10 Steps

Toward a More Walkable, Sustainable

Traverse City

Jeffrey Tumlin

Presentation Outline

1. Measure what matters
2. Fix your trunk roads
3. Adopt a good street design manual
4. Make walking a pleasure
5. Make biking safe and easy for everyone
6. Make transit fast, frequent, reliable, dignified
7. Make traffic analysis work
8. Focus on the demand side
9. Park once
10. Create a better vision

1. Measure what matters

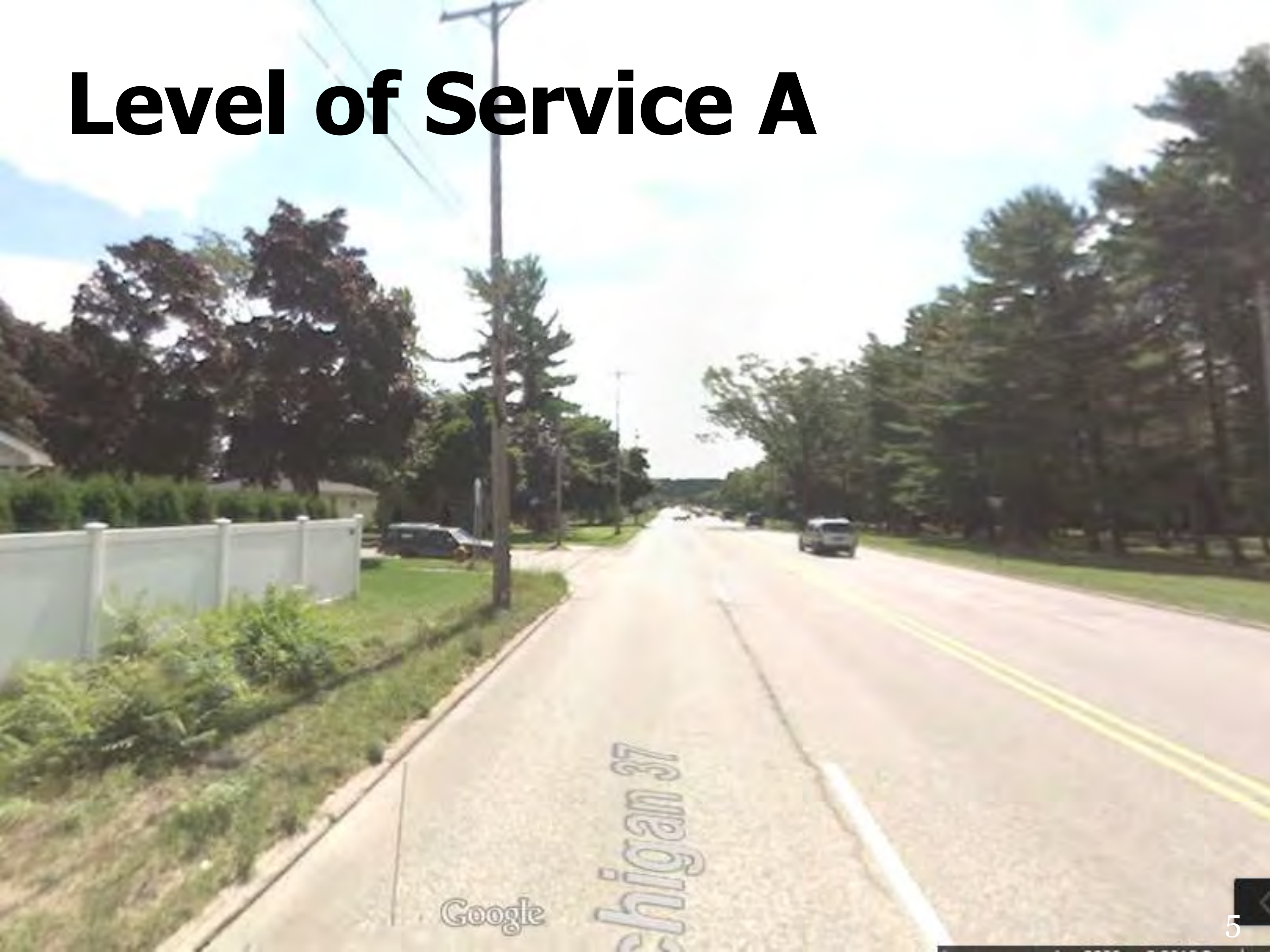
- Transportation is not an end in itself
- It is merely a means by which we support individual and collective goals and objectives

How Transportation Meets Goals

- **Mobility:**
  - Can I travel freely and easily to where I want to go?
  - Reduce roadway congestion
  - Increase transit frequency, reliability and speed
  - Create bicycle lanes and complete sidewalks

- **Accessibility**
  - Can I get the things and services I want?
  - Bring people, goods and services closer together
  - Mix uses
  - Technology, delivery

Level of Service A

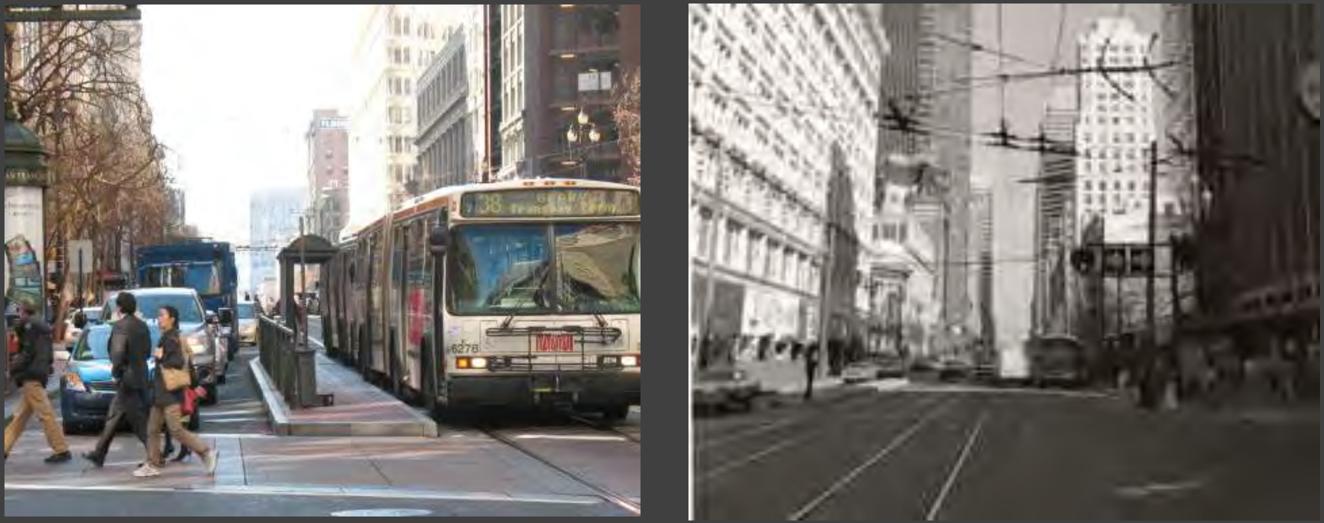

Michigan 37
Google

Level of Service C

TRAVERSE CITY FILM FESTIVAL
HARMONY AND ME

Level of Service F

What’s important depends upon perspective



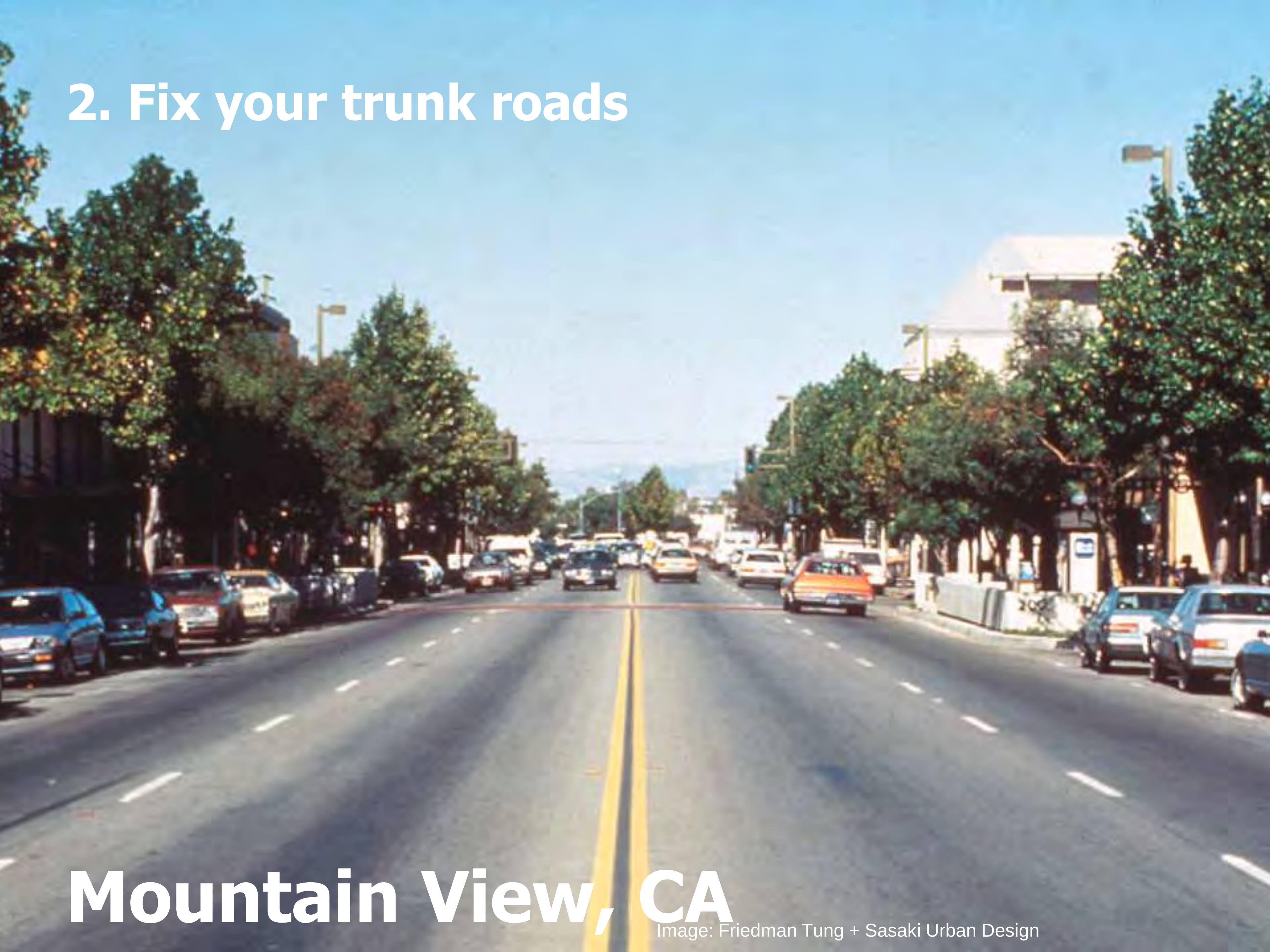
Traffic engineer:	F	A
Economist:	A	F

Measure what matters

Why not Consider…

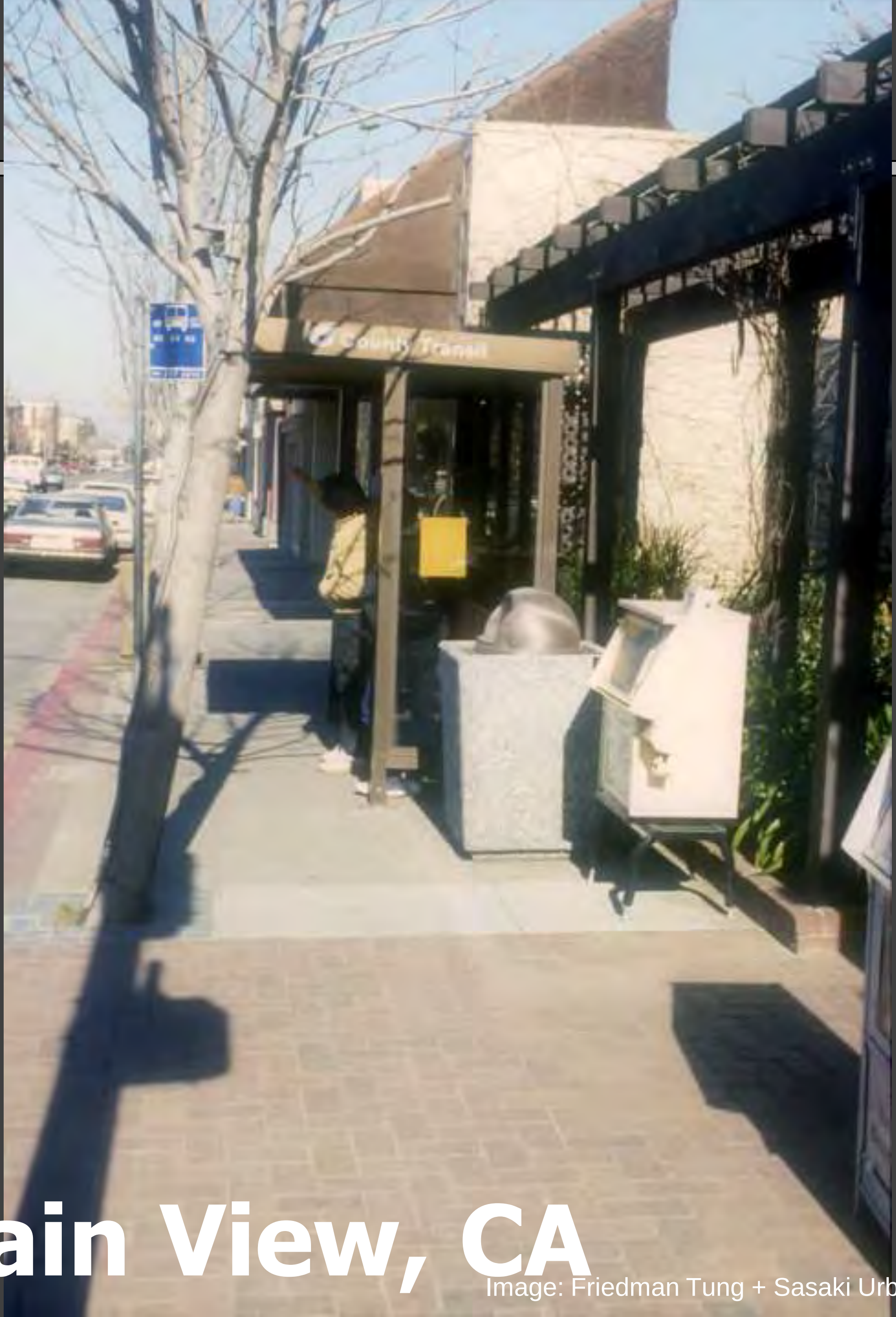
- Economic Development
  - Job creation
  - Real estate value increase
  - Retail sales
- Quality of Life
  - Access to jobs
  - Access to shopping
  - Residential property value impact
- Social Justice
  - Do benefits accrue equitably?
  - Are investments spread equitably?
- Ecological Sustainability
  - VMT per capita (=CO_2, NO_x, runoff, etc.)
  - Land use/transportation connection

