Collaborative Vision for Safety
APWA Complete Streets Conference, April 10, 2019
Project Background

Countywide Active Transportation Plan

• 35 local cities + county
• State funding likely to require local ATP
• ATP grant secured to prepare Countywide study
• Build upon bikeways studies
• Prepare first pedestrian analysis
Community Engagement

Dynamic Public Outreach

• Completed two public surveys
• Solicited input at 66 community events and festivals
• Engaged with OCTA stakeholders:
  • Citizens Advisory Committee Bicycle and Pedestrian Subcommittee
  • Teen Council
  • Diverse Community Leaders Committee
  • Technical Advisory Committee
• Collaboration with Partners
  • OCCOG Technical Advisory Committee
  • Alliance for a Healthy Orange County

What we heard - Better bike and pedestrian access to:

• Parks
• Downtown areas
• Schools
• Jobs & retail
• Transit

OCTA – Orange County Transportation Authority
OCCOG – Orange County Council of Governments
Community Engagement (cont’d)
Community Engagement (cont’d)

Dynamic Public Outreach (Cont’d)

• Stakeholder working group
  • 20-30 staff from local agencies and advocacy groups
• Partners in community events
  • California Department of Transportation
  • Orange County schools
  • Orange County Health Care Agency
  • Local police departments
  • Local agencies
Pedestrian Analysis

Modeling High-Need Areas

- Data analysis and weighting for composite map
- Highlight potential focus areas
- Position cities for funding improvements
- City-by-city maps created
  - Refer to representative City of Placentia map
Bikeways Analysis

Identification of Planned Bikeways

- Prioritize implementation
- Provide cost estimates
- Position cities for funding improvements
- City-by-city maps created
  - Refer to representative City of Placentia map
Layered Bikeway Network

- Local city/county bikeways
- 41 Regional bikeways
- Regional connectors
  - Utilizes regional bikeways
  - Backbone network for countywide access
  - Branding to support implementation
Tools for Local Success

• Pedestrian focus area mapping
• Layered bikeway network
• Non-infrastructure Recommendations
• Funding guidance opportunities
• OC Active addresses state requirements
Project Background

Countywide Bike/Ped Crash Analysis

Project Goal: Improve Safety and reduce the number and severity of collisions involving people walking and bicycling in Orange County

- HSIP/SSARP grant secured to prepare Countywide study
- HSIP funding may require local road safety plan

HSIP = Highway Safety Improvement Program
SSARP = Systemic Safety Analysis Report Program
Systemic Safety Plan – Project Process

- Analyze Bike + Ped Crash Data
- Identify Infrastructure Typologies
- Provide Recommendations
- Develop HSIP Grant How-To Guide
Toolbox: HSIP Eligibility & Efficacy

68 Countermeasures: 7 Categories

- Signal Timing & Phasing
- Intersection & Roadway Design
- Signs & Markings
- Bikeway Design
- Pedestrian Crossings
- Other
- Low-Cost & Quick Build
Understanding Crash Reduction Factor

Crash Reduction Factor Defined

• The percentage crash reduction that might be expected after implementing a given countermeasure at a specific site.

State & Federal Clearinghouse

http://www.dot.ca.gov/hq/LocalPrograms/HSIP/2018/CA-LRSM.pdf
https://safety.fhwa.dot.gov/tools/crf/
Typology 1: Commercial Corridor

With Bicycle and Pedestrian Crashes

Note: Icons represent toolbox countermeasures

BEFORE

AFTER
### Typology 1: Commercial Corridor

With Bicycle and Pedestrian Crashes

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Total Cost</td>
<td>$2,060,800</td>
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<tr>
<td>Total Benefit</td>
<td>$8,814,701</td>
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<tr>
<td>B/C Ratio</td>
<td>4.28</td>
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</table>

Note: Report will detail cost & benefit calculations
Typology 2: Signalized Intersections, Angle Crashes

With Bicycle Crashes

Note: Icons represent toolbox countermeasures
Typology 2: Signalized Intersections, Angle Crashes

With Bicycle Crashes

TOTAL COST
$1,128,500

TOTAL BENEFIT
$10,988,893

B/C RATIO
9.74

Note: Report will detail cost & benefit calculations
Typology 3: Contra-Flow Bicycle Riding

With Bicycle Crashes

Note: Icons represent toolbox countermeasures
Typology 3: Contra-Flow Bicycle Riding

With Bicycle Crashes

TOTAL COST
$1,741,500

TOTAL BENEFIT
$7,721,212

B/C RATIO
4.43

Note: Report will detail cost & benefit calculations
OCTA Hosted Workshop

- August 1, 2018
- OC Jurisdictions Invited
- Demonstrated HSIP Analyzer
- How-To Guide, Toolbox, and Sample Cut Sheet Distributed
Non-Infrastructure Recommendations

Categories
- Locations
- Parties
- Situations

Topic Areas
- Education
- Enforcement
- Evaluation
Partnerships With Police

Enforcement Presentations
• Bike & Ped Crashes
• New & Relevant Laws
• 14 (of 15) Presentations reaching 239 Officers
Next Steps

- Continue cross-sector collaboration
- Expand regional bike/ped projects
- Support local agency funding efforts
- Highlight aligned grant opportunities
- Host training workshops
- Provide best practices guidance
- Troubleshoot technical/non-technical obstacles
Thank You!

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