



PILOT EBIKE INCENTIVE PROGRAM

Eric Campbell and Jason Meggs
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Why ebikes?



- Many times lower GHG emissions (and other air pollutants)
- Greatly expand bikes' potential to replace motor vehicle
- Faster than cars, trucks and vans for many urban trips
- Fun – people ride them more than normal bikes
- People thus get more healthy exercise on average w/ebikes
- Much shorter path to scale up than for larger EVs

Overview

- Challenge: small starting funds
- Goals:
 - Maximize long-term increase in ebike use
 - Prioritize substitution of combustion vehicles
 - Achieve equity benefits
 - *We assume every program can build in an equity benefit, some more than others*
 - Achieve resiliency (ebike capacity)
 - Local design/build
 - Local repair/training
 - Produce quality data for research/results
 - Environmental, Economic, Equitable, Experiential, Expansion
 - Design for success -> funding to expand

Positive Networking

- DOEE/DDOT collaboration
 - Open Streets
 - Fleet Procurement
- WABA's Trail Rangers program
- People for Bikes
- Madison, WI municipal bike pilot w/Saris
- California's \$10M Ebike incentive program
- British Columbia's commercial program
- Nashville, TN
- And more...

This is a draft presentation for input.

Some big questions..



...is there a program design that would be most effective?

...is there one that others haven't tried?

...what are the options?

...brainstorm and rank

General categories...



RESIDENTIAL



COMMERCIAL



MUNICIPAL

SERVICE

- High cost per demonstration (\$15K+)
- Small business commits to substitute for motor vehicle
- Track closely, publicize results
- *Goal to require?*

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Service Vehicles				



SERVICE

- **Note:** goal is service vehicles: electrician, plumber, etc.
- Possible local delivery incl. nonprofit services.

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Service Vehicles				



Pictured here:

- Half-ton flatbed bike truck (above).
- Locking heavy-duty utility trike (left).



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al	Municipal	Cross-Cutting











Rebates

Common program design.

Concerns:

- Misses unique sectors
- What is ideal price point?

If price point is \$750 for low-income recipients, and 15% overhead, 45 people served.

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Rebate/Refund				



Lifestyle

Take an ebike home for a set period of time.

- *Observation: Capital Bikeshare (CaBi) has structures that might support.*
- *One response: just increase ebikes at CaBi. Or explore discounted access to strategic new docks.*

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Taste the Lifestyle				



Local Bikes

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Neighborhood Resource				

Provide high quality stable electric cargo tricycles that most anyone can ride.

- *Local residents can use for free.*
- *Available from community organization or perhaps an enthusiastic individual (work trade for ownership).*



<https://blackthen.com/looking-black-on-today-in-1886-mathew-a-cherry-received-patent-for-the-tricycle/>



<https://www.bicycling.com/culture/a34864189/niche-book-bar-bike/>







*ELF: Kinda-locally made in North Carolina.
Equity concept: improved ability to shop for
carfree households.*

Roadshow

Anecdotaly, giving people the chance to try an ebike is one of the most effective ways to increase adoption.

A mobile road show with many varieties of cargo and normal ebikes offering free trial rides could reach a very broad audience for the first time.

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Demonstration Roadshow				



Roadshow

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Demonstration Roadshow				





Essential Workers

Highly successful pilot in Denver, perfectly timed for the pandemic.

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Essential Workers				



<https://energyoffice.colorado.gov/zero-emission-vehicles/can-do-colorado-ebike-pilot-program>

<https://denvergov.org/Government/Agencies-Departments-Offices/Climate-Action-Sustainability-Resiliency/News-Events/News/2021/CPF-to-Support-E-Bikes-for-Essential-Workers>

Essential Workers

NYC Equitable Commute Project will subsidize 10,000 ebikes for low-income workers.

<https://equitablecommuteproject.carrd.co/>

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Essential Workers				



<https://nyc.streetsblog.org/2021/05/21/new-program-aims-to-give-e-bikes-to-low-income-workers/>

Adaptive Cycling

Bicycles can open a world of possibilities for people with certain disabilities. Ebikes offer additional potential.

Adaptive Cycling programs already exist in Berkeley and Oakland, California.

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Adaptive Cycling - People w/Disabilities				



<https://www.borp.org/programs/adaptive-cycling/>

Adaptive Cycling

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Adaptive Cycling - People w/Disabilities				



Adaptive Cycling

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Adaptive Cycling - People w/Disabilities				





Figure. A cyclist carries a cane in Copenhagen, Denmark (left), while another after a broken leg carries crutches in a small trailer in York, England (right). (Photos, Jason Meggs)

Source: Best Practices in Bicycle Planning (report for European Union's BICY Project, Jason Meggs)

Outreach

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Public Outreach Campaign				

There are already so many positive facts to share with the public – and ebikes are on the rise – does it make more sense to spread the word?

