

Riding Into the Future

UNH Facilities Bike Fleet Pilot Program **Alex Brickett Stephen Pesci**





Departmental Bike Program



Integrating bikes into a campus vehicle fleet:

- pilot program lessons

- cultural change

 sustainable practice • workforce benefits





Campus Context



Bike time = 15 min max; 5 min core

- igodot
- ightarrow
 - \bigcirc

- flat!

A Walking Campus consolidated core limited parking facilities split: **FPM** Adjacent **Operations remote** connected infrastructure 25mph street system

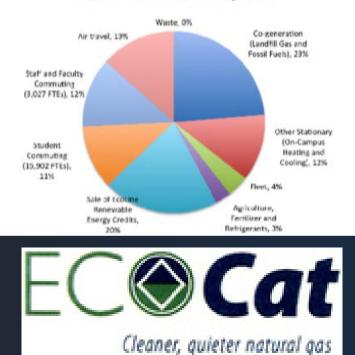








Relative Contributions of Activities to UNH Carbon Footprint



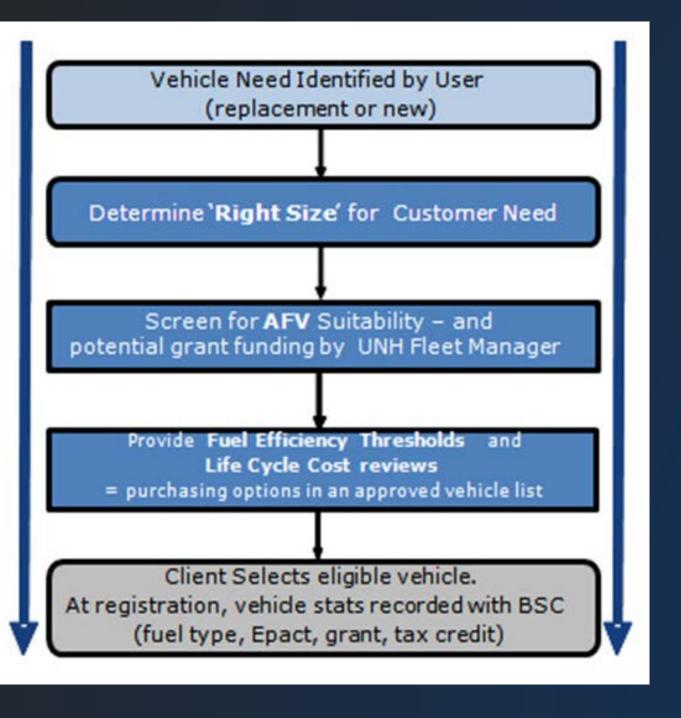
Transportation Policy & Climate Commitments

- **Transportation Policies** since 2003: PTDM
- **STARS Platinum**: 2017
- **Climate Commitments:** GHGE Inventory
- Alternative fuel fleet: 20 year EcoCat History igodot300 vehicles, 1.7M miles, 230k gge 5% total emissions
- Facilities is a good test kitchen: ightarrowdemonstrate best practices/clip





Idea Genesis?



pragmatic visioning

Based on prior practice: "EcoCat Vehicle Calculator"

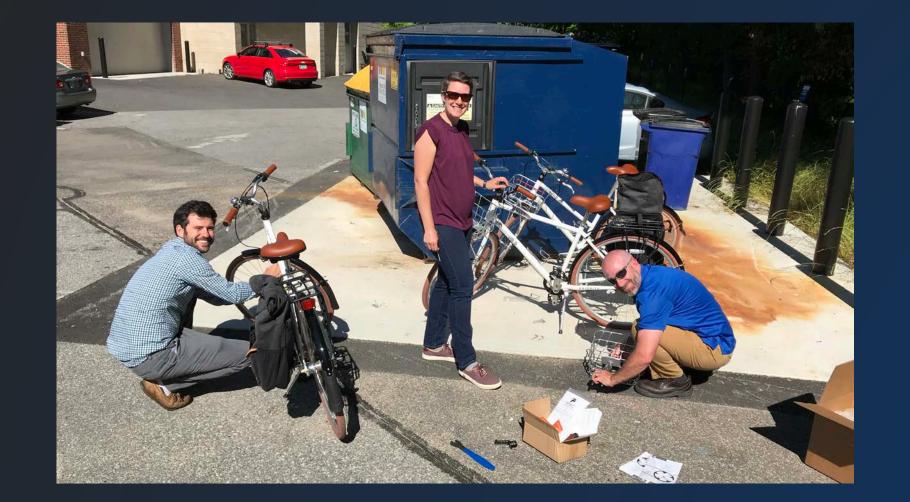
- life cycle costing
- alternative fuel fit
- emisisons
- need

