2011-6 Grant Progress Report

Please report your project activities and outcomes clearly, briefly and honestly. Include setbacks as well as successes. Knowing *why* something didn't work can be as helpful as knowing why something worked.

In describing your relationship with Knight Foundation, please be candid and provide constructive criticism whenever appropriate. Honest feedback can help both of us improve our organizations.

To get started, please read the following anticipated outcomes paragraph carefully. That paragraph sums up what we were expecting from this grant.

Anticipated Outcomes:

LocalWiki will release a modern collaborative software platform and documentation tailored to the needs of local communities under an open-source license. The software will be launched in at least one community with LocalWiki's support. We expect other software developers will build upon the code base and other communities will also launch their own independent wikis. Ultimately, we hope to demonstrate community wikis as a viable way for communities with a strong culture of volunteering to manage and share information.

Requested Information:

1. Please list each anticipated outcome and tell us if, and when, you achieved it

LocalWiki will release a modern collaborative software platform and documentation tailored to the needs of local communities under an open-source license.

We are in the process of creating a modern collaborative software platform (and documentation) tailored to the needs of local communities that will be released under an open-source license. We have taken an iterative, entirely-open approach to our software development process, and are making constant software releases.

These early releases are geared toward other software developers, and we have not yet made a polished, general-public software release. We expect to make such a release around or before November of 2011, as laid out in our grant timeline. However, while incomplete, our software is usable even in its current state. It is currently somewhat difficult to install, so to help mitigate this, for our pilot program we will likely host all of the installations ourselves.

Around November we will focus on making the software easier for non-developers to install. We've been carefully following the OpenBlock project's progress on this front, as one of their goals is to make OpenBlock installable and maintainable by a wide variety of organizations. As LocalWiki and OpenBlock share several common backend technologies (Python and Django, among others), we've been looking for opportunities for collaboration on this front and others. We've already collaborated with OpenBlock on fixing up a map widget library we both use, developed by a fellow at the Center for Civic Media.

The software will be launched in at least one community with LocalWiki's support.

We've just begun our first focused pilot project in Denton, TX. We developed a set of criteria for suitable pilot communities and directly interviewed individuals in 15 different communities out of dozens who had expressed interest. We selected Denton as our first pilot largely because the people involved seemed the most motivated to work under limited initial guidance. As our resources are currently limited and our Knight grant funding focuses on software development, the ability to work somewhat autonomously was given high priority.

One of the major goals of the first pilot is to gather feedback for refinement of the software, spurred by the needs of a real-world community. We hope to begin pilot projects in several other communities over the coming months, contingent on our organizational resources, the size and activity level of our volunteer base, and our ability to raise additional funds to support an outreach program.

The first pilot will be publicly launched when it has met a suitable quality threshold and our software has stabilized. As laid out in the grant timeline, we expect this to happen before November of 2011.

We expect other software developers will build upon the code base and other communities will also launch their own independent wikis.

Other software developers have begun checking out our software. No one has yet launched their own independent installation -- we expect that will happen around the time our first pilot is formally "launched" to the public.

Ultimately, we hope to demonstrate community wikis as a viable way for communities with a strong culture of volunteering to manage and share information.

This is a longer-term goal. We are confident we will demonstrate the local wiki as a viable way for communities to manage and share information.

2. Were there any major changes in the project activities and timetable? What caused them?

There was a delay in our grant timeline by about three months. The grant document assumes a project start of August 1st, but we were unable to begin work until we received funds from Knight, delaying our start until November. Aside from the shift, we are otherwise on track to complete all milestones as described in the grant document. The scope of the project is not affected by the unexpected delay.

3. Describe any setbacks you encountered and how you addressed them.

While external to the project itself, the unexpected initial funding delay proved to be a setback. We had planned to leave our previous organizations and begin work on the project in August, but the funding delay complicated matters. Mike began working at a new organization in the interim and Philip stayed on at his previous organization for a few months. For professional reasons, Mike was unable to leave his interim organization and begin work on LocalWiki full-time until February, working on LocalWiki only part-time from November until February.

