

# Active Transportation Bicycle Database Clearinghouse

Alan Thompson  
SCAG Active Transportation Coordinator

Modeling Task Force

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# Purpose of Creating the Bicycle Database Clearinghouse

- To develop a standard methodology for collecting and documenting bicycle (and pedestrian) activity
  - (apples to apples)
- To develop a more accurate estimate of current state of bicycling and bicycle-to-transit access
- To develop a database for local and regional planners to better measure and report bicycle (and pedestrian) activity

# Products

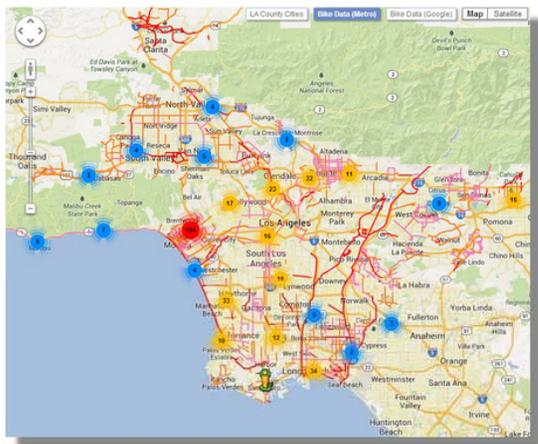
- Literature review of existing methodologies/best practices
- Standard set of methodologies
- Count Data
- Survey data
- Protocol manual for receiving and archiving data
- Training manual
- Database Clearinghouse

<http://www.bikecounts.luskin.ucla.edu/>

# Bike Count Data Clearinghouse

## Welcome to the Bike Count Data Clearinghouse!

### What is the Bike Count Data Clearinghouse?



The Bike Count Data Clearinghouse is a one-stop repository for bicycle count data throughout LA County and beyond. This tool allows users to easily view, query, and download bicycle count volumes. Bicycle count data collected in Los Angeles County prior to December 2012 is already loaded into the clearinghouse. Going forward, local agencies throughout the Southern California Association of Governments (SCAG) region and beyond can upload their count data to the clearinghouse website.

The goal of this collaborative effort is to streamline and enhance the use of count data in active transportation planning and policy.

SCAG has also developed a bicycle count training manual, which provides guidance and standardized methodologies that municipalities, nonprofits, and consultants should use when conducting bicycle and pedestrian counts. As an additional component of the Bike Count Data Clearinghouse effort, SCAG assessed the potential for bicycle counts to inform and validate travel demand modeling, as well as estimations of reductions in emissions.

This project is co-sponsored by SCAG and the Los Angeles County Metropolitan Transportation Authority (Metro).

Contact: [BikeClearinghouse@luskin.ucla.edu](mailto:BikeClearinghouse@luskin.ucla.edu)

### Bike Count Data Clearinghouse Project Documents

- 1) Conducting Bicycle and Pedestrian Counts: A Manual for Jurisdictions in Los Angeles County and Beyond
- 2) Recommended Count Form - Supervisor Form
- 3) Recommended Count Form - Tally Form
- 4) Literature Review
- 5) Bike Counts, Travel Demand Modeling, and Benefits Estimation: a White Paper

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# CONDUCTING BICYCLE AND PEDESTRIAN COUNTS

A Manual for Jurisdictions in Los Angeles County and Beyond



# When to Conduct Counts

- During screen-line counts of motor vehicles
- Adding Bike/Ped counts to manual intersection counts
- Traffic Warrants
- EIRs
- Conduct bike/ped specific counts

# Automatic counters

- Video vs. loop detector vs. tube vs...
- Permanent or portable
- Manual upload or automatic
- Durability
- Costs
- What data does it not collect?
  - Gender
  - Age
  - Helmet usage

# How to Conduct Manual Counts

- Specific time periods/frequencies
  - (same as motor vehicles?)
- Specific minimum data attributes
  - Helmets/no helmets
  - Gender
  - Children
  - Sidewalk riding
  - "Other" to allow cities flexibility to add data they are looking to obtain.

