

7. COST, IMPLEMENTATION STRATEGY, & FUNDING

Based on the cost of the SCT preferred alternative, the implementation of the project will be phased. Funding for the five phases can come from a variety of different sources. This Chapter reviews the cost of the project, an implementation strategy, and the various funding opportunities available for the trail.

7.1. COST

Preliminary cost estimates for constructing the SCT are based on unit capital costs and estimates needed for developing the preferred alternative treatments. Also included in this cost are most of the recommended trail amenities such as signage and planting. The preferred alternative would likely need an Environmental Impact Report, this cost estimate does not include this dollar amount. The total estimated cost for the preferred alignment of the SCT is just over \$6.7 million.

Table 7- 1 Costs for SCT summarizes planning level unit cost estimates for the various items and activities necessary to complete the trail. Land easement purchases may be necessary in Phase 3 and are not considered in the estimate. The largest costs are installing the northern section of the trail, including the bridge and retaining walls. Contingency and design and engineering costs are included for the total.

**Table 7-1
Costs for SCT**

	Unit Cost	Unit	Quantity	Total
STEVENS CREEK TRAIL				
Phase 1: Fremont Avenue				
Sawcut Existing Asphalt	\$15.00	LF	4400	\$66,000
Asphalt trail (10 ft wide)	\$38.00	LF	4400	\$167,200
Crusher Fines (2' wide shoulders)	\$2.60	LF	4400	\$11,440
Aggregate base (12 ft wide)	\$7.50	LF	4400	\$33,000
Centerline Striping	\$2.00	LF	4400	\$8,800
Clearing & Grubbing	\$2.00	LF	4400	\$8,800
Excavation	\$10.00	CY	760	\$7,600
Trail Wayfinding Signs	\$750.00	EA	8	\$6,000
Planting	\$2.50	SF	12000	\$30,000
Irrigation	\$1.50	SF	12000	\$18,000
2" Water Meter	\$30,000.00	EA	1	\$30,000
Bench	\$1,500.00	EA	1	\$1,500
Trash Receptacle	\$800.00	EA	1	\$800

		Unit Cost	Unit	Quantity	Total
Fallen Leaf Lane					
	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Stop Bars	\$200.00	EA	1	\$200
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Truman Avenue					
	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Stop Bars	\$200.00	EA	1	\$200
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Wessex Avenue					
	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Stop Bars	\$200.00	EA	1	\$200
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Kathy Lane					
	Bulb Outs	\$20,000.00	EA	2	\$40,000
	Transverse Crosswalks	\$500.00	EA	1	\$500
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Stop Bars	\$200.00	EA	1	\$200
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Julie Lane					
	Bulb Outs	\$20,000.00	EA	2	\$40,000
	Transverse Crosswalks	\$500.00	EA	1	\$500
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Stop Bars	\$200.00	EA	1	\$200
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Siesta Drive					
	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Stop Bars	\$200.00	EA	1	\$200
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800

	Unit Cost	Unit	Quantity	Total
Montebello Oaks Court				
Bulb Outs	\$20,000.00	EA	2	\$40,000
Transverse Crosswalks	\$500.00	EA	1	\$500
Stop Pavement Markings	\$400.00	EA	1	\$400
Stop Bars	\$200.00	EA	1	\$200
Trail Crossing Sign	\$750.00	EA	1	\$750
Removable Bollard	\$900.00	EA	2	\$1,800
Grant Road				
High Visibility Crosswalks	\$1,200.00	EA	3	\$3,600
Stop Bars	\$200.00	EA	3	\$600
Trail Crossing Sign	\$750.00	EA	2	\$1,500
Removable Bollard	\$900.00	EA	2	\$1,800
Pedestrian Signals	\$1,600.00	EA	8	\$12,800
TOTAL: Phase 1				\$717,790

Phase 2: Grant Road: Fremont Avenue to South Bound Terminus (Foothill Expwy)

