



## Team Approach to Violence:

Using digital technologies to boost community resilience  
in south side neighborhoods

Scoping paper: June 2013

Team Approach to Violence is a project about using everyday digital technologies to boost community resilience in Chicago's south side neighborhoods.

The aim of the project is to use digital tools - web, mobile, SMS - to enable residents, community organizations, police and public agencies to share information and start conversations about community safety and tackling violent crime.

In the process, TAVT will support communities to become more resilient and capable by building trust between neighbors and local agencies, supporting local social networks, and creating a space for a public dialogue about crime and safety.

The work is being funded by the University of Chicago's Office of Civic Engagement, McCaffery Interests and Cisco.



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## 1. Introduction

Team Approach to Violence is a project about using everyday digital technologies to boost community resilience in Chicago's south side neighborhoods. The work is being funded by the University of Chicago's Office of Civic Engagement, McCaffery Interests and Cisco.

The aim of the project is to use digital tools - web, mobile, SMS - to enable residents, community organizations, police and public agencies to share information and start conversations about community safety and tackling violent crime.

In the process, TATV will support communities to become more resilient and capable of building trust between neighbors and local agencies, supporting local social networks, and creating a space for a public dialogue about crime and safety.

The idea for Team Approach to Violence came from a workshop about digital technologies and community resilience that was hosted by the University of Chicago and Cisco in 2012, and is part of [The Social Life of Cities Collaborative](#), a wider program of work about urban social innovation and socially sustainable communities that is run by Cisco, [Social Life](#) and the [Young Foundation](#).

The 2012 workshops brought together community organizations, City stakeholders, public agencies and NGOs to discuss how locally-based digital projects could help to boost community resilience in south side neighborhoods.

Participants in this workshop identified three key issues that were blocking community resilience in south side neighborhoods:

### 1. Disconnection and social isolation

Workshop participants described how many residents are socially disconnected from each other, from nearby neighborhoods, and from the City and public agencies; and expressed a desire to foster stronger local social networks - with an emphasis on creating bridging social capital between neighborhoods and different groups of people - and to create stronger connections to the City so residents are more able to articulate problems and influence decision-making.

### 2. Violence and fear of crime

Violent crime was described as a major problem for residents of south side neighborhoods. Apart from the obvious problems of personal safety, workshop participants described a number of complex issues that impact on the capacity of these communities, and public agencies, to deal with violent crime. These included: residents' fear of reporting crime; fear of using some public spaces; residents' isolation, the emptiness of streets and lack of street-based social life; and how reporting of crime levels impacts negatively on how south side neighborhoods, and the City more broadly, are perceived, which feeds a negative cycle of disinvestment and disconnection.

### 3. Empty and un-used spaces

Participants described how empty, un-used or derelict spaces are problematic as both physical, social and symbolic spaces: they create opportunities for anti-social and criminal behavior, which reinforces local anxieties about safety and crime and discourages people from using certain streets and public spaces.

The need to bring “life” and activity back to streets and intersections, for example by creating shops and other places for people to meet, was voiced. Empty streets also symbolize the lack of visible progress or development in many neighborhoods and the deprivation and struggle many south side residents experience daily.

From this set of issues workshop participants developed the idea of Team Approach to Violence: a digital project that can connect residents, community organizations, police and public agencies, creating a space for residents to anonymously report violent crime and to start a conversation about community safety with neighbors, police and public agencies.

The Team Approach to Violence idea of creating a safe space for public dialogue about community safety has become more relevant since the closure of EveryBlock earlier this year. The work also aligns with the Police Department’s initiative to open up the ClearPath crime data and to encourage community organizations and civic developers to use the data to create new digital tools.

The work that has now started is about prototyping and developing digital tools that allow residents to map, report and discuss public safety and neighborhood crime, in a way that supports and strengthens offline initiatives and meets the broader aims of boosting community resilience by building trust, supporting dialogue, and building relationships between residents and public agencies.

The Social Life team is currently talking to community and City stakeholders about how the Team Approach to Violence project can support and align with existing offline and digital public safety initiatives. In July 2013, the Social Life team will be facilitating two prototyping workshops to bring together community and City stakeholders to jointly design the project’s digital tools.

This scoping document brings together information, insights and case studies about digital projects that support communities; drawing on initiatives that Social Life and the Young Foundation have been involved in, as well as a review of other tools and projects from North America and Europe. These lessons will inform how Team Approach to Violence is developed. The scoping document includes information about:

- **Using digital tools to support community resilience:** a summary of what is known about how digital projects can boost community resilience and local social networks
- **What makes digital projects work:** practical lessons and insights about what factors impact on the success of community-based digital projects
- **Web, mobile and SMS usage in Chicago and south side neighborhoods:** a summary of data from the University of Illinois about how residents use different digital technologies
- **Web, mobile and SMS tools about crime and community safety:** case studies about existing tools and projects, and some concepts recently developed by the Chicago Open City Apps team, which could be relevant to this project. Some of these are open source projects that could be adapted or incorporated in the Team Approach to Violence project.

## 2. Why community resilience?

“Community resilience”: the capacity of communities to bounce back in the face of adversity, is a key factor in what makes neighborhoods thrive. Boosting community resilience is central to the process of creating and supporting socially sustainable places. Building and boosting community resilience is the underlying theme for this project. It provides a new lens for examining questions about people, places and placemaking in Chicago.

Resilience is sometimes described as an “ordinary superpower”, or the ability of some people, groups or communities to bounce back (or bound forward and change or progress) after adversity. The idea of resilience encourages people to think differently about very local issues. Low income neighborhoods are often discussed in terms of what is wrong, their “deficits” (including unemployment, low incomes, poor health and education and crime), rather than in terms of their assets - the strengths within a neighborhood that supports residents when life is hard (assets can include good public services, good transportation, strong social networks, high capacity for self-help, and strong resilience).

Social Life distinguishes between different types of resilience. There is the resilience that enables people to stoically endure hardship and survive difficulties, this we call “survival” resilience. Our work focuses most on the forward looking concept of “adaptive resilience”, which enables people to move forward, create, and seek out, opportunity, in spite of the difficulties they face.

Thinking about places and resilience, as opposed to deprivation, creates an opportunity for public agencies and community organizations to consider the intangible, social dimensions of community life alongside the physical and economic. For example, the two charts below compare work by the Project for Public Spaces in New York about what makes a successful place with work carried out by the Young Foundation and Social Life about some of the factors that help to build a sense of community.

Figure 1: What makes a successful place? [Project for Public Spaces](#)



Figure 2: What makes a community? [Social Life](#)

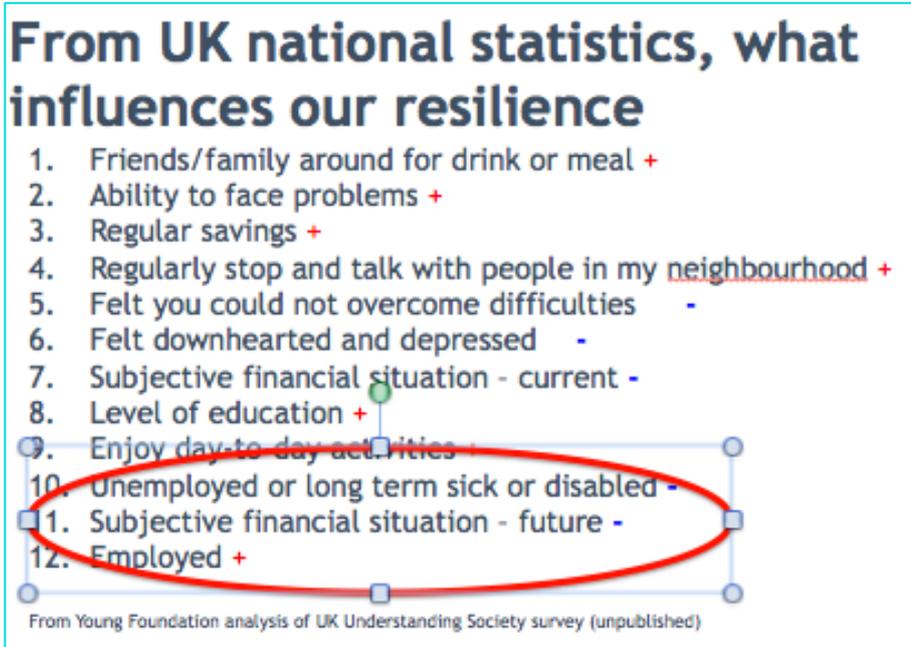
## What else builds community?

- A sense of identity: a place people feel they belong
- Local history, myths & stories
- Strong social relationships, networks & bonds
- Trusting the neighbors
- Rituals and rhythms
- Physical boundaries to promote geographical identity
- Visible leadership

Community resilience is dynamic in the sense that it can be influenced and changed both positively and negatively, by individual, family and local circumstances. Research carried out by the Young Foundation using an analysis of UK national statistics identifies the factors that influence individual resilience, and how these operate in three different spheres of life: individual, social and structural.

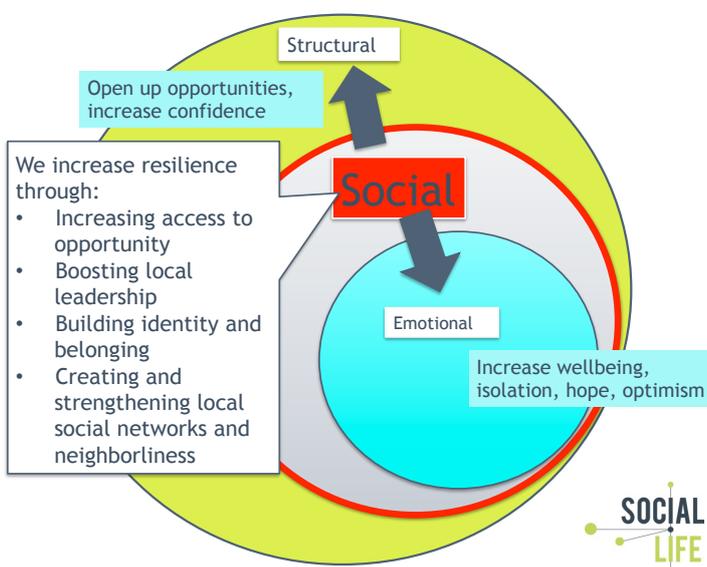
The Young Foundation’s analysis found that economic and work related factors are important, but less important than people’s social relationships.

Figure 3: What influences resilience? Young Foundation



At the July 2012 workshops, participants explored what community resilience meant in the context of south side neighborhoods and the potential for digital technology projects to boost community resilience. The group worked with the idea that, within local communities, resilience has an individual emotional component (how people feel about their lives, their own personal circumstances and histories); a social component (how neighbors support each other and the strengths within the local community); and a structural component (for example employment opportunities, good transportation, good local schools).

Figure 4: Spheres of community resilience, Social Life





The group focused on the social aspects of resilience, as this was the area in which community activism could have most influence. After discussing these overall concepts, and what boosted and blocked resilience in south side neighborhoods, participants worked on designing digital technology projects targeting the social sphere of community resilience.

### 3. Using digital projects to support community resilience

This section outlines some practical lessons and insights around how local online tools can help to build community resilience, and what we know impacts on the success of community-based digital projects. It also discusses how digital technologies can help crime reporting, and the challenges to achieving a project that is sustainable in the long term. These lessons have been drawn from projects and programmes run by Social Life and the Young Foundation and a review of other projects and evaluations.

The key lessons from this work are the need to:

- Focus on social needs before technology design
- Work with digital tools that reflect pre-existing patterns of technology use
- Integrate digital tools with offline projects.

#### 3.1 What makes digital projects work?

Over the past four years the Young Foundation, one of the partners in this project, has run two programs to support communities in England to use hyper-local digital technologies.<sup>1</sup> The aim of these programs was to work with community-based organizations and local government to develop practical, local projects that were resident-led, in order to understand the role digital technology can play in informing, engaging and empowering communities, and furthermore, explore the support role for local authorities.

The findings from these programs have been widely incorporated in the Young Foundation's broader innovation work and Social Life's thinking about creating resilient and socially sustainable communities.

We know from this work that digital technologies have a role to play in helping to build resilient and socially sustainable communities.<sup>2</sup> Specifically, they can support the following dimensions of community resilience:

- **Increasing access to information and opportunities** (eg information about support, welfare, employment opportunities and training; and practical opportunities to develop new skills and capabilities)
- **Boosting local leadership** by increasing the visibility of local organizations and the voices of residents

<sup>1</sup> For a description of these programs see the Young Foundation's website at [Local 2.0](#) and [Building Local Activism](#).

<sup>2</sup> See the Young Foundation's work on [wellbeing](#) and Social Life's work on [social sustainability](#)

- **Contributing to building a sense of local identity and feelings of belonging**, from using neighborhood websites to promote community history, cultural events or local independent businesses, to community discussion forums that debate local issues and ideas
- **Creating and strengthening local social networks and neighborliness**, through simple email exchanges between local people to online neighboring networks or digital timebanking services.

We also know that while digital technologies can support community development many projects fail, or are less successful than hoped, because they place too much emphasis on technology design and not enough emphasis on understanding local conditions - needs, aspirations, levels of engagement and technology take-up. Therefore, focusing on social needs and where technology can complement, enable and support people and communities to solve problems or get things done more efficiently, is a priority for this work.

Consequently, many community-based digital technology projects overlook two crucial elements: **the relevance of technology projects to local people; and the amount of real-world support required to establish and maintain local projects.**

Building Local Activism is a recent two-year study from the Young Foundation that explored whether social media could empower local communities. This work shows that community-based digital technology projects often fail because they:

- **Put more emphasis on designing and understanding technology than future use**
- **Assume a level of digital literacy that is not shared by all**
- **Demand that people become familiar with new interfaces rather than those they already use and trust**
- **Rely too much on one single digital platform**

In our experience, even the simplest hyper-local websites require considerable person-power to generate content, moderate online discussions and keep online communities and networks alive. This is especially pertinent in places where levels of civic and digital engagement are already low. Forrester's [Social Technographics](#)<sup>3</sup> work has identified seven categories, or stages, of social media use and mapped these globally for different socio-economic groups and consumer types. The stages span 'inactives' (people who are online but not participating in any form of social media) to 'conversationalists' and 'creators', people who will actively generate their own content.

