

Implementing Complete Streets in Pennsylvania

**Pennsylvania Chapter of the American Planning Association
2009 Annual Conference
Valley Forge, Pennsylvania
October 5, 2009**

Moderator

John Madera, AICP, Transportation Planning Consultant

Panelists

John Nawn, PE, PTOE, FACFEI, Patrick Engineering, Inc.

Brian D. Hare, PE, Chief, Design Services Division, Bureau of Design, PennDOT

Mike Dzurko, Bureau of Highway Safety and Traffic Engineering, PennDOT

Agenda

1. What are Complete Streets, and why do we need them?
2. Why aren't more of our streets complete?
3. Implementation of a Complete Street
4. Is reform needed?
 - a. Design regulations and processes
 - b. Maintenance and funding policies
 - c. Right-of-way and risk management policies
5. Open Q&A
6. Lightning round: How do I implement this?

What Are Complete Streets?

Complete Streets are designed and operated so they are safe, comfortable, and convenient for all users – pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

-- National Complete Streets Coalition

Why Do We Need Complete Streets?

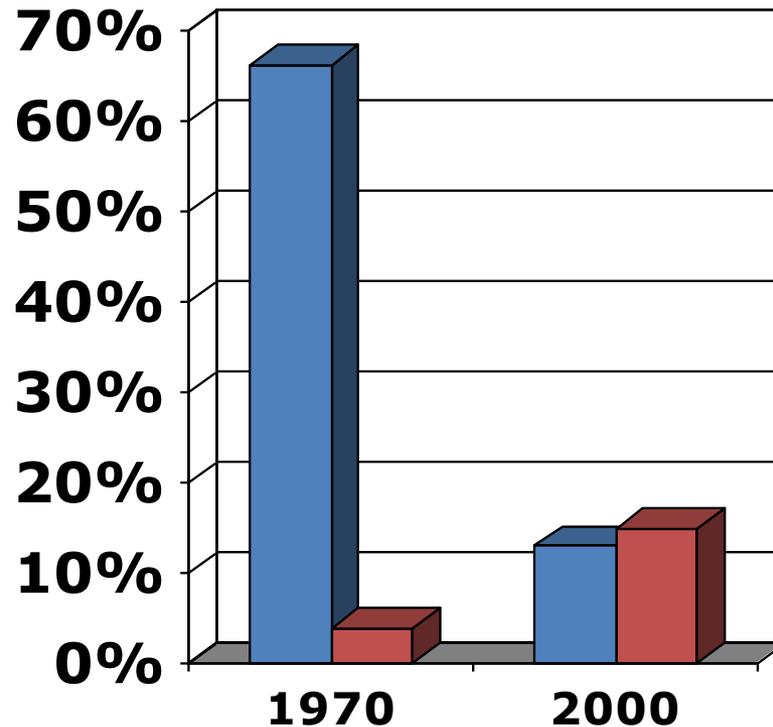
SURVEY SAYS:

“In choosing where to live, how important to you was the availability of bikeways, walking paths, and sidewalks...?”

Somewhat or very important 65 Percent

Source: Federal Highway Administration

SRTS: The numbers that matter



■ Walk/Bike to School ■ Obese

SURVEY SAYS:

“During the past 30 days, have you used any of the following types of transportation for either personal or business travel?”

