



The Computerworld Honors Program

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Final Copy of Case Study

Status:

Laureate

Year:

2013

Organization Name:

Chicago Metropolitan Agency for Planning (CMAP)

Organization URL:

<http://cmap.illinois.gov>

Project Name:

MetroPulse Chicago

Please select the category in which you are submitting your entry:

Sustainability

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

Two years ago, CMAP released its GO TO 2040 comprehensive regional plan for the 7-county Chicago region. The Plan has been recognized for its innovation and collaborative nature, and it was accompanied by a regional indicators project called MetroPulse Chicago (<http://metropulsechicago.org>). MetroPulse defined thousands of data sets that could be tracked over time, informing our region's understanding of Livable Communities, Human Capital, Effective Governance and many other policy realms. We continue to update the MetroPulse engine, and have spun off special-topic sites such as <http://metropulsechicago.org/jobs>. MetroPulse is a joint effort by CMAP and the Chicago Community Trust. MetroPulse was designed to solve the problem of a fragmented information base within the region's public policy environment. With no common base of information to inform regional conversations, solutions could not be evaluated in light of a common historical statistical base. To identify the most important data sets to be tracked in MetroPulse, CMAP engaged 15 working committees, each focused on one public policy issue area, and each comprising representatives from

around the region. Each of the 15 working committees identified 15 indicators that were supported by available data, trackable over time and sensitive to public policy change. In this way, we leveraged expertise of public policy experts in a deliberate and focused process. The MetroPulse engine was built as a set of open APIs (application programming interfaces) that could generate data visualizations, downloads, exports, etc. CMAP utilizes these APIs for its MetroPulse websites, but they can also be used to feed websites created by others. The project's collaborative approach to indicator identification, followed by open APIs and user-friendly data visualizations make the MetroPulse project innovative. Challenges include long-term maintenance and data updates, but we have automated many of these tasks.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

The MetroPulse Chicago regional tracking website was launched in November 2010. Since that time we have expanded its scope to issue specific portals (e.g., <http://metropulsechicago.org/jobs>), an open data platform at <http://opendata.cmap.illinois.gov> (built on the open-source CKAN platform), an online map gallery, a localized version of MetroPulse for community-level planners, a mobile app called MetroPulse Mobile, and a sensor-driven project for transportation planners that archives and makes available traffic volumes, average speeds and incidents. In the technology realm, we have begun a migration to HTML5 that will make the MetroPulse sites more portable. We are also beginning to pull data from the City of Chicago's open data portal on an automated basis, so that these raw data resources can be aggregated, geo-coded and made available in the MetroPulse APIs.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

We view the MetroPulse project as a regional resource that will evolve to meet regional needs. In that sense it is never finished, because as new information needs arise, we attempt to contribute to solutions. Last year's MetroPulse Jobs application was just such an adjustment. CMAP and partners felt that the jobs-skills mismatch was holding back economic growth, so we created a specialized workforce development portal that shows views of the data that the MetroPulse flagship site simply is not equipped to provide.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

MetroPulse data visualizations are portable, in the sense that they can be embedded in other websites or even emailed. This came in handy last year when we partnered with World Business Chicago and the Illinois Science and Technology Coalition to produce the Innovation Index. The Innovation Index is a periodic deep-dive look at a specific innovation-related metric such as patent applications, research and development investments, venture capital deals, and so on. Each month CMAP has provided portable data visualizations that not only can be accessed on the web, but can be attached to the coalition's monthly newsletters (which are actually Survey Monkey documents). The



Innovation Index has led to many good conversations about the regional economy and how we can grow it. So CMAP is proud to have facilitated these conversations.

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

The innovative use of public data APIs for building sophisticated public-policy-related websites is an innovation that could benefit many public-sector organizations. We are planning to open-source the API code in the near future, so that it could then be downloaded and deployed (in modified format to meet local needs) by anyone who chose to do so. The API allowed us to participate in last year's "Apps for Metro Chicago" app contest.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

One of the most challenging technical aspects of our MetroPulse framework is system integration. Now that we have several "baby MetroPulses", we are working hard to make sure they interact and share common functions. For example, a user who logs in to the flagship MetroPulse site and bookmarks a data visualization should be able to then log in to MetroPulse jobs and see that bookmark when he or she clicks "My Favorites". We are implementing just this approach at the current time. But the fundamental value of the MetroPulse websites is how they support the GO TO 2040 comprehensive plan. We are now approaching the 2-year plan update, and measuring indicators is a big part of that update. When the regional snapshots are released in 2013, they will be well supported by MetroPulse-generated data components.