

appendices



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Appendix A: Detailed Project Lists and Descriptions

LOCAL STREETS AND COUNTY ROADS CONSTRAINED PROJECT LIST

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R1	Hacienda Ave. Improvements —Reconstructs and reconfigures Hacienda Ave. between Winchester Blvd. and San Tomas Aquino Rd.	Campbell	\$3.5	\$2.8
R2	Campbell Ave. Bicycle and Pedestrian Improvements under SR 17 —Widen both sides of Campbell Ave.; install new sidewalk behind the abutment walls; replace the existing abutment walls with new retaining and wing walls with portals on both sides of East Campbell Ave.	Campbell	\$3.0	\$2.4
R3	Rancho Rinconada Traffic Calming Project —Develops a neighborhood traffic management plan for the Rancho Rinconada Neighborhood.	Cupertino	\$0.1	\$0.1
R4	IIOF Ave. Overcrossing —Construct a new overcrossing at US 101 and IIOF Ave. The new overcrossing will consist of a two-lane structure with six-foot shoulders/ bicycle lanes and eight-foot sidewalks.	Gilroy	\$14.5	\$9.5

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R5	Gilroy Orbital Concept (NW Quadrant): Buena Vista Ave. to Monterey Rd. —Construct a new four-lane arterial that extends Buena Vista Ave. from Santa Teresa Blvd. to Monterey Rd.	Gilroy	\$8.5	\$6.0
R6	Las Animas Ave. Overcrossing —Construct new overcrossing at US 101 and Las Animas Ave. The new overcrossing will consist of a two-lane structure with six-foot shoulders/bicycle lanes and eight-foot sidewalks.	Gilroy	\$9.2	\$6.4
R7	Tenth St. Bridge Project —Construct a four-lane bridge across Uvas Creek that connects existing Tenth St. on the east side of the channel with a new section of Tenth St. on the west side of the channel. The bridge will have four travel lanes plus bike lanes and sidewalks. The project also includes a new traffic signal at the intersection of Tenth St. and Uvas Park Dr.	Gilroy	\$14.0	\$9.5
R8	Miramonte Ave. Bikeway Improvements —Upgrades the bike route (Class III) on Miramonte Ave. to a bike lane (Class II) between Mountain View City Limits at the northern end of Foothill Expwy. at the southern end.	Los Altos	\$1.4	\$1.1
R9	SR 9 Gateway Enhancements at University Ave. and North Santa Cruz Ave. —Enhance the capacity and appearance by reconfiguring the intersections for bicycle and pedestrian safety with traffic signalization.	Los Gatos	\$3.0	\$2.4
R10	Blossom Hill Rd. at University Ave. Intersection Improvements —Install sidewalk, wheelchair ramps and a bicycle lane to improve pedestrian and bicycle movements. This project will also replace existing outdated traffic signals.	Los Gatos	\$1.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R11	Calaveras Blvd. Overpass Widening with Operational Improvements — Replace the four-lane bridge over the Union Pacific railroad tracks with a new six-lane structure as well as new bicycle and pedestrian facilities on both sides. Includes intersection improvements at Abel St. and from the overpass west to Abbott Ave. on Calaveras Blvd.	Milpitas	\$70.0	\$56.0
R12	Montague Expwy. and Great Mall Pkwy./Capitol Ave. Grade Separation — Elevate Great Mall Pkwy./Capitol Ave. over Montague Expwy., placing it at the same level of the Tasman East Light Rail system. Montague Expwy. and all turn movements will remain at-grade level.	Milpitas	\$60.0	\$48.0
R13	Dixon Landing Rd. Widening —Project consists of widening Dixon Landing Rd. from four to six travel lanes between North Milpitas Blvd. and I-880. This project will also include provision of bicycle lanes, sidewalks and an upgrade to the Union Pacific Railroad crossing (located just east of the Milmont Rd. signalized intersection). These improvements will allow for enhanced traffic flow on this critical east-west connector route.	Milpitas	\$60.0	\$48.0
R14	Dixon Landing Rd. and North Milpitas Blvd. Intersection Improvements —The Dixon Landing Rd. and North Milpitas Blvd. intersection is a key northern gateway into the City of Milpitas. Construct an additional northbound and southbound left-turn lane and an eastbound left and right-turn lane to improve level of service at this location.	Milpitas	\$3.0	\$2.4
R15	Butterfield Blvd. South Extension — Extends Butterfield Blvd. from Tennant Ave. to Watsonville Rd. Constructs new roadway segment and railroad overpass bridge, extends drainage channel, upgrades traffic signals, installs median and landscaping, bike lanes and sidewalks.	Morgan Hill	\$18.8	\$9.4

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R16	Santa Teresa Blvd. Improvements — Construct a new roadway segment to provide connection between West Main Ave. and DeWitt Ave. at Spring Ave. The new segment will be a four-lane arterial with median, landscaping, sidewalks and bike lanes.	Morgan Hill	\$10.2	\$5.1
R17	Rengstorff Ave. Grade Separation — This project will construct a grade separation, depressing Rengstorff Ave. under the Caltrain tracks and reconnecting the roadway to a new at-grade Rengstorff Ave. and Central Expwy. intersection.	Mountain View	\$65.0	\$64.9
R18	Palo Alto Smart Residential Arterials — Designs and constructs Automated Traffic Signal System elements, Electronic Driver Speed Advisory signs and lighted pedestrian crossings along five residential streets: Embarcadero Rd., University Ave., Middlefield Rd., Charleston Rd. and Arastradero Rd.	Palo Alto	\$10.0	\$8.0
R19	Autumn Pkwy. Improvement from Union Pacific Railroad to Park Ave. — Extend new four-lane multimodal street from Union Pacific Railroad crossing to St. John St. and improve existing Autumn St. from St. John St. to Park Ave.	San Jose	\$33.0	\$26.4
R20	North First St. Core Area Grid Streets — Several local streets will be constructed to form a “grid system” of streets to serve future development and provide connections to all major arterials in North San Jose.	San Jose	\$61.0	\$0.0
R21	Chynoweth Ave. Extension from Almaden Expwy. to Winfield Blvd. — Road will provide a new four-lane connection. Chynoweth Ave. bridge will include construction of a new connector, bike lanes and sidewalks.	San Jose	\$15.0	\$12.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R22	Charcot Ave. Extension Over I-880 —Planned Charcot Ave. overpass will cross I-880 and provide extension from Charcot Ave. to Old Oakland Rd. Connection will provide an alternative east/west route to Brokaw Rd. and Montague Expwy. as well as provide for bicycle and pedestrian access.	San Jose	\$34.0	\$17.0
R23	Coleman Ave. Widening from I-880 to Taylor St. —Widen Coleman Ave. to six lanes as part of an enhanced highway gateway to serve planned expansion of Downtown San Jose.	San Jose	\$13.0	\$10.4
R24	King Rd. Bridge Replacement and Widening at Penitencia Creek —Eliminate roadway bottleneck along King Rd. and replace bridge to accommodate flood control and bicycle and pedestrian trail facilities along Penitencia Creek, a bicycle and pedestrian access route to the planned Berryessa BART station.	San Jose	\$5.0	\$4.0
R25	Branham Ln. Widening from Vista Park Dr. to Snell Ave. —Widen Branham Ln. to four lanes and add sidewalks, bike lanes and median islands. Eliminate roadway bottleneck and enhance bicycle and pedestrian facilities to create part of a multi-modal transportation corridor along planned “agriculture heritage” park and connecting with Branham Light Rail Station, Guadalupe River Trail and Coyote Creek Trail.	San Jose	\$10.3	\$8.2
R26	Blossom Hill Rd. Bike/Ped Improvements —Provides bicycle and pedestrian overcrossing at Blossom Hill Rd./ Monterey Highway area over Union Pacific Railroad tracks.	San Jose	\$10.0	\$0.0
R27	Caltrain Pedestrian Crossing Bridge at Blossom Hill Station —Pedestrian bridge connecting Edenvale Transit Village, which includes 2,000 housing units, to Caltrain Rail Station.	San Jose	\$2.5	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R28	Almaden Rd. Improvement from Malone Rd. to Curtner Ave. —Project will provide significant bottleneck relief, continuous bicycle and pedestrian improvements, sidewalk improvements and bicycle trail connections.	San Jose	\$5.4	\$4.2
R29	Downtown Couplet Conversion Projects —Conversion of one-way couplets to two-way streets, reduce lanes and add bike lanes along 10th St. and 11th St., Almaden Ave. and Vine St., and 2nd St. and 3rd St.	San Jose	\$22.0	\$11.0
R30	North San Jose Bicycle and Pedestrian Improvements —New bike lanes and sidewalks to convert previously auto-oriented streets into multimodal streets.	San Jose	\$33.0	\$0.0
R31	Snell Ave. Widening from Branham Ln. to Chynoweth Ave. —Widen Snell Ave. and add median landscaping to relieve congestion, improve safety, enhance aesthetics.	San Jose	\$4.0	\$3.2
R32	Zanker Rd. Widening from US 101 to Tasman Dr. —Widen Zanker Rd. from to six lanes to support traffic circulation in North San Jose area.	San Jose	\$54.0	\$0.0
R33	Branham Ln./Monterey Hwy Grade Crossing Project —Reconstructs the Branham Ln. intersection with Monterey Hwy below the Caltrain and Union Pacific Railroad corridor to improve safety and accommodate California High Speed Rail. Includes R35 - Caltrain Grade Separation at Branham Ln.	San Jose	\$30.0	\$24.0
R34	Neiman Blvd. Pedestrian Overcrossing at Capitol Expwy. —Project provides new connection for bicycle and pedestrian safety and improved access to Eastridge Transit Center.	San Jose	\$8.0	\$6.4
R35	Caltrain Grade Separation at Branham Ln. —Included in R33.	San Jose	—	—

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R36	Senter Rd. Widening from Umbarger Rd. to Lewis Rd. —Eliminates roadway bottleneck, improves bicycle and pedestrian facilities and installs median landscaping.	San Jose	\$5.4	\$4.3
R37	North San Jose Miscellaneous Intersection Improvements —Makes improvements to various intersections in North San Jose.	San Jose	\$29.0	\$0.0
R38	Bird Ave. Pedestrian Corridor —Development of bicycle lanes, sidewalks and interchange improvements.	San Jose	\$3.0	\$2.4
R39	Park Ave. Improvements from Bird Ave. to SR87 —Widen Park Ave. to add median islands and improve bike/ped facilities at gateway to Downtown San Jose.	San Jose	\$4.1	\$3.3
R40	Oakland Rd. Improvements from 101 to Montague – Phase 2 —Completes widening of Oakland Rd. to six lanes for improved capacity and traffic flow and adds median islands for enhanced safety and aesthetics.	San Jose	\$10.0	\$5.0
R41	Auzerais Ave. Bicycle and Pedestrian Improvements from Sunol St. to Race St. —Adds bicycle lanes, sidewalks and streetscape amenities in the Midtown area improving connection between high-density housing and Light Rail Transit.	San Jose	\$1.9	\$1.5
R42	Caltrain Grade Separation at Skyway Dr. —Roadway underpass grade separation at Caltrain railroad tracks and future High Speed Rail. Includes significant safety and multimodal access improvements.	San Jose	\$25.0	\$20.0
R43	San Carlos St. Bridge Replacement and Widening at Caltrain/ Vasona LRT —Replace structurally deficient bridge with improved facilities for biking and walking.	San Jose	\$10.0	\$8.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R44	Great America Pkwy./Mission College Blvd. Intersection Improvements — Intersection Improvements at the intersection of Great American Pkwy. and Mission College Blvd. This includes widening and capacity improvements to add triple left turns in two directions and traffic signal upgrades.	Santa Clara	\$6.5	\$5.2
R45	El Camino Real and Lafayette St. Intersection Improvements —Widening and capacity improvements and signal systems upgrades at the intersection of El Camino Real and Lafayette St.	Santa Clara	\$1.0	\$0.8
R46	Reconstruction/Rehabilitation of Various Streets —Reconstruction and Rehabilitation of entire streets network. Includes street pavements, sidewalks, curbs and gutters and utilities.	Santa Clara	\$15.0	\$12.0
R47	El Camino Real/San Tomas Expwy. Intersection Improvements — Intersection Improvements at El Camino Real and San Tomas Expwy., including widening and capacity improvements and traffic signal upgrades.	Santa Clara	\$0.8	\$0.6
R48	Center Ave. and Marcella Ave. two-lane Connection —Extend Center Ave. approx. 0.2 miles as a two-lane roadway to connect to Marcella Ave.	Santa Clara County	\$3.0	\$2.4
R49	DeWitt Ave./Sunnyside Ave. Realignment at Edmunsen Ave. — Aligns DeWitt Ave. with Sunnyside Ave. to eliminate the existing offset intersection and introduce shoulder treatments.	Santa Clara County	\$6.6	\$5.3
R50	Hill Rd. Extension from East Main Ave. to Peet Rd. —Constructs a new two-lane alignment for Hill Rd. from East Main Ave. across Half Rd. and connect to Peet Rd. Project also includes realigning existing Peet Rd. approach to Half Rd. to line up and connect with an extension of Hill Rd.	Santa Clara County	\$8.0	\$6.4

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R51	Marcella Ave. Two-Lane Realignment —Realign existing two-lane Marcella Ave. into a straighter line (eliminate 90-degree zig-zag along the alignment) to improve line of sight and level of service.	Santa Clara County	\$6.0	\$4.8
R52	Foothill-Loyola Bridge —Widen Loyola Bridge over Foothill Expwy. to add a third lane (for left turns), six-foot shoulders for bicycle use and five-foot sidewalks with pedestrian ramps.	Santa Clara County	\$1.0	\$0.8
R53	Fitzgerald Ave./Masten Ave. Realignment at Monterey Rd. —Straighten the existing off-set intersection to provide an aligned intersection and add a left-turn lane to Fitzgerald Ave. It will also provide bike lanes and sidewalks.	Santa Clara County	\$0.6	\$0.5
R54	Alum Rock Ave. Pedestrian Connection to Miguelita Bridge —Construct pedestrian facilities, pedestrian ramps and install signage, striping and crosswalks to close the sidewalk gap on Alum Rock Ave. eastbound approach to the newly constructed Miguelita Creek Pedestrian Bridge.	Santa Clara County	\$0.4	\$0.3
R55	Santa Teresa Blvd. & Tilton Ave. Traffic Signal Improvements —Installation of traffic signal at the intersection of Santa Teresa Blvd. and Tilton Ave.	Santa Clara County	\$0.6	\$0.5
R56	Railroad Crossing Improvements at Church Ave. and Monterey Hwy. —Improves the railroad crossing and traffic operation and safety at the Church Ave. and Monterey Hwy. intersection for all modes of transportation.	Santa Clara County	\$0.7	\$0.6
R57	McKee Rd. Pedestrian Improvements —Construct sidewalks and pedestrian ramps along McKee Rd. between White Rd. and Staples Ave. Install signage, striping and crosswalks; and create parking restricted zone due to visual obstruction if needed.	Santa Clara County	\$0.4	\$0.3

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R58	Watsonville Rd. Center Turn Lane — Add center lane and right turn improvements where needed to serve driveways and cross streets and improve paved shoulders for bicycle use.	Santa Clara County	\$7.0	\$5.6
R59	Santa Teresa Blvd. & San Martin Ave. Traffic Signal Improvements — Installation of traffic signal at the intersection of Santa Teresa Blvd. and San Martin Ave.	Santa Clara County	\$0.6	\$0.5
R60	Doyle Rd. Bicycle and Pedestrian Trail Connection —Provide bicycle and pedestrian access from where Doyle Rd. deadends into Lawrence Expwy. (currently a T-intersection) to the trail west of Lawrence Expwy. Project involves adding a crosswalk on Lawrence Expwy., modifying the signal system for the crossing, modifying a sound-wall to create an opening for the bicyclist/ pedestrians and making other bicycle/ pedestrian improvements necessary for trail access.	Santa Clara County	\$0.4	\$0.3
R61	SR 9 Pedestrian Safety Improvement — SR 9 Pedestrian Safety Improvements consist of pedestrian sidewalk/paths and include supporting improvements such as AC dikes, drainage improvements, utility under grounding/relocation, retaining walls/concrete barriers, driveway/property restorations, ADA compliant curb ramps, clearing/grubbing, tree removal and signing/striping. A bicycle and pedestrian bridge spanning Los Gatos Creek and connecting to the existing creek trail is also part of this project.	Saratoga	\$2.0	\$1.6
R62	Citywide Signal Upgrade Project Phase II —Provide Traffic Management System at City Hall and communication equipment to all upgraded signals. Interconnect signals along Coordination Corridors and coordinate with Management System.	Saratoga	\$0.5	\$0.4

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R63	Herriman Ave./Saratoga Ave. Traffic Signal —Install a traffic signal at the intersection of Herriman Ave. and Saratoga Ave. that currently meets traffic warrants.	Saratoga	\$0.3	\$0.2
R64	Prospect Rd. Median Project —This project will provide new medians with landscape along Prospect Rd. between Saratoga Ave. and Saratoga-Sunnyvale Rd. This is a joint project between the City of Saratoga and City of San Jose. The existing median along Prospect Rd. consist of State detail 22 striping.	Saratoga	\$2.0	\$1.6
R65	Verde Vista Ln. Traffic Signal —Install a traffic signal at the intersection of Verde Vista Ln. and Saratoga-Sunnyvale Rd. that currently meets traffic warrants.	Saratoga	\$0.3	\$0.2
R66	Saratoga Ave. Rehabilitation and Overlay Project —Provide pavement rehabilitation and overlay for several segments along Saratoga Ave., including new striping and bike facilities in the final striping wherever feasible and consistent with local plans. The project will consist of two phases along Saratoga Ave.	Saratoga	\$0.8	\$0.6
R67	Saratoga Ave. Sidewalk Pedestrian Improvement —Provide the necessary sidewalk gap closure that exists between the project limits, including new concrete gutters, curbs, sidewalks and handicap ramps.	Saratoga	\$0.3	\$0.2
R68	Mary Ave. Extension —Reduces congestion and increases access to the Moffett Industrial Park area by extending Mary Ave. north across SR-237, reconfiguring the Mathilda Ave./US-101 interchange, re-routing Moffett Park Dr. and modifying the eastbound SR 237/Northbound Mathilda Ave. flyover to create an alternative north/south route.	Sunnyvale	\$58.0	\$29.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R69	Lawrence Expwy. and Wildwood Ave. Realignment and Signalization —Realigns Wildwood Ave. to connect directly with Lawrence Expwy. and creates a new signalized intersection at Lawrence Expwy. and Wildwood Ave.	Sunnyvale	\$5.0	\$4.0
R70	Comprehensive Sidewalk Network for Employment Areas —Completion of sidewalks on all City streets in industrial areas.	Sunnyvale	\$8.1	\$6.5
R71	Sunnyvale Local Street Improvements —Intersection widening and sidewalk improvements at various locations citywide.	Sunnyvale	\$14.7	\$0.0
R72	Sunnyvale Downtown Specific Plan Transportation Improvements —Intersection and streetscape enhancements, bikeways, signal improvements and roadway reconfiguration.	Sunnyvale	\$13.0	\$10.4
R73	Installation of Pedestrian Countdown Signals —Installation of pedestrian countdown signals at all signalized intersections citywide.	Sunnyvale	\$0.2	\$0.2

LOCAL STREETS AND COUNTY ROADS UNCONSTRAINED PROJECT LIST

R74	Blossom Hill Rd. and Union Ave. Intersection Improvements —Widen roadway, install new traffic signals and modify intersection to improve circulation and safety.	Los Gatos	\$3.0	\$0.0
R75	Los Gatos-Almaden Rd. Improvements —Installation of storm drain system, curb and gutter and sidewalk to provide continuous bicycle and pedestrian facilities from Cherry Blossom Ln. to Taft Dr.	Los Gatos	\$2.5	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R76	Los Gatos Blvd. Widening - Lark Ave. to Samaritan Dr. —Road widening and installation of sidewalks and bicycle lanes between Lark Ave. and Samaritan Dr.	Los Gatos	\$0.8	\$0.0
R77	Union Ave. Widening and Sidewalks —Widen Union Ave. and install sidewalks to complete pedestrian and bicycle routes and improve circulation.	Los Gatos	\$0.6	\$0.0
R78	Wedgewood Ave. Traffic and Pedestrian Safety Improvements - Phase II —Addresses traffic safety improvements, pedestrian safety improvements and storm drainage issues.	Los Gatos	\$1.0	\$0.0
R79	Wood Rd. Gateway on Santa Cruz Ave. —Installation of a roundabout to calm traffic entering and exiting SR 17 adjacent to Wood Rd.	Los Gatos	\$1.0	\$0.0
R80	Downtown Palo Alto Traffic Signals Upgrade —Install emergency vehicle pre-emption detectors and video detection cameras at 30 signalized intersections on University Ave., Lytton Ave. and Hamilton Ave. between Middlefield Rd. and Alma St.	Palo Alto	\$1.2	\$0.0
R81	Quito Rd. Sidewalk Improvements — This project will provide the necessary sidewalk gap closure that exists between the project limits. This project will include new concrete gutters, curbs, sidewalks and handicap ramps. Approximately 1100 linear feet of sidewalk will be placed along the eastside of Quito Rd.	Saratoga	\$0.3	\$0.0
R82	Citywide Traffic Calming Program — Traffic calming capital construction in Sunnyvale residential neighborhoods.	Sunnyvale	\$3.0	\$0.0
R83	Installation of In-Pavement Lighted Crosswalks —Installation of in pavement lighted crosswalks at 10 locations citywide.	Sunnyvale	\$0.7	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
R84	Installation of Radar Speed Signs for School Areas —Installation of 20 pole mounted radar speed feedback signs in school zones or on school routes.	Sunnyvale	\$0.2	\$0.0
R85	Replacement of Signal Controllers Citywide —Replacement of signal controllers that have reached the end of their functional life.	Sunnyvale	\$2.7	\$0.0
R86	SR 82 Gateway Program —Enhance gateways to Sunnyvale on El Camino Real with focal point features such as towers, fountains, beacons, gateposts, pylons and/or signs.	Sunnyvale	\$4.0	\$0.0
R87	Junipero Serra Blvd. Traffic Calming —Construct a continuous eight to twelve foot wide median with bulb-outs at each end and possibly in the middle as a traffic calming measure near Stanford University.	Santa Clara County	\$1.7	\$0.0
R88	Magdalena at Country Club intersection signal —Install new traffic signals at the Magdalena Ave./Country Club Dr. intersection and coordinate with existing signals at Foothill Expwy. and Magdalena Ave. as well as Fremont Ave. and Springer Rd.	Santa Clara County	\$0.7	\$0.0

