Adding Growth Without Adding Car Trips

Ramses Madou
SPUR San Jose, May 12th

Transportation Demand Management

Altering the economy of transportation choices to achieve a more efficient use of resources

But what about the infrastructure….

Supporting conditions

Legal Constraints
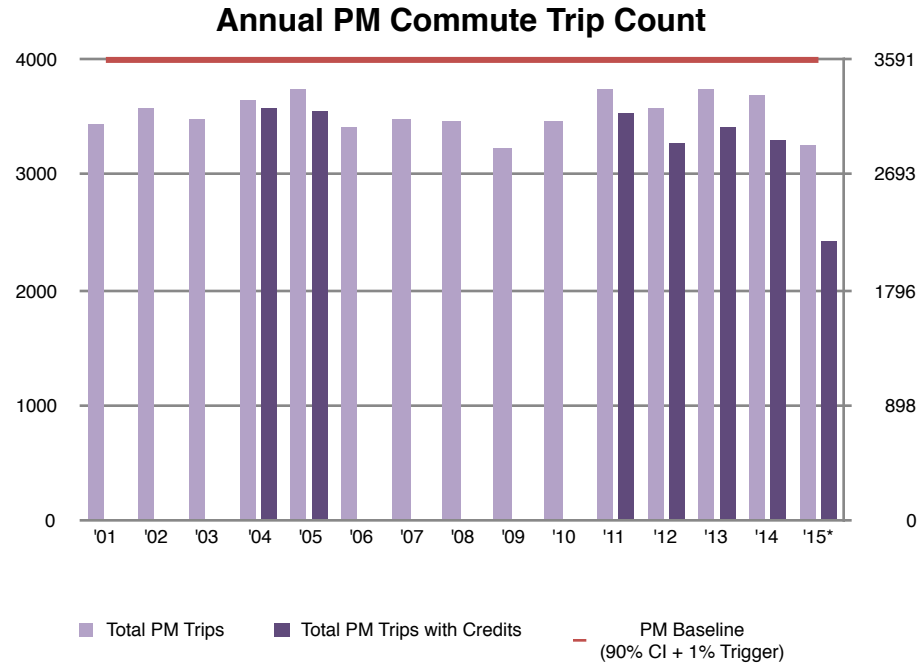- Entitlements (General Use Permit)

Leadership support
- Legal pressure helps

Environmental support
- Regional transit connections needed OR build your own system at very high cost

2000 General Use Permit (GUP)

- Trip cap: no net new trips

Annual PM Commute Trip Count

■ Total PM Trips   ■ Total PM Trips with Credits   — PM Baseline
(90% CI + 1% Trigger)

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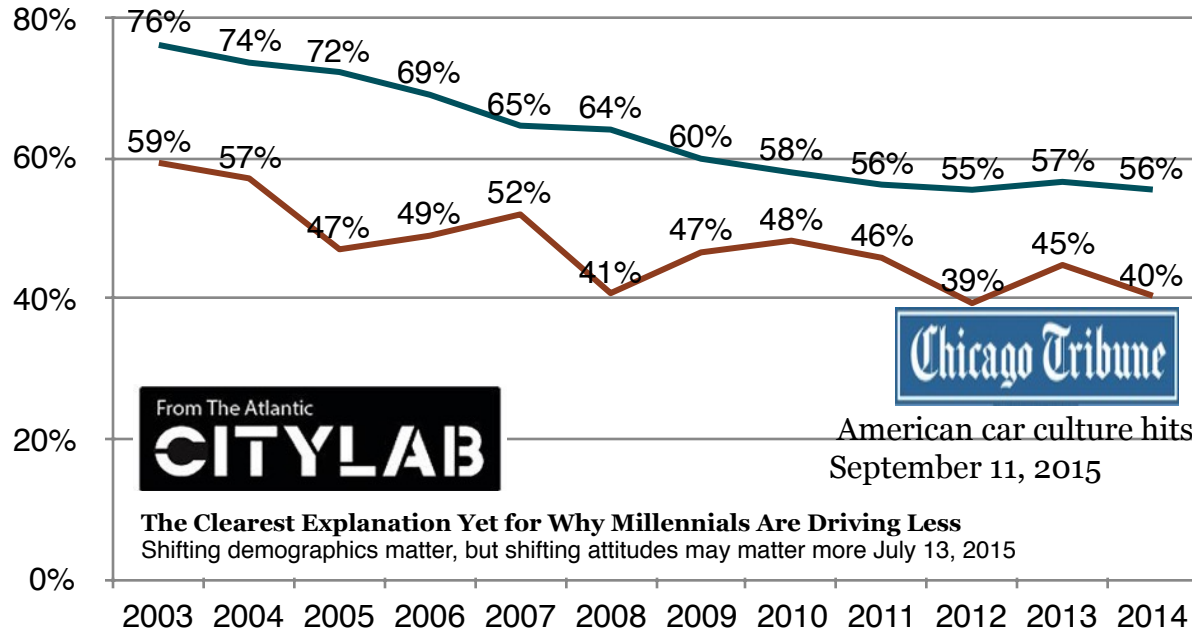
Reducing drive-alone commuting

