

# Active Transportation and SB 375



Sean Co  
Transportation planner  
Metropolitan Transportation Commission

# BayArea Plan

Building on a Legacy of Leadership

**Links land use and housing to transportation**

**Region must show how it can house all the population in the next 30 years**

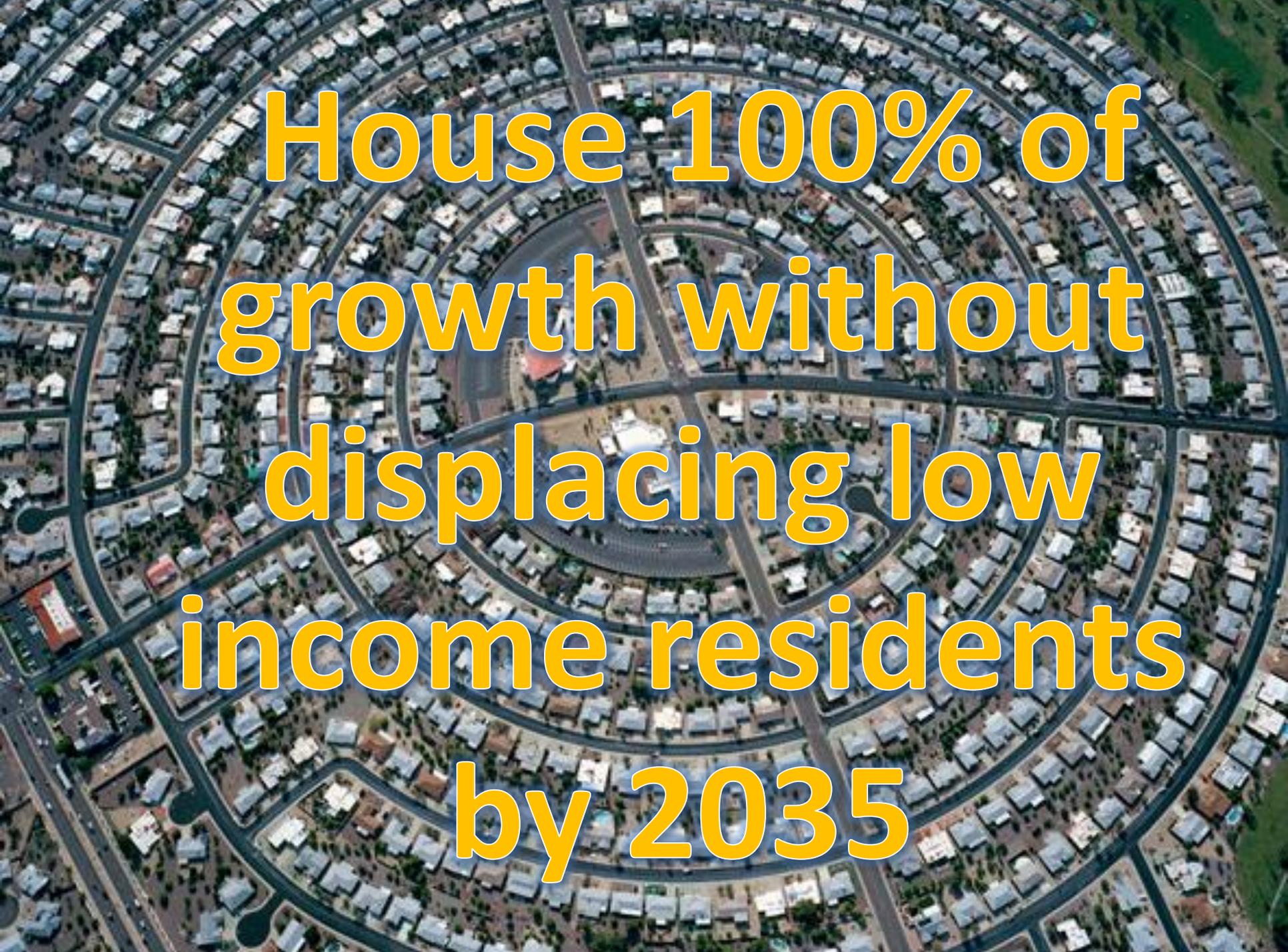
**Preservation of open space and agricultural land**

