

TOTAL FUNDS FROM SETTLEMENT: \$2 MILLION

YEAR 1																																																																																					
Preliminary Evaluation of Projects																																																																																					
CENA priority	TC Priority 6/17/10	Source	Project	Description	Initial Construction Cost Estimate	Next Steps	Potential Delays	Fee for Next Steps	Preliminary conclusions	Priority Based on Ease of Completion	Construction Cost Estimate	Study and Design Fees	City/State Fees	Total Cost	High																																																																						
<table border="0" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;"></td> </tr> <tr> <td colspan="11"></td> <td style="text-align: center;">Construction Cost Estimate</td> <td colspan="2" style="text-align: center;">Consultant Study and Design Fees</td> <td style="text-align: center;">City/State Fees</td> <td colspan="2" style="text-align: center;">Total Cost</td> </tr> <tr> <td colspan="11"></td> <td style="text-align: center;">Low</td> <td colspan="2" style="text-align: center;">High</td> <td style="text-align: center;">Low</td> <td colspan="2" style="text-align: center;">High</td> </tr> <tr> <td colspan="11"></td> <td style="text-align: center;">Total for Year 1</td> <td style="text-align: center;">\$1,569,000</td> <td style="text-align: center;">\$145,000</td> <td style="text-align: center;">\$290,000</td> <td style="text-align: center;">\$235,350</td> <td style="text-align: center;">\$1,949,350</td> <td style="text-align: center;">\$2,094,350</td> </tr> </table>																																													Construction Cost Estimate	Consultant Study and Design Fees		City/State Fees	Total Cost													Low	High		Low	High													Total for Year 1	\$1,569,000	\$145,000	\$290,000	\$235,350	\$1,949,350	\$2,094,350
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1a	Y1	1	Claremont & Ashby Intersection Improvement Study (Phase 1)	Left Turn lanes Study	n/a	Conduct Field review and study to develop concept for discussion with Caltrans	May not meet Caltrans signal operation standards	\$5,000	\$10,000	Phase 1 is a candidate for first year implementation	?	\$5,000	\$10,000	\$5,000	\$10,000	Phase 1 Study; Phase 2 Construction																																																																					
1b	Y1	1	Claremont & Ashby Intersection Improvements (Phase 2)	Turning lanes Design/Construction	\$250,000	1. Field review to determine project scope, re-calculate design and construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain state permits (6 month)		\$15,000	\$20,000	Phase 2 will follow Phase 1 if the concept developed is accepted by Caltrans	?	\$250,000	\$15,000	\$20,000	\$37,500	\$302,500	\$307,500	Project added and cost revised by CENA/FBC. Create 4-way stop and add left hand turn signal and dedicated lane in both N/S direction																																																																			
2a	Y1	1	Upland Corner Radius	Reconstruct corner radius to slow right turning traffic onto Upland.	\$15,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain state permits (6 month)	Caltrans may require design exception documents depending on radius change since Uplands is very narrow.	\$2,500	\$15,000	Modifying the radius is an easy task to study and identify a solution, but Caltrans may require extensive reconstruction since it is a state route.	Yes	\$15,000	\$2,500	\$15,000	\$2,250	\$19,750	\$32,250																																																																				
2b	Y1	1	Uplands @ Tunnel (Phase 1)	Intersection study	n/a	1. Field review to determine project scope (1 month) 2. Traffic signal warrant study (1 month) 3. Meet with Caltrans to define permitting requirements (1 month) 4. Develop design documents and obtain city/state permits (6 month)	Requires CTCDC permission. Caltrans may require design exception documents because signal operation is not in California MUTCD. Could be utility conflicts with signal pole placement	\$20,000	\$30,000		Yes	\$20,000	\$30,000	\$20,000	\$30,000	\$20,000	\$30,000	Phase 1 study and CTCDC approval could be long process. Phase 2 Construction																																																																			
2c	Y1	1	Uplands @ Tunnel (Phase 2)	Install bike / pedestrian control device. Possible HAWK signal	\$250,000	Implement outcome of Phase 1	See above			Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$250,000		\$37,500	\$287,500	\$287,500	Phase 1 study and CTCDC approval could be long process. Phase 2 Construction																																																																				