HIGHWAY CONSTRAINED PROJECT LIST

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H1	SR 85 Express Lanes: US 101 (South San Jose to Mountain View) —Convert existing HOV lanes on SR 85 to express lanes.	Mountain View, Los Altos, Sunnyvale, Cupertino, Saratoga, Campbell, Los Gatos and San Jose	\$72.0	\$72.0
H2	SR 87 Express Lanes: SR 85 to US 101 (Conversion) —Convert HOV lane to express lane.	San Jose	\$30.0	\$30.0
H3	US 101 Express Lanes: San Mateo Countyline to SR 85 in Mountain View (Conversion) —Convert existing HOV lanes to express Lanes on US 101 from the San Mateo County line to SR 85 in Mountain View.	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose	\$12.0	\$12.0
H4	US 101 Express Lanes: SR 85 (San Jose) to Cochrane Rd. (Conversion) —Convert existing HOV lanes to express lanes on US 101 from SR 85 in South San Jose to Cochrane Rd. in Morgan Hill.	San Jose, Morgan Hill, Santa Clara County	\$23.0	\$23.0
H5	US 101 Express Lanes: SR 85 in Mountain View to SR 85 in San Jose (Conversion) —Convert existing HOV lanes to express lanes on US 101 between SR 85 Mountain View and SR 85 in San Jose.	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose	\$90.0	\$90.0
H6	US 101 HOV/Express Lanes: Cochrane Rd. to Masten Ave. —Build HOV/express lanes on US 101 from Cochrane Rd. to Masten Ave.	Morgan Hill, Santa Clara County	\$93.0	\$93.0
H7	US 101 HOV/Express Lanes: Masten Ave. to 10th St. —Build HOV/express lanes on US 101 from Masten Ave. to 10th St. in Gilroy.	Gilroy, Santa Clara County	\$59.0	\$59.0
H8	US 101 HOV/Express Lanes: 10th St. to SR 25 —Build HOV/express lane on US 101 between 10th St and SR 25 in Gilroy.	Gilroy, Santa Clara County	\$43.0	\$43.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H9	SR 237 Express Lanes: I-880 to Mathilda Ave. (Conversion) —Convert existing HOV lanes to express lanes from I-880 to Mathilda Ave.	Milpitas, San Jose, Santa Clara, Sunnyvale, Mountain View	\$20.0	\$20.0
H10	SR 237 Express Lane Connectors (Milpitas) to I-880 —Convert HOV direct freeway connectors, I-880 southbound to SR 237 westbound and SR 237 eastbound to I-880 northbound to express direct connectors.	Milpitas	\$5.0	\$5.0
H11	SR 237 HOV/Express Lanes: Mathilda Ave. to SR 85 —Build new HOV/express lanes on SR 237 between Mathilda Ave. and SR 85.	Sunnyvale and Mountain View	\$70.0	\$70.0
H12	I-280 Express Lanes: Leland Ave. to Magdalena Ave. (Conversion) —Convert existing HOV lanes to express lanes on I-280 from Leland Ave. to Magdalena Ave.	San Jose, Cupertino, Los Altos	\$50.0	\$50.0
H13	I-280 Express Lanes: US 101 to Leland Ave. —Build HOV/express lanes on I-280 between US 101 and Leland Ave.	San Jose	\$21.0	\$21.0
H14	I-280 HOV/Express Lanes: Southbound El Monte Rd. to Magdalena Ave. —Build HOV/express lane on I-280 southbound from El Monte Rd. to Magdalena Ave.	Los Altos Hills	\$12.0	\$12.0
H15	I-680 HOV/Express Lanes: Calaveras Blvd. to US 101 —Convert to HOV/express lane on I-680 between Calaveras Blvd. and US 101.	Milpitas and San Jose	\$30.0	\$30.0
H16	I-880 Express Lanes: Alameda Countyline to US 101 (Conversion) —Convert existing HOV lanes to express lanes on I-880 from Alameda Countyline to US 101.	Morgan Hill, Santa Clara County	\$20.0	\$20.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H17	SR 17 Southbound/Hamilton Ave. Off-Ramp Widening —Widen off ramp to include extra lane at Hamilton Ave. from southbound SR 17.	Campbell	\$1.0	\$1.0
H18	SR 25/Santa Teresa Blvd./US 101 Interchange (includes US 101 widening between Monterey Rd. and SR 25 and connection to Santa Teresa Blvd.) —Constructs a full interchange at the intersection of US 101 and SR 25. The project also includes a widening of US 101 between Monterey Hwy and SR 25 and an extension to Santa Teresa Blvd.	Gilroy	\$233.0	\$233.0
H19	SR 85 Northbound to Eastbound SR 237 Connector Ramp and Northbound SR 85 Auxiliary Lane —Widens off-ramp from northbound SR 85 to eastbound SR 237 to two lanes. Constructs auxiliary lane on eastbound SR 237 between SR 85 on-ramp and Middlefield Rd. Constructs braided off-ramp on eastbound SR 237 between SR 85 and Dana St.	Mountain View	\$26.0	\$26.0
H20	Fremont Ave. Improvements at SR 85 —Ramp improvements at Fremont Ave. interchange and reconfiguration at Bernardo Ave.	Sunnyvale	\$3.0	\$3.0
H21	SR 85/Cottle Rd. Interchange Improvements —Interchange improvements with minor ramp reconfiguration at SR 85 and Cottle Rd.	San Jose	\$5.0	\$0.0
H22	SR 87/Capitol Expwy./Narvaez Ave. Interchange Improvements —Make changes to the SR 87 interchange, with possible adjustment at Narvaez Ave.	San Jose	\$10.0	\$5.0
H23	US 101/Montague Expwy./San Tomas Expwy./Mission College Blvd. Interchange Improvements —Construct partial cloverleaf interchange at US 101 and Montague Expwy.	Santa Clara County	\$12.0	\$10.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H24	US 101/Trimble Rd./De La Cruz Blvd./Central Expwy. Interchange Improvements —Modifies existing loop cloverleaf ramp from southbound US 101 to Trimble Rd. into a partial cloverleaf ramp (diagonal ramp with signalized intersection). The southbound US 101 on-ramp from De La Cruz Blvd./Central Expwy. will be modified to one mixed-flow lane and one HOV lane with ramp metering equipment.	San Jose	\$34.0	\$17.0
H25	US 101/Blossom Hill Rd. Interchange Improvements —Reconfigure interchange at US 101/Blossom Hill Rd. in San Jose; modifications are on the local roadway system, including widening of Blossom Hill Rd. over US 101.	San Jose	\$20.0	\$9.0
H26	US 101/Mabury Rd./Taylor St. Interchange Improvements —Constructs a new interchange with full access to the US 101 freeway.	San Jose	\$49.0	\$24.0
H27	US 101 Southbound Auxiliary Lane: Great America Parkway to Lawrence Expwy. —Auxiliary lane on US 101 from Great America Pkwy. to Lawrence Expwy.	Sunnyvale	\$3.0	\$3.0
H28	US 101/Old Oakland Rd. Interchange Improvements —Interchange improvements at US 101 and Old Oakland Rd. Project may include additional widening of Old Oakland Rd.	San Jose	\$20.0	\$10.0
H29	US 101 Southbound Widening from Story Rd. to Yerba Buena Road —Adds a lane on southbound US 101 between south of Story Rd. to Yerba Buena Rd. The project also includes the modification of the US 101/Tully Rd. interchange to a partial cloverleaf.	San Jose	\$63.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H30	US 101/Capitol Expwy. Interchange Improvements (includes new Northbound on-ramp from Yerba Buena Rd.) —Converts the interchange into partial cloverleaf interchange and adds ramp storage capacity.	San Jose	\$40.0	\$40.0
H31	US 101/Tennant Ave. Interchange Improvements —Constructs a new bridge parallel to existing bridge over US 101, widens Tennant Ave. to four lanes with bike lanes and sidewalks. A northbound loop on-ramp will be constructed.	Morgan Hill	\$17.0	\$8.5
H32	US 101 Southbound Auxiliary Lane Widening: I-880 to McKee —US 101 Southbound add an auxiliary lane from I-880 to McKee Rd.	San Jose	\$9.0	\$9.0
H33	US 101 Auxiliary Lanes - SR 85 to Embarcadero Rd. —Auxiliary lanes on US 101 in Mountain view and Palo Alto, from SR 85 to Embarcadero Rd.	Mountain View	\$103.0	\$0.0
H34	US 101 Ramp Metering Facilities: 10th St —Installation of ramp metering devices at the 10th St. interchange, with possible ramp widening.	Santa Clara County	\$7.0	\$7.0
H35	US 101 Ramp Metering Facilities at Leavesley Rd. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$10.0	\$10.0
H36	US 101 Ramp Metering Facilities: Masten Ave. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$5.0	\$5.0
H37	US 101 Ramp Metering Facilities: San Martin Ave. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$5.0	\$5.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H38	US 101 Ramp Metering Facilities: Tennant Ave. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$6.0	\$6.0
H39	US 101 Ramp Metering Facilities: E. Dunne Ave. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$5.0	\$5.0
H40	US 101 Ramp Metering Facilities: Cochrane Ave. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$6.0	\$6.0
H41	US 101 Ramp Metering Facilities: Coyote Creek Golf Dr. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$5.0	\$5.0
H42	US 101 Ramp Metering Facilities: Bailey Ave. —Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	\$4.0	\$4.0
H43	US 101 Ramp and Intersection Improvements: Southbound off-ramp at Tennant Ave. —Widen off-ramp from to three lanes to provide a second right turn lane.	Santa Clara County	\$1.0	\$1.0
H44	US 101 Ramp/Intersection Improvements: Southbound Ramp at 10th St. —Improve the US 101 southbound ramp at 10th St.	Santa Clara County	\$3.0	\$3.0
H45	US 101 Ramp/Intersection Improvements: US 101 Southbound and Northbound Ramps at Masten Ave. —Signalize ramp termini.	Santa Clara County	\$1.0	\$1.0
H46	US 101 TOS Improvements —Incident management, CCTV, speed control system in South County area between SR 85 and Monterey Rd.	Santa Clara County	\$35.0	\$35.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H47	US 101/Hellyer Ave. Interchange Improvements —Reconfigure interchange at US 101/Hellyer Ave. in San Jose by widening the overcrossing from to four lanes and installing traffic signals at each of the two off-ramp intersections.	San Jose	\$14.0	\$12.0
H48	US 101/Zanker Rd./Skyport Dr./Fourth St. Interchange Improvements —Constructs a new interchange connecting Zanker Rd. and Old Bayshore Highway, with North Fourth St. and Skyport Dr. at US 101.	San Jose	\$90.0	\$45.0
H49	US 101 Southbound Auxiliary Lane Improvement Between Ellis St. and SR 237 —Constructs a southbound auxiliary lane on US 101 from Ellis St. interchange to eastbound SR 237.	Sunnyvale	\$4.0	\$4.0
H50	US 101 Ramp/Intersection Improvements: Southbound off-ramp at Cochrane Rd. —Widen southbound off ramp to three lanes.	Santa Clara County	\$1.0	\$1.0
H51	US 101 Ramp/Intersection Improvements: Northbound off-ramp at Cochrane Rd. —Widen eastbound approach to Cochrane to provide 2nd thru lane.	Santa Clara County	\$1.0	\$1.0
H52	US 101 Ramp/Intersection Improvements at Dunne Ave. —Local street improvements.	Santa Clara County	\$2.0	\$2.0
H53	US 101/Buena Vista Ave. Interchange Improvements —Project includes construction of a flyover southbound on-ramp to braid with the existing truck exit at the CHP Inspection Station. Off-ramp diagonal ramps will be constructed.	Gilroy	\$27.0	\$27.0
H54	US 101 Ramp/Intersection Improvements: US 101 Southbound Ramps at San Martin Ave. —Signalize ramp termini at US 101 and San Martin Ave.	Santa Clara County	\$1.0	\$1.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H55	US 101 Southbound Improvements from San Antonio Rd. to Charleston Rd./Rengstorff Ave. —Southbound improvements on US 101 from San Antonio Rd. to Charleston Rd./Rengstorff Ave.	Palo Alto, Mountain View	\$19.0	\$19.0
H56	US 101 Widening to Six-Lane Freeway: SR 25 to SR 129 —Widen US 101 to six lanes from SR 25 to SR 129.	Santa Clara County	\$170.0	\$0.0
H57	SR 152 Improvements: Intersection Improvement at Ferguson Road —Provides lighting and widening improvements at the intersection of SR 152 from Ferguson Rd.	Santa Clara County	\$2.0	\$2.0
H58	SR 152 Ramp/Intersection Improvements: SR 152 at Bloomfield Ave. —Ramp and intersection improvements for SR 152 at Bloomfield Ave.	Santa Clara County	\$2.0	\$2.0
H59	SR 152 Ramp/Intersection Improvements: SR 152 at Frazier Lake Rd. —Intersection improvements at SR 152 at Frazier Lake Rd.	Santa Clara County	\$2.0	\$2.0
H60	SR 152 Ramp/Intersection Improvements: SR 152 at Watsonville Rd. —Construct a left turn lane on eastbound SR 152 at the Watsonville Rd. intersection, add a refuge area for motorists turning left onto eastbound SR 152, improve the shoulders to provide motorists with additional recovery area and overlay the existing pavement.	Santa Clara County	\$3.0	\$3.0
H61	New SR 152 Alignment: SR 156 to US 101 —Construct new SR 152 alignment between SR 156 and US 101 and conversion to toll highway.	Gilroy, Santa Clara and San Benito Counties	\$350.0	\$350.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H62	SR 237/El Camino Real/Grant Rd. Intersection Improvements —Extends the westbound SR 237 left-turn storage lane, extends the northbound El Camino Real right-turn lane to Yuba Drive, extends southbound El Camino Real left-turn storage lane and constructs southbound El Camino Real right-turn lane to Grant Rd.	Mountain View	\$4.0	\$4.0
H63	SR 237 Westbound On-Ramp at Middlefield Rd. —Construct westbound loop on-ramp from northbound Middlefield Rd. to westbound SR 237. Eliminate the signalized intersection at Middlefield Rd./ westbound SR 237 diagonal on-ramp. Realign frontage road to form a new intersection at Middlefield Rd./Ferguson Dr.	Mountain View	\$11.0	\$11.0
H64	SR 237 Eastbound Auxiliary Lane between Zanker Rd. and North First St. —SR 237 eastbound auxiliary lane between Zanker Rd. and North First St.	San Jose, Santa Clara County	\$7.0	\$7.0
H65	SR 237/Mathilda Ave. and US 101/Mathilda Ave. Interchange Improvements —Convert north side of northbound US 101/Mathilda Ave. interchange to partial cloverleaf; remove northbound US 101 loop ramp to southbound Mathilda Ave.; add diagonal ramp from southbound Mathilda Ave. to northbound US 101; add auxiliary lane on northbound US 101 between Mathilda Ave. and SR 237; remove Mathilda Ave. on-ramp to westbound SR 237.	Sunnyvale	\$15.0	\$15.0
H66	SR 237/North First St. Interchange Improvements —Interchange improvements at SR 237 and North First St.	San Jose	\$2.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H67	SR 237 Westbound to Northbound US 101 Ramp Improvements —Widens westbound Route 237 on-ramp from SR 237 to northbound US 101 to two lanes. Adds auxiliary lane on northbound US 101 from SR 237 on-ramp to Ellis St. interchange.	Sunnyvale	\$9.0	\$9.0
H68	SR 237 Eastbound Auxiliary Lanes: Mathilda Ave. to Fair Oaks Ave. —Build auxiliary lanes between Mathilda Ave. and Fair Oaks Ave. on eastbound SR 237.	Sunnyvale	\$6.0	\$6.0
H69	I-280 Northbound - Second Exit Lane to Foothill Expwy. —Constructs a second exit lane from northbound I-280 to Foothill Expwy.	Cupertino, Los Altos	\$2.0	\$2.0
H70	I-280 Northbound Winchester Blvd. Interchange Improvements —Included in H73.	San Jose	—	—
H71	I-280 Downtown Access Improvements between 3rd St. and 7th St. —Reconstructs the existing northbound I-280 off-ramp at 7th St. to connect directly to 3rd St.	San Jose	\$25.0	\$20.0
H72	I-880/Montague Expwy. Interchange Improvement —Construct partial cloverleaf interchange at US 101 and Montague Expwy.	Milpitas, San Jose, Santa Clara County	\$12.0	\$0.0
H73	I-880/I-280/Stevens Creek Blvd. Interchange Improvements —Eliminates the eastbound off-ramp loop and reconfigures the off-ramp to eastbound Stevens Creek Blvd. which will include construction of a signal and highway lighting. This project also includes H70 - I-280 Northbound Winchester Blvd. Interchange improvements.	San Jose	\$64.0	\$59.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H74	I-880 Widening for HOV Lanes from SR 237 to Old Bayshore —Widen I-880 for HOV lanes in both directions between Route 237 in Milpitas to US 101 in San Jose.	Milpitas, San Jose	\$95.0	\$0.0
H75	I-880 Northbound Auxiliary Lane - Coleman Ave. to First St. —I-880 northbound auxiliary lane between Coleman Ave. and First St.	San Jose	\$13.0	\$13.0

HIGHWAY UNCONSTRAINED PROJECT LIST

H76	I-880 HOV/Express Lanes: US 101 to I-280 —Build HOV/Express Lane on I 880 between US 101 and I 280.	San Jose	\$160.0	\$0.0
H77	SR 85 Southbound Auxiliary Lanes from Stevens Creek Blvd. to Saratoga-Sunnyvale Rd. —Constructs auxiliary lane on SR 85 northbound/southbound from Saratoga-Sunnyvale to Stevens Creek Blvd. and related TOS improvements.	Cupertino	\$15.0	\$0.0
H78	I-880 Southbound Auxiliary Lane - First St. to Coleman Ave. —I-880 Southbound Auxiliary lane between Coleman Ave. and First St.	San Jose	\$17.0	\$0.0
H79	SR 237 Westbound Auxiliary Lane between Coyote Creek Bridge and North First St. —Widens and constructs auxiliary lane on eastbound SR 237 between North First St. to Zanker Rd.; and includes TOS elements.	Milpitas, San Jose	\$17.0	\$0.0
H80	US 101 Northbound Auxiliary Lane Widening: I-880 to McKee —Northbound auxiliary lane widening on US 101 between I-880 and McKee Rd.	San Jose	\$10.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H81	SR 85/ El Camino Real Interchange Improvement —SR 85 auxiliary lanes between El Camino Real and SR 237, and SR 85/El Camino Real interchange improvements.	Mountain View	\$21.0	\$0.0
H82	SR 85 Northbound Auxiliary Lanes from North of Winchester Blvd. to Saratoga Ave. —Proposes auxiliary lanes from Saratoga Ave. to Winchester Blvd. on SR 85 in both directions along with related TOS improvements.	Saratoga, San Jose, Campbell, Los Gatos	\$18.0	\$0.0
H83	US 101 Northbound Auxiliary Lane Widening: Tennant Ave. to Dunne Ave. —Auxiliary lane widening on US 101 between Tennant Ave. and Dunne Ave. in Morgan Hill.	Morgan Hill, Santa Clara County	\$11.0	\$0.0
H84	US 101 Southbound Auxiliary Lane Widening: Tennant Ave. to Dunne Ave. —Auxiliary lane widening on US 101 Southbound between Tennant Ave. and Dunne Ave.	Morgan Hill, Santa Clara County	\$11.0	\$0.0
H85	I-680/Montague Expwy. Interchange Improvement —Construct partial clover-leaf interchange at I-680 and Montague Expwy. including improvements on Montague Expwy.	San Jose (Santa Clara County)	\$18.0	\$0.0
H86	SR 85 Auxiliary Lanes: Homestead Ave. to Fremont Ave. —Creates SR 85 northbound and southbound auxiliary lanes between Homestead Ave. and Fremont Ave.	Sunnyvale, Cupertino	\$22.0	\$0.0
H87	US 101 Auxiliary Lane Widenings: Trimble Rd. to Montague Expwy. —Widen US 101 for northbound and southbound auxiliary lane from Trimble Rd. to Montague Expwy.	San Jose, Santa Clara	\$12.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H88	SR 85 Northbound Auxiliary Lanes from Stevens Creek Blvd. to Saratoga/Sunnyvale Road —Constructs auxiliary lanes on northbound and southbound SR 85 between Saratoga-Sunnyvale Rd. and Stevens Creek Blvd. and related TOS improvements.	Cupertino, San Jose	\$15.0	\$0.0
H89	I-280 Northbound Saratoga Ave. - Connect Auxiliary Lanes to Complete Fourth Lane —Connect auxiliary lanes to complete fourth lane on northbound I-280 at Saratoga Ave.	San Jose	\$20.0	\$0.0
H90	SR 85 Southbound Auxiliary Lanes from North of Winchester Blvd. to Saratoga Ave. —Proposes auxiliary lanes from Saratoga Ave. to Winchester Blvd. on SR 85 in northbound and southbound directions along with related TOS improvements.	Saratoga, San Jose, Campbell, Los Gatos	\$18.0	\$0.0
H91	US 101 Southbound Braided Ramps between Capitol Expwy. and Yerba Buena Rd. —Adds a braided ramp onto southbound 101 between Capitol Expwy. and Yerba Buena Rd. Includes improvements at Capitol Expwy. interchange.	San Jose	\$24.0	\$0.0
H92	SR 237 Eastbound to Mathilda Ave. Flyover Off-Ramp —Convert north side of northbound US 101 at Mathilda Ave. interchange to partial cloverleaf. Remove Northbound US 101 loop ramp to southbound Mathilda Ave. Add diagonal ramp from southbound Mathilda Ave. to northbound US 101; add auxiliary lane on northbound US 101 between Mathilda Ave. and SR 237. Remove Mathilda Ave. on-ramp to westbound SR 237.	Sunnyvale	\$20.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H93	SR 237 Westbound to Southbound SR 85 Connector Ramp Improvements (including SR 85 auxiliary lanes between El Camino Real and SR 237) —Construct a collector/distributor road in the westbound direction on SR 237 from the Central Expwy. overcrossing to SR 85. Widen off-ramp from westbound SR 237 to southbound SR 85 to two lanes. Add auxiliary lane in the southbound direction between SR 237 and the El Camino Real interchange on SR 85.	Mountain View	\$37.0	\$0.0
H94	US 101 Northbound Auxiliary Lane Widening: 10th St. to Leavesley Rd. —US 101 northbound widening of auxiliary lane between 10th St. and Leavesley Rd. in Gilroy.	Gilroy	\$20.0	\$0.0
H95	US 101 Southbound Auxiliary Lane Widening: 10th St. to Leavesley Rd. —US 101 southbound widening of the auxiliary lane from 10th St. to Leavesley Rd.	Gilroy	\$21.0	\$0.0
H96	I-280 Northbound Braided Ramps between Foothill Expwy. and SR 85 —Reconfigures the existing I-280 northbound off-ramp to Foothill Expwy. into a braided ramp with the southbound SR 85 to northbound I-280 direct connector.	Cupertino, Los Altos	\$40.0	\$0.0
H97	US 101 Northbound Braided Ramps between Capitol Expwy. and Yerba Buena Rd. —Adds a braided ramp onto northbound US 101 between Capitol Expwy. and Yerba Buena Rd., including improvements at the Capitol Expwy. interchange.	San Jose	\$24.0	\$0.0
H98	SR 85 Northbound/Southbound Auxiliary Lanes from Saratoga-Sunnyvale Rd. to Saratoga Ave. —Proposes auxiliary lanes from Saratoga-Sunnyvale Rd. to Saratoga Ave. on SR 85 in northbound and southbound directions, along with related TOS improvements.	San Jose, Saratoga	\$37.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
H99	Moffett Blvd./US 101 Overcrossing Replacement —Replacement of Moffett Blvd over crossing of US 101.	Mountain View	\$20.0	\$0.0
H100	US 101/Oregon Expwy./Embarcadero Rd. Improvements —Improvements to US 101/Oregon Expwy./Embarcadero Rd.	Santa Clara County	\$50.0	\$0.0
H101	US 101 Southbound to Eastbound SR 237 Connector Improvements —Realign exit lane from southbound US 101 to eastbound SR 237 loop ramp. Widen loop ramp from southbound US 101 to eastbound SR 237 to two lanes. Construct new SR 237 bridge over US 101 to provide auxiliary lane leading to the new two-lane connector. Reconstruct the eastbound SR 237 off-ramp to southbound US 101.	Sunnyvale	\$64.0	\$0.0
H102	SR 85 Auxiliary Lanes between Fremont Ave. and El Camino Real —Construct auxiliary lanes in both directions between Homestead Rd. and El Camino Real, reconstruct The Dalles Ave. pedestrian overcrossing, widen Fremont Ave. overcrossing structure and widen the Stevens Creek Blvd. structure.	Los Altos, Mountain View, Sunnyvale	\$56.0	\$0.0
H103	US 101/Coyote Valley Parkway Interchange —Reconfigure interchange at US 101 and Coyote Valley Pkwy. by widening on-ramps and off-ramps.	San Jose	\$25.0	\$0.0
H104	I-680 Northbound/Southbound Auxiliary Lanes from McKee Rd. to Berryessa Rd. —Addition of auxiliary lanes in both directions of I-680.	San Jose	\$53.0	\$0.0
H105	I-880/US 101 Interchange Improvements —Reconfiguration of the interchange at I-880 and US 101.	San Jose	\$1,000.0	\$0.0

EXPRESSWAY CONSTRAINED PROJECT LIST

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
X1	Almaden Expwy. – Widen Coleman to Blossom Hill —Widen Almaden Expwy. to eight lanes between Coleman Ave. and Blossom Hill Rd.	Santa Clara County	\$10.5	\$10.5
X2	Capitol Expwy. – TOS Infrastructure —Add TOS infrastructure on Capitol Expwy. between US 101 and Almaden Expwy.	Santa Clara County	\$3.5	\$3.5
X3	Central Expwy. – Auxiliary Lanes between Mary Ave. and Lawrence Expwy. —Provide auxiliary acceleration and/or deceleration lanes on Central Expwy. between Lawrence Expwy. and Mary Ave. to improve ramp operations and safety.	Santa Clara County	\$17.0	\$17.0
X4	Central Expwy. – Convert Measure B HOV lane (De La Cruz Blvd. to San Tomas Expwy.) —Converts Measure B HOV lane on Central Expwy. between San Tomas Expwy. and De La Cruz Blvd. to mixed flow.	Santa Clara County	\$0.1	\$0.1
X5	Central Expwy. – Convert HOV queue Jump Lane at Bowers Ave. —Convert HOV queue jump lanes along Central Expwy. at Bowers Ave. to general use	Santa Clara County	\$0.1	\$0.1
X6	Central Expwy. – Six lanes from Lawrence Expwy. to San Tomas Expwy. —Widen Central Expwy. between Lawrence Expwy. and San Tomas Expwy. to six through lanes, consistent with the original planned width of Central Expwy.	Santa Clara County	\$13.6	\$13.6
X7	Foothill Expwy. – Extend deceleration lane at San Antonio Rd. —Extends the existing westbound deceleration lane of Foothill Expwy. at San Antonio Rd. by 250 feet.	Santa Clara County	\$0.7	\$0.7

