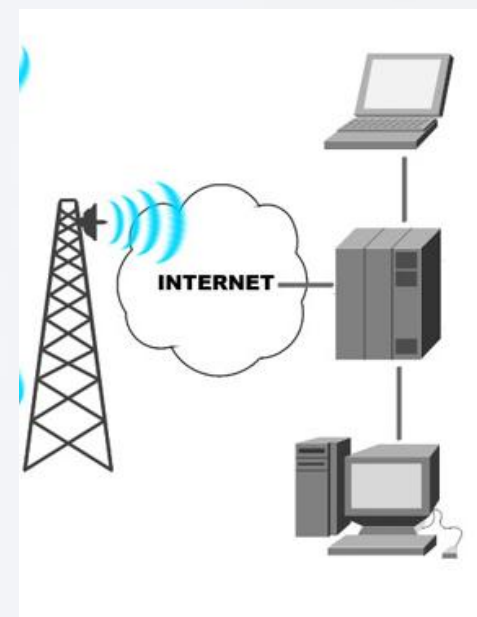
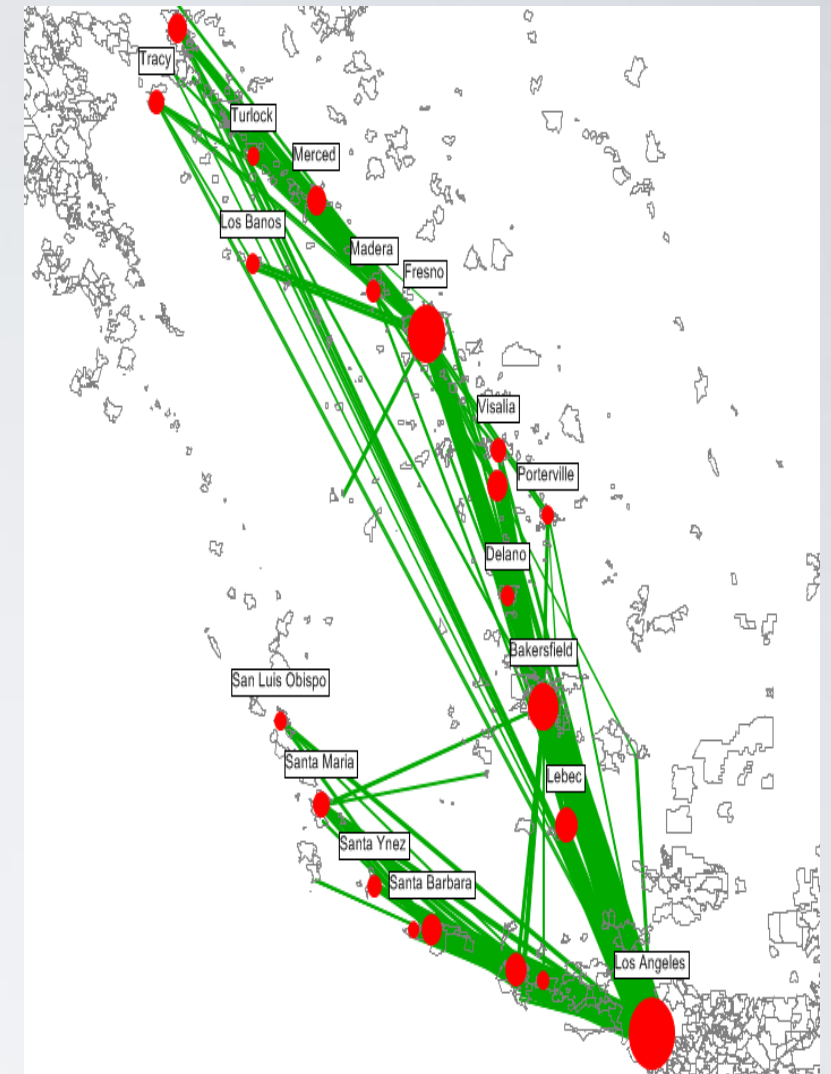


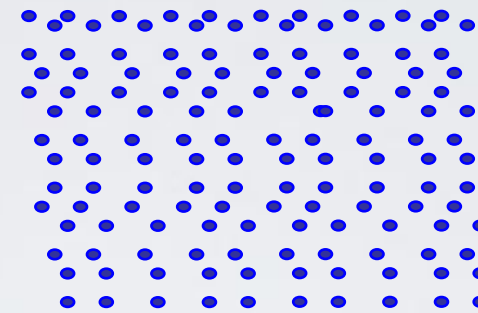
# Deriving Operational Origin-Destination Matrices from Mobile Phone Data

