

Sacramento Area Council of Governments



# Connecting “the D’s” to Vehicle Miles Traveled in the Sacramento Region

Presentation to  
SB375 Regional Targets Advisory Committee  
February 3, 2009

# Purpose



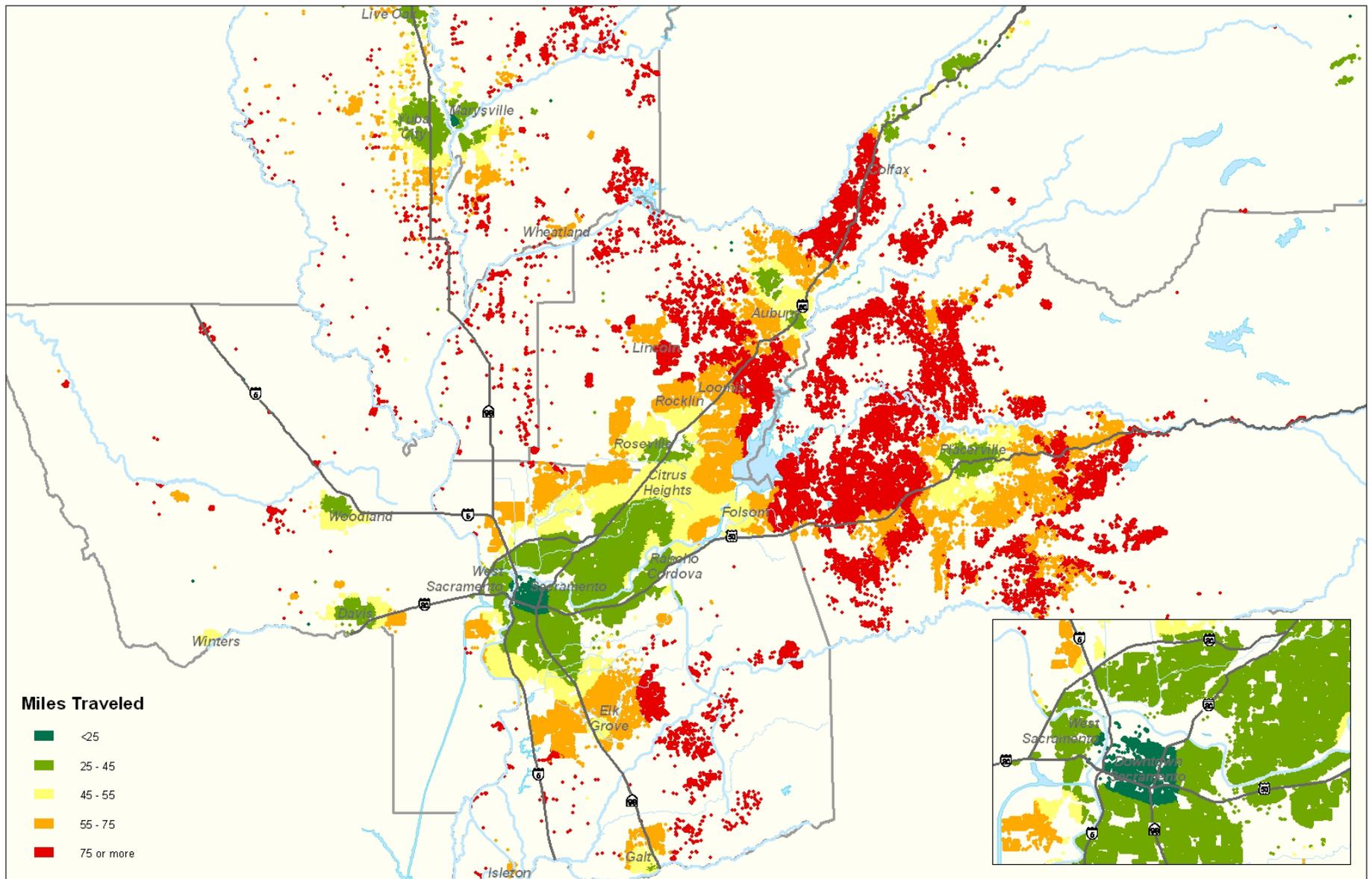
- Show one practical, regional planning application of the D's
- Provide examples of MANY ways to reduce VMT going forward
- Demonstrate that system-wide improvements happen over time
- Stimulate focused RTAC discussion and debate

# Outline



- Vehicle miles traveled as primary indicator
  - Defining area types by average VMT per household
- Land use characteristics of VMT-defined areas
- Drilling down to specifics in prototype areas
- Forecasting results

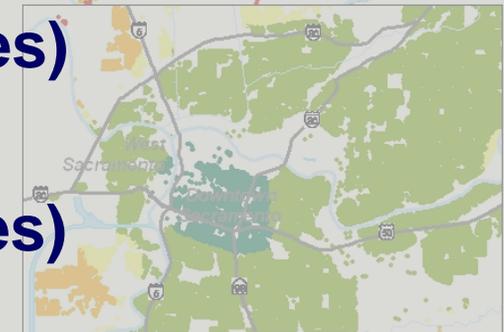
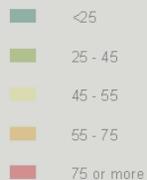
# 2005 VMT Per Household



# 2005 VMT Per Household

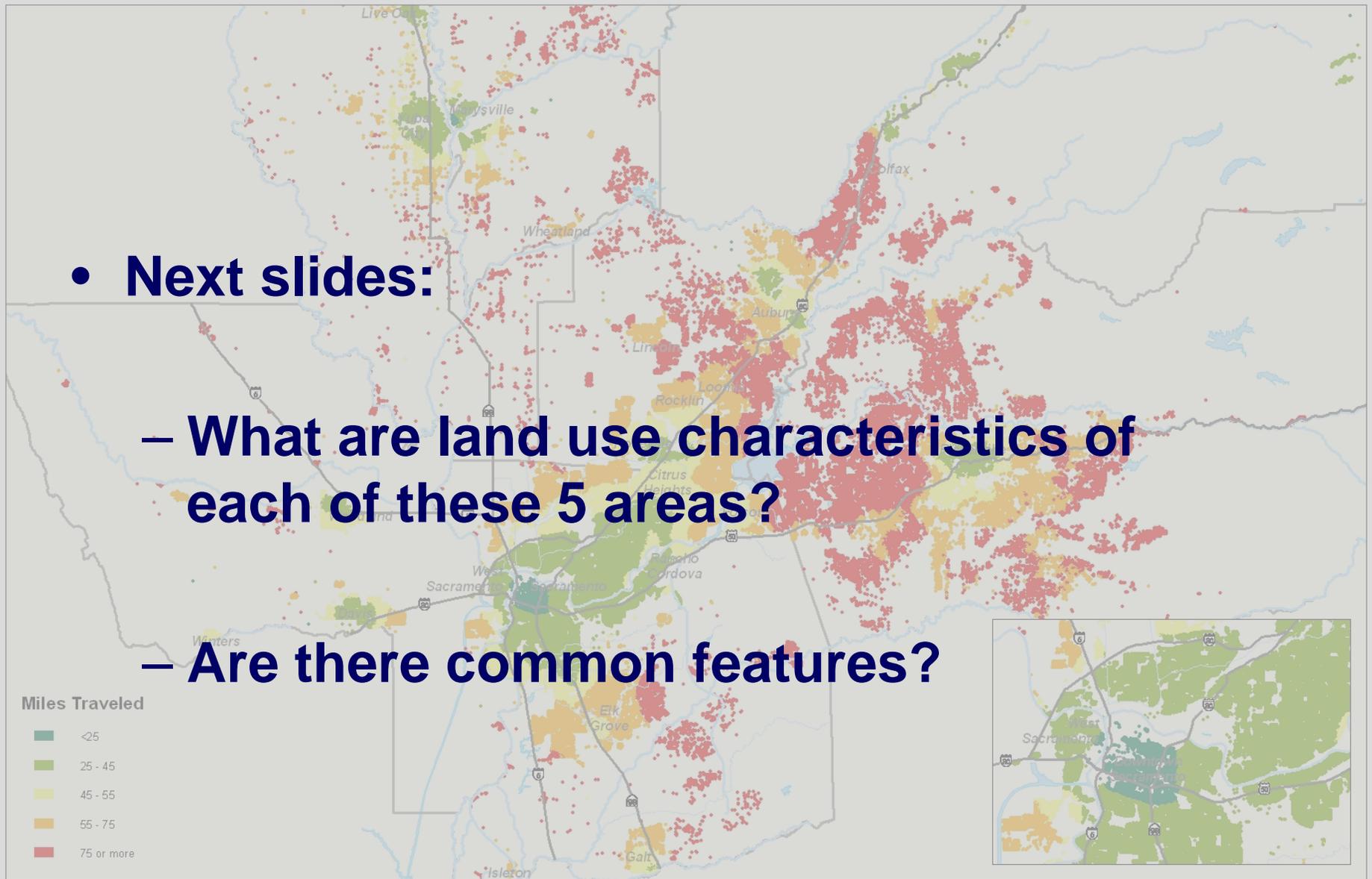
- **2005 reg. average VMT/HH = +/-50 miles**
  - **Dark green = Group 1--Very Low VMT (< 25 miles)**
  - **Light green = Group 2--Low VMT (25 – 45 miles)**
  - **Yellow = Group 3--Average(45-55 miles)**
  - **Orange = Group 4--High (55-75 miles)**
  - **Red = Group 5--Very High (75+ miles)**

## Miles Traveled



# 2005 VMT Per Household

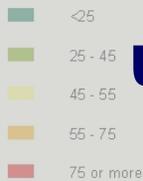
- **Next slides:**
  - **What are land use characteristics of each of these 5 areas?**
  - **Are there common features?**



# VMT Prototype Areas

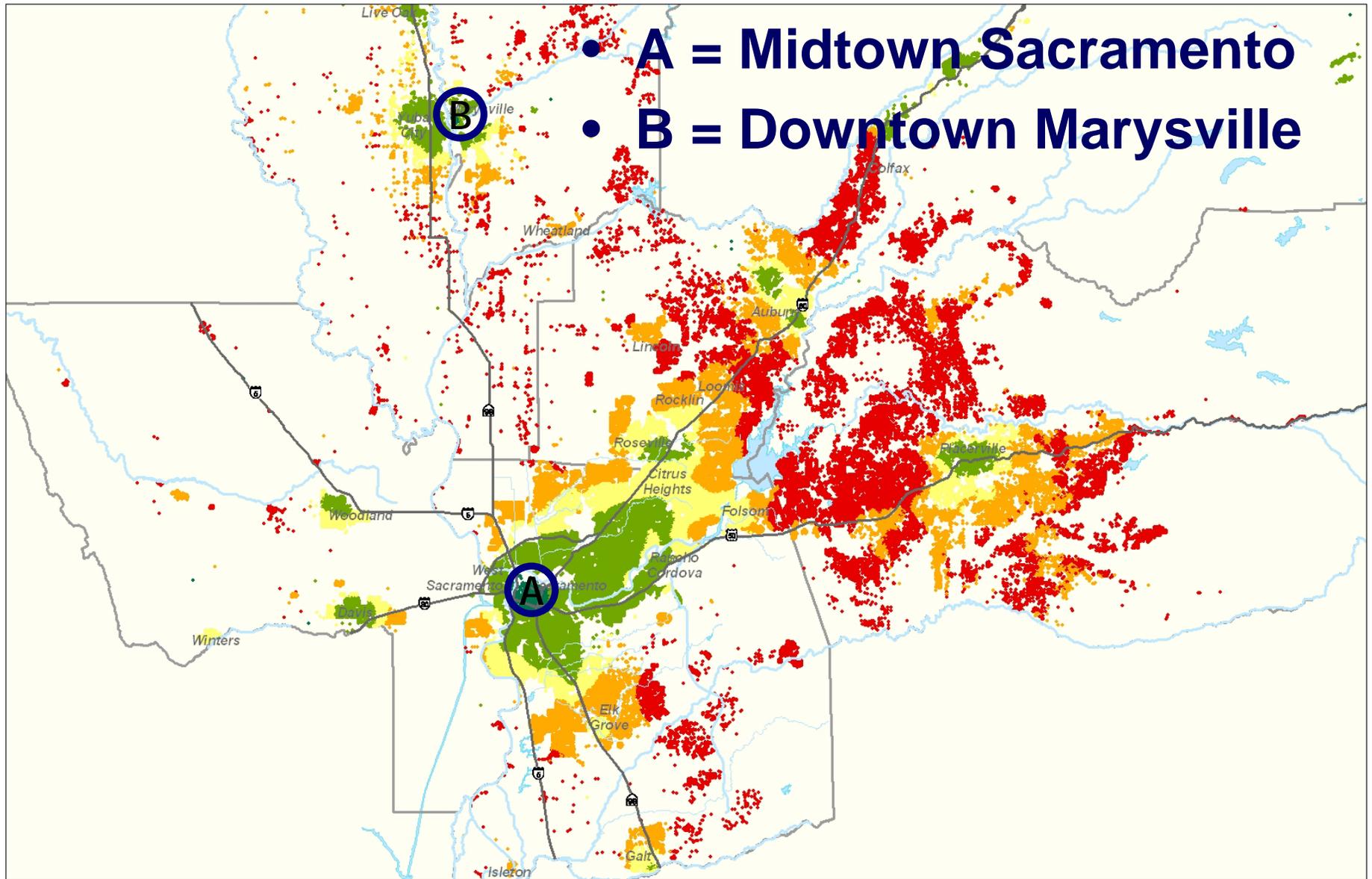
- **18 Prototype areas**
- **2 to 4 prototypes areas per VMT group**
- **Areas spread across region**
- **Variety**
- **Used the prototype areas to compare land uses and travel behavior**

