# Libre (FLOSS) Software for Bike Collective Shops

The purpose of this workshop is to gently introduce the audience to the current state of Free Software designed specifically for the operation of Community Bike Shops.

After discussing why FLOSS(ing) is good for the health of your Bike Collective, and how **you** and **your collective** can encourage, and facilitate the development of amazing new or reused software

We will study demonstrations of useful FLOSS software at  http://bikebike.wvcompletestreets.org!

**"Give me liberty, or give me death!"**

**- Patrick Henry**
**Virginia Convention in 1775, at St. John's Church in Richmond, Virginia**

**"Give me libre software, or give me death!"**

**- Jonathan Rosenbaum**
**Bike! Bike! Southeast 2016, at Rag & Bones in Richmond, Virginia**

"Free software" means software that respects users' freedom and community. Roughly, it means that the users have the freedom to run, copy, distribute, study, change and improve the software. Thus, "free software" is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech," not as in "free beer". We sometimes call it "libre software" to show we do not mean it is gratis.

- Free Software Foundation

# Why the word FLOSS?

# Free/Libre and Open Source Software

It sounds cool

More people are familiar with the word Open Source

And there is not enough time today to discuss the political differences

You may not know it,

but ..

# FLOSS has already changed your LIFE!!

# This year's shocking quote!!

**"On a 12-month rolling total basis, electric power sector CO2 emissions are now regularly below transportation sector CO2 emissions for the first time since the late 1970s. CO2 emissions from electric power have been trending lower since 2007."**

**- US Energy Information Administration**
**January 19, 2017**

More than ever, providing an easy to use framework to expedite the creation of new bike collectives, and enhance existing collectives has become paramount!

# To Get More People On Bikes, More Often!!

Bike Collective Specific Software is a critical part of providing that framework especially for new collectives.

# Why I got very interested in FLOSS for Bike Collectives

# Ready Made FLOSS Solutions

# Three Requirements

- Provides a solution specific to Community Bike Shops (CBS != LBS)

- Proven history in a CBS production environment (Quality Assurance (QA)) **and**/or extensive community testing

- User Interface (UI) Design is easy to utilize with minimal training required for staff/managers

At first
Nothing seemed to exist
So I considered building on an existing platform

# Enterprise Resource Planning (ERP)

Odoo, OpenBravo, webERP

- Not CBS specific software
- Proven!  But not in a CBS.
- High learning curve

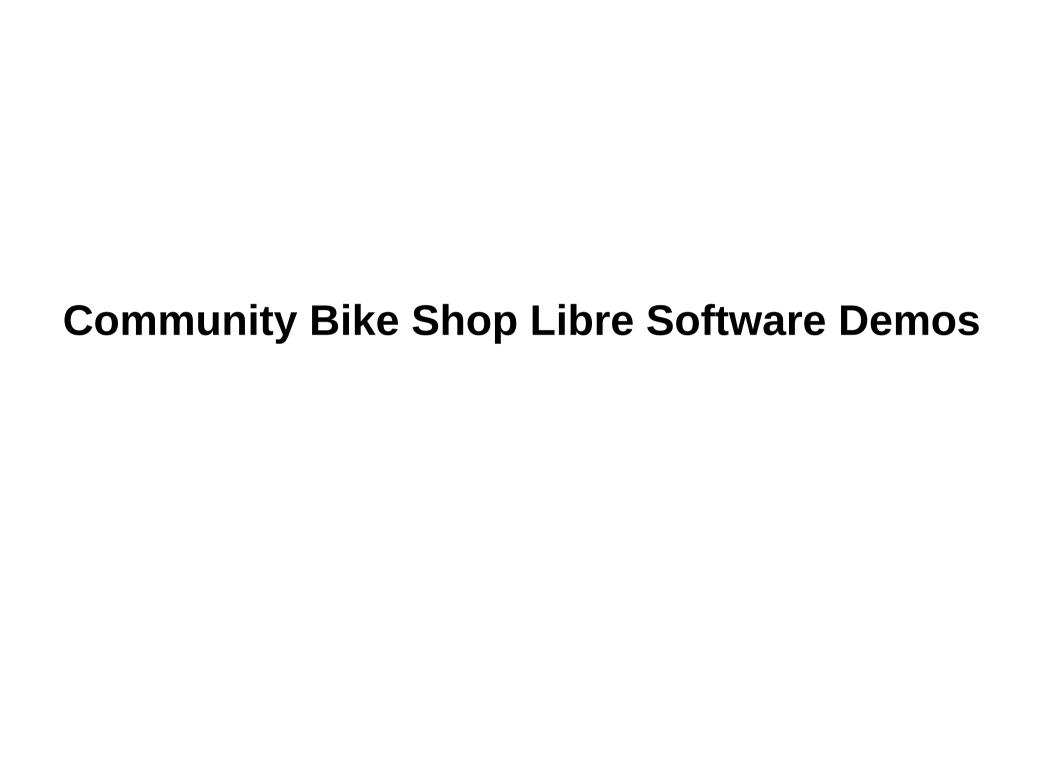# Constituent Relationship Management (CRM) for NonProfits

