Strengthening Communities and GISCorps

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Community Solutions Project for Northeast Hartford Communities

Implementation of GIS and ArcGIS On-line to support community engagement with Community Solutions

• GISCorps project began with Community Solutions in September 2016 with the following objectives for the GISCorps team:
  - Capture and visualize data related to health, joblessness, crime, housing for a low income community in Hartford, Connecticut
  - Assist Community Solutions in applying this data to identify opportunities and address issues at the local community level to improve health, safety, and living environments.
  - Assist Community Solutions in structuring the data collection, analysis, and display based on the Hartford experience to other low income areas.

• Community Solutions had available an ArcGIS On-Line account for use in display and analysis of the data for the local community as well as ArcGIS Desktop

• In April, 2017, the City of Hartford Promise Zone was incorporated as a chief focus area
GIS Data Sources

CDC Healthy City Project
Chronic Conditions
Preventative Health
Risk Behavior
Connecticut Department of Public Health
Trends in Asthma – Age and Sex
GIS Data Sources

Connecticut Department of Education - EdSight Database on Trends
- Graduation Rates
- Chronic Absenteeism
- Performance Measures
- Etc.
GIS Data Sources

City of Hartford GIS Data Portal

Databases

Shape Files

Web Services
Major Data Sources for Hartford Project

City of Hartford ArcGIS online Open Data website
Connecticut Department of Public Health
Centers for Disease Control and Prevention – 500 Cities: Local Data for Better Health
U.S. Census. American Community Survey
Connecticut Department of Agriculture farmers markets and Hartford regional market
HUD
Etc.
GISCorps Team Members – Community Solutions Project

Remote Deployment and Coordination

- David Hansen – Team lead (Sacramento, California)
- Kristina Drysdale – Database Manager (Dallas, Texas)
- Kelli Brock – Data Wrangler (Littleton, Colorado)
- Drew Wold – Portal Developer / Analyst (Alexandria, Virginia)
- Shannon Cox – Portal Developer / Analyst (Vancouver, British Columbia)
- Trish Long – Portal Developer / Analyst (Trenton, New Jersey)

- Community Solutions Leads
  - Ben Faust – Boston Massachusetts – September 2016 to April 2017
  - Patrick McKenna – Hartford Connecticut – May 2017 to present
Community Solutions Initial Coordination from Boston Area
GISCorps Team Members – Remote Deployment

- Vancouver, BC
- Sacramento, CA
- Littleton, CO
- Dallas, TX
- Hartford, CT
- Trenton, NJ
- Alexandria, VA
Remote Deployment of Team to address Community Issues

- **Team coordination with Community Solutions**
  - Bi-weekly conference calls and emails
  - Video conference to review products
    - Effective in initial data development
    - Effective in development of the Community Solutions AGOL account
    - Effective in initial web map and web app development

- **Issues in effective communication with the community of interest**
  - GISCorps team had limited communication with the local Community Solutions team until May, 2017
    - Identifying effective products for use in the local community
    - Identifying tools for use in the web map or web app environment
    - Transfer of knowledge and skills in the use of the ArcGIS On-line account and ArcGIS Desktop
Data Capture and Product Generation

Initial data download, evaluation, and generation of web maps and PDF maps
Initial Steps for Northeast Hartford Project

1. Identify data sources and gather data
2. Document data sources
3. Develop database structure for data that has been collected
4. Construct map series for review by Community Solutions
5. Prepare initial set of web maps and web apps on Community Solutions ArcGIS On-line account
6. Where possible identify trends
7. Identify what may be effective for Community Solutions and the Hartford community
# Data Collection, Review, and Documentation

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Identified by</th>
<th>Smallest geographic representation</th>
<th>Frequency Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evictions</td>
<td>Eviction data for Hartford compiled by street address from public records. Two separate data files. One covers the city from March 2016 to August 2016. The second covers the northend of Hartford from 2013 to March 2016.</td>
<td>Benjamin Faust</td>
<td>Street address and apartment number</td>
<td>Infrequently compiled by hand from public records</td>
</tr>
<tr>
<td>Foreclosures</td>
<td>Foreclosures/Lis Pendens by Address</td>
<td>Kelli Brock</td>
<td>Point data with coordinates</td>
<td>Regularly updated on Hartford GIS data portal</td>
</tr>
<tr>
<td>Inspections</td>
<td>Housing code violations for City of Hartford</td>
<td>David Hansen</td>
<td>Point data with X,Y locations - Connecticut State Plane NAD83, feet</td>
<td>Daily</td>
</tr>
<tr>
<td>911 Calls</td>
<td>List of the address from where 911 calls are made</td>
<td>Kelli Brock</td>
<td>address</td>
<td>Regularly updated -</td>
</tr>
</tbody>
</table>
Community Solutions – Initial Focus Area – Northeast Hartford Neighborhood
City of Hartford Promise Zone

Expansion of area to include Clay – Arsenal and Upper Albany Neighborhoods with Northeast Hartford
Public Transportation and Commuting Population
Food Options for Healthy Neighborhoods

Food Options in Hartford Promise Zone Area
Health Data

Chronic Conditions
Risk Behaviors
Preventative Health
Hartford Neighborhoods – Population Characteristics
Data Storage and Analysis

File geodatabase. Shape files, metadata, ArcGIS Online
We work toward a future without homelessness, in which poverty never follows families beyond a single generation. We do it by helping communities become better problem solvers, so they can fix the expensive, badly designed systems that low income people must rely on every day.
Northeast Hartford Neighborhood – Evictions and Housing Code Violations
Heat Map – Evictions and Housing Code Violations – City of Hartford
Crime Data – City of Hartford

Aggravated Assaults in Hartford, CT

Drug Offenses in Hartford, CT

Criminal drug offenses data for Hartford compiled by street address from public records. January to November 2016.
Next Steps for Community Solutions and GISCorps Team on Project

- Review available data with Community Solutions for the project
  - Document web links to data sources
  - Activate links to web maintained data such as the City of Hartford GIS data portal
- Identify web maps and web apps that Community Solutions staff find useful for the Hartford Community
- Develop survey tools for use by Community Solutions neighborhood teams
  - Blight Survey with Survey 1 2 3
- Provide documented database of the GIS data to Community Solutions
- Assist Community Solutions in the active use of the ArcGIS on-line account
- Assist Community Solutions in understanding the role of the GIS database and options that they have for using and maintaining this database over time
Suggestions for GISCorps on similar projects with local organizations

- Remote deployment did work well with the GISCorps team
  - The team had bi-weekly conference calls with web access with Community Solutions team
- Local contact with Community Solutions members in the Hartford area have enhanced this project
- A GISCorps team member or GIS intern in the greater Hartford area would have assisted in transferring knowledge and skills to the local Community Solutions team.
Thank you

- The GISCorps team on this project would like to provide appreciation to Community Solutions for this experience
  
  - Kristina Drysdale (Dietz)
  - Shannon Cox
  - Drew Wold
  - Kelli Brock
  - Trish Long
  - David Hansen

- Thank you
  
  - Community Solutions Team
    - Ben Faust – Initial lead
    - Patrick McKenna – Current lead
    - Kirah Edwards
    - Mat Poirot