

Bicycle Transportation Policy Statement

Bicycles are eminently suitable for short to moderate range personal transportation, particularly in urban areas. Bicycle transportation benefits society by improving public health and reducing pollution, noise, congestion, greenhouse gasses and imported oil, to name a few issues. However, planners must understand that cyclists are drivers of vehicles, not pedestrians. Our goal is to ensure that bicycle drivers are fully integrated into the surface transportation system. This means that cyclists must have safe, direct and convenient access to every destination served by public roads. Cyclists must be “design users” of every roadway (except possibly freeways). Every street must be considered a “bicycle facility” and every lane a “bike lane”. Every “Bike Plan” must address factors other than facilities. Indeed, these other factors are of primary importance.

I -- Education

The critical ingredient is knowledge. Everyone involved in planning for bicycle transportation must understand how to operate a bicycle as a vehicle, following the standard rules of the road. Every user of bicycles and every other user of the roads must also be taught that bicycles are vehicles that belong on the road and that should be driven according to the same traffic rules. Universal *bicycle driving* education must be the primary product of any bicycle plan.

Real knowledge of cycling is quite rare in our society. Ironically, almost everyone thinks he or she knows everything about cycling. As Will Rogers once remarked: "It's not what he doesn't know that bothers me; it's what he knows for sure that just ain't so."

Ignorance of cycling is a product of our history. Bicycles were popular among adults for several years in the late 19th to early 20th century; but then for over two generations, almost no American adults used them. This led to the notion that bicycles are toys for children, rather than serious vehicles. What little “Bike Safety” instruction children receive is performed by authority figures with little experience or qualification. The result is that the misinformed teach the ignorant. Compare this to children’s swimming lessons taught by carefully trained Red Cross water safety instructors.

Fortunately, competent cycling instruction is gradually becoming available. The “BikeEd” program administered by the League of American Bicyclists is a simplified version of *Effective Cycling*, the first program to apply traffic science to the operation of bicycles. Information and a list of instructors is available on the Web at www.bikeleague.org or in Ohio at www.ohiobike.org. Police can receive similar training through the International Police Mountain Bike Association. A few states have issued John Allen’s *Street Smarts* booklet as a drivers’ manual. (In Ohio this is called *Ohio Bicycling Street Smarts*.)

Much more public training is needed. Training opportunities include: (1) Programs in schools, through Scouts and other youth groups; (2) Adding a cycling module to mandated drivers’ training programs (with relevant questions on the license exam); (3) Public service announcements and other use of the media.

II -- Planning Bicycle Facilities

Traditional bicycle planning focuses almost exclusively on building facilities to separate bicycle and motor traffic. Often these separate paths and bike lanes expose the very people they are intended to protect to new and unexpected hazards. Sidepaths (paths parallel to roadways) introduce conflicts at every intersection and even every driveway. Separate bike lanes introduce hazards because they encourage motorists to stay to the left and cyclists to stay right, even where the rules of the road require otherwise. Some bike lanes are placed in hazardous locations, such as in the “door zone” of parked cars.

Any “bike plan” must recognize that cycling and walking are very different travel modes; thus cyclists and pedestrians have different needs. Mixing pedestrians with cyclists is dangerous to both. Bicycle drivers must be expected to use roadways while pedestrians use sidewalks. A plan must also avoid

confusing facilities that may be suitable for low-speed, casual recreational use from the need for bicycle transportation, especially commuting to work and for sport (athletic or fitness) cycling.

For cyclists who understand proper bicycle driving in traffic, roads that are well designed for motor traffic are also quite suitable for bicycle traffic. Every existing street must be regarded to *already be* a bicycle facility. Improvements must be directed to making roads more pleasant, efficient, convenient, and safe for both motorists and cyclists sharing them. In many cases, little extra work need be done since adequate roads are already suitable. The main need is to check for and eliminate hazards.

Where traffic volume is heavy, increased road space (wide curb lanes) reduces tensions between road users and can improve safety. The Arizona DOT recently adopted a policy for state highways in urban areas that recommends 15 foot curb lanes to accommodate bicycle traffic. Depending on traffic speed and other factors, even 12-13 foot lanes may be adequate for sharing between bicycles and motor vehicles.

Multiple-use (shared) paths are popular for recreation and can be useful for bicycle transportation, but they must be *supplemental* to good roadways. While there may be special opportunities for path construction along some rail and stream corridors, any bike plan must avoid hazardous *sidepath* facilities (parallel to roadways).

A second use for a multi-use path is to provide a “shortcut” where automobile use is not desired. For example, there are many residential developments built on cul-de-sac roads that require a relatively long journey on high-traffic roads to reach destinations that are geographically close. A series of connecting access paths may be very desirable in such locations. However, these are special situations; the emphasis must be to integrate cyclists into the ordinary road system.