2. Fix your trunk roads



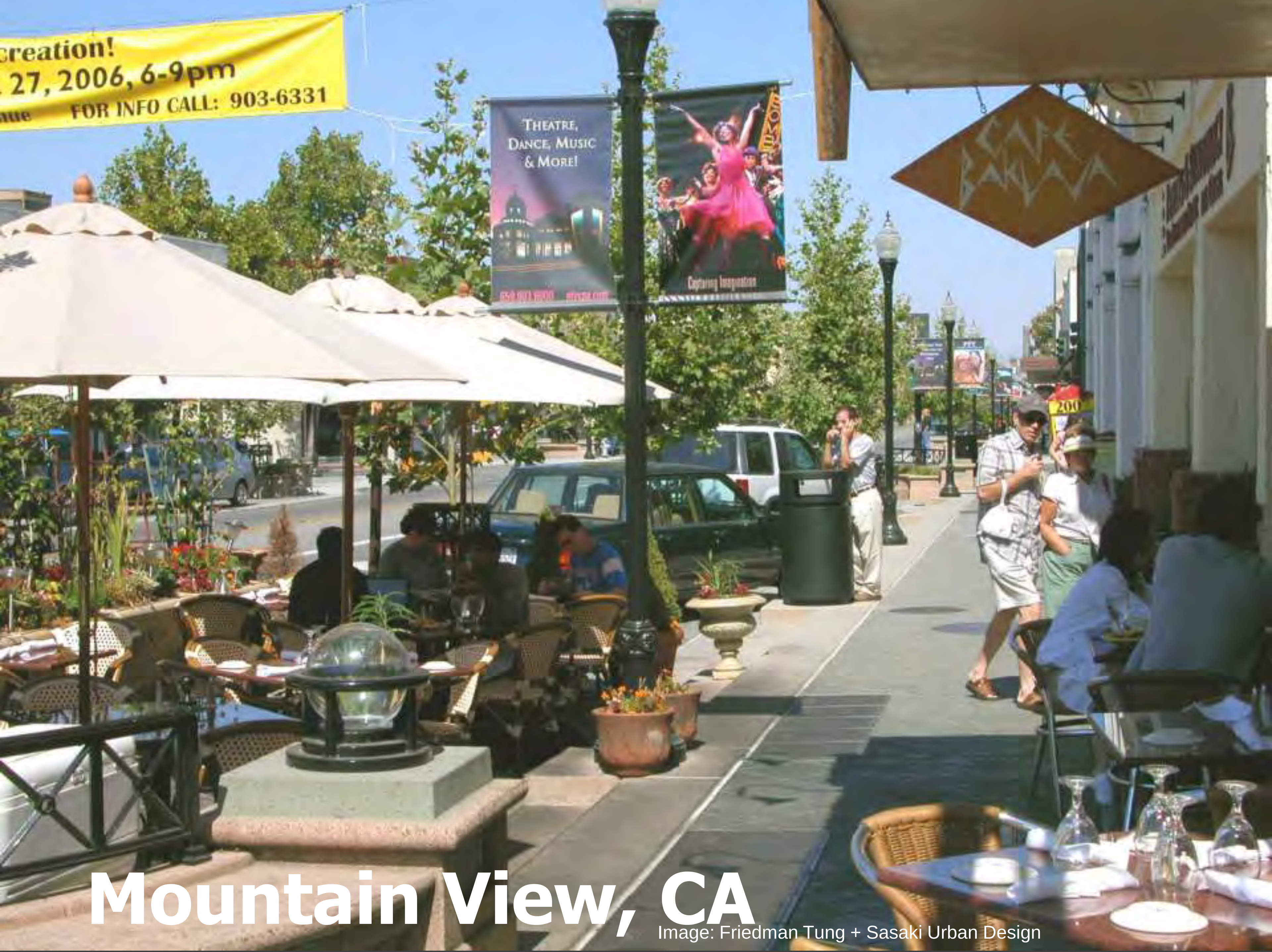
Mountain View, CA

Image: Friedman Tung + Sasaki Urban Design


County Transit

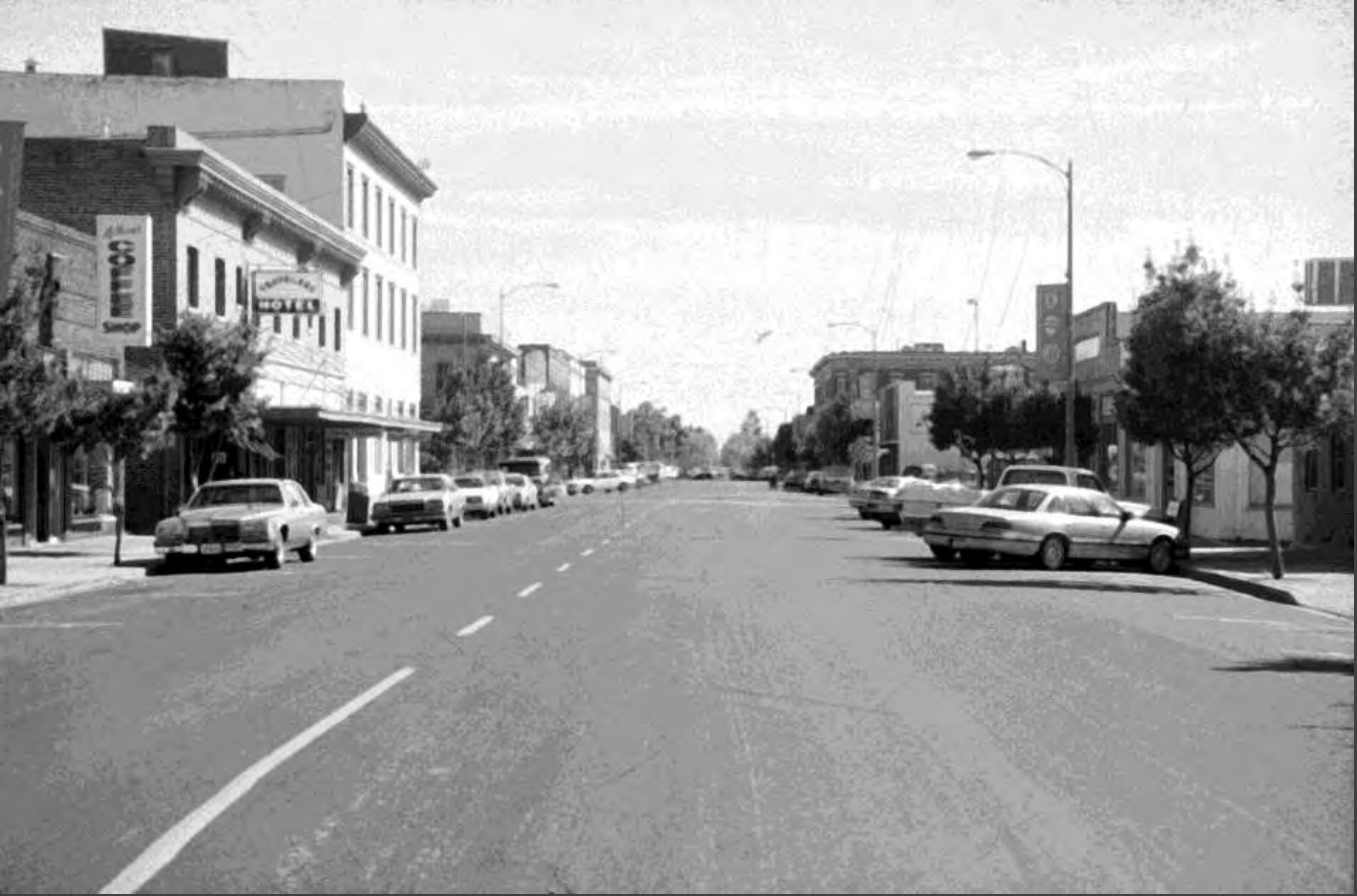
Mountain View, CA

Image: Friedman Tung + Sasaki Urban Design


creation!
27, 2006, 6-9pm
FOR INFO CALL: 903-6331
THEATRE, DANCE, MUSIC & MORE!
Capturing Imagination
CAFE BAKLAVA
200

