Submitted Proposal

Organization: Hawaii Open Data

Requested Amount: $100,000.00

Proposal Title: (FS-Interisland Terminal) Hawaii Open Data

1. Describe your organization. What is your mission and who do you serve? Highlight some of the most notable successes your organization has had in the last several years.

Hawaii Open Data, Inc. (HOD) is dedicated to advancing the adoption of open data and the development of solutions capitalizing on open data in Hawaii. We focus on improving data accessibility and integrity in support of public/private collaboration, government transparency, and civic engagement. Our interest in data includes government datasets but extends into the fields of technology, energy, health, education, media, social science, labor, agriculture, economic development, and the environment.

HOD is a new non-profit organization formed in 2012 in the State of Hawaii. HOD is in process of filing for 501(c)3 status with the IRS. HOD was born out of the recognized need to foster and nurture the ecosystem for open data in Hawaii. There is a wealth of public information stored in computers and servers in the various government agencies that is currently not accessible by the general public. The premise is if this data can be liberated, it would usher in a greater understanding of the workings of government and the community at large. With this greater understanding would come trust in government and increased civic engagement.

HOD started as a concept to create an environment to bring together government and community, to collaborate on ideas and to leverage technology to create applications that encouraged government transparency and helped to engage the community. This effort started with the first CityCamp Honolulu in Dec. 2011. The event was facilitated in a unconference format with participants driving the conversation. Approximately 140 people attended CityCamp Honolulu. Session topics were generated by the attendees. These topics were discussed in the sessions attended by both community members and government representatives. As a result, participants generated ideas for possible application development.

What followed in January 2012 was the first City Hackathon. In it, teams of coders, developers and designers created early prototypes of their applications. There were about 40 participants and 6 teams entered their applications for judging. Of the six teams, DaBus, RoadPuka and Allb.us won 1st, 2nd and 3rd place respectively. Both DaBus and Allb.us went on to complete their apps and are now featured on The Bus placard and the City's Can-Do website. Citizens can download or web access these apps for near real-time Bus location and arrival data.

HOD's mission is to continue to foster this environment to leverage open data and to encourage creative technical solutions to drive transparency, data liberation and civic engagement. The concept of government as a platform is at a point where the right elements are aligned to create a rich marketplace for applications. This platform also provides the potential for unique perspectives into government previously unrealized. Government alone cannot achieve this. HOD strives to be the catalyst and glue that grows the open data ecosystem to a point of self sustainability.

2. Please describe your innovation. Include the practical steps involved to take the innovation from the idea phase to implementation.

Hawaii Open Data's innovation is to remain agile and lean, and to leverage web technology, crowdsourcing, social media, design thinking and new collaboration models to create environments where the community and government can come together to build useful applications that drive understanding, engagement and improvement in the place we live. In addition to the company's core competencies which include marketing, outreach, community building, education, strategic planning, project management, IT technologies and infrastructure support, HOD personnel are

experienced in new forms of collaboration including idea forums, Web 2.0, unconferences, CityCamps, hackathons,Ignite talks, meetup groups, iteration and rapid prototyping.

To date, HOD is well positioned to support the City & County of Honolulu and the State of Hawaii with their open data initiatives. Both administrations have implemented the Socrata cloud platform and an open data plan to encourage internal agencies to publish readily accessible, machine readable data. As of this writing both Gov. Abercrombie and Mayor Carlisle are drafting letters to their staff in support of open data.

A recent innovation is to enable non-profit organizations and neighbor island counties to also take advantage of the Socrata platform to publish data. HOD has gotten approval to allow the non-profit community to publish data on the State and/or City license of Socrata. Examples of non-profit data would be energy data from Blue Planet Foundation, festival data from HVCB and farmers market info from the Farm Bureau.

