

Table of Contents

	Page
VOLUME I	
Table of Contents	i
Introduction	v
List of Technical Studies (Bound Separately).....	ix
List of Figures	xi
List of Tables	xiv
List of Abbreviated Terms	xvi
Summary	S-1
S.1 Introduction	S-1
S.2 Summary of the Proposed Project under CEQA.....	S-1
S.2.1 Summary of Alternatives to the Proposed Project under CEQA.....	S-4
S.3 Summary of the Proposed Action under NEPA	S-6
S.3.1 Summary of Alternatives to the Proposed Action under NEPA.....	S-7
S.4 Summary of Major Potential Impacts of the Proposed Project/Action and of the Alternatives	S-7
S.5 Known Areas of Controversy.....	S-8
S.6 Short-term Uses Versus Long-Term Productivity	S-8
S.7 Irreversible and Irrecoverable Commitment of Resources.....	S-8
S.8 Environmentally Preferred Alternative.....	S-9
S.9 Summary of Coordination and Consultation with Other Agencies	S-10
S.10 Summary of Public Involvement Process.....	S-11
Chapter 1 Project Objectives/Purpose and Need and Description of the Proposed Project/Action.....	1-1
1.1 Project Location	1-1
1.2 Project Background	1-1
1.3 Project Approach.....	1-6
1.4 Existing Interchange.....	1-7
1.5 CEQA Project Objectives and Description of the Proposed Project.....	1-8
1.5.1 CEQA Project Objectives	1-8
1.5.2 CEQA Project Description.....	1-9
1.6 NEPA Purpose and Need and Description of the Proposed Action.....	1-17
1.6.1 NEPA Purpose and Need	1-17
1.6.2 NEPA Description of the Proposed Action.....	1-18
1.7 Related Project	1-21
1.8 Required Permits and Approvals.....	1-22
1.8.1 Lead Agency Approvals.....	1-22
1.8.2 Approval by Other Agencies.....	1-23
Chapter 2 Project Alternatives	2-1
2.1 Alternatives Development Process and Alternatives Considered and Withdrawn	2-1
2.2 CEQA Project Alternatives	2-4
2.2.1 No-Project Alternative (2025).....	2-5
2.2.2 6-Lane Tight Diamond Alternative	2-5
2.2.3 4-Lane Tight Diamond Alternative (2025).....	2-6

2.3	NEPA Project Alternatives.....	2-7
2.3.1	No-Action Alternative.....	2-7
Chapter 3 Affected Environment, Environmental Consequences, and Mitigation Measures—		
	NEPA Evaluation.....	3-1
3.1	Land Use, Planning, and Growth.....	3-3
3.1.1	Affected Environment.....	3-3
3.1.2	Environmental Consequences.....	3-10
3.2	Community Impacts and Environmental Justice.....	3-19
3.2.1	Affected Environment.....	3-19
3.2.2	Environmental Consequences.....	3-24
3.3	Relocation.....	3-29
3.3.1	Affected Environment.....	3-29
3.3.2	Environmental Consequences.....	3-29
3.4	Traffic and Transportation/Pedestrian and Bicycle Facilities.....	3-35
3.4.1	Affected Environment.....	3-35
3.4.2	Environmental Consequences.....	3-43
3.5	Air Quality.....	3-59
3.5.1	Affected Environment.....	3-59
3.5.2	Environmental Consequences.....	3-65
3.6	Noise.....	3-73
3.6.1	Affected Environment.....	3-73
3.6.2	Environmental Consequences.....	3-82
3.7	Hydrology, Water Quality, and Floodplains.....	3-89
3.7.1	Affected Environment.....	3-89
3.7.2	Environmental Consequences.....	3-95
3.8	Wildlife and Botanical Resources, Threatened and Endangered Species, and Wetlands and Waters of the U.S.....	3-105
3.8.1	Affected Environment.....	3-105
3.8.2	Environmental Consequences.....	3-122
3.9	Historic and Archeological Preservation.....	3-145
3.9.1	Affected Environment.....	3-145
3.9.2	Environmental Consequences.....	3-157
3.10	Earth Resources and Hazardous Materials.....	3-161
3.10.1	Affected Environment.....	3-161
3.10.2	Environmental Consequences.....	3-168
3.11	Visual.....	3-175
3.11.1	Affected Environment.....	3-175
3.11.2	Environmental Consequences.....	3-181
3.12	Utilities/Emergency Services.....	3-189
3.12.1	Affected Environment.....	3-189
3.12.2	Environmental Consequences.....	3-190
Chapter 4 Cumulative Impacts.....		
4.1	Introduction.....	4-1
4.2	Growth Forecast for Traffic, Air Quality, and Noise Evaluations.....	4-1
4.3	Growth Forecast for Other Environmental Issues.....	4-2
4.4	Assessment of Cumulative Impacts.....	4-3
4.4.1	Land Use, Planning, and Growth.....	4-3
4.4.2	Community Impacts.....	4-3
4.4.3	Relocation.....	4-4
4.4.4	Traffic and Transportation/Pedestrian and Bicycle Facilities.....	4-4
4.4.5	Air Quality.....	4-5
4.4.6	Noise.....	4-5