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
X8	Foothill-Loyola Bridge —Widen Loyola Bridge over Foothill Expwy. to add a third lane for left turns, six-foot shoulders for bicycle use and five-foot sidewalks with pedestrian ramps.	Santa Clara County	\$7.0	\$5.0
X9	Lawrence Expwy. – Additional Left Turn Lane at Prospect —Provide a second left turn lane from eastbound Prospect Rd. to northbound Lawrence Expwy. and modify existing traffic signals.	Santa Clara County	\$2.6	\$2.6
X10	Lawrence Expwy. – Close Median, Right In/Out —Close median at Lochinvar Ave. and right-in-and-out access at DeSoto Ave., Golden State Dr., Granada Ave., Buckley St., and St. Lawrence Dr./Lawrence Station Rd. on-ramp.	Santa Clara County	\$1.5	\$1.5
X11	Lawrence Expwy. – Arques Square Loop Grade Separation —Construct interchange at intersection of Lawrence Expwy. and Arques Ave. with square loops on Kern Ave. and Titan Way.	Santa Clara County	\$45.0	\$0.0
X12	Lawrence Expwy. – Expand to Eight Lanes from Moorpark Ave. to South of Calvert Dr. —Widens Lawrence Expwy. from to eight lanes between Moorpark Ave./ Bollinger Rd. and south of Calvert Dr.	Santa Clara County	\$5.2	\$5.2
X13	Montague Expwy. – Eight Lanes from Trade Zone Blvd. to Park Victoria Dr. —Widen Montague Expwy. to eight lanes between Trade Zone Blvd. and I-680 and to eight lanes between I-680 and Park Victoria Dr., including filling in deck over I-680. Designate new lanes between Trade Zone Blvd. and I-680 as HOV lanes.	Santa Clara County	\$20.0	\$7.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
X14	Montague Expwy. – Eight Lanes from Lick Mill Blvd. to Trade Zone Blvd. —Widen Montague Expwy. to eight lanes between Lick Mill Blvd. and Trade Zone Blvd. and widening of Guadalupe River Bridge and Penitencia Creek Bridge. The new lanes will be HOV lanes.	Santa Clara County	\$12.0	\$0.0
X15	Montague Expwy. – Trimble Rd. Flyover —To construct a new flyover interchange at Trimble Rd. and Montague Expwy.	Santa Clara County	\$32.0	\$0.0
X16	Montague Expwy. – Mission College Blvd. At-Grade Improvements —To provide intersection improvements by enhancing and modifying the operational characteristics of the intersection.	Santa Clara County	\$4.0	\$4.0
X17	Oregon Expwy./Page Mill Rd. – I-280 Page Mill Rd. Modification for Bicycle Travel —Modifies the I-280 freeway connections to enhance safety and improve operations primarily for bicyclists and pedestrians traveling on Page Mill Rd. through the interchange area.	Santa Clara County	\$6.6	\$6.6
X18	San Tomas Expwy. – SR 17/San Tomas Expwy. Improvements —At-grade improvements at SR 17/San Tomas Expwy: Re-stripe the eastbound through lane on White Oaks Rd. to provide an optional left as a third left turn lane; provide second right-turn lane on southbound off-ramp.	Santa Clara County	\$2.6	\$2.6
X19	San Tomas Expwy. Box Culvert —Rebuild 3.9 miles of box culvert under San Tomas Expwy.	Santa Clara County	\$13.2	\$13.2
X20	San Tomas Expwy. – Eight Lanes between Williams Rd. and El Camino —Widens San Tomas Expwy. to eight lanes between Williams Rd. and El Camino Real (SR82) with additional left-turn lane from eastbound and westbound El Camino Real to San Tomas Expwy.	Santa Clara County	\$40.7	\$40.7

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
X21	Santa Teresa Blvd./Hale Ave. Corridor – Realign DeWitt Ave. S-Curve —Realign existing “S” curve between approximately Edmundson Ave. and Spring Ave.	Santa Clara County	\$2.5	\$2.5
X22	Santa Teresa Blvd./Hale Ave. Corridor – TOS Infrastructure Improvements —Add TOS Infrastructure on Santa Teresa Blvd. between Day Rd. and Mesa Rd.	Santa Clara County	\$5.0	\$5.0
X23	SCC Motorist Traffic Information and Advisory Systems —Install traffic information outlets such as electronic information changeable message signs along expressways, advisory radio, cable TV feeds and web page to provide real time traffic information to expressway users.	Santa Clara County	\$5.0	\$5.0
X24	Signal Coordination/Interconnect with Cross Streets —To implement signal coordination between expressway signals and major cross-street signals.	Santa Clara County	\$5.0	\$5.0
X25	TOS Infrastructure Improvements —Implement ITS elements: Automated Traffic Count Collection System, Wireless Controller Communication System, Wireless Vehicular Detection System and Signal and Video Infrastructure Upgrades.	Santa Clara County	\$10.0	\$10.0
N/A	Almaden Expwy. SR 85 Interchange PSR —Initiate a Caltrans Project Study Report/Project Development Study (PDS) to reconfigure SR 85/Almaden interchange.	Santa Clara County	\$0.4	\$0.0
N/A	Central Expwy. – Median Curbs —Install median curbs where missing and enhance existing median curbs as needed between SR 85 and SR 237 to improve safety and operations.	Santa Clara County	\$0.8	\$0.0
N/A	Lawrence Expwy. – I-280 Project Study Report —Prepare Caltrans Project Study Report for Tier 1C project at the Lawrence Expwy./Calvert Dr./I-280 interchange area.	Santa Clara County	\$1.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
N/A	Oregon Expwy. – Alma Bridge Feasibility Study —Alma Bridge Replacement Feasibility Study.	Santa Clara County	\$0.3	\$0.0

EXPRESSWAY UNCONSTRAINED PROJECT LIST

TBD	Lawrence Expwy. – Kifer Rd. Interchange —Construct urban interchange at the intersection of Lawrence Expwy. and Kifer Rd.	Santa Clara County	\$59.0	\$0.0
TBD	Lawrence Expwy. – Monroe St. Interchange —Construct urban interchange at the intersection of Lawrence Expwy. and Monroe St.	Santa Clara County	\$59.0	\$0.0
TBD	Montague Expwy. – McCarthy Blvd. Square Loop Interchange —Construct a square loop grade separation project at Montague Expwy. and McCarthy Blvd./ O'Toole Ave. intersection.	Santa Clara County	\$37.0	\$0.0

TRANSIT PROJECTS

T1	Additional Measure A Operating and Capital Needs ¹	All Cities	\$1,954.0	\$1954.0
T2	ACE Upgrade —The proposed project will provide VTA's share of funds for additional train sets, passenger facilities and service upgrades for the ACE service from San Joaquin and Alameda Counties.	Santa Clara, San Jose	\$24.0	\$24.0
T3	BART to Milpitas, San Jose and Santa Clara ² —Extend BART from Fremont through Milpitas to downtown San Jose and the Santa Clara Caltrain Station.	Milpitas, San Jose, Santa Clara	\$6,172.0	\$6,172.0

¹ Funds assumed to be available over the 25-year plan timeframe to fund the Measure A Program and additional transit capital and operating expansion projects

² BART cost includes total TCRP programmed to BART extension Warm Springs to Santa Clara/San Jose, including prior expenditures.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
T4A	Bus Rapid Transit – El Camino BRT³ —The proposed project will implement a new Bus Rapid Transit (BRT) corridor in The Alameda and El Camino Real. (This is not an R3434 project.)	Mountain View, Palo Alto, Los Altos, Sunnyvale, Santa Clara, San Jose, Cupertino	\$207.0	\$207.0
T4B	Bus Rapid Transit – Stevens Creek BRT⁴ —The proposed project will implement a new Bus Rapid Transit corridor along San Carlos St./Stevens Creek Blvd. from Diridon Station to De Anza College.	Mountain View, Palo Alto, Los Altos, Sunnyvale, Santa Clara, San Jose, Cupertino	\$127.0	\$127.0
T5A	Caltrain Electrification Tamien to San Francisco⁵ —The project includes the installation of ten traction power substations, an overhead catenary system to supply power to the trains, signal and grade crossing circuitry changes and related communications improvements.	Palo Alto, Mountain View, Los Altos, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	\$222.0	\$222.0
T5B	Caltrain Electrification Gilroy to Tamien⁶ —Electrify Caltrain line from Tamien to Gilroy	Palo Alto, Mountain View, Los Altos, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	\$123.0	\$123.0
T6	Caltrain Service Upgrades —Construct service improvements on Caltrain line such as locomotives, access and signal systems.	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	\$203.0	\$203.0

³ Project from Diridon Station to Palo Alto

⁴ Project from downtown San Jose to De Anza College

⁵ Project is electrification only. Does not include capital funds needed for additional vehicles or service expansions. VTA share of cost only.

⁶ Project is electrification only. Does not include capital funds needed for additional vehicles or service expansions

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
T7	Caltrain – South County —Double track segments on the Caltrain line between San Jose and Gilroy.	San Jose, Morgan Hill, Gilroy	\$86.0	\$86.0
T8A	Santa Clara/Alum Rock Phase I: BRT⁷ —The project will provide Bus Rapid Transit as Phase I of the project in the Santa Clara-Alum Rock corridor with the ability to convert to light rail at a future date if the community desires	San Jose	\$128.0	\$128.0
T8B	Santa Clara/Alum Rock Phase II: LRT⁸ —The near term development strategy (Phase I) for the corridor is Bus Rapid Transit in the Santa Clara-Alum Rock Corridor with the ability to convert to light rail at a future time (Phase II) if the community desires.	San Jose	\$265.0	\$265.0
T8C	Capitol Expwy. LRT⁹ —Provides light rail extension in the East Valley. Extends the Capitol Ave. light rail line 2.6 miles from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center.	San Jose	\$334.0	\$334.0
T8D	Nieman LRT Extension¹⁰ —Phase II of Capitol Expwy. project that would extend light rail from Eastridge Transit Center to the Capitol Station on the Guadalupe LRT line.	San Jose	\$137.0	\$137.0
T8E	Monterey Hwy BRT¹¹ —One of three DTEV projects that would build Bus Rapid Transit on Monterey Hwy.	San Jose	\$87.0	\$87.0
T9	Dumbarton Rail Corridor —Rehabilitate existing rail infrastructure, procure rolling stock and commission rail transit service over the Dumbarton bridge between communities on east bay and peninsula.	Palo Alto	\$44.0	\$44.0

⁷ Project from Eastridge via Capitol Expressway/Alum Rock/Santa Clara to Downtown San Jose

⁸ Project from Santa Clara/Alum Rock to Diridon Station

⁹ Project from Eastridge to existing Alum Rock LRT Station

¹⁰ Project from Eastridge south to Nieman Ave.

¹¹ Project from Downtown San Jose to Santa Teresa LRT Station

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
T10	Hwy 17 Bus Service Improvements —The proposed project will increase bus service between Santa Clara County and Santa Cruz County over SR 17.	Los Gatos, Campbell, San Jose	\$2.0	\$2.0
T11	Vasona Junction ¹² —Extension of Vasona Light Rail line two stations to Vasona Junction in Los Gatos.	Los Gatos, Campbell	\$99.0	\$99.0
T12	Mineta San Jose International Airport APM Connector —The proposed project will provide transit link to San Jose International Airport from VTA's Guadalupe Light Rail Transit Line, and from Caltrain and future BART in Santa Clara, using automated People Mover technology.	San Jose	\$264.0	\$264.0
T13	Palo Alto Intermodal Center —Expand the Palo Alto Caltrain Station and Bus Transit Center.	Palo Alto	\$59.0	\$59.0
T14	ZEB Demonstration Program —Demonstration program to achieve goal of zero emissions to be in compliance with CARB's fleet rule.	All Cities	\$20.0	\$20.0
T15	ZEB Facilities Program —The ZEB program includes installation and modification of VTA facilities to support the demonstration program.	All Cities	\$78.0	\$78.0
T16	Sunnyvale-Cupertino BRT ¹³ —Bus Rapid Transit between Sunnyvale and Cupertino.	Sunnyvale/ Cupertino	\$68.0	\$68.0
T17	North San Jose Transit Enhancements ¹⁴	San Jose	\$35.0	\$35.0

¹² Project from Campbell to Netflix/Highway 85 via Winchester Blvd.

¹³ Project not in 2000 Measure A ballot

¹⁴ Project included the North San Jose Development Area Deficiency Plan

TRANSPORTATION SYSTEMS OPERATIONS & MANAGEMENT (ITS) PROJECTS

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S1	Hamilton Ave. Intelligent Transportation System —Expand on the ITS infrastructure currently on Hamilton Ave. by linking three signals via wireless interconnect to the Smart Corridor signals to the east. Will include signal retiming of these three signals.	Campbell	\$0.4	\$0.0
S2	Citywide Traffic Signal System Upgrade —Replace older traffic signal controllers with new controllers and signal system software that is compatible with NTCIP and Silicon Valley-ITS Data Exchange Network Software protocols.	Campbell	\$0.2	\$0.0
S3	Winchester Blvd. Intelligent Transportation System —Expand upon existing ITS equipment on Winchester Blvd. by installing new conduit, fiber and fiber equipment.	Campbell	\$0.4	\$0.0
S4	Reactivation of Traffic Count Stations —Reactivating traffic count stations along arterials such as Hamilton Ave., Winchester Blvd. and Campbell Ave.	Campbell	\$0.1	\$0.0
S5	Installation of Pedestrian Countdown Timers —Install countdown pedestrian signals at locations near schools, locations with frequent jaywalking and locations with high pedestrian volumes.	Campbell	\$0.2	\$0.0
S6	City of Gilroy Adaptive Traffic Control System	Gilroy	\$0.9	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S7	City of Gilroy Event Management System —Develop and implement changeable message signs, highway advisory radio, information kiosk and traveler information system for special events and incident management in the Gilroy area.	Gilroy	\$0.9	\$0.0
S8	City of Gilroy Traffic Signal System Upgrade —Upgrade traffic signal controller and communications systems with the current technology, including Interconnect, to replace outdated equipment and provide city with centralized traffic management system.	Gilroy	\$3.9	\$0.0
S9	City of Gilroy Flood Watch Camera Installations —Deployment of CCTV cameras to provide real-time video to the City of Gilroy Emergency Operations Center to be used to conduct traffic management and emergency operations activities in times of significant flooding.	Gilroy	\$0.5	\$0.0
S10	ITS Enhancements on Santa Teresa Blvd. —Signalization modifications along Santa Teresa Blvd.	Gilroy	\$2.0	\$0.0
S11	10th St. and Downtown Signals Upgrade —Controllers, adaptive, detectors along 10th St. in Gilroy.	Gilroy	\$1.5	\$0.0
S12	SR 152 Signal System Upgrade	Gilroy	\$2.3	\$0.0
S13	Gilroy Community Bus Signal Priority	Gilroy	\$0.4	\$0.0
S14	Gilroy Other Signals Upgrade	Gilroy	\$1.0	\$0.0
S15	Gilroy Downtown Parking Management System	Gilroy	\$0.3	\$0.0
S16	Town of Los Gatos Traffic Signal System Upgrade	Los Gatos	\$0.3	\$0.0
S17	South Milpitas Blvd. SMART Corridor	Milpitas	\$0.5	\$0.0
S18	City of Milpitas Traffic Signal Upgrade —Citywide improvements to signal timing.	Milpitas	\$0.8	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S19	Citywide Traffic Signal Operation Center —Construct traffic signal operation center.	Morgan Hill	\$1.3	\$0.0
S20	Citywide Wireless Vehicle Detection System Installation —Install wireless vehicle detection system at all signalized intersections within the City.	Morgan Hill	\$0.9	\$0.0
S21	Citywide Traffic Signal Upgrade and IP Traffic Signal Access —Upgrade the City’s existing traffic signal system through the installation of new traffic signal controllers, software and Internet accessible traffic signal communications.	Mountain View	\$2.5	\$0.0
S22	Grant Rd. Adaptive Traffic Signal — Upgrade the existing traffic signal interconnect system on Grant Rd. to a new adaptive traffic signal system.	Mountain View	\$1.4	\$0.0
S23	Shoreline Blvd. Adaptive Traffic Signals —Upgrade the existing signal interconnect system to adaptive traffic signals.	Mountain View	\$1.7	\$0.0
S24	Rengstorff Ave. Traffic Signal Improvements —Along Rengstorff Ave., modify signal timing and upgrade certain signals.	Mountain View	\$0.4	\$0.0
S25	Smart Residential Arterials Project — Project consists of design and construction of Automated Traffic Signal System elements, Electronic Driver Speed and Travel Advisory signs and lighted pedestrian crossings along five residential arterial streets.	Palo Alto	\$6.2	\$0.0
S26	Citywide Traffic Signal System Upgrades —Replace outdated traffic signal controllers, cabinets and communication chips including installation of time of day GPS system equipment for each signalized intersection.	Palo Alto	\$1.8	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S27	Citywide Traffic Signal CCTV/ Emergency Vehicle Preemption Project —A citywide program to give priority to emergency vehicles via signal timing adjustments.	Palo Alto	\$1.4	\$0.0
S28	Silicon Valley Transportation and Incident Management Center —Setup of a location that will monitor traffic incidents as well as travel information.	San Jose	\$7.5	\$0.0
S29	San Jose Proactive Signal Retiming Program —A citywide program that will monitor current traffic signals and improve them where necessary.	San Jose	\$25.0	\$0.0
S30	San Jose Transportation Communications Network Enhancements —Provides fiber optic communications to support advanced traffic management infrastructure.	San Jose	\$24.0	\$0.0
S31	San Jose Traffic Signal System Upgrades —A citywide program that will look at older signal systems and upgrade them where needed.	San Jose	\$8.0	\$0.0
S32	Downtown San Jose Area Freeway Management System —An equipment package that will monitor downtown freeways and provide incident management tools to assist with traffic.	San Jose	\$2.0	\$0.0
S33	Downtown San Jose Local Street Advanced Traffic Management System —Expands “real time” traffic management system provided in Arena area.	San Jose	\$3.0	\$0.0
S34	Downtown San Jose CMS Upgrades —Upgrades aging changeable message sign infrastructure in Arena area.	San Jose	\$1.4	\$0.0
S35	King Rd./Story Rd. Area Advanced Traffic Management System —Provides “real time” traffic management for high traffic congestion location.	San Jose	\$3.0	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S36	Silicon Valley ITS Program Upgrades —Upgrades infrastructure for existing county-wide ITS system.	San Jose	\$27.0	\$0.0
S37	Countywide Freeway Traffic Operation System and Ramp Metering Improvements —Complete planned installation of monitoring cameras, electronic message signs and ramp metering on freeway system.	San Jose	\$25.0	\$0.0
S38	Silicon Valley TiMC – San Jose Police Department Integration —Allows for special management of traffic signals for public safety incidents.	San Jose	\$2.0	\$0.0
S39	City of San Jose Red Light Running Enforcement Program —Installation of cameras at various intersections to capture red light runner incidents.	San Jose	\$0.5	\$0.0
S40	San Jose Traffic Signal Interconnect	San Jose	\$4.0	\$0.0
S41	SVITS Hybrid Analogy/Digital Video System —An video component of a greater traffic management system.	San Jose	\$0.2	\$0.0
S42	Silicon Valley TiMC-Ramp Metering Integration	San Jose	\$8.0	\$0.0
S43	Coyote Valley ITS —A system of signal upgrade, interconnect, and CCTV cameras throughout Southern San Jose in the Coyote Valley.	San Jose	\$6.0	\$0.0
S44	Monterey Highway ITS —A system of signal upgrade, interconnect, and CCTV cameras throughout the Monterey Highway area.	San Jose	\$4.8	\$0.0
S45	San Jose Mobile Video Surveillance for Emergency Response	San Jose	\$0.3	\$0.0
S46	San Jose Emergency Vehicle Preemption System	San Jose	\$6.6	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S47	SVITS Connection to Sunnyvale —A system of CCTV, signage and the development of a traffic management center in the City of Sunnyvale.	San Jose	\$3.5	\$0.0
S48	Construction Information Management System —A system of signage and other traffic notifications to alert travelers of any delays.	San Jose	\$0.1	\$0.0
S49	Winchester/Stevens Creek Area Advanced Traffic Management System —A system of traffic cameras, signal timing upgrades and other traffic management tools.	San Jose	\$2.0	\$0.0
S50	Eastridge/Evergreen Area Advanced Traffic Management System —A system of traffic cameras, signal timing upgrades and other traffic management tools.	San Jose	\$4.0	\$0.0
S51	Almaden/Blossom Hill Area Advanced Traffic Management System —A system of traffic cameras, signal timing upgrades and other traffic management tools.	San Jose	\$2.0	\$0.0
S52	Santa Clara Communications Network Upgrade —Convert City's existing copper twisted wire pair communication infrastructure to new fiber optic cable network.	Santa Clara	\$3.5	\$0.0
S53	Santa Clara Traffic Signals Upgrade —Citywide traffic signal modifications.	Santa Clara	\$3.2	\$0.0
S54	Santa Clara TMC Upgrade —Convert City's existing traffic operations room to a new Traffic Management Center.	Santa Clara	\$0.4	\$0.0
S55	City of Saratoga Citywide Signal Upgrade Project-Phase II	Saratoga	\$0.2	\$0.0
S56	Citywide Accessible Pedestrian Signals —Update city-owned signals with audible signals for the visually impaired.	Saratoga	\$0.3	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S57	Traffic Adaptive Signal Controller Update —Expand the City's adaptive traffic signal control system to all major arterials.	Sunnyvale	\$3.3	\$0.0
S58	Citywide CCTV Camera Deployment —Installation of Closed Circuit Television Cameras for traffic monitoring and incident management on the major arterials.	Sunnyvale	\$1.1	\$0.0
S59	Citywide Traffic Signal Controller Update —Acquire and install new traffic signal controller and cabinets to upgrade City-maintained traffic signals citywide.	Sunnyvale	\$0.6	\$0.0
S60	Citywide Count and Speed Monitoring Stations —Deploy count and speed monitoring stations at various locations around the City to provide up-to-date/current statistical information regarding vehicular traffic on arterials.	Sunnyvale	\$1.0	\$0.0
S61	Citywide ITS Communications Infrastructure —Install fiber optic cables to support ITS implementation, communication, video and data sharing within the City and with adjoining municipalities.	Sunnyvale	\$1.7	\$0.0
S62	Traffic Management Center Integration —Implement physical connection to the area-wide data and video information sharing networks to improve the ability to coordinate operations with neighboring transportation management systems.	Sunnyvale	\$0.3	\$0.0
S63	Emergency Preemption Receiver Installation —Provide priority and safe passage to emergency vehicles at signalized intersections.	Sunnyvale	\$1.0	\$0.0
S64	Capitol Expwy. TOS —Install TOS infrastructure on Capitol Expwy. including fiberoptic trunkline, CCTV, ethernet-capable controller, battery backup system and system detector loops.	Santa Clara County	\$3.5	\$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
S65	County Expressway Countdown Pedestrian Signal Heads —Replace signal heads throughout the expressway system where necessary.	Santa Clara County	\$0.5	\$0.0
S66	TOS Infrastructure Improvements — Enhance expressway traffic operations systems components and functions, improve signal cross coordination with adjacent city signals and provide connectivity between Santa Clara County and cities for sharing of ITS data/communications.	Santa Clara County	\$10.0	\$0.0
S67	Signal Coordination/Interconnect with Cross Streets —Signal coordination/ interconnect between expressway signals and city/Caltrans signals on cross streets.	Santa Clara County	\$5.0	\$0.0
S68	SCC Motorist Traffic Information and Advisory Systems —Motorist traffic information and advisory systems (electronic changeable message signs, advisory radio and web page).	Santa Clara County	\$5.0	\$0.0
S69	Adaptive Pedestrian Timing Demonstration Project —Adaptive pedestrian timing-dynamic FDW by detecting pedestrians in crosswalk.	Santa Clara County	\$1.0	\$0.0
S70	Expressway Bike Detection —Install bicycle detection on expressway shoulders close to stop bar at all signalized intersections in both directions of the expressway approach to the intersections.	Santa Clara County	\$2.1	\$0.0

BICYCLE PROJECTS CURRENTLY FUNDED BY BICYCLE EXPENDITURE PROGRAM/VTP ALLOCATION

The Bicycle Program in VTP 2035 is presented with a programmatic area allocation of \$160 million. The projects currently in the Bicycle Expenditure Plan (BEP) are listed along with their allocation. Some of these projects already have programmed funds, totaling about \$25 million. Those projects not anticipated to need

additional funding from the BEP are indicated by a footnote.

During spring 2009, the BEP was reviewed and rescored, with the inclusion of requests for revised allocation amounts for existing BEP projects and the addition of new projects. This process created the new BEP project list for the 25-year timeframe.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B1	Campbell Ave. Improvements at SR 17 and Los Gatos Creek¹ —Widen both sides of Campbell Ave. to accommodate bicycle lanes, install new sidewalks to accommodate pedestrians and replace abutting walls on both sides.	Campbell	\$1.50	\$0.00
B2	Los Gatos Creek Trail Expansion on west side (Hamilton Ave. to Campbell Ave.) —Bridge widening over Los Gatos Creek, installing sidewalks and bike lanes. Trail goes under Campbell Ave. but comes up to grade to get onto roadway.	Campbell	\$2.50	\$2.00
B3	Mary Ave. (I-280) Bicycle and Pedestrian Overcrossing² —Scope of work includes bridge, landscaping and associated improvements.	Cupertino	\$15.00	\$0.00
B4	Uvas Creek Trail Feasibility Study —Feasibility Study of three alternatives for the Uvas Creek trail from Gilroy Sports Park to Gavilan College.	Gilroy	\$0.15	\$0.12
B5	Adobe Creek Bicycle/Pedestrian Bridge Replacement —Replace existing bridge over Adobe Creek that is jointly owned by the Cities of Los Altos and Palo Alto. It is located on the bicycle/pedestrian pathway along the Hetch-Hetchy right-of-way.	Los Altos	\$0.50	\$0.00

¹ This project is receiving \$950,000 in Transportation Enhancement (TE) funds from the American Recovery and Reinvestment Act.

