



Leadership Institute
Smart Growth Symposium V

Moving Beyond A Plan: Parking in TODs

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Why is parking so important?

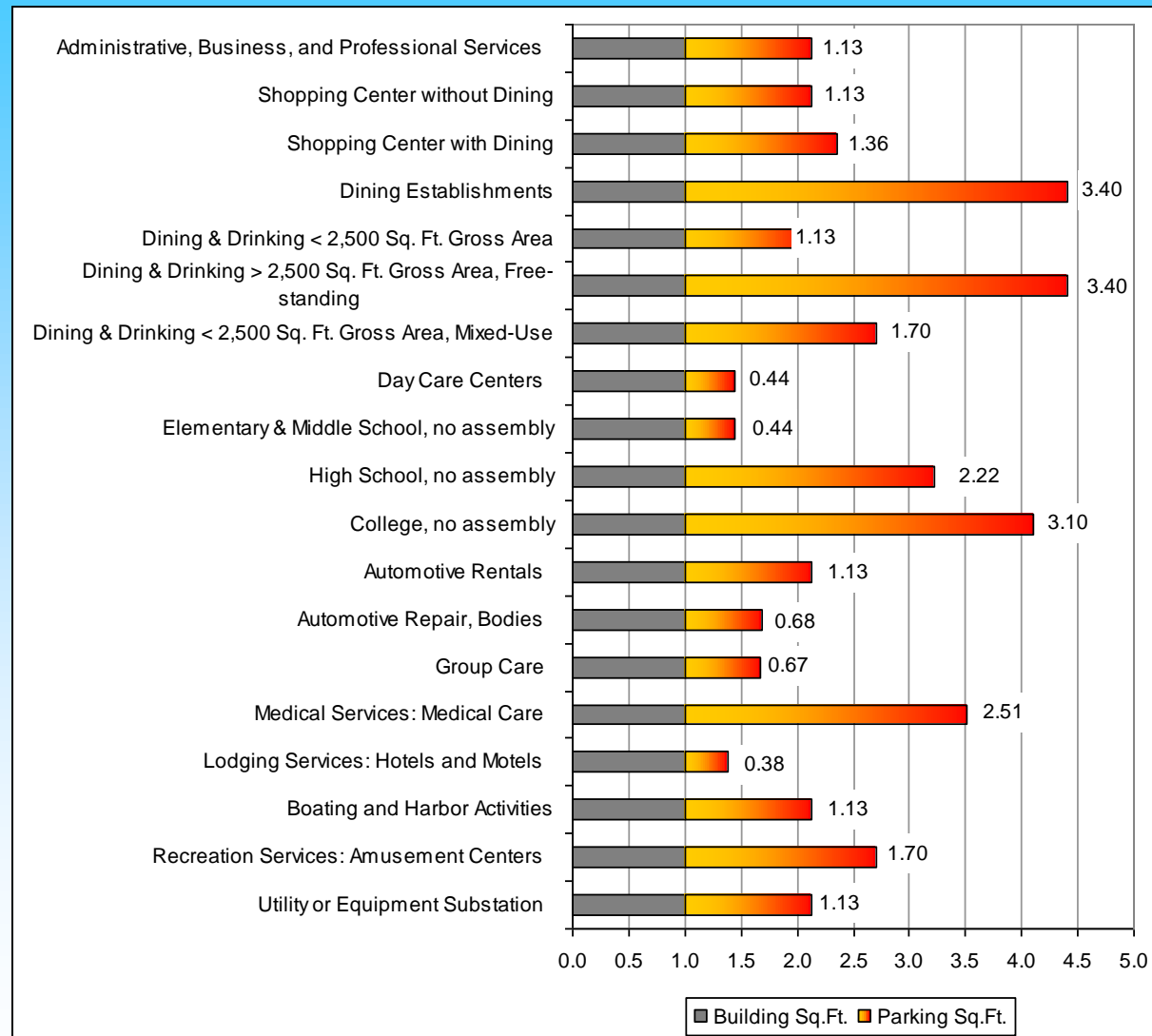


Parking supply and management is the difference between smart growth and sprawl

Stuart Cohen, Transportation and Land Use Coalition

Parking Wastes Land

- If you require more than 3 spaces per 1,000 sq ft, you're requiring more parking than land use