# Sample Form Template for Manual Counts

### Bicycle/Pedestrian Data Collection - Screenline Count Form

Date DAY MONTH YEAR 20	This Page FROM : AM PM TO : AM PM	Pages PAGE OF TOTAL
Location STREET PATH BETWEEN AND	Count Period START : AM PM END : AM PM	Rain <input type="checkbox"/> YES <input type="checkbox"/> NO

#### Bicyclists

Count bicyclists when they cross this imaginary line

Make additional marks to count other characteristics

Bikes - Right to Left TOTAL	Bikes - Left to Right TOTAL	Female TOTAL
		Sidewalk Riding TOTAL
		Wrong Way Riding TOTAL
		Other: TOTAL
		Other: TOTAL

#### Pedestrians

Count pedestrians when they cross this imaginary line

Make additional marks to count other characteristics

Pedestrians - Right to Left TOTAL	Pedestrians - Left to Right TOTAL	Wheelchair/Special Needs TOTAL
		Skateboard/Scooter/Skates TOTAL
		Child TOTAL
		Other: TOTAL

# Supervisor Form for Manual Counts

## Bicycle/Pedestrian Data Collection - Screenline Supervisor Form

<b>Date</b> DAY MONTH YEAR _____ 20____	<b>Count Periods at This Location</b> ① START END : : AM PM : : AM PM ② START END : : AM PM : : AM PM ③ START END : : AM PM : : AM PM	<b>Pages</b> PAGE OF TOTAL _____ OF _____
<b>Location</b> STREET PATH# _____ BETWEEN _____ AND _____		

### Show Them Where to Count...

- Mark where the counter should be located with an "X" on the Count Location Schematic below. Then, draw in the counter's screenline.
- Label the street the counter will be counting on, as well as the nearest cross streets, as they will appear from the count location.
- Indicate which way will be "left to right" and "right to left" on the arrows below. Also mark cardinal directions (N, S, E, or W. Note that NW, SE, etc. are not allowed) as they will appear to the counter. If you are not sure which cardinal direction to assign because the street does not run exactly north-south or east-west, please consult any previous counts and be consistent with what has been chosen in the past.

### Count Location Schematic



### Bikeway Type at This Location

Record the bikeway type present at this location, if any, including sub-options.

- BIKE PATH   
  BIKE LANE   
  BIKE ROUTE   
  BIKE BOULEVARD   
  NONE  
 COLORED   
  PAINTED BUFFER   
  PHYSICAL BUFFER   
  SHARROWS   
  SHARROWS

### Additional Variables to Count

Indicate any additional attributes the counter should count using the checkboxes below.

- Bicycle**   
  FEMALE   
  WRONG WAY RIDING   
  SIDEWALK RIDING   
  OTHER: \_\_\_\_\_   
  OTHER: \_\_\_\_\_  
**Pedestrian**   
  WHEELCHAIR/SPECIAL NEEDS   
  SKATEBOARDY/SCOOTER/SKATES   
  CHILD   
  OTHER: \_\_\_\_\_   
  OTHER: \_\_\_\_\_

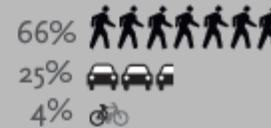
How did you get to the station or stop?



### Bus Riders



### Train Riders



2012 survey

How long did it take you to get to the station/stop and how long did you wait?

traveling to station/stop

waiting at station/stop

total time before boarding bus/train

BUS RIDERS



+



=



20 min

TRAIN RIDERS



+

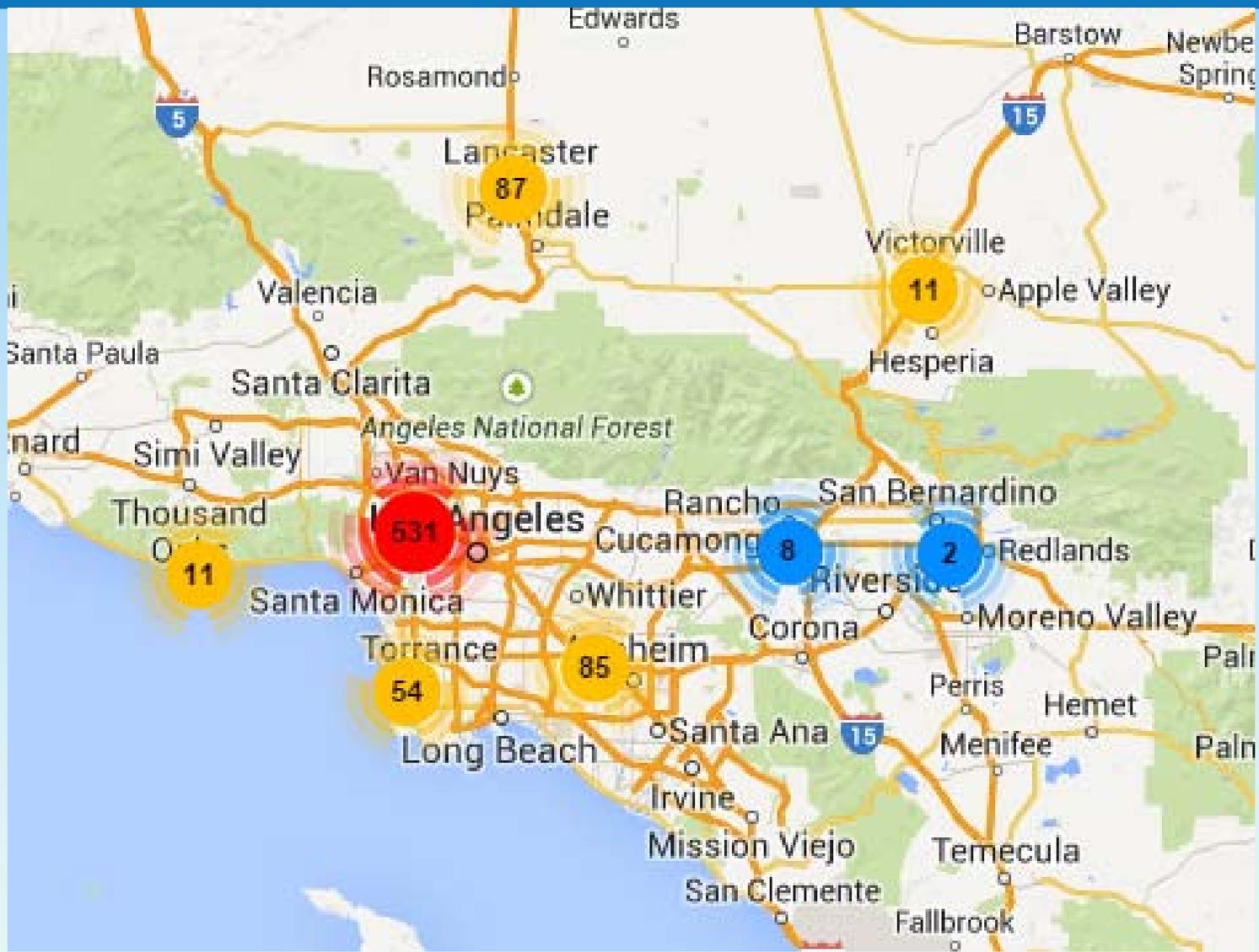


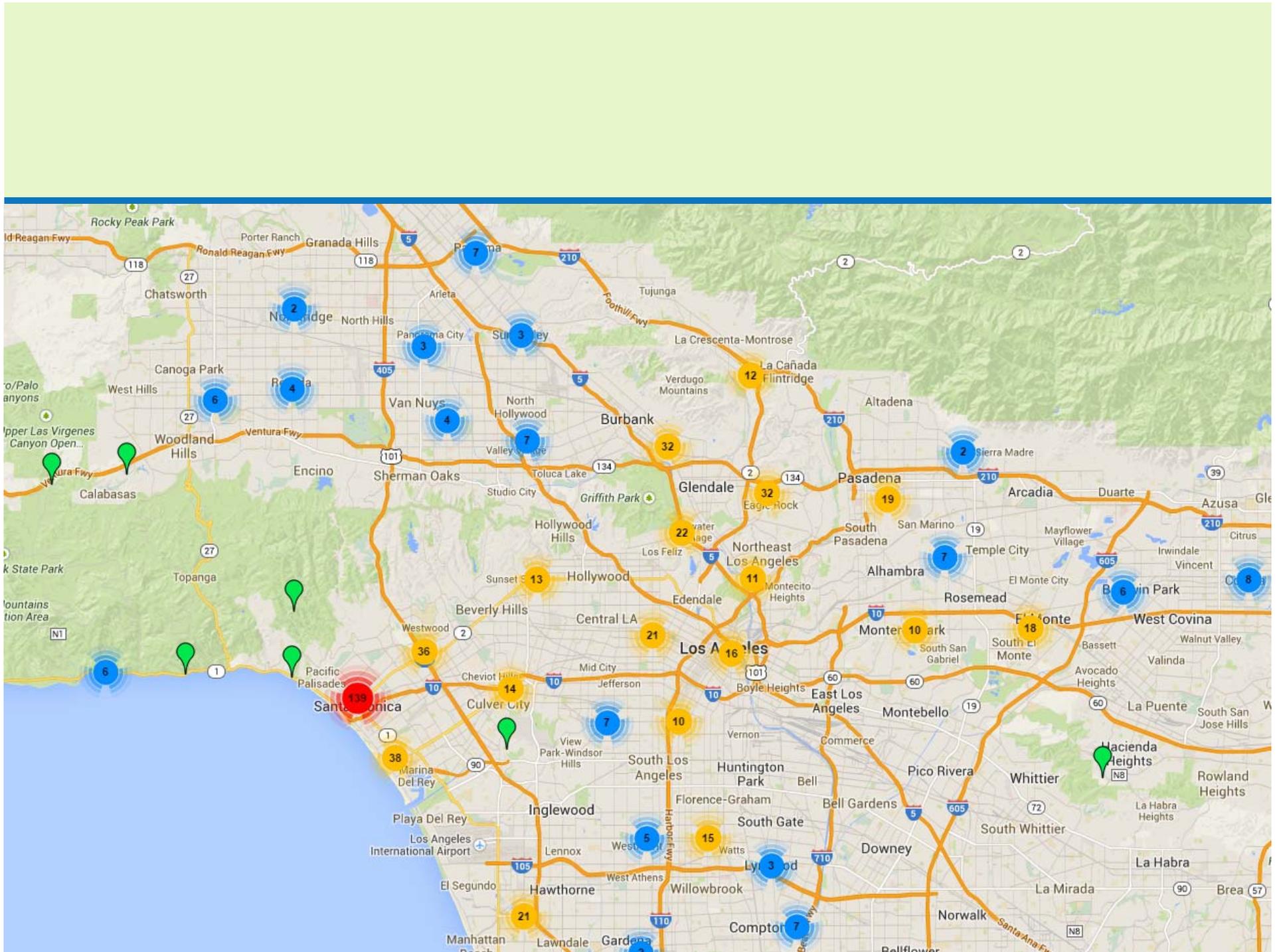
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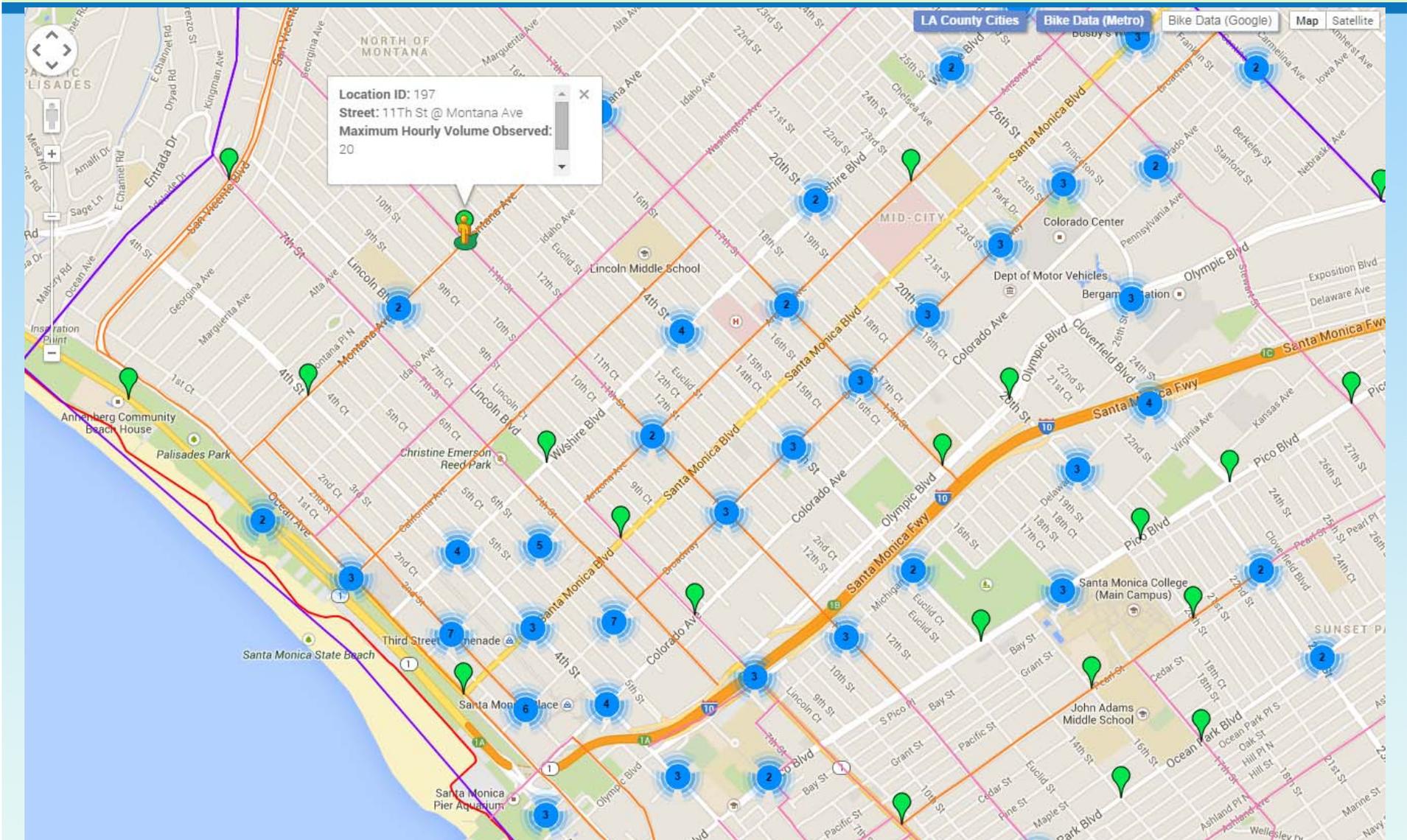


19 min

2012 survey







## Tools For Which Data Can Be Used

- Metro Bicycle Investment Scenario Analysis Model
- • Integrated Transportation and Health Impact Modeling Tool (ITHIM)
- • Health Economic Assessment Tool (HEAT)
- • NCHRP 552 Bike Cost Tool
- • Quantifying the Cost of Physical Inactivity
- • California Air Resources Board method for calculating emissions reductions
- • Rojas-Rueda, et al method for quantifying benefits from a bikeshare system

## Problems with Implementation

- Not every city conducting counts
- Other Data (traffic warrants, Land-Use EIRs) not getting into system
- Difficult to get knowledge of this database to the right people in each city.

# Active Transportation & Special Programs

Sarah Jepson, Manager [jepson@scag.ca.gov](mailto:jepson@scag.ca.gov) 213.236.1955

Alan Thompson, [thompson@scag.ca.gov](mailto:thompson@scag.ca.gov) 213.236.1940

Stephen Patchan, [patchan@scag.ca.gov](mailto:patchan@scag.ca.gov) 213.236.1923

Rye Baerg, [baerg@scag.ca.gov](mailto:baerg@scag.ca.gov) 213.236.1866