**Community projects using digital technology need to reflect local interests, local patterns of real-world civic engagement, and local patterns of technology use.**

The Young Foundation's Local 2.0 work found that initially many community organizations had high aspirations for creating new platforms and online tools. As the projects progressed however, it became clear that local patterns of technology use needed consideration. For example, in one neighborhood members of the Asian community would engage with SMS-messaging about community news and alerts but would not use social media.

In the same vein, community-based digital technology projects need to be designed with realistic expectations about the potential of technology to improve or change real-world civic engagement. Technology makes participation easier for some people, but it does not affect the underlying

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<sup>3</sup> Forrester, Social Technographics, 2007

behaviors and values that really motivate people to get involved; these can only be addressed through broader community development work.

**An important insight from the Young Foundation's Local 2.0 work has been the desire from both public agencies and communities to use digital tools, in particular social media, to create dialogue that will actively build relationships between neighbors, communities and institutions.**

Building Local Activism explored whether social media - like Facebook or Twitter - could empower local communities. This research found the following limitations to using social media to empower communities:

- **Social media is not the shortcut to empowerment or higher participation**
- **Community activity online seems to be driven by a handful of committed individuals, just as it is in the offline world**
- **Social media may remove some barriers to participation, such as time, but it does not really affect more important determinants of participation; our motivations, values, desire to belong or have influence. These factors underpin our sense of efficacy and if you believe that you can change things, you are much more likely to act**
- **This sense of efficacy is also influenced by the attitude and capability of agencies like the local authority to listen to local people and act**
- **There were few signs of social media being an effective method for citizens to force more interesting and responsive channels of decision-making**

However, this research found that social media can help communities in other ways:

- **Social media really helped activists to network and communicate better with one another. It meant that information flowed much quicker than it did before, with activists no longer dependent on meetings or chance encounters on the street to share news**
- **It makes community activity much more visible. Simply being able to observe means a wider group of people are informed, even if they choose not to take their involvement further**
- **Online community conversations need to be heard by public agencies who can respond, and also be connected to offline conversations both in the community and at the local administrative level. Research into what makes communities resilient shows that reinforcing these relationships will not only increase civic participation but it will also ensure communities are adaptive and open to new ideas from outside the neighborhood (Rowing Against the Tide, 2013).**

But, email and SMS should not be overlooked in favour of new digital technologies:

- **Email and SMS meet the needs of most residents, who want to regularly receive local information but do not want to use the web to make contact with neighbors. ([see article for some useful examples](#)).**

The key lessons from this work are:

- To focus on social needs before technology design
- To work with digital tools that reflect pre-existing patterns of technology use
- To integrate digital tools with offline projects.

## 3.2 Digital projects about crime and safety

In addition, there are a specific set of considerations associated with community-based digital projects that are about crime and public safety. These include: trust, the security of users, the integrity of data and crime reports that are being generated, and the impact of mapping crime on feelings of safety.

- **Providing crime data information in isolation can be counterproductive:**

The platform Amethyst (Information Hub for Cornwall Community Safety Partnership) states that “by sharing information, patterns of crime are more likely to be identified along with the underlying causes; leading to more informative decision making, effective targeting of resources and cohesive partnership working”. But crime data provided in isolation may result in residents feeling more unsafe, and less empowered to act. According to the founder of CrimeReports.com, the aim of the site is to give people useful information about their communities but he also acknowledges that site could lead to a slight increase in wariness or paranoia if a particular neighborhood shows up in police reports more regularly than its residents had anticipated ([review of the site by Switch.com](#), 2008). This reinforces the importance of connecting on and offline initiatives and encouraging dialogue around community safety.

- **Confidentiality and monitoring:**

Building trust is important for ensuring sustained participation. In order for people to feel secure about using a crime related tool, confidentiality and monitoring of the site are important and would need careful consideration. Many online reporting sites allow residents to report crimes anonymously in order to protect their identities. However, this becomes problematic if the site is going to be used for promoting online community dialogue. A balance must be struck between protecting residents who report community issues and the potential for a site to building community relationships. SeeClickFix for example, offers both identifiable and anonymous profiles.

- **Build in story telling:**

Sharing local stories is a way of building trust and maintaining involvement with community-based digital projects. MyPolice and CureViolence both capture user’s stories within their websites. Similarly [Local360 Network](#) is an online project from Media Trust in the UK, giving people the opportunity to connect, share and learn to tell stories about their community.

## 4. Technology uptake in Chicago neighborhoods

This section summarises survey data about how Chicago residents use digital technologies. The information is based on research from the University of Illinois, which investigates internet use and barriers to technology uptake in Chicago neighborhoods and explores how demographic differences impact on internet use.

These findings identify how social inequalities are closely connected to digital inequalities, and how segregation and poverty at the neighborhood level are significant factors that affect access to home internet.

The research also shows the number of Chicago residents using cell-phones to access the internet has grown rapidly from 26% in 2008 to 39% in 2011, especially among people aged 18-29 years old.

Consequently, the research indicates the importance of using simple, practical mobile tools - cell-phones, SMS, smart phones - for this project that reflect existing patterns of internet use for both younger residents and low income households in south side neighborhoods.

The information presented is primarily taken from two surveys. The first was conducted in 2008 and is based on a random-sample telephone survey of 3453 Chicago residents aged 18 or over. The research method and analysis are discussed at length in Mossberger & Tolbert (2009). The second was conducted in 2011 and is based on more than 3500 Chicago residents aged 18 or over. The research method and analysis are discussed at length in Mossberger et al (2012a) and Mossberger et al (2012b). The data both surveys were commissioned by the City of Chicago Department of Innovation and Technology.

### 4.1 Survey findings: patterns of technology use

In Chicago, broadband infrastructure is now widely available. However, internet access and use depends on a variety of social, geographical and economic factors. Research from the University of Illinois (see Mossberger et al., 2012b) shows that in Chicago “barriers to Internet use vary by neighborhood as well as by individual demographic characteristics”. Certain social inequalities, such as race and socio-economic status, are particularly strongly connected to digital inequalities (Hampton, 2010), so it is important to this project to understand these issues and how neighborhood characteristics relate to digital exclusion. Karen Mossberger’s research identifies: “Segregation and concentrated poverty at the neighborhood level are significant factors that affect access to home internet” (2012b).

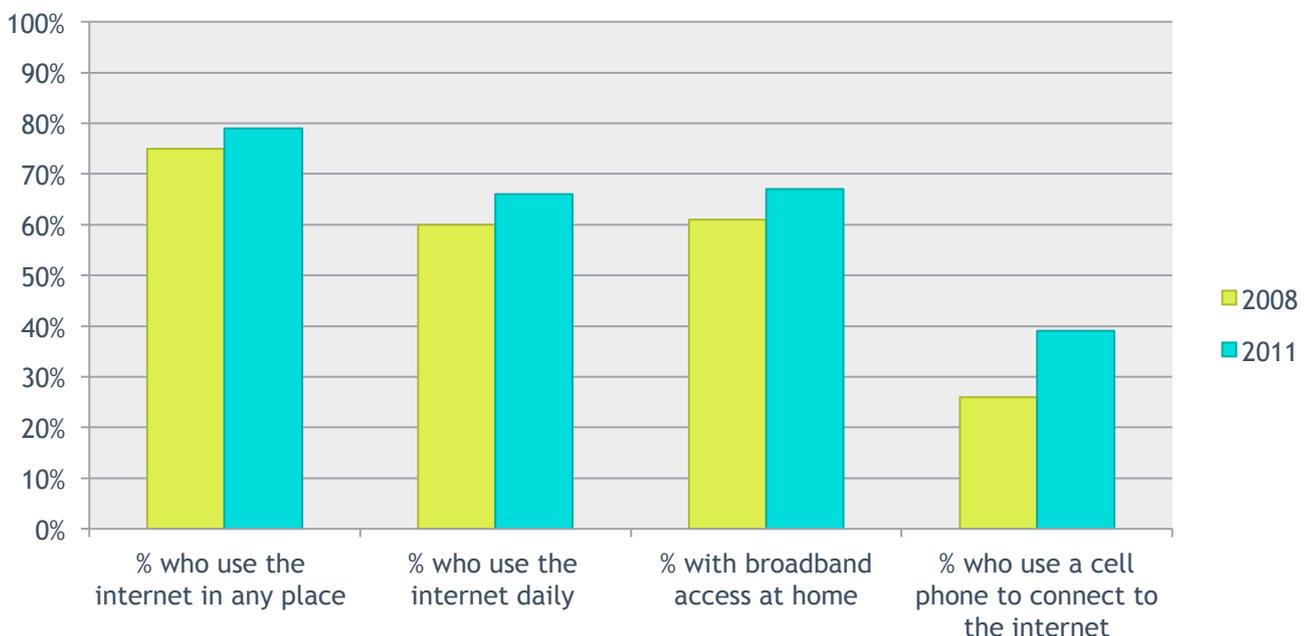
Her research looks at how race, income and other demographic factors are related to digital exclusion and finds:

- Chicago residents are more likely to be offline or less well connected if they are older, Latino, African American, low income and less educated; consequently, neighborhoods with a high percentage of African-American and Latino residents have particularly low levels of internet use
- People earning more than \$75k+ are thirty-two per cent more likely to use home broadband than to rely on publicly available internet
- African American and Latino residents are more likely than non-Hispanic Whites to have no personal access to an internet connection
- For poorer residents, Latinos, females and those with lower education, affordability is the main reason given for being offline
- African American residents in low income neighborhoods are more likely to use public access points to use the internet than Latino residents
- African Americans are more likely than Whites and Latinos to look for job information online
- Young people are among the residents who are most likely to follow politics or news online, or to access e-government.

### Internet access - citywide

In 2008 75 per cent of Chicago residents were using the internet “at least occasionally” and 60 per cent used it “at least once each day”. The figures in 2011 were 79 per cent for occasional use and 66 per cent for daily use, respectively (see Chart 1, p.17).

Chart 1: Internet use in Chicago - 2008 & 2011





Mossberger’s research indicates that women and parents are among the most likely to use the City of Chicago website and are more likely to access health information online other groups. Residents of high-poverty neighborhoods are among those most likely to use a public transit website. Young people are among the residents who are most likely to follow the politics or news online, or to access e-government, despite traditionally being regarded as the group least interested in politics or public affairs.

### Internet access - south side community areas

The research identifies notable differences between neighborhoods within the south side; levels of internet use in northern areas are substantially higher than those in the south. For example, Armour Square is ranked as the 7<sup>th</sup> best connected community area across Chicago for internet use - “at least occasionally” - compared to Greater Grand Crossing’s position at 71 and South Shore’s at 45 (Note: Mossberger’s research models the survey data to take account of social and economic factors and produces rankings for connectivity and internet use). The number of south side residents using the internet on a daily basis is also lower compared to the city as a whole. Woodlawn and Greater Grand Crossing are the south side community areas with the lowest levels of internet use. This data looks at internet use by different racial groups and shows Hispanic residents go online significantly less than other ethnic groups living in south side neighborhoods (see Chart 2).

Chart 2: Internet use in Chicago - South Side Community Areas split by ethnicity (2011)

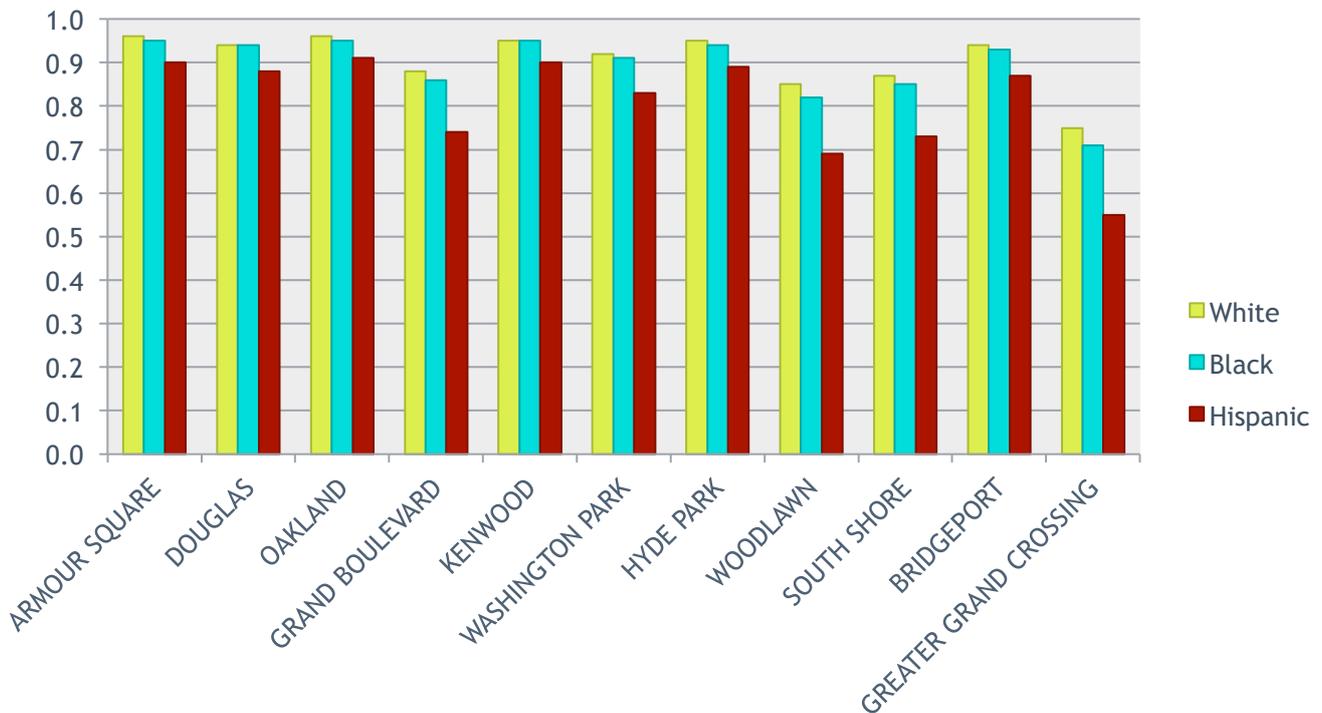
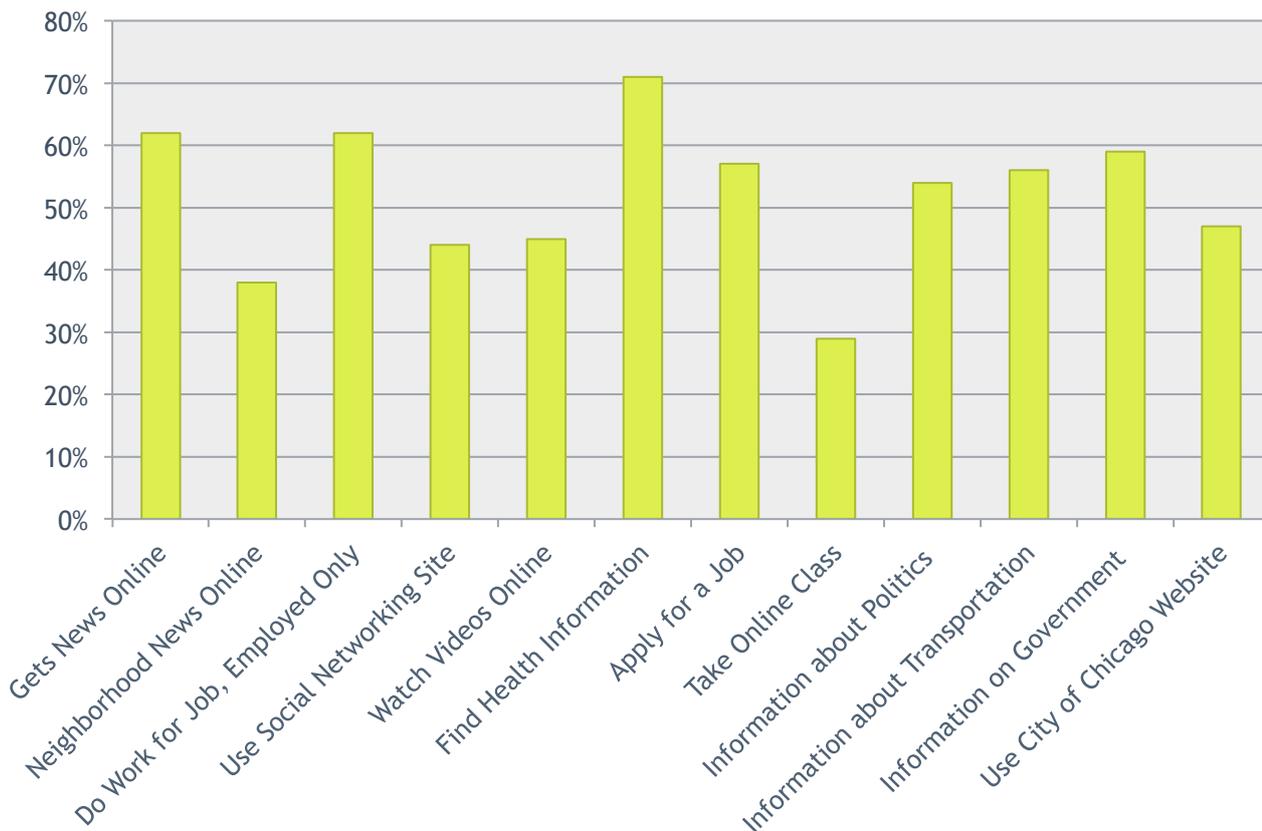


