Smart Cycling Talking Points

This guide is to help the media when developing a story for print, TV, or radio on bicycle education, safety and advocacy. This does not address bicycle racing or mountain biking.

Vehicular Cycling – Safe cycling is based on the concept of vehicular cycling. That is you operate a bicycle just as you would any motor vehicle. John Forester developed the concept that "cyclists fare best when they act and are treated as drivers of vehicles."

Follow the rules – Operating a bicycle safely depends on following the rules of the road that apply to both cyclists and motorists. When either group fails to follow these rules, the likelihood of a collision increases.

Terminology

Bike rider vs bike driver – There is no such thing as a "bike rider." Riding is a passive action, like riding a roller coaster. You have no control over where you are going or how fast you get there. A bike rider would not get far because they would fall over the moment they got on the bike. A bicycle driver is the accurate way to describe a operating a bicycle. However, since the public is not familiar with this principle, I recommend using the terms "bicyclist" or "cyclist" to describe the operator and "bicycling," "cycling," or "operating" to describe the action.

Accident vs. crash/collision/incident – When describing a crash, avoid the term "accident." Accident implies there was no factor that caused the crash, which is rarely the case. Terms that are more accurate are "crash," "collision," or "incident."

Traffic – Many cyclists are negatively depicted as "impeding" traffic. Since bicycles are legal vehicles, they are traffic. There is no minimum speed limit except for controlled access highways. Encountering bicycles is no different that other slower moving traffic such as farm or construction equipment.

5 E's of Bicycles Advocacy – In bicycle advocacy, the 5 "E's" are the elements to get more people cycling.

- Engineering – Facilities such as wide outside lanes, shoulders, bike lanes, and multi-use trails/greenways that make people feel safer while cycling.
- Education – Courses such as Smart Cycling or Safety City that teach cyclists and motorists how to minimize conflicts and avoid collisions. Education also includes how to be comfortable on the bike and enjoy cycling more.
- Enforcement - Enforcement is police action against motorists to address the issue of poor driving behavior and harassment of cyclists. However, this also includes action against cyclists that do not know or are unwilling to follow the rules of the road.
- Encouragement – Encouragement includes support, events, and advertising to promote cycling. National Bike to Work Day is one such event. However, facilities such as showers, lockers, and bike parking also encourage cycling as a viable form of transportation.

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- Evaluation – The increase in cycling before & after implementing the other 4 E's is necessary to determine if the changes being made are effective at improving cycling.

Smart Cycling Classes – These seven classes form the Smart Cycling program. Smart Cycling and its predecessor Effective Cycling have been taught for over 30 years and is the only nationally recognized education program for adults. It is more than a safety class, but an education class.

- Cycling Essentials – initial adult class on vehicular cycling
- Traffic Skills 201 – advanced cycling topics
- Commuter - issues with getting to work
- Group – addresses specific issues of group cycling and etiquette
- Cycling Skills for Parents – for parents of elementary students
- Kids 2 – Cycling Essentials for middle schoolers
- Motorist – how to drive around cyclists

These facilities are very popular to increase the number of cyclists. However, studies show these facilities create problems that increase the crash risks. By increasing the number of cyclists, though, they have the benefit of increased visibility of cycling and that cyclists are to be expected. Since people feel safer they are more likely to take up cycling and therefore more interested in learning how to cycle safely.

- Greenways & multi-use trails
- Bike lanes
- Sidewalks
- Shoulders

There are many misperceptions of cycling. This list is just a few of them. They are very common in the public. John Forester characterized some of them as the "cyclist inferiority phobia." Many feel safer while the crash risks actually increase. Cyclists:

- Should get off of the road
- Should ride against traffic
  - Since pedestrians are encouraged to walk against traffic, people assume that cyclists should too. Cyclists traveling against traffic are the largest cause of bike/car collisions.
- Don't pay taxes
  - Motorists would have to pay $0.36 per gallon more in gas taxes and several hundred dollars more in vehicle fees to pay for all of the roads at the state level. Municipalities fund roads with sales taxes.
- Keep away from motor vehicles
  - People are afraid of cycling around motor vehicles but less than 20% of bike crashes involve motor vehicles.
- Don't need lights
  - CPSC required reflectors are assumed to provide enough protection to cycle at night. Since 90% of bike/car collisions involve crossing traffic, reflectors only become visible when it is too late.

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Principles of Traffic Law – There are five principles of traffic law that applies to the operation of a bicycle.

