CITY OF STOCKTON
PUBLIC NOTICE OF AVAILABILITY
DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
(Pursuant to Public Resources Code Sections 21092 and 21092.3 and
Cal. Code of Regulations Title 14, Section 15087)

The City of Stockton Community Development Department has completed, independently reviewed and analyzed the following Draft Initial Study/Mitigated Negative Declaration: P17-0432

A Draft Initial Study/Mitigated Negative Declaration (IS/MND) is proposed for the City of Stockton Bicycle Master Plan update project (P17-0432). The City of Stockton Bicycle Master Plan (BMP) will provide the City with a clear plan for implementing bicycle-friendly, complete streets in Stockton that encourage people of all ages, abilities, and means to bicycle. With a focus on the equitable distribution and implementation of projects, the BMP will guide infrastructure and programmatic decisions to create a low-stress, accessible bicycle network that works for everyone. The intent of this Plan is to provide key project details the City of Stockton can use to implement a citywide backbone network. A General Plan amendment is proposed to incorporate the BMP bikeway network, goals and policies.

A copy of the Draft IS/MND may be reviewed and/or obtained at the following addresses:

- *http://www.stocktongov.com/government/departments/communityDevelop/cdPlanEnv.html*

- Community Development Department
  Planning and Engineering Division
  345 North El Dorado Street
  Stockton, CA 95202
  Attn: Michael McDowell, Planning Manager

The Draft IS/MND may also be reviewed at the following public library:

- Cesar Chavez Central Library
  605 North El Dorado Street
  Stockton, CA 95202

Send your written comments to Michael McDowell, Planning Manager, at the Community Development Department address shown above or at Michael.mcdowell@stocktonca.gov Comments on this document must be received at this same address no later than **August 23, 2017 by 4:30 p.m.** . Further information may be obtained by contacting the City Planning and Engineering Division at (209) 937-8266.

DAVID KWONG, DIRECTOR
COMMUNITY DEVELOPMENT DEPARTMENT

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: City of Stockton Bicycle Master Plan

Lead Agency: City of Stockton Community Development Department
Contact Person: Mike McDowell, Project Manager
Mailing Address: 425 N. El Dorado Street
Phone: (209) 937-8690
City: Stockton Zip: 95202
County: San Joaquin

Project Location: County: San Joaquin City/Nearest Community: City of Stockton
Cross Streets: N/A Zip Code: N/A
Longitude/Latitude (degrees, minutes and seconds): N/A ° ' " N / N/A ° ' " W Total Acres: N/A
Assessor's Parcel No.: N/A Section: N/A Twp.: N/A Range: N/A Base: N/A
Within 2 Miles: State Hwy #: I-5, SR 4, SR 99 & others Waterways: The Delta and others
Airports: Stockton Metro. & others Railways: UPRR, BNSF Schools: UOP & others

Document Type:

CEQA: ☐ NOP ☐ Draft EIR NEPA: ☐ NOI Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) ☐ Draft EIS ☐ Other:
☒ Mit Neg Dec Other: ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☒ General Plan Amendment ☒ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other:

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees ☐ Transportation: Type
☐ Commercial: Sq.ft. Acres Employees ☐ Mining: Mineral
☐ Industrial: Sq.ft. Acres Employees ☐ Power: Type MW
☐ Educational: ☐ Waste Treatment: Type MGD
☐ Recreational: ☐ Hazardous Waste: Type
☐ Water Facilities: Type MGD ☐ Other:

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☒ Recreation/Parks ☒ Vegetation
☒ Agricultural Land ☐ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality
☒ Air Quality ☒ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☐ Sewer Capacity ☒ Wetland/Riparian
☒ Biological Resources ☒ Minerals ☒ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☒ Land Use
☐ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☐ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☐ Other:

Present Land Use/Zoning/General Plan Designation:

N/A

Project Description: *(please use a separate page if necessary)*
See attached project description

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

X	Air Resources Board	X	Office of Historic Preservation
X	Boating & Waterways, Department of	X	Office of Public School Construction
X	California Emergency Management Agency	X	Parks & Recreation, Department of
X	California Highway Patrol		Pesticide Regulation, Department of
X	Caltrans District #10	X	Public Utilities Commission
X	Caltrans Division of Aeronautics	X	Regional WQCB #5S
X	Caltrans Planning	X	Resources Agency
X	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board	X	San Joaquin River Conservancy
X	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of	X	State Lands Commission
X	Delta Protection Commission	X	SWRCB: Clean Water Grants
	Education, Department of	X	SWRCB: Water Quality
X	Energy Commission	X	SWRCB: Water Rights
X	Fish & Game Region #2&3		Tahoe Regional Planning Agency
X	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of	X	Water Resources, Department of
X	General Services, Department of		
X	Health Services, Department of	X	Other: State of California Attorney General
X	Housing & Community Development	X	Other: California Transportation Commission
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date July 24, 2017 Ending Date August 23, 2017, 4:30 P.M.

Lead Agency (Complete if applicable):

Consulting Firm: _____ Applicant: _____
Address: _____ Address: _____
City/State/Zip: _____ City/State/Zip: _____
Contact: _____ Phone: _____
Phone: _____

Signature of Lead Agency Representative: _____ **Date:** 7/14/17

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Mitigated Negative Declaration

CITY OF STOCKTON
Bicycle Master Plan

June 28, 2017

Prepared For:

CITY OF STOCKTON

Public Works Dept., CIP Division
22 E. Weber Ave., Rm. 301
Stockton, CA 95202
(209) 937-8492

Prepared by:

VRPA TECHNOLOGIES, INC.

4630 W. Jennifer, Ste. 105
Fresno, CA 93722
(559) 259-9257

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I. PROJECT INFORMATION

1. Project Title:

City of Stockton Bicycle Master Plan (Project).

2. Lead Agency Name:

City of Stockton
Public Works Department,
Capital Improvement Projects (CIP) Division
22 E. Weber Avenue, Room 301
Stockton, CA 95202

3. Contact Person:

Ms. Karla Cervantes, Project Manager

Phone Number: (209) 937-8492

4. Project Location:

City of Stockton General Plan Sphere of Influence (SOI).

5. Project Sponsor's Name:

See Lead Agency in Section I.2 above.

6. General Plan Designation:

Various. The Bicycle Master Plan (Plan) designates bicycle facilities that are/will be located throughout the City of Stockton and within its Sphere of Influence. See Project Description provided in Section II below.

7. Zoning:

Various. The Plan designates bicycle facilities that are/will be located throughout the City of Stockton and within its Sphere of Influence. See Project Description provided in Section II below.

8. Description of Project:

See Project Description provided in Section II below.

9. Surrounding Land Uses and Setting:

See Project Description provided in Section II below.

10. Other Public Agencies Whose Approval is Required:

The Project does not require that other agencies approve the Plan. There are however, bicycle facilities that are planned along Caltrans routes, which will require the approval of encroachment permits by Caltrans District 10. In addition, the Plan designates planned facilities that are located within unincorporated areas of the County but within the City of Stockton's General Plan SOI. As a result, coordination between the San Joaquin County and the City of Stockton will be critical as the Plan is implemented.

II. INTRODUCTION

Introduction and Regulatory Guidance

The City of Stockton is the lead agency under the California Environmental Quality Act (CEQA) and is responsible for determining and evaluating the potential environmental impacts of the Stockton Bicycle Master Plan in compliance with CEQA. Approval of the Plan is at the discretion of the City of Stockton.

This environmental document has been prepared to assess the Plan and to determine whether significant environmental impacts would occur if the Plan was approved by the Stockton City Council and as specific bicycle improvement projects are constructed in accordance with the Plan. The environmental document is also prepared to provide the public with the potential environmental impact or effects resulting from the Plan.

Project Approvals

Approval of the Plan is at the discretion of the Stockton City Council. While the Plan has been environmentally assessed, separate project approvals and additional environmental review may be needed prior to project implementation. Depending on the location and specific characteristics of each individual bicycle project, future environmental assessment, encroachment permits, and approvals for may also be needed by one or more of the following agencies:

- ✓ California Department of Transportation (Caltrans), District 10
- ✓ California Department of Fish and Wildlife (CDFW)
- ✓ San Joaquin County
- ✓ San Joaquin County Flood Control and Water Conservation District
- ✓ U.S. Army Corps of Engineers (USACE)
- ✓ California Regional Water Quality Control Board (RWQCB)
- ✓ Others, as required

When specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

III. PROJECT DESCRIPTION

Project Location

The project is located in the City of Stockton General Plan SOI, which includes the incorporated areas of the City and the unincorporated areas of the San Joaquin County within the City's SOI. The City of Stockton is located in the Central San Joaquin Valley within the County of San Joaquin and Is bounded by Stanislaus County to the south and east, Sacramento County to the north, Amador and Calaveras to the east, and Alameda and Contra Costs to the west.

Environmental Setting

The City of Stockton is located in the Central San Joaquin Valley of California 80 miles east of the San Francisco Bay Area and 50 miles south of Sacramento. The City of Stockton experiences a mild, Mediterranean climate with hot summers and cool winters, has a generally flat terrain, and traversed by the Calaveras and San Joaquin Rivers. The Stockton SOI boundaries are generally bounded by Armstrong Road and Live Oak Road on the north, Jack Tone Road on the east, Roth Road on the south, and San Joaquin River, Burns Cutoff, Stockton Deep Water Channel, Fourteen Mile Slough, and Bishop Cut on the west. Unincorporated communities contained within the City of Stockton's General Plan SOI or Plan Area include Country Club, French Camp, Garden Acres, Kennedy, Lincoln Village, Morada, and Taft Mosswood. Additional detail regarding the environmental setting ore provided in Section V – Evaluation of Environmental Impacts.

Purpose and Need

According to the Draft Bicycle Master Plan, the Plan (Project) is "the result of an extensive, community-driven planning process involving close collaboration between the City of Stockton and its residents. The goals, vision, and implementation strategy of the Plan are informed by the needs of the community, and codified in the plan's vision statement. The Plan also states that the Update "is intended to not only envision a future for the City of Stockton where bicycling is a viable option for people of all ages and abilities, but to also serve as an implementation roadmap for elected officials and City staff to achieve that goal."

The Plan includes a listing of bicycle facilities and viable funding programs. The Plan will be used by the City of Stockton to apply for program and grant funding available from federal and State agencies, as well as from the San Joaquin Council of Governments (SJCOG). The Plan also supports the Region's goals and policies related to the reduction of greenhouse gas emissions as documented in the SJCOG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Finally, the Plan provides an overview of the existing conditions as related to the bicycle and pedestrian modes in the region, assesses existing and future bicycle and pedestrian infrastructure needs, and highlights the bicycle programs and improvements that will meet these needs.

Project Vision and Goals

The Bicycle Master Plan contains the following vision statement:

> "The Stockton Bicycle Master Plan seeks to implement a vibrant, safe, and supportive bicycle network that connects residents in every neighborhood with desirable places to ride for any trip purpose. The Bicycle Master Plan should be the catalyst for starting a cultural shift toward cycling in Stockton by effectively marketing cycling as a healthy, active transportation option and through funding supportive education programs to reach people of all ages and abilities."

In addition, there are four goals that are included to support and implement the vision. The goals noted below also include specific policies and projects that support each goal.

Goal One – Enhance Citywide Connectivity

1. California Separated Bikeway
2. East/West Access Road Diets and Alpine Multi-Modal Alternatives Assessment
3. Pacific Avenue Corridor Study and Multi-Modal Alternatives Assessment
4. El Dorado/Center Separated Bikeways

Goal Two – Safety First for All Users

5. West Lane/Airport Way Complete Streets Study – Highest collisions in the City concentrated at Hammer intersection.
6. Dr. Martin Luther King, Jr. Complete Streets Study – Highest collision area in South Stockton that provides critical east/west connectivity
7. Harding Way Complete Streets Study
8. Citywide Bicycle Parking Program

Goal Three – Mode Shift and Access

9. Airport Way Separated Bikeway between Hazelton & Performance – Primary South Stockton access to the rest of the city
10. Monte Diablo/Acacia Bicycle Lanes – Connects multiple bicycle boulevards to California and Downtown. Alternative parallel route to Harding.
11. Bicycle Boulevards Implementation – Multiple Projects. Kensington/Baker will be the Pilot project.

Goal Four – Education & Support Programs

12. Safe Routes to School Program
13. Multi-Modal Safety Education Campaign
14. Bike Share Feasibility Study
15. Wayfinding Program

Project Characteristics

Bicycle Master Plan Contents

The Bicycle Master Plan contains ten (10) chapters (as described in the Plan), which document the steps taken during the Update process.

Chapter 1: Developing the Plan - Provides an overview of the Stockton Bicycle Master Plan, explains the importance of the plan, and identifies the structure of this document.

Chapter 2: Community Engagement - Provides an overview of the outreach completed in the development of the Bicycle Master Plan update process along with a description of the online platforms, surveys, and multiple rounds of community workshops held throughout the city.

Chapter 3: Bicycling in Stockton Today - Provides an overview of existing conditions in Stockton, including existing bikeways, barriers to cycling, and collision trends used in the development of the proposed bikeway network.

Chapter 4: Vision - Provides a detailed overview of the development of the vision statement and discusses how new advancements in bikeway planning and design were used to develop the citywide bikeway network. A map of the proposed City of Stockton Bicycle Network is presented in this chapter.

Chapter 5: Goal One – Enhance Citywide Connectivity - Provides an overview of how the Backbone Network was designed to support citywide connectivity by closing gaps caused by high-stress arterials and collectors. Descriptions and project fact sheets are provided for the four highest priority projects that will help the City of Stockton implement enhancements to citywide connectivity.

Chapter 6: Goal Two – Safety First for All Users - Provides an overview of how collision data, safety concerns, and personal security concerns necessitate projects that address high-injury corridors and bicycle parking theft. Descriptions and project fact sheets are provided for the four highest priority projects that will help the City of Stockton promote safety for all roadway users through enhanced complete streets planning efforts and updated standard design review practices.

Chapter 7: Goal Three – Mode Shift and Access - Provides an overview of projects that will help to reach various users that might not feel comfortable using existing facilities and provides new facility options or addresses key connections that will encourage a transformative increase in bicycle ridership. Descriptions and project fact sheets are provided for the three highest priority projects that will promote a modal shift or highly increase access along key corridors.

Chapter 8: Goal Four – Education & Support Programs - Provides an overview of supportive programmatic and educational campaigns which create safer biking practices. This goal was directly influenced by community feedback that safety practices are more than just the facilities themselves, and that education and enforcement are critical. Descriptions of key supportive educational opportunities and programs are summarized for implementation in addition to the physical improvements proposed in this Plan.

Chapter 9: Implementation and Funding - Provides an overview of the Backbone Network project prioritization, implementation strategies, and funding options the City of Stockton can use to build upon the momentum of this planning effort.

Chapter 10 – Plan Evaluation & Performance Measures - Provides a framework for assessing the implementation of the Plan to allow the City to reorient efforts to meet the community driven goals.

Appendices – The Plan also includes a number of appendices including:

A. Design Guidelines
B. Bicycle Improvement Network Project List
C. Neighborhood Connectivity Analysis Maps
D. City Of Stockton Bicycle Master Plan Existing Conditions Report
E. Caltrans Atp Guidelines
F. Funding Sources

Bicycle Infrastructure and Networks

The Plan includes a description of existing bicycle networks and includes an inventory of bicycle connections at all of the City's rail, airport, and transit connection points, as well as accommodations that are made for bicyclists on major transit systems. It also includes a description and maps of the existing and proposed bicycle networks in the region (see Figures 1 and 2 and Table 1). Another key component of the Plan is inclusion of proposed bicycle projects. The networks and bicycle project lists were developed in consultation with advocacy groups and members of the public. The network improvements and bicycle projects identified in the Plan will improve the bicycle environments in the City by increasing mobility and improving safety.

Other Programs

The Plan contains a summary description of programs that address the issue areas that matter to bicyclists:

- ✓ Safety – The plan highlights the frequency and severity of bicycle- and pedestrian-involved collisions, injuries, and fatalities and discusses programs that can be implemented to reduce or minimize these occurrences.
- ✓ Education and Community Involvement
- ✓ Enforcement
- ✓ Safe Routes to School
- ✓ Evaluation
- ✓ Maintenance
- ✓ Bike Share

Funding

The Plan identifies a vision of an interconnected network of bicycle infrastructure based on the proposed network shown in Figure 2 and the projects contained in Table 1. Funding the Plan is a critical component of the planning and implementation process.

