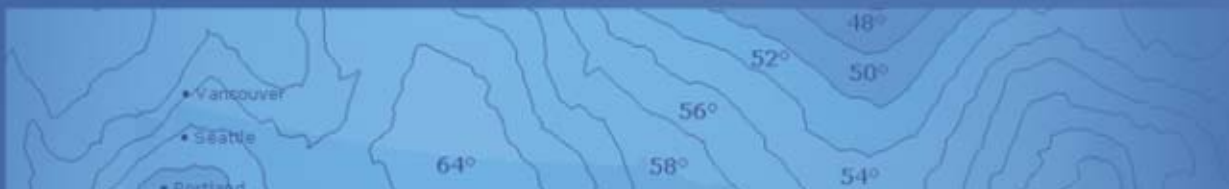# GPS and Travel Modeling
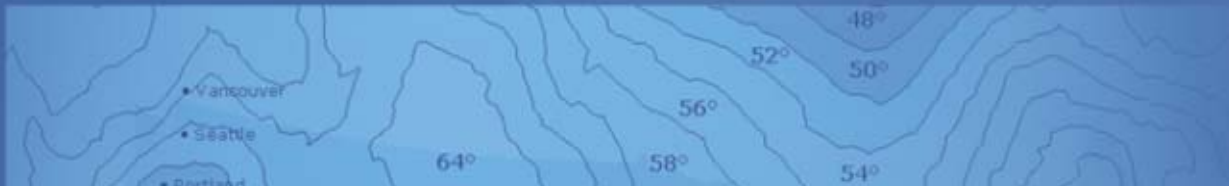
Terry Bills, ESRI
October 10, 2005
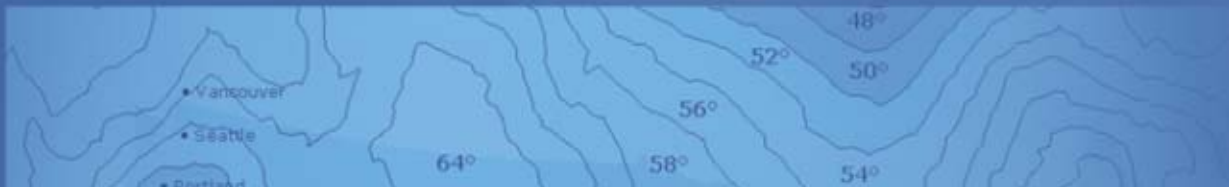
GPS and Travel Modeling

- **Argue for a wider usage of GPS data**

- **To be useful, a number of conceptual and methodological issues**
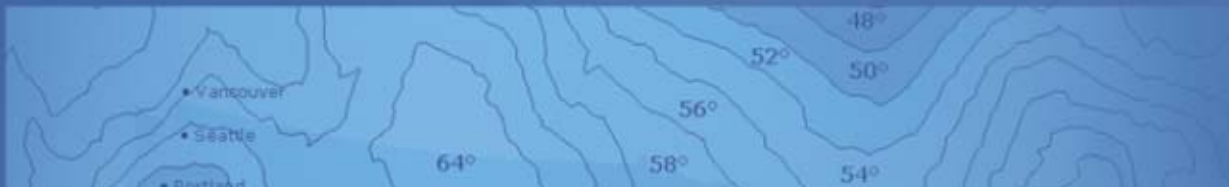
Methodological Issues

- **How to aggregate the voluminous data?**

    – **Individual path tracing?**
    – **Trip segments**

- **Trip segments w attributes**
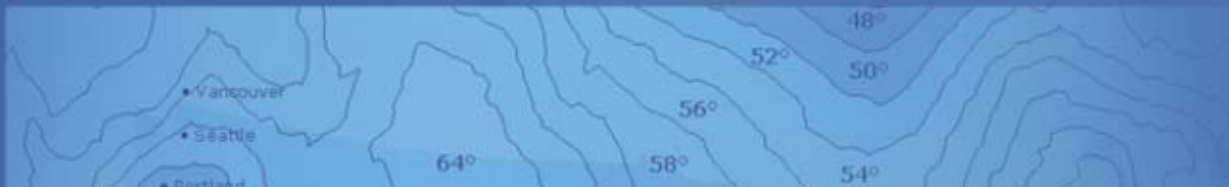
Methodological Issues

- **What is the appropriate unit of analysis?**
  - Individual
  - Household
  - "community"

- **Each will give a considerably different view**

Methodological Issues

- **Community View:**

  – **How to discover the patterns in the voluminous data?**

  – **Data Mining issues**

Methodological Issues

- **Microsimulation Models:**
  - **What sample size?**

- **Open the possibility of very large samples – worth the effort?**