Public transit	15 percent
Bicycle	20 percent

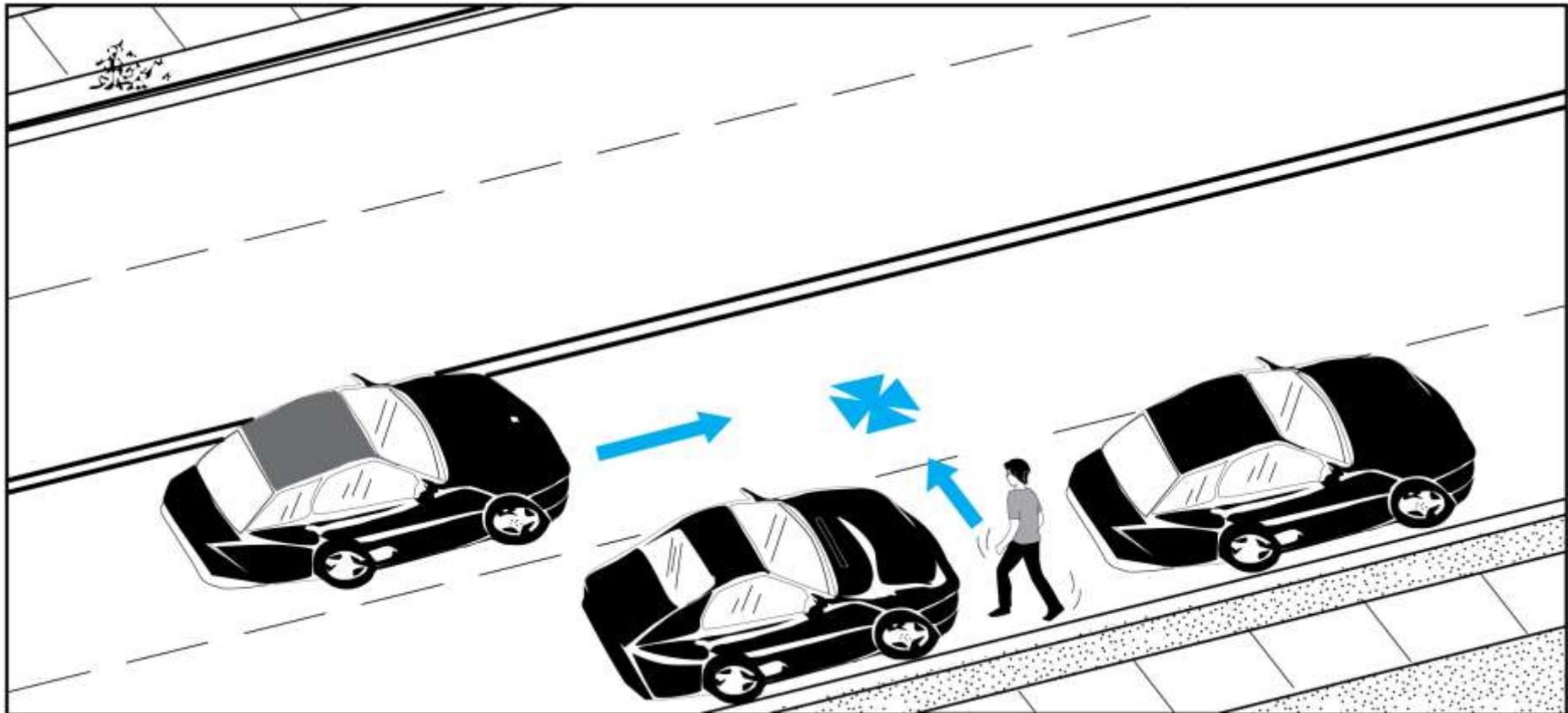
Source: Federal Highway Administration



Why aren't more streets
Complete Streets?

