² This project is fully funded; the BEP will need to reimburse the Local Program Reserve up to \$3.5 million.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B6	Moody Rd./El Monte Rd. Bike Improvements Segments 1, 2 and 3³ —Bike and Pedestrian improvements along Moody Rd. and El Monte Rd. that will create new trail connections from Los Altos through Foothill College.	Los Altos Hills	\$3.50	\$0.00
B7	El Monte Rd. from Stonebrook Dr. to Voorhees —New landscaping and intersection improvements to existing pathway.	Los Altos Hills	\$0.20	\$0.16
B8	West Llagas Creek Trail⁴ —Spring Rd. to Edes Ct.—Install Class I bike path adjacent to West Little Llagas Creek. Final phase- Spring Ave. to Edes Ct.	Morgan Hill	\$0.65	\$0.50
B9	Stevens Creek Trail Reach 4 Segment 2 (Sleeper Ave. to Dale/Heatherstone) —Segment of Stevens Creek Trail will travel from Sleeper Ave. on the west side of SR 85, over SR 85 to Dale Ave./Heatherstone Way.	Mountain View	\$10.00	\$7.00
B10	Stevens Creek Trail Reach 4 Segment 2 (Dale/Heatherstone Wy. to Mountain View High School) —Segment of Stevens Creek Trail will travel from Dale Ave./ Heatherstone Way to Mountain View High School by crossing SR 85, completing Stevens Creek Trail in Mountain View.	Mountain View	\$12.00	\$10.00
B11	Bicycle Boulevards Network Project —Expand Bicycle Boulevard Network pursuant to adopted bicycle plan.	Palo Alto	\$5.00	\$3.93
B12	California Ave. Caltrain Undercrossing —replacement of California Ave. pedestrian and bicycle undercrossing of Caltrain tracks with new ADA compliant structure.	Palo Alto	\$13.00	\$10.40

³ Segments 1–3 of this project (between Rhus Road and Stonebrook Rd.) have received the full BEP allocation for this project and are fully funded. Segments 1 and 2 are open and Segment 3 is under construction. Segments 4 and 5 will need additional BEP allocation.

⁴ This project was designed and programmed in three segments. Segment 1—the Wildlife Trail—is completed. Segment 2 is fully programmed and under construction. Segment 3 from Spring Ace to Edes Court will need the remaining third of the BEP Allocation.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B13	Almaden Expwy. Bicycle and Pedestrian Overcrossing —Construct a 360-foot bicycle and pedestrian bridge over expressway to connect nearby trails and the Almaden Light Rail Station.	San Jose	\$5.70	\$4.60
B14	Guadalupe River Trail (Montague Expwy. to Alviso) — A partially paved trail segment along the Guadalupe River from Gold Street to Montague Expwy. Elements of the trail include a 12-foot paved AC trail with striping and signage, a seating area midpoint, call boxes, and a gateway structure at Montague Expwy. with historical elements.	San Jose	\$5.00	\$2.62
B15	Los Gatos Creek Trail (Auzerais Ave. to Park Ave.) —San Carlos St. Segment— Completion of the last reach of the Los Gatos Creek Trail including design, land acquisition and environmental review.	San Jose	\$5.00	\$2.94
B16	Los Gatos Creek Trail (Park to Santa Clara) —Diridon Station Segment— Completion of the last reach of the Los Gatos Creek Trail, including design, land acquisition and environmental review.	San Jose	\$7.30	\$5.86
B17	Coyote Creek Trail (Montague Expwy. to Oakland Rd.) — The completion of the creek trail in the North San Jose Segment.	San Jose	\$7.50	\$6.00
B18	Coyote Creek Trail (Oakland Rd. to Watson Park) —The completion of the creek trail of the Berryessa BART Station Segment.	San Jose	\$7.50	\$6.00
B19	Coyote Creek Trail (Watson Park to Williams St. Park) —The completion of the creek trail of the Northside to Naglee Park Neighborhood Segment.	San Jose	\$5.00	\$4.00
B20	Coyote Creek Trail (Williams St. Park to Kelley Park) —The completion of the creek trail of the I-280 Underpass Segment.	San Jose	\$2.50	\$2.00

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B21	Branham Ln./US 101 Bicycle and Pedestrian Overcrossing —Pedestrian overcrossing over US 101 connecting to Branham Ln. on both sides. Extend bikeway east connecting with Coyote Creek Trail, extend west of Branham across town connecting with 87 Bike Path, Guadalupe river Trail and Los Gatos Creek Trail.	San Jose	\$7.00	\$5.60
B22	San Tomas Aquino Creek Trail —North of Monroe Ave. to SR 237.	Santa Clara	\$10.00	\$0.00
B23	San Tomas Aquino Creek Trail — Monroe Ave. to Cabrillo Ave. to southern city limit.	Santa Clara	\$1.60	\$1.30
B24	PG&E De Anza Trail (Reach 3) —Develop and construct reach 3 trail along PG&E easement through Saratoga. Scope of work includes bike path, bike/ped signals and bridges.	Saratoga	\$2.50	\$0.22
B25	SR 9 Bicycle and Pedestrian Safety Improvements⁵ —SR 9 through Monte Sereno, Los Gatos and Saratoga; Bikcycle and Pedestrian safety improvements including new bike lanes and shoulder widening for improved mobility for non-motorized public. 4.4 miles of SR 9 will be treated to improve bicyclist and pedestrian safety and convenience along this main route.	Saratoga/Los Gatos	\$2.70	\$0.00
B26	Sunnyvale East Drainage Trail (JWC Greenway to Tasman Dr.) —Provide access to the trail and Tasman Drive from the mobile home park located to the north of Tasman Drive.	Sunnyvale	\$1.33	\$1.04
B27	Borregas Bike Lanes between Weddell and Persian —Bike lanes between Weddell Dr. and Persian Dr.	Sunnyvale	\$0.06	\$0.05

⁵ This project received the bulk of its funding from outside the BEP; it is anticipated to be completed with only \$20,000 of BEP funds.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B28	Borregas Bike Bridge over US 101 and SR 237⁶ —Provides a straight continuous bicycle and pedestrian connection on Borregas Ave. alignment over two freeways.	Sunnyvale	\$8.70	\$0.00
B29	Bernardo Ave. Caltrain Undercrossing —Eliminate a barrier for bicyclists traveling to the north of Sunnyvale on Bernardo Ave. by constructing an undercrossing of the Caltrain railroad tracks.	Sunnyvale	\$8.50	\$1.00
B31	McKean Rd. Shoulder Improvements (Harry Rd. to Bailey Ave.) —Shoulder improvements to facilitate bicycle travel.	Santa Clara County Roads	\$6.60	\$3.96
B32	Foothill - Loyola Bridge⁷ —Short-term: restripe shoulders to 7 feet in width under the Loyola Bridge.	Santa Clara County Roads	\$0.46	\$0.00
B33	Loyola Bridge over Foothill Expwy. —Bicycle improvements on the Loyola Bridge over Foothill Expressways consisting of the addition of bike lanes.	Santa Clara County Roads	\$7.00	\$1.00
B34	Page Mill/I-280 Interchange Improvements —Bicycle improvements at the Page Mill/I-280 interchange consisting of improved access for bikes and pedestrians over I-280.	Santa Clara County Roads	\$6.60	\$1.32
B35	Santa Clara Caltrain Undercrossing —Extend planned Caltrain tunnel to east side of Union Pacific tracks.	VTA	\$8.00	\$2.73
B36	Pilot Bicycle Parking Program —Develop a VTA systemwide station bicycle parking program.	VTA	\$0.25	\$0.03
B37	Widen Los Gatos Creek Trail on east side (Camden Ave. to Campbell Ave.) —Widen existing east side of the trail between Camden Ave. and Campbell Ave. from eight feet to twelve feet and include drainage improvements.	Campbell	\$0.30	\$0.24

⁶ This project is fully programmed and funded and under construction and will most likely not need any additional funds from the BEP.

⁷ This project was revamped to provide a more cost-effective solution to bike access under the Loyola Bridge than a total

reconstruction of the Loyola Bridge. The indicated Project Cost and VTP Allocation, therefore, are much less than the previous project. That project is still listed in the Expressway Element of this plan.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B38	San Tomas Aquino Creek Trail —Provide a connection between east and west banks of San Tomas Aquino Creek in conjunction with the development of a new San Tomas Aquino Creek Trail.	Campbell	\$1.50	\$1.20
B39	Portals Project: Widening Campbell Ave. under SR 17 —Widen both the north and south sides of Campbell Ave. for a bike lane and install new sidewalk on both sides of Campbell Ave.	Campbell	\$3.00	\$2.40
B40	Western Ronan Channel SCVWD service road (Leavesley Rd. to Llagas Creek) —12 foot wide bicycle/pedestrian trail with 18-24 inch wide aggregate shoulders on each side.	Gilroy	\$2.70	\$2.16
B41	Gilroy Sports Park (Santa Teresa Blvd./ Mesa Rd. to Sports Park Ticket Booth) —12 foot wide bicycle/pedestrian trail to connect to Gavilan College and planned future residential development in Southern Gilroy to the Sports Park.	Gilroy	\$4.80	\$3.84
B42	Lions Creek SCVWD service road west of Kern Ave. (Kern Ave. to Day Rd.) —12 foot wide bicycle/pedestrian trail to follow the existing SCVWD service road elevation and alignment.	Gilroy	\$1.90	\$1.52
B43	Lions Creek SCVWD service road west of Santa Teresa Blvd/Day Rd. (east) intersection (Santa Teresa Blvd to Bike/ Ped bridge across Lions Creek) —12 foot wide bicycle/pedestrian trail segment to connect Christopher High School to surrounding neighborhoods.	Gilroy	\$0.60	\$0.48
B44	Northern Uvas Creek SCVWD service road (Santa Teresa Blvd. at Third St. to Burchell Creek Bridge) —12 foot wide bicycle/pedestrian trail will connect and expand the existing Uvas Creek trail system.	Gilroy	\$1.90	\$1.52

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B45	Lions Creek Service Road West —12 foot wide bicycle/pedestrian trail to follow the existing SCVWD service road elevation and alignment.	Gilroy	\$0.90	\$0.72
B47	Miramonte Ave. Bikeway Improvement Project —Upgrade the bike route (Class III) on Miramonte Avenue to a bike lane (Class II) between Mountain View City Limits at the northern end of Foothill Expwy. to the southern end.	Los Altos	\$1.40	\$1.12
B48	Stevens Creek Link Trail —Provide a link from the proposed Stevens Creek Trail in the vicinity of San Antonio Rd. and Adobe Creek.	Los Altos	\$3.00	\$2.40
B49	Blossom Hill Rd. Sidewalks and Bicycle Lanes —Widen roadway to install bicycle lanes and sidewalks on both sides of Guadalupe river Trail, Cottle Light Rail Station, Blossom Hill Rd. planned pedestrian overcrossing and Coyote Creek Trail.	Los Gatos	\$0.80	\$0.64
B50	Los Gatos Creek Trail Connector to SR 9 —Installation of pathway and bridge to connect bicyclists and pedestrians to non-motorized Los Gatos Creek trail to SR 9.	Los Gatos	\$1.00	\$0.80
B51	Montague Expwy. Pedestrian Overcrossing —Connect the future Milpitas BART Station to the Great Mall of the Bay Area and future transit-oriented development from Great Mall Parkway to Piper Ln.	Milpitas	\$15.00	\$7.50
B52	US 101 and Cochrane Road —Install bike lane and pedestrian sidewalk improvements on the south side of Cochrane Rd. between DePaul Dr. and Madrone Pkwy.	Morgan Hill	\$0.60	\$0.48
B53	Madrone Recharge Channel Bike Path —Convert existing service road into a joint use bicycle and pedestrian pathway.	Morgan Hill	\$0.50	\$0.40

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B54	US 101/Permanente Creek Trail Bike/ Ped Crossing —Construct an overcrossing of US 101 and a grade separated crossing of Old Middlefield Way at Permanente Creek Trail.	Mountain View	\$9.50	\$2.10
B55	Stevens Creek Trail/Middlefield Rd. North Side Access —Construct a new access point to Stevens Creek Trail from the north side of Middlefield Rd.	Mountain View	\$0.70	\$0.35
B56	Stevens Creek Trail/Landels School Trailhead Improvements —Widen the existing pathway between the Landels School Trailhead and Stevens Creek Trail.	Mountain View	\$0.60	\$0.48
B59	US 101/Adobe Creek Ped./Bicycle Grade Separation —Grade separation of US 101 for pedestrians and bicyclists in the vicinity of San Antonio Rd. and Adobe Creek.	Palo Alto	\$13.00	\$10.40
B61	Blossom Hill - Calero Bikeways —Enhanced bikeway connecting Leigh Ave. bikeway with Guadalupe Creek Trail, Guadalupe River Trail, Cottle Light Rail Station, Blossom Hill Rd. planned pedestrian overcrossing and Coyote Creek Trail.	San Jose	\$0.30	\$0.24
B62	Brokaw - Coleman - Airport Bikeway —Enhanced Onstreet bikeway connecting: Santa Clara Caltrain Station/Planned BART Station via pedestrian overcrossing with Guadalupe River Trail and Airport Area. Treatment will include bike lanes (regular and either buffered or colored), sharrows, signs, multi-use path (on north side of Airport Blvd., Coleman Ave. to Guadalupe River Trail), etc.	San Jose	\$1.00	\$0.80
B63	Capitol Ave./Capitol Expwy. Bikeway —Enhanced on-street bikeway connecting Penitencia Creek Trail, Capitol Light rail Station and Thompson Creek Trail. Treatment will include enhanced bikeway (such as physically separated bike lane, buffered bike lane, and/or colored bike lane); signs, etc.	San Jose	\$0.30	\$0.24

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B64	Charcot Bikeway —Enhanced on-street bikeway from Guadalupe river Trail eastward to Coyote Creek Trail and existing Oakland rd. bike lanes, via planned I-880 crossing. Treatment will include bike lanes (regular and either buffered or colored), signs and an enhanced bikeway such as a physically separated bike lane, etc.	San Jose	\$0.40	\$0.32
B65	Five Wounds Trail (Watson Park to Williams St. Park)—Alum Rock BART Station Segment —Conversion a former railway alignment into a pedestrian corridor that traverses the neighborhood from Watson Park to Williams Street Park.	San Jose	\$5.00	\$4.00
B66	Hedding St. Bikeway —Enhanced on-street crosstown bikeway between San Jose/Santa Clara city limit with Guadalupe River Trail, Coyote Creek Trail and Penitencia Creek Trail. Treatment will include bike lanes (regular and either buffered or colored), sharrows, signs, etc.	San Jose	\$0.20	\$0.16
B67	Hwy 237 Bikeway —On-street connections—Enhanced Hwy 237 bikeway connecting to Guadalupe River Trail, Bay Trail, Coyote Creek Trail and cities of Santa Clara and Milpitas. Improve on-street segments with enhancements such as bike lanes (regular, buffered or colored), physically separated bike lanes, signs, etc.	San Jose	\$0.40	\$0.32
B68	Monroe Bikeway —Enhanced on-street bikeway connecting existing city of Santa Clara bike lanes to north, existing San Jose bike lanes William to west, Valley Fair, pedestrian overcrossing over I-280, pedestrian overcrossing over SR 17, Bascom LRT station. Treatment will include enhanced bikeway (such as physically separated bike lane, buffered bike lane, and/or colored bike lane); sharrows, signs, etc.	San Jose	\$0.10	\$0.08
B69	Newhall St. Bike/Ped Overcrossing over Caltrain	San Jose	\$7.00	\$5.60

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B70	Park Ave./San Fernando St./San Antonio Bikeway —Enhanced on-street crosstown bikeway between San Jose/ Santa Clara city limits with Diridon Transit Center, Downtown San Jose, San Jose Creek Trails (Los Gatos, Guadalupe, Coyote), SJSU and east San Jose. Treatment will include bike lanes (regular and either buffered or colored), sharrows, signs, etc.	San Jose	\$0.10	\$0.08
B71	Penitencia Creek Trail (Coyote Creek - King Rd.) —Berryessa BART Station Segment.	San Jose	\$3.75	\$3.00
B72	Thompson Creek Trail: Eastridge Transit Center to Evergreen College —A segment from yerba Buena to the Eastridge Transit Center that includes the construction of a 12 foot wide Class I Trail. Where the trail intersects major streets, trail users will follow existing sidewalks to signalized pedestrian street crossings. The project will include trailheads at major locations with possible construction of bridges where feasible.	San Jose	\$6.40	\$4.25
B73	Willow Glen Spur Trail —Provide a trail connection between the Los Gatos Creek Trail to Kelley Park.	San Jose	\$2.50	\$2.00
B74	San Tomas Aquino Creek Spur Trail —Bike/ped spur trail along creek right of way, parklands, private easements and public streets.	Santa Clara	\$1.00	\$0.80
B75	Blue Hills School Rail Crossing Safety Project —Restore at-grade pedestrian crossing between Fredericksburg Dr. and Guava Ct.	Saratoga	\$0.38	\$0.30
B76	Mary Ave. Bike Lanes —Creation of bike Lanes from Evelyn Ave. to Fremont Ave.	Sunnyvale	\$0.52	\$0.42
B77	Maude Ave. Bike Lanes —Creation of bike Lanes from Mathilda Ave. to Wolfe Rd.	Sunnyvale	\$0.22	\$0.18
B78	Stevens Creek Trail Connector —Construct a connector to provide access to the Mountain View reach 4 trail.	Sunnyvale	\$1.40	\$1.12

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 \$MILLIONS)	VTP ALLOCATION ('08 \$MILLIONS)
B79	Mathilda Ave. Bike Lanes —Creation of bike lanes from US 101 to El Camino Real.	Sunnyvale	\$3.90	\$3.12
B80	Pastoria Ave. Bike Lanes —Creation of bike lanes from El Camino Real to Evelyn Ave.	Sunnyvale	\$0.24	\$0.19
B81	Hendy Ave. Bike Lanes —Creation of bike lanes from Sunnyvale Ave. to Fair Oaks Ave.	Sunnyvale	\$0.67	\$0.54
B92	Santa Teresa Blvd./Hale Ave. Bicycle Delineation	Santa Clara County Roads	\$0.50	\$0.40
B93	Bicycle Detection —Expressways and Santa Teresa/Hale.	Santa Clara County Roads	\$2.10	\$1.68
B94	Los Gatos Creek Trail - Lark Ave. to Blossom Hill Dr. —Rehabilitate and enhance 1.8 miles of trail along a regionally significant trail alignment within the Vasona County Park.	SCC Parks	\$1.50	\$1.20
B95	Coyote Creek Trail - Silicon Valley Blvd. to Metcalf Rd. —Rehabilitate and enhance 1.37 miles of trail along Coyote Creek Trail within the Coyote Creek Parkway County Park.	SCC Parks	\$1.10	\$0.88
B96	Capitol Caltrain Station Crossing —Eliminate a barrier for passengers deboarding at the Capitol Caltrain station by providing a safe crossing or grade separation of the train tracks to access the west side of the tracks.	VTA	\$8.50	\$1.00

Appendix B: Community Design and Transportation Program

BACKGROUND

The Community Design and Transportation Program is a collaborative and innovative program developed in partnership with local governments, community and advocacy groups and the business community. Its framework of cores, corridors and station areas has provided a model for emulation throughout the nation, including the recent ABAG and MTC FOCUS Program and Priority Development Areas (PDA) regional blueprint. In 2002, the VTA Board of Directors adopted the CDT Program as its primary program for integrating transportation and land use. In 2003, the 16 city and county governments of Santa Clara County endorsed the CDT program and its cores, corridors and station areas framework through formal council or Board actions.

The CDT program was created to help achieve VTA's land use vision and implement

its goal and objectives. It is also intended to unite VTA planning, design, programming and construction activities with common objectives. It is designed to inspire new thinking and actions about the form and function of growth, broaden the range of viable transportation choices and make the most efficient use of transportation and other resources in the county.

Fundamentally, CDT calls for change: across multiple disciplines, from design to finance to engineering, each of which has overlapping importance to the other disciplines. CDT challenges us to critically reexamine our current pattern of outward growth and begin working toward creating places that invite pedestrian activity, support transit and build on the distinct qualities of each community. Through the CDT program, VTA is engaging its partners in a countywide dialogue to develop strategies for changing planning and

development processes to more consistently support alternative travel modes and efficient automobile use.

CDT PROGRAM VISION

The CDT program envisions a new paradigm for reshaping our existing environment and building new environments that better blend urban form and multimodal transportation options such as walking, transit and biking. Our built environments work to protect the climate, become accessible by many modes of travel and are more pedestrian-oriented and energy efficient. There are many elements—and hurdles—to achieving such a vision; however, as we approach our goals the following visions could emerge.

Vision for Station Areas

Transit station areas have become “places to be,” and destinations in their own right. Residents and workers located near these stations enjoy many benefits, having access to a wide variety of activities and amenities without needing a car. This mixing of activities brings together the station and surrounding areas and the station area has emerged as a highly valued community asset.

Vision for Smarter Suburbs

A new form of suburbia emerges: these are areas less dominated by automobiles and better designed for walking, biking and transit access. Pockets of mixed-use, higher-

density development are strategically placed throughout suburbia, providing neighborhood services and social and recreational activities close to homes. They also contain a variety of housing types that better serve changing demographics and support a range of incomes and age groups. Interconnected streets—some designed specifically to support transit service—support bike paths and attractive sidewalks, offering residents options other than the car for moving around their community. This new suburban form— together with more compact development in core areas—works to complement urban centers and halt the common pattern of sprawling, low-intensity development, separation and decentralization.

Vision for Concentrated Development

Most of the cities in Santa Clara County desire city- or village-style development in strategic locations. Although these places will vary greatly in form and character, the vision for all includes people being able to get around comfortably without a car. This requires developments that are compact and diverse and capable of supplying the whole spectrum of daily activities within easy walking distances.

The qualities that create these places differ in scale and emphasis, but consistently include:

- A mix of land uses that enables residents and workers to complete their errands and obtain services without driving. The mix

includes retail, entertainment, a variety of housing types, offices and civic activities such as libraries and post offices.

- Human-scale urban design that creates a vibrant environment and promotes walking and transit use through appropriate intensity of use, a dynamic mix of land uses, site design conducive to pedestrians and located within walking distance of frequent transit service.
- Building design that creates safe and attractive pedestrian environments through appropriate setbacks, building heights and ground floor uses.
- Street design that balances the use of all modes of transportation rather than maximizing auto capacity, and as a result facilitates amenity-rich compact development, which in turn supports transit, walking and bicycling.
- Concentrations of major community attractions that serve as destinations for people who live in and outside the area. These include education and health care facilities as well as places for cultural activities and entertainment.
- Attractive, safe and efficient transportation facilities for all modes of travel that enhance public spaces, along with appropriate accommodations for autos where they are necessary.
- An urban form that reduces the production of greenhouse gases, is more energy

efficient and is less dependent on non-renewable resources.

Transportation Implications of Concentrated Development

A recent Transportation Cooperative Research Program (TCRP) study noted Transit Oriented Development (TOD) households typically own fewer cars because they have smaller households and because they may forgo extra cars due to transit's proximity. TOD households are also almost twice as likely to not own any car and own almost half the number of cars of other households. In addition, over a typical weekday period, the 17 surveyed TOD-housing projects averaged 44 percent fewer vehicle trips than estimated by the Institute of Transportation Engineers manual.

Each of these elements is addressed in VTA's *Community Design and Transportation Program: A Manual of Best Practices for Integrating Transportation and Land Use*.

CDT PROGRAM APPROACH

The approach of the CDT program reflects VTA's role as a multimodal transportation provider. It considers all transportation modes and stresses the importance of a healthy pedestrian environment, concentrated mixed-use development, integrated transit service, innovative street design and the

interrelationships of buildings and sites with transportation facilities and services. It is concerned with how policies shape these pieces and how the pieces can be fitted together to create an attractive, safe and sustainable urban form.

The CDT program is designed around a framework for application in community cores, along the major transportation corridors and surrounding transit station areas. On the following page is a CDT map of cores, corridors and station areas designated by local agencies and VTA for the CDT program. These sites, discussed in more detail below, are structured around a framework of cores, corridors and station areas. They constitute the new frontiers for growth and are a primary focus of the CDT program.