Miles traveled

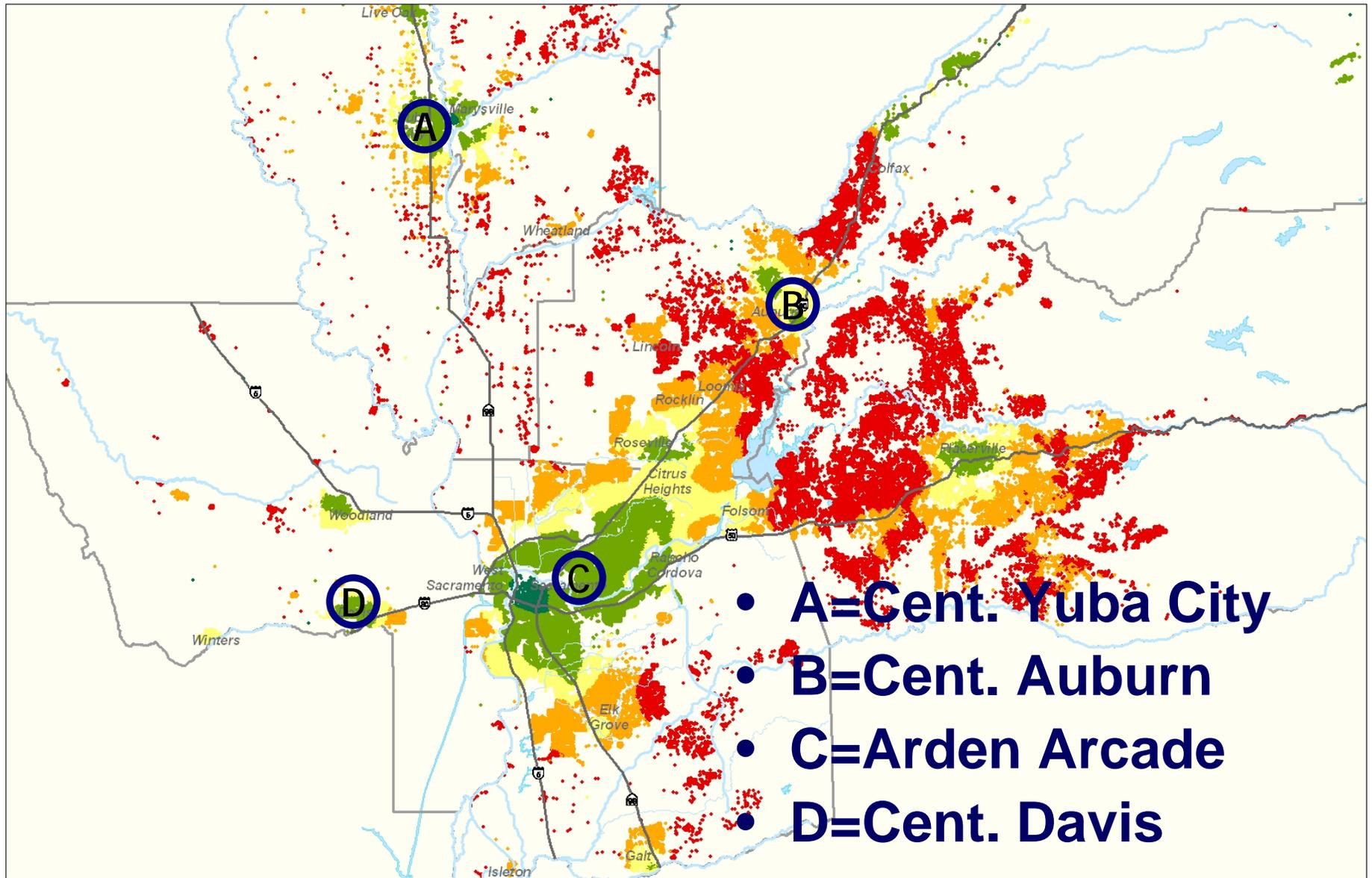


# Very Low VMT Prototypes (Group 1)

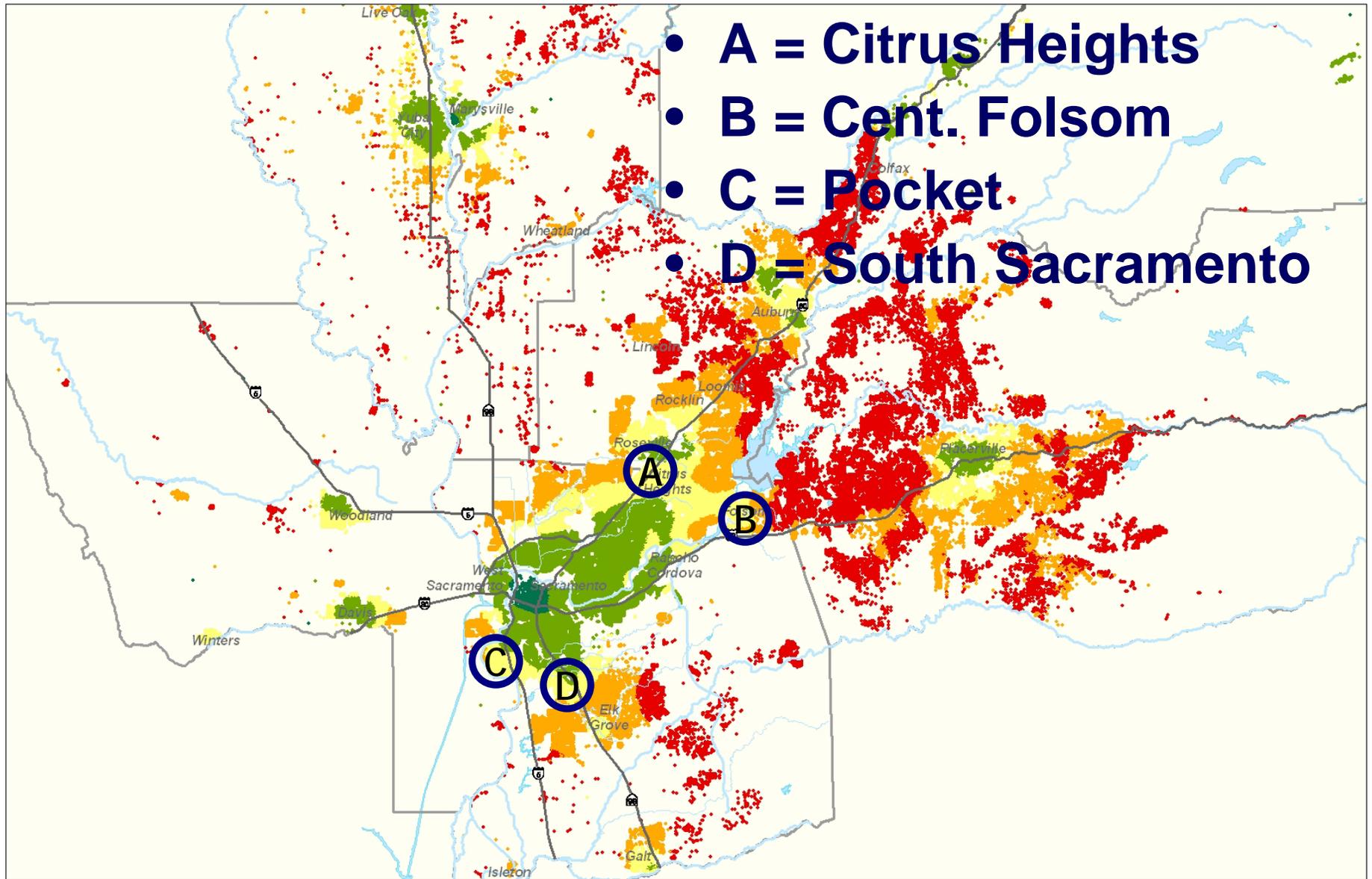
- **A = Midtown Sacramento**
- **B = Downtown Marysville**



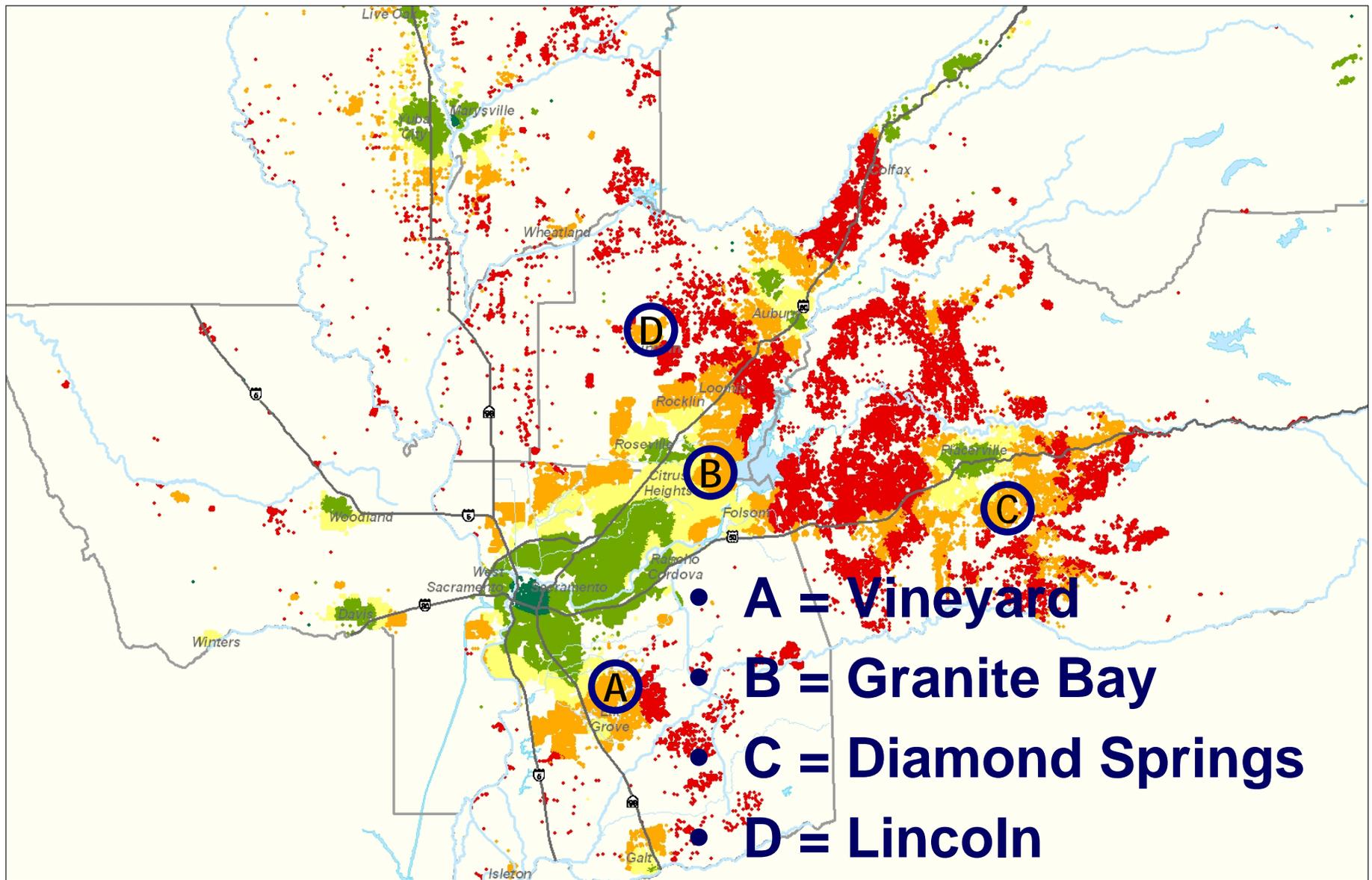
# Low VMT Prototypes (Group 2)