Parking Wastes Money



\$20,000

\$20,000

\$20,000

\$20,000

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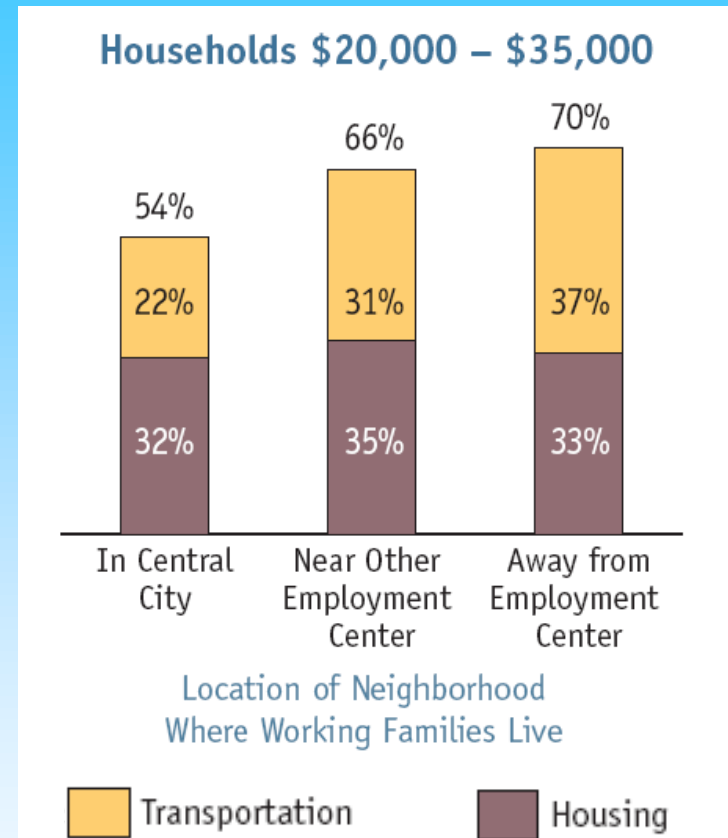
\$20,000

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Parking Worsens Housing Affordability

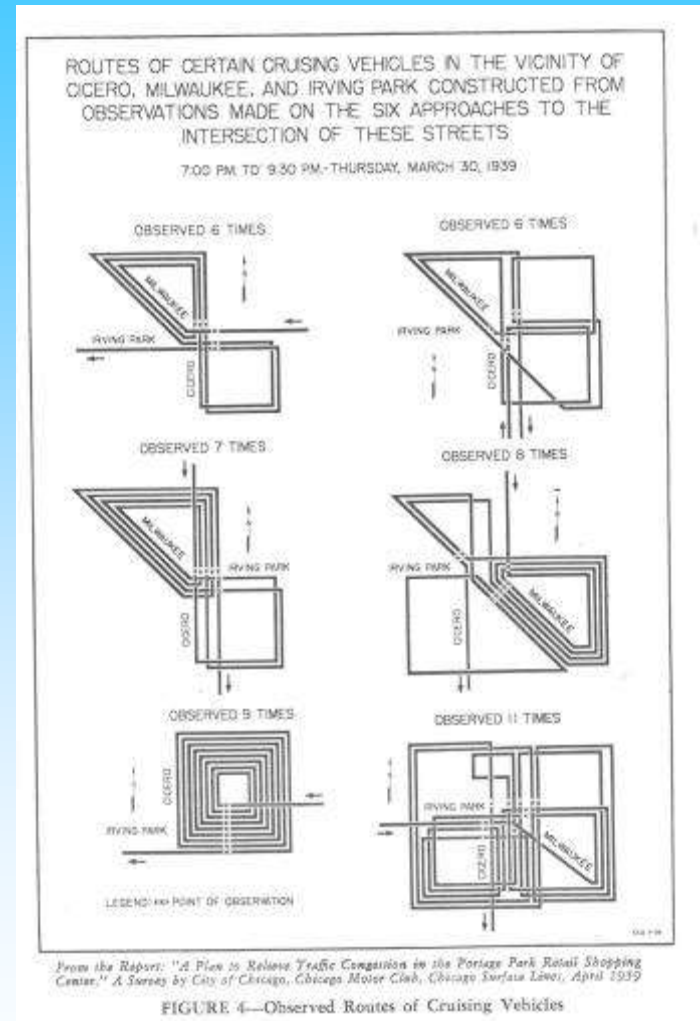
- For each parking space required in a residential unit:
 - Price of unit increases 15-30%
 - Number of units that can be built on typical parcel decreases 15-25%
- No accommodation for car-free households: Getting rid of a car = extra \$100,000 in mortgage
- At >300 sq ft, each parking space consumes more space than an efficiency apartment



