Utilizing Private Partners to Build State Capacity

BBF Data and Evaluation Committee

January 30, 2025

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VERSO Program Director@ UVM

VERSO started in 2022 focused on building an open community through:

- **ORCA Program:** Student teams create open-source research tools and data with UVM and community partners.

- **Consulting Services:** Help UVM researchers and the community adopt best practices in open science.

- **Events and Outreach:** Share knowledge through events, lectures, and initiatives like Open Source Connector and PyData Vermont 2024.

- **Infrastructure and Policy:** Promote open practices and build open research tools and policies.

Open is about creating, sharing, and maintaining resources together

Open Data is **findable accessible, interoperabile,** and **reusable** by **anyone** for any purpose

Types of Open Data Platforms

1. **Institutional Repository** - to store data created by the institution
2. **Discipline-Specific Repositories** - to hold data within a specific subject domain
3. **Cross-Disciplinary Repositories** - to hold data from across many disciplines

The University of Vermont

Open Licenses

Why have a license at all?
A license helps protect the author by verify there is no liability or warranty, clearly states if there needs to be attribution, if there are constraints to use and if it can be used for commercial use.

Is there a difference between Database vs. Data Content licenses?
There are licenses specifically tailored to each, it is helpful to use the right license.

"International conventions are clear that copyright can protect compilations of data or other material which by reason of the selection or arrangement of their contents constitute intellectual creations. But copyright does not extend to the data contained in the database which may or may not be protected depending on whether they meet the conditions identified above: to be original expressions in their own right."
(https://direct.mit.edu/dint/article/2/1-2/199/10013/Licensing-FAIR-Data-for-Reuse)

Data Content Licenses

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- CC BY-NC-ND (Attribution-NonCommercial-NoDerivatives)
- The Restrictive License Template
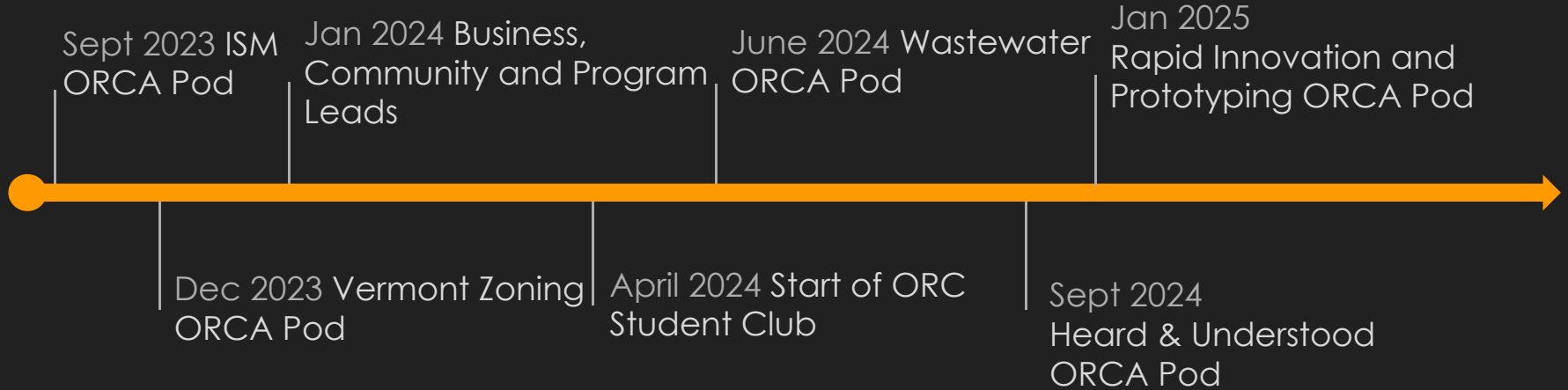- The BSD 3-Clause Software License

OPEN
RESEARCH
COMMUNITY
ACCELERATOR

Translating academic research or community needs into open source projects through a passionate group of students