# Average VMT Prototypes (Group 3)

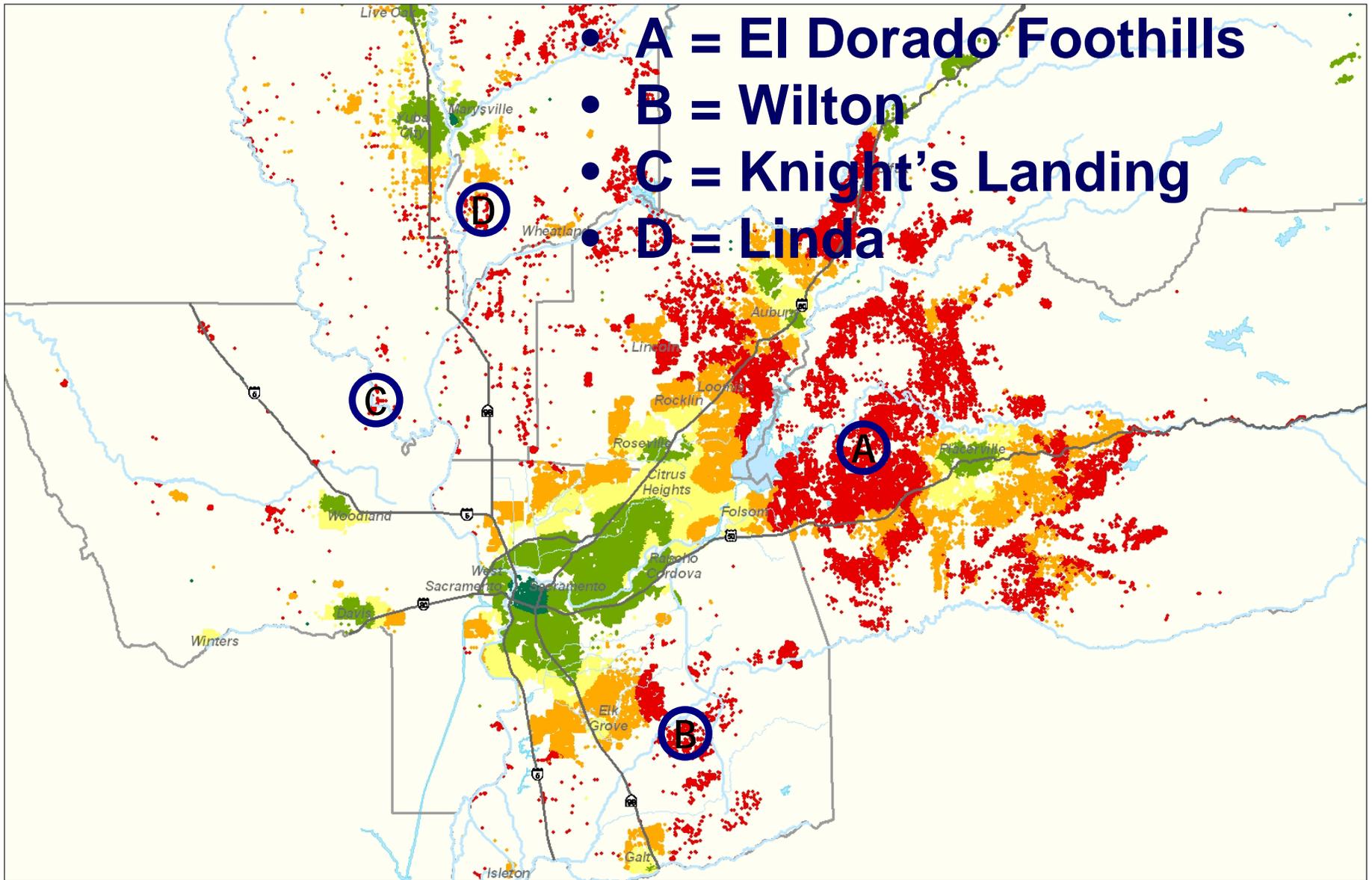


# High VMT Prototypes (Group 4)



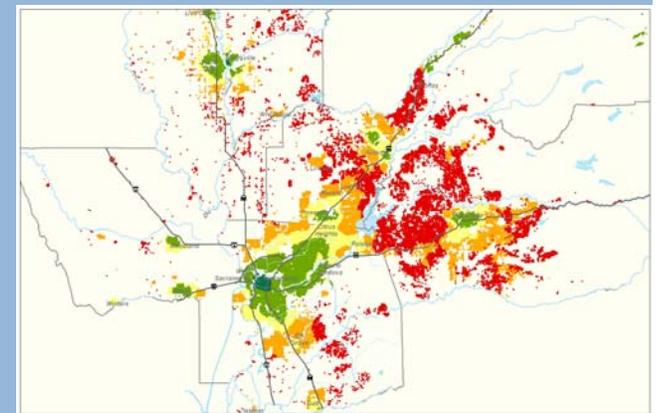
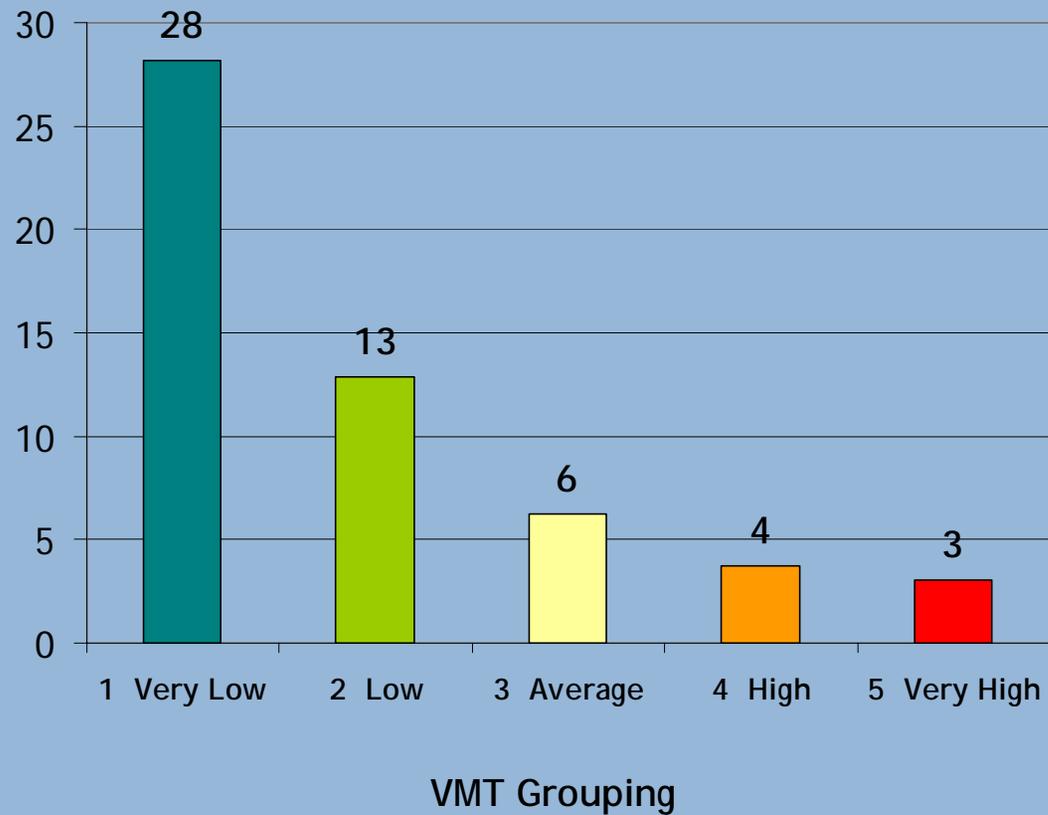
# Very High VMT Prototypes (Group 5)

- **A = El Dorado Foothills**
- **B = Wilton**
- **C = Knight's Landing**
- **D = Linda**



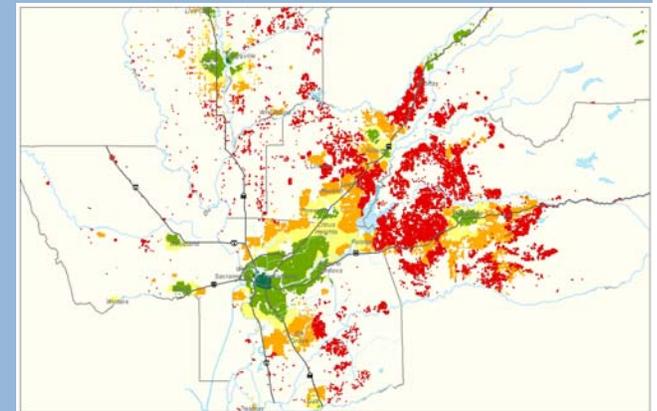
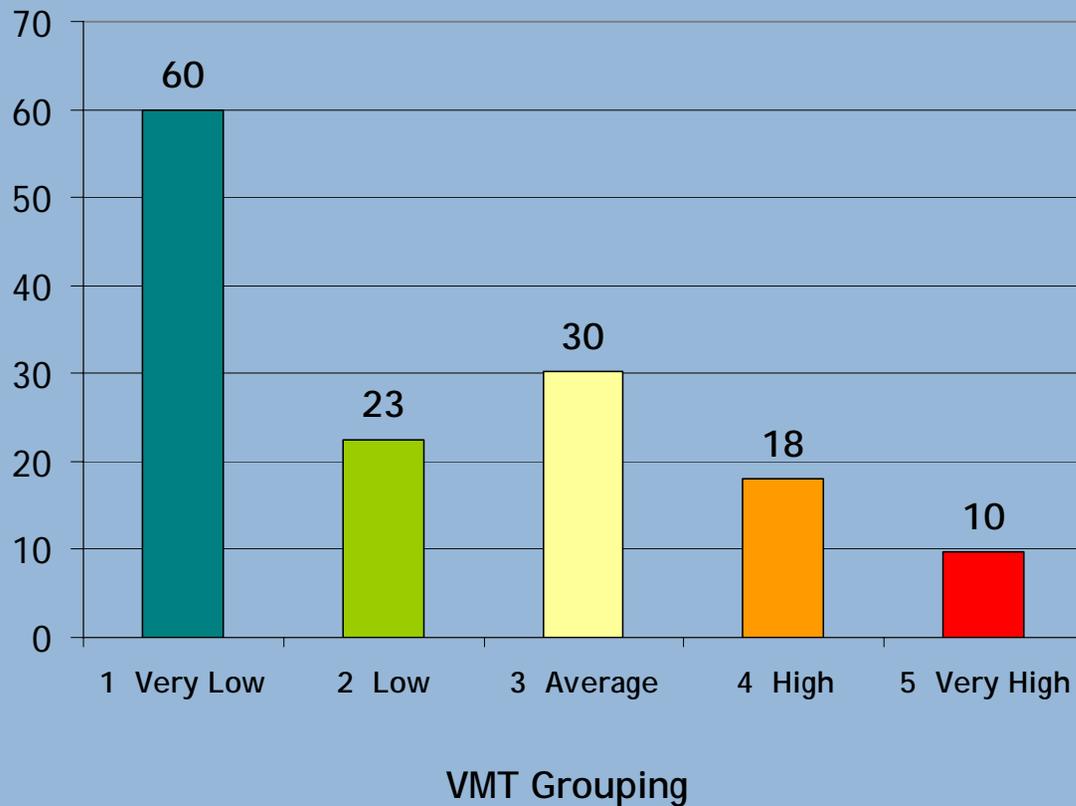
# Density in Prototype Areas

