

# Bicycle Theft Awareness and Prevention

Presented By



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**POLICE**  
DEPARTMENT

# Bicycle Theft Awareness and Prevention

- The bicycle has become increasingly popular as a healthier and environmentally friendlier mode of transport.
- In the United States, between 1992 and 2006, bicycle sales have increased from 15.3 million to 18.2 million per year (an increase of roughly 20 percent)

# Bicycle Theft Awareness and Prevention

- With the increase in bicycle sales and the increase in bicycle usage, we have witnessed another increase –
- An increase in **BICYCLE THEFTS**



# Bicycle Theft Data

- According to the FBI, in 2004, bicycle theft accounted for 3.6 percent of all incidents of theft, which equates to 250,000 bicycles stolen each year.
- According to an estimate from the National Crime Victimization Survey, in 2006 the number of incidents of theft-of or theft-from bicycles was more like 1.3 million (just under 2.5 incidents per minute).
- This suggests that for every crime reported, another four (or more) may have occurred.

# Bicycle Theft Awareness and Prevention

- Offenders use a number of techniques to steal bicycles.
- The technique an offender uses will often be directly linked to the cyclist's locking practices (i.e., the type of lock the cyclist uses and the way he or she applies it).

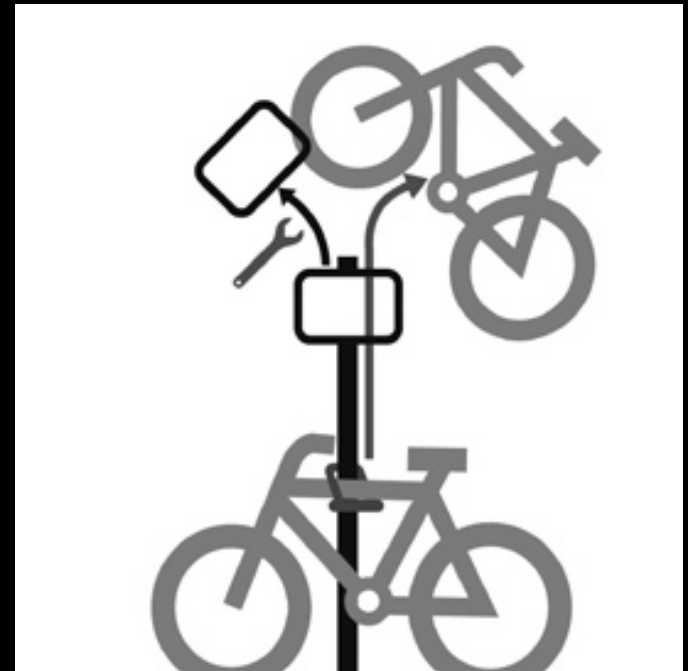
# Bicycle Theft Awareness and Prevention



- When the bike is unlocked or poorly secured, little skill is required.
- Some common perpetrator techniques used to steal locked bikes are described here.

# Techniques - Lifting

- Thieves lift the bike and lock over the top of the post to which the bike is secured. If it is a signpost, then the thieves may remove the sign to lift the bicycle clear.
- Sometimes the post itself is not anchored securely and can be lifted clear of the bike and the lock



