

How U.S. Cities are Moving the Needle

Western Places | Western Spaces
Rocky Mountain Land Use Institute
Denver, CO
March 6, 2020



PRESENTER

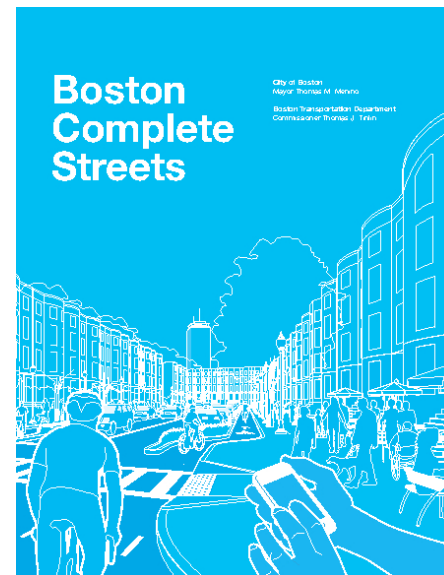
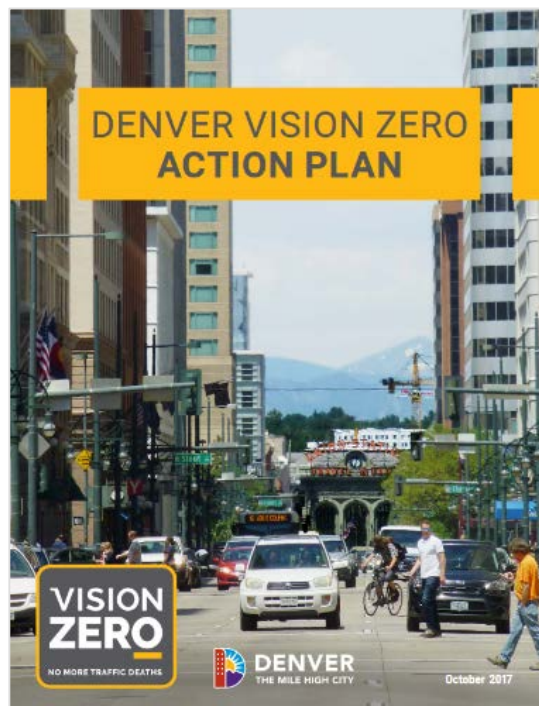
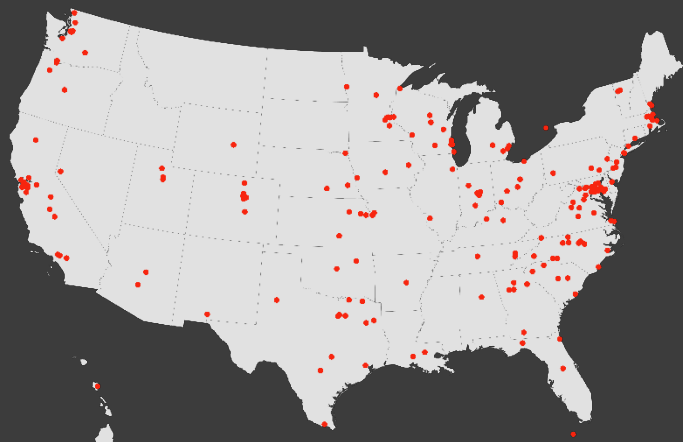