University of Vermont

VERSO

UVM OPEN SOURCE PROGRAM OFFICE

Timeline

Sept 2023 ISM
ORCA Pod

Jan 2024 Business,
Community and Program
Leads

June 2024 Wastewater
ORCA Pod

Jan 2025
Rapid Innovation and
Prototyping ORCA Pod

Dec 2023 Vermont Zoning
ORCA Pod

April 2024 Start of ORC
Student Club

Sept 2024
Heard & Understood
ORCA Pod

ORCA By The Numbers

27
Students Hired

22
Open Projects

6,500+
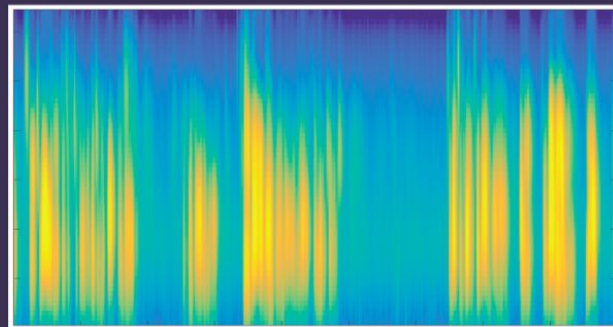Hours Worked

Heard & Understood App

Started September 2024

Research Sponsor: Bob Gramling, Donna Rizzo

Partners

- Vermont Conversation Lab
- Apple

The Vermont Conversation Labs explores how key aspects of human relationships, communication, and connection show up in conversations about serious illness, caregiving, or grief. Their goal is to create fair and accurate ways to study these experiences in large and diverse groups of peopl

The Heard & Understood App will create a user platform supporting the research exploration of the CONSert algorithm.

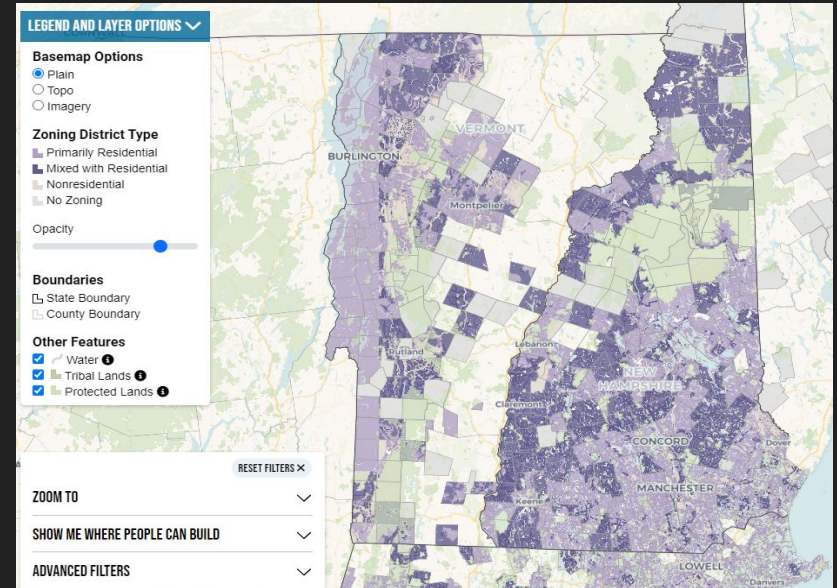CONNECTIONAL SILENCE

Vermont Zoning Atlas

Started January 2024

Research Sponsor: Yoshi Bird

Partners

- National Zoning Atlas
- Vermont state Agency of Commerce and Community Development (ACCD)
- Vermont Center for Geographic Information (VCGI)
- Vermont Housing Finance Agency (VHFA)
- And more!