Sources: "A Heavy Load: The Combined Housing and Transportation Burdens of Working Families," Center for Neighborhood Technology, 2006. "The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice," Center for Neighborhood Technology, 2008. Sedway Cook studies of parking and housing costs in San Francisco and Oakland.

Parking Produces Traffic Congestion

- Every parking space is a magnet for cars. Why provide more parking than you have traffic capacity to access that parking?
- Poorly managed parking results in motorists circling for a parking space, from 8 to 74% of traffic in many downtowns.
- Eliminating just 10% of vehicles from any congested location makes traffic free flowing.



Sources: "Cruising for Parking," Don Shoup, 2006.

How much is enough?

- No right answer
- No such thing as set “demand” for parking:
 - Pricing
 - Availability
 - Choices
- Supply is a value judgment based on wider community goals
- Don’t confuse supply and availability



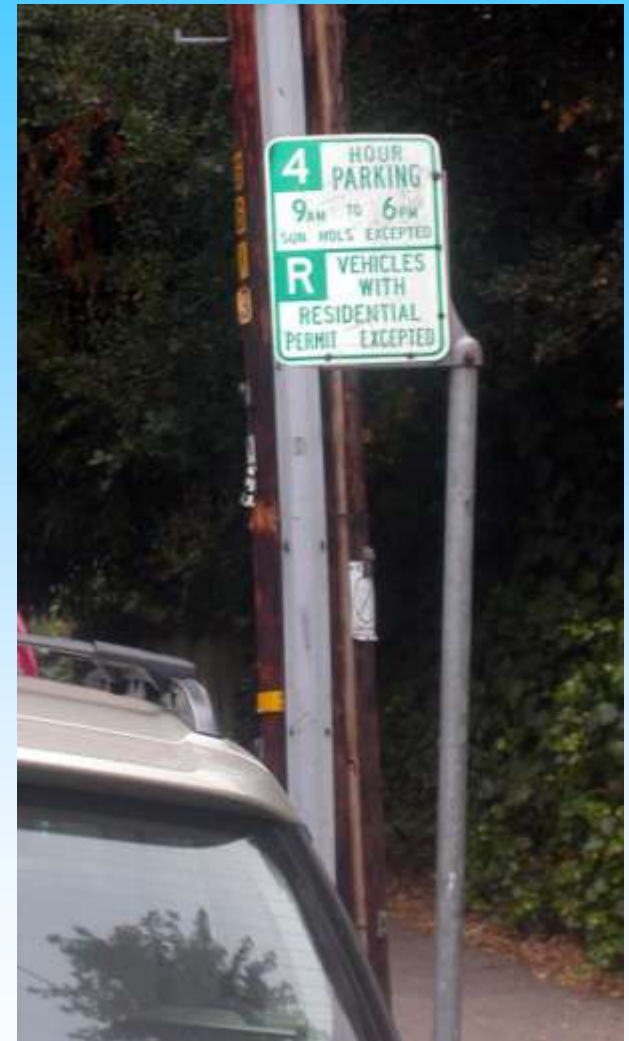
Getting Parking Right

1. Manage Spillover Parking
2. Create a "Park Once," shared parking environment
3. Create on-street parking availability by ensuring a 15% vacancy at all times through market pricing
4. Ensure good parking design
5. Vary parking requirements according to context and goals:
 - Tailor minimums
 - Eliminate minimums
 - Establish maximums
6. Shape parking to create a *transit-oriented* development, not just *transit-adjacent*

