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APPENDIX D

COST ESTIMATES OF SAFETY PROJECTS



City of Colusa Cost Estimate

Project 1: Citywide Street Light Inventory

Project Limits: Citywide

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Street Light Inventory and Installation	Perform Photometric Analysis	EA	\$7,500.00	1	\$7,500	\$1,070,000	\$1,230,500
	Upgrade Existing Street Lighting	EA	\$1,000.00	250	\$250,000		
	Installing New Street Lighting	EA	\$12,000.00	50	\$600,000		
	Install Service Point	EA	\$10,000.00	10	\$100,000		
	Install Street Lighting Cable	LF	\$5.00	22500	\$112,500		
Project Cost Total							\$1,230,500
Contingency Cost(20%)							\$246,100
Subtotal							\$1,476,600
Engineering Costs(35%)							\$516,900
Total							\$1,993,500

City of Colusa Cost Estimate

Project 2: Citywide Sign Inventory and Sign Retroreflectivity

Project Limits: Citywide

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Sign Inventory and Installation	Remove Sign and Post	EA	\$200.00	2,290	\$458,000	\$1,374,000	\$1,580,100
	Install Sign and Post	EA	\$400.00	2,290	\$916,000		
Project Cost Total							\$1,580,100
Contingency Cost(20%)							\$316,100
Subtotal							\$1,896,200
Engineering Costs(25%)							\$474,100
Total							\$2,370,300

City of Colusa Cost Estimate

Project 3: Citywide Speed Study

Project Limits: Citywide

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Speed Study	Perform Speed Study	LS	\$20,000.00	1	\$20,000	\$120,000	\$138,000
	Install Dynamic/Variable Speed	EA	\$10,000.00	10	\$100,000		
Project Cost Total							\$138,000
Contingency Cost(20%)							\$27,600
Subtotal							\$165,600
Engineering Costs(25%)							\$41,400
Total							\$207,000

City of Colusa Cost Estimate

Project 4: Bicycle Safety Improvements

Project Limits: 6th Street (from Main St to Sioc St)							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Class II Bike Lane	Install Striping	LF	\$4.00	13800	\$55,200	\$89,400	\$102,900
	Install Pavement Marking	EA	\$250.00	76	\$19,000		
	Install Sign and Post	EA	\$200.00	76	\$15,200		
Project Limits: Fremont St (10th St to Bridge St)							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Class II Bike Lane	Install Striping	LF	\$4.00	16000	\$64,000	\$79,300	\$91,200
	Install Pavement Marking	EA	\$250.00	34	\$8,500		
	Install Sign and Post	EA	\$200.00	34	\$6,800		
Project Limits: 3rd St - Jay St - 4th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Class III Bike Route	Install Pavement Marking	EA	\$250.00	122	\$30,500	\$42,700	\$49,200
	Install Sign and Post	EA	\$200.00	61	\$12,200		
Project Limits: 3rd and Parkhill							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	36	\$90	\$1,134	\$1,400
	Install Striping	LF	\$4.00	36	\$144		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: Fremont and 1st							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	36	\$90	\$1,134	\$1,400
	Install Striping	LF	\$4.00	36	\$144		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		

Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: Sioc and Bridge St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
LPI	Modify Signal Phasing to Implement a Lead Pedestrian Interval	LS	\$2,500.00	1	\$2,500	\$2,500	\$2,900
Advance stop bar	Install Stop Bar	LF	\$8.00	120	\$960	\$960	\$1,200
Project Limits: 3rd St (Jay St to Victoria Way)							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Fill Sidewalk Gap	Site Preparation and Removal	SF	\$12.00	7500	\$90,000	\$378,000	\$434,700
	Install Sidewalk	SF	\$20.00	7500	\$150,000		
	Install Curb Ramp	EA	\$10,000.00	12	\$120,000		
	Install Curb and Gutter	LF	\$40.00		\$0		
	Install Driveway	EA	\$5,000.00		\$0		
	Allowance for Drainage	LS	\$18,000.00	1	\$18,000		
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	8	\$8,000	\$8,000	\$9,200
Improve Sign Visibility							
Project Limits: 6th St (Main St to Sioc St)							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
ADA compliant sidewalks and curb ramps	Site Preparation and Removal	SF	\$12.00	20700	\$248,400	\$1,335,200	\$1,535,500
	Install Sidewalk	SF	\$20.00	20700	\$414,000		
	Install Curb Ramp	EA	\$10,000.00	59	\$590,000		
	Install Curb and Gutter	LF	\$40.00		\$0		
	Install Driveway	EA	\$5,000.00		\$0		
	Allowance for Drainage	LS	\$82,800.00	1	\$82,800		
Upgrade Pavement Markings							
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Install Street Lighting	Install Street Light Pole	EA	\$17,000.00	18	\$306,000	\$806,500	\$927,500
	Install Street Lighting Conduit	LF	\$75.00	4140	\$310,500		
	Install Service Point	EA	\$10,000.00	19	\$190,000		
Project Limits: Parkhill St (Bridge Street to 13th Street):							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Class II Bike Lane	Install Striping	LF	\$4.00	20800	\$83,200	\$108,400	\$124,700
	Install Pavement Marking	EA	\$250.00	56	\$14,000		
	Install Sign and Post	EA	\$200.00	56	\$11,200		