- **Density = Jobs + housing per acre at place of residence**
- **Higher density = lower VMT**



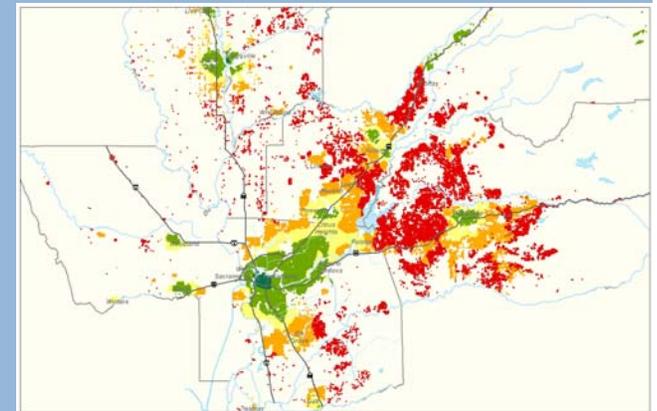
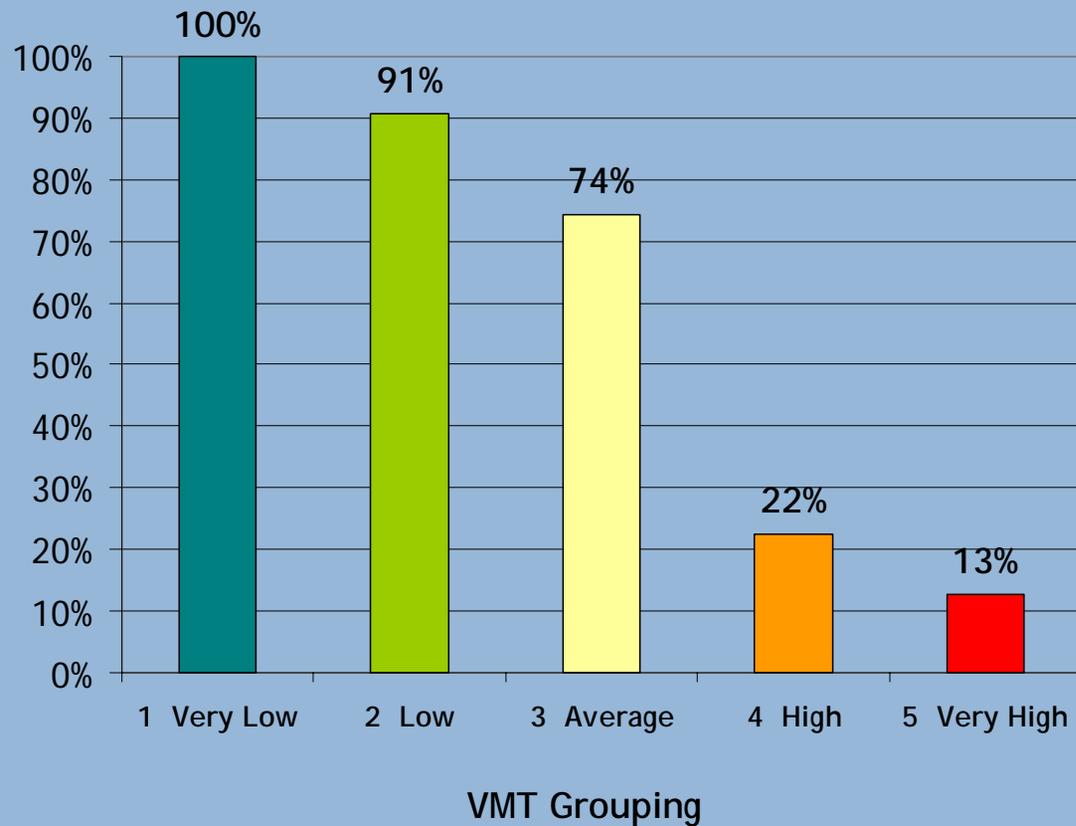
# Street Pattern in Prototype Areas

- **Street pattern = density of good intersections at place of residence**
- **Better street pattern = lower VMT**



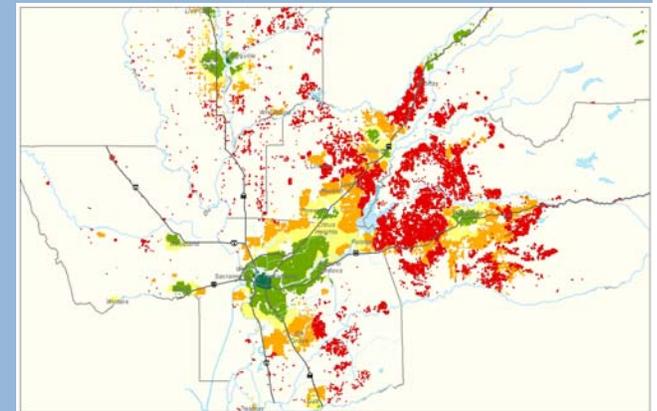
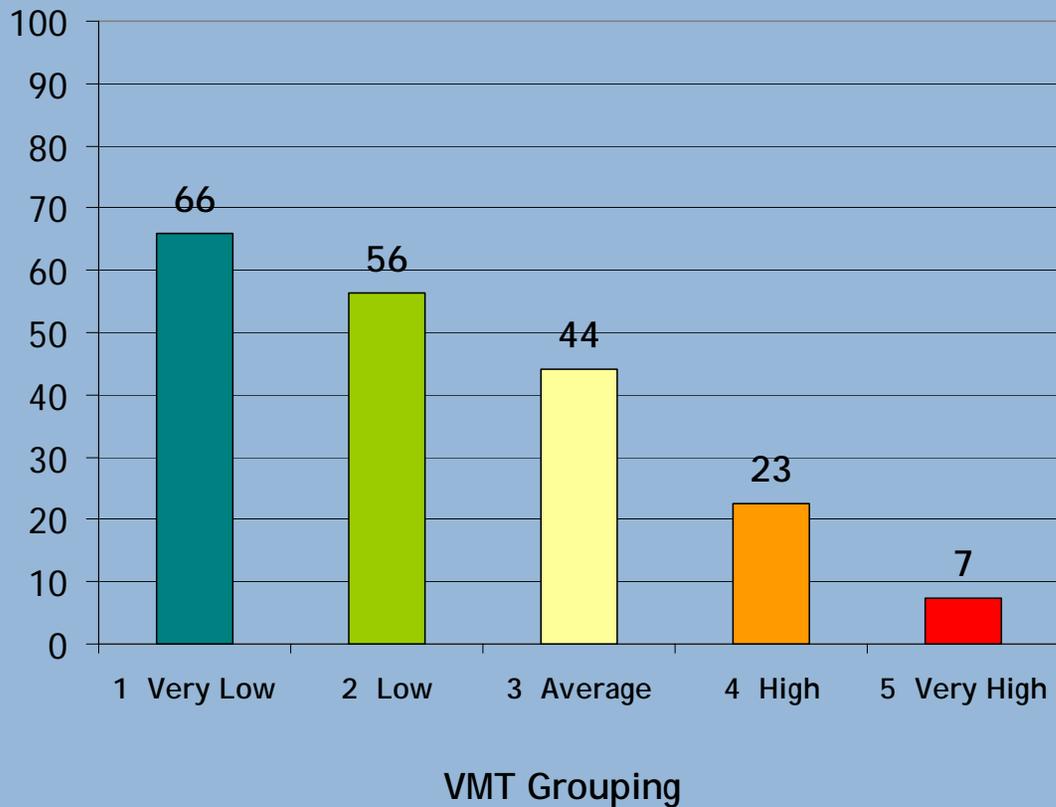
# Transit Proximity in Prototype Areas

- **Proximity = % of households within ¼ mile of nearest transit**
- **Higher proximity = lower VMT**



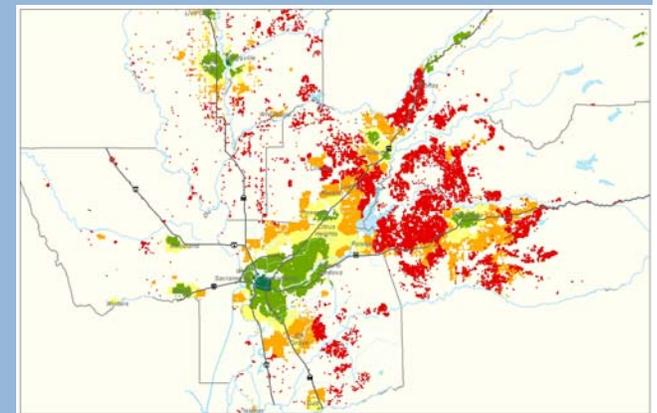
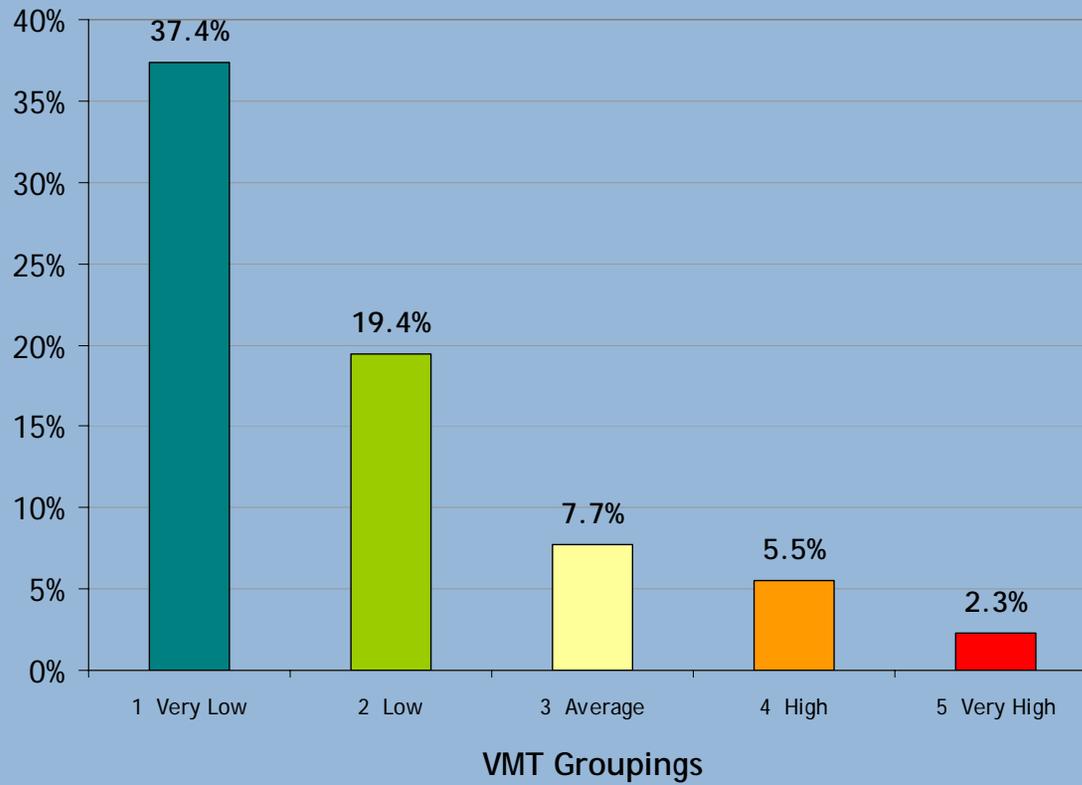
# Mix of Use in Prototype Areas