**JESSICA
FIELDS**

PE, AICP

Toole Design
Denver Office Director

TOOLE DESIGN EXPERIENCE



U.S. CONTEXT: CAR CULTURE



Source: Smart Growth America

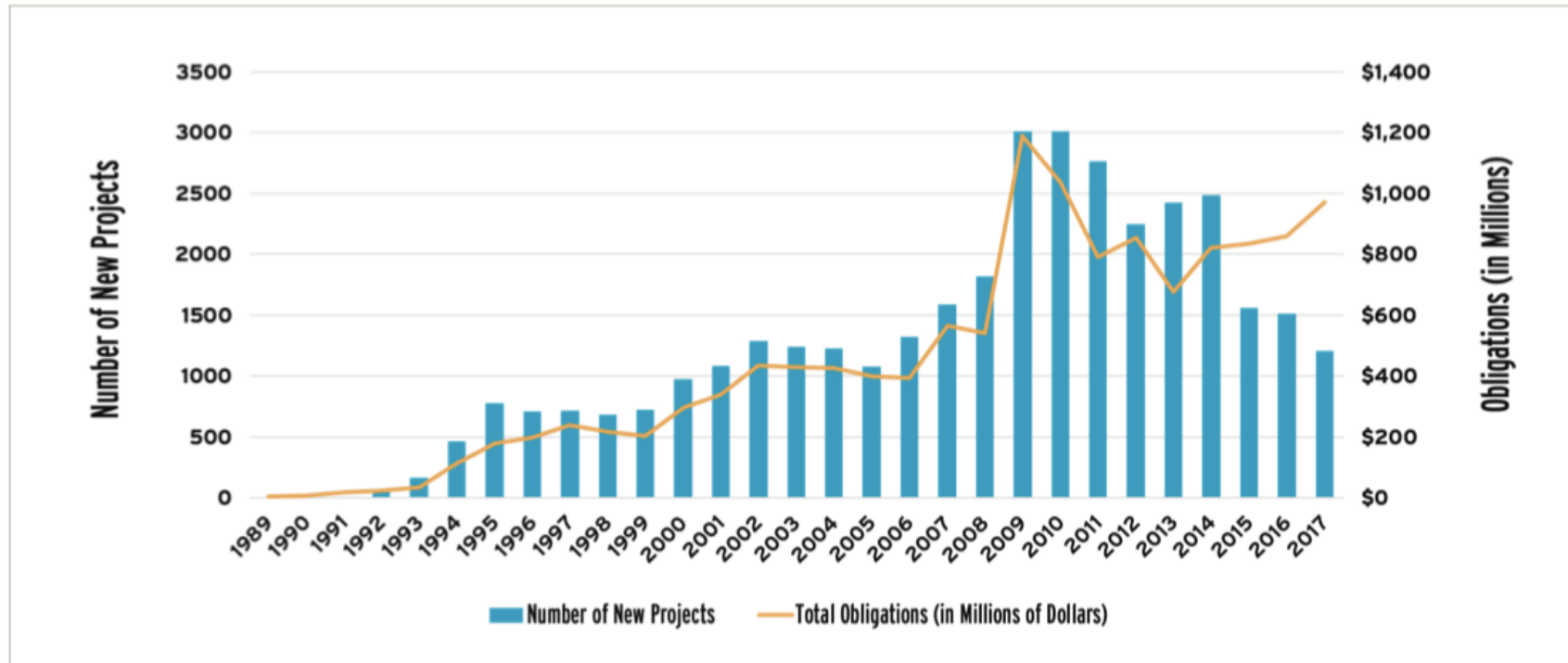