- Incentives and behavior change
  - › Commute Club (over 9,000)
    - Clean Air Cash
    - Carpool Credit
  - › Free and discounted transit
    - Caltrain Go Pass, VTA Eco Pass
    - ACE and East Bay Express service
  - › Last mile – Marguerite
  - › Carpooling/vanpooling incentives
  - › Zipcar credits and car rental vouchers
  - › Emergency Ride Home
  - › Folding bike subsidy

- Marketing and outreach
  - › Campaigns & Promotions
    - Free Parking with Ride
    - Commute photo contest

L.A. Cicero/Stanford News Service

Graduate Student Transportation Trends

The Clearest Explanation Yet for Why Millennials Are Driving Less
Shifting demographics matter, but shifting attitudes may matter more July 13, 2015

American car culture hits skids with Millennials
September 11, 2015

Legend:
— ES Permits to Beds ratio   — Graduate Commuter SOV Rate

Data points:
ES Permits to Beds ratio: 2003: 76%, 2004: 74%, 2005: 72%, 2006: 69%, 2007: 65%, 2008: 64%, 2009: 60%, 2010: 58%, 2011: 56%, 2012: 55%, 2013: 57%, 2014: 56%

Graduate Commuter SOV Rate: 2003: 59%, 2004: 57%, 2005: 47%, 2006: 49%, 2007: 52%, 2008: 41%, 2009: 47%, 2010: 48%, 2011: 46%, 2012: 39%, 2013: 45%, 2014: 40%

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EV Residential Transportation Demand Management

- Transit hub
  - › Dedicated on site bus bays

- Car share
  - › Zip car
  - › Enterprise

- Bike facilities
  - › ~2,000 bike racks
  - › Bike repair station
  - › Mini-bike shop

- Improve active transportation connections

- Shared economy support

- On site facilities under consideration
  - › Grocer
  - › Café/bar
  - › Study space
  - › Community room

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Regional projects we are watching

- Santa Clara County transportation ballot measure
- SPUR report on transit integration
- Dumbarton Corridor Study
- CalTrain Electrification (High Speed Rail)