FIGURE 1
Existing Bicycle Network

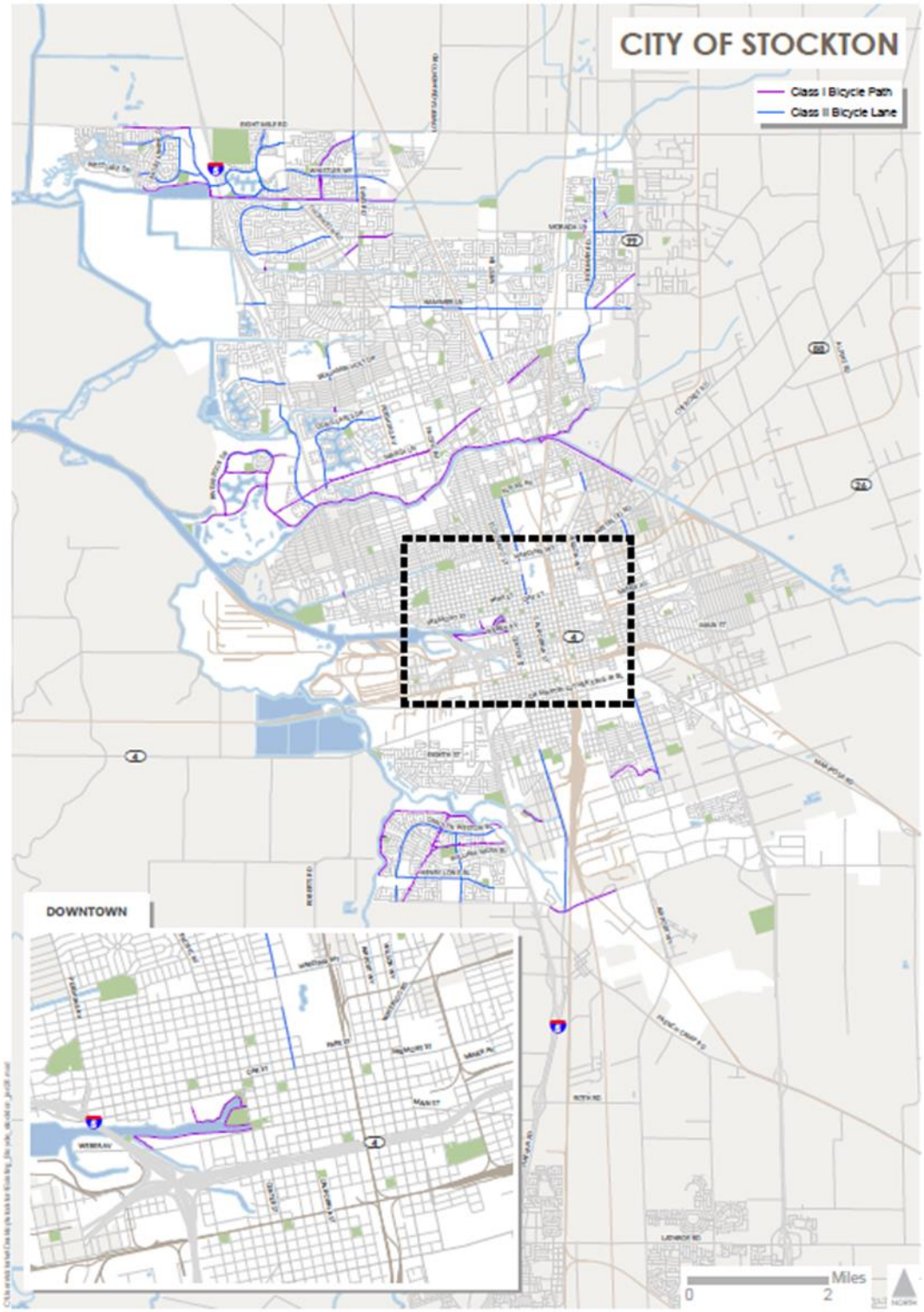

FIGURE 2
Citywide Backbone Network Map By Facility Type

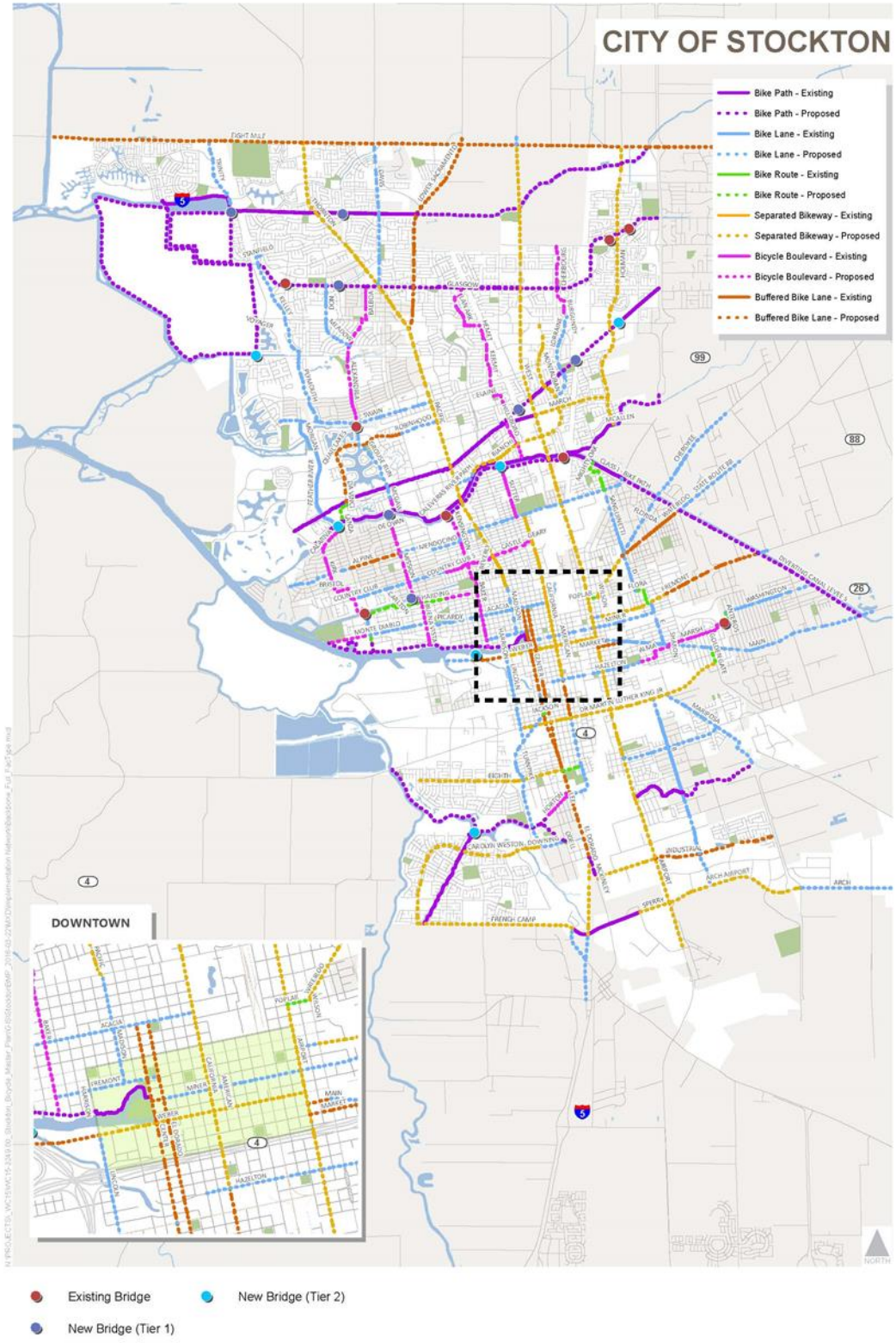

TABLE 1
Complete Project List

CITY OF STOCKTON BICYCLE MASTER PLAN

PROJECT LIST

Project Number	Corridor Project Name	Implementation Extents	Proposed Facility	Implementation	Jurisdiction	Distance (miles)	Cost Estimate
1		**Eight Mile Road Buffered Bike Lanes**					
A	Eight Mile Road Buffered Bike Lanes	Between Regatta Lane (Future Extension) and Stony Gorge Drive	Class II Buffered Bicycle Lanes	Lane Striping	City of Stockton/SJ County	2.3	$ 558,000
B	Eight Mile Road Buffered Bike Lanes	Between Stony Gorge Drive and Chantel Lane	Class II Buffered Bicycle Lanes	Capital Improvements	City of Stockton/SJ County	5.9	$ 1,439,000
2		**Bear Creek Multi-Use Pathway Extension**					
A	Bear Creek Multi-Use Pathway Extension	Between Lower Sacramento Road and Eight Mile Road	Class I Multi-use Path	Capital Improvements	City of Stockton/SJ County	3.6	$ 7,903,000
B	Bear Creek Multi-Use Pathway Extension	Between Thornton Road and Davis Road	Bicycle & Pedestrian Bridge	Capital Improvements	City of Stockton	0.9	$ 969,000
C	Bear Creek Multi-Use Pathway Extension	West of Interstate 5	Class I Multi-use Path	Capital Improvements	City of Stockton	1.2	$ 2,635,000
3		**Mosher Slough Multi-Use Pathway**					
A	Mosher Slough Multi-Use Pathway	Between Kelley Drive and SR-99 Frontage Road	Class I Multi-use Path	Capital Improvements	City of Stockton	5.9	$ 12,916,000
4		**Swain Road Bicycle Lanes**					
A	Swain Road Bicycle Lanes	Between Cumberland Place and Plymouth Road	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.6	$ 125,000.0
B	Swain Road Bicycle Lanes	Between Plymouth Road and Pacific Avenue	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton/SJ County	1.7	$ 357,000.0
C	Swain Road Bicycle Lanes	Between Pacific Avenue and West Lane	Class II Bicycle	Road Diet	City of Stockton	1.4	$ 295,000.0
5		**Quail Lakes Bicycle Connectivity Improvements**					
A	Quail Lakes Bicycle Connectivity Improvements	Robinhood Drive Between Pershing Avenue and Pacific Avenue	Class II Bicycle Lanes	Road Diet	City of Stockton	2.3	$ 482,000.0
B	Quail Lakes Bicycle Connectivity Improvements	Quail Lakes Drive between March Lane and Pershing Avenue	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton	0.6	$ 137,000
6		**East Bay MUD Path Connectivity Improvements**					
A	East Bay MUD Path Connectivity Improvements (Western Segment)	EBMUD Corridor Between Brookside Road and West Lane	Class I Multi-use Path	Capital Improvements	City of Stockton	3.9	$ 8,478,000
7		**East Bay MUD Path Connectivity Improvements**					
A	East Bay MUD Path Connectivity Improvements (Eastern Segment)	EBMUD Corridor Between March Lane and West Lane	Class I Multi-use Path	Capital Improvements	City of Stockton	0.6	$ 1,273,000
B	East Bay MUD Path Connectivity Improvements (Eastern Segment)	EBMUD Corridor Between Lorraine Avenue and 99 Frontage Road	Class I Multi-use Path	Capital Improvements	City of Stockton	1.8	$ 3,965,000
8		**March Lane Separated Bikeway**					
A	March Lane Separated Bikeway	Between West Lane and Holman Road	Class IV Separated	Road Diet	City of Stockton	0.3	$ 147,000
9		**Calaveras River Path North Extension**					
A	Calaveras River Path North Extension	Between McAllen Road and SR-99 Frontage Road	Class I Multi-use Path	Capital Improvements	City of Stockton/SJ County	0.9	$ 2,057,000
10		**Thornton Road Separated Bikeway**					
A	Thornton Road Separated Bikeway	Between Pacific Avenue and Eight Mile Road	Class IV Separated Bikeway	Capital Improvements	City of Stockton/SJ County	3.1	$ 1,307,000
11		**Davis Road Bicycle Lanes**					
A	Davis Road Bicycle Lanes	Between Eight Mile Road Whistler Way	Class II Buffered Bicycle Lanes	Capital Improvements	City of Stockton	0.7	$ 140,000.0
B	Davis Road Bicycle Lanes	Between Whistler Way and Thornton Road	Class IV Separated	Road Diet	City of Stockton	1.3	$ 285,000.0
12		**Lower Sacramento Road Buffered Bike Lanes**					
A	Lower Sacramento Road Buffered Bike Lanes	Between Eight Mile Road and Royal Oak Drive	Class II Buffered Bicycle Lanes	Capital Improvements	City of Stockton/SJ County	1.6	$ 404,000
B	Lower Sacramento Road Buffered Bike Lanes	Between Royal Oak Drive and Pacific Avenue	Class II Buffered Bicycle Lanes	Lane Striping	City of Stockton	1.1	$ 279,000
13		**West Lane/Airport Way Separated Bikeways**					
A	West Lane/Airport Way Separated	West Lane Between Eight Mile Road and Morada	Class IV Separated	Capital	City of Stockton	1.4	$ 581,000
B	West Lane/Airport Way Separated Bikeways	West Lane between Morada Lane and Harding Way, Airport Way between Harding Way and Hazelton	Class IV Separated Bikeway	Further Study	City of Stockton	6.1	$ 2,569,000
C	West Lane/Airport Way Separated Bikeways	Airport Way between Hazelton Avenue and Dr. Martin Luther King Jr. Boulevard	Class IV Separated Bikeway	Lane Striping with Parking	City of Stockton	0.6	$ 234,000
D	West Lane/Airport Way Separated Bikeways	Airport Way between Dr. Martin Luther King Jr. Boulevard and C.E. Dixon Street	Class IV Separated Bikeway	Capital Improvements	City of Stockton	3.5	$ 1,479,000
14		**Pacific Avenue Separated Bikeway**					
A	Pacific Avenue Separated Bikeway	Between Lower Sacramento Road and Harding Way	Class IV Separated	Further Study	City of Stockton	3.9	$ 1,651,000
15		**West Side Bikeway**					
A	West Side Bikeway	Kelley Drive Between Stanfield Drive and Plymouth Road, Plymouth Road between Kelley Drive and	Class II Bicycle Lanes	Lane Striping with Parking	City of Stockton	2.5	$ 539,000.0
B	West Side Bikeway	Morgan Place between Swain Avenue Feather River Drive, Feather River Drive between Swain Road and Calaveras River Path	Class II Bicycle Lanes	Traffic Calming	City of Stockton	1.8	$ 390,000.0
C	West Side Bikeway	Bicycle & Pedestrian Bridge bewteen Feather River Drive to Ryde Avenue over the Calaveras River	Bicycle & Pedestrian Bridge	Capital Improvements	City of Stockton/SJ County	0.1	$ 1,399,000

TABLE 1 (cont.)
Complete Project List

CITY OF STOCKTON BICYCLE MASTER PLAN

PROJECT LIST

Project Number	Corridor Project Name	Implementation Extents	Proposed Facility	Implementation	Jurisdiction	Distance (miles)	Cost Estimate
D	West Side Bikeway	Calariva Drive between Ryde Avenue and Del Rio Drive, Del Rio Drive between Calariva Drive and Kirk Street, Kirk Street between Del Rio Drive and Michigan Avenue, Michigan Avenue between Kirk Street and Oregon Avenue, Oregon Avenue between Michigan Avenue and Country Club Boulevard, Fontana Avenue between Country Club and Smith Canal Bridge	Class III Bicycle Boulevard	Traffic Calming	City of Stockton/SJ County	1.7	$ 599,000
E	West Side Bikeway	Smith Canal Pedestrian Bridge between Fontana Avenue & Shimizu Drive, Shimizu Drive between Smith Canal Bridge & Ryde Avenue	Bicycle & Pedestrian Bridge	Capital Improvements	City of Stockton	0.1	$ 2,046,000
F	West Side Bikeway	Ryde Avenue between Shimizu Drive and Fremont Street	Class II Bicycle Lanes	Lane Striping with Parking	City of Stockton	0.5	$ 116,000.0
16		**Alexandria Bicycle Boulevard**					
A	Alexandria Bicycle Boulevard	Avenue, Balboa Avenue between Cortez Avenue and Hammer Lane, Alexandria Place between Hammer Lane and Swain Road	Class III Bicycle Boulevard	Traffic Calming	City of Stockton/SJ County	2.2	$ 778,000
B	Alexandria Bicycle Boulevard	Lakes Drive, Grouse Run Drive between Quail Lakes Drive and March Lane, McGaw Street between March Lane and Rosemarie Lane	Class II Bicycle Lanes	Lane Striping	City of Stockton/SJ County	1.2	$ 250,000.0
C	Alexandria Bicycle Boulevard	McGaw Street between Rosemarie Lane and Brookside Drive	Class II Bicycle Lanes	Lane Striping with Parking	City of Stockton	0.2	$ 36,000.0
D	Alexandria Bicycle Boulevard	Bicycle and Pedestrian bridge between McGaw Street and Mission Road over the Calaveras River	Bicycle & Pedestrian Bridge	Capital Improvements	City of Stockton	0.1	
17		**Mission Bicycle Boulevard**					
A	Mission Bicycle Boulevard	Mission Road between River Road and Tuxedo Avenue, Tuxedo Avenue between Mission Road and Buena Vista Avenue	Class III Bicycle Boulevard	Traffic Calming	City of Stockton/SJ County	1.2	$ 419,000
B	Mission Bicycle Boulevard	Bicycle and Pedestrian bridge to connect Buena Vista Avenue over Smith Canal	Bicycle & Pedestrian Bridge	Capital Improvements	City of Stockton/SJ County	0.1	$ 2,046,000
C	Mission Bicycle Boulevard	Buena Vista Avenue between Smith Canal and Fremont Street	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	0.8	$ 278,000
18		**Don/Meadow Bicycle Lanes**					
A	Don/Meadow Bicycle Lanes	Don Avenue Between Mosher Slough Path and Hammer Lane, Meadow Avenue between Hammer	Class II Bicycle Lanes	Lane Striping with Parking	City of Stockton	1.0	$ 218,000.0
19		**Holman Road Separated Bikeway**					
A	Holman Road Separated Bikeway	Between Eight Mile Road and Hendrix Drive	Class IV Separated	Capital	City of Stockton	0.7	$ 275,000
B	Holman Road Separated Bikeway	Between Hendrix Drive and Telstar Place	Class IV Separated	Road Diet	City of Stockton	2.1	$ 904,000
C	Holman Road Separated Bikeway	Between Telstar Place and McAllen Road	Class IV Separated	Road Diet	City of Stockton	1.3	$ 534,000
20		**Kermit Bicycle Boulevard**					
A	Kermit Bicycle Boulevard	Mosher Slough Multi-Use Path (Future Facility) Connection to Glasgow Avenue	Class I Multi-use Path	Capital Improvements	City of Stockton	0.04	$ 79,000
B	Kermit Bicycle Boulevard	Glasgow Avenue to between Mosher Slough Multi-Use Path Connection and Falkirk Drive, Falkirk Drive between Glasgow Avenue and Glencannon Street, Glencannon Street between Farlkirk Drive and Lan Ark Drive, Lan Ark Drive between Glencannon Street	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	0.6	$ 225,000
C	Kermit Bicycle Boulevard	Way, Prado Way between Lan Ark Drive and Hemet Avenue, Hemet Avenue between Prado Way and Murillo Drive, Murillo Drive between Hemet Avenue and Kermit Lane, Kermit Lane between Murillo Lane and Elaine Drive, Elain Drive between Kermit Lane and Holiday Drive, Holiday Drive between Elaine Drive and March Lane, March Lane between Holiday Drive and Hillsboro Way, Hillsboro Way between March Lane and Bianchi Road, Bianchi Road between Hillsboro Way and Townehome Drive, Townehome Drive between Bianchi Road and Caribrook Way, Caribrook Way between Townehome Drive &	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	2.4	$ 858,000
21		**Burgundy Bicycle Boulevard**					
A	Burgundy Bicycle Boulevard	Cherbourg Way between Morada Lane and Burgundy Drive, Burgundry Drive between Cherbourg Way and	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	1.1	$ 391,000
22		**Lorraine Bikeway**					
A	Lorraine Bikeway	Lorraine Avenue between Burgundry Drive and Montauban Avenue	Class II Bicycle Lanes	Lane Striping	City of Stockton	1.2	$ 265,000.0
23		**Bianchi/Montauban Bikeway**					
A	Bianchi/Montauban Bikeway	Montauban Avenuee between Hammer Lane and March Lane, Bianchi Road between March Lane and Carson Place	Class IV Separated Bikeway	Road Diet	City of Stockton	4.9	$ 2,069,000
B	Bianchi/Montauban Bikeway	Bianchi Road between Carson Place and Pacific Avenue	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.1	$ 22,000.0
24		**Sutter Bicycle Boulevard**					
A	Sutter Bicycle Boulevard	Sutter Street between Calaveras River and Alpine Avenue	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	0.7	$ 255,000
25		**Calaveras River Path South Connection**					
A	Calaveras River Path South Connection	Southern side of the Calaveras River between University of the Pacific Bicycle and Pedestrian Bridge and the Bicycle and Pedestrian Bridge East of	Class I Multi-use Path	Capital Improvements	City of Stockton	2.1	$ 4,663,000