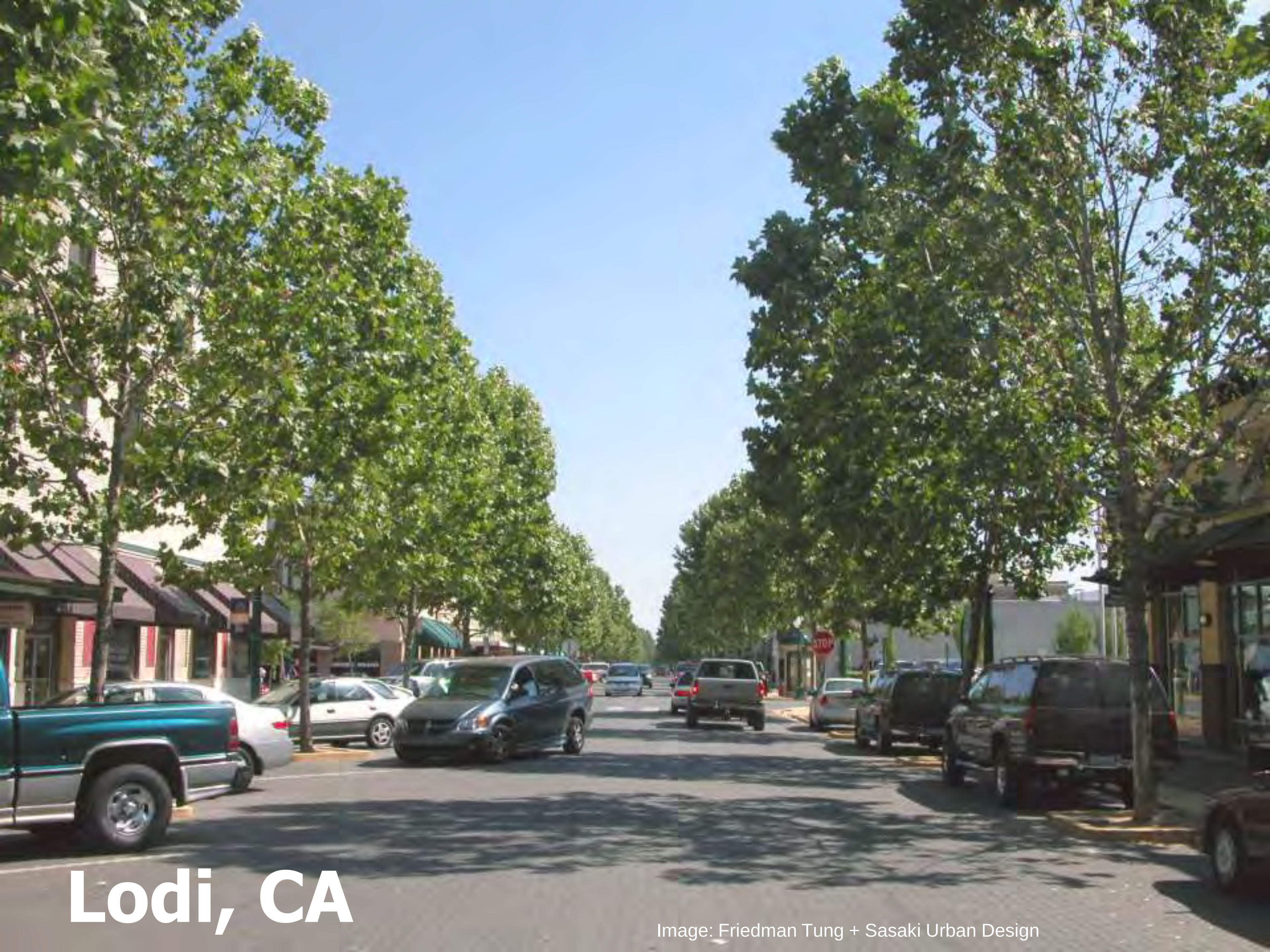
Mountain View, CA

Image: Friedman Tung + Sasaki Urban Design


COFFEE SHOP
HOTEL

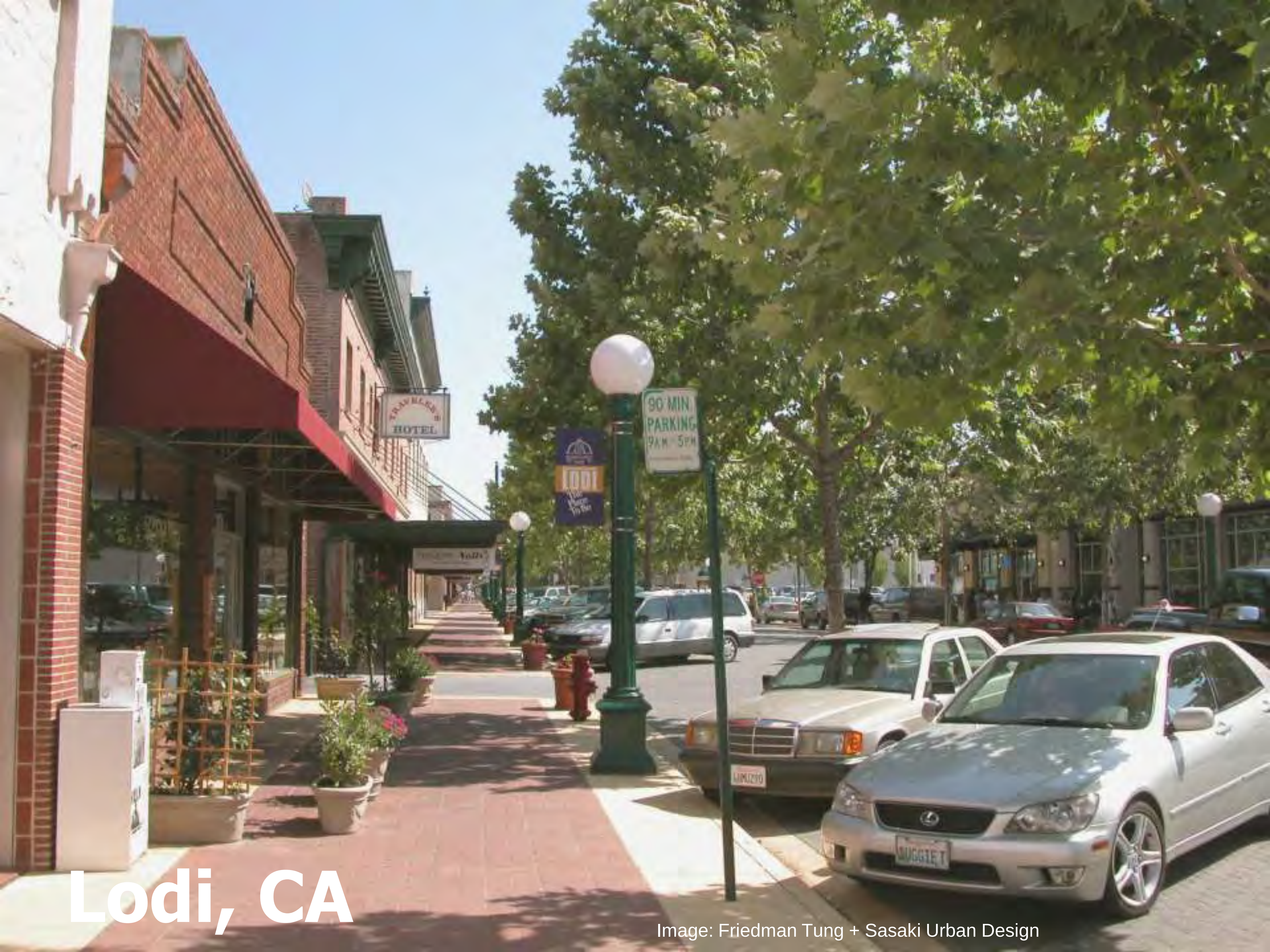
Lodi, CA

Image: Friedman Tung + Sasaki Urban Design



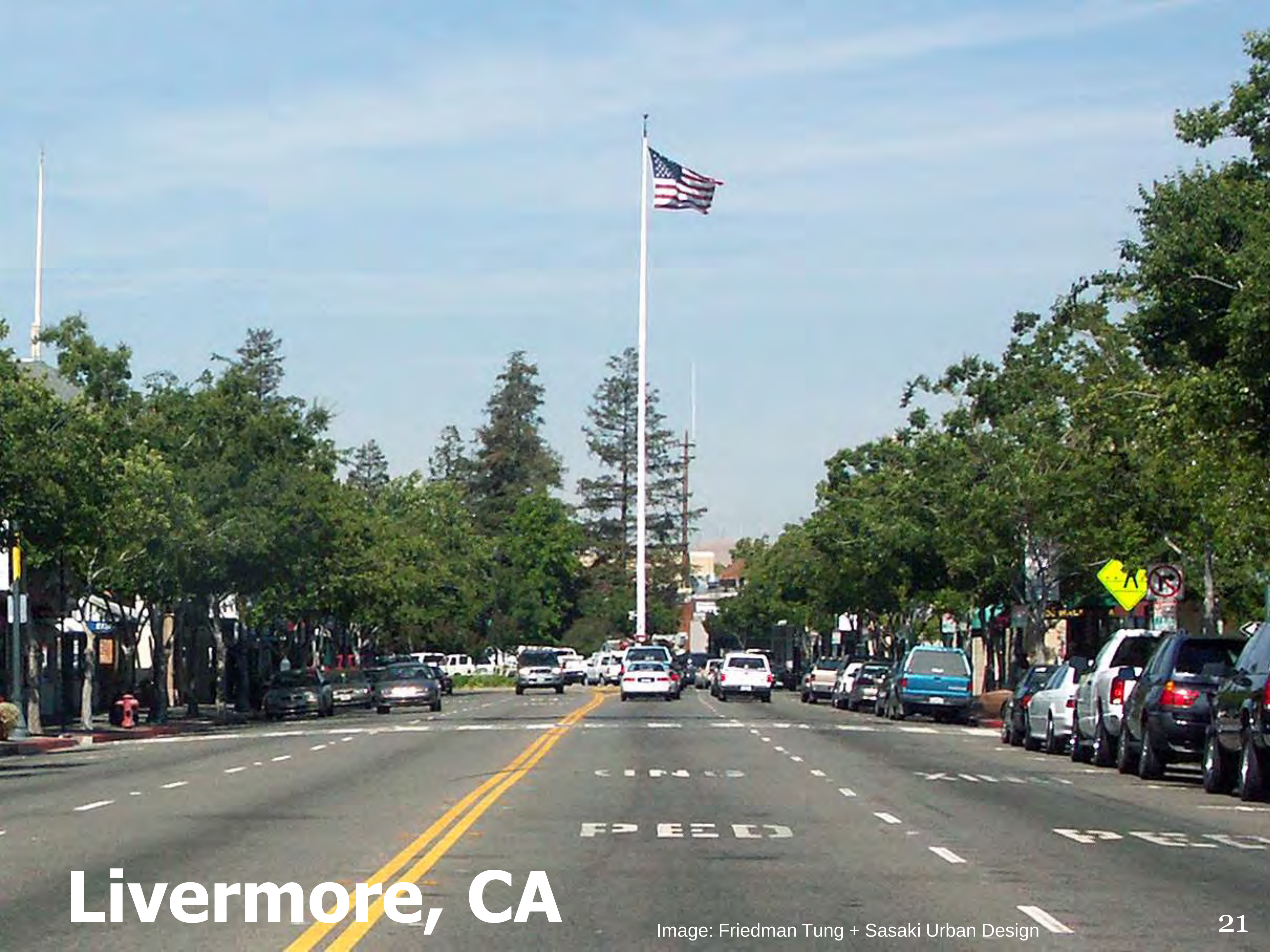
Lodi, CA

Image: Friedman Tung + Sasaki Urban Design


TRAVELERS HOTEL
90 MIN PARKING 9AM - 5PM
LODI

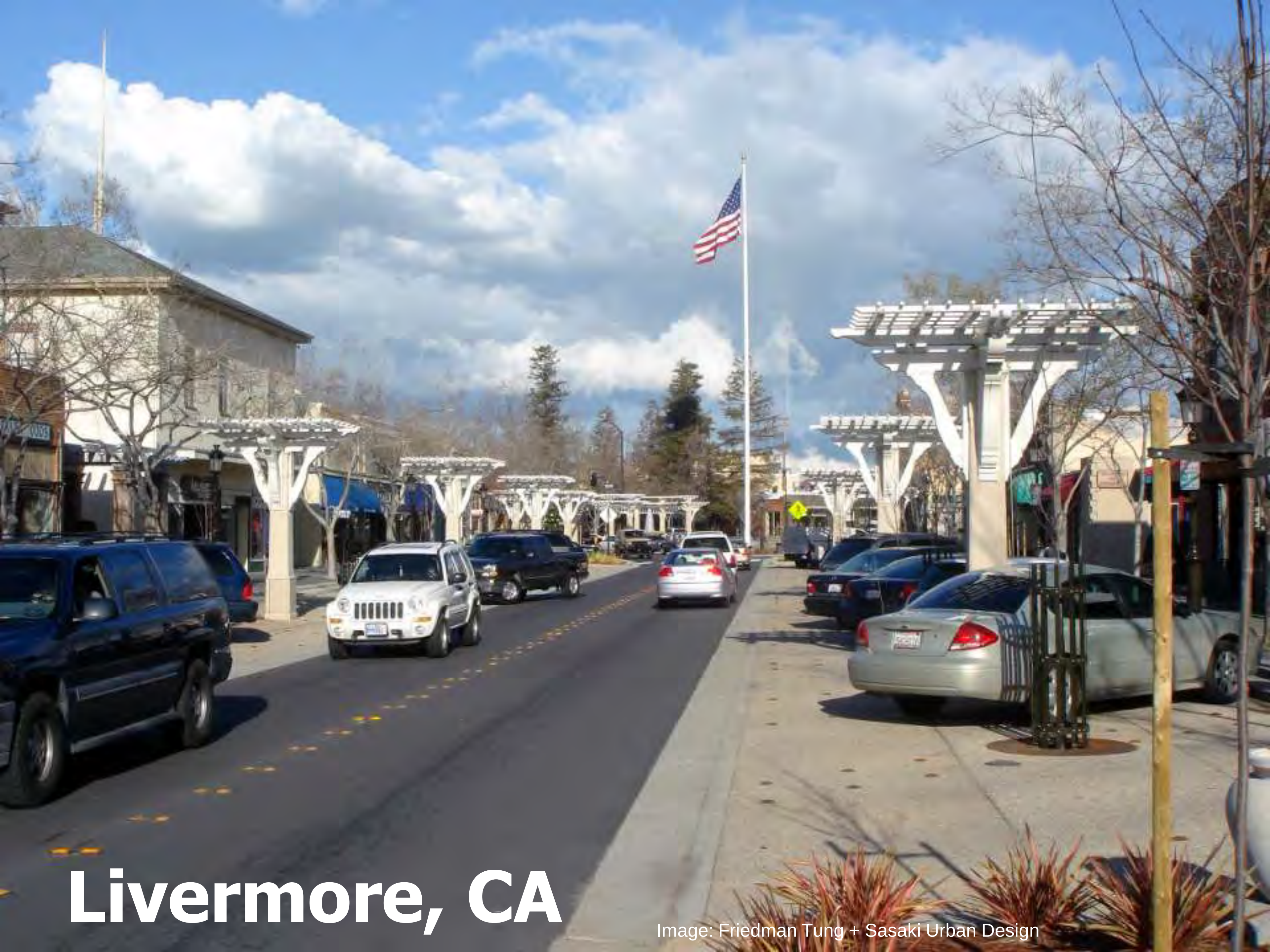
Lodi, CA

Image: Friedman Tung + Sasaki Urban Design



Livermore, CA

Image: Friedman Tung + Sasaki Urban Design



Livermore, CA

Image: Friedman Tung + Sasaki Urban Design

Livermore, CA

Image: Friedman Tung + Sasaki Urban Design

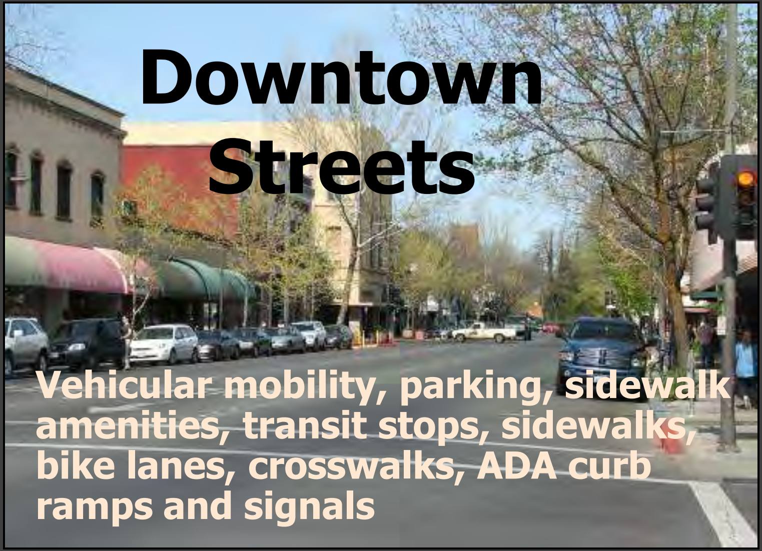
3. Adopt the right street design manual

Arterial Streets

Vehicular mobility, transit stops, sidewalks, bike lanes, crosswalks, ADA curb ramps and signals

Local Streets

Sidewalks, bike lanes, pedestrian permeability, access to transit, ADA curb ramps

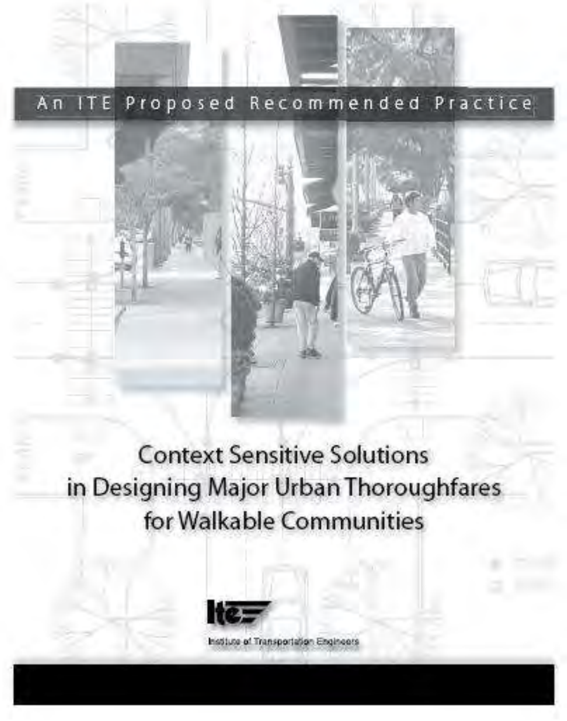


Downtown Streets

Vehicular mobility, parking, sidewalk amenities, transit stops, sidewalks, bike lanes, crosswalks, ADA curb ramps and signals

Adopt *urban* street guidelines

- **ITE *Context Sensitive Solutions***
  - Free at ite.com/css
  - Best for arterials
- **ITE *Residential Streets***
  - Best for residential streets
- **NACTO**
  - Free at nacto.org
  - Bikeways available now. Urban Street Design Manual out soon.
- **Steal from other cities**
  - SF, Boston, Indianapolis, NYC

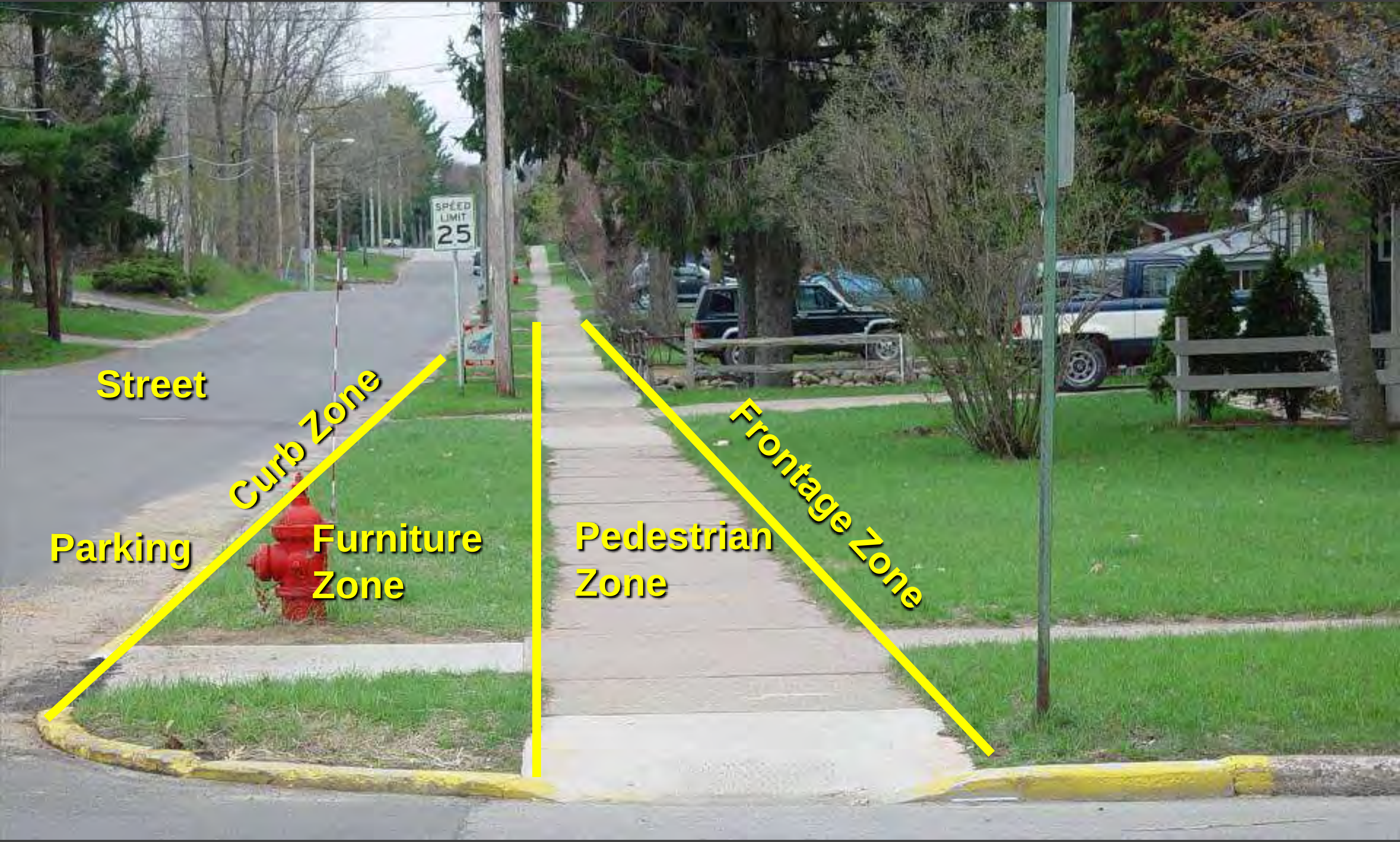


An ITE Proposed Recommended Practice

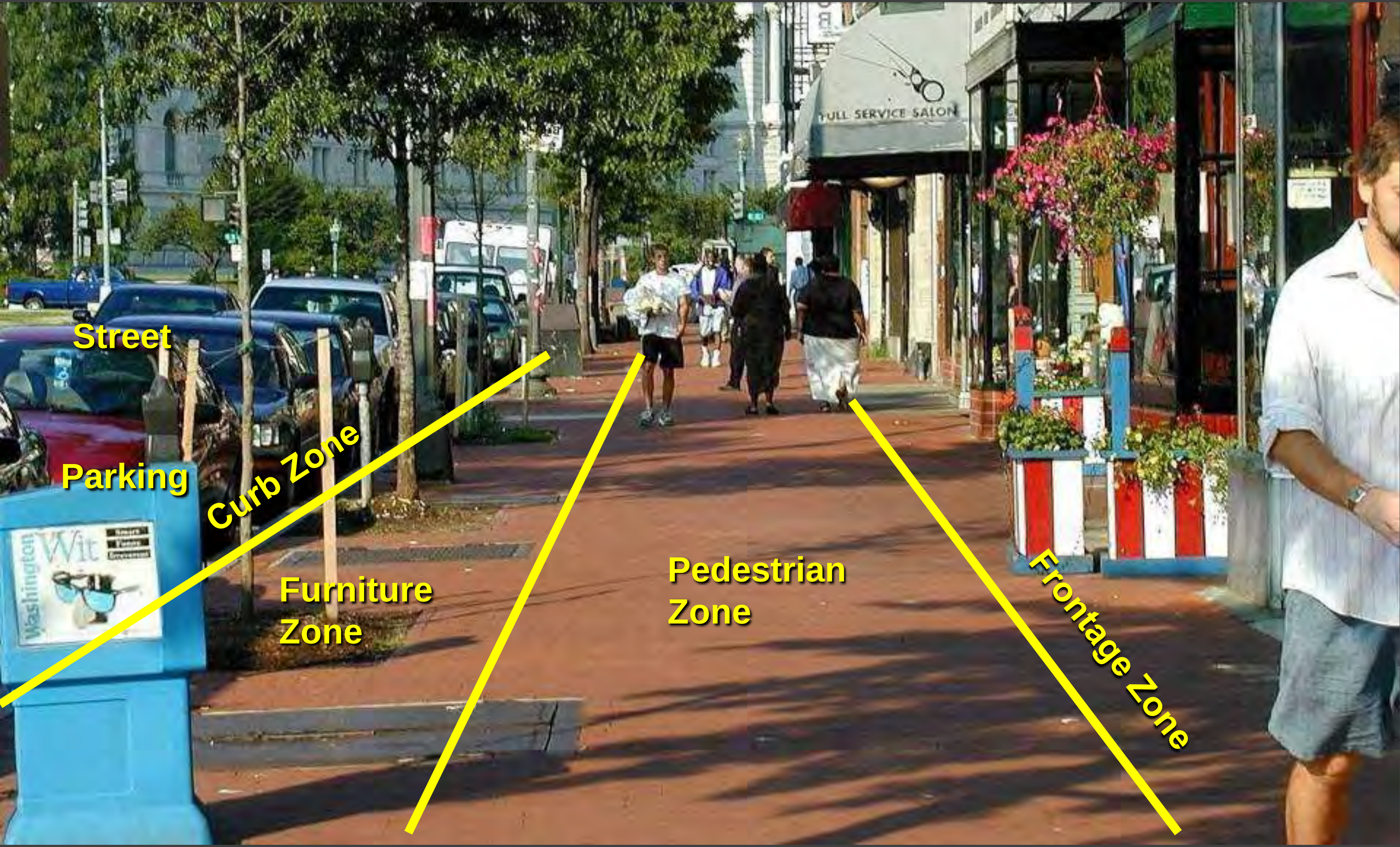
Context Sensitive Solutions
in Designing Major Urban Thoroughfares
for Walkable Communities

Institute of Transportation Engineers

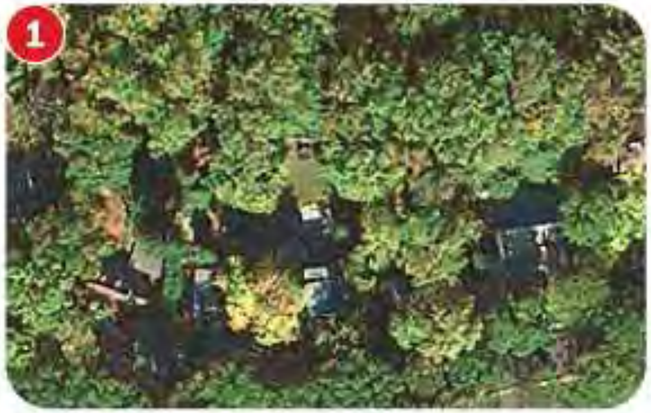
4. Make walking a pleasure


Street
Curb Zone
Parking
Furniture Zone
Pedestrian Zone
Frontage Zone
SPEED LIMIT 25

4. Make walking a pleasure


Street
Parking
Curb Zone
Furniture Zone
Pedestrian Zone
Frontage Zone
FULL SERVICE SALON

Washington DC

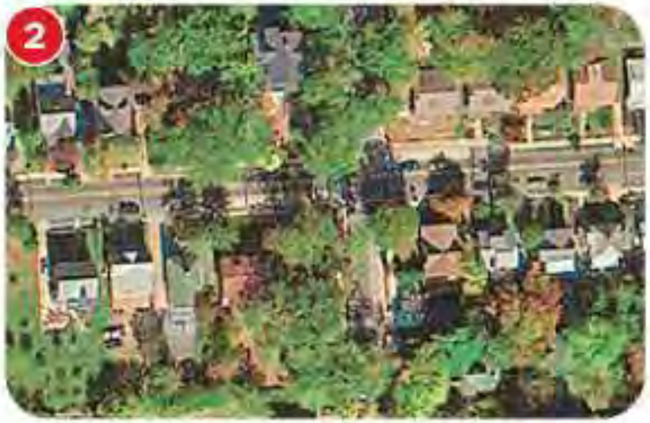


Tree-cover rating:

81%

Median household income:

$205,750

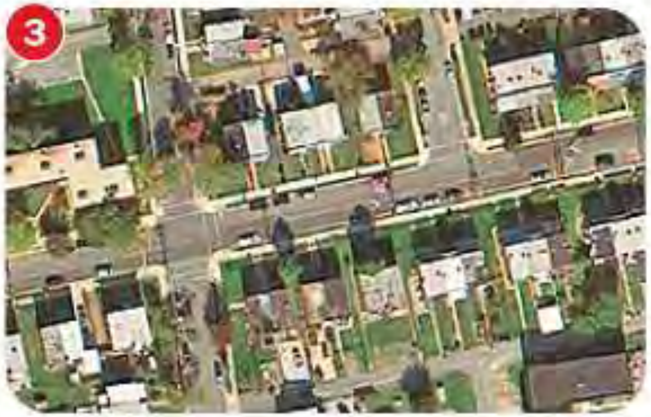


Tree-cover rating:

64%

Median household income:

$78,523



Tree-cover rating:

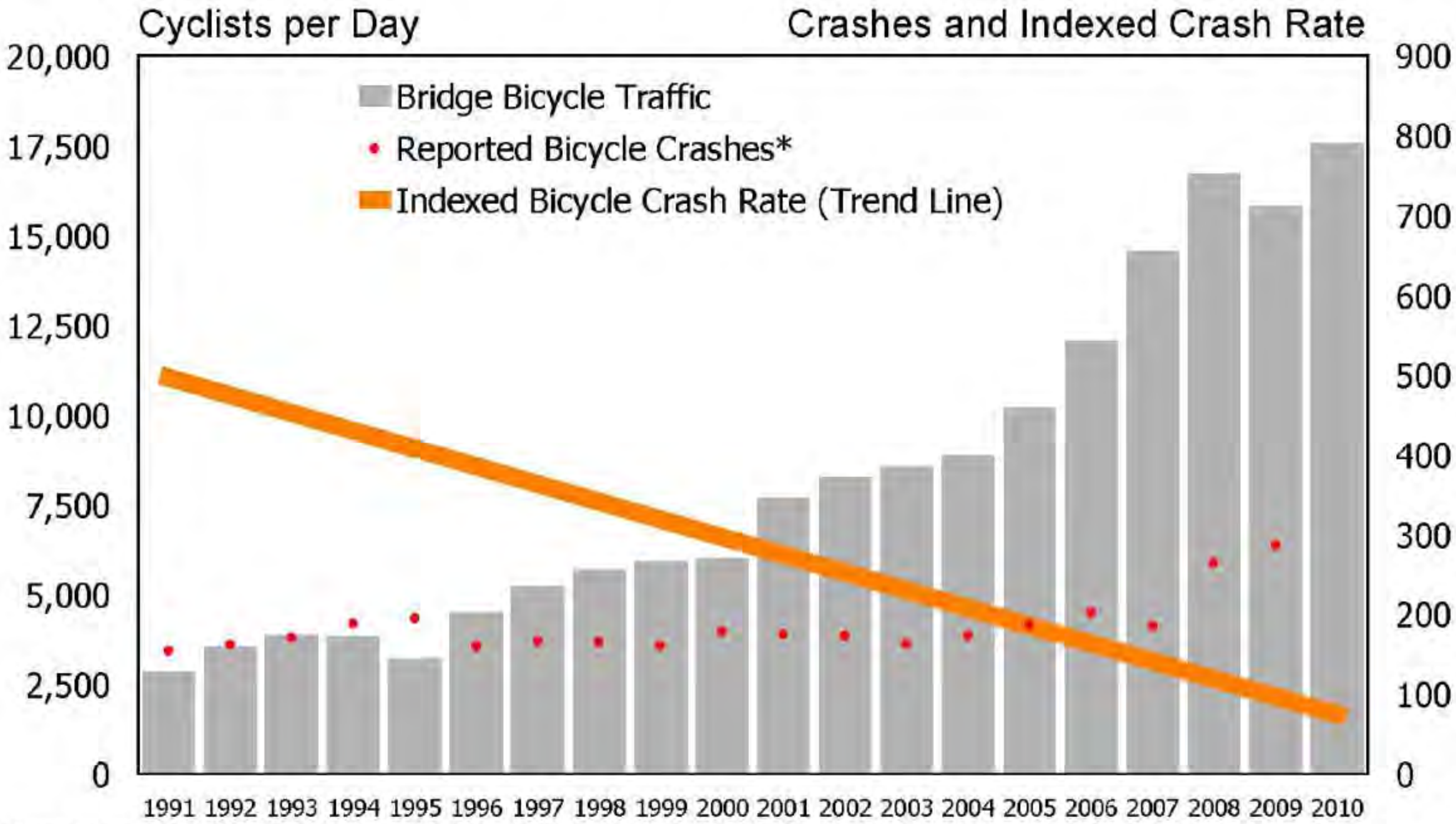
48%

Median household income:

$36,250

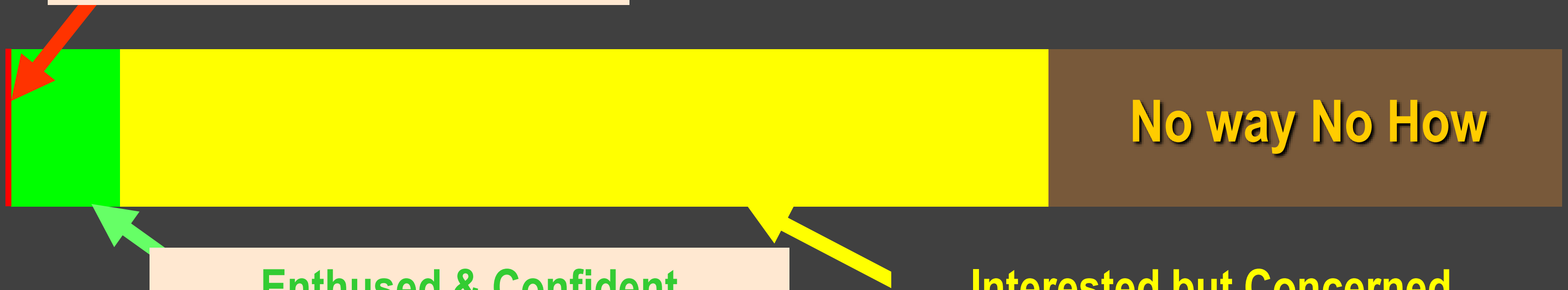
5. Make cycling comfortable for all ages

Combined Bicycle Traffic over Four Main Portland Bicycle Bridges Juxtaposed with Bicycle Crashes



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bridge Bicycle Traffic	2,850	3,555	3,885	3,830	3,207	4,520	5,225	5,690	5,910	6,015	7,686	8,250	8,562	8,875	10,192	12,046	14,563	16,711	15,794	17,576
Reported Bicycle Crashes*	155	163	171	189	195	160	167	166	161	179	175	173	164	174	188	203	186	265	287	*
Indexed Bicycle Crash Rate (Trend Line)	544	459	440	493	514	354	320	292	272	298	230	210	192	196	184	168	128	159	182	*
Bicycle Fatalities	2	0	4	3	2	1	5	3	0	0	5	0	4	1	4	0	6	0	4	*

Source: Roger Geller



Strong & Fearless
Will ride regardless of facilities
Trip distance not an issue

No way No How

Enthused & Confident
Comfortable in traffic with appropriate facilities
Prefer shorter trip distances

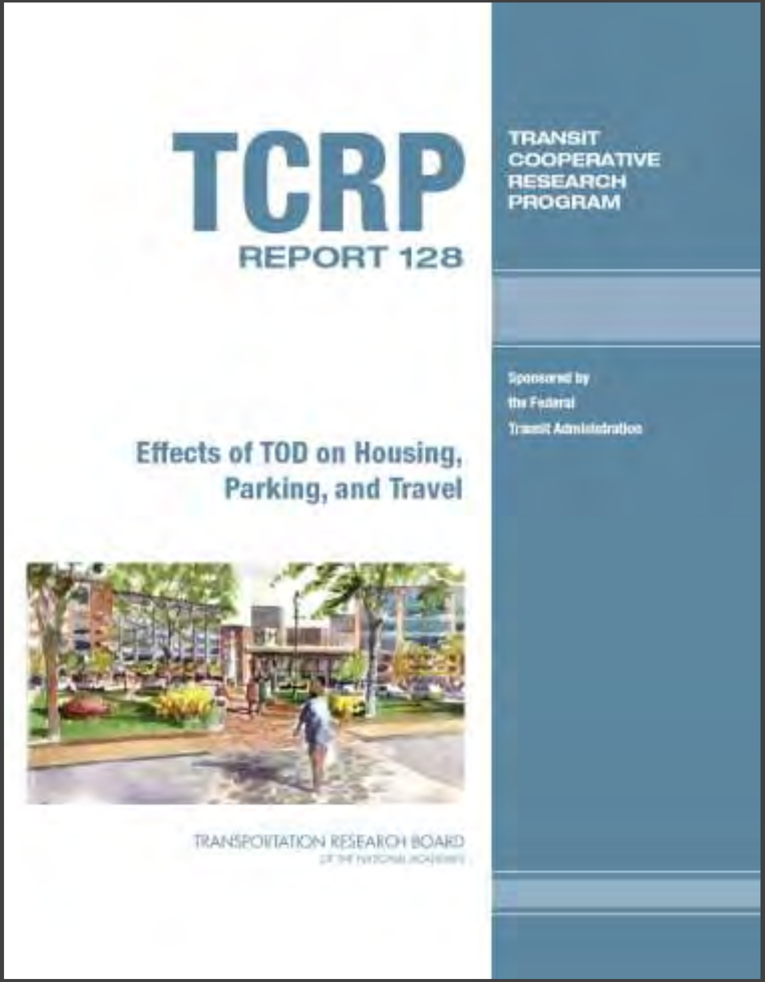
Interested but Concerned
Not attracted by bike lanes
Not comfortable in traffic
Will ride in low-volume, low-speed conditions (boulevards, off-street)

Source: City of Portland Survey

6. Make Transit Fast, Frequent, Reliable, and Dignified

7. Make traffic analysis smart

- To be “conservative,” transportation analyses typically use ITE trip generation rates, data from isolated, single-use projects with no access except by car.
- TODs typically generate ~50% fewer vehicle trips than predicted by ITE. (“Effects of TOD on Parking, Housing and Travel,” TCRP 128, 2008)
- Guidelines focus on localized traffic impacts and ignores regional impacts.



TCRP
REPORT 128

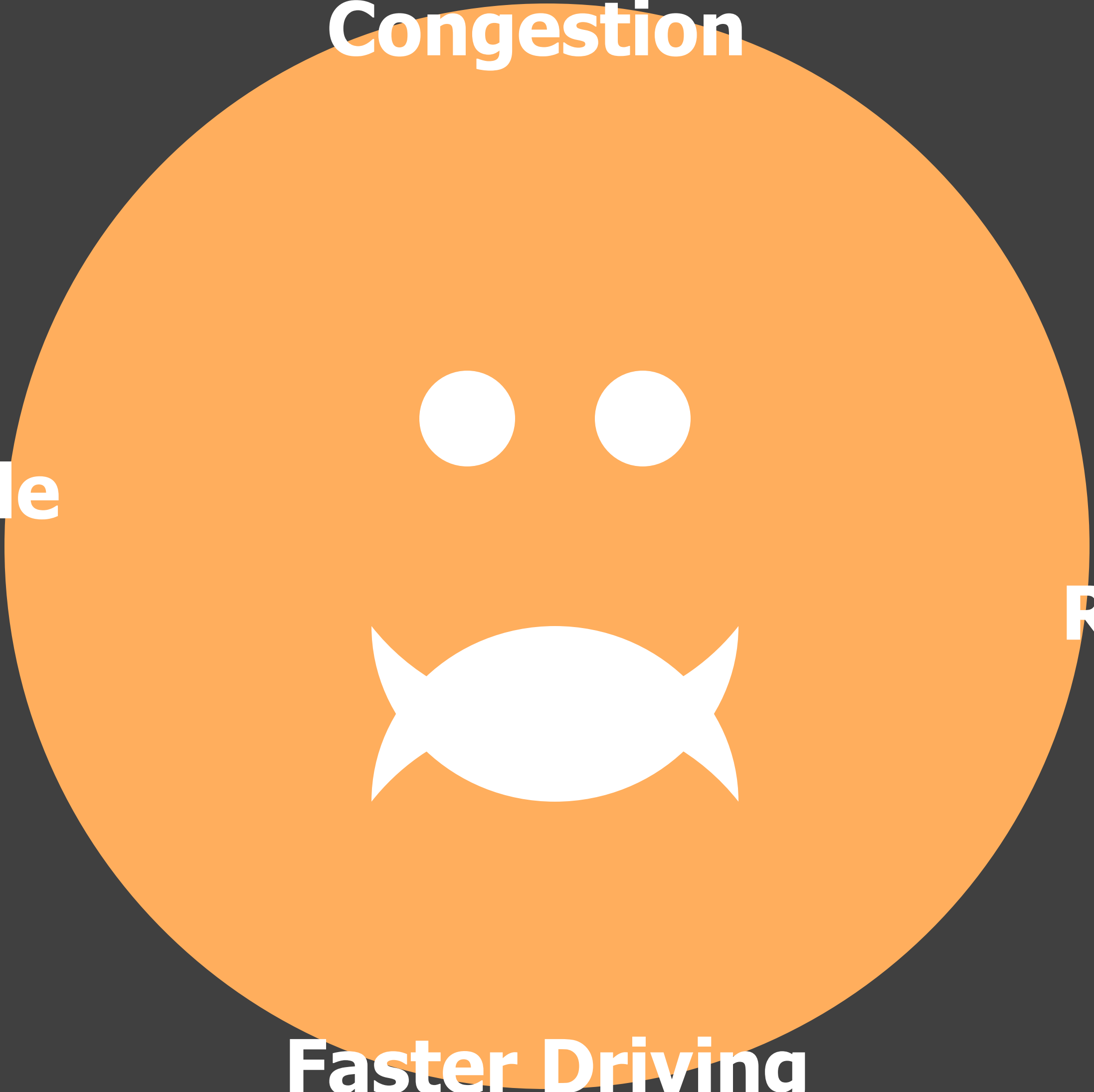
TRANSIT
COOPERATIVE
RESEARCH
PROGRAM

Sponsored by
the Federal
Transit Administration

Effects of TOD on Housing,
Parking, and Travel

TRANSPORTATION RESEARCH BOARD

Induced and Latent Demand



Congestion

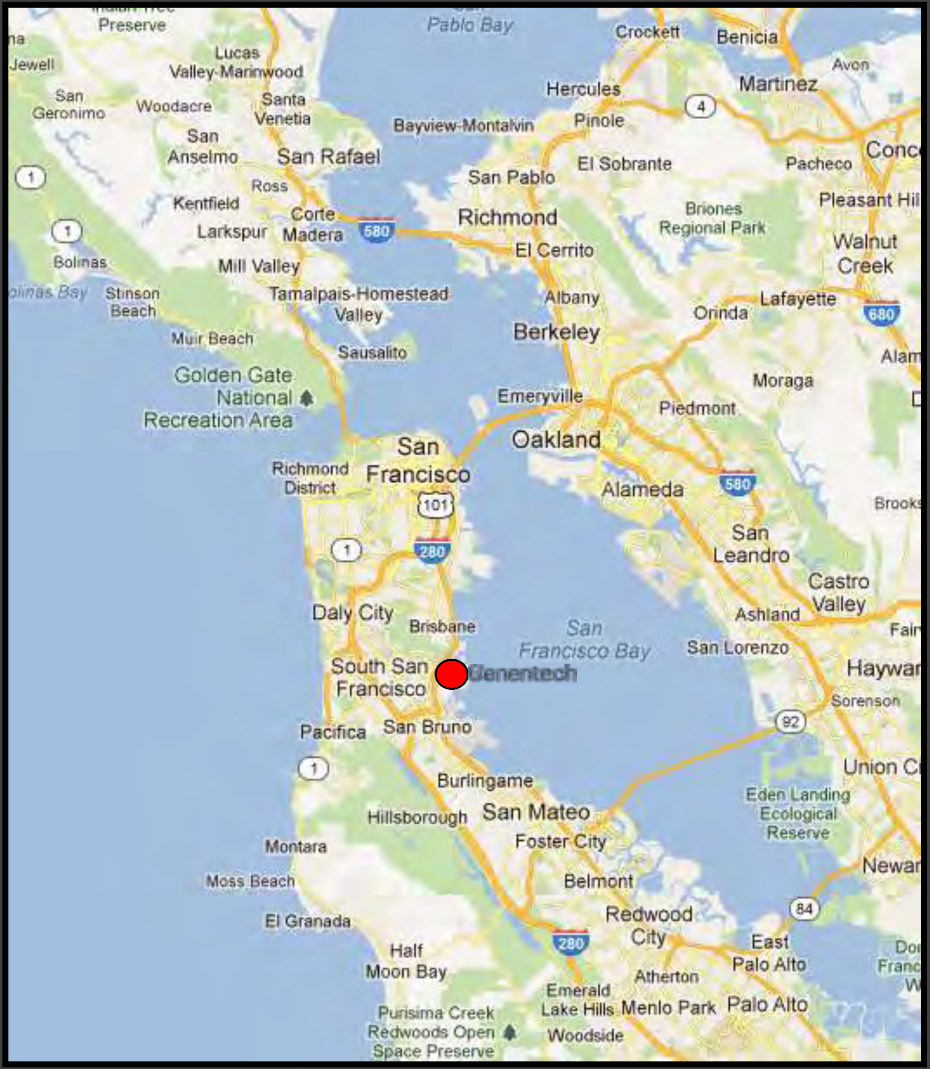
Widen
Roadway

Faster Driving

More People
Drive

8. Pay attention to the demand side

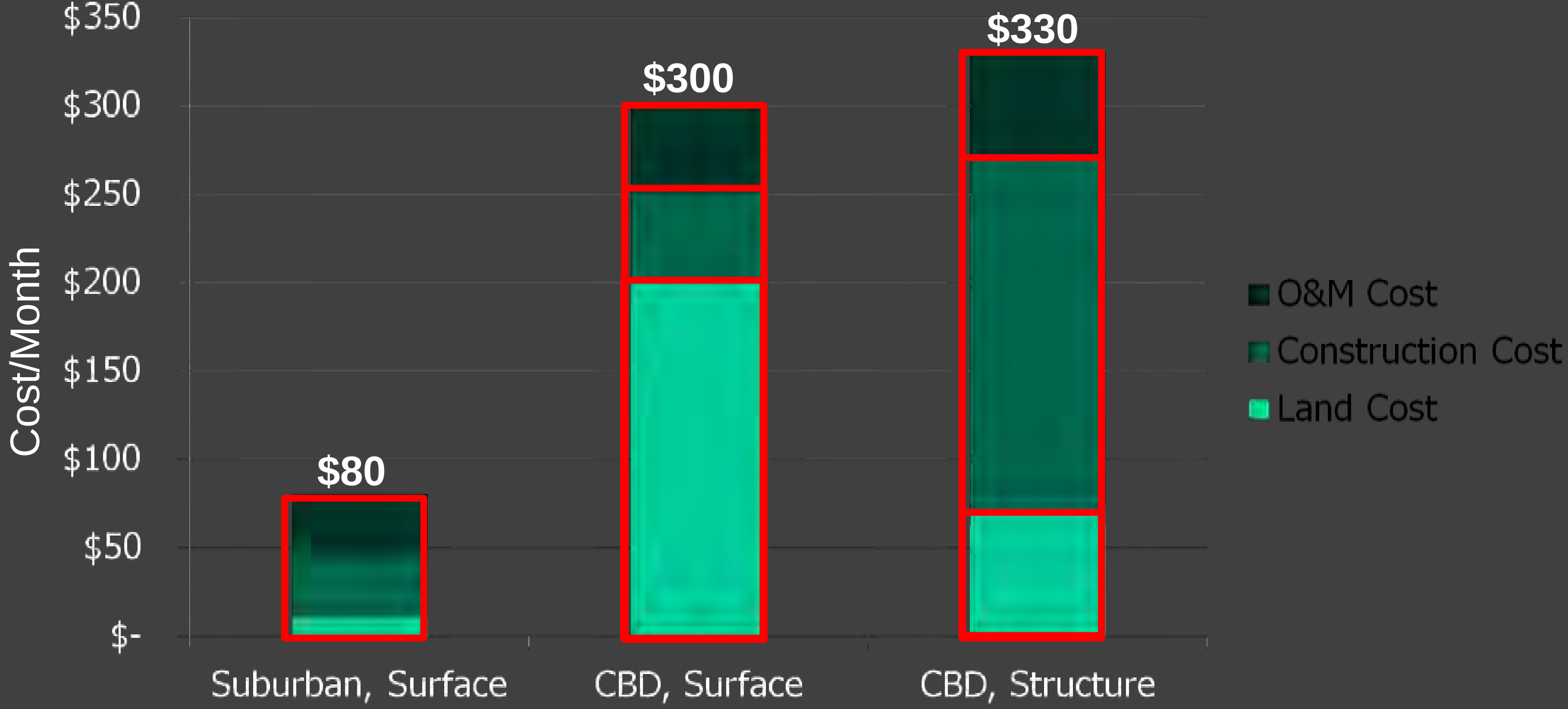
Genentech
South San Francisco


Genentech
San Francisco
South San Francisco
Daly City
Brisbane
San Bruno
Pacifica
Oakland
Berkeley
Richmond
Alameda
San Leandro
San Francisco Bay
Pablo Bay
San Rafael
Sausalito
Golden Gate National Recreation Area
Burlingame
San Mateo
Hillsborough
Foster City
Belmont
Redwood City
Half Moon Bay
Menlo Park
Palo Alto
East Palo Alto
Hayward
Union City
Castro Valley
Lafayette
Orinda
Moraga
Walnut Creek
Martinez
Benicia