**Show how development pattern and transportation network can reduce greenhouse gases**

Plan Bay Area to achieve a

**15%**

**CO<sub>2</sub> reduction per capita by  
2035**



**House 100% of  
growth without  
displacing low  
income residents  
by 2035**

# BENEFITS & COSTS

## PERSONAL CHOICE

Travel  
Time



Vehicle  
Operating Costs



Health  
Costs



## EXTERNALITIES



CO<sub>2</sub>/PM  
ROG/NOX



Fatal and Injury  
Collisions



Noise

**700**  
**Projects**  
**Analyzed**

# Active Transportation Target Development

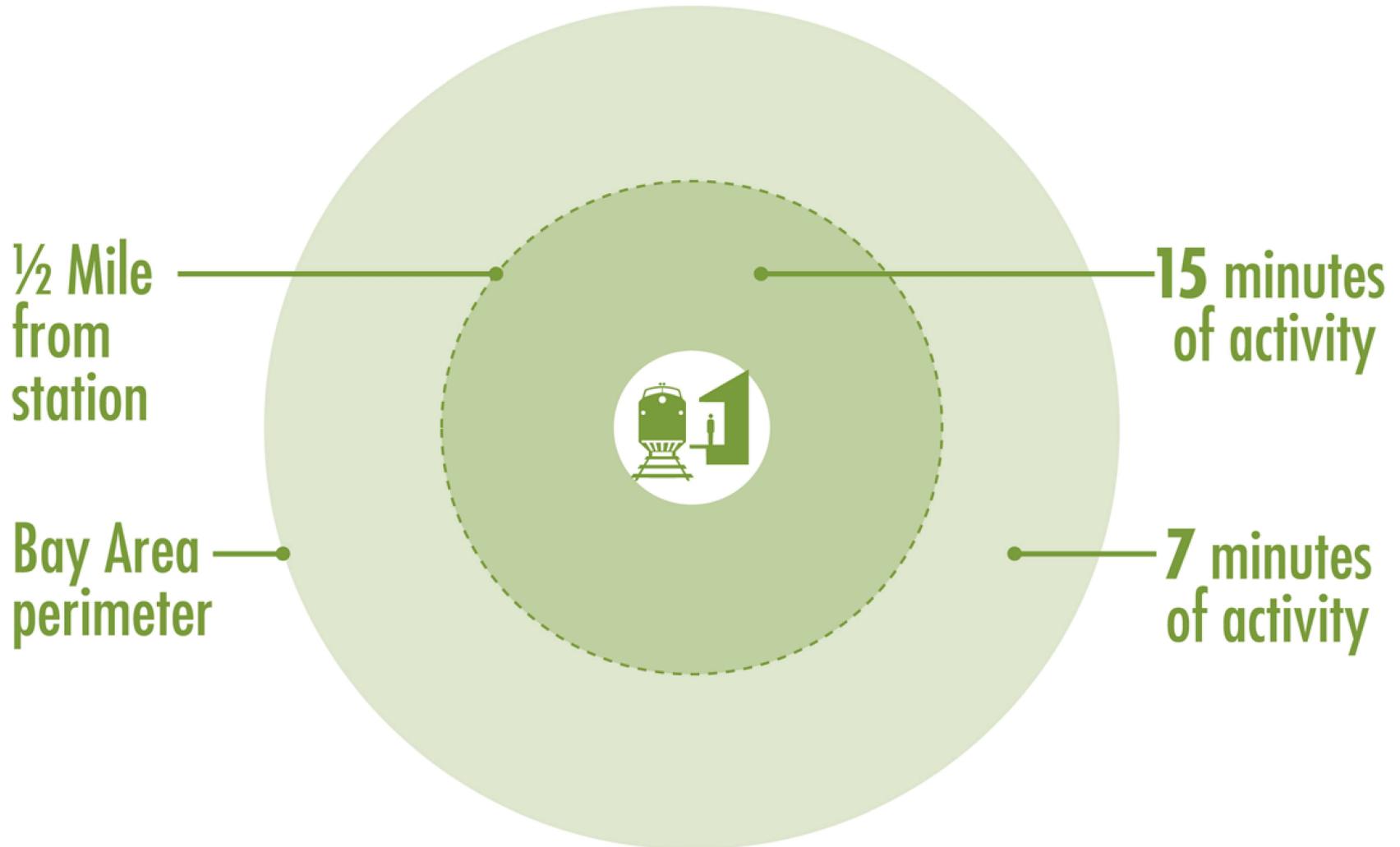
Where does walking and cycling fit within the 30 min/day of moderate to vigorous activity?