TABLE 1 (cont.)
Complete Project List

CITY OF STOCKTON BICYCLE MASTER PLAN

PROJECT LIST

Project Number	Corridor Project Name	Implementation Extents	Proposed Facility	Implementation	Jurisdiction	Distance (miles)	Cost Estimate
26		**Alpine Bikeway**					
A	Alpine Bikeway	Alpine Avenue between Kirk Street and Ryde Avenue	Class II Bicycle Lanes	Lane Striping with Parking Removal	SJ County	0.3	$ 67,000.0
B	Alpine Bikeway	Alpine Avenue between Ryde Avenue and California Street (Includes jog around University of the Pacific on Pershing Avenue, Mendocino Avenue, & Kensington Way)	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton/SJ County	2.6	$ 640,000
C	Alpine Bikeway	Alpine Avenue between California Street to Wilson Way	Class II Bicycle Lanes	Further Study	City of Stockton/SJ County	1.4	$ 300,000.0
27		**Country Club Crosstown Connectivity Improvements**					
A	Country Club Crosstown Connectivity Improvements	Country Club Boulevard Between Fontana Avenue and Argonaut Street	Class II Bicycle Lanes	Lane Striping	City of Stockton/SJ County	1.4	$ 301,000.0
B	Country Club Crosstown Connectivity Improvements	Country Club Boulevard (South) between Argonaut Street and Oxford Circle, Oxford Circle between Country Club Boulevard and Central Avenue, Central Avenue (South) between Oxford Circle and Central Court, Central Court between Central Avenue and Pacific Avenue, Castle Street between Pacific Avenue and El Dorado Street, El Dorado Street between Castle Street and Hampton Street, Hampton Street between El Dorado Street and Sutter Street, Sutter Street between Hampton Street and Hampton Street, Hampton Street between Sutter Street and California Street	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	1.5	$ 522,000
28		**Kensington/Baker Bicycle Boulevard**					
A	Kensington/Baker Bicycle Boulevard	Stagg Way between Brookside Road over University of Pacific bridge and Dave Brubeck Way, Kensington Way between Dave Brubeck Way to Oxford Circle, Oxford Circle between Kensington Way and Kensington Way, Kensignton Way between Oxford Circle and Baker Place, Baker Place between Kensington Way and Baker Street, Baker Street between Baker Place and Flora Street, Flora Street between Baker Street and Harrison Street, Harrison Street between Flora Street and Miners Levee Path	Class III Bicycle Boulevard	Traffic Calming	City of Stockton/University of the Pacific	2.1	$ 746,000
29		**Pathway Improvement to Miners Levee Connection**					
A	Pathway Improvement to Miners Levee Connection	Miners Levee Path between Harrison Street and current terminus near Ballpark	Class I Multi-use Path	Capital Improvements	City of Stockton	0.6	$ 1,215,000
30		**Shimizu Bike Route**					
A	Shimizu Bike Route	Shimizu Drive between Ryde Avenue and Harding Way	Route	Signage Only	City of Stockton	0.4	$ 29,000
B	Shimizu Bike Route	Harding Way between Shimizu Drive and Baker Street	Boulevard	Traffic Calming	City of Stockton	1.2	$ 437,000
31		**Monte Diablo/Acacia Bicycle Lanes**					
A	Monte Diablo/Acacia Bicycle Lanes	Monte Diablo Avenue between Shimizu Drive and Ryde Avenue	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	0.6	$ 215,000
B	Monte Diablo/Acacia Bicycle Lanes	Monte Diablo Avenue between Ryde Avenue and Picardy Drive, Picardy Drive between Monte Diablo Avenue and Pershing Avenue, Acacia Street between Pershing Drive and California Avenue.	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	2.6	$ 551,000.0
32		**Miners Levee Multi-Use Path Extension**					
A	Miners Levee Multi-Use Path Extension	Between Harrison Street and Monte Diablo Avenue	Path	Improvements	City of Stockton	2.39	$ 5,190,000
33		**California Separated Bikeway**					
A	California Separated Bikeway	Between Alpine Avenue and Oak Street	Bikeway	Road Diet	City of Stockton	4.3	$ 1,808,000
B	California Separated Bikeway	Between Oak Street and Miner Avenue	Bikeway	Road Diet	City of Stockton	0.2	$ 90,000
C	California Separated Bikeway	Between Miner Avenue and Hazelton Avenue	Bikeway	Road Diet	City of Stockton	0.6	$ 266,000
D	California Separated Bikeway	Between Hazelton Avenue and Dr. Martin Luther King Jr. Boulevard	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton	0.6	$ 136,000
E	California Separated Bikeway	Between Dr. Martin Luther King Jr. Boulevard and Ninth Street	Class II Bicycle Lanes	Road Diet	City of Stockton	0.8	$ 174,000.0
F	California Separated Bikeway	Between Ninth Street and El Dorado Street	Class II Bicycle Lanes	Lane Striping	City of Stockton	0.5	$ 102,000.0
34		**Diverting Canal Multi-Use Path (South)**					
A	Diverting Canal Multi-Use Path (South)	Extension East of West Lane to Main Street	Class I Multi-use Path	Capital Improvements	City of Stockton/SJ County	5.0	$ 10,879,000
35		**East Side Bikeway**					
A	East Side Bikeway	Mighty Oak Drive between Calaveras River and Oak Forest Avenue, Oak Forest Avenue between Mighty Oak Drive and Shady Forest Way, Shady Forest Way between Oak Forest Avenue and Sanguinetti Lane, and Sanguinetti Lane between Shady Forest Way and Alpine Avenue.	Class III Bicycle Route	Signage Only	City of Stockton	0.5	$ 35,000
B	East Side Bikeway	Sanguinetti Lane between Alpine Avenue and Bradford Street	Class II Bicycle Lanes	Lane Striping	SJ County	0.8	$ 168,000.0
C	East Side Bikeway	Sanguinetti Lane between Bradford Street and Cherokee Road	Class II Bicycle Lanes	Capital Improvements	SJ County	0.1	$ 28,000.0
D	East Side Bikeway	Cherokee Road between Sanguinetti Lane and D Street, and D Street between Waterloo Road and Flora Street	Class II Bicycle Lanes	Lane Striping	City of Stockton	0.5	$ 113,000.0

TABLE 1 (cont.)
Complete Project List

CITY OF STOCKTON BICYCLE MASTER PLAN

PROJECT LIST

Project Number	Corridor Project Name	Implementation Extents	Proposed Facility	Implementation	Jurisdiction	Distance (miles)	Cost Estimate
E	East Side Bikeway	Flora Street between D Street and E Street, and E Street between Flora Street and Fremont Street	Class III Bicycle Route	Signage Only	City of Stockton	0.3	$ 23,000
F	East Side Bikeway	E Street between Fremont Street and Main Street	Class II Bicycle Lanes	Lane Striping	City of Stockton	0.6	$ 132,000.0
36		**Waterloo Bikeway**					
A	Waterloo Bikeway	Waterloo Road Between Wilson Way/Poplar Street and Cherokee Road	Class IV Separated Bikeway	Road Diet	City of Stockton	0.7	$ 289,000
B	Waterloo Bikeway	Poplar Street between Airport Way and Wilson Way	Route	Signage Only	City of Stockton	0.1	$ 10,000
C	Waterloo Bikeway	Waterloo Road Between Cherokee Road and SR-99	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton/SJ County	1.3	$ 319,000
D	Waterloo Bikeway	Waterloo Road Between SR-99 and Beyer Lane	Class II Bicycle Lanes	Lane Striping	SJ County	0.8	$ 176,000.0
37		**Cherokee Bicycle Lanes**					
A	Cherokee Bicycle Lanes	Cherokee Road between Waterloo Road and the Diverting Canal	Class II Bicycle Lanes	Capital Improvements	SJ County	1.0	$ 215,000.0
B	Cherokee Bicycle Lanes	Cherokee Road between the Diverting Canal and Overhiser Road	Class II Bicycle Lanes	Capital Improvements	SJ County	1.5	$ 318,000.0
38		**Fremont Bikeway**					
A	Fremont Bikeway	Fremont Street between Airport Way and Wilson Way	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.1	$ 31,000.0
B	Fremont Bikeway	Fremont Street between Wilson Way and Filbert Street	Bikeway	Road Diet	City of Stockton	1.0	$ 414,000
C	Fremont Bikeway	Fremont Street between Filbert Street and SR-99	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton/SJ County	0.6	$ 157,000
D	Fremont Bikeway	Fremont Street between SR-99 and the Diverting Canal	Bicycle Lanes	Lane Striping	SJ County	0.9	$ 213,000
39		**Miner Bicycle Lanes**					
A	Miner Bicycle Lanes	Miner Avenue between Center Street and A Street	Class II Bicycle Lanes	Road Diet	City of Stockton	1.4	$ 291,000.0
B	Miner Bicycle Lanes	Miner Avenue between A Street and E Street	Class II Bicycle Lanes	Improvements	City of Stockton	0.5	$ 100,000.0
40		**Main Street Bikeway**					
A	Main Street Bikeway	Market Street between Airport Way and Main Street	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton	0.4	$ 92,000
B	Main Street Bikeway	Main Street between Airport Way and Wilson Way	Class II Buffered Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.1	$ 36,000
C	Main Street Bikeway	Main Street between Wilson Way and SR-99	Class II Bicycle Lanes	Road Diet	City of Stockton	1.5	$ 327,000.0
D	Main Street Bikeway	Main Street between SR-99 and Del Mar Avenue	Class II Bicycle Lanes	Road Diet	SJ County	0.7	$ 149,000.0
41		**Fremont Downtown Connector**					
A	Fremont Downtown Connector	Fremont Street between Baker Street and Harrison Street	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.1	$ 31,000.0
B	Fremont Downtown Connector	Fremont Street between Baker Street and El Dorado Street	Class II Bicycle Lanes	Road Diet	City of Stockton	0.5	$ 109,000.0
42		**Madison Street Bicycle Lanes**					
A	Madison Street Bicycle Lanes	Madison Street between Harding Way and Fremont Street	Class II Bicycle Lanes	Road Diet	City of Stockton	0.7	$ 149,000.0
43		**El Dorado/Center Separated Bikeways**					
A	El Dorado/Center Separated Bikeways	El Dorado Street between Acacia Street and Fifth Street, Center Street between Acacia Street and Fifth Street	Class IV Separated Bikeway	Road Diet	City of Stockton	2.0	$ 856,000
B	El Dorado/Center Separated Bikeways	El Dorado Street between Fifth Street and City Limits	Bikeway	Lane Striping	City of Stockton	2.6	$ 1,110,000
C	El Dorado/Center Separated Bikeways	El Dorado Street South of City Limits	Class II Bicycle Lanes	Lane Striping	City of Stockton/SJ County	0.8	$ 167,000.0
44		**McKinley Avenue Connector**					
A	McKinley Avenue Connector	McKinley Avenue between El Dorado Street and Industrial Drive	Class I Multi-use Path	Capital Improvements	SJ County	0.3	$ 726,000
45		**Weber Separated Bikeways**					
A	Weber Separated Bikeways	Weber Avenue between Washington Street and Lincoln Street	Class II Buffered Bicycle Lanes	Lane Striping	City of Stockton	0.5	$ 115,000
B	Weber Separated Bikeways	Weber Avenue between Lincoln Street and Center Street	Bikeway	Road Diet	City of Stockton	0.4	$ 154,000
C	Weber Separated Bikeways	Weber Avenue between Center Street and Airport Way	Bikeway	Further Study	City of Stockton	0.9	$ 398,000
46		**Hazelton Bikeway**					
A	Hazelton Bikeway	Hazelton Avenue between California Street and Wilson Way	Class II Bicycle Lanes	Road Diet	City of Stockton	0.9	$ 185,000.0
B	Hazelton Bikeway	Hazelton Avenue between Wilson Way and B Street	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.4	$ 91,000.0
47		**Marsh Bicycle Boulevard**					
A	Marsh Bicycle Boulevard	Hazelton Avenue between B Street and Court Street, Court Street between Hazelton Avenue and Alma Street, Alma Street between Court Street and Sharon Avenue, Sharon Avenue between Alma Street and Main Street, Marsh Street between Main Street and Broadway Avenue, Lafayette Street between Marsh Street and Garden Avenue, and east of Garden Avenue to Crosstown Freeway Bicycle & Pedestrian Bridge	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	1.6	$ 574,000
48		**Washington Bicycle Lanes**					
A	Washington Bicycle Lanes	Crosstown Freeway Bicycle & Pedestrian Bridge and Washington Street, and installation of bicycle lanes for Washington Street between Anteros Avenue and the Diverting Canal	Class II Bicycle Lanes	Capital Improvements	SJ County	1.4	$ 305,000.0
49		**Lincoln Bicycle Lanes**					
A	Lincoln Bicycle Lanes	Lincoln Street between Weber Avenue and French Camp Turnpike	Class II Bicycle Lanes	Road Diet	City of Stockton	1.2	$ 264,000.0

TABLE 1 (cont.)
Complete Project List

CITY OF STOCKTON BICYCLE MASTER PLAN

PROJECT LIST

Project Number	Corridor Project Name	Implementation Extents	Proposed Facility	Implementation	Jurisdiction	Distance (miles)	Cost Estimate
50		**French Camp Turnpike Bikeway**					
A	French Camp Turnpike Bikeway	French Camp Turnpike between Center Street and Lincoln Avenue	Class II Bicycle Lanes	Road Diet	City of Stockton	0.5	$ 104,000.0
B	French Camp Turnpike Bikeway	French Camp Turnpike between Lincoln Avenue and Eighth Street	Class II Bicycle Lanes	Lane Striping	City of Stockton	0.6	$ 130,000.0
C	French Camp Turnpike Bikeway	French Camp Turnpike between Eighth Street and Ninth Street	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton	0.2	$ 36,000.0
D	French Camp Turnpike Bikeway	French Camp Turnpike between Ninth Street and San Joaquin River Levee Rd/Walker Slough	Class II Bicycle Lanes	Lane Striping	City of Stockton	0.5	$ 100,000.0
E	French Camp Turnpike Bikeway	French Camp Turnpike between San Joaquin River Levee Rd/Walker Slough and Downing Avenue	Class II Bicycle Lanes	Capital Improvements	City of Stockton	0.3	$ 58,000.0
51		**Eighth Street Separated Bikeways**					
A	Eighth Street Separated Bikeways	Eighth Street between Houston Avenue and El Dorado Street	Class IV Separated Bikeway	Road Diet	City of Stockton	2.3	$ 980,000
B	Eighth Street Separated Bikeways	Eighth Street between El Dorado Street and California Street	Class III Bicycle Route	Signage Only	City of Stockton	0.3	$ 19,000
52		**Carolyn Weston Separated Bikeways**					
A	Carolyn Weston Separated Bikeways	Carolyn Weston Boulevard between French Camp Road and Ews Wood Boulevard (Includes future roadway through vacant parcel)	Class IV Separated Bikeway	Road Diet	City of Stockton	1.8	$ 754,000
B	Carolyn Weston Separated Bikeways	Carolyn Weston Boulevard between Ews Wood Boulevard and Downing Avenue, Downing Avenue between Carolyn Weston Boulevard and French Camp Turnpike	Class IV Separated Bikeway	Further Study	City of Stockton	0.9	$ 390,000
53		**Downing Bicycle Lanes**					
A	Downing Bicycle Lanes	Downing Avenue between French Camp Turnpike and Odell Avenue	Class II Bicycle Lanes	Lane Striping with Parking Removal	City of Stockton/SJ County	0.4	$ 76,000.0
54		**San Joaquin River Levee Trail**					
A	San Joaquin River Levee Trail	Levee Road (North Side of Walker Slough) between Eighth Street and French Camp Turnpike	Class I Multi-use Path	Capital Improvements	City of Stockton	2.6	$ 5,548,000
B	San Joaquin River Levee Trail	Levee Road (North Side of Walker Slough) between French Camp Turnpike and El Dorado Street	Class I Multi-Use Path	Capital Improvements	City of Stockton	0.8	$ 1,800,000
C	San Joaquin River Levee Trail	New connection between the San Joaquin River Levee Trail and Horton Avenue	Class I Multi-use Path	Capital Improvements	City of Stockton	0.2	$ 340,000
55		**Horton Bicycle Boulevard**					
A	Horton Bicycle Boulevard	Horton Avenue between future San Joaquin River Levee and El Dorado Street	Class III Bicycle Boulevard	Traffic Calming	City of Stockton	0.5	$ 175,000
56		**French Camp Bikeway**					
A	French Camp Bikeway	French Camp Road between Carolyn Weston Boulevard and Frank W Circle	Class IV Separated Bikeway	Capital Improvements	City of Stockton/SJ County	2.2	$ 943,000
B	French Camp Bikeway	French Camp Road between Frank W Circle and EL Dorado Street	Class II Bicycle Lanes	Capital Improvements	SJ County	0.2	$ 50,000.0
57		**Arch Airport Separated Bikeways**					
A	Arch Airport Separated Bikeways	Sperry Road between Performance Drive and Airport Way, and Arch Airport Road between Airport Way and Alitalia Way	Class IV Separated Bikeway	Capital Improvements	City of Stockton/SJ County	0.8	$ 347,000
B	Arch Airport Separated Bikeways	Arch Airport Road between Alitalia Way and Pock Lane	Bikeway	Improvements	Stockton/SJ	0.3	$ 132,000
C	Arch Airport Separated Bikeways	Arch Airport Road between Pock Lane and SR-99 Frontage Road, and Arch Road between SR-99 and City Limits	Class IV Separated Bikeway	Capital Improvements	City of Stockton/SJ County	2.5	$ 1,076,000
58		**Industrial Bikeway**					
A	Industrial Bikeway	Industrial Drive between McKinley Avenue and Airport Way	Class IV Separated Bikeway	Capital Improvements	City of Stockton	0.9	$ 374,000
B	Industrial Bikeway	Industrial Drive between Airport Way and SR-99 Frontage Road	Class II Buffered Bicycle Lanes	Road Diet	City of Stockton	1.7	$ 425,000
59		**Dr. MLK Jr. Separated Bikeways**					
A	Dr. MLK Jr. Separated Bikeways	Dr. Martin Luther King Jr. Boulevard between Lincoln Street and Golden Gate Avenue	Class IV Separated Bikeway	Further Study	City of Stockton	3.0	$ 1,255,000
60		**Golden Gate Bike Route**					
A	Golden Gate Bike Route	Golden Gate Avenue between Main Street and Dr. Martin Luther King Jr. Boulevard	Class III Bicycle Route	Signage Only	City of Stockton	0.2	$ 16,000
61		**B Street Bikeway Extension**					
A	B Street Bikeway Extension	B Street between Dr. Martin Luther King Jr. Boulevard and Fourth Street	Class II Bicycle Lanes	Lane Striping	City of Stockton	0.3	$ 70,000.0
B	B Street Bikeway Extension	B Street between Ralph Avenue and Arch Airport Road	Class II Bicycle Lanes	Lane Striping	City of Stockton	1.3	$ 269,000.0
62		**Eighth Street Bicycle Lanes (Southwest)**					
A	Eighth Street Bicycle Lanes (Southwest)	East Eighth Street between Airport Way and Mariposa Road	Class II Bicycle Lanes	Lane Striping	City of Stockton/SJ County	1.4	$ 303,000.0
63		**Mariposa Bicycle Lanes**					
A	Mariposa Bicycle Lanes	Mariposa Road between Dr. Martin Luther King Jr. Boulevard and 99 Frontage Road	Class II Bicycle Lanes	Road Diet	City of Stockton/SJ County	1.2	$ 255,000.0
B	Mariposa Bicycle Lanes	99 Frontage Road between Mariposa Road and future Duck Creek Trail Extension	Class II Bicycle Lanes	Lane Striping	City of Stockton/SJ County	0.4	$ 86,000.0

TABLE 1 (cont.)
Complete Project List

CITY OF STOCKTON BICYCLE MASTER PLAN

PROJECT LIST

Project Number	Corridor Project Name	Implementation Extents	Proposed Facility	Implementation	Jurisdiction	Distance (miles)	Cost Estimate
64		**Duck Creek Trail Extension**					
A	Duck Creek Trail Extension	Duck Creek between B Street and 99 Frontage Road	Path	Improvements	SJ County	2.2	$ 4,804,000
65		**Delta Cove Multi-use Path**					
A	Delta Cove Multi-use Path	Surrounding the future Delta Cove development on the levee	Class I Multi-use Path	Capital Improvements	City of Stockton	3.0	$ 6,472,000
66		**Sanctuary Multi-use Path**					
A	Sanctuary Multi-use Path	Surrounding the future Sanctuary development on the levee	Class I Multi-use Path	Capital Improvements	City of Stockton	8.0	$ 17,307,000
67		**Harding Way Complete Streets Study**					
A	Sanctuary Multi-use Path	Harding Way between Baker Street and California Street	Class II Buffered Bicycle Lanes	Further Study	City of Stockton	0.9	$ 232,000

IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less than Significant With Mitigation Incorporated" as indicated by the checklist on the following pages.

X	Aesthetics		Agriculture and Forest Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources		Geology and Soils
	Greenhouse Gas Emissions		Hazards and Hazardous Materials		Hydrology/Water Quality
X	Land Use and Planning		Mineral Resources		Noise
	Population and Housing		Public Services		Recreation
X	Transportation/Traffic	X	Tribal Cultural Resources		Utilities and Service Systems
	Mandatory Findings of Significance				

V. DETERMINATION

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Name _____

Signature _____ Date _____

VI. EVALUATION OF ENVIRONMENTAL IMPACTS

This section evaluates the potential environmental effects of the proposed project using the environmental checklist from the State CEQA Guidelines as amended. The definitions of the potential level of impact in the response column headings are as follows:

A. Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

B. Less Than Significant With Mitigation Incorporated: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

C. Less Than Significant Impact: An impact is considered adverse but does not trigger a significance threshold.

D. No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

I. AESTHETICS Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?		X		
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?		X		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

Environmental Setting

The City of Stockton is located near the center of San Joaquin County and is located approximately 80 miles east of the San Francisco Bay area and 40 miles south of Sacramento. The Plan Area's proximity to the San Joaquin Delta (Delta) allows for the developed areas of the City to interact with a variety of open space environments.