See
St

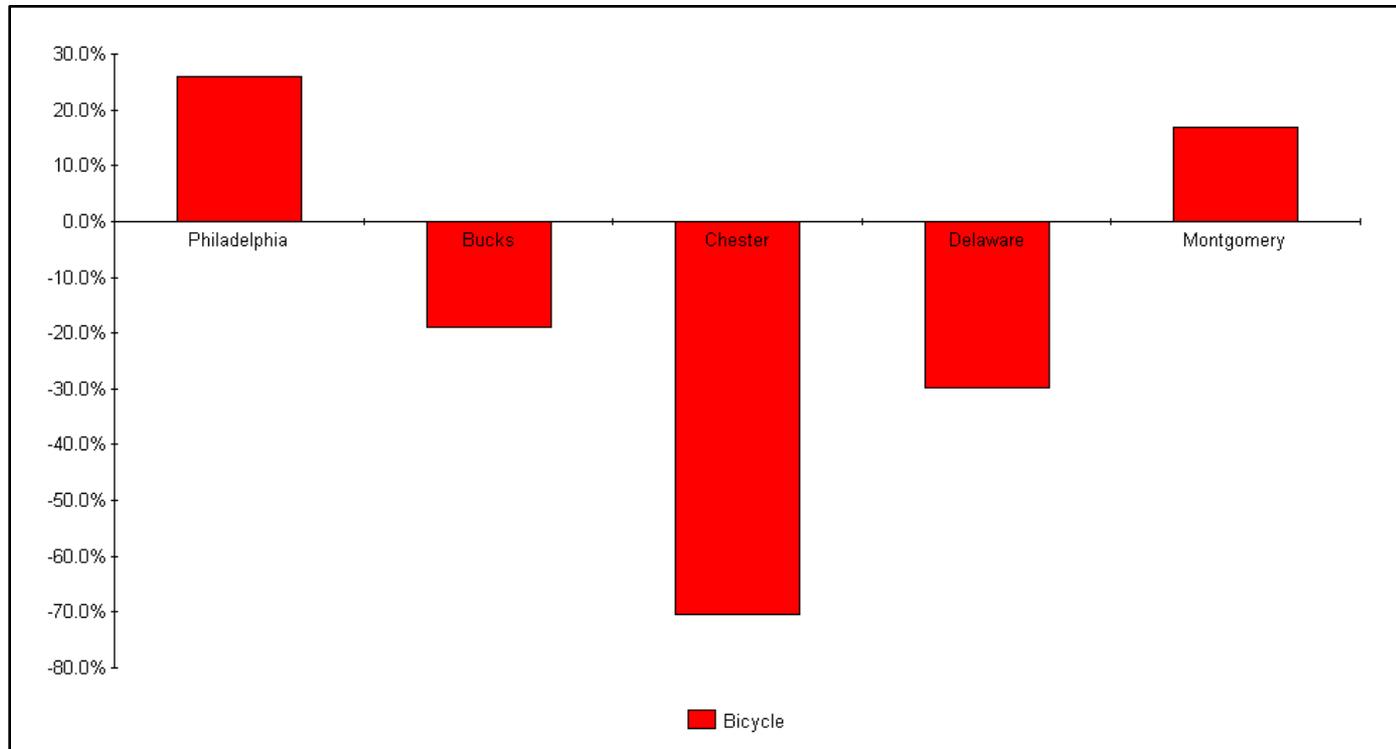




Reasons for biking...

- ✓ **Time competitive with car and bus up to 5 mi.**
- ✓ **Economical**
- ✓ **Environmentally benign**
- ✓ **Provides fitness benefit**
- ✓ **Great way to get to know your community!**