Sawcut Existing Asphalt	\$15.00	LF	2050	\$30,750
Asphalt trail (10 ft wide)	\$38.00	LF	2050	\$77,900
Crusher Fines (2' wide shoulders)	\$2.60	LF	2050	\$5,330
Aggregate base (12 ft wide)	\$7.50	LF	2050	\$15,375
Centerline Striping	\$2.00	LF	2050	\$4,100
Excavation	\$10.00	CY	354	\$3,540
Clearing & Grubbing	\$2.00	LF	2050	\$4,100
Trail Wayfinding Signs	\$750.00	EA	8	\$6,000
Planting	\$2.50	SF	4000	\$10,000
Irrigation	\$1.50	SF	4000	\$6,000
2" Water Meter	\$30,000.00	EA	1	\$30,000
Bench	\$1,500.00	EA	1	\$1,500
Trash Receptacle	\$800.00	EA	1	\$800
Drinking Fountain	\$15,000.00	EA	1	\$15,000
Kiosk	\$8,000.00	EA	1	\$8,000
Richardson Avenue				
Bulb Outs	\$20,000.00	EA	2	\$40,000
High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
Stop Pavement Markings	\$400.00	EA	1	\$400
Stop Bars	\$200.00	EA	1	\$200
Trail Crossing Sign	\$750.00	EA	1	\$750
Removable Bollard	\$900.00	EA	2	\$1,800
Driveway (@ Ensenada Way)				
Transverse Crosswalks	\$500.00	EA	1	\$500
Don Kirk Street				
Bulb Outs	\$20,000.00	EA	2	\$40,000
High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
Stop Pavement Markings	\$400.00	EA	1	\$400
Stop Bars	\$200.00	EA	1	\$200
Trail Crossing Sign	\$750.00	EA	1	\$750
Removable Bollard	\$900.00	EA	2	\$1,800

	Unit Cost	Unit	Quantity	Total
Morton Avenue				
Bulb Outs	\$20,000.00	EA	2	\$40,000
High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
Stop Pavement Markings	\$400.00	EA	1	\$400
Stop Bars	\$200.00	EA	1	\$200
Trail Crossing Sign	\$750.00	EA	1	\$750
Removable Bollard	\$900.00	EA	2	\$1,800
TOTAL: Phase 2				\$351,945

Phase 3: Multi-Use Path along Stevens Creek

Asphalt trail (10' wide)	\$38.00	LF	3550	\$134,900
add 4' cut	\$20.71	LF	3550	\$73,521
add for distance parallel to stream	\$100.00	LF	700	\$70,000
Crusher Fines (2' wide shoulders)	\$2.60	LF	3550	\$9,230
Aggregate base (12 ft wide)	\$7.50	LF	3550	\$26,625
10' wide bridge	\$6,000	LF	100	\$600,000
Excavation	\$10.00	CY	614	\$6,140
Clearing & Grubbing	\$2.00	LF	3550	\$7,100
Removable Bollard	\$900.00	EA	1	\$900
Trail Wayfinding Signs	\$750.00	EA	4	\$3,000
Centerline Striping	\$2.00	LF	3650	\$7,300
Retaining Wall	\$300.00	LF	1200	\$360,000
Jersey Barrier (along I-85 off ramp)	\$50.00	LF	325	\$16,250
Sound Wall (along I-85)	\$150.00	LF	1200	\$180,000
Lighting under I-85 bridge	\$2,500.00	EA	4	\$10,000
Lighting along trail (20' high spaced 50' apart)	\$4,000.00	EA	65	\$260,000
Benches	\$1,500.00	EA	2	\$3,000
Trash Receptacle	\$800.00	EA	2	\$1,600
Kiosk	\$8,000.00	EA	1	\$8,000
Drinking Fountain	\$15,000.00	EA	1	\$15,000
TOTAL: Phase 3				\$1,792,566

Phase 4: Grant Road paralleling Foothill Expressway

Sawcut Existing Asphalt	\$15.00	LF	4000	\$60,000
Asphalt trail (10 ft wide)	\$35.00	LF	4000	\$140,000
Crusher Fines (2' wide shoulders)	\$2.60	LF	4000	\$10,400
Aggregate base (12 ft wide)	\$7.50	LF	4000	\$30,000
Centerline Striping	\$2.00	LF	4000	\$8,000
Excavation	\$10.00	CY	690	\$6,900
Clearing & Grubbing	\$2.00	LF	2050	\$4,100
Trail Wayfinding Signs	\$750.00	EA	10	\$7,500
Planting	\$2.50	SF	8000	\$20,000
Irrigation	\$1.50	SF	8000	\$12,000
2" Water Meter	\$30,000.00	EA	1	\$30,000
Bench	\$1,500.00	EA	1	\$1,500
Trash Receptacle	\$800.00	EA	1	\$800

