# 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 <u>does not</u> 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

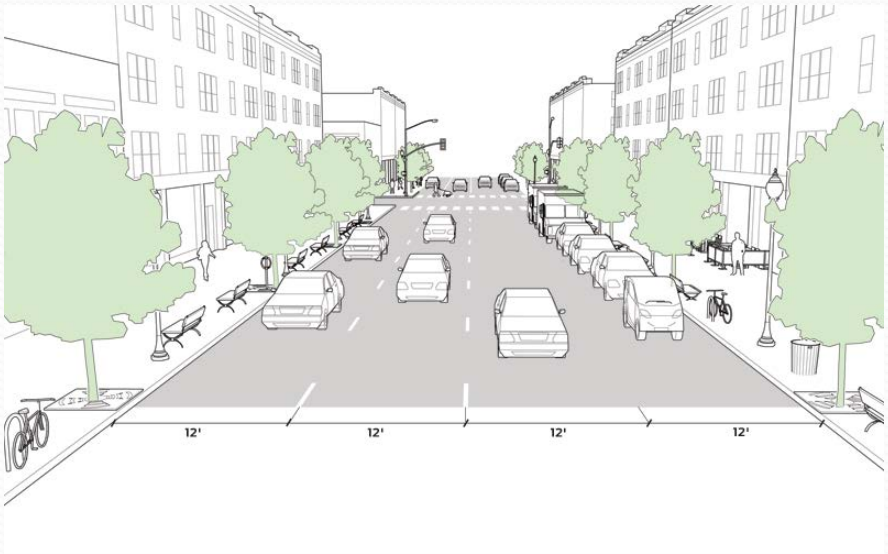
- Principles cities are using to make streets **safe** and **inviting** for people **walking, shopping, parking, and driving** in urban contexts.
- Creating real **spaces for people on city streets**.
- **Economic development** is integrally tied into this transformation.
- **Paramount to all of this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

➢ ***SAFE, SUSTAINABLE, INTEGRATED, EFFICIENT SYSTEM to ENHANCE ECONOMY AND LIVIBILITY***

# Comparison

## Urban Street Design Guide

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



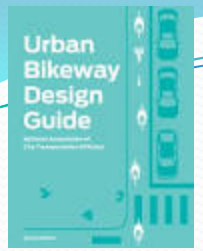

## Main Street California

- 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

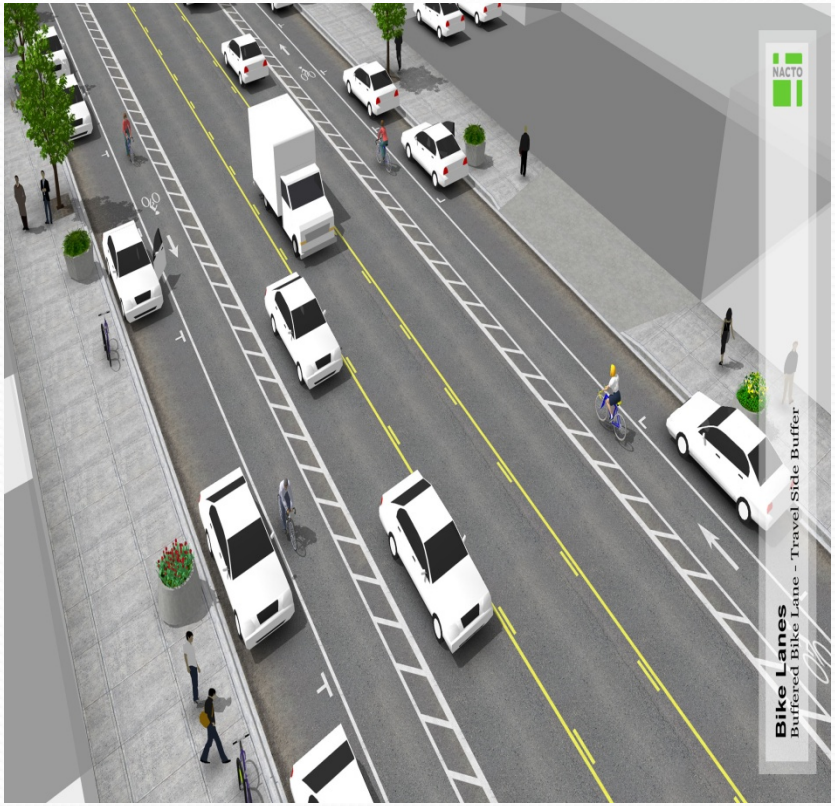
- Numerous options for urban bikeways, including cycle tracks, buffered bike lanes
- General design parameters and with related considerations
- Most applications separate bikes from automobiles
- Integral with MUTCD

## Highway Design Manual

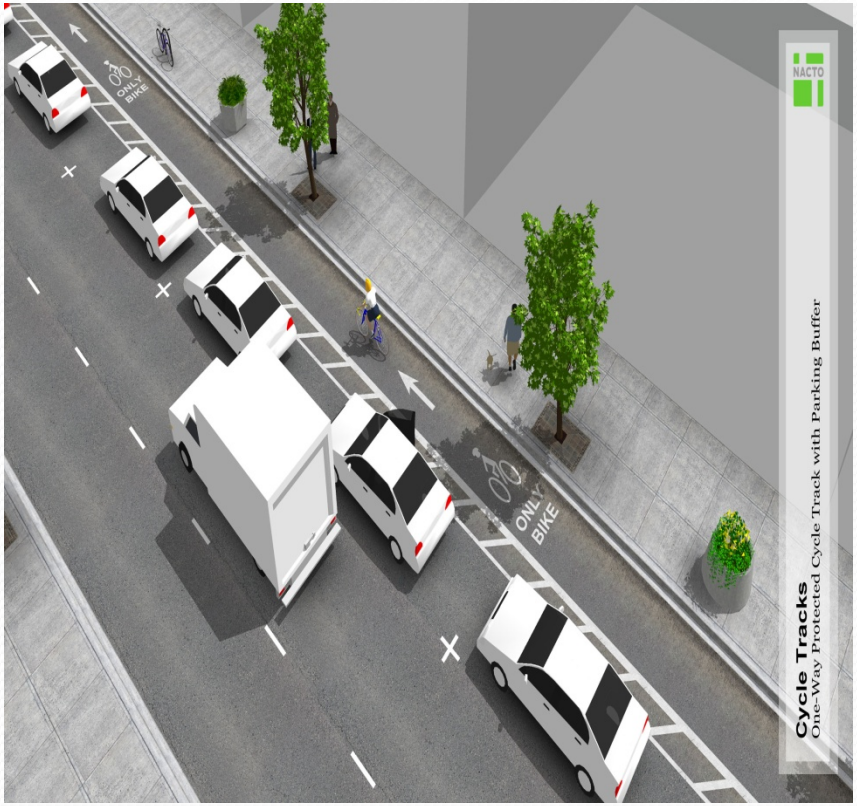
- Focus on Class I-III, bike route, bike lane and bike path, for state highways
- Specific design parameters along with supporting guidance
- Treats bikes as a legal user of the road, per statute.
- Integral w/ CAMUTCD

# 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/