Regional Transportation: An Employer's Perspective
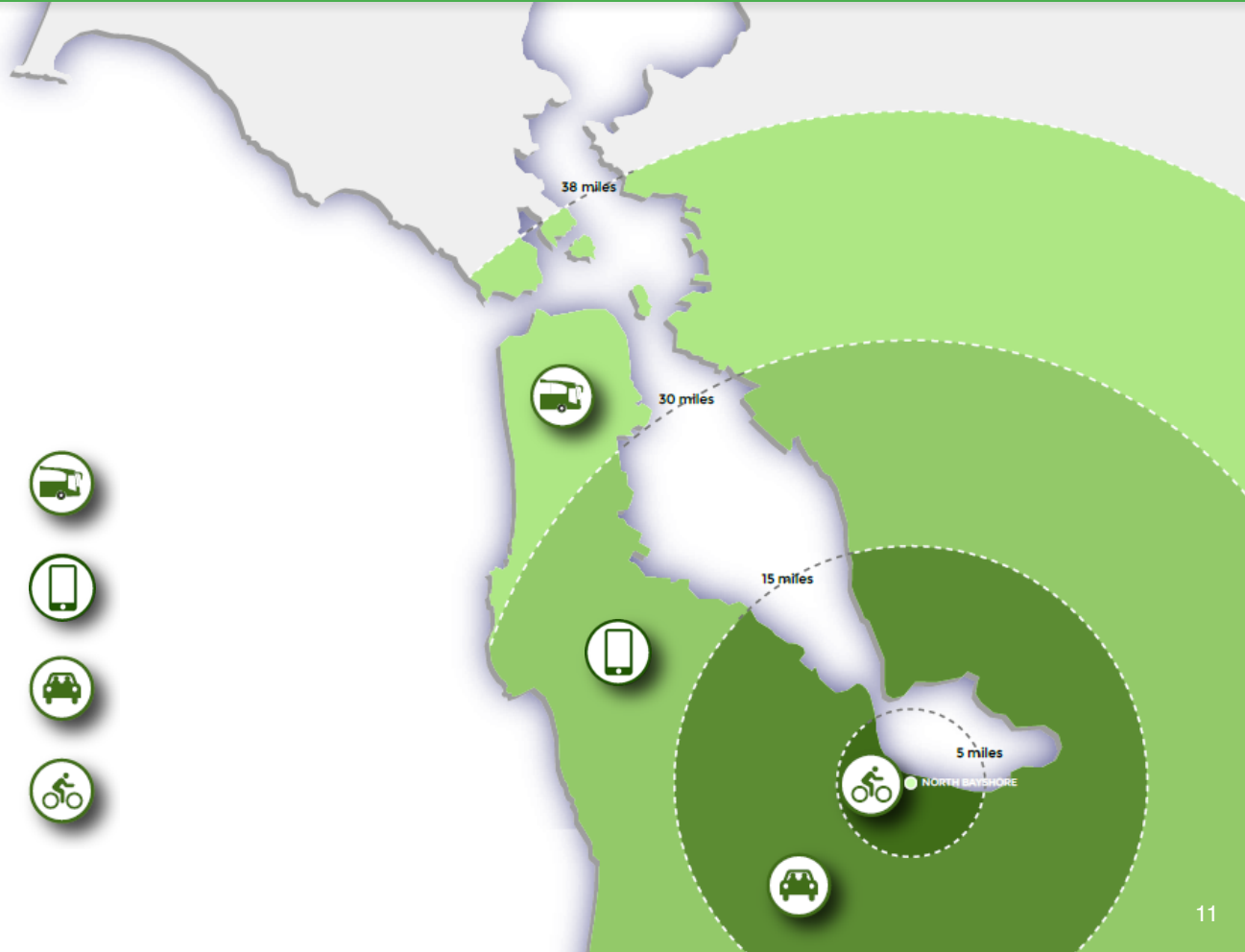
May 2016

Jeral Poskey

Enriching the employee experience by focusing on work, home and the connections in between

60% of Googlers live in the South Bay

San Francisco

South SF (Calico)

San Bruno (YouTube)

Palo Alto (Nest)

South Peninsula (HQ)