Discussion

a) *Have a substantial adverse effect on a scenic vista?* ***(Less than Significant with Mitigation Incorporated)***

The Stockton General Plan states that "the most significant visual features within this portion of the Study Area are existing agricultural and open space areas, including views of the Sierras. Riparian areas along the local waterways including the San Joaquin River, the Calaveras River, and the larger Delta also provide important visual elements within the Study Area. The Plan could result in the implementation of a variety of bicycle facilities and related structures along streets, rivers, canals, and other geographic feature areas. Such improvements, including signage and fencing should be compatible with the surrounding environment. In addition, signage should be placed to avoid obstructing scenic views. Finally, access to view corridors may be improved with implementation of bicycle facilities in some areas. **Mitigation Measures I.1 through I.3** would reduce potential impacts to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?* ***(Less than Significant with Mitigation Incorporated)***

The current Caltrans Map of Designated Scenic Routes shows that there are no official state-designated or eligible scenic routes within the Plan Area. However, the San Joaquin County 2035 General Plan Draft EIR Scenic Routes Map identifies several locally designated scenic roadway segments in the Study Area including W. Eight Mile and Empire Tract Roads. As mentioned previously, additional scenic resources in Stockton include existing agricultural and open space areas, including views of the Sierras, as well as Riparian areas along the local waterways including views of the San Joaquin River, the Calaveras River, and the Delta.

The City of Stockton General Plan identifies ten (10) State Historic Landmarks, two (2) State Historical Points of Interest, 48 City Historic Landmarks/Sites, and several historic bridges. The General Plan further identifies two (2) Historic Preservation Districts, the Magnolia Historic District and Doctor's Row District, and an area designated the "Old City" that is bounded by Harding Way, Wilson Way, Charter Way, and Pershing Avenue.

The proposed projects identified in the Bicycle Master Plan are not expected to substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway. However, some bicycle projects could require the removal or relocation of exiting trees. The implementation of **Mitigation Measure I.4** would reduce this impact to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?* ***(Less than Significant with Mitigation Incorporated)***

The Plan would involve the development of bikeways, signage, and other support facilities. The proposed bicycle projects would primarily be implemented in the developed portions of the Plan Area. The Plan could result in the implementation of a variety of bicycle facilities and related structures along streets, rivers, canals, and other geographic feature areas. Such improvements, including signage and fencing should be designed to be compatible with the surrounding environment. In addition, signage should be placed to avoid degradation of the existing visual character of the surrounding site or area. **Mitigation Measures I.1 though I.4** would reduce potential impacts to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* ***(Less Than Significant with Mitigation Incorporated)***

While many of the proposed bicycle facilities are located within the urbanized areas of the Plan Area and would not substantially degrade existing day or nighttime views, other proposed bicycle improvements in the suburban areas of the Plan Area could introduce new sources of light or glare. With the application of **Mitigation Measure I.5**, the impact would be reduced to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

Mitigation Measures

I.1: Off-street trails and bikeways shall be designed to minimize the amount of cut and fill, conform to existing topography and minimize vertical height of cut/fill slopes to less than three (3) feet, unless additional analysis is completed. All graded areas shall be revegetated with site-appropriate native plant species.

I.2: Retaining walls shall be limited to three (3) feet, with a maximum slope ratio of 2:1 unless a supplemental study is completed.

I.3: Structural elements shall be minimized. Bridges, boardwalks, retaining walls, fencing, signage, and other structures shall be compatible with the existing landscape setting and follow approved signage design standards. Avoid placement of bicycle support facilities and/or signage at key areas of scenic viewpoints and trailheads.

I.4: Removal of trees to accommodate bicycle facilities development shall be minimized to the greatest extent practicable.

I.5: Lighting of bicycle facilities shall be limited to that required for safety. Lighting shall be directed down onto the facility itself and shall not spill over onto adjacent land uses.

II. AGRICULTURE AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land, or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Environmental Setting

As noted in the City of Stockton General Plan, the City of Stockton Sphere of Influence (SOI) includes 2,340 acres of Open Space/Agriculture land use. This represents approximately 3% of the total SOI acreage for the City of Stockton. However, it should be noted that these 2,340 acres of Open Space/Agriculture land use is not classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance according to the Farmland Mapping and Monitoring Program.

Discussion

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?* ***(No Impact)***

The Plan Area is surrounded by agricultural land as shown on the Farmland Mapping and Monitoring Program of the California Resources Agency. However, except for three small areas (classified as residential in the City of Stockton General Plan), the monitoring program classifies the City of Stockton as "Urban and Built-Up Land". Therefore, Plan would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?* ***(No Impact)***

Land with the City of Stockton SOI with a Williamson Act contract as of 2016, include a property adjacent to Henry Long Boulevard, French Camp Road, and Bear Creek. However, the City of Stockton Bicycle Master Plan would include the development of bikeways and appropriate facilities/signage within City rights-of-way or along drainageways. Therefore, the Plan would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?* ***(No Impact)***

The City of Stockton does not have any land that is designated as forest land, timberland, or timberland zoned Timberland Production. Therefore, the Plan would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

d) *Result in the loss of forest land, or conversion of forest land to non-forest use?* ***(No Impact)***

The City of Stockton does not have any land that is designated as forest land. Therefore, the Plan would not result on the loss of forest land, or conversion of forest land to non-forest use.

e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?* ***(No Impact)***

The City of Stockton Bicycle Master Plan would include the development of bikeways and appropriate facilities/signage within City rights-of-way or along drainageways. Therefore, the Plan would not

involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?				X

Environmental Setting

The City of Stockton is located in one of the most polluted air basins in the country – the San Joaquin Valley Air Basin (SJVAB). The surrounding topography includes foothills and mountains to the east and west. These mountain ranges direct air circulation and dispersion patterns. Temperature inversions can trap air within the Valley, thereby preventing the vertical dispersal of air pollutants. In addition to topographic conditions, the local climate can also contribute to air quality problems. Climate in Stockton is classified as Mediterranean, with moist cool winters and dry warm summers.

The SJVAB is comprised of eight counties: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. Encompassing 24,840 square miles, the San Joaquin Valley is the second largest air basin in California. Cumulatively, counties within the Air Basin represent approximately 16 percent of the State's geographic area. The Air Basin is bordered by the Sierra Nevada Mountains on the east (8,000 to 14,492 feet in elevation), the Coastal Range on the west (4,500 feet in elevation), and the Tehachapi Mountains on the south (9,000 feet elevation). The San Joaquin Valley is open to the north extending to the Sacramento Valley Air Basin.

Wind patterns within the SJVAB result from marine air that generally flows into the Basin from the San Joaquin River Delta. The Coastal Range hinders wind access into the Valley from the west, the Tehachapi's prevent southerly passage of airflow, and the high Sierra Nevada Mountain Range provides a significant barrier to the east. These topographic features result in weak airflow that becomes restricted vertically

by high barometric pressure over the Valley. As a result, the SJVAB is highly susceptible to pollutant accumulation over time. Most of the surrounding mountains are above the normal height of summer inversion layers (1,500-3,000 feet).

San Joaquin Valley Air Basin Monitoring

The SJVAB consists of eight counties, from San Joaquin County in the north to Kern County in the south. SJVAPCD and the ARB maintain numerous air quality monitoring sites throughout each County in the Air Basin to measure ozone, PM2.5, and PM10. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. The nearest monitoring station to the City of Stockton is located at Stockton's Hazelton Street Monitoring Station (Wilson Way at Sonora Street). The station monitors particulates, ozone, carbon monoxide, and nitrogen dioxide. Monitoring data for the past three years is summarized in Table AQ-1.

TABLE AQ-1
Maximum Pollutant Levels at Stockton's Hazelton Street Monitoring Station

Pollutant	Time Averaging	2013 Maximums	2014 Maximums	2015 Maximums	Standards National	Standards State
Ozone (O_3)	1 hour	0.080 ppm	0.090 ppm	0.094 ppm	-	0.09 ppm
Ozone (O_3)	8 hour	0.067 ppm	0.077 ppm	0.078 ppm	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)[a]	8 hour	--	--	--	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO_2)	1 hour	62.4 ppb	66.9 ppb	58.0 ppb	100 ppb	0.18 ppm
Nitrogen Dioxide (NO_2)	Annual Average	15.0 ppb	13.0 ppb	11.0 ppb	0.053 ppm	0.030 ppm
Particulates (PM_{10})	24 hour	95.5 µg/m^3	94.0 µg/m^3	55.3 µg/m^3	150 µg/m^3	50 µg/m^3
Particulates (PM_{10})	Federal Annual Arithmetic Mean	31.3 µg/m^3	24.1 µg/m^3	27.4 µg/m^3	-	20 µg/m^3
Particulates ($PM_{2.5}$)	24 hour	66.5 µg/m^3	56.8 µg/m^3	58.8 µg/m^3	35 µg/m^3	-
Particulates ($PM_{2.5}$)	Federal Annual Arithmetic Mean	17.6 µg/m^3	12.1 µg/m^3	12.8 µg/m^3	12 µg/m^3	12 µg/m^3

Source: California Air Resources Board (ADAM) Air Pollution Summaries

a: Data not available

Air Quality Standards

The Federal Clean Air Act (FCAA), first adopted in 1963, and periodically amended since then, established National Ambient Air Quality Standards (NAAQS). A set of 1977 amendments determined a deadline for the attainment of these standards. That deadline has since passed. Other CAA amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources.

In 1988, the State of California passed the CCAA (State 1988 Statutes, Chapter 568), which set forth a program for achieving more stringent California Ambient Air Quality Standards. The ARB implements State ambient air quality standards, as required in the CCAA, and cooperates with the federal government in implementing pertinent sections of the FCAA Amendments (FCAAA). Further, CARB regulates vehicular emissions throughout the State. The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates stationary sources, as well as some mobile sources. Attainment of the more stringent State PM10 Air Quality Standards is not currently required.

The EPA uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called the NAAQS.

The SJVAPCD operates regional air quality monitoring networks that provide information on average concentrations of pollutants for which State or federal agencies have established ambient air quality standards. Descriptions of nine pollutants of importance in San Joaquin County follow.

- ✓ **Ozone (1-hour and 8-hour)**

  The most severe air quality problem in the Air Basin is the high level of ozone. Ozone occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. Here, ground level, or "bad" ozone, is an air pollutant that damages human health, vegetation, and many common materials. It is a key ingredient of urban smog. The troposphere extends to a level about 10 miles up, where it meets the second layer, the stratosphere. The stratospheric, or "good" ozone layer, extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays.

  "Bad" ozone is what is known as a photochemical pollutant. It needs reactive organic gases (ROG), NOx, and sunlight. ROG and NOx are emitted from various sources throughout San Joaquin County. To reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors.

  Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

  Ozone is a regional air pollutant. It is generated over a large area and is transported and spread by wind. Ozone, the primary constituent of smog, is the most complex, difficult to control, and pervasive of the criteria pollutants. Unlike other pollutants, ozone is not emitted directly into the air by specific sources. Ozone is created by sunlight acting on other air pollutants (called precursors), specifically NOx and ROG. Sources of precursor gases to the photochemical reaction that form ozone number in the thousands. Common sources include consumer products, gasoline vapors, chemical solvents, and combustion products of various fuels. Originating from gas stations, motor vehicles, large industrial facilities, and small businesses such as bakeries and dry cleaners, the ozone-forming chemical reactions often take place in another location, catalyzed by sunlight and heat. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins. Approximately 50 million people lived in counties with air quality levels above the EPA's health-based national air quality standard in 1994. The highest levels of ozone were recorded in Los Angeles, closely followed by the San Joaquin Valley. High levels also persist in other heavily populated areas, including the Texas Gulf Coast and much of the Northeast.

  While the ozone in the upper atmosphere absorbs harmful ultraviolet light, ground-level ozone is damaging to the tissues of plants, animals, and humans, as well as to a wide variety of inanimate materials such as plastics, metals, fabrics, rubber, and paints. Societal costs from ozone damage

include increased medical costs, the loss of human and animal life, accelerated replacement of industrial equipment, and reduced crop yields.

- ***Health Effects***

  While ozone in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground-level ozone can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems, such as: forests and foothill communities; agricultural crops; and some man-made materials, such as rubber, paint, and plastic. High levels of ozone may negatively affect immune systems, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia. Ozone accelerates aging and exacerbates pre-existing asthma and bronchitis and, in cases with high concentrations, can lead to the development of asthma in active children. Active people, both children and adults, appear to be more at risk from ozone exposure than those with a low level of activity. Additionally, the elderly and those with respiratory disease are also considered sensitive populations for ozone.

  People who work or play outdoors are at a greater risk for harmful health effects from ozone. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities. Research indicates that children under 12 years of age spend nearly twice as much time outdoors daily than adults. Teenagers spend at least twice as much time as adults in active sports and outdoor activities. In addition, children inhale more air per pound of body weight than adults, and they breathe more rapidly than adults. Children are less likely than adults to notice their own symptoms and avoid harmful exposures.

  Ozone is a powerful oxidant—it can be compared to household bleach, which can kill living cells (such as germs or human skin cells) upon contact. Ozone can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. Ozone in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to levels of ozone above the current ambient air quality standard leads to lung inflammation and lung tissue damage and a reduction in the amount of air inhaled into the lungs.

  The ARB found ozone standards in San Joaquin County nonattainment of Federal and State standards.

✓ **Suspended PM (PM10 and PM2.5)**

Particulate matter pollution consists of very small liquid and solid particles that remain suspended in the air for long periods. Some particles are large or concentrated enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter is emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. PM10 refers to particles less than or equal to 10 microns in aerodynamic diameter. PM2.5 refers to particles less than or equal to

2.5 microns in aerodynamic diameter and are a subset of PM10. Particulates of concern are those that are 10 microns or less in diameter. These are small enough to be inhaled, pass through the respiratory system and lodge in the lungs, possibly leading to adverse health effects.

In the western United States, there are sources of PM10 in both urban and rural areas. Because particles originate from a variety of sources, their chemical and physical compositions vary widely. The composition of PM10 and PM2.5 can also vary greatly with time, location, the sources of the material and meteorological conditions. Dust, sand, salt spray, metallic and mineral particles, pollen, smoke, mist, and acid fumes are the main components of PM10 and PM2.5. In addition to those listed previously, secondary particles can also be formed as precipitates from chemical and photochemical reactions of gaseous sulfur dioxide (SO2) and NOx in the atmosphere to create sulfates (SO4) and nitrates (NO3). Secondary particles are of greatest concern during the winter months where low inversion layers tend to trap the precursors of secondary particulates.

The ARB 2008 PM2.5 Plan builds upon the aggressive emission reduction strategy adopted in the 2007 Ozone Plan and strives to bring the valley into attainment status for the 1997 NAAQS for PM2.5. The 2008 PM2.5 Plan indicates that all planned reductions from the 2007 Ozone Plan and state standard.

The following new controls considered in the 2008 PM2.5 Plan include:

- Tighter restrictions on residential wood burning and space heating
- More stringent limits on PM2.5, SO2, and NOx emissions from industrial sources
- Measures to reduce emissions from prescribed burning and agricultural burning
- More effective work practices to control PM2.5 in fugitive dust

The control strategy in this plan would also bring the valley closer to attainment status for the 2006 daily PM2.5 standard. The district presented the draft 2008 PM2.5 Plan to the District Governing Board on April 17, 2008, following a 30-day public comment period. This plan was delivered to the EPA in April 2008. The 2008 PM2.5 Plan for the 1997 PM2.5 standard (as revised in 2011) was approved by EPA on November 9, 2011, which contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions, as well as a trading mechanism. The motor vehicle emissions budget for PM2.5 includes directly emitted PM2.5 motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SOx, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes.

- ***Health Effects***

  PM10 and PM2.5 particles are small enough—about one-seventh the thickness of a human hair, or smaller—to be inhaled and lodged in the deepest parts of the lung where they evade the respiratory system's natural defenses. Health problems begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. Non-health-related effects include reduced visibility and soiling of buildings. PM10 can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases,

and reduce the body's ability to fight infections. PM10 and PM2.5 can aggravate respiratory disease and cause lung damage, cancer, and premature death.

Although particulate matter can cause health problems for everyone, certain people are especially vulnerable to adverse health effects of PM10. These "sensitive populations" include children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis. Of greatest concern are recent studies that link PM10 exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM10 can also damage manmade materials and is a major cause of reduced visibility in many parts of the United States.

The ARB found PM10 standards in San Joaquin County in attainment of Federal standards and nonattainment for State standards. The ARB found PM2.5 standards in Fresno County nonattainment of Federal and State standards.

✓ **Carbon Monoxide (CO)**

Carbon monoxide (CO) is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive. CO is a byproduct of motor vehicle exhaust, contributes more than two thirds of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO.

- ***Health Effects***

CO enters the bloodstream and binds more readily to hemoglobin than oxygen, reducing the oxygen-carrying capacity of blood and thus reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and in prolonged, enclosed exposure, death.

The adverse health effects associated with exposure to ambient and indoor concentrations of CO are related to the concentration of carboxyhemoglobin (COHb) in the blood. Health effects observed may include an early onset of cardiovascular disease; behavioral impairment; decreased exercise performance of young, healthy men; reduced birth weight; sudden infant death syndrome (SIDS); and increased daily mortality rate.

Most of the studies evaluating adverse health effects of CO on the central nervous system examine high-level poisoning. Such poisoning results in symptoms ranging from common flu and cold symptoms (shortness of breath on mild exertion, mild headaches, and nausea) to unconsciousness and death.

The ARB found CO standards in San Joaquin County in attainment of Federal and State standards.

✓ **Nitrogen Dioxide (NO2)**

Nitrogen oxides (NOx) is a family of highly reactive gases that are primary precursors to the formation of ground-level ozone and react in the atmosphere to form acid rain. NOx is emitted from combustion processes in which fuel is burned at high temperatures, principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. A brownish gas, NOx is a strong oxidizing agent that reacts in the air to form corrosive nitric acid, as well as toxic organic nitrates.

- ***Health Effects***

NOx is an ozone precursor that combines with Reactive Organic Gases (ROG) to form ozone. See the ozone section above for a discussion of the health effects of ozone.

Direct inhalation of NOx can also cause a wide range of health effects. NOx can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of nitrogen dioxide (NO2) may lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO2 may lead to increased susceptibility to respiratory infection and may cause irreversible alterations in lung structure. Other health effects associated with NOx are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO2 may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. NOx can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to production of particulate nitrates. Airborne NOx can also impair visibility. NOx is a major component of acid deposition in California. NOx may affect both terrestrial and aquatic ecosystems. NOx in the air is a potentially significant contributor to a number of environmental effects such as acid rain and eutrophication in coastal waters. Eutrophication occurs when a body of water suffers an increase in nutrients that reduce the amount of oxygen in the water, producing an environment that is destructive to fish and other animal life.

NO2 is toxic to various animals as well as to humans. Its toxicity relates to its ability to combine with water to form nitric acid in the eye, lung, mucus membranes, and skin. Studies of the health impacts of NO2 include experimental studies on animals, controlled laboratory studies on humans, and observational studies.

In animals, long-term exposure to NOx increases susceptibility to respiratory infections, lowering their resistance to such diseases as pneumonia and influenza. Laboratory studies show susceptible humans, such as asthmatics, exposed to high concentrations of NO2, can suffer lung irritation and, potentially, lung damage. Epidemiological studies have also shown associations between NO2 concentrations and daily mortality from respiratory and cardiovascular causes as well as hospital admissions for respiratory conditions.

