

# SANTA CLARA COUNTYWIDE BICYCLE PLAN

**August 2008**

To assist VTA and Member Agencies in the planning, development and programming of bicycle improvements in Santa Clara County.

## *Vision Statement*

*To establish, protect and enhance bicycling as a viable transportation mode and to assure that bicycling is a practical and safe mode of travel, by itself and in combination with other modes.*

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**Adopted by the VTA Board of Directors**  
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## ***About VTA***

*Santa Clara Valley Transportation Authority (VTA) is an independent special district responsible for bus, light rail and paratransit operations; congestion management; specific highway improvement projects; and countywide transportation planning. As such, VTA is both an accessible transit provider and multi-modal transportation planning organization involved with transit, highways and roadways, bikeways and pedestrian facilities.*



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### **Acknowledgements**

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# EXECUTIVE SUMMARY

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## INTRODUCTION

Bicycle planning began in Santa Clara County in 1974 with the *Arterials Bikeway Plan*. Concurrently the County Parks and Recreation Department developed a Trails Master Plan in 1978. In 1997, the *Countywide Bicycle System T2010 Update Working Paper* identified ten bicycle corridors; these were the basis for the sixteen Cross County Bicycle Corridors developed in the 2000 Countywide Bicycle Plan (CBP). These in turn were expanded into the 48 cross county bicycle corridors in this (2008) CBP: 24 roadways, 17 trails and all 7 expressways.

The goals and policies were updated for this 2008 plan; they fall into five main areas shown below. The specific action steps that implement the policies are presented in Appendix A.

- Goal A.       Transportation Planning and Programming
- Goal B.       Land Use Planning
- Goal C.       Local Ordinances and Guidelines
- Goal D.       Design and Construction - Infrastructure
- Goal E.       Complementary Policies That Encourage Bicycling

## CURRENT CONDITIONS AND SETTING

The 2000 U.S. census revealed that 10,000 residents or about 1.2% of the County's employed residents traveled to work by bicycle. This is a drop from 1.4% in the 1990 Census and 1.9% in the 1980 Census. Palo Alto remains the city with the highest bike mode split of 5 %. It is hoped that with the implementation of this plan, the countywide bicycle commute mode share would increase to 10 %.

The number of bicyclists using the bike racks on busses has remained fairly constant at about 2% of all boardings since the year 2000. Light rail historically achieves a higher bike ridership than the buses, reaching a peak of 5% in 2005. VTA conducts numerous other surveys and counts of the existing transit and roadway networks related to bicycling. The following efforts related to bike counts and existing conditions are recommended:

- Bike Counts:
  - a. Continue with annual CMP Monitoring Program bike counts at ten intersections, AM, midday, and PM peak periods.
  - b. Count bikes and pedestrians at key bridges and cordons once a year; coordinate with neighboring cities if possible.

- c. Count bikes brought on board buses and LRV once every two years; use data to assist in relieving overcrowding, see page 6-8.
- d. Prior to a new ABC opening, assist with “before” bicycle and pedestrian counts, on the alternate routes.
- Estimate countywide mode split once every two years for journey-to-work and other trip purposes.
- Estimate bicycle and pedestrian access-to-transit mode split.
- Identify fund sources for these tasks.
- Evaluate bicycle collision data annually.

## CAPITAL PROJECTS

The CBP focuses on identifying bikeway projects that have regional or countywide significance. This is defined as being:

- on the Cross County Bicycle Corridor (CCBC) network;
- a bike routes to major transit stations and centers (SR2T);
- a nonmotorized crossing of a major barrier, i.e. freeway, railroad or waterway, referred to as an Across Barrier Connection (ABC).

The benefits of identifying specific capital projects within the Countywide Bicycle Plan include:

- Helps define the projects for inclusion in the Bicycle Expenditure Plan (BEP) and Valley Transportation Plan (VTP). More information on this topic is presented in Chapter 4;
- Projects included in the CBP are in a better position for future state or outside funding sources;
- Aids VTA in more accurately identifying the current countywide funding shortfall for bicycle and pedestrian mobility projects;
- Aids Member Agencies in transportation and land use planning, both internally and across city limits and in conditioning developers to provide pedestrian and bicycle infrastructure.