3	Y1	1	College @ Ashby intersection study (Phase 1) - Left turn NB College to WB Ashby; Ped scramble; Ped signal instruction signs	Study pedestrian scramble phase + left turn control device vs Berkeley Pedestrian Masterplan: Project 18	n/a	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain city/state permits (6 month)	Study to determine Caltrans support	\$10,000	\$20,000	Phase 1 is a candidate for first year implementation	Yes	\$10,000	\$20,000	\$10,000	\$20,000	\$10,000	\$20,000	Phase 1 study; Phase 2 Construction																																																																			
3	Y1	1	College @ Ashby (Phase 2)	Berkeley Pedestrian Masterplan: Project 18 or install pedestrian scramble phase + left turn control device	\$120,000	Implement outcome of Phase 1				Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$120,000		\$18,000	\$138,000	\$138,000	Phase 1 study; Phase 2 Construction																																																																				
4	Y1	1	Alameda Countywide Bicycle Plan, Project 22, Al: Domingo between Russell/Claremont and Tunnel	Create Class 3 residential street bikeway; Berkeley Bicycle Masterplan Project 18E (Bike Route signage)	\$16,000	1. Field review to determine project scope (1 month) 2. Develop design documents and obtain city permits (1 month)	Need Caltrans agreement that project is "on the corridor"	\$5,000	\$5,000	Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$16,000	\$5,000	\$5,000	\$2,400	\$23,400	\$23,400																																																																				
4	Y1	1	Alameda Countywide Bicycle Plan, Project 22, AJ: Tunnel between Claremont and Caldecott	Create Class 2 bikeway; Berkeley Bicycle Masterplan Project 18F (stripe bike lane)	\$28,000	1. Field review to determine project scope (1 month) 2. Develop design documents and obtain city permits (1 month)	Coordinate with City of Oakland's plans for bike merge lane on Tunnel Rd. between Roble Rd. and Hiller Dr.	\$5,000	\$10,000	Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$28,000	\$5,000	\$10,000	\$4,200	\$37,200	\$42,200	cost may be higher																																																																			
5a	Y1	1	Speed Limit Signs	Replace 35 mph with 25 mph signs. Relocate signs to more visible location	\$5,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Identify sign placement changes (1 month) 3. City complete work as part of maintenance permit (2 months)	Must confirm legally valid speed limits per California Vehicle Code based on 85th percentile speed measurements	\$1,500	\$3,000	Replacing signs is generally an easy task and is often completed through existing maintenance agreements.	Yes	\$5,000	\$1,500	\$3,000	\$750	\$7,250	\$8,750																																																																				
5b	Y1	1	Hard wire Speed Feedback Signs	Re-install two existing feedback signs for traffic entering the City. Install one new sign for traffic leaving the City prior to Uplands	\$30,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain state permits (6 month)	Cost depends on the location of electrical service points for electricity hook-ups. Will require utility hook up fees and on-going electricity costs.	\$2,500	\$10,000	Construction is likely feasible but the cost for hooking up to electricity can be expensive i.e., about \$30 per linear foot. The cost can be clarified after coordinating with the utility company. Solar and battery back up far more cost effective.	Yes	\$30,000	\$2,500	\$10,000	\$4,500	\$37,000	\$44,500																																																																				
5c	Y1	1	Sidewalk repair and possible widening on North Side of Tunnel Rd.	Repair sidewalk (up to 700 feet) on Tunnel Road from city limit to Domingo to remove obstructions.	\$30,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Identify sign placement changes (1 month) 3. City complete work as part of maintenance permit (2 months)		\$3,000	\$9,000	Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$30,000	\$3,000	\$9,000	\$4,500	\$37,500	\$43,500	Estimate is for repair only; Does not cover cost of any sidewalk expansion																																																																			
6	Y1	1	SR 24 Signs	Install guide sign "Berkeley Next Three Exits" i.e., Tunnel, College, and Telegraph	\$10,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain state permits (6 month)		\$1,500	\$5,000	Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$10,000	\$1,500	\$5,000	\$1,500	\$13,000	\$16,500	What about Broadway exit? Work w/ Oakland																																																																			
7	Y1	1	Domingo @ Tunnel	Reconstruct corner radi at northeast and southeast corners to enhance pedestrian crossings. Install advanced limit lines at crosswalks	\$50,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain state permits (6 month)	Caltrans may require design exception documents to support design changes.	\$2,500	\$15,000	Developing a design concept is straightforward. The installation could be extensive because shifting the curb line requires new handicap ramps and moving drainage.	Yes	\$50,000	\$2,500	\$15,000	\$7,500	\$60,000	\$72,500																																																																				