# Techniques - Levering

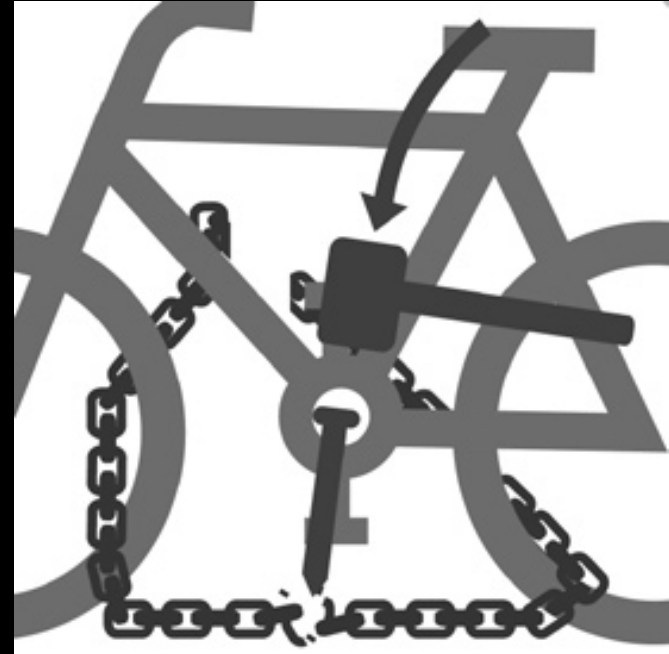


- Thieves will use the gap between the stand and the bike left by a loosely fitted lock to insert tools such as jacks or bars to lever the lock apart.
- Thieves will even use the bike frame itself as a lever by rotating it against the stand or other stationary object to which it is locked.
- Either the bike or the lock will break. The thief doesn't mind which—after all, it's not his or her bike!

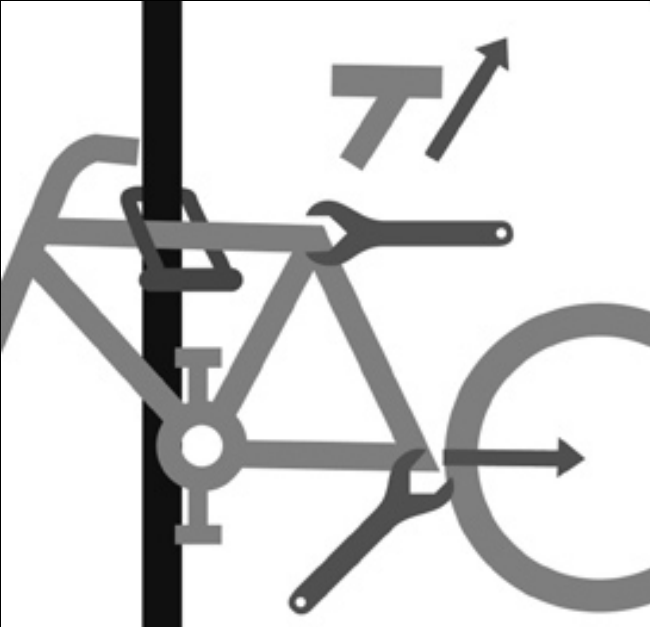


# Techniques - Striking

- If a cyclist locks a bicycle leaving the chain or lock touching the ground, thieves may use a hammer and chisel to split the securing chain or lock.



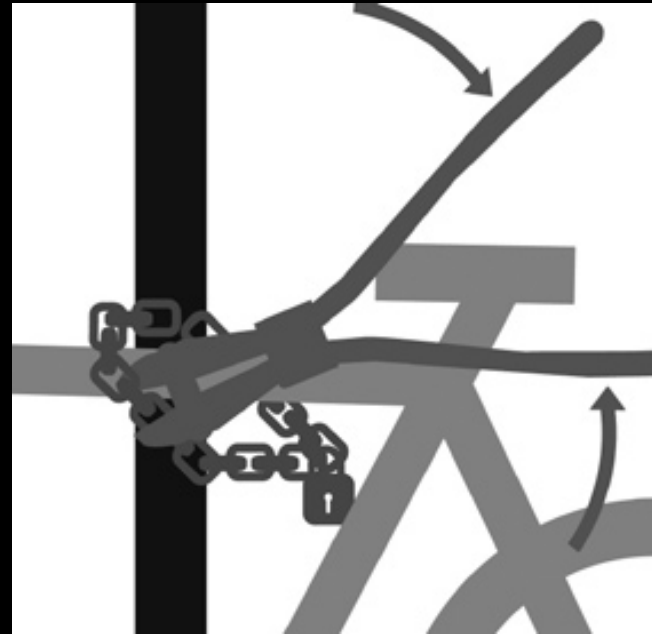
# Technique - Unbolting



- Thieves know how to undo bolts and quick-release mechanisms.
- If a cyclist locks a bike by the wheel alone, then it may be all that is left when the cyclist returns.
- If a cyclist locks only the frame, then a thief may remove a wheel or wheels.
- In this case, if a cyclist leaves a wheel-less bike with the intent of picking it up later, then the thief may return before the cyclist returns and remove the rest of the bike.