Change in Bike Commuting, Percent, 1990 - 2000

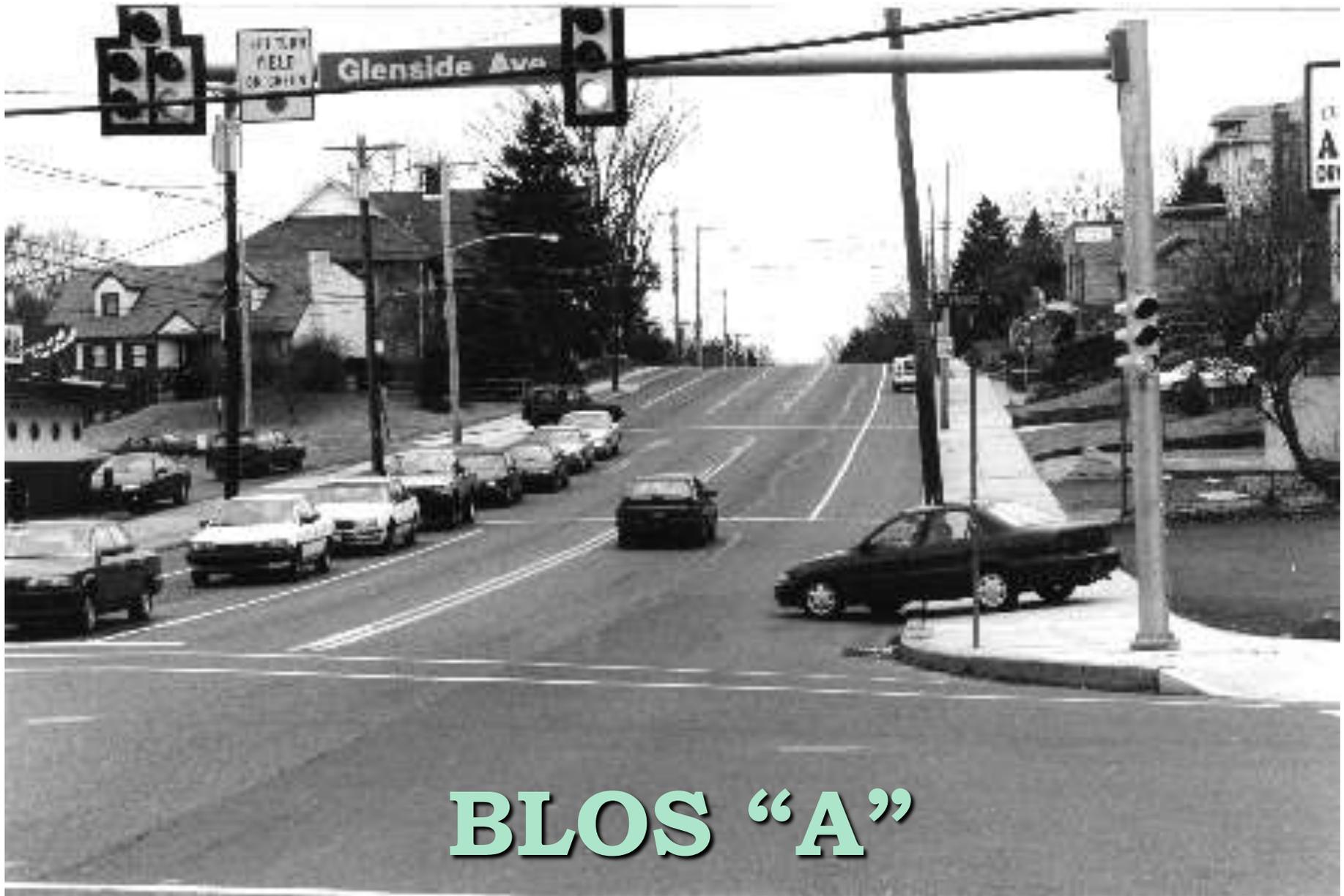


- Bucks 568 -20%
- Chester 129 -70%
- Delaware 650 -30%
- Montgomery 550 +20%
- Philadelphia 4908 +28%

Source: US Census

A paved path runs along a grassy area with several alligators resting on the ground. A brown sign on two wooden posts stands on the right side of the path. The background is filled with dense green foliage and trees.

HIKERS and BIKERS
Move to the side of
the road when a
vehicle approaches



BLOS "A"