- **Mix Index = 0 (homogeneous development) to 100 (balanced mix)**
- **More balanced mix = lower VMT**



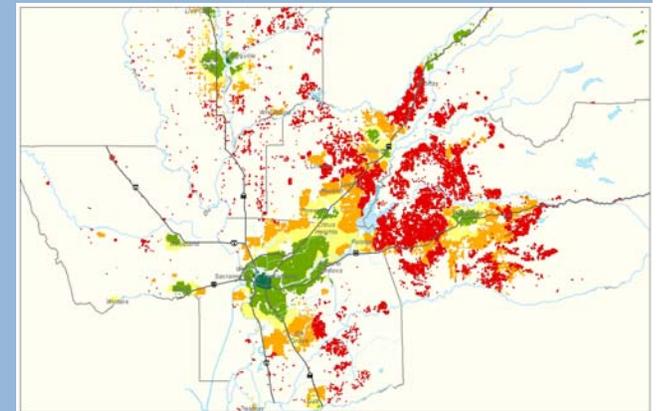
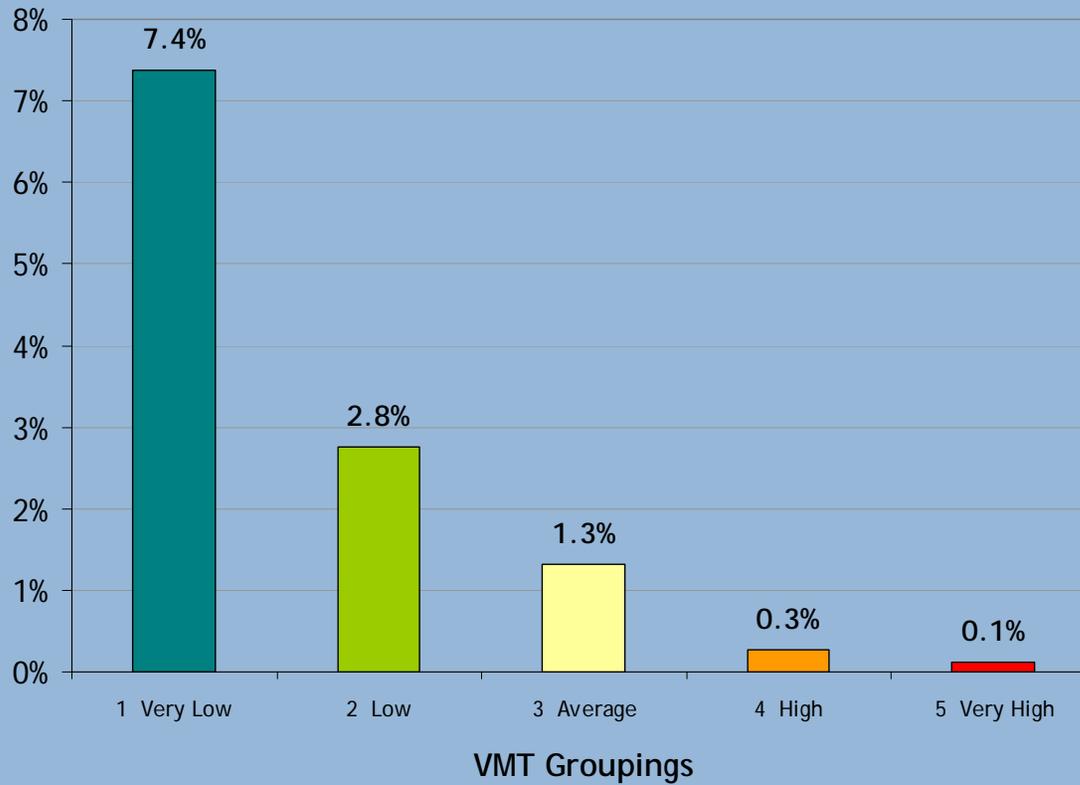
# Bike/Walk Mode Share in Prototype Areas

- **Regional Average = 7.5 %**
- **Higher share in lower VMT areas**



# Transit Mode Share in Prototype Areas

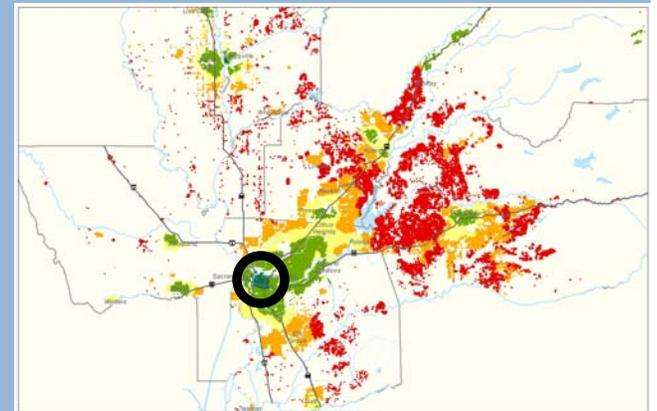
- **Regional Average = 1.2 %**
- **Higher share in lower VMT areas**



# Drill Down into Lower VMT Prototype Areas (Groups 1 and 2)



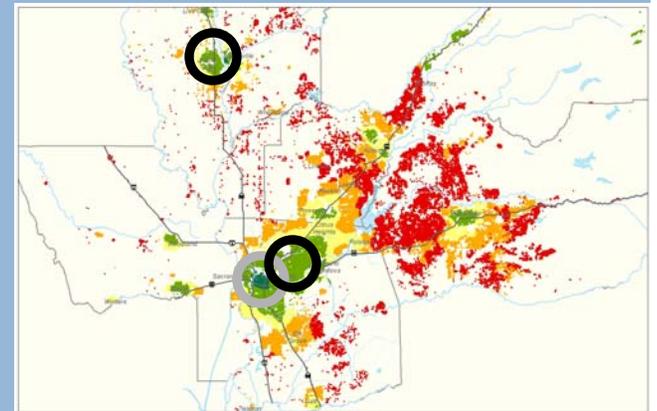
- Very Low VMT area (Group 1)
  - Midtown Sacramento



# Drill Down into Lower VMT Prototype Areas (Groups 1 and 2)



- Very Low VMT area (Group 1)
  - Midtown Sacramento
- Low VMT areas (Group 2)
  - Arden Arcade
  - Yuba City

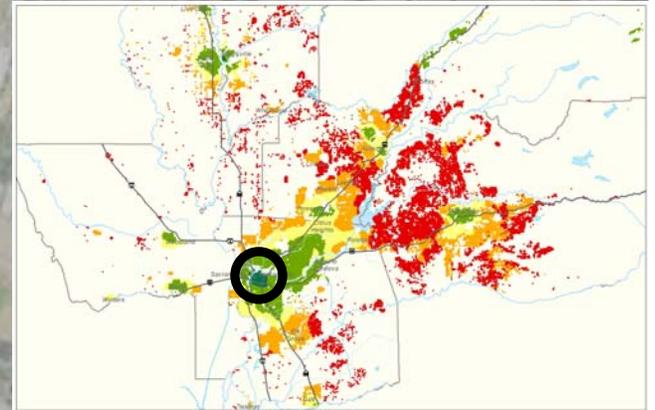


# Midtown Sacramento (Group 1—Very Low VMT)

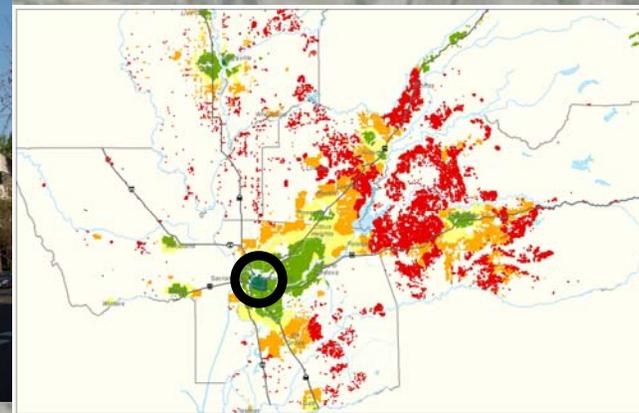


## Midtown Sacramento—Land Use

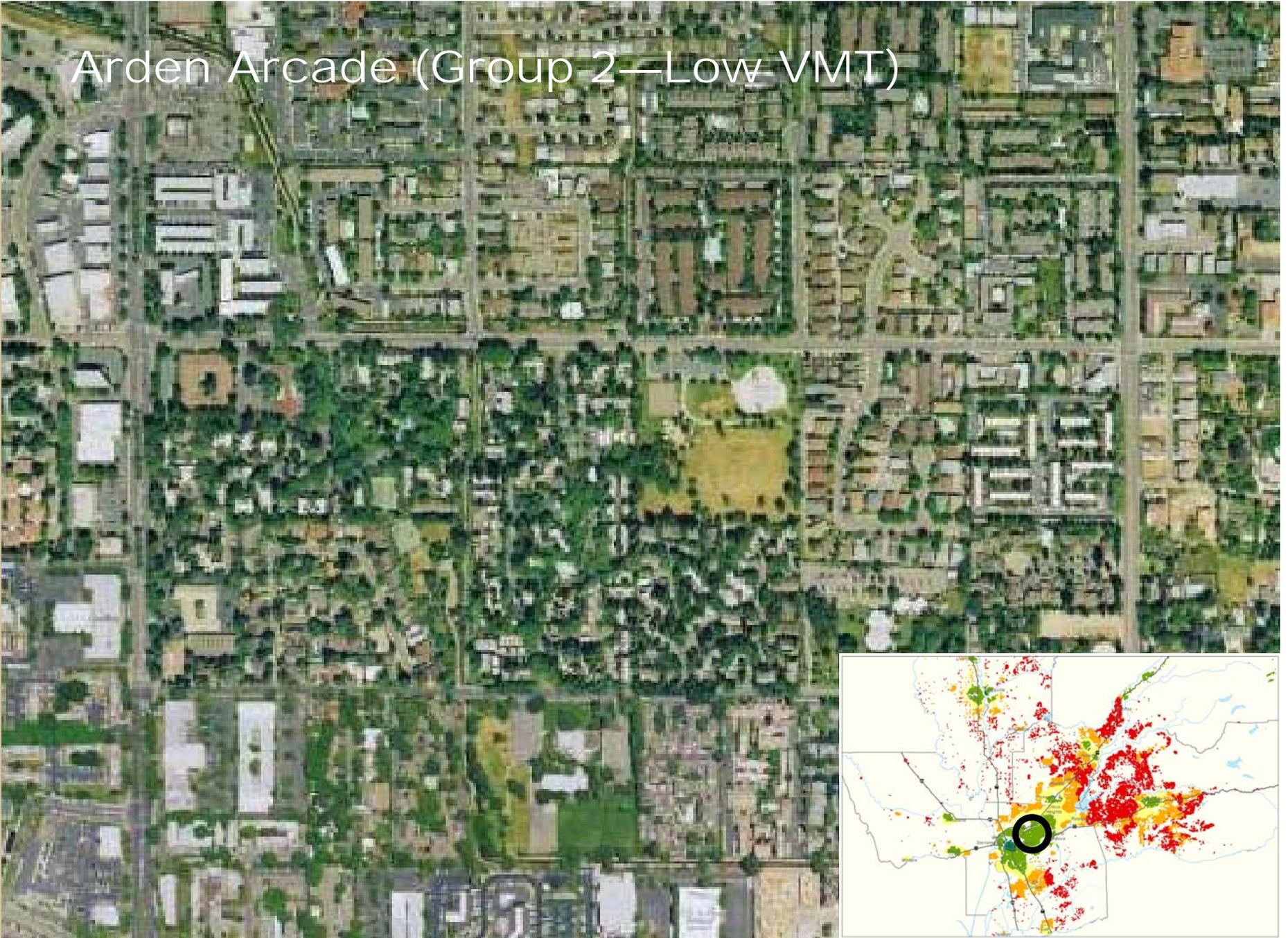
- **Adjacent to CBD**
- **Mixed office, retail, residential**
- **Small-lot single family + apartments**
- **Small blocks, grid pattern**
- **High frequency transit**