The five months that elapsed between the grant announcement at MIT in June and the funded start of the project caused some perception issues. Some people thought we had begun serious software development work in June, leading to the perception that we were failing to make progress on the project. Thankfully, once both Mike and Philip were able to work full-time on the project, progress picked up immediately. We're now in overall terrific shape -- we've completed the first iteration of our software, are beginning work with our first pilot community and are on track to meet all our milestones.

4. Were there any positive surprises? If so, please explain.

Our work thus far has been focused almost exclusively on software development. In our development process there have been lots of positive surprises and learning opportunities. Some elements of software development have turned out to be easier than expected (positive surprise!) and other elements more difficult.

The publication of the Aspen Institute & Knight Foundation white paper *"Creating Local Online Hubs"*, and its praise of our model was a positive surprise:

> *"It is an amazing compendium of useful, user-generated information about the community's history, culture, government, schools, activities and much more. The Davis Wiki site offers almost everything the authors of the Informing Communities report hoped for when they drew up the seven key ingredients for any local online hub listed in Recommendation 15."*

5. Please explain how you are meeting the overall goals stated in the anticipated outcomes.

LocalWiki will release a modern collaborative software platform and documentation tailored to the needs of local communities under an open-source license. The software will be launched in at least one community with LocalWiki's support.

We are working non-stop to improve and extend our new software. In fact, up until this point our efforts have been almost entirely focused on software development. We're now beginning to shift our focus, devoting time to working with folks in our first pilot community. We will be improving the software based on their feedback, mentoring and stewarding them through the process of creating a thriving resource,

We expect other software developers will build upon the code base and other communities will also launch their own independent wikis.

Once we've launched our first pilot to the public , we expect that interest in using and contributing to our software will grow greatly. By working to create well-documented (for developers and users) and easy to install software we can make this outcome even more likely.
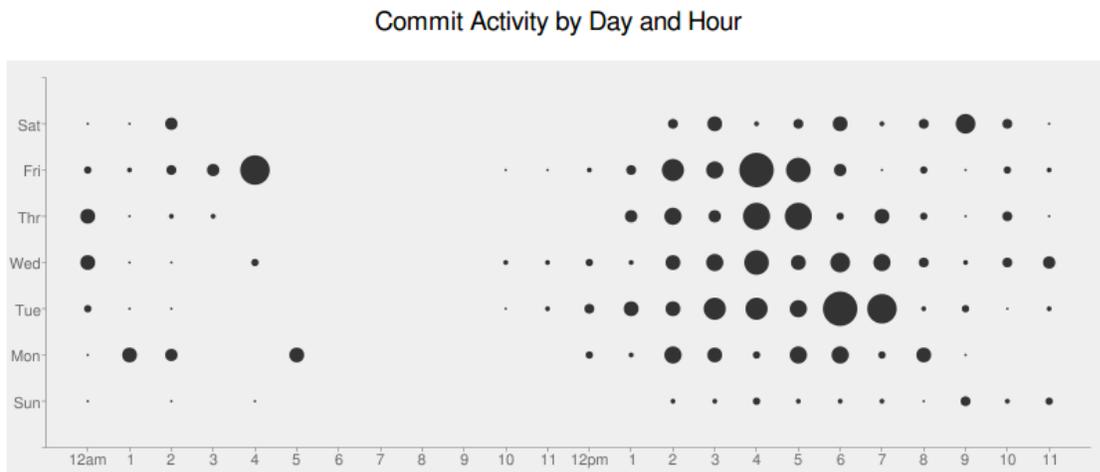
Ultimately, we hope to demonstrate community wikis as a viable way for communities with a strong culture of volunteering to manage and share information.

This is our overarching goal for the LocalWiki project, as part of this software -oriented grant and beyond. We may not have enough time or resources to spread the model wide and far with our software grant, but we feel confident we can demonstrate just how powerful collaborative local media can be.