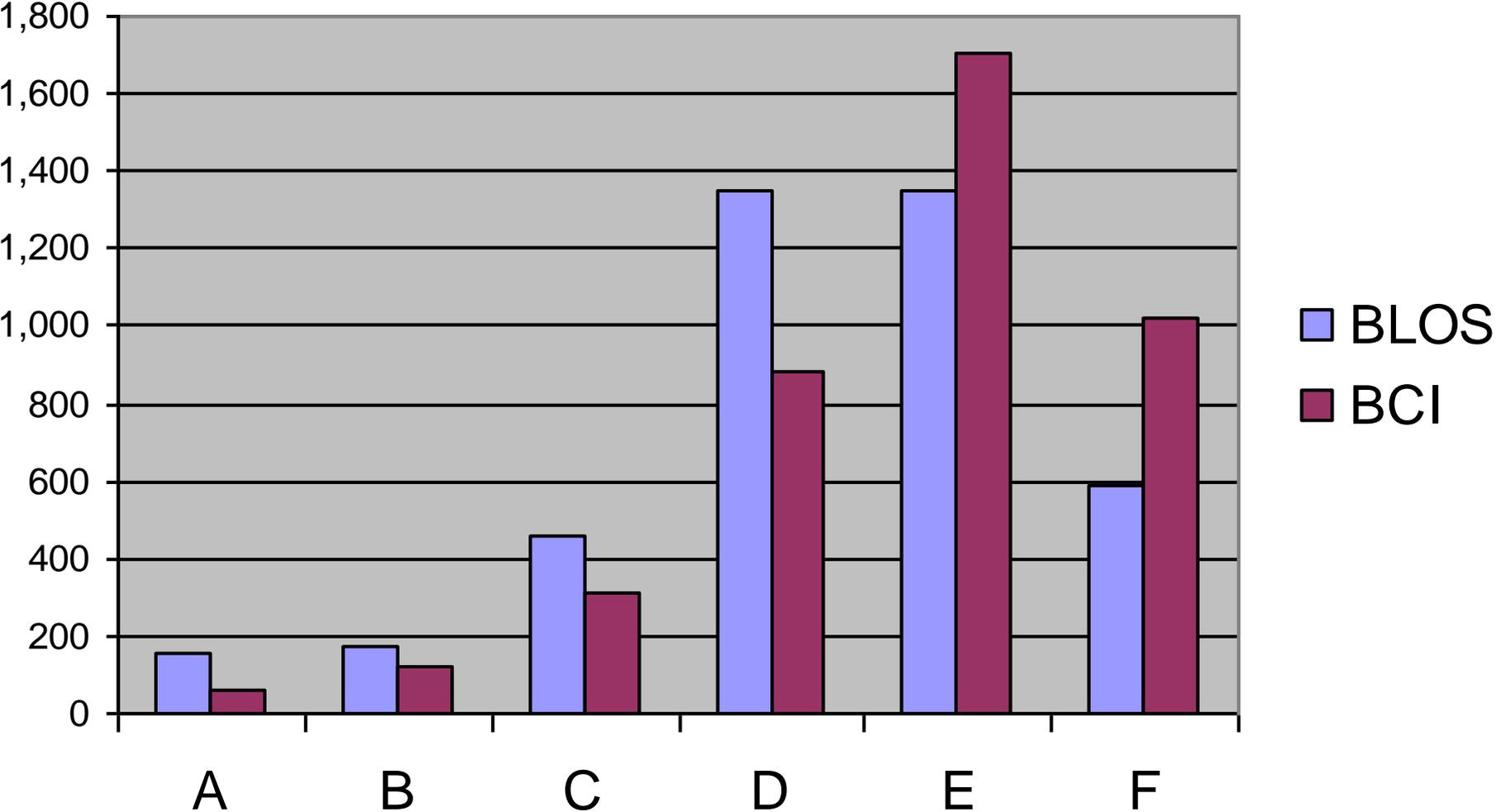


BLOS "C"

BLOS "E"