No metrics for active transportation

No performance standards from the CDC Community Guide – insufficient evidence that transportation policies increase physical activity

What is the expected increase in active transportation in 30 years?

# How much physical activity should transportation take credit for?



# Methodology of Evaluating Active Transportation

**% of Active  
Individuals**

$$\frac{(\text{Change in minutes/person/day}) * (\text{inactive population } 62\%)}{(\text{Minutes to become active } -30)}$$

**Active  
individuals from  
the project**

$$\frac{\text{Percent of active or inactive individuals}}{\text{Projected Bay Area Population}} *$$

**62%**

**Bay Area Inactive**

California Health Interview Survey

< 30 minutes  
of activity

**\$717**

**Savings From Lost Productivity**

Per person

**\$326**

**Health Care Cost Savings** Per person

(Disease types attributable to physical inactivity)

# Physical Activity Benefits

Coronary heart disease

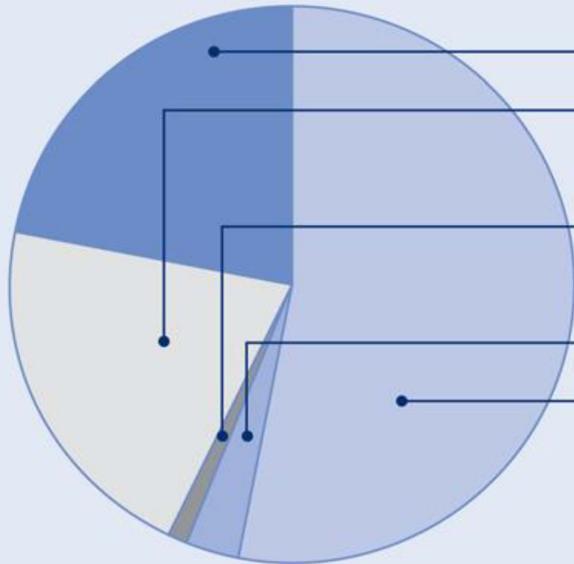
Breast cancer

Type 2 diabetes

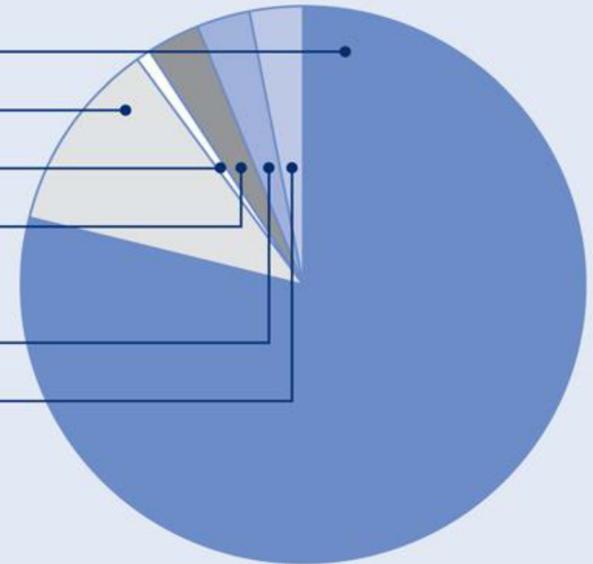
Colon cancer

Depression

Dementia



22%	Travel Time	79%
21%	Auto Travel Costs	11%
0%	PM	1%
1%	CO2	3%
0%	Other Pollutants	0%
3%	Collisions	3%
53%	Active Transportation	3%
0%	Noise	0%



