



Adult Bicycle Commuter Training

Supporting adults and young adults to drive their bicycles as a tremendously efficient and healthy mode of transportation

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LVCAT.org

1 About CAT

CAT-Coalition for Appropriate Transportation is a 501(c)(3) non-profit, based in Bethlehem, Pennsylvania, serving Lehigh and Northampton Counties (approx. 650,000 people) for the last 25 years. This includes the three urban areas of Allentown, Bethlehem and Easton, plus 59 suburban and rural municipalities, south to the Bucks County line and north to the Appalachian Trail.

CAT's mission is to promote smart bicycling, pedestrian access, and public transit. CAT aims to encourage bicycling through education in three areas: (1) Bicycling education for adults (traffic & mechanics); (2) Youth bicycling education programs in local schools; and (3) Bicycling outreach to local governments and police departments.

2 Contents of this Proposal

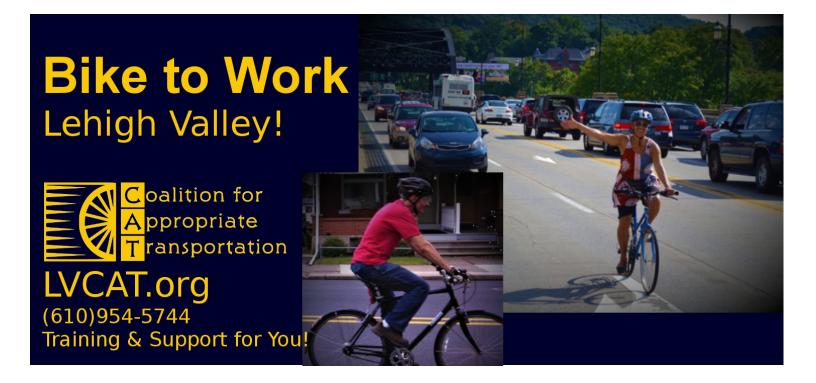
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3 Program Offering

The Adult Bicycle Commuter Training program consists of six (6) major features:

- 1. **Outreach -** Promoting "Bike to Work" with LANta bus exterior graphics.
- 2. **On-Road Education** CyclingSavvy classes to improve bicyclists' on-road behavior and to provide strategies for communication and cooperation with other drivers.
- 3. Encouragement Organizing Lehigh Valley Bike to Work Week annually in May.
- 4. **Support** At the CAT Bicycle Cooperative, providing one-on-one mentorship for maintenance instruction and commute planning.
- 5. **Equipment** Providing essential equipment to low-income bicycle commuters (helmet, head/taillight, bike lock).
- 6. **Engagement** with local businesses to reach employees who are interested in bicycling for transportation.



4 Desired Results

This program empowers Lehigh Valley adults and young adults (ages >14) of all income levels, who desire to ride their bicycles more often, for commuting to work, for shopping, for recreation, and for exercise.

By engaging individuals with encouragement, training, and mentorship, our goal is to have them bicycling with fewer conflicts and setbacks.

Mobility through Education

The program will teach: (1) how to choose a bicycle and how to set it up for their desired use, (2) how to maintain a bicycle, (3) bicycle handling skills, (4) state traffic laws for bicycling legally, (5) strategies for avoiding motorist frustration and inviting their cooperation.

The Bigger Picture

There are regional issues that can be mitigated when people make more trips by bicycle instead of by car: reduction of traffic congestion, improvement of air quality, and improvement of health.

Less Traffic Congestion

Traffic concerns that we see in the Lehigh Valley are: road congestion, aggressive & distracted driving, parking demand, and mobile source air emissions. With more and more motor vehicles on the road, more parking lots are paved and roads are widened to four and six lanes. Having more bicycles used for transportation helps reverse this trend.

Better Air Quality

Transportation generates 28% of the United States' greenhouse gas emissions. The more than 600,000 people who reside in the Lehigh Valley are affected daily by air pollution due to cars and trucks, compounded by the valley's natural topography. Air pollution such as ground level ozone, smog, and greenhouse gas emissions is reduced with more bicycle travel.