Google Maps

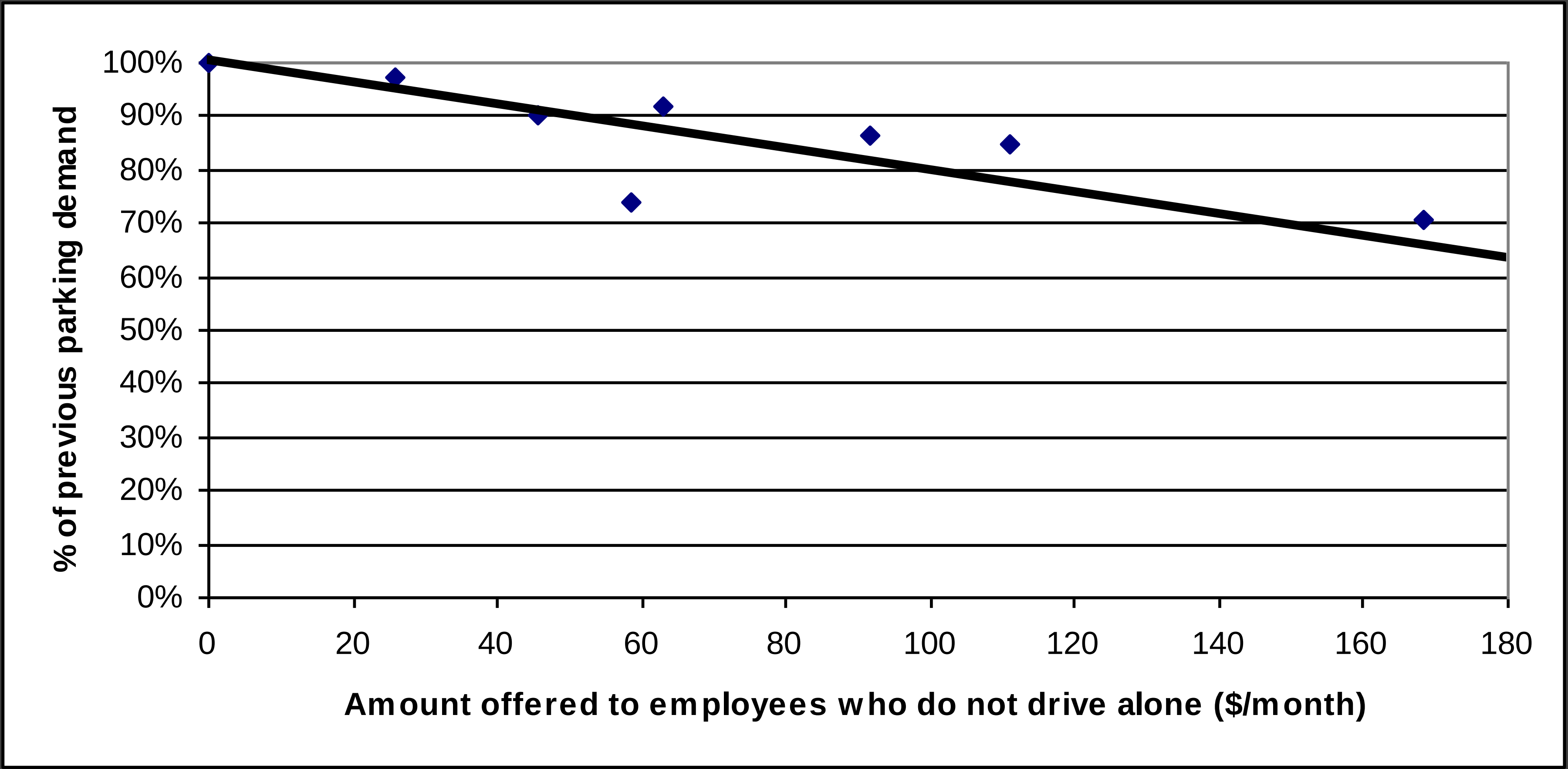
Case Study: Genentech

Parking Cost Break-Down



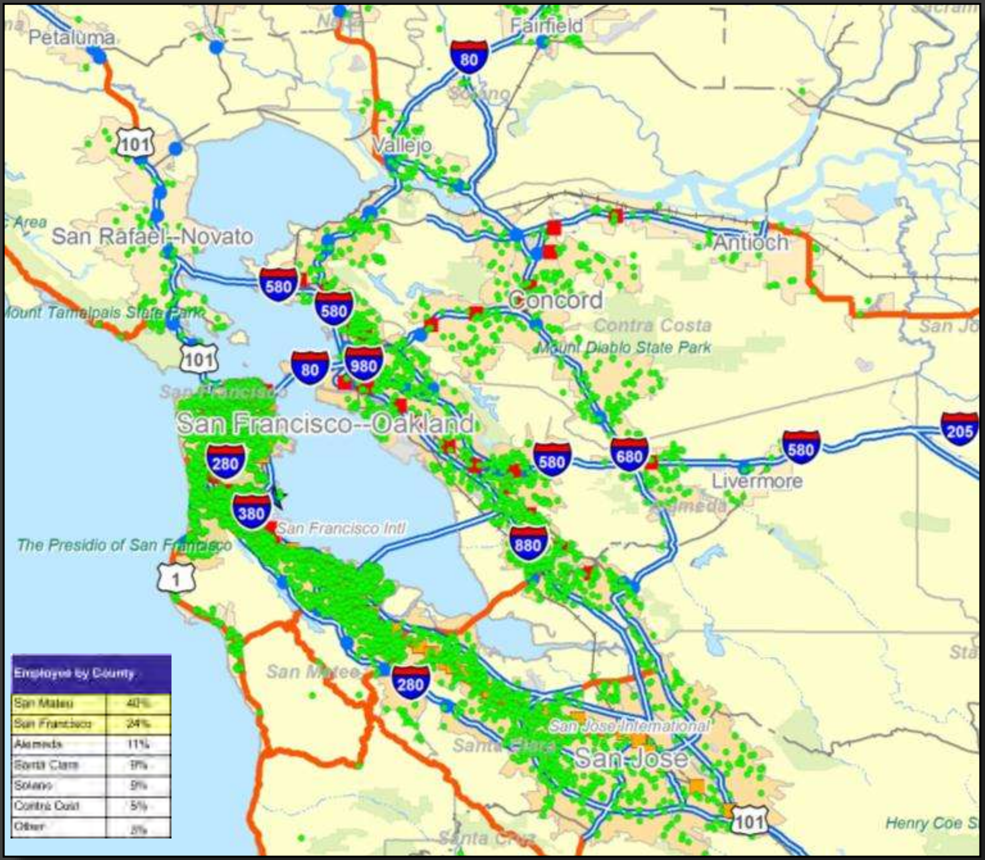
Source: Adapted from Victoria Transport Policy Institute, 2012

Parking Cash Out Reduces Parking Demand



gRide Program

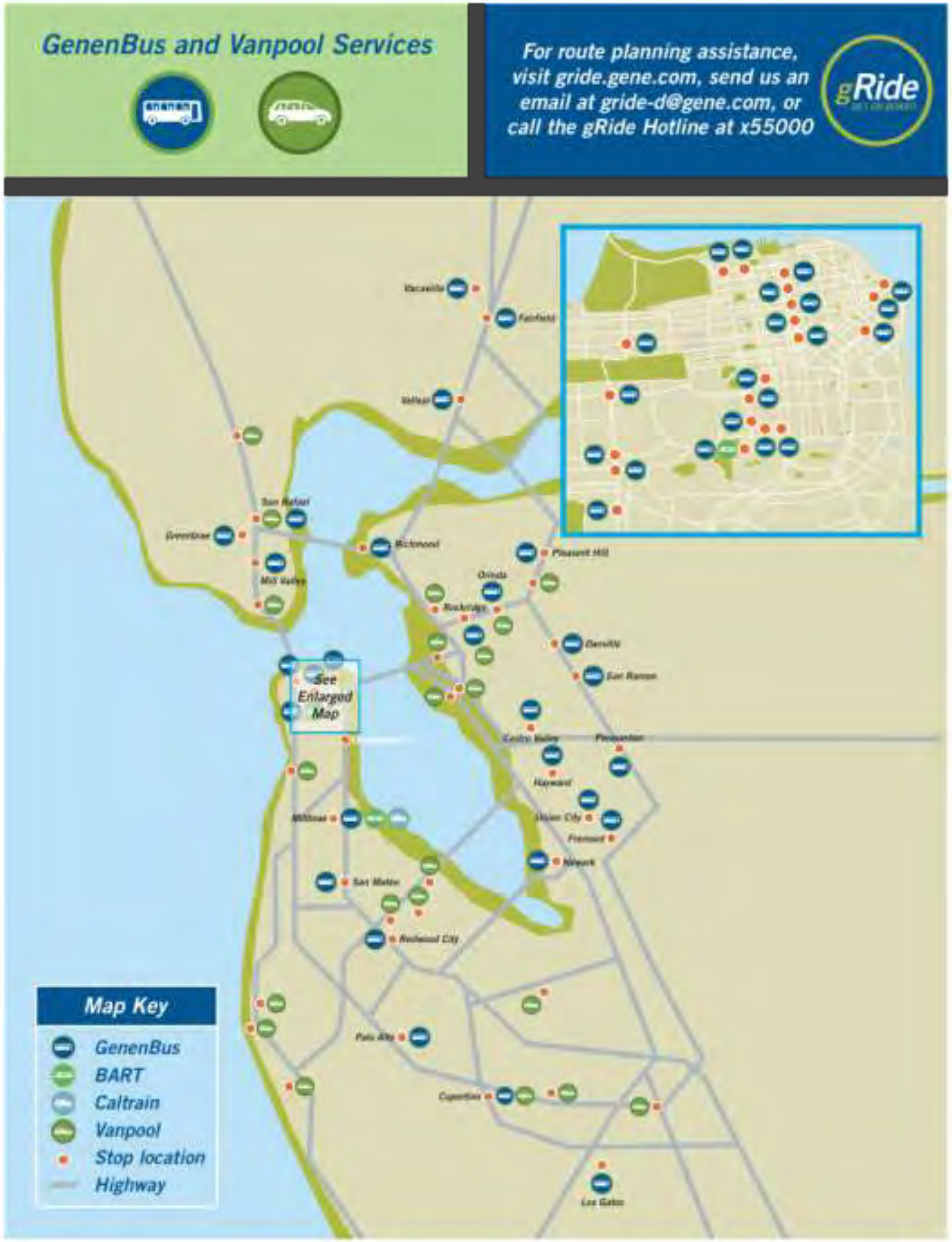
- 64% of employees reside in San Mateo or San Francisco counties
- Over 6,000 out of 8,500 SSF eligible employees are registered members in the gRide program
- Over 3,000 employees are active gRide users who average 13 gRide commute days per month


Petaluma
Fairfield
Vallejo
San Rafael--Novato
Antioch
Concord
Contra Costa
Mount Diablo State Park
Mount Tamalpais State Park
San Francisco--Oakland
Livermore
San Francisco Intl
The Presidio of San Francisco
San Mateo
San Jose International
San Jose
Santa Clara
Santa Cruz
Henry Coe S
80
101
580
980
280
380
680
880
205
1

Employee by County	
San Mateo	40%
San Francisco	24%
Alameda	11%
Santa Clara	9%
Solano	5%
Contra Costa	5%
Other	5%

GenenBus

- Focused service on areas with
  - No viable public transit alternatives
  - Longer, more arduous and costly commutes
  - high density SF neighborhoods
- 38 GenenBuses serving 27 commuter routes with over 3,500 riders per day


GenenBus and Vanpool Services
For route planning assistance, visit gride.gene.com, send us an email at gride-d@gene.com, or call the gRide Hotline at x55000
gRide
Vacaville
Fairfield
Vallejo
San Rafael
Greenbrae
Mill Valley
Richmond
Pleasant Hill
Orinda
Rockridge
Danville
San Ramon
See Enlarged Map
Castro Valley
Pleasanton
Hayward
Union City
Fremont
Newark
Millbrae
San Mateo
Redwood City
Palo Alto
Cupertino
Los Gatos
Map Key
GenenBus
BART
Caltrain
Vanpool
Stop location
Highway

gRide Assistance

Verizon
3:46 PM
87 %
gRide
GET ON BOARD

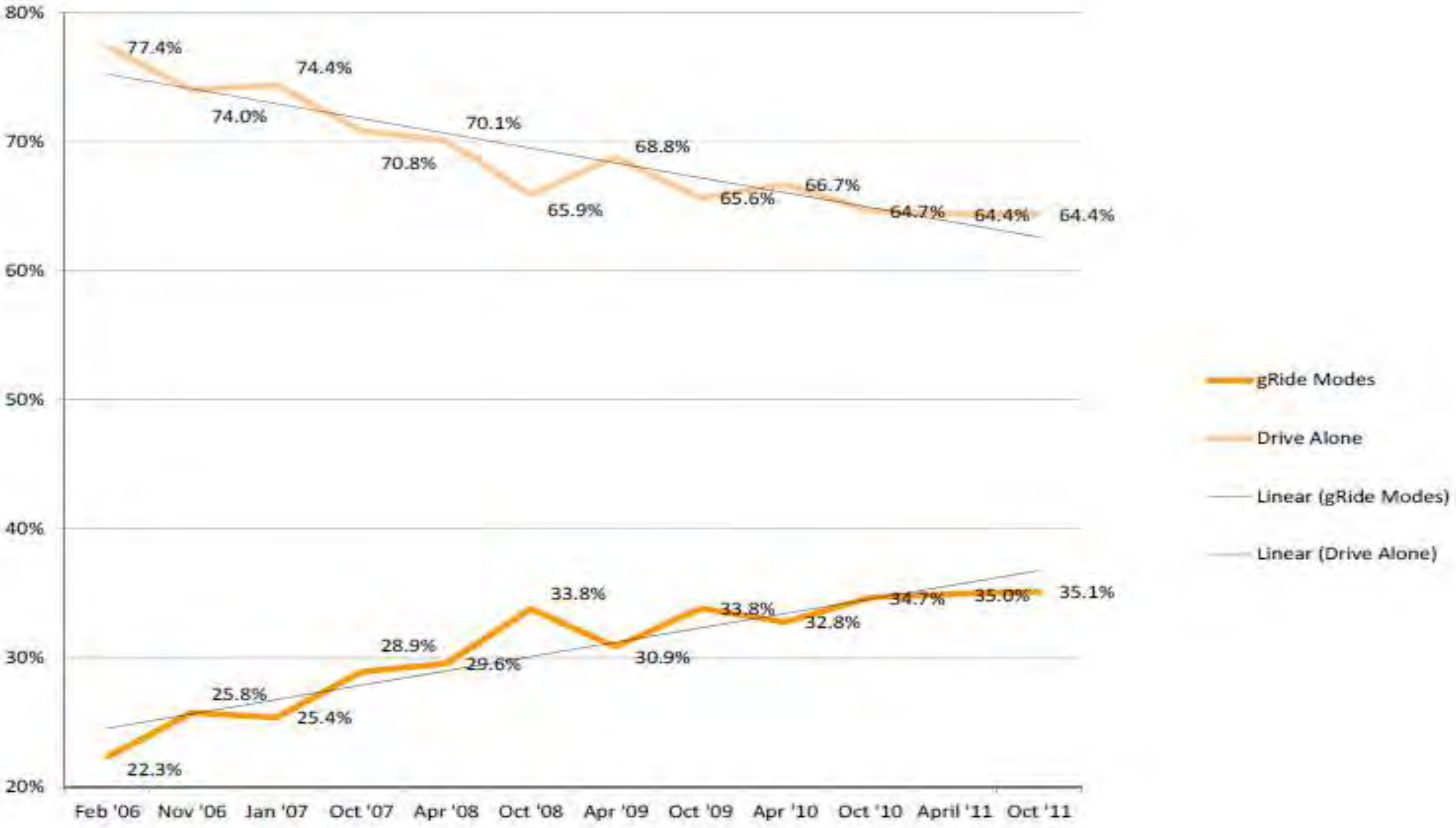
- Employees can contact gRide for help with programs, personalized commute planning, or any other questions they might have.
  - gRide Hotline: 6:00 AM to 7:30PM
  - Simple Email address to gRide team
  - gRide website
  - gRide iPhone App with schedules
  - SMS Text Alerts
  - gRide FAQs, discussion forum, gRide Blog

