40,000	$ 16,000	Pavement delineation and signing
Pine Street: Cypress Avenue to Trinity Street	Mile	0.9	$ 20,000	$ 18,000	Pavement delineation and signing
Class III Bike Lanes				**$ 50,000**	
Various Locations	Lump Sum	1	$ 50,000	$ 50,000	Pavement delineation and signing
Class IV Bike Lanes				**$ 2,350,000**	
Riverside Drive: CT DW to Center Street	Mile	0.1	$ 1,500,000	$ 150,000	Retrofit into existing right-of-way
Center Street: Division Street to Riverside Drive	Mile	0.5	$ 1,500,000	$ 750,000	Retrofit into existing right-of-way
Division Street: Center Street to California Street	Mile	0.05	$ 1,000,000	$ 50,000	Retrofit into existing right-of-way
Trinity Street: Center Street to Continental Street	Mile	0.45	$ 1,000,000	$ 450,000	Retrofit into existing right-of-way
California Street: Yuba Street to Division Street	Mile	0.1	$ 1,500,000	$ 150,000	Retrofit into existing right-of-way
Continental Street: Trinity Street to Butte Street	Mile	0.3	$ 1,000,000	$ 300,000	Retrofit into existing right-of-way
Sundial Bridge Drive: Rodeo Grounds to Turtle Bay	Mile	0.2	$ 2,500,000	$ 500,000	Widen Sundial Bridge Drive
Area-Wide Design Elements				**$ 1,150,000**	
Signing	Lump Sum	1	$ 50,000	$ 50,000	Standardized informational and directional
Intersection Markings	Lump Sum	1	$ 500,000	$ 500,000	e.g., Green paint
Crossing Signals	Lump Sum	1	$ 500,000	$ 500,000	Signal push buttons
Bike Parking	Lump Sum	1	$ 100,000	$ 100,000	Bike racks
Class IV Bike Lanes (Additional Study Required)				**$ 450,000**	
California Street: Gold Street to Yuba Street	Mile	0.3	$ 1,500,000	$ 450,000	Retrofit into existing right-of-way
Green Streets Action Plan			***Total Cost:***	***Included Above***	
Storm Water Management				**N/A**	
Structural Best Management Practices	N/A	N/A	N/A	N/A	Costs are included in other identified construction activities
			Total Construction Cost of Improvements:	**$ 63,529,500**	Costs assumed to be spread over a 20-year implementation period

APPENDIX K

PREVIOUS & PROPOSED SIGNIFICANT FUNDED TRANSPORTATION PROJECTS

Appendix K identifies significant projects implemented since 2010 that were funded by various programs including the State Highway Operation and Protection Program (SHOPP), State Transportation Improvement Program (STIP), and City of Redding General Fund and Traffic Impact Fees (TIF). The Redding Redevelopment Agency, abolished by the state in 2011, also funded two significant projects before 2010, the Market Street and Yuba Street Demonstration Blocks.

Appendix K also identifies two significant projects scheduled for construction and potential funding. The Diestelhorst to Downtown Non-Motorized Improvement Project is funded and scheduled for construction. Funding applications for construction have been made for the Redevelopment of the Former Dicker's Building Project.

PREVIOUS SIGNIFICANT FUNDED PROJECTS

The following projects are examples of transportation projects that have had a significant effect on Downtown since 2010.

Bike Lanes on California Street and Pine Street – SHOPP Funded

In 2015, Caltrans completed a pavement overlay project on various sections of state highway in the Downtown area. City staff and various stakeholders worked with Caltrans to incorporate the following enhancements to the pedestrian and bicycle environments:

- Elimination of a vehicular lane and the addition of a bicycle lane on California Street.
- Addition of a bicycle lane on Pine Street.

Curb Extensions and High-Visibility Crosswalks – STIP Funded

In 2013, a Caltrans construction project that widened Eureka Way between California Street and Market Street also included curb extensions at the Market Street/Shasta Street intersection and high-visibility crosswalks at the intersection of Market Street/Tehama Street. The project also included striping changes to create two eastbound traffic lanes on Tehama Street, between California Street and Market Street.

Bike Lanes on Court Street and California Street – City General Fund

In 2013, a City of Redding pavement overlay project included:

- Restriping that eliminated a northbound vehicular lane on California Street, between Tehama Street and Eureka Way, and added bike lanes.
- Restriping that eliminated a vehicular lane in each direction and added bike lanes, from Sonoma Street to Placer Street.

Bike Lanes and Pedestrian Improvements on East Street – City General Fund

In 2014, a City of Redding pavement overlay project included:

- Restriping to add bike lanes on East Street from Locust Street to Placer Street.
- Additional high-visibility crosswalks at the intersections of East Street/Yuba Street.

Pedestrian Refuge Islands on East Street – City General Fund

In 2012, as a City maintenance project, the City added pedestrian refuge islands and high-visibility crosswalks at the intersections of East Street/Yuba Street and East Street/Butte Street.

Pedestrian Refuge Islands on Court Street – City General Fund

In 2010, the City completed a pavement overlay construction project on Court Street that included adding pedestrian refuge islands and high-visibility crosswalks at the intersections of Court Street/ Yuba Street and Court Street/Butte Street.

Market Street Demonstration Block – Redding Redevelopment Agency

The Redding Redevelopment Agency funded a Complete Street style makeover of Market Street from Sacramento Street to Placer Street. Improvements included narrow vehicular lanes, wider sidewalks, trees, pedestrian-scale lighting, seating, and other architectural enhancements.

Yuba Street Demonstration Block – Redding Redevelopment Agency

The Redding Redevelopment Agency funded a Complete Street style makeover of Yuba Street from Oregon Street to California Street. Improvements included narrower vehicular lanes, wider sidewalks, trees, pedestrian-scale lighting, seating, and other design enhancements.

PROPOSED SIGNIFICANT PROJECTS

Following are two examples of projects with the potential to have transformative positive impacts on Downtown:

Diestelhorst to Downtown Non-Motorized Improvement Project – ATP and STIP Funds

Approved by the California Transportation Commission in 2015, this project will provide high-quality bicycle connectivity between the Diestelhorst Trailhead and Downtown. Pedestrian and cycling improvements will include either an enhanced crossing of Court Street with rectangular rapid flashing beacons, and a dedicated cycling and pedestrian pathway along Riverside Drive that may include a partial closure of Riverside Drive from Court Street to Center Street; or one-way vehicular travel, bike lanes, and sidewalks.

Redevelopment of the Former Dicker's Building – Anticipated Funding Sources: Private Developer, AHSC, STIP, and TIF

The City of Redding and K2 Development have applied for an Affordable Housing and Sustainable Communities grant to facilitate development of a five-story mixed-use building on the site of the former Dicker's Department Store. The proposal includes re-introducing portions of Market Street, Yuba Street, and Butte Street through The Market Street Promenade. Also included in the proposal are pedestrian and bicycle improvements to the surrounding roads and the extension of a two-way protected bike lane on California Street, from Yuba Street to Division Street, as an extension of the Diestelhorst to Downtown project improvements.

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