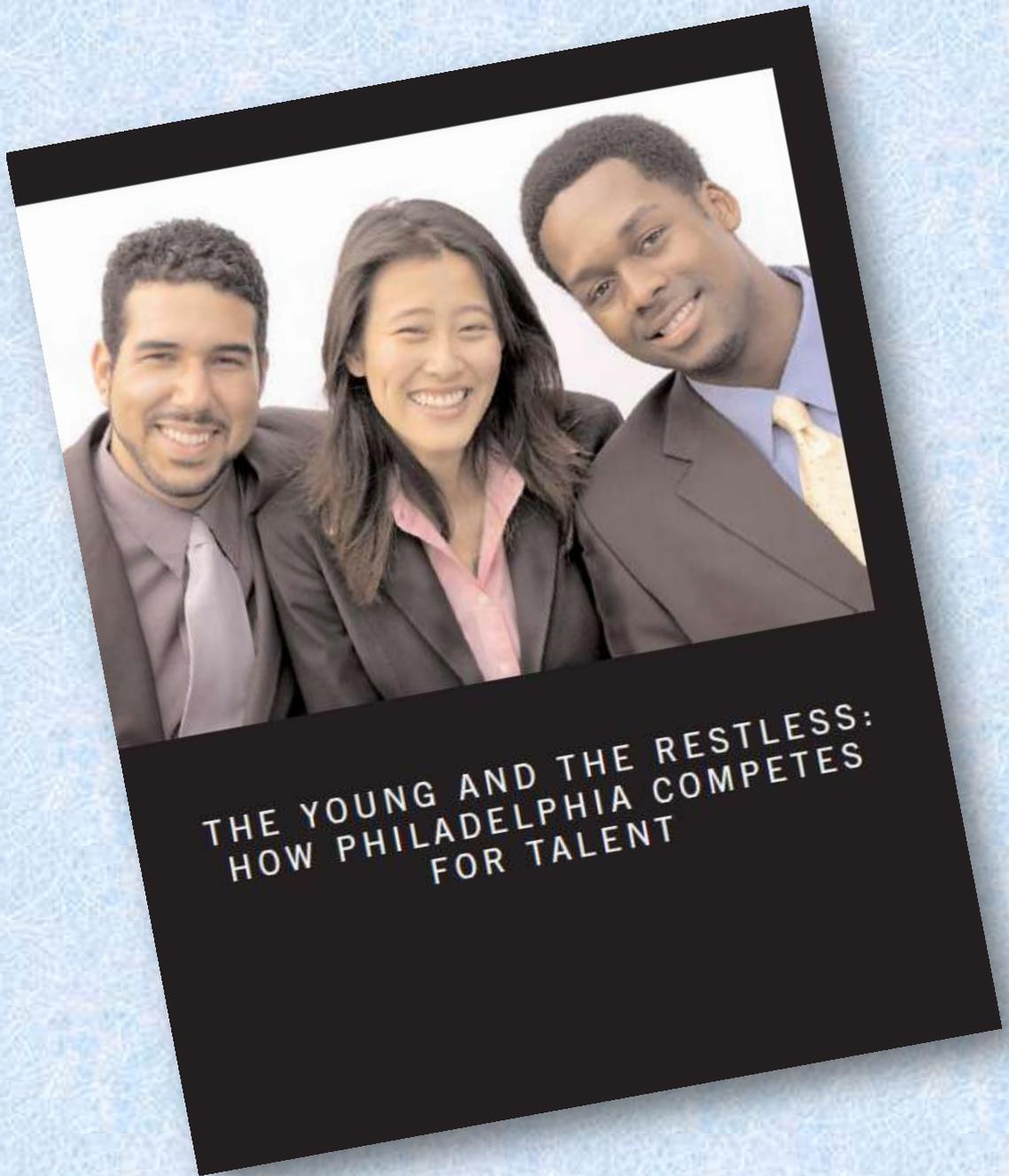
System-wide Results - Miles



- 
- Men - 2:1, working age (25-64 years)
 - Women age 25-34 years
 - Affluent and educated (median HHI \$64K)
 - More likely to live in two-person households
 - Own fewer cars

