

**In Response to:** CITY OF BURLINGTON & BTV IGNITE  
COMMUNITY INNOVATION PROPOSAL  
**Proposal for:** “Improving voter access and awareness during 2020 election”  
**Submitted to:** Brian Lowe, Chief Innovation Officer  
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## Introduction

Code for BTV fully supports Vermonter’s access to the ballot, and is excited to submit a proposal to improve voting access and awareness as described in section 3, part 2 of the Community Innovation Proposal RFP. (At this time we will not be submitting proposals for parts one and three.)

## About Code for BTV

Code for BTV makes Vermont better by supporting social support organizations.

We are a local chapter (or “Brigade”) of the national organization, Code for America. Our Brigade focuses the ample volunteer energy of the technology community on building digital tools that help existing organizations do their work more efficiently and effectively.

Code for BTV delivers our digital products to our Partners for free by designing enticing volunteer opportunities for local technologists. As an all-volunteer organization, we operate differently from traditional vendors and have developed unique processes that offer stability for our partners while also remaining flexible for our members.

## Project Definition & Scoping

### Agile Iterations

Our brigade practices “Agile” methods of project iterations. The project begins by delivering a bare-bones working product (the minimal viable product or MVP) early and then continuing to layer on a series of feature upgrades. This allows us to deliver small working versions to our partners earlier which can be experimented with and can inform and revise upcoming versions.

Breaking a project into iterations is important for volunteer-based work for two reasons. First it regularly draws feedback and review into the development process which keeps our work grounded. Second, splitting a single deliverable into a series of upgrades helps us smooth out fluctuations within our volunteer teams.

## User Centered Design

Code for BTV believes that the best outcomes start with the needs of the end users. We begin projects by talking with real people to understand who they are, what they need, and how they behave. We design around those needs, continuously test with users, and refine our work accordingly.

Keeping our work consistently centered on the user ensures that we provide our Partners with services that most appropriately impact the lives of Vermonters.

## Timelines & Scheduling

Since predicting project completion is inherently difficult for an all-volunteer organization, Code for BTV is best suited for working with projects and organizations who have more flexibility in their timelines than their budgets. In recognition of the generosity of our volunteers, the Brigade abstains from formally committing to any dates or milestones on a project.

We have, however, established some processes to provide our Partners with a relatively stable and predictable experience. Good project selection and design limits the pressure from the outset. Selecting projects with modest overall scopes increases the likelihood of completing within our typical 3-12 month windows. Breaking the project into multiple iterations ensures that value is delivered as frequently as possible. Good communication between the project team and our Partners keep everyone on the same page. All of which generally gives us the flexibility to see that the project delivery is comfortably aligned with the expectations of our Partners.

## Project Leadership

Each project has three key leadership roles: a Project Manager (PM), a Tech Lead, and – on the Partner's side – the Project Steward.

### Project Steward

Code for BTV has remarkable expertise in software development, but we look to our partners for the authority and experience to deliver the right products. The Project Steward works for our Partner and serves as the Brigade's direct contact. Their involvement is critical to the success of the project and typically involves activities such as:

- Communicates with the Project Manager regularly regarding all aspects of project work
- Facilitates conversations between Project Manager and subject matter experts
- Meets occasionally with project team volunteers to share value and purpose<sup>1</sup>

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<sup>1</sup> Meeting the project team is important, but not frequent. Typically our Project Stewards join our week night meetups once every 2-3 months to offer encouragement and context for the work.

## Project Manager

The project manager plays a key role in ensuring our projects move forward smoothly. Historically most of our projects have received PMs from our partnership with the Champlain Valley Project Management Institute (PMI), and this project would likely be the same. Our members from PMI are consistently certified professionals within their field and are a delight to work with.

## Technical Lead

The technical lead on a project coordinates the volunteer effort. They work with the PM and the Brigade's Project Delivery Lead to make sure that the entire project team has work available and the intentions are being clearly translated into the deliverable project.

## Project Team

Individual enthusiasm and engagement are the keystones of our organization. When Vermonters are invited to apply their professional skills to improve their communities, the response is striking.

Once we have our project leaders, we work with them to build a broad team around the initiative. We reach out to over 650 sets of ears in our Meetup.com account, spread word through social media, and visit local tech user groups. Of the roughly 800 individuals who hear our call, typically 50 will engage with the project overall, with a core team of 4-10 people.