Project Limits: Parkhill St and 10th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50		\$0	\$900	\$1,100
	Install Striping	LF	\$4.00		\$0		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Parkhill St and 9th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	20	\$50	\$580	\$700
	Install Striping	LF	\$4.00	20	\$80		
	Remove Pavement Marking	EA	\$200.00	1	\$200		
	Install Pavement Marking	EA	\$250.00	1	\$250		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	200	\$800	\$800	\$1,000

Project Limits: Parkhill St and 8th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Parkhill St and 7th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Parkhill St and 6th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Parkhill St and 5th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Parkhill St and 4th St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Parkhill St and 2nd St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50		\$0	\$0	\$0
	Install Striping	LF	\$4.00		\$0		
	Remove Pavement Marking	EA	\$200.00		\$0		
	Install Pavement Marking	EA	\$250.00		\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	800	\$3,200	\$3,200	\$3,700

Project Limits: Parkhill St and 1st St:

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50		\$0	\$0	\$0
	Install Striping	LF	\$4.00		\$0		
	Remove Pavement Marking	EA	\$200.00		\$0		
	Install Pavement Marking	EA	\$250.00		\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	800	\$3,200	\$3,200	\$3,700
Project Limits: Parkhill St and Bridge St:							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade Pavement Markings	Remove Striping	LF	\$2.50		\$0	\$0	\$0
	Install Striping	LF	\$4.00		\$0		
	Remove Pavement Marking	EA	\$200.00		\$0		
	Install Pavement Marking	EA	\$250.00		\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Cost Total							\$3,320,700
Contingency Cost(20%)							\$664,200
Subtotal							\$3,984,900
Engineering Costs(35%)							\$1,394,800
Total							\$5,379,700

City of Colusa Cost Estimate

Project 5: Fremont Street Safety Improvement

Project Limits: 10th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Fremont St - Through and Left turn lanes	Install Striping	LF	\$4.00	400	\$1,600	\$2,100	\$2,500
	Install Pavement Marking	EA	\$250.00	2	\$500		
Install Pedestrian Hybrid Beacon (PHB)	Install Pedestrian Hybrid Beacon System	LS	\$200,000.00	1	\$200,000	\$201,000	\$231,200
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
Install medians at the intersection approaches 10th St	Install Median Concrete	SF	\$25.00	200	\$5,000	\$21,000	\$24,200
	Install Median Curb	LF	\$40.00	400	\$16,000		
Project Limits: 9th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Clear sight triangle	Paint Red Curb	LF	\$4.00	200	\$800	\$800	\$1,000
Upgrade pedestrian crossing with a sign	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Project Limits: 8th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	200	\$800	\$800	\$1,000
Upgrade pedestrian crossing with a sign	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Project Limits: 7th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
LPI	Modify Signal Phasing to Implement a Lead Pedestrian Interval	LS	\$2,500.00	1	\$2,500	\$2,500	\$2,900
Project Limits: 6th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization

Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Upgrade pedestrian crossing with a sign	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Project Limits: 5th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Bulb-outs	Install Bulbout	EA	\$15,000.00	4	\$60,000	\$140,000	\$161,000
	Install Curb Ramp	EA	\$10,000.00	8	\$80,000		
Project Limits: 4th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Project Limits: 3rd St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
LPI	Modify Signal Phasing to Implement a Lead Pedestrian Interval	LS	\$2,500.00	1	\$2,500	\$2,500	\$2,900
Project Limits: 2nd St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Upgrade pedestrian crossing with a sign	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Project Limits: 1st St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization

Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Upgrade pedestrian crossing with a sign	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Project Limits: Bridge St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Traffic Signal	Install Traffic Signal (subject to warrant study)	EA	\$1,000,000.00	1	\$1,000,000	\$1,000,000	\$1,150,000
						Project Cost Total	\$1,629,600
						Contingency Cost(20%)	\$326,000
						Subtotal	\$1,955,600
						Engineering Costs(35%)	\$684,500
						Total	\$2,640,100

City of Colusa Cost Estimate

Project 6: Sioc Street Safety Improvement

Project Limits: 9th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Project Limits: 8th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Project Limits: 7th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade pedestrian crossing with a sign	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: 6th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade pedestrian crossing with a sign	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: 5th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade pedestrian crossing with a sign	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	800	\$3,200	\$3,200	\$3,700
Project Limits: 4th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization

Upgrade pedestrian crossing with a sign	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: 3rd St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Project Limits: 2nd St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Upgrade pedestrian crossing with a sign	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
	Install Sign and Post	EA	\$200.00	4	\$800	\$800	\$1,000
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: Bridge St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Protected Left Turn	Install Signal Modification	LS	\$100,000.00	1	\$100,000	\$100,000	\$115,000
						Project Cost Total	\$168,100
						Contingency Cost(20%)	\$33,700
						Subtotal	\$201,800
						Engineering Costs(35%)	\$70,700
						Total	\$272,500

City of Colusa Cost Estimate

Project 7: School Safety Improvement

Project Limits: Colus Ave to Harris St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
ADA compliant sidewalks and curb ramps	Site Preparation and Removal	SF	\$12.00	39480	\$473,760	\$1,621,280	\$1,864,500
	Install Sidewalk	SF	\$20.00	39480	\$789,600		
	Install Curb Ramp	EA	\$10,000.00	20	\$200,000		
	Install Curb and Gutter	LF	\$40.00		\$0		
	Install Driveway	EA	\$5,000.00		\$0		
	Allowance for Drainage	LS	\$157,920.00	1	\$157,920		
Class II Bike Lane	Install Striping	LF	\$4.00	4900	\$19,600	\$30,400	\$35,000
	Install Pavement Marking	EA	\$250.00	24	\$6,000		
	Install Sign and Post	EA	\$200.00	24	\$4,800		
Install Street Lighting	Install Street Light Pole	EA	\$17,000.00	13	\$221,000	\$491,500	\$565,300
	Install Street Lighting Conduit	LF	\$75.00	2940	\$220,500		
	Install Service Point	EA	\$10,000.00	5	\$50,000		
Pavement resurface	Removal and resurfacing of pavement	SF	\$8.00	98000	\$784,000	\$784,000	\$901,600
Pavement markings and striping	Install Striping	LF	\$4.00	4900	\$19,600	\$19,600	\$22,600

Project Limits: 8th St at Harris St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Advance stop bar	Install Stop Bar	LF	\$8.00	48	\$384	\$384	\$500

Project Limits: 8th St at Sioc St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Advance stop bar	Install Stop Bar	LF	\$8.00	96	\$768	\$768	\$900
Fill Sidewalk Gap	Site Preparation and Removal	SF	\$12.00	780	\$9,360	\$36,708	\$42,300
	Install Sidewalk	SF	\$20.00	780	\$15,600		
	Install Curb Ramp	EA	\$10,000.00	1	\$10,000		
	Install Curb and Gutter	LF	\$40.00		\$0		
	Install Driveway	EA	\$5,000.00		\$0		
	Allowance for Drainage	LS	\$1,748.00	1	\$1,748		