Zoning regulations are typically inaccessible to the public. The Vermont Zoning Atlas aims to create a tool for easy access and comparison of residential zoning codes to streamline housing development and address affordable housing and residential density issues.
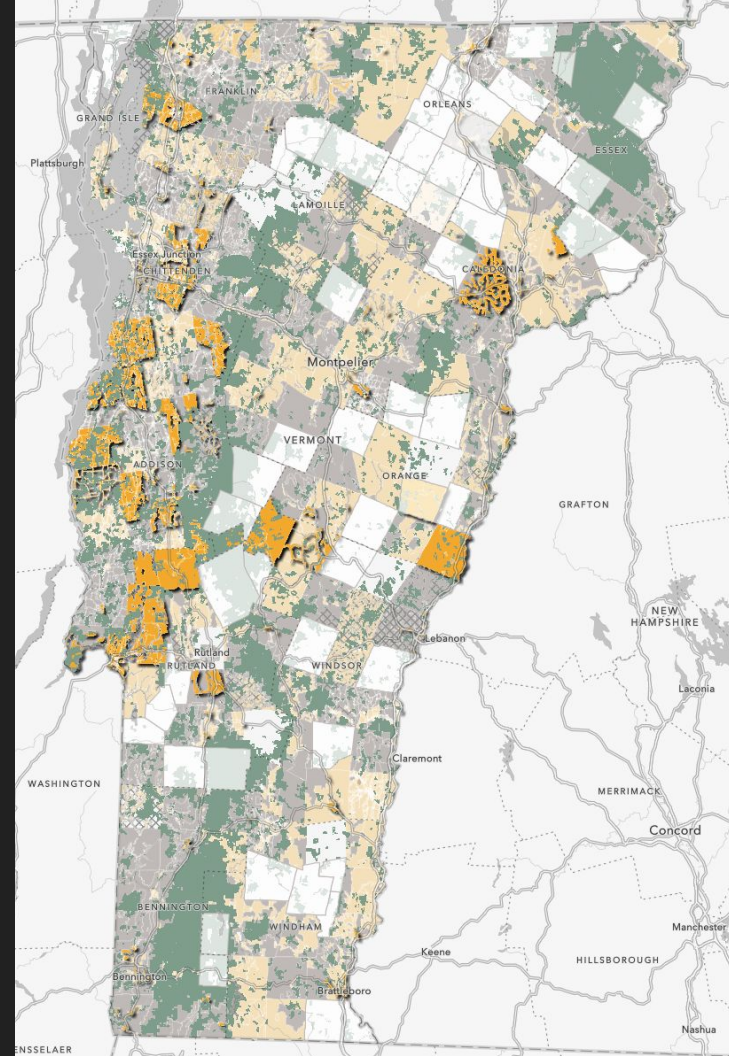
The Steering Committee

The Vermont Zoning Atlas is a cross-sector, public-private, multidisciplinary collaboration:

- State of Vermont
- Vermont Association of Planning & Development Agencies
- Center for Geographic Information
- Chittenden County Regional Planning Commission
- Northwest Regional Planning Commission
- Vermont Housing Finance Agency
- Champlain Valley Office of Economic Opportunity
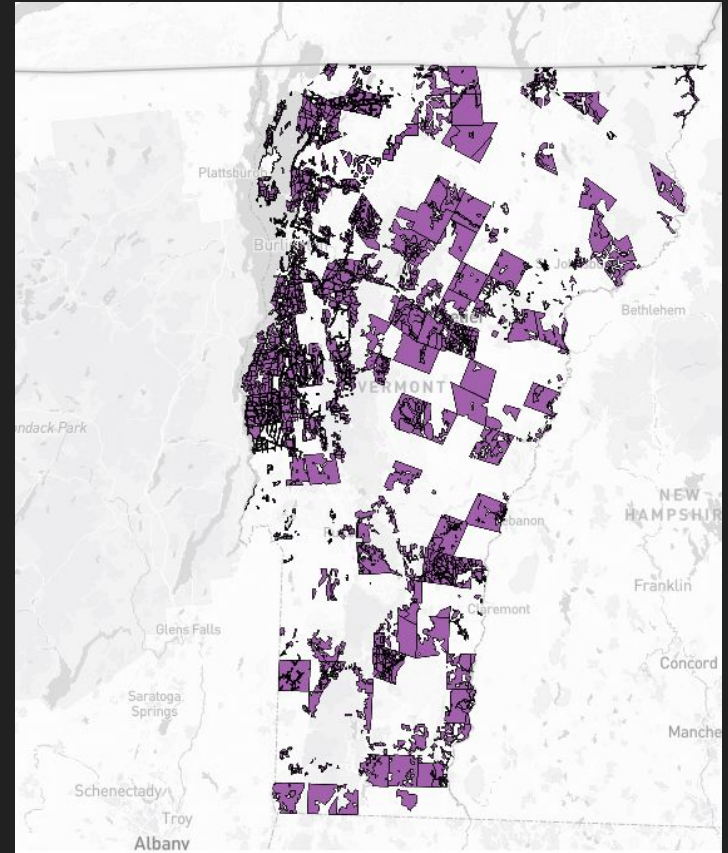- University of Vermont
- Middlebury College