		Unit Cost	Unit	Quantity	Total
Grant Library	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
Newcastle Drive	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Farndon Avenue	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Crist Drive	Bulb Outs	\$20,000.00	EA	2	\$40,000
	High Visibility Crosswalks	\$1,200.00	EA	1	\$1,200
	Stop Pavement Markings	\$400.00	EA	1	\$400
	Trail Crossing Sign	\$750.00	EA	1	\$750
	Removable Bollard	\$900.00	EA	2	\$1,800
Driveways	Trail Stop/Yield Signs	\$500.00	EA	8	\$4,000
	Trail Crossing Sign	\$750.00	EA	8	\$6,000
TOTAL: Phase 4					\$474,850

Phase 5: Grant Road at El Sereno Avenue to Foothill Expressway through I-280 NB Ramps

Sawcut Existing Asphalt	\$15.00	LF	1500	\$22,500	
Asphalt trail (10 ft wide)	\$38.00	LF	1500	\$57,000	
Crusher Fines (2' wide shoulders)	\$2.60	LF	1500	\$3,900	
Aggregate base (12 ft wide)	\$7.50	LF	1500	\$11,250	
Centerline Striping	\$2.00	LF	1500	\$3,000	
Excavation	\$10.00	CY	260	\$2,600	
Clearing & Grubbing	\$2.00	LF	2050	\$4,100	
High Visibility Crosswalks	\$1,200.00	EA	7	\$8,400	
Stop Bars	\$200.00	EA	5	\$1,000	
Trail Crossing Sign	\$750.00	EA	9	\$6,750	
Removable Bollard	\$900.00	EA	4	\$3,600	
Trail Wayfinding Signs	\$750.00	EA	10	\$7,500	
Planting	\$2.50	SF	9000	\$22,500	
Irrigation	\$1.50	SF	9000	\$13,500	
2" Water Meter	\$30,000.00	EA	1	\$30,000	
Bench	\$1,500.00	EA	1	\$1,500	
Trash Receptacle	\$800.00	EA	1	\$800	
Kiosk	\$8,000.00	EA	1	\$8,000	
Drinking Fountain	\$15,000.00	EA	1	\$15,000	
TOTAL: Phase 5					\$222,900

TOTAL CAPITAL COSTS:	\$3,560,051
TRAFFIC CONTROL (10%):	\$356,005
PERMITTING (8%):	\$284,804
MOBILIZATION (10%):	\$356,005
DESIGN & ENGINEERING (20%):	\$712,010
CONTINGENCY (40%):	\$1,424,020
TOTAL COST:	\$6,692,895

7.2. IMPLEMENTATION STRATEGY

The primary purpose for an implementation plan that includes phasing is to ensure a logical sequence of implementation that provides a high degree of success as each phase is built. These phases are flexible but this Plan recommends the following approach for the best success. As each phase is built momentum builds through public and political support for the next phase or section of the trail. The project is broken into five phases.

The first phase is the Fremont Avenue section of the SCT. In comparison to the other segments, this section is considered easy to implement. There is existing right-of-way along Fremont Avenue to work with for the SCT. This connection also provides an east-west corridor for bicycling and walking in southern Los Altos to Sunnyvale. For Phase 2, along Grant Road there is also right-of-way that would not have considerable impact to the surrounding area. This is a logical connection to the business land uses near Foothill Expressway. Phase 3: Multi-Use Path along Stevens Creek is the most expensive section of the trail. For this phase to be successful, Mountain View must connect the existing SCT south to the proposed over crossing at Mountain View High School. Delaying this segment of the trail to third allows Mountain View time to complete the northern segment. Also, it is likely that once the first two phases are complete the project will have more momentum and residents of Los Altos will see the benefits for the trail connection. Phase 4 and 5 are connections to Sunnyvale and Cupertino and will complete the SCT in Los Altos.

7.2.1. Phases

The first phase is for the development of the SCT along the north side of Fremont Avenue. This will be located where there is an existing wide and unpaved shoulder. The SCT will cross residential streets where bulb outs are recommended to decrease traffic speeds and decrease street crossing lengths. These improvements will connect the Path with Sunnyvale and the intersection with Grant Road. Signal improvements are recommended for the Grant Road/Fremont Avenue intersection.

Phase 1: Fremont Avenue

Primary Improvements: Bicycle/Pedestrian Path and Bulb Outs

Capital Cost: \$717,790

The second phase is the SCT connection on Grant Road. These improvements include a Class I path and will connection the Fremont Avenue path and Grant Road adjacent to Foothill Expressway. Trail crossings occur at the side-streets.