Author: Dr. Jingtao Ma  
Presenter: Thomas Haupt

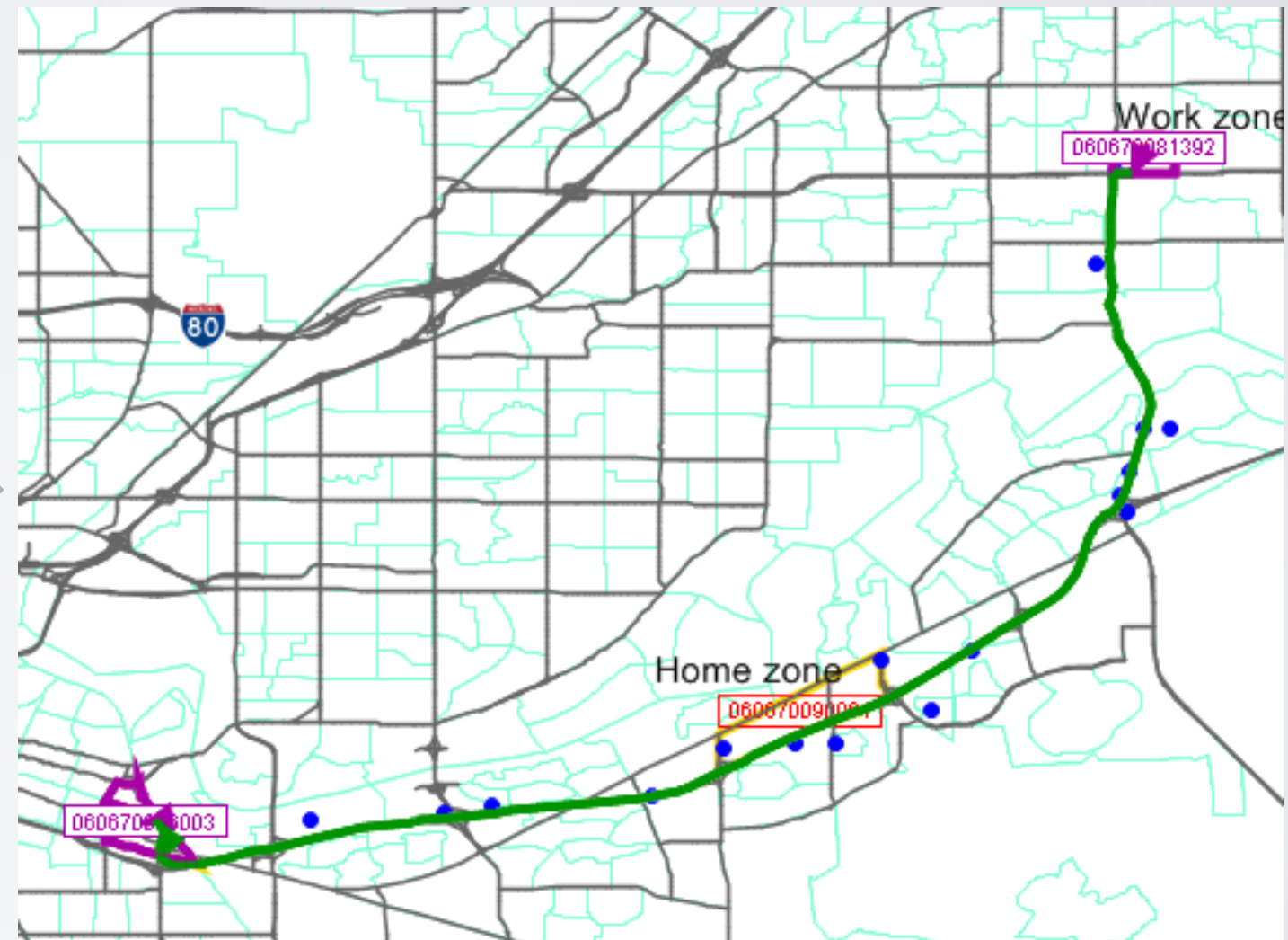
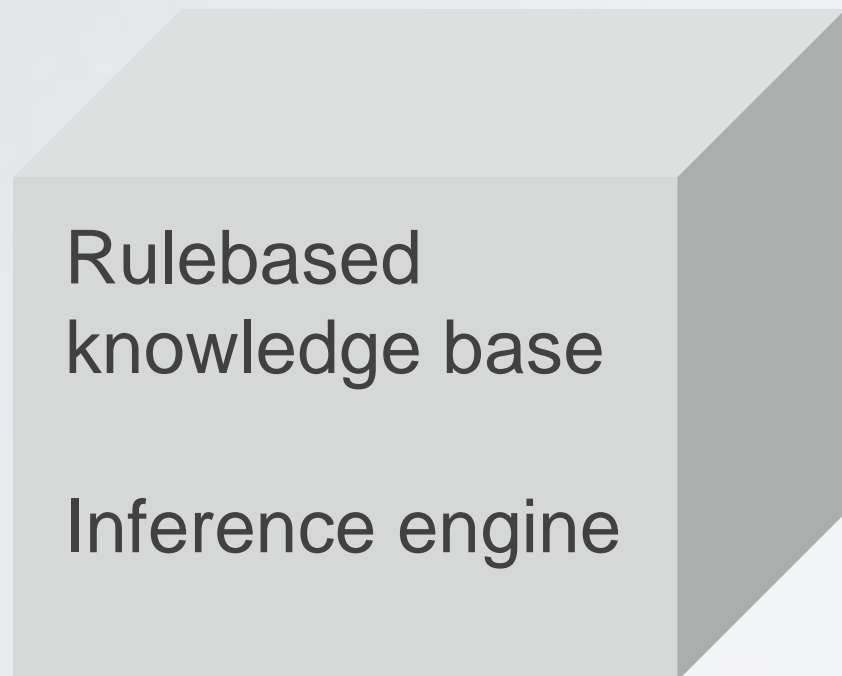