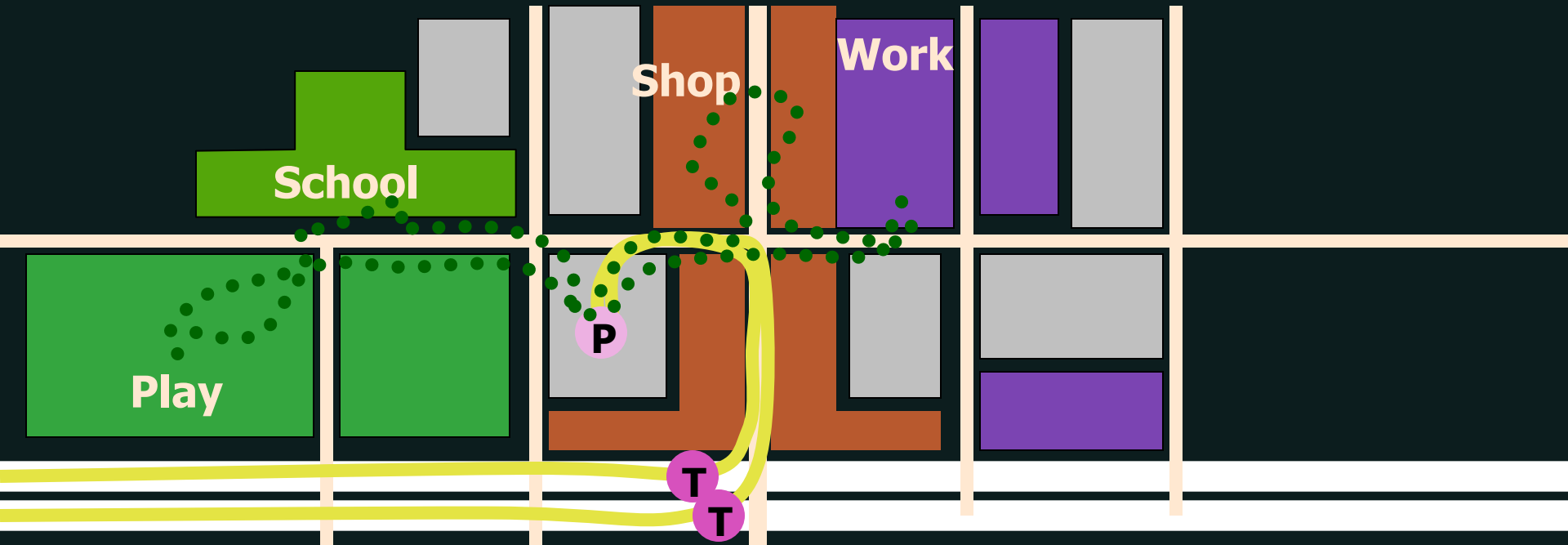


1. Residential Parking Permit Districts

- Residential Parking Permit Districts
 - Critical for addressing spillover parking concerns of infill development
 - Requires neighborhood vote on parking district
- Austin Parking Benefit Districts
 - <http://www.ci.austin.tx.us/parkingdistrict/default.htm>
 - Allows residents to sell surplus neighborhood parking capacity to commuters
 - Revenue returned to neighborhood for community improvements