# Midtown Sacramento—Development Types

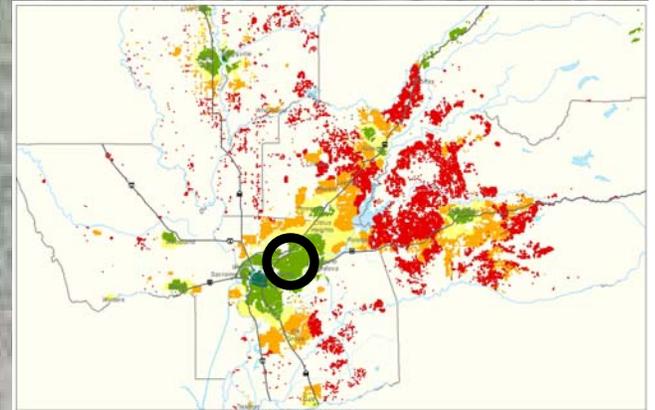


# Arden Arcade (Group 2—Low VMT)

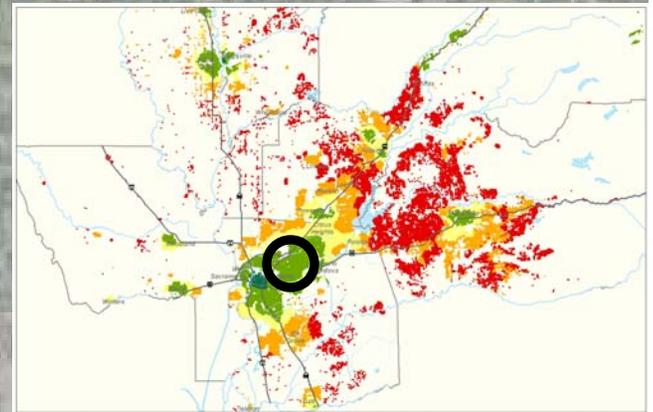


## Arden Arcade—Land Use

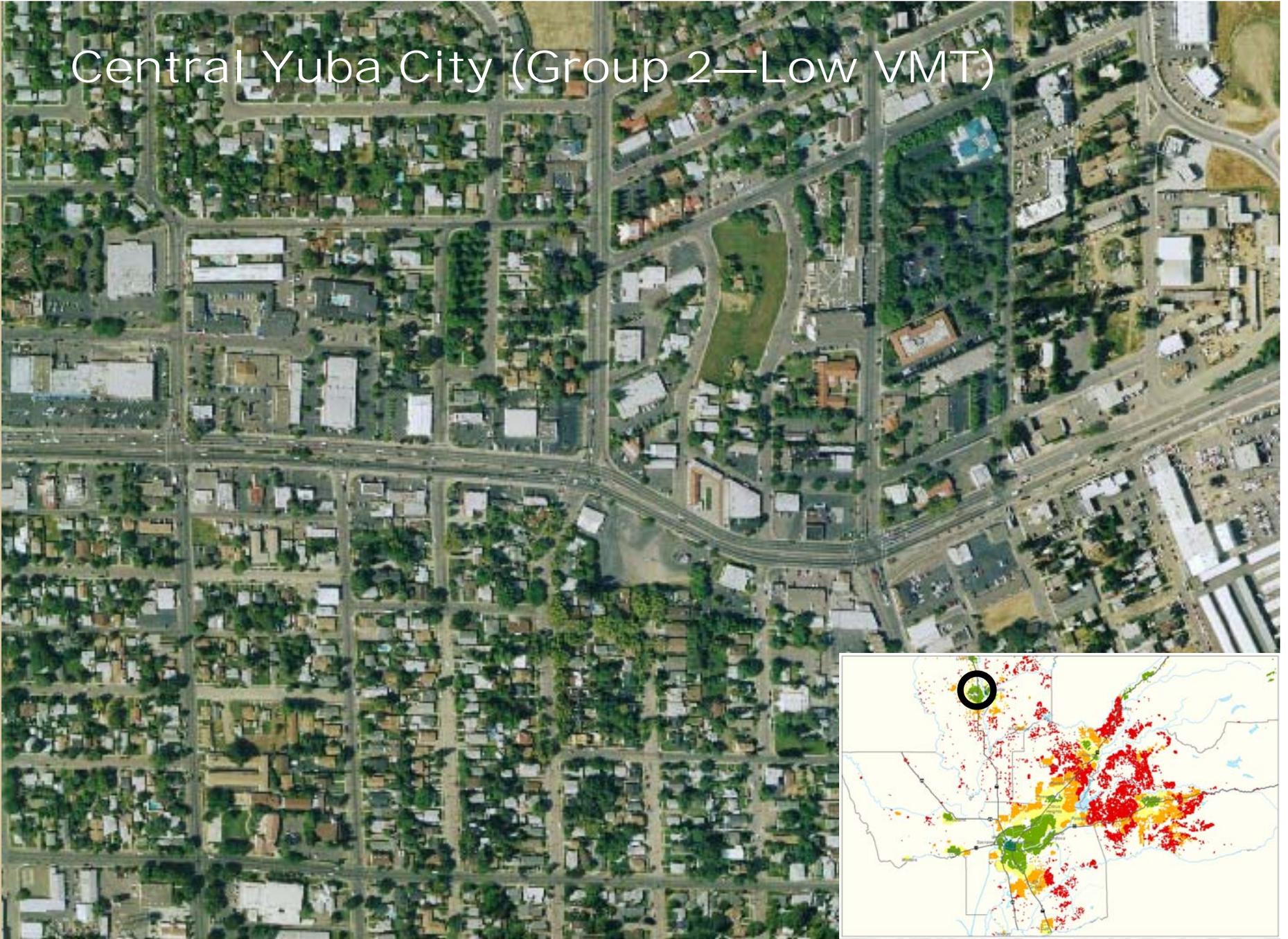
- Inner suburban, 5 miles from CBD
- Low/medium density retail and commercial strip
- Large-lot single family + some large scale multi-family
- Large blocks, fragmented street pattern
- High frequency transit



# Arden Arcade—Development Types

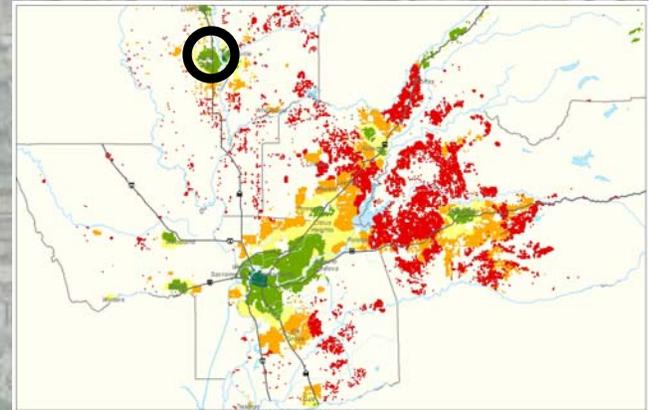


# Central Yuba City (Group 2—Low VMT)

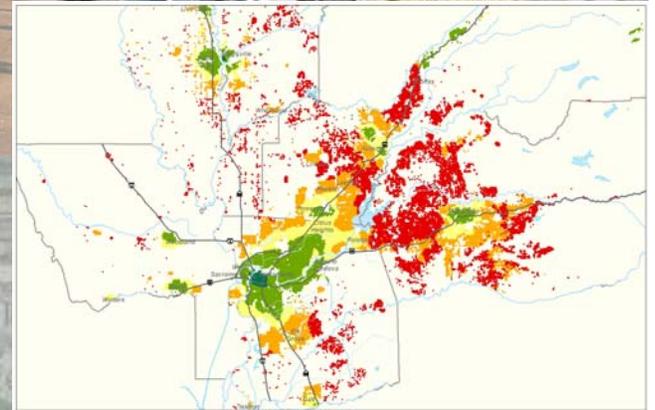


## Central Yuba City—Land Use

- **Historic farm-market town**
- **Strip commercial and large lot single family residential**
- **Medium street grid in residential, large blocks in commercial and retail areas**
- **Low frequency transit**