### **Cross County Bicycle Corridor s (CCBC)**

The purpose of the CCBC network is to provide continuous connections between Santa Clara county jurisdictions and to adjacent counties, and to serve the major regional attractors in the County. While neither roads nor trails nor expressways on their own appeal to all types of bicyclists all the time, collectively they do. Therefore this plan identifies three types of CCBC's:

- **CCBC Roadways:** Twenty-four roadway corridors totaling 580 miles comprise the CCBC roadway network.
- **CCBC Trails:** The County Parks and Recreation Department regional and sub regional trails comprise the CCBC trail network along with four other trails of regional significance.
- **CCBC Expressways:** The 62-mile expressway system is incorporated into this plan. Expressways are attractive to some bicyclists for the same reason that expressways provide better service to motorists: they are direct and continuous, have very few driveways, and intersections are spaced widely apart which collectively significantly reduces over all travel time. In addition, they almost all have 6 to 8-foot shoulders, which are very suitable for experienced cyclists.

### **Barrier Inventory**

Eight freeways and numerous rivers, creeks and railroad tracks crisscross the county creating impermeable barriers for pedestrians and bicyclists. Even when roadways cross these barriers, there are often inadequate or no accommodations for bicycles or pedestrians. Providing connections across these barriers can significantly reduce walking and biking distances. The following issues were identified in the countywide inventory conducted for this plan:

- Roadway crossings (collectors or arterials) without bike lanes or shoulders (197);
- Large gaps between existing crossings of a barriers (109); and
- Freeway interchanges with high speed ramp connections to local streets (80).

### **Safe Routes to Transit**

Twenty projects were identified by local agencies that would improve bicycle access to a major transit station.

## **COST AND IMPLEMENTATION**

### **Construction Cost Estimates**

Planning level costs of the three components of the Bicycle Capital Projects chapter of the CBP were estimated. These costs are shown below:

- CCBC's
  - 24 roadway routes: \$350 million
  - 17 trails (70 miles): \$105 million

- Expressways: \$9 million plus County Expressway Planning Study Projects (Expressway Program)
- Barrier Crossings
  - ABC's 112 locations: \$560 million
  - Roadway Crossings \$780 million
  - Freeway interchanges cost not estimated;  
(would be funded through the Highway Program)
- Safe Routes to Transit-20 projects: \$55 million

### **Implementation Strategies**

The Bicycle Expenditure Program (BEP) is the funding mechanism for the Countywide Bicycle Plan and other regionally significant bicycle projects in Santa Clara County . Given that the BEP is financially constrained, only some of these projects will be incorporated into the revised BEP, scheduled for Spring 2009. The purpose of the BEP is to have an unprioritized shortlist of eligible bicycle projects to match the projected funding for the Bicycle Element to be identified in VTP 2035. Since the BEP is financially constrained, potential projects will be evaluated and selected using the BEP Evaluation Criteria, followed by Board approval. Outside funding is essential to implement those projects not included in the BEP and also to assist in funding those that are. Examples and options of other implementation strategies are presented in Chapter 4.

## **PROGRAMS AND NONCAPITAL PROJECTS**

The following are recommendations for support programs, facilities and non capital projects to improve and encourage bicycle transportation.

### **Recommended Bicycle Safety & Education and Promotion Programs for VTA**

VTA would like to expand its bicycle program activities. Future activities could include:

- Apply for Bicycle Friendly Community status;
- Work with TSCN and others to expand “Juvenile Diversion” traffic safety classes for youths stopped for bicycling violations;
- Assist as appropriate in developing a Traffic School for motorists with bicycle-related infractions;
- Countywide Route Signing of the Cross County Bicycle Corridors ;
- Sponsor bike tours of VTA projects;

- VTA intends to partner with SVBC to deliver more bicycle safety education classes;
- Coordinate with member agencies on a consistent policy across the county regarding the a consistent bail schedule for bike-related infractions consistent with California law would be appropriate and fair

### **Recommended Bike Parking Projects**

- Bike racks at all VTA Light Rail stations and major bus stops.
- eLockers at all Park & Ride lots and Transit Centers.
- Bike stations at all transit stations with demand over 70 bikes per day.
- Update bike parking inventory from the 2000 Bike Plan.

### **Recommended Intermodal Bike Projects**

- Bikes on VTA Buses: Increase capacity or otherwise relieve limited capacity of bike racks on buses; consider:
  - Bike racks with 3 bikes per rack,
  - Special bike bus/shuttle with capacity for about 20 passengers with bikes, and /or
  - Bike sharing at locations with high demand so that riders can use the bike share and do not have to bring their bikes with them, see below.
- Bikes On Board Caltrain: Work with Caltrain to implement their bike master Plan to relieve the chronic overcrowding of bikes on board Caltrain trains.
- Bike Sharing: Work with member agencies and employers to develop a bike sharing program that would be available for VTA passengers to ride to and from VTA stations and stops.

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