# “Snowball” Trip Identification and Analysis System (STIAS™)

“Connecting the dots”

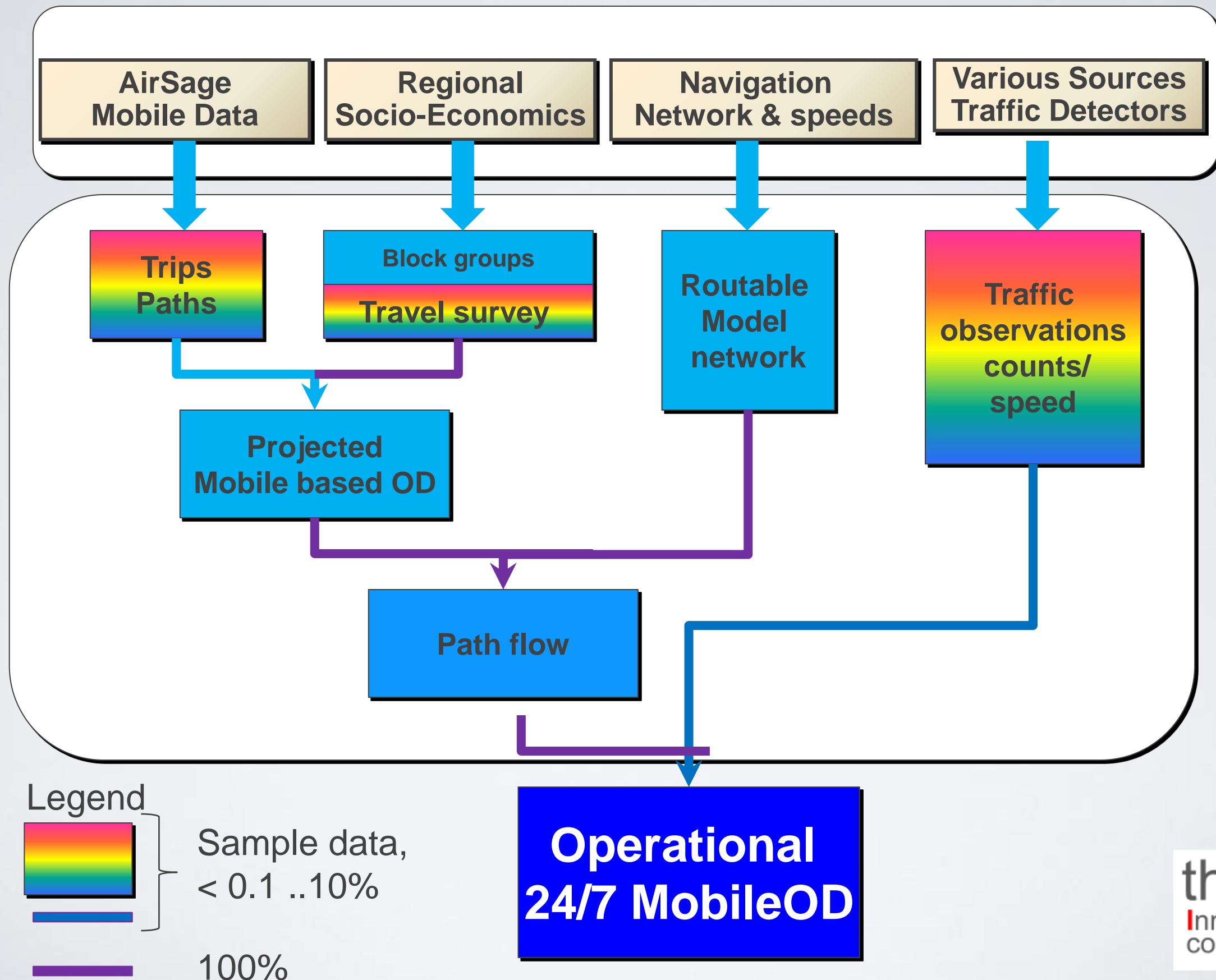


Fri, 08 Oct 2010 14:55:04
Fri, 08 Oct 2010 14:55:10
Fri, 08 Oct 2010 14:55:50
Tue, 12 Oct 2010 15:43:04