Source: Rebecca Wilson, Flickr

U.S. CONTEXT: INVESTMENT

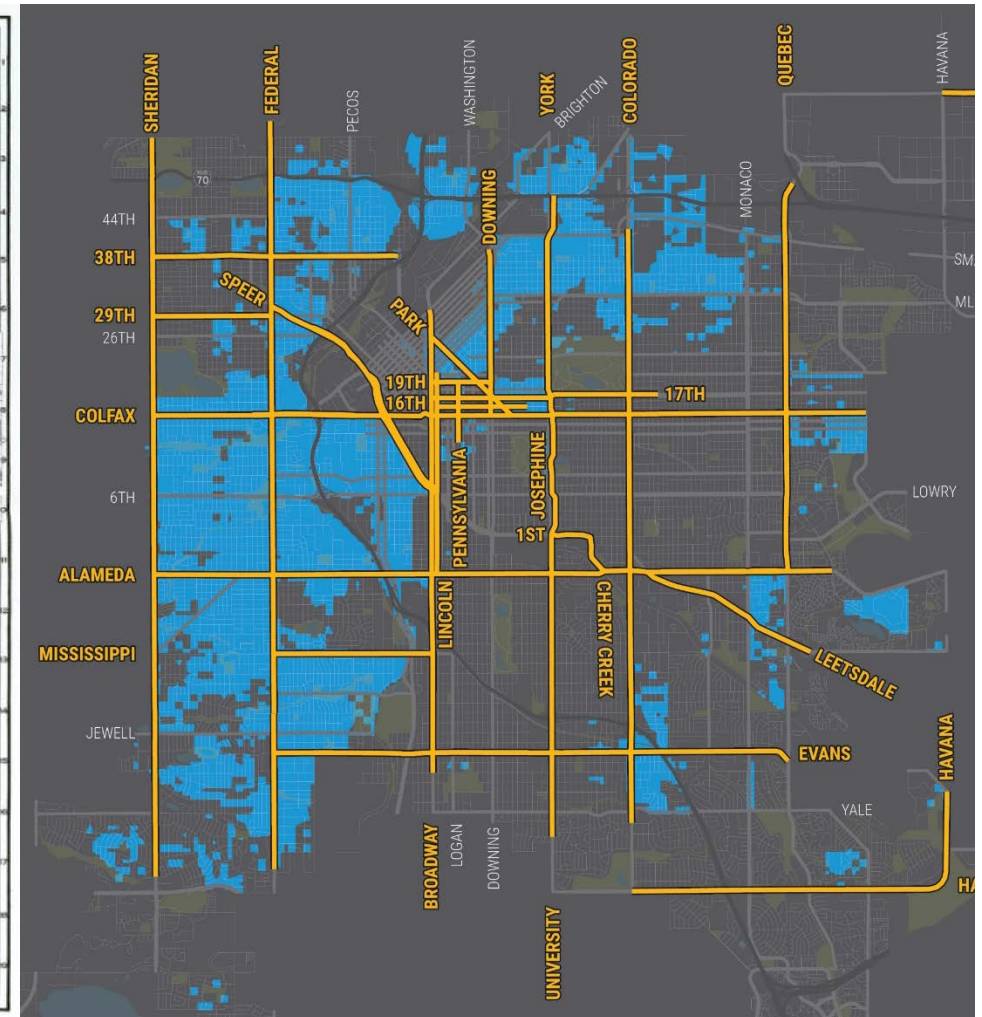
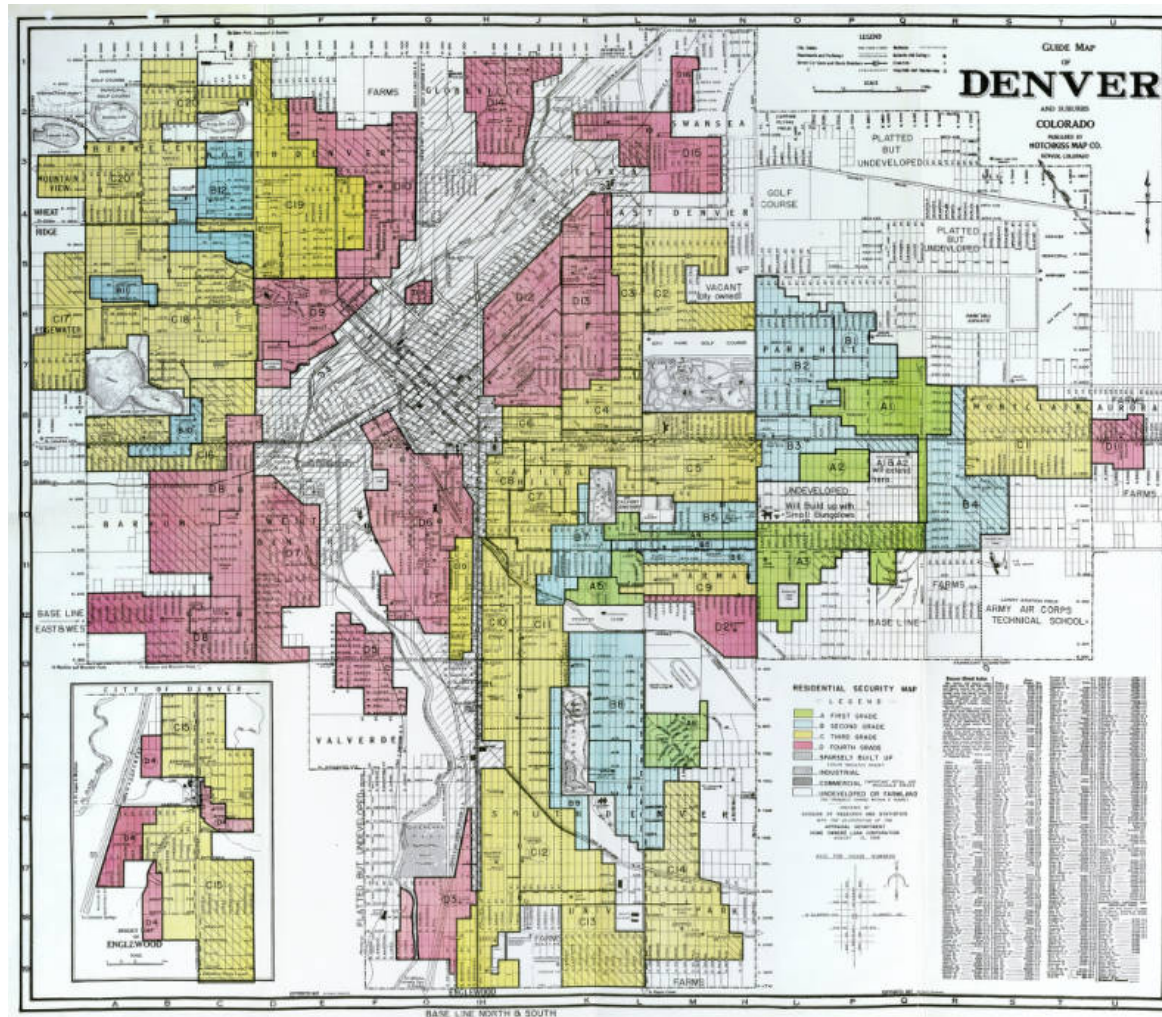
Federal Funding for Bicycling & Walking Infrastructure ⁵²