# Project Proposal

We are proposing building a web-based application that will help people quickly determine who they should be voting for. We will keep the deliverable light and simple while focusing on important aspects of user experience such as multilingual accessibility and offline functionality.

## Audiences

This tool will be designed for two primary audiences:

### Burlington Residents

The primary audience for this application are Burlington residents seeking voting information. Although there are several sources that offer to tell people who they will be voting for, none cover the entire ballot. This application intends to give people certainty of who will be on their ballot and, secondarily, to make it plain that they are registered and ready to vote.

### Polling station workers

Polling station workers will also be able to use this application to quickly verify that residents are at the correct station and clarify questions relating to ballots, wards, and legislative districts.

Easy, web-based access to this information has the potential to save time and misunderstanding for residents and polling workers alike.

## Goals

1. Help users answer these questions as quickly and intuitively as possible:
  - a. **Voter Ballot**
    - Who will be on my ballot?
  - b. **Voter Readiness**
    - What ward & legislative district am I in, and where will I go to vote?
    - Am I on the checklist at my polling station? <sup>2</sup>
    - Am I [registered to vote](#), and if not, how can I [register to vote](#)? <sup>3</sup>
2. Helps residents identify voting eligibility issues early ([out-of-state students](#), non-registration, etc) and guides them towards appropriate resources.
3. Support all language speakers with multilingual capability and an emphasis on non-textual design elements.
4. Designed to draw from external data sources and APIs where possible, and redirecting to authoritative sources when necessary, to avoid becoming dated and irrelevant over time.
5. Uses low- or no-cost IT infrastructure to securely manage data exchanges.
6. Designed for offline use to support polling stations with limited connectivity.

## Data Access

Accurate, up to date information is fundamental to this project. Since it does not make sense for this application to be the canonical source for the ballot data, we will ensure that data is ultimately available from other sources and draw from those. Initially, there appear to be roughly four categories of data the app will share with vermonters:

1. **Statewide candidate data:** Google and Democracy Works have partnered on the Voters Information Project (VIP) which makes official ballot information accessible via API. They are currently receiving state-wide candidate information from the Secretary of State's office. This appears to be an excellent source for this data.
2. **Local candidate data:** This information currently appears to be something City Hall can make available, but which isn't yet available through an official api. Initially, we may ingest static or manual datasets to drive the MVP (received as spreadsheets or other

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<sup>2</sup> Presumes that this data can be made available and updated at satisfactory intervals.

<sup>3</sup> The application will redirect users to these services on the official "My Voter Page" website.

tabular data formats). However, we would ultimately like to retrieve this data externally. The VIP project is interested in acquiring this local-level data and may be a good steward.

3. **Polling station checklists:** Initial conversations indicate that this data may be available from City Hall, and can be updated at satisfactory intervals. If available, this would be excellent to incorporate into the application since it is the most accurate indicator that someone is ready to vote. However the overall application will not be impacted if this data is not available.
4. **Ward & legislative districts:** This geo spatial data is generally available already, though it is not clear whether it is currently available through an official api. This data would not be user-facing, but instead would be used to determine what ballot information the user should see.

## Product Feature Roadmap

### Minimum Viable Product (MVP)

This is the initial deliverable. It will contain the smallest number of features necessary to provide the intended benefit to users. The MVP is complete enough to be made visible to the public if desired, or it can be shared internally or with external focus groups.

- Will identify the ward and legislative districts for a user
- Will display all state level candidates
- Will work offline
- Will display nicely on all current versions of desktop browsers
- Data will be drawn from existing apis or use temporary static datasets
- Will leverage modern UI design patterns that encourage good design behavior and usability

Once the MVP is delivered, we will begin iterating on the product to add new enhancements. Note that the following iterations are conceptual groupings. If a feature is completed significantly earlier than others, the project team will move that work to a staging environment and the Project Manager and the Project Steward will decide if they would like to do an interstitial release.

### First Iteration

- Will display all local candidates
- Will display polling station information
- Analytics will be added to track behavior
- Will support selecting desired language

## Second Iteration

- Any static datasets will be moved outside the application to external data stores
- Will work with all current versions of mobile browsers.