NOx contributes to a wide range of environmental effects both directly and when combined with other precursors in acid rain and ozone. Increased nitrogen inputs to terrestrial and wetland

systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters can lead to eutrophication as discussed above. Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates conditions of low pH and levels of aluminum that are toxic to fish and other aquatic organisms.

The ARB found NO2 standards in San Joaquin County in unclassified/attainment of Federal standards and attainment for State standards.

- ✓ **Sulfur Dioxide (SO2)**

The major source of sulfur dioxide (SO2) is the combustion of high-sulfur fuels for electricity generation, petroleum refining and shipping. High concentrations of SO2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Short-term exposures of asthmatic individuals to elevated SO2 levels during moderate activity may result in breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Other effects that have been associated with longer-term exposures to high concentrations of SO2, in conjunction with high levels of PM, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO2 also is a major precursor to PM2.5, which is a significant health concern and a main contributor to poor visibility. In humid atmospheres, sulfur oxides can react with vapor to produce sulfuric acid, a component of acid rain.

The ARB found SO2 standards in San Joaquin County as unclassified for Federal standards and attainment for State standards.

- ✓ **Lead (Pb)**

Lead, a naturally occurring metal, can be a constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Lead was used until recently to increase the octane rating in automobile fuel. Since the 1980s, lead has been phased out in gasoline, reduced in drinking water, reduced in industrial air pollution, and banned or limited in consumer products. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels; however, the use of leaded fuel has been mostly phased out. Since this has occurred the ambient concentrations of lead have dropped dramatically.

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children. Effects on the nervous systems of children are one of the primary health risk concerns from lead. In high concentrations, children can even suffer irreversible brain damage and death. Children 6 years old and under are most at risk, because their bodies are growing quickly.

The ARB found Lead standards in San Joaquin County in unclassified/attainment of Federal standards and attainment for State standards.

✓ **Toxic Air Contaminants (TACs)**

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination. The ten TACs are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (diesel PM). Caltrans' guidance for transportation studies references the Federal Highway Administration (FHWA) memorandum titled "Interim Guidance on Air Toxic Analysis in NEPA Documents" which discusses emissions quantification of six "priority" compounds of 21 Mobile Source Air Toxics (MSAT) identified by the United States Environmental Protection Agency (USEPA). The six-diesel exhaust (particulate matter and organic gases), benzene, 1,3-butadiene, acetaldehyde, formaldehyde, and acrolein.

Some studies indicate that diesel PM poses the greatest health risk among the TACs listed above. A 10-year research program (California Air Resources Board 1998) demonstrated that diesel PM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to diesel PM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

Diesel PM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a diesel PM exposure method. This method uses the ARB emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of diesel PM. The ARB Handbook's includes recommended buffer distances associated with various types of common sources.

Existing air quality concerns within San Joaquin County and the entire SJVAB are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

- ✓ **Odors**

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor.

Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

- ✓ **Naturally Occurring Asbestos (NOA)**

Asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Asbestos is commonly found in ultramafic rock and near fault zones. The amount of asbestos that is typically present in these rocks ranges from less than 1% up to approximately 25% and sometimes more. It is released from ultramafic rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways, which are surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. Asbestos is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time. Asbestos is hazardous and can cause lung disease and cancer dependent upon the level of exposure. The longer a person is exposed to asbestos and the greater the intensity of the exposure, the greater the chances for a health problem.

The proposed Project's construction phase may cause asbestos to become airborne due to the construction activities that will occur on site. In order to control naturally-occurring asbestos dust,

the project can use some of the following control actions to reduce the release of airborne asbestos fibers:

- Water wetting of road surfaces
- Rinse vehicles and equipment
- Wet loads of excavated material, and
- Cover loads of excavated material

Regulatory Setting

Air quality within the Project area is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies primarily responsible for improving the air quality within San Joaquin County are discussed below along with their individual responsibilities.

Federal Agencies

- ✓ **U.S. Environmental Protection Agency (EPA) -** The Federal Clean Air Bill first adopted in 1967 and periodically amended since then, established federal ambient air quality standards. A 1987 amendment to the Bill set a deadline for the attainment of these standards. That deadline has since passed. The other federal Clean Air Bill Amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources. The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the 1990 amendments.

  The Federal Clean Air Act (FCAA) and the national ambient air quality standards identify levels of air quality for six "criteria" pollutants, which are considered the maximum levels of ambient air pollutants considered safe, with an adequate margin of safety, to protect public health and welfare. The six criteria pollutants include ozone, CO, nitrogen dioxide, sulfur dioxide, particulate matter, and lead.

  The Clean Air Act Section 176(c) (42 U.S.C. 7506(c)) and EPA transportation conformity regulations (40 CFR 93 Subpart A) require that each new RTP and TIP be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). The conformity analysis is a federal requirement designed to demonstrate compliance with the national ambient air quality standards. However, because the San Joaquin Valley State Implementation Plan (SIP) for CO, PM_{10}, $PM_{2.5}$ and Ozone address attainment of both the state and federal standards, for these pollutants, demonstrating conformity to the federal standards is also an indication of progress toward attainment of the state standards. Compliance with the state air quality standards is provided on the pages following this federal conformity discussion.

  The EPA approved San Joaquin Valley reclassification of the ozone (8-hour) designation to extreme nonattainment in the Federal Register on May 5, 2010, even though the San Joaquin Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard. In accordance with the FCAA, EPA uses the design value at the time of standard promulgation to assign nonattainment areas to one of several classes that reflect the severity of the nonattainment problem; classifications range from marginal nonattainment to extreme nonattainment. In the Federal Register on October 26, 2015, the EPA revised the primary and secondary standard to 0.070 ppm to provide increased

public health protection against health effects associated with long- and short-term exposures. The previous ozone standard was set in 2010 at 0.075ppm.

San Joaquin County is considered to be in nonattainment of ozone and $PM_{2.5}$ standards.

State Agencies

- ✓ **California Air Resources Board (ARB) -** The California Air Resources Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing its own air quality legislation called the California Clean Air Act (CCAA), adopted in 1988. The ARB was created in 1967 from the merging of the California Motor Vehicle Pollution Control Board and the Bureau of Air Sanitation and its Laboratory.

  The ARB has primary responsibility in California to develop and implement air pollution control plans designed to achieve and maintain the National Ambient Air Quality Standards (NAAQS) established by the EPA. Whereas the ARB has primary responsibility and produces a major part of the SIP for pollution sources that are statewide in scope, it relies on the local air districts to provide additional strategies for sources under their jurisdiction. The ARB combines its data with all local district data and submits the completed SIP to the EPA. The SIP consists of the emissions standards for vehicular sources and consumer products set by the ARB, and attainment plans adopted by the Air Pollution Control Districts (APCDs) and Air Quality Management District's (AQMDs) and approved by the ARB.

  States may establish their own standards, provided the state standards are at least as stringent as the NAAQS. California has established California Ambient Air Quality Standards (CAAQS) pursuant to California Health and Safety Code (CH&SC) [§39606(b)] and its predecessor statutes.

  The CH&SC [§39608] requires the ARB to "identify" and "classify" each air basin in the state on a pollutant-by-pollutant basis. Subsequently, the ARB designated areas in California as nonattainment based on violations of the CAAQSs. Designations and classifications specific to the SJVAB can be found in the next section of this document. Areas in the state were also classified based on severity of air pollution problems. For each nonattainment class, the CCAA specifies air quality management strategies that must be adopted. For all nonattainment categories, attainment plans are required to demonstrate a five-percent-per-year reduction in nonattainment air pollutants or their precursors, averaged every consecutive three-year period, unless an approved alternative measure of progress is developed. In addition, air districts in violation of CAAQS are required to prepare an Air Quality Attainment Plan (AQAP) that lays out a program to attain and maintain the CCAA mandates.

  Other ARB duties include monitoring air quality. The ARB has established and maintains, in conjunction with local APCDs and air quality management districts, a network of sampling stations (called the State and Local Air Monitoring [SLAMS] network), which monitor the present pollutant levels in the ambient air.

Regional Agencies

- ✓ **San Joaquin Valley Air Pollution Control District** - The SJVAPCD is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within San Joaquin County and throughout the SJVAB. The District also has responsibility for monitoring air

quality and setting and enforcing limits for source emissions. The ARB is the agency with the legal responsibility for regulating mobile source emissions. The District is precluded from such activities under State law.

Activities of the SJVAPCD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

Discussion

a) *Conflict with or obstruct implementation of the applicable air quality plan?* ***(Less Than Significant Impact)***

The primary way of determining consistency with the air quality plan's (AQP's) assumptions is determining consistency with the applicable General Plan to ensure that the Project is consistent with the goals and policies used in the AQPs for the air basin. The Health & Safety Element of the City of Stockton General Plan Update identifies numerous policies and measures to reduce air quality within the Plan Area. Those policies include providing bicycle access to large development projects, street design that provides an environment which encourages transit use, biking and walking, and encouraging all new development to be designed in a manner that promotes bicycle access. In addition, the Transportation and Circulation Element includes policies such as encouraging pedestrian and bicycle travel as viable modes of movement throughout the Plan Area by providing safe and convenient pedestrian and bicycle facilities within and linking commercial areas, residential neighborhoods, and employment centers.

One of the goals of the Plan is to provide a connected bicycle grid of low stress facilities that acts as the primary spine for the north/south and east/west routes while closing gaps in the existing network. As such, the Plan coincides with the goals and objectives of the City of Stockton General Plan, the San Joaquin County General Plan, as well as regional AQP's (The SJVAPCD 2013 Ozone, 2007 PM_{10}, and 2012 $PM_{2.5}$Plans). As a result, implementation of the City of Stockton Bicycle Master Plan Update will not conflict with or obstruct implementation of any local, regional, state or federal air quality plan, and therefore, the Plan will have a less than significant impact.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?* ***(Less Than Significant with Mitigation Incorporated)***

As noted previously, one of the goals of the Plan is to provide a connected bicycle grid of low stress facilities that acts as the primary spine for the north/south and east/west routes while closing gaps in the existing network. The projects associated with the Plan are designed to reduce air quality emissions by encouraging bicycle travel as a viable mode of movement in the Plan Area. Therefore,

implementation of the Plan will not contribute to an existing or projected air quality violation or violate an air quality standard.

Short-term impacts related to the construction phase of a project are recognized to be short in duration. Construction air quality impacts are generally attributable to dust generated by equipment and vehicles. Fugitive dust is emitted both during construction activity and as a result of wind erosion over exposed earth surfaces. Clearing and earth moving activities do comprise major sources of construction dust emissions, but traffic and general disturbances of soil surfaces also generate significant dust emissions. Further, dust generation is dependent on soil type and soil moisture.

The environmental document for the Plan is not project specific. However, the Sacramento Air Quality Management District's Road Construction Emissions Model (version 7.1.5.1) was used to estimate the construction emissions associated with the development of a 5-mile-long bikeway construction project. Bicycle projects are typically 1 to 3 miles in length, but a length of 5 miles was used to provide a conservative estimate of construction emissions associated with a bicycle project. Table AQ-2 shows the estimated construction emissions that would be generated from a bicycle project 5 miles in length. Results of the analysis show that emissions generated from the construction phase of a 5-mile bicycle project will not exceed the SJVAPCD emission thresholds. Construction emissions associated with development of the Plan are therefore considered less than significant with the implementation of Regulation VIII control measures – **Mitigation Measure III.1.**

TABLE AQ-2
Construction Emissions (tons/year)

Summary Report	CO	NO_X	ROG	PM_{10}	$PM_{2.5}$
Construction Emissions Per Year	3.40	5.40	0.60	3.10	0.80
SJVAPCD Level of Significance	100	10	10	15	15
Does the Project Exceed Standard?	No	No	No	No	No

Source: Road Construction Emissions Model, 7.1.5.1

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?* ***(Less Than Significant with Mitigation Incorporated)***

One of the goals of the Plan is to provide a connected bicycle grid of low stress facilities that acts as the primary spine for the north/south and east/west routes while closing gaps in the existing network. As such, the Plan coincides with the goals and objectives of the City of Stockton General Plan, the San Joaquin County General Plan, as well as regional AQP's (The SJVAPCD 2013 Ozone, 2007 PM_{10}, and 2012 $PM_{2.5}$Plans). Further, the projects associated with the Plan are designed to reduce air quality emissions by encouraging bicycle travel as a viable mode of movement in the Plan Area. It should be

noted that approximately 33 projects included in the Bicycle Master Plan Update will be implemented via "Road Diets". The most common type of road diet, is the conversion of a four-lane undivided roadway to a three-lane roadway, with two through lanes and a center Two-Way-Left-Turn-Lane (TWLTL). The space previously allocated to the fourth lane is then converted to other uses, such as sidewalks, parking, or bicycle lanes.

Road diets can offer benefits to all roadway users. Drivers benefit as left-turning vehicles pull out of the through-travel lane to make turns, which reduces the need to either wait behind a turning vehicle or make a lane change. Pedestrians benefit as it reduces the number of travel lanes that must be crossed, and bicyclists benefit as dedicated roadway space is provided for them. Road diets also moderate travel speeds through a corridor, as speeds are governed by the lead vehicle, which not only improves the bicycle and pedestrian experience, but in combination with the reduction in vehicle interactions reduces crash frequency and severity. It should be noted that reducing the number of travel lanes could potentially increase vehicle delay along the corridor, thus potentially increasing air quality emissions. The Road Diet Informational Guide, developed by the U.S. Department of Transportation Federal Highway Administration, advises that roadways with ADT of 20,000 vpd or less may be good candidates for a road diet. Roadways with an ADT of 20,000 or less don't typically show an increase in congestion with implementation of a roadway diet. According to the Road Diet Informational Guide, there is concern with the reduction four-lane undivided roadways to three-lane cross-sections with a road diet. However, planners/traffic engineers have found that some of the four-lane undivided roads operate as three-lane roadways (one lane in each direction with TWLTL) due to turning movements and driver propensities. An operational analysis, including appropriate mitigation measures, should be conducted on roadways that exceed 15,000 vpd to confirm level of service conditions with a road diet.

When specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents. Implementation of **Mitigation Measures III.2** would ensure that any specific bicycle project implemented via a road died will be evaluated for potential decreases in vehicle delay and levels of service. As a result, this impact would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations? ***(Less than Significant Impact)***

Sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses that have the greatest potential to attract these types of sensitive receptors include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential communities.

The first step in evaluating the potential for impacts to sensitive receptors for TAC's from the Project is to perform a screening level analysis. One type of screening tool is found in the ARB Handbook: Air Quality and Land Use Handbook: A Community Perspective. This handbook includes a table (depicted in Table 1-1 of the handbook) with recommended buffer distances associated with various types of common sources. The Bicycle Master Plan does not include land uses that are depicted in Table 1-1 of the handbook. Therefore, TAC's are not a concern based upon the uses provided in Table 1-1. However, any bicycle facilities proposed adjacent to major truck routes could potentially locate sensitive receptors to near existing sources of TAC. It should be noted that the bicycle facilities under

the Plan will be consistent with the City of Stockton General Plan, and the San Joaquin County General Plan. Also, the 2007 EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050.

Therefore, the Plan would result in a less than significant impact on sensitive receptors exposed to substantial pollutant concentrations.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

e) *Create objectionable odors affecting a substantial number of people?* ***(No Impact)***

The SJVAPCD requires that an analysis of potential odor impacts be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to be located near existing sensitive receptors or other land uses where people may congregate, and
- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people located near existing odor sources.

The Plan will not generate odorous emissions and will not develop projects that intend to attract people to an area where odor sources are present. As a result, the Plan would not create objectionable odors affecting a substantial number of people.

Mitigation Measures

III.1: Each new project shall comply with provisions and mitigation measures contained in Regulation VIII approved by the SJVAPCD.

III.2: During the preliminary engineering and environmental review phase of each bicycle project that involves a road diet, an operational analysis will be conducted on roadways that exceed 15,000 vpd. Appropriate mitigations measures, as necessary, will be applied consistent with CEQA guidelines.

IV. BIOLOGICAL RESOURCES Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

Environmental Setting

The Plan Area is comprised of a variety of vegetation communities (or habitats) that contribute to the overall functionality of the Delta ecosystem. Characteristic vegetation communities are largely comprised of annual grassland, riparian woodland, and agricultural habitats. ***(Less than Significant Impact)***

Discussion

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The City and County General Plans note that sensitive vegetation communities or habitants are located in the Plan Area and include annual grasslands, wetlands, and riparian areas. A number of sensitive plant species are also known to dwell in the Plan Area, including Palmate-bracted bird's beak, Delta button-celery, and Greene's tuctoria. The General Plans further note that a number of sensitive animal species are also known to occur in the Plan Area and these species include, but are not limited to, the riparian brush rabbit, the giant garter snake, the delta smelt, and the valley elderberry longhorn beetle.

Many of the projects proposed in the Plan would involve improvements to existing roadways and would not affect biological resources. Some of the proposed projects would involve new bicycle facility construction in areas that may contain sensitive biological resources. With proper design, off-street bike paths are expected to be compatible with existing habitats and would not result in significant impacts to sensitive plant or animal species.

Should trees be removed to allow for the construction of bicycle facilities, such removal would not have a significant impact on protected species given the urban characteristics of the Plan Area. Given the scale of projects contained in the Plan, it is not expected that a large portion of the Plan Area's tree canopy would be removed to accommodate improvements.

It is anticipated that with proper design, bicycle and pedestrian improvements would be compatible with existing habitats and would have less than significant impacts on sensitive plant or animal species or protected trees.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?* ***(Less than Significant with Mitigation Incorporated)***

The General Plans state that riparian habitat occurs along the San Joaquin River, the Calaveras River, and other local waterways. This riparian habitat helps to support an assortment of plant and wildlife species along bodies or water. Riparian habitats support a variety of plant and wildlife species along watercourses or water bodies adaptable to seasonal flooding. Other sensitive habitats in the Study Area include annual grassland, wetlands, and vernal pool habitats.

There is still a potential for the construction of bicycle facilities to adversely impact riparian habitat. The level of impact for a specific bicycle project is not known at this time, and would depend on the

location of the project, the extent of disturbance, and actual habitat loss. This is a potentially significant impact. **Mitigation Measure IV.1** would reduce this impact to a less than significant level. Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?* ***(Less than Significant with Mitigation Incorporated)***

Construction bicycle facilities would generally be located within existing street and road rights-of-way and would not impact sensitive species habitat. Construction impacts from these facilities would be less than significant. Some projects will not be constructed within existing paved rights-of-way and will require earthwork and paving. Where construction of Plan projects require grading, construction activities could disturb natural areas that support special status species. The implementation of **Mitigation Measure IV.1** would ensure that impacts to sensitive resources, including wetlands, are less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?* ***(Less than Significant Impact)***

Plan projects would be constructed in urbanized and developed areas, although some facilities are planned along the shorelines of rivers and creeks. The urbanized portions of the Plan Area do not generally support wildlife movement corridors or wildlife nursery sites. Since the scale of the proposed bicycle facilities is not substantial and existing bicycle and pedestrian routes already exist in the vicinity of these areas, implementation of the Plan would not substantially interfere with the movement of established, native resident or migratory fish or wildlife species. The plant and wildlife species that currently occur within the Plan Area have adapted to disturbed conditions; therefore, adverse effects from construction activities or the use of the bicycle routes on movement corridors or nursery sites is considered to be less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* ***(Less than Significant Impact)***

Plan projects would comply with all applicable ordinances related to tree preservation and vegetation removal. Therefore, the Plan would result in a less than significant impact.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?* ***(Less than Significant Impact)***

The Plan would comply with the General Plans and applicable ordinances. Development consistent with the General Plans would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Implementation of **Mitigation Measures IV.2** would ensure that any covered species under the recovery plan would not be adversely impacted. As a result, this impact would be less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

Mitigation Measures

IV.1: During the preliminary engineering and environmental review phase of each bicycle project that involves work along a stream corridor or within open space or undeveloped property or may otherwise disturb a riparian habitat or special-status plant species, a survey shall be conducted by a qualified botanist and recommendations shall be reviewed and followed.