- **Save Money**
- **Improve your health**
- **Have fun**



Mobile Repair

Problem: ebikes are new, and repairs face maintenance barriers (heavier to get to shop, more complex to fix). DC has its own mobile bike repair, Upshift. International new business model, provide mobile ebike repair insurance (20 euros / month). Upshift also gives bike education workshops.

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Mobile Repair Service				





<https://www.upshiftdc.com/>

Mobile



Mobile Repair



¡CUIDE SU BICI!

¡ARREGLOS!

BIKE REPAIR

6/28 - 7/2 LU / MA / MI / JU / VI 10AM - 2PM	FRANKLIN SQ PLAYFIELD (2845 N. 10TH ST)	7/26 - 7/30 LU / MA / MI / JU / VI 10AM - 2PM	COLUMBIA PLAYFIELD (1848 W COLUMBIA ST)
7/6 - 7/9 MA / MI / JU / VI 10AM - 2PM	CLARKE SQUARE (2200 W WYOMU PL)	8/2 - 8/6 LU / MA / MI / JU / VI 10AM - 2PM	MERRILL PARK (481 W 50TH ST)
7/12 - 7/16 LU / MA / MI / JU / VI 10AM - 2PM	NEIGHBORHOOD HOUSE (2014 W RICHARDSON PL)	8/9 - 8/13 LU / MA / MI / JU / VI 10AM - 2PM	WALKER SQ PARK (1001 E 18TH ST)
7/19 - 7/23 LU / MA / MI / JU / VI 10AM - 2PM	LINCOLN AVE ELEMENTARY (1917 W LINCOLN AVE)	8/16 - 8/20 LU / MA / MI / JU / VI 10AM - 2PM	MOODY PARK (2201 W ALDER AVE)

ENCUENTRE A NUESTRO EQUIPO EN ESTOS LUGARES PARA
OBTENER ARREGLOS Y AJUSTES GRATIS!

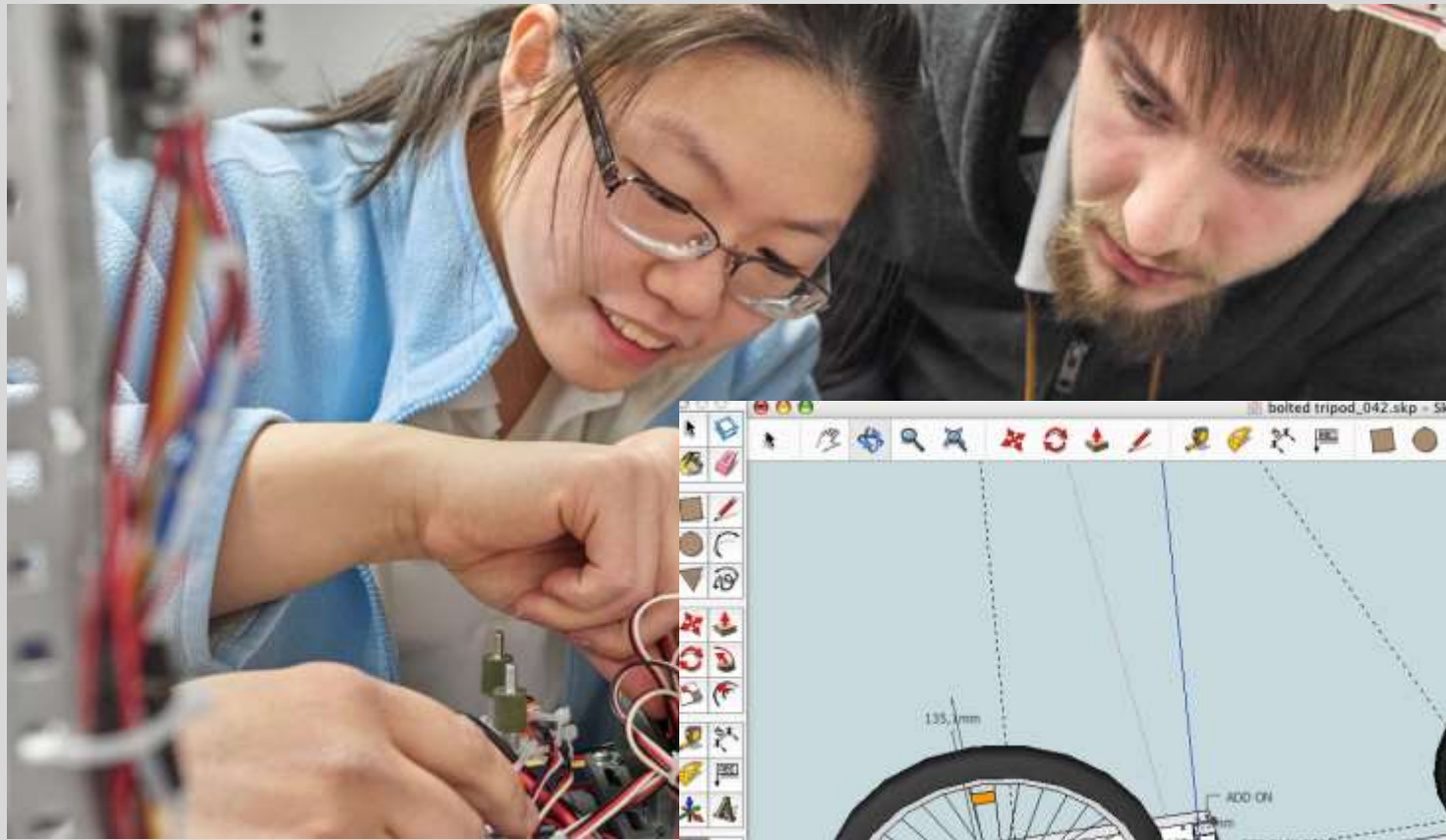
<https://wisconsinbikefed.org/what-we-do/programs/mobile-bike-repair/>