Steps toward achieving this include:

-- Marketing and outreach of Socrata and the available datasets. This initial effort would be to try and get as many agencies to publish their data and to get as many developers to attend Socrata training webinars.
-- Work with legislators to help educate them about open data and its benefit to the community. This would lead to possible legislation to mandate public accessibility to machine readable data.
-- Hold internal (City and State) data camps. This would be unconference like events just for internal agencies to understand what open data is and what the benefit of publishing data would be.
-- Work as a support organization with government and non-profit organizations to provide access to Socrata and to help publish their data.
-- Hold City and State data camps and meetups to bring programmers together with government subject matter experts to discuss what is available and what applications can be built.
-- Hold hackathons and code contests to further develop the applications that come out of the data camps. The key would be to work with application groups to take early prototypes to production ready release.
-- Hold application events (for example Geeks on DaBus) to drive use and adoption and to get feedback for future enhancements and upgrades.

3. Please explain how your innovation is a clear improvement over what already exists or what is currently meeting the needs of your clients, constituents, members, or customers.

HOD is in a unique position to not only help establish open data in Hawaii but if successful will contribute to government transparency, increased trust in government, civic engagement, improved communities and economic development in the technology sector. Currently there is no other organization poised to accomplish this.

Governments are strapped for funds and their internal bureaucracies do not lend themselves well to public engagement, community trends and quick pivots. They have a tendency to look inward as somewhat of a closed system often considering the public as the adversary. The internal environment also goes into a stagnant mode during the campaign season. If data were already made available as machine readable, this would not be as much of an issue.

HOD remains focussed on the big picture and strives to work with whichever administration is in office and will continue to bring to light the benefit of open data to the community at large. The successful implementation of HOD is integrally linked with the open data initiatives of the City and the State but can also be driven by the voice of the community.

With the core support of open data by the C&C of Honolulu and the State of Hawaii, HOD can extend the capability to non-profit organizations and the neighbor island counties. Applications that get developed by programming teams can easily extend to the neighbor islands as well as other locations on the Mainland, where applicable.

4. What impact do you expect the innovation to have on your field or on other fields? Provide specific examples of how your innovation will benefit the public.

By enabling access to datasets of all types, HOD believes in the old Chinese saying "Letting a hundred flowers blossom and a hundred schools of thought contend." As mentioned before, at a high level a successful implementation of open data would drive open government, transparency and civic engagement. Many States and municipalities are engaging in their own open data initiatives. This lofty goal is not achieved with one year's budget graph or the visualization of crime sites across the city. But if over time budgets, both approved and actuals are graphed over years and show an efficient use of tax revenues then this effort would be considered impactful.

Big goals are achieved by many little goals. For example, the location of bike racks around the city might lead to more bike riders, which might lead to more bike lanes and a healthier lifestyle. Mapping of crime data could show what neighborhoods need to establish more police patrols or neighborhood watches. Adopt a siren would help ensure proper operation of sirens and early warning of a possible emergency. Mapping of art data would provide a means by which visitors could appreciate the artist community in Hawaii.

HOD aims to enable as much data as possible with the hopes that the creative community will come up with ways to build apps that display, interpret, tell stories, improve and engage the citizen. Incremental small steps over time will foster increased openness and government/community collaboration. The design thinking process enables a good methodology for developing user centric applications. It is HOD's intent to drive relevant applications with design thinking.

One tenant of the open data initiative is open source. Although not a requirement many developers make their code freely available for others to use. This extends the potential for an application's impact to spread to other locations. For example the Adopt a Hydrant application which was built in Boston is being reused and customized by Code for America to be used as Adopt a Siren here in Honolulu. The difference being the data it is accessing and the look of the application.

The reverse could also happen. Applications created here in Hawaii could be used elsewhere spreading the application's utility and providing the developers some recognition for the code base. HOD plans to assist in the development of local applications, to help them grow from early prototypes to production ready applications and to share them with the broader open data community across the country.

5. How have you tested demand or interest for your innovation? Have you developed a prototype of your product or pilot tested your new idea yet? Surveyed potential users? Please provide data and information from your early stage testing.