Healthier People

In the Lehigh Valley, there is a prevalence of health conditions related to a sedentary lifestyle: obesity (28% of adults), type 2 diabetes, heart disease, high blood pressure, and depression (31% of low-income people). The 2016 Lehigh Valley Health Network Community Needs Health Assessment shows that these major illnesses can be minimized with 30 minutes of daily physical activity such as bicycling.

CAT Community Exemplar:

Gary is an electrician who commutes by bicycle in the Lehigh Valley. On the first day of every project he drives his van to the jobsite, bringing tools and supplies. On subsequent days he rides his bicycle to and from the jobsite, up to 20 miles each way. This is Gary's way to create a balanced transportation portfolio, saving wear and tear on his work van, as well as saving money on gas.

4.1 Targets and Milestones

The program's success depends on engaging adults and young adults who have the need and desire to bicycle for transportation.

4.1.1 Engagement Milestones

(1) 200,000 people (mostly drivers) will see Bike to Work LANta bus exteriors (over a 3 month period) beginning in April.

(2) 1,500 visits to the CAT Bicycle Cooperative for training (January-December).

(3) 100 low-income bicycle commuters will receive essential equipment (helmet, head/taillight set and bike lock) (January-December).

(4) 100 people will complete a CyclingSavvy class (March-October).

(5) 400 people will participate in Lehigh Valley Bike to Work Week activities during the week in May.

(6) 30 local employer presentations will engage 200 participants (March-November).

4.1.2 **Performance Targets**

(A) 90% of participants in the above programs express an increase in perceived bicycling ability and functional bicycle aptitude after participating in the program.

(B) 80% of participants are bicycling more often, 1 month after participating.

(C) 70% are still bicycling more often (compared to baseline), 3 months after initiating their participation.

(D) 50% are still bicycling regularly 6 months after initiating their participation.

(E) Participants report more comfort bicycling to their destinations and less incidence of conflict with other drivers.

CAT Community Exemplar:

Wanda came to the Lehigh Valley from Puerto Rico after Hurricane Maria in October 2017. She quickly got a job working at a school, but didn't have a driver's license or a car to get to work. She purchased an electric-assist bicycle with headlights and brought it to the CAT Bicycle Cooperative to assemble herself with CAT mechanics helping her.

The next morning, Anne, a CAT cycling instructor rode with her to work on a lowstress route they chose together, showing her best practices for riding as part of traffic flow. Wanda continued to bike the 5 mile commute each way during decent weather, and carpooled when she didn't ride.



<u>CAT will measure program success in the following ways:</u>

LANta Bus exterior graphics will channel participants to the programs below and will generate regional interest in Bike to Work. Success is measured by how many people see the signs in their daily travels. LANta Bus have carried out modeling to demonstrate this visibility.

CAT Bicycle Cooperative - every visitor signs in, and completes an information form, including the purpose for their visit. This will be included in the Closeout report.

Essential Equipment (helmet, lights, bike lock) - Distribution to low-income commuters will be documented with the surveys described below.

CyclingSavvy classes - recording enrollment, photos/videos, and testimonials of student experiences. Baseline/follow-up surveys will be completed.

Lehigh Valley Bike to Work Week - Logging online registrations, ride participation, photos, stories, and videos.

CAT's connections with local businesses - Tracking meetings and number of employees engaged.

Baseline Surveys - At the time of initial contact in all above program activities, CAT will provide a baseline survey to each participant, for tabulating: (1) perceived bicycling ability, (2) bicycling aptitude regarding equipment, traffic laws & best practices, (3) baseline riding frequency, (4) mileage per week/ per month, (5) what the person wants to learn to be able to bicycle more, (6) whether the person

previously participated in CAT-sponsored programs, (7) optional demographic info (age, gender, race, zip code, household income range)

Follow-up Surveys - To determine if there was benefit to participation in CAT's educational and encouragement programs, CAT will contact the individuals at 1, 3, and 6 months to provide a progress-survey to tabulate: (1) increase or decrease in riding frequency and mileage, (2) change in bicycling aptitude, (3) what the person has learned.