Where automobile “cut-through” traffic is banned because it is detrimental to the quality of life of residents, cyclists should be permitted because they are not part of the problem being addressed. For example, signs may be posted that say "No Right Turn - Motor Vehicles". Alternately, a bypass bicycle path around a barricade may be useful.

Wherever traffic calming techniques are employed, they should not deter bicycle use on the “calmed” streets. For example, unsafe speed bumps that cannot be avoided by cyclists and excessive use of stop signs discourage use of “calmed” streets by cyclists.

A bicycle plan must recognize that high-traffic areas are often the most important places for utilitarian cyclists to travel (in contrast to being places from which previous planners may have tried to scare away pedestrians and cyclists). Plans must include wording that requires "accommodation of cyclist travel on every street and across every intersection". Cyclists must be expected to operate as drivers, not pedestrians on wheels.

A bike plan must include bicycle parking in properly-designed fixtures that do not damage bicycles. The typical schoolyard bike rack can easily become a “wheel bender”. Parking must also be both convenient and secure from vandals. Bike lockers also protect bicycle cargo, tools and equipment.

It is imperative that people who plan cycling facilities are trained in bicycle operation. Too often the planners are landscape architects lacking knowledge of bicycle driving, who design beautiful but dangerous facilities. Bike paths which twist and wind around and under trees, with sight lines obscured by foliage and other obstacles may look pretty, but they are unsafe except at walking speed. The code of ethics for an engineer requires that the engineer practice only where he is qualified or employ qualified consultants. This requirement is rarely followed for bicycle-related engineering.

III -- Fixing Road Hazards

Because bicycles are balanced vehicles with narrow wheels and usually no suspension, they are vulnerable to road surface defects, including potholes, cracks, slots and ridges. Other problems include

parallel bar drain grates, unresponsive vehicle detectors and occasionally, inadequate signal clearance time at wide intersections.

Standards for traffic signals must specify that they will not cause unreasonable hazard or delay for cyclists (e.g. ensure bicycle-sensitive vehicle detectors at side streets and left-turn lanes). No cyclist should be expected to push a pedestrian button to change a traffic signal.

IV -- Laws and Enforcement

Motor vehicle traffic laws are generally uniform throughout the 50 states. A driver traveling from state to state need not learn a new set of laws with each border crossing. Likewise, within each state, local authorities have only limited powers to enact local ordinances. The basic set of the "rules of the road" is reasonably consistent throughout the country and certainly within any state. This set of laws allows reasonably safe and efficient travel for all citizens.

Unfortunately, uniformity of rules is not the case for bicycle traffic laws, particularly in Ohio. Part of the cause of this confusion is the misguided attitude that bicycles are toys for children, rather than vehicles used by adults. However, a related reason is that the people who make the rules are not cyclists; they do not know how to operate a bicycle properly. Because of this ignorance, some bicycle-specific traffic laws actually mandate dangerous practices.

Among the dangerous practices is required operation on sidewalks. Sidewalks have between two and eight times the crash rate of the adjacent roadway, depending on the speed of the cyclist and the density of intersections and driveways, among other factors. Another mandated dangerous practice is riding too close to the edge of the road. Riding too close to the curb encourages motorists to attempt to pass even where passing is not safe. It contributes to mistakes where motorists turn in front of cyclists, the so-called "right hook". It tends to force cyclists to ride too close to parked cars, exposing them to risk of being "doored", and to ride over and through hazards rather than around them. It also leads to novice cyclists making left turns by swerving in front of traffic from the right edge, as in a "shooting gallery".

A plan must also address equitable enforcement of traffic laws. Police must enforce against the violations that cause accidents: wrong-way riding, failure to use lights in the dark, running red lights, etc. Unfortunately, most police have not been trained in bicycle operation. They instead rely on judgment too-often based on misinformation. This results in occasional incidents where police harass law-abiding cyclists for being on the road while they ignore illegal practices that cause accidents.

Authorities must not tolerate road rage against cyclists. Police should maintain a registry for reports of incidents that are not witnessed by police. A warning phone call to the perpetrator can be effective in deterring future assaults. Police can also help by setting a good example, riding conspicuously with correct vehicular techniques. Where needed, 'undercover' police can observe motorist harassment, reporting the incident via radio. Such "sting" operations must be publicized to have effect.

Conclusions

Bicycles are very suitable for short to moderate range personal transportation, particularly in urban areas. Bicycle transportation is beneficial to society. However, planners must understand that the bicycle is a vehicle and that cyclists are not pedestrians. The best facility for accommodating cyclists is the existing roadway network. The most important aspects of a successful bicycle plan are education, equitable laws and sensible enforcement. Construction of facilities must be a minor part of any bicycle plan.

This document developed by Ohio Bicycle Federation, 19 Oct 2002

We encourage its use by state and local governments and by other organizations.

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