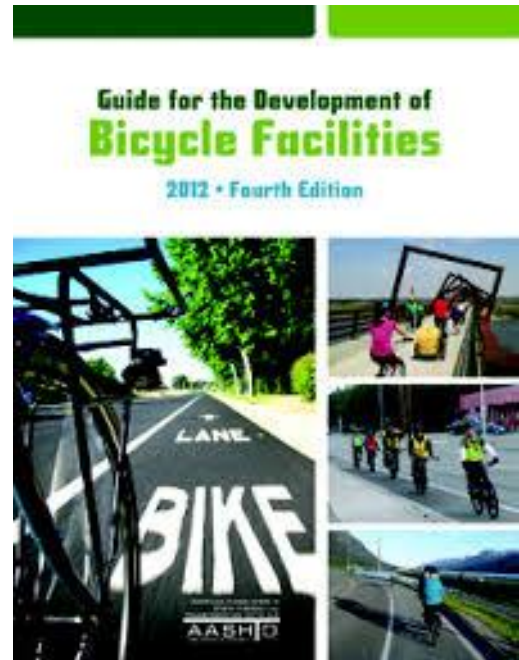
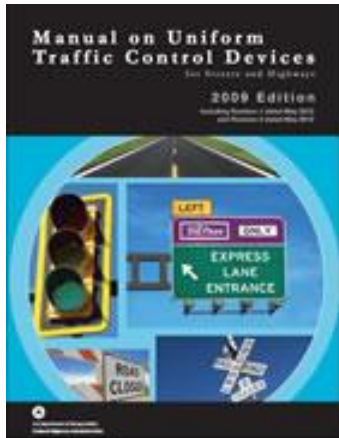
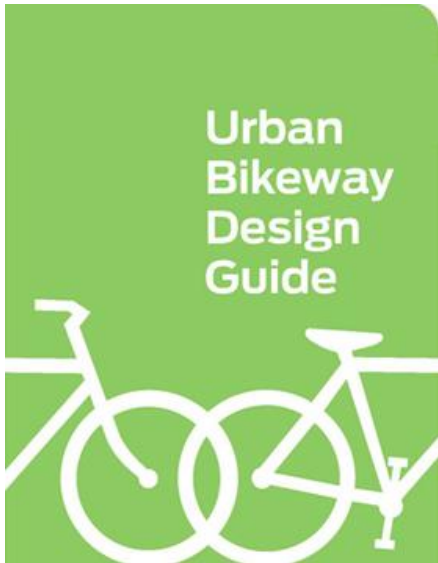


BICYCLE INFRASTRUCTURE

CYNTHIA HOYLE, FAICP, LCI



BIKE INFRASTRUCTURE DESIGN IS EVOLVING RAPIDLY



APBP PROFESSIONAL DEVELOPMENT SEMINAR 2013

MOBILE TOUR: BOULDER BY BIKE

Preview Boulder's best bicycle and pedestrian planning, programs and facilities. Among the highlights: Valmont Bike Park, the Pearl Street pedestrian mall, pedestrian and bicycle facilities including street crossings, a community cycle shop, and CU Boulder.



BOULDER, COLORADO – PLATINUM BFC

OCT. 18, 2012 - BOULDER RENEWED AS A PLATINUM BICYCLE FRIENDLY COMMUNITY BY THE LEAGUE OF AMERICAN BICYCLISTS



America's Top 50 Bike-Friendly Cities

To determine our top 50 bike-friendly cities for 2012, we evaluated cities with populations of 95,000 or more, using data provided by the Alliance for Biking and Walking and the League of American Bicyclists, as well as input from local advocates and bike-ped coordinators. To make the list, a city must possess both a robust cycling infrastructure and a vibrant bike culture. Read on to find out how your city stacks up.