## Third Iteration

- Will tell users whether they are on the voter checklist at their polling station
- Data will be drawn exclusively from external apis

## Additional Enhancements

The following features are valuable additions that will be pursued if the Project Manager and the Project Steward determine that timelines and circumstances are favorable.

- Allow users to receive reminders of upcoming elections, changes, and new information

## Deliverables for each phase

The Brigade typically stores information and assets on Google Drive and Github. The Project Steward will have access to those accounts as well as any supporting third party accounts utilized by the application. Deliverables are made available at the end of each iteration.

- A fully functional application
- Github access
- Credentials & environment access for all third party tools and services
- Assets & docs

## Cost Summary

The cost of developing, providing, and maintaining this product is expected to be close to \$0.

\$0	Initial development
\$0	Ongoing maintenance
\$0-110 / yr	Operating costs <sup>4</sup>
\$0-500	Optional project team support

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<sup>4</sup> The threshold for triggering third-party expenses is 10,000 users/mo using the MVP. Adding email notifications may bring the threshold down to 1,000.

By utilizing infrastructure that provides a generous free pricing tier, and by employing the volunteer time of industry professionals the Brigade avoids most of the traditional costs of software development.

## Operating Costs

While the Brigade is committed to keeping project costs transparent and reasonable for the Partner, once the final product is launched the partner will be responsible for all ongoing costs.

The basic application is unlikely ever to exceed the free tier of the services we typically use. Given the cyclical nature of elections, if we build text or email reminder support, there is potential to spike into paid subscription pricing beyond the first ~1000 monthly users.

Cost	Service
\$25/mo	<a href="#">Google's Firebase</a> "Blaze" plan
\$30/mo	<a href="#">Sendgrid</a> "Essentials" plan

The services we use do not have an annual commitment so we only need to pay for months in which we exceed limits. Based on the following assumptions, we expect annual costs to be around \$110 per year.

- 1 significant election per year
- 2 months of high volume activity (1-10k monthly users) preceding the election

## Support for Volunteers

As with all volunteers, our project teams are paid primarily in recognition, appreciation, and pizza. We encourage our Partners to get involved in whatever way they are able. Appreciation and recognition from outside the Brigade—financial or otherwise—is very impactful.

Purchases for project teams typically range from \$250-500 for a 9 month project and may include snacks and drinks at our bi-monthly meetups, laptop stickers specific to the project, and celebratory launch parties. The Brigade is prepared to cover these costs, but we invite our Partners to contribute if they would like.

## Partner Commitments

### Resources supplied by City Hall

These are the most significant resources we would like the Partner to supply for this project:

- **Project Steward:** As mentioned above having a dedicated point person is important. This person would be most involved in the earliest stage of the project, then would need to be available for an average of 1-2 hours per week for the duration of the project.
- **Polling Station Workers:** In accordance with the principals of user-centered design, we will want to solicit opinions from the intended users early in the design process. An introduction to one or more polling station workers to inform the application design would be most appreciated.
- **Data:** It will be helpful to have early access to the data used by this application. There are likely to be a number of decisions to make about where and how to distribute the information, so making this an early priority will be helpful logistically.
- **Language Translation:** The Brigade does not currently have the necessary skills to produce translated language for the application. If necessary, we can seek translation services from our wider community, but if this can be provided (either translators or finished translations) by City Hall, that would be a more simple solution.

### Co-Marketing & Promotion of the Brigade

Providing our expertise and labor at no cost to our Project Partners is foundational to the mission of the Brigade. But as an organization fueled by the awareness and enthusiasm of our volunteers, recognition and promotion is very valuable to us.

One of the responsibilities of the Project Manager is to work with the Project Partner and the Project Steward to find reasonable ways to credit and elevate the Brigade and the accomplishments of the project team.

### Project Liability

It is important to Code for BTV that, to the extent possible, our organization avoids assuming liability. We deploy our work at the direction and discretion of our Partners. The Brigade works with our partners to proactively share a working knowledge of the deliverables and discuss different scenarios that may arise beyond the end of the Brigade's involvement. The mission of the Brigade is to amplify volunteer energy by boosting the great work of our Partners, so it is vital that you are entirely confident in the products we deliver.



Typically we leave the decision of whether or not to deploy our work up to our Partners, and we also ask that they assume the associated responsibility.