## CiviCRM

- Not CBS specific software
- Proven!  In a few CBS's with paid staff.
- High learning curve

# Bike! Bike! 2014 in Columbus, Ohio

# TheThinkTank Mailing List to the rescue!

# Next Step

Study existing community driven FLOSS efforts

# Community Bike Shop Libre Software Demos

# Docker Containers

Used for all live demos @

http://bikebike.wvcompletestreets.org

(may change to bikebike.bikelover.org)

# Other advantages of Docker

- Easy Testing / Development / Deployment

- Packaging / Shipping - No dependency hell. The end user experiences the exact same software the developer designed!
  - *Niche software: you probably are not going to find CBS software packages, anytime soon.*

- Easy Installation

However, before I continue with this saga, I will first discuss what bike collectives can do to facilitate the development of software.

# Community Development

# FLOSS!

# BUT DO IT CORRECTLY

Release Early, Release Often, and listen to your Constituents.

# BUT I AM NOT A DEVELOPER

**You do not have to be a developer.**

Because more than anything

FLOSS wants Quality Assurance (QA)

FLOSS prospers from QA, and it is where it differs in significant ways from proprietary software.

Coding represents only a small part of software design, development, testing, implementation and release to the public.

- Help with testing

- Submit issues and bugs

- Suggest / Request enhancements and features

- Write documentation

- Help with translations

# AND

End Users play a large role in dictating the design.

It is not by chance that many of today's successful bike collective software projects have been led by folk who still are or have been involved with management roles in their respective collectives.

