Solving Parking Shortages
New Solutions for an Old Problem

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Agenda

1. Setting goals

2. Old solutions
   ...and their unintended consequences

3. New solutions for an old problem – a toolkit of strategies
   – The two key parts of every parking system
   – Increasing supply
   – Reducing demand
1. SETTING GOALS
What is the goal of your community’s parking policies?
Petaluma Smart Code - Key Goals

- Spark new life downtown, achieve economic success
- Solve the perceived parking shortage
- Revive vacant buildings – proposed new uses couldn’t meet parking requirements
- Protect nearby neighborhoods from spill-over parking
- Reduce traffic
- Solve the worsening housing crisis
- Fix the City’s budget crunch
- Bring a movie theater back to Petaluma
Petaluma Smart Code - Vision
How can their vision be realized?

...parking policies must support it.
Parking plan – goals

- Parking & transportation is not an end in itself...
- ... but rather a means of achieving larger community goals

- What are your community’s overall goals? (...for equity, the economy, the environment, quality of life, etc.)
2. OLD SOLUTIONS
Petaluma’s Old Solutions

1. Prohibit or discourage curb parking
2. Keep curb parking free in places where it is still allowed.
3. Require lots of off-street parking.

...in short, a typical 1950s approach to parking
What is the purpose of minimum parking requirements?
**Definition**

*Minimum parking requirements* are government regulations that specify the *minimum* number of parking spaces that must be provided for every land use.

They are intended to ensure that cities have more parking spaces than they would if the matter was left up to the free market.
Palo Alto, CA – parking requirements adopted in 1951
Minimum Parking Requirements

**Purpose**

- **Palo Alto**: “to alleviate traffic congestion”?
- **San Diego**: “to reduce traffic congestion and improve air quality”
- to prevent spill-over parking problems
 ROUTES OF CERTAIN CRUISING VEHICLES IN THE VICINITY OF CICERO, MILWAUKEE, AND IRVING PARK CONSTRUCTED FROM OBSERVATIONS MADE ON THE SIX APPROACHES TO THE INTERSECTION OF THESE STREETS

7:00 PM TO 9:30 PM—THURSDAY, MARCH 30, 1939

OBSERVED 6 TIMES

OBSERVED 6 TIMES

OBSERVED 7 TIMES

OBSERVED 8 TIMES

OBSERVED 9 TIMES

OBSERVED 11 TIMES

LEGEND: ★★★ POINT OF OBSERVATION

From the Report: "A Plan to Relieve Traffic Congestion in the Portage Park Retail Shopping Center." A Survey by City of Chicago, Chicago Motor Club, Chicago Surface Lines, April 1939

FIGURE 4—Observed Routes of Cruising Vehicles
A brief history of parking requirements

- 1908 Henry Ford starts his first assembly line
- 1923 Columbus Ohio adopts first off-street parking requirement
- 1939 Fresno adopts first parking requirement for any use besides housing, adopting them for hotels and hospitals
- 1946 survey: only 17% of cities have parking requirements, 1951, 71% of these cities have parking requirements or are adopting them.
Minimum Parking Requirements - Source

Example: Office Parks
Peak Occupancy Rates, in spaces per 1000 sf of building area:

- Lowest: 0.94 spaces
- Average: 2.52 spaces
- Highest: 4.25 spaces

Typical requirement: 4.0 spaces/1000 sf
Typical office: 4 parking spaces per 1000 sq.ft.

1.3 sq. ft. of asphalt per sq. ft. of building area
“Form follows parking requirements”

Existing Town Center regulations often required more parking than building... and this was especially true for uses that add life and vibrancy to downtown.
Unintended Consequences of Minimum Parking Regulations

Minimum parking regulations require excess spaces even when parking is free, even at isolated locations with no transit.

Parking provided for free at most places and its costs hidden in the price of other goods and services.

Parking appears free, resulting in more parking demand, more driving, more congestion, more pollution.