... And so many volunteers!

Vermont Livability Map

https://verso-uvm.github.io/Vermont-Livability-Map/

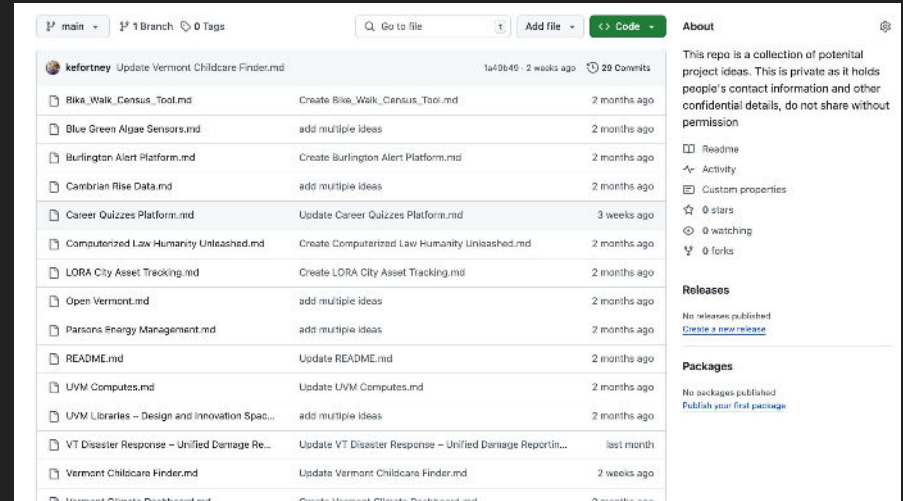Beta data visualization bringing together Zoning, Wastewater, Flooding and more!

