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CAT Operations Manual

for staff, volunteers, instructors, ride leaders, and members at CAT Bicycle Cooperative, CAT youth events, and CAT-led bike rides

CAT Vision Statement –

CAT envisions a world where bicycling, walking, ADA accessibility, and public transit prevail.

CAT Mission Statement –

CAT–Coalition for Appropriate Transportation strengthens our Lehigh Valley community and our environment through [bicycling](#), [pedestrian accessibility](#), and [public transportation](#).

CAT works to improve mobility for everyone. Better bicycling, walking, ADA accessibility, and public transit develop a stronger, smarter economy and a higher quality of life. Sustainable transportation reduces traffic congestion, counters climate change, and offers a healthier community for everyone.

CAT serves adults & children of Pennsylvania’s Lehigh & Northampton Counties.

CAT is an IRS 501(c)3 non-profit organization.

CAT is here to help people (youth and adults) learn and enjoy all about bikes, from mechanics to riding and traffic skills. With this comes the goal of creating a safe environment to work with others.

Everyone: your feedback and ideas to improve this manual and CAT policies are welcome!

Welcome to CAT!

CAT stands for **transportation education** in the Lehigh Valley.

CAT helps people **bike**.

CAT helps people **walk** or **roll**.

CAT helps people ride the **bus**.

CAT helps people enjoy our local **trails**.

CAT is for kids and grownups.

CAT is for bicyclists, motorists, and pedestrians.

CAT **means choices** for mobility, environment, and community.

CAT's mission is universal to all gender, race, social, and economic groups.

CAT helps people cross the street.

CAT asks drivers to be looking for pedestrians.

CAT sees that the law says **pedestrians go first**.

CAT agrees that our transportation system relies on everyone's **exercise of care**.

CAT takes **pride** in our regional public transit system.

CAT invites anyone to **try transit** by riding LANTA bus.

CAT's Adopt-a-Bus Stop volunteers are here to help.

CAT's Bicycle Cooperative is **not a bike shop**.

CAT **teaches you how** to take care of your bike or build one from the frame up.

CAT helps you get a good bike when you can't afford one.

CAT builds bikes for the community.

CAT partners with schools, police departments, and bike shops.

CAT teaches kids the basics and reminds adults that we are not beyond the basics.

CAT teaches kids to be responsible drivers.

CAT teaches adults to cooperate, play nice, and feel like kids again.

CAT shares skills for **rebuilding relationships** between people driving bikes and cars.

CAT asks you, how can we help?

CAT thanks you for **your support**.

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Code of Mutual Respect

1. Everyone is entitled to an excellent experience.
2. Be respectful and tolerant of others' opinions and points of view.
3. Everyone please sign in when you arrive and sign out when you leave.
4. Use of CAT Bicycle Cooperative and tools are reserved for members in good standing.
5. Used parts are available by donation or with earned volunteer hours.
6. Use a tool only if you know how to use it safely.
7. Ask staff if you need something. Do not touch or take bikes, parts, or tools without staff permission.
8. Parts area, storage room, and bike barns in the garage are off-limits unless supervised.
9. Use solvents sparingly and catch any drips.
10. Leave the shop cleaner than you found it.
11. Ask staff if you need a computer or CAT phone.
12. Do not come to the shop while intoxicated.
13. No weapons or illegal drugs on premises.
14. No alcohol on premises during official bicycle cooperative hours.
15. No smoking/vaping inside or outside within 20 feet of the door.
16. Tell staff if you have a problem.
17. Conflicts to be handled with dignity and respect.
18. Please use respectful language.
19. Be mindful of a family friendly environment.
20. Members and staff are expected to obey traffic laws while riding their bikes. CAT recommends wearing a bicycle helmet for personal use, and requires it for all CAT rides & events.

Consequences

Enforcement of the CAT Code of Mutual Respect is at the discretion of staff and may result in loss of shop privileges, loss of volunteer credit hours, and/or a phone call to parent (for members under age 18).

1. 1st violation - verbal warning
2. 2nd violation - suspended for remainder of day, (call parents if member is a minor)
3. 3rd violation - 1 to 12 month suspension and loss of hours

Based on severity of misconduct, staff and/or Leadership reserves the right to repeal membership privileges for longer periods, i.e. one year, or permanently. Appeals can be made in writing or scheduling an in-person meeting with CAT Leadership.

Working on Bikes

Safety Considerations

1. Members who use tools should first have a 15 minute orientation about shop conduct and processes.
2. Members should use only tools they are familiar with... Staff supervise as-needed to prevent injury and damage to tools/parts.
3. Members who can work independently are welcome to do so. Staff check in with them as-needed.
4. Use CAT Bike Build checklist to be thorough. Test ride every bike before releasing member to leave.
5. Staff should use best judgement that no unsafe bikes leave the shop, including bikes with no brakes.

Sharing Space

1. Wipe and put away tools when done with them and clean up along the way.
2. Keep project parts together in a small area.
3. If a tool is missing, everyone stop work to help find it.
4. Return parts bins back where they came from with label facing out.
5. Lightly used rags can be set on white workbench, dirty rags into trash (not in clean rag bin)
6. For dirty work, work over a garbage can. Sweep into trash when project is complete.
7. Avoid dirty work on carpet. (keep 'em beautiful!)
8. Clean hands before handling non-bike stuff: phone, dishes, door knobs, toilet.
9. E-bikes must be street legal. Follow CAT e-bike policy in this manual.
10. CAT does not allow bikes with gasoline engines or out-of-spec e-bikes in to the shop

Bike Builds

1. Bikes being worked on for the general supply should be worked using a [Bike Build Checklist](#).
2. Blank forms available in the bins on top of the filing cabinet.
3. Before beginning a build, check filing bins if a form is in-progress.

CAT Team Members

Volunteer Level Descriptions (for CAT Bicycle Cooperative and Youth Events)

- **Level 1** – New person (anyone coming into CAT including regardless of experience level) – not permitted on their own in bike parts area, storage room (except handwashing), or garage bike barns. Requires Level 2-4 oversight on all projects.
- **Level 2** – Have demonstrated competence with basic bike projects, i.e. changing a flat tire, oiling a chain, overhauling a front hub, oiling cables (releasing rear derailleur without tools), cleaning bikes, ABC Quick Check. Be able to ask for guidance in case of any questions, rather than proceeding unsure or guessing.
- **Level 3** – Higher responsibility with more complex tasks, be able to rebuild an entire bike using the checklist. Requires all background checks. May accompany people to bike barns in garage. Trained in helmet fitting. Minimum age 18.
- **Level 4** – Senior mechanics: can final check bikes, but not necessarily trained on administrative side. Minimum age 18.