Citizens must pay for more parking and bigger roads.
Unintended Consequences of the old solutions: a Texas example
RATES

30 MINUTES      FREE
30 MIN - 1 HOUR $3
EACH ADDITIONAL HOUR $4
MAXIMUM FEE $15
2 HOUR PARKING
7AM 7PM
PARK
$7.00
SALES TAX INCLUDED
2 HOUR PARKING
7AM - 7PM
weighed
Austin’s Unintended Consequences

• Curb parking was full, private lots were underused
• Drivers circled in search of free curb parking
• Neighborhoods still complained about spill-over parking
• Perceived parking shortages persisted
• Redevelopment was hindered by parking requirements
3. NEW SOLUTIONS FOR AN OLD PROBLEM – A TOOLKIT OF STRATEGIES
New Solutions

Every parking system has two key parts:

1. **Quantity (# of parking spaces)**
2. **Management (policies, regulations, prices)**
What does it cost to build a parking space?
How much revenue is needed to break even on the cost of building and operating a $40,000 parking space?
Anything a community can do to reduce parking demand for less than $275/month/space is a bargain.
Every parking system has two key parts:

1. **Quantity** (# of parking spaces)
2. **Management** (policies, regulations, prices)

- Do you have a parking supply problem, or a parking management problem?
A Management Solution: Parking Benefit Districts

Example: Old Pasadena
Parking Problems in Old Pasadena

- Employees and shop owners parked at the curb
- Merchants opposed meters because they feared customers would stay away
- Pasadena had no money to pay for public infrastructure in Old Pasadena
Hours of Operation
Sunday - Thursday
11 AM to 8 PM
Friday - Saturday
11 AM to 12 midnight
Except Holidays

Your meter money will make the difference in Old Pasadena
Signage - Lighting - Benches - Paving
The City of Pasadena
Tools: 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*
Pasadena Retail Sales Tax Revenue

Old Pasadena
Playhouse District
Plaza Pasadena
South Lake

Year
Sales Tax Revenue
1989 1991 1993 1995 1997 1999
$0
$500,000
$1,000,000
$1,500,000
$2,000,000
$2,500,000

Pasadena Retail Sales Tax Revenue

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Playhouse District
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Old Pasadena
Playhouse District
Plaza Pasadena
South Lake
Three Parking Management Reforms

1. Charge the right price for curb parking

2. Spend the resulting revenue to pay for neighborhood public improvements

3. Remove the requirements for off-street parking
Ventura Parking Benefit District Boundaries

Source of Base Map: April 2003 Katz, Okitsu and Associates Parking Study
What is the “Right” Price?

Performance-based Pricing

- Charge the lowest price that will leave one or two vacant spaces on each block
- Eliminate the traffic congestion caused by drivers cruising for parking
Ventura’s Parking Benefit District – Results

- Commercial Parking Benefit District – devote parking revenue to district where funds raised
  - Example: downtown Ventura
    - Meters installed on premium spaces only (318 of 2500 total)
    - Policy: set rates at lowest rate needed to achieve 1-2 available spaces on every block
    - Current rates: $.50 to $1/hour
    - No time limits
    - Revenue: $530,000 annually
    - Funds new police officer & 9 police cadets, better lighting, free public Wi-Fi

➢ Crime down 40%
Solution: Residential Parking Benefit Districts

Prevent excessive spillover parking into neighborhoods
Boston’s Beacon Hill neighborhood

- 3,933 resident permits issued - free
- 983 curb spaces available
- Lesson: limit # of permits issued to spaces available

Prevent ‘spill-over’ parking - Errors to avoid
Solution: Residential Parking Benefit District

- Non-Residents pay regular parking fees
  - Revenues fund neighborhood improvements
  - Payment options: pay stations, meters, pay by cell phone, in-vehicle meters, or permits

- Existing residents get free or cheap parking permits
  - Limit permits issued to available curb space
Solution: Residential Parking Benefit District

- Example: Laguna Beach, CA
  - Regular parking fees: $1.25-$2.25 per hour
  - Annual permit for residents: $40 per year

- Example: Oceanside, CA
  - Regular parking fees: $1 per hour
  - Annual permit for residents: $100 per year

- Other Examples
  - Washington DC
  - Santa Cruz, CA
  - West Hollywood, CA
  - Austin, TX
  - Boulder, CO
Austin’s Residential Parking Benefit District – How is it doing?

- Residents get residential parking permits
- University of Texas commuters pay at meters
- Revenues returned to neighborhood fund
- EPA provided start-up grant
Three Reforms

1. Charge fair-market prices for curb parking

2. Spend the resulting revenue to pay for neighborhood public improvements

3. Remove the requirements for off-street parking
Main Street – Requirements Removed

- 7 new restaurants opened up within months
- Allowed new 10-screen movie theater
Successful Precedents

Reviving neighborhoods by abolishing minimum parking requirements

- Boulder, CO
- Coral Gables, FL
- Eugene, OR
- Fort Myers, FL
- Fort Pierce, FL
- Great Britain (entire nation)
- Hayward, CA
- Los Angeles, CA
- Milwaukee, WI
- Nashville, TN
- Olympia, WA
- Portland, OR
- San Francisco, CA
- Santa Clarita
- Stuart, FL
- Seattle, WA
- Spokane, WA
- Washington DC
Problem – Inefficient & Unwelcoming Parking Fiefdoms
Solution: Lease or purchase private lots & add them to the public supply