# Techniques - Cutting

- Thieves are known to use tin snips, bolt cutters, hacksaws, and angle grinders to cut their way through locks and chains to steal bicycles.



# Techniques - Picking



- For locks requiring keys, thieves can insert tools into the keyhole itself and pick the lock open.

# Bicycle Theft Awareness and Prevention

- A consistent finding is that most stolen bicycles, regardless of theft location, are either not locked at all or are secured using a lock that requires little force to break or remove.
- While it has been proposed that all locks can be overcome if the opportunity is present and the offender is suitably equipped, it is clear that inadequate locking practices will create a situation conducive for the offender, and that observing more-secure locking practices should, at the very least, reduce opportunistic crime.

# Bicycle Theft Awareness and Prevention

- Bicycle theft is a good example of an opportunistic crime.
- Some of the reasons for this are encapsulated by the acronym **CRAVED**, which outlines why bicycles are attractive targets for theft.

# CRAVED

- **C**oncealable
- **R**emovable
- **A**vailable
- **V**aluable
- **E**njoyable
- **D**isposable

# Concealable

- Most thieves will look inconspicuous riding away on a stolen bicycle, which effectively makes the crime concealable. In addition, offenders steal many bikes from public places where passersby conceal the theft .



# Removable

- If poorly locked, bicycles are easy to take and ride away. In other cases, quick-release features such as wheels or seat posts that are not appropriately secured require little effort to steal.

# Available

- Increased bicycle ownership and use provides more opportunities for theft and a greater demand for bicycles and replacement parts. In addition, poor locking practices by cyclists ensure a constant supply of available targets.

# Valuable

- Bicycles are not cheap. The average cost for a mountain bike ranges from \$330 to \$400, with some costing thousands of dollars. In one study, it was found that police were less likely to recover expensive bikes than to recover cheaper ones.

# Enjoyable

- Many thieves steal a bike simply because they want one. This may be to replace one that was stolen from them, or just for pleasure. Analysis of one survey data showed that the risk of theft for “sporty” bicycles such as mountain bikes or BMXs was twice as high as that for “ordinary” bicycles.

# Disposable

- Thieves can easily sell stolen bikes, either “whole” or “piecemeal,” to a fence or through other outlets (such as online auctions).
- Regrettably little is known about the market for stolen bicycles, but the proof-of-ownership problem suggests few bicycles could easily be identified as stolen, which aids the sale of stolen bikes and reduces the risk of apprehension and identification.
- Moreover, offenders can disguise stolen bicycles by painting different parts, altering components, or scratching any property-marking etchings, making positive identification harder.

# Theft Deterrence

- So far we have discussed the data on bike theft, the techniques used and the reasons bicycles are stolen. Now let's look at steps that you can take to deter theft of your bike.
- Remember though, no method is 100% reliable in every situation.

# Theft Deterrence

- The most obvious means of deterrence is to lock your bike up with a suitable lock.
- Currently, a wide range of bicycle locks are available, each differing in (for example) material, intended use, and mechanism by which they are supposed to prevent bicycle theft.

# Types of Bicycle Locks

- **D or U lock**—a D- or U-shaped steel bar that is closed at one end, with a removable section that a key can lock. The lock's strength depends on materials and quality. Such locks can be vulnerable to levering but are resistant to cutting.





# Types of Bicycle Locks



- **Cable or coil lock** - a many-stranded steel cable enclosed in a plastic casing, with an integrated lock or looped end through which the user secures the shank of an additional lock. The cables come in various thicknesses. These locks are vulnerable to cutting, and thieves can easily sever them using available hand tools.