FIGURE 1.5.1 - # OF PROJECTS & TOTAL OBLIGATIONS TO PEDESTRIANS & BICYCLE FACILITIES & PROGRAMS BY YEAR



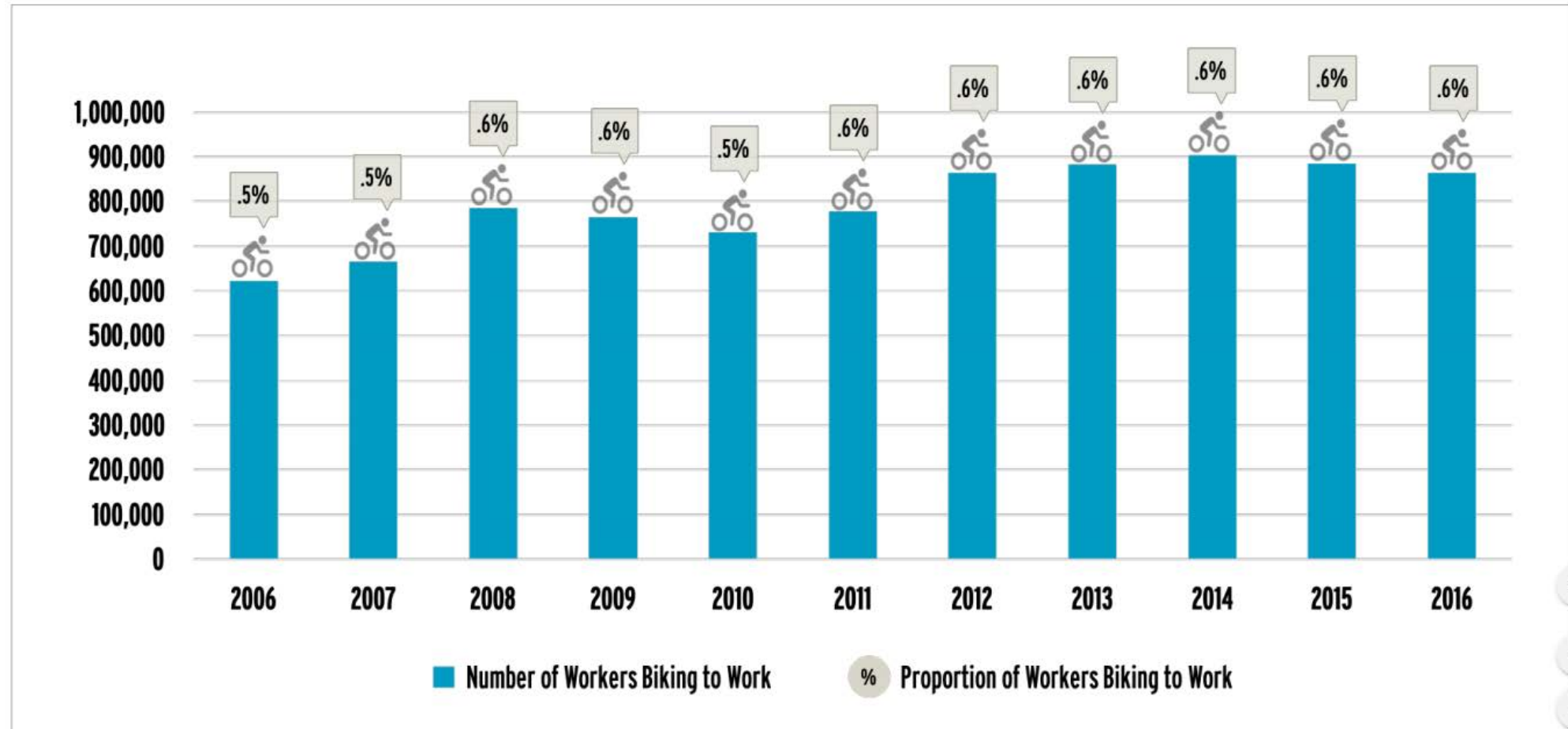
Source: League of American Bicyclists

U.S. CONTEXT: SEGREGATION



Source: Denver Public Library

AMERICANS BIKING TO WORK



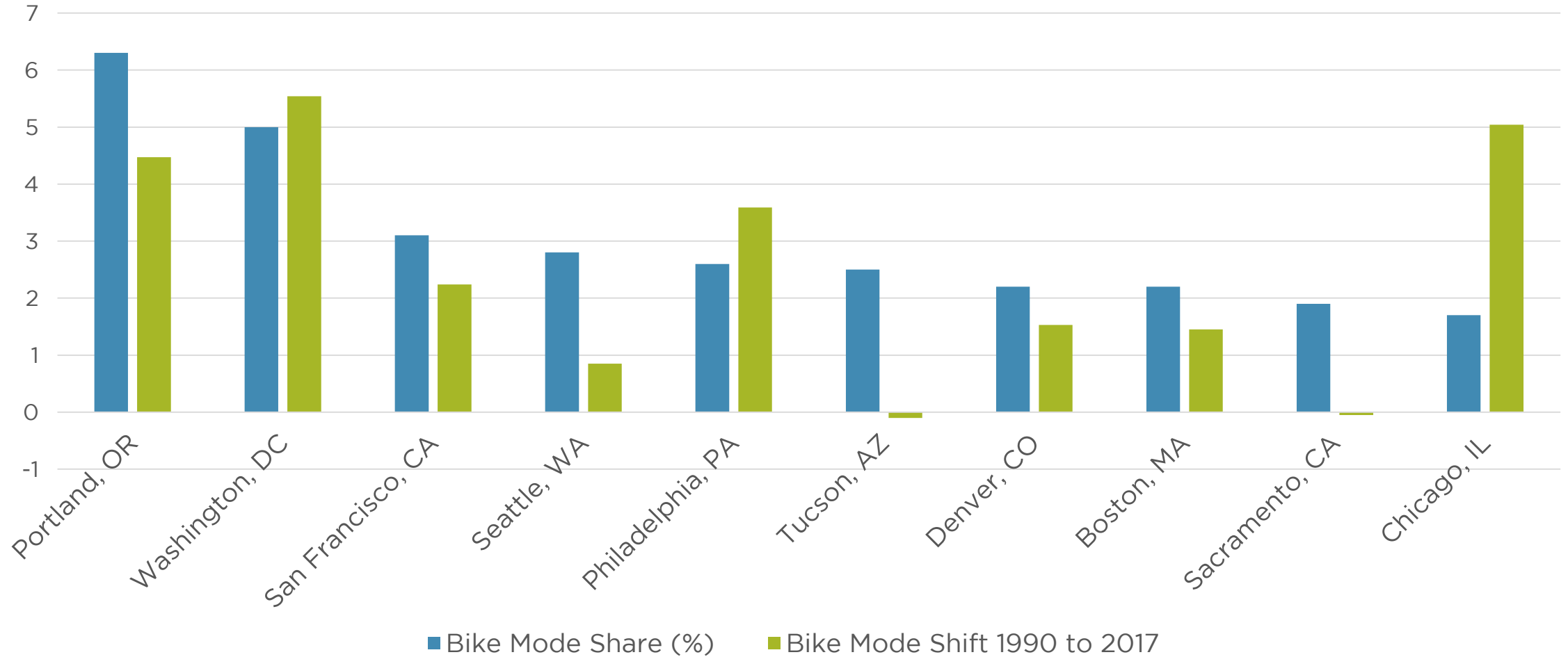
Source: League of American Bicyclists

SAFETY INEQUITIES

**According to data from the CDC,
compared to white bicyclists, the
fatality rate was 23% higher for
Hispanic and 30% higher for
African-American riders.**

