

GISCorps Volunteers Assist in Conducting Blight Analysis

GISCorps Volunteers Assist in Conducting Blight Analysis – Community Solutions Hartford Project

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The project between GISCorps and Community Solutions (<https://www.community.solutions/>) began in September, 2016. Community Solutions intends to build an approach for addressing issues of safety, health, and prosperity that can be replicated in other communities. The original intent of the project was to:

- Identify and collect data at the neighborhood level.

- Curate data for neighborhoods of interest.

- Perform analysis and visualization of data to assist in addressing issues for the community.

As a part of the project, Community Solutions obtained both an ArcGIS Desktop license and an ArcGIS On-line account. Before the project began, the Community Solutions staff member with some familiarity with GIS left the project and the ArcGIS Desktop license was not used during the year. The ArcGIS on-line account was actively used by GISCorps volunteers. This account and hard copy maps were the main vehicles for communicating work products to Community Solutions staff.

The initial focus for the GISCorps volunteers was on a low income neighborhood in Hartford, Connecticut. GISCorps volunteers were needed in 4 key areas: data wrangling/data collection, data management, GIS analysis, and GIS web portal development. The project involved six GISCorps volunteers. Volunteer service was expected to be from about three months to one year. One volunteer completed service after about five months. The remaining five volunteers continued with the project for the full year. Volunteers participating in this project were: Kristina Drysdale, Kelli Brock, Drew Wold, Trish Long, Shannon Cox, and David Hansen who played the role of Project Manager on GISCorps side. All GISCorps volunteers operated remotely with communication by teleconference, on-line meetings and email. Remote data sharing was done through the use of the Community Solutions ArcGIS on-line account and via Drop Box. There were bi-weekly conference calls between GISCorps volunteers and Community Solutions. Initial steps for the GISCorps volunteers were:

- Identifying and collecting data related to crime, health, education, income, housing, and others.

- Running analyses and visualizing the data both in maps and in the ArcGIS on-line account.

- Documenting the data collected and storing as shape files, .cvs files, and in a file geodatabase.

The main contact for GISCorps volunteers during the first eight months of the project was located in Cambridge, Massachusetts. Contact with Community Solutions team members in the Hartford area was only established in June, 2017. This limited the actual transfer of technology to Community Solutions Hartford staff. Community Solutions staff has been gaining experience with ArcGIS on-line and are excited about the use of this interface to address issues in the Hartford area.

GIS data collected during the project was archived and stored in a file geodatabase by the GISCorps database manager. The database is a repository of much of the data for the area and is available to Community Solutions as needed in the future. The database manager also documented available data in a spreadsheet. This spreadsheet identifies web links or

the URL for the original source data. This data and additional data such as shape files or csv files have been loaded into the ArcGIS on-line account. The City of Hartford maintains an open data portal which is accessible via the Community Solutions ArcGIS on-line account. Much of this data is maintained by the City of Hartford in near real time. Community Solutions team members in Hartford have been actively collecting data via spreadsheets.

The initial license provided by Esri to Community Solutions expired in August 2017. This license has been reactivated. With the Esri license restored, volunteer efforts are expected to continue in the following areas.

- Assist Community Solutions team members in managing the ArcGIS on-line account.
- Further develop and refine the Community Solutions on-line portal.
- Assist Community Solutions team members in loading locally collected data onto the ArcGIS on-line portal.
- Assist Community Solutions team members in visualizing the data and running analysis.
- Review data with Community Solutions to prepare for access by the public or collaborating groups.
- Review data in the file geodatabase and Drop Box folder to ensure that all data has been loaded onto the Community Solutions portal.

The above assistance can be provided by GISCorps volunteers remotely. The use of the ArcGIS Desktop program by Community Solutions would best be handled by either a volunteer who is in the Hartford area or by a Community Solutions intern that has some GIS experience.

The original intent for this GISCorps project included developing a template or approach to address issues for other low income communities. There are common groups of data that were identified in this project that can apply to other communities around the country. These are generally limited to the Census block or tract level. The most detailed and current data for any community are locally developed. For the Hartford area, there are rich and varied data available through the open portal maintained by the City of Hartford. Similar sources will vary across the country. Data developed by Community Solutions team members in Hartford are also primary sources of detailed and current data. The data methods developed by the Community Solutions team can serve as templates for other communities. The skills that Community Solutions develop in working with their ArcGIS on-line account can be applied to address issues in other communities.