- Lease or purchase existing private lots from willing sellers and add them to the public supply
  - Examples: San Clemente, Ventura
  - City assumes maintenance, security, enforcement, and liability insurance costs
  - Typical costs – $35 per space per month

- Creates a “Park Once” District
Problem: Standard Parking Requirements Are Derived From Isolated, Single-Use Developments
Solution: Share parking, create “Park Once” Districts
Conventional Development
Mixed Use, Park Once District

Results:
- <½ the parking
- <½ the land area
- ¼ the arterial trips
- 1/6th the arterial turning movements
- <¼ the vehicle miles traveled
Park once efficiency in downtown Palo Alto

Observed peak occupancy:
- 1.91 spaces per 1,000 s.f.

Peak occupancy w/ 10% vacancy:
- 2.1 spaces per 1,000 s.f.

Existing Requirement:
- 4 spaces per 1,000 s.f.
- Would require 5,210 more spaces than observed demand to bring downtown to 4 spaces per 1,000 sf requirement
- At $51K/space = $298 million
Solution: Set “tailored” parking requirements

Example: Dana Point, CA (awaiting approval)
All non-residential land uses:

- 2 spaces per 1,000 sf if made available to public as shared parking
- Existing citywide rates apply if parking is kept private
  - Example: Redwood City
- Establish in-lieu-of-parking fee (between $10,000 - $25,000 per space)
Solution: deep discount group transit pass programs

Example: Boulder’s “Eco-Pass” group transit pass program
- $83 per year per worker
- Deep discount for group enrollment – only 6% of normal cost ($1,485)
- Program includes over 8,300 employees at 1,200 downtown businesses
- Funded by meter revenues

Results
- Drive alone rates fell from 56% to 36%
- Eco-Pass reduces commuter parking demand by 850+ spaces
Solution: Transportation Improvement District

Example: Portland (OR) Lloyd District Transportation Management Association

• Invests over $1 million annually into commute trip reduction programs
• Meter revenues fund 1/3 of TMA’s budget
• Programs include free transit passes, carpool matching & carsharing
• Since 1997, district-wide drive alone rate has fallen 29%
Solution: Unbundle the cost of parking from other goods

Cost of parking “unbundled” from other goods & services

- Hourly & daily fees
- Monthly parking fees
- Parking condominiums

Cost of parking is revealed to the user

People save money by using less parking, resulting in less parking demand, less driving, less congestion, less pollution

Less parking needs to be funded and built
Solution: Unbundle parking costs from commercial leases

Example: Downtown Bellevue, WA

- Requires building owners to include parking costs as a separate line item in leases
- Minimum rate for monthly long-term parking: ≥ twice the price of a bus pass
- Minimum rate in 2003: $144/month
- Maximum parking requirements: 2.4 spaces / 1000 sf GLA

Results: drive alone commute rate fell by 30%, from 81% driving alone to 57%
Make Housing Affordable: “Unbundle” Parking Costs from Housing Costs
Parking costs are “unbundled”

Parking fee: $150/month
The Freedom of Driving WITHOUT The Hassles of Ownership
The Gaia Building – Parking Demand

- 91 apartments, theater, café & office space
- 42 parking spaces supplied

- Result: 237 adult residents with just 20 cars
# Parking: High & Low Traffic Strategies

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<tr>
<th>Traffic</th>
<th>Conventional Minimum Requirements</th>
<th>‘Tailored’ Minimum Requirements</th>
<th>Abolish Minimum Requirements</th>
<th>Set Maximum Requirements</th>
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<tr>
<td>High</td>
<td>▶ Requirement &gt; Average Demand ▶ Hide all parking costs</td>
<td>Adjust for: ▶ Density ▶ Transit ▶ Mixed Use ▶ ‘Park Once’ District ▶ On-street spaces ▶ …etc.</td>
<td>▶ Market decides ▶ Parking funded by parking revenues ▶ Manage on-street parking with parking benefit districts</td>
<td>▶ Limit parking to road capacity ▶ Manage on-street parking ▶ Market rate fees encouraged/required</td>
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Petaluma, CA: Smart Code Results

Key Policies

1. ‘Park Once’ Environment
2. Manage On-Street Parking
3. Parking requirements drastically reduced, then abolished

- Nov ’02: Project start
- June ’03: Code adopted
- July ’03: $75 million project (theaters, retail, apartments, office) approved
- Today: Theater District open