Source: League of American Bicyclists

STANDOUT CITIES



1

**HIGH-
COMFORT
DESIGN**

2

**QUICK-BUILD
NETWORKS**

3

**MULTIMODAL
INTEGRATION**

4

**STRATEGIC
POLICIES**



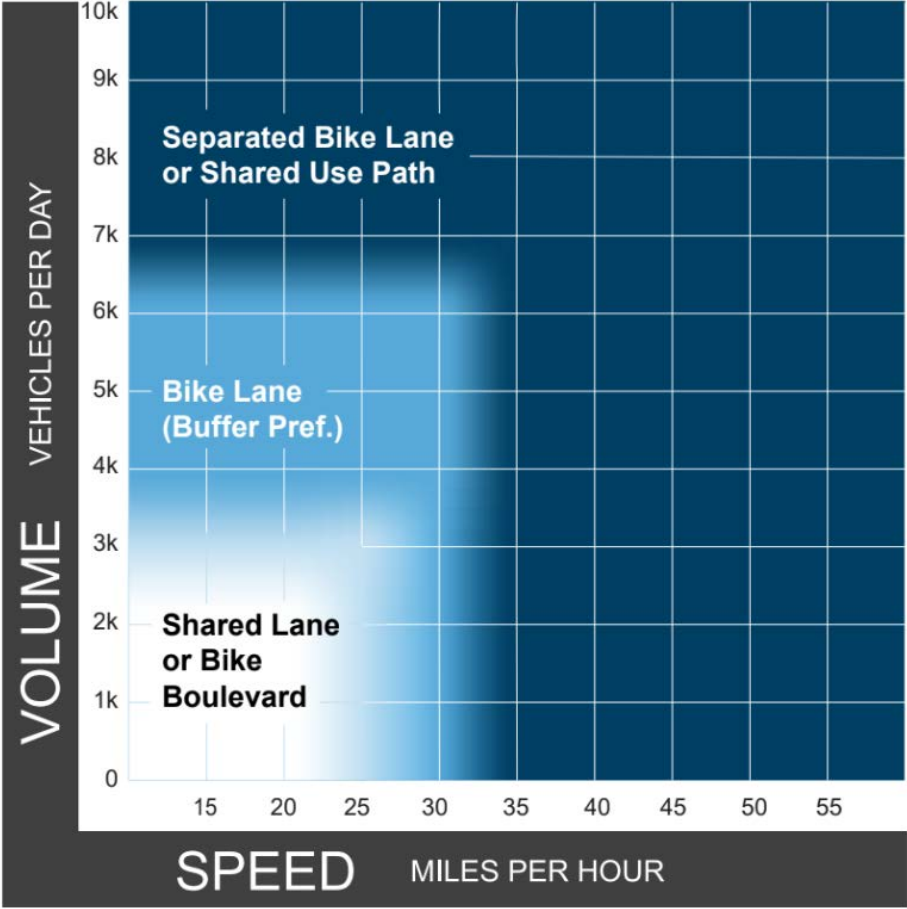
1

**HIGH-
COMFORT
DESIGN**



lower stress
tolerance

higher stress
tolerance





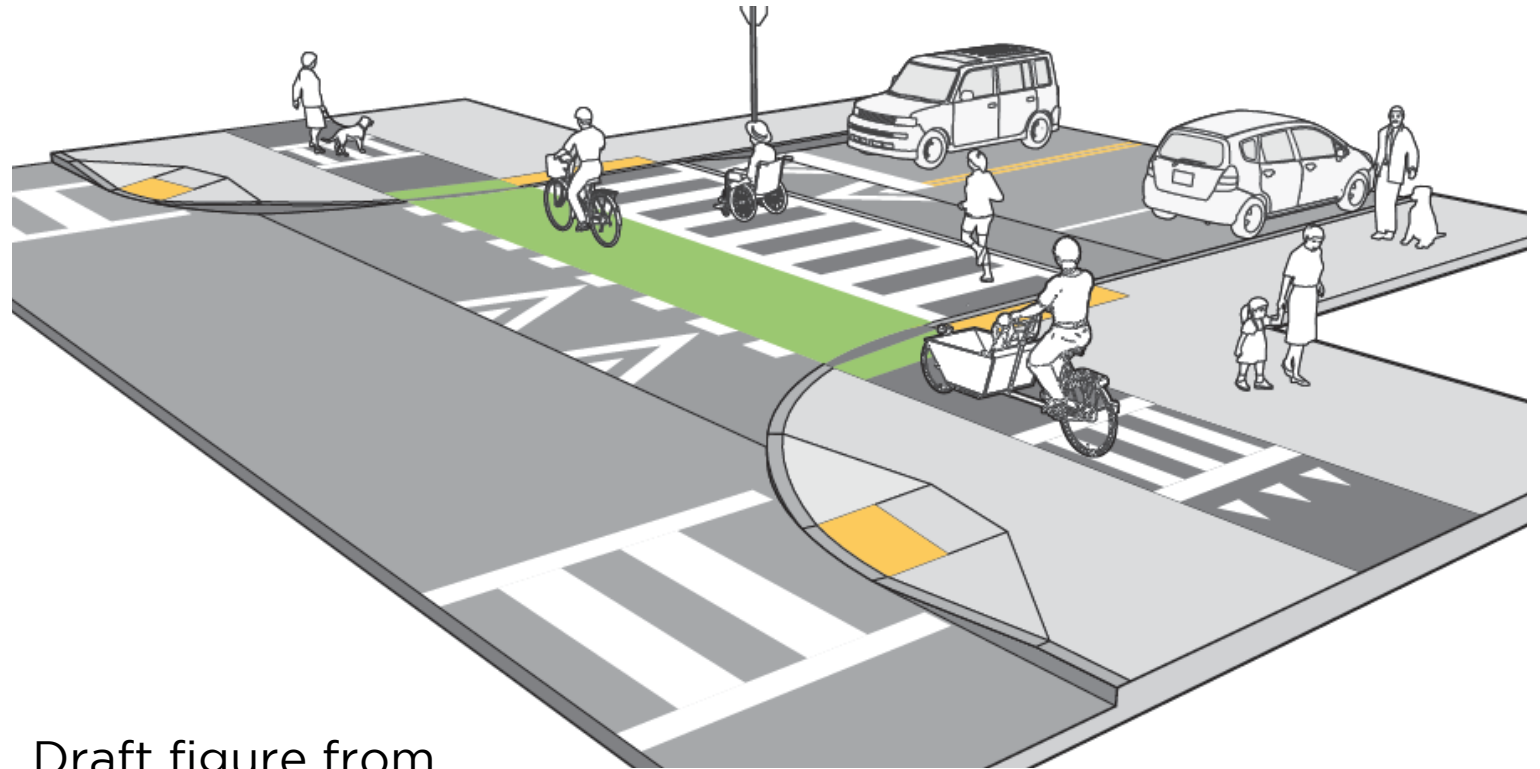
CONNECT HISTORIC BOSTON

BOSTON, MA

RAISED CROSSINGS

Raised crossings had 50% crash reduction

(Schepers, J. P.; Kroeze, P. A.; Sweers, W.; Wüst, J. C. 2011)



