Developing an Active Transportation Database for Southern California

AMPO Conference

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About SCAG

- Nation’s largest Metropolitan Planning Organization (MPO)
- Governed by a Regional Council of 84 local elected officials
- Nation’s Global Gateway for Trade

SCAG FACTS

- 191 Cities
- 18.5 Million People
- 16th Largest Economy in the World
SCAG’s Active Transportation Program

Advertising Campaign

Toolkits/Toolbox

Open Streets & Temporary Events

Sustainability Planning Grants
Background

- SCAG is Los Angeles area MPO
- Bicycle Data Clearinghouse Released in 2012 w/ UCLA
- Allows storage of manual counts
- Primarily focused on bicyclists
Original Deliverables

- Conducting Bicycle and Pedestrian Count Manual
- Count Forms
- Literature Review
- Modeling Integration White Paper
- Union Station Bike Count Report
Goals of the Update

- Integrate Pedestrian Data
- Improve User Interface
- Improve Data Retrieval and Reporting (incl. TMG)
- Support Mobile App Integration
- Provide a Planning Tool for ATP, TIGER grants, other
- Integrate Automated Counters
- Support Regional Modeling Efforts
- Counter siting plan, incl. stratification factors
Stakeholder Outreach

- Online survey to 100+ jurisdictions
- Interviews with county and transit agency modeling and bike/ped staff
- Needs:
  - Grant application support, integration of related data (census, safety, vehicle traffic)
  - Standardized procedures for counting
  - Easy upload/download of data
State of Practice Outreach

- Interviews with peer agencies and national thought leaders

- Recommendations/ideas:
  - Leverage one week counts with permanent counters – develop annualization factors
  - Conform to TMG October 2016 Update
  - API to feed data to public and third party developers
  - Data visualization and user interface options
New Database Schema

- Conforms to 2016 TMG
- Bike and ped data
- Automated & manual counts
- Interval volumes or individual timestamped observations
- Screenlines or turning movements
- User characteristics (helmet, gender, age, WC)
- Environmental characteristics
New Website User Interface

- Count management/assignment
- Location management
- Data upload
Mobile Counter App

- Collect real time observational data
- Optional traveler characteristics (helmet, gender, age, WC)
- Integrated with count assignments from website
Additional Components

- ESRI data viewing and download portal
- Automated counter interface (API)
- Flexibility to receive and standardize counts from any source, many formats
Future Considerations

- New technologies:
  - Video recognition,
  - Bluetooth MAC tracking,
  - Phone GPS traces
- Potential to integrate with social tracking app data
  - Many screenlines can weight penetration of apps
- Environmental characteristics (facility width, pavement condition, etc.) correlation with count volumes