- First come first serve – No cyclist should be expect to cede their place on the roadway to a motorist, just as no motorist should have to cede their place to other vehicles.
- Slower vehicles on right – All traffic follows the principle that slower traffic should move right. However, there are numerous occasions when a cyclist should "use the full lane" for safety.
- Yield to crossing traffic – All traffic when emerging from feeder roads to larger collector and arterial roads must yield to traffic in the larger road. Yield and stop signs and traffic lights manage this principle.
- Yield when changing lanes – When changing lanes, all traffic must yield to traffic already in the lane.
- Speed positioning – Cyclists follow the principle of speed positioning. That is if a cyclist is traveling the same speed as motorists, the cyclist should use the full lane.
- Intersection positioning – Cyclists also follow the principle of intersection positioning. Two aspects are:
  - Take the right most lane going to your destination
  - On lanes with more than one destination, use the third of the lane going to your destination.

AL Law – Alabama law addresses operation of bicycles in Title 32-5A-260 to 266 and 32-5A-280 to 285. Other states have newer versions of bicycle laws compared to Alabama.

Types of Crashes & Crash Risk – Being hit by a car and being hit from behind concern most of the public. They believe that cycling is extremely dangerous.

Here is a look at how cycling stacks up against other activities:
(Fatalities per 100,000 people, all ages)

- Motor Vehicle Crash 14.9
- Poisoning 8.3
- Alcohol Related Deaths 7.2
- Falls 6.9
- Homicide by Firearms 4.2
- Fatal Bicycle Crash 0.258

Source: CDC 2006 death statistics & NHTSA 2006 fact sheet for Pedacyclists

Since the fatality rate includes those that will not follow the rules of the road, the true fatality rate for experienced cyclists is a fraction of this. Consider these totals in view of the *67 million people that cycle a total of about 15 billion hours annually*. Source: *Bicycle Use and Hazard Patterns in the United States*, G Rodgers, et al, CPSC, 1994

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Activity	Fatalities per million hours
▪ Bicycling	0.26 is actually safer than
▪ Water skiing	0.28
▪ Driving your car	0.47
▪ Snowmobiling	0.88
▪ Swimming	1.07
▪ The act of living	1.53
▪ Scuba diving	1.98
▪ Road motorcycling	8.80
▪ Skydiving	128.71

(Considering all sources of fatal accidents) Data compiled by Failure Analysis Associates, Inc.

When it comes to causes of bicycle crashes, motor vehicles are not the only threat.
Falls – 50%
Bike/Car – 17%
Bike/Bike – 17%
Bike/Ped – 8%
Bike/Animal – 8%
Source: John Forester, *Effective Cycling*.

85-90% of bicycle/car crashes involved crossing traffic. Less than 5% involve being hit from behind.
Source: University of North Carolina Highway Safety Research Center, Report # FHWA-RD-96-104

Additional info on bicycle crashes
- 500,000 emergency room visits, 10% involve motor vehicles
- 25,000 hospitalizations, 30% involve motor vehicles
- 700 fatalities, 80% involve motor vehicles

Source: Emergency Dept Data Source: CDC, WISQARS, Fatalities Data Source: *Traffic Safety Facts 2002*. NHTSA, U.S. DOT.

- 43% of bike fatalities are in non-daylight hours
- 17% of all car/bike collisions happen at night

Source: U.S. DOT NHTSA, Fatal Accident Reporting System, 2002, and tabulations from 1998-2002.

Conclusion? Cyclists are killed more at night due to failure to use legally required headlights and taillights.

- Most car/bike collisions involving child cyclists are caused by the child.
- Most car/bike collisions involving adult cyclists are caused by the motorist.
- ≅50% of collisions are caused by the cyclist, ≅50% are caused by the motorist.

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In 2008:

- 37,261 people were killed by motor vehicles
- 4,378 PEDESTRIANS died
- 716 BICYCLISTS died
- In ALABAMA 4 BICYCLISTS died in traffic in 2008…
- Four states (California, Florida, New York, and Texas) accounted for 46% of bicycle deaths. More bicyclists were killed in urban areas (69%) than in rural areas (31%).
- Nearly 13% of cyclists killed in traffic crashes were between the ages of five and 15.
- 87% of 2007 bicycle deaths were riders 16 years and older. This compares with 32% of bicycle deaths in 1975.
- More than 87% of bicycle-related deaths are male cyclists.
- 37% of cyclist fatalities involved alcohol use--either by the automobile driver or the cyclist.
- Bicycle deaths are most likely to occur in summer, at the peak times of 5-9 p.m.
  Source: NHTSA 2008 Pedacyclist statistics

Most Dangerous Facilities (based on total accident rate)

- Bike Paths
- Roads with heavy traffic
- Roads with light traffic

Sources: Chlapecka,et.al.: Schupack & Driessen; Kaplan; Cross & Fisher

Also consider these fatality numbers:

Cyclist	716
General Aviation	495
Recreational Boating	709

Source: NTSB & NHTSA 2008 Transportation Statistics

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