6. How are you measuring your progress? Please attach copies of any evaluation reports, and list results of any measurements, such as Web traffic, downloads, registered users, monthly trends, etc.
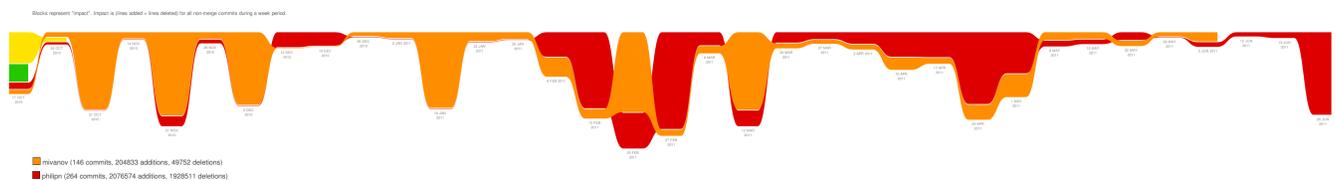
Due to the current project stage, we've focused primarily on internal, largely technical measures of success. As our grant is for software development, we have been tracking code commit volume and frequency, test coverage and test pass rates, feature and bug ticket volume, and code quality. We have just begun outreach to other software developers in the open source community.
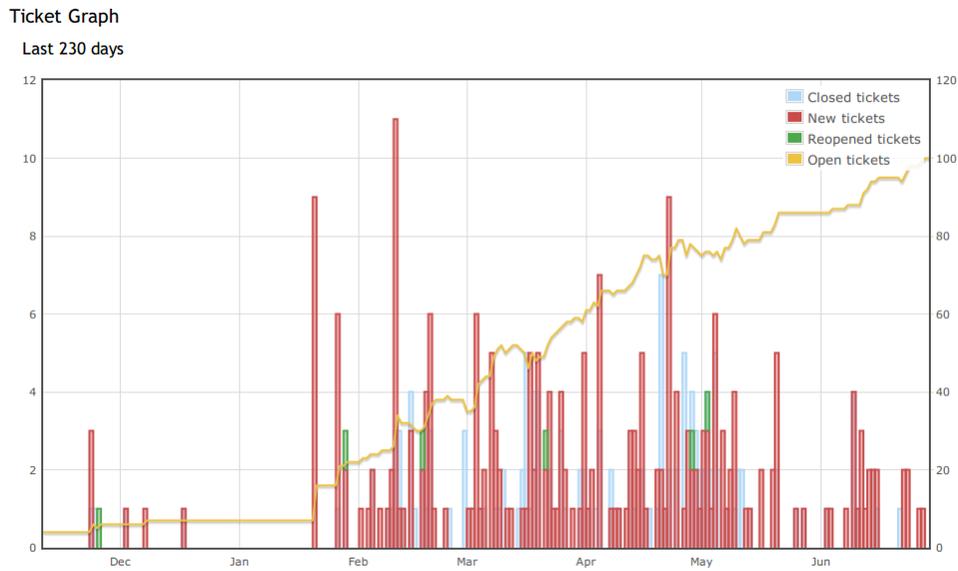
Commit activity by Day and Hour:

The above graph displays the code commits we make, by hour, over time.

Code "impact", over time:

The above graph represents code commit "impact" over time. The larger areas are where we've committed large blocks of code.

Feature/bug/task tickets, over time:

Ticket Graph

Last 230 days

The above graph represents the number of "tickets" in our ticketing system over time. A ticket represents a task to be completed – a bug, a feature, or a general task.