Special Levels

- **Administrative** – Can open and close the CAT Bicycle Cooperative, accept donations (bikes and \$\$). Have background checks. May accompany people to bike barns in garage. Minimum age 18.
- **League Cycling Instructor (LCI) & Cycling Savvy Instructor (CSI)** - Are certified in teaching youth & adults Learn to Ride and Traffic Skills. Volunteers should seek LCIs and CSIs for guidance in these regards.
- **Youth** – minimum age is 14 with parent approval (special approval possible if minimum 12 years old who have demonstrated responsibility with parent present). No minimum age if accompanied by parent. Ages 18 and over fall under regular volunteer levels.
- **With Restrictions** – varies: banned/not allowed in the building/at CAT events, or with specific restrictions

Daily Operations

- **Daily Coordinator** – Sets up Whiteboard with daily projects & priorities. Leads daily briefing 15 minutes before opening with workstand mechanics before opening to discuss scheduled clients. Assigns projects to volunteers and mechanics. Observes workflow to keep volunteers engaged.
- **Front-End Coordinator** – Welcomes visitors, gives visitor/volunteer tours, signs up new members, accepts donations, reminds everyone to check-in and check-out at the CAT Kiosk. Checks member status and updates contact info for members/visitors in DonorPerfect. Maintains office area and volunteer area.
- **Mechanics Advisor** – Floats between workstands to check in with mechanics to answer questions and ensure safety.
- **Workstand Mechanic** –Lead a workstand, guiding 1-2 other volunteers/clients/CAT members to be actively engaged in the project. Keeps an eye out for safety and personal needs of clients.

CAT Office & Bicycle Cooperative
33 W Walnut St, Suite 100
Bethlehem, PA 18018
610-954-5744



- **Everyone:** consult with Daily Coordinator for challenges or personnel needs. Note on whiteboard any needed tools, supplies, or parts. Lead cleanup of your areas 15 minutes before closing time.

Teaching Others

1. Staff member, you are a teacher - the member is a student.
2. Teaching sequence: A-describe, B-demonstrate, C-supervise, and D-independent practice.
3. A & B may be coincident. C will keep the student from breaking tools or parts. D will give the teacher/staff time to work with others or take a breath!
4. Try to read the student's learning style (auditory, visual, or kinesthetic) to keep them engaged. Or ask them what their learning style is.
5. Excessive lecturing can lose a student's attention if they are a "visual/doing" learner.
6. Ask the student if they've done "this" or used "this tool". Read their experience initially to be able to teach at their level without mansplaining or talking down to them. If they are comfortable with a tool/procedure, and they want to work independently, give them space.
7. When someone has a project, there are two reasons to stop them:
 - a. If they are doing something unsafe that could cause injury or damage to tool or bike
 - b. If you ask them and if they want help
8. Share knowledge when comfortable with the task. Learn alongside someone when unsure.
9. We aim for members to be continually engaged in the process of learning.
10. Staff should not be doing the work for a person while they are sitting up front doing something else.

Useful Volunteer Jobs

In order of increasing skill level:

1. A current list is on the whiteboard in the volunteer area.
2. Clean sidewalk in front of CAT along to the bus stops at New Street end of the block.
3. Picking up litter on the sidewalk and street gutter. Fill bucket then show staff full bucket.
4. Scrub grease marks from doors, walls, workbench with gojo soap, wet rag. Dry with clean rag.
5. Vacuum then mop shop floor.
6. Front door "volunteer coordinator":
 - a. Should greet all visitors in a friendly way, ask them if they've been to CAT before, tell them about CAT, check member list before they can proceed.
 - b. See above "When Someone Walks In", and "Crowd Control".
7. Help staff with in-process bikes - start with simple jobs---supervise!
8. Pump tubes to be tested for leaks
9. Sort small parts return bin.
10. Label small parts bins and shelves for larger parts.
11. Take photos of projects and members working (ask people's permission before photographing)

Bike Build and Parts Policy

1. Volunteers should already have completed a [CAT Volunteer Signup](#). (and if under age 18, had parent sign and accompany its return)

2. **Volunteer time cards** - Use a yellow/green time card to track hours if needed for school or program. Staff to verify that info is complete and legible. Staff to sign initials/name when volunteer signs out.
3. **Earn-a-membership** - Members stating that they cannot afford CAT membership can earn the value of their membership by volunteering for five hours before choosing a bike. This time commitment covers their membership only and any hours to be earned toward a bike are worked are considered after fulfilling this requirement.
4. **Bike2Work bike build** - Volunteers may choose a bike to earn with staff tying a tag on the handlebar that includes: name, phone number, and the day's date. Bikes will be held for up to one month, after which the tag is removed. If working toward earning a bike, work may begin when all hours have been earned.
5. **Bike Build** - Volunteers may earn credit only when helping others, not working on their current/future bikes. Credit is earned at an equivalent of \$10/hr of volunteering.
6. **Extra credit** - Volunteers may earn ½ hour of time when arriving by bicycle and wearing a helmet.
7. **Loss of credit** - Volunteers may lose earned hours if they are observed not obeying traffic laws while riding their bikes.
8. **Award certificates** - When awarding an earned bicycle or parts, staff should (1) make a note on the volunteer time card below the latest entry and (2) [complete an award certificate](#) (¼ page) for the member to have proof and pride that they earned it!
9. Ask member if a photo would be ok, and if so, take a fun photo of them with their bike.

What Goes into a CAT-Refurbished Bike

Bikes at low/no-cost: CAT provides bikes to the community without barriers. Anyone with financial hardship can receive a bike on a donation basis or even at no cost. All bikes awarded are refurbished by CAT volunteer mechanics-in-training and are checked by experienced mechanics. Volunteer time is strongly recommended for no-cost bike recipients. Bikes available at low/no-cost can be identified by CAT staff.