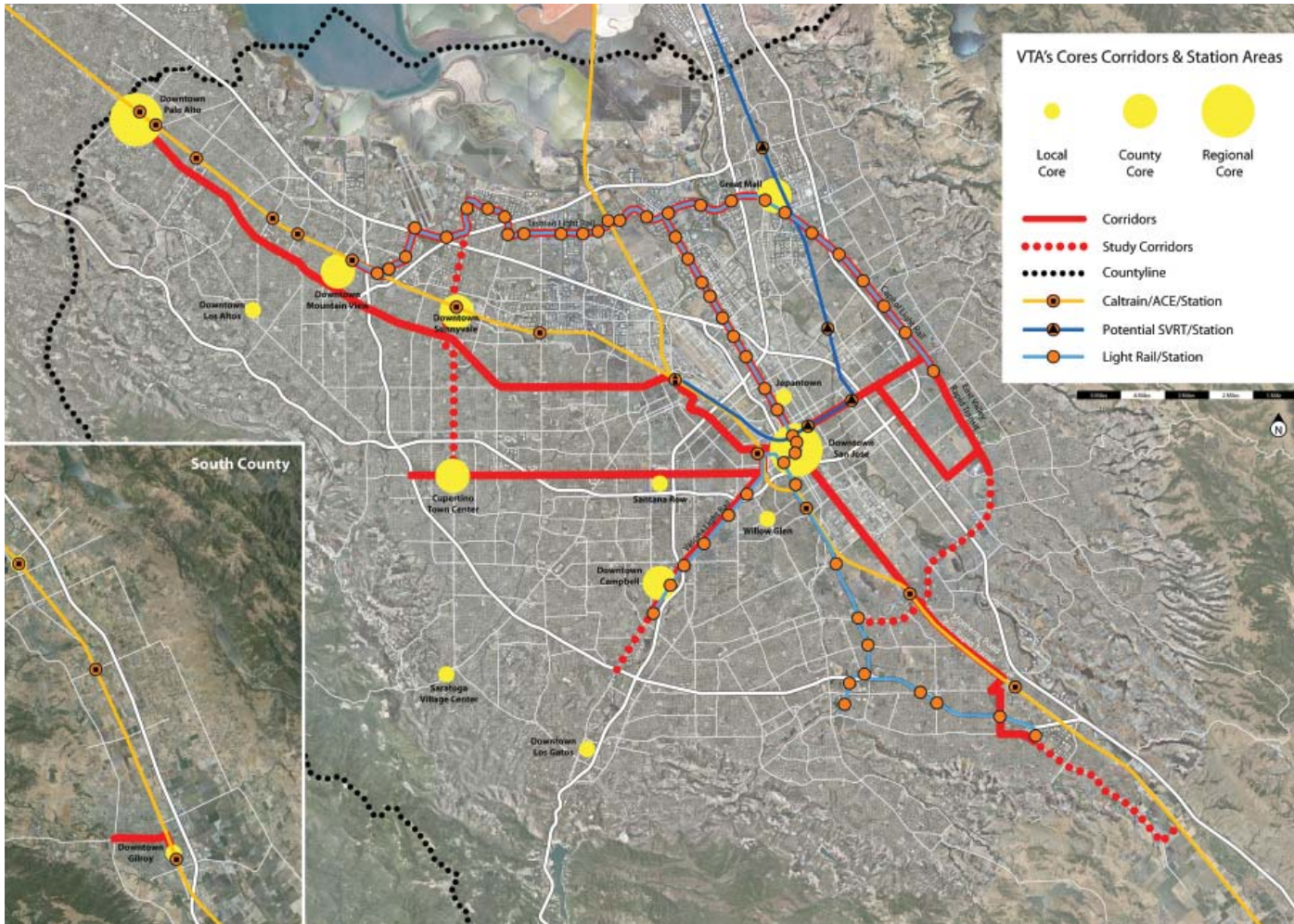
New Frontiers for Growth

Untouched lands at the urban fringe have generally been thought of as leading candidates for growth and development. However, Santa Clara County's mature urban areas are also prime development opportunities. In fact, vacant or underutilized urban sites offer advantages over outlying areas because they are already connected with urban services and infrastructure. Moreover, accommodating growth in urban cores plays a more

critical role in protecting valuable open space at the edge.

Cores, Corridors and Station Areas Defined

- **Cores** are districts that contain concentrations of residential areas, employment sites, and other destinations such as retail, entertainment, academic and cultural activities. They are further distinguished as regional cores, such as downtown San Jose, county cores such as downtown Mountain View or Sunnyvale, or local cores such as San Jose's Willow Glen area and downtown Los Gatos.
- **Corridors** are linear in shape, centered on a street or transit line, and often function as a backbone for surrounding communities. Corridors offer opportunities similar to cores for intensified mixed-use development, but usually in a more defined area within a block or so of the corridor. Corridors also present tremendous opportunities for creating urban- or village-like nodes, especially at major intersections where several transit lines cross. With enhanced "boulevard-like" pedestrian environments and other multimodal improvements such as transit preferential treatments and bike lanes, corridors have real potential for becoming cohesive community elements, offering a multitude of activities, a range of pleasant



environments, and several choices of ways to move along their length.

- **Station areas** are locations adjacent to rapid transit stations that already serve, or will serve, as focal points for new infill development and redevelopment. Station areas have opportunities similar to cores and corridors for intensified mixed-use development, and offer unique opportunities for community “place-making.”

Attractive urban design, multimodal transportation improvements, and a variety of all-day activities at station areas can create vibrant centers of activity. Station areas become destinations in their own right and add value to surrounding communities. If located within a local core area, such as near a downtown or Main Street, the station area design can complement and enhance the overall urban experience of those areas.

These are areas most likely to benefit from land use intensification and implementation of the CDT best practices principles (discussed in following sections) and are key land use opportunity areas for providing multimodal transportation alternatives that can serve the needs of both existing and new residents and workers.

MANUAL OF BEST PRACTICES FOR INTEGRATING TRANSPORTATION AND LAND USE

The CDT Manual of Best Practices for Integrating Transportation and Land Use is a key product of the CDT program and was developed to support the implementation of VTA's land use objective and goals. It documents proven and innovative best practices in urban design and transportation planning that support and enhance both VTA's and its Member Agencies' investments in the community. It provides planning and design guidance for how to develop in the cores, corridors and station areas. It also provides policy guidance and outlines steps that communities and local governments can take to identify and overcome barriers to developing more livable and sustainable communities. Moreover, it articulates VTA's vision for how communities and a multimodal transportation system can grow together, their respective roles and how

the actions of each can be mutually supportive and beneficial.

This vision is outlined in four key concepts and ten principles that provide the basis for the CDT program.

KEY CONCEPTS AND PRINCIPLES FOR INTEGRATING TRANSPORTATION AND LAND USE

The *key concepts*, summarized below, underlie all aspects of the CDT Program and form the foundation upon which the principles, practices and actions are built:

- **Interconnection**—focuses on interconnecting street, bicycle and pedestrian networks, transit modes, buildings and activity centers to get more from transportation resources, and to form distinct districts and more livable places
- **Place-making**—focuses on the human-scale elements of the built environment that create uniqueness and identity, and that make places attractive, comfortable, memorable and lasting
- **Access-by-Proximity**—focuses on clustering complementary land uses and compact, well-designed development to make the types of amenity-rich places that allow trips to be combined, reduced or eliminated, and made by transit, walking or biking; and accordingly, this helps achieve

the kind of critical mass that makes vibrant public life possible

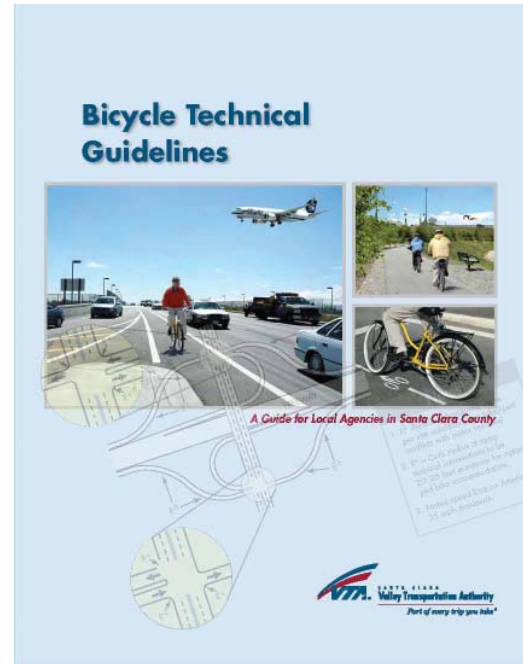
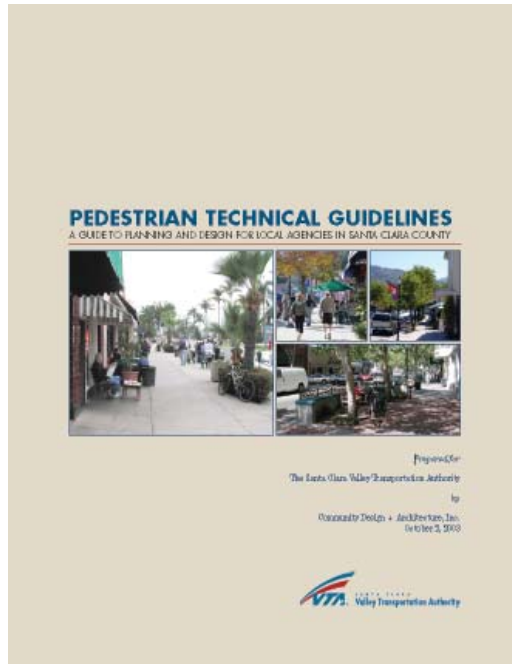
- **Choice**—focuses on the notion that one-size-does-not-fit-all, and seeks to expand the range of choices about the design of developments that we live and work in, where activities are located, the character of the community, and the means of getting around

CDT PRINCIPLES FOR INTEGRATING TRANSPORTATION AND LAND USE

These time-proven planning and design principles build upon and expand the big-picture key concepts described previously and create a foundation for more detailed practices and actions covered in the CDT Manual. An overview of each principle is provided below.

1. **Target growth in cores, corridors and station areas.** Focusing growth on established cores, corridors and station areas is about doing more with less. New growth in these areas capitalizes on existing infrastructure and allows cities to avoid the costs of expanding and maintaining new infrastructure. Infill growth thwarts urban fringe development, conserving open space, resources and natural areas. Transit service in these areas is more fully utilized and productive.
2. **Intensify land uses and activities.** Compact, amenity-rich development is essential to developing vibrant and functional places. Higher-intensity land use in cores, corridors and station areas facilitates walkability, creates viable transportation options, promotes thriving businesses and develops a sense of place. High-quality urban design and architecture must accompany intensified development to make communities feel comfortable, attractive and safe.
3. **Provide a diverse mix of uses.** Mixed-use developments offer users various combinations of commercial, office and residential land uses within close proximity. A variety of uses attracts people during all times of the day and creates synergies that help these areas reduce the need for automobile trips; make transit, walking and biking viable options; enhance community livability; and thrive both economically and socially.
4. **Design for pedestrians.** The hallmark of great places is the ability to walk between destinations. This principle, coupled with a diverse mix of uses and high-quality project design, helps to create synergies that encourage walking, enliven public spaces and bring vitality to urban areas. Being able to walk to destinations also takes automobile trips off the roadway network, and reduces energy consumption and pollution.

5. **Design in context.** Designing in context focuses on the materials, design details and architectural styles that establish and reinforce a unique community character. Designing in context is also about sensitivity to the relationships between buildings, streets and public spaces.
6. **Focus on existing areas.** Before consuming additional land and resources in outlying areas, greater attention should be given to using land already dedicated to the urban fabric more efficiently. This also means that sustaining the community is just as important as improving it—and that after-care and maintenance programs are as vital as good planning and design are in creating a sense of place and community.
7. **Create a multimodal transportation system.** Great places offer a multitude of ways to get around. Provision of viable transportation alternatives is not about destroying the automobile; rather, it is about balancing the needs of vehicle movement with the needs of transit, walking and biking.
8. **Establish streets as places.** In addition to being part of the multimodal transportation system that moves people and goods, streets are the most abundant public space in cities. Rather than being viewed as just a thoroughfare for cars, street design should also reflect the context of adjacent land uses and the needs of people.
9. **Integrate transit.** Transit service benefits everyone; but transit can only function effectively when it is fully integrated with the community. Integration can be achieved either by extending the community fabric out to connect with transit facilities, or by bringing transit service directly into the heart of the community. Transit stops and stations should be viewed as valuable civic spaces warranting public resources and high-quality design.
10. **Manage parking.** Parking takes up enormous amounts of land and is today perhaps the single most important element influencing the design of urban areas. As such, the design and placement of parking helps dictate the character of a place, determining whether it will feel isolated from adjacent uses or integrated into a continuous urban fabric. These concepts and principles are intended for implementation together in fulfillment of a long range vision for growth and development. Consistent and incremental implementation will create the types of synergy-rich and amenity-rich environments that make urban spaces thrive, and bring wholesale positive results to the transportation system and our communities.



CDT Manual Topics

The CDT Manual addresses critical topics by illustrating best practices and identifying implementation strategies and methods for propagating best practices throughout the county. The manual is intended to be a living document that evolves in response to new information and opportunities.

Best practices topics covered in the CDT Manual include:

- Site and building design
- Street connectivity and multimodal street design
- Innovative and efficient uses of land
- Supporting concentrated development

- Development density recommendations for cores and corridors
- Alternative use of level of service standards
- Rethinking parking requirements
- Model places and visualizing best practices
- The role of local governments in best practices
- Building community support for best practices
- Flexible zoning strategies
- Community planning for bus transit, rail transit and station areas
- Attracting developers to best practices projects
- Transportation demand management

Documents Supporting the CDT Manual

The CDT Manual was conceived as a comprehensive “toolkit,” but some areas of planning and design covered in the manual warrant greater detail. So in addition to updates of the manual, the CDT program includes the development of other supporting documents. For example, quality pedestrian and bicycle environments are critical to the vitality and success of communities and to the productivity of transit. To help plan and build better pedestrian and bicycle environments, VTA has developed pedestrian technical guidelines and bicycle technical guidelines.

Future CDT program publications providing additional detail may include but not limited to:

- Parking policies, strategies and design guidelines
- Station area access and design guidelines
- Multimodal street and site design guidelines
- Strategies for community and economic sustainability

Appendix C: Transportation, Energy and Air Quality Program

Public transportation agencies have a significant role in addressing issues related to climate protection and energy. Simply stated, the more things we can do to get people out of their cars and into other transportation modes such as transit, walking and biking, *the greater the cumulative positive impact the transportation sector will have on climate protection and energy usage.* Agencies can support land use changes that make alternative modes more attractive, promote carpooling, encourage people to make fewer and shorter trips, allocate existing and future resources more efficiently and effectively and create, adapt and use technology to assist in the conservation of natural resources, reduction of greenhouse gases, prevention of pollution and use of renewable energy and materials. When future generations reflect on this era, they will realize that it wasn't one action that addressed climate and energy concerns—it was many solutions working in harmony. This is the focus of

VTA's Transportation Energy and Air Quality (TEAQ) Program.

The TEAQ Program will provide a framework for VTA to develop initiatives, projects and programs, conduct research and work with partner agencies—such as BAAQMD, MTC and ABAG—to address climate change and energy issues over the coming years and decades. It is envisioned as a dynamic program that will evolve and adapt over time as new information, technologies and programs emerge.

TEAQ PROGRAM GOALS

- Offer options to reduce Vehicle Miles Traveled (VMT) and Average Daily Trips (ADT) by promoting more compact and active development adjacent to high-frequency transit corridors
- Offer options to reduce Single Occupant VMT by offering high-quality high-frequency bus and rail transit in corridors where compact mixed-use development exists or is planned

- Promote land use strategies through the CDT Program that foster changes in development patterns to allow for a reduction in VMT and increases in transit, walk and bike trips
- Promote energy efficiency in transportation through advocacy, education, research and leadership by example
- Ensure that all VTA capital projects utilize construction practices and building materials that follow and/or implement LEED guidelines
- Provide high-efficiency transit services that support compact mixed-use developments in the CDT Cores, Corridors and Station Areas
- Support proven and innovative programs to reduce single-occupant automobile trips and reduce congestion

What Are Greenhouse Gases and Where Do They Come From?

On Earth, the most abundant greenhouse gases are, in order of relative abundance: water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₂) and chlorofluorocarbons (CFC) compounds. According to research, water vapor causes about 36–70 percent of the greenhouse effect on Earth, carbon dioxide about 9–26 percent; methane roughly 4–9 percent and ozone at about 3–7 percent. These percentages represent a combination of the strength of the greenhouse effect of the gas and its abundance in the environment—the higher end of the ranges quoted are for the gas alone; the lower end, for the gas counting overlaps. For

example, methane is a much stronger greenhouse gas than CO₂—about 25 times more heat absorptive than CO₂—but it is present in much smaller concentrations. Methane also has a large effect for a brief period (a net lifetime of 8.4 years in the atmosphere), whereas CO₂ has a small effect for a long period (a net lifetime of over 100 years in the atmosphere).

Greenhouse gases such as carbon dioxide and methane come from a variety of manmade and natural sources. Animals produce CO₂ and methane and plants absorb carbon and produce oxygen but release CO₂ and methane when burned or when biologically degraded—for example, waste landfills can be sources of methane when the materials biodegrade. The burning of fossil fuels such as coal, natural gas and petroleum products (e.g., gasoline and diesel fuels) since the industrial revolution are thought to account for the majority of additional greenhouse gases in our atmosphere. Fossil fuels are derived from organic sources and have very high levels of stored energy.

In discussions about reducing greenhouse gas emissions from energy use and production, it is important to distinguish between primary and secondary sources. For example, switching cars from gasoline powered to electrically powered engines will only be partially effective if the primary source of electrical energy generation is petroleum-based (i.e., oil, natural gas or coal). We don't want our local actions to simply shift the problem to another area.

Manmade Sources of Greenhouse Gases

The U.S. Environmental Protection Agency (EPA) ranks the major greenhouse gas contributing end-user sectors in the following order: industrial, transportation, residential, commercial and agricultural. Major sources of an individual's greenhouse gas include home heating and cooling, electricity consumption and transportation. Corresponding conservation measures are: improving home building insulation, using compact fluorescent lamps and choosing energy-efficient vehicles. BAAQMD estimates that 50 percent of greenhouse gases generated in the Bay Area are from the transportation sector; however, this estimate does not account for emissions from electricity generated outside of the Bay Area, and since California imports about twenty to thirty percent of its total electricity, the percentage attributed to the transportation sector may be overestimated.

According to the EPA, fossil fuel combustion in the U.S. generates approximately 6 billion tons of CO₂ annually. Of this, electrical energy production is responsible for about 2.38 billion tons of CO₂/year, or about 40 percent of total emissions. The transportation sector accounts for 1.8 billion tons per year, or roughly 31 percent. Automobiles account for about 634 million tons/year or about 10 percent of the total and 35 percent of the transportation sector. Light, medium and heavy duty trucks account for about 13.5 percent of the total and 46 percent of the transportation sector.

It is apparent that the scope of the subject is large. To be effective in addressing greenhouse gas issues it will take creative and innovative thinking applied to multiple areas and pursued with rigorous long-term commitment to change. The following are initial recommended TEAQ Program action items.

TEAQ ACTION ITEMS

The TEAQ Program will subscribe to these principles:

Embrace technology. Since the early 1970s research and development of new technologies have improved fuel efficiency in the transportation sector, reduced production of harmful emissions and broadened the spectrum of energy sources. In addition, greater efficiencies can be realized from our existing infrastructures. It will be VTA policy to stay current on the development and application of new technologies and evaluate new technologies for application in VTA operations.

Speak through the marketplace. In 2000 there was only one commercially available model of hybrid car sold in the United States—the Honda Insight. In 2001 the Toyota Prius was introduced. In 2009, because the public is demanding them, car manufacturers are expected to offer 20 or more models of hybrid vehicles covering the full range of vehicle model types from ultra-economic sedans to high-end SUVs and trucks—a 900 percent increase in eight years. If large numbers of

consumers demand more fuel-efficient and alternative fuel vehicles the strong market forces will compel manufacturers to respond—if they wish to remain competitive. The cumulative, long-term effect of market forces can dwarf what can be prescribed or legislated by government.

Act individually. For climate protection and energy use, many effective immediate and near-term actions can be taken by individuals, private and public organizations such as businesses, schools and public agencies—and many are not transport-related. In addition, many of these individual actions save money as well as the environment. Following is a list of actions individuals could take and the dramatic benefits that result.

- *Take transit.* A recently released report from the American Public Transportation Association (APTA) found that the single most effective way to cut one’s personal quotient of carbon dioxide pollution is switching from cars to public transit (http://apta.com/research/info/online/climate_change.cfm). According to APTA, “when compared to other household actions that limit carbon dioxide (CO₂), taking public transportation can be more than ten times more effective in reducing this greenhouse gas.”
- *Change home appliances to Star Energy Saver appliances.* Can save 3,000 pounds of CO₂ emissions per year/household, or approximately 1.5m tons of CO₂/year if every home in Santa Clara County converted.
- *Change incandescent lighting in your household to compact fluorescent lighting (CFL).* Saves money by reducing your electric bill and also reduces CO₂ emissions by about 500 pounds annually. If every household in the Santa Clara County switched to CFLs about 250,000 tons/year of CO₂ would be prevented from entering the atmosphere. In addition, the emerging Light Emitting Diode (LED) technology portends even greater savings as production costs decrease and lumen output increases—possibly tripling this number.
- *Plant trees.* The average tree removes from the atmosphere about 10 tons of CO₂ over its lifetime.
- *Buy or lease a fuel efficient car.* Reduces greenhouse gases.
- *Leave your car at home two days a week.* Can save on average about 1,600 pounds/year of CO₂.
- *Insulate your home.* Can save 3,000 pounds of CO₂ emissions per year/household.
- *Support local farms, organic produce, and locally produced products.* Reduces energy usage associated with transport and petroleum-based fertilizers.
- *Recycle newspaper, glass, and metal.* Reduce your garbage output by 25 percent; could save an average of about 1,850 pounds of CO₂ emissions per year/household.

Develop and support locally produced energy sources such as solar, wind, geothermal, hydro, and tidal and wave energy. This has a threefold benefit: first, it reduces the need to import foreign energy (predominantly oil) and keeps dollars spent on energy in the country to function as an additive to the economy; second, it can develop local primary production jobs which help stimulate and power local economies; and third, it works toward the incremental realization of a green economy whereby an entire new industry can be created. Such actions reach beyond the transportation sector and are inextricably tied to the health, sustenance and long-term stability of our society as a whole.

Pursue New Funding. Some funding can come from existing sources—such as using existing budgets to replace transportation fleets (public and private) with low or zero emission vehicles instead of diesel or gasoline vehicles. However, it is likely that new funds will be needed to accomplish society’s climate and energy goals.

The pursuit of new funds to address climate and energy issues has three fundamental roles: first, to continue to maintain, operate and expand transit, walk, bike and shared ride modes of travel; second, to influence personal choices in selecting places to live and transport modes and personal behavior regarding energy consumption; and third, to provide

funding for new programs and projects that lead to long-term and sustainable reductions in greenhouse gas emissions and other environmental and economic impacts. Possible sources of new funds for these uses include:

- Gasoline and diesel fuel surcharges
- Countywide vehicle registration fee
- Portion of new sales or property taxes dedicated to climate protection programs
- Portion of future express lane net revenue

Possible Uses of New Funds

- Additional transit service
- First and last mile transit connections including possible shuttle and community bus lines, bike and car sharing programs, and other modal improvements
- Funding assistance for land use and pedestrian-oriented improvements
- Funding assistance for city programs (transportation related)
- Funding assistance for other agency programs (for example, school bus programs)
- Ongoing research, education and advocacy component

VTA TEAQ PROGRAM IMPLEMENTATION

Develop TEAQ Plans

The adage “Think Globally, Act Locally” is good general advice—and bringing the adage closer to home—“Think Regionally, Act Locally” certainly rings true when it comes

to climate and energy issues and is the best way to realize meaningful long-term change. Many, if not most, options to reduce energy use and protect the climate are best implemented at the local and individual level. Accordingly, VTA's TEAQ Program will focus on funding local efforts in coordination with regional, State and national visions and goals. Over the next few years VTA will work with local jurisdictions and regional partners to develop guidelines for preparing TEAQ plans and/or incorporating TEAQ-related elements within the structure of existing plans or programs. These plans may also serve to support legislative mandates; for example the two recently passed State bills summarized below:

AB 32 (Nunez) California Global Warming Solutions Act of 2006. This bill requires the State board to adopt regulations to require the reporting and verification of Statewide greenhouse gas emissions and to monitor and enforce compliance with this program. The bill further establishes Statewide greenhouse gas emissions limit equivalent to the Statewide greenhouse gas emissions levels in 1990 to be achieved by 2020, as specified. The bill would require the State board to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the State board, pursuant to specified provisions of existing law. The bill would authorize the State board

to adopt a schedule of fees to be paid by regulated sources of greenhouse gas emissions, as specified. Key dates include:

- Approved by the State of a scoping plan no later than January 1, 2009. The plan will outline measures and strategies for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020.
- Adoption by January 1, 2010 of regulations to implement the measures identified on the list to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from those sources or categories of sources identified.
- To further achieve the Statewide greenhouse gas emissions limit the State board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the State board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.
- After January 1, 2011, the State board may revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of this division.

Because the bill requires the State board to establish emissions limits and other

requirements that, if violated, constitute a criminal act, it creates a State-mandated local program.

SB 375 (Steinberg), 2008—Transportation Planning: Travel Demand Models: Sustainable Communities Strategy:

Environmental Review. This bill would require the California Transportation Commission (CTC) to maintain guidelines, as specified, for travel demand models used in the development of regional transportation plans by metropolitan planning organizations. This bill would also require the regional transportation plan for regions of the State with a metropolitan planning organization to adopt a sustainable communities strategy (SCS), as part of its regional transportation plan, as specified, designed to achieve certain goals for the reduction of greenhouse gas emissions from automobiles and light trucks in a region.

The bill requires the State Air Resources Board, working in consultation with the metropolitan planning organizations, to provide each affected region with greenhouse gas emission reduction targets for the automobile and light truck sector for 2020 and 2035 by September 30, 2010 and to appoint a Regional Targets Advisory Committee to recommend factors and methodologies for setting those targets and to update those targets every eight years. The bill requires certain transportation planning and programming activities by the metropolitan

planning organizations to be consistent with the sustainable communities strategy contained in the regional transportation plan, but exempts certain transportation projects programmed for funding on or before December 31, 2011 from the sustainable communities strategy process.

To the extent the SCS is unable to achieve the greenhouse gas emission reduction targets, the bill requires affected metropolitan planning organizations to prepare an alternative planning strategy (APS) showing how the targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

The State Air Resources Board is required to review each metropolitan planning organization's sustainable communities strategy and alternative planning strategy to determine whether the strategy, if implemented, would achieve the greenhouse gas emission reduction targets. Any SCS that is found to be insufficient by the State board must be revised by the metropolitan planning organization, with a minimum requirement that the metropolitan planning organization obtain State board acceptance that an alternative planning strategy, if implemented, would achieve the targets. The bill specifically States that the adopted strategies do not regulate the use of land and are not subject to State approval and that city or county land use policies, including the general plan, are not required to be consistent with the regional transportation plan,

which would include the sustainable growth strategy, or the alternative planning strategy.