IV.2: If a bicycle facility is proposed within an area where such use is not currently allowed by an Operations and Management Plan or similar plan approved by a local, state, or federal agency, the City and County shall consult with the appropriate agency and follow all required measures to avoid, minimize, and/or mitigate any impacts to environmental resources.

V. CULTURAL RESOURCES Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outsides of formal cemeteries?		X		

Environmental Setting

The patterns of human occupation of Stockton includes the aboriginal inhabitance by the Northern Valley Yokuts. The City and County participated in the Gold Rush as part of a significant supply and transportation center and this eventually resulted in economic transition from gold mining to agricultural development.

Discussion

a) *Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?* ***(Less than Significant with Mitigation Incorporated)***

In areas where bicycle improvements are proposed along existing streets and within developed rights-of-way and paths, there would be no impact on historical or archaeological resources. The remainder of projects that are not within existing rights-of-way have the potential to damage or destroy historical, archaeological and/or paleontological resources during construction. In such cases, any required cultural resources investigation would be conducted during the environmental process for the roadway project. The potential for impact is higher in open space areas that have not been previously developed, infill areas where prior cultural resources inventories have not been completed, and in areas where prior cultural resource inventories have identified historic, archaeological and/or paleontological resources. **Mitigation Measure V.1** would reduce the impact to less than a significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?* ***(Less than Significant with Mitigation Incorporated)***

Archaeological resources could be encountered during construction activities associated with Plan projects. Implementation of **Mitigation Measure V.1** would ensure that impacts to archaeological resources identified during construction would be reduced to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?* ***(Less than Significant with Mitigation Incorporated)***

Paleontological resources include fossil plants and animals, and the evidence of past life such as trace fossils and tracks. In some areas proposed bicycle and pedestrian improvements may require grading or ground disturbance and may have an impact on paleontological resources. To reduce impacts to a less than significant level, **Mitigation Measure V.2** would be implemented.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

d) *Disturb any human remains, including those interred outside of formal cemeteries?* ***(Less than Significant with Mitigation Incorporated)***

Uncovering Native American human remains can occur throughout California. In some areas, proposed bicycle improvements may require grading or ground disturbance and human remains may be found as a result. To reduce impacts to a less than significant level, **Mitigation Measure V.3** would be implemented.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

Mitigation Measures

V.1: Work Stoppage and Notification would reduce the potential impacts related to cultural and historical resources to a less than significant level. Should an archaeological resource be encountered during project construction activities, construction shall be halted in the vicinity of the find and immediately notify the City or the County. Construction activities shall be redirected to a qualified archaeologist, to evaluate the archaeological resource to determine if it is a historical or unique archaeological resource. The archaeologist will make recommendations regarding the resource.

V.2: If paleontological resources are identified during construction, all work within 25 feet of the discovery shall be halted until a qualified paleontologist reviews the resources and provides recommendations on how to address the potential impact.

V.3: If human remains are encountered during construction activities, work within 25 feet of the discovery shall be halted and the San Joaquin County Coroner and an archaeologist immediately notified to review the remains and consult with other appropriate agencies. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of the identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion, the archaeologist shall document the results, and provide recommendations for the treatment of human remains and any other associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City or the County and to the Northwest Information Center for review and action.

V.4 There shall be consultation with Native American representatives regarding cultural resources to identify locations of importance to Native Americans, including archeological sites and traditional cultural properties. Coordination with the Native American Heritage Commission should begin at the onset of a particular project.

VI. GEOLOGY AND SOILS Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii. Strong seismic ground shaking?				X
iii. Seismic-related ground failure, including liquefaction?				X
iv. Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

Environmental Setting

The Plan Area is located among farmland of the San Joaquin Valley and an abundance of waterways that make up the California Delta. As noted in the General Plans, the Plan Area has soils attained from the alluvial deposition of granitic and/or mixed rock sources from the San Joaquin River system. Soils found in the Plan Area possess a naturally high seasonal water table and are subject to extended saturation due to the low landscape positions.

Discussion

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.* ***(No Impact)***

The Plan Area is not located within, nor crosses a delineated Alquist-Priolo Earthquake Fault Zone. Given this information, bicycle projects would not be subject to fault rupture. As a result, impacts are not anticipated.

ii. *Strong seismic ground shaking?* ***(No Impact)***

The Plan Area is not in an area where significant seismic ground shaking is anticipated. However, the City requires that new structures intended for human occupancy, public facilities, and emergency/disaster facilities be designated and constructed in accordance with adopted building codes and design/construction standards for bicycle design to minimize risk to the public due to ground shaking. Therefore, impacts are not anticipated.

iii. *Seismic-related ground failure, including liquefaction?* ***(No Impact)***

The City of Stockton General Plan states that the probability of soil liquefaction taking place is low to moderate, due to the city's distance from the active Hayward and Calaveras Fault zones, and the type of ground shaking experienced from those faults. However, the possibility of soil liquefaction should be considered when planning and designing structures in areas that have the potential for liquefaction. As a result, Plan projects are not expected to be affected by ground failure or liquefaction. Therefore, impacts are not anticipated.

Landslides? ***(No Impact)***

There are several factors that can designate an area as a landslide hazard area including an area with significant slope, very weak soil types, and heavy rains. As previously noted, the Plan Area is relatively flat. to Per the Landslide Hazard Identification Furthermore, bicycle projects will be constructed in accordance with the City's design/construction standards. Those standards require the preparation of a site-specific soils analysis. Therefore, impacts are not anticipated.

b) *Result in substantial soil erosion or the loss of topsoil?* ***(Less than Significant Impact)***

Construction and grading activities associated with bicycle improvements will result in the removal of vegetative cover and exposure of soils to wind and rain, the common mechanisms by which soil erosion occurs. The construction of projects in locations that are at risk to erosion would comply with applicable regulations that require new development to implement measures that minimize soil erosion from wind and water related to construction. As a result, the potential for substantial soil erosion or the loss of topsoil is considered to be less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?* ***(Less than Significant Impact)***

Soils in the Plan Area are typically associated with stream terraces and alluvial bottoms. These soils are typically deep and well drained, have low permeability and low shrink-swell potential, and have low soil strength (US Department of Agriculture 1980). Local agency design/construction standards require site specific soils investigation for bicycle facility construction. These studies would address soil stability considering soil type and the type of bicycle related improvement, and would include recommendations to ensure that the structural design of bicycle projects is sufficient. This requirement would ensure that the potential impacts related to expansive soil are addressed. As a result, this impact is considered less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?* ***(Less than Significant Impact)***

In most developed areas, the existing layer of soil has been mixed into more granular soils as part of past site excavation, which helps in reducing the soils overall expansiveness. In addition, Plan projects would be implemented in accordance with an agency's geotechnical engineering standards, which would require mitigation of potential impacts related to expansive soils. As a result, this impact is considered less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?* ***(No Impact)***

It is anticipated that restroom facilities for bicycle and pedestrian projects are likely to be installed at park sites. If stand-alone restrooms are installed, such restrooms will be connected to the City's wastewater system, and septic tanks will not need to be used. As a result, impacts are not anticipated.

VII. GREENHOUSE GAS EMMISSIONS Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Environmental Setting

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Global Climate Change (GCC) means a shift in the climate of the earth as a whole that occurs naturally as in the case of the ice age. According to the California Air Resources Board (CARB), the climate change that is occurring today differs from previous climate changes in both time and scale.

Gases that catch heat in the atmosphere are regularly called greenhouse gases (GHGs). The Earth's surface temperature would be about 61 degrees Fahrenheit colder than it is currently if it were not for the innate heat trapping effect of GHGs. The buildup of these gases in the earth's atmosphere is considered the source of the observed increase in the earth's temperature (global warming). Some greenhouse gases such as carbon dioxide occur naturally in nature and are emitted to the atmosphere through natural processes and as well as through some anthropocentric activities. Other GHGs (e.g., fluorinated gases) are created and emitted solely through human activities.

Since the Industrial Revolution (circa 1750), global concentrations of carbon dioxide (CO_2) have risen about 36%, chiefly due to the burning of fossil fuels. Questions remain about the amount of warming that will occur, how rapidly it will occur, and how the warming will affect the rest of the climate system, including weather events.

The United Nations Intergovernmental Panel on Climate Change constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The Panel concluded that a stabilization of GHGs at 400 to 450 parts per million (ppm) CO_2 equivalent concentration is required to keep global mean warming below 3.6º Fahrenheit (2º Celsius). This is presumed necessary to avoid dangerous climate change (Association of Environmental Professionals, 2007).

State law defines greenhouse gases as any of the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6) (California Health and Safety Code Section 38505(g).) CO_2, followed by CH_4 and N_2O, are the most common GHGs that result from human activity. The characteristics of state defined GHGs are described below:

- ✓ **Carbon dioxide** – CO_2 results from fossil fuel combustion in stationary and mobile sources. It contributes to the greenhouse effect, but not to stratospheric ozone depletion. In 2011, CO_2 accounted for approximately 88 percent of total GHG emissions in the State (CARB, 2017);

- ✓ **Methane** – CH_4 can also be divided into anthropogenic (i.e., resulting from human activities and/or processes) and natural sources. Anthropogenic sources include rice agriculture, livestock, landfills, and waste treatment, some biomass burning, and fossil fuel combustion. Natural sources are wetlands, oceans, forests, fire, termites and geological sources. Anthropogenic sources currently account for more than 60 percent of the total global emissions; and

- ✓ **Other regulated GHGs include Nitrous Oxide (N_20), Sulfur Hexafluoride (SF_6), Hydrofluorocarbons (HFC), and Perfluorocarbons (PFC)** - These gases all possess heat-trapping characteristics that are greater than CO_2. Emission sources of nitrous oxide gases include, but are not limited to, waste combustion, waste water treatment, fossil fuel combustion, and fertilizer production. Because the volume of emissions is small, the net effect of nitrous oxide emissions relative to CO_2 or CH4 is relatively small. SF_6, HFC, and PFC emissions occur at even lower rates.

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain other gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change over the long-term. Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2°C (0.36° Fahrenheit) per decade is projected, and there are identifiable signs that global warming is taking place, including substantial ice loss in the Arctic.

It has become evident that human activities are continuing to impact the earth's energy budget. Observations of atmosphere, land, oceans, and cryosphere have provided evidence of climate change which is largely the result of human activities. The average global surface air temperatures over land and oceans have increased over the last 100 years as discussed in detail in numerous publications by the International Panel on Climate Change (IPCC), namely "Climate Change 2013, The Physical Science Basis". Climate change modeling shows that further warming could occur, which would induce additional changes in the global climate system during the current century. GHGs have the potential to affect the environment because such emissions are believed to contribute cumulatively to global climate change. Although GHG emissions from one single project will not by themselves cause global climate change, it is thought that GHG emissions from multiple projects, past, present and future throughout the world may collectively result in a cumulative impact with respect to global climate change. It is speculated that global climate change could contribute to rising sea levels, which can inundate low-lying areas; impact rainfall

and snowfall, which could change water supply; affect habitat, which could affect biological resources, along with other unknown effects.

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with construction activities and the operation of passenger, public transit, and commercial vehicles results in GHG emissions that cause global climate change. In addition, alternative fuels like natural gas including CNG and liquefied natural gas (LNG), ethanol, and electricity (unless derived from solar, wind, nuclear, or another energy source that does not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Changes in California's climate and ecosystems are occurring at a time when the State's population is expected to increase from 37 to 48 million by 2040, according to the California State Department of Finance. As such, the number of people potentially affected by climate change, as well as the amount of anthropogenic GHG emissions expected under a "business as usual" scenario, is expected to increase. Climate models indicate that temperatures in California may rise by 4.7°F to 10.5°F by the end of the century if GHG emissions continue to proceed at a medium or high rate (CEC, 2006). Lower emission rates would reduce the projected warming to 3.0°F to 5.6° Fahrenheit. Almost all climate scenarios include a continuing trend of warming through the end of the century given the amounts of GHGs already released, and the difficulties associated with reducing emissions to a level that would stabilize the climate. Total GHG emissions in California have been approximated by CARB, which found that 461 MMT of CO_2E GHG emissions were produced in California in 2011. CARB also found transportation to be the source of 38 percent of the State's GHG emissions, followed by industrial sources at 21 percent and electricity generation at 19 percent.

The IPCC was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information to further understand climate change, its potential impacts, and options for adaptation and mitigation. The IPCC predicts substantial increases in temperatures globally of between 1.1 to 6.4 degrees Celsius, depending on the scenario studied. This may impact California's natural environment in the following ways:

- ✓ Rising sea levels along the California coastline, particularly in the San Francisco Bay Area and within the San Joaquin Delta because of ocean expansion;
- ✓ Extreme-heat conditions, such as heat waves and very high temperatures, which could last longer and become more frequent;
- ✓ An increase in heat-related human deaths, infectious diseases, and a higher risk of respiratory problems caused by deteriorating air quality;
- ✓ Reduced snow pack and stream flow in the Sierra Nevada mountains, affecting winter recreation and water supplies;
- ✓ Potential increases in the severity of winter storms, affecting peak stream flows and flooding;
- ✓ Changes in growing season conditions that could affect California agriculture, causing variations in crop quality and yield;

- ✓ Changes in the distribution of plant and wildlife species because of changes in temperature, competition from colonizing species, changes in hydrologic cycles, changes in sea levels, and other climate-related effects;

- ✓ Increases in the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas of Los Angeles and the San Joaquin Valley by the end of the 21st century; and

- ✓ High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level.

The State of California GHG Inventory performed by CARB compiled statewide human sources of GHG emissions. It includes estimates for carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. The current inventory covers the years 2000 to 2011, and is summarized in Table GHG-1. When accounting for GHGs, all types of GHG emissions are expressed in terms of CO_2 equivalents (CO_2E) and are typically quantified in metric tons (MT) or millions of metric tons (MMT). Data sources used to calculate this GHG inventory include California state and federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC. The 2000 emissions level is the sum total of sources from all sectors and categories in the inventory. The inventory is divided into seven (7) broad sectors and categories. These sectors include: agriculture; commercial and residential; electricity power; High GWP; industrial; recycling and waste; and transportation. Emissions of carbon dioxide and nitrous oxide are byproducts of fossil fuel combustion, among other sources. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices and landfills, among other sources. Sinks of carbon dioxide include uptake by vegetation and dissolution into the ocean.

TABLE GHG-1
State of California GHG Inventory (2000-2011)

Economic Sector	Greenhouse Gas Emissions ($MMTCO_2e$)												% of Total in 2000	% of Total in 2011	% Change in Emission	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011			2000-2011	2010-2011
Agriculture	29.04	29.23	32.39	32.84	32.57	32.81	33.95	32.94	33.88	31.69	31.68	32.24	6.3%	7.2%	11.0%	1.8%
Commercial and Residential	43.64	43.25	43.06	42.47	43.60	42.52	43.10	43.83	44.59	44.19	45.13	45.47	9.4%	10.1%	4.2%	0.8%
Electricity Power	104.86	122.01	108.65	112.62	115.20	107.86	104.54	113.94	120.14	103.56	90.09	86.57	22.7%	19.3%	-17.4%	-3.9%
High GWP	7.11	7.12	7.25	7.87	8.53	9.25	9.86	10.50	11.48	12.45	14.15	15.17	1.54%	3.39%	113.4%	7.2%
Industrial	95.81	93.85	94.42	93.42	95.73	94.23	91.88	88.79	89.27	84.43	91.00	93.24	20.7%	20.8%	-2.7%	2.5%
Recycling and Waste	6.14	6.26	6.20	6.32	6.33	6.47	6.51	6.57	6.69	6.81	6.94	7.00	1.3%	1.6%	14.0%	0.9%
Transportation	176.29	176.65	183.86	183.55	187.21	188.94	189.34	188.97	177.16	171.57	170.61	168.42	38.1%	37.6%	-4.5%	-1.3%
Total Emissions	462.9	478.4	475.8	479.1	489.2	482.1	479.2	485.5	483.2	454.7	449.6	448.1	--	--	-3.2%	-0.3%

Source: ARB California Greenhouse Gas Inventory for 2000-2011

1. Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations
2. Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions
3. These categories are listed in the Industrial sector of ARB's GHG Emission Inventory sectors
4. This category is listed in the Electric Power sector of ARB's GHG Emission Inventory sectors

Discussion

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* ***(Less-than-Significant Impact)***

The Health & Safety Element of the Stockton General Plan identifies numerous policies and measures to reduce air quality within the Plan Area. Those policies include providing bicycle access to large development projects, street design that provides an environment which encourages transit use, biking and walking, and encouraging all new development to be designed in a manner that promotes bicycle access. In addition, the Transportation and Circulation Element includes policies such as encouraging pedestrian and bicycle travel as viable modes of movement throughout the Plan Area by providing safe and convenient pedestrian and bicycle facilities within and linking commercial areas, residential neighborhoods, and employment centers.

One of the goals of the Bicycle Master Plan is to provide a connected bicycle grid of low stress facilities that acts as the primary spine for the north/south and east/west routes while closing gaps in the existing network. Further, the projects associated with the Plan are designed to reduce air quality emissions by encouraging bicycle travel as a viable mode of movement in the Plan Area. As a result, implementation of the Plan will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?* ***(Less than Significant Impact)***

The Health & Safety Element of the City of Stockton General Plan Update identifies numerous policies and measures to reduce air quality within the Plan Area, including greenhouse gas emissions. Those policies include monitoring and supporting the efforts of the ARB. In addition, project-specific compliance with SJVAPCD permitting would support the reduction of greenhouse gas emissions associated with individual projects.

The goal of the Bicycle Master Plan is to provide a connected bicycle grid of low stress facilities that acts as the primary spine for the north/south and east/west routes while closing gaps in the existing network. Further, the projects associated with the Plan are designed to reduce air quality emissions by encouraging bicycle travel as a viable mode of movement in the Plan Area. As a result, implementation of the Plan will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

VIII. HAZARDS AND HAZARDOUS MATERIALS Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Environmental Setting

Hazards and hazardous materials are defined and regulated by federal, state, and local regulations, including those administered by U. S, Environmental Protection Agency, the U.S. Occupational Safety and Health Administration, and the U.S. Department of Transportation. The Institute of Hazardous Materials Management defines a hazardous material as any item or agent (biological, chemical, or physical) that has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other hazardous materials.

Discussion

I. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* ***(No Impact)***

There may be limited use of substances such as gasoline, diesel fuel, tar and other similar substances during the construction of proposed bicycle facilities. Such substances would be used in small amounts and would be handled in accordance with federal, state, and local standards. Therefore, implementation of projects identified in the Plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and impacts would not be anticipated.

II. *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?* ***(No Impact)***

The Bicycle Master Plan does not propose projects that would require the routine transportation, use, or disposal of hazardous materials. The limited handling of hazardous materials during the development of identified projects in the Plan would occur in accordance with federal, state, and local standards. As a result, impacts are not anticipated.

III. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?* ***(No Impact)***

The Plan does not propose projects that would emit hazardous emissions near schools, although there may be limited use of substances such as gasoline, diesel fuel, tar and other similar substances during the construction of proposed bicycle facilities. These substances would be used in small amounts and would be handled in accordance with federal, state, and local standards. As a result, impacts are not anticipated.