Draft figure from
the 2020 AASHTO
Bike Guide

PROTECTED INTERSECTIONS



Draft figure
from the 2019
AASHTO Bike
Guide

COLUMBUS AVE & 70TH ST

NEW YORK, NY





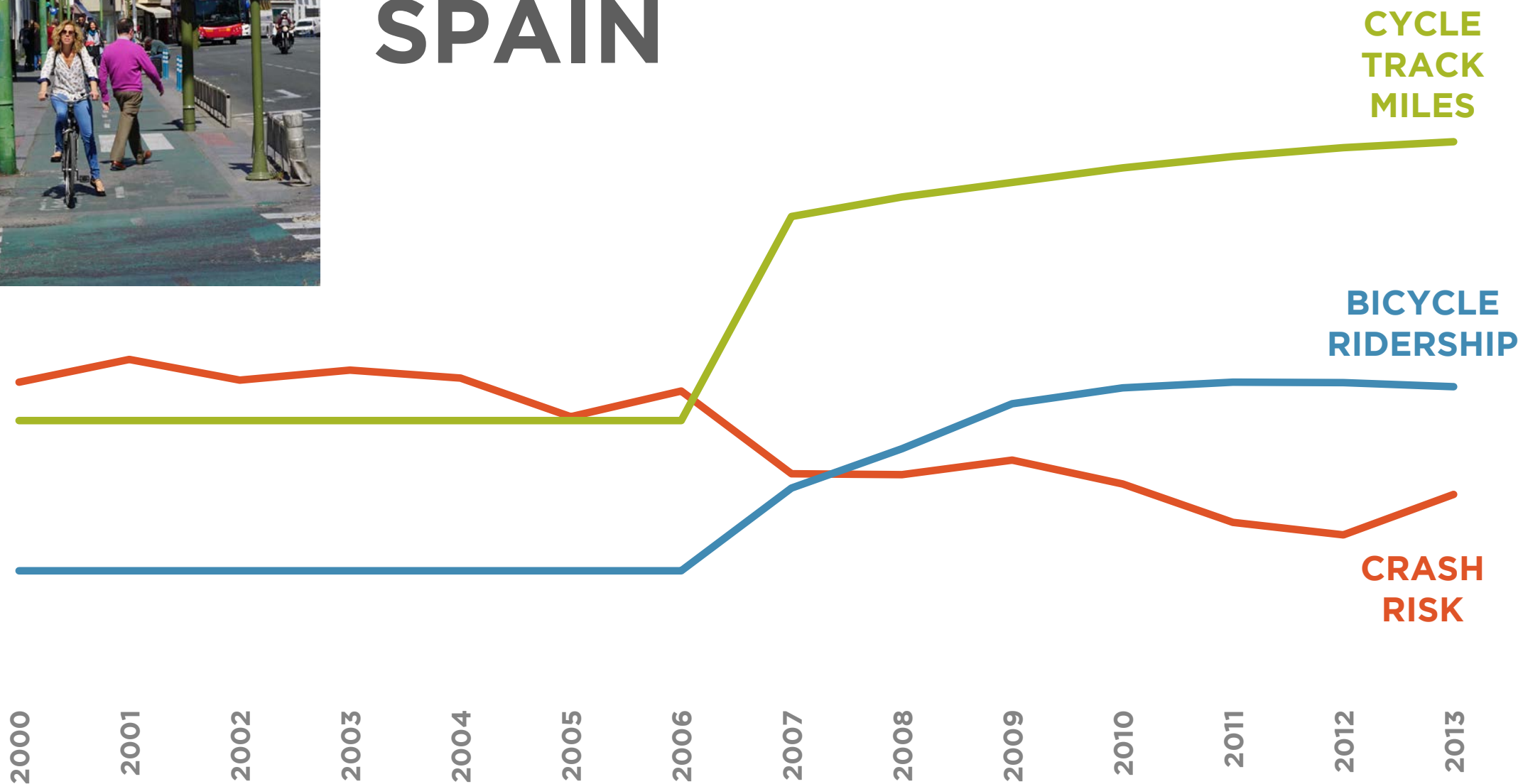
Source: Marques et al., 2015

2

QUICK- BUILD NETWORKS



SEVILLE, SPAIN



SOURCE: MARQUES AND HERNANDEZ-HERRADOR

NORTH AMERICAN EXAMPLES

CALGARY
EDMONTON

HOUSTON

NEW ORLEANS

PROVIDENCE