Lines of code analysis:

Any sort of lines-of-code analysis is bound to be horribly flawed, as more lines of code do not indicate better software. Nevertheless, once in a while we run our code through the following tool, sloccount, which counts the number of lines of code and produces an estimate of how much the software would cost to produce. The tool estimates that the code we've written so far would probably cost $414,197 to develop. While this analysis is doubtlessly flawed, it gives us a vague indication that we are producing code at a good rate.

```
SLOC    Directory        SLOC-by-Language (Sorted)
7690    sapling          python=6979,php=682,xml=28,sh=1
5658    sapling-daisydiff java=5586,xml=72
114     install_config   xml=78,sh=36


Totals grouped by language (dominant language first):
python:        6979 (51.84%)
java:          5586 (41.49%)
php:            682 (5.07%)
xml:            178 (1.32%)
sh:              37 (0.27%)


Total Physical Source Lines of Code (SLOC)                = 13,462
Development Effort Estimate, Person-Years (Person-Months) = 3.07 (36.79)
  (Basic COCOMO model, Person-Months = 2.4 * (KSLOC**1.05))
Schedule Estimate, Years (Months)                         = 0.82 (9.84)
  (Basic COCOMO model, Months = 2.5 * (person-months**0.38))
```

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Estimated Average Number of Developers (Effort/Schedule)  = 3.74
Total Estimated Cost to Develop                           = $ 414,197
 (average salary = $56,286/year, overhead = 2.40).
SLOCCount, Copyright (C) 2001-2004 David A. Wheeler
SLOCCount is Open Source Software/Free Software, licensed under the GNU GPL.
SLOCCount comes with ABSOLUTELY NO WARRANTY, and you are welcome to
redistribute it under certain conditions as specified by the GNU GPL license;
see the documentation for details.
Please credit this data as "generated using David A. Wheeler's 'SLOCCount'."
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7. If you were publicizing the single most important outcome of your work, what headline would you write for your news release?

Given the somewhat early state of our work, something akin to "LocalWiki progresses to pilot phase, works to refine new software" would be apt.

8. What did you do to market the project? Was it successful? What would you do differently next time?

Our marketing falls into two main categories: community marketing and software marketing. Community marketing can be further divided into inter-pilot marketing (flyering, getting people involved with the pilot projects) and full-project marketing (getting other communities interested in working with us). Software marketing can be divided into marketing geared toward open-source developers (aiming to get them involved / contributing) and marketing geared toward general-purpose users (folks who would install our software who aren't themselves programmers).

At our current stage, we haven't yet begun any serious community marketing, as the software has just reached its first usability milestone. We are just beginning our marketing geared toward open-source developers. Marketing targeted at general-purpose users will likely come near the time of our first polished, general public release of the software, at or before November 2011.

For open-source marketing, we have been active on GitHub.com, have created a development mailing list, a chat "IRC" channel, and recently created a 90 minute code walkthrough screencast. We intend to hold a series of LocalWiki code hackathons in the coming months.

9. Please provide the demographic breakdown of your staff. What percentage are women and people of color? How does this participation measure up to your diversity goals and plans? Please describe your efforts to achieve diversity.

Currently, only Philip and Mike are compensated for their time on the project. Mike is

white, male and was born in Russia. Philip is white, male and born in the US.

Demographic diversity is a top priority in our current board recruitment process, and also will be an extremely high priority in our future hiring.

10. Please provide the audited financial statements from your organization's last fiscal year.

Please see the Miami Foundation records.

11. Please attach the Knight Foundation budget report form showing the proposed budget and the actual spending in each project category. Explain any significant changes.

See attached. Please note: the proposed expenses were for the full 2 year ($350k) grant period.

12. Do you have a surplus from your Knight grant? If so, please tell us how much it is and explain why you have it. Please explain what you propose to do with the unspent funds, and indicate whether these are new or previously proposed activities.

Accounting for the shift in our project start date, we are on track to spend funds according to our proposed timeline.

13. Who else funded this effort, and at what level? Was it necessary for you to make significant changes to the proposed project budget?

We launched a fundraiser that coincided with the Knight announcement in June. We fundraised over $26,000 from 427 individuals -- most living in Davis, California -- to help support the project.

We are currently exploring funding sources to create a comprehensive outreach program and support more localwiki pilot communities.