Tue, 12 Oct 2010 15:44:18
Tue, 12 Oct 2010 15:44:31
Tue, 12 Oct 2010 16:36:06

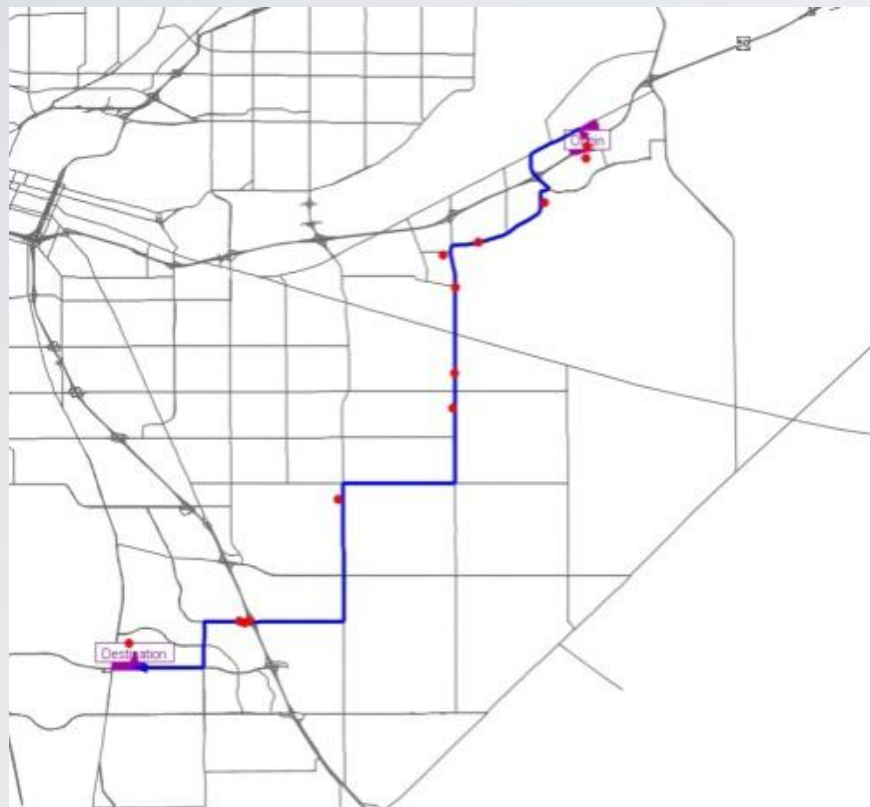


- ▶ Data cleaning
- ▶ Trip OD Identification
- ▶ Multiplexed Validation Feedback Loops

