



# An Evaluation of Automobile Use, Parking Provision, and Urban Activity

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UCONN



Austin, TX

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Transportation and Livable Communities**

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# “Parking Demand”

## **Nantucket Parking Study**

2010 Draft

### **Utilization study**

Max utilization: 94%

**+ 77 spaces (on-street)**

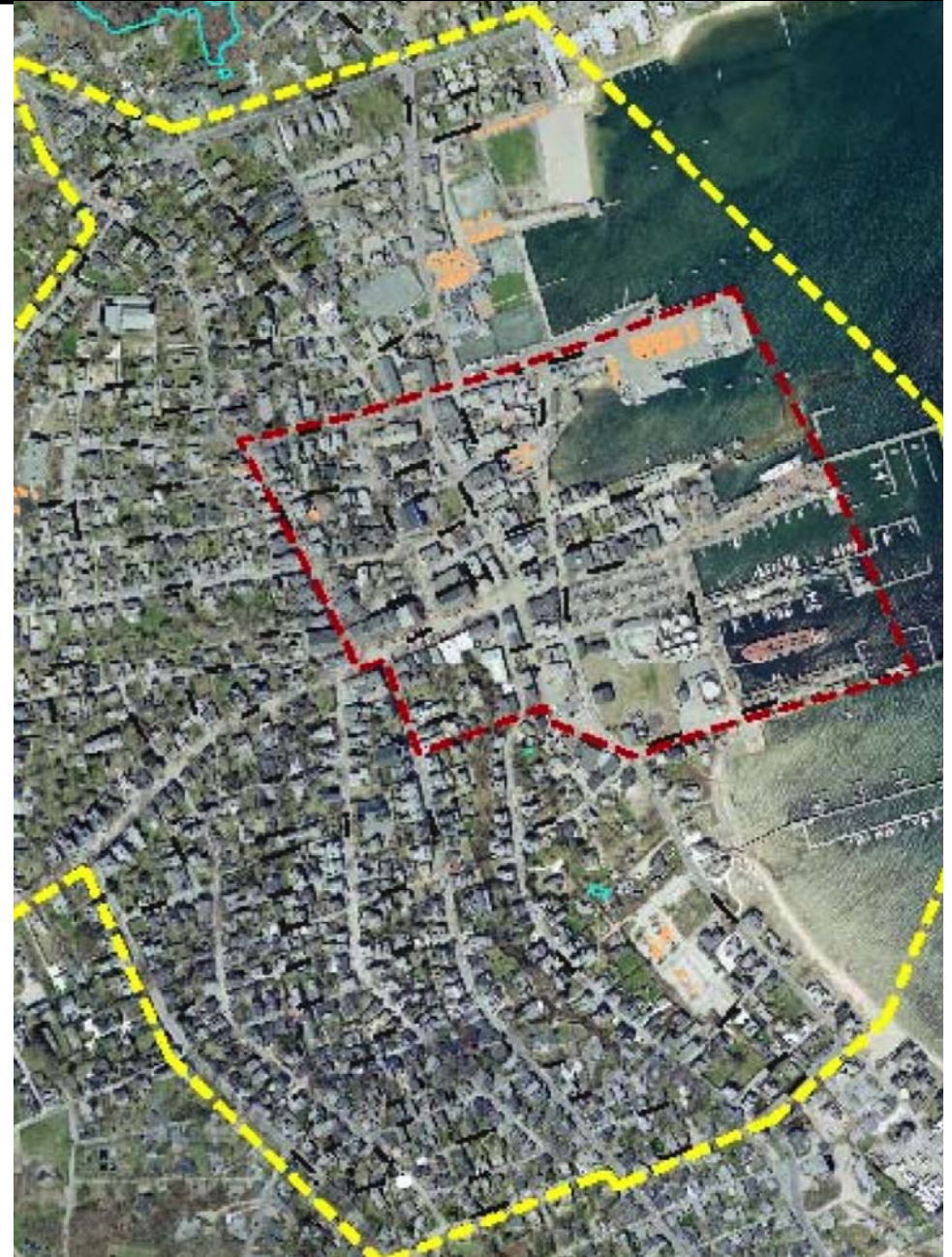
### **Land use study**

Demand: 2,870 spaces

**+ 670 spaces**

### **Local zoning codes**

**+ 2,337 spaces**





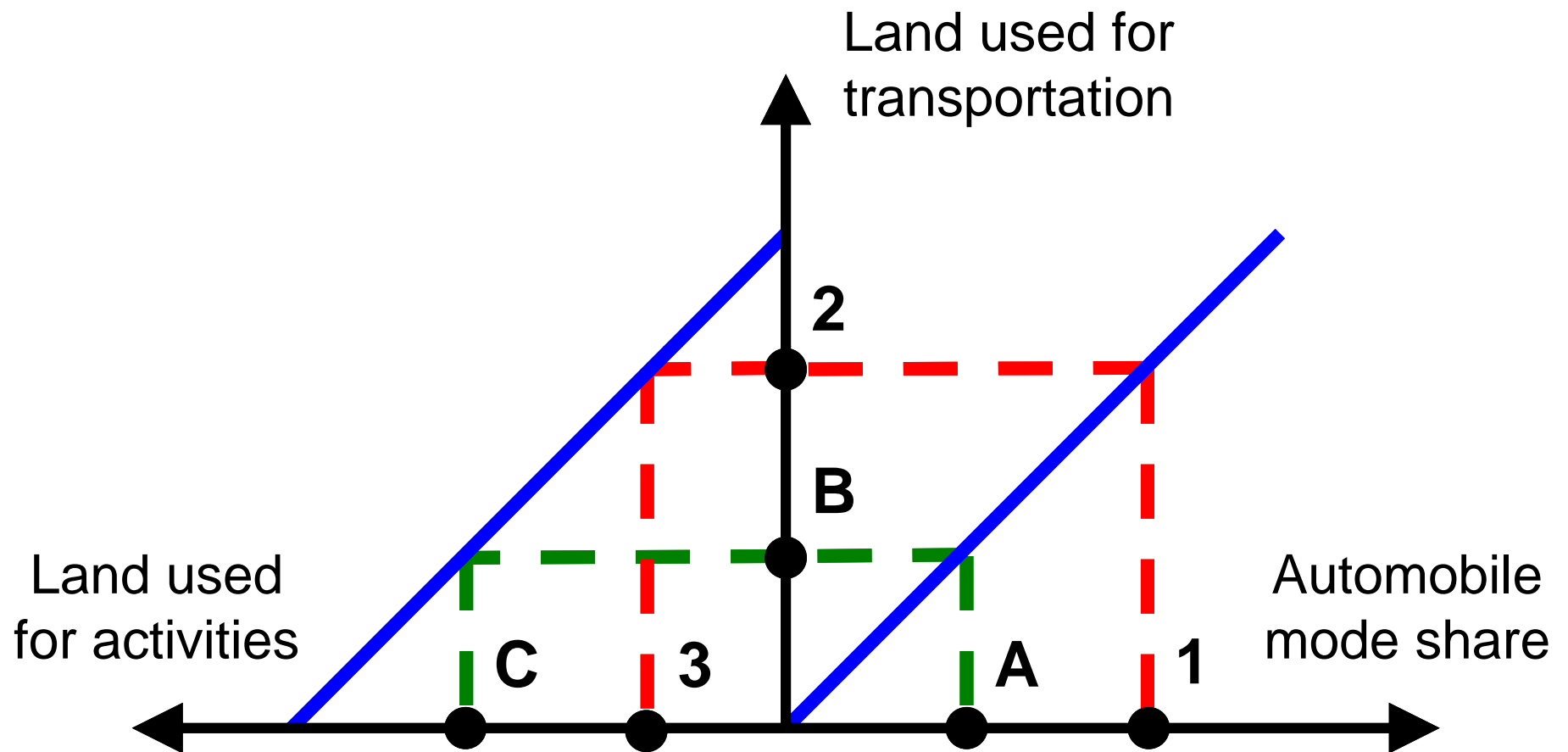
# “Parking Demand”





Increase parking?