SB 375 exempts from CEQA a transit priority project, as defined, that meets certain requirements and that is declared by the legislative body of a local jurisdiction to be a sustainable communities project. The transit priority project would need to be consistent with a metropolitan planning organization's SCS or APS that has been determined by the State Air Resources Board to achieve the greenhouse gas emission reductions targets. The bill provides for limited CEQA review of various other transit priority projects.

With respect to other residential or mixed-use residential projects meeting certain requirements, SB 375 exempts the environmental documents for those projects from being required to include certain information regarding growth inducing impacts or impacts from certain vehicle trips. The bill also authorizes the local jurisdictions to adopt traffic mitigation measures for transit priority projects and exempts a transit priority project seeking a land use approval from compliance with additional measures for traffic impacts, if the local jurisdiction has adopted those traffic mitigation measures.

Because the bill imposes additional duties on local governments relative to the housing element of the general plan, it imposes a State-mandated local program.

TEAQ Implementation Strategies

In support of the TEAQ Program VTA will:

- Support TEAQ-related efforts through its Legislative Program
- Support State, regional and local legislative and voluntary climate protection actions
- Proactively implement VTA's Sustainability Program
- Explore support from private sector development through its capital and ongoing operating programs
- Support regional and local advocacy efforts related to land use transportation integration
- Support programs such as the EPA's "SmartWay" Program
- Improve transit; focusing on key corridors where local jurisdictions are committed to land use intensification and on first/last mile connections
- Develop express lanes and advocate for pricing roadways and parking
- Convert to alternative fueled/low- or zero-emissions fleets as technology becomes cost-effective
- Support State and local building codes that require LEED Certified construction —insulation, energy efficient design and passive and active solar design elements
- Explore new technologies through research, test/pilot projects and partnerships with other agencies
- Develop and implement education and awareness

Appendix D: Systemwide Performance Measures

Performance measures provide a common framework to evaluate programs and projects. They also provide an indication of how well Santa Clara County's transportation system serves the traveling public. In 1999, the VTA Board adopted a set of multimodal performance measures as part of the Santa Clara County Congestion Management Program (CMP). These performance measures are used to evaluate the impacts of land use decisions and projections on the county's transportation system. This section estimates how well the transportation system will perform in 2035, given the additional growth in and out of the county and the implementation of the VTP 2035 projects.

The transportation system performance is evaluated using a 2005 base condition, a 2035 No Project scenario and a 2035 Project scenario. The "base" refers to

existing conditions. The No Project scenario includes the 2035 land use conditions but not the VTP 2035 projects. The 2035 Project scenario includes all of the base projects, plus the VTP 2035 Investment Program. This analysis scenario includes projects funded with 30 years of State and Federal programming, as well as the 2000 Measure A sales tax revenue and proposed express lane corridors. It also presumes that VTA is able to secure adequate funding to be able to fully implement and operate the 2000 Measure A program of projects.

TRAFFIC LEVEL OF SERVICE

Traffic level of service (LOS) measures the interrelationship between travel demand (volume) and supply (capacity) of the transportation system. LOS is a quantitative measure categorized into six levels, A through F—with LOS A representing ideal

TABLE D-1 *Deficient Freeway and Expressway Miles*

	2005 BASE	2035 NO PROJECT	2035 PROJECT	2035 NO PROJECT VS. PROJECT NET CHANGE	2035 PERCENT CHANGE
AM Peak	100.5	302.6	297.2	-5.4	-1.8%
PM Peak	105.5	380.7	371.1	-9.6	-2.5%

conditions and LOS F representing poor conditions or congested flow.

Roadways at LOS F are considered deficient. The Santa Clara County CMP considers freeway segments with a speed less than 35 miles per hour and expressway segments less than 13 miles per hour to be deficient (LOS F). Due to the growth within the county as well as the increase in travelers coming into the county, the number of roadways operating at LOS F will increase between the base year and 2035. Nevertheless, the VTP 2035 Project scenario shows some improvement over a No Project scenario in miles of deficient roadway segments.

By the year 2035, the miles of deficient freeways and expressways are projected to be 302.6 miles in the AM peak and 380.7 miles in the PM peak for No Project conditions. This represents an increase well over 2005 base year conditions for both the AM and PM peak periods. With the VTP 2035 Project scenario, deficient freeway and expressway miles are projected to decrease from the No Project scenario by 5.4 miles in

the AM peak and 9.6 miles in the PM peak, a decrease of 1.8 percent and 2.5 percent, respectively.

MODAL SPLIT

Modal split measures the extent to which travelers use the various available transportation modes. It is measured as the proportion of people making a trip using a given mode. Modal split values shown in Tables D-2 and D-3 on the following page are for daily person trips in the base year 2005 and in 2035. The 2035 Project scenario increases the viability of alternatives to driving alone with investments in transit, HOV improvements and express lane conversions. These investments will allow more alternative mode use, as indicated by the tables below. The percentage of drive-alone work trips decreases over 5 percent from 2005 to 2035 Project scenario. The proportion of commute trips for the shared-ride (HOV) mode is expected to increase by about 2 percent for both 2035 No Project and Project scenarios. Transit experiences the largest increase in commute shares, increasing

TABLE D-2 *Mode Split: Home-Based Work Trips*

	2005	2035 NO PROJECT	2035 PROJECT
Drive Alone	79.90%	74.90%	73.90%
Shared Ride	13.30%	15.00%	14.90%
Transit	3.60%	5.60%	6.70%
Bike	1.00%	1.60%	1.60%
Walk	2.20%	2.90%	2.90%

TABLE D-3 *Mode Split: All Trips*

	2000	2035 NO PROJECT	2035 PROJECT
Drive Alone	56.90%	52.60%	52.30%
Shared Ride	32.70%	32.80%	32.70%
Transit	2.10%	3.60%	4.10%
Bike	1.70%	1.60%	1.50%
Walk	11.30%	9.40%	9.40%

from 3.3 percent in 2005 to 6.7 percent in the 2035 Project scenario. While this is not a large percentage increase in transit mode share, this increase over 2005 represents approximately 164,900 more daily transit trips made in Santa Clara County. Trips made by bicycle and walk modes also increase slightly over 2005 shares.

VEHICLE MILES OF TRAVEL AND VEHICLE HOURS OF TRAVEL

A vehicle mile of travel per vehicle trip (VMT) identifies the number of roadway vehicle miles of travel required to satisfy the demand for travel by vehicles, measured in vehicle trips. When monitored

over time, it is an indicator of the level of utilization for high-occupancy modes (carpooling, transit, etc.). Vehicle hours of travel per vehicle trip (VHT) are an indicator of the average amount of time travelers spend getting to their destination. A decrease in these measures indicates people are traveling more efficiently and mobility is improving. As shown in Tables D-4 and D-5, vehicle miles and vehicle hours of travel decrease under the 2035 Project scenario, meaning that people will travel more efficiently in the Project scenario than in the No Project scenario. Vehicle miles and vehicle hours per trip also decrease under the Project scenario.

TABLE D-4 *Vehicle Miles of Travel and Vehicle Hours of Travel, AM Peak*

	NO PROJECT	PROJECT	NET CHANGE	PERCENT CHANGE
VMT	10,879,800	10,732,000	-147,800	-1.40%
VHT	362,600	332,900	-29,700	-8.20%
Vehicle Trips	955,900	947,000	-8,900	-0.90%
VMT/Trip	11.38	11.33	-0.05	-0.40%
VHT/Trip	0.38	0.35	-0.03	-7.30%

TABLE D-5 *Vehicle Miles of Travel and Vehicle Hours of Travel, PM Peak*

	NO PROJECT	PROJECT	NET CHANGE	PERCENT CHANGE
VMT	15,353,800	14,744,900	-608,900	-4.00%
VHT	848,800	567,700	-281,100	-33.10%
Vehicle Trips	1,501,800	1,491,500	-10,300	-0.70%
VMT/Trip	10.22	9.89	-0.34	-3.30%
VHT/Trip	0.57	0.38	-0.18	-32.70%

Systemwide VMT decreases about 1.4 percent and 4.0 percent respectively during the AM and PM peak for the Project scenario. VMT per trip decreases from 11.38 to 11.33 miles for the AM peak hour (0.4 percent reduction) and from 10.22 to 9.89 miles during the PM peak hour (3.2 percent reduction), which shows improved travel efficiency for individual travelers. Vehicle hours per trip decrease for both the AM and PM periods. This decrease is particularly significant for the PM peak period, as there is a 32.7 percent drop in VHT/trip, reducing the average trip time from 0.57 hours (34 minutes) to 0.38 hours (23 minutes).

Much of this decrease in time spent during the peak periods is due to the time savings offered by the express lane projects.

TRANSIT ACCESSIBILITY

Transit accessibility is an indicator of the ease with which employment opportunities may be reached from a given traffic analysis zone using a transit system. It is measured using a gravity model formulation, which calculates accessibility, on a zonal basis, as a sum of employment opportunities weighted by the households in the origin zone multiplied by the inverse of transit travel time from this zone to those dispersed

opportunities. In the formula, a friction factor parameter is also included to represent how people of different income groups perceive the relationship between transit travel times.

$$A_i = \sum_{j=1}^n E_j * \sum_{q=1}^4 \frac{hh_{iq}}{Tr_{ij} * FF_q(Tr_{ij})}$$

Where,

A_i = Transit Accessibility in Zone i;

E_j = Employments in each destination zone j, j=1 to total number of zones n;

hh_{iq} = Households of income group q in Zone i, q = 1 to 4;

Tr_{ij} = Peak hour transit travel time between zone i and j;

FF_q(Tr_{ij}) = A vector parameter of friction factor for individual income group q, The higher the travel time TR_{ij}, the lower the friction factor.

Accessibility thereby is an abstract measure that can inform planners about the effect of changes in two aspects: travel time to jobs (transit system performance), and the number and location of jobs and households (land use). The higher an area's accessibility, the better the transit system is doing getting residents to large concentrations of employment in minimal time.

The maps on the facing page show the impacts that land use and the VTP slate of projects are projected to have on transit accessibility in Santa Clara County. The upper map compares transit accessibility in 2035 to the 2005 base year, assuming only land use intensification.

The lower map compares the increase in transit accessibility in 2035 that results from adding the VTP projects to the projected 2035 land use intensification. As shown in the maps, transit accessibility is anticipated to significantly improve over the next 30 years for several reasons:

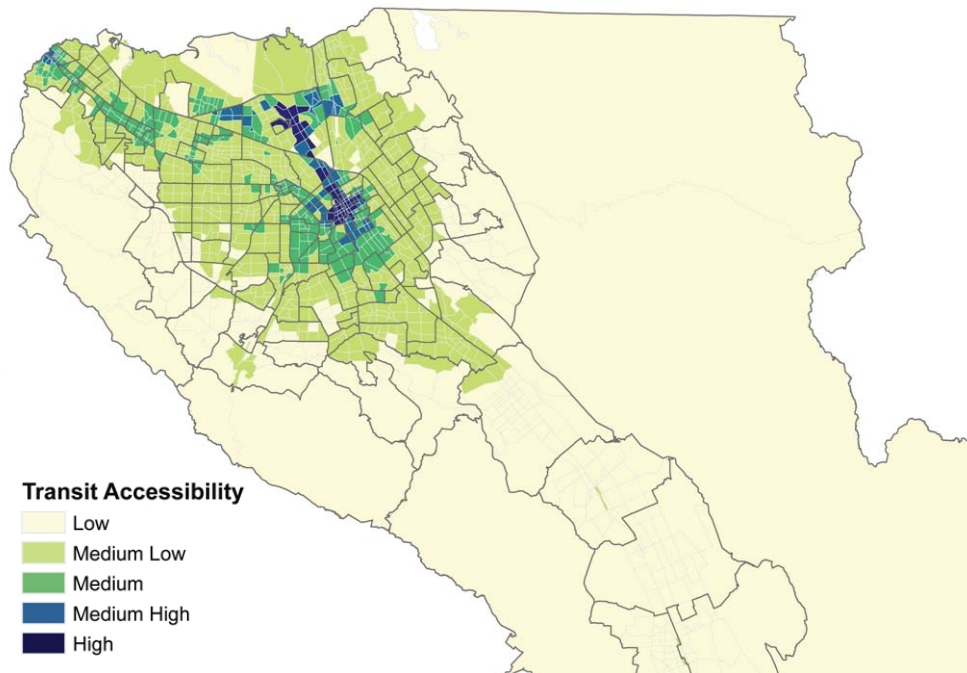
- Transit improvements, particularly along the BART corridor through Milpitas, San Jose and Santa Clara, as well as around the airport and in the East Valley area
- Improvements along the BRT lines on Steven Creek and from Sunnyvale to Cupertino
- Improvements in the Northwest County area, potentially a result of the Line 522 improvements (one of four future BRT corridors), and Caltrain upgrades and service increases
- Land use pattern changes concentrating greater numbers of households and jobs near transit services, in particular for the North San Jose development corridor focused along the VTA light rail alignment

AIR QUALITY

Air pollutants caused by vehicle emissions are estimated for conformance with State CMP guidelines and are related to several factors, including cold and hot starts and stops, speed changes and idling time.

Air quality results were calculated from California Air Resources Board (CARB) air quality modeling methodologies using

Transit Accessibility: 2035 No Project Scenario versus 2005 Base Year



Transit Accessibility: 2035 Project Scenario versus 2035 No Project Scenario

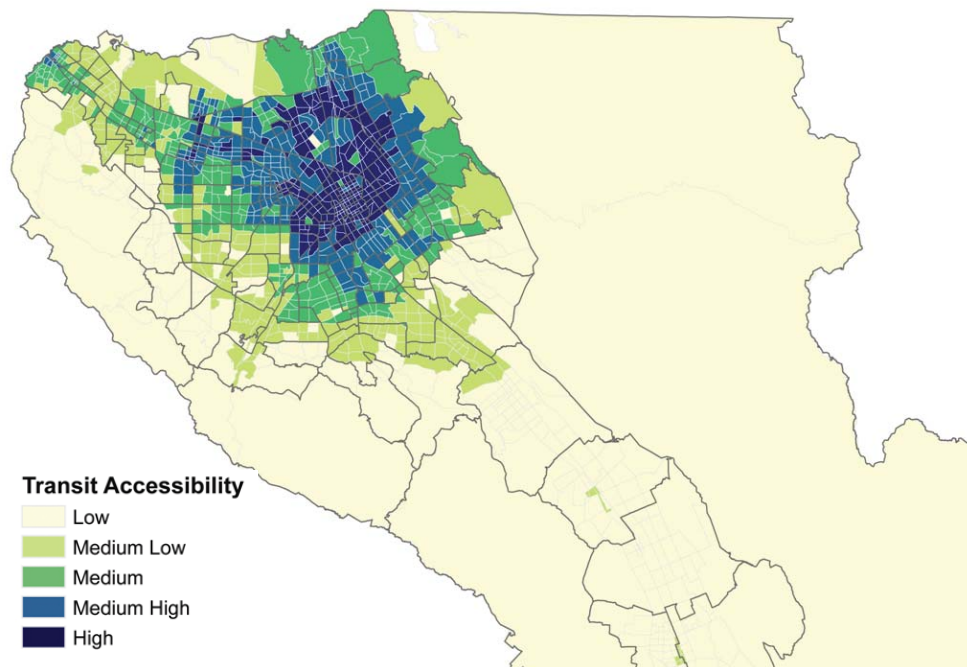


TABLE D-6 *Vehicle Emissions*

TYPE OF EMISSION	TIME PERIOD	2007	NO PROJECT	PROJECT	PERCENT CHANGE NO PROJECT v. 2007	PERCENT CHANGE PROJECT v. NO PROJECT
Organic Gases (tons)	AM	5.19	1.85	1.82	-64.40%	-1.60%
	PM	6.88	2.38	2.33	-65.40%	-2.10%
Carbon Monoxide (tons)	AM	42.38	12.02	11.9	-71.60%	-1.00%
	PM	59.79	17.24	16.73	-71.20%	-3.00%
Oxides of Nitrogen (tons)	AM	8.14	1.78	1.76	-78.10%	-1.10%
	PM	11.32	2.56	2.48	-77.40%	-3.10%
Carbon Dioxide (tons x 1,000)	AM	3.97	4.14	4.10	4.28%	-1.00%
	PM	5.47	5.87	5.68	7.31%	-3.20%
PM10 (particulate matter) (tons)	AM	0.43	0.54	0.54	25.60%	0.00%
	PM	0.59	0.77	0.75	30.50%	-2.60%

EMFAC2007. Improvements in air quality may indicate the benefits of an efficient multimodal transportation system. As shown in Table D-6, air quality for the peak periods is expected to dramatically improve between the base year 2007 (the base year condition provided by CARB) and both the 2035 No Project and Project scenarios. As a result of the introduction of no/low emission vehicles and the retirement of early-year high emission vehicles (as assumed by CARB) organic gases, carbon monoxide and oxides of nitrogen are expected to decrease. However, both carbon dioxide (considered to be a primary agent in global warming) and large (PM10) particulates are expected to rise due to increases in both overall trips and vehicle-miles of travel over 2007 levels. Nevertheless, the 2035 Project shows a

decrease in both of those pollutants relative to the No Project. While there is an improvement in most emissions, the fact that carbon dioxide and particulate emissions increase above 2007 base levels indicate that unless there are more substantial shifts from auto modes of travel to transit and non-motorized modes and therefore generating less vehicle-miles traveled, there are limitations as to how much those emissions can be decreased. Achieving substantive greenhouse gas emissions reductions as a goal may place an increasing emphasis on applying changes to land use development patterns in order to increase transit market shares in coordination with pricing policies that would make transit and non-motorized travel more attractive options than automobile modes of travel.

DURATION OF CONGESTION, AM PEAK PERIOD

Duration of congestion measures the length of time that particular links are subject to congested conditions. This measure is calculated from the VTA Countywide model and is summarized for freeway segments with less than one hour of congestion, between one to four hours of congestion and more than four hours of congestion. Duration of congestion is a measure of peak spreading and it provides a way of showing the length of time over which congested traffic conditions persist. Duration of congestion can be affected by changes in travel demand or changes in transportation capacity such as adding highway lanes, improving intersections, transit improvements and ITS strategies. As shown in TableD-7 (pages 238–239), there are marked increases in the duration of congestion for most freeway segments for the 2035 No Project compared to the 2005 base year. There are 27 segments that experience four or more hours of congestion in the AM peak period under the No Project scenario, up from only four segments in the year 2005 base. These locations represent severe roadway bottlenecks. Under the Project scenario, the duration of congestion is expected to improve for eight specific segments, highlighted in bold in Table D-7.

Severe bottleneck locations (four+ hours of congestion) are reduced from 27 segments to only 22 segments under the Project scenario, however, 2035 traffic conditions are expected to markedly degrade over 2005 base year conditions under either scenario.

TRAVEL TIME

This measure is an estimate of average travel time across drive-alone auto, carpool and transit modes summarized for ten origin/destination pairs located across Santa Clara County. TableD-8 (page 239) shows travel time changes for the 2035 forecast years, with improvements for most origin/destination pairs for the Project compared to the No Project scenario. For all modes of travel, travel times are reduced for each origin-destination pair from the No Project conditions, although there is considerable variation between corridors in terms of the amount of travel time improvement. While transit travel times in many corridors are not competitive with drive-alone or shared ride auto times, there are a few corridors where transit improvements make transit more competitive with auto users, particularly in the BRT corridors (Downtown San Jose to DeAnza College and Eastridge Mall to San Jose State University) and the BART corridor (Central Fremont to Downtown San Jose).

TABLE D-7 *AM Peak Duration of Congestion*

FREEWAY	DIRECTION	SEGMENT	2005 BASE DURATION	2035 NO PROJECT DURATION	2035 PROJECT DURATION
SR 17	NB	San Tomas to I-280	<1	1 to 4	1 to 4
I-880	NB	I-280 to SR 87	<1	1 to 4	1 to 4
I-880	NB	SR 87 to Brokaw Road	<1	4+	4+
I-880	NB	Brokaw Road to Alameda County Line	<1	1 to 4	1 to 4
I-880	SB	Alameda County Line to Calaveras Road	4+	4+	4+
I-880	SB	Calaveras Road to Montague Expressway	1 to 4	4+	4+
I-880	SB	Montague Expressway to N. First Street	<1	1 to 4	1 to 4
I-880	SB	SR 85 to Lark Street	<1	1 to 4	1 to 4
US 101	NB	Dunn Avenue to Cochrane Rd	1 to 4	4+	4+
US 101	NB	Cochrane Rd to SR 85 S	<1	4+	4+
US 101	NB	SR 85 to Helleyer	<1	1 to 4	1 to 4
US 101	NB	Helleyer to McLaughlin	<1	4+	4+
US 101	NB	McLaughlin to I-280	4+	4+	4+
US 101	NB	I-280 to McKee	<1	4+	4+
US 101	NB	McKee to I-880	4+	4+	4+
US 101	NB	I-880 to San Tomas Expressway	1 to 4	4+	4+
US 101	NB	San Tomas Expressway to SR 237	<1	4+	4+
US 101	NB	SR 237 to SR 85 N	<1	1 to 4	1 to 4
US 101	NB	SR 85 N to Embarcadero	1 to 4	4+	4+
US 101	NB	Embarcadero to San Mateo County Line	1 to 4	4+	1 to 4
US 101	SB	San Mateo County Line to SR 85 N	1 to 4	4+	4+
US 101	SB	I-280 to Capitol Expressway	<1	1 to 4	<1
US 101	SB	Capitol Expressway to Cochrane	<1	1 to 4	1 to 4
SR 85	NB	US 101 S to SR 87	<1	4+	4+
SR 85	NB	SR 87 to Almaden Expressway	<1	1 to 4	1 to 4
SR 85	NB	Almaden Expressway to Camden	<1	4+	1 to 4
SR 85	NB	Camden to I-280	1 to 4	4+	4+
SR 85	NB	I-280 to US 101 N	<1	1 to 4	1 to 4
SR 85	SB	I-280 to Saratoga Rd	<1	1 to 4	<1
SR 85	SB	Saratoga Rd to SR 17	<1	1 to 4	1 to 4
SR 85	SB	Camden to Almaden Expressway	<1	1 to 4	1 to 4
SR 85	SB	SR 87 to US 101 S	<1	1 to 4	1 to 4
SR 87	NB	Capitol Expressway to Almaden Expressway	<1	1 to 4	1 to 4
SR 87	NB	Almaden Expressway to I-280	4+	4+	4+
SR 87	NB	I-280 to US 101	<1	4+	1 to 4

TABLE D-7 (CONT'D) *AM Peak Duration of Congestion*

FREEWAY	DIRECTION	SEGMENT	2005 BASE DURATION	2035 NO PROJECT DURATION	2035 PROJECT DURATION
SR 237	WB	I-880 to Lafayette	<1	4+	4+
SR 237	WB	Lafayette to Lawrence Expressway	1 to 4	4+	1 to 4
SR 237	WB	Lawrence Expressway to US 101	<1	1 to 4	<1
SR 237	EB	US 101 to N. First Street	<1	1 to 4	1 to 4
SR 237	EB	N. First Street to Zanker	<1	1 to 4	<1
I-280	NB	US 101 to 11th Street	<1	4+	4+
I-280	NB	11th Street to SR 87	1 to 4	4+	4+
I-280	NB	SR 87 to I-880	<1	1 to 4	1 to 4
I-280	NB	I-880 to San Tomas	1 to 4	4+	4+
I-280	NB	San Tomas to Lawrence	1 to 4	1 to 4	1 to 4
I-280	NB	Lawrence to SR 85	<1	1 to 4	1 to 4
I-280	NB	SR 85 to Foothill	1 to 4	4+	4+
I-280	NB	Foothill to San Mateo County Line	<1	1 to 4	1 to 4
I-680	SB	Alameda County Line to Calaveras Rd	<1	4+	4+
I-680	SB	Capitol Avenue to I-280	<1	1 to 4	<1
I-680	NB	Capitol Expressway to Calaveras Road	<1	1 to 4	1 to 4
I-680	NB	Calaveras Road to Alameda County Line	<1	4+	1 to 4

TABLE D-8 *AM Peak Average Travel Times by Mode*

ORIGIN/DESTINATION PAIR	DRIVE ALONE AUTO		SHARED RIDE AUTO		TRANSIT	
	NO PROJECT	PROJECT	NO PROJECT	PROJECT	NO PROJECT	PROJECT
Los Gatos Residential Area to Lockheed in Sunnyvale	66	59	29	27	120	120
Morgan Hill Residential Area to Sun/RiverMark in Santa Clara	142	132	43	36	95	95
Los Gatos Residential Area to Sun/RiverMark in Santa Clara	62	52	37	29	107	107
Palo Alto Residential to Apple Computers in Cupertino	25	23	18	17	90	72
Evergreen Residential Area to Downtown San Jose	58	51	39	32	98	83
N. Milpitas to Cisco Site near Tasman/Zanker	38	31	32	25	54	46
N. Milpitas to Lockheed in Sunnyvale	66	53	32	24	115	82
Eastridge Mall to San Jose State University	53	45	38	30	52	39
Downtown San Jose to DeAnza College	53	46	23	18	97	58
Central Fremont to Downtown San Jose	71	57	27	26	85	42

TABLE D-9 *PM Peak Average Travel Times by Mode*

ORIGIN/DESTINATION PAIR	DRIVE ALONE AUTO		SHARED RIDE AUTO		TRANSIT	
	NO PROJECT	PROJECT	NO PROJECT	PROJECT	NO PROJECT	PROJECT
Lockheed in Sunnyvale to Los Gatos Residential Area	85	63	35	27	120	120
Sun/RiverMark in Santa Clara to Morgan Hill Residential Area	142	109	54	43	95	95
Sun/RiverMark in Santa Clara to Los Gatos Residential Area	84	65	46	33	107	107
Apple Computers in Cupertino to Palo Alto Residential Area	34	30	23	21	90	72
Downtown San Jose to Evergreen Residential Area	65	47	37	30	98	83
Cisco Site near Tasman/Zanker to N. Milpitas	44	35	32	29	54	46
Lockheed in Sunnyvale to N. Milpitas	82	60	36	27	115	82
San Jose State University to Eastridge Mall	56	42	35	29	52	39
DeAnza College to Downtown San Jose	56	44	22	15	97	58
Downtown San Jose to Central Fremont	87	63	29	28	85	42

Based on collective results of all system performance measurements (such as congested miles of road, transit mode shares and emissions) travel times are improved in the Project scenario compared to the No Project scenario. But overall these numbers indicate that we cannot build our way out of congested conditions. Instead, a balanced program of improvements beyond typical physical infrastructure—such as changes to land use development policies and pricing policies that discourage reliance on single-occupant vehicles—is needed to address transportation issues in the coming years.

