

# **Bike+Rail in the Bay Area**

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**The Last Green Mile**  
**Sustainable ways to complete the rail trip**

Rail~Volution, San Francisco, California  
Wednesday, October 29, 2008

## Bicycle traffic in the Bay Area is booming



SFMTA intersection counts show **43% increase** in SF bicycle traffic over the past two years (Aug. 2006 - Aug. 2008)

*SF State of Cycling Report (SFMTA, 2008):*

- about **6%** of trips in San Francisco take place by bike
- about **128,000** bike trips take place every day in San Francisco
- about **16%** of San Franciscans ride a bike at least twice a week

## Bicycle integration into Bay Area rail is well-established



**BART** has allowed bikes onboard without any special permit since 1998

- 2% of BART boardings bring a bike (peak hour blackout limits capacity)
- 1% of BART trips arrive by bike and store it at the station

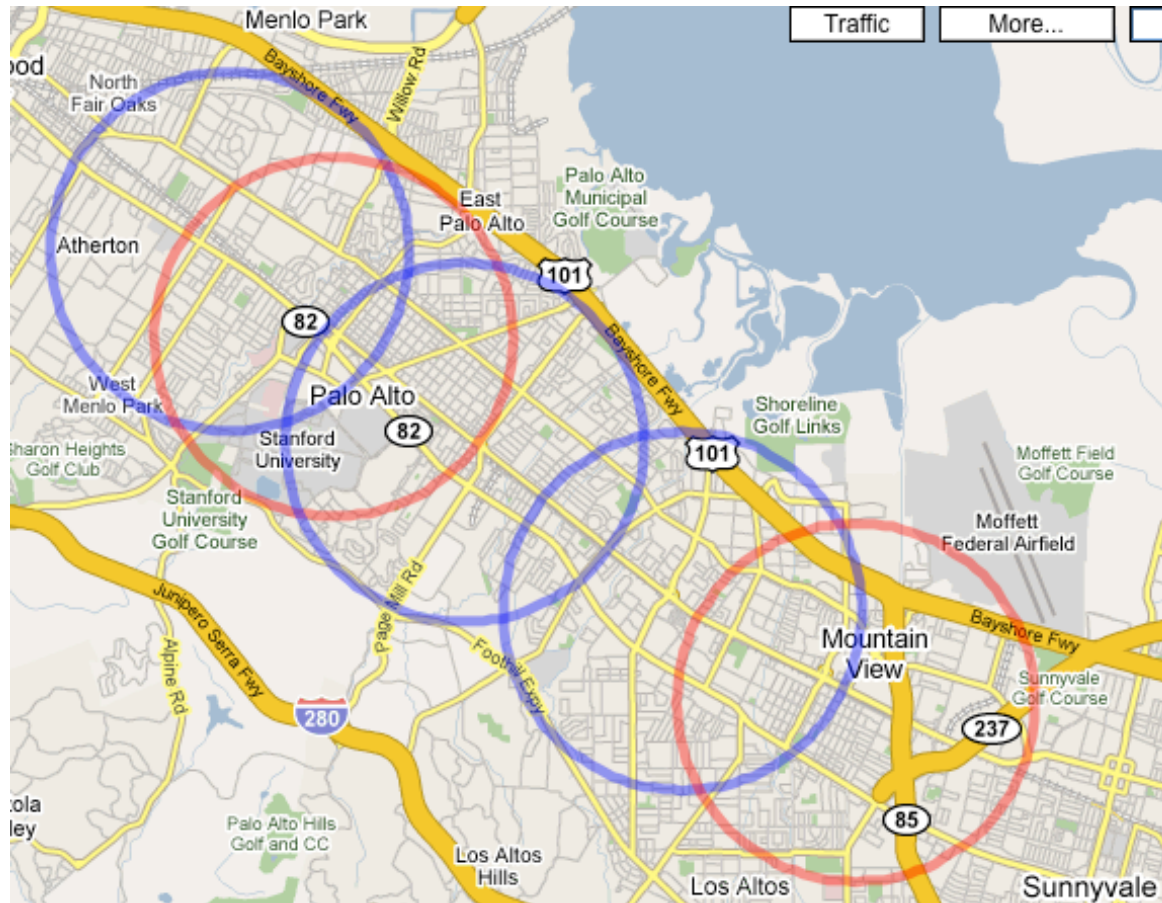
**Caltrain** has allowed bikes onboard without any special permit since 1992

