

## Bicycle Co-ops and Environmental Education

Changing our current transportation system to be more dependent on biking, walking, and mass transit will require many efforts to work together. Transportation policy currently favors automobiles on the road, economic considerations make automobiles feasible, and cultural norms make cycling something that is considered abnormal. Andy Dyson, the executive director of Neighborhood Bike Works, feels that we can have all the ambitious bike-friendly engineering schemes and policy goals we want, but the ultimate goal is simple: for biking to be viewed as normal, which means that it needs to be viewed as safe (Thompson). Of course better bicycle infrastructure will help in changing this public perception, but bicycle education is crucial part of shifting deeply entrenched cultural norms.

Utilitarian biking, which means biking for practical reasons rather than for sport, has increased significantly over the past few decades. One report estimates that during the 1980's and 1990's bicycle trips in the U.S. doubled. While this is encouraging, it only brings the percentage of urban trips travelled by bike to just under one percent. There is plenty of potential for improvement, as forty eight percent of all trips taken in the U.S. are less than three miles, which is well within the distance that is feasible to bike (Pucher). This is a stark contrast to Germany, Switzerland and Denmark, in which at least ten percent of all trips are taken by bike. The Netherlands is even more impressive, having thirty percent of all trips taken by bike. In the U.S. the rate of utilitarian bicycle use is heavily correlated with socioeconomic status (Blickstein). People who earn less than \$15,000 a year are three times more likely to commute using a bike than someone who makes more than \$80,000 a year (Pucher). This result is obviously caused by the fact that biking is cheaper than owning and maintaining a car, but it also points to an attitude towards bicycles as a second rate form of transportation. The European countries mentioned above are some of the most affluent in the world, yet they have much higher cycling rates than we do. Most motorists in the U.S. and even some police officers are unaware that vehicle codes in all states grant cyclists the right to be on most roads. I am well aware of this fact, after commuting to work in Tucson for a year with angry motorists yelling at me to get off the road.

These angry motorists serve to illustrate the point that more public education is needed about the laws of the road, but also about the health and environmental benefits of biking. A large network of bicycle co-ops has sprung up in the U.S. since the mid-1980's (BICAS website). These organizations are becoming ubiquitous around the country, but I will focus on two specifically: Neighborhood Bike Works (NBW) here in Philadelphia and an organization called BICAS in Tucson, Arizona. NBW is located on the

edge of Penn's campus on Locust Walk, renting space from St. Mary's Church, and is charged with the mission of "increasing opportunities for youth through bicycling (Seyfert)." NBW is not directly a bicycle advocacy group, though their activities do indirectly advocate for cyclists simply by making them visible in the community. There are other groups that specialize in bicycle advocacy, such as the Bicycle Coalition of Greater Philadelphia (Bevacqua). NBW has non-profit status as a 501(c)3 and will save bicycles from entering the waste stream by accepting bicycle donations and taking them from landfills. The main focus of the organization is to reach out to kids, ages 8 to 18, living in Philadelphia and to develop their interest in bicycles by teaching them how to build and maintain them. The organization also provides education on safety, health benefits, and the environmentally-friendly aspects of cycling. This goal is accomplished through two main programs, Earn a Bike and the Summer Cycling Day Camp. There is a small fee for the summer camp, but the Earn a Bike program is completely free for the kids.



[http://www.neighborhoodbikeworks.org/programs/pictures\\_2.htm](http://www.neighborhoodbikeworks.org/programs/pictures_2.htm)

The Earn a Bike program accomplishes just what its name implies. The kids go through fourteen two hour after school sessions. Ten of these sessions deal with proper bike maintenance. Each kid picks out a bike from the stash of bikes that have been rescued from the landfill or donated by individuals. The kids will work on building up their bike and learning how it works during those ten sessions. The other sessions are divided between bike handling, safety, riding in traffic, and learning about the health and environmental benefits of cycling. Each student must attend at least twenty hours of sessions, pass their safety lessons, and attend a graduation ceremony to earn their bike. At graduation the kids also receive a helmet, lock, and some basic bike tools. The summer camp is set up in the same way, except in a more intensive fashion over a shorter span of time (NBW website). Each year there are about 350

new youth that go through the Earn a Bike and summer camp programs. Since NBW's founding in 1999 more than 5,000 bikes have been donated to this cause, saving over 100 tons of scrap metal from entering the landfills (NBW website). According to David Bevacqua, the program coordinator at NBW, in 2008 450 youth participated in one of NBW's programs, totaling over 17,000 hours of hours of youth work. In 2000 and 2001 the organization salvaged 360 bicycles from the Lower Merion Solid Waste Transfer Station and was recognized by the PA Department of Environmental Protection with a Waste Watcher award in 2002 for furthering Pennsylvania's goal of 35% waste reduction by 2003 (PADEP). Additionally, in 2008 the organization won the Philadelphia Sustainability Award for reusing material from the waste stream (Seyfert).