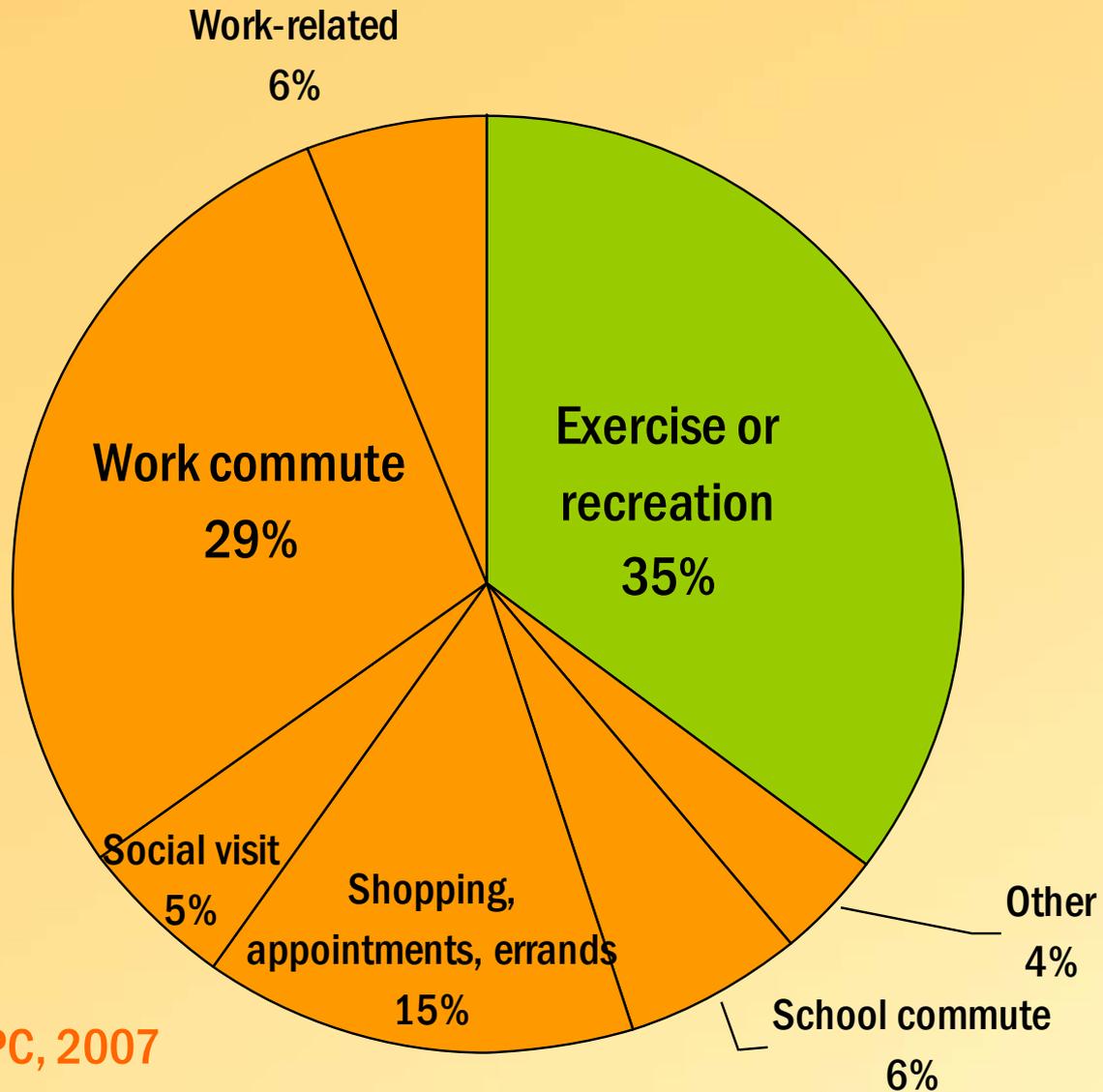
Who bikes?

Source: DVRPC, 2007



THE YOUNG AND THE RESTLESS:
HOW PHILADELPHIA COMPETES
FOR TALENT

Bicycle trips: purpose



Source: DVRPC, 2007

“What would encourage you to ride more?”

