

Design Flexibility and NACTO

Presented by:

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Topics of Discussion

- Why flexibility in design is needed
- Partner and stakeholder perceptions
- NACTO
 - Urban Street Design Guide
 - Urban Bikeway Design Guide
- Actions taken and underway in Caltrans
- Desired Outcomes

Why Flexibility in Design is Needed

- Transportation world is evolving:
 - Rarely do we build on new alignments
 - Squeezing more into existing corridors
 - No longer are we vehicle centric >>>
Multimodal, Sustainable, Integrated
 - Funding Constraints
- No two situations are alike
- One size does not fit all
- Enables incorporating stakeholder views and objectives

Partner and Stakeholders Perceptions

- Program Review:
 - Increased delegation authority
 - Increased design efficiencies
 - Implement innovative project delivery processes

Partner and Stakeholders Perceptions

- Caltrans Improvement Project (SSTI) - Caltrans should:
 - Update design manuals and guidance to implement new strategic plans and vision
 - Relinquish oversight of bike facilities on locally owned streets
 - Build more flexibility into its processes
 - With CalSTA, revisit legal guidance on the risk of innovative design and practices
 - Generally rethink its approach to facilities in metro areas
 - Give designers option of using NACTO guidance in metro areas

NACTO – National Association of City Transportation Officials

NACTO facilitates the ***exchange of transportation ideas, insights and best practices*** among large cities, while fostering a cooperative approach to ***key issues facing cities and metropolitan areas***.

- Urban Street Design Guide
- Urban Bikeway Design Guide



Urban Street Design Guide



- Principles cities are using to make streets **safe** and **inviting** for people **walking, shopping, parking, and driving** in urban contexts.
- Creating real **spaces for people on city streets**.
- **Economic development** is integrally tied into this transformation.
- **Paramount to all of this is the safety of people** on city streets.
- ***SAFE, SUSTAINABLE, INTEGRATED, EFFICIENT SYSTEM to ENHANCE ECONOMY AND LIVABILITY***

Comparison

Urban Street Design Guide

- Promotes sustainability, livability and multimodal
- Specific to street type
- Recommended dimensions



Main Street California

- Promotes sustainability, livability and multimodal
- Specific to main streets
- Options w/ pros and cons



Comparison

Urban Street Design Guide

Main Street California





Urban Bikeway Design Guide



- Provide cities with state-of-the-practice solutions that can help create **complete streets that are safe and enjoyable for bicyclists.**
- Designs in this document were **developed by cities for cities**, since **unique urban streets require innovative solutions.**
- Most **treatments are not directly referenced in the AASHTO Guide** to Bikeway Facilities.
- **Most are permitted under** the Manual on Uniform Traffic Control Devices (**MUTCD**).
- Authors conducted extensive worldwide literature search from design guidelines and real-life experience.

Comparison

Urban Bikeway Design Guide

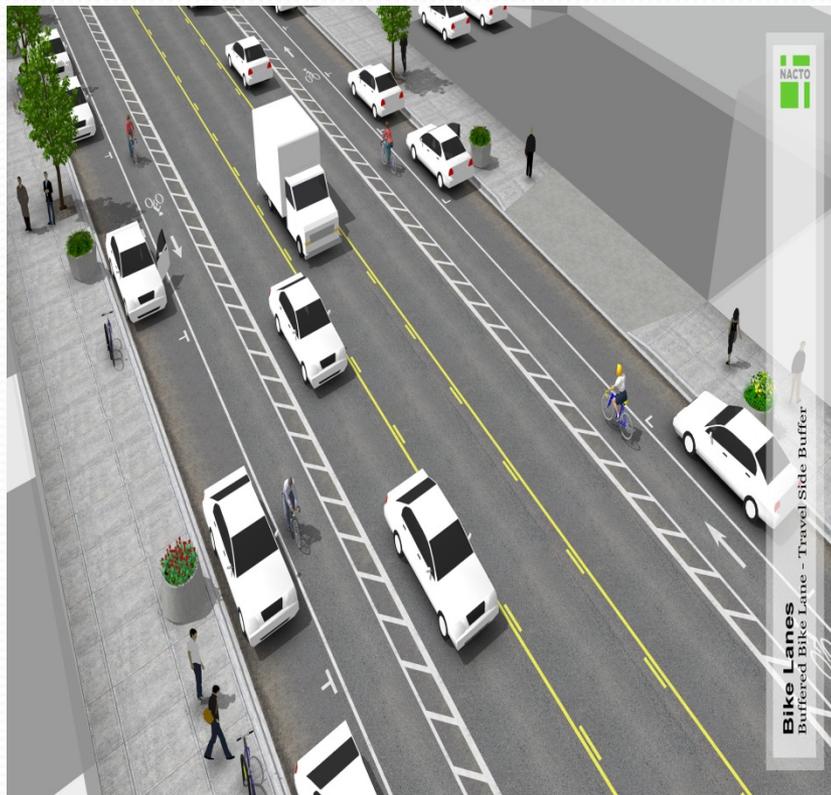
- Numerous options for urban bikeways, including cycle tracks, buffered bike lanes
- General design parameters and with related considerations
- Most applications separate bikes from automobiles
- Integral with MUTCD