Mixed Use, Park Once District

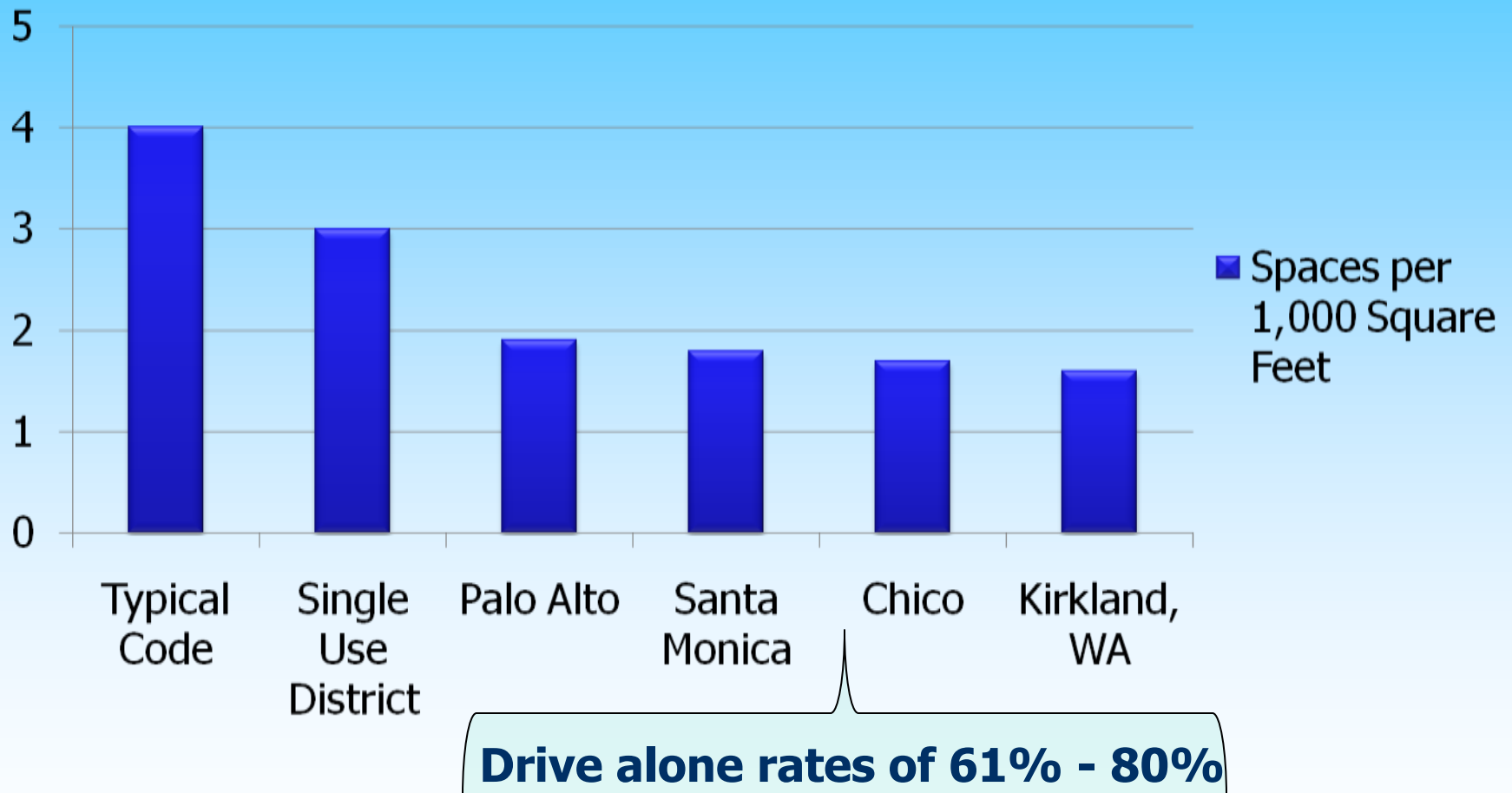


Results:

- $< \frac{1}{2}$ the parking
- $< \frac{1}{2}$ the land area
- $\frac{1}{4}$ the arterial trips
- $\frac{1}{6}^{\text{th}}$ the arterial turning movements
- $< \frac{1}{4}$ the vehicle miles traveled

Parking Demand in Mixed Use Zones

Spaces per 1,000 Square Feet





Hours of Operation
Sunday - Thursday
11 AM to 8 PM
Friday - Saturday
11 AM to 12 midnight
Except Holidays



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Parking Benefit Districts

- Devote meter & permit revenue to district where funds raised
- Example: Old Pasadena
 - Meters installed in 1993: \$1/hour
 - Garage fees
 - Revenue: \$5.4 million annually
 - Tiny in-lieu of parking fees
- Funds garages, street furniture, trees, lighting, marketing, mounted police, daily street sweeping & steam cleaning
- Focus on availability, not price



Old Pasadena, 1992-99:
***Sales Tax Revenues
Quadruple***



4. Ensure good parking design



4. Ensure good parking design





5. ITE Rates

- Based on locations with no transit accessibility, no adjacent land uses
- R^2 of 0.038 means that variation in floor area explains only 3.8 percent of variation in peak parking demand
- Parking generation rate is reported as precisely 9.95 spaces per 1,000 square feet
- ITE no longer shows R^2 of less than 0.6