Chart 3 below shows how residents in south side neighborhoods use the internet. The University of Illinois data suggests the most common reasons for internet use is to find health information, especially in Oakland, Kenwood and Hyde Park. In all south side community areas the least popular use of the internet was for taking online classes. African Americans are the most likely ethnic group to search for jobs online (see Mossberger et al 2012a & Mossberger et al 2003).

Chart 3: Types of internet activity - all south side Community Areas (2011)



### Broadband and home internet access - citywide

69 per cent of Chicago residents surveyed in 2008 used the internet at home and 61 per cent had broadband access (the figure for broadband use in 2011 was 67 per cent, see Chart 1, p. 15).

Mossberger & Tolbert (2009) highlight that “Low-income African-Americans are among those with lower level of access to home broadband, but tend to go online elsewhere. In contrast, Latinos (and older residents) lag behind in use elsewhere, home access and broadband”. Table 1 (p. 19) shows that non-Hispanic Whites surveyed in 2011 were substantially more likely to have access to a broadband connection at home than rely on a mobile connection (by thirty-four per cent) or a public source of internet.

### Broadband and home internet access - south side community areas

Woodlawn is ranked 50<sup>th</sup> of 77 Chicago community areas for home broadband access and has the second lowest level of access on the south side.

Latinos are less likely to have access to home broadband than other ethnic groups (see Chart 4). Non-Hispanic Whites have greater broadband access than African Americans and Latinos in all of the south side community areas (Mossberger et al 2012a). Greater Grand Crossing is the least well connected of all the south side areas and has the 4<sup>th</sup> lowest level of broadband access across the 77 community areas in Chicago. The community areas with best access on the south side are Hyde Park, Kenwood, and Oakwood.

Chart 4: Home broadband access - South Side Community Areas split by ethnicity (2011)

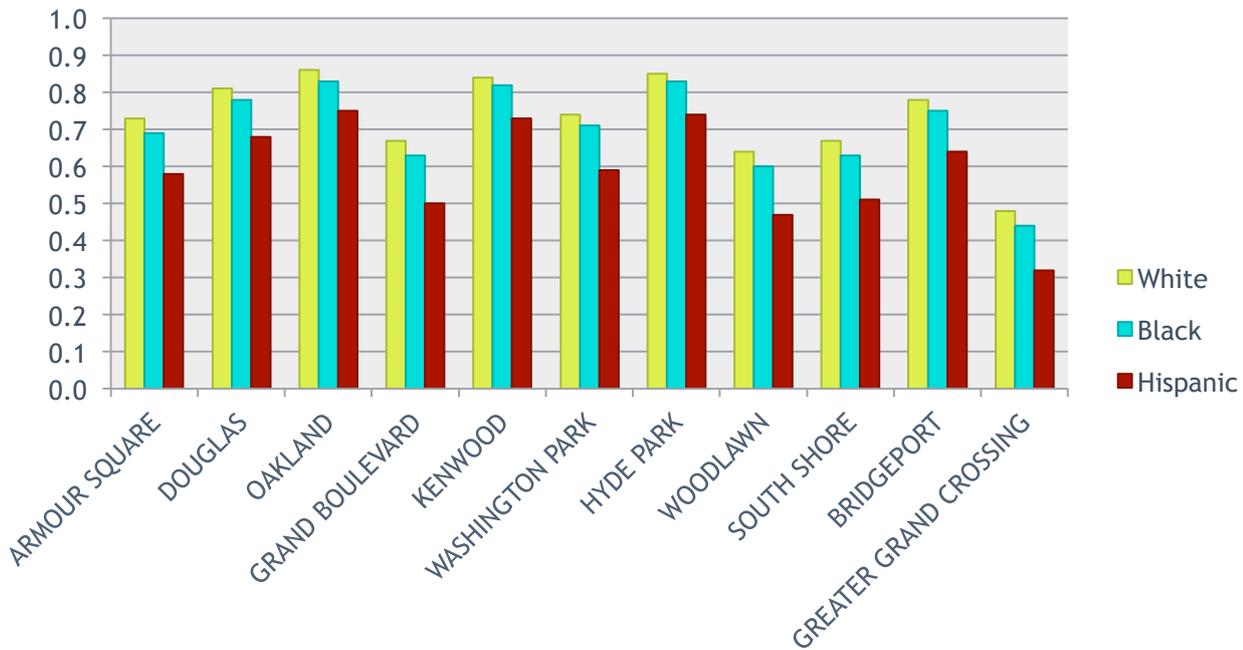




Table 1: Demographics for types of internet use, Mossberger et al (2012a) (some columns do not add up to 100% due to rounding).

	No Home Broadband/ Unconnected	Internet User/ No Personal Access	Mobile Access Only	Home Broadband
<b>Race:</b>				
White	34	38	23	57
Black	39	36	45	26
Latino	23	22	24	11
Asian	1	1	2	3
Other	3	3	6	3
<b>Total:</b>	100%	100%	100%	100%
<b>Education:</b>				
Less High School	22	12	12	3
High School Degree	32	24	37	12
Some College	24	29	27	25
Bachelor's or More	22	36	23	59
<b>Total:</b>	100%	101%	99%	99%
<b>Income:</b>				
Under 20k	44	30	34	12
20-39k	28	32	30	18
40-75k	20	26	29	25
Over 75k	8	13	6	45
<b>Total:</b>	100%	101%	99%	100%
<b>Age:</b>				
18-29	10	10	50	14
30-49	16	25	26	35
50-64	27	34	13	32
65+	48	31	10	19
<b>Total:</b>	101%	100%	99%	100%

*This table present percentages of Chicago's populations with different forms of access to the Internet. Columns from left to right list increasingly regular and effective access to the Internet, with home broadband access in column 4. Column 3 is individuals who lack home broadband but have mobile access via their smartphones. In column 2 are Internet users who have no personal access—neither home broadband nor mobile Internet—but go online in public libraries, friends' homes, and so on. Finally, in column 1 are the generally less connected, including everyone without home broadband, those who are offline or unconnected, and the small percentage of dial-up users. The demographic characteristics of respondents with these varying forms of Internet access are also listed.*

## Cell phone internet connection - citywide

According to 2008 data 26 per cent of Chicago's population use their phones to connect to the internet. The figure in 2011 was 39 per cent, the largest increase of a type of internet access (see Chart 1, p. 15). Residents between 18-29 years old rely on their cell phones to get online more than any other age group; younger respondents are significantly more likely to go online using a mobile connection than they are to use any other source (see Table 1, p.19). Table 1 also shows that African Americans are 19 cent more likely to rely on mobile internet than a home broadband connection, and Latinos are 13 per cent more likely (Mossberger et al 2012a). Similar patterns are found among lower income residents with those earning less than a \$20,000 annual salary 22 per cent more likely to have access only via a cell phone than to have broadband at home.

## Cell phone internet connection - south side community areas

We have been unable to access the appropriate mobile connection data at south side community area level. However, as is highlighted above, areas with higher concentrations of African Americans, Latinos, younger residents and people on lower incomes are more likely to rely on cell phone internet access.

## Public and wireless access - citywide

35 per cent of Chicago residents surveyed in 2008 used wireless internet in a public place. We have been unable to access the 2011 data related to the same question. However we do have city wide data that focuses on residents who use the internet but do not have personal access (e.g. through a cell phone or home broadband connection). Table 1 (p.19) shows that residents aged 65 and over are 21 per cent more likely to use a public internet source than a mobile connection. Income and ethnicity also has a significant bearing on whether Chicago residents have access to a personal connection. Those earning \$75k+ are 32 per cent more likely to use home broadband than to rely on publicly available internet. African American and Latino residents are more likely than non-Hispanic Whites to have no personal access to an internet connection.

## Public and wireless access - south side community areas

We have been unable to access data at south side community area level. However it is known that in poorer communities public libraries and community technology centres play an important role in providing internet access.

## 5. Digital tools and community projects: case studies

This section contains short case studies about existing web, mobile and SMS tools, mainly from North America and the UK, which have been designed to generate conversations between neighbors, support a dialogue between citizens and public agencies, allow residents to report or map issues in their neighborhood, or to address issues around community safety, crime reporting or crime mapping.

This is a selective review; we have chosen case studies about digital projects that focus on relationship building and community voice, as well as some examples of pure crime mapping and crime reporting tools. The case studies are including to demonstrate the range of existing tools and platforms, to provide inspiration for the prototyping workshops, and to identify practical lessons to inform this project.

Some of these tools provide data from police departments so that residents can be informed about the levels of crime in their neighborhoods whilst others enable communities themselves to play an active role in providing information and also solutions. We have made a distinction between ‘passive’ tools where citizens receive information but do not play a part in producing or reporting information, and ‘active’ tools that allow users to generate reports, data and conversations.

A significant number of these digital tools are open source, which means they could be adopted or built on for the TATV project.

In addition to these examples the Open City Apps team in Chicago recently held a public safety hackathon event with the City, Smart Chicago Collaborative and Chicago Police Department. The event was about creating new public safety apps to enable communities to interact with the Police Department using the Police Department’s new ClearPath API (or public data). Several concepts came out of the event that could be relevant to TATV, these include:

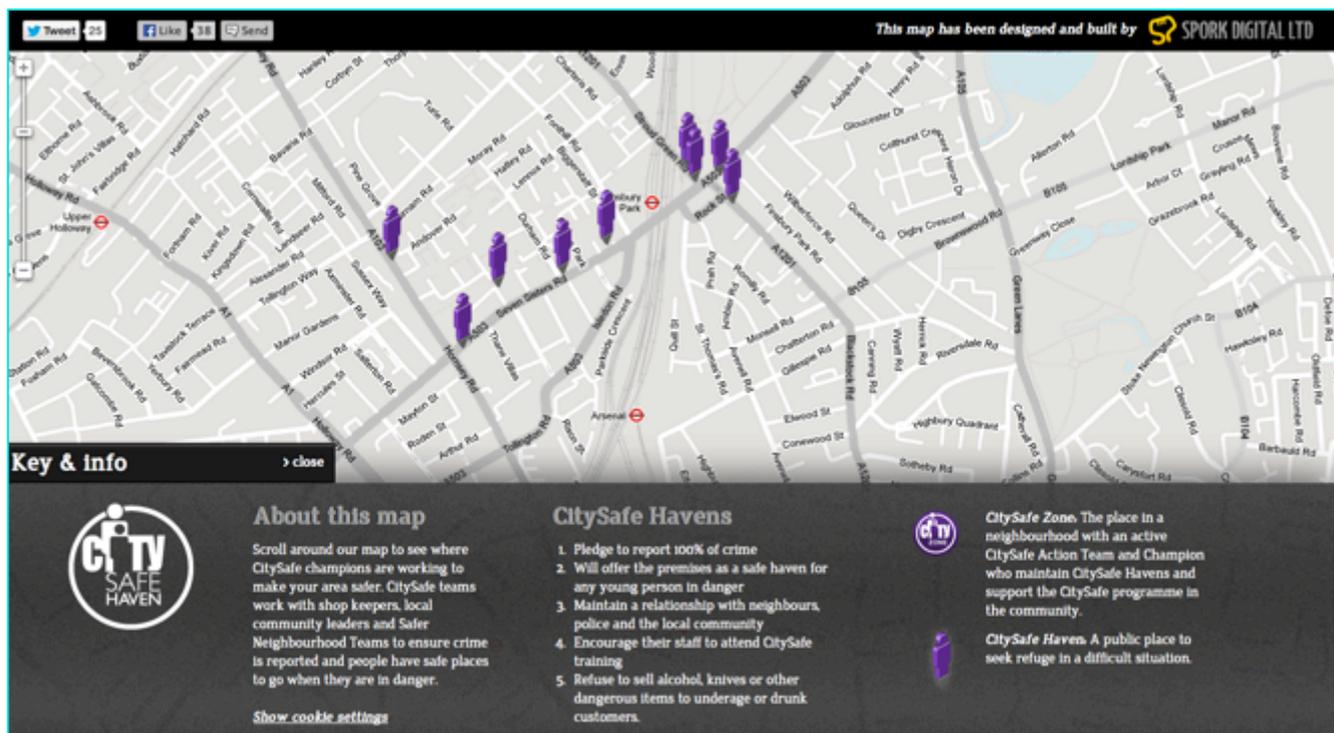
- **Third Place:** a mobile app that allows residents to report community concerns about safety to the Police and also sends out text alerts when crime is reported in the neighborhood
- **CAPS by text:** an app prototype that allows users to send a community concern to their local CAPS district by text so that residents without the internet can connect to CAPS
- **CAPstagram:** an app concept that allows users to attach a picture to a community concerns report (currently the ClearPath API doesn’t allow residents to include pictures when making a report).