Hawaii Open Data organized several events that brought together government officials and citizens to see what types of information would be of interest and what types of applications could be built. In Dec 2011, CityCamp Honolulu was the first of its kind civic unconference that provided the opportunity for citizens and government to interact in a collaborative environment. As a result of CityCamp Honolulu, 10 ideas were proposed for further development. In January 2012, HOD organize the first Civic Hackathon that brought together application development teams to work on rapid prototyping several ideas. Six applications were presented including DaBus and Allb.us.

When DaBus officially launched on the iTunes App Store in March, it was a chance to showcase all three apps (Hea.theBus.org, Allb.us and DaBus) and to build awareness of the open data ecosystem, ie. data, applications and community. There was also a third goal, to demonstrate the use of social media to the City who historically used traditional media to communicate to the public.

HOD in collaboration with the C&C Honolulu, Code for America and the Social Media Club of Hawaii developed a one day event called "Geeks on DaBus". The game plan was to engage the public, using any of the three apps, to ride the Bus from wherever they chose and meetup at a central location in Downtown Honolulu. Along the way you could tweet, photograph, shoot video, etc. As an added bonus, Mayor Carlisle caught a Bus near Honolulu Hale to make the rendezvous.

The estimated number of participants for this event was 20 but our actual was doubled that at 40. According to the Archivist.com the hashtag #DaBusHNL represented nearly 500 tweets. Another telling stat was the number of downloads for the DaBus app:

Date Downloads
4/11 – 162
4/12 – 220
4/13 – 226
4/14 – 154

In addition to the tweet stats and app downloads, there were the blog posts and articles by Jerome Koehler (Non-Stop Honolulu), Sheba Najmi (Code for America), Tara Coomans (Social Media Club of Hawaii), Ryan Ozawa (Hawaii Star) and Civil Beat. This all helped to maintain the dialog between the community and government. It also helped to document this process from various points of view.

Another interesting outcome was the mashup of digital content, social media and the web. A Wordle.com word cloud captured the key words and people behind the tweets. Local developers, John Garcia and Derek Gabriel created a spash page for DaBusApp and Brian Dote created Tweetmapr, a map of tweets based on geolocation. These new ways of presentation and visualization help to stimulate ideas and insights into the data. Open data in combination with app development, social media and visualization tools not only create transparency and civic engagement but also stimulate new ways of understanding the data.

6. Are you aware of others working in a similar way as your proposed innovation? Please describe these other efforts and describe how your innovation is different from theirs. Do you plan to collaborate? If so, how?

In Hawaii, HOD is uniquely positioned to advance the open data initiative through its relationship with City and State government, the local tech and social media community and key vendors like Socrata and Code for America. There are other organizations that advocate for transparency, civic engagement and open government like the news agencies, League of Women Voters and the Media Council. But none with a focus on technology, community and open government like HOD.

On the programming side, there are independent programing groups like Hi Capacity and commercial developers like Hawaii Apps, Mental Pez, Ikayzo, Tapiki, Get Shacked, etc. Both groups see working on open data apps for the government (or non-profits) as worthy, socially conscious efforts to participate in but do not see it as commercially viable. Open data programs provide a degree of exposure and recognition but very little in terms of payout.

As mentioned in previous sections, government as an organization could promote their own open data initiative but it is unlike they will have the resources or the focus to successfully engage the programming community, create an environment for idea exchange, catalyze early prototypes and to see the finished product to completion.

The glue that holds these parties together and creates an environment for civic app development is HOD. Each of these parties are stakeholders in the success of open data establishing itself in Hawaii. HOD brings these parties together and stays focused on the mission to nurture this environment to leverage open data and to encourage creative technical solutions to drive transparency, data liberation and civic engagement.

7. Please describe the background of your primary innovation team. If your innovation is a collaboration or partnership, please provide information about each partner's role and responsibilities. (e.g. Who will be the lead? Are key staff in place or will you hire?)