LONG DISTANCE SHUTTLE

RIDESHARE, LOCAL SHUTTLES & MOBILITY SERVICES

DRIVE

BIKE

38 miles

30 miles

15 miles

5 miles

NORTH BAYSHORE

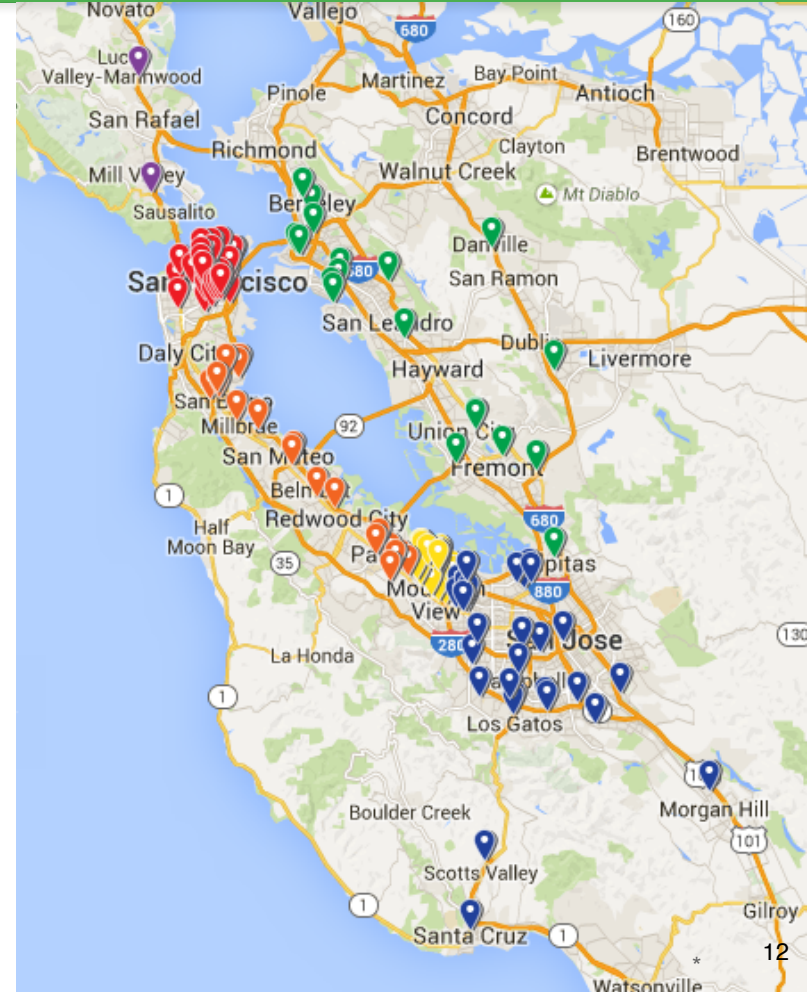11

8,000 daily shuttle riders

16,000 total daily trips

3,000,000+ total rides in 2014

200 buses serving 600+ daily departures

100 shuttle stops in 7 Bay Area counties

400+ intra-campus connectors running daily

Other current programs

BICYCLES

4,000 community bicycles
500 e-bikes

VANPOOLS / CARPOOLS

570,000 miles driven in 2014

EV CHARGING

1,100 charge ports
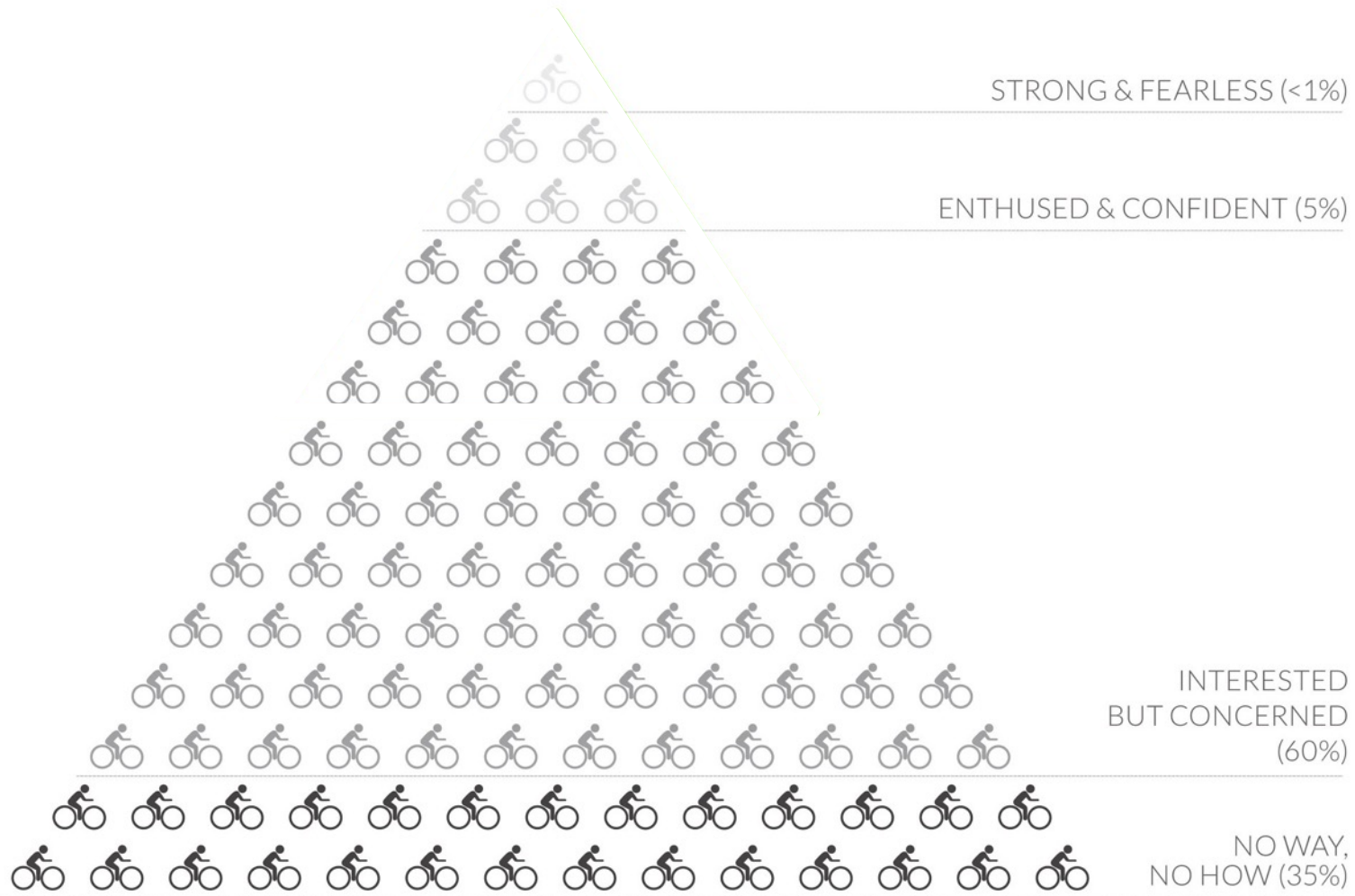268,000 charging sessions