NBW also puts on a bicycling fitness program for youth called RIDE Fitness. This free program involves sixteen two hour sessions with eight to twelve people learning exercise techniques on stationary bikes. There is an Entrepreneur Group that fixes up bikes and then learns how to sell them individually, or by posting ads on eBay and selling them. The kids in this group wrote a grant recently and received funds that are now being used to purchase supplies for NBW (NBW website). Social workers in the area will often refer children to NBW to do volunteer work as a way to provide some structure in a troubled child's life. The District Attorney's Office has also been known to send youth who are first time, non-violent offenders to NBW to perform community service hours. This program has a high rate of success and eighty percent of first offenders who take this route have not entered the legal system again (Bevacqua).

NBW relies heavily on grants and government funding to meet its \$200,000 annual budget, though these sources have been drying up recently due to the economic downturn (Pompilio). The organization also earns revenue through fees and donations for their adult programs. A program called the Bike Church is a space for adults to bring their bikes to learn to do their own bike repairs. There is no charge, though participants are asked for donations or to volunteer for NBW. Other more formal classes that teach bicycle repair and Urban Survival Biking require a fee from participants (NBW website). NBW also makes money by running bike valet parking services at public events for a fee and through their Bike Parts Art Show. This art show is an annual event where local artists will take bike parts from NBW that are unusable and make art out of them. The art can be sculptures, jewelry, paintings, or anything else that is creative. The pieces are auctioned off and will sell for anything between \$30 and \$1,000. The proceeds contribute about \$10,000 to NBW's budget (Pompilio).



<http://www.flickr.com/>

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NBW has become an establishment in Philadelphia and considers its biggest success reaching so many kids in the surrounding communities. There are already a couple branches in other communities, but Andy Dyson would like to see further expansion into north Philadelphia. Bevacqua is happy with the accomplishments of the organization, but would like to see the educational program become more rigorous in teaching the kids about bike mechanics and the environmental and health benefits of cycling. He would also like to see an increase in NBW's ability to serve children with special needs, either physical or emotional. NBW specifically describes itself as a development program and not a prevention program. The goal is to develop and nourish an interest in cycling in youth to develop them as people. Seeing a project through from beginning to end, developing self confidence, and working on something constructive will help the youth in the future as they enter the working world. As a nice side benefit, the kids are kept off the streets and out of trouble after school.

There is a different bike co-op in Tucson, AZ called BICAS, which stands for Bicycle Inter-Community Action and Salvage. It is very similar to NBW in that it diverts bikes from the waste stream and teaches people in the community to fix them up for themselves. BICAS aims to be open to people from all walks of life, though there are certain groups that tend to take advantage of their services. The organization started out in 1983 as the Tucson branch of Bikes Not Bombs, which is an organization that donates used bikes to people in developing countries and then teaches them how to maintain and repair the bikes. The Tucson chapter developed in 1989 into another group called Bootstraps to Share,

which employed homeless people in Tucson to fix up bikes and weld bike trailers to be used in developing countries. The mission slowly evolved into its current conception as BICAS (BICAS website).

BICAS does have some youth programs, but has a wider focus than NBW. The main program at BICAS is the Work-Trade program, which is a way for people to earn credits to buy bikes and parts through work. People can come in and volunteer at the shop by organizing bike parts, cleaning up the shop, or dismantling old bikes. Each hour of volunteer work translates into \$8 of shop credit. Ten hours of work will earn a bike as-is from the “bike purgatory,” which is where donated bikes are stored, and unlimited shop time to fix up the bike. Used parts are very cheap, costing between \$1 and \$5. Over 5,100 hours of work are traded for bikes and services each year, with 5,000 unique people visiting BICAS per year (BICAS website). The Work-Trade program is a great way for low income people to obtain a bike and to learn how to maintain it. As Troy Neiman, a staff worker for BICAS, puts it, “No money, No problem. All it will cost you is a little time helping us out around the shop.” People can also pay \$80 for an eight session class in which participants learn how to completely disassemble a bike and then rebuild it like new.

As an organization BICAS does not participate in bicycle activism to change specific policies in Tucson, though as individuals the staff participates in these activities. BICAS does, however, coordinate events designed to make cycling more normal and visible. I was able to participate in one of their Tuesday night bike rides, in which a large group (up to 400) of cyclists gather on the campus of the University of Arizona and then takes up a lane of traffic to ride through the city for about an hour (Neiman). Many of the bikes are customized in unique ways, which makes the ride as much as an art show as a bike ride. It is debatable whether these group rides help the cause of bicycles as a legitimate presence on the road, since there are plenty of motorists who become bitter at cyclists for taking up a lane of traffic, but it certainly is a way for cyclists to be visible and to have a good time. Some motorists think the nighttime bike rides are fun and cheer the group from their cars, but others view it as an obnoxious affront on territory that, in their opinion, is specifically built for cars. Another way that BICAS will raise awareness for bikes is by installing “ghost bikes” where bicycle fatalities have occurred. Ghost bikes are bikes that are painted white and have a plaque with the name of the victim attached to the frame. The wheels are partially submerged in some buried cement in order to make the ghost bike a permanent memorial (Renzi). BICAS will also teach classes on making art out of bike parts. They actually have a permanent position on staff for a bike art coordinator. This bike art is a fairly common sight in public places, such as in the middle of roundabouts in the city. BICAS also takes part in events

such as National Park(ing) Day, in which they will inhabit a parking space and turn it into a temporary park to advocate for more pedestrian-friendly streets (BICAS website).