**Regional Bicycle Network**

**Summary of Total Benefits**

# What happens when everyone meets the 15 minutes per person per day target?

**\$1.1 Billion**

Lost productivity and health care cost savings

**10.6%** Become active



**\$3.2 Billion**

Saved based on the Value of Statistical Life (VSL)

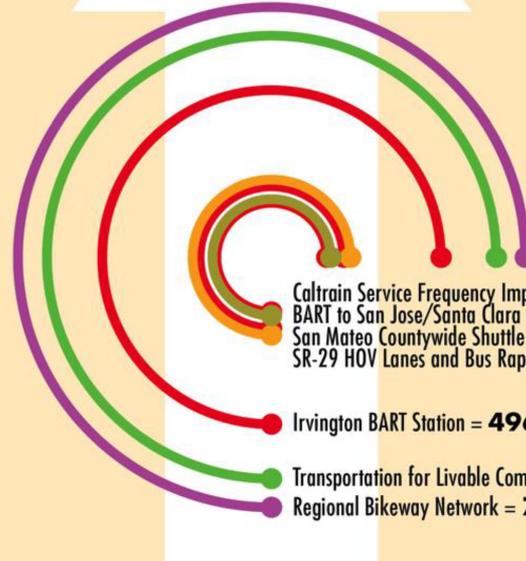
**650 LIVES SAVED**



# Most Physically Active Persons per Dollar

Project Name = **Additional Active Individuals/Million \$**

- Transit Efficiency
- Pricing
- Road Efficiency
- TLC
- Bike/Ped
- Transit Expansion
- Express Lanes
- Arterial Expansion



Caltrain Service Frequency Improvements = **170**  
BART to San Jose/Santa Clara = **173**  
San Mateo Countywide Shuttle Service Frequency Improvements = **211**  
SR-29 HOV Lanes and Bus Rapid Transit = **231**