<http://www.streetfilms.org/boulder-goes-bike-platinum/>

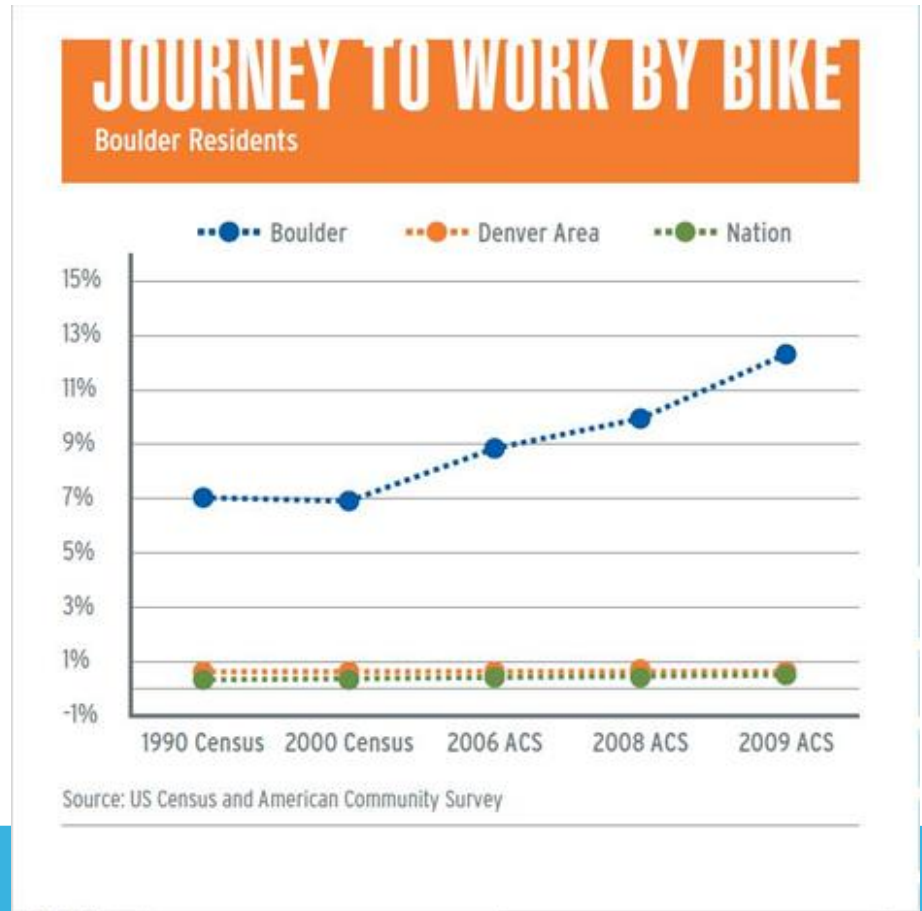
SAFE STREETS BOULDER REPORT & TRANSPORTATION MASTER PLAN

- 95% of Boulder's arterials accommodate bicyclists
- Boulderites bike to work 20x the national average
- Boulderites walk to work 3x the national average
- Peds & bikes are involved in collisions less often than expected based on high trip rate:
 - 8,000 motor vehicle collisions over 40 month period
 - 1.8% involved peds (151)
 - 6% involved bicyclist (516)
 - .2% involved skateboarder (14)
- Crosswalks most common location for collisions w/ bikes/peds
- In collisions with peds, drivers were cited 3x more often than peds
- In collisions with bicyclists, drivers were cited 1.8% more than cyclists
- Bicycle collisions spike in August & September, ped collisions spike in January, February, March

<https://www-static.bouldercolorado.gov/docs/transportation-report-on-progress-2012-1-201305291118.pdf>

BOULDER JOURNEY TO WORK BY BIKE

- 58 miles paved multiuse pathways with 78 underpasses
- 34 miles with bike lanes
- 4 miles climbing bike lanes
- 10 miles of paved shoulders
- 43 miles bike routes
- 10 miles of soft surface trails



LIVING LABORATORY PROGRAM

Program to test new bike facilities to see if they are right for Boulder.

Treatments are installed in summer/fall to offer a real world 'living laboratory' for cyclists to test and report results to the city. Current demonstration projects include:

- Buffered Bike Lanes + Protected Cycle Track (University Ave. Broadway to 9th St.)
- Protected Cycle Track (University Ave. Broadway to 9th St.)
- Back-in-Angle Parking (University Ave. Broadway to 17th St.)
- Protected Cycle Track (Baseline Rd. 30th -35th St.)
- Buffered Bike Lanes – Two Types
- Bike Boulevard
- Bike Box
- Advisory Bike Lane
- Electric-assist Bike Policy (Currently not allowed on multiuse paths, but allowed on all in-street bicycle lanes.)



