



Biking as an Alternative Mode of Transportation

Roslynn Brain & Jared Stapp
Department of Environment & Society

Why Bike?

With this fact sheet, you can overcome common barriers keeping you from becoming your own mode of transportation, and bettering your life because of it. According to the U.S. Census Bureau, “creating new infrastructure and altering existing infrastructure to accommodate bicycling and walking has become a goal for several metropolitan planning organizations across the United States” (McKenzie & Rapino, 2011). Now is a great time to take advantage of this shifting focus away from vehicle commuting and delve into a healthier and cheaper mode of transportation: Cycling.

Convenience

Have you ever felt frustrated driving in circles to find an available parking space while watching time, gas, and patience needlessly slip away? When cycling to your destination, you will discover that you need not worry about securing a parking space and you will be able to park closer to your destination than if you drove.

Over 75% of U.S. workers drive alone to work, take an average of 25 minutes to get there, and spend much of their time stopped in traffic (McKenzie & Rapino, 2011). Depending on the distance of *your* commute, in traveling via bicycle, you could save time and money by combining commuting and exercise, finding non-congested routes via bike lanes or trails, and in not having to search and pay for parking.

Economics

A bicycle costs \$50-200 to maintain annually if ridden 2,000 annual miles, averaging 5-15¢ per mile (VTPI, 2011). In driving a vehicle, however, we accrue operating costs (gas, maintenance



Biking is increasing in popularity among students and employees across Utah.

and tires) of approximately 19.64 cents per mile (AAA, 2012). With an average total daily driving distance in the U.S. of 29 miles, or just over 50 minutes behind the wheel, this works out to \$2,078.89 to operate a vehicle each year; more than 40 times more expensive than operating a bicycle. Note that this estimate does not include cost of the vehicle itself, or insurance.

Environment

Transportation accounts for 27% of our nation’s total greenhouse gas emissions (EPA, 2010). This is the second highest source of greenhouse gas emissions in the nation, following the electric power industry’s 35% (EPA, 2010).

Cycling to school and/or work every day can be viewed as one’s personal contribution to combating these statistics by reducing greenhouse gas emissions and consuming less non-renewable resources. Each gallon of gasoline in our cars emits 8,887 grams (almost 20 pounds of CO₂) into the atmosphere, whereas riding a bicycle produces none aside from our breath (note that you still breathe while driving!) (EPA, 2011).

Health

When you arrive at your destination on a bicycle, it is likely that you will be feeling energized with a joyful, more positive perspective. Also, bicycling allows for an intimate connection with your community and surrounding natural environment, where you can directly see, hear, feel, smell, and even taste the environment around you.

Riding a bike offers the following health benefits (Alliance for Biking and Walking, 2012):

Increased...

- Cardiovascular fitness
- Strength
- Balance and flexibility
- Endurance and stamina
- Calories burned
- Cognition
- Energy

Relevance in Utah

Air quality is a chief environmental concern for Utah (Malek et al., 2006). Polluted air is exacerbated by winter inversions, where trapped pollutants contribute to several health hazards, such as: Decreased life expectancy, cancer, cardiac arrest, and central nervous system problems such as systemic inflammation (Stanek et al., 2010). An example of this inversion affect can be seen in Logan, Utah, where during inversion episodes, air pollution concentrations exceed the EPA National Ambient Air Quality Standards (NAAQS) (Malek et al., 2006). Reducing motorized vehicle emissions by engaging in alternative modes of transportation can improve health and quality of life in our state.



Cyclists can find fun alternative routes when running errands or for their daily commute.



USU students enjoy the convenience of biking across campus, not to mention the free parking!

How to Get Started

There are two primary things you will need to do before making the switch to biking as your primary mode of transportation: Figure out what kind of bike to get, and decide which route would be the most bike and time friendly for your daily commute.

Hitching a ride

A great way for anyone to get started biking is to pull that dusty, abandoned bike out of the garage and take it in for a tune up. If all you have in the garage is a gas-burning vehicle, you may want to consider local thrift stores, online classifieds, newspaper ads, local bike shops, or your local sporting goods store. Bikes are frequently available at an inexpensive price.

If you plan on purchasing a bike, whether from the thrift store or not, make sure you do your research beforehand. Prior to hitting the bike market, ask yourself these three questions to learn what type of bike you should be looking for.

- What type of riding am I looking to do?
- How tall am I?
- How much do I want to spend?

Local cycling shops can be helpful in determining the most appropriate bicycle for you.

Mapping out routes

In your spare time, you may want to map out and ride to your frequent destinations and record approximate travel time frames for each. This will help you plan your biking days accordingly.



Intimidated by that big hill enroute to your destination? Bike to your local transit station and take the bus.

Overcoming Common Barriers

Don't sweat the small stuff! These tips and tricks will get you over the mental hills that may be keeping you from putting on a helmet and hitting the road.

Bad Weather

You may be surprised to learn that biking in the elements is not as much of a challenge as you might think. Installing fenders on your bicycle is a great way to protect against rain and slush, and appropriate clothing choices can carry you through the seasons. Also, you can purchase special bike tires for winter if you are concerned about snow and ice.

Hills

Hills...the burden of every biker. Don't be intimidated; hills can be easily conquered with a little patience, perseverance, and the help of a low gear setting. Not to mention, the toned quadriceps you get will reward you for your dedication! If you ultimately decide that hills are not for you, an alternative option would be to bike to a public transit station, and catch an uphill ride from there.

Sweat

No one likes to arrive at his or her destination sweaty. To combat this, wear appropriate clothing, bring a "work shirt" to change into, stay hydrated, walk your bike up steep hills, and bike slower if possible. In addition, if you feel the need, get familiar with your school and/or workplace shower systems.

Safety

When cycling, best practices include: Wearing a helmet, signaling with your arm when turning or changing lanes, not riding on sidewalks, stopping for red lights and stop signs, rolling your right pant leg up so it doesn't get caught in or dirtied by the chain, biking on the right-hand side of your lane, and occupying a lane at a red light or stop sign. Keep in mind that bicycles are considered vehicles, so check local and state policy and laws to learn the rules of the road.

Maintaining Your Bike Habit

Those who cycle frequently should have their bike tuned every few weeks to insure proper air pressure in tires, grease on chains, proper brake function, etc.

This can be accomplished by taking your bike to a bike shop, or you may decide to the ropes yourself through the help of professionals or online sources. Some universities, such as Utah State University, offer free bike maintenance tutoring and services. For more information, visit Aggie Blue Bikes at <http://usu.edu/abb/>.



Some bike rental services, such as Aggie Blue Bikes at USU, offer free tools, service, and checkouts to students.

Keeping the Fun Alive

Switching up your bike routes can provide relief from your regular routine. New routes provide diverse scenery and atmosphere. Try to be aware of all the interesting things around you as you bike through your neighborhood. The seasons and weather will always keep it interesting!

Sources

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