



Press Release

For Immediate Release

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Azavea Awarded Two USDA SBIR Grants to Support Urban Forestry Inventory, Ecosystem Modeling and Prioritization

Philadelphia, PA – September 30, 2011 – Azavea, an award-winning geospatial analysis (GIS) software development company, was awarded a Phase I Small Business Innovation Research (SBIR) grant to create software tools that will assist in prioritizing urban forestry planting initiatives and a Phase II SBIR grant to expand on OpenTreeMap, the open source software for collaborative, geography-enabled urban tree inventory. The grants are awarded as part of the SBIR grant program managed by the [United States Department of Agriculture National Institute of Food and Agriculture](#).

The SBIR Phase I grant of \$100,000 will support the development of software tools for prioritizing geographic areas for tree planting as well as modeling the ecosystem impact of trees planted in urban areas. Urban street trees provide myriad proven benefits for the community including improving air and water quality, assisting with stormwater runoff, decreasing electricity bills, raising property values, and enhancing the look and feel of communities. Finding the most effective place to plant a tree, however, is a complex process influenced by several variables such as transportation infrastructure, utilities, land use and presence of potential stewards that will water and care for a tree. Azavea will research and develop a prototype web-based tool that will provide options for users to select a prioritization scenario, assign weights to each of several parameters, and generate heat maps depicting the best locations for planting trees in a new area. The research will build on Azavea's [DecisionTree](#) framework that enables high performance computation of large scale geographic data over the Internet. Staff members from the Pennsylvania Horticultural Society, Philadelphia Parks & Recreation, and Delaware Valley Regional Planning Commission will provide feedback and testing for the project.

The SBIR Phase II grant builds on an SBIR Phase I grant awarded to Azavea in 2010 to develop a prototype tree inventory data management system that would assist communities in collaboratively inventorying and maintaining the urban forest. The resulting software, which was merged with the Urban Forest Map software developed in San Francisco, was released as an open source software toolkit called OpenTreeMap. It is currently being used in Philadelphia, San Francisco, and Sacramento. The OpenTreeMap software enables the public, non-profit organizations, and local government to search and view all the trees available in a database

based on species, location, and other criteria. With a free registration, users can add new trees, edit existing tree details, and upload tree images. Using iTree, a tool developed by the USDA Forest Service, OpenTreeMap also provides calculations of the economic and ecosystem benefits of urban trees, demonstrating the many beneficial ways trees impact air quality, energy consumption, and stormwater management.

The SBIR Phase II grant of \$460,000 will enable Azavea to expand the OpenTreeMap software to include the development of mobile and tablet versions, the creation of input/output application programming interfaces (APIs) to enable integration with other tree management systems, the introduction of social networking, and gaming and competition elements to encourage use and implementation of a cloud-based deployment option. The work will be conducted over the next two years in collaboration with the Pennsylvania Horticultural Society, Delaware Valley Regional Planning Commission, Philadelphia Parks & Recreation, and Urban Ecos.

“We received a lot of terrific suggestions on the initial version of OpenTreeMap. In the second phase, we will both integrate these suggestions and enable more people to do this type of inventory and survey work in their neighborhoods. Many of our cities are seeking to expand their urban forests in order to reap the benefits of stormwater infiltration, lower energy costs, improved air quality and more attractive places. OpenTreeMap enables residents to work alongside City Hall to create cleaner, greener neighborhoods. Combined with our research into urban forest modeling and prioritization, these new geospatial tools will help to both expand and strengthen the stewardship of our vital urban forests,” said Robert Cheetham, Azavea President and CEO.

The development of Urban Forestry Modeling and Prioritization Tools is supported by the Small Business Innovation Research (SBIR) program of the United States Department of Agriculture National Institute of Food and Agriculture Award Number 2011-33610-30511. OpenTreeMap: Tools for Collaborative Urban Forestry is funded under the same program, Award Number 2011-33610-30862.

About Azavea - Azavea is an award-winning geospatial analysis (GIS) software development firm specializing in the creation of location-based web and mobile software as well as geospatial analysis services. Azavea is a [certified B Corporation](#) that applies geographic data and technology to promote the emergence of more [dynamic, vibrant, and sustainable communities](#). Each of Azavea’s projects, products and pro bono engagements showcases this commitment. For more information, visit <http://www.azavea.com>.

If you would like more information about Azavea or to schedule an interview with Robert Cheetham, Azavea CEO and President, please contact Amy Trahey at (215) 558 – 6184 or e-mail atrahey@azavea.com.

About OpenTreeMap – OpenTreeMap is open software for collaborative, geographically-enabled urban forestry. OpenTreeMap provides a public tree inventory platform that enables individuals, organizations, and governments to collaboratively contribute to an interactive and dynamic map of a community’s tree population. For more information and to download the open source code: <http://www.azavea.com/opentreemap/>

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