Rapid Innovation and Prototyping
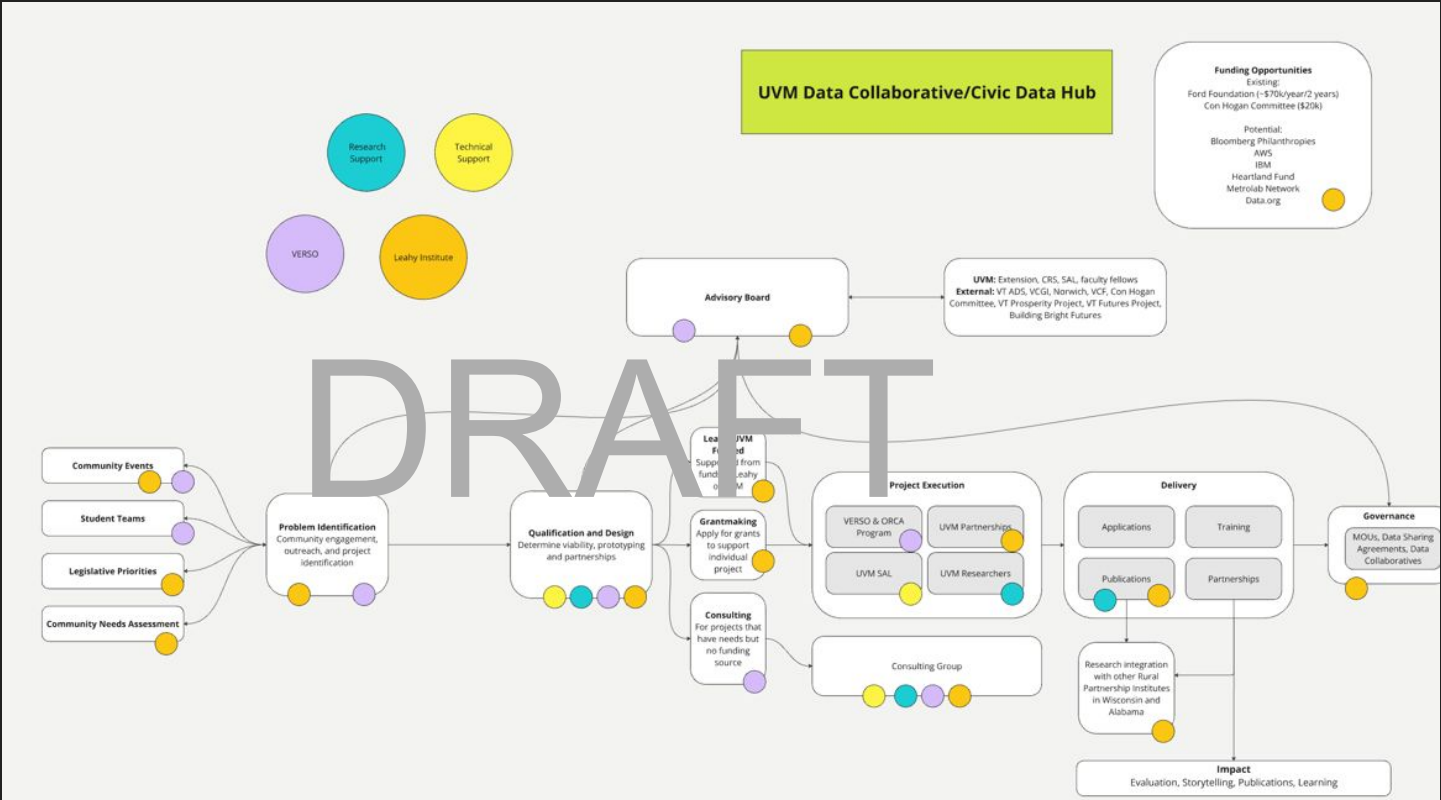
Starting January 2025

This pod is devoted to rapid prototyping to quickly evaluation multiple ideas for feasibility by creating a working prototype that can be shared with stakeholders.

The goal is to work on three projects in the semester and identify what should turn into large scale development

UVM Data Services

Project Bank

- **Bike/Walk Census Tool** - Using Dartmouth Open Source project create an easy way to understand bike traffic in towns
- **Blue Green Algae Sensors** - Work with St. Michael's on a hardware project that can detect algae blooms from a floating sensor
- **Burlington Alert Platform** - Collaborate with the City of Burlington on a mobile app that can provide city alerts and updates (beach closures, parking ban, etc)
- **Cambrian Rise Data** - Support Cambrian Rise developers in sharing their collected data
- **Career Quizzes Platform** - Develop with the UVM Career Center a way to run career quizzes
- **Computerized Law Humanity Unleashed** - Collaborate with the Social Good Lab on ways to deploy OpenAI for social good
- **LORA City Asset Tracking** - Working with the Cirt of Burlington on ways to use the existing LORA network to track city asset

- **Open Vermont** - Develop an organization with the Leahy Institute to empower open data collection and data services for State, regional and local organizations
- **UVM Computes** - Resurrect the browser-base supercomputer project
- **VT Disaster Response** – Redesign a unified damage reporting platform with VEMs and UVM
- **Vermont Child Care Finder** - Working with the Child Resource Centers, create a simple to use tool to help families find, sort and select childcare in Vermont
- **Vermont Climate Dashboard** - Working with the State of Vermont Climatologist, develop a regionalized climate dashboard
- **Vermont Rural Water Association Data Visualization** - In collaboration with VRWA, develop data visualizations and data collections that can be used for advocacy
- **Vermont Unified Social Services Application** - Create a simple interface with a form that can be used to generate applications for all applicable programs

Summer camps database!

What are key missing pieces to advance the welfare of children and families?

Who are the key users that can change the picture?

Please email kendall.fortney@uvm.edu if you have feedback, potential collaboration or ideas