# Theoretical model of land consumption



**Taller buildings and/or Fewer activities**

# Hartford, CT - 1953



Hartford, CT - 1965





1957





1995





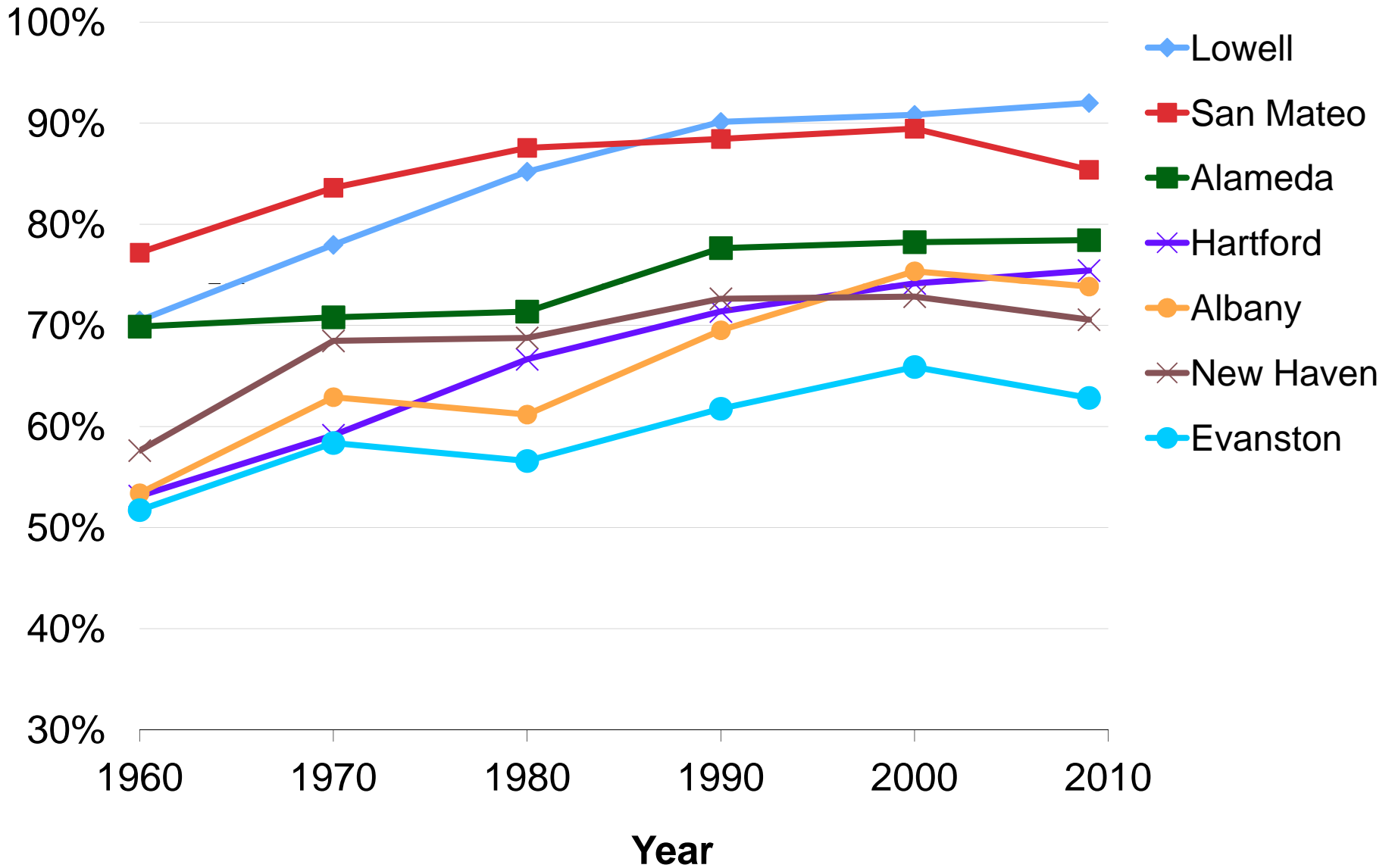
