

Climate Action Leadership Summit



# Parking Pricing

May 4, 2009

Fox Oakland Theatre

**Nelson | Nygaard**  
consulting associates

# Why is parking so important?

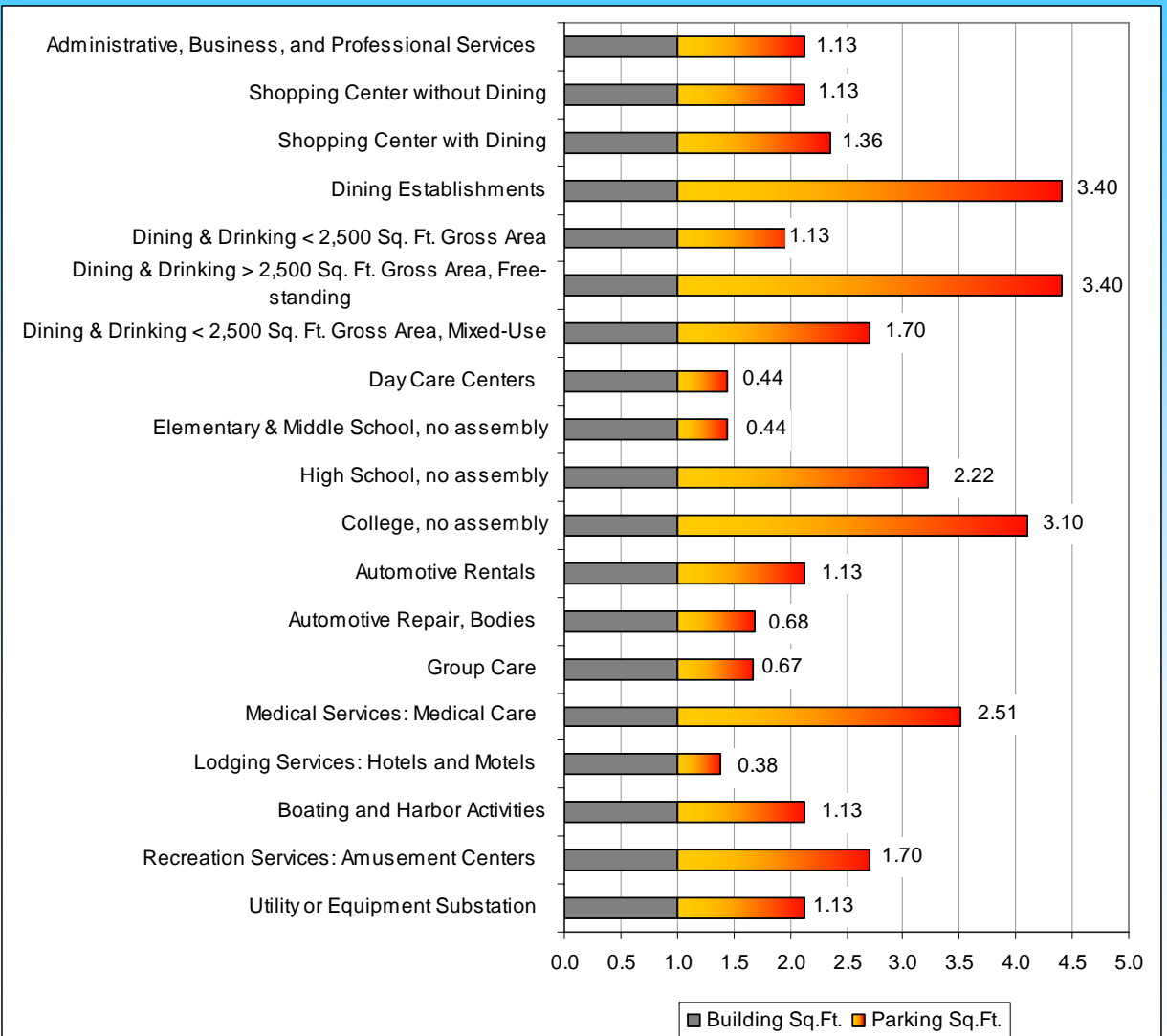


Parking supply and management is the difference between smart growth and sprawl

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

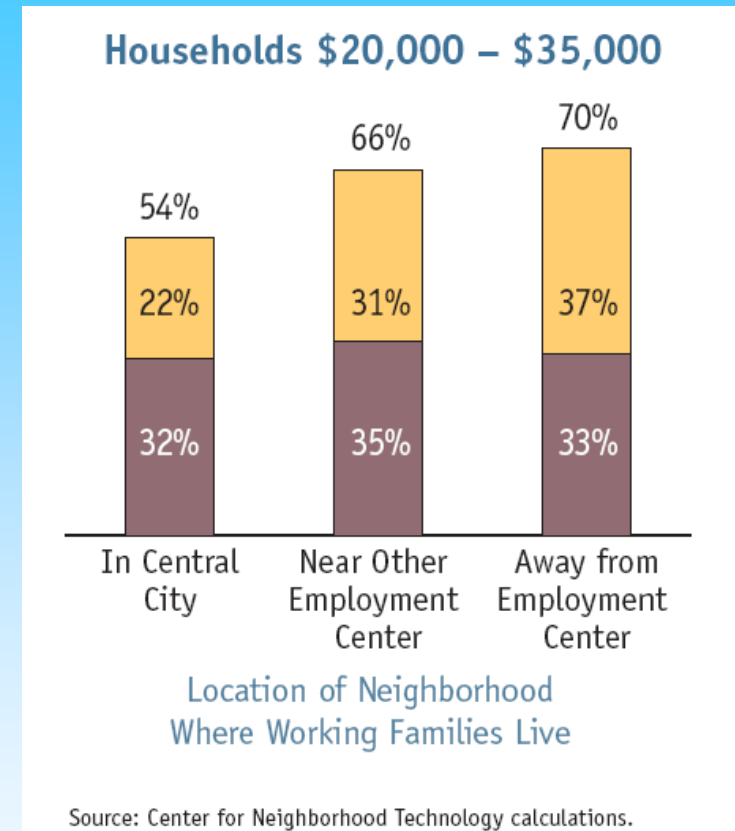


# Parking Wastes Money



# 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

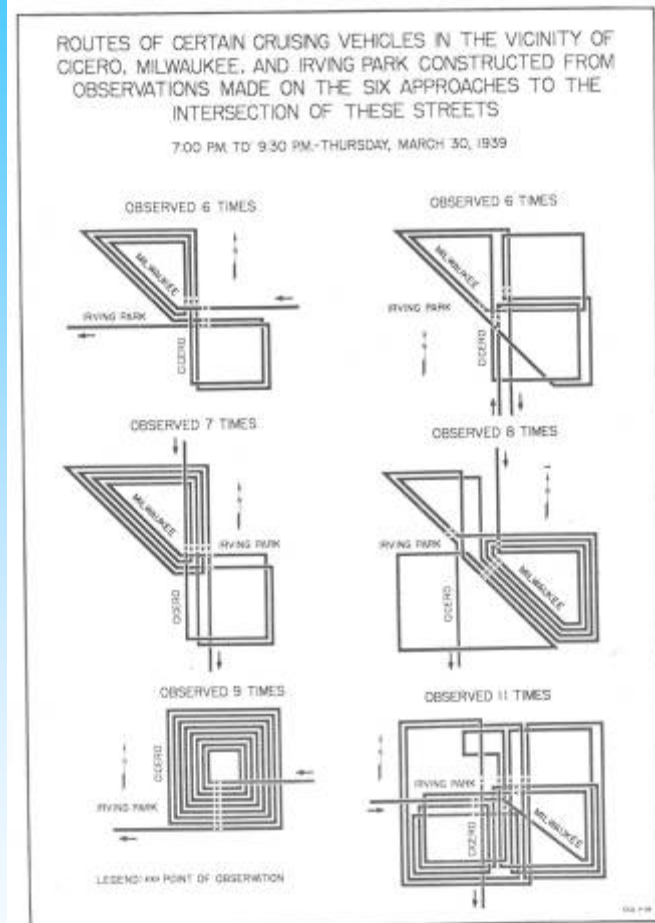


Sources: "A Heavy Load: The Combined Housing and Transportation Burdens of Working Families," Center for Neighborhood Technology, 2006. "The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice," Center for Neighborhood Technology, 2008. Sedway Cook studies of parking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



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 Surveys Unit, April 1939

FIGURE 4—Observed Routes of Cruising Vehicles

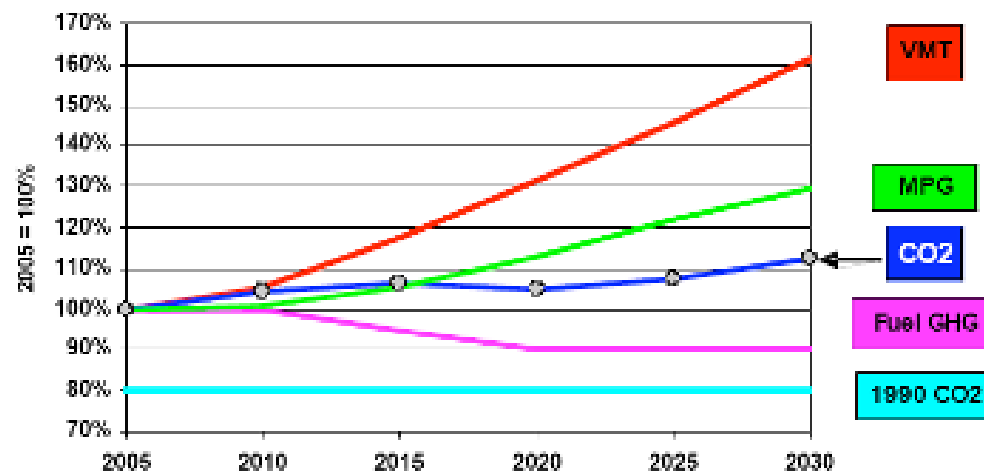
Sources: "Cruising for Parking," Don Shoup, 2006.

# Parking is key to Climate Change Prevention

- Aggressive improvements in fuel economy put us 40% above 1990 CO<sub>2</sub> levels by 2030. For climate stabilization, we must be 15-30% *below* by 2020.

Figure 0-3 Projected Growth in CO<sub>2</sub> Emissions from Cars and Light Trucks Assuming Stringent Nationwide Vehicle and Fuel Standards\*

Source: EIA 2007



Sources: VMT: IIA with 10% rebound MPG: US Service, Fuel:

Source: "Growing Cooler: The Evidence on Urban Development and Climate Change," Reid Ewing, et al, ULI Press.



# How is Parking Regulated?



Adam Millard, Ball, Nelson\Nygaard

- Most cities levy minimum parking requirements
- Key aim: avoid spillover
- Usually based on standards in neighboring cities, or derived from ITE *Parking Generation*

# How much is enough?

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- 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



# Conclusion

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- We can cut VMT by 50% or more in new development – and save money – but right now it is effectively illegal to do so, or at best the public sector make it onerous for developers wanting to do the right thing.
- We can cut VMT by 20-30% in existing development by offering the right incentives, particularly around parking pricing.
- Parking pricing earns ~\$2,000 per ton of CO2 removed. If priced correctly, market-based pricing is good for business, good for the economy, good for social equity and good for the environment.



# Get Parking Right

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1. Manage Spillover Parking
2. Create a “Park Once,” shared parking environment
3. Charge the right price for curbside parking, ensuring 15% vacancy at all times.
4. Ensure parkers can pay by credit card, debit card and cellphone
5. Unbundle the price of parking from the price of housing.
6. Ensure good parking design
7. Manage parking in order to achieve development and congestion management goals context and goals
8. Adjust/eliminate minimum requirements; consider maximums.
9. Consider parking impact fees

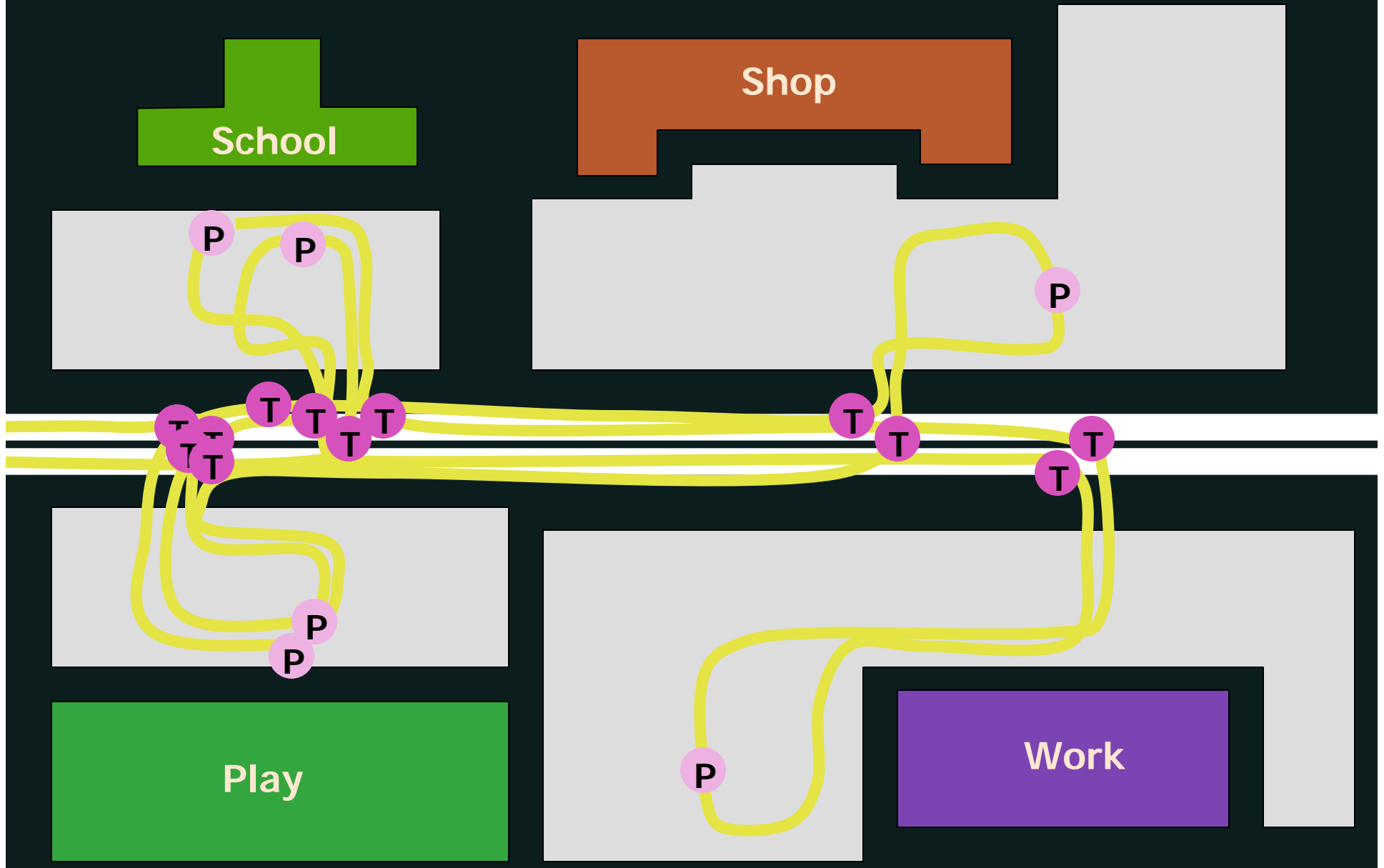
# Our Speakers

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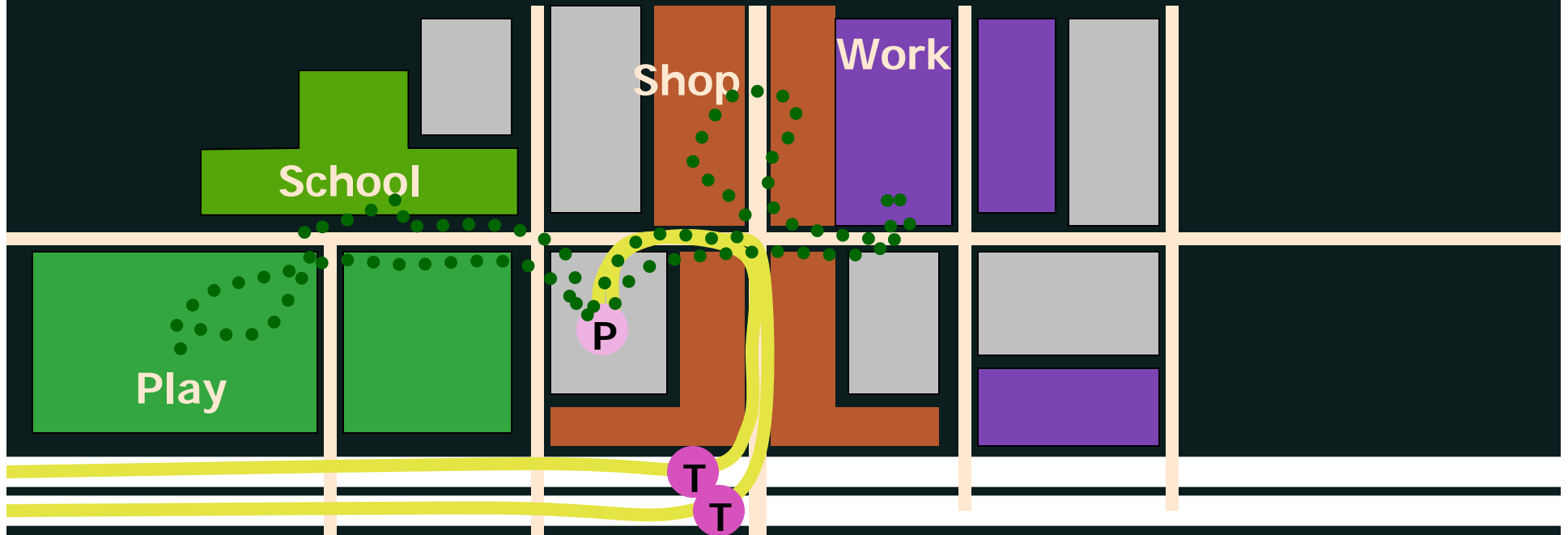
- Valerie Knepper: MTC
- Kevin Haggerty: BART
- Matt Nichols: City of Berkeley
- David Baker: David Baker + Associates



# Conventional Development



# Mixed Use, Park Once District

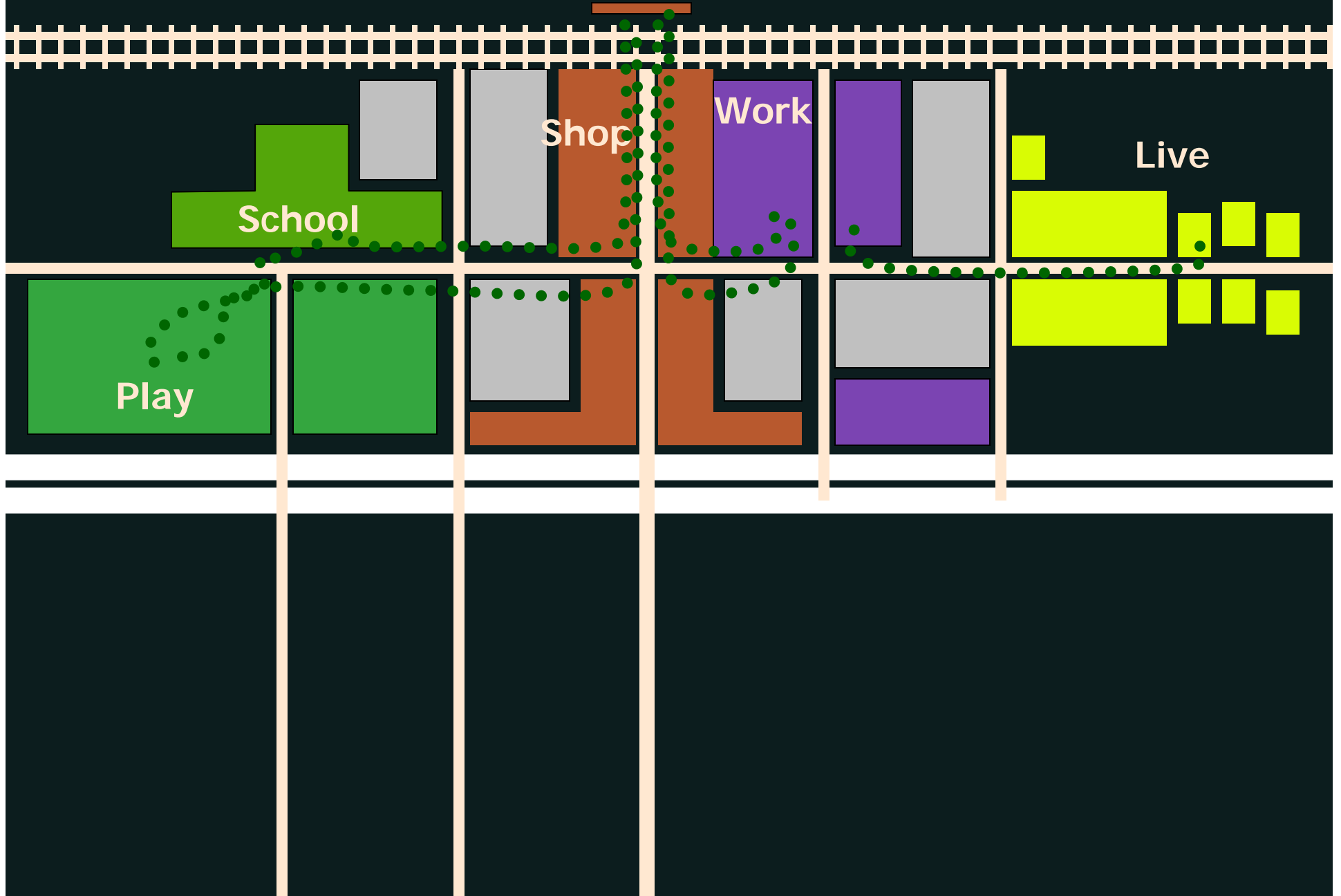


## Results:

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



# Transit Oriented Development



# Parking Maximums



Catherine Preston, City of Cambridge

- Promotes alternatives to the private automobile
- Can tackle congestion if related to roadway capacity or mode shift goals
- Maximizes land area for other uses
- Appropriate in areas with strong real estate market where priority is to minimize auto dependence
- Examples: downtown San Francisco, Portland, Cambridge

# Parking Management Strategies

## Can be mandated or incentivized:



- Strategies to reduce parking demand:
  - Pricing
  - Unbundling
  - Car-Sharing
  - Other demand management (e.g. EcoPasses)
- Strategies to reduce parking impacts:
  - Shared parking
  - Structured parking
  - Stacked parking/parking lifts
  - Design requirements (e.g. wrap parking in active uses)

## 4. Manage Demand as well as Supply

### Cut vehicle trip generation in half by:

- Increased density, walkability and transit intensity

### Cut another 40% by:

- Universal transit passes
- Parking cash-out
- “Unbundle” parking from development
- Carsharing
- Transportation Management Associations
- Transportation Improvement Districts



# For More Information

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