FIGURE 2

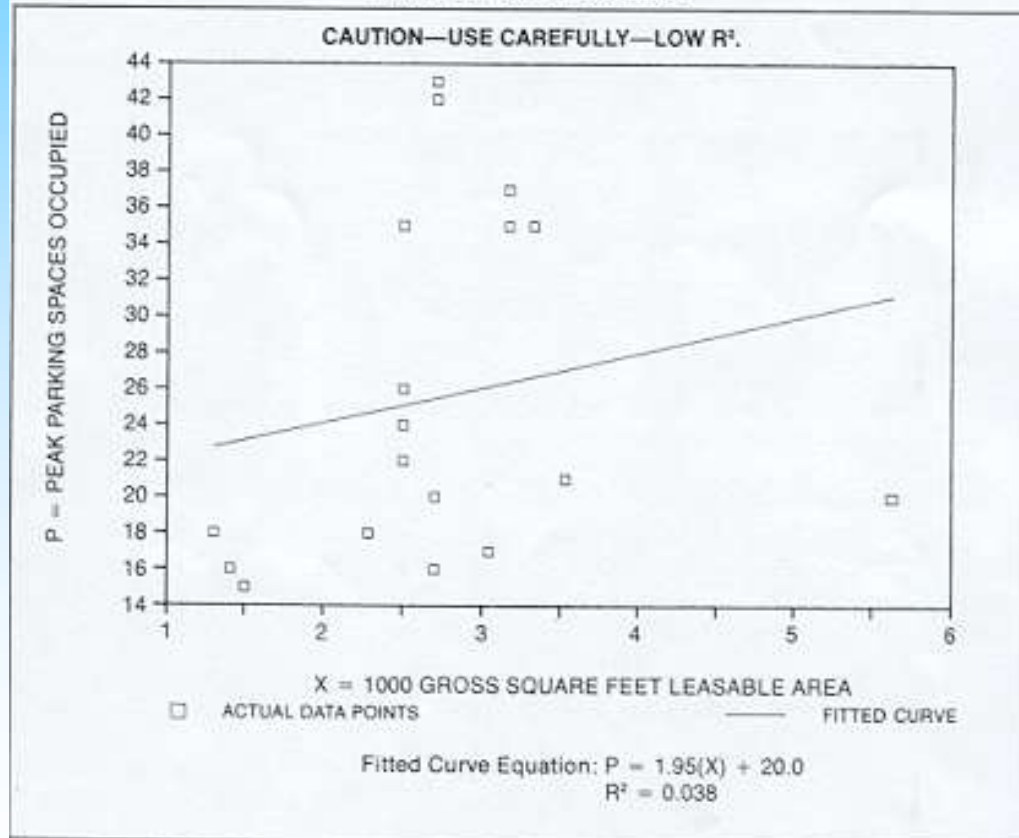
FAST FOOD RESTAURANT WITH DRIVE-IN WINDOW (836)

Peak Parking Spaces Occupied vs: 1,000 GROSS SQUARE FEET LEASABLE AREA
On a: WEEKDAY