DENVER



HOUSTON'S "BUILD 50" CHALLENGE

EARLY RESULTS

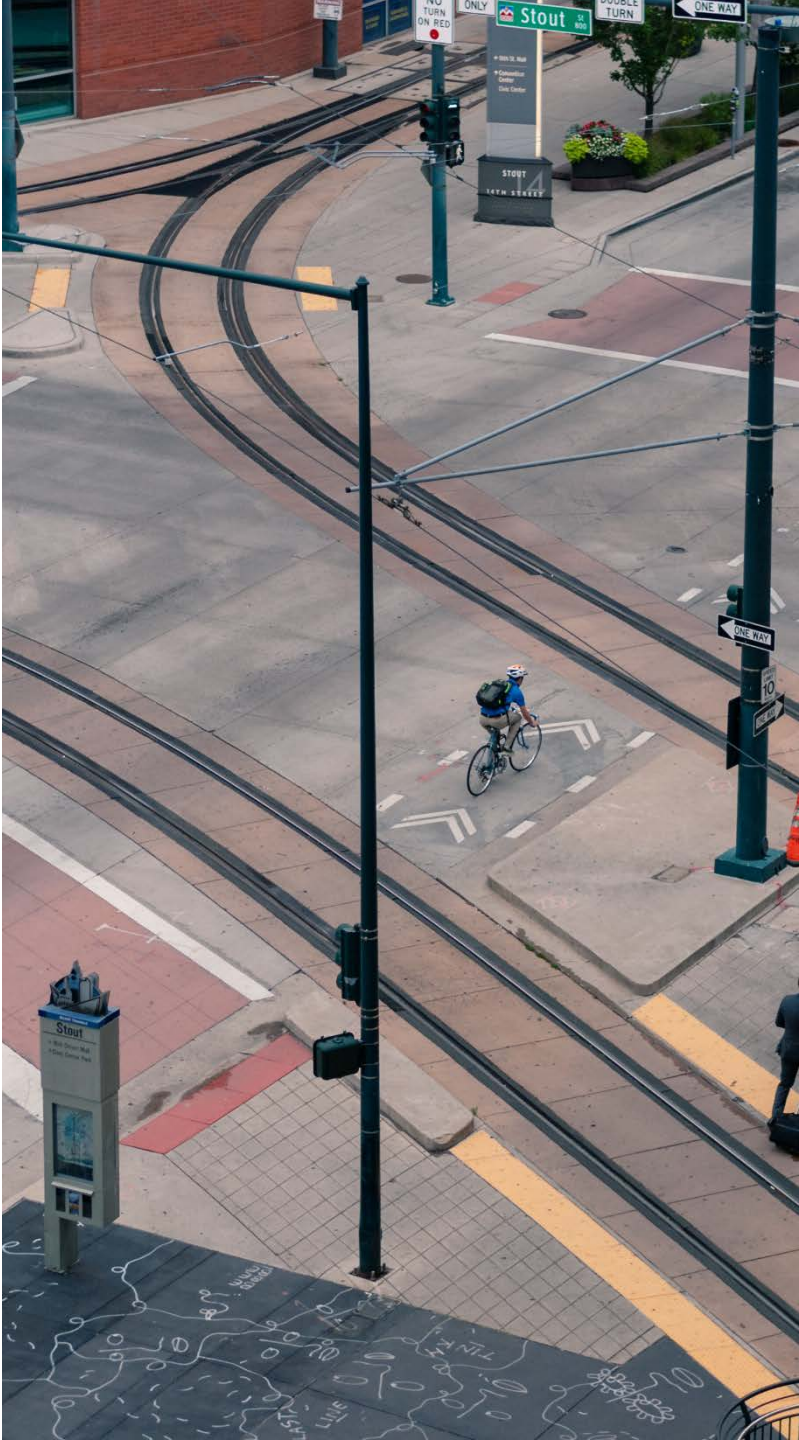


NEW ORLEANS



NEW ORLEANS





3

**MULTIMODAL
INTEGRATION**

Introduction

Vision

Chapter 1

Street Types

Chapter 2

Sidewalks

Chapter 3

Roadways

Chapter 4

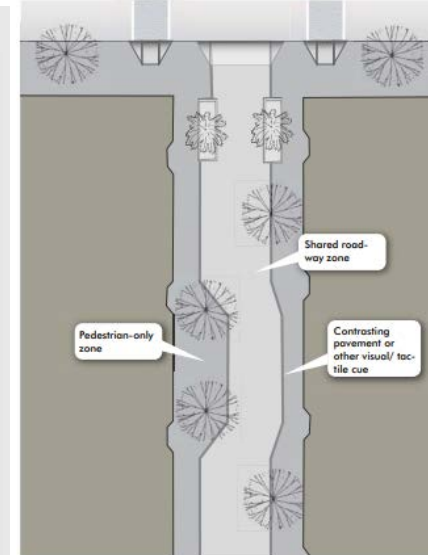
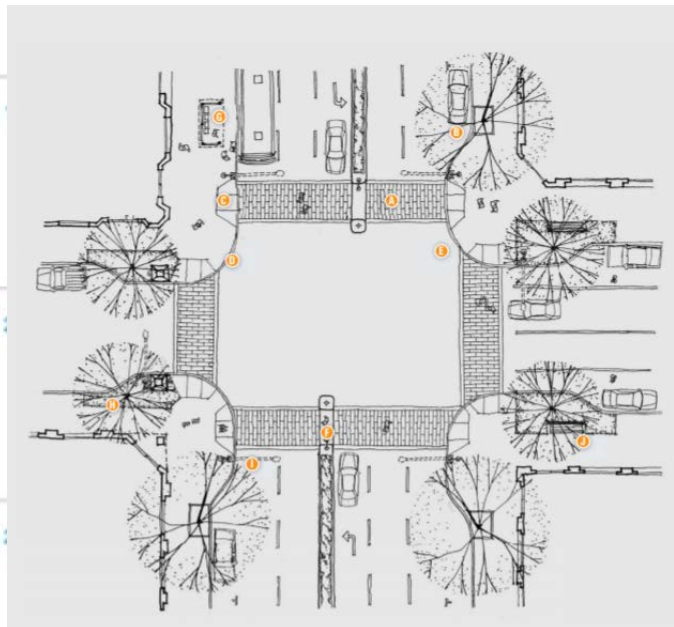
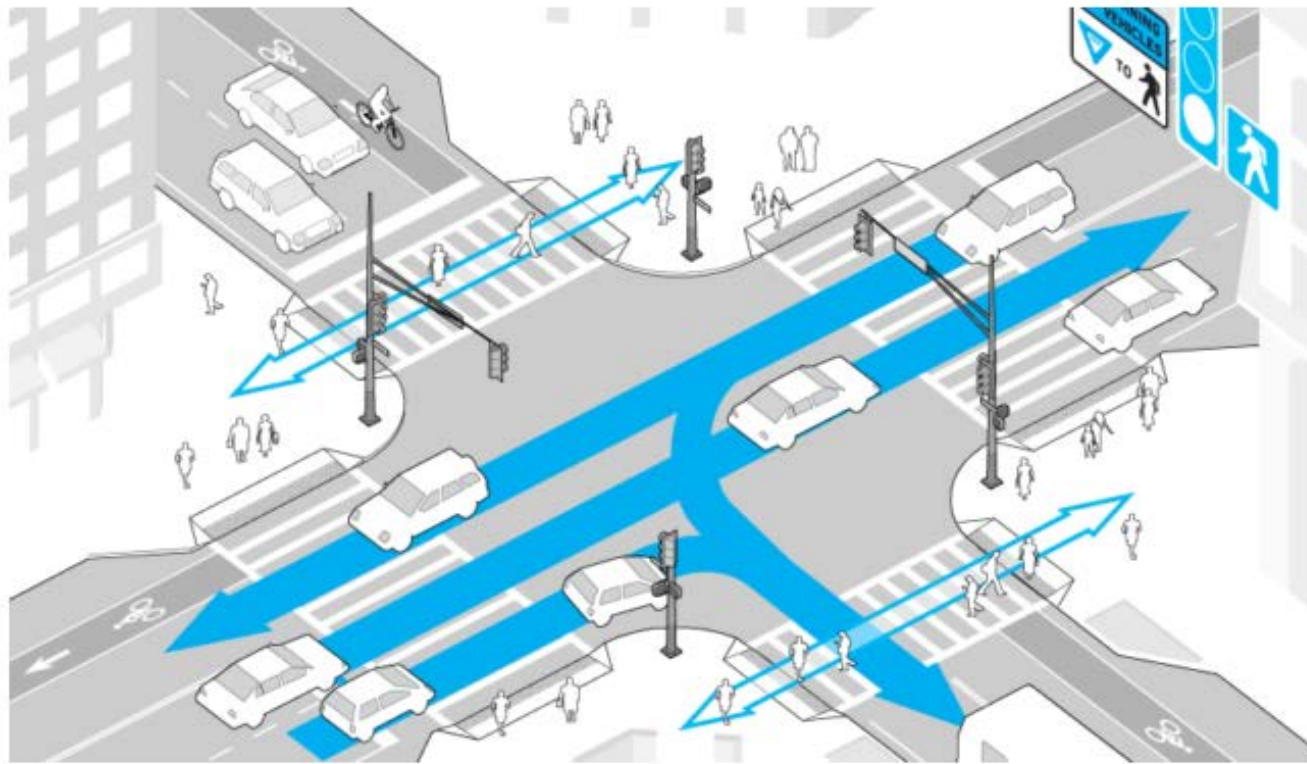
Intersections