The Social Life team are talking to Open City Apps and the civic hackers about collaboration to develop some of these ideas.

## 5.1 Digital tools for building community resilience & community networks

### CitySafe Map

<http://map.citysafe.org.uk/>



Platform info: (unknown)

Reporting method: n/a

Country of origin: UK

Special features: it is built around an offline community-led safety strategy

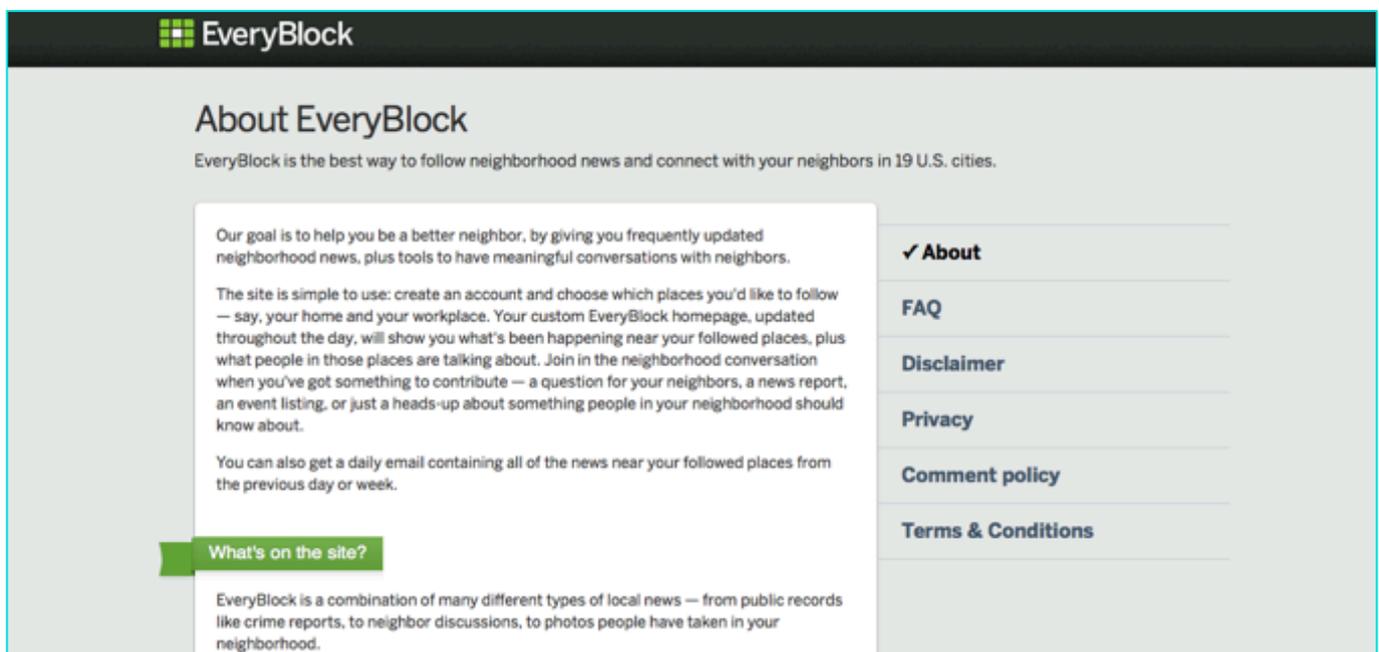
CitySafe is a community self-policing initiative from [London Citizens](#) aiming to tackle crime and reconnect fractured neighborhoods. It uses a mixture of online and offline methods to help young people feel safer on the streets of London. The project works with shops, local businesses and other community buildings (stations or libraries, for example) to offer their premises as a safe haven for young people if they are feeling vulnerable or threatened. The aim is that this will develop stronger and better relationships within the community - person to person, and between local people and local businesses too. CitySafe teams work with shop-keepers, local community leaders and Safer Neighborhood Teams to ensure crime is reported and people have safe places to go when they are in danger. To date there are 300 CitySafe Havens and 62 CitySafe Zones in London. The site was developed by Spork Digital Ltd. [The CitySafe Resource Guide can be seen here.](#)

### How it works:

The CitySafe Map pinpoints the following:

- **CitySafe Zones** - the place in a neighborhood with an active CitySafe Action Team and Champion who maintain CitySafe Havens and support the CitySafe programme in the community.
- All the **CitySafe Havens** across London

## EveryBlock



**Platform info:** EveryBlock's crime reports were based on Chicago Police Department CLEARMap data

**Reporting method:** online community portal

**Country of origin:** Chicago, USA

**Special features:** modelled on a neighborhood forum

EveryBlock was a hyper-local online forum that began in Chicago and spread to 19 US cities. It offered a closed, online community that was based on neighborhood boundaries eg Woodlawn, South Chicago. Members could use forum bulletin boards to discuss local news and share information, local events were covered, along with crime reports. In Chicago's south side, EveryBlock's Crime Reports used the Chicago Police Department's [CLEARMap](#) data to provide residents with information about incidents in their area. The reports were static lists of crime in different neighborhoods and were published weekly. EveryBlock users could not interact with or comment on the reports.

The project started in 2008 as a way of helping people find out what's going on in their neighborhood by providing a range of information, from civic information to news articles to neighborhood messages. EveryBlock was originally funded by a two-year grant from the [Knight Foundation](#) through its [Knight News Challenge](#) program. It was then taken over by NBC Universal and closed in 2013 because of difficulties in creating a sustainable revenue model for the site.

EveryBlock's community bulletin boards and forums were widely used and there was considerable disquiet and disappointment from users when it closed.

**How it worked:**

For this site, the developers created their own maps. [Click here for technical details.](#)

**Review:**

EveryBlock's bulletin boards were very well used by residents and there was considerable disquiet when the site closed down with little warning to users earlier this year. EveryBlock's community conversations and bulletin boards demonstrate Chicago residents are willing to take part in online discussions. There is an opportunity to link these conversations into city departments and public agencies, which EveryBlock did not do, so these constructive conversations were not being heard.

## CureViolence

[www.cureviolence.org](http://www.cureviolence.org)



**Platform info:** (unknown)

**Reporting method:** n/a

**Country of origin:** USA

**Special features:** The online portal supplements an offline programme

CureViolence (formerly CeaseFire) is an innovative program that addresses the problems of violent gun crime using methods and strategies associated with disease control. The organization believes that in order to effectively combat peaking societal violence, social norms must be targeted from the source. CeaseFire Illinois has local partners in Chicago's south side neighborhoods including Claretian Associates and Network of Woodlawn, which are also LISC New Communities Programs. On its online portal, CureViolence uses simple but effective video applications that allow people to tell their stories in direct and powerful ways.

### How it works:

The model prevents violence through a three-prong approach:

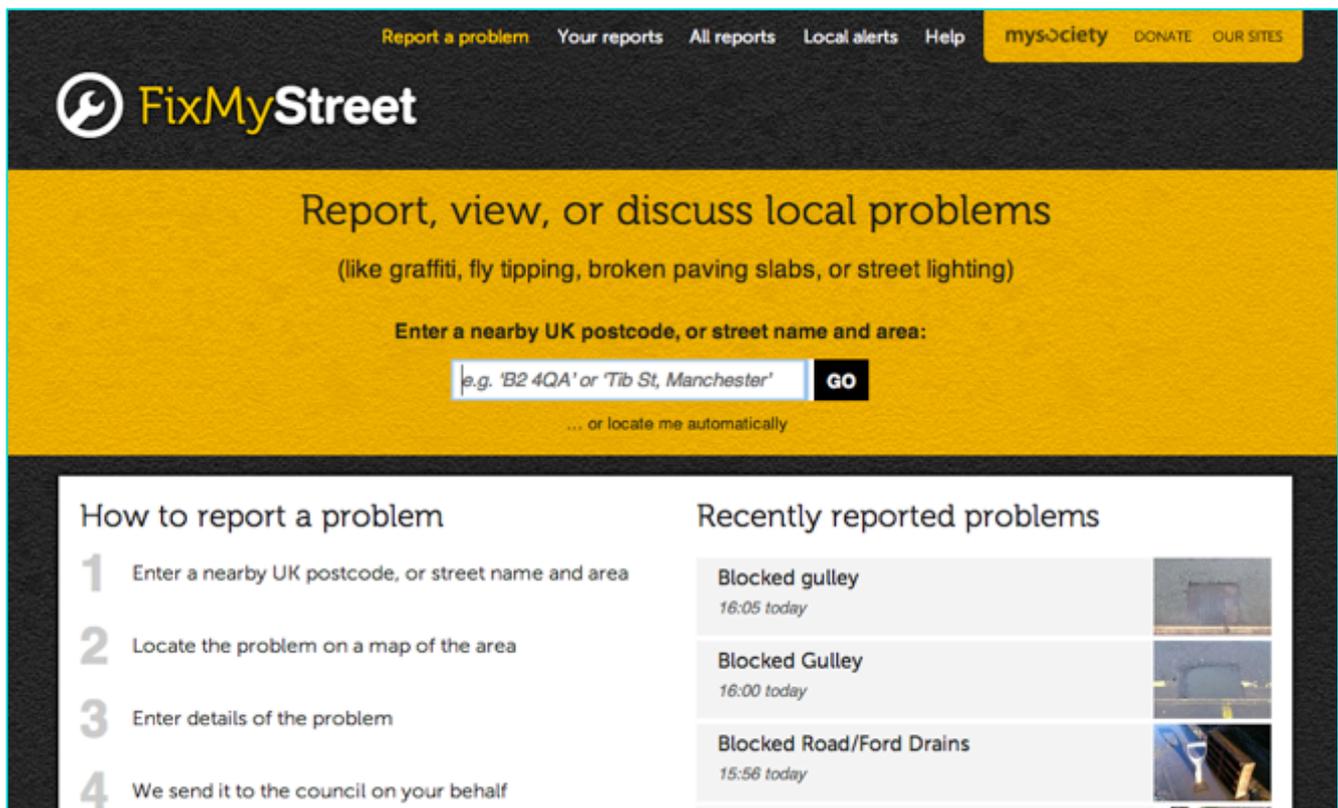
1. **Interrupt transmission** - a network of trained community members (who often have had experience in gangs) are used to intervene during a period of conflict
2. **Identify and change the thinking of highest potential transmitters** - intensive one-to-one support through outreach workers
3. **Change group norms** - Cure Violence uses a public education campaign, community events, community responses to every shooting, and community mobilization to change group and community norms related to the use of firearms.

### Review:

A report [found here](#) presents the findings of an evaluation of CeaseFire. The program is administered by the Chicago Project for Violence Prevention (CPVP). This approach uses online tools to support an offline social programme. The online stories are supplementary rather than integral to the project.

## FixMyStreet

<http://www.fixmystreet.com/>



The screenshot shows the FixMyStreet website interface. At the top, there is a navigation bar with links: "Report a problem", "Your reports", "All reports", "Local alerts", "Help", "mysociety", "DONATE", and "OUR SITES". The main header features the FixMyStreet logo and the text "Report, view, or discuss local problems (like graffiti, fly tipping, broken paving slabs, or street lighting)". Below this, there is a form to "Enter a nearby UK postcode, or street name and area:" with a text input field containing "e.g. 'B2 4QA' or 'Tib St, Manchester'" and a "GO" button. A link "... or locate me automatically" is also present. The main content area is divided into two columns: "How to report a problem" and "Recently reported problems".

How to report a problem	Recently reported problems
1 Enter a nearby UK postcode, or street name and area	Blocked gully 16:05 today
2 Locate the problem on a map of the area	Blocked Gully 16:00 today
3 Enter details of the problem	Blocked Road/Ford Drains 15:56 today
4 We send it to the council on your behalf	

Platform info: Open source software under the GNU Affero GPL software license

Reporting method: online platform or smart phone

Country of origin: UK

Special features: transparent dialogue between residents and the local council

FixMyStreet allows residents to report public realm issues directly and automatically to the relevant council officer. FixMyStreet can be used as a forum for local discussion or dialogue between residents and public agencies. It was developed by My Society with the Young Foundation. Significantly, transparency was a key objective in the development of FixMyStreet. A specific aim was to give residents the opportunity to publicly record complaints, reports and suggestions that would normally be recorded privately by a local authority or public agency, so other residents could see the reports and progress in responding to them.

**How it works:**

1. You create the report on FixMyStreet or with a smart phone
2. FixMyStreet sends that report to the right department at the right council.
3. That body puts it into its own back-end system.
4. Later, when the council fixes the problem, FixMyStreet is updated, and everyone knows it's fixed.

It can function as a standalone website or can be embedded in other websites. Citizens' problems are reported via email to the relevant government body. FixMyStreet for Councils is an offshoot of Fix My Street. This website launched in 2012 embeds the software into council website.