Phase 2: Grant Road: Fremont Avenue to South Bound Terminus

Primary Improvements: Bicycle/Pedestrian Path

Capital Cost: \$351,945

The third phase is for the development of the Class I – multi-use trail north of Fremont Avenue. This is most expensive section and includes a bridge and under crossing of Highway 85. Lighting is recommended because there is currently none in the area. Retaining walls are also necessary to support the trail, both along Highway 85 where there is a narrow section and in the Highway 85 under crossing.

Phase 3: Multi-Use Path along Stevens Creek

Primary Improvements: Bicycle/Pedestrian Path, Bridge, Retaining Walls

Capital Cost: \$1,792,566

The fourth phase is the SCT connection on Grant Road adjacent to Foothill Expressway or the frontage road. This segment is part sidepath where there is no sidewalk on the opposite side of the street. This route is an existing sidewalk and will be widened to accommodate bicyclists and pedestrians with the addition of bulb outs. Improvements include the Class I – multi-use path and connections across driveways.

Phase 4: Grant Road adjacent to Foothill Expressway

Primary Improvements: Bicycle/Pedestrian Path

Capital Cost: \$474,850

Phase five is the Los Altos SCT connections to Sunnyvale and Cupertino. The trail connections and crossings to Foothill Boulevard and I-280 are in this phase.

Phase 5: Grant Road adjacent to Foothill Expressway

Primary Improvements: Bicycle/Pedestrian Path

Capital Cost: \$222,900

7.3. FUNDING

Funding for design and construction of the SCT can come from a variety of local, state, and federal funding sources and with this Plan, the SCT qualifies for funding as it becomes available. Most funding programs are competitive and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. Local funding for projects typically comes from local capital improvement programs (CIPs) and can potentially come from Measure B funds. Regional support for projects make for stronger funding applications and where the trail directly borders other jurisdictions, the support of these agencies is required. Therefore, a collaborative regional approach, especially for the segments of the trail with shared borders, is recommended. A review of different funding sources is below.

7.3.1. Federal Funding

The primary federal source of surface transportation funding—including bicycle and pedestrian facilities—is SAFETEA-LU, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. SAFETEA-LU is the fourth in a series of Federal transportation funding bills. The \$286.5 billion SAFETEA-LU bill, passed in 2005, authorizes federal surface transportation programs for the five-year period between 2005 and 2009.

SAFETEA-LU funding is administered through the State (Caltrans and Resources Agency) and regional planning agencies. Most, but not all, of these funding programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Specific funding programs under SAFETEA-LU include:

Congestion Mitigation and Air Quality (CMAQ) — Funds projects that are likely to contribute to the attainment of national ambient air quality standards. Funds are available for projects and programs in areas that have been designated in non-attainment or maintenance for ozone, carbon monoxide or particulate matter. Since the Bay Area is in attainment of national air quality standards for all pollutants except ozone, future Bay Area eligibility for CMAQ allocations is currently being determined.

Recreational Trails Program — \$370 million nationally through 2009 for non-motorized trail projects.

Safe Routes to School Program — A new program with \$612 million nationally through 2009.

Transportation, Community and System Preservation Program — \$270 million nationally over five years (2006-2011) reserved for transit oriented development, traffic calming and other projects that improve the efficiency of the transportation system, reduce the impact on the environment, and provide efficient access to jobs, services and trade centers.

The State of California uses both federal sources (such as the Recreational Trails Program) and its own budget to fund pedestrian projects and programs. In some cases, such as Safe Routes to School, Office of Traffic Safety, and Environmental Justice grants, project sponsors apply directly to the State for funding. In others, such as Bay Trail grants, sponsors apply to a regional agency.

7.3.2. State Funding

Bicycle Transportation Account — The State Bicycle Transportation Account (BTA) is an annual statewide discretionary program that is available through the Caltrans Bicycle Facilities Unit for funding bicycle projects. Available as grants to local jurisdictions, the emphasis is on projects that benefit bicycling for commuting purposes. Due to the passage of AB1772 in the year 2000, the BTA had \$7.2 million available between 2000 and 2005. Following the year 2005, the fund dropped to \$5 million per year. In funding cycle 2007/2008, there are \$5 million in statewide BTA funds available. The local match must be a minimum of 10% of the total project cost.