Chapter 5

Smart Curbsides

Chapter 6

Implementation



▲ Shared public ways greater than 15' in width should distinguish between pedestrian-only and shared zones through contrasting paving or other measures

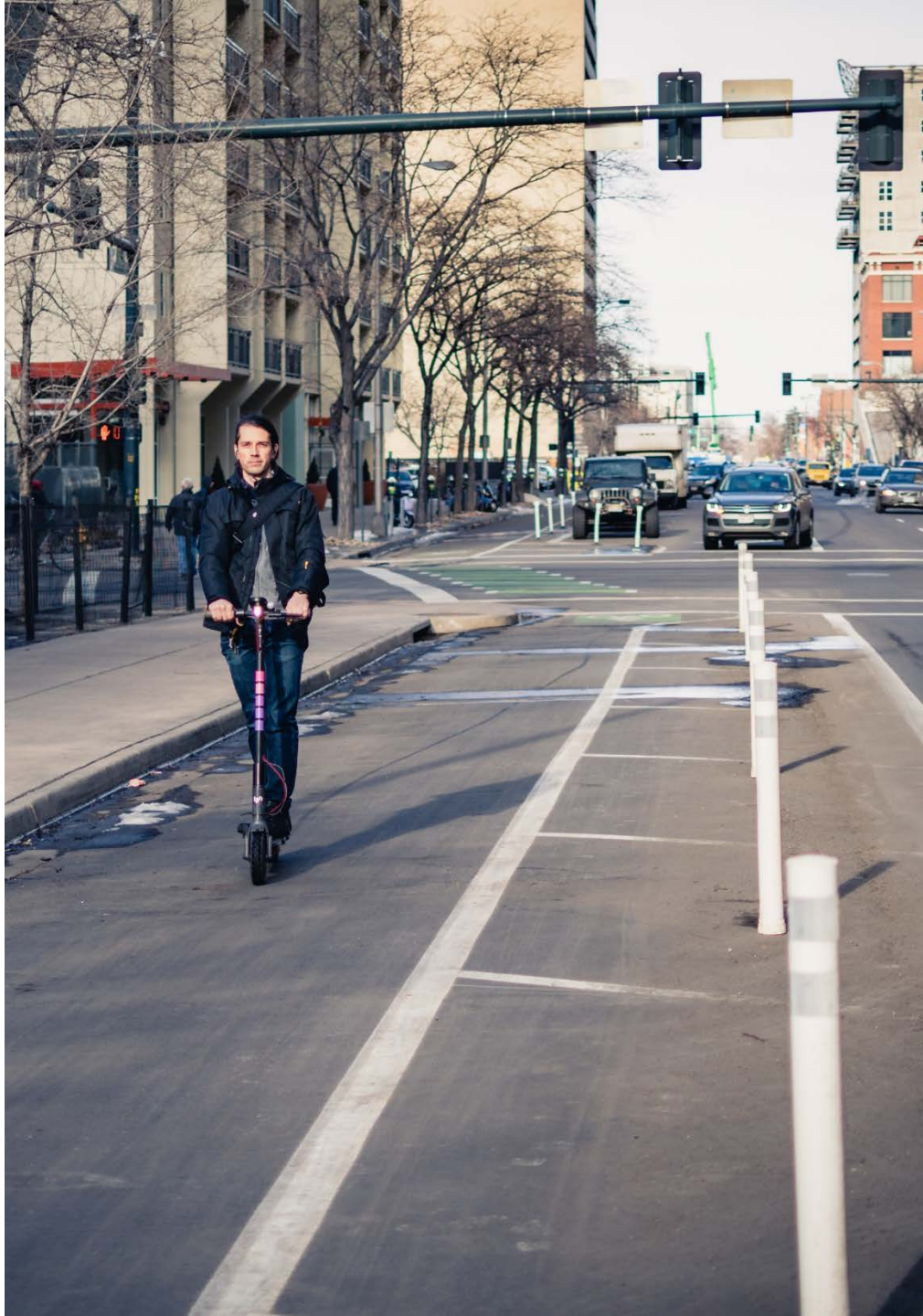
Credit: SF
Better Streets
& Boston
Complete
Streets

2ND AVENUE SEATTLE, WA



2ND AVENUE SEATTLE, WA





4

STRATEGIC POLICIES

REQUIRING BIKEWAYS CAMBRIDGE, MA

Cambridge passed a first-of-its-kind ordinance mandating **protected bike lanes** as part of roadway reconstruction.



Editorials

EDITORIAL

A bike lane program to emulate



DAVID L. RYAN/GLOBE STAFF/FILE 2018

The Cycling Safety Ordinance requires the city to add permanent separated bike lanes when doing reconstruction of certain roads.

APRIL 14, 2019

In five or 10 years, bicyclists in Cambridge may marvel at a comprehensive network of bike lanes on city streets and the foresight of their city government. Or they may pay little mind to history and just pedal by, taking for granted that protected lanes for bikes (and probably by then, scooters) were always there.

PROACTIVE PLANNING

BOSTON, MA



TOOLE
DESIGN

KEY TAKEAWAYS



Focus on the
MOST
IMPORTANT
ELEMENTS of
HIGH-COMFORT
DESIGN.



If given the
chance, **BUILD**
YOUR NETWORK
QUICKLY.



INTEGRATE all
modes.



Institute
POLICIES that
ALIGN WITH
YOUR GOALS.



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TOOLE
DESIGN