Business Drivers

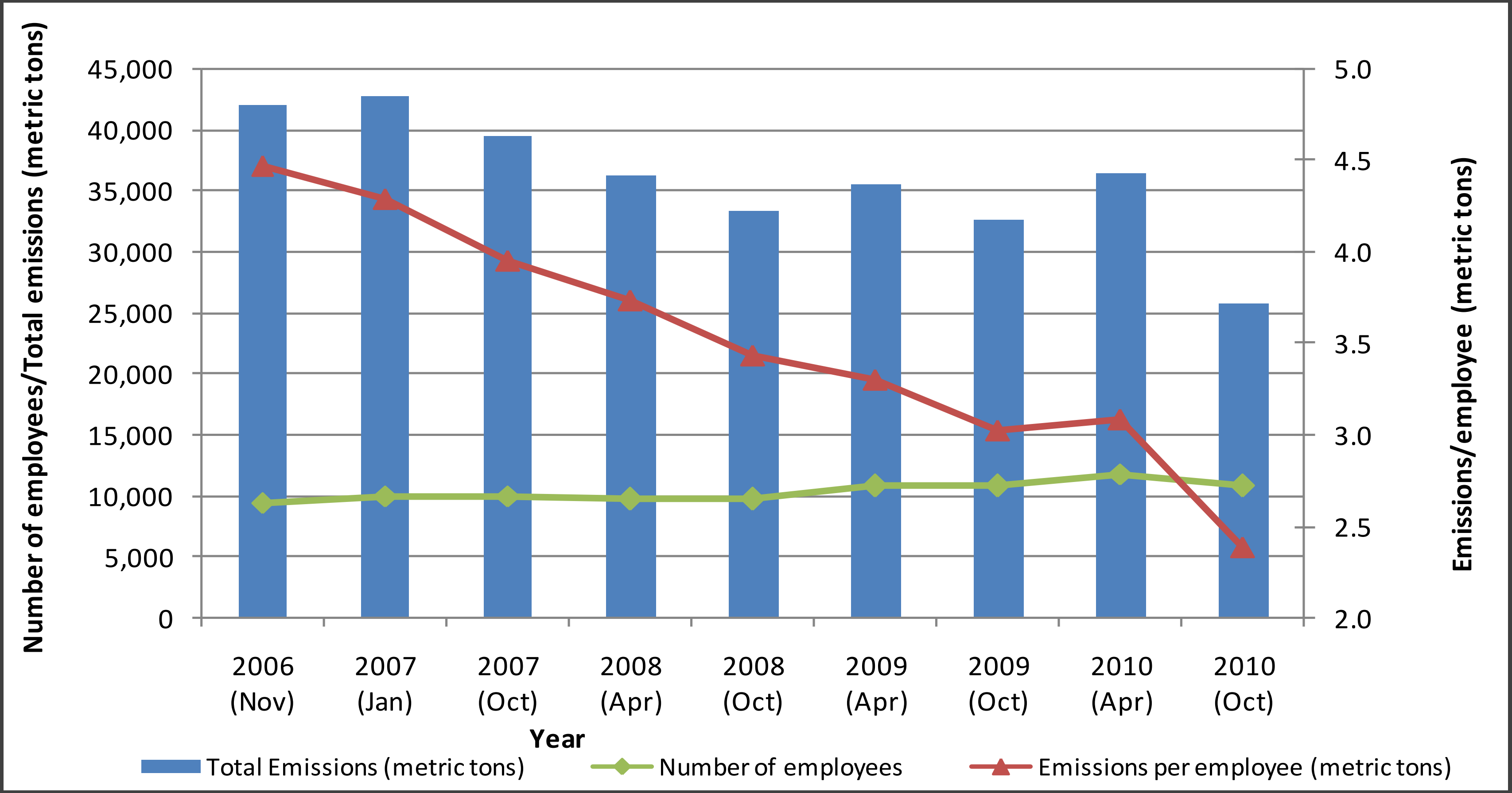
- **Productivity enabler**
  - >12,000 GenenBus WiFi sessions per month:
    - ~$2M gained productivity
  - DNA intra-campus shuttle facilitates face to face meetings

- **Carbon Footprint**
  - ~12.5% of GNE CO2 emissions are from commute travel
  - gRide has eliminated over 63.4 million lbs. of CO2 since program launch

gRide and Drive Alone Rates 2006-Present



GHG Reduction Impacts by Year



9. Park Once

1. Eliminate minimum parking requirements
2. Create a “Park Once,” shared parking environment
3. Charge the right price for curb parking
4. Manage parking in order to achieve development and congestion management goals context and goals

Smart Meters

00:44
TIME
CANCEL
OK
VISA
COINS

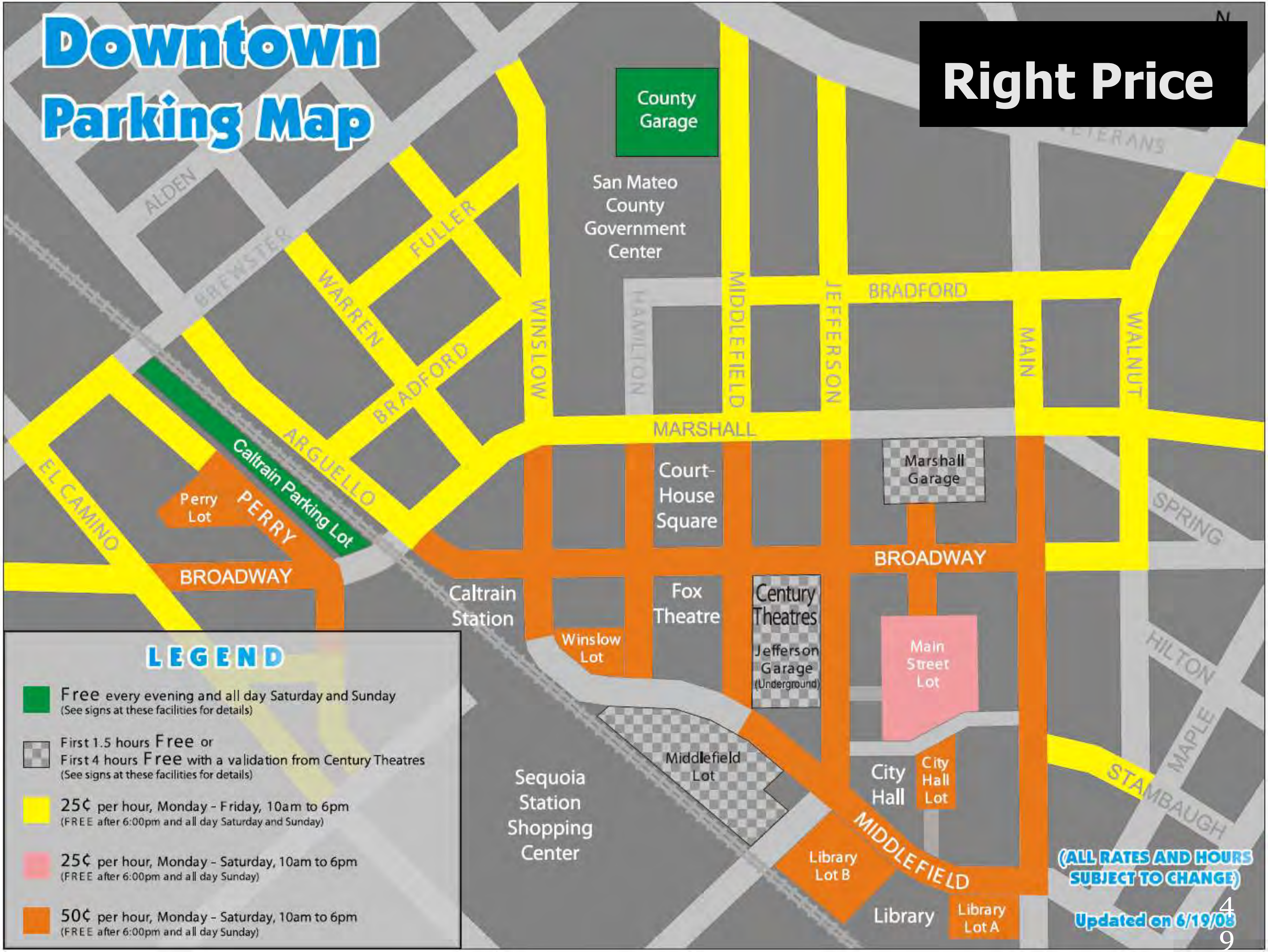
Smart Technology

parkassist

PARKING INFO: GARAGE
SPACE AVAIL.
Portsmouth 66
St. Mary's Full
G. Gateway 15

AT&T 3G
9:42 AM
The Embarcadero
Bay St
Columbus Ave
Search
Directions

Right Price


Downtown Parking Map
N
County Garage
San Mateo County Government Center
VETERANS
ALDEN
BREWSTER
FULLER
WARREN
BRADFORD
WINSLOW
HAMILTON
MIDDLEFIELD
JEFFERSON
BRADFORD
MAIN
WALNUT
MARSHALL
ARGUELLO
Caltrain Parking Lot
EL CAMINO
Perry Lot
PERRY
BROADWAY
Court-House Square
Marshall Garage
SPRING
BROADWAY
Caltrain Station
Fox Theatre
Century Theatres
Jefferson Garage (Underground)
Winslow Lot
Main Street Lot
HILTON
MAPLE
Middlefield Lot
City Hall
City Hall Lot
STAMBAUGH
Sequoia Station Shopping Center
MIDDLEFIELD
Library Lot B
Library
Library Lot A

LEGEND

🟩 Free every evening and all day Saturday and Sunday
(See signs at these facilities for details)

▨ First 1.5 hours Free or
First 4 hours Free with a validation from Century Theatres
(See signs at these facilities for details)

🟨 25¢ per hour, Monday - Friday, 10am to 6pm
(FREE after 6:00pm and all day Saturday and Sunday)

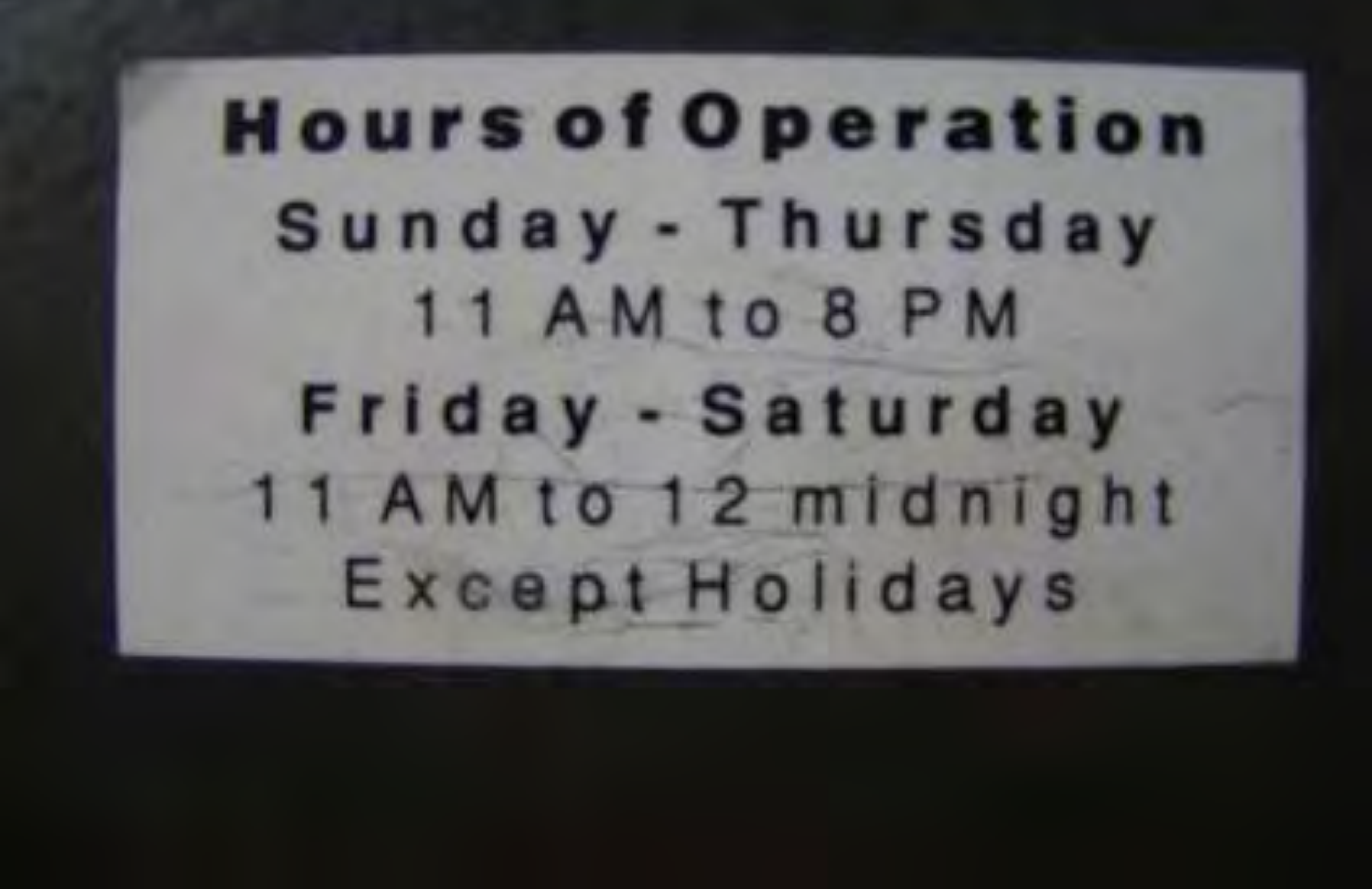
🟥 25¢ per hour, Monday - Saturday, 10am to 6pm
(FREE after 6:00pm and all day Sunday)

🟧 50¢ per hour, Monday - Saturday, 10am to 6pm
(FREE after 6:00pm and all day Sunday)

(ALL RATES AND HOURS SUBJECT TO CHANGE)

Updated on 6/19/08

Right Time



Hours of Operation

Sunday - Thursday

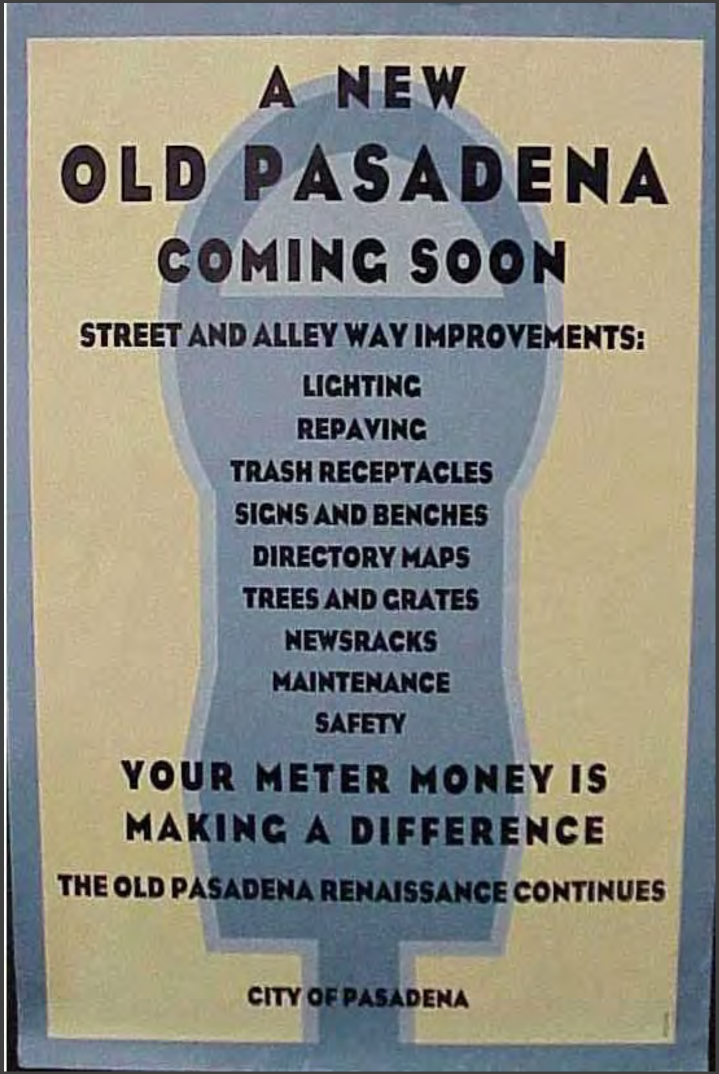
11 AM to 8 PM

Friday - Saturday

11 AM to 12 midnight

Except Holidays

Invest Revenue



A NEW

OLD PASADENA

COMING SOON

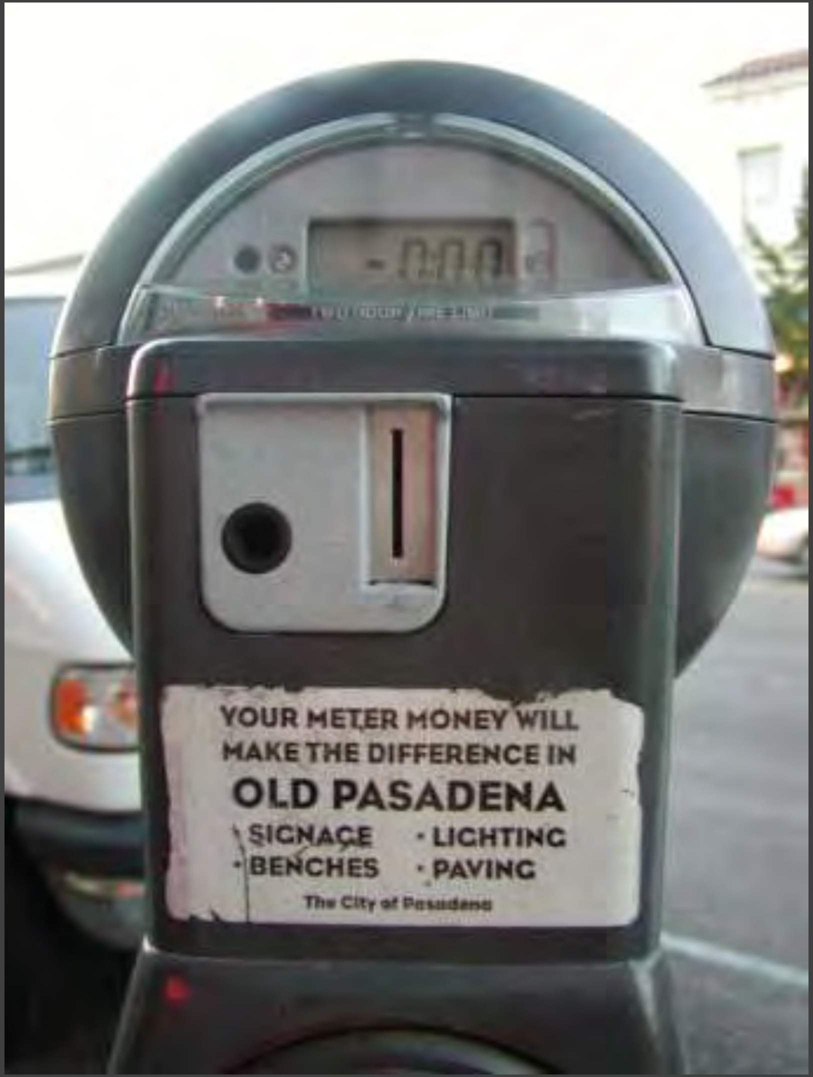
STREET AND ALLEY WAY IMPROVEMENTS:

LIGHTING
REPAVING
TRASH RECEPTACLES
SIGNS AND BENCHES
DIRECTORY MAPS
TREES AND GRATES
NEWSRACKS
MAINTENANCE
SAFETY

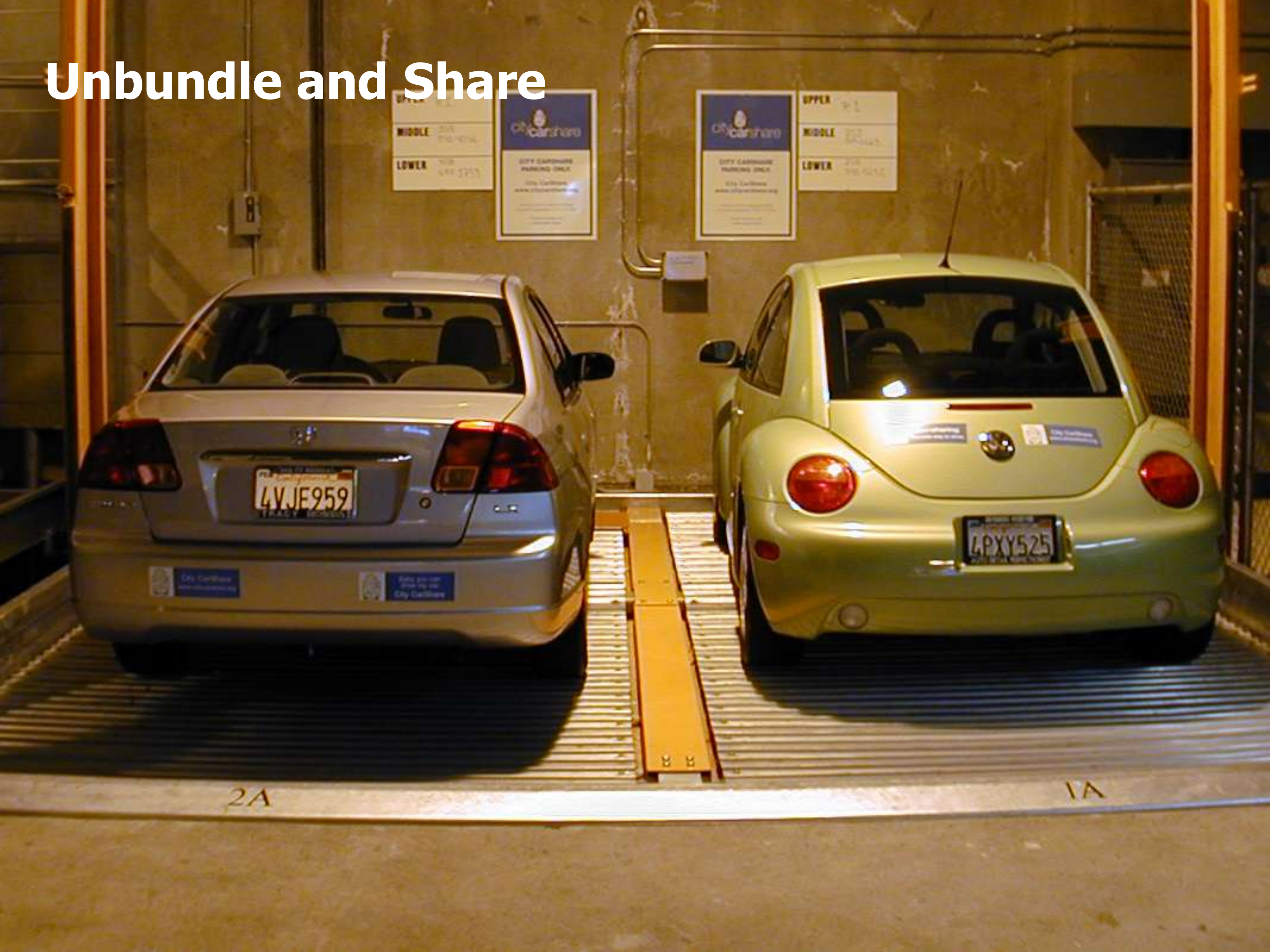
YOUR METER MONEY IS MAKING A DIFFERENCE

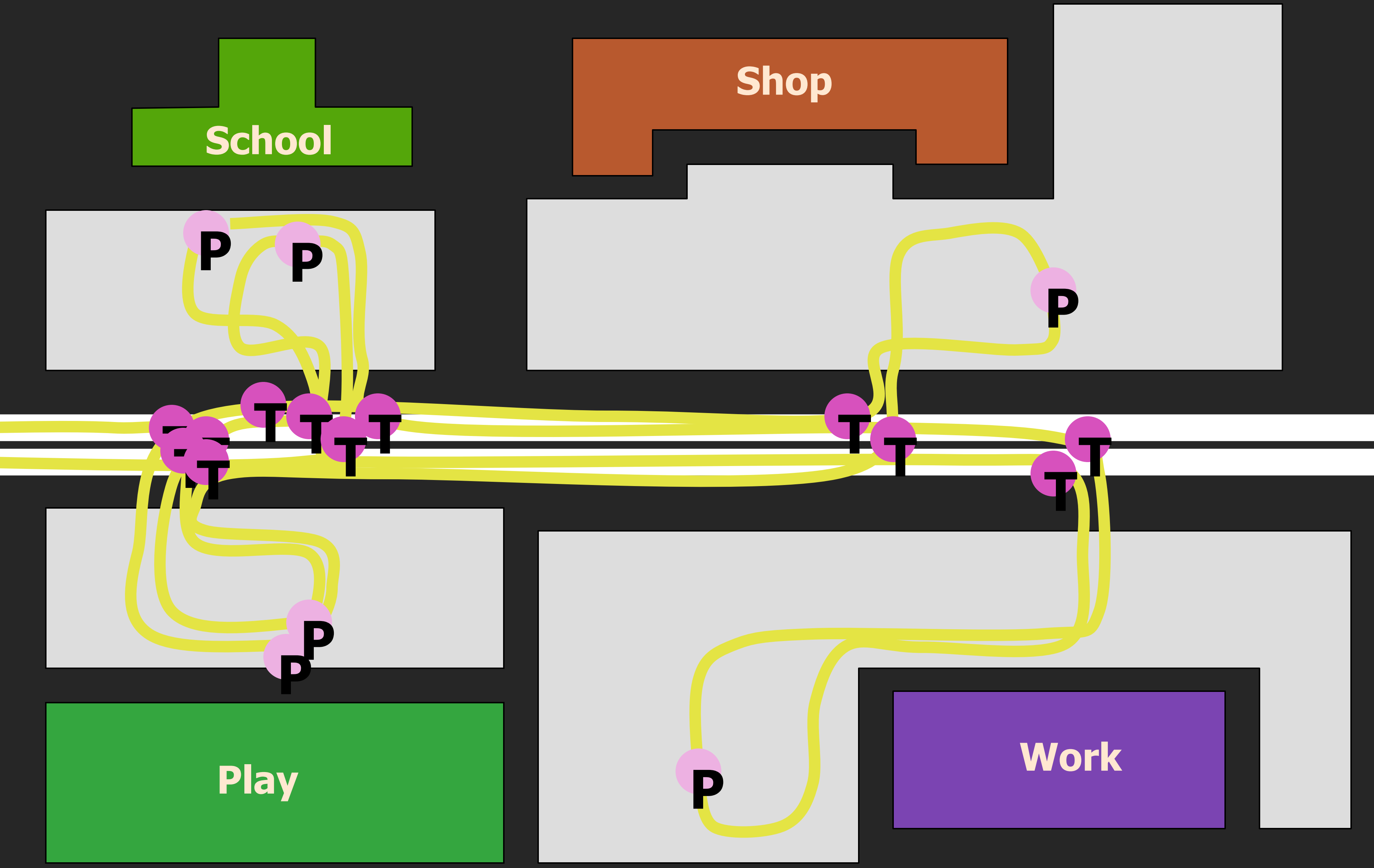
THE OLD PASADENA RENAISSANCE CONTINUES

CITY OF PASADENA


YOUR METER MONEY WILL MAKE THE DIFFERENCE IN
OLD PASADENA
SIGNAGE
LIGHTING
BENCHES
PAVING
The City of Pasadena

Unbundle and Share


UPPER
MIDDLE
LOWER
City CarShare
CITY CARSHARE PARKING ONLY
4VJE959
4PXY525
2A
1A


School
Shop
Play
Work
P
P
P
P
P
P
T
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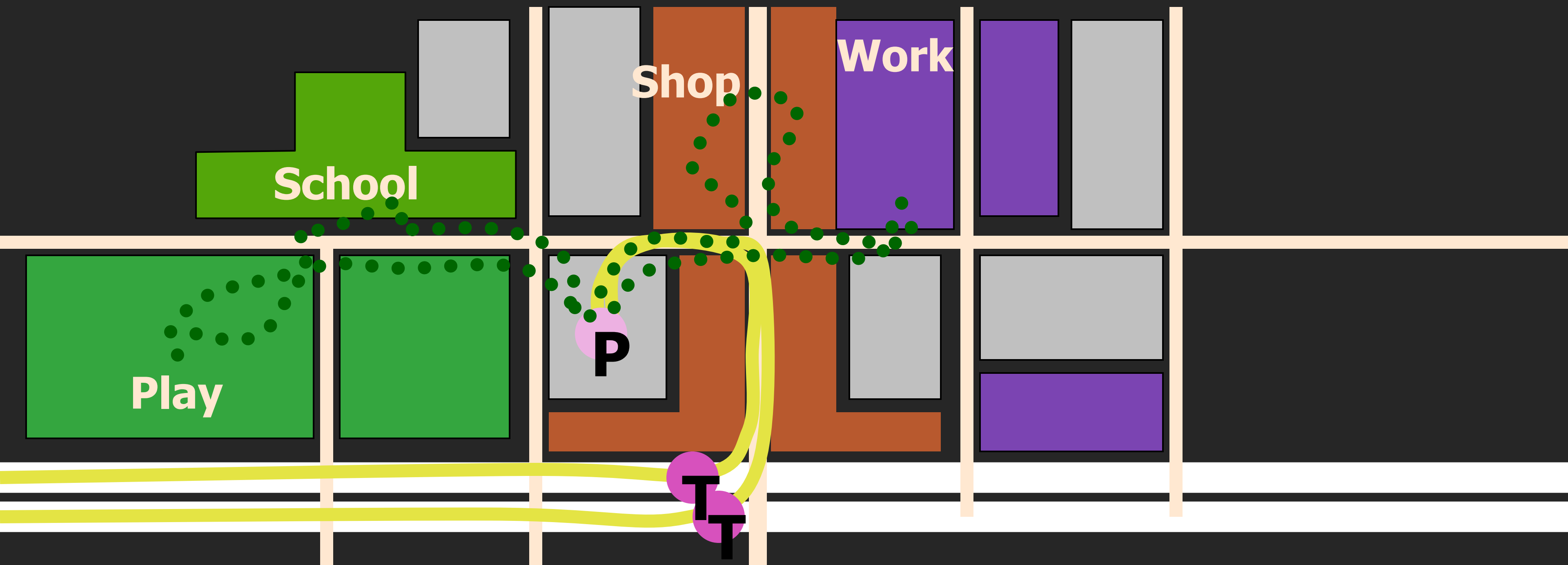
T
T
T
T

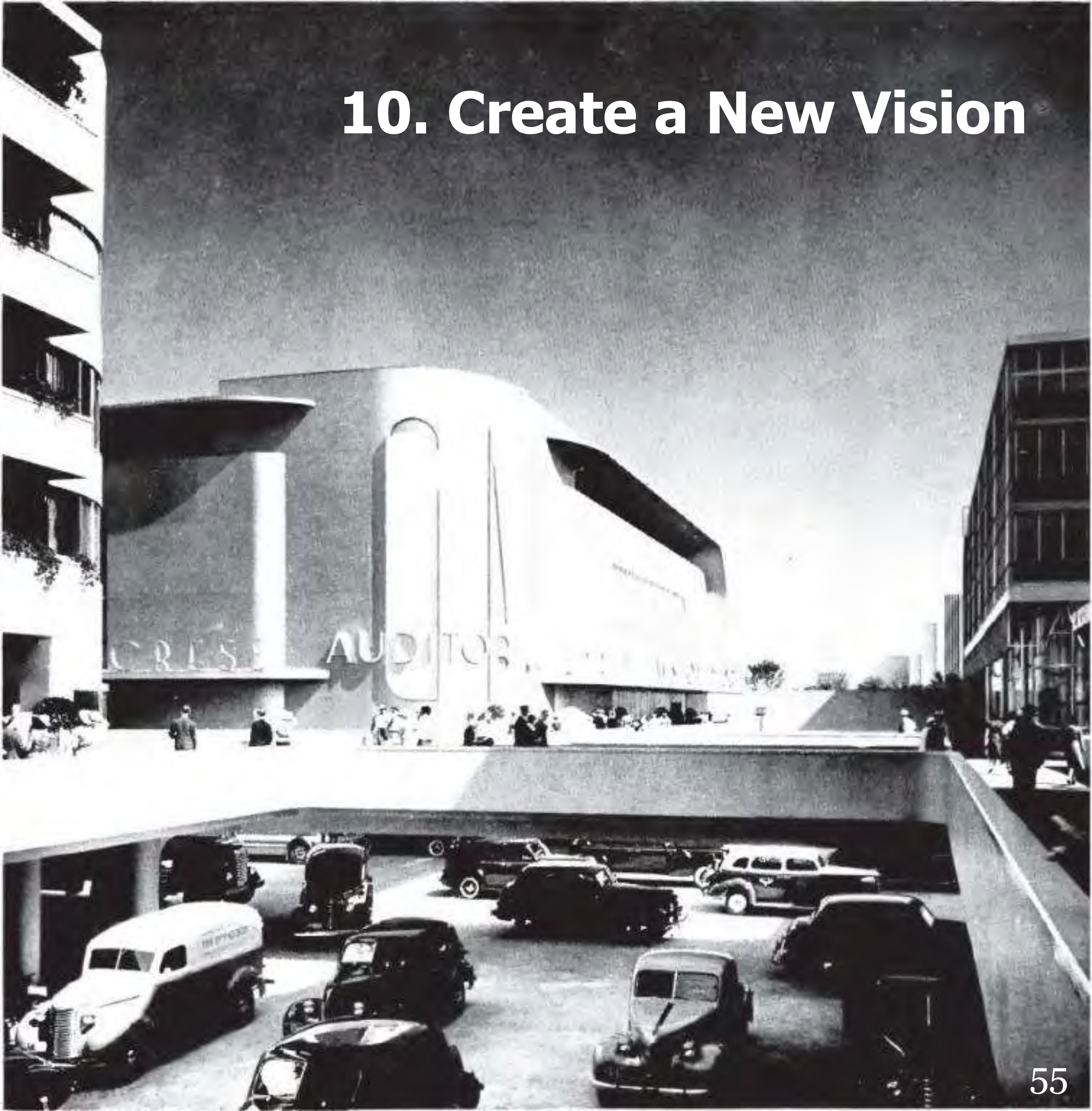
Mixed Use, Park Once District

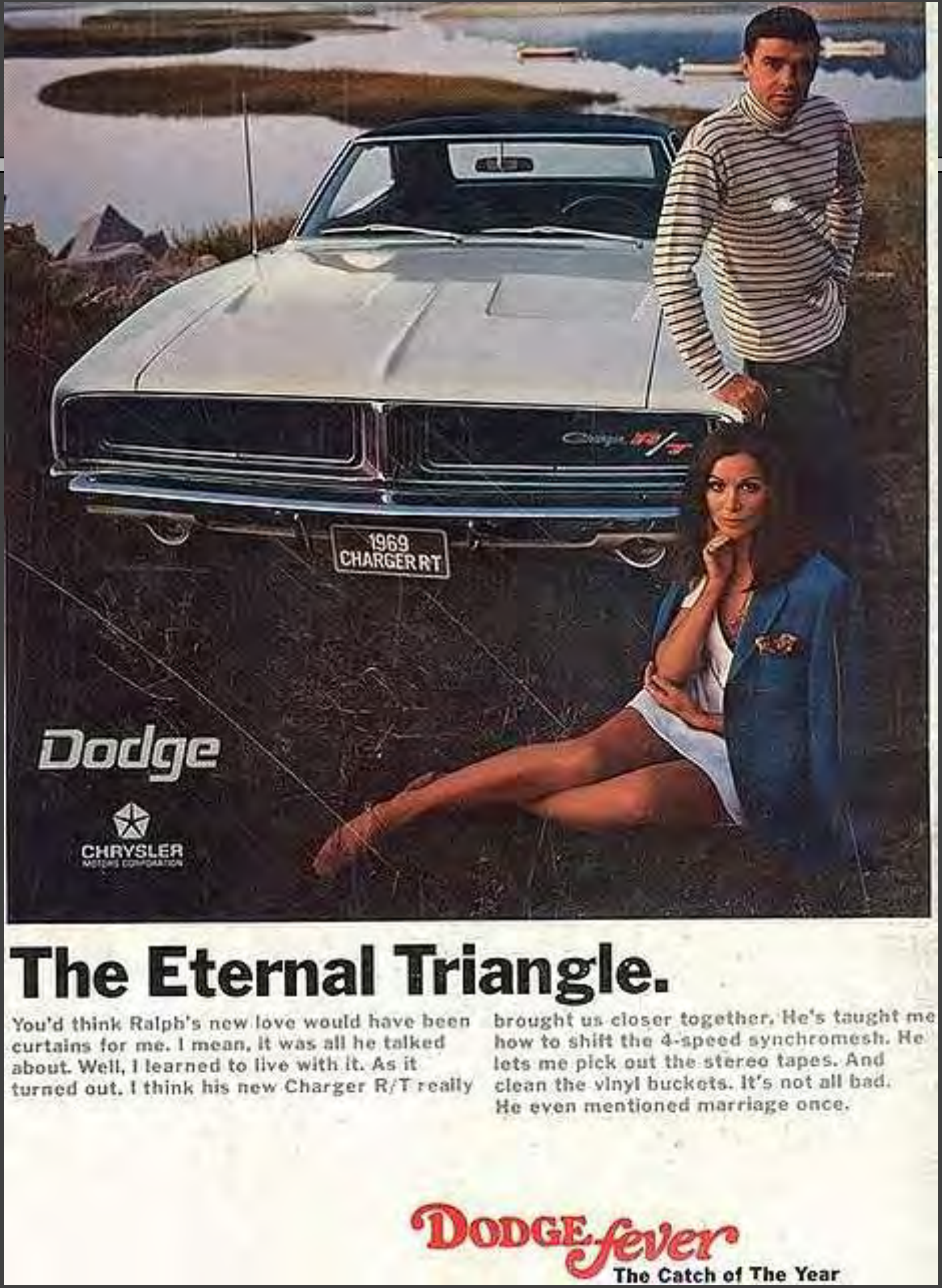

Shop
Work
School
P
Play
T
T

Results:

- <½ the parking
- <½ the land area
- ¼ the arterial trips
- 1/6th the arterial turning movements
- <¼ the vehicle miles traveled