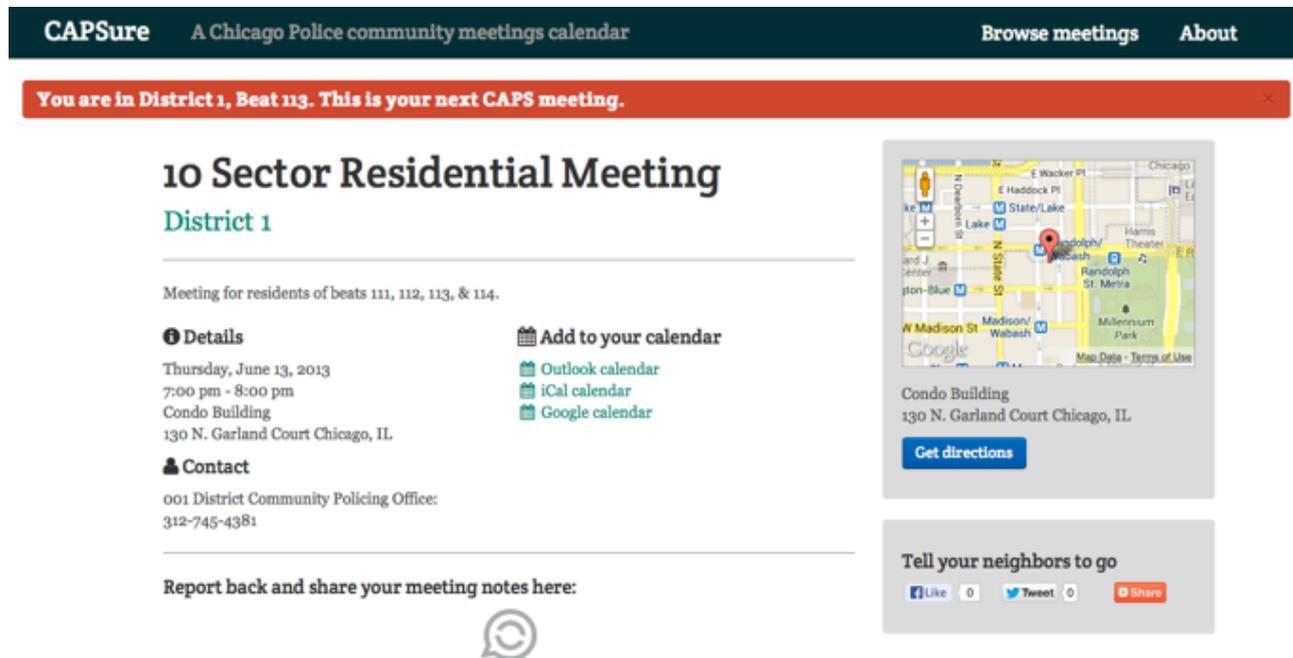
The software behind this site is open source, and available mainly under the GNU Affero GPL software license. You can [download the source code](#). [Fiksgatami](#) is an example of the code being used in a Norwegian version of FixMyStreet.

**Review:**

My Society argue that centralised customer complaints systems are no longer efficient: "Today, an email report of a broken paving slab will typically be received by a public servant working in a call centre. This person will normally cut and paste text from the email into a new database, or into a new email, before dispatching it for someone else to consider, and action". They argue that sending the problem directly to the relevant government team would save time and money, which is why FixMyStreet directs reports to the relevant local authority contact.

## CAPSure

<http://capsure.opencityapps.org/>



The screenshot shows the CAPSure website interface. At the top, there is a dark blue navigation bar with the text "CAPSure A Chicago Police community meetings calendar" on the left and "Browse meetings About" on the right. Below this is a red banner with the text "You are in District 1, Beat 113. This is your next CAPS meeting." The main content area features a large heading "10 Sector Residential Meeting" and a sub-heading "District 1". Below this, it states "Meeting for residents of beats 111, 112, 113, & 114." There are two columns of information: "Details" (Thursday, June 13, 2013, 7:00 pm - 8:00 pm, Condo Building, 130 N. Garland Court Chicago, IL) and "Add to your calendar" (Outlook calendar, iCal calendar, Google calendar). A "Contact" section provides the address "001 District Community Policing Office: 312-745-4381". To the right, there is a map of the area and a "Get directions" button. At the bottom right, there is a "Tell your neighbors to go" section with social media sharing options for Facebook (0 likes), Twitter (0 tweets), and a red "Share" button.

Platform info: <http://opencityapps.org/>

Reporting method: n/a

Country of origin: Chicago, USA

Special features: connects Chicago Police Department with Chicago residents

Chicago Alternative Policing Strategy meetings, [CAPS meetings](#), are regular events held with the Chicago Police Department and Chicago residents that encourage community members and police to work together to reduce crime. The CAPSure website lets participants find out when and where their next meeting is, in an effort to increase the level of citizen participation. Like Crime in Chicago this tool was developed by Open City.

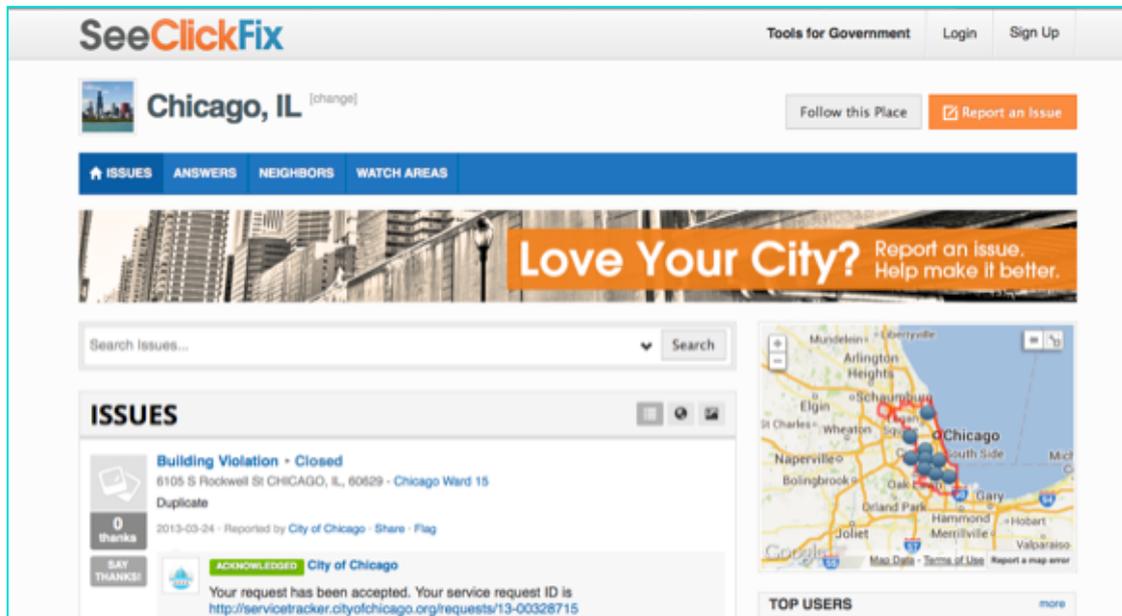
### How it works:

Participants of local crime meetings can find out information about their next meeting and also upload their meeting notes onto the website so that they can be shared publicly. The website also encourages people to ‘tell your neighbors to go’ by sending them a reminder of the event through social media.

To deploy this app in another city all the code is on the [GitHub repository](#).

## SeeClickFix

<http://seeclickfix.com/>



**Platform info:** Open311

**Reporting method:** Smart phone app and website

**Country of origin:** USA

**Special features:** “civic points” for neighbors

SeeClickFix encourages residents to participate in neighborhood improvements. Like FixMyStreet, residents are encouraged to report issues through the website by taking pictures using their mobile phones or by reporting them on the website. These reports then go directly to local government agencies. Then they are publicly displayed and can be tracked for progress. The platform was started in 2008. There are various sources of funding for the project: some income comes from sponsorship and advertising and some comes selling the customization of their application (SeeClickFix Plus).

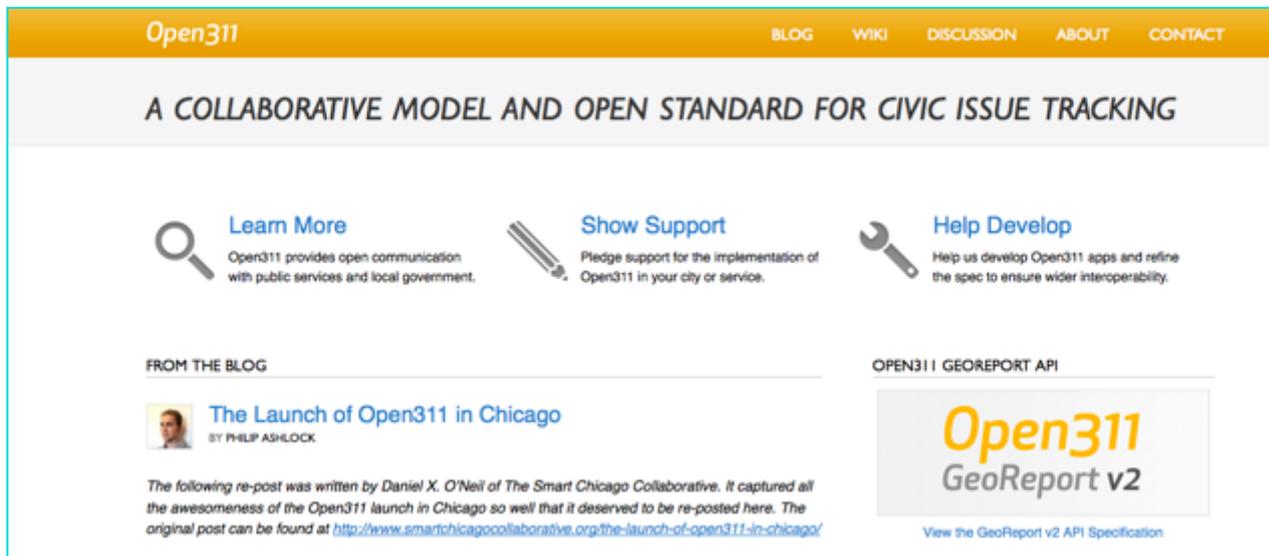
SeeClickFix Connect, is a new product that is being tried in a few US cities that ties all of SeeClickFix’s reporting tools into a city government’s existing work order system.

**How it works:**

See Click Fix allows anyone to report non-emergency issues using the android platform to their servers, which integrate with 100+ governments and provides an Open311 compliant endpoint. This allows anyone access to the open data. Neighbors are given a profile and gain “civic points” depending on how much they have reported.

## Open 311

<http://open311.org>



**Platform info:** Open311 API software (GeoReport v2)

**Reporting method:** online portal

**Country of origin:** USA

**Special features:** can integrate data from council databases

Open311 is a non-emergency phone number available in many cities across the US. Now '311' refers to the entire process of handling service requests from citizens around a wide range of non-emergency neighborhood issues, from street cleaning to noisy neighbors.

Open 311 API is a location-based, open standard collaborative model for civic issue tracking. Many 311 systems provide a broad range of information and services, but currently the primary focus here is coordinating a standardized, open-access, read/write model for citizens to report non-emergency issues. There are various Open 311 cities in the US, including Chicago.

The Open311 initiative was established in 2010 by OpenPlans and is managed by Civic Commons. OpenPlans builds open source civic infrastructure. They collaborate with the public sector to create technology for more efficient, responsive, and inclusive government.

### How it works:

MySociety have a [full explanation of how it works](#). Much like FixMyStreet, the most developed function of Open311 technologies is to report and track non-emergency issues in public spaces. But unlike FixMyStreet, you can slot requests, messages and problem reports directly into local government 'to do' databases. Using a mobile device or a computer, someone can enter information (ideally with a photo) about a problem at a given location. This report is then routed to the relevant authority to address the problem. The information is available for anyone to see and it allows anyone to contribute more information. This is the model: **Client - Open311 server - Council database**

The server is available over HTTP(S), so the client can access it, and the server itself connects to the council's database. Open311 responds to HTTP requests with XML data. [Information on the Open 311 \(GeoReport v2\) specification](#) can be found here.

The fact that it is Open Standard means that reports can be gathered from various sources (text, email etc) and channelled directly through the same open platform. The Open311 API allows you to:

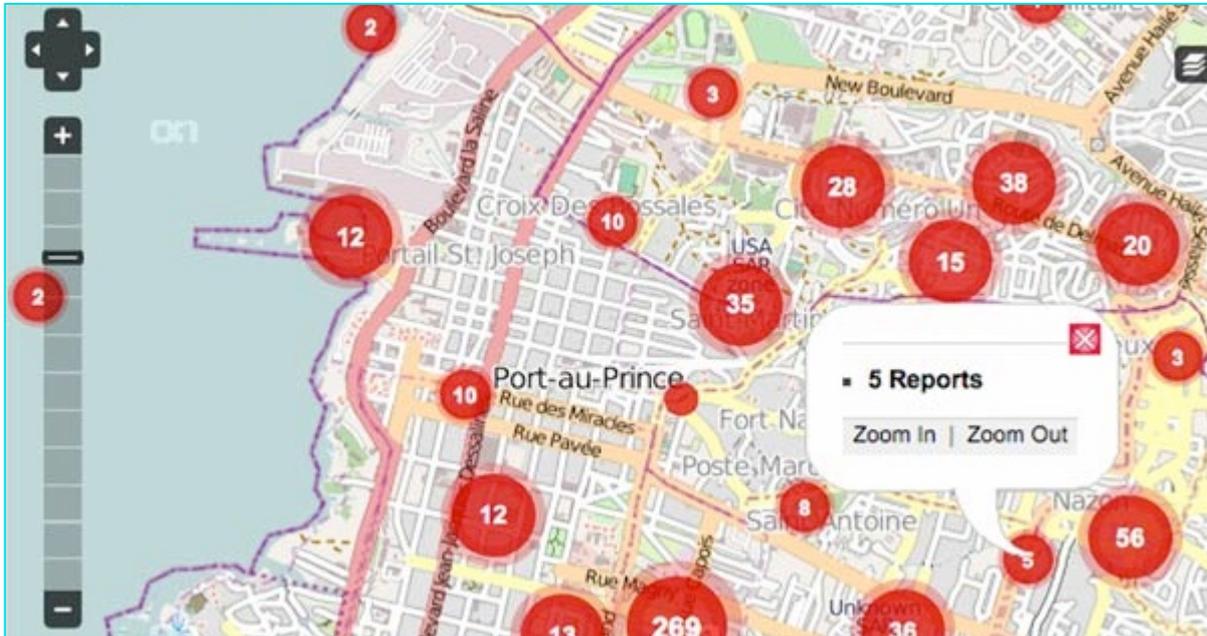
- **Find out what the service can do (service discovery):** In the Open311 API, this is handled by GET Service List. Each service has its own service code which the client must use when requesting it.
- **Add details about the issue (add service definitions):** In the Open311 API, this is handled by the GET Service Definition method.
- **Report a location-based problem (Request a service):** In the Open311 API, this is handled by POST Service Request. You need an API key to do this, which simply means the server needs to know which client this is. Sometimes it makes sense for the server to have additional security such as IP address restriction, and login criteria that's handled by the machines (not the user).
- **Listing known requests:** In the Open311 API this is handled by GET Service Request(s).