Design / Build DC

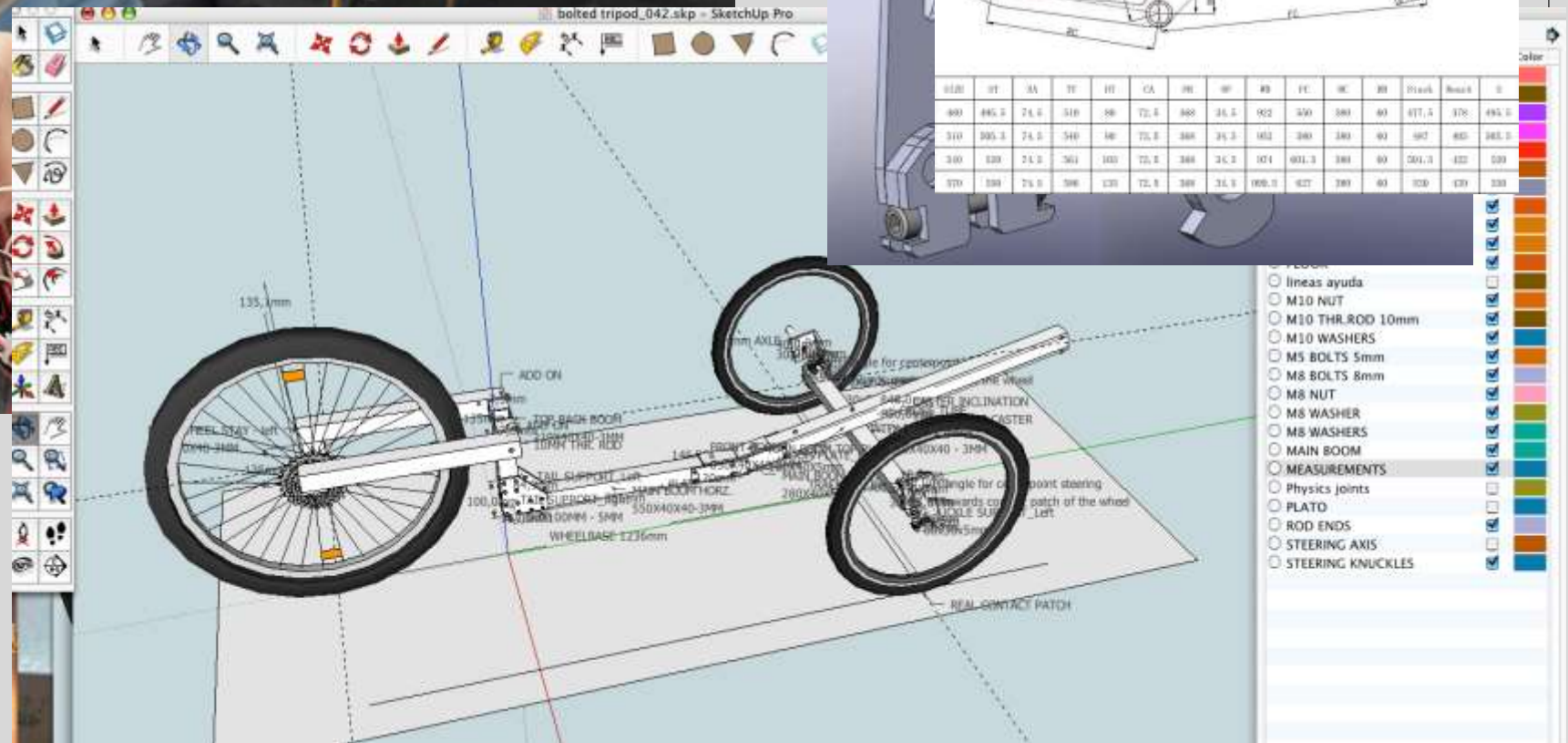
What if DC had its
*own bicycle design/
build vocational
Training?*