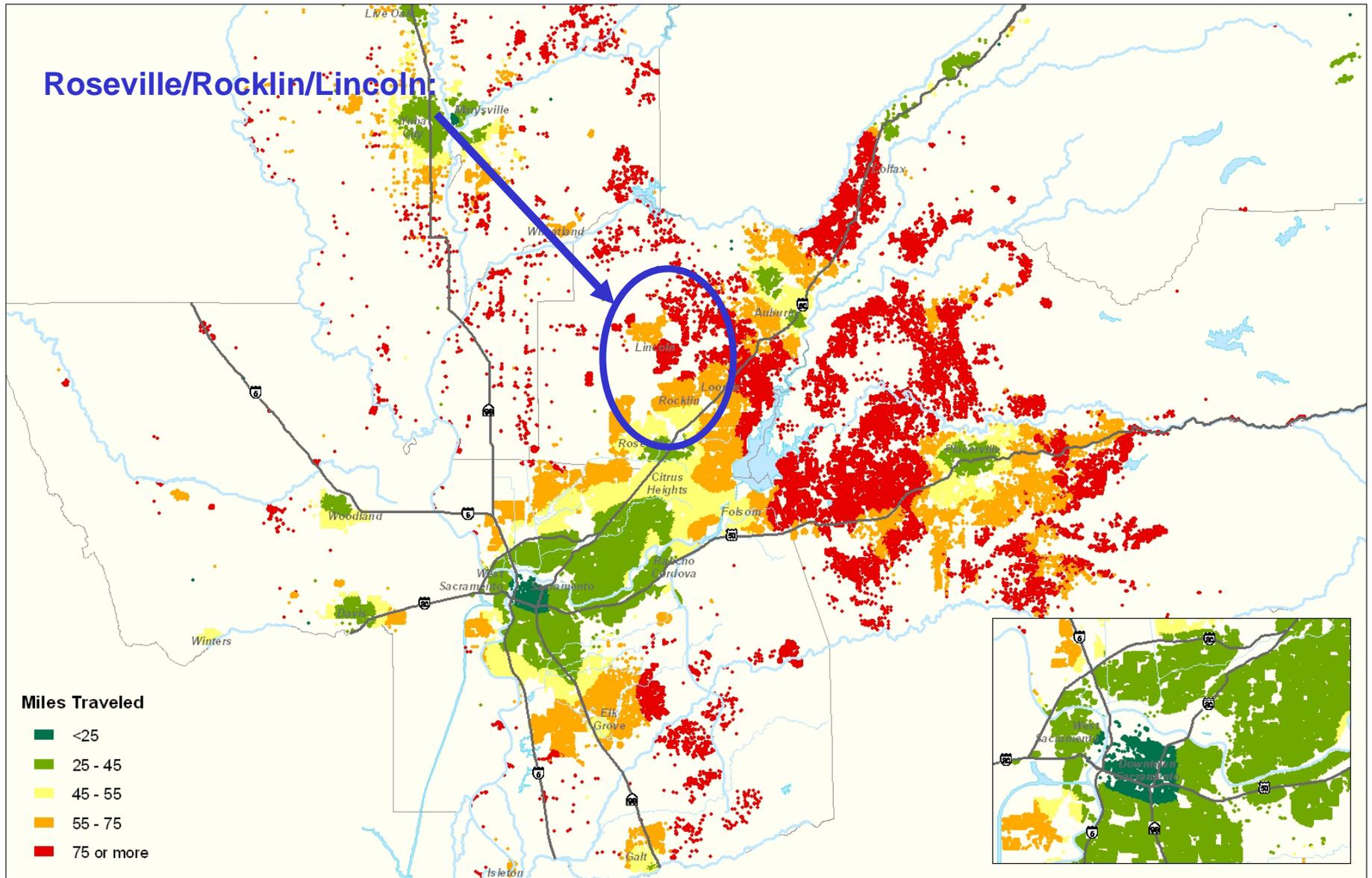


# Central Yuba City—Development Types

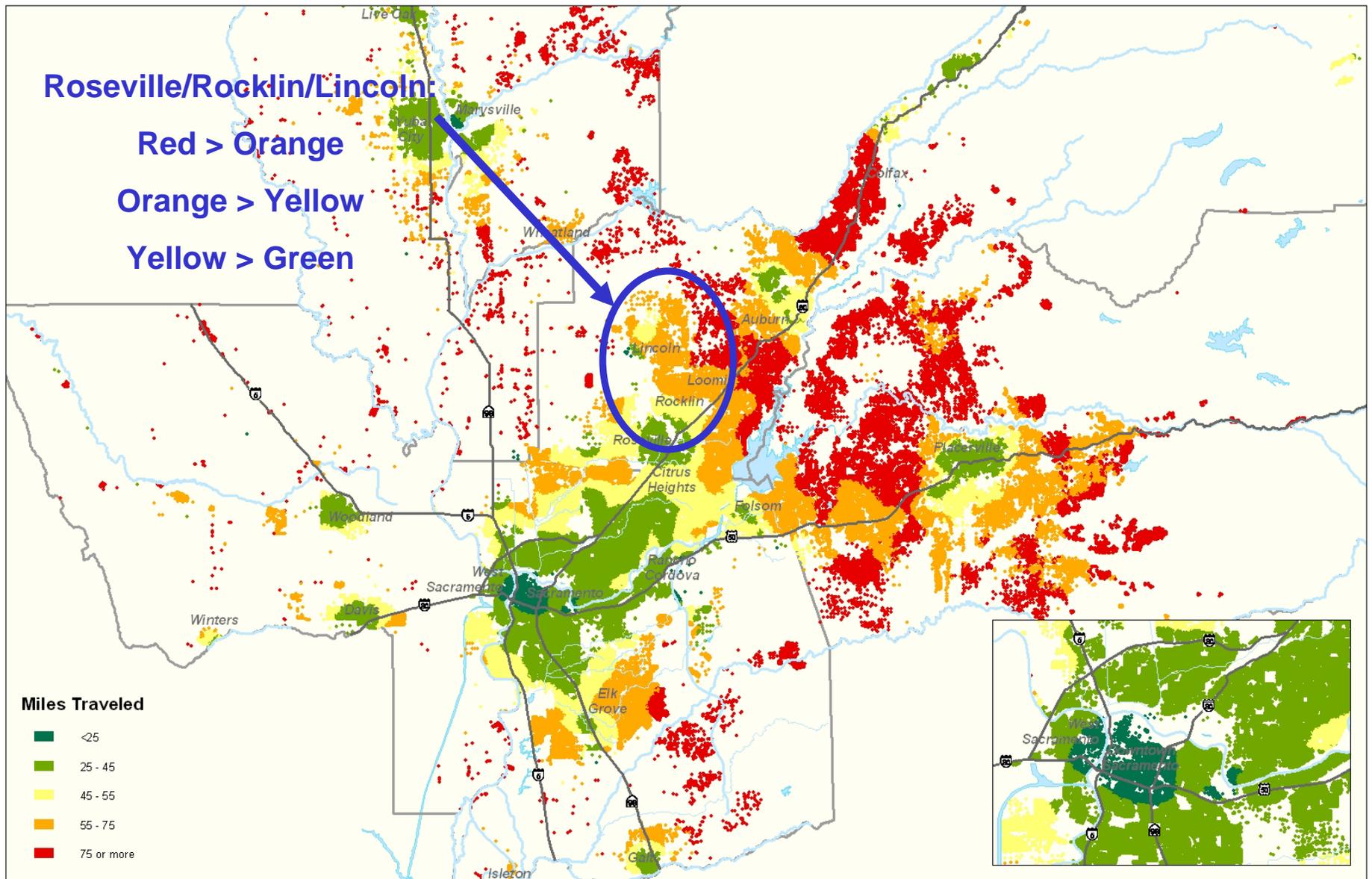




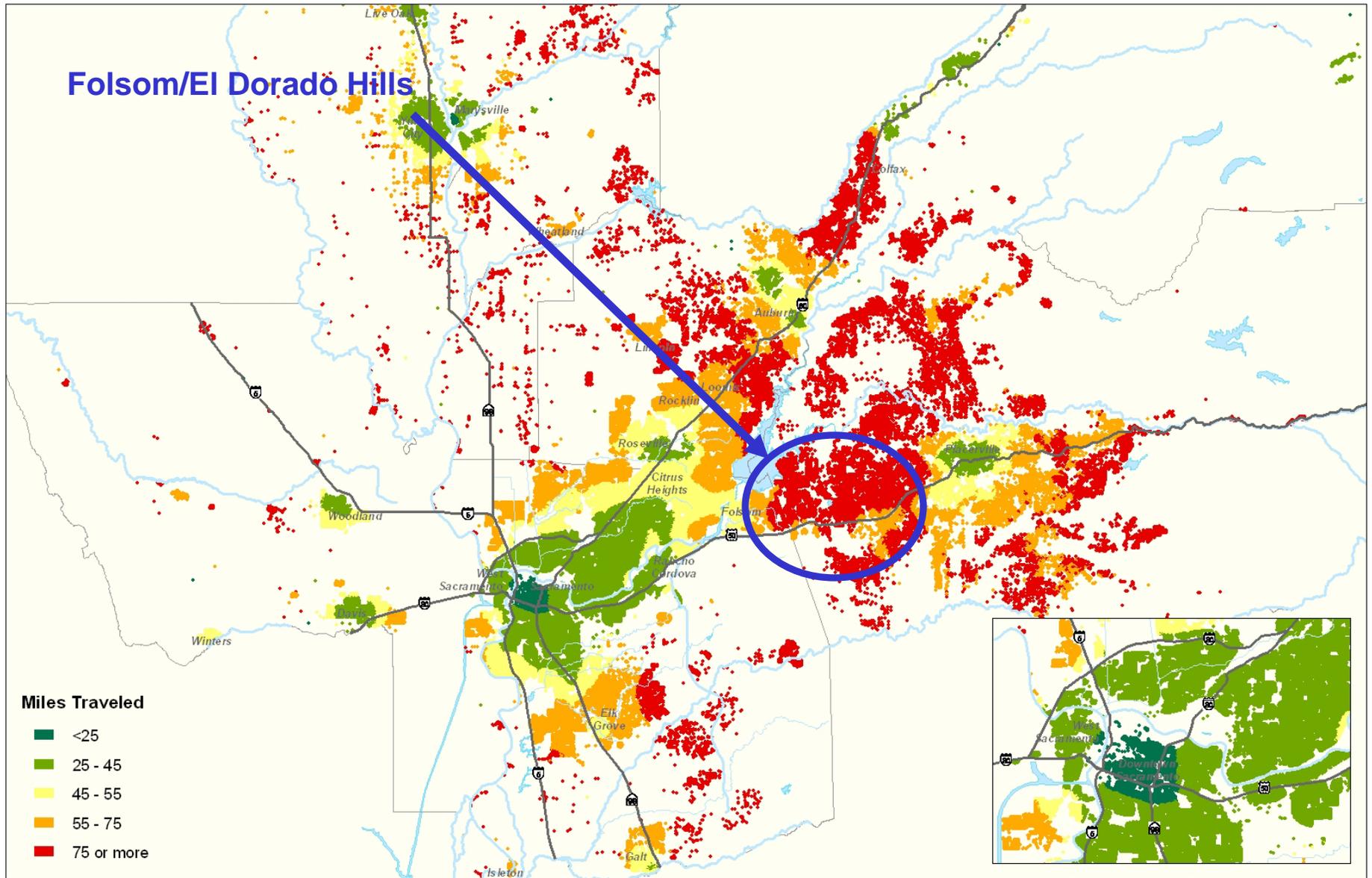
# Areas of Improvement: 2005 VMT / HH



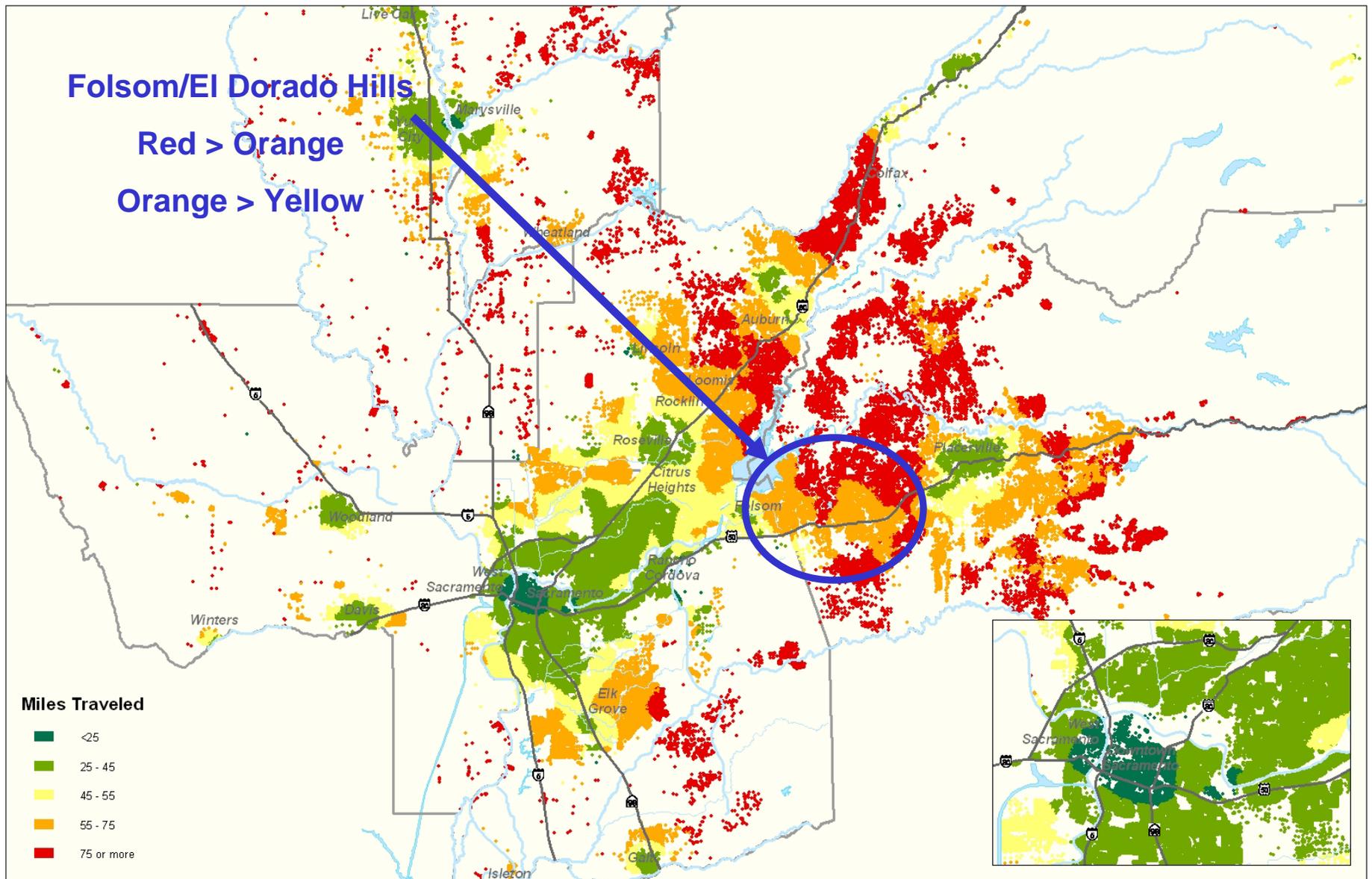
# Areas of Improvement: 2035 MTP VMT / HH