Bikes with donation: CAT-refurbished bikes that are available with donation serve as a fundraiser to support CAT's operation, including: purchasing of tools, supplies and parts for the CAT Bicycle Cooperative, paying CAT's rent/utilities, and supporting our administrative staff.

Whether you adopt-a-bike at no-cost or by donation, your bike includes CAT membership for one year. Member benefits include access to the CAT Bicycle Cooperative (by appointment), discounts at area bike shops, our CATNews! newsletter, and invitation to CAT events throughout the year.

CAT-refurbished bikes have a high value. They may be 20 years old when you get it, but with reasonable care, they can serve as useful transportation and enjoyment for another 20 years.

We aim to help all people use their feet, use the bus, use the trails, and use their bikes.

Where to Find Stuff (by location)

See Steve's S's Searchable Spreadsheet

Where to Find Stuff (alphabetical)

Aprons - next to closet at rear of main room

B.O.B. trailer - middle room

Bench grinder, staff supervise - small white bench

Bike storage, Bike shop quality bikes - basement east

Bike storage, Department store bikes & Classic bikes - Basement west

Bikes, scrapped - back garage

Books/Library- Blue workbench

Brooms, vacuum cleaner, trash bags - closet

Car racks - Basement west

Cassette/freewheel tools - Black shelves

Chisels - Red tool box

Cleaners - Black shelves

Components, anything larger than a matchbox, smaller than a breadbox - Parts shelves

Computer, CAT leadership or Tim Madine - Front desk

Donation drawer - small red cabinet

Drill & bits - Red tool box

Lubes, drip - Black shelves

Educational handouts - brown filing shelves in front area

Empty parts bins - main floor, back room

Extra rags - closet

Fenders - Basement west

Flex hones - Red tool box

Forks - Blue workbench

Forms - brown filing shelves in front area

grease - Black shelves

Handlebars, Drop bars - Basement west

Handlebars, straight bars - Blue workbench

Hardware (non-bike stuff: nails, screws, plumbing stuff) - main floor, back room

headset press - Red tool box

Helmets (free for kids under 14, fit them if possible) - west basement, rear

Kids' bikes (all the way in the back) - - basement east

Shared computer, staff supervised - White shelf
nitrile gloves - to right of side window

Patches - small red cabinet

Road bikes - basement east on the right

Scrap pile, very rusty and broken parts, department store bikes that are very low quality (stamped brakes), remove any needed parts before scrapping - Back garage

Seatposts - Blue workbench

small parts drawers - Blue workbench

snap ring pliers - Red tool box

Solvents - Red tool box (misc)

Spokes - Blue workbench

Tandem bike - middle room

Tape measures - Red tool box

Tape-all kinds (below, along back rail)

Taps & dies - Red tool box

Tents, tennis balls & event supplies - basement

Tire levers - small red cabinet

Tires (good ones) and wheels (sorted by size) - Basement west

Tires2recycle (dry rotted/very worn) - storage room

Toe clips - Basement west

Tools & vice - Main workbench

Torque wrench - Red tool box

Towels (not for rags) - closet

Tubes - on parts shelves next to truing stand and more downstairs in front of west basement

Truing stand - small red cabinet

Wire baskets - Basement west

Zip ties - Main workbench

List of Suggested Donations for Used Bikes & Parts

- CAT offers used bikes & parts as our primary fundraiser for CAT educational programs.
- Suggested donation amounts below are flexible based on financial need.
- Members with financial hardship are requested to volunteer equivalent of one hour per \$10 value below. (see Bike Build and Parts above)

Bikes (refurbished, includes annual membership)

Kids bikes \$20-50

Mountain/hybrid bike (department store brand) \$50-100

Mountain/hybrid bike (entry level) \$150

Mountain/hybrid/road bike (midrange) \$150-250

Mountain/hybrid/road bike (high end) \$300+

Bikes (as-is, un-refurbished)

Mountain/hybrid/road bike \$25-200

Used Parts

Bottom bracket \$5-15

Brake caliper w/ lever \$5-15

Brake pads \$5-10

Cable (brake or shift) \$5-10

Cargo/seat bag \$5-30

Cargo rack \$5-30

Cassette \$10-30

Chain \$5-25

Clothing \$5-15

Crankset \$10-20

Derailleur (front) \$5-15

Derailleur (rear) \$10-30

Fork-rigid \$10-25

Fork-suspension \$25-75

Frame \$10-60

Freewheel \$5-20

Grips \$5-20

Handlebar \$5-25

Headset \$5-10

Helmet -free for ages 17 and under

Pedals (pair) \$5-20

Pegs for BMX \$5

Seat \$10-20

Seatpost \$5-15

Shoes \$5-40

Spoke \$1

Stem \$5

Tire \$5-15

Tube \$5

Tube patch - free

Wheel (front or rear) \$10-75

Trades at the discretion of staff

Opening the Bike Cooperative

1. Use key to unlock front door, then engage pushbar from the inside (until it gets repaired)
2. Sign in at registration kiosk (Member/Visitor Check-In).
3. Check/update the whiteboard in the volunteer area for current priority projects
4. Turn on lights.
5. Put CAT sign on sidewalk.
6. Put laptop on podium.
7. Turn heat to 65, or A/C to 78

Closing the Bike Cooperative

Stop work and begin cleanup *30 minutes* before closing time:

1. Wipe grease from tools and workbenches. (alcohol rag or wet wipe is good)
2. Sweep work area of debris and wipe grease/oil from floor.
3. Check that no tools are missing.
4. Put away loose parts/store or keep with unfinished bikes.
5. Unfinished bikes:
 - a. put wheels on bike and put bike in rack. bag and tag loose parts that belong to them.
 - b. put bike and parts together in lower section of corral bike rack in storage room.
 - c. update progress sheets and file progress sheets on shelf.
 - d. Update whiteboard with bike status.
6. Sweep/vacuum floors & wipe workbench. (broom & vac in the storage room)
7. Mostly dirty rags go into trash.
8. Empty workbench trash, recycling, and scrap metal to larger bins in the storage room.
9. To lock front door, use key on inside to engage pushbar
10. Put laptop and phone on charger.
11. Clean coffee pot and make sure it's off.
12. Turn heat to 60 or A/C to off.
13. Bring in sign from sidewalk and stand it behind front door.
14. Turn all lights out.
15. Lock front & back doors

OPTIONAL:

Create staff report of the day's activities in email or written note:

Email Subject: CAT Shop Report for Tuesday, 27-Nov-2018

| | | |
|-----------------------------|---------------------------|----------------------------------|
| Staff: | Bikes worked on: | Bikes/parts awarded: |
| Volunteers: | Donations received | Donations (\$\$) in cash drawer: |
| Visitors: | (bikes/parts) --from who? | Parts/things we need: |
| Notes: (how'd it go today?) | where'd you put them? | Photos (optional) |

Working on a Bike Project

1. Use clipboard and Bike Build Checklist
2. Make sure work area is clear of parts from last project
3. Make sure all tools are present on toolboard.
4. Keep area clean and wipe grease and drips as you work
5. Put tools away as you go, especially if they are borrowed from the main toolbox.