Burt Lum is Founder and Executive Director of HOD. He has more than 30 years in Hawaii's technology and telecom sector. He is an Instructor at UH in the ICS Dept. and has worked as a Community Manager for the City & County of Honolulu's Digital Cities Initiative. Burt was also founding member of the Innovation Center at HMSA, Sr. Product Manager at Hawaiian Telcom, and CEO/President of a Hawaii data center startup. His online activities include social media, community building, blogging, podcasting, content curation and citizen journalism. For the last 5 years he also planned and coordinated an annual grassroots technology event called the Unconferenz.

Ryan Ozawa is Chief Operating Officer of HOD. He has worked in independent media and publishing for more than two decades, establishing Hawaii's first online news service in 1994 and today running a network of Hawaii-focused websites. He consults, teaches, and speaks regularly on citizen journalism, new media, and the social web. He has worked in fields ranging from international conference planning to information security, and currently works at Hawaii Information Service, an MLS software company that specializes in public records. Beyond his day job, he is an obsessive media maker and a passionate community builder focused on Hawaii's technology and media scene.

Jared Kuroiwa is Chief Technology Officer at HOD. His professional experiences run the gamut in technology. His educational background started in biomedical engineering with work experience in application programming and software design, focusing on health care. That shifted to management of a small programming department, a jump into broadcast technology, and as the application development lead for a leading payroll outsourcing company. Jared now works at Oceanic Time Warner Cable, developing its on-demand platform and finding ways to integrate web technologies.

8. How will you grow the impact of your innovation? Describe how your innovation has potential to scale up and expand benefit beyond just your organization. Be specific about expansion plans and targets for making that increased impact. (e.g. increase in users, replication at other sites/communities, etc.)

The impact of HOD will be to grow the ecosystem, one app at a time. As much as it would be gratifying to see the fruits of HOD's efforts in Hawaii expand beyond Hawaii, its goal to establish itself here is first and foremost. And although the end product could be counted in number of apps, it also boils down to: are these apps working, do they tell a story, do they engage the public and do they make a difference in making government and the community better.

HOD's focus will continue to be the C&C of Honolulu and the State of Hawaii. There are currently only a few apps developed like DaBus and Allb.us. More are on the way. HOD is working on ways to quantify engagement. As with DaBus app, we were able to quantify engagement during a the short period of time for the event, Geeks on DaBus.

Concurrent with the City and State, work continues with selected non-profits. The strategy to engage non-profits is to not only to make interesting data available but to also be a means to show government agencies what can be done

with open data. The assumption here is that the non-profit organizations would be willing and interested in making some of their data publicly available.

In addition to the non-profit organizations are the neighbor island counties. They can also be federated through the Socrata platform at no additional cost to them, like the non-profit organizations. Our plan is to conduct outreach to the neighbor islands and to conduct data camps and app contests there as well. Applications that are built on open data from the City and State would easily be extensible to the neighbor island if their data were available. HOD would also include any programming groups from the neighbor islands into any data camps or code contests conducted.

HOD also plans to engage the education community, primarily at the university level to look at opportunities to incorporate open data into student capstone projects. At the university level, open data could be incorporated in a number of ways including computer science, communications, political science, journalism, etc. By introducing open data to the education community, the hope is to spark interest and to generate more tools and analysis of open data.

HOD has strong relations with national open government, open data organizations like Code for America, Sunlight Foundation, Hacks/Hackers and Socrata. HOD plans to present Hawaii's open data story at the upcoming Code for America summit in October and Sunlight Foundation's Transparency Camp 2013. These national organizations provide HOD the opportunity to share open data solutions developed here in Hawaii. Through this exposure Hawaii developers could see opportunity to expand beyond Hawaii.

Future efforts include expanding this initiative beyond Hawaii, into Asia and the Pacific. Although not a primary focus at this time, there are talks to hold a Transparency Camp Asia/Pacific in Hawaii. HOD would play a key planning role in this effort and could provide best practices for open data initiatives in those countries interested in technology and open government.