BOULDER BY BIKE TOUR MONDAY 9-9-13



TOUR STARTS ON SECTION OF THE 58 MILES OF PAVED MULTIUSE PATHWAYS



INCLUDED MANY OF 78 UNDERPASSES



PREVIOUSLY A HIGH CRASH INTERSECTION CLOSE TO CU CAMPUS – REGENT & COLORADO



Reduced Conflict Points Reduced Crashes



Dozens of Students Bicycling to Class via Bike Path







Multiuse path
installed with
roadway redesign to
create a boulevard.



Underpasses serve dual purpose:
Stormwater Management and Transportation





Some tunnels include art as well as lighting



HIGHEST PASSENGER COUNT BUS STOP ON BUSY ROAD BY CAMPUS HAD RESULTED IN PEDESTRIAN FATALITIES

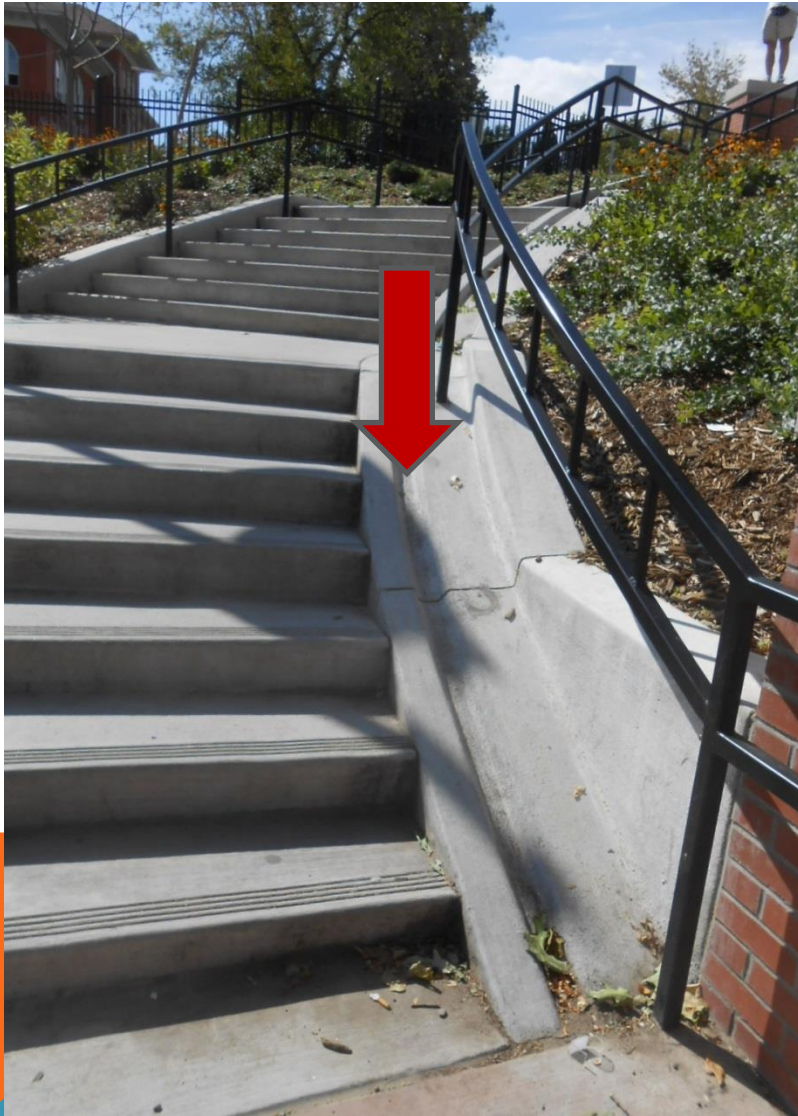


Multijurisdictional Project Completely Redesigned Intersection Offering Pedestrians and Cyclists Multiple Choices

ELEMENTARY SCHOOL ACROSS THE STREET FROM CAMPUS



BICYCLISTS & PEDS HAVE MANY CHOICES HERE



Peds & cyclists can use underpass or overpass.





Use of Living Lab to test new infrastructure.

Right: Back in Parking (includes bike lane)

Below: Buffered bike Lane

One of two types of left-buffered bike lanes being tested: this one includes delineated parking spaces with door zone added.