<http://www.tucsonweekly.com/tucson/in-memory-of/Content?oid=1092133>

Though these organizations have different focuses, there are many common threads that run through both. This is a great example of when social issues intersect with environmental issues. There is a great synergy that happens when old bikes are kept out of the landfills, low income kids or adults learn valuable bicycle skills, and more people buy into a more sustainable mode of transportation. Though utilitarian biking has gained some momentum in the U.S. the groups that run these bike co-ops are still considered by many to be radical. After spending some time around BICAS in Tucson, there are indeed some politically motivated undertones to the organization, which only appeal to certain sections of society. Troy Neiman agrees, saying that “bike collectives around the country and the world tend to be pretty radical organizations that offer a unique divergence from the typical societal norm.” Both BICAS and NBW have shop hours set aside specifically for women and transgendered people, out of recognition that bike repair mechanics are predominately male, which can be intimidating for some women. Bikes Not Bombs, the precursor to BICAS, was built on pacifist ideas. Bikes have become a vehicle for social justice, representing a way to be independently mobile without the need to rely on cars or the money it takes to pay for cars. Neiman says that he has “noticed an increase in cycling due to rising gas prices and bad economy. A lot more folks are getting pushed into riding simply because of being priced out of their cars.”

Hopefully through emphasis on the cost-saving, health, and environmental benefits of bicycling these organizations will be able to involve enough people at the grassroots level in biking and help push utilitarian cycling into the realm of normalcy in the eyes of the general public. In 1995 fifty seven percent of all bike trips in the U.S. were for recreational purposes and only nine percent for commuting .

The larger the number of cyclists on the road, the safer cycling will be, as motorists learn to respect their presence on the road. Motorists in the Netherlands are very respectful of cyclists since there are so many of them and the motorists are likely to be cyclists themselves (Pucher). Progress is being made, as seen by Mayor Nutter's decision to hire Philadelphia's first bicycle and pedestrian coordinator (Thompson). With the political will, funding, financial incentives, and grassroots efforts I am optimistic that the image of the utilitarian cyclist will soon change from a societal renegade to that as normal as a motorist on the road.

## Works Cited

- Bevacqua, David. "David Bevacqua Interview." Personal interview. 8 Nov. 2009.
- Bicycle Inter-Community Action and Salvage*. BICAS. Web. <<http://bicas.org/>>.
- Blickstein, Susan, and Susan Hanson. "Critical mass: forging a politics of sustainable mobility in the information age." *Transportation* 28.4 (2001): 347-62. *SpringerLink*. Springer Netherlands, 28 Oct. 2004. Web. <<http://www.springerlink.com/content/x086566221k47511/>>.
- CBS3. "Brotherly Love: Neighborhood Bike Works." *Brotherly Love*. CBS Broadcasting, Inc., 22 July 2009. Web. <<http://cbs3.com/brotherlylove/Brotherly.Love.Dave.2.1096386.html>>.
- Neighborhood Bike Works*. Dir. Bunker Seyfert. *Bunkerfilms.com*. 27 July 2009. Web.
- Neighborhood Bike Works Philadelphia*. Web. <<http://www.neighborhoodbikeworks.org/about/index.html>>.
- Neiman, Troy. "Troy Neiman Interview." E-mail interview. 6 Nov. 2009.
- PA Department of Environmental Protection. *PADEP Names Local Group a 2002 Waste Watcher*. 7 June 2002. Web. <[http://www.neighborhoodbikeworks.org/press/Waste\\_watcher\\_award.html](http://www.neighborhoodbikeworks.org/press/Waste_watcher_award.html)>.
- Pompilio, Natalie. "The Art of Cycling." *Philadelphia Inquirer*. Philly Online, LLC., 11 Sept. 2009. Web. <[http://www.philly.com/inquirer/weekend/20090911\\_The\\_art\\_of\\_cycling.html](http://www.philly.com/inquirer/weekend/20090911_The_art_of_cycling.html)>.
- Pucher, John, Charles Komanoff, and Paul Schimek. "Bicycling Renaissance in North America?: Recent trends and alternative policies to promote bicycling." *Transportation Research Part A: Policy and Practice* 33.7-8 (1999): 625-54. *ScienceDirect*. Elsevier Science Ltd., 17 Aug. 1999. Web.
- Renzi, Steve. "Remembering the Fallen." *Explorer*. The Explorer Newspaper, 15 July 2009. Web. <[http://www.explorernews.com/articles/2009/07/15/el\\_sol/doc4a5d09eac4726305297888.prt](http://www.explorernews.com/articles/2009/07/15/el_sol/doc4a5d09eac4726305297888.prt)>.
- Thompson, Isaiah. "Biketopia: How to make Philly a cyclist's paradise." *Philadelphia City Paper*. 3 June 2009. Web. <<http://citypaper.net/articles/2009/06/04/bicycle-city-philadelphia>>.