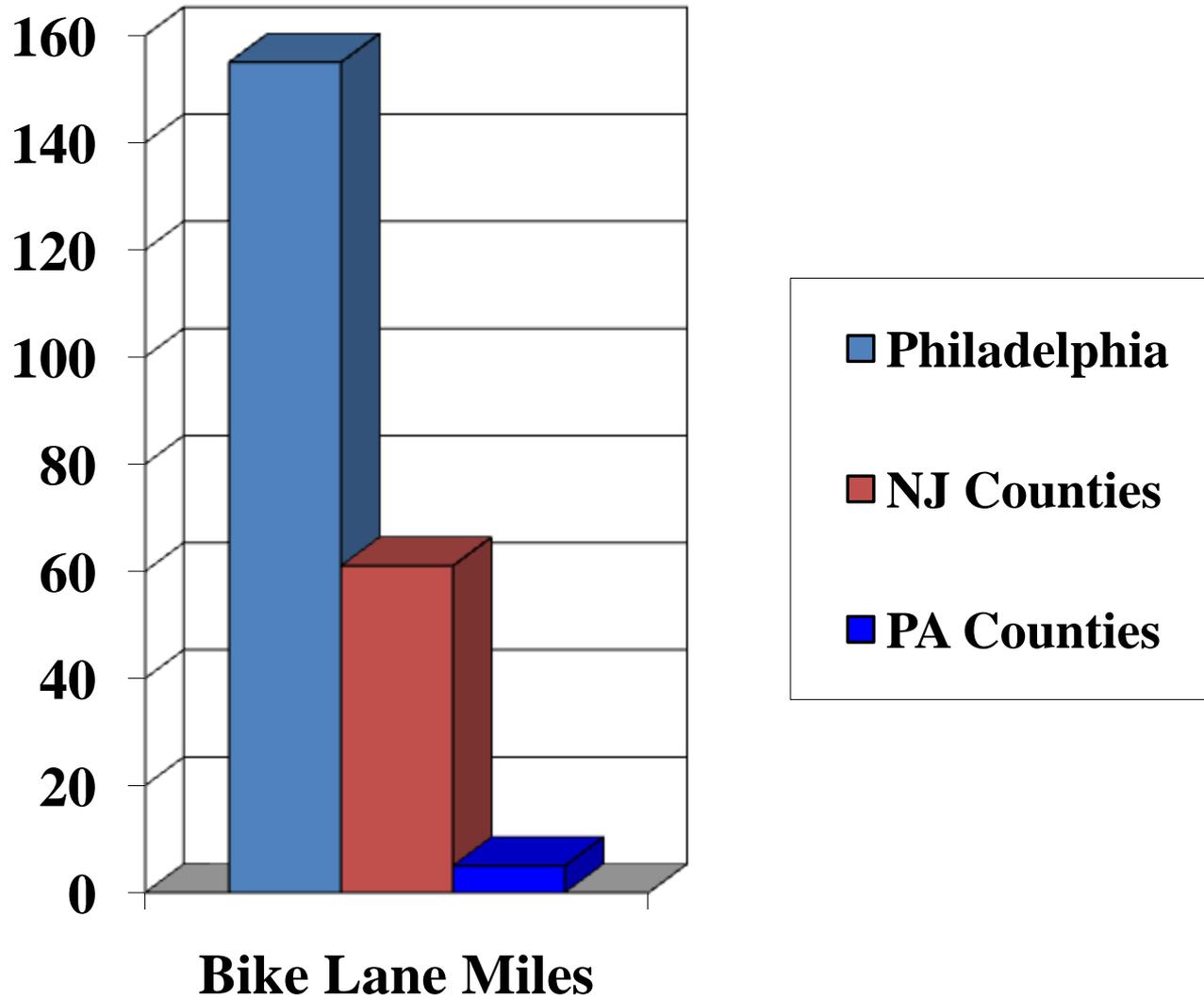


**"Very
"Important" important"**

Bike lanes	82%	59%
Wide shoulders	80%	41%
Shared lanes	72%	35%
Greenway trails	71%	46%
Sidepaths	64%	44%

Source: DVRPC, 2007

Bike Lane Progress



Courtesy John Boyle, BCGP



Swarthmore

BIKE LANE

BIKE LANE




BIKE ROUTE
BICYCLISTS
BALTIMORE PIKE
TO PHILADELPHIA

HIGHWAY CAPACITY MANUAL

Special Report 209

TRANSPORTATION RESEARCH BOARD
National Research Council





15 mph



20 mph



25 mph



30 mph

SPEED

p (killing pedestrian)

15 mph

3.5 %

31 mph

37.0 %

44 mph

83.0 %

Who regulates streets and highways?

- **FHWA**
- **AASHTO**
- **NCUTCD**
- **PennDOT**
- **Access Board**
 - **County**
- **Municipality**



110

END SCHOOL ZONE

WWW

ECONOLINE 150



Implementation of a
Complete Street