Personal Stories on LVCAT.org - To document community members' bicycling experiences in a human and personal way, CAT will maintain an online blog at LVCAT.org, documenting their challenges, successes, and bicycling epiphanies.

Closeout Report - CAT will compile results of the surveys, personal stories and photos into a report.

4.2 People Served

This program focuses on adults (ages 18+) and young adults (ages 15-17).

By Demographic:

- A) **People who need a transportation option** who live within 2-10 miles of their destinationlow-income individuals who cannot afford a car and those without a driver's license (for economic, medical or legal reasons).
- B) **Adults who may bicycle out of necessity** may not understand best bicycling practices or have the right equipment to promote their safety and comfort on road and trail.
- C) **People who have an interest** but do not regularly bicycle (likely interest for environmental, lifestyle or health reasons).
- D) **People who are current bicycle commuters** and can benefit from additional skills and equipment.
- E) **People who already bicycle for recreation** or sport may be likely to try bicycling for utility purposes.

By Program Feature:

1. **LANta Bus Exterior Graphics** - Reach: CAT estimates conservatively that 200,000 people in the Lehigh Valley will see these. Viewers of the bus graphics will be single-occupant automobile commuters (80% of motor vehicle trips in the Lehigh Valley), as well as public transit riders who have strong potential to be bicycle commuters (Bicycles can be transported on every LANta bus!)

- 2. **CAT Bicycle Cooperative** Reach: 1,500 visits will be logged annually at the CAT Bicycle Cooperative (CAT is on track to reach ~750 visits for 2018.)- educating, mentoring and supporting people of all ages who bicycle in the Lehigh Valley. The CAT Bicycle Cooperative is open to the community 3 days per week, for 50 weeks, for a total of 600 hours per year. The CAT Bicycle Cooperative is open for all community members regardless of income to support their learning about maintaining and riding safe bicycles.
- 3. **Bicycling Commuter Essentials** Reach: 100 low-income participants receive a helmet, head/taillight set, and a bike lock.
- 4. **CyclingSavvy Classes** Reach: 100 Lehigh Valley residents will complete CyclingSavvy classes to gain understanding and strategies for bicycling where they want to go.
- 5. **Lehigh Valley Bike to Work Week** Reach: 400 bicyclists will participate in #LVBike2Work, through in-person events, bike rides and the online ride tracking competition. (CAT reached 200 people each year in 2017 and 2018.)
- 6. **Employer Presentations** Reach: 30 local businesses = 200 participants. Focus will be on minimum wage earners, but also will include others. CAT estimates as-follows: 100 participants: 20 small-medium businesses (with fewer than 100 employees) (5 participants per business). 100 participants: 10 large companies (with more than 100 employees) (10 participants per business).



5 Cost Investment

Tota	\$63,950			
Itemized Budget				
1	Graphics on LANta Buses	\$10,000		
2	Instructor & Facility Costs	\$29,600		
3	CyclingSavvy	\$9,500		
4	Bike to Work Week Activities	\$2,100		
5	Supplies	\$12,750		

6 Author & CAT Contact

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Scott Slingerland, Professional Engineer, Executive Director, League of American Bicyclists certified Instructor (LCI) since 2006. Has taught youth bicycling education programs to over 10,000 Lehigh Valley children and has instructed over 500 adults and has led multi-day tours and group rides since 2002. Working through CAT, he has also studied and supported pedestrian, transit and trail improvements in our region.



LVCAT.org

Bike to Work Lehigh Valley!





Do you love the freedom that a bicycle can bring?

- Adult Bicycle Commuter Training is available for you!
- Set up your bike at CAT Bicycle Cooperative, Learn traffic awareness & cooperation in CyclingSavvy class, and get essential equipment (helmet, lights, lock). No one turned away.

More info: LVCAT.org

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