#### Review:

Recently MySociety has done [a review of Open 311](#). Although the reports are listed there is currently no way of tracking the progress of your report. MySociety are trying to find a way to integrate status reports.

## Ushahidi

<http://ushahidi.com/>



**Platform info:** (see below)

**Reporting method:** SMS messages

**Country of origin:** USA

**Special features:** real-time crowdsourced public data

The Ushahidi website was initially developed to map reports of violence in Kenya after the post-election fallout at the beginning of 2008. The original website was used to map incidents of violence and peace efforts throughout the country. The reports were submitted via the web and using SMS messaging by Kenyan citizen journalists. This website had 45,000 users in Kenya and became the catalyst for developing a platform that could be used worldwide.

More information about [how to map SMS messages is available here](#) and a guide on [how to build an Ushahidi platform](#).

## Brickstarter

<http://brickstarter.org>

<b>BRICK STARTER</b>	An Introduction Background Contact
From NIMBY to YIMBY—Yes in my backyard!	<b>What happens next?</b>
<i>Brickstarter enables everyday people, using everyday technology and culture, to articulate and progress sustainable ideas</i>	From the very start, the <b>response to</b> Brickstarter <b>has been incredible</b> . We knew as soon as we started writing (and seeing your anxious inquiries about our launch date) that we had hit a nerve. The momentum behind crowdfunding in contemporary culture and the

**Platform info:** online forum/blog

**Reporting method:** n/a

**Country of origin:** UK

**Special features:** development of community-led projects

Brickstarter is a concept site that has been designed to enable everyday people, using everyday technology, to start community projects, generate momentum around them, bring together different experts and networks, use crowdsourcing to generate funding, and keep local communities informed about progress with projects. Brickstarter aims to improve the connection between people and institutions. It is described as a platform to turn possibilities into proposals into projects.

### How it works:

Brickstarter aims to provide the following:

- Forum for citizens to articulate possibilities, and start aggregating attention
- Public story-telling platform, capturing the ebb and flow of debate around proposals
- Community fundraising tool for shared initiatives
- ‘Real-time dashboard’ displaying the collective desires of a community that can be mapped against institutional strategies and legislative frameworks, enabling bureaucracy to work more effectively

[Your Square Mile](#) is a similar tool used in the UK.

## 5.2 Crime and public safety tools: user-generated content

### StreetViolence

<https://www.streetviolence.org/>



**Platform info:** Google map

**Reporting method:** StreetViolence website

**Country of origin:** UK

**Special features:** The site allows victims, witnesses and police to post information

StreetViolence is a location-based online public reporting tool in the UK set up by the charity Witness Confident. Witness Confident has designed the site for and around victims, witnesses and the public. It allows people to, “warn others, appeal for witnesses, thanks passers-by who helped and report when the police catch those responsible...check if any incident gives you and your family real cause for concern and if it does, you can go online to seek reassurance from the police.”

Witness Confident - which is funded by the Nuffield, Allen Lane and Wates Foundations - will operate the service across London free of charge for a year.

**How it works:**

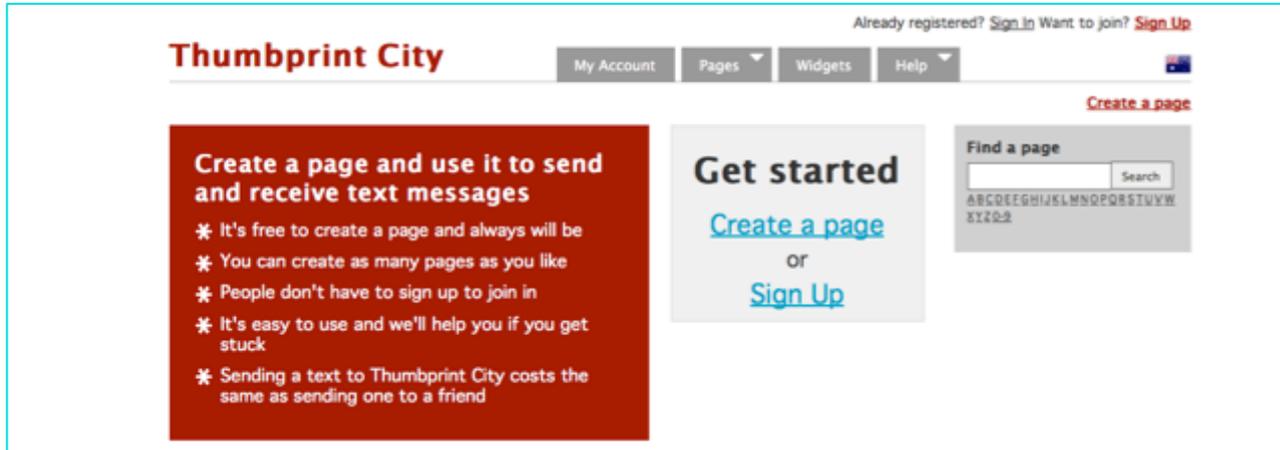
Residents can post reports directly onto the website. Information on crimes reported through Streetviolence.org will be sent directly to the neighborhood policing team to investigate. People who do not wish to formally report a crime can post information on the site anonymously.

**Review:**

The tool was initially developed in collaboration with the Metropolitan Police Service, however they pulled out of the project before the launch. There were concerns that it was a difficult adjustment to integrate this service into the Metropolitan Police’s existing systems and structures and that it could stop people reporting directly to the police ([EPCUupdates.org](http://EPCUupdates.org)).

## Where Do I Feel Unsafe? / Thumbprint City

<http://www.thumbprintcity.com/>



**Platform info:** Open source mapping software from Thumbprint City

**Reporting method:** SMS

**Country of origin:** UK

**Special features:** focus is on reporting feeling unsafe, not necessarily crimes

[Where Do I Feel Unsafe?](#) Is a text service that lets local residents flag concerns relating to the local area with their Neighborhood Police Team (NPT). The NPT can then target their interventions locally to address these concerns and help increase the sense of safety in the community. It is a pilot programme funded by NESTA and created by Thumbprint Co-operative in partnership with Greater Manchester Police. £25,250 was awarded through NESTA's Reboot Britain programme to develop and test the prototype tool. The pilot is in Gorton, Greater Manchester - one of the most deprived wards in the UK. The project uses text messaging. Residents are encouraged to report areas where they feel unsafe in their community to one single reporting point, regardless of the issue. This could range from reports of broken street lighting, vandalism, and suspected drug dealing.

### How it works:

Police community officers receive the text messages via a computer interface, creating a digital trail of incoming texts and responses. Officers then liaise across a range of public services to get problems fixed, with reporters given updates via text message. All incidents are kept open until they are resolved and residents are updated by text to let them know how their concerns have been dealt with. The tool uses Thumbprint's open source software Thumbprint City, which is [explained here](#).

## CitySourced

<http://www.citysourced.com>



**Platform info:** iCityHall and iCitizen technology hosted by government agencies

**Reporting method:** smart phone

**Country of origin:** USA

**Special features:** real time reports

CitySourced is a real time mobile civic engagement platform in the US. It provides a platform empowering residents to identify civic issues (public safety, quality of life, environmental issues, etc.) and report them to city hall for quick resolution; an opportunity for government to use technology to save time and money plus improve accountability to those they govern; and a positive, collaborative platform for real action. CitySourced is a start-up, the idea was developed in 2009 at TechCrunch 50.

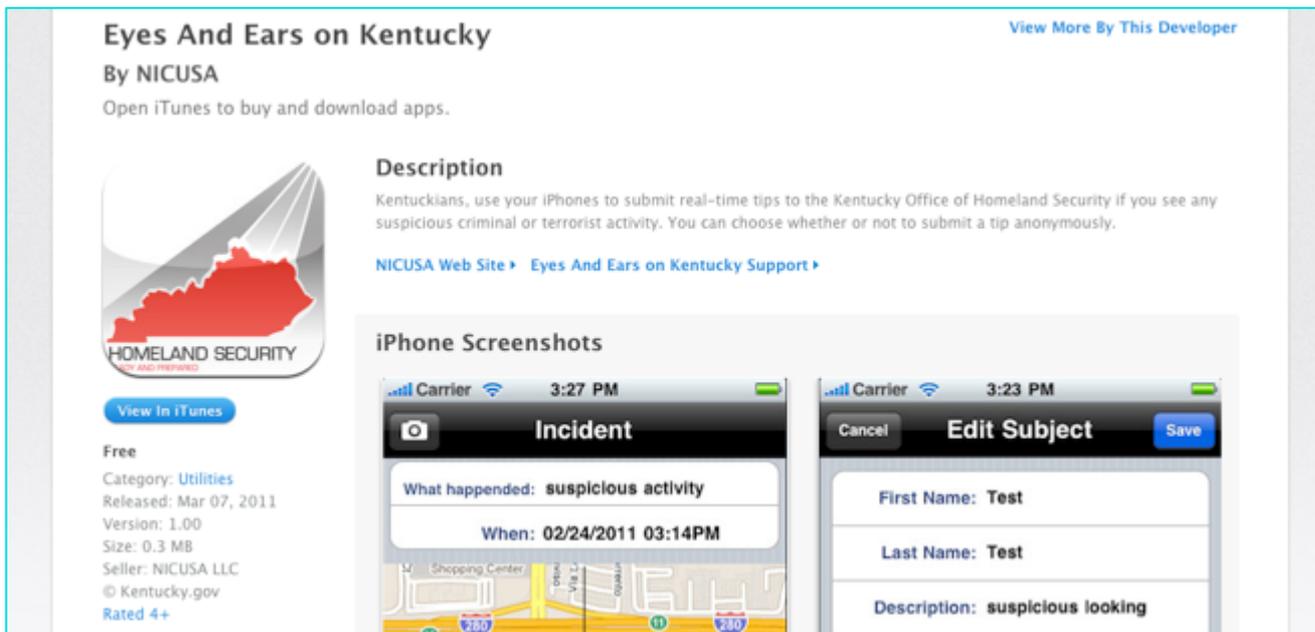
### How it works:

CitySourced's iCityHall technology enables municipalities to use this service. Together with iCitizen technology, custom civic mobile reporting applications are delivered to the municipality's citizens and residents across all the major smartphone platforms. "The app on your Blackberry, Android or iPhone lets you take a picture of the infraction. The app detects your location via GPS and once the image is loaded and approved, you are brought to the reporting screen. You can then identify what the problem is, add comments, and Tweet the problem out from your Twitter account.

Once you press "file", the report is captured, bundled and automatically transferred to the government agency that is responsible for the infraction. On the back end, the city agency gets a web dashboard that lets them see how many reports have been submitted, a map mashup of where the reports are located, pending reports that are incomplete, and graphs that break down reports by type over a given period of time. Cities can then download all the data into a file. The app is free for the user and cities pay an annual license fee for the dashboard.

## Eyes and Ears on Kentucky

<http://homelandsecurity.ky.gov/eyeonky.htm>



**Eyes And Ears on Kentucky**  
By NICUSA  
Open iTunes to buy and download apps.

**Description**  
Kentuckians, use your iPhones to submit real-time tips to the Kentucky Office of Homeland Security if you see any suspicious criminal or terrorist activity. You can choose whether or not to submit a tip anonymously.

[NICUSA Web Site](#) ▶ [Eyes And Ears on Kentucky Support](#) ▶

**iPhone Screenshots**

**Incident**  
What happened: suspicious activity  
When: 02/24/2011 03:14PM

**Edit Subject**  
First Name: Test  
Last Name: Test  
Description: suspicious looking

**Platform info:** (unknown)

**Reporting method:** iPhone App

**Country of origin:** USA

**Special features:** anonymous tipping directly to the Kentucky Office of Homeland Security

[Eyes and Ears Kentucky](#) is a telephone tip line for reporting criminal and suspicious activity. Crimes can now also be reported using smart phones. Kentuckians can use their iPhones to submit real-time tips to the Kentucky Office of Homeland Security (KOHS) if they see any suspicious criminal or terrorist activity.

KOHS worked with a team from Kentucky.gov, provider of the official website of the Commonwealth of Kentucky, to deliver the web and mobile versions of the Eyes and Ears on Kentucky application. It was created by developers NICUSA and launched in 2011.

### How it works:

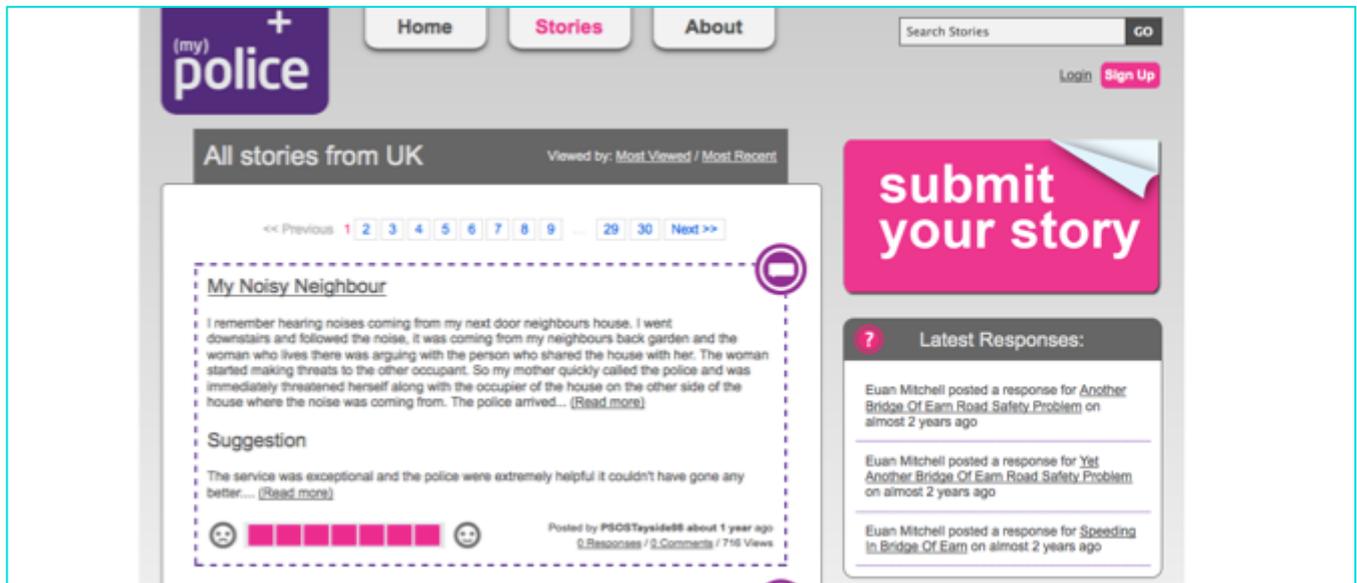
The Eyes and Ears on Kentucky mobile application captures information about the incident, subject(s), and vehicle(s), and takes advantage of built in functionality from the iPhone such as global positioning and the camera. Dallas Iwatch is a similar 'confidential web tipping information system', available in English, Spanish and French.