Near-distance bike challenge

Two factors:
- Ability
- Access

ABILITY

ACCESS

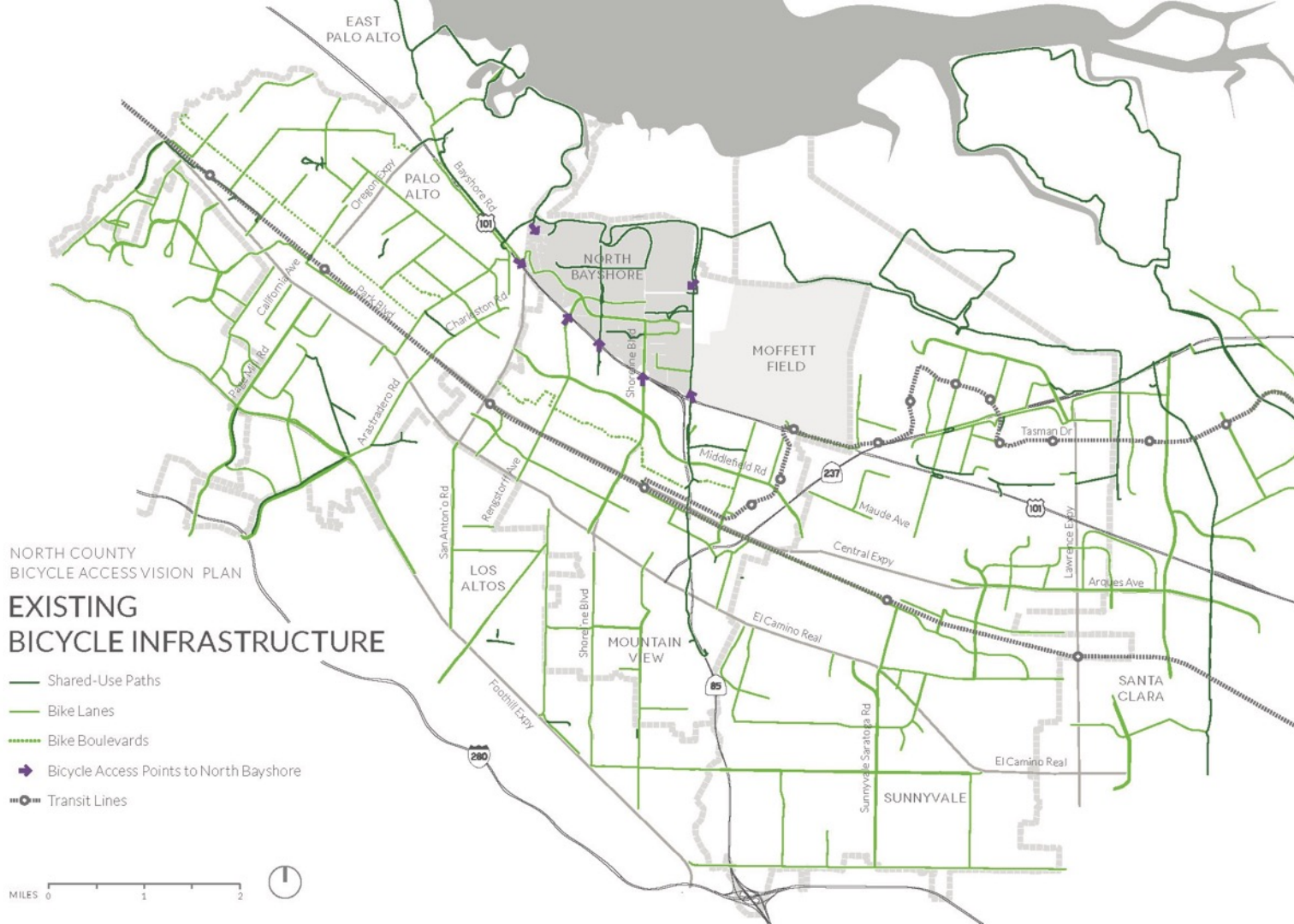STRONG & FEARLESS (<1%)