IV. *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?* ***(No Impact)***

There are 56 sites listed in the Plan Area on the Regional Water Quality Control Board's (Water Board) leaking underground storage (LUST) database and the RWQCB spills, leaks, investigations, and cleanups (SLIC) database, two of the component databases that comprise the State Cortese List of known hazardous materials sites compiled pursuant to Government Code Section 65962.5. Sites throughout the Plan Area are also listed on other components of the Cortese List, including the DTSC

hazardous waste and substances list. The projects proposed by the Plan are not located on any of these hazardous materials sites. If hazardous materials are discovered during construction, construction would cease until such hazardous materials have been identified and removed, in accordance with federal, state, and local requirements. As a result, impacts are not anticipated.

V. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?* ***(No Impact)***

The Stockton Metropolitan Airport is a commercial air carrier facility and the primary airport for San Joaquin County. Based on the March 2009 Airport Master Plan, the Stockton Airport is projected to have a total of roughly 80,000 general aviation operation in the year 2028.

The Plan is proposing bicycle facilities in the vicinity of the airport. However, it should be noted that cyclists will not be 'residing' or 'working' along a bicycle facility outside of the construction phase and/or scheduled maintenance of a bicycle facility. These periods will be short in duration and will not expose people to safety hazards. Construction/Maintenance workers would be subject to Occupational Safety and Health Administration (OSHA) Standard 1926.52, which protects against the effects of hazards. Feasible administrative or engineering controls shall be utilized to lessen potential hazards and improve safety. In addition, conflicts with airport land use plans are not anticipated. As a result, impacts are not anticipated.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

VI. *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?* ***(No Impact)***

There are a couple of private airstrips and private heliports that exist within the Plan Area. The Plan is proposing bicycle facilities throughout the Plan Area, which may be constructed in the vicinity of a private airstrip. However, it should be noted that pedestrians will not be 'residing' or 'working' along a bicycle facility outside of the construction phase and maintenance of the facility. These periods will be short in duration and will not expose people to hazards. Construction/Maintenance workers would be subject to Occupational Safety and Health Administration (OSHA) Standard 1926.52, which protects against the effects of hazards. As a result, impacts are not anticipated.

VII. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?* ***(No Impact)***

Implementation of the projects proposed in the Plan would result in the development of an extended bicycle network. The proposed Plan would allow for an alternative form of evacuation in the event of an emergency and would not interfere with local emergency response plans. In addition, bicycle facility construction may involve the closure of traffic lanes during construction of Plan facilities and potentially when such facilities intersect with streets. Local agency design/construction standards

require that roadwork requiring traffic lane closures be approved by the City and the County. As a result, impacts are not anticipated.

VIII. *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?* ***(No Impact)***

There are no known designated Wildland Fire Hazard Areas in or adjacent to the Plan Area. Development of the planned bicycle network and pedestrian facilities would not increase the fire hazard in the area and therefore would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. As a result, impacts are not anticipated.

IX. HYDROLOGY AND WATER QUALITY Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place housing within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving				X

flooding including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?				X

Hydrology

Hydrology addresses the distribution and circulation of water, both aboveground (surface water) and belowground (groundwater). The Plan Area is located within the San Joaquin River hydrologic region according to the California Department of Water Resources.

Discussion

a) *Violate any water quality standards or waste discharge requirements?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within Plan Area rights-of-way or along drainageways. However, the construction phase of some projects could utilize water supply and increase the impervious surface areas. Such projects would be required to adhere to the National Pollutant Discharge Elimination System (NPDES) storm-water provisions.

One of the goals of the Plan is to provide a connected bicycle grid of low stress facilities that act as the primary spine for the north/south and east/west routes while closing gaps in the existing network. The projects are designed to reduce automobile travel by encouraging bicycle travel as a viable mode of movement in the Plan Area. Reducing automobile trips would cause a decrease in the deposition of rubber and fluids on roadways that ultimately washes into the waterways. Plan projects are not expected to violate any water quality standards or waste discharge requirements but actually reduce waste discharge as a result of fewer automobile trips. As a result, impacts are not anticipated.

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within Plan Area rights-of-way or along drainageways. The projects included in the Plan would require the use or extraction of groundwater during construction. However, the Plan would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. As a result, impacts are not anticipated.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within Plan Area rights-of-way or along drainageways. Drainage patterns may be slightly modified with the development of some projects, but would not include the alteration of the course of a stream or river

in a manner which would result in substantial erosion of siltation on- or off-site. Therefore, the Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. As a result, impacts are not anticipated.

d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within the Plan Area rights-of-way or along drainageways. Drainage patterns may be slightly modified with the development of some project, but would not include the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Therefore, the Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. As a result, impacts are not anticipated.

e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within the Plan Area rights-of-way or along drainageways. However, the construction phase of some projects could utilize water supply and increase the impervious surface areas. Such projects would be required to adhere to the National Pollutant Discharge Elimination System (NPDES) storm-water provisions. In addition, drainage patterns may be slightly modified with the development of some projects, but would not create or contribute runoff water which would exceed the capacity of existing or planned storm-water drainage systems or provide substantial additional sources of polluted runoff. As a result, impacts are not anticipated.

f) *Otherwise substantially degrade water quality?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within City rights-of-way or along drainageways. However, the construction phase of some projects could utilize water supply and increase the impervious surface areas. Such projects would be required to adhere to the National Pollutant Discharge Elimination System (NPDES) storm-water provisions.

One of the goals of the Plan is to provide a connected bicycle grid of low stress facilities that acts as the primary spine for the north/south and east/west routes while closing gaps in the existing network. The projects associated with the Plan are designed to reduce automobile travel by encouraging bicycle travel as a viable mode of movement in the Plan Area. Reducing automobile trips would cause a decrease in the deposition of rubber and fluids on roadways that ultimately washes into the waterways. Plan projects are not expected to degrade water quality but actually reduce waste discharge as a result of fewer automobile trips. As a result, impacts are not anticipated.

g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?* ***(No Impact)***

The Plan includes the development of bikeways and appropriate facilities/signage within the Plan Area rights-of-way or along drainageways and does not include the development of housing. Therefore, the Plan would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. As a result, impacts are not anticipated.

h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within the Plan Area rights-of-way or along drainageways. The construction phase of some projects could increase the impervious surface areas. However, projects included in the Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Flood flows would not be impeded or redirected by bicycle improvements included in the Plan. As a result, the Plan would not place within a 100-year flood hazard area structures which would impede or redirect flood flows. As a result, impacts are not anticipated.

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding including flooding as a result of the failure of a levee or dam?* ***(No Impact)***

The Plan would include the development of bikeways and appropriate facilities/signage within the Plan Area rights-of-way or along drainageways. A vast majority of the projects included in the Plan improve existing roadway facilities and would not subject users to flooding hazards. As a result, the Plan is not expected to expose people or structures to a significant risk of loss, injury or death involving flooding including flooding as a result of the failure of a levee or dam. Impacts are therefore not anticipated.

j) *Inundation by seiche, tsunami, or mudflow?* ***(No Impact)***

The would include the development of bikeways and appropriate facilities/signage within the Plan Area rights-of-way or along drainageways. A vast majority of the projects included in the plan improve existing roadway facilities.

The Plan Area is located outside of the areas of California at risk for tsunamis, as mapped by the California Department of Conservation, so impacts from tsunamis are not analyzed. The Plan would have no impact on inundation by tsunamis.

Large enclosed or partially enclosed water bodies are susceptible to seiche. Seiche can be caused by several factors including tsunami, earthquake, and wind. No state or federal regulations exist related to seiches. Given the absence of tsunamis and low level of earthquake risk in San Joaquin County, there is a low probability of seiche occurrence in the plan area. Therefore, the Plan would have no impact on inundation by tsunamis.

Any bicycle facility constructed adjacent to unstable slopes would be susceptible to mudflows. Current state and local design standards require slope stabilization that would reduce the possibility for mudflows. When water rapidly accumulates in the ground, during heavy rainfall or rapid snowmelt, mudflows can develop. Since the terrain in the Plan Area is generally flat, projects developed in the Plan will not likely be prone to or cause mudflows.

X. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?		X		

Environmental Setting

There is approximately 81,000 acres of land in the City of Stockton and additional acreage is located outside of the City limits, which is contained within the unincorporated areas of the Plan Area or Stockton SOI. Land use designations for the Plan Area include residential, commercial, industrial, open space, agriculture, and institutional. The City's downtown area is located just north of Highway 4 characterized by high-rise office and higher-density residential uses. Areas north of Highway 4 are low-density residential and commercial while areas to the south are low-density residential and industrial. Development boundaries are Interstate 5 to the west and Highway 99 to the east.

Discussion

a) *Physically divide an established community?* ***(No Impact)***

The physical division of an established community usually occurs through the construction of a physical feature such as an interstate, highway, or railroad, or through the removal of a feature such as a bridge or local roadway that would impair mobility within the community or between a community and the outlying area. Implementation of the projects proposed under the Plan generally would occur on existing rights-of-way with the Plan Area. Some projects, removal or changes to vehicular travel lanes due to road diets, installation of curb extensions and bridges to improve pedestrian and bicycle safety, could result in minor alterations to local pedestrian, bicycle, and vehicular circulation patterns, but would not result in a divide to the existing communities in the Plan Area. Implementation of the Plan would result in a grid of connected bicycle facilities accommodating all cyclist needs and providing connections to critical services and transit. Bicycling is an alternative mode of nonpolluting transportation improving the multi-modal environment. The grid of travel corridors created with implementation would not physically divide the communities in the Plan Area, but would benefit community integrity and connectivity. Therefore, the Plan would have no impact.

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?* ***(Less than Significant Impact)***

The Generals Plan considered land use compatibility for most of the proposed facilities during adoption and during the City of Stockton's adoption of the original Bicycle Master Plan. The designation of new bicycle facilities within open space and parks and recreation areas will not result in a conflict with any adopted land use plan, policy or regulation. The bicycle projects would provide a recreational amenity and improve access to open spaces areas for local residents as recommended by the General Plans. This potential impact is less than significant.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?* ***(Less than Significant with Mitigation Incorporated)***

The designation of new bicycle facilities will not result in a conflict with any adopted habitat conservation plan or natural community conservation plan, policy or regulation. Some of the proposed Class I bike paths may be located within open space areas that are subject to Operations and Management (O&M) plans established for the express purpose of protecting and maintaining the open space areas. Implementation of **Mitigation Measure X.1** will reduce this impact to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

Mitigation Measure

X.1: If a bicycle facility is proposed to be located within an area where such use is not currently allowed by an Operations and Management Plan or similar approved plan by a local, state, or federal agency, the City and the County shall consult with the appropriate regulatory agency and follow all required agency measures to avoid, minimize, and/or mitigate for any bike path impacts to environmental resources.

XI. MINERAL RESOURCES Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* ***(Less than Significant Impact)***

The General Plan categorizes much of the Plan Area as being within the MRZ-1 mineral zone with one isolated MRZ-3 pocket. MRZ-1 is an area where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. MRZ-3 is an area containing mineral deposits the significance of which cannot be evaluated from available data.

Existing development patterns in Stockton have essentially precluded the extraction of potential mineral resources. No future mineral extraction is anticipated. However, implementation of the Plan would not preclude future extraction if important resources were discovered. The bikeway locations and features are expected to commit relatively small amounts of land to development. All proposed Class II and Class III bikeways would occur within or adjacent to existing roadways. The Class I bikeways are proposed within open space areas where mineral extraction would be prohibited. The Plan does not propose to excavate for mineral resources and the existing land uses surrounding potential mineral resources are incompatible with mining and excavation. Therefore, implementation of the Plan would result in a less than significant impact to mineral resources and extraction.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?* ***(No Impact)***

Refer to Section XI, a). No known locally important mineral resource recovery sites have been identified within the Plan Area or in local plans. Implementation of the Plan would not result in the loss of availability of a locally-important mineral resource recovery site.

XII. NOISE Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			X	

Environmental Setting

Noise can generally be described as unwanted sound and has been cited as being a health problem, not just in terms of actual physiological damages such as hearing impairment, but also in terms of inhibiting general wellbeing and contributing to stress and annoyance. Long or repeated exposure to sounds at or above 85 decibels can cause hearing loss. The louder the sound, the shorter the time period before hearing loss can occur. Sounds of less than 75 decibels are unlikely to cause hearing loss even after long exposure.

Existing noise levels in the city are principally generated by transportation noise sources. Vehicular traffic noise is the dominant source in most areas, but aircraft and rail activity are also significant sources of environmental noise in the local areas surrounding these operations. Noise is generated by either mobile or stationary sources.

- ✓ Mobile noise sources are typically associated with transportation, such as cars, trains, and aircraft. The most significant mobile sources of noise in the City of Stockton are freeways and other major roadways, the Stockton Metropolitan Airport, and the Union Pacific and the BNSF railroad lines.

- ✓ Stationary noise sources are any 'fixed' noise generating source. Examples of stationary sources include outdoor machinery (i.e. such as heating/air conditioning systems), and industrial areas within the City. Noise generated from construction sites also falls into the category of stationary sources.

Discussion

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* ***(Less than Significant Impact)***

Implementation of the Bicycle Master Plan has the potential to result in short-term construction noise impacts to surrounding land uses due to construction activities. Construction noise represents a short-term impact on ambient noise levels. Although most of the types of exterior construction activities associated with the Bicycle Master Plan will not generate continually high noise levels, occasional single-event disturbances from grading and construction activities are possible. Table N-1 depicts typical construction equipment noise. Construction equipment noise is controlled by the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations).

During the construction phase of any future bicycle projects, noise from construction activities will add to the noise environment in the immediate area. Activities involved in construction would generate maximum noise levels, as indicated in Table N-1, ranging from 77 to 85dB at a distance of 50 feet. Construction activities will be temporary in nature and are expected to occur during normal daytime working hours. Construction noise impacts could result in annoyance or sleep disruption for nearby residences if nighttime operations occurred, or if unusually noisy equipment was used.

To reduce potential construction noise impacts to sensitive receptors, all future bicycle projects should comply with the City of Stockton and San Joaquin County Noise Ordinances. Implementation of the Plan not cause the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

TABLE N-1
Construction Equipment Noise

TYPE OF EQUIPMENT	Sound Levles Measured (dBA of 50 feet)
Rock Drills	85
Jack Hammers	85
Pneumatic Tools	85
Pumps	77
Dozers	85
Tractor	84
Front-End Loaders	80
Hydraulic Backhoe	80
Hydraulic Excavators	85
Graders	85
Air Compressors	80
Trucks	84

Source: Noise Control for Buildings and Manufacturing Plants (Bolt, Beranek and Newman, 1987).

b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?* ***(Less than Significant Impact)***

Ambient vibration levels in residential areas are typically 50 VdB, which is well below human perception. The operation of heating/air conditioning systems and slamming of doors produce typical indoor vibrations that are noticeable to humans. Construction activity can result in ground vibration, depending upon the types of equipment used. Operation of construction equipment causes ground vibrations which spread through the ground and diminish in strength with distance from the source generating the vibration. Building structures that are founded on the soil in the vicinity of the construction site respond to these vibrations, with varied results. Ground vibrations as a result of construction activities very rarely reach vibration levels that will damage structures, but can cause low rumbling sounds and feelable vibrations for buildings very close to the site. Construction activities that generally create the most severe vibrations are blasting and impact pile driving.

Vibration levels from various types of construction equipment are shown in Table N-2. The primary concern with construction vibration is building damage. Therefore, construction vibration is generally assessed in terms of peak particle velocity (PPV). Using the highest vibration level shown in Table N-2 (Lv 87), the anticipated vibration level at 100 feet, 150 feet, and 200 feet is 75, 71, and 69 VdB, respectively.

The bicycle projects associated with the Bicycle Master Plan are not anticipated to result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

TABLE N-2
Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 ft (in/sec)	Approximate L_v* at 25 ft
Large bulldozer	0.089	87
Caisson drilling	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

* RMS velocity in decibels (VdB) re 1 minch/second

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?* ***(Less than Significant Impact)***

The Plan is not anticipated to generate a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project since the noise levels generated from bicycle use would be lower than automobile use in the area. Maintenance of the bicycle facilities are not anticipated to create a substantial permanent increase either.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?* ***(Less than Significant Impact)***

Implementation of the Plan has the potential to result in short-term construction noise impacts to surrounding land uses due to construction activities. Construction noise represents a short-term impact on ambient noise levels. Although most of the types of exterior construction activities associated with the Plan will not generate continually high noise levels, occasional single-event disturbances from grading and construction activities are possible. Table N-1 depicts typical construction equipment noise. Construction equipment noise is controlled by the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations).

During the construction phase of any future bicycle projects, noise from construction activities will add to the noise environment in the immediate area. Activities involved in construction would generate maximum noise levels, as indicated in Table N-1, ranging from 77 to 85dB at a distance of

50 feet. Construction activities will be temporary in nature and are expected to occur during normal daytime working hours. Construction noise impacts could result in annoyance or sleep disruption for nearby residences if nighttime operations occurred, or if unusually noisy equipment was used.

To reduce potential construction noise impacts to sensitive receptors, all future bicycle projects should comply with the City of Stockton and San Joaquin County Noise Ordinances. Implementation of the Plan not cause the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* ***(Less than Significant Impact)***

The Stockton Metropolitan Airport is a commercial air carrier facility and the primary airport for San Joaquin County. Based on the March 2009 Airport Master Plan, the Stockton Airport is projected to have a total of roughly 80,000 general aviation operation in the year 2028.

The Plan is proposing bicycle facilities in the vicinity of the airport. However, it should be noted that pedestrians will not be 'residing' or 'working' along a bicycle facility outside of the construction phase and maintenance of the facility. These periods will be short in duration and will not expose people to sustained noise levels. Construction/Maintenance workers would be subject to Occupational Safety and Health Administration (OSHA) Standard 1926.52, which protects against the effects of noise exposure when the sound levels exceed specific noise standards. Feasible administrative or engineering controls shall be utilized in the event the sound level standard is exceeded.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?* ***(Less than Significant Impact)***

There are a couple of private airstrips and private heliports that exist within the Plan Area. The Plan is proposing bicycle facilities throughout the Plan Area, which may be constructed in the vicinity of a private airstrip. However, it should be noted that pedestrians will not be 'residing' or 'working' along a bicycle facility outside of the construction phase and maintenance of the facility. These periods will be short in duration and will not expose people to sustained noise levels. Construction/Maintenance workers would be subject to Occupational Safety and Health Administration (OSHA) Standard 1926.52, which protects against the effects of noise exposure when the sound levels exceed specific noise standards. Feasible administrative or engineering controls shall be utilized in the event the sound level standard is exceeded.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

XIII. POPULATION AND HOUSING Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Environmental Setting

The City of Stockton is the 13th largest city in California. Historically, the City has seen steady growth since the late 1800s. The 2010 Census reported a population of 291,707 with 99,637 housing units at an average density of 1,538.7 per square mile. It is estimated that the population had grown to 305,658 in 2015. Population also resides within the unincorporated area of the Pan Area or Stockton SOI.

Discussion

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* ***(No Impact)***

Implementation of the Plan will not either directly or indirectly facilitate or induce population growth. Instead, the bicycle projects planned therein are transportation and recreational facilities that will be made available to existing City residents and future residents in previously-planned growth areas. As a result, there is no impact.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?* ***(No Impact)***

The bicycle projects contemplated by the Plan may in some instances require right-of-way acquisition. Right-of-way acquisitions for bicycle projects may involve the acquisition of undeveloped portions of residential, commercial, industrial and other types of properties. The actual amount of right-of-way required for each bicycle project is not known at this time and will be determined during project-specific planning and engineering. The City is not intending to and does not expect any of the bicycle projects to require displacement of existing housing. Therefore, there is no impact**.**

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?* ***(No Impact)***

Implementation of the proposed Plan would result in improvements to bicycle facilities within existing rights-of-way and would not displace any people. As a result, the construction of replacement housing would not be necessary. There is no impact.