Irvington BART Station = **496**

Transportation for Livable Communities = **658**

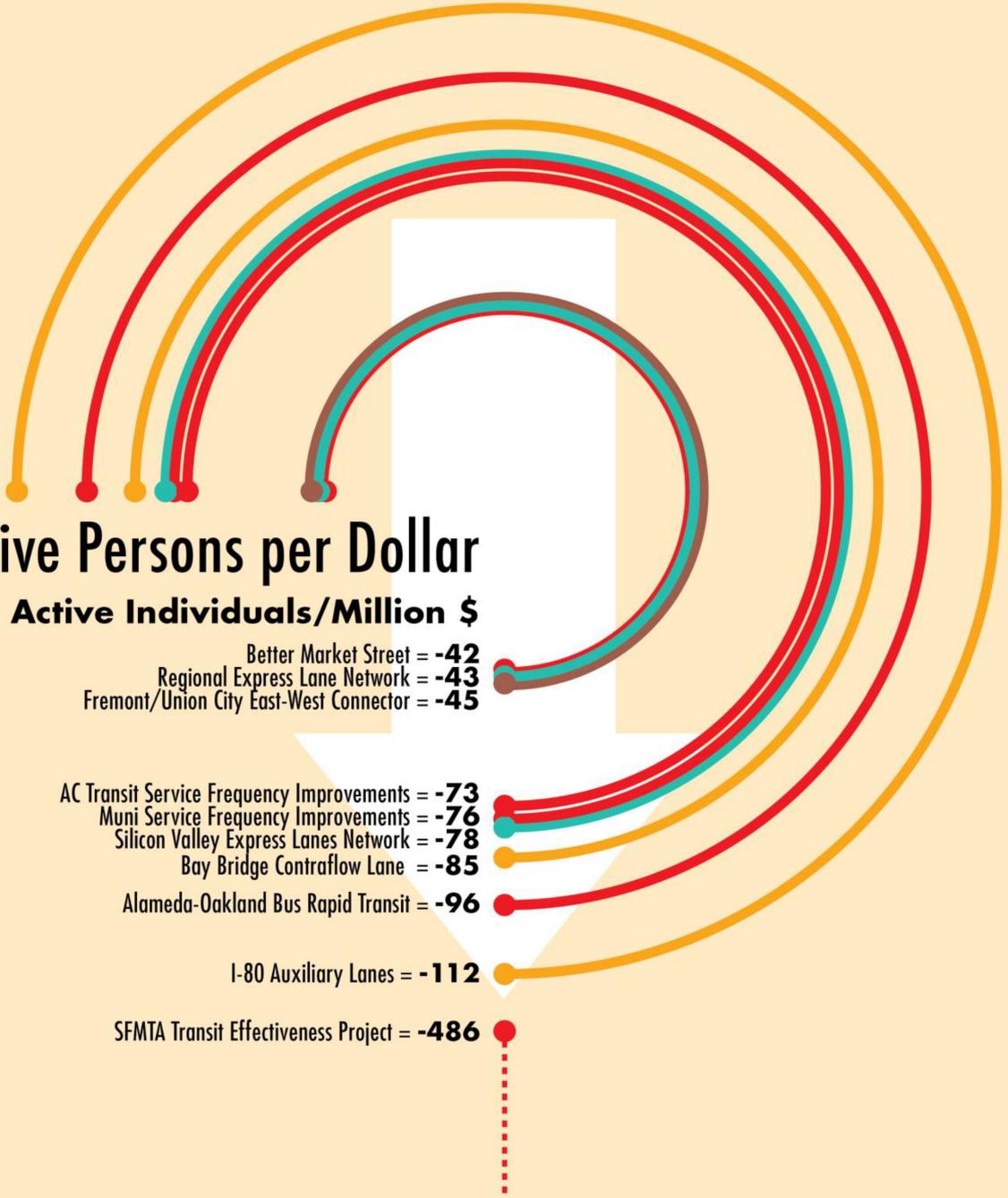
Regional Bikeway Network = **743**

Treasure Island Congestion Pricing = **2,108**

Congestion Pricing Pilot = **2,338**

BART Metro Program = **>2,338**

- Transit Efficiency
- Pricing
- Road Efficiency
- TLC
- Bike/Ped
- Transit Expansion
- Express Lanes
- Arterial Expansion



# Fewest Physically Active Persons per Dollar

Project Name = **Fewer Active Individuals/Million \$**

Better Market Street = **-42**  
 Regional Express Lane Network = **-43**  
 Fremont/Union City East-West Connector = **-45**