Project Limits: 8th St at E Carson St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Pavement resurface	Removal and resurfacing of pavement	SF	\$8.00	4500	\$36,000	\$36,000	\$41,400
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	48	\$120	\$1,212	\$1,400
	Install Striping	LF	\$4.00	48	\$192		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Project Limits: 8th St at Fremont St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Project Limits: Webster St: 10th St to 7th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Pavement resurface	Removal and resurfacing of pavement	SF	\$8.00	54000	\$432,000	\$432,000	\$496,800
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	360	\$900	\$5,040	\$5,800
	Install Striping	LF	\$4.00	360	\$1,440		
	Remove Pavement Marking	EA	\$200.00	6	\$1,200		
	Install Pavement Marking	EA	\$250.00	6	\$1,500		
Project Limits: Webster St and 8th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Project Limits: Webster St and 7th St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
						Project Cost Total	\$4,054,100
						Contingency Cost(20%)	\$810,900
						Subtotal	\$4,865,000
						Engineering Costs(35%)	\$1,702,800
						Total	\$6,567,800

City of Colusa Cost Estimate

Project 8: Oak Street Improvement

Project Limits: Oak St & 14th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	2	\$2,000	\$2,000	\$2,300
Advance stop bar	Install Stop Bar	LF	\$8.00	20	\$160	\$160	\$200
Stop Legend	Install Pavement Marking	EA	\$250.00	1	\$250	\$250	\$300
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	0	\$0	\$0	\$0

Project Limits: Oak St & 13th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	2	\$2,000	\$2,000	\$2,300
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	0	\$0	\$0	\$0

Project Limits: Oak St & 12th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 11th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		

	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 10th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	2	\$2,000	\$2,000	\$2,300
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	0	\$0	\$0	\$0
	Install Striping	LF	\$4.00	0	\$0		
	Remove Pavement Marking	EA	\$200.00	0	\$0		
	Install Pavement Marking	EA	\$250.00	0	\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 9th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 8th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 7th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
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Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 6th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 5th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	0	\$0	\$0	\$0
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	0	\$0	\$0	\$0
	Install Striping	LF	\$4.00	0	\$0		
	Remove Pavement Marking	EA	\$200.00	0	\$0		
	Install Pavement Marking	EA	\$250.00	0	\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	800	\$3,200	\$3,200	\$3,700

Project Limits: Oak St & 4th St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 3rd St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 2nd St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	40	\$100	\$1,160	\$1,400
	Install Striping	LF	\$4.00	40	\$160		
	Remove Pavement Marking	EA	\$200.00	2	\$400		
	Install Pavement Marking	EA	\$250.00	2	\$500		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & 1st St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	0	\$0	\$0	\$0
	Install Striping	LF	\$4.00	0	\$0		
	Remove Pavement Marking	EA	\$200.00	0	\$0		
	Install Pavement Marking	EA	\$250.00	0	\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900

Project Limits: Oak St & Bridge St

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Crosswalk Enhancement	Install High Visibility Crosswalk	EA	\$1,000.00	4	\$4,000	\$4,000	\$4,600
Upgrade Pavement Markings	Remove Striping	LF	\$2.50	0	\$0	\$0	\$0
	Install Striping	LF	\$4.00	0	\$0		
	Remove Pavement Marking	EA	\$200.00	0	\$0		

	Install Pavement Marking	EA	\$250.00	0	\$0		
Remove street parking near the intersection/ Clear sight triangle	Paint Red Curb	LF	\$4.00	400	\$1,600	\$1,600	\$1,900
Project Limits: Oak St Corridor							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Install Street Lighting	Install Street Light Pole	EA	\$17,000.00	35	\$595,000	\$1,385,000	\$1,592,800
	Install Street Lighting Conduit	LF	\$75.00	8400	\$630,000		
	Install Service Point	EA	\$10,000.00	16	\$160,000		
Center Line	Install Striping	LF	\$4.00	14000	\$56,000	\$56,000	\$64,400
Pavement resurface	Removal and resurfacing of pavement	SF	\$8.00	280000	\$2,240,000	\$2,240,000	\$2,576,000
Project Cost Total							\$4,331,700
Contingency Cost(20%)							\$866,400
Subtotal							\$5,198,100
Engineering Costs(35%)							\$1,819,400
Total							\$7,017,500