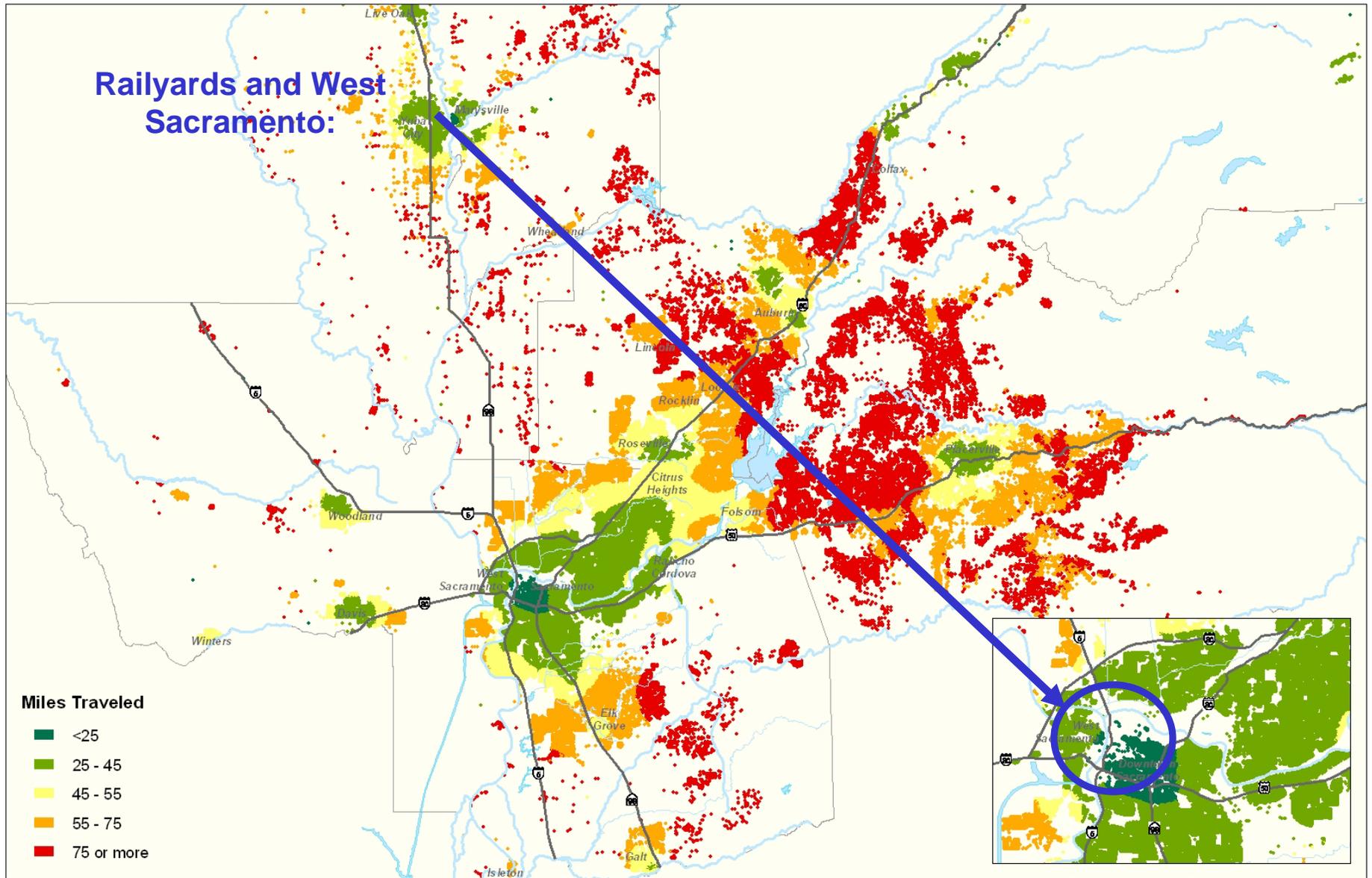
# Areas of Improvement: 2005 VMT / HH



# Areas of Improvement: 2035 MTP VMT / HH

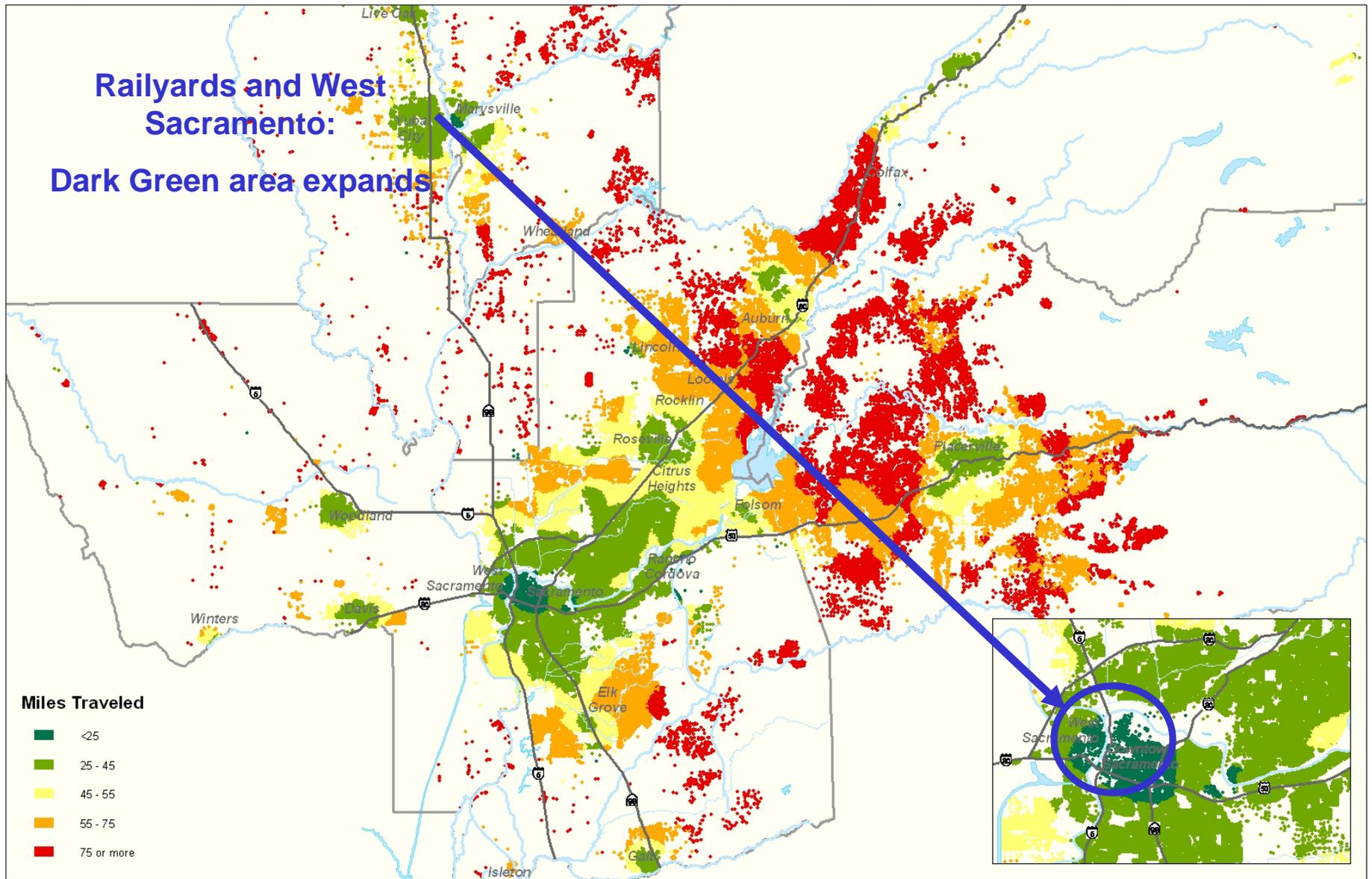


# Areas of Improvement: 2005 VMT / HH



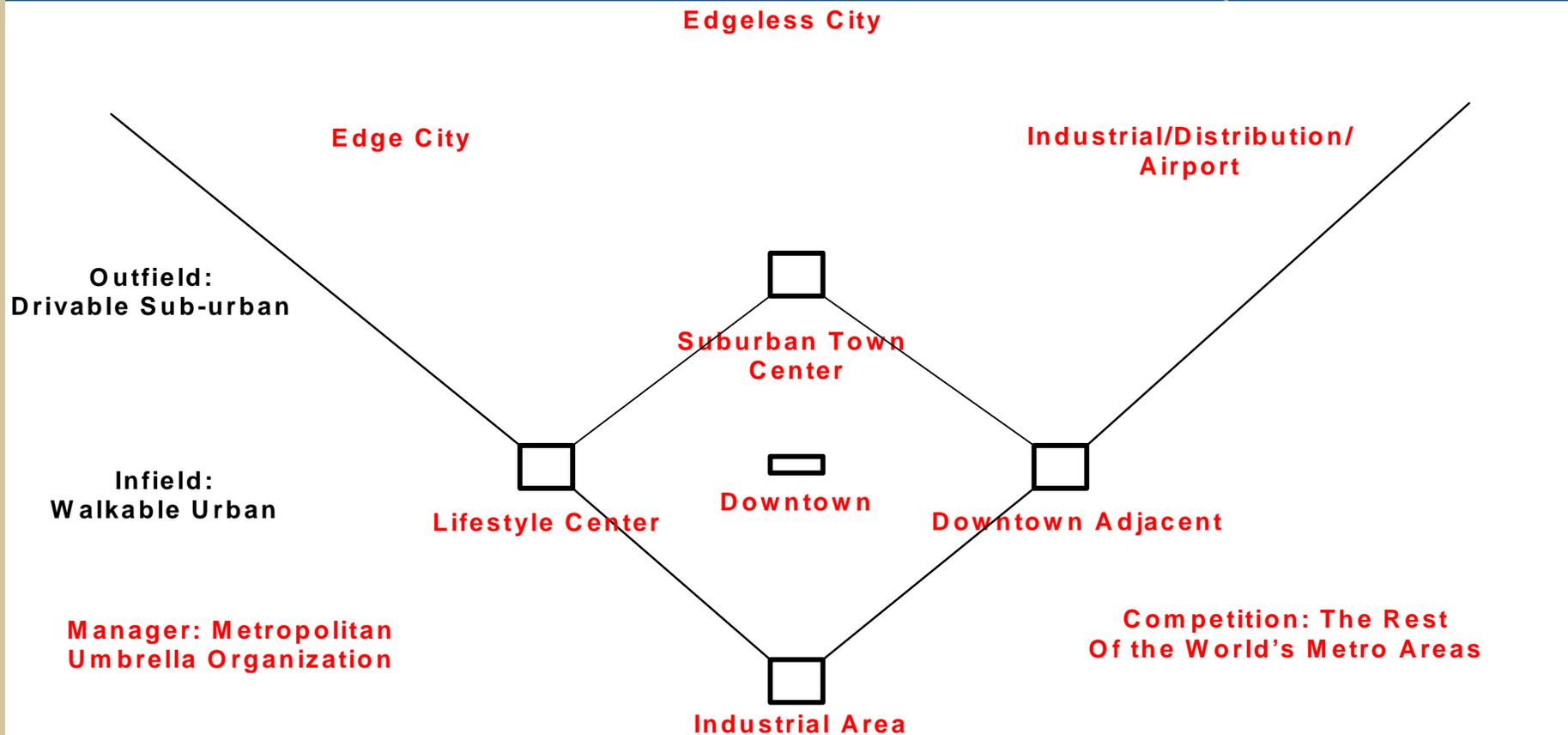
# Areas of Improvement: 2035 MTP VMT / HH

**Railyards and West Sacramento:**  
**Dark Green area expands**



# Regional Baseball Analogy

- From Christopher Leinberger
- Unique roles for cities within a region
- Not “one size fits all”



*Each position has unique skills, rarely competes directly with one another and each wins when all wins*