

Bike Path Phobia: Selling Skeptics On Urban Greenway Bike Path Safety

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Do bike paths cause crime? While enthusiasts may laugh at the suggestion, others fear dire consequences if underdeveloped areas become public trails. Urban greenway supporters may cross swords with adamant opponents in vitriolic public meetings or expensive court cases. One community fought this battle on both fronts for years.

Do greenway bike paths kill? Some people think so. 1999 marked the end of a protracted dispute over completion of a world-class urban trail in Eugene, Oregon. The bruising and expensive battle pitted a pro-bicycle faction against hostile private property owners. The city was accused of callous disregard for the safety of school children. The private property owners were labeled elitist obstructionists. Lawyers on both sides made out like bandits. The rest of us picked up the tab.

The bike path follows the Willamette River on both banks, with four pedestrian bridges linking the two sides. Although most of the path has been in place and widely used for years, there remains an unbuilt segment. A short stretch of the latter, unfortunately, runs along the riverbank behind a private high school, which has greatly enjoyed its solitude. The school fought the bike path zealously and on any fronts possible. One premise, attending to the public's fear of school-related homicides, asserted that the path would somehow generate violent crime, putting their school at great risk.

Other communities may run into similar arguments. It's not unusual for citizens to conclude that bike paths are inherently unsafe based on a flurry of path-specific incidents enhanced by alarmist media coverage. Perhaps your community can benefit from knowing in advance the cogent arguments and recommendations we wish we had presented earlier and more effectively:

1. Our greenway trail area covers 222 acres. That's the equivalent of a 7.7 by 7.7 square-block area. If you compare statistics for crime reported on the bike paths to crime reported in other areas of comparable size, it's clear that crime is generally lower on the bike path when examined based on raw geography.
2. However, crime rates are generally based on the rate of crime per 100,000 people, not on geographic area. How does this apply to a bike path? If you can orchestrate an accurate traffic count on a bike path you may be able to generate a crime rate figure, although this gets a little tricky. Crime statistics are often based on a residential population, such as the number of people who live in a city based on census data, a far more stable number than is likely to be found in non-residential settings where nobody stays more than a few minutes. Bike path "population" is different. It might be more comparable to another high-mobility area based on similar tabulations, such as by counting pedestrians and bicyclists. For example, if we can determine that 10,000 people walk past city hall, 2,000 people pass a major bike path intersection, and 6,000

people pass alongside an inner-city park monthly, these might present opportunities to develop comparable statistics: the number of violent crimes reported within a 400 foot radius, adjusted per 100,000 people. Police departments can often help generate some or all of this data to help determine crime rates.

Paradoxically, if ten people use the path, and a serious crime occurs there, the crime rate will be very high. If, on the other hand, one thousand people use the same exact path and the same crime occurs there, the crime rate will be one hundred fold lower. In other words, the more users and less crime the better the statistics. This goes beyond skewed data--if there is a constant legitimate presence, meaning that there are good people on the path at all times, then criminals will often find this an uncomfortable location for illegitimate activity. They'll look elsewhere for victims--specifically where individuals are more isolated.

An important statistic to look at is the number of injury vehicle accidents in your community. Bicycles and pedestrians on paths that are separated from car traffic are unlikely to be hit by cars. When the injury rate on such paths is compared to the number of people in your community who are injured or killed by cars at other locations, it should be clear that many lives would have been saved if people had an alternative to motorized transportation or to sharing the road with motor vehicles. Traffic fatalities, accounting for 41,967 deaths nationwide in 1997, are the leading cause of death for people aged 5-32, and are the leading explanation for deaths on-the-job. Out of that 1997 total, 5,307 victims were pedestrians and 813 were bicyclists--all of whom had encounters with motor vehicles and all of whom presumably would be alive today if they had been separated from vehicle traffic.

Medical miracles skew the picture, saving the lives of thousands who never would have recovered from similar injuries a few decades ago. Many people survive horrendous accidents but must contend with permanently debilitating injuries: 3,399,000 people were injured in traffic accidents in 1997.

Similarly, the rate of injuries sustained by teenage drivers can be compared to the rate of injuries to bicyclists. The safety comparison clearly will support bicycles as a safer option. For a high school to reject a bike path while promoting teen-age driving is an illogical point of view where student safety is a concern.

3. In response to the suggestion that bike paths bring violent crime to campuses, a representative flew to the National School Safety Center to personally review their records on every school-related violent incident in the country. Not one of those incidents had anything to do with a bike path. This observation was confirmed as accurate by NSSC staff.