When Someone Walks through the Door

1. Start with something like this:
 - a. "Welcome to CAT"
 - b. "I'm _____. What's your name?"
 - c. "Have you been here before?"
 - i. If yes, "Are you a member?"
 - ii. If no, "Do you know what we do here? "This is a community workshop, and you can use the tools and fix your own bike. Our goal is for you to learn."
 - iii. "Do you ride a bike, walk, or take the bus?"
2. "What's your goal today?"
3. If person asks "Do you sell bikes?" short answer is that CAT makes bikes and support available to everyone regardless of financial situation. People looking for bike are encouraged to make suggested donation or to volunteer based on their situation. More info in section above "What Goes into a CAT-Refurbished Bike".
4. If receiving bike donation, see "Receiving Bike Donations" section below.
5. Ask visitor please sign in and out at registration kiosk.
6. First time visitors please complete volunteer or Bike2Work form. Payment not req'd.
7. Members using the CAT Shop, please read and fill out the [CAT Volunteer Signup](#). Minors (under 18) to have parent sign and return the sheet in person for short orientation with staff. At that time, staff can check that all info is filled out and legible. [Intro Letter to Parents](#)
8. If there is no volunteer coordinator and staff is working with someone already, give the person already working a self-sufficient task that gives you a few minutes free to greet the visitor.
9. The active member list can be looked up in DonorPerfect by Scott, Sissy, or Edwin. If someone you don't know comes into shop and says they're a member and wants to work on their bike, check the list. If they're a non-paying (charity) member, they are listed as volunteer or Bike2Work client. You may request them to perform one hour volunteer work before working on their project.
10. **Visitors arriving to donate bikes/parts** - Ask if they need help to unload and set donated items on the floor in front area near the quilt wall. Strongly urge donor to fill out a Bike/Parts Donation receipt at the front kiosk. Staff can fill out list of donated items, but we can't put \$ value on the receipt. Make copy or take photo and give original to donor with a big thanks!

Crowd Control

1. **Appointments are helpful** - All members who are coming in with projects that are anticipated to be longer than 30 minutes should [make an appointment](#), by phone or [online via LVCAT.org](#). Otherwise, first-come-first-serve.
2. Five staff members on-duty is our goal.
3. Staff on duty have discretion to limit shop activity to what they can handle. For example, if one staff member on duty working with one person, staff may limit a supervised project to 30 minutes, and if another member comes in during that time, staff may ask them to come back later at a specified time or schedule another day.
4. Focus the member, by asking what projects they have come in for, i.e. be cognizant when people are idle or distracted.
5. Up to two observers are welcome to assist or watch a member with a single project, so long as they too are focused and are not creating a distraction. Staff may dictate how to achieve this, i.e. having observers sitting in folding chairs around to the workstand. If distracting, ask observers to please leave.
6. Areas that are off-limits for visitors: office area, parts area, storage room, bike barns in the garage. Staff should bring bikes/parts up instead of bringing visitors downstairs. If member is working on a volunteer project in these areas, it should be only with direct staff supervision.

Receiving Bike Donations, Membership Forms, or \$\$

1. **Donation Receipt** - When receiving bike/parts donations, have donor fill out Bike/Parts [Donation Receipt](#). Blank receipts are in rightmost column of brown shelves above printer.
 - a. If donation form is completed/signed on paper, make copy on printer, photograph it and email to cat@lvcat.org, or text to Scott cell 845-430-6552.
 - b. If bike looks mostly rusty trash, remove any useful parts.
 - c. Bring bike donations to basement and sort accordingly.
 - d. Note make/model of bike/parts for daily report.
 - e. Ask if they need help to unload and set donated items on the floor in front area near the quilt wall.
 - f. Strongly urge donor to fill out a Bike/Parts Donation receipt at the front kiosk. Staff can fill out list of donated items, but we can't put \$ value on the receipt. Make copy or take photo and give original to donor with a big thanks!
2. When receiving cash or check for membership, parts, or bike adoption, use membership form as receipt, fill out "office use" section, make a copy, and slide through red cash box drawer under printer.
3. When receiving Squareup credit card payment, have donor complete the In-Person Cash/check donation on the front kiosk.

Electric-Assist Bike (e-bikes)

Overview

This policy provides safe and effective support for e-bikes that are street legal in Pennsylvania within the scope of varied expertise and training of CAT volunteer staff mechanics. This policy also applies to people who participate in CAT group bike rides or classes.

E-Bike Workflow (see also flow chart at end of this section)

1. Someone shows up at CAT Bicycle Cooperative or at a group bike ride with e-bike.
2. Someone calls and asks for help with their bicycle (does not identify bike as e-bike)
3. While on the phone or first greeting, CAT staff to ask “What kind/type of bike is it?” and Person replies, “It’s an e-bike...”
 - a. If person confirms it’s an e-bike, CAT staff to ask:
 - i. How fast does it go?
 1. If motor powers it over 20mph, respond “I’m sorry, this e-bike cannot be repaired at CAT or join CAT rides, as it is not street legal in PA.”
 - ii. How big is the motor?
 1. If motor is over 750 watts (1 horsepower), respond “I’m sorry, this e-bike cannot be repaired at CAT or join CAT rides, as it is not street legal in PA.”
 - iii. Does it have a throttle? Throttles are not permitted per CAT insurance. (Must be pedal-assist only.)
 - iv. Less common question is to confirm that it has operating pedals and that operator is 16 years or older, which are required by PA vehicle code.
4. If the e-bike meets the criteria above (is street legal in PA), ask person “What kind of repair project will you be working on?”
 - a. If mechanical project (i.e. derailleurs, shifters, chains, tires, bearings), it can be scheduled for any open CAT appointment with general CAT volunteer staff.
 - b. If electrical project (i.e. batteries, motors, controllers, sensors), it can only be scheduled with CAT staff who are certified in e-bike repair.
5. When person arrives for their appointment:
 - a. CAT staff inspect bike and motor for identification of motor size or Class (Class 1 meets legal definition in PA. (again, unclear if throttles are legal in PA)
 - b. Have client fill out “CAT E-Bike Declaration” that it is street legal (<20mph, ≤750 watts)
 - c. Take one or more photos of bike overall, motor, signed declaration, and email to cat@lvcat.org with CAT client’s name and date so we can save to CATdrive.