### Review:

This app only allows information to travel in one direction. There is no feedback from authorities and therefore no dialogue between citizens and authorities.

## MyPolice

www.mypolice.org



**Platform info:** (unknown)

**Reporting method:** online forum

**Country of origin:** UK

**Special features:** direct dialogue between citizens and police

MyPolice allows the public to have open, direct conversations with the police in the UK in a neutral setting. It was set up by Glasgow based design consultancy Snook in 2009. Snook created the idea of MyPolice at a [Social Innovation Camp](#) and subsequently secured funding from Channel 4's investigative technology fund 4 IP and Firstport to build the platform and launch a pilot with a local police force. Tayside Police commissioned Snook to pilot this service in their local wards over a period of three months. The ambition is to roll it out across Scotland's single police force.

### How it works:

The service allows the public to:

- Find out more about your local police - who they are and what they do;
- Send feedback to the police from a neutral platform;
- Support other people's questions, experiences and stories, as well as share them; and
- Rate your police experience and their performance
- Police can respond to comments and hold conversations, provide data and identify weaknesses and spot opportunities in the service their force delivers.

MyPolice has been rolled out across all UK forces; providing one national site for discussion of police services - with postcodes allowing comments to be directed to the appropriate force. Police forces pay a small annual fee to receive the service.

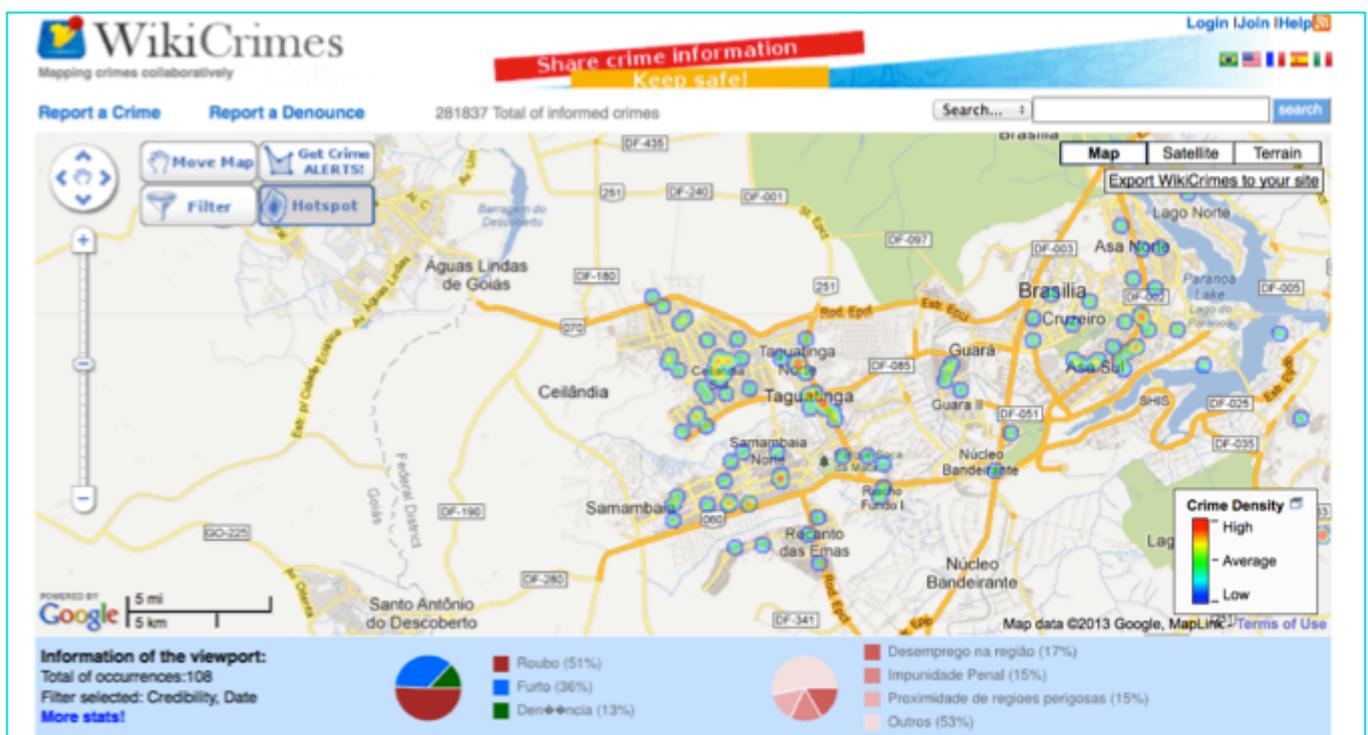
### Review:

The benefits of this output are centred around the police rather than the citizen reporting:

- Police forces around the UK now use social media, MyPolice was a catalyst in making this happen.
- Police forces around the UK now have a way to increase their visibility and broaden the range and diversity of the people they reach.
- Police forces around the UK now have the chance to save money by being aware and responding to problems before they become issues that demand costly resource and energy.

## WikiCrimes

<http://www.wikicrimes.org/main.html>



Platform info: Google Map

Reporting method: online portal

Country of origin: Brazil

Special features: a 'validity' scale

[Wiki Crimes](http://www.wikicrimes.org) is a web tool created by Professor Vasco Furtado from the University of Fortaleza in northern Brazil. It is a hybrid of crime data and maps, which is updated on a collaborative basis with contributions both from the public and from public databases. The information is shown on a map, so that visitors can see where there is a greater occurrence of a particular crime.

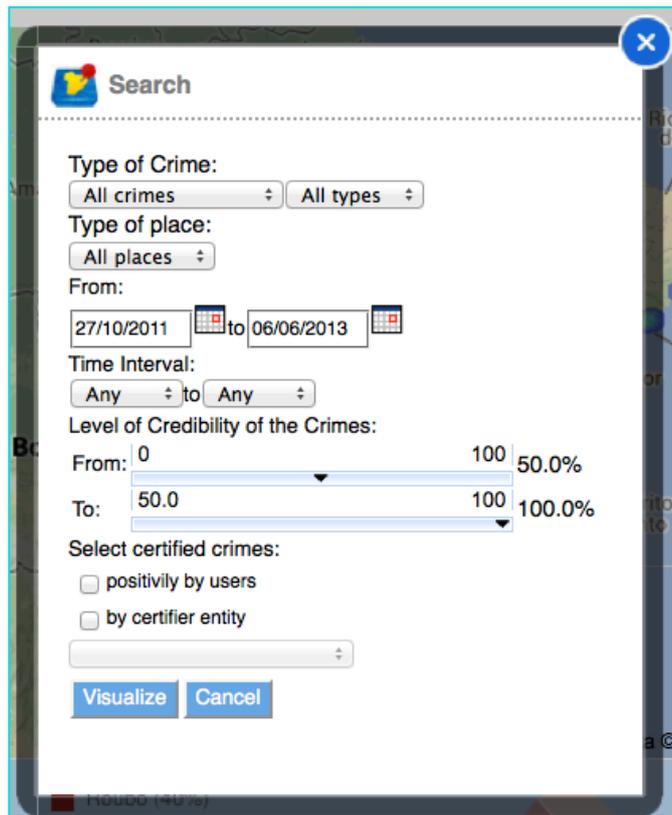
It was set up in response to the feeling that many crimes in Brazil go unreported by the police and that there is very little crime data that is publicly available. Crimes can be posted from across the world but the focus so far has been in Brazil. The site also offers crime alerts. To date, 281,837 crimes have been reported in total. Police departments have decided not to engage with this tool.

**How it works:**

WikiCrimes works as a layer on top of Google Maps. If you are a victim, you can quickly and anonymously pinpoint the location of the offense, then add details of what happened, including a date, type, description, and whether it was reported to the police. It also uses data from public databases. The project run from the university.

**Review:**

There are concerns about the validity of the information reported on the site. This has been addressed by including a ‘validity’ scale, which helps to make citizen reports more reliable.



is

## Nixle

www.nixle.com



**Platform info:** Municipal Wire Service

**Reporting method:** online portal, phone texts and emails

**Country of origin:** USA

**Special features:** Notification system from police to residents

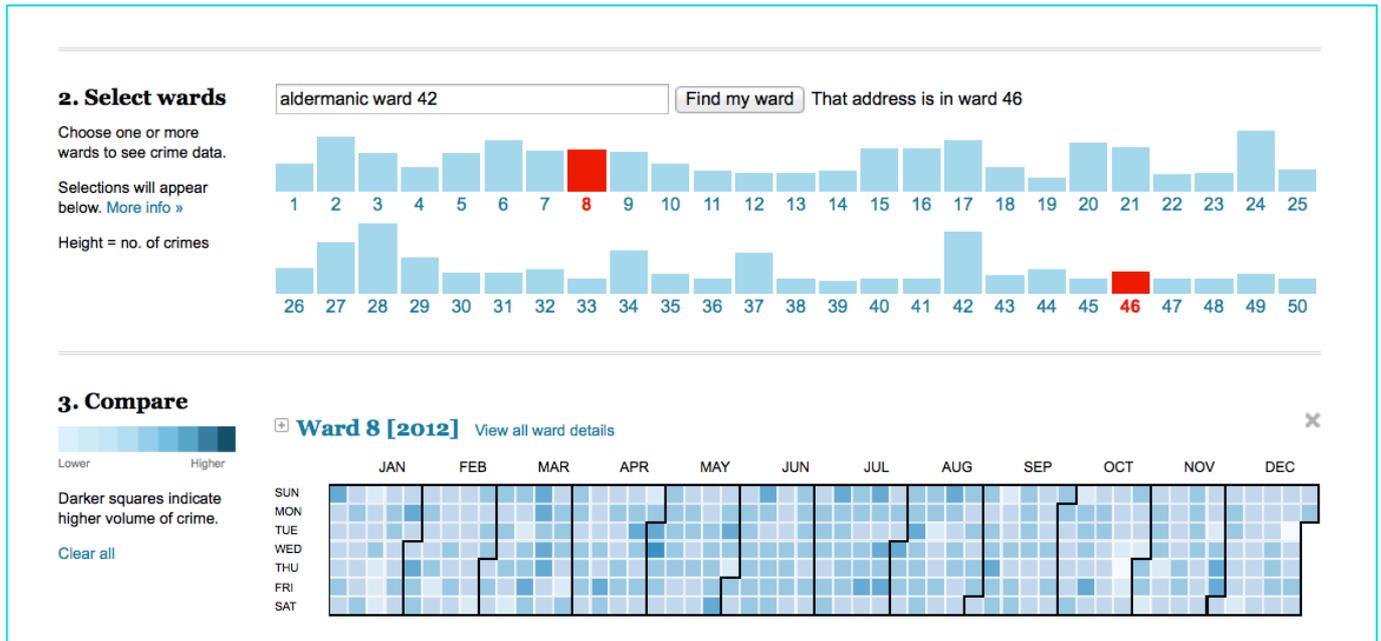
Nixle was established in 2007 to help government agencies, small to medium size businesses and enterprise-level organizations to communicate in a secure way and exchange multimedia content over a trusted mobile platform. In 2009 Nixle formed a partnership with Nilets, the International Justice & Public Safety Network and created a Municipal Wire system that enables US police departments to communicate important, neighborhood-level information to residents using text messaging and email. Nixle’s Municipal Wire Service provides communities throughout the country with news and information that is both proximate and personally relevant. They make this information instantly available over, SMS, mobile application, email, and web. The service is free of charge for police departments and residents. Over 4,600 public safety and other government agencies have been certified to use the service. Police departments using the service require officers to post information on the web site as they do their reports.

See here for [an example of how it is being used in the County of Rumson, USA.](#)

## 5.3 Crime mapping and community safety tools using Police Department data

### Crime in Chicago

<http://www.crimeinchicago.org/>



Platform info: <http://opencityapps.org/>

Reporting method: online portal connected to police department data

Country of origin: Chicago, USA

Special features: data visualisations to compare wards

Crime in Chicago is a data visualization tool created by [Open City](#) (a group of volunteers who create apps with open data to improve citizen understanding of government) that lets you explore crime trends in Chicago's 50 wards. It was built using open data about Chicago crimes released by the [Chicago Police department](#) in 2011.

With this website, you can compare crime levels over the years and across city wards. You can further explore each ward's crime profile, which shows daily crime volumes going back to 2002, crime types and subcategories, and contact information for each Ward representative.