7	Y1	1	Domingo @ Tunnel	Evaluate and modify type and placement of existing intersection signing related to turn restrictions and pedestrian awareness	\$5,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Identify sign placement changes (1 month) 3. City complete work as part of maintenance permit (2 months)		\$1,500	\$3,000	Replacing signs is generally an easy task and is often completed through existing maintenance agreements.	Yes	\$5,000	\$1,500	\$3,000	\$750	\$7,250	\$8,750																																																																				
8	Y1	1	Oakridge and Tunnel Rd. Safe egress (Phase 1)	Study safe egress solution for Oakridge motorists exiting onto Tunnel Rd.	n/a	1. Field review to determine project scope (1 month) 2. Traffic signal warrant study (1 month) 3. Meet with Caltrans to define permitting requirements (1 month) 4. Develop design documents and obtain city/state permits (6 month)		\$20,000	\$30,000		Yes	\$20,000	\$30,000	\$20,000	\$30,000	\$20,000	\$30,000	addresses difficulty of traffic exiting from Oakridge																																																																			
8	Y1	1	Oakridge and Tunnel Rd. Safe egress (Phase 2)	Oakridge and Tunnel Flashing yellow until activated or regular signal	\$250,000	Implement outcome of Phase 1				Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$250,000		\$37,500	\$287,500	\$287,500	addresses difficulty of traffic exiting from Oakridge																																																																				
9	Y1	1	Gateway Sign at NB Hwy 13 entrance to Berkeley	Locate monument sign on Tunnel Road entering the City	\$25,000	1. Field review to determine project scope, re-calculate construction cost (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain state permits (6 month)	Caltrans may require design exception documents depending on sign design, size, and placement. Could be utility costs for sign lighting. Architectural and aesthetics could complicate public review and acceptance.	\$5,000	\$10,000	It is highly likely that the public outreach and associated fees will be extensive given the community values placed on monument signs.								cost varies based on design																																																																			
10	Y1	1	Ashby @ Hillegass (Phase 1)	Study bike / pedestrian safe crossing at Bicycle Blvd	n/a	1. Field review to determine project scope (1 month) 2. Traffic signal warrant study (1 month) 3. Meet with Caltrans to define permitting requirements (1 month) 4. Develop design documents and obtain city/state permits (6 month)	Requires CTCDC permission. Caltrans may require design exception documents because signal operation is not in California MUTCD. Could be utility conflicts with signal pole placement	\$20,000	\$30,000		Yes	\$20,000	\$30,000	\$20,000	\$30,000	\$20,000	\$30,000	Phase 1 study and CTCDC approval could be long process. Phase 2 Construction																																																																			
10	Y1	1	Ashby @ Hillegass (Phase 2)	Install bike / pedestrian control device. Possible HAWK signal	\$250,000	Implement outcome of Phase 1	See above			Construction is likely feasible within construction budget depending on project scoping during field review.	Yes	\$250,000		\$37,500	\$287,500	\$287,500	Phase 1 study and CTCDC approval could be long process. Phase 2 Construction																																																																				

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Y1	Y2	Project	Description	Initial Construction Cost Estimate	Next Steps	Potential Delays	Fee for Next Steps	Preliminary conclusions	Priority Based on Ease of Completion	Construction Cost Estimate	Study and Design Fees	City/State Fees	Total Cost										
	Y1	2	9th Street Bicycle Boulevard Extension @ Ashby (Phase 1); Berkeley Bicycle Masterplan Project 53	Modify traffic signal for multi-use path crossing		1. Field review to determine project scope (1 month) 2. Develop design alternatives for City review (1 month) 3. Meet with Caltrans to define permitting requirements (1 month) 4. Develop design documents and obtain city/state permits (6 month)	\$25,000	\$70,000	Caltrans may require design exception documents.	Yes, design development only	\$25,000	\$70,000	\$25,000	\$70,000	Phase 1 - Design Development								
	Y1	2	9th Street Bicycle Boulevard Extension @ Ashby (Phase 2); Berkeley Bicycle Masterplan Project 53	Modify traffic signal for multi-use path crossing (includes rail-removal-and-resurfacing)	\$250,000				Caltrans may require design exception documents.		\$250,000		\$37,500	\$287,500	Phase 2 - Construction								