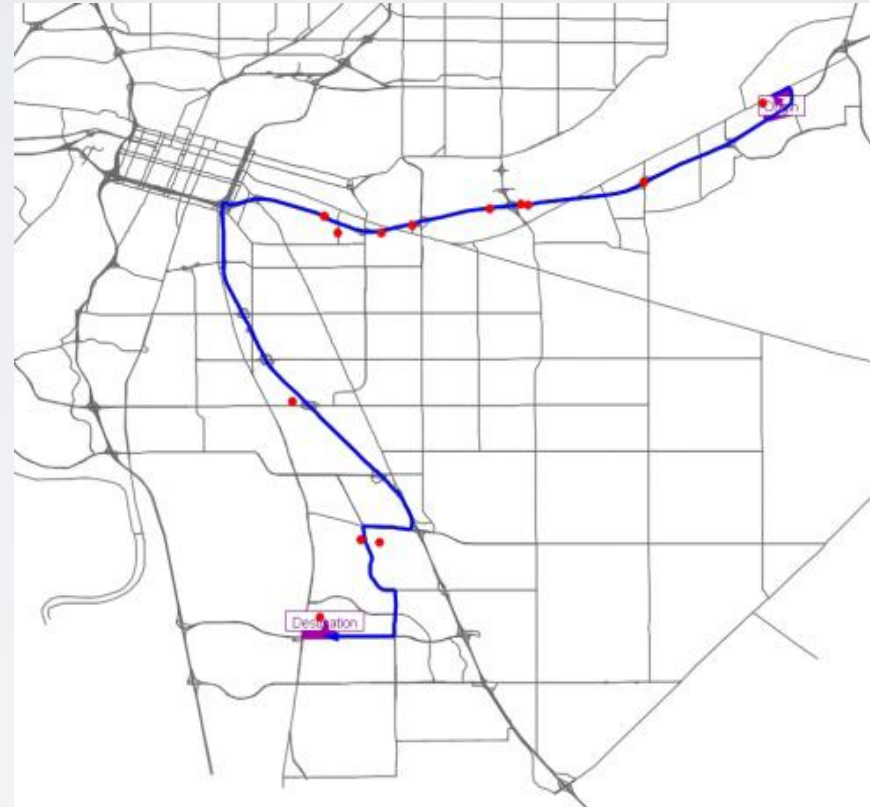
# MobileOD – Data Mining Workflow



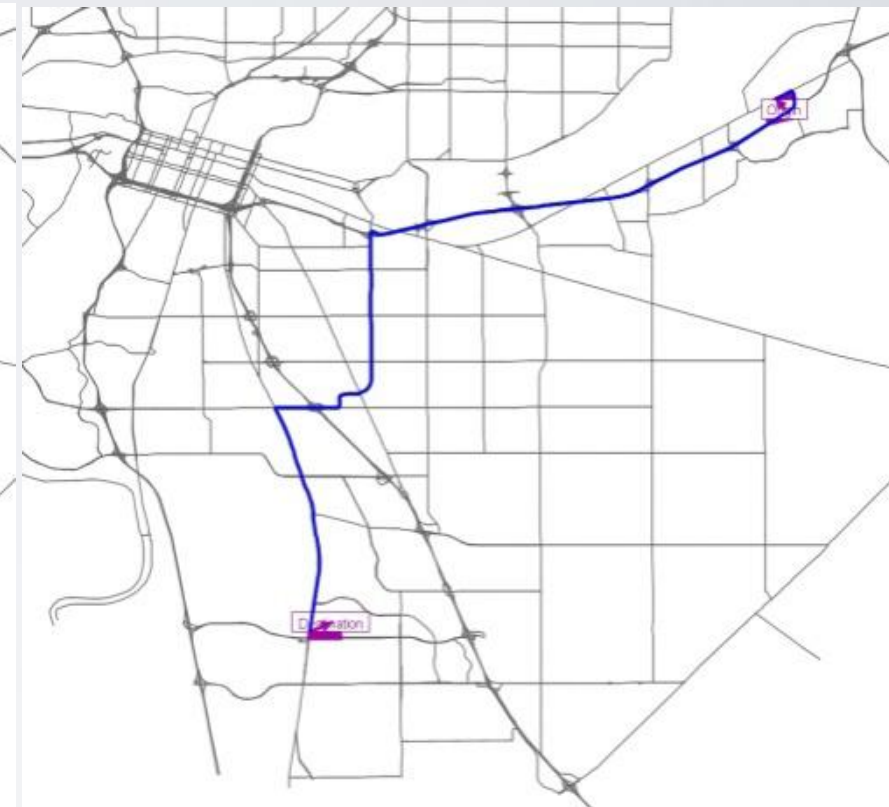
## Same OD Pair – Three Paths



All Arterial, from mobile phone trajectory