ENTHUSED & CONFIDENT (5%)

INTERESTED
BUT CONCERNED
(60%)

NO WAY,
NO HOW (35%)

ACCESS

NORTH COUNTY
BICYCLE ACCESS VISION PLAN

EXISTING
BICYCLE INFRASTRUCTURE

——— Shared-Use Paths
——— Bike Lanes
········· Bike Boulevards
➡ Bicycle Access Points to North Bayshore
●○● Transit Lines

MILES 0   1   2
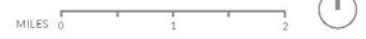
REALITY

NORTH COUNTY
BICYCLE ACCESS VISION PLAN

MAJOR ACCESS
BARRIERS
FOR BICYCLISTS

ACCESS BARRIERS

Freeways
Transit Lines and Stations
Creeks

STRESSFUL ROUTES

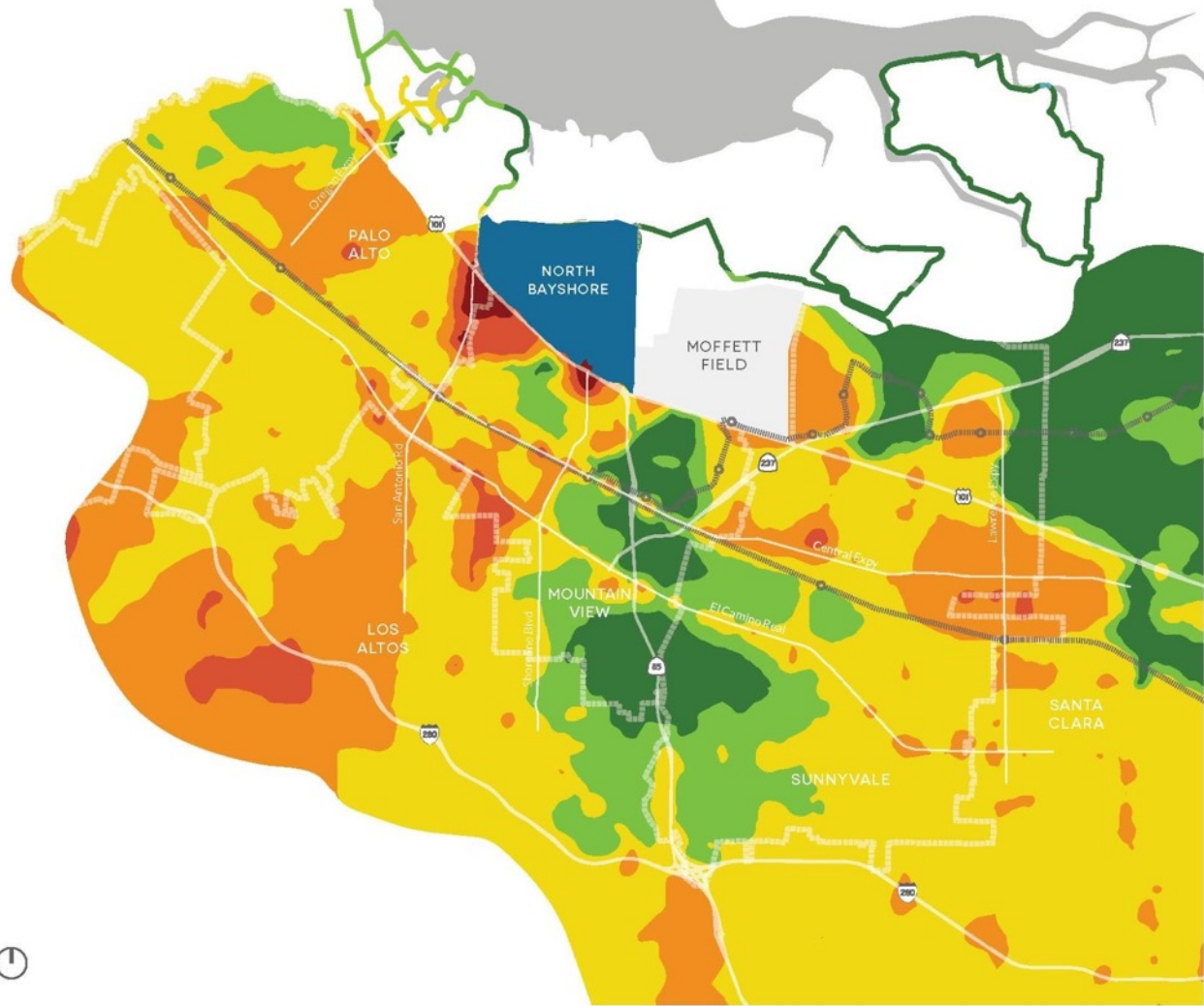Challenging Crossings
Moderate Bicycling Stress
High Bicycling Stress