	Y1	2	Berkeley Pedestrian Masterplan: Project 26	Ashby @ Telegraph (pedestrian countdown signals)	\$10,000	1. Meet with Caltrans to define permitting requirements (1 month) 2. Develop design documents and obtain city/state permits (1 month)	\$5,000	\$5,000	May need to make other ADA-compliant improvements to intersection	Yes	\$10,000	\$5,000	\$5,000	\$1,500	\$16,500								
YEAR 2																							
										Construction Cost Estimate		Consultant Study and Design Fees		City/State Fees		Total Cost							
										Low		High		Low		High							
Source:																							
1 4th Bore Coalition Projects																							
2 Projects Provided by City																							
										Total for Year 2		\$730,000		\$65,000		\$135,000		\$109,500		\$737,750		\$974,500	
Preliminary Evaluation of Projects																							
CENA priority	TC Priority	Source	Project	Description	Initial Construction Cost Estimate	Next Steps	Potential Delays	Fee for Next Steps	Preliminary conclusions	Priority Based on Ease of Completion	Construction Cost Estimate	Study and Design Fees	City/State Fees	Total Cost									
11	Y2	2	Ashby Corridor: Controller interconnect	Install 14,000 ft of signal interconnect @ \$35/ft	\$490,000	1. Field review to determine project scope (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. develop design documents and obtain city/state permits (6 month)	Controller assembly replacements to accommodate interconnect. Utility conflicts. Easement may be needed for conduit and pull boxes.	\$40,000	\$85,000	Construction is likely feasible so long as controller and communication equipment at each intersection is compatible with limited upgrades.	Yes	\$490,000	\$40,000	\$85,000	\$73,500	\$603,500	\$648,500						
11	Y2	2	Ashby Corridor: Video detection at Domingo	Add video detection to three legs	\$20,000	1. Field verification, re-calculate construction cost (1-month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain city/state permits (6-months)	Signal poles may need to be replaced to accommodate the added load from cameras. Conduit may need to be replaced to accommodate video cabling. Bike detection may not be possible with controllers. Potential for ADA improvements and new equipment specifications	\$45,000	\$100,000	Construction costs reflect video equipment only. Signal modifications for additional loads on signal mast arms could increase construction cost to over \$100,000 per location.	yes	\$20,000	see above	see above	\$3,000	\$23,000	Cost assumes study and design fees are part of interconnect study and design fees						
11	Y2	2	Ashby Corridor: Video detection at Claremont	Add video detection to four legs	\$25,000					yes	\$25,000	*	*	\$3,750	\$28,750	Priority depends on cost; if new mast arms required at all sites, total cost could increase by \$800K							
11	Y2	2	Ashby Corridor: Video detection at College	Add video detection to four legs	\$25,000					yes	\$25,000	*	*	\$3,750	\$28,750								
11	Y2	2	Ashby Corridor: Video detection at Shattuck	Add video detection to four legs	\$25,000					yes	\$25,000	*	*	\$3,750	\$28,750								
11	Y2	2	Ashby Corridor: Video detection at Adeline	Add video detection to four legs	\$25,000					yes	\$25,000	*	*	\$3,750	\$28,750								
11	Y2	2	Ashby Corridor: Video detection at MLK	Add video detection to four legs	\$25,000					yes	\$25,000	*	*	\$3,750	\$28,750								
11	Y2	2	Ashby @ Telegraph	Add signal heads to for left turn phasing	\$10,000		Signal poles may need to be replaced to accommodate left turn heads. Conduit may need to be replaced to accommodate new wiring.	\$10,000	\$30,000	Construction costs reflect changing out signal heads. Signal modifications such as signal mast arms upgrades to meet current code could increase construction cost to over \$100,000.	yes	\$10,000	\$10,000	\$30,000	\$1,500	\$21,500	\$41,500	Priority depends on construction cost; could be an add'l \$100K if mast arm upgraded					
11	Y2	2	Ashby @ MLK	Add signal heads for left turn phasing	\$10,000					yes	\$10,000	see above	see above	\$1,500	\$11,500	\$11,500	Priority depends on construction cost; see above; design fees incl in above item						
	N/A	2	Ashby @ San Pablo	Left-Turn Pockets and Signal-Heads (SB & NB)						yes							Removed from project list						
11	Y2	2	Battery backup for controllers	15 battery backups @ \$5000 each	\$75,000	1. Field review to determine project scope (1 month) 2. Meet with Caltrans to define permitting requirements (1 month) 3. Develop design documents and obtain city/state permits (2 months)	Modification of service conduit and wiring might be required.	\$15,000	\$20,000	Construction is likely feasible assuming minor changes to signal service/control cabinets.	Yes	\$75,000	\$15,000	\$20,000	\$11,250	\$101,250	\$106,250	Good improvement for emergency preparedness purposes on key corridor.					