A campus transportation planner scheme =









- igodot

- 'pilot' best practices

Goals:

expand staff mobility-efficiency reduce motor vehicle reliance reduce on-site parking demand reduce operational costs improve health & morale enhance community bike culture







Pilot Implementation 2017-2018

- Gain Leadership/Institutional support
- Secure funding: approx. \$4k
- HR and Legal Counsel reviews

- Training: formalized but fun
- **Organization & Future Expansion: semi** autonomous pods

Develop safety and operating protocols Procurement: Collaborate with local shop











Currently: 3+3 bikes 2 pods 30 trained participants

- the bikes igodot
- ightarrow
- ightarrow
- ightarrow
- ightarrow

ightarrow

the departmental funding the maintenance the training feedback and data collection the growth plan





Liabilities, Legal, Learning

H Facilities tmental Bike Program

Overview

All Facilities-Ritzman employees are encouraged to use the UNH Facilities Departmental bikes for trips around campus and downtown Durham.

The bikes allow for quick, economical transportation, with the added benefit that you will never be concerned about finding a parking spot. They also offer a great way to get some fresh air and exercise! Remember, the bikes are campus vehicles, and are intended to be operated per program rules and for official use only.

Before you can use a University bike, the following one-time steps must be completed:

- Read the Safety Rules and Practices. 500 C 13
- Request and be fitted for a stylid: UNH-supplied heimet, which will be assigned to you Step 21
- Schedule and attend a brief initial bike cafety training, led by either Alex Brickett or 500 C 1 Steve Peacl, to go over the bike operations and rules of the road.
- Sign the Release of Liability and Acceptance of Rules S240-40

- No precedent for program
- First reaction: vehicle biases

Ensure liability protection for participants Parallel driver safety training review







Vehicle Specs/Selection

- weatherproof (non-ferrous)
- greaseless (Kevlar chain)
- lightweight (cro-molly)
- durable
- frame sizing
- helmet = uniform

simple gearing (internal 3 speed)

partner with local bike shop









Safety + Structure

- 3rd party assembly and annual tuning ightarrow
- university-issued helmets igodot
- lights on bikes ightarrow
- pod managers igodot
- train the trainers
- adapt pods to unique team/setting ightarrow









"It's like riding a bike"... but you may have forgotten

45-minute mandatory training required for all participants:

- review legal documents
- explain the program intent
- review safe biking basics
- field-testing





Marketing & Growth

1. Outreach to

Departments Value Equation:

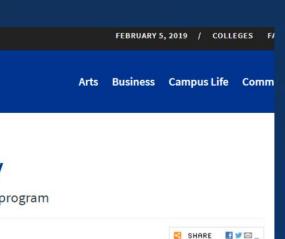
- Cars costs \$23k+, bike costs \$700 with ulletfitup
- dept parking spot on campus cost igodot

	Capital \$	Annualized Life Cycle Cost	Annual Maint	Cost/Mile
Bike	\$700	\$170	\$100 max	.10c/mi
Prius C	\$23,000	\$2,800	\$500 min	.3055c/mi

FACULTY/STAFF NEWS Cycling for Sustainability And that's just one of the benefits of this new program







TUESDAY, DECEMBER 11, 2018







Data from 2018 season (4 months/20 bike months) Fleet grew from 4 to 6 bikes 807 miles 107 hours 1,465 trips 45,000 calories dropped 1 vehicle from fleet



Results





Bike Ecosystem

This program is not a "bike share" – that is another conversation.

Other bike work underway:

Over \$60k of bike infrastructure in last 5 years Improvements to trails and lanes and roads Looking at a bike center concept/student request







Questions/Contacts

Alex Brickett UNH Facilities Project Management Alexander.Brickett@unh.edu

Stephen Pesci UNH Campus Planning Stephen.Pesci@unh.edu