MILES 0   1   2

AVERAGE RIDE STRESS

EXISTING CONDITIONS:

What's the **Average Stress** I'll Encounter on my Ride to North Bayshore?

Low Average Stress

Medium Average Stress

High Average Stress

Rail Transit Stops

The future Google envisions for the communities of Northern Santa Clara County:

A place where almost anyone--from 8 to 80 years old--can ride a bike comfortably & safely, for any trip they need to make.

8-to-80 means safety & comfort for all

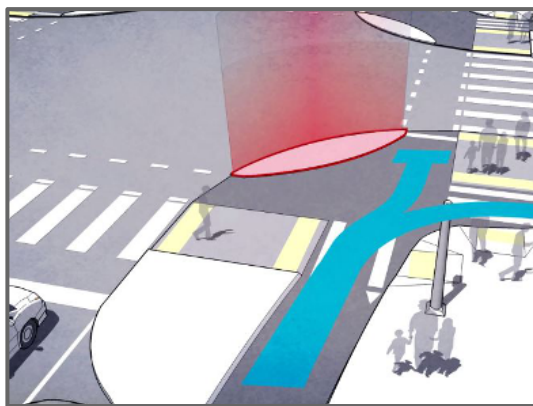Protected Bike Lanes

Bicycle Boulevards
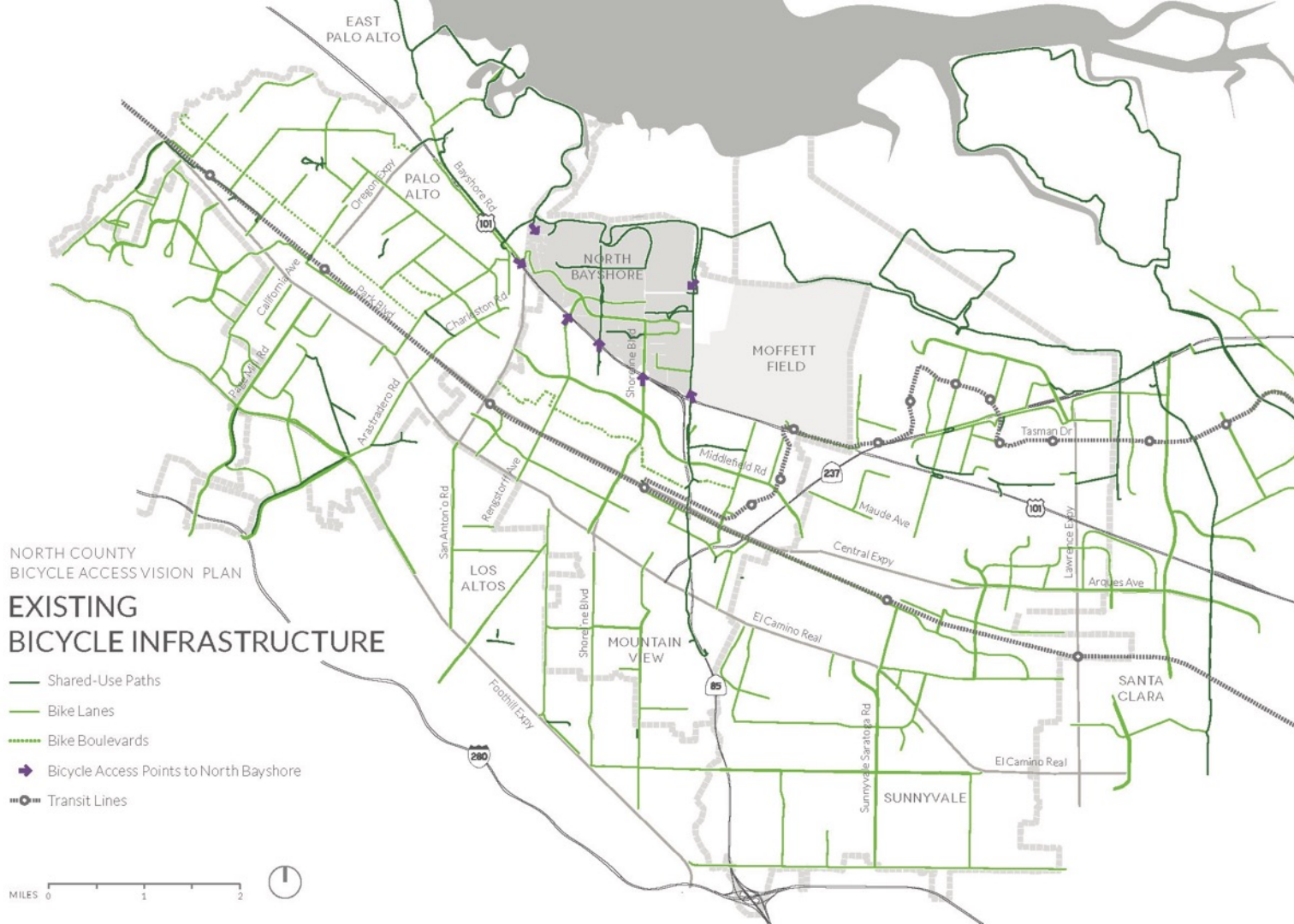

Bike Paths & Trails

Advanced Infrastructure

Safe Intersections

Buffered Bike Lanes

GAPS

NORTH COUNTY
BICYCLE ACCESS VISION PLAN

EXISTING
BICYCLE INFRASTRUCTURE

— Shared-Use Paths

— Bike Lanes