14. Please describe your plans in detail to sustain the project long term.

Our current sustainability plan is similar to that outlined in our initial grant proposal:

> *After a certain critical mass, the Davis Wiki became entirely community-maintained. This began to happen after it contained a certain amount of institutional information relevant to some segment of the community and after the project attracted a diverse set of*

engaged community members. We expect to achieve a similar community sustainability elsewhere.

While work in Davis indicates a tremendous potential for fundraising at the local level, we're not sure what the ultimate relationship between the LocalWiki.org organization and the individual local wikis will be — and this relationship will dictate how we structure our fundraising. Right now, we see two distinct forms this relationship could take.

One possibility is a parent organization that is closely coupled with local wikis. In this case, we could provide hosting, technical, and other services to the communities in exchange for membership dues and voting rights. We would provide a certain amount of fundraising assistance, but each community would ultimately be responsible for fundraising at the local level.

Another is a completely decoupled relationship where there is little or no formal connection between the local wikis and the parent organization. We would provide the open-source software, support, educational materials, training and outreach assistance.

At least initially, we will take the closely-coupled approach, though we may end up with a hybrid of the two models.

Will likely pursue a cooperative-based model akin to that of the National Association of Housing Cooperatives. The NAHC is a non-profit cooperative that has voting members who are, themselves, housing cooperatives.

There have been some changes since the proposal was written, however. We successfully fundraised over $26,000 to support the project, with the majority of the contributions coming from individuals in Davis, California. We believe that with modest investment and planning we could fundraise much more in Davis, California. This gives us a strong indication that other successful local wiki communities should be able to fundraise to support their projects.

Our long-term sustainability plan is centered around expanding our donor base by supporting the creation of successful local wiki projects throughout the world.

We see foundation funding as an important part of our funding strategy until we see a variety of successful local wiki projects established. We plan to work with community foundations across the country to help jump-start local wiki pilot projects and help offset the cost of our efforts.

We are only just beginning our pilot program, but we've already been in discussions with some community foundations. We've also helped Boise State University apply for a

$50,000 NEH grant (award status to be known in mid-July) to begin work on a historically-focused local wiki project in Boise, Idaho with us.

Sustainability means much more than simply finding funding to support organization operations, though. We are extremely focused on building a scalable, replicable project at every level. The Davis Wiki project was entirely self-sustaining for years -- with fundraising to cover costs and thousands of volunteer editors contributing to the project. We hope to foster a similar, distributed, volunteer-culture rich project.

15. Did you collaborate with other organizations, particularly Knight Foundation grantees, during the course of this project? How?

Thus far, most of our collaboration with other organizations and individuals has been through interactions in the open source community. Through our development process we have collaborated with a wide range of individuals and organizations.

We have tried our best to be good open-source citizens, contributing back fixes to all open-source software we use to build LocalWiki. We have contributed bug reports, fixes and improvements to open-source projects, including Django, django-olwidget (used by OpenBlock as well), CKeditor, daisydiff, and django-haystack. We have developed a number of independent open-source libraries we intend to spin off as separate open-source projects, usable by a wide range of projects.

We hope to collaborate with OpenBlock in the coming months on creating an installation process that's easy for non-programmers. As mentioned earlier, the LocalWiki software and OpenBlock share many common backend technologies. We hope to later collaborate with ScraperWiki to integrate our flexible versioning system into their code "wiki" backend.

We have been in informal contact with many fellow Knight Foundation grantees.

16. Please describe your interaction with Knight Foundation staff. What was most useful and what changes would you suggest?

All of our interactions with Knight Foundation staff have been positive, prompt and extremely helpful.

Around the time our grant was awarded there were a number of staff changes at the foundation which made it a bit unclear who we were supposed to talk to about the project. This isn't likely to be a problem for future grantees, though.

17. Did you ever need Knight Foundation to help you facilitate contacts with experts in the field, professional peers and similar organizations? If so, was Knight Staff helpful?

We haven't asked for help with contacts yet, but we likely will as our pilot program expands -- especially into Knight communities and communities with local foundations that have worked with the Information Challenge in the past.