4.4.7	Hydrology, Water Quality, and Floodplains	4-6
4.4.8	Wildlife and Botanical Resources, Threatened and Endangered Species, and Wetlands and Waters of the U.S	4-7
4.4.9	Historic and Archeological Preservation.....	4-9
4.4.10	Hazardous Materials and Earth Resources	4-9
4.4.11	Visual	4-10
4.4.12	Utilities/Emergency Services	4-11
Chapter 5	California Environmental Quality Act Evaluation.....	5-1
5.1	Land Use, Planning, and Growth	5-5
5.1.1	Determining Significance under CEQA	5-5
5.1.2	Environmental Impacts	5-5
5.2	Community Impacts	5-17
5.2.1	Determining Significance under CEQA	5-17
5.2.2	Environmental Impacts	5-17
5.3	Relocation	5-21
5.3.1	Determining Significance under CEQA	5-21
5.3.2	Environmental Impacts	5-21
5.4	Traffic and Transportation/Pedestrian and Bicycle Facilities.....	5-27
5.4.1	2025 Conditions	5-27
5.4.2	Determining Significance under CEQA	5-30
5.4.3	Environmental Impacts	5-31
5.5	Air Quality	5-43
5.5.1	Determining Significance under CEQA	5-43
5.5.2	Environmental Impacts	5-43
5.6	Noise	5-49
5.6.1	Determining Significance under CEQA	5-49
5.6.2	Environmental Impacts	5-50
5.7	Hydrology, Water Quality, and Floodplains.....	5-57
5.7.1	Determining Significance under CEQA	5-57
5.7.2	Environmental Impacts	5-58
5.8	Wildlife and Botanical Resources, Threatened and Endangered Species, and Wetlands and Waters of the U.S.	5-69
5.8.1	Determining Significance under CEQA	5-69
5.8.2	Environmental Impacts	5-70
5.9	Historic and Archeological Resources	5-93
5.9.1	Determining Significance under CEQA	5-93
5.9.2	Environmental Impacts	5-93
5.10	Earth Resources and Hazardous Materials	5-97
5.10.1	Determining Significance under CEQA	5-97
5.10.2	Environmental Impacts	5-98
5.11	Visual	5-105
5.11.1	Determining Significance under CEQA	5-105
5.11.2	Environmental Impacts	5-105
5.12	Utilities/Emergency Services	5-113
5.12.1	Determining Significance under CEQA	5-113
5.12.2	Environmental Impacts	5-113
5.13	Mitigation Monitoring Program	5-117
Chapter 6	Summary of Public Involvement Process/Tribal Coordination.....	6-1
6.1	Public Involvement Process	6-1
6.2	Tribal Coordination	6-2
Chapter 7	List of Preparers.....	7-1

Chapter 8 References Cited..... 8-1
8.1 Printed References..... 8-1
8.2 Personal Communications 8-11

VOLUME II (Bound Separately)

Appendix A Title VI Policy Statement
Appendix B Coordination and Consultation
Appendix C Correspondence
Appendix D Notice of Preparation (NOP), CEQA Checklist, and NOP Comments
Appendix E Public Involvement Process
Appendix F Summary of Relocation Benefits
Appendix G Draft Mitigation Monitoring Program
Appendix H Writ of Mandate
Appendix I Relationship of Program-Level Mitigation Measures Adopted as Part of the Missouri Flat Area Master Circulation and Funding Plan (MC&FP) Environmental Impact Report and the Project-Level Mitigation Measures Recommended in this Report for the U.S. 50/Missouri Flat Road Interchange Project
Appendix J Relationship of Program-Level Mitigation Measures Adopted as Part of the 2025 Metropolitan Transportation Plan and Project-Level Mitigation Measures Recommended in this Report for the U.S. 50/Missouri Flat Road Interchange Project