Program Description	Residential	Commercial	Municipal	Cross-Cutting
DC Design/Build				





Partner with
engineering
programs?



Lock / Charge

Many people don't have *easy access to store and charge their ebike.*

Program Description	Residential	Commercial	Municipal	Cross-Cutting
Secure Lock/Charge				



<https://www.securabike.com/Shop/Bike-Cages/Horizontal-Double-28-Bike-Cage>

eBike Charging Station



https://gallery.saris.com/Content/assets/eBike_Charging_Station.pdf

Parking at Night

No proper solution



Free (of charge)



Bikes in All Policies?

What is the potential to retrofit to EV chargers?



Initial categories again...



RESIDENTIAL



COMMERCIAL



MUNICIPAL

Concepts

Program Description	Residential	Commercial	Municipal	Cross- Cutting
Service Vehicles				
Municipal Fleet(s)				
Rebate/Refund				
Taste the Lifestyle				
Neighborhood Resource				
Demonstration Roadshow				
Essential Workers				
Adaptive Cycling - People w/Disabilities				
Public Outreach Campaign				
Mobile Repair Service				
DC Design/Build				
Secure Lock/Charge				

Additional categories...



TRY IT



DO IT



MAKE IT

Venn-ish Diagram

(Try/Do/Make)



Additional categories...



OUTREACH



CAPACITY



EQUITY

Outreach/Capacity/Equity

Program Description	Outreach	Capacity	Equity
Service Vehicles			
Municipal Fleet(s)			
Rebate/Refund			
Taste the Lifestyle			
Neighborhood Resource			
Demonstration Roadshow			
Essential Workers			
Adaptive Cycling - People with Disabilities			
Public Outreach Campaign			
Mobile Repair Service			
DC Design/Build			
Secure Lock/Charge			

High-level draft ranking categories

(draft - not including environmental and health benefits)

Target Group Size
Number Benefitting
Cost Each
Growth Potential
Local Economy
Likely Long-Term Impact

FEEDBACK!!!



W24 Vienna: "Talk & Ride" filmed on cargo bike





















Ranking Exercise - *individual example*

Program Description	Target Group Size	Number Benefitting	Cost Each	Growth Potential	Local Economy	Likely LT Impact	Outreach	Capacity	Equity	AVERAGE
Service Vehicles	2	3	5	1.5	1	2	3	1	1	2.17
Municipal Fleet(s)	3	3	4	3	3	3	3	2	4	3.11
Rebate/Refund	1	3	1.5	1	2	2.5	1.5	3	1.5	1.89
Taste the Lifestyle	3	3	3	2	2.5		1	3	1.5	2.38
Neighborhood Resource	1.5	1.5	1.5	3	3	2	1	2	1.5	1.89
Demonstration Roadshow	1.5	1.5	1.5	3	3	2	1	2.5	2	2.00
Essential Workers	1.5	3	3	3	3	3	3	3	1.5	2.67
Adaptive Cycling - People w/ Disabilities	3	3	3	3	3	3	3	3	1.5	2.83
Public Outreach Campaign	1	1	1	3	2.5	1.5	1	3	3	1.89
Mobile Repair Service	1.5	2.5	3	1	1	1	2	2	2	1.78
DC Design/Build	3	2	5	1	1	2	3	1	1.5	2.17
Secure Lock/Charge	2	2	5	2	2.5	3	1.5	1	1.5	2.28

Ranking (Sorted, Unweighted)

Program Description	AVERAGE
Mobile Repair Service	1.78
Rebate/Refund	1.89
Neighborhood Resource	1.89
Public Outreach Campaign	1.89
Demonstration Roadshow	2.00
Service Vehicles	2.17
DC Design/Build	2.17
Secure Lock/Charge	2.28
Taste the Lifestyle	2.38
Essential Workers	2.67
Adaptive Cycling - People with Disabilities	2.83
Municipal Fleet(s)	3.11