All Freeway, from mobile phone trajectory

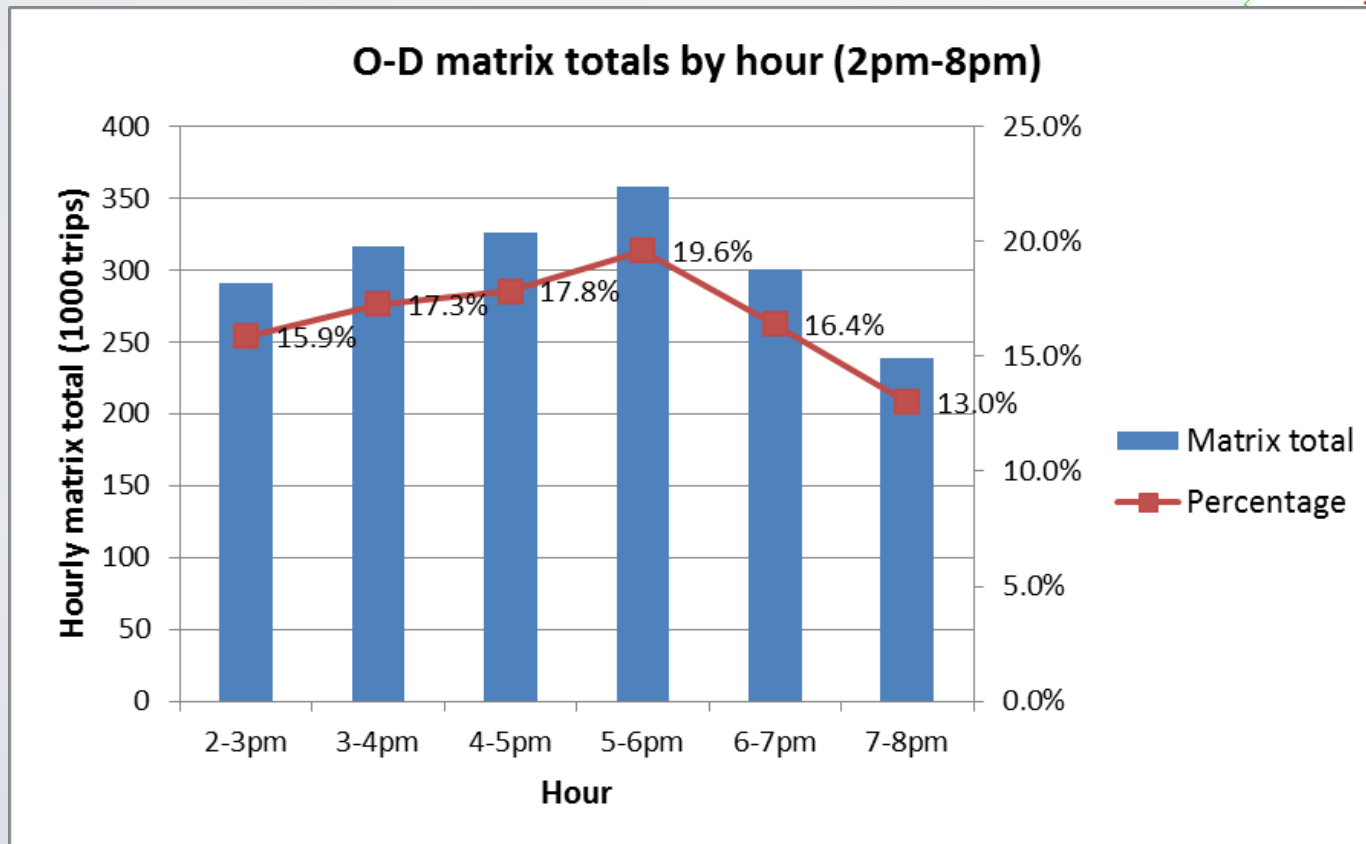
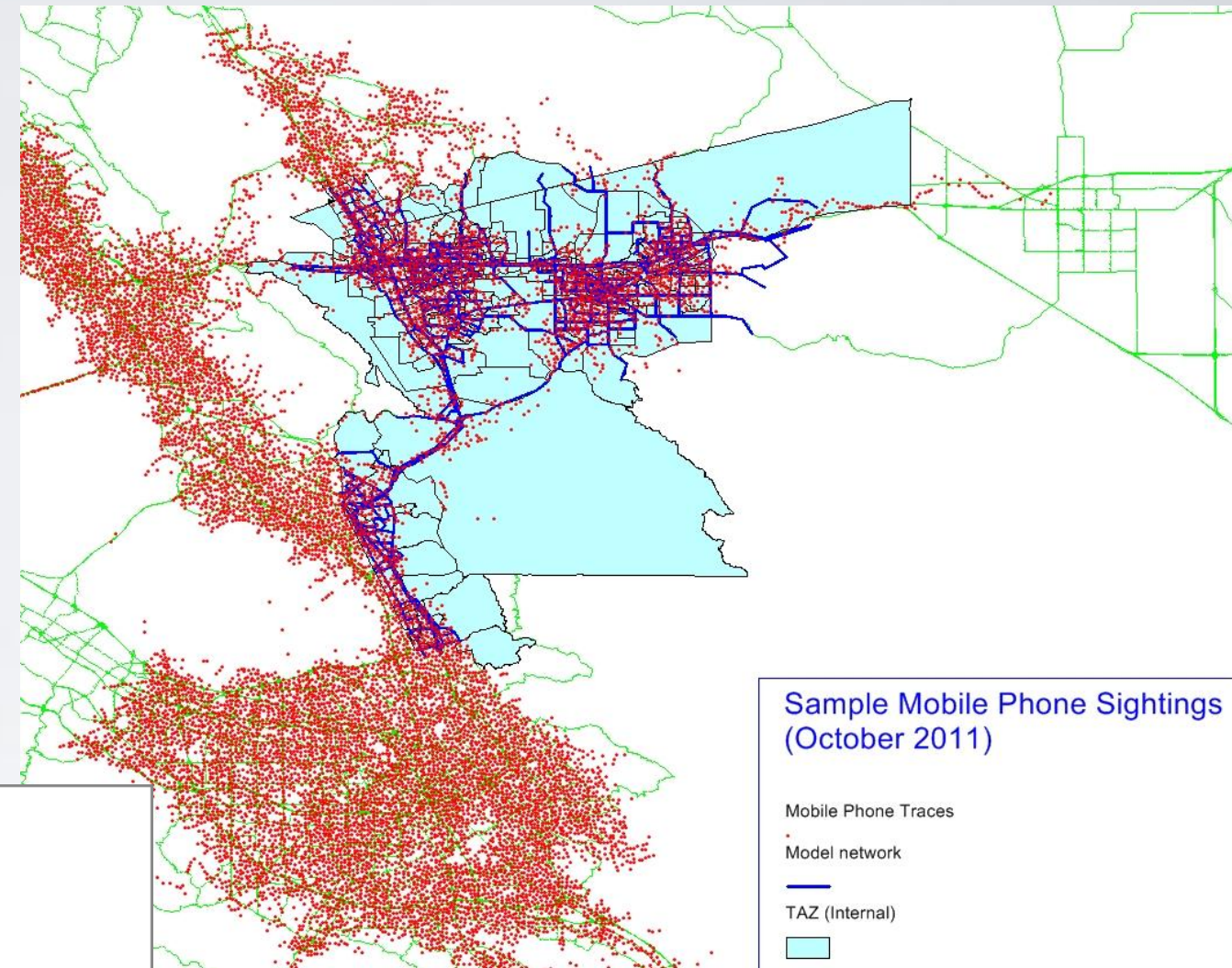


Arterial & freeway mix, from shortest path search



# Cross-reference to Other Data Sources

- ▶ Another joint work with a consulting firm to produce MobileOD seed matrices for Pleasanton/Dublin/Livermore, CA
- ▶ External related demand is of big concern



# LDT: Frequently Visited Cities and Desirelines