E-Bike Safety Protocols

1. When working on mechanicals of bike:
 - a. Turn off control unit
 - b. Remove battery and place somewhere where it won't be dropped, i.e. on the floor next to the window.
 - c. Be very mindful of not damaging wires during mechanical repairs.
 - d. After repair, test ride bike with electrical system turned off and without battery.
 - e. Client should take bike with them at end of session, i.e. don't store at CAT.

2. No bike shall be ridden until a full mechanical checkup has been done and checked.

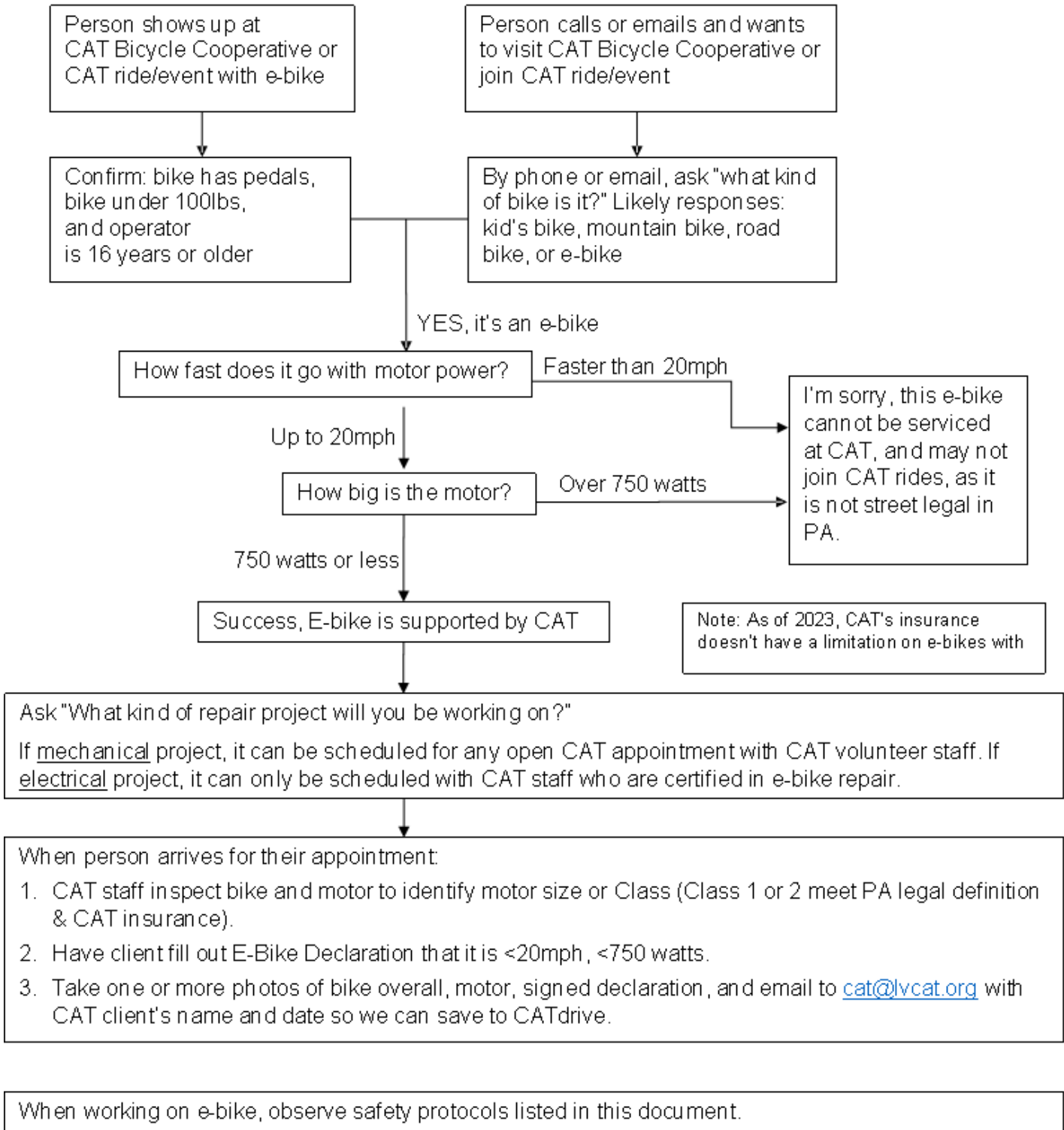
3. Battery Charging
 - a. Batteries may be charged at CAT only when staff is in the building.
 - b. Read manual for charger being used to understand expected charging time and meaning of charging lights.
 - c. Charge only at outlet between window and white bench.
 - d. Unplug charger one (1) hour before closing time (use timer).
 - e. Do NOT leave batteries charging overnight.
 - f. While charging, check every 30 minutes to feel battery temperature is not HOT to the touch.

4. Receiving E-Bike Donations
 - a. Only accept e-bikes that meet the street-legal requirements of ≤ 20 mph, ≤ 750 watts, etc.
 - b. Do not charge battery or use electrical system until inspection has been made by CAT e-bike certified staff
 - c. Do not accept batteries that have visible damage

5. No bike shall be ridden until a full mechanical checkup has been done and checked.

CAT E-Bike Policy Flow Chart

Visual version of outline from above



COVID Pandemic Protocol

UPDATE 4-12-2022: COVID Protocol has been lifted.

During a State of Pennsylvania declared emergency, the CAT Office/Bicycle Cooperative will operate on a limited basis to minimize risk/spread of COVID-19.