- each train has space for at least 16 bikes (some have as many as 64 spots)
- 7% of Caltrain boardings bring a bike (hit capacity ceiling in 2006)
- 1% of Caltrain trips arrive by bike and store it at the station

**Amtrak Capital Corridor**

- 9% of Amtrak trips involve a bike (don't know onboard/store at station split)

## Bike+rail in the Bay Area is practical and attractive



Circles represent a radius of about 1.7 miles from Caltrain stations, the distance that an average cyclist can travel in about ten minutes of bicycling (of course, strong cyclists can and do go much further).



## Bike+rail is strikingly efficient and competitive

Travel mode to station	Travel mode to destination	Most favorable	Most probable	Least favorable
walk	walk	\$4.80	\$5.03	\$5.03
walk	bus	\$11.03	\$10.45	\$6.79
walk	shuttle	\$11.40	\$11.03	\$7.94
<b>bike</b>	<b>bike</b>	<b>\$12.80</b>	<b>\$13.40</b>	<b>\$13.40</b>
bus	bus	\$17.26	\$15.88	\$8.55
bus	shuttle	\$17.63	\$16.45	\$9.70
shuttle	shuttle	\$18.00	\$17.03	\$10.85
drive	walk	\$62.05	\$25.33	\$9.19
drive	bus	\$68.28	\$30.76	\$10.96
drive	shuttle	\$68.65	\$31.33	\$12.11

Estimated subsidies for various methods of getting to and from Caltrain stations.

Bike bring-along trips are probably subsidized less than all other trip types besides walking at least one leg of the trip (so long as driving is not the transportation mode at the other end).

Bicycle “last mile” trips are cheap, green, and socially coherent, but given the “last regard”



Pleasant Hill BART station



## Bike+rail trips are mis-valued and de-prioritized



Bike-bearing passenger is regarded as second-class customer, despite his placing a much lower burden on the overall system and serving policy goals more perfectly. “Bumped” enough times, this bike+train customer is likely to return to driving alone the whole way.

Bike+rail service is provided distractedly, without focus or priority



1: Train 134: Sept 22 9:07 AM



2: Train 134: Sept 22 9:07 AM

Caltrain service imbalance – trains leave the station with empty seats while paying passengers (with bicycles) are left standing on the platform



## Station bicycle parking



Amsterdam CS



## Station bicycle parking



metro stop in Chiba, Japan (Tokyo Disneyland)

## Station bicycle parking



Warm Planet Bikes at San Francisco Caltrain terminal, Townsend St at Fourth St  
130 spaces, attended – open less than a year, already over-capacity



## Station bicycle parking



Bike lockers, Burlingame Caltrain station - 725 lockers operated by Caltrain, more from VTA, City of San Mateo, City of Palo Alto



Bike+rail service and planning is provided distractedly, without focus or priority

### **Caltrain**

- < 1 FTE working on bicycle service planning
- bicycle bring-along customers are turned away because of capacity limits
- service is provided inconsistently and unpredictably (7:30 am train has 32 bike spaces one day, 16 bike spaces the next day)

### **BART**

- < 1 FTE working on bicycle service planning
- AM & PM peak “blackout” period excludes bicycle bring-along customers at most needed time of day

### **MTC**

- < 1 FTE working on bicycle planning and programming

## Recommendations

Prioritize regional perspective for "total trip" cost and benefit – bike+rail probably the most efficient trip type, serving the most policy goals, with a significant potential market share in the region (very competitive with automobility)

Prioritize bicycle bring-along for rail systems as a central, cornerstone regional transit service, rather than a “special interest extra”

Support other facilitation of bicycle “last mile” trips using rail – station area access, bike storage, bike sharing, promotion, etc.

Commit adequate bicycle planning and program resources for agencies (operators and MPO)

CA High Speed Rail: Plan for bikes onboard, as well as station area access, bike storage, bike sharing, promotion, etc.