···· Bike Boulevards

➤ Bicycle Access Points to North Bayshore

-●- Transit Lines

MILES 0 1 2

Only two steps needed

1. Thorough understanding of the reality of the bike network,
   from the mindset of a safety-minded rider

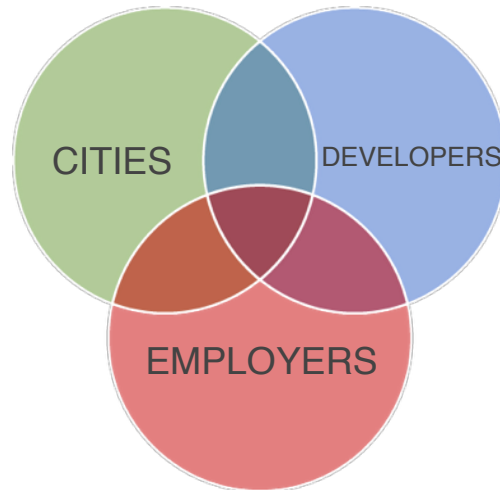2. Prioritize future investment based on a project's impact to the network

Current / completed Google projects

- Resurface two miles of the Bay Trail
- Improve bike connections between North Bayshore and the San Antonio Caltrain area
- Permanente Creek Trail undercrossing
- 2 crosswalks
- 3 signal timing projects
- 2 green painted bike lanes
- 2 experimental bike box treatments

Current paradigm works well for smaller companies…
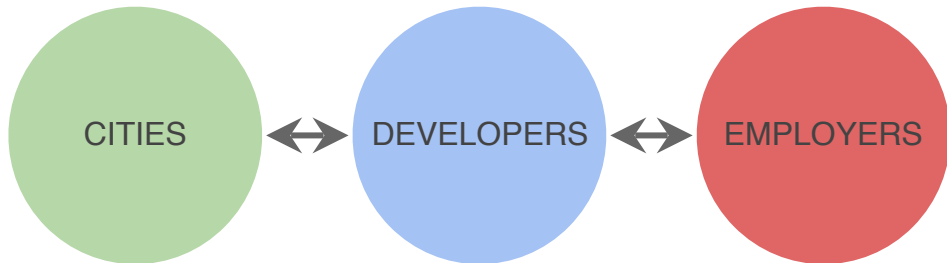
… but less so for very large companies