XIV. PUBLIC SERVICES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:			X	
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?				X
iv. Parks?			X	
v. Other public facilities?			X	

Environmental Setting

The Stockton Fire Department (SFD) provides fire protection services for the City of Stockton. The department is led by a Fire Chief with 181 sworn fire personnel and 24 civilian employees. The SFD also provides contract fire protection and emergency medical services to four districts (Lincoln Fire District, Eastside, Tuxedo-Country Club Fire Districts, and Boggs Tract Fire Protection District) with contiguous boundaries to the City of Stockton. Total population served is estimated at 336,000 with 91.9 square miles of protected area. Sworn personnel respond from 12 neighborhood fire stations which house 12 engine companies and 3 truck companies.

The Stockton Police Department serves the City of Stockton with a main police station at 22 E. Market Street. The department has 418 employees with 377 sworn officers and has additional support from 185 Civilian Personnel and 127 volunteers. The Departments annual budget for FY 2016-17 is $110 million.

The City of Stockton is served by four public school districts: Stockton Unified School District and Lincoln School District. During the 2014 2015 school year, the Stockton Unified School District served 40,000 students with 54 schools and a budget of $523 million. Lincoln School District serves grades TK-12 with more than 9,100 students. The district includes Lincoln High School Engineering Construction Academy and John McCandless STEM Charter schools. Stockton is also served by the Lodi and Manteca Schools Districts.

Fire services in the unincorporated areas of the Stockton General Plan SOI are provided through the San Joaquin County Emergency Medical Services (EMS) Department.

Discussion

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

i. *Fire protection?* ***(Less than Significant Impact)***

The proposed Plan generally would result in bicycle improvement projects within existing rights-of-way and would not result in new fire hazards or an increased demand for fire services. While some projects would result in minor alterations to local pedestrian, bicycle, and vehicular circulation patterns (e.g. removal or changes to vehicular travel lanes due to road diets, installation of curb extensions, and bridges to improve pedestrian and bicycle safety), these projects would not substantially impair emergency access. Overall, the Plan Area would continue to be served by the Stockton Fire Department and the San Joaquin County EMS Department. The Plan would result in less than significant impacts to fire protection services.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

ii. *Police protection?* ***(Less than Significant Impact)***

The Plan generally would result in improvements within existing rights-of-way and would not result in new demand for police services. While the Plan includes recommendations for an officer training program for bicycling safety issues and enforcement best practices, this program would not result in the need for additional police facilities. Overall, the Plan Area would continue to be served by the Stockton Police Department and the San Joaquin County Sheriff's Department. Plan implementation would result in less than significant impacts to police services.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

iii. *Schools?* ***(No Impact)***

The Plan will not generate additional residents and would not result in the need for new or expanded school facilities. Bicycle projects proposed by the Plan are further intended to facilitate enhanced access to schools. There is no impact.

iv. *Parks?* ***(Less than Significant Impact)***

The proposed Plan includes development of new bicycle facilities throughout the Plan Area. Development of the Plan's recommended improvements would increase connections between

existing recreational facilities and parks within the Plan Area, and could result in an incremental increase in park use. The increased use of park facilities would not result in the physical deterioration of parks. As a result, this impact is considered less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

v. *Other public facilities?* ***(Less than Significant Impact)***

The Plan is not expected to result in the need for new or expanded transit, library, ambulance or other services, because it would not result in population or employment growth in the Plan Area, or cause other demographic changes that would increase the demand for such facilities. Bicycle projects may include earthwork or other activities that have the potential to affect underground or aboveground utility services such as natural gas service, telephone service, cable television and electric service. The City's and County's project processing procedures and the design/construction standards include requirements to contact service providers that may be affected to ensure that conflicts are avoided, or if conflicts cannot be avoided, that measures are taken to avoid service disruptions. As a result, the impact is less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

XV. RECREATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Environmental Setting

The City of Stockton Community Services Department Parks Division maintains and operates 63 parks. Parks. Parks range from two-acre neighborhood parks to 64-acre community parks. Each park provides varied amenities and facilities such as picnic areas, tot lots, game courts, swimming pools, fountains and more. In addition to the 63 parks, Stockton is home to Pixie Woods Children's Playland and Stockton Skate Park. Parks within the unincorporated areas of the Plan Area or adjacent to the Plan Area are provided through the San Joaquin County Parks and Recreation Department and include Madison Park, Boggs Tract Park, West Jackson Park, Gianone Park, Garden Acres Park, Eastside Park, Kennedy Park, and Taft Park.

Discussion

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* ***(Less than Significant Impact)***

The projects proposed in the Plan would not substantially increase the demand for neighborhood or regional parks or other recreational facilities, or affect existing recreational opportunities. Many of the proposed bicycle projects are intended for recreational use and have the potential to improve access to recreational facilities, thereby enhancing the experience for users of these facilities. As such, buildout of the Plan is not anticipated to result in substantial deterioration of these facilities and related impacts would be less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* ***(Less than Significant Impact)***

As noted in Section XV, a), the Plan would not substantially increase the use of local recreational facilities, and would not require the construction or expansion of recreational facilities beyond the improvement projects identified in adopted land use plans or other recreation plans. Therefore, the Master Plan would have a less than significant impact on recreational facilities.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

XVI. TRANSPORTATION/TRAFFIC Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact/ Positive Impact**
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		X		
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

Discussion

a) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?* ***(Less than Significant with Mitigation Incorporated)***

Thresholds of significance have been developed and articulated in the City of Stockton roadway system based on transportation impact study guidelines adopted in 2003. These guidelines require

conditions without and with the project be compared to identify significant impacts to City of Stockton roadways. Specifically, the guidelines state:

1. If a signalized intersection is projected to operate acceptably (i.e., LOS D or better with an average control delay of equal to or less than 55 seconds per vehicle) without the project and the project is expected to cause the facility to operate at an unacceptable LOS (LOS E or F), the impact is considered significant.

3. If an intersection is projected to operate unacceptably (i.e., LOS E or F) without the project, and the project is expected to increase the average control delay by more than 5 seconds, the impact is considered significant.

4. If an intersection is projected to operate at an unacceptable LOS E without the project and the project is expected to cause the facility to operate at an unacceptable LOS F, but the average control delay does not increase by more than 5 seconds, City staff would determine whether the project has a significant impact.

5. If the operations of an unsignalized study intersection is projected to decline from acceptable to unacceptable with the addition of project traffic, and if the installation of a traffic signal based on the Manual on Uniform Traffic Control Devices (MUTCD) Peak Hour Signal Warrant (Warrant 3) would be warranted, the impact is considered significant.

By providing improved opportunities for bicycle travel in the Plan Area, the Plan should generally reduce levels of auto use and improve level of service for all travelers. Moreover, specific development is not being proposed by Plan and adoption of this environmental document would not authorize any development project. The Plan is a programmatic document that proposes goals and policies pertaining to the future of bicycling in the Plan Area. The Plan is intended as a guidance document aimed at promoting an ultimate vision of a connected and complete bikeway system that provides safe convenient and enjoyable connections between key destinations in around the Plan Area.

While the adoption of the Plan would not directly lead to physical changes, future implementation of project components contained in the Plan (bike lanes, bike paths, bridges, small structures, etc.) could potentially impact existing roadways and intersections and traffic operations at such facilities. Importantly, for projects listed on Table 1 where Road Diets are shown as the means of implementing bicycle lanes, a focused traffic study should be conducted to ascertain that the reduction in auto lanes from four to three will not result in a significant impact to auto LOS per the City's criteria. Similarly, for projects listed on Table where implementation is shown as requiring "further study" should be required to perform a focused traffic analysis, if such further study recommends reduction in the number of lanes available to motor vehicles.

Furthermore, new unprotected bicycle lanes should first be subjected to additional analysis to determine their impacts to (and safety from) other roadway and vehicular activity, particularly on high volume facilities with speed limits of 35 mph or greater.

Also, construction activities will require various vehicular trips to and from the various project sites. However, these will be minimal and temporary. If partial or full road closure is necessary during project construction, the contractor will be required to adhere to all regulations from the City, Caltrans, Sn Joaquin County, and/or other regulatory agency. Individual projects would be subject to site-specific environmental review, at which time the responsible agencies would identify the potential transportation-related impacts.

While adoption of the Plan alone would not directly create any transportation-related impacts, since specific development is not being proposed under the Plan, and the Plan itself would not in itself authorize any development, further study will be necessary in conjunction with the implementation of specific projects included in the Plan, Individual projects to implement the Plan should be required to comply with the goals and policies under the City's and County's General Plan, development codes, and other relevant regulatory documents. Moreover, as discussed above, projects listed on Table 1 that involve Road Diets or otherwise reduce motor vehicle capacity should first perform focused traffic studies to ensure there are no significant impacts to vehicular LOS per City standards. With this mitigation, impacts will be less than significant.

b) *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?* ***(No Impact)***

The San Joaquin County Council of Governments (SJCOG) is the county Congestion Management Agency (CMA) for Stockton and its region. SJCOG has established multimodal performance measures since Federal directives require multimodal system performance measurement, as well as strategies that can be reflected in regional planning documents, such as SJCOG's Regional Transportation Plan (RTP) and SJCOG's Federal Transportation Improvement Program (FTIP).

SJCOG's Regional CMP monitors several performance indicators that track progress in the following areas, including the regional bicycle system:

- ✓ Roadway Operational Efficiency
- ✓ Goods Movement
- ✓ Transit System Performance
- ✓ ***Bikeway System***
- ✓ Complete Streets / Alternative Modes
- ✓ Travel Demand Management

Bicycle system performance measures are reported during biennial Regional CMP updates. Four indicators track the percent of the entire planned regional bicycle network completed, as well as the percent of Class I, II, and III bicycle facilities completed. By facilitating the development of bicycle facilities, the Stockton Bicycle Master Plan will improve Bicycle System performance per SJCOG's CMP standards. Moreover, as noted above under item a), the Master Plan should generally serve to reduce levels of auto use and improve roadway/motor vehicle level of service.

The Regional CMP also includes vehicular LOS standard applicable to the Regional CMP network. This network includes several major Stockton arterial streets. Since the basic Regional CMP LOS standard

(LOS E) is less stringent than the City of Stockton's LOS D standard, maintaining the City's LOS standard will ensure that the Regional threshold is not exceeded.

c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?* ***(No Impact)***

The Stockton Metropolitan Airport located in located within the City's sphere of influence, and the airport vicinity would be served by proposed bikeways under the Master Plan. However, there would be no impact on air traffic to and from the Airport.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* ***(Less than Significant Impact)***

The Plan aims to reduce hazards for cyclists due to lack of proper design for bicycles, including dangerous curves and intersections, and to reduce incompatible mixes of traffic types. The Plan proposes bikeways that are compatible with the existing and planned street network. Like all California Cities, specific design of the Plan Area's bikeways will be governed by numerous design standards and guidance, including the Caltrans Highway Design Manual (HDM), and the California Manual of Uniform Traffic Control Devices (MUTCD). Proposed Bicycle Infrastructure improvements would enhance safety through appropriate separation of bicyclists from motorized traffic. Following these design manuals, potential adverse impacts associated with design features would be reduced to a less than significant level.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

e) *Result in inadequate emergency access?* ***(No Impact)***

The Plan overall will have no adverse impact on emergency access. Under Stockton's and San Joaquin County's development review process, local law enforcement agencies and fire services are included in the design process to ensure that there are provisions for emergency access.

f) *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?* ***(No Impact)***

The Plan supports and implements adopted policies, plans and programs supporting alternative transportation. Implementation of the proposed Plan would provide for many bicycle facilities and programs intended to promote alternative transportation for commuting, personal business, and recreation purposes.

SB 743 and the BICYCLE MASTER PLAN MND

Senate Bill 743 signed into law in 2013 mandates changes in the way that public agencies evaluate transportation impacts of projects under the California Environmental Quality Act. Legislative findings in that bill plainly state that CEQA should not treat active transportation options as adverse environmental

outcomes. The latest SB 743 Guidelines (January 2016) from the Governor's Office of Planning and Research state (page I.2) "that development proposed near transit, as well as roadway rehabilitation, transit, bicycle and pedestrian projects, should be considered to have a less than significant transportation impact."

On pp. III.26 and III.27 the draft Guidelines state:

Projects that would not likely lead to a substantial or measurable increase in VMT, and therefore should not require analysis, generally include:

- ✓ Rehabilitation, maintenance, replacement and repair projects designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts, tunnels, transit systems, and **assets that serve bicycle and pedestrian facilities**) and that do not add additional motor vehicle lanes.

On page III.32. the Guidelines comment on how Transit and Active Transportation Projects should be viewed under CEQA:

- ✓ Transit and active transportation projects generally reduce VMT and therefore are presumed to cause a **less than significant impact on transportation**. **This presumption may apply to all** passenger rail projects, bus and bus rapid transit projects, and **bicycle and pedestrian infrastructure projects**. Streamlining transit and active transportation projects aligns with each of the three statutory goals by reducing GHG emissions, increasing multimodal transportation networks, and facilitating mixed use development.

While the current SB 743 guidelines view bicycle facilities as having less than significant impacts, it is uncertain at this point whether this applies to bicycle projects that reduce auto travel lanes and as a result, significantly increase auto congestion. Therefore, based on the foregoing discussion, the following transportation mitigation measures should be adopted.

Mitigation Measures

XVI.1: Projects listed in Table 1 whose implementation involves Road Diets shall conduct a focused traffic analysis to ascertain that reducing the number of lanes available for motor vehicles will not result in significant impact to the City's vehicular level of service standards.

XVI.2: Projects listed in Table 1 whose implementation requires further study shall conduct a focused traffic analysis to ascertain that there will not be a significant impact to the City's vehicular level of service standards, if such further study determines the need to reduce the number of lanes available for motor vehicles.

XVI.3: Where unprotected bike lanes are proposed on higher speed, high volume roadways, a focused traffic analysis should be conducted to ensure that there will not be a significant increase in safety risks. Design features shall be recommended and incorporated into the project to allow for a safe facility considering adjacent motorized traffic volume and speed.

XVII. TRIBAL CULTURAL RESOURCES Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Environmental Setting

Discussion

a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or* ***(Less than Significant with Mitigation Incorporated)***

It is possible that implementation of an improvement project contained in the plan could result in the discovery of an artifact or other item of cultural and historical importance to tribal nations. To reduce impacts to a less than significant level, **Mitigation Measure XVII.1** would be implemented.

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.* ***(Less than Significant with Mitigation Incorporated)***

Uncovering Native American human remains or artifacts or affecting a sacred place can occur throughout California. In some areas proposed bicycle and pedestrian improvements may result in grading or ground disturbance of human remains, impacts on a sacred place or site, or cause other

Native American artifacts to be found. To reduce impacts to a less than significant level, **Mitigation Measure XVII.1** would be implemented.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

Mitigation Measure:

XVIII.1: If human remains or other native American artifacts are encountered during construction activities, or if it is determined that a sacred site or area ha potentially been disturbed, work within 25 feet of the discovery shall be halted and the San Joaquin County Coroner and an archaeologist shall be immediately notified to review the remains, review the artifact recovered, or to determine whether a sacred site exists. The City, San Joaquin County, or other responsible agency shall consult with other appropriate agencies, as necessary. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of the identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. The Native American Heritage Commission and local Native American Tribal representatives must also be notified of any significant artifacts recovered. Upon completion, the archaeologist shall document the results, and provide recommendations for the treatment of human remains and any other cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City and/or San Joaquin County and the Northwest Information Center for review and action.

XVIII.2: There shall be consultation with Native American representatives regarding cultural resources to identify locations of importance to Native Americans, including archeological sites and traditional cultural properties. Coordination with the Native American Heritage Commission should begin at the onset of a particular project.

XIII. UTILITIES AND SERVICE SYSTEMS Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Environmental Setting

The City of Stockton's Municipal Utilities Department (MUD) provides wastewater treatment services (via the Regional Wastewater Control Facility) to the City of Stockton and some outlying County areas, clean drinking water for the northern and southern portions of the City, and stormwater services throughout the City. Some of the Plan Area's water supply comes from groundwater wells with remaining water needs met via treated surface water supplied by the Stockton East Water District. The Delta Water Treatment Plant provides a supplemental, high quality water supply for the Plan Area.

Discussion

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?* ***(No Impact)***

The proposed Plan would not increase the demand for wastewater treatment and would therefore not exceed the treatment requirements of the Regional Water Quality Control Board. As a result, there would be **no impacts** to water and wastewater facilities.

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* ***(Less than Significant Impact)***

Implementation of the Plan would not generate or require the use of substantial quantities of water. A small increase in water use may occur with landscape irrigation for projects that include landscaping or street tree planting. Such improvements would all need to comply with City and County policies regarding irrigation, planting of native species, and water-efficient landscape design. The Plan would not require the construction of new wastewater or water facilities, or the expansion of existing facilities. Therefore, the Plan would have a less than significant effect on water and wastewater treatment facilities.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* ***(Less than Significant Impact)***

Refer to Sections IX, a) and c). Projects that would be implemented under the proposed Plan would not generate a substantial quantity of runoff that would exceed the capacity of stormwater drainage systems that serve the Plan Area and no new drainage facilities would need to be constructed. Therefore, implementation of the Plan would have less than a significant effect.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?* ***(Less than Significant Impact)***

Development of some recommended Plan projects that include landscaping or street tree planting could require small amounts of water for irrigation. Once established, and operating under City and County policies for public landscaping, these plants would require little if any supplemental watering. Existing water entitlements would be sufficient to supply water to the projects and impacts associated with insufficient water supplies are expected to be less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would

be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?* ***(No Impact)***

Projects that would be implemented under the proposed Plan would not generate wastewater and would not result in an increase in demand for wastewater treatment. Therefore, there would be no impacts to wastewater treatment facilities demand.

f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?* ***(Less than Significant Impact)***

Implementation of the proposed plan would not generate solid waste (beyond whatever small quantities of construction waste could not be recycled and reused). Existing landfills would have sufficient capacity to accommodate this potential minor increase in construction waste. Impacts associated with landfill capacity are expected to be less than significant.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

g) *Comply with federal, state, and local statutes and regulations related to solid waste?* ***(Less than Significant Impact)***

See section XVII, f). The proposed improvements under the Plan would comply with federal, State, and local statues and regulations related to solid waste. Therefore, implementation of the Plan would have a less than significant effect on statutes and regulations related to solid waste.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

XIX. MADATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Environmental Setting

Discussion

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?* ***(Less than Significant Impact)***

Projects reflected in the proposed Plan could degrade the quality of the environment; however, implementation of Mitigation Measures 1.1 – 1.5, III.1, IV.1 and IV.2, V.1 – V.3, X.1, XVII.1 and XVII.2 would ensure that potential impacts related to aesthetics, air quality, biological resources, cultural resources, land use and planning, and tribal cultural resources would be reduced to less than significant levels. With mitigation, implementation of the Plan and proposed projects would not: 1) substantially degrade the quality of the environment; 2) substantially reduce the habitat of a fish or wildlife species; 3) cause a fish or wildlife species population to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a

rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?* ***(Less than Significant Impact)***

Proposed Plan projects would generally be individually limited and not cumulatively considerable. Most of the Plan impacts would result from construction-period activities for individual projects, and would be temporary. All environmental impacts that could occur as a result of implementation of the proposed Plan would be reduced to less than significant levels through implementation of the mitigation measures recommended in this document.

Furthermore, when specific bicycle projects are implemented, the affected agencies will conduct CEQA analysis, as necessary. In addition, implementation of the Plan and its individual projects would be required to comply with the goals and policies under the City's and the County's General Plan, development codes, and other relevant regulatory documents.

c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?* ***(No Impact)***

The proposed Plan would not result in environmental effects that would cause substantial direct or indirect adverse effects to human beings.