Bicycle Transportation Account

<http://www.dot.ca.gov/hq/LocalPrograms/bta/btaweb%20page.htm>

Safe Routes to School (SR2S) — In September 2004, with the passage of SB 1087 (Soto), the State extended Safe Routes to School legislation for three additional years. The current bill is scheduled to sunset on January 1, 2008. AB 57 (Soto) was signed by the Governor in 2007, continuing the program and allowing the remaining \$52 million of SR2S funds to be spent.

This program is meant to improve the safety of walking and cycling to school and encourage students to walk and bicycle to school through identification of existing and new routes to school and construction of pedestrian and bicycle safety and traffic calming projects. Caltrans is currently evaluating California's SR2S funding, in light of the new federal SR2S Program. Recent SAFETEA-LU legislation, which requires each state's Department of Transportation to designate a SR2S Coordinator, also contains a SR2S program. As of this printing, whether or not these programs will be combined in California or will remain autonomous has not been determined.

Caltrans, SR2S Program

www.dot.ca.gov/hq/LocalPrograms/saferoute2.htm

7.3.3. REGIONAL FUNDING SOURCES

Safe Routes to Transit (SR2T) - Regional Measure 2 (RM2), approved in March 2004, raised the toll on seven state-owned Bay Area bridges by one dollar for 20 years. This fee increase funds various operational improvements and capital projects, which reduce congestion or improve travel in the toll bridge corridors.

Twenty million dollars of RM2 funding is allocated to the Safe Routes to Transit Program, which provides competitive grant funding for capital and planning projects that improve bicycle and pedestrian access to transit facilities. Eligible projects must be shown to reduce congestion on one or more of the Bay Area's toll bridges. The competitive grant process is administered by the Transportation and Land Use Coalition and the East Bay Bicycle Coalition. Competitive funding is awarded in five \$4 million grant cycles. Future funding cycles will be in 2009, 2011 and 2013.

Transportation and Land Use Coalition, SR2T Program

www.transcoalition.org/c/bikeped/bikeped_saferoutes.html

Regional Bicycle and Pedestrian Program (RBPP) - The RBPP was created in 2003 as part of the long range Transportation 2030 Plan developed by the Bay Area Metropolitan Transportation Commission. The program—currently funded with Congestion Mitigation and Air Quality funds—funds regionally significant bicycle and pedestrian projects, and bicycle and pedestrian projects serving schools or transit. \$200 million dollars are committed to this program over the 25-year period. Seventy five percent of the total funds are allocated to the county congestion management agencies based on population. The remaining 25 percent of funds are regionally competitive, with the county CMAs recommending the projects to be submitted to MTC for funding consideration.

Metropolitan Transportation Commission, RBPP Program

www.mtc.ca.gov/planning/bicyclespedestrians/regional.htm#bikepedprog

7.3.4. LOCAL FUNDING SOURCES

TDA Article 3

Transportation Development Act (TDA) Article 3 funds are available for transit, bicycle and pedestrian projects in California. According to the Act, pedestrian and bicycle projects are allocated two percent of the revenue from a 1/4 cent of the general state sales tax, which is dedicated to local transportation. These funds are collected by the State, returned to each county based on sales tax revenues, and typically apportioned to areas within the county based on population. Eligible pedestrian and bicycle projects include construction and engineering for capital projects; maintenance of bikeways; bicycle safety education programs; and development of comprehensive bicycle or pedestrian facilities plans. A city or county is allowed to apply for funding for bicycle or pedestrian plans not more than once every five years. These funds may be used to meet local match requirements for federal funding sources.

Metropolitan Transportation Commission, TDA Funding Program
www.mtc.ca.gov/funding/STA-TDA/index.htm

Santa Clara Valley Transportation Authority (VTA) Bicycle Expenditure Program

The 2000 Santa Clara Countywide Bicycle Plan established the VTA Bicycle Expenditure Plan (BEP) to fund countywide bicycle projects. The BEP list was updated in 2004 and includes the SCT Feasibility Study -this Study was primarily funded from this source. The Program includes funds from the 1996 Measure B Sales Tax, Transportation Development Act Article 3 funds, Transportation Funds for Clean Air, and TEA 21 funds. There is some remaining funds in the BEP and will be programmed to other bicycle projects. A minimum 20 percent match from non-BEP sources is required for these projects.

VTA Bicycle Expenditure Program
<http://www.vta.org/projects/bikeprogram.html>