10. Create a New Vision

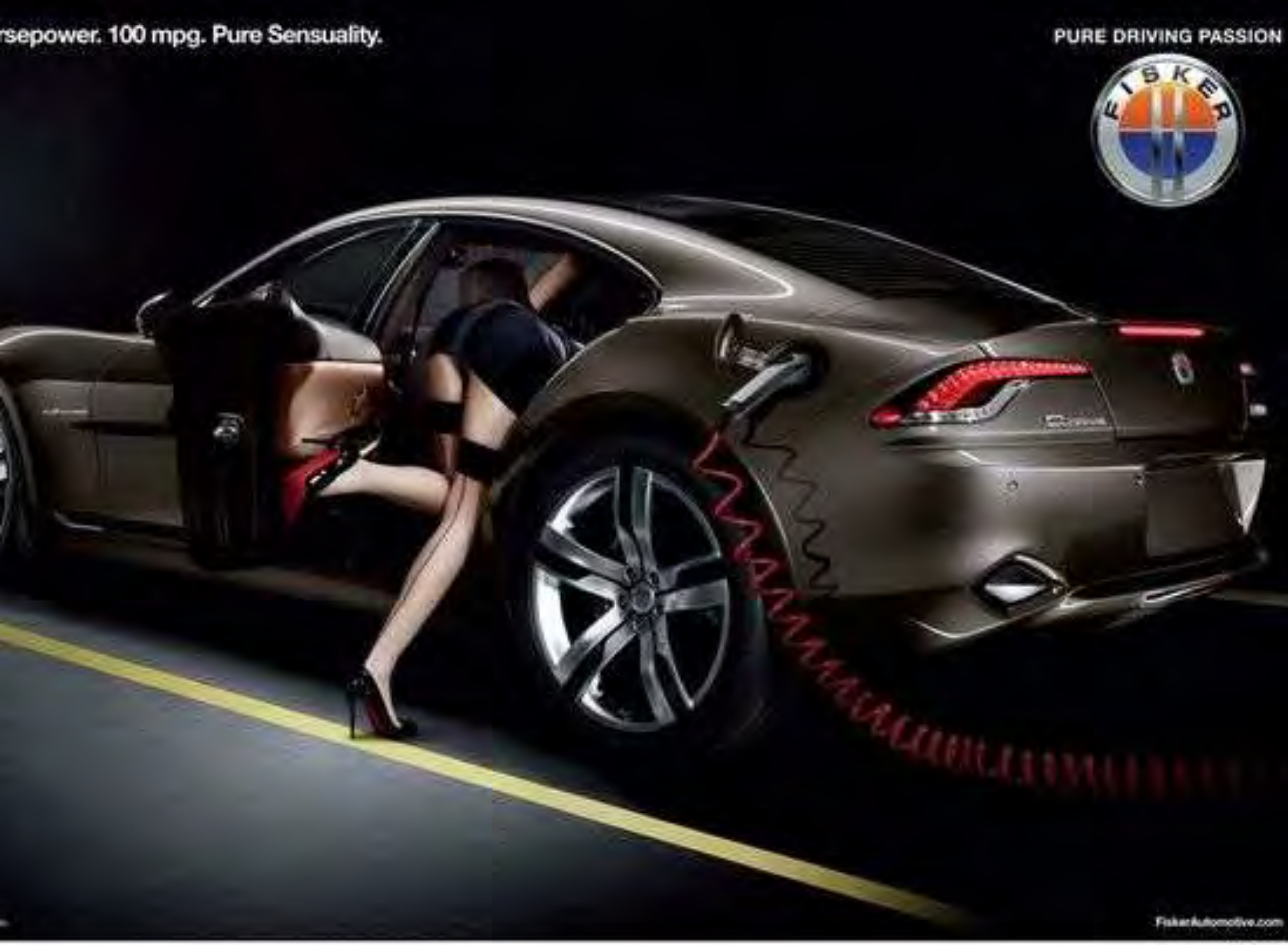



1969
CHARGER RT
Dodge
CHRYSLER
MOTORS CORPORATION

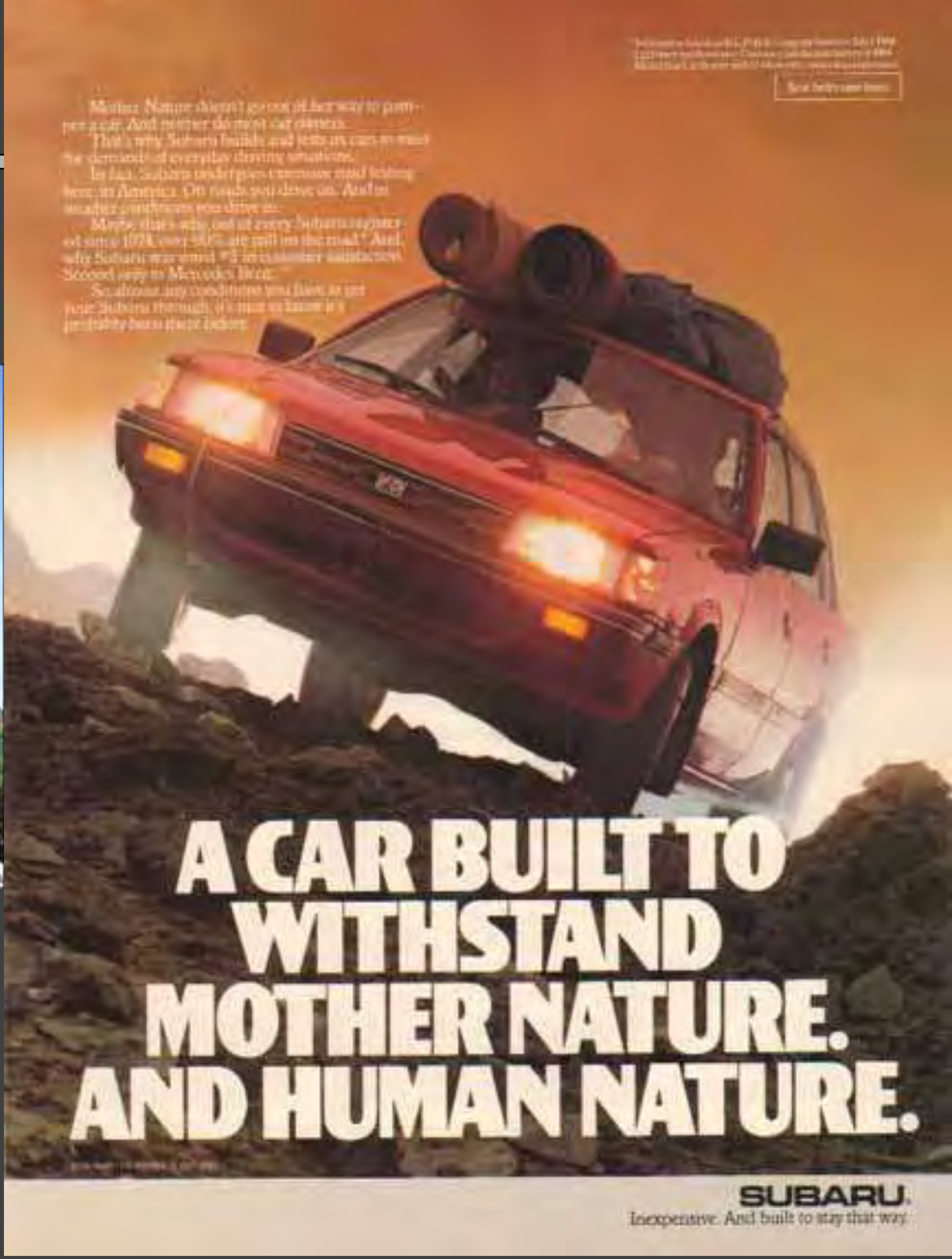
The Eternal Triangle.

You'd think Ralph's new love would have been curtains for me. I mean, it was all he talked about. Well, I learned to live with it. As it turned out, I think his new Charger R/T really brought us closer together. He's taught me how to shift the 4-speed synchromesh. He lets me pick out the stereo tapes. And clean the vinyl buckets. It's not all bad. He even mentioned marriage once.

DODGE fever
The Catch of The Year


rsepower. 100 mpg. Pure Sensuality.
PURE DRIVING PASSION
FISKER
FiskerAutomotive.com

Fisker

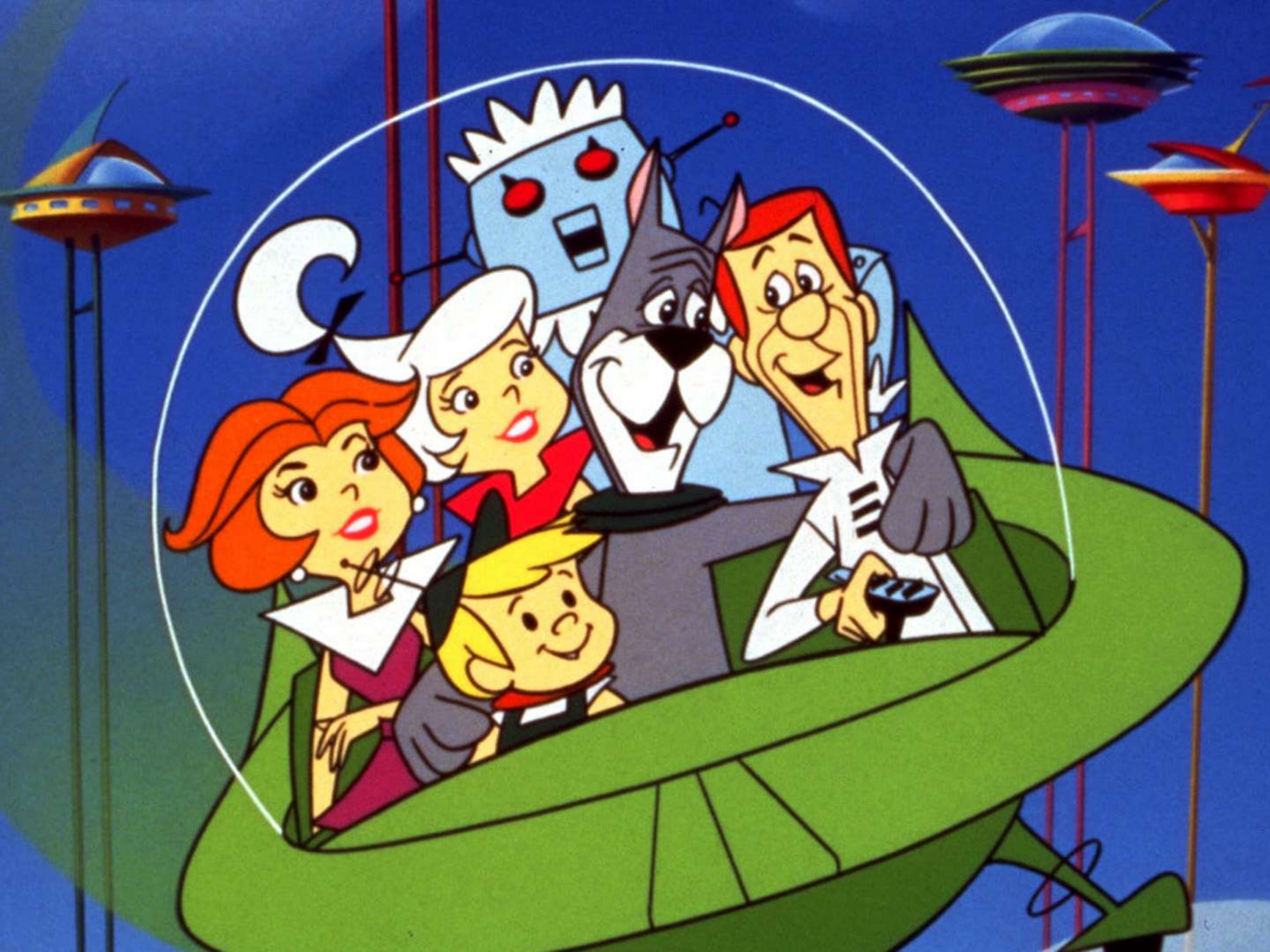


A CAR BUILT TO WITHSTAND MOTHER NATURE. AND HUMAN NATURE.

SUBARU.

Inexpensive. And built to stay that way.

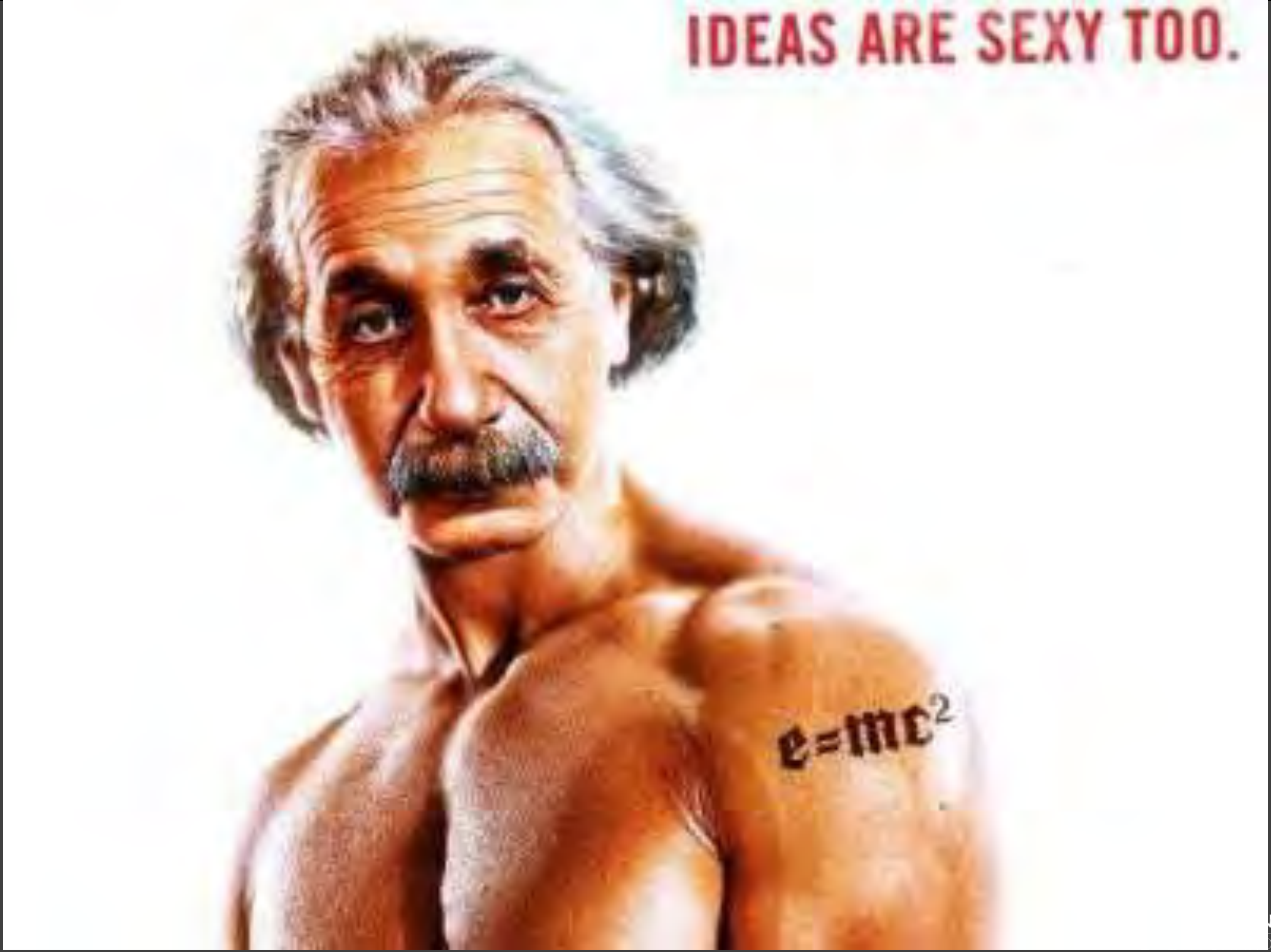
745
504



It’s not sustainable if it’s not beautiful

Culinara
Genießen macht glücklich
Culinara Weine & Tischkultur

Toward a Better Vision?


IDEAS ARE SEXY TOO.
e=mc²

For More Information

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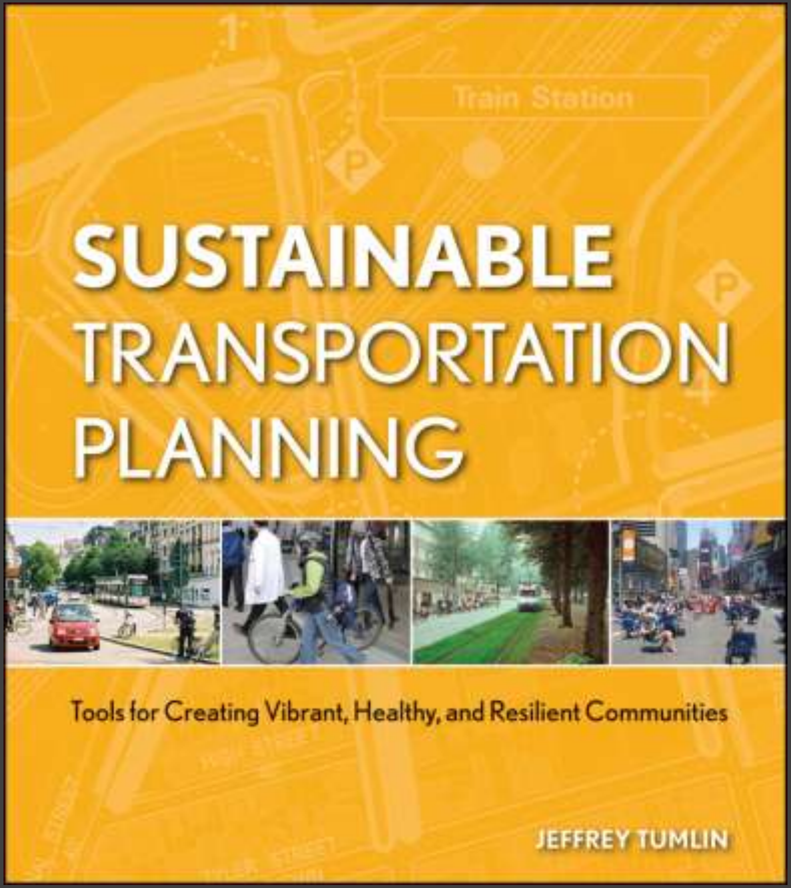

SUSTAINABLE
TRANSPORTATION
PLANNING

Tools for Creating Vibrant, Healthy, and Resilient Communities

JEFFREY TUMLIN