# Types of Bicycle Locks

- **Chain lock** - a length of chain (often fabric- or plastic-coated) combined with a securing padlock or mini-D lock. Chains can be very robust, though the lock's strength depends on materials and quality. These locks are vulnerable to striking if applied incorrectly. Poor-quality chain locks are also vulnerable to cutting with bolt croppers and pneumatic cutting tools.



# Types of Bicycle Locks

- **Armored cable lock** - a steel cable core covered with a series of rotating metal tube sections to protect the cable against cutting. Armored cable locks usually have an integrated locking device. Armored cables can be very robust, though the lock's strength depends on materials and quality. These locks can be vulnerable to cutting with bolt croppers and pneumatic cutting tools.



# Tips for Theft Deterrence

- Always lock your bike.
- Lock to a fixed, immovable object like a parking meter or permanent bike rack. Be careful not to lock to items that can be easily cut, broken or removed. Be careful that your bike cannot be lifted over the top of the object to which it is locked.
- Lock in a visible and well-lit area.

# Tips for Theft Deterrence

- Lock in a location where there are other bikes. The chances are better that there will be a bike with a less secure lock than yours. Thieves will usually go for the easiest target.
- When using a U-lock, position your bike frame and wheels so that you fill or take up as much of the open space within the U-portion of the lock as possible. The tighter the lock up, the harder it is for a thief to use tools to attack your lock.

# Tips for Theft Deterrence

- Always position a U-lock so that the keyway is facing down towards the ground. Don't position the lock close to the ground. This makes it easier for a thief to attack it.
- Always secure your components and accessories, especially quick-release components, with a secondary cable lock.

# Tips for Theft Deterrence

- Don't lock your bike to itself (i.e. put the lock through the wheel and frame only). Lock it to something. Otherwise, it can be easily lifted and carried away.
- Don't lock in the same location all the time. A thief may notice the pattern and target your bike.
- Don't lock to anything posted illegal. Check with area law enforcement agencies for local bike parking regulations.

# Tips for Theft Deterrence

- Always check your lock before leaving your bike to be sure you have secured it properly.
- For the greatest theft deterrence, use two locks such as a U-lock and a locking cable. The longer it takes a thief to get through your bike security, the less likely your bike will be stolen.



# Tips for Theft Deterrence

- If your bike is expensive enough to have a serial number, write it down now.
- Whether your bike has its own serial number, add your own numbers to it as well. Engrave your own ID number into two places on the frame, such as under the bottom bracket and on the down tube.
- The reason you're engraving into two places is because if a thief is smart enough to try to file your numbers off, he might NOT be smart enough to think that there could be a second set of numbers after he's found the first.

# Registering Your Bike

- VUPD encourages you to register your bike on campus.
- Registering discourages theft and aids in identification should your bike get stolen.
- In addition, any personalization on your bike (stickers, markings, PIN, etc.) should be documented and kept in case your bike is stolen.
- This will make it easier for police to identify.

# Registering Your Bike

- All of this information should be stored and saved along with purchase receipts, manufacturer's information, and a photograph of the bicycle.
- Registering your bike can be accomplished by registering with VUPD's Operation ID at the following link:

<http://police.vanderbilt.edu/register-your-possession/>

# If Your Bike Is Stolen, What Should You Do?

- If you believe that your bike has been stolen or impounded you should contact VUPD at (615) 322-2745.
- If you happen to witness a bike theft, either by force or stealth, dial 421-1911 immediately and inform the dispatcher where you are and what is happening. Try to remember as much as you can about the suspect for police reports.

# If Your Bike Is Stolen, What Should You Do?

- If you suspect that someone has stolen your bike, do not directly confront them because an incident may occur.
- Contact VUPD and give them as much information as possible.
- You can never be entirely sure that a suspect has stolen your bike, because many bikes look the same and many people have the same bike.

# Conclusion

- A lot of these tips are common sense, but keep them in mind. They may just prevent you from being the next victim of bicycle theft.
- Remember, if you lock your bike tightly and securely with a U-lock, your chances of being the victim of a bike theft will be substantially lower.

# And finally, the only sure way to prevent your bike from being stolen



# Questions?



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