Your Bike Collective can be the hero!
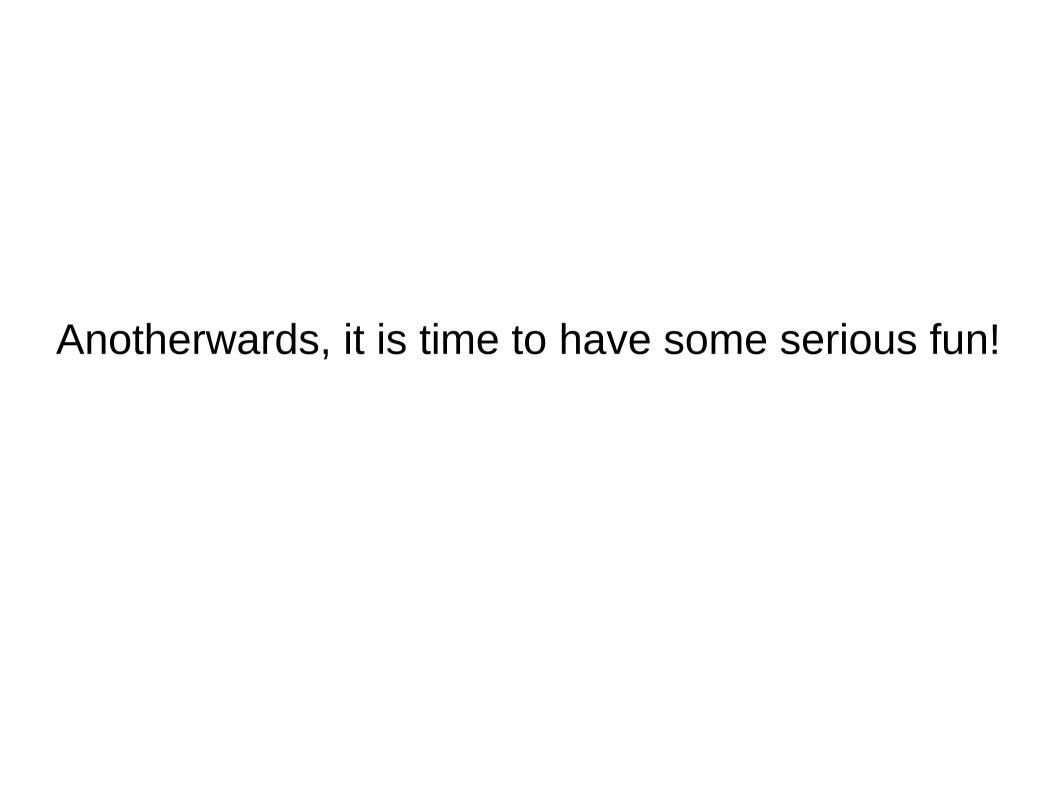
# Want New Features?

COMPENSATE COMMUNITY DEVELOPERS

And/Or @ least thank them!

# What can we do to help FLOSS for Bike Collectives move at a faster pace?

1. Communication, and more Communication!

2. Not just for my bike collective, but for everyone.

3. Much more RERO – Release Early, Release Often

4. Break free from mental blocks:  Replace them with courage, certainty, and belief and suddenly we will discover that we do have the time to take CBS Software to the next level, now, not later.

All these issues could be resolved very easily just by becoming more aware, and by avoiding the repeat of the same mistakes from the past.

Anotherwards, it is time to have some serious fun!

**And now the show you have all been waiting for!!**

# Bike Kitchen POS

"A custom point-of-sale program for the Mac."

# Free Hub

"Freehub is a member and shop visit application implemented in Rails by the San Francisco Bike Kitchen."

# BikeBinder

"BikeBinder is Free Ride's Inventory System application."

# BikeShed

"Bikeshed is Velocipede's User, Sales, and Bike Inventory Web App."

# Yellow Bike Database

## "Yellow Bike Project's Hours and Transaction Database"

# SignIn App

"The Sign In App is a mobile app to track Volunteer, Member, Staff or Earn a bike hours."

# Broke Spoke Shop Management System

# New (or **not so new**) additions since 2016!

Ask me to explain about the not so new aspect.

# Workstand

# Bike Database

"Bike-db is an open source project to help community bicycle projects track bikes, clients, and volunteers."

# Vtracklery

"Vtrack is a Rails 4.1.4 application for tracking hourly activity in a volunteer work setting."

# Vtracklery2.0

"Volunteer time logging and kiosk app for community bike shops."

# Bike Tree Software

"An open source mash up of POS for co-ops with several features including POS/member, membership tracking, volunteer tracking, paid repairs tracking, and a bike rental tracking system (bike library)"

# No Name Yet

"Newark Bike Projects management software"

**IS SOMEONE OUT THERE FLOSSING?**
**SHOW ME THE SOURCE**

I keep track of FLOSS for bike collectives, and encourage bike collectives who have their own solutions to consider releasing their code under an appropriate FLOSS License to the public.

Jonathan Rosenbaum

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