STUDY OF ALTERNATIVE TRANSPORTATION AND LAND USE SCENARIOS

As part of the future planning work and to inform VTP updates, VTA is developing aspects of its Countywide/Bay Area Travel Demand Model to facilitate better testing of alternative land use and transportation scenarios. Subsequent to the adoption of VTP 2035, VTA planning will pursue testing and analysis of alternative land use and transportation scenarios.

These studies will test the various interactions of a range of variables such as roadway and

parking pricing, increased transit service, changes in land use patterns, the cost of transportation modes, the effect of the quality of the pedestrian and built environments and perceived quality of service and passenger amenities. The ultimate purpose is to quantify how land use changes (such as development densification near transit stops, and pricing policies such as toll and parking charges) can

increase the performance and efficiency of the transportation system.

Results from these studies will be brought to the VTA committees and Board at various stages for information and discussion. The information will also be available to inform city planning efforts such as General Plan updates.

Appendix E: Summary of VTA Guiding Policies

A wide range of VTA policies and documents, coming from all VTA departments and the Board of Directors, is used to guide the development of the VTP. Those listed in this appendix are intended to illustrate the breadth of policies that influenced the development of VTP 2035 and do not represent an exhaustive list.

TRANSIT SUSTAINABILITY POLICY/SERVICE DESIGN GUIDELINES

The *Transit Sustainability Policy* (TSP), adopted February 2007, is a ridership-based policy that provides a framework for the efficient and effective expenditure of transit funds and for realizing the highest return on investment in terms of public good and ridership productivity. It provides the Board of Directors with a common decision-making process by providing the most complete information available regarding options, cost,

benefits and trade-offs of various transit projects and service proposals prior to selection of mode, service plan or funding decisions.

The *Service Design Guidelines* (SDG) are designed for use in conjunction with the TSP evaluation and recommendation process. The SDG are comprised of two parts: Service Performance Standards and Design Guidelines. They provide a framework to evaluate, design, implement and monitor transit services in the region. In accordance with the TSP, all transit projects are subject to an evaluation of the effects the proposed capital project or service improvement will have on transit ridership and operating efficiency. The results will determine if the project meets the ridership criteria established for the proposed mode, if the proposed mode is the most feasible and appropriate for the market and operational environment, and

if the proposed mode is the most cost-effective option. The evaluation may also result in a recommendation to develop a Project Phasing Plan along with an Improvement Plan. The phasing plan would implement a particular service level or mode with the intent of increasing service or changing the mode, as conditions develop to support the service.

The TSP/SDG is available upon request.

COMMUNITY DESIGN AND TRANSPORTATION MANUAL OF BEST PRACTICES FOR INTEGRATING TRANSPORTATION AND LAND USE

The Community Design and Transportation Manual of Best Practices for Integrating Transportation and Land Use is a key product of the CDT program and was developed to support the implementation of VTA's land use objective and goals. It documents proven and innovative best practices in urban design and transportation planning that support and enhance both VTA's and its Member Agencies' investments in the community. It provides planning and design guidance for how to develop in the cores, corridors and station areas. It also provides policy guidance and outlines steps that communities and local governments can take to identify and overcome barriers to developing more livable and sustainable communities. Moreover, it

articulates VTA's vision for how communities and a multimodal transportation system can grow together, their respective roles and how the actions of each can be mutually supportive and beneficial. Appendix B provides more background on the CDT Program.

The CDT Manual is available upon request.

PEDESTRIAN TECHNICAL GUIDELINES

The *Pedestrian Technical Guidelines* (PTG) is a companion document to the CDT Manual. It is designed as a guide for the planning and design of pedestrian facilities and environments and as technical resource to those responsible for designing community infrastructure and who are interested in improving the pedestrian environment. The PTG provides planning, design and policy guidance for VTA planning and capital projects.

The PTG is available upon request.

2008 COUNTYWIDE BICYCLE PLAN

The *Countywide Bike Plan* (CBP) provides a policy basis for developing an integrated countywide network of bicycle routes and corridors. The CBP is developed in conjunction with VTA Member Agencies and the Bicycle and Pedestrian Advisory Committee (BPAC). The plan identifies the bicycle network and the projects and capital needed to develop and

maintain the network. The CBP also provides policies related to developing and maintaining the bike network and provides the planning and policy framework for developing the Bicycle Expenditure Plan (BEP).

The 2008 Countywide Bike Plan is available upon request.

BICYCLE TECHNICAL GUIDELINES

The *Bicycle Technical Guidelines* (BTG) is a companion document to the CBP and the CDT Manual. It is designed as a guide for the planning and design of bicycle facilities and as technical resource to those responsible for designing, engineering and building bicycle facilities. The BTG provides planning, design and policy guidance for VTA planning and capital projects.

The BTG is available upon request.

SHORT-RANGE TRANSPORTATION PLAN

The *Short-Range Transit Plan* (SRTP) is the master plan for the programming of transit service and operations and outlines future transit system development and the capital projects that are necessary for this development. The plan describes VTA's existing transit system, documents the ongoing transit development and planning process, and outlines what is anticipated for VTA for a 10-year

period. It also provides a blueprint for VTA's Transit Capital Improvement Program (CIP) development over the 10-year period.

The SRTP is available upon request.

CONGESTION MANAGEMENT PROGRAM

As the Congestion Management Agency for Santa Clara County, VTA is responsible for implementing the *Congestion Management Program* (CMP) for Santa Clara County. State statute requires that a congestion management program be developed, adopted and updated biennially for every county that includes an urbanized area and that it shall include every city and the county government within that county. Since the CMP became effective with the passage of Proposition 111 in 1990, it has forged new ground in linking transportation, land use and air quality decisions for one of the most important urban areas in the country. The CMP addresses the impact of local growth on the regional transportation system. The statutory elements of the CMP include highway and roadway system monitoring, multi-modal system performance analysis, a transportation demand management program, the land use analysis program and local conformance for all the county's jurisdictions. In addition, the CMP requires the development of a Capital Improvement Program (CIP) element which considers both

roadway and transit improvements and provides a basis for securing funding through the State's Transportation Improvement Program (TIP).

The CMP is available upon request.

VTA BIENNIAL BUDGET

VTA policy calls for the development of a biennial (two-year) budget. This process allows VTA to build a more stable near-term financial foundation and to monitor longer-term financial trends and take corrective actions as necessary throughout this two-year cycle. The budget encompasses all of the activities under the jurisdiction of the VTA Board, including Transit Enterprise Operations and Capital, the Measures A and B Capital programs, the Congestion Management Program and related VTP projects and programs.

The VTA Budget is available upon request.

POLICY GUIDANCE FOR MEASURE A REVENUE AND EXPENDITURE PLAN (ADOPTED 06/05/08)

- Maintain financial integrity of organization
- Increase transit usage
- Achieve environmental improvements
- Support transit-oriented land use
- Support countywide economic development
- Strengthen complementary partnerships
- Take advantage of leveraged and new fund sources
- Model various financial conditions
- Achieve a balanced transportation plan
- Implement the intent of Measure A

The full text of Policy Guidance for Measure A Revenue and Expenditure Plan is available upon request.

Appendix F: Glossary of Terms

AB-32—Assembly Bill 32 The Global Warming Solutions Act of 2006 (Assembly Bill 32) caps California’s greenhouse gas (GHG) emissions at the 1990 level by 2020. Meeting this target represents an 11 percent reduction from current levels and requires about a 29 percent cut in emissions below projected 2020 levels. AB 32 directed the California Air Resources Board (ARB) to adopt a GHG emissions cap on all major sources to reduce Statewide emissions to 1990 levels by 2020.

ABAG—Association of Bay Area Governments A regional agency responsible for regional planning (excluding transportation). ABAG publishes forecasts of projected growth for the region.

Access The facilities and services that make it possible to get to any destination, measured by the availability of physical connections (roads, sidewalks, etc.), travel options, ease of movement and nearness of destinations.

ABC—Across Barrier Connections

Access-by-Proximity A key concept of the CDT Program. Focuses on clustering complementary land uses and well-designed compact development to combine, reduce or eliminate trips, reduce automobile trips and to help achieve the kind of critical mass that makes vibrant public life possible.

ACCMA—Alameda County Congestion Management Agency The agency responsible for transportation planning and programming of transportation funds in Alameda County.

ACE—Altamont Commuter Express A commuter rail service that runs between the City of Stockton in San Joaquin County and the City of San Jose in Santa Clara County. The service is a partnership involving VTA, the San Joaquin Regional Rail Commission and the Alameda County Congestion Management Agency.

ACTIA—Alameda County Transportation

Improvement Authority A special government agency authorized by State law and created by the voters of Alameda County to collect a half-cent sales tax and use the money for a specific list of transportation projects and programs in Alameda County.

ADA—Americans with Disabilities Act

On July 26, 1990, ADA was signed into law, requiring public transit systems to make their services fully accessible to persons with disabilities as well as to underwrite a parallel network of paratransit service for those who are unable to use the regular transit system. In addition, VTA must meet the new ADA accessibility design guidelines for all newly constructed transit facilities such as light rail stations, bus stops and transit centers. All procurement of bus and rail vehicles must also meet the ADA accessibility design guidelines.

A & F—Administration and Finance

Committee A standing committee of the VTA that reviews policy recommendations pertaining to the general administration of VTA.

APS—Alternative Planning Strategies**APTA—American Public Transportation Agency****ATMS—Advanced Traffic Management**

System ATMS is a category of intelligent transportation systems that focuses on the management of traffic. It typically includes ramp metering, traffic management centers (TMCs), HOV lanes, integrated corridor

management, CCTVs, arterial management and/or incident management.

Auxiliary Lanes A lane from one on-ramp to the next off-ramp to allow vehicles coming on the freeway or getting off the freeway to have more time to merge with the through lanes. These lanes are often installed for safety purposes (reduce merging accidents).

AVL—Automated Vehicle Location AVL is the use of electronic technologies to allow fleet managers to know where vehicles are located at a given time. Several different types of AVL technologies exist. The Department of Defense's Global Positioning System (GPS) is the basis for several recent transit industry AVL projects. In addition to its primary use by transit dispatchers and supervisors, AVL can be linked into other systems and used to provide real-time arrival information for transit customers, to support paratransit services and for a variety of other applications.

BAAQMD—Bay Area Air Quality

Management District The regional agency created by the State legislature for the Bay Area air basin (Alameda, Contra Costa, half of Solano, half of Sonoma, Marin, Napa, San Francisco, San Mateo and Santa Clara counties) that develops, in conjunction with MTC and ABAG, the air quality plan for the region. BAAQMD has an active role in approving the TCM plan for the region, as well as in controlling stationary and indirect sources of air pollution.

BPAC—Bicycle/Pedestrian Advisory

Committee An advisory committee to the VTA that is responsible for overseeing the work of the VTA staff associated with bicycle and pedestrian plans, guidelines and programs.

BART—Bay Area Rapid Transit The San Francisco Bay Area Rapid Bart Transit District (BART) provides heavy passenger rail service in Alameda, Contra Costa, San Mateo and San Francisco counties, between the cities of Fremont, Pleasanton, Richmond, Pittsburg and San Francisco.

BEP—Bicycle Expenditure Plan The ten-year funding program dedicated for the implementation of bicycle projects in Tier 1 of the Santa Clara Countywide Plan (Bicycle Element of VTP 2030). It includes funding from various local, State and Federal sources. Projects in the Bicycle Expenditure Program are required to provide a minimum 20 percent local match.

Bicycle Technical Guidelines VTA document that provides a uniform set of optimum standards for the planning, design and construction of bicycle projects in Santa Clara County.

BOD—Board of Directors The VTA Board of Directors is composed of 12 elected officials appointed by the member cities and County of Santa Clara. The members of this partnership work together to address the transportation needs of Santa Clara County.

Braided Ramp Type of freeway on-/off-ramp that consists of grade separated ramp(s) that keep two major traffic movements from crossing one another.

BRT—Bus Rapid Transit BRT combines the quality of rail transit and the flexibility of buses. It can operate on exclusive transitways, HOV lanes, expressways, or ordinary streets. A BRT system combines intelligent transportation systems technology, priority for transit, cleaner and quieter vehicles, rapid and convenient fare collection and integration with land use policy.

BSP—Bus Signal Priority

BTG—Bicycle Technical Guidelines

CAC—Citizens Advisory Committee A committee to the VTA Board of Directors that advises on issues of interest to the committee members and the communities they represent and will serve as the oversight body for the 2000 Measure A Transit Sales Tax Program.

Caltrain/Peninsula Corridor Joint Powers Board Commuter rail service running between Gilroy and San Francisco through San Jose. The Peninsula Corridor Joint Powers Board (JPB), made up of representatives from the counties of San Francisco, San Mateo and Santa Clara, oversees this commuter rail service.

Caltrans—California Department of Transportation The responsible owner/operator of the State highway system. Caltrans is responsible for the safe operation and maintenance of roadways.

Capacity The maximum rate of flow that can be accommodated on a facility segment under prevailing conditions. Rate of flow is the number of vehicles passing a point on a facility during some period of time, expressed in vehicles per hour or persons per hour.

Capitol Corridor Intercity Rail Service

A 150-mile intercity rail service along the Union Pacific ROW Capitol Corridor, which runs between San Jose and Auburn, through Oakland and Sacramento.

CBO—Community Based Organization

CARB—California Air Resources Board

Carpooling An arrangement in which commuters share driving and the cost of commuting. A carpool is formed with a minimum of two people who commute on a regular basis. The members generally share common residential and employment locations as well as common commuting patterns and schedules.

CBTP—Community-Based Transportation Plan

CCBC—Cross-County Bicycle Corridors

CCEPS—Comprehensive County Expressway Planning Study

CCTV—Closed-Circuit Television This ITS component is used for traffic surveillance, where the signal is transmitted by wire. A CCTV system usually communicates with a centralized facility such as a TMC or OCC.

CDP—Countywide Deficiency Plan A document that will address deficiencies on Santa Clara County's freeways and expressways and include a set of improvements, programs and actions that are designated to both improve service on the overall transportation system and cause a significant improvement in air quality.

CDT Program See Community Design and Transportation Program.

CELR—Capitol Expressway Light Rail

CEQA—California Environmental

Quality Act The basic goal of CEQA is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to 1) identify the significant environmental effects of their actions; and either 2) avoid those significant environmental effects where feasible or 3) mitigate those significant environmental effects where feasible.

CFL—Compact Fluorescent Lighting

Choice A key concept of the CDT Program Focuses on the notion that one-size-does-not-fit-all. A transportation system that is dominated by a single mode fosters development

patterns and policies that encourage sprawl, decentralization and separation of uses.

Choice seeks to expand the range of options about what kind of home to live in, where that home is located, the character of the community and the means of getting around.

CIP—Capital Improvement Program A multiyear program of projects to maintain or improve the traffic level-of-service and transit performance standards developed by the CMP and to mitigate regional transportation impacts identified by the CMP Land Use Analysis Program, which conforms to State and Federal air quality requirements. It is updated every other year as part of the Congestion Management Program update. The CIP is a ten-year program.

Clean Air Act The Federal law that requires urban areas with high pollution to modify transportation policies in order to reduce emissions. This law makes air quality a primary concern in transportation decisions.

CMA—Congestion Management Agency The CMA is a countywide organization responsible for preparing and implementing the county's CMP (see definition below). CMAs came into existence as a result of State legislation and voter approval of Proposition 111 in 1990 (later legislation removed the statutory requirements of Proposition 111, making CMAs optional). In Santa Clara County, VTA is the designated CMA.

CMAQ—Congestion Mitigation and Air Quality Improvement Program

A Federal funding program established by ISTEA and continued in TEA-21 specifically for projects and programs that will contribute to the attainment of a national ambient air quality standard. The funds are available to non-attainment areas for ozone and carbon monoxide based on population and the degree of severity of pollution. Eligible projects will be defined by the approved State Implementation Program (SIP) and the State's air quality plan.

CMIA—Corridor Mobility Improvement Account

A State Highway funding program for projects on the California State Highway System that: reduce travel time or delay, improves connectivity of the State Highway System between rural, suburban and urban areas, or improves the operation and safety of a highway or road segment; improve access to jobs, housing, markets and commerce; and begin construction before December 2012.

CMP—Congestion Management Program

A comprehensive program designed to reduce traffic congestion, to enhance the effectiveness of land use decisions and to improve air quality. The program must comply with CMP State statutes and with State and Federal Clean Air Acts. Unless otherwise specified, CMP means Santa Clara County's Congestion Management Program.

CMP Roadway Network A network of roadways within a CMA that are of regional significance. The CMP roadway network in Santa Clara County consists of freeways, expressways, urban arterials (six-lane facilities or non-residential arterials with average daily traffic (ADT) of 30,000 vehicles per day) and rural highways.

CMPP—Congestion Management

Program and Planning Committee A standing committee of the VTA that reviews policy recommendations pertaining to the Congestion Management Program and Countywide Transportation Plan.

COA—Comprehensive Operations Analysis

Community Design and Transportation

(CDT) Program A partnership between the VTA and the 15 cities/towns and the county to develop and promote strategies for improving transportation systems and community livability. This involves creating areas with high-quality planning and design that support walking, biking and local auto trips. It also promotes concentrated development, good access to transit services, multimodal street design and efficient use of land. The CDT program is VTA's primary program for integrating transportation and land use and has been adopted by each of the 16 city, town and county governments in Santa Clara County.

Commute A home-to-work or work-to-home trip.

Complete Streets Program The concept that all public roadways should be designed and built for safe travel by all potential roadway users. Roads should also not create barriers for any roadway users; bicyclists and pedestrians in particular are harmed when crossings of freeways, waterways and rail lines are not safe and/or frequent and when roadway intersections aren't designed to include other modes.

Comprehensive Operations Analysis

(COA) An in-depth effort to analyze VTA's existing transit services, identify underserved markets and ultimately produce a new structure for bus services. A key component of the COA effort was the development of policy standards to continually evaluate and monitor the performance of the bus system against Board-adopted measures of productivity.

Concentrated Development Usually synonymous with higher-density development than is the average for the area. Among land use planners, concentrated development implies a minimum of multistory, attached residential condominiums or apartments, mid- to high-rise office or retail, or some mix of these land uses. Usually, concentrated development connotes an urban setting located around some type of transit

station, downtown commercial center, or other attraction or amenity. Concentrated development generally contrasts with “clustered” development, which may describe a grouping of detached residential units in a rural or suburban setting and intended to preserve open space in a large parcel.

Congestion The condition of any transportation facility in which the use of the facility is so great that there are delays for the users of that facility. Usually this happens when traffic approaches or exceeds facility capacity.

Connectivity Generally defines how well a street network allows pedestrians, bicyclists and non-auto modes to travel in a straight line (i.e., shortest path) between two points. Improvement to connectivity, such as extending dead-end streets or continuing arterials under freeways, encourages walking and bicycling. Planners would contend that a perfect grid or radial street pattern maximizes connectivity while cul-de-sacs, at-grade freeways, rail tracks and other impediments or intimidating structures diminish connectivity. For auto travel, connectivity may apply to extending arterial roadways that will allow autos to avoid using congested freeway segments to make short trips.

Cores District areas that include many streets and blocks characterized by concentrated development features.

Corridors Linear areas, typically centered on a single street, that function as the spine of the surrounding community.

Countywide Bicycle Plan A document that includes policies and implementing actions designed to improve bicycle facilities and inter-agency coordination and which will promote bicycling and bicycle safety in Santa Clara County.

CPB—Countywide Bicycle Plan

Cross-County Bicycle Corridor A system of 24 on-street bicycle routes and 17 trail networks. They are to be the most direct and convenient routes for bike trips to local and regional destinations across city or county boundaries.

CSS—Commuter Services Study A VTA study document updated every two to three years to ensure commuter services are responsive to changing commuter patterns in Santa Clara County. The study is an analysis of commuter trips, to assess the viability of existing commuter bus services and to identify new commuter bus service concepts and routes.

CTA—Committee for Transit

Accessibility A committee to the VTA Board of Directors that advises on bus and rail accessibility issues, paratransit services and issues related to the Americans with Disability Act (ADA).

CTC—California Transportation

Commission A State agency that sets State

spending priorities for highway and transit and allocates funding. Members are appointed by the governor.

CVO—Commercial Vehicle Operations

Use of ITS technologies to improve travel time and reliability for freight traffic and reduce the cost of shipping goods. CVO applications include satellite tracking of truck traffic, automated weigh-in-motion scales and automatic vehicle identification systems.

Deficiency Deficiencies occur where the transportation facilities provided do not conform to the standards that the area has adopted as minimally acceptable. A deficient roadway in Santa Clara County is one with a Level of Service (LOS) of F.

Delay A measure of the amount of time spent during a trip due to congestion. It is measured as the difference in travel time between congested and free-flow conditions.

Developer Exaction A contribution or payment required as an authorized precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

Development Impact Fees A fee, also called a development fee, levied on the developer of a project by a city, county or other public agency as compensation for otherwise unmitigated impacts the project will produce. California Government Code Section 66000

et seq. specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Economic Health A term used to describe the fundamental and long-term strength of the economy. The most common measures of a region's economic health include unemployment rate, business output, personal income, the sales growth of indigenous business and the attraction of new business to the area. Short-term indicators of economic health may include congestion, historically high cost of housing, parking shortages, low commercial and retail vacancy rates and a high cost of living. Long-term, however, these indicators could presage economic decline if not addressed. It may also include long-term indicators that measure a region relative to the State or nation in regard to wages, construction of high-end housing, demand for skilled labor, diversity of the industrial mix, and/or the share of economic activity related to new or robust industry sectors (e.g., biotech, telecommunications, etc.).

Eco Pass Partnership between Santa Clara Valley employers and the VTA. Eco Pass is a transit card with unlimited use of VTA bus and light rail services. Employers purchase annual Eco Pass stickers for full-time employees at a

given site, at one low cost. Pricing levels are based on proximity to VTA transit services and the number of employees.

**EIR/EIS—Environmental Impact Report/
Environmental Impact Statement.**

A study which analyzes various alternatives for environmental impacts, identifies possible mitigations to reduce impacts and obtains legally mandated State and/or Federal environmental clearance for a chosen preferred alternative.

Electrification To equip rail or bus transit systems for use of electric power.

EPA—Environmental Protection Agency

Evaluation Criteria factors that help to distinguish the relative value of alternative actions.

Express Lanes High-occupancy toll lanes that combine the characteristics of HOV lanes and toll roads by allowing carpools, vanpools and buses free access, while charging for single occupant vehicle (SOV) or drive alone use.

FHWA—Federal Highway

Administration A division of the United States Department of Transportation that specializes in highway transportation. The agency's major activities are grouped into two "programs," the Federal-Aid Highway Program and the Federal Lands Highway

Program. FHWA's role in the Federal-Aid Highway Program is to oversee Federal funds used for constructing and maintaining the National Highway System. Under the Federal Lands Highway Program, FHWA provides highway design and construction services for various Federal land-management agencies.

Final Engineering Finalizes design drawings and produces construction documents for the preferred alternative.

Fixed-Route Transit Transit service provided on a repetitive, fixed-schedule basis along a specific route, with vehicles stopping to pick up passengers at and deliver passengers to specific locations.

Flexible Work Hours This is a form of alternative work schedule. It is a policy that gives employees the option of varying their start and end times each workday. The intent is to allow employees more flexibility to adjust work hours to meet individual needs and provide incentive to use commute alternatives.

Flyover Ramp A ramp connecting two roadway facilities that provides a direct connection to avoid congestion, merging and/or an intersection.

FPI—Freeway Performance Initiative An effort developed by MTC to improve the circulation on the Bay Area's freeway system. The purpose of the FPI is to develop a com-

prehensive strategic plan to guide the next generation of freeway investment.

FTA—Federal Transit Administration

A component of the U.S. Department of Transportation, delegated by the Secretary of Transportation to administer the Federal transit program under the Urban Mass Transportation Act of 1964, as amended, and various other statutes.