Operating hours - Services of the CAT Office/Bicycle Cooperative will be available only by making an appointment via phone call, email, LVCAT.org, or Facebook/IG messenger. Members seeking services are required to wear a mask covering mouth and nose when they arrive outside. Those not wearing a mask may be refused service.

A sign will be placed on the door "No Public Entry beyond this point - CAT Staff & By Appointment Only"

Interactions - Members arrive at their scheduled time and shall wait outside (not permitted inside the building). Only staff/volunteers will be permitted inside at a time and will keep the door locked/or a chain across when inside to avoid surprise walk-ins.

Anyone entering the building shall record their forehead temperature on the sign-in sheet. Infrared thermometer is provided on the sign-in desk.

Members attending classes or volunteering with programs such as Holiday Bike building should make an appointment in advance to avoid overcrowding the workspace.

Note to staff and volunteers: Do not touch face, nose, mouth, or eyes while in the shop regardless of wearing gloves or not. Washing hands and forearms with warm soapy water for >20 seconds is recommended after all contacts.

Dropping off - CAT staff and volunteers must wear masks when interacting with each other and members of the public, and shall maintain social distancing of 6' when possible. If the member did not fill out the application online, the CAT staff member may have them complete the form or donation receipt using a clipboard. The CAT staff shall complete a tag to be placed on the handlebar of the bike indicating name, date dropped off, and phone number.

Once the interaction is complete, the member will leave, staff will mist the whole bike with the **recommended cleaner solution** (alcohol min. 60%) or bleach solution mixed at 2.5oz (5 tablespoons) per gallon of water)) and bring it inside.

Working on bikes - CAT staff will wear disposable gloves and mask. Work surfaces and tools shall be periodically sprayed with cleaner solution.

Picking up bikes - Members picking up bikes shall make an appointment, wear a mask, and remain outside. Staff will greet them wearing mask and gloves with strict social-distancing from at least 6' away.

Interest/test riding bikes - Members looking for a bike should follow the same procedure as picking up a bike. The bike will be brought outside and placed in a bike rack after being sprayed down. Members may test ride the bike, but if declined, they shall then place the bike in the bike rack for the CAT staff to spray down.

Shop cleanliness - Before leaving for the day, CAT staff should spray workbenches, tools, tables, clipboard, pen, door handles with recommended cleaner solution:

Supplies to keep in stock -

1. Recommended cleaner solution in a spray bottle, one of the following:

1. alcohol min. 60% or,

2. bleach solution mixed at 2.5oz (5 tablespoons) per gallon of water or,
3. most common EPA-registered household disinfectants
2. Hand sanitizer near front sign-in desk
3. Paper towels for the bathroom
4. Paper towels for the shop area
5. Disposable latex or light-duty gloves (for minor interactions)
6. Disposable nitrile gloves for working on bikes
7. Masks (cloth or N95) to be brought by CAT staff and volunteers
8. Hand soap for the bathroom

Training & Clearances for Staff, Ride Leaders & Instructors

1. Forms:
 - a. [CAT Participation & Events Form](#) (emergency contact info is most critical)
 - b. [IRS W-9 Form](#) (if you will earn more than \$600 per year paid from grants)
2. Trainings:
 - a. For Bicycle Cooperative staff: read this manual, on-site orientation with CAT Director, and twenty hours of on-site time during open hours.
 - b. For ride leaders: Attend CAT Ride Leader Training and co-lead three (3) rides with an experienced ride leader.
 - c. For instructors: maintain current certification with bikeleague.org (LCIs) or Cyclingsavvy.org (CSIs)
 - d. For everyone: First Aid & CPR obtained through Red Cross or American Heart Association (renewed every 2 years. CAT will reimburse upon request.) (\$75-85)
 - e. For everyone: (coming-soon): Conflict resolution class, trauma-informed training
3. Clearances: For everyone - the following three background checks to be updated every five years.
 - a. [Pennsylvania Child Abuse History Clearance](#) (if you don't already have a Keystone ID, choose "create individual login". Fee waived once every five years)
 - b. [Pennsylvania State Police Criminal Record Check](#) (choose "new record check", free if choosing "volunteer")
 - c. [FBI Criminal Background Check](#) (\$22, CAT will reimburse) – Click on the link, enter Service Code "1KG6ZJ", Schedule a 10 minute appointment at Allentown or Hellertown Identogo locations.
4. When you have received the above clearances (first two are almost instant if you do online), email to cat@lvcat.org (preferred) or bring a copy to office, along with your receipt for reimbursement.

Phone Numbers

1. CAT Phone – **610-954-5744** - Goes to voicemail and sends audio and text message transcript to Scott instantly – this is a google voice line. If calls come in during your shift, Scott will notify you (for those with cell phones)
2. Scott Slingerland, CAT Director – **845-430-6552** (call anytime for membership or shop questions)
3. Bethlehem Parking Authority-David Horvath, Maintenance - **(610)905-0992** (if you can't reach Scott & there is a building issue)
4. If a health emergency or threat to life, phone **9-1-1**.

Emergency Needs

1. Two fire extinguishers: (1) in the storage room and (2) at the back of the parts area
2. First aid kit by the handwash sink in the storage room

CAT Ride Leader Training

This section is intended as a knowledgebase for new and continuing ride leaders.

1. Why do people participate in group rides?

- a. Fun!
- b. Social connections
- c. Physical fitness/exercise & stress release
- d. Safety in numbers
- e. To learn
 - i. Bike knowledge
 - ii. Local history
 - iii. Nature, plants, geology
 - iv. Discover new places & don't get lost

2. Creating a CAT Ride

- a. What is audience of ride? i.e. women, men, children (age range?), seniors, people of color
 - i. Will ride be open/promoted to public or closed group?
 - ii. Group size? (to plan how many ride leaders and route considerations)
- b. What is level of ride? i.e. beginner, intermediate, advanced
 - i. Consider trail (surface) & road (traffic)
- c. How strenuous will ride be?
 - i. Consider pace, hills, frequency of rest stops
- d. Frequency of Ride
 - i. Once-a-year, once-a-week, etc
- e. Meet and discuss ride concept with CAT Director and Ride Leader Chairpeople (Anne F & Tim P)
 - i. Determine if ride can apply to a current or future CAT grant (i.e. LV Greenways or PennDOT)