4. A critic in our community cited a half-dozen homicides as evidence of bike paths being dangerous. This suggestion helped stampede state legislators into blocking the bike path project, only to be overridden by the governor. If legislators had checked the facts, as we did when we pulled the reports, they would have found that the bike path was of little or no consequence to the crimes. The bike path might have been in the same area, but so was the river, the underbrush, or in particular cases an apartment complex, a street, a school, or a shopping mall. The path had no more impact on these crimes than did the Douglas firs, ducks, or squirrels, yet all of these

other factors escaped demonization. The common denominator was not bike paths; it was isolation, under the cover of darkness, in an apartment or in thick underbrush.

DESIGNING THE SAFEST POSSIBLE GREENWAY BIKE PATH

None of this is meant to suggest that bike paths are magically immune to crime. Incidents do happen in almost every kind of environment, and bike paths are no exception. However there are measures that can be taken to enhance bike path safety.

Natural Surveillance

If offenders recognize that they can be seen, they tend to restrain themselves from overtly criminal acts. Just as important, if good people can see what's going on, they can intervene, act as witnesses, or call for help. These individuals may be living or working nearby, in which case we want to keep their fields of vision as clear as possible.

Occasionally neighbors will suggest that the path be hidden from view. This is counterproductive from a safety perspective:

* If path users, as well as neighbors, are isolated from the view of passing Good Samaritans, they will be more easily victimized.

* Thick brush or solid fences restrict natural surveillance while providing criminals with someplace to hide. This raises the risk of victimization, and, in fact, clearly has played a role in greenway area crimes. Maintaining a safety zone for at least 10 feet on each side of the bike path is a sensible step. Lower tree limbs and thick underbrush should be trimmed enough to improve visibility.

* "Banking" the trail--dropping its elevation to remove it from the visible landscape--presents the same weakness.

Lighting

Some people suggest leaving lights off at night to discourage users from walking on dangerous paths. I support the opposite approach: enhance lighting to improve natural surveillance and make users feel safer. If they feel safer, they will be more inclined to visit. The more people on the path, the safer it becomes.

Lighting needs to be consistent. If it alternates between light and dark, the human eye will have to compensate. There will be lag time during which vision is compromised. Lighting needs to include the area on each side of the path, to expose any offenders waiting for victims. Lighting should be shielded so that light goes where we need it; there's no advantage to lighting the area above the trees.

Shielding also can eliminate glare. Glare can make it harder to see, compromising natural surveillance. Directional lighting can have a similar weakness. Improperly installed, it may blind

members of the local Neighborhood Watch, making it difficult for them to provide assistance to those in need.

Natural Access Control

Because greenway trails are usually public thoroughfares, access cannot be very effectively restricted. However, bollards in the path at select locations can keep cars off the path (but make sure emergency vehicles have keys allowing access).

In some cases, potential neighbors will be fearful of trespassers. Those concerns can be addressed with fencing. Most of the properties along our greenway trail have been successful with only token border definition, such as is found with a split rail fence. This hasn't dissuaded others from feeling fearful, and in such cases, wrought iron fencing is a good way to go. Although expensive in the short run, wrought iron is ideal because:

- * It's almost entirely vandal proof,
- * It's almost entirely maintenance free, reducing long term costs,
- * It doesn't compromise natural surveillance in either direction,
- * It doesn't provide enough surface area to attract graffiti, and
- * It provides a positive image. Wire mesh or barbed wire alternatives are more likely to instill fear or project the ambiance of a prison yard.

Where costs are prohibitive, steel mesh fencing may suffice. Its greatest drawbacks are vulnerability to vandalism and general aesthetics, but otherwise, it's a reasonable option.

Territoriality

If behavior is so uncontrolled that it becomes unsafe, then the community has lost, not gained, public space. While an area may be open to the public, boosting civil behavior will serve the community well. Park rules restricting alcohol, drugs, and antisocial behaviors can help establish some clear expectations. Police or volunteers wearing Park Watch vests can provide visible support for civil behavior and their mere presence can enhance territoriality. Some communities, including ours, ban individuals from using parks if they are convicted of violating park rules or criminal laws.

Territoriality based on a strong functional designation should be incorporated into design work. A playground or water park is likely to attract families with children; a skatepark is likely to attract teenagers; community gardens will attract urban farmers. In each case, these populations will develop a sense of ownership over their piece of the park, will discourage vandalism or littering in the area, and will provide a legitimate presence to mitigate isolation for trail users. Conversely, if a particular area wants to minimize the number of trail users who linger, care should be taken to eliminate attractants, such as benches, barbecue pits, or swimming holes. Six-

foot benches may be attractive as sleeping platforms; three or four foot benches are less likely to promote this function. Environmental design choices should promote the desired activity. Areas that have been clearly ignored or neglected--particularly if they provide areas to hide in--are attractive for illicit behavior.