FTIP—Federal Transportation

Improvement Program All Federally funded projects are required to be included in the FTIP. The FTIP is a document that includes key information regarding all Federally funded and “regionally significant” projects. This document is used as a common reference point for review and approval of processes (such as funding, air quality conformity, etc.) by various State and Federal agencies. The FTIP is actually a composition of select projects from State, regional and local sources. Each “level” also has its own transportation improvement program (TIP). Therefore, in order for a project to be included in the FTIP, it must first be included in a local TIP, then in the RTIP, then in the STIP. Each TIP will require a review and approval process by the agency responsible for administering the TIP.

GP—General Plan

Grade Separation A grade separation is a structure necessary to provide for either the

passage of a roadway or bicycle or pedestrian facility under or over a rail line.

HOT—High Occupancy Toll

HOV Lanes—High-Occupancy Vehicle

Lanes Lanes on heavily congested roadways that are used exclusively by carpools, vanpools, buses or any vehicle that transports multiple passengers.

HSR—High Speed Rail

IIP—Interregional Improvement

Program A State funding program created by SB-45. IIP funds may be programmed to projects outside of the urbanized areas and/or interregional projects. All IIP funds are programmed by Caltrans, via the Interregional Transportation Improvement Plan (ITIP) process, with final approval by CTC.

Intensification For residential uses, the increase in the actual number or the range of dwelling units per net or gross acre. For nonresidential uses, an increase in the actual or the maximum permitted floor area ratios (FARs).

Interconnection A key concept of the CDT Program. Focuses on interconnecting streets, pedestrian and bicycle networks, transit modes, buildings and developments to get more from transportation resources and urban infrastructure and to form coherent districts and more livable places.

Intermodal The term “mode” refers to and distinguishes the various forms of transportation, such as automobile, transit, ship, bicycling and walking. Intermodal refers specifically to the connections between modes.

Inter-Agency Indicates cooperation between or among two or more discrete agencies.

Inter-County Existing or occurring between two or more counties.

Inter-Jurisdictional Existing or occurring between two or more jurisdictions.

Intra-County Existing or occurring within the county boundaries.

ISR—Information Service Representative

ISTEA—Intermodal Surface Transportation Efficiency Act Federal legislation passed in 1991 and expired in 1997 which restructured much of the basis for funding highway projects and made some of these funds available to urban areas for transit projects. A key ISTEA component is increased flexibility in the programming of projects.

ITE—Institute of Traffic Engineers

ITIP—Interregional Transportation Improvement Program The ITIP is a four-year planning and expenditure program adopted by the CTC and updated in even numbered years. The ITIP covers rural highway and key interregional improvements, including intercity rail.

ITS—Intelligent Transportation Systems

Technologies that improve the management and efficiency of our transportation system, such as electronic fare payment systems, ramp metering, timed traffic signals and on-board navigation systems.

Jobs/Housing Balance; Jobs/Housing

Ratio The availability of housing for employees in a particular area. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

Joint Development Program A program adopted by the VTA Board in 2005. It is designed to secure the most appropriate private and public sector development of VTA-owned property at and adjacent to transit stations and corridors.

JPB—Joint Powers Board

LAN—Local Area Network A computer network that spans a relatively small area. Most LANs are confined to a single building or group of buildings. However, one LAN can be connected to other LANs over any distance via telephone lines and radio waves.

Land Use Activities and structures on the land, such as housing, shopping centers, farms and office buildings.

LED—Light Emitting Diode

LEED—Leadership in Energy and Environmental Design

Livability While this term may encompass as many different meanings as there are workers and residents in Santa Clara County, it is used in the VTP 2035 as a more broadly defined synonym for “quality of life” to describe the plan’s support for four types of transportation investments and services: relief from congestion, better facilities and services for non-work and off-peak trips, attractive travel choices and services for a diverse and changing population. Livability describes a resident’s satisfaction with the transportation system in such terms as its ease of use, convenience, reliability, cost, range of travel choices and interference in non-transportation-related activities.

Long-Range Plan A transportation plan covering a time span of 20 or more years. While the VTP 2035 is a living document that will be updated every two to five years, the plan’s methodologies are intended to create performance-based processes that will be used to select projects and design programs over the plan’s 20-year horizon.

LOS—Level-of-Service LOS measures the interrelationship between travel demand (volume) and supply (capacity) of the transportation system. LOS is a quantitative measure categorized into six levels, A through F, with A

representing ideal conditions—or no congestion—and LOS F representing poor conditions or congested flow. The VTA Congestion Management Program has a standard of LOS E; roadways at LOS F are considered deficient.

LRT—Light Rail Transit LRT operates on an electrical system powered from an overhead wire on a dedicated track. The system is capable of operating at high speeds in dedicated rights of way and at lower speeds on arterial streets and downtown environments.

LSCR—Local Streets and County Roads

Measure A (1996) A Santa Clara County advisory ballot measure passed in 1996 that identified a specific program of priority transportation improvement projects in Santa Clara County to be undertaken as funding became available.

Measure A (2000) A 2000 ballot measure in Santa Clara County that provides a 1/2 cent sales tax for 30 years, beginning in April 2006. The proceeds would be used to fund several transit projects throughout the county. The Measure passed in November 2000.

Measure B (1996) A 1996 ballot measure in Santa Clara County that raised the local sales tax by 1/2 cent for a nine-year period, with the proceeds being deposited into the county’s General Fund.

Member Agencies Local jurisdictions that are signatories to the CMA’s Joint Powers

Agreement. This includes all cities and towns within the county, Santa Clara County and the Santa Clara Valley Transportation Authority.

MIS—Major Investment Study A study required for major Federally funded transportation projects (highway and transit) before a project can be included in the RTP. The study must include all reasonable alternatives to address defined transportation problems and the study process must include all affected agencies, local governments, MTC and the public.

Mitigation An action to reduce or eliminate the impacts of another action.

Mixed Use Refers to a variety of land uses and activities with a mixture of different types of development, in contrast to separating uses, such as job sites, retail and housing; multiple land uses in the same structure or same general area of a community; used to describe buildings with different types of use on different floors, particularly commercial uses (such as shops or banks) on the ground floor with flats above.

Mobility The movement of people or goods throughout our communities and across the region. Mobility is measured in terms of travel time, comfort, convenience, safety and cost.

Modal Split or Mode Share Modal split measures the extent to which travelers use the various available transportation modes. It is

measured as the proportion of people making a trip using a given mode.

MPO—Metropolitan Planning

Organization A Federally required transportation planning body responsible for the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) in its region; the governor designates an MPO in every urbanized area with a population of over 50,000.

MOU—Memorandum of Understanding

MTC—Metropolitan Transportation

Commission The metropolitan planning organization (MPO) for the nine-county San Francisco Bay Area.

Multimodal Of or relating to more than one mode of transportation.

NBSSR—Noise Barrier Summary Scope Report

NOP—Notice of Preparation

OCC—Operations Control Center

Centralized location where transportation operations (traffic and/or transit) are monitored and conducted.

PA/ED—Project Approval/Environmental Document

PAB—Policy Advisory Board An advisory group that ensures that the local jurisdictions most affected by major transportation

improvement projects are involved in guiding the planning, design and construction of these projects.

PAC—Policy Advisory Committee A committee to the VTA Board of Directors that advises on issues related to the development of VTA's policies.

Paratransit Paratransit services are specialized systems of transportation operated for people who are unable to use conventional fixed-route transit. Paratransit services provide trips between a rider's origin and destination, usually door-to-door. ADA requires that the service be comparable to the fixed-route service available.

PDA—Priority Development Area

Peak Hour The peak hour of traffic volumes in an area.

Peak Spreading A lengthening of the peak period of traffic congestion, usually accompanied by a flattening of the peak.

Performance Measure A means to measure whether an objective has been achieved or whether investments or strategies improve over time or across alternatives.

Person Trip A trip made by one person irrespective of mode.

Place-Making A key concept of the CDT Program. Focuses on the human-scale elements of the built environment that create

uniqueness and identity and make places attractive, comfortable and memorable.

PMP—Pavement Management

Program Funding program intended to repair or replace the existing roadway pavement. Funds are distributed using a population-based and lane mile formula. The cities and county must use a Pavement Management System certified by the MTC to identify and prioritize pavement needs.

Preliminary Engineering A study that identifies alternatives for attaining a specified goal. For each alternative, the document describes benefits and contains engineering drawings with enough detail to perform environmental analysis and gauge construction feasibility.

PR—Project Report Refers to the report used by Caltrans to recommend approval of a project. The term "Draft Project Report" (Draft PR) refers to a draft version of this report that must be prepared for projects with environmental documents.

PSR—Project Study Report A PSR is an engineering report, the purpose of which is to document agreement on the scope, schedule and estimated cost of a project so that the project can be included in a future State Transportation Improvement Program (STIP). Chapter 878 of the Statutes of 1987 requires that any capacity-increasing project on the State highway system, prior to programming

in the STIP, have a completed PSR. The PSR must include a detailed description of the project scope and estimated costs. The intent of this legislation was to improve the accuracy of the schedule and costs shown in the STIP and thus improve the overall accuracy of the estimates of STIP delivery and costs.

PTA—Public Transportation Account

These revenues are derived from the sales tax on gasoline and diesel fuel. Under the provisions of SB-45, 50 percent of PTA revenues are distributed to the State Assistance Program (STA) with the other 50 percent used for funding planning activities of Caltrans, the CTC, intercity rail purposes and for the operations of the new California High-Speed Rail Authority. Part of the revenues are for uses formerly covered by the Transit Capital Improvement (TCI) Program (TCI has been eliminated as a separate program and folded into the PTA), which include transit vehicle purchases.

PTAP—Paratransit Technical Assistance Program

A regional effort to focus training in the areas of paratransit operations.

PTG—Pedestrian Technical Guidelines

Redevelopment Tax Increment This source of local revenues comes from property taxes within a defined redevelopment area. The county assessor freezes the assessed value of all real property within the redevelopment

area as of a base year. As property values appreciate over the life of the redevelopment area (usually about 20 years), the same proportion of the increment of tax revenues above the base year value is paid into the redevelopment agency special fund and used for designated projects. In theory, these specific projects help the area's property to increase in value beyond the appreciation rate of what would have occurred without these projects. Proposition 13 restricts the appreciation of property values to 2 percent per year (or less if the market appreciates at a lower rate). Other agencies that normally receive property taxes may negotiate "pass-through" agreements with the redevelopment agency to avoid losing their share of the increment to the agency. Tax increments are bondable revenue streams that have leveraged large amounts of local bonds for all types of public improvements.

Right-of-Way A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads and utility lines.

RIP—Regional Improvement Program

RM2—Regional Measure 2

Roadway Pricing "Road pricing" is an umbrella phrase that covers all charges imposed on those who use roadways. The term includes such traditional revenue sources as fuel taxes and license fees as well as

charges that vary with time of day, the specific road used and vehicle size and weight.

RTC—Regional Transportation Card

RTI—Real-Time Transit Information

RTIP—Regional Transportation

Improvement Program A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency (for the Bay Area—MTC), as a request for State funding. The individual projects are first proposed by local jurisdictions, then submitted by the CMA to the regional agency and then submitted by the regional agency for submission to the CTC. The RTIP has a four-year planning horizon and is updated every two years.

RTP—Regional Transportation Plan

A multimodal blueprint to guide the region's transportation development for a 20-year period. Updated every two to three years, it is based on projections of growth and travel demand coupled with financial assumptions. Required by State and Federal law.

RTPA—Regional Transportation Planning Agency

Santa Clara Countywide Bicycle Plan

Plan developed by the VTA to guide the development of bicycle facilities in order to promote safe and convenient bicycling throughout the county. It also provides coordi-

nation of facilities that cross jurisdictional boundaries.

SAFETEA-LU—Safe, Accountable, Flexible, Efficient Transportation Equity

Act: A Legacy for Users SAFETEA-LU

represents the largest surface transportation investment in the nation's history.

SAFETEA-LU builds on the Intermodal

Surface Transportation Efficiency Act of 1991

(ISTEA) and the Transportation Equity Act

for the 21st Century (TEA-21). SAFETEA-LU

addresses the many challenges facing our

transportation system today—challenges

such as improving safety, reducing traffic

congestion, improving efficiency in freight

movement, increasing intermodal connectiv-

ity and protecting the environment—as well as

laying the groundwork for addressing future

challenges.

SB-375—Senate Bill 375 A very important

yet fairly modest measure, because it requires

the 18 metropolitan planning organizations

across the State of California to show that

their future planning scenarios will result

in a reduction in carbon. The requirement

will engage regions in a process similar to a

process pioneered in Sacramento, known as

“the blueprint,” which essentially says that

there needs to be a plan as a region, not just

as individual cities and counties. The bill

provides incentives for regions to consider the

impact of land use on climate change. Under

the provisions of the bill, regions must engage in a process to develop scenarios that show a contribution to climate change and if they do so but are unable to actually achieve the goal, the State is going to require the region to submit reports demonstrating the strategies they may need to meet the goals.

SB-45 – Senate Bill 45 Governor Wilson signed SB-45 into law at the end of the 1997 legislative session. This legislation consolidated several State transportation funding programs into three funding programs and devolved State transportation programming responsibility to the county and MPO level. Funds consolidated by SB-45 include the Flexible Congestion Relief (FCR), Transit Capital Improvement (TCI), Transportation Systems Management (TSM) and Regional Traffic Signalization and Operations Program (RTSOP) funds²⁵.

SCS – Sustainable Communities Strategies

SDG – Service Design Guidelines

Section 5307 Funds provided through FTA through a complex formula. These funds are not available for operating assistance in Urbanized Areas (UZAs) with a population over 200,000; however, they can be used for preventive maintenance purposes. Additionally, in UZAs with populations greater than 200,000, one percent of the UZA formula funds are to be spent on transit

enhancements, which include rehabilitation, connections to parks, signage, pedestrian and bicycle access and enhanced access for those persons with disabilities, and one percent must be spent on security.

Section 5309 This includes both discretionary and formula transit capital funds provided through the FTA. New rail starts and extensions are funded through this program, which operates through earmarking at the congressional level. Other categories are fixed guideway modernization (formula-based) and bus and bus facilities (discretionary).

Section 5311 FTA funds available for rural/intercity bus projects including purchases of buses and related equipment and bus operations in rural areas.

SHA – State Highway Account

SHOPP – State Highway Operations and Protection Plan

A program created by State legislation that includes State highway safety and rehabilitation projects, seismic retrofit projects, landscaping, some operational improvements and bridge replacement. SHOPP is a four-year program of projects adopted separately from the STIP cycle. Both new (Prop. 111) and old State gas tax revenues and Federal funds are the basis for funding this program. The legislature and governor have made seismic retrofit the State's highest priority and in practice have used other STIP monies for these projects.

SJC—Mineta San Jose International Airport (sometimes referred to as SJIA). The airport serving the Santa Clara Valley area. It is a self-supporting enterprise, owned and operated by the City of San Jose.

SLPP—State Local Partnership Program

A State matching program for entities that enact local transportation taxes and uniform developer fees.

Smart Corridor A Smart Corridor is one where various public agencies' traffic management activities are coordinated to more effectively manage traffic in that corridor. These are typically achieved using advanced technologies or ITS, while partnerships between jurisdictions are necessary to develop procedures and measures for coordination.

SOV—Single Occupant Vehicles

SR—State Route

SRTP—Short Range Transit Plan This documents the VTA's on-going transit development and planning process for a ten-year planning horizon. It is used to support projects in the RTP and VTP.

STA—State Transit Assistance Provides funding for mass transit, transit coordination projection and transportation planning. Half of the revenues budgeted for the PTA are appropriated to STA. STA apportionments to regional transportation planning agencies (MTC in the Bay Area region) are determined

by two formulas: 1) 50 percent of funds are distributed according to population and 2) 50 percent are distributed on a basis proportional to operator revenues in the region for the prior year. The Bay Area region usually receives about 38 percent of State STA funds.

Station Areas Locations immediately proximate to rapid transit stations that already serve or will serve as central elements in a transit-oriented development (TOD).

STIP—State Transportation

Improvement Program The STIP is a multi-year planning and expenditure plan adopted by the CTC for the State Transportation System and is updated in even-numbered years. The STIP is composed of the approved RTIPs and the Caltrans ITIP. The 2000 STIP is a four-year program. New State legislation passed in 2000 will extend the STIP timeframe to a five-year program.

STP—Surface Transportation Program

A flexible funding program established by ISTEA. Many mass transit and highway projects are eligible for funding under this program. Ten percent of the projects in this program must be transportation enhancement projects and ten percent must be safety projects.

SVBC—Silicon Valley Bike Coalition

SVITS—Silicon Valley ITS Program

Expanded partnership formed to implement

the Silicon Valley Smart Corridor project to work toward implementing three additional ITS projects in VTP 2030 Santa Clara and southern Alameda County. The original Smart Corridor was focused on the I-880 and SR 17 corridor.

SVRT—Silicon Valley Rapid Transit The BART to Santa Clara County project.

SWOT Analysis A strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities and Threats involved in a project or in a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective.

TAC—Technical Advisory Committee An advisory committee to the VTA that is responsible for overseeing the technical work of the VTA staff and developing recommendations to the Board of Directors on projects and programs.

TCM—Transportation Control Measure A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances and the use of cleaner-burning fuels in motor vehicles. MTC has adopted specific TCMs, in compliance with the Federal and State Clean Air Acts.

TCRP—California Governor’s 2000 Traffic Congestion Relief Program A program established in 2000 to provide \$2 billion in funding for traffic relief and local street and road maintenance projects throughout California.

TCRP (alternate definition)—Transportation Cooperative Research Program

TDA—Transportation Development Account Created in 1972, this account receives 1/2 cent of the 6-cent Statewide sales tax. The 1/2 cent is apportioned to the county of origin according to the amount of sales tax generated by that county and allocated by MTC to the county’s eligible applicants. In Santa Clara County, the transit agency is the only eligible applicant for Article 4 allocations. In addition to Article 4, allocations from TDA are also made under Article 4.5 for community and paratransit services. This provision allows MTC to allocate up to five percent of the total TDA allocation for Santa Clara County for these types of services, which the Santa Clara Valley Transportation Authority claims for ADA paratransit services. Additionally, Article 3 funds (four percent of the total) are allocated annually for bicycle/pedestrian projects, which are nominated by the VTA.

TDM—Transportation Demand Management The purpose of TDM is to

increase the efficiency of existing roadway systems by reducing the demand for vehicular travel. TDM strategies and initiatives are multimodal and aimed at reducing peak-hour travel demands. Example TDM strategies include carpooling or vanpooling, flexible work hours, telecommuting, parking controls and use of alternative transportation modes such as transit.

TE—Transportation Enhancements

Program VTA established the TE with the Santa Clara TEA funds. Approximately 37 percent of the TEA funds from TEA-21 will be dedicated to Countywide Bicycle Expenditure Program projects and the remainder will be available for projects in all TEA funding categories.

TEA—Transportation Enhancement

Activities ISTEA provided for a ten percent set-aside of each State's STP allocation to be used for TEA projects above and beyond normal capital improvements. Enhancement funds must be used for elements of a project that have a direct relationship to the inter-modal transportation system and fit one or more of 12 activities categories described in TEA-21.

TEA-21—Transportation Equity Act for the 21st Century TEA-21 is the successor legislation to ISTEA. Congress enacted TEA-21 in mid-1997. The legislation covers the six-

year period 1997/98 to 2002/03 and extends and expands many of the funding programs developed under ISTEA.

TEAQ—Transportation Energy and Air Quality

A new program in VTP 2035 through private and public partnerships that aims to conserve natural resources, reduce greenhouse gases, prevent pollution and use renewable energy and materials.

Telecommuting A system of working at home or at an off-site workstation with computer facilities that link to the worksite.

TFCA—Transportation Fund for Clean Air

TFCA funds are generated by a \$4.00 surcharge on vehicle registrations. The funds generated by the fee are used to implement projects and programs to reduce air pollution from motor vehicles. Health and Safety Code Section 44241 limits expenditure of these funds to specified eligible transportation control measures (TCMs) that are included in BAAQMD's 1991 Clean Air Plan, developed and adopted pursuant to the requirements of the California Clean Air Act of 1988. BAAQMD manages 60 percent of the funds via a regional discretionary program. The remaining 40 percent are returned to each county based on annual vehicle registrations.

TIP—Transportation Improvement

Program A Federally required document produced by a regional transportation plan-

ning agency (MTC in the Bay Area) that states investment priorities for transit and transit-related improvements, mass transit guideways, general aviation and highways. The TIP is the MTC's principal means of implementing long-term planning objectives through specific projects.

TLC—Transportation Livable

Communities Program MTC created a new regional discretionary funding program called TLC with some of the TEA funds. Sponsors of projects must apply directly to MTC for these funds. Funds are to be used for cities to help them develop transportation-related projects aimed at improving quality of life.

TMC—Traffic Management Center TMCs help in the real-time management of traffic, including monitoring and controlling roadway access, responding to and managing incidents, rerouting traffic, and communicating and coordinating with the public and the media. They perform these functions with advanced ITS technology such as sophisticated sensors; data fusion, information processing and communications equipment; and technology to automate routine decision-making and other activities.

TOC—Traffic Operations Center

TOD—Transit-Oriented Development

TOS—Traffic Operations System A system made up of various ITS components that

improve and monitor traffic operations for an area. Components typically include surveillance (loop detectors, CCTV, etc.), monitoring equipment, highway advisory radio, changeable message signs (CMS) and ramp metering.

TP & O—Transit Planning and

Operations Committee A standing committee of the VTA that reviews policy recommendations pertaining to transit planning, its projects and operations.

Transient Occupancy Taxes These taxes are also known as hotel taxes and are charged for any overnight stay at a commercial lodging. They typically run between 8 and 15 percent but may be higher. Some proportion of the transient occupancy tax revenues is sometimes dedicated for convention and visitor promotions or special projects. The balance is usually paid into the county's General Fund. The revenue stream from these taxes is bondable and has often been used to subsidize the construction of convention centers and downtown improvements.

Transit Passenger service provided to the public along established routes. Paratransit is a variety of smaller, often flexibly scheduled and routed transit services serving the needs of persons that standard transit would serve with difficulty or not at all.

Transit-Oriented Development Transit-oriented development (TOD) is characterized

by a compact layout that encourages use of public transit service and walking or bicycling instead of automobile use for many trip purposes. Typically, it places higher-density development within an easy walking distance of 1/4 to 1/2 mile of a public transit station or stop and is accessible by all other modes. It is compact, typically mixed-use, pedestrian-friendly and has a transit stop or station as an activity center.

TransLink The Bay Area’s regional electronic fare payment collection system.

TravInfo The Bay Area’s advanced traveler information system.

TSD—Transit Special District

TSOM—Transportation Systems

Operations and Management The use of low-cost capital and operational improvements to increase the efficiency of road transportation and transit services. Sometimes the term is also applied to techniques used to reduce the demand for travel in an area. Other TSOM measures are engineering-oriented, such as timing traffic signals to smooth the flow of traffic and ramp metering, which regulates the entrance of vehicles onto a freeway, thus increasing the efficiency of the freeway.

TSP—Transit Sustainability Policy

A policy framework for evaluating new and existing transit services. The TSP shifts the

historic focus of transit investment for Santa Clara County from providing transit service to all parts of the county regardless of demand to a market-based network intended to attract the greatest number of riders.

Universe of Projects The compilation of projects in the VTP 2030 which were proposed by interested agencies and the general public. The projects proposed by individual cities and the county required city council or board approval prior to submittal to the VTA for inclusion in the plan.

Urban Design The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass and design of various urban components and combines elements of urban planning, architecture and landscape architecture.

UA (or UZA)—Urbanized Area An area defined by the United States Census Bureau that includes one or more incorporated cities, villages and towns (or “central place”) and the adjacent densely settled surrounding territories (or “urban fringe”) that together have a minimum of 50,000 persons. The urban fringe generally consists of contiguous territory having a density of at least 1,000 persons per square mile. UZAs do not conform to congressional districts or any other political boundaries, but are set by the Census Bureau

on demographics, numbers and definitions. Non-urbanized areas are demographically rural in population.

USC—United States Code

VA/E—Value Analysis/Engineering

Vanpooling Commuting in a 7- to 15-passenger van, with driving undertaken by commuters. Some portion of the van’s ownership and operating cost is usually paid by the riders on a monthly basis. The van may be privately owned, employer-sponsored with the company owning and maintaining the vehicle, or it may be provided through a private company that leases vehicles.

VHT/P-T—Vehicle Hours of Travel

per Person Trip A measure of the average amount of time travelers spend getting to their destination.

Vision A brief description of what we want the region to be for the next generation.

VMT—Vehicle Miles of Travel A standard area-wide measure of travel activity, calculated by multiplying average trip length by the total number of trips.

VTA—Santa Clara Valley

Transportation Authority The Santa Clara Valley Transportation Authority (VTA) is

an independent special district responsible for bus and light rail operations, congestion management, specific highway improvement projects and countywide transportation planning. As such, VTA is both a transit provider and a multimodal transportation planning organization involved with transit, highways and roadways, bikeways, pedestrian facilities and land use.

VTP—Santa Clara Valley

Transportation Plan A 25-year plan developed by VTA which provides policies and programs for transportation in the Santa Clara Valley including roadways, transit, ITS, bicycle, pedestrian facilities and land use.

The VTP is updated every three to four years to coincide with the update of the Regional Transportation Plan (RTP).

WAN—Wide Area Network

ZEB—Zero Emission Bus The VTA’s plan to purchase and deploy a zero emission bus fleet. ZEB is defined as an urban bus certified to zero exhaust emission of any pollutant under any and all conditions and operations. This includes hydrogen-powered fuel cell buses, electric trolley buses and battery electric buses.