3. Before the Ride

- a. Get the word out:
 - i. Post ride on Meetup.com
 - ii. List CAT on Facebook and/or Instagram
 - iii. Create poster
 - iv. CAT Newsletter (need advance notice)
 - v. Bikeleague.org instructor site (Scott or Jennifer C. can help)
 - vi. Planning a month ahead is helpful for outreach

4. After the Ride

- a. Documenting Rides for Grants

- i. Log ride info below in appropriate spreadsheet (i.e. LV Greenways for adult/family or PennDOT TASA for youth)
 1. Type of ride (i.e. Women's Ride, Bakery Ride, and/or Partnering Agency)
 2. Date of ride
 3. Locations of ride start & destination (descriptive, don't need address, i.e. Sand Island to Hellertown bakery)
 4. Number of participants
 5. Name(s) of ride leaders
 6. # of hours (duration of ride with setup/cleanup)
 7. Other notes
- ii. Email ride photos to Scott (email to cat@lvcat.org) OR upload to CATdrive folder

5. Relevant CAT Policies

- a. Statement of Inclusivity (1-5-2017)
- b. Diversity, Inclusion, and Civility Policy (6-7-2021)
- c. Helmet Policy 9-8-2021
- d. E-Bike Policy (e-bike needs to be street legal in PA, i.e. max 750 watts and 20mph. If in doubt, ask rider the motor size and max speed of their bike)

6. Forms, Trainings & Clearances (see previous section in this manual)

7. Educational Content

- a. LAB's Need-to-Know Presentation (email ahead of time or discuss when riders arrive)
- b. Pennsylvania Bicycle Driver's Manual
- c. Weekly rides can focus on one concept each week.
- d. Use personal style to deliver content in a way that is encouraging and supportive to riders.

8. Ride Leader Strategies

- a. Planning the route
 - i. Map it.
 - ii. Ride it.
 1. Check for ride flow, to determine surface hazards, traffic patterns, lane choice, construction, trail closures, etc.
 2. Determine good rest stop locations and where to stop to brief riders on upcoming safety and navigational features.
 - iii. Remap it - as needed.
 - iv. Evaluate it - does it meet goals of the ride? (see above)
 - v. Check Ride within a week of the group ride to check for changing conditions.
- b. Pre-Ride Communication
 - i. Email or phone to share pre-ride info

- ii. Describe to riders the type of ride, meeting location (address and/or landmark) and special expectations (i.e. bring \$\$\$ for snack, extra water, lights for night ride)
 - iii. Weather/last-minute updates (ride leader cancellations, etc)
- c. Arrival
- i. Arrive 15 minutes before posted start time and be visible so riders can find you
 - ii. Greet riders as they arrive
 - iii. Encourage riders to learn ABC Quick Check and do it themselves when they arrive
 - iv. Encourage riders to test ride their bikes 100' before the group rolls out.
- d. During the Ride (Operation Mother Hen)
- i. Goal #1 is to get everyone back safely
 - ii. Be predictable (The Big Four)
 - 1. Ride the same direction as traffic flow
 - 2. Stop at stop signs/red lights
 - 3. Sidewalks are for walking speed (illegal in PA business districts)
 - 4. Lights at night
 - 5. CAT rides encourage legal bicycling that follows PA vehicle code.
 - iii. Safe Passing and Personal Space
 - 1. Everyone keep space/be aware of riders in the group
 - 2. Safely pass/be passed by other cyclists/pedestrian (trails)
 - 3. Safely pass/be passed by motorists (streets)
 - iv. Concepts for Successful Cycling
 - 1. Be alert & aware of surroundings
 - 2. Be visible and communicate clearly
 - a. Use big hand signals for turns, straight, stopping, slowing, hazards
 - b. Call out “car back”, “car up”, “bike/rider back”, “bike/rider up”, name of any hazards (and pointing if practicable). Not necessary to call every car back if there is a continuous stream of traffic or every slight depression in the road. Call the ones that matter. Definitely call rough or angled railroad tracks and when turning into driveway entrances with a 1” lip or more (approach perpendicular to avoid diversion crash)
 - c. All riders should convey the call-out
 - d. As ride leader, note your tone of voice. Note when to be clear, loud, and calm vs. yelling, controlling, and alarming.
 - e. Don’t call out “clear” (more below)
 - f. No headphones on ride.

3. Independent decision making (avoid herd mentality)
 - a. Everyone should go when it's good for them - Don't call out "clear"
 - b. The big exceptions are:
 - i. When the group arrives together to an all-way stop sign and drivers at the other legs are stopped – after the front of the group stops, then the group may move together and not stop individually. If there are any gaps in the group, the separate clumps of riders should stop.
 - ii. When changing lanes, the front of the group should communicate to back of the group, and if possible, the last rider should change lanes before anyone else does (zipper effect)
 - iii. Ride leader may elect to have riders go single- or double-file and should call it out with hand signal and verbal. Double-file riding shortens the length of the group by half and can make it easier for a motorist to pass the group if they change lanes to do so. Suggest not to go double-file in narrow lanes if door-zone is present. Double-file riding is legal in Pennsylvania.
 - v. Regrouping/rest stops (all CAT rides are "no-drop")
 - a. Pull off side of trail or road to rest/wait for comfort and safety.
 - b. Consider size of the group when planning where to stop.
 - c. Don't congregate the group at stop signs or intersections where motor or trail traffic will be blocked.
 - d. Find shady, quiet spots to regroup so riders can relax and hear you if you have important info to share.
 - vi. Navigating the Group (don't lose anyone!)
 - a. Ride leader or designee in front should know the route.
 - b. IBT Cornering System: When group makes a turn, ride leader should delegate #2 rider to stop at corner in a safe spot and wave other riders to not miss the turn. The corner person should wait there until they see the last rider/sweep make the turn. This also reduces group blob effect at intersections and can allow regrouping in quieter spots. This cornering system was made popular by IBT (International Bike Touring).
 - c. Alternative (the Inch-Worm): have every rider keep the rider behind them in sight/earshot and slow down if the rider behind them lags.
 - vii. Foster group cohesion – i.e. creative introductions
 - a. Challenges to cohesion:
 - i. Large group size
 - ii. Challenging attitude
 - iii. Disengaged ride leaders