Highway Design Manual

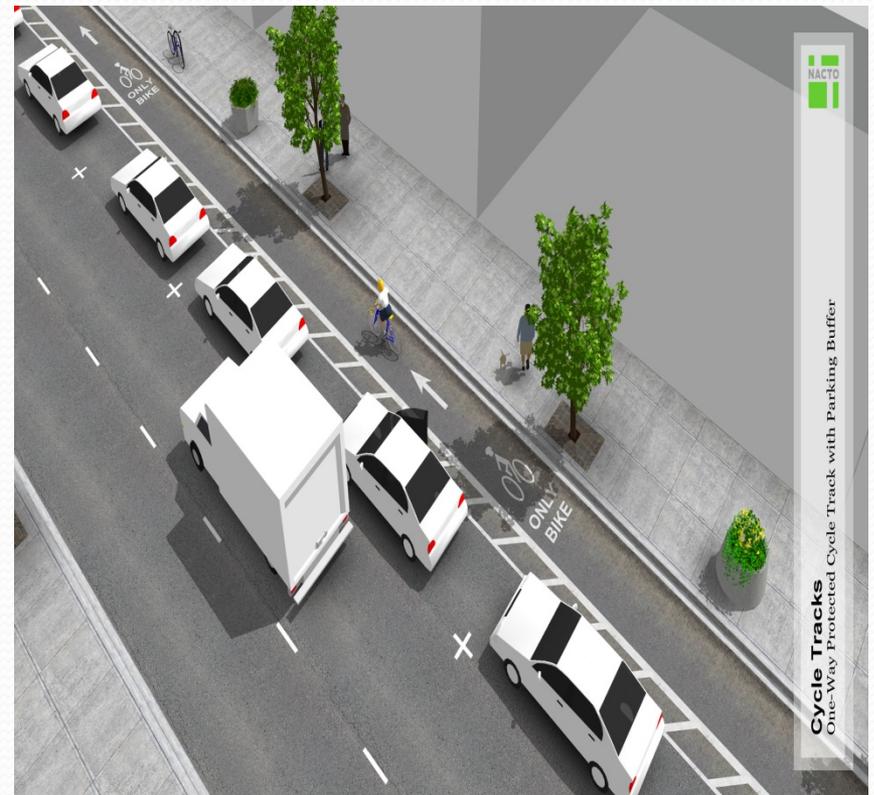
- Focus on Class I-III, bike route, bike lane and bike path, for state highways
- Specific design parameters along with supporting guidance
- Treats bikes as a legal user of the road, per statute.
- Integral w/ CAMUTCD

NACTO Urban Bike Guide Applications

Buffered Bike Lane



Cycle Track



Actions Taken

- **Design Flexibility Memo – April 10, 2014**
 - Reaffirms CT philosophy regarding flexibility
 - Reiterates local entities authorities on facilities they own and operate
 - Highlights recent improvements made by CT
 - Highway Design Manual Update to incorporate Complete Streets philosophies
 - “Main Street, California, a Guide for Improving Community and Transportation Vitality”
 - Supported the use of NACTO and other guidance
 - Highlighted importance of documenting decisions
- **Analyzed NACTO** for inclusion of concepts into HDM and CAMUTCD

Actions Underway or Pending

- Working with Local Partners to further refine HDM
- Engaging at national level (e.g. AASHTO)
- Ensure training includes flexibility and complete streets/urban design concepts
- Engage in outreach with external partners and Caltrans staff regarding flexibility and complete streets/urban design concepts
- Developing Stewardship Agreements with Districts to implement further delegations of design standards and policies
- Evaluate current design exception process

Desired Outcomes

- Maintain the safety, efficiency and sustainability of our facilities for workers and users
- Ensure standards, guidance and training are truly flexible and applicable to varying conditions
- Local partners and stakeholders are in concert with Department goals and strategies
- Maximize the value of our investments
- Maintain design immunity
- Eliminate the culture of fear surrounding flexible design

REFERENCES

- Caltrans Design:
<http://www.dot.ca.gov/hq/oppd/index.htm>
- Caltrans Traffic Operations:
<http://dot.ca.gov/hq/traffops/>
- NACTO: <http://nacto.org/>
- AASHTO: <http://www.transportation.org/>