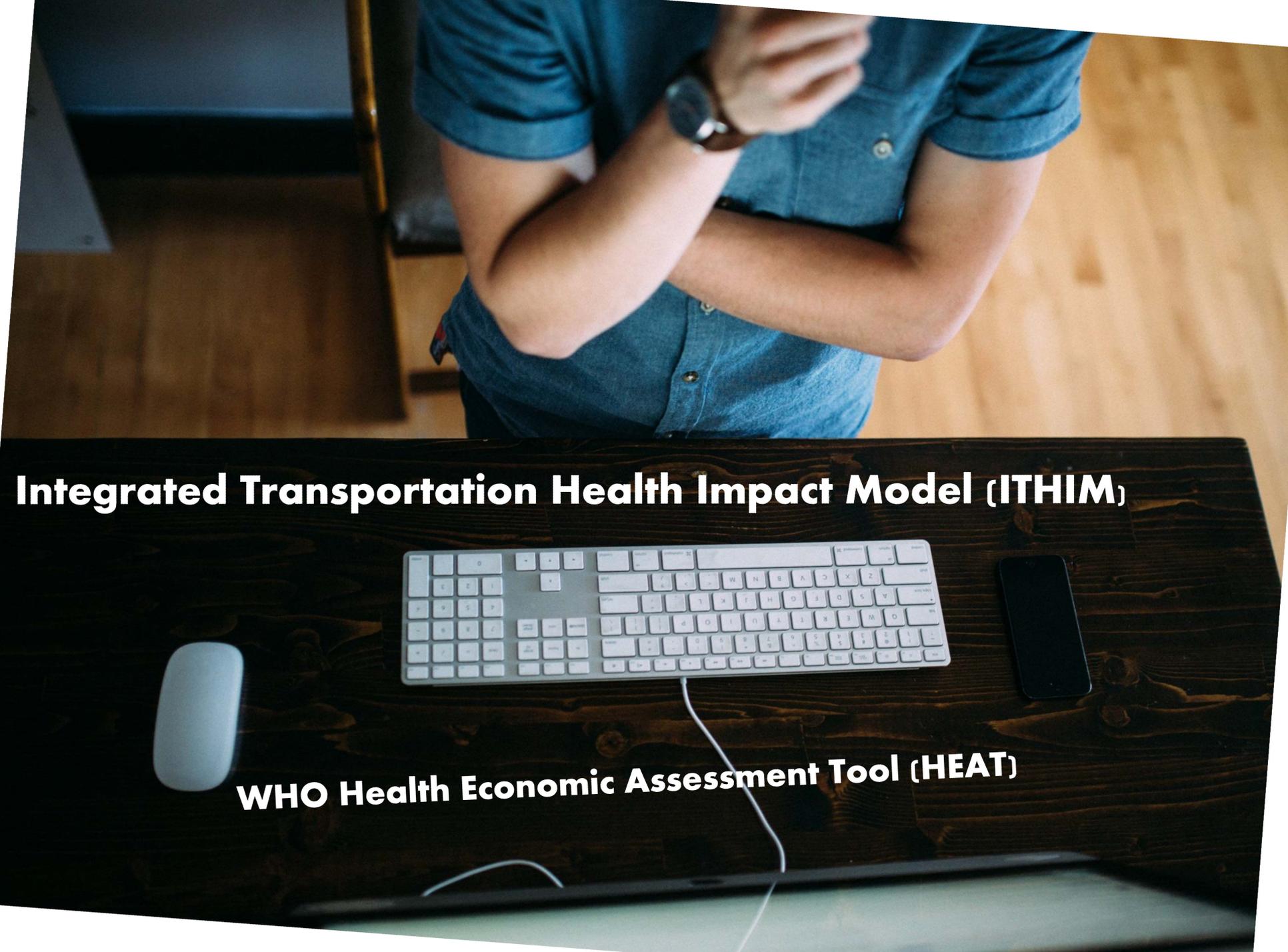
AC Transit Service Frequency Improvements = **-73**  
 Muni Service Frequency Improvements = **-76**  
 Silicon Valley Express Lanes Network = **-78**  
 Bay Bridge Contraflow Lane = **-85**  
 Alameda-Oakland Bus Rapid Transit = **-96**

I-80 Auxiliary Lanes = **-112**

SFMTA Transit Effectiveness Project = **-486**

**Transit projects that  
compete with  
bicycle trips can  
make people less  
active**

**Transit projects that  
have travel time  
savings make  
people more active**

A high-angle photograph of a person sitting at a dark wooden desk. The person is wearing a blue short-sleeved button-down shirt and a watch on their left wrist. Their hands are clasped together in front of them. On the desk, there is a white computer keyboard, a white mouse, and a black smartphone. The background shows a wooden floor and a chair.

**Integrated Transportation Health Impact Model (ITHIM)**

**WHO Health Economic Assessment Tool (HEAT)**

**Sean Co**

**Metropolitan  
Transportation  
Commission**

**[sco@mtc.ca.gov](mailto:sco@mtc.ca.gov)**