1. Avoid this by getting to know everyone personally
2. Don't let one rider take all your attention
3. Switch it up and ride with different parts of the group
- iv. Riders of vastly different abilities
- v. If a rider is too fast?
 1. Address this before the ride if possible (if you go "off the front" you're on your own)
 2. Catch them and suggest to slow down if the group is fractured.
- vi. If a rider can't keep up?
 1. Should group go the pace of the slowest?
 2. Should one ride leader stay with them?
 3. Should they turn around?
- viii. How many ride leaders per ride?
 1. Rider-to-leader ratio: typical 5:1 for adults, 3:1 for kids
 - a. Depends on specific needs of riders
 2. Two ride leaders: who should go in front and who should sweep?
 - a. Front/leader: know route very well, be strong enough to keep up with faster participants.
 - b. Rear/sweep: know route well, have first aid kit, flat-fixing ability
 3. Only one ride leader:
 - a. Delegate one experienced rider to ride in the back and sweep or in the front to navigate and set the pace - depending on the complexity of the route.
 4. If more than two ride leaders, spread out.
 - a. One extra ride leader should stay near front to assist lead.
 - b. One extra ride leader should stay near rear or keep an eye on the sweep to assist.
- ix. On-Ride Emergencies
 1. **Non-Medical Needs**, i.e. Rider violation of CAT code of mutual respect, helmet policy, traffic issue, or other. If any question or if support is needed, ride leader should at their own discretion:
 - i. Give verbal warning or ask participant to leave the ride
 - ii. Call Ride Leader Chairs (Anne or Tim)
 - iii. Call CAT Director (Scott)
 - iv. Call CAT Board President (Bill M.)
 - v. Call CAT Ombuds (Jennifer Swann)
 - b. If any of the above actions are taken, ride leader should email all team members above within 24 hours describing the situation and name(s) of person(s) involved. This information will be treated with confidentiality.

2. Medical Needs

a. Crash or injury

- i. Assess the situation
- ii. What is condition of rider? (physical/mental)
 1. Should the rider be moved? (NO-if potential of back/spine injury)
 2. Talk to rider. Ask if they have pain and if so, where?
 3. If stable, move person and bike from roadway to comfortable spot.
 4. Check for bleeding, follow first aid protocols
 5. Did they hit their head? (ask them)
 - a. If unsure, check helmet, though damage might not always be visible
 - b. Check for mental confusion or repeating questions
- iii. If dire, call 9-1-1
 1. For injury location:
 - a. If on road, know GPS address using phone or street address on nearby house/mailbox or business sign
 - b. If on trail, know nearest trail mile marker (i.e. "we are on the D&L Trail in City of Bethlehem, ½ mile west of mile marker 70") and closest access point (i.e. "near Farmersville Road trailhead"). Send one rider from group to trail access point to wait for EMS.
 2. Use phone list to call injured's emergency contact or use their phone (secondary to 9-1-1 urgency)
- iv. Condition of bike
 1. If rider appears okay, ABC quick check bike and another person test ride
- v. Other questions: Decide who should stay with rider? Who should warn approaching drivers (if blocking roadway)? Should other riders continue? If motor vehicle involved-take many photos and get driver's license/plate/insurance info)

b. Non-crash medical

- i. Rider bonking
 1. Determine if overheated, dehydrated, overhydrated, need sugar, need electrolytes?
 - ii. Bee sting or allergic reaction? How serious?
 - iii. Other medical emergency?
- c. **Notify CAT Ride Leader Chairs (Anne & Tim) and CAT Director (Scott) with phone call and email describing emergency (within 24 hours)**

3. On-Ride Mechanical Needs

- a. Can rider fix it? Can anyone else on ride fix it or improvise to continue?
- b. Do you have tools/parts needed?
- c. How long will repair take, and should group wait or continue?
 - i. If continuing, someone to stay with person?
- d. Is it a safety issue where rider shouldn't ride the bike?
 - i. Have rider get a ride or put bike on LANTA bus (google maps has transit directions?)
 - ii. If rider is waiting for pickup, choose a good location/landmark and have their phone number.

e. What Ride Leaders Should Carry on Ride

- i. Cell phone
- ii. First aid kit
 1. Example: Bandages, gauze pads, medical tape, pair of gloves in ziploc sandwich bag, alcohol wipes, ace bandage, tweezers, aspirin, benadryl tablets, antibiotic cream, instant cold pack, moleskin. (Note: only use what you are trained for)
- iii. Extra water
- iv. Emergency snack/sugar (for diabetics and anyone who is bonking)
- v. Personal medical needs i.e. epipen
- vi. Electrolytes (optional)
- vii. List of all participants' cell phone numbers and important CAT phone numbers
- viii. CAT shirt (optional)
- ix. CAT cards/brochures (optional)
- x. Tools
 1. Spare tube that fits their bike (size & valve type)
 2. Tire levers and little pump
 3. Floor pump for start of ride (optional)
 4. Patch kit (fits all bike tube sizes)
 5. Bacon strips – plugs for tubeless tires (optional)
 6. Multi-tool
 7. Small 6" crescent wrench
 8. Chain tool & extra links for 8, 9, 10 speed
 9. Nitrile gloves & rag for messy bike work
 10. Chain oil (small bottle)
 11. Few zip ties
- xi. Duct tape
- xii. Extra helmet (optional)
- xiii. Emergency blanket (optional for long rides)

f. What Participants Should Bring on a Ride

- i. Bike & helmet
- ii. Enough water + a little extra
- iii. Emergency snack
- iv. Personal medical needs i.e. epipen
- v. Phone number of ride leader
- vi. Tools
 1. Spare tube that fits their bike (size & valve type)
 2. Tire levers and little pump
 3. Patch kit (optional)
 4. Multi-tool (optional)

Reference Forms & Docs

1. [CAT Kiosk](#)
2. [Membership](#)
3. [CAT Volunteer Signup](#)
4. [Donation Receipt](#)
5. [Award Certificate for Earn-a-bike/Barter-Parts](#)
6. [CAT E-Bike Owner's Declaration](#)
7. [Bike Build Checklist](#)
8. Sign-In Sheet
9. Volunteer Time Card
10. Active Member List
11. [CAT Calendar for Bicycle Cooperative, events & classes](#)
12. CAT Bicycle Cooperative Scheduling