PARKING GENERATION RATES

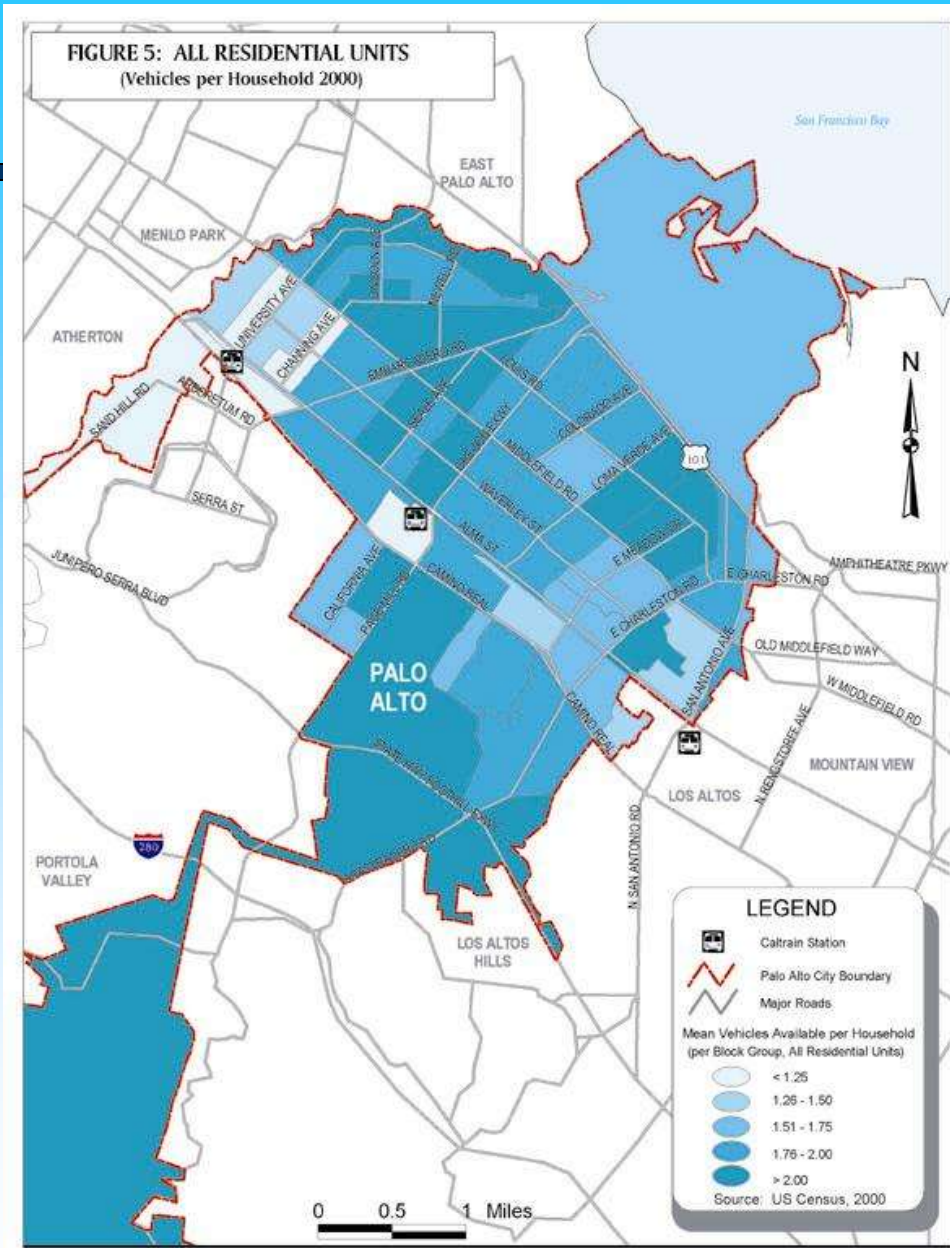
Average Rate	Range of Rates	Standard Deviation	Number of Studies	Average 1,000 GSF Leasable Area
9.95	3.55-15.92	3.41	18	3

DATA PLOT AND EQUATION



Tailor Parking Requirements?

- Parking demand varies with geographic factors:
 - Density
 - Transit Access
 - Income
 - Household size
- Cities can tailor parking requirements to meet demand, based on these factors
- Does not seek to *constrain* demand



Reviving Communities

By abolishing minimum parking requirements

- Coral Gables, FL
- Eugene, OR
- Fort Myers, FL
- United Kingdom (entire nation)
- Los Angeles, CA
- Milwaukee, WI
- Olympia, WA
- Portland, OR
- San Francisco, CA
- Seattle, WA
- Spokane, WA

By instituting maximum parking requirements

- Promotes alternatives to driving
- Maximizes land area for other uses
- Examples: downtown San Francisco; Portland, OR; Cambridge; all of UK
- Aside from congestion pricing, parking management is the *only* useful tool for eliminating congestion

Transit-Oriented Development

- Clarendon Metrorail Station, Arlington VA



- Shared parking; Metered parking
- Neighborhood association for local businesses, residents, & the arts



Transit-Adjacent Development

- Concord BART Station, Concord CA
 - Surrounded by parking
 - Easy highway access



Transit-Oriented Development

- Dallas Mockingbird DART Station, Dallas TX

- Original surface parking was bleak
- New development on top of parking has generated a doubling of economic activity



Transit-Adjacent Development

- Alewife Station, Cambridge MA
 - 2,000 car garage
 - No on-street parking
 - Top 20 congested intersection



For More Information

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