# Cambridge, MA





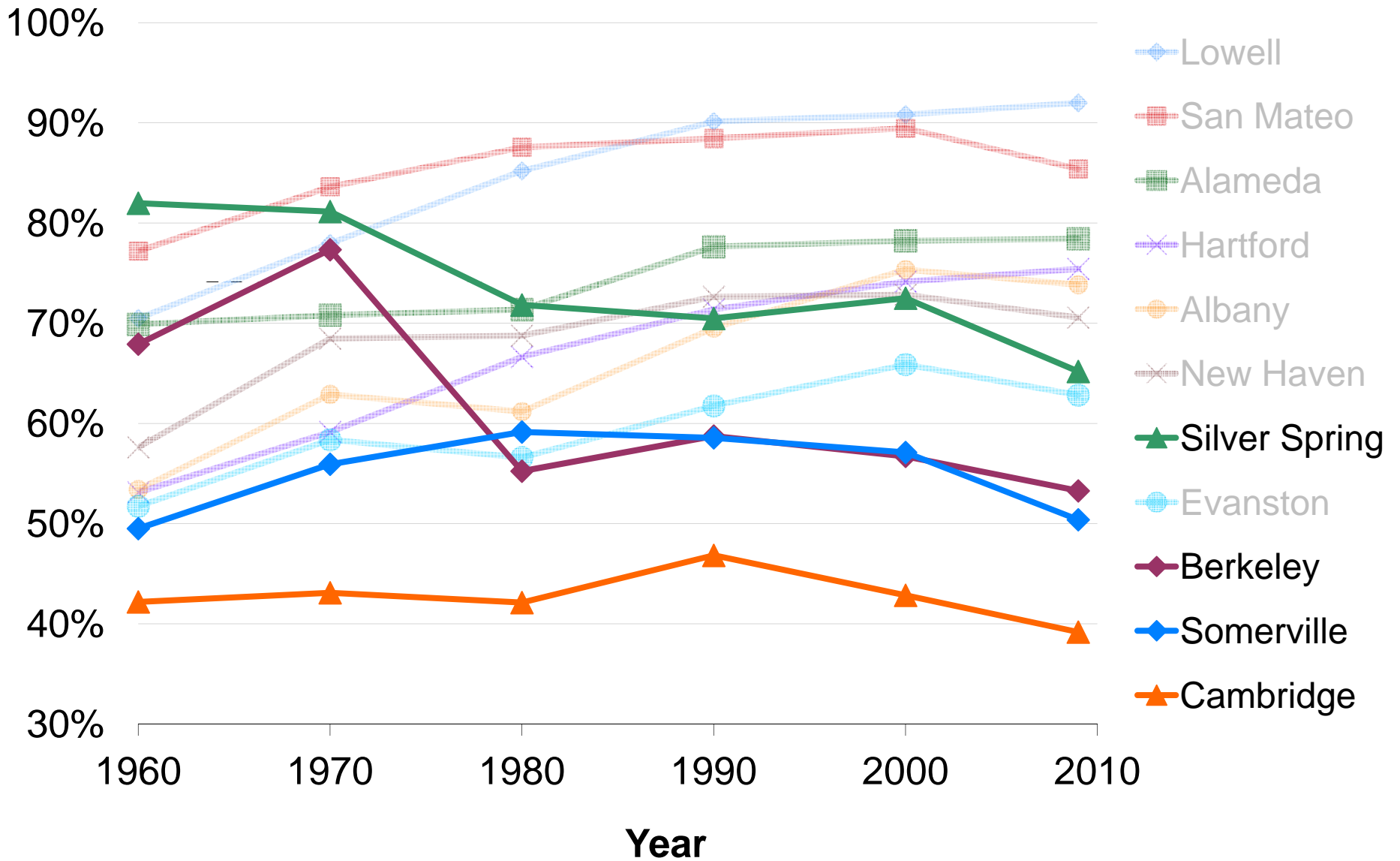
# Historical automobile use

(Percent of resident commuters)

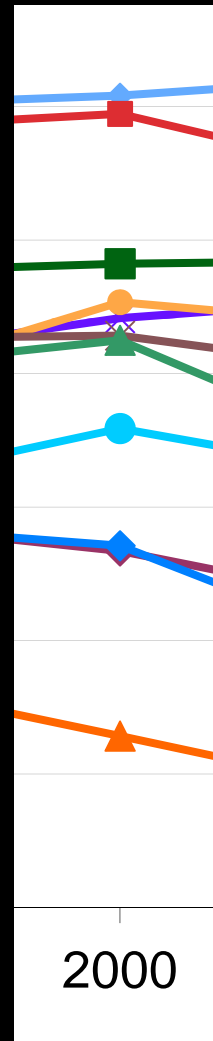


# Historical automobile use

(Percent of resident commuters)

