Safer speeds, better cities

Redesigning streets to manage speed and support sustainable transport

Melinda Hanson
Melinda@nacto.org

Leipzig, Germany | May 2018
Janette Sadik-Khan

Global Designing Cities Initiative

Bloomberg Philanthropies
INITIATIVE FOR GLOBAL ROAD SAFETY
1.3 million traffic fatalities annually
1 person every 30 seconds
Speed turns crashes into fatalities
Risk of Pedestrian Death and Impact Speed

Note: The above figure shows the relationship between pedestrian fatalities and vehicle impact speed published by the OECD (2006). Some recent studies show a similar relationship, but account for sample bias to find slightly lower risks in the 40 to 60 km/hr range. (Rosen & Sandor 2000, Tefft 2011, Richards 2010, Hannawald and Kauer 2004) There are not, however, studies from low- and middle-income countries where things like vehicle type, emergency response time and other characteristics may influence this relationship. In any case, there is clear evidence to support policies and practices that lower vehicle speeds to 30 km/hr where pedestrians are commonly present, and no more than 50 km/hr on non-grade separated streets.

Source: WRI Safer Cities by Design

30km/h = 90% chance of SURVIVAL
Risk of Pedestrian Death and Impact Speed

60km/h = 90% chance of DEATH

Source: WRI Safer Cities by Design
Speed inhibits vision.
Speed inhibits vision.
Wider travel lanes are correlated with higher vehicle speeds.

Wider Lanes = Higher Speeds
People are dying on arterials

• From 2009 to 2016, the number of people who died while walking increased from ~4,000 to almost 6,000.

• Almost the entire increase occurred on arterials.
And at intersections
Instead of re-engineering the human body...
...cities are reimagining and redesigning streets

Narrower lanes
Safe spaces for pedestrians
Separated bike lanes
Dedicated transit infrastructure
And taking a more **proactive** approach

- Target Speed
- Design Speed
-Posted Speed
Vehicles Speeding: 74%
Addis Ababa, Ethiopia
Speeds decreased!

**Weekends**

- Before: [Bars for Two-wheeler, Cars, Bus, Truck]
- After: [Bars for Two-wheeler, Cars, Bus, Truck]

**Weekdays**

- Before: [Bars for Two-wheeler, Cars, Bus, Truck]
- After: [Bars for Two-wheeler, Cars, Bus, Truck]
Bogota, Colombia
Testing chicanes
Speed (in chicane section)

Cars: -29%

Motorcycles: -25%
The Global Street Design Guide

English

Spanish

Portuguese
Simple design strategies support safe speeds
...and reclaim underutilized space
Giving us space for sustainable transport
And inviting activities that create better cities
Thank you!

Melinda Hanson
Melinda@nacto.org

@GlobalStreet
www.globaldesigningcities.org
NACTO National Association of City Transportation Officials
GDCI Global Design Cities Initiative