One final point on territoriality: include anxious neighbors in the planning process. This may include going door to door or holding small group discussions, town hall meetings, or "charettes," (apparently named for the roasting of park officials that often occurs there!) If they are truly involved in the design aspect of the project, they are more likely to assume some ownership and investment in seeing it go forward. If they are ignored for too long at the front end, some of them may assume the worst, in which case by the time you've scheduled a charette, you can expect them to show up with flaming torches.

Signs

Good, vandal-resistant signs can provide critical information for preventing problems as well as for rescuing the lost or injured. All path users, including the elderly, children, tourists, and immigrants should be able to easily understand where they are on the path. Intersections should be marked with arrows pointing toward rest rooms, emergency telephones, emergency assistance, or cross streets. Other signs can assist with environmental awareness, identifying endangered species or tree varieties. Multilingual warnings about toxic plants, quicksand, deep water, or dangerous wildlife can help prevent a variety of misadventures!

Clear address markings, such as "100 East Bank Trail," can be beneficial for a number of reasons:

- * Cell phone users, as well as persons who leave the path to call for assistance for third parties, can direct emergency workers to specific locations, as opposed to "past the hollow log."
- * Police can more precisely compile crime statistics, pinpointing problem areas on the path as opposed to lumping them all together into a "somewhere on the bike path" category.
- * Visitors can use address markings to measure the length of travel for recreational hikes or competitive runs, as well as to arrange to meet friends.
- * Textures, icons, and colors, in addition to glow-in-the-dark words and numbers, can broaden the usefulness of address markers to serve illiterate and preliterate populations. A small child can be told to always stay on the yellow brick road or to only use the path where the signs have pictures of birds, for example. If lost, they can be told that it's safest to wait at the next place they see a picture of ducks in a nest, where there should be a play area as well.

Greenway trails, like public schools, can be unfairly labeled as violent locations. Diligent research can show otherwise, and preventive design work can improve safety. A number of studies (see sidebar) have now shown that urban greenway trails do not increase crime and, in fact, are commonly regarded as improvements by adjacent property owners. Comparisons of mugging, assault, rape, and murder make it quite clear that rail-trail crime rates are almost non-

existent on a per capita comparison to other areas. Making this data available to nervous future neighbors can help ease tensions and demonstrate your willingness to communicate. Provide them with your police and parks department phone numbers, and perhaps cell phones and binoculars, and you may win them over as valuable allies in keeping the trail safe.

Bitter battles over rails-to-trails or other urban greenway paths can absorb hundreds of thousands of dollars in litigation and months or years of your time. We reached an agreement in our case, but spent a lot of tax dollars doing so. Widely disseminating clear data at the front end about risks and benefits may help your community avoid paying such a hefty price. Get your facts straight beforehand and sailing may be reasonably smooth. Neglect your homework and you may find yourself up the creek without a paddle--and without a path on which to walk back!

1. For visitors who prefer a slower paced, more natural experience, this section of the path is paralleled by a dirt trail.
2. This sturdy water fountain is designed to allow path users to remove themselves from the path while drinking.
3. The bridge, the only one of its kind in the United States, is designed solely for the use of pedestrians and bicyclists.
4. Properties adjacent to the path at this location effectively establish their border definition with landscaping.
5. Benches, bike racks, stairs, and other amenities allow Valley River Inn guests to take full advantage of the path.
6. The sun sits in Alton Baker Park, adjacent to a guide to Eugene's scale model solar system, thanks to the work and inspiration of local educator Jack Van Dusen. He originally painted the planets on the trail in 1989.
7. Newly designed signs include a distinctive icon for each section of the path, with easily understood mileage markers.
8. A major concern in trail design is finding the right mix between the wild ambiance and the need for margins of safety.
9. Clear signs are important, particularly at all intersections.
10. This broad bank of the Willamette River is in popular destination for path users, where they can feed the ducks, wade in the river, and bask in the sun.
11. A neighborhood group was the driving force behind the construction of this playground within the greenway, adjacent to their homes.

12. A curved stairwell provides pedestrians with access onto the bridge that avoids conflict with bicyclists on the ramp.

13. Every bridge in the system incorporates benches into its design.

14. These rose gardens are separated from the path by a well-tended rose trellis. The trail surface is a fine gravel-mix, good for walkers while encouraging bicyclists to stay on the main path.

15. Underpasses often pose a risk of isolation for path users. This design manages to remain fairly open. A protective railing mitigates the steep drop in elevation, while wooden boards provide some protection in the event of mishaps.

16. This inn was initially wary of the plan for a riverbank trail. Now it promotes it in marketing literature as one of the great amenities they have to offer.

17. This office complex successfully establishes border definition and territoriality with a change in elevation and careful maintenance.

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In addition to laying to rest the phobias surrounding bike path development in his article on page 62, Schneider has given presentations to parks, forest management, crime prevention and planning associations, schools, government and citizen groups, architecture departments, and private businesses. Tod is married and has "about three children at any one time." He can be reached at tod@pond.net.

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