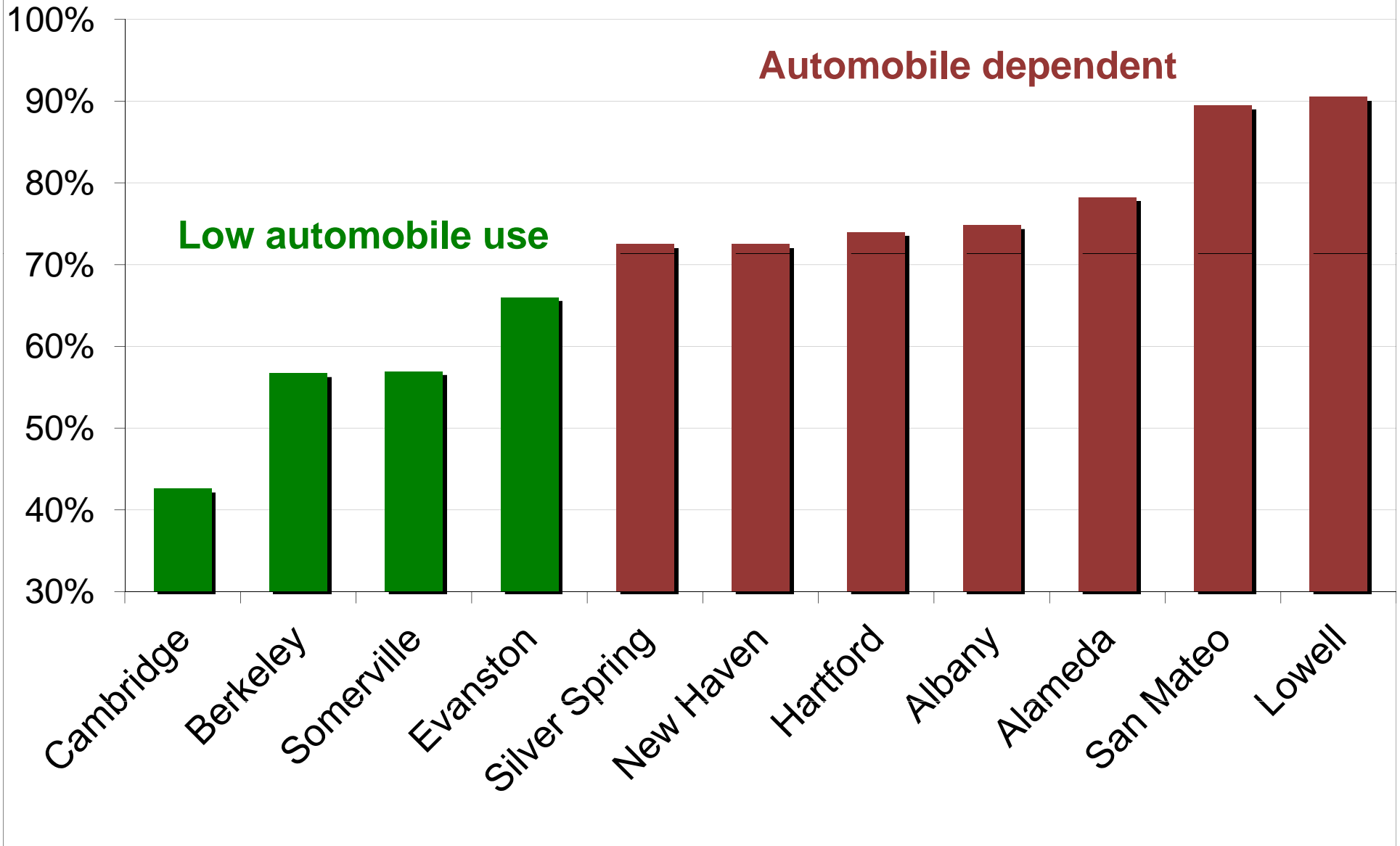






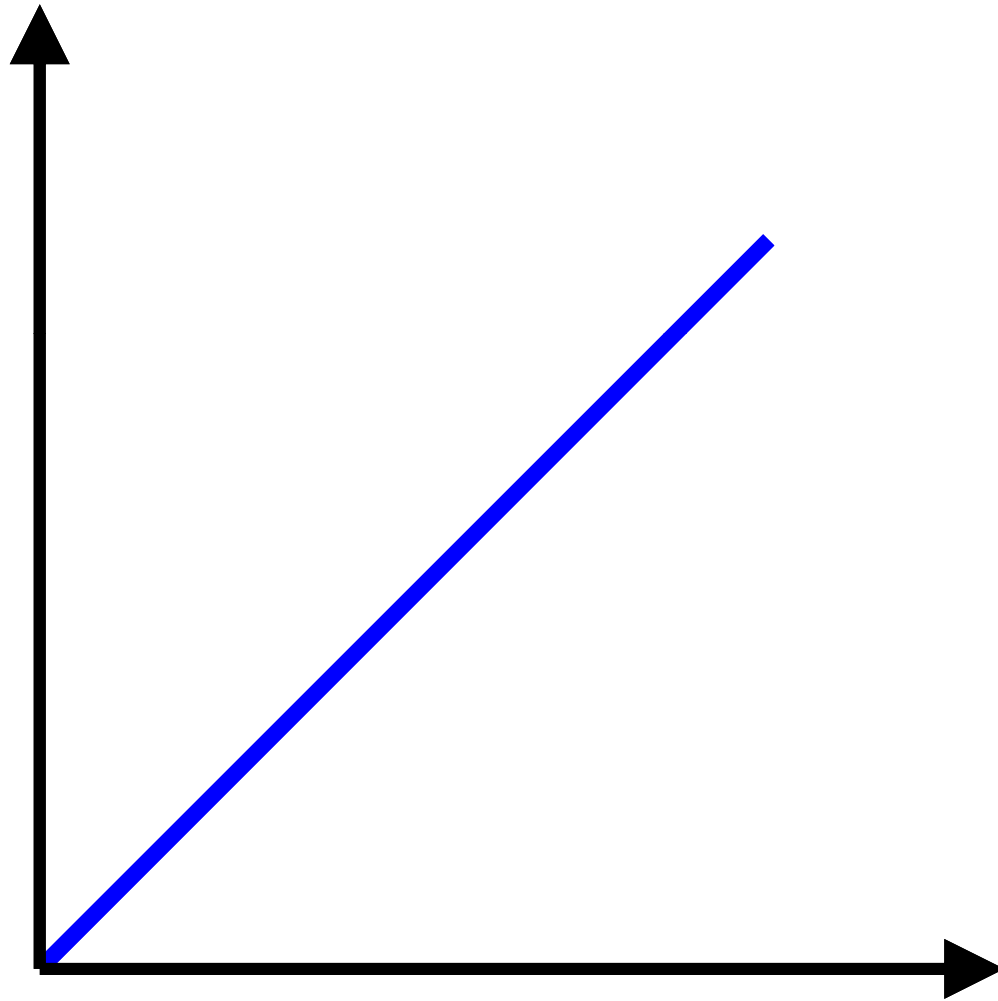
# Automobile use in 2000

(percent of resident commuters)