City of Colusa Cost Estimate

Project 9: Improve Safety on State Routes (SR 20 and SR 45)								
Project Limits: Bridge St and Market St								
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization	
	Traffic Signal	Install Traffic Signal (subject to warrant study)	EA	\$1,000,000.00	1	\$1,000,000	\$1,000,000	\$1,150,000
Project Limits: Market St at 4th St								
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization	
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500	
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000			
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000			
Project Limits: Market St at 5th St								
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization	
	Flashing beacon at STOP sign	Install Flashing Beacon System (per pole)	EA	\$15,000.00	2	\$30,000	\$30,000	\$34,500
Project Limits: Market St at 6th St								
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization	
Install Pedestrian Hybrid Beacon (PHB)	Install Pedestrian Hybrid Beacon System	LS	\$200,000.00	1	\$200,000	\$201,000	\$231,200	
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000			
Project Limits: Market St at 7th St								
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization	
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500	
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000			
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000			
Project Limits: Market St at 8th St								
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization	
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500	
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000			
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000			
Project Limits: Market St at 12th St								

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Project Limits: 10th St from Fremont St to Harris St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
ADA compliant sidewalks and curb ramps	Site Preparation and Removal	SF	\$12.00	11280	\$135,360	\$546,080	\$628,000
	Install Sidewalk	SF	\$20.00	11280	\$225,600		
	Install Curb Ramp	EA	\$10,000.00	14	\$140,000		
	Install Curb and Gutter	LF	\$40.00		\$0		
	Install Driveway	EA	\$5,000.00		\$0		
	Allowance for Drainage	LS	\$45,120.00	1	\$45,120		
Project Limits: SR 20 (10th St) and Will S Green Ave							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Curve Warning and Chevron Signs	Install Sign and Post	EA	\$200.00	12	\$2,400	\$2,400	\$2,800
Curve advisory speed feedback sign	Install Dynamic/Variable Speed Warning Sign (Solar-Powered)	EA	\$15,000.00	2	\$30,000	\$30,000	\$34,500
Project Limits: SR 20 (10th St) and Harris St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
Install medians	Install Median Concrete	SF	\$25.00	200	\$5,000	\$21,000	\$24,200
	Install Median Curb	LF	\$40.00	400	\$16,000		
Curve Warning and Chevron Signs	Install Sign and Post	EA	\$200.00	12	\$2,400	\$2,400	\$2,800
Curve advisory speed feedback sign	Install Dynamic/Variable Speed Warning Sign (Solar-Powered)	EA	\$15,000.00	2	\$30,000	\$30,000	\$34,500
Project Limits: 10th St and Parkhill St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Project Limits: 10th St and Webster St							

CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Project Limits: Bridge St and Clay St							
CM	Description	Unit	Unit Cost	Quantity	Subtotal	Total	Total with Traffic Control and Mobilization
RRFB	Install RRFB System (per Pole)	EA	\$10,000.00	2	\$20,000	\$23,000	\$26,500
	Install High Visibility Crosswalk	EA	\$1,000.00	1	\$1,000		
	Install Pedestrian Signage	EA	\$250.00	8	\$2,000		
Project Cost Total							\$2,328,000
Contingency Cost(20%)							\$465,600
Subtotal							\$2,793,600
Engineering Costs(35%)							\$977,800
Total							\$3,771,400

E

APPENDIX E

PROJECT PRIORITIZATION CALCULATION



Project	Safety Banefites (30%)	Vulnerable Users (15%)	School Impact (15%)	Equity Impact (10%)	Public Engagement (10%)	Ease of Implementation (20%)	Final Score
Project 1: Citywide Street Light Inventory	10	10	10	10	10	10	10
Project 2: Citywide Sign Inventory and Sign Retroreflectivity	10	10	10	10	10	10	10
Project 3: Citywide Speed Study	10	10	10	10	10	10	10
Project 4: Bicycle Safety Improvements	10	10	10	10	10	5	9
Project 5: Fremont Street Safety Improvement	5	10	10	0	10	5	6.5
Project 6: Sioc Street Safety Improvements	5	10	0	10	10	5	6
Project 7: School Safety Improvement	2	10	10	10	10	5	6.6
Project 8: Oak Street Safety Improvement	2	10	0	0	0	5	3.1
Project 9: Improve Safety on State Routes (SR 20 and SR 45)	10	10	10	10	10	5	9

Fatal	Severe Injury	Visible Injury	Complain of Pain	Severity Weight
1	1	10	17	43
1	1	6	12	30
0	1	4	9	20
0	0	1	1	3
0	0	2	3	7
2	2	6	10	34

Buckets (for BCR)	Value
Highest Value	43
Lowest Value	3
Group Range	40
Bucket 1 (2 points)	3 - 16
Bucket 2 (5 points)	17 - 30
Bucket 3 (10 points)	31 - 43