#### How it works:

First you enter your ward. This will bring up a heat-map that displays an entire calendar year of crime for that ward. Each square represents a day. The darker the square, the more crimes occurred that day. You can also visualise trends, compare wards and types of crime. The technology used to build the site is described below:

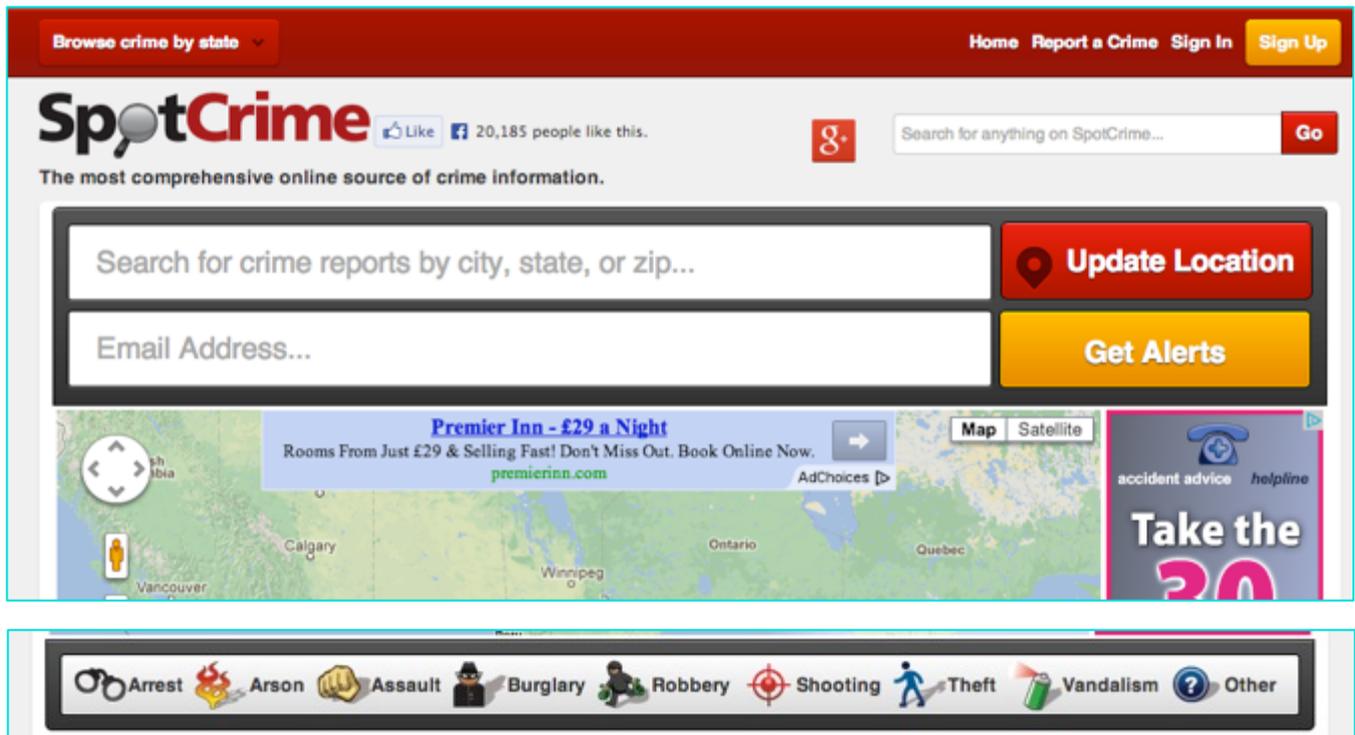
- Front-end: HTML, CSS, [jQuery](#)
- Data visualization: [D3](#), [Highcharts](#), Sparklines, [Google Maps](#), [Fusion Tables](#)
- Back-end: Ruby, [Sinatra](#), [Postgres](#)
- To deploy this app in another city all the code is on [github](#).

**Review:**

The data is separated into wards, which does not commonly reflect natural neighborhood boundaries. This website does not track crimes in real-time. The Police Department waits two weeks before releasing data about a crime. They plan on updating the site every month.

## SpotCrime

Spotcrime.com



**Platform info:** Google Map interface

**Reporting method:** police reports are mapped on online portal

**Country of origin:** USA

**Special features:** regular email alerts

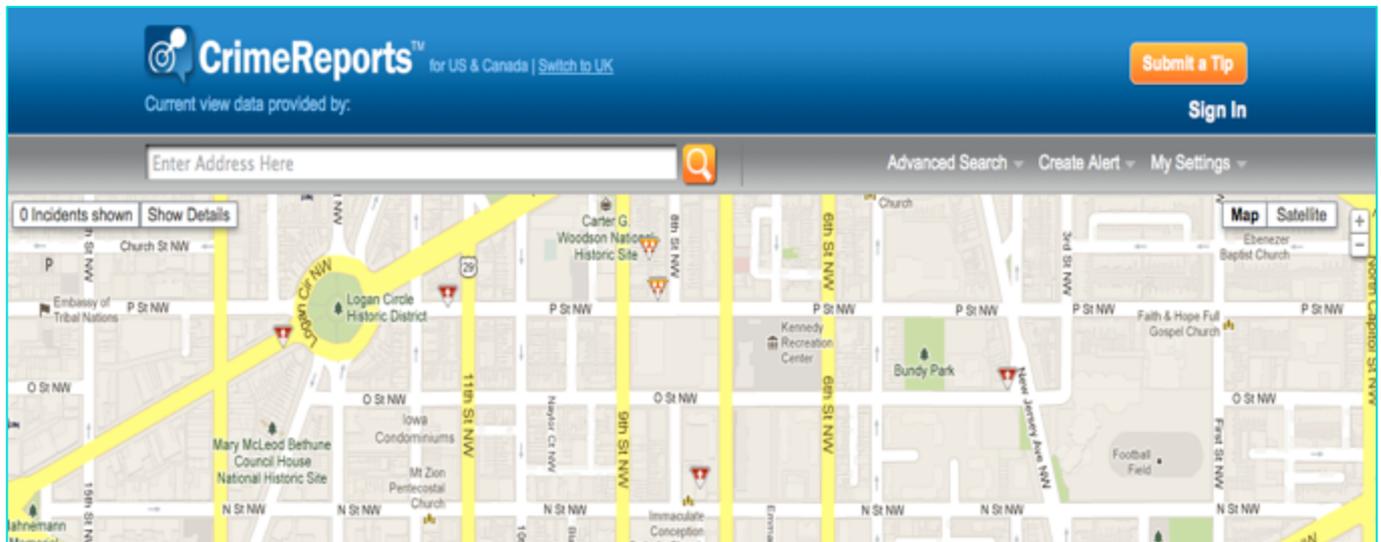
Covering over 100 of the largest US cities, SpotCrime displays recent crime activity around a location selected by the user. Crime incidents are displayed on a Google Map interface with icons representing different types of crimes including shooting, robbery, assault, theft, burglary, arson and vandalism. Users can identify high crime areas in cities, and get specific details of the crime events. For each US state there is a 'Crime map', 'most wanted' and 'daily crime reports'.

**Review:**

There is no citizen input: SpotCrime marks its map by taking information from police reports. This site is not in real-time and does not allow citizens to directly interact with the Police department. While SpotCrime gets most of its information from police reports, it also monitors local news coverage of crime. SpotCrime does not offer complete coverage of the United States - just major cities.

## CrimeReports

CrimeReports.com



**Platform info:** (unknown)

**Reporting method:** police data is mapped on online portal

**Country of origin:** USA

**Special features:** This tool is funded by local police departments

CrimeReports.com takes data from police in various communities around the United States and puts them into map form so users can see where police calls and arrests have been made. The system started in Virginia in 2007. Users can view maps showing types of crime; when and where they are occurring; receive regular crime alerts and view photos and addresses of registered sex offenders living in their neighborhood.

**How it works:**

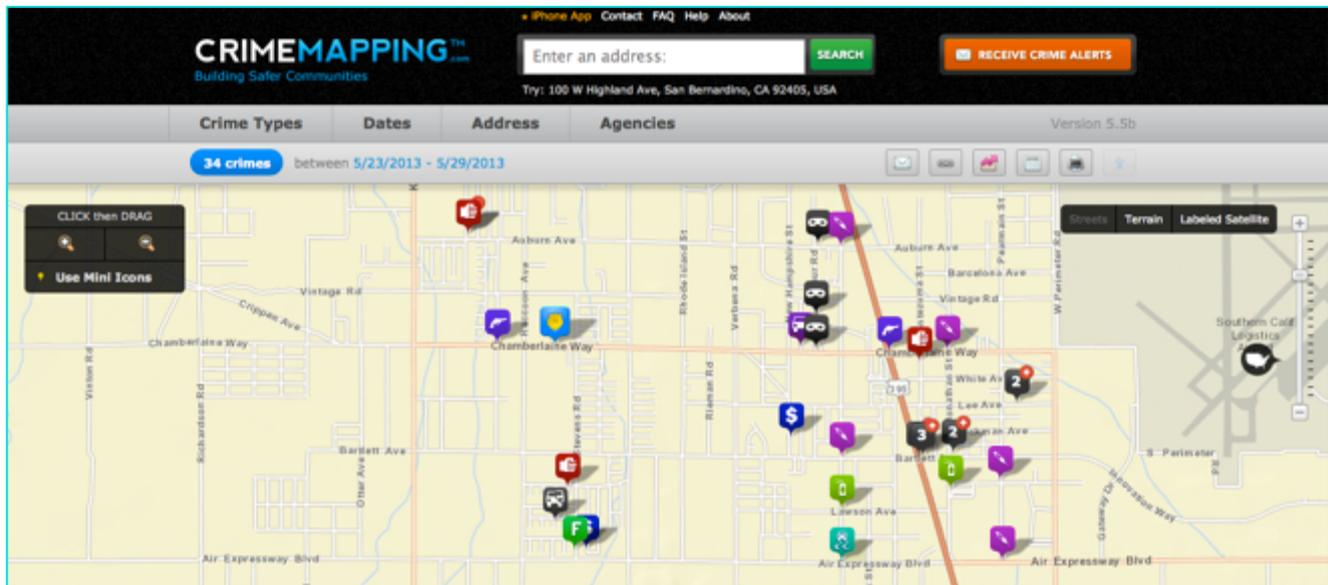
Crime Reports gets paid by participating police departments to review their logs and upload the map statistics.

**Review:**

Crime Reports does not offer complete coverage of the United States - just major cities. According to a [review of the site by Switch.com](#) (2008) "Police departments pay \$100 to \$200 per month for CrimeReports.com to go through their reporting systems and publish the information. Since police departments don't use one uniform system for capturing all their data, this can be a complicated and time-intensive process."

## CrimeMapping

CrimeMapping.com



**Platform info:** Crime Mapping Module by CODY Systems using [ESRI](#) GIS mapping engine

**Reporting method:** enforcement agency data mapped on online portal

**Country of origin:** USA

**Special features:** crime alerts received via email

CrimeMapping.com has been developed by The Omega Group (a California based company) to help law enforcement agencies throughout North America provide the public with information about recent crime activity in their neighborhood through an online portal. It has been set up by agencies in most states, but not all. The public can also report crimes and receive customised crime alerts via email. Their aim is to assist police departments in reducing crime through a better-informed citizenry, creating more self-reliance among community members. In Berks County, the site had 1000 subscribers to crime alerts in the first two months of operation.

### How it works:

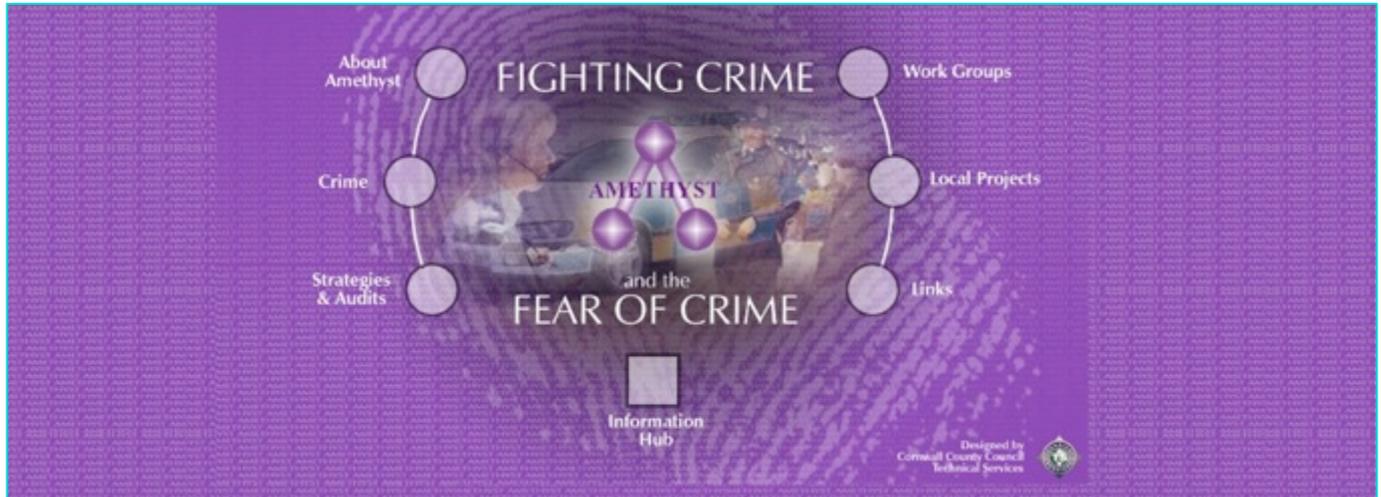
The mapping tools used is CODY Systems' Crime Mapping Module, which is powered by CrimeMapping.com and works alongside a national records sharing system called Cobra.net. CrimeMapping.com utilizes [ESRI](#)'s mapping engine.

Crime data is extracted on a regular basis from each department's records system so that the information being viewed through a Web browser is the most current available. This data is always verified for accuracy and all address information is generalized by block in order to help ensure privacy is protected. The tool works like this:

- Agencies create incidents by entering the crime data into their local RMS system. This local agency crime data is then synched in real time with COBRA.net and as a result is pushed to CrimeMapping.com
- Through CrimeMapping.com the crimes are presented in an interactive map, displaying crimes happening across the country

## Amethyst

[www.amethyst.gov.uk/crime.htm](http://www.amethyst.gov.uk/crime.htm)



**Platform info:** GIS platform created by InstantAtlas

**Reporting method:** online portal managed by local authorities

**Country of origin:** UK

**Special features:** Crime Explorer App

The Amethyst project initially funded by the UK's Home Office, was set up in response to growing demand to collect and share local data. On the new website you can learn about various problem areas such as drugs and alcohol, domestic abuse or antisocial behaviour. You can find out more about the problems and solutions in specific towns. It went live in 2002. In 2008, Amethyst partnered with GeoWise to create the Cornwall Crime Explorer App - a simple, interactive way for users in Cornwall to explore the latest data at a level of geography that was sufficiently granular to make it relevant and useful. [SaferCornwall](#) is managed by local government agencies and uses this platform.

### How it works:

The reporting tool used by Amethyst is **InstantAtlas** - a statistical visualization tool for geographic and temporal data, which is complementary to their web GIS platform.

[Click here for more examples](#) of how Instant Atlas can be used.

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