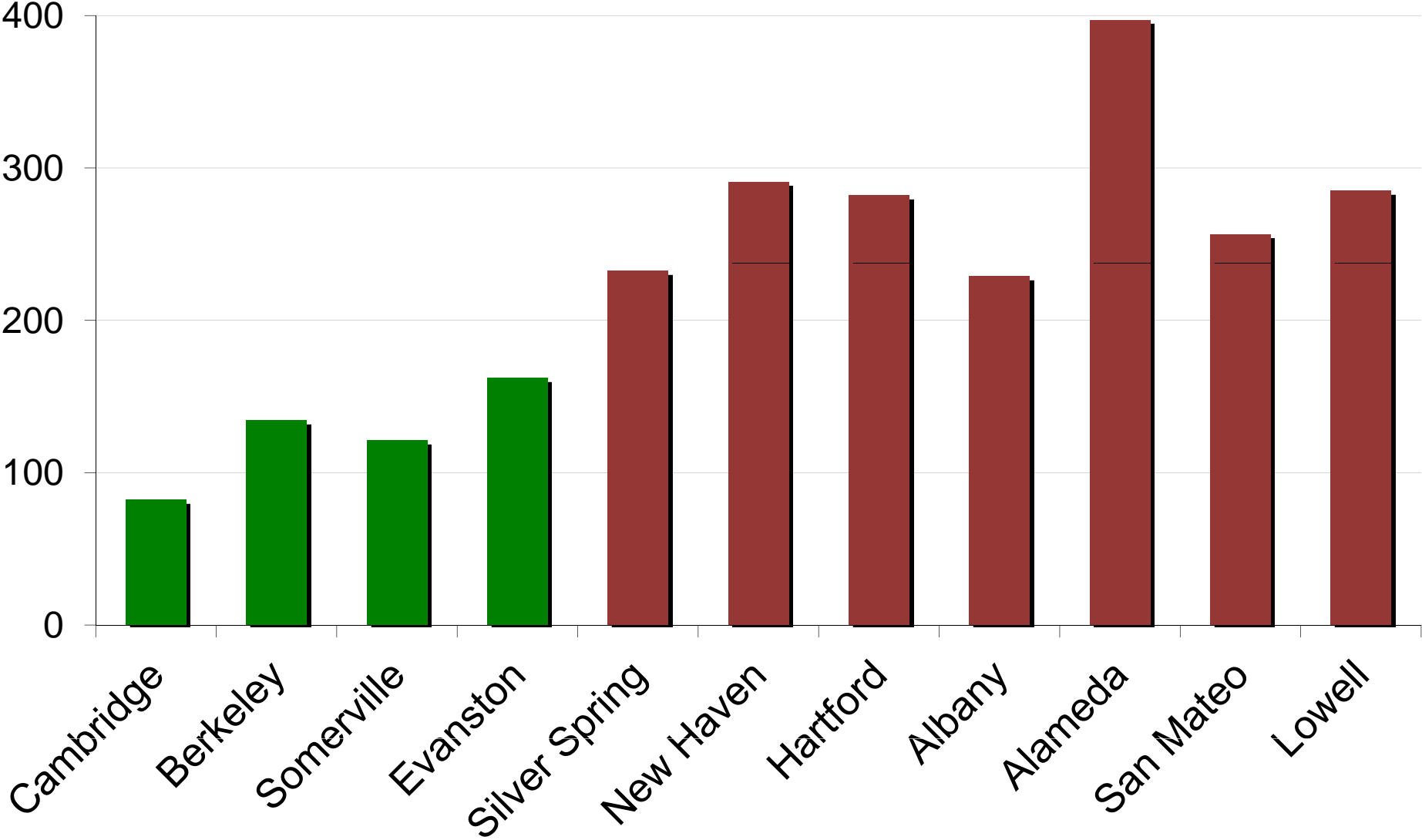
Land used for  
transportation

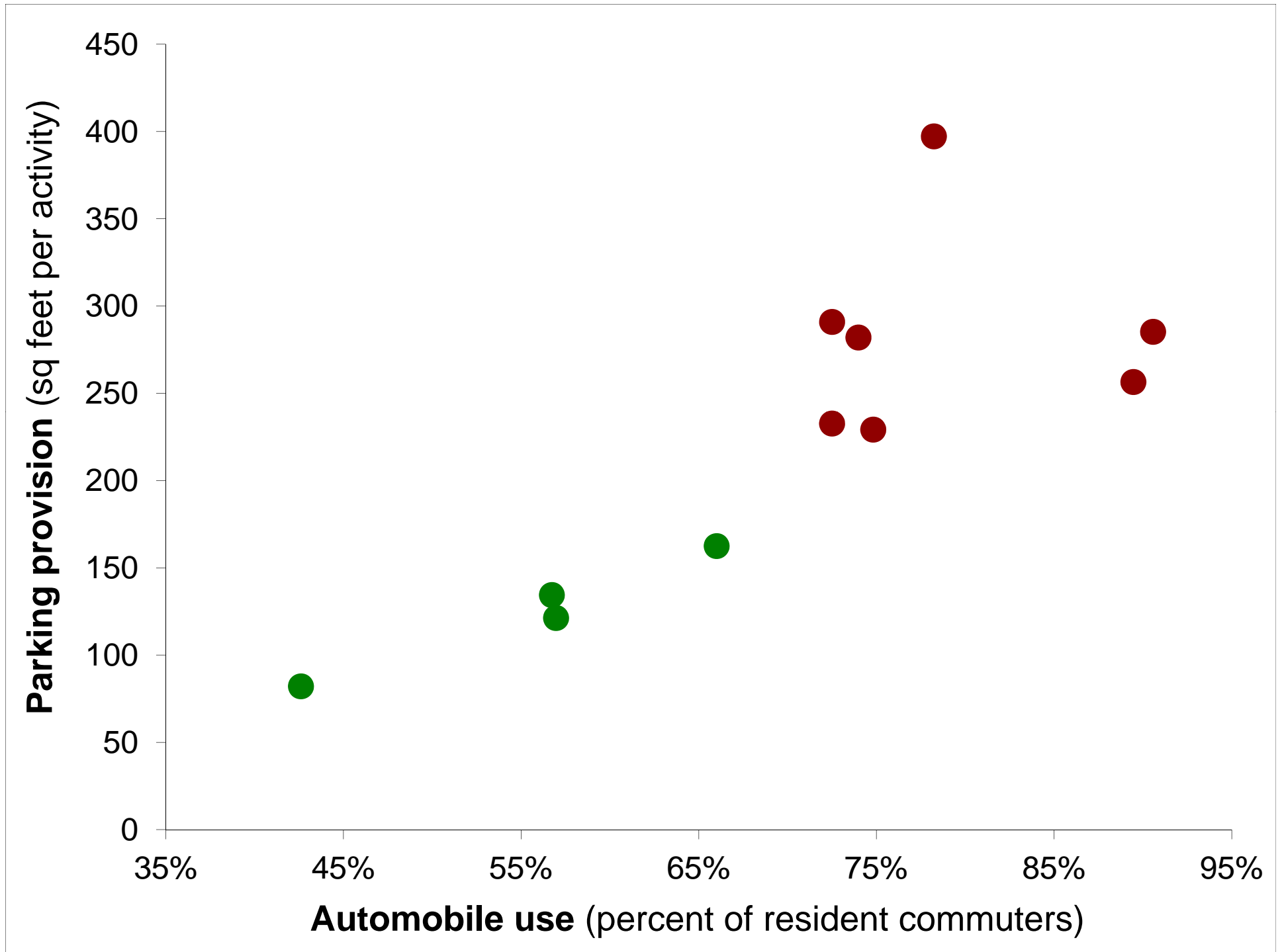


Automobile  
mode share

# Parking provision in 2000

(square feet per activity)