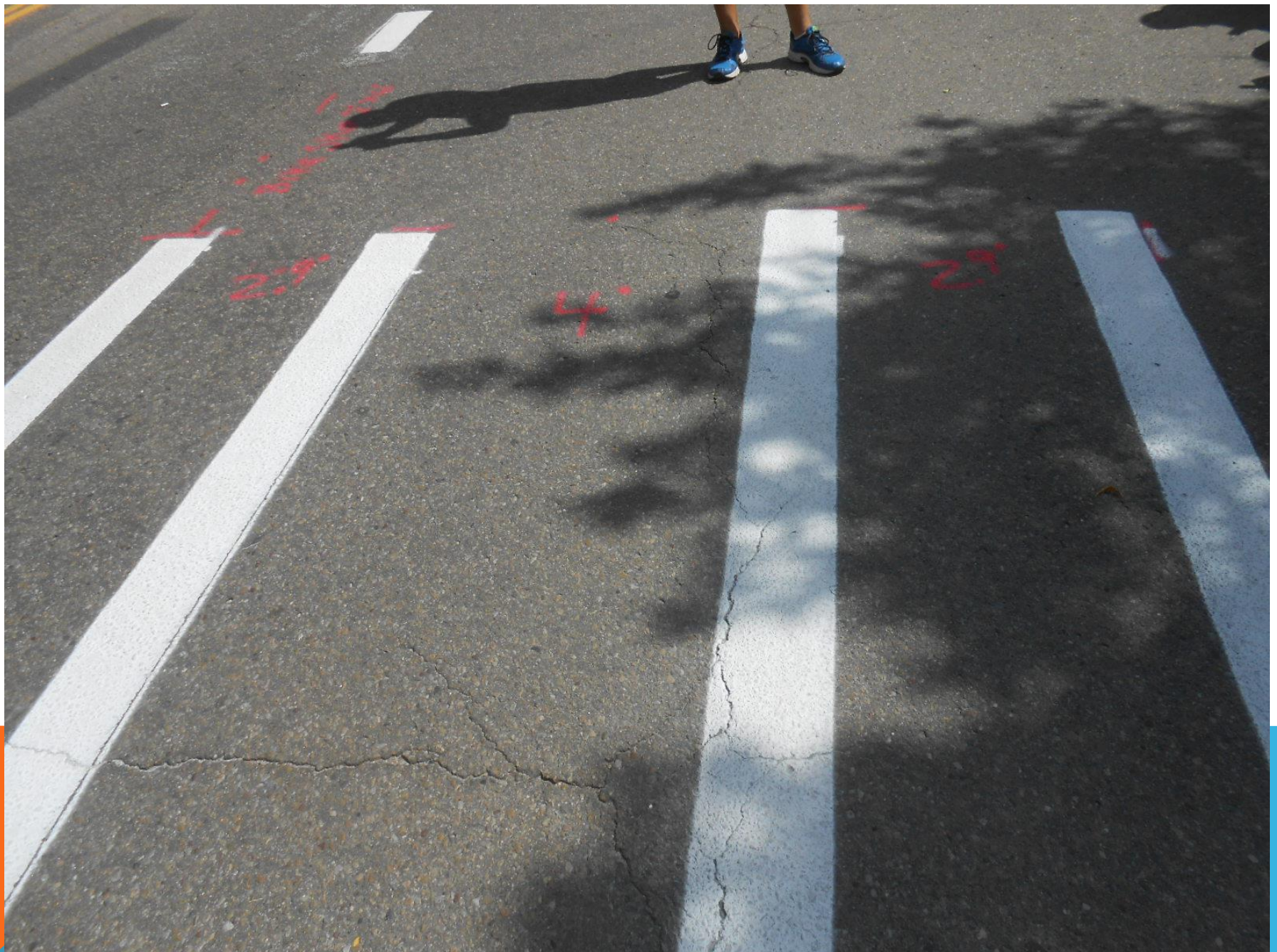


Overbuilt 6-lane roadway converted to 4-lanes w/ protected cycle track. Multiuse pathway used as well. CU dorms to the left.



LEFT & RIGHT BUFFERED BIKE LANES





CONTRAFLOW BIKE LANE LEADS TO BIKE PATH







DOWNTOWN BOULDER USES SEVERAL DESIGNS



CONTRAFLOW BIKE LANES



QUESTIONS?

Cynthia Hoyle, FAICP, LCI
Orion Planning Group