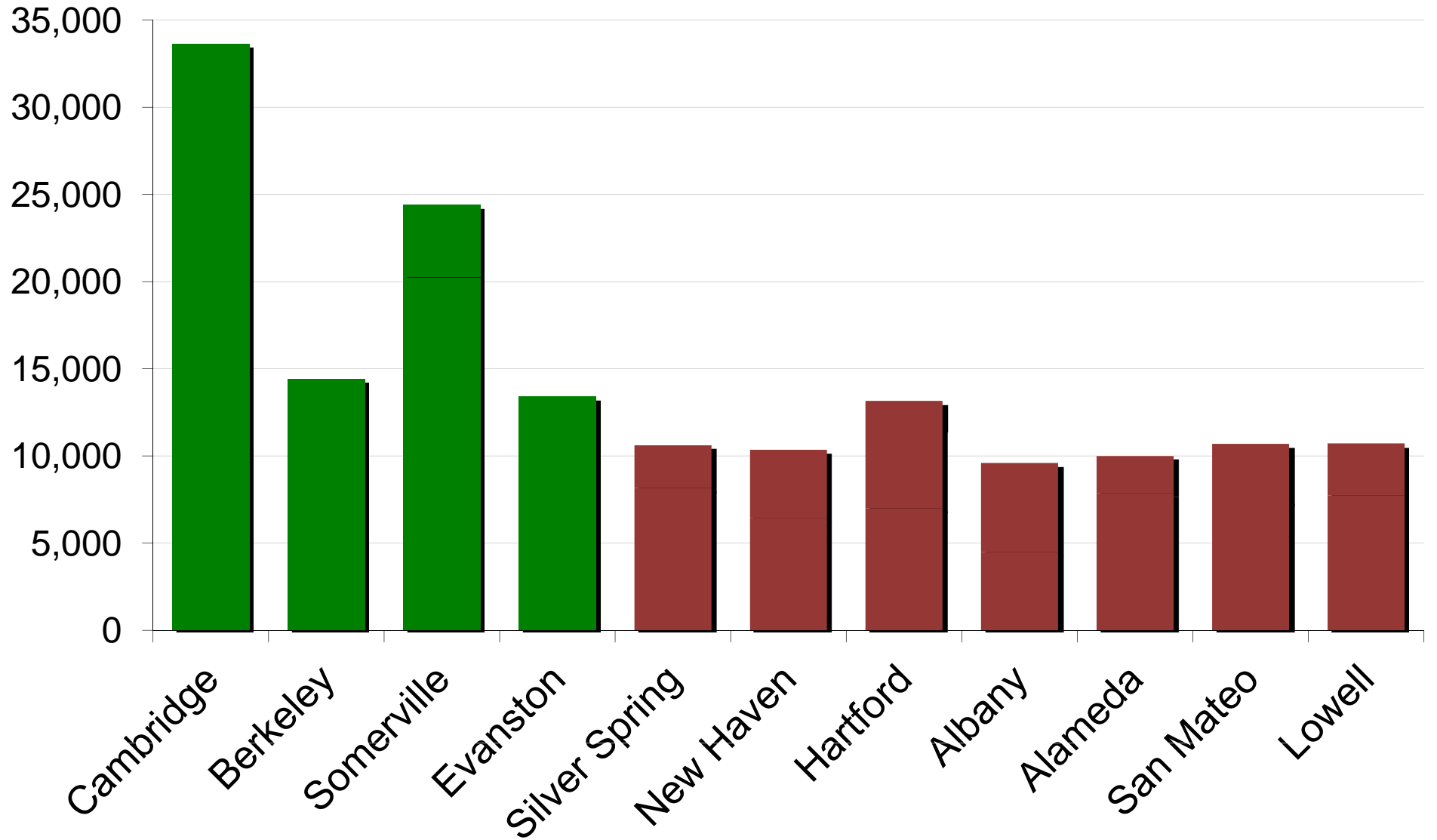


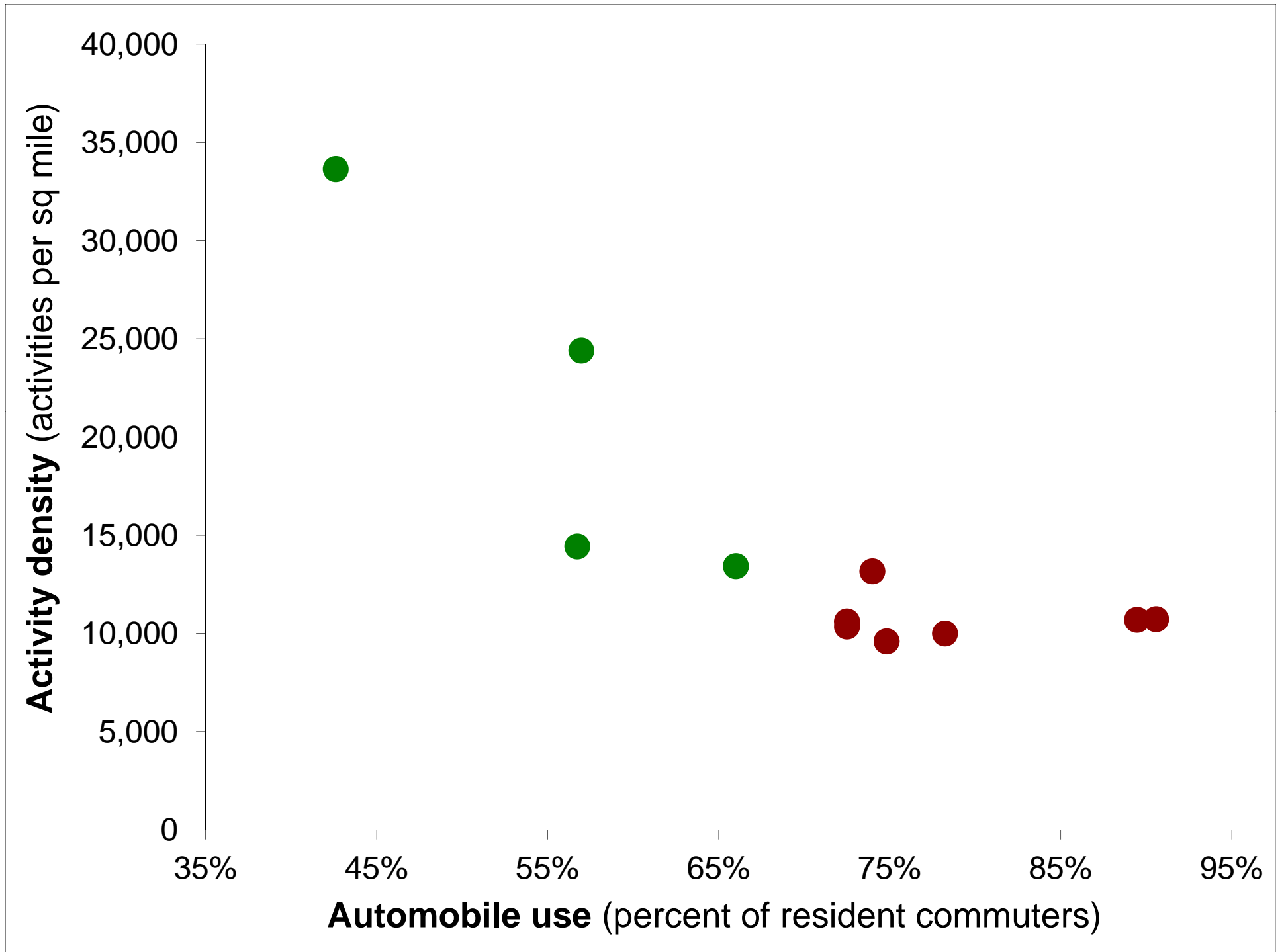


Level of activity

# Activity density in 2000

(combined residents plus employees per square mile)







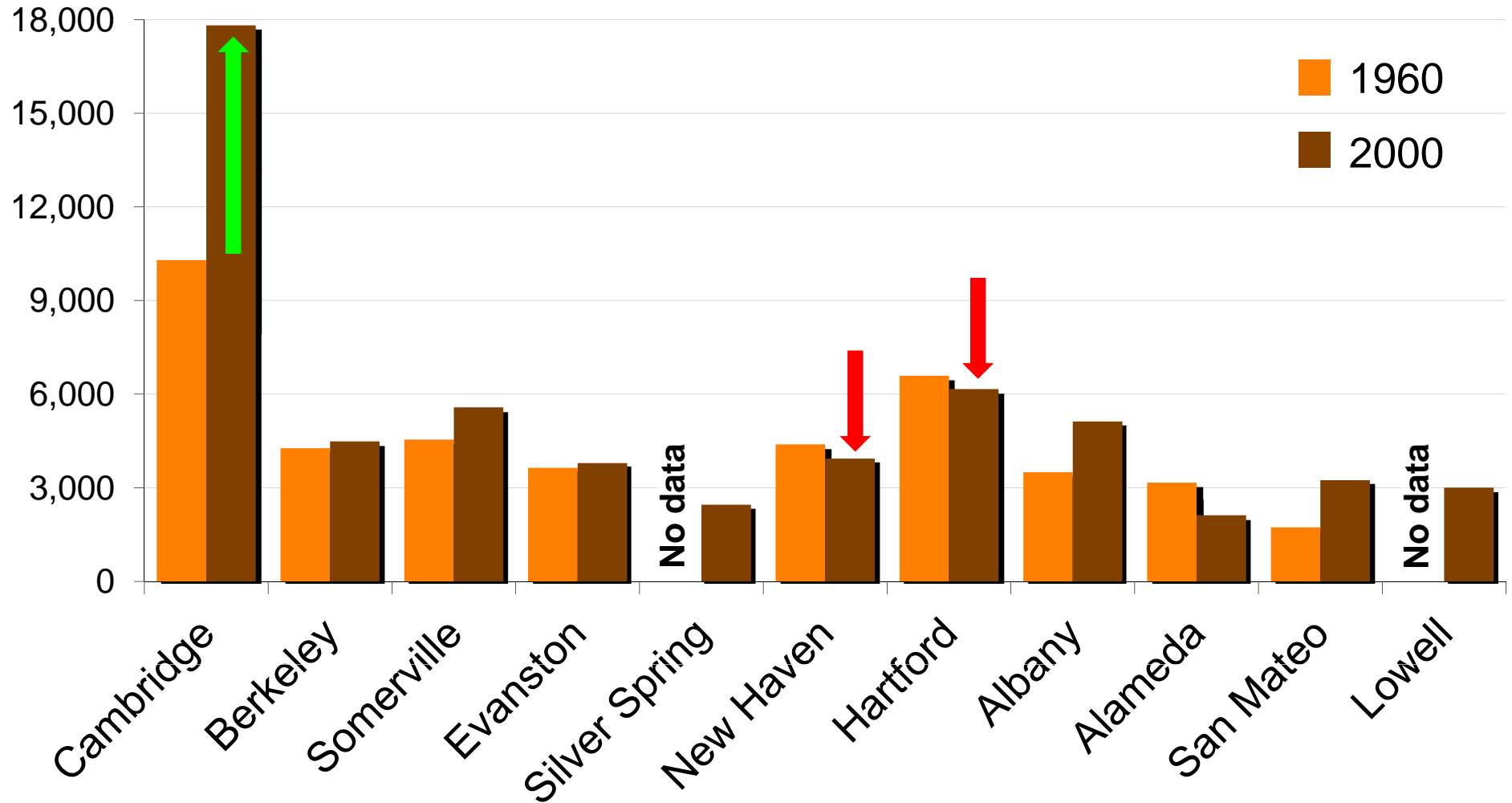
Limits on growth?

# Employee density

(employees per square mile)

Driving to work:

58% 65% 70% 68% 74% 83% 88% 87% 78% 86% 89%



# Findings...

1. High levels of automobile use (*and parking*) correspond with fewer activities





# Findings...

2. Cities with the most activities have preserved their urban fabric and provide a range of transportation options





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*Good urban planning must provide a place for the motor car: that goes without saying. But this does not in the least mean that the motor car must be permitted to penetrate every part of the city and stay there, even though it disrupts all other activities.*

**- L. Mumford (1961)**

*Too much dependence on private automobiles and city concentration of use are incompatible.*

*Depending on which pressure wins most of the victories, one of two processes occurs: erosion of cities